

LAND NORTH WEST OF SOUTHWATER

HDA Ref: 2090.78

Client: Berkeley Strategic Land Ltd

Date: 2nd June 2026

TECHNICAL NOTE TO ADDRESS CONSULTATION RESPONSES FROM ECOLOGY CONSULTEES

1 INTRODUCTION

- 1.1 This technical note responds to matters raised by nature conservation consultees in response to the outline planning application for a mixed use development, with all matters reserved (except for primary access to the highway), made by Berkeley Strategic Land Ltd (planning reference: DC/26/0366). The application relates to approximately 116ha of land located on the northwestern edge of Southwater, West Sussex, hereinafter referred to as 'the site'.
- 1.2 The purpose of this technical note is to provide a formal response to consultation responses received from Naturespace, Place Services, the Horsham District Council (HDC) Ecology Officer and the Woodland Trust, and where appropriate, identify how these are addressed by the scheme and proposed conditions.

2 NATURESPACE

- 2.1 This section considers the matters raised by Naturespace in their submission of 25th March 2026.
- 2.2 The *Great Crested Newt eDNA and HSI Survey* report submitted as Appendix 8-14 to the Environmental Statement confirms the presence of Great Crested Newts in two off-site waterbodies to the west of the site, reflecting the findings of previous survey work undertaken by HDA in 2021 and 2022. The report goes on to identify two approaches to mitigation and licensing available to the applicant comprising:
- European Protected Species Licence (EPSL) approach: The *Great Crested Newts eDNA and HSI Survey* report sets out measures required for the protection of individual newts and maintenance of their habitat resource at the site as would be required under an EPSM licence. It is considered that the emerging development proposals would allow for sufficient terrestrial habitat to be maintained in the vicinity of the off-site ponds to ensure the viability of the local Great Crested Newt population in the long-term and this is therefore a viable licensing option.
 - District Licence approach: The second approach would be to subscribe to Naturespace's District Licence, by making financial contributions to Naturespace for habitat creation and enhancement works in the wider landscape with only limited 'on site' works associated with protection of individual newts during construction.

- 2.3 Naturespace's submission of 25th March 2026 agrees with the findings and approach to licensing detailed in the *Great Crested Newt eDNA and HSI Survey* report.
- 2.4 The applicant is engaging with Naturespace with regard to inclusion on the District Licence. This consultation is ongoing and the applicant will inform HDC of the outcome. In the event that the applicant elects to subscribe to Naturespace's District Licence then it is expected that the standard conditions applicable to inclusion on District Licences would be included on any planning consent granted.
- 2.5 In the event that it is decided not to cover the proposed development under a District Licence, an EPSL licence can be secured following granting of planning consent.

3 HORSHAM DISTRICT COUNCIL

- 3.1 The HDC Ecologist provided comments regarding the Biodiversity Net Gain (BNG) calculation submitted with the application in their submission of 1st April 2026.
- 3.2 Where appropriate, the BNG calculation has been updated to reflect the comments by the HDC Ecology Officer, and an updated calculation is provided as *Annex A* to this technical note. Responses to the HDC Ecologist's comments are given below. These are provided broadly under the same sub-headings used by HDC for ease of reference.

- **Southwater Site:**

- Baseline*

- Hedgerows: Classification of hedgerows has been updated to reflect the detailed findings outlined in the *Hedgerow Survey Report* (as opposed to the UK Habitat Classification survey). As identified in the original submission, only limited hedgerow loss is expected to arise as a result of the proposed development and the updated BNG calculation identifies that in order to achieve 10% BNG for linear habitats, the following hedgerows (or equivalent) would need to be included in the detailed design:
 - 140m of species-rich native hedgerow with trees, associated with a bank or ditch;
 - 110m of species-rich native hedgerow; and
 - 250m of single species native hedgerow.

It is considered that the above extent of additional hedgerow planting can be comfortably accommodated within the proposed development at the detailed design stage.

The HDC Ecologist also noted that the full condition sheet for hedgerows had been 'cut off'. The full condition sheets have subsequently been included in the updated Biodiversity Net Gain submission provided as *Annex A* to this technical note.

- Scrub: An additional condition sheet has been added relating to the 'poor' condition area of scrub, which is located within the Christs Hospital area of the site.
- Tall Ruderal: The condition for the tall ruderal habitat has been retained as being in 'moderate' condition (as opposed to 'good') as Criterion 1 is not passed due to lack of contiguous vegetation structure.
- Ponds: The treatment of ponds has been updated to correspond with the HDC Ecologist's comments. The pond that was previously identified as being in 'moderate' condition has been downgraded to being of 'low' condition in keeping with the pond not achieving a score of 5 or higher.
- Rivers: The river corridor assessment followed the standard modular river corridor survey assessment (available from: <https://modularriversurvey.org/river-condition/>) as recommended by the RCA. It was undertaken under the supervision of Clare Bird MCIEEM of HDA. Clare is an Associate Ecologist at HDA and approved as a 'Qualified Surveyor' by the RCA team and the Royal Geographical Society. The GPS locations of the sample points have been added to the condition sheet as requested.

Post development

- Rivers: It is agreed that the measures identified to achieve the post development target conditions would need to be reflected at the detailed design stage and, where appropriate, management measures included in the Habitat Management and Monitoring Plan (see below).

It is also agreed that the metric to be prepared on the basis of the detailed design will need to account for installation of any headwalls on watercourses/ ditches as part of the drainage strategy, alongside positive benefits such as removal of existing culverts. Although details of such limited structures are not available at this time, the BNG calculation currently identifies a 28.02% net gain for watercourses, and it is considered that inclusion of minor structures such as headwalls in the calculation at the detailed design stage would not compromise the ability of the proposed development to achieve a 10% BNG for watercourse units.

- Woodland and trees: In keeping with the HDC Ecologist's comments, no hardstanding is proposed or will be provided within the ancient woodland or ancient woodland buffer zones. It is likely that this misunderstanding has arisen due to the way the path was depicted on the submitted

landscape plan. Where paths are located outside the woodland, but within the woodland buffer zone, these will be of a sympathetic material (e.g. crushed hoggins) and located outside the root protection area of the woodland trees. The exact positioning and composition of the path network will be a subject of detailed design.

The HDC Ecologist's recommendations for planting of trees with substantial canopies where access routes are to cross existing and proposed habitat corridors (e.g. hedgerows, treebelts etc) is supported and in keeping with the recommendations provided in the ES Ecology Chapter.

It is noted that the HDC Ecologist requests that attenuation features are located outside the woodland buffer zones. There are numerous examples of approved development schemes with SuDS located within ancient woodland buffer zones, and it should be noted that sympathetically designed SuDS are supported by Natural England within ancient woodland buffers, as reflected in Natural England and the Forestry Commission's *Standing Advice for Ancient Woodland, Ancient Trees and Veteran Trees*¹ (a material consideration in the planning process_ which states:

"You should only approve sustainable drainage schemes if:

- they do not affect root protection areas*
- any change to the water table does not negatively affect ancient woodland or ancient and veteran trees".*

As stated in the ES Ecology Chapter, where SuDS are provided within an ancient woodland buffer zone these will be located as such to avoid impacts on the hydrology of the woodland and avoid the root protection areas of the outermost woodland trees. In addition, they will be designed to maximise opportunities for wildlife thereby both complementing adjacent areas of woodland as well as providing habitat in their own right. Notwithstanding the above, the proposals indicate that, with the exception of a short section of swale, all SuDS would be located >15m from the woodland edge. It is noted that Place Services' consultation response of 24th March 2026 explicitly supports the proposed approach to ancient woodland buffer provision.

The HDC Ecologist's response also suggests that buffer zones had not been depicted around the entire periphery of the ancient woodland within

¹ <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

and adjacent to the site. With regard to the images taken from the 'Proposed Habitat' plans below, it can be seen that buffers comprising scrub (white crosshatch over green background) and/ or 'other neutral grassland' (orange) habitats are shown around the on-site areas of Courtlands Wood/ Marl Post Gill and Smiths Copse in their entirety.

Courtlands Wood and Marl Post Gill: Existing woodland shown as solid green and woodland buffer depicted as new mixed scrub (green with white cross hatch) and species-rich 'other neutral grassland' (orange). Development areas are shown in pink:



Smiths Copse: Existing woodland shown as solid green and woodland buffer depicted as new mixed scrub (green with white cross hatch) and species-rich 'other neutral grassland' (orange). Development areas are shown in pink:



- Allotments: As flagged by the HDC Ecologist, the allotment area to the north of Smith's Copse had been accidentally omitted from the original BNG calculation. This has now been added.
- Treatment of roads/ road verges and footpaths and cycleways: In keeping with the outline nature of the current application, in the absence of detailed proposals the BNG calculation assumes that within the development areas 70% of the land will be buildings and hardstanding

and 30% will be 'residential garden' (a very low scoring habitat). This approach is in keeping with current BNG guidelines and offers a reasonable conservative approach to forecasting BNG values for development areas in the absence of detailed proposals.

- **Christ's Hospital Site:** The original application included the potential for provision of car parking at the Christ's Hospital area of the site, located to the west of the main site, subject to further assessment. Since the application was submitted, the potential for car park surfacing in this area has been removed and therefore there will be no development or other works within the Christ's Hospital area of the site. The comments raised with regards to the Biodiversity Net Gain (BNG) calculation and Christ's Hospital in HDC's submission of 1st April 2026 are therefore no longer relevant to the scheme.
- **Habitat Management and Monitoring Plan (HMMP):** High level measures for the management of target habitats and species are given in the ES Ecology Chapter and accompanying appendices. Additional management measures are set out in the additional protected species reports provided as *Annexes B to D* of this technical note. These set out requirements to maximise the value of retained and newly created habitats to maximise their value for wildlife in addition to specific species requirements and provide an appropriate level of information for HDC to determine the application. In keeping with the recommendations given in Section 8.7 of the ES Ecology Chapter and those of the HDC Ecology Officer it is proposed that preparation of a Habitat Management and Monitoring Plan² is subject of a condition of planning consent.

3.3 It should be noted that the application is in outline and that the BNG calculation would require updating at the detailed design stage and it is expected that this would be subject of a condition of planning consent.

4 PLACE SERVICES

4.1 Place Services, acting on behalf of HDC, provided comments with regards to habitats and protected species in their submission of 24th March 2026.

4.2 Place Services' comments largely relate to provision of additional/ updated information in relation to habitats, bats, birds and invertebrates. These are discussed in turn below:

Habitats:

4.3 Place Services' response notes that although a specific Ecological Appraisal is included as an appendix to the ES Ecology Chapter for the Christs Hospital area of the site, there is not a similar document for the 'main site'. This is because similar information is included for the main site as stand-alone appendices (e.g. desk study, UK Habitat Classification Survey) or within the body of the ES Ecology Chapter (e.g. habitat

² Referred to as a 'Landscape and Ecological Management Plan (LEMP)' in the ES Ecology Chapter.

descriptions) and that the ES Chapter includes a full assessment of the development scheme as a whole together with recommended measures for impact avoidance and mitigation. There is not therefore any baseline information or assessment work missing for the main site that would otherwise necessitate preparation of an additional Ecological Appraisal report.

Bats:

- 4.4 An updated *Bat Survey Report* is provided as *Annex B* to this technical note, presenting the findings of an updated Phase 1 Bat Roost Scoping Survey and Bat Activity Survey undertaken between April 2025 and March 2026.
- 4.5 The findings of the updated bat activity survey work are in keeping with the bat foraging and commuting activity observed between June 2021 and July 2022, thereby confirming that the assessment of the effects of the proposed development on foraging and commuting bats (including consideration of The Mens SAC and Ebernoe Comon SAC) included in the ES Ecology Chapter remains sound.
- 4.6 The findings of the updated Phase 1 bat roost scoping survey confirmed the presence of suitable roosting opportunities for bats in a number of buildings and trees potentially affected by the proposed works. Although no new bat roosts were recorded as part of this work, where appropriate Phase 2 emergence surveys and/ or climbed inspections will be updated for suitable features affected by the proposed works in accordance with the Bat Conservation Trust's 2023 survey guidelines. Although this work will be subject of a separate report on completion, from observations made during the 2026 Phase 1 bat survey and the current development scheme it is considered highly unlikely that any significant bat roosts would be affected by the proposed works and, in the event that new bat roosts are recorded, then any effects could be mitigated using standard measures.

Breeding and Wintering Birds:

- 4.7 An updated *Wintering and Breeding Bird Survey* report is provided as *Annex C* to this technical note which presents the findings of updated survey work carried out between May 2025 and March 2026. The findings of the updated Wintering and Breeding Bird Survey reflect the findings of similar survey work undertaken between November 2021 and June 2022 thereby confirming that the assessment of the effects of the proposed development on wintering and breeding birds included in the ES Ecology Chapter remains sound.

Invertebrates:

- 4.8 Place Services' consultation response requests consideration be given to the continued reliance on the 2021/2022 terrestrial and aquatic invertebrate survey work.

4.9 Updating of the invertebrate survey work was considered during the preparation of the 2025 ES Ecology Chapter, however it was considered that updating of this particular survey element is not required in consideration of:

- The 2025 updated desk study did not identify any significant new records that would otherwise merit updating of the survey;
- The 2025 updated UK Habitat Classification survey, and subsequent visits in 2026, did not identify any significant change in the extent or character of habitats present at the site that might otherwise have increased the value of the site for invertebrates, thereby indicating that the invertebrate assemblage is likely to remain similar to that previously recorded;
- The development proposals allow for the retention of key invertebrate habitats including watercourses, woodland and the majority of hedgerows and mature trees; and
- The development proposals include creation and enhancement of semi-natural habitats across the site, as indicated by the positive results of the BNG calculation. In addition, the proposed development would secure management of the newly created and existing habitats, along with inclusion of features of value for invertebrates as set out in the ES Ecology Chapter. These include habitat piles, bug hotels, pollen and nectar rich planting etc.

4.10 Notwithstanding the above, following observation of an adult Brown Hairstreak recorded during the 2021 survey, a specific survey to determine whether or not this species is breeding at the site was undertaken in December 2025. A copy of the subsequent survey report is provided as *Annex D*. This work confirmed the presence of Brown Hairstreak eggs on Blackthorn in hedgerows within the site. In accordance with the outcome of the BNG calculation, the majority of hedgerows within the site will be retained in addition to substantial opportunities for new native hedgerow and scrub planting works (to include Blackthorn, its larval foodplant), together with introduction of sympathetic management (the hedgerows are generally subject to regular flailing). In addition, the emerging landscape proposals allow for retention and creation of rough and species-rich grassland within hedgerow/ scrub/ woodland buffers, and maintenance of the tree and woodland resource of the site for foraging adults.

Additional comments:

4.11 Place Services' consultation response recommends including conditions of planning consent within any permission granted to secure the measures proposed in the ES Ecology Chapter in relation to:

- Sensitive lighting design
- Measures to protect reptiles during construction
- Reasonable Avoidance Measures to protect Dormice during construction; and
- Habitat management

4.12 It is considered that such conditions are reasonable and are supported by the applicant.

5 THE WOODLAND TRUST

5.1 The Woodland Trust provided comments with regard to woodlands in their submission of 27th April 2026.

5.2 Firstly it should be noted that the Woodland Trust's response relates to a proposed development of 1500 homes, rather than 1000 homes actually proposed. It may be that they have repurposed their response of 1st December 2022 relating to a substantially larger scheme previously proposed for the site which has now been withdrawn. Notwithstanding the Woodland Trusts substantial overestimation of the scale of the proposed development, which may underlie their concerns, the comments raised in their response of 27th April 2026 are considered below

- **Buffer provision:** Since the 1500 home scheme was withdrawn, the proposed buffers adjacent to areas of ancient woodland in the current scheme have increased (see ES Ecology Chapter para 8.6.5). This includes a minimum buffer of 20m for development in the vicinity of Smiths Copse and a 30-50m buffer for development in the vicinity of Courtland Wood. This is considered appropriate in consideration of current land use, the nature of the proposed development, and proposed habitat creation works within the buffers (and beyond) which will replace intensively farmed arable land with species-rich grassland, native scrub, tree planting and other habitats complementing the retained woodlands as well as providing meaningful habitat in their own right. It is noted that Place Services' consultation response of 24th March 2026 explicitly supports the proposed approach to ancient woodland buffer provision.
- **Drainage and SuDS:** As discussed in *Section 3.2* above, the emerging proposals indicate that only a short section of swale will be located in a buffer zone within 15m of any area of ancient woodland, and that Natural England's Standing Advice supports the provision of suitably designed SuDS within buffer zones. Any SuDS provision (whether in an ancient woodland buffer or not) would be designed to ensure that the hydrology of ancient woodland habitat is not affected.
- **Recreational activity:** The effects of recreational activity and noise are considered in Section 8.6.44-8.6.47 of the ES Ecology Chapter together with measures to avoid and mitigate any adverse effect, including use of buffers, layout of properties, monitoring and control of non-native species, provision of alternative greenspace, use of fencing/ dense scrub planting and signage, and securing woodland management. The ES Ecology Chapter goes on to conclude that any residual adverse effect on ancient woodland would be negligible.
- **Habitat fragmentation and landscape connectivity:** Impacts of fragmentation and connectivity on ancient woodland are specifically considered in Section 8.6.49-8.6.53 of the ES Ecology Chapter. Proposed measures to avoid loss of connectivity include creation of a corridor of semi-natural habitat (predominantly woodland) between Smiths Copse and Courtlands Wood with a minimum width of 15m (currently there is a single hedgerow with intensively farmed land on either side) in addition to retention of the existing hedgerow network and other

habitat creation works. Where a road crosses land located between the two woodland areas then a selection of measures including sensitive lighting design, creation of canopy bridges and provision of a mammal tunnel/ dropped kerbs will maintain permeability for wildlife.

- Traffic: The proposed development would not be expected to generate sufficient traffic to result in air quality impacts on ancient woodland habitats within or adjacent to the site. This is with due regard to existing background levels in addition to improvements to internal combustion engines and the movement towards electric vehicles. Notwithstanding this, during construction measures are proposed to avoid damage to woodland and other vegetation caused by dust and these are detailed in Section 8.6.39 of the ES Ecology Chapter.
- Loss of secondary woodland: The Woodland Trust response raises concerns with regard to loss of secondary woodland for creation of the primary access route into the north of the site. It should be noted that care has been taken to minimise loss of the secondary woodland and that substantial replacement planting will be provided. In total, the emerging proposals indicate that 0.05ha of secondary woodland will be lost across the entire scheme in contrast to the creation of 0.47ha of new native woodland that would be planted.
- Veteran trees: With reference to T9, a veteran tree, located in the Christ's Hospital Area of the site, the Woodland Trust response raises concerns regarding the impact of car parking in the area. Although it is considered that parking could be designed allowing retention and protection of the veteran tree, as stated in *Section 3.2* above, provision of the car park in this area of the site is no longer proposed. The Woodland Trust's comments with regard to veteran trees in the wider site are noted and are in keeping with the recommendations provided in the ES Ecology Chapter (see Section 8.6.81-97). Through implementation of these measures, and in keeping with the emerging masterplan, it is considered that the veteran trees present within the site can be accommodated within the detailed design for the open space, affording appropriate buffers and surrounding land use in accordance with Natural England Standing Advice.

ANNEX A

Updated BNG Calculation

LAND NORTH-WEST OF SOUTHWATER, HORSHAM

HDA Ref: 2090.78

Date: 2nd June 2026

TECHNICAL NOTE TO ACCOMPANY BIODIVERSITY NET GAIN CALCULATION – REV

A

1 *Introduction*

1.1 This briefing note accompanies the Biodiversity Net Gain calculation prepared in relation to the development proposals of land north-west of Southwater, Horsham.

1.2 The Biodiversity Net Gain calculation is based on an adaptation of the *Illustrative Masterplan* (KPK) represented by the *BNG Proposed Broad Habitats Plan* (Appendix 1).

1.3 The Biodiversity Net Gain calculator used was Defra's Statutory Metric Tool. The plans associated with the calculation are provided within *Appendix 1* and extracts from the assessment calculator are included within *Appendix 2*.

2 *Broad habitats*

2.1 The calculation for the losses and gain in broad habitats (e.g. grassland, scrub) indicated on the *Illustrative Masterplan* (KPK) are summarised in *Table 1* below.

Table 1: Summary of losses and gains in broad habitats

Habitat group	Baseline		Post-development on-site		On-site change	
	On-site existing area	On-site existing value	On-site proposed area	On-site proposed value	On-site area change	On-site unit change
Cropland	30.23	60.45	0.00	0.00	-30.23	-60.45
Grassland	66.57	133.13	39.98	253.10	-26.59	119.97
Heathland and shrub	0.26	2.10	7.43	50.08	7.17	47.98
Lakes	0.06	0.23	0.06	0.36	0.00	0.13
Sparsely vegetated land	0.69	2.75	0.00	0.00	-0.69	-2.75
Urban	3.01	0.03	52.93	25.39	49.92	25.36

Wetland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and forest	14.67	58.82	15.09	58.97	0.42	0.15
Individual trees	8.97	93.53	9.21	92.53	0.24	-1.00

2.2 The calculations for the losses and gains in broad habitats (e.g. grassland or urban) indicated on the plan in *Appendix 1* identify that the development proposals would result in a total increase in biodiversity units for broad habitats of +129.40 units (gain). This is a 36.86% increase over the baseline value of the site, thereby indicating that the development proposals will achieve a net gain for biodiversity.

2.3 In addition, the value of the site for biodiversity would be further enhanced through delivery of measures which are not represented in the Biodiversity Net Gain calculation¹. These measures include:

- Provision of features for bats and breeding birds on new buildings and retained trees;
- Provision of log and brash piles; and
- Use of fruit and nut producing species, and pollen and nectar-rich species in the formal landscape planting scheme.

3 Linear habitats

3.1 The calculation for the loss/gain of hedgerows and treelines arising from the proposals identifies a total increase in biodiversity units for linear habitats of +5.63 units (gain). This is a 5.66% increase over the baseline value of the site which although a net gain is below the minimum target of 10%.

3.2 A number of linear features are present on the *Illustrative Masterplan* however on a precautionary basis these have not been included within the metric as these features are yet to be confirmed and are not shown on the parameter plans. Given the outline nature of this application, this is not considered to be a limitation at this stage of the project as the number of proposed linear features shown on the *Illustrative Masterplan* would easily achieve a 10% net gain in hedgerows if implemented during detailed design. To satisfy the trading rules and achieve a 10% net gain, a minimum length of the following hedgerow types would need to be implemented:

- 140m of species-rich native hedgerow with trees, associated with a bank or ditch;
- 110m of species-rich native hedgerow; and
- 250m of single species native hedgerow.

4 Watercourses

¹ This is due to inherent limitations in the Defra metric calculator.

- 4.1 The calculation for the loss/gain of 'watercourses' arising from the proposals identifies a total increase in biodiversity units of +2.69 units (gain) based on the current masterplan. This is an 28.02% increase over the baseline value of the site, thereby providing an indication that the development proposals will achieve a 10% net gain in watercourse habitat units.

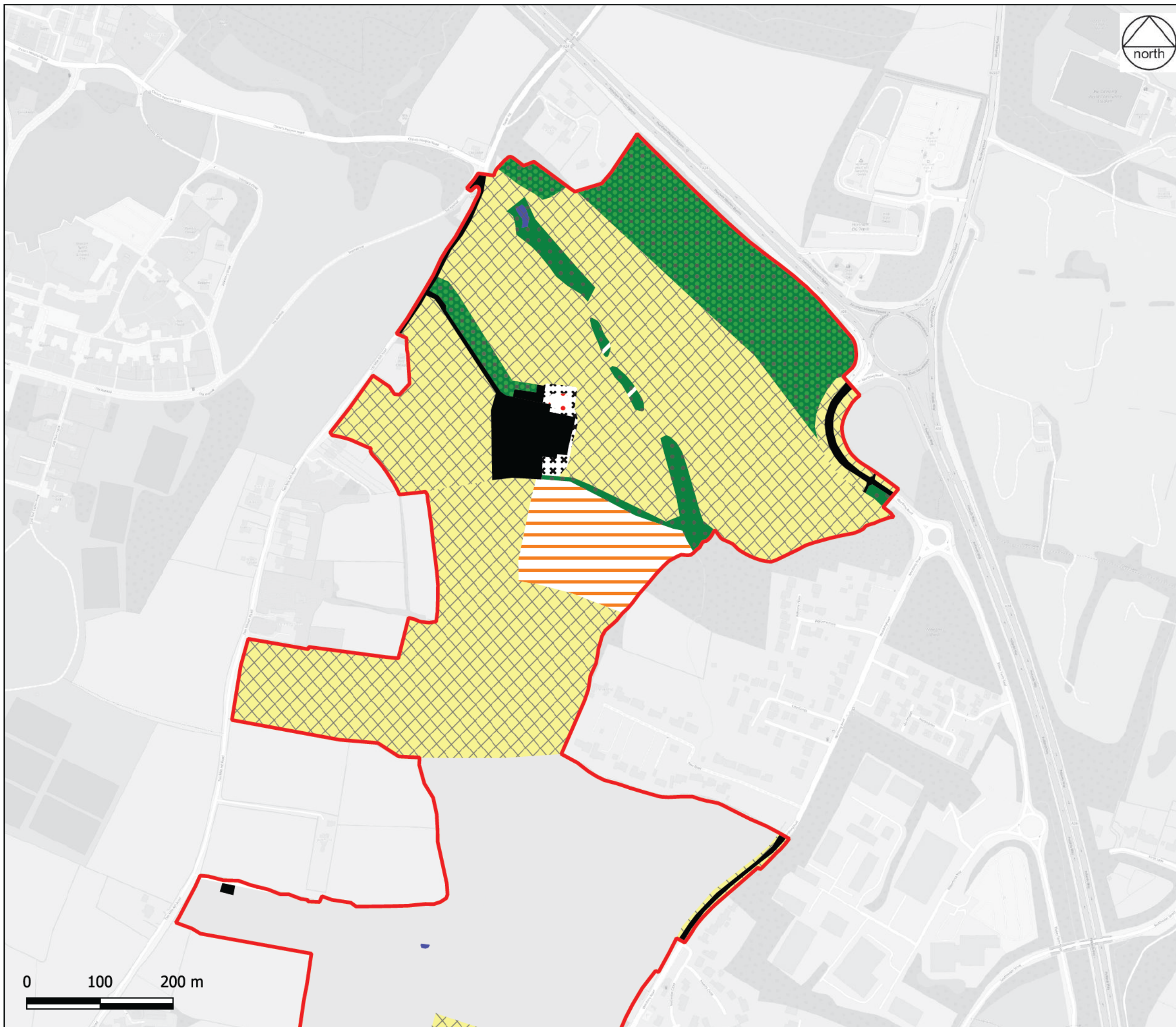
5 Conclusion

- 5.1 The Biodiversity Net Gain calculation based on the outline landscape scheme indicates that a substantial net gain for 'broad habitats' (+36.86% increase), a minor net gain for 'linear habitats' (5.66% increase), and a substantial net gain for 'watercourse habitats' (28.02%) would arise as a result of the current proposals².

² Please note that the calculation is provisional and should be reviewed at appropriate design stages.

Appendix A

Supporting plans



KEY

 Site boundary

Habitats baseline

 Artificial unvegetated, unsealed surface

 Winter stubble

 Developed land; sealed surface

 Lowland mixed deciduous woodland

 Mixed scrub

 Modified grassland

 Non-cereal crops

 Other woodland; mixed

 Ponds (non-priority habitat)

 Ruderal/Ephemeral

Baseline habitat condition

 Moderate

 Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Baseline Broad Habitats Plan (North)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 25a

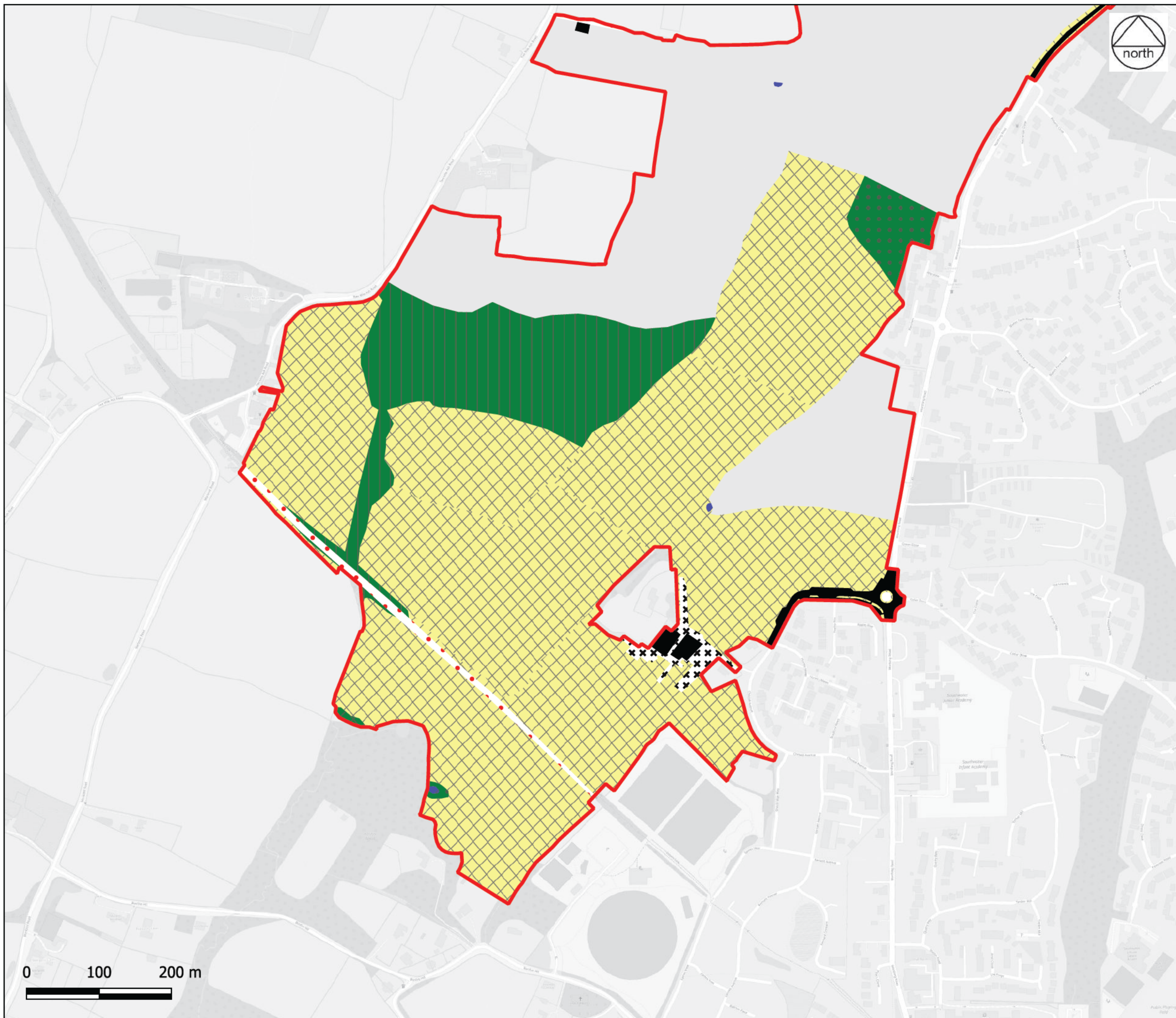
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Landscape Architecture
Masterplanning
Ecology





KEY

Site boundary

Habitats baseline

Artificial unvegetated, unsealed surface

Cereal crops

Developed land; sealed surface

Introduced shrub

Lowland mixed deciduous woodland

Mixed scrub

Modified grassland

Non-cereal crops

Ponds (non-priority habitat)

Ruderal/Ephemeral

Baseline habitat condition

Good

Moderate

Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Baseline Broad Habitats Plan (South)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 26a

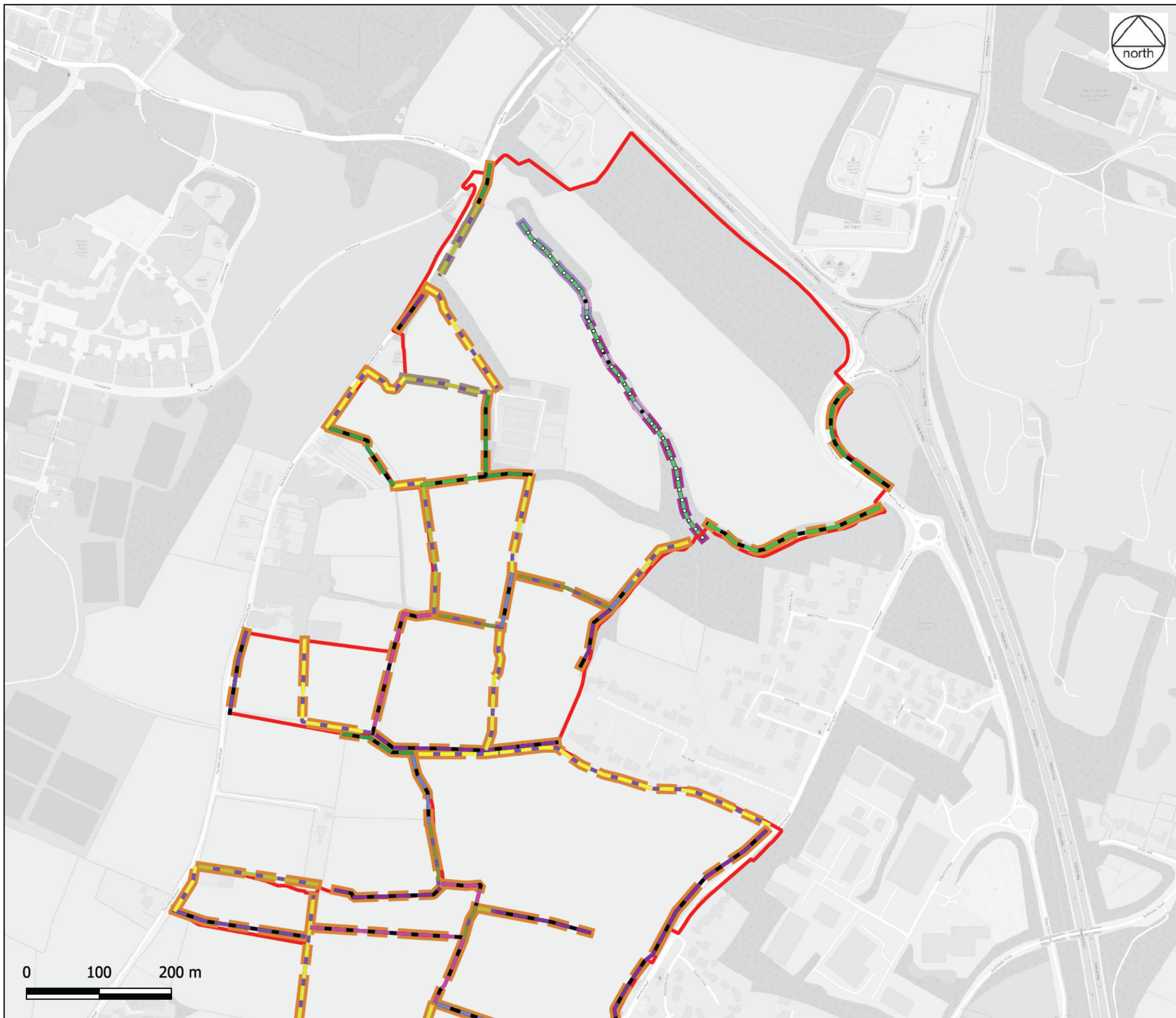
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Ecology





KEY

- Site boundary
- Hedgerow baseline
- Line of trees
- Line of trees - associated with bank or ditch
- Native hedgerow
- Native hedgerow - associated with bank or ditch
- Native hedgerow with trees
- Native hedgerow with trees - associated with bank or ditch
- Species-rich native hedgerow
- Species-rich native hedgerow - associated with bank or ditch
- Species-rich native hedgerow with trees
- Species-rich native hedgerow with trees - associated with bank or ditch

Baseline hedgerow condition

- Moderate
- Poor

Watercourse Baseline

- Culvert
- Other rivers and streams

Baseline Watercourse Condition

- Moderate
- Fairly Poor
- Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Baseline Linear Habitats Plan (North)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 28a

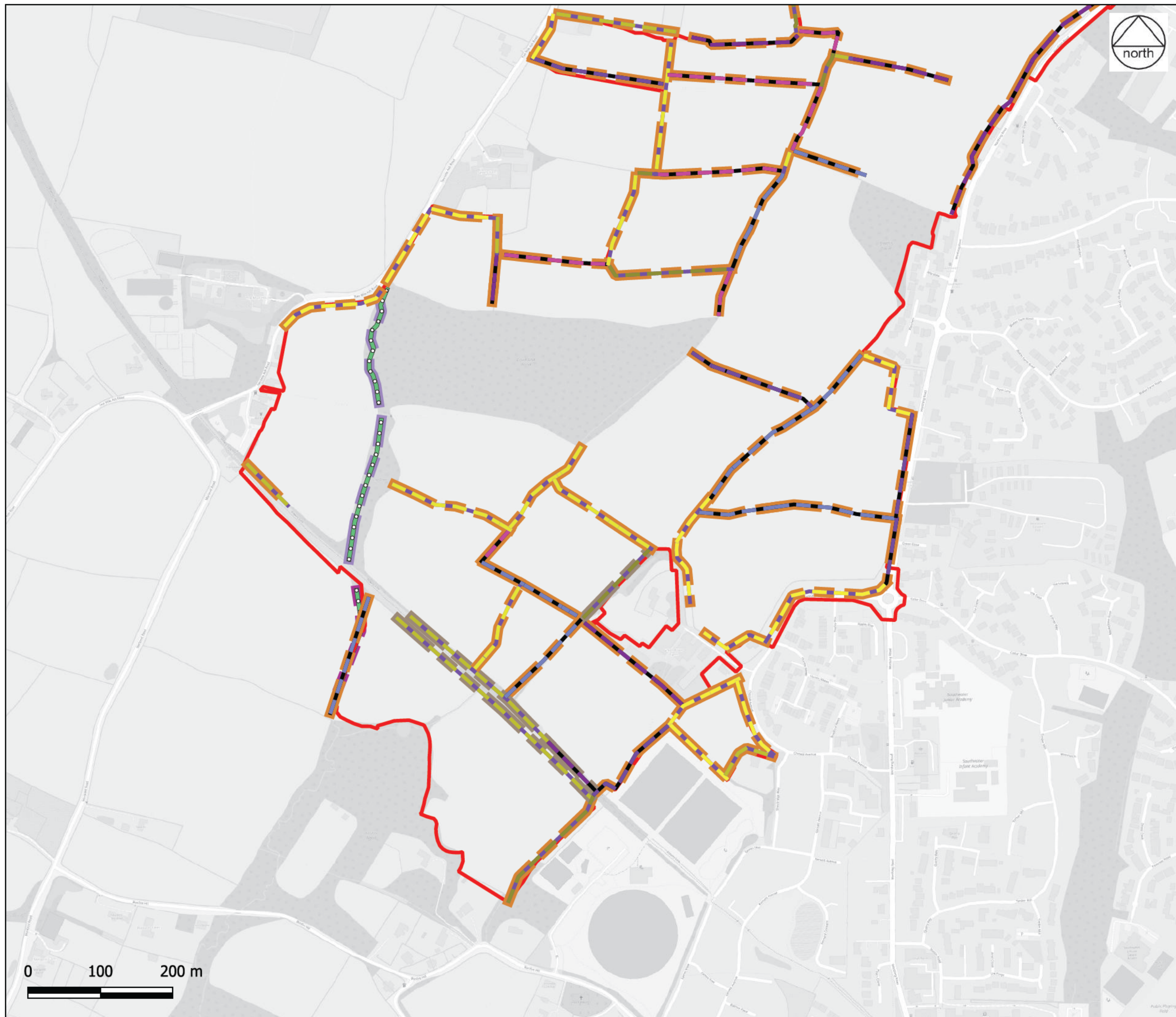
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Ecology





KEY

Site boundary

Hedgerow baseline

Native hedgerow

Native hedgerow - associated with bank or ditch

Native hedgerow with trees

Native hedgerow with trees - associated with bank or ditch

Species-rich native hedgerow

Species-rich native hedgerow - associated with bank or ditch

Species-rich native hedgerow with trees

Species-rich native hedgerow with trees - associated with bank or ditch

Baseline hedgerow condition

Moderate

Poor

Watercourse Baseline

Other rivers and streams

Baseline Watercourse Condition

Moderate

Fairly Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Baseline Linear Habitats Plan (South)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 29a

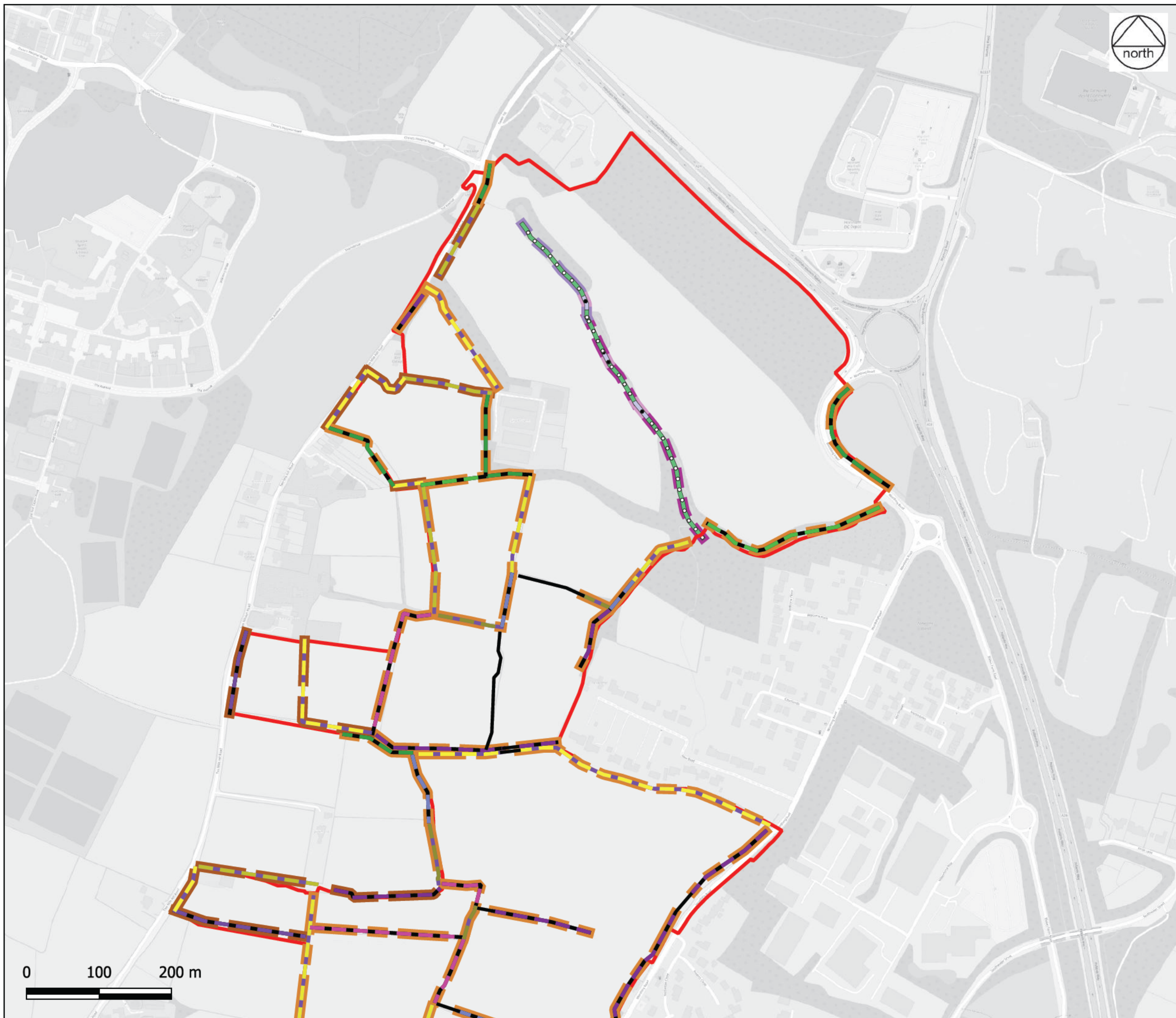
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Ecology





KEY

- Site boundary
- Hedgerows proposed
 - Line of trees
 - Line of trees - associated with bank or ditch
 - Native hedgerow
 - Native hedgerow - associated with bank or ditch
 - Native hedgerow with trees
 - Native hedgerow with trees - associated with bank or ditch
 - Species-rich native hedgerow
 - Species-rich native hedgerow - associated with bank or ditch
 - Species-rich native hedgerow with trees
 - Species-rich native hedgerow with trees - associated with bank or ditch
- Lost
- Proposed hedgerow condition
 - Good
 - Moderate
- Watercourse Proposed
 - Culvert
 - Other rivers and streams
- Proposed Watercourse Condition
 - Moderate
 - Fairly Poor
 - Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Proposed Linear Habitats Plan (North)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

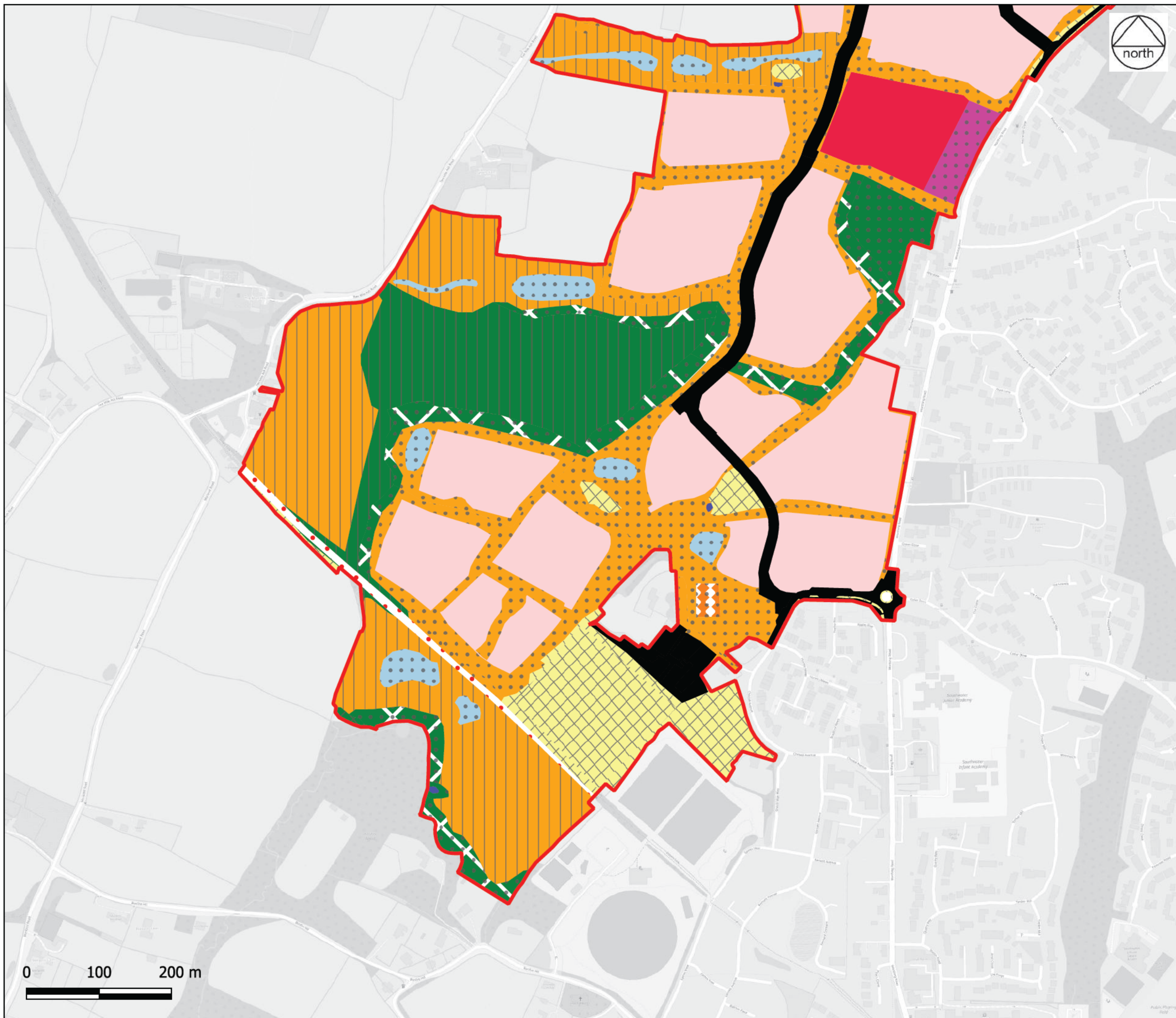
2090.78 / 34a

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KEY

Site boundary

Habitats proposed

Allotments

Artificial unvegetated, unsealed surface

Developed land; sealed surface

Introduced shrub

Lowland mixed deciduous woodland

Mixed scrub

Modified grassland

Other neutral grassland

Ponds (non-priority habitat)

Sustainable drainage system

Traditional orchards

School lands: developed land; sealed surface : modified grassland (poor condition) split 60 : 40 respectively

Developed land; sealed surface : vegetated garden split 70 : 30 respectively

Proposed habitats condition

Good

Moderate

Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Proposed Broad Habitats Plan (South)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 32a

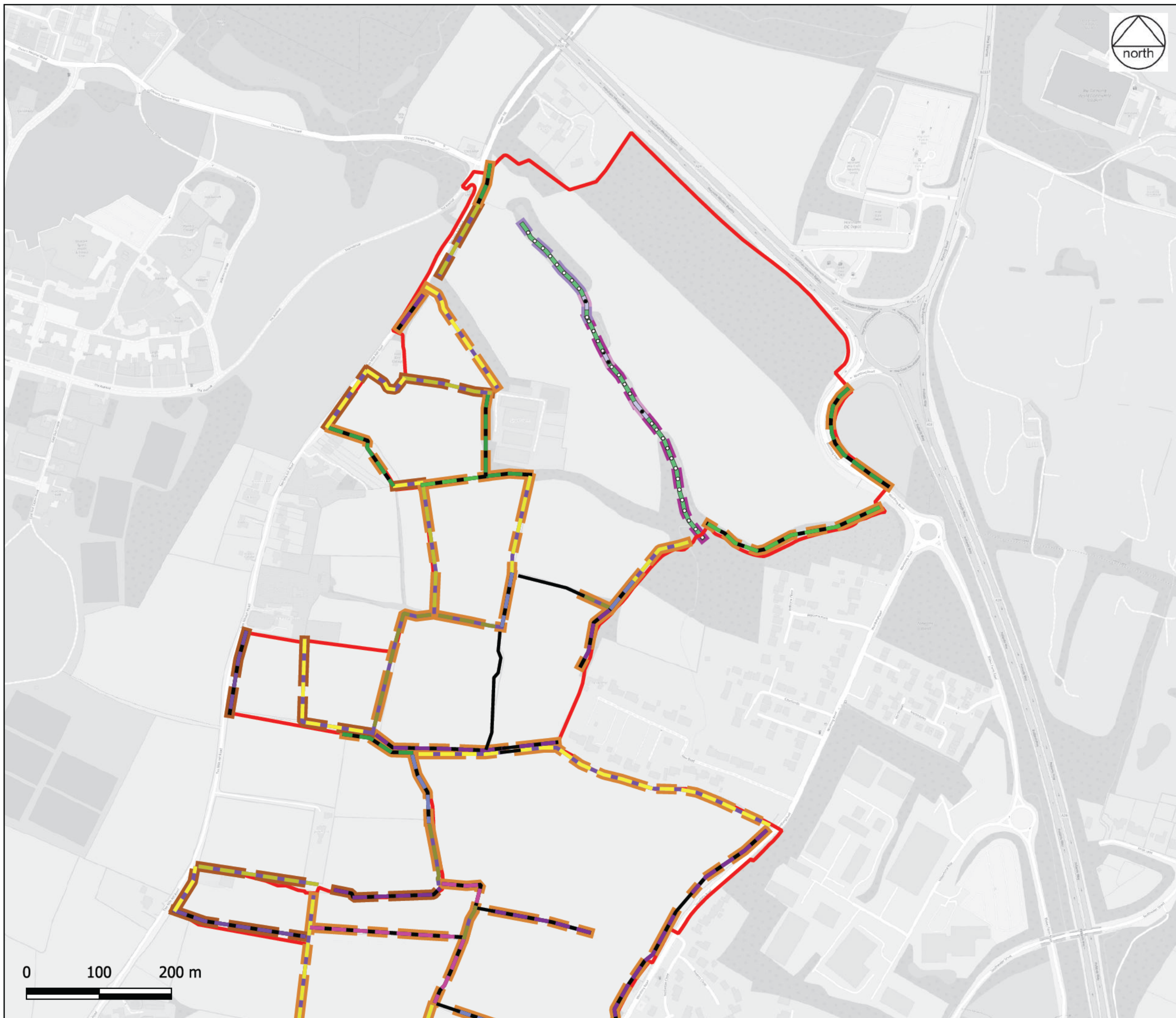
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 - Species-rich native hedgerow with trees - associated with bank or ditch
- Lost
- Proposed hedgerow condition
 - Good
 - Moderate
- Watercourse Proposed
 - Culvert
 - Other rivers and streams
- Proposed Watercourse Condition
 - Moderate
 - Fairly Poor
 - Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Proposed Linear Habitats Plan (North)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

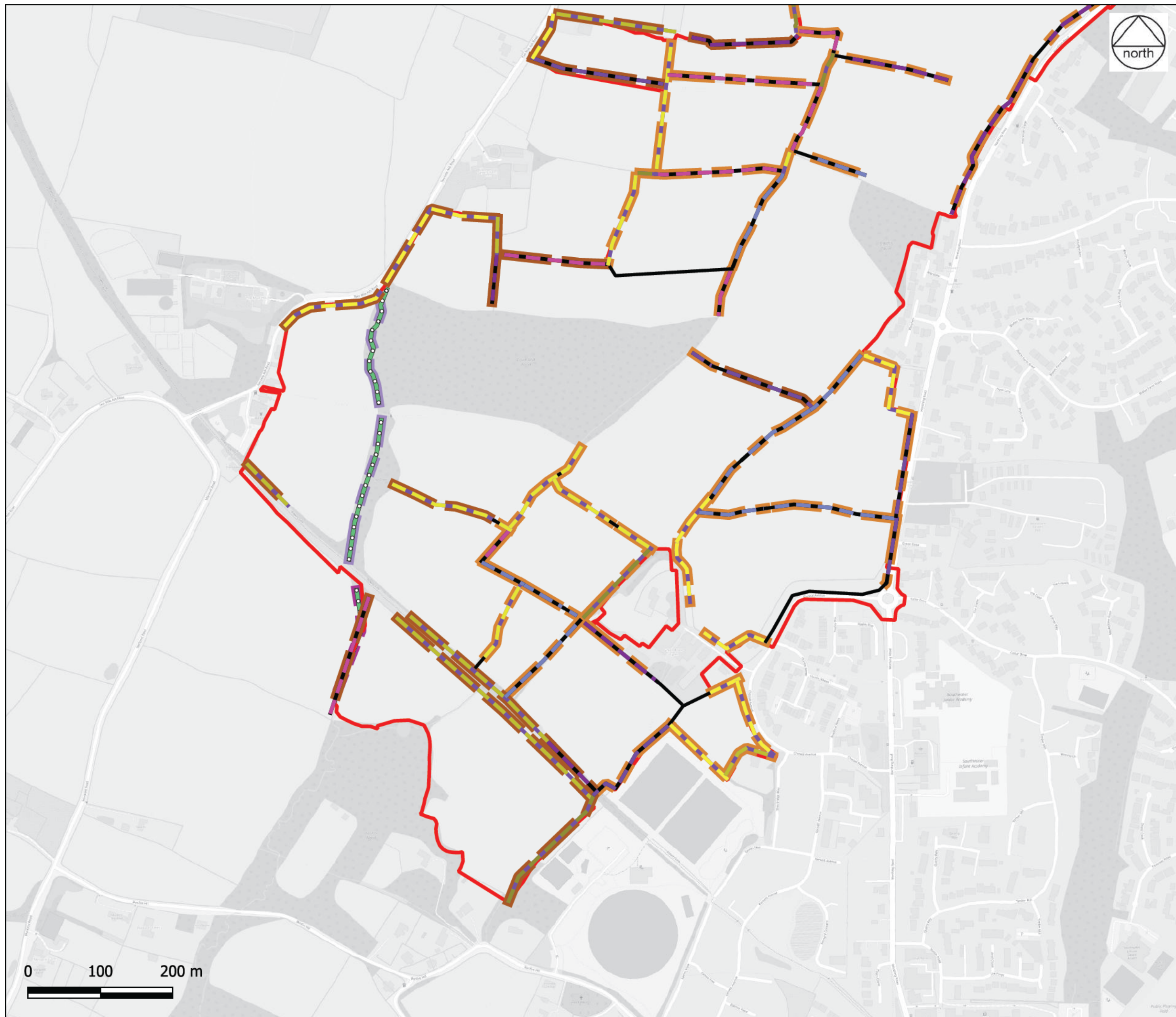
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 - Species-rich native hedgerow with trees
 - Species-rich native hedgerow with trees - associated with bank or ditch
- Lost
- Proposed hedgerow condition
 - Good
 - Moderate
- Watercourse Proposed
 - Other rivers and streams
- Proposed Watercourse Condition
 - Moderate
 - Fairly Poor

Map data from OpenStreetMap 2026-02-05

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-west of Southwater, Horsham

TITLE:
BNG Proposed Linear Habitats Plan (South)

SCALE AT A3:
See Scale Bar

DATE:
May 2026

2090.78 / 35a

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Appendix B

Extracts from Defra's Statutory Biodiversity Metric Tool

Land North-west of Southwater
Headline Results
Scroll down for final results ▲

Return to results menu

On-site baseline	Area habitat units	351.03	
	Hedgerow units	99.41	
	Watercourse units	9.62	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	480.43	
	Hedgerow units	105.04	
	Watercourse units	12.31	
On-site net change (units & percentage)	Area habitat units	129.40	36.86%
	Hedgerow units	5.63	5.66%
	Watercourse units	2.69	28.02%

On-site net gain is less than target set ▲

Off-site baseline	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Area habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	129.40
	Hedgerow units	5.63
	Watercourse units	2.69
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	129.40
	Hedgerow units	5.63
	Watercourse units	2.69
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	36.86%
	Hedgerow units	5.66%
	Watercourse units	28.02%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Total net gain achieved is less than target set ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	351.03	386.14	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	99.41	109.35	4.31	
Watercourse units	10.00%	9.62	10.58	0.00	No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲

Project Name: Land North-west of Southwyer Main Reference						Area habitat summary			
A-1 On-Site Habitat Baseline						Total Net Loss Change	-122.45		
						Total Net % Change	-18.80%		
						Treeding Rules Satisfied	Yes /		
Condense / Show Columns						Condense / Show Rows			
Main Menu									
Existing area habitats									
ID	Broad Habitat	Habitat Type	Inreplaceable habitat	Area (hectares)	Distinctiveness	Condition	Strategic significance	Required Action to Meet Treeding Rule	Ecological baseline Total habitat units
1	Cropland	Cleed crops	No	3.9714	Low	Condition Assessment HA	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	7.34
2	Cropland	Rice-corn crops	No	22.9395	Low	Condition Assessment HA	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	42.01
3	Cropland	Water stubble	No	2.0427	Low	Condition Assessment HA	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	5.30
4	Cropland	Modified grassland	No	6.0914	Low	Poor	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	13.38
5	Cropland	Modified grassland	No	12.0584	Low	Poor	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	25.32
6	Cropland	Modified grassland	No	0.9073	Low	Poor	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	1.81
7	Cropland	Modified grassland	No	34.3001	Low	Poor	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	66.02
8	Cropland	Modified grassland	No	12.0081	Low	Poor	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	24.02
9									
10									
11	Woodland and shrub	Mixed scrub	No	0.282	Medium	Moderate	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	0.10
12									
13	Lake	Ponds (non-priority habitat)	No	0.0505	Medium	Poor	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	0.20
14	Lake	Ponds (non-priority habitat)	No	0.0067	Medium	Poor	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	0.03
15	Specialty registered land	Ruderal/Typhonal	No	0.6688	Low	Moderate	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	2.75
16	Urban	Artificial constructed, unsealed surface	No	0.656	V Low	N/A - Other	Avoid/compensation not to local strategy no local strategy	Compensation Not Required	0.00
17	Urban	Developed land, sealed surface	No	2.31	V Low	N/A - Other	Avoid/compensation not to local strategy no local strategy	Compensation Not Required	0.00
18									
19	Urban	Introduced shrub	No	0.0134	Low	Condition Assessment HA	Avoid/compensation not to local strategy no local strategy	Some disturbance or better habitat required -	0.03
20	Woodland and forest	Lowland mixed deciduous woodland	No	0.0513	High	Good	Avoid/compensation not to local strategy no local strategy	Some habitat required +	0.82
21	Woodland and forest	Lowland mixed deciduous woodland	Yes	6.8803	High	Good	Formally identified in local strategy	Require compensation likely to be required	0.00
22	Woodland and forest	Lowland mixed deciduous woodland	No	1.0403	High	Moderate	Avoid/compensation not to local strategy no local strategy	Some habitat required +	12.40
23	Woodland and forest	Lowland mixed deciduous woodland	Yes	1.0295	High	Moderate	Formally identified in local strategy	Require compensation likely to be required	0.00
24	Woodland and forest	Lowland mixed deciduous woodland	No	0.0451	High	Poor	Avoid/compensation not to local strategy no local strategy	Some habitat required +	0.27
25	Woodland and forest	Other woodland, mixed	No	5.0432	Medium	Moderate	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	45.15
26	Individual trees	Pond tree	No	7.2242	Medium	Good	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	36.69
27	Individual trees	Pond tree	No	0.0401	Medium	Moderate	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	6.72
28	Individual trees	Pond tree	No	0.0285	Medium	Poor	Avoid/compensation not to local strategy no local strategy	Some forest habitat or a higher disturbance level required -	0.11
29	Individual trees	Pond tree	Yes	0.0770	Medium	Good	Formally identified in local strategy	Require compensation likely to be required	0.00
30									
31									
32									
33									
34									
35									
36									
37									
				Total habitat area	122.44				351.03
Site Area (Excluding area of individual trees, green walls, interstitial hard structures)				115.47					
25.23 19.97 1.0912 26.06 86.24 172.62 Total area lost (excluding area of individual trees, green walls and interstitial hard structures) 86.01									
M² to hectare conversion tool:				Select a unit	Hectare	M²			

Area habitat summary	
Total Net Unit Change	129.40
Total Net % Change	36.88%
Trading Rules Satisfied	Yes ✓
Area Check	Area Acceptable ✓

Project Name: Land North-west of Southwater Map Reference:

B-1 On-Site Hedge Baseline

Continue / Show Columns

Continue / Show Rows

Main Menu

Hedgerow summary	
Total Net Unit Change	£ 63
Total Net % Change	8.6%
Trading Rules Satisfied	No - check trading summary A

Existing hedgerow habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline	Comments									
Ref	Hedge number	Habitat type	Length (km)	Distinctiveness	Condition	Strategic significance		Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning authority comments	Habitat reference number
1		Line of trees - associated with bank or ditch	0.348	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	1.38	0.348	0	1.38	0.00	0.00	0.00	See appendix C (Main Site)		
2		Line of trees	0.625	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	2.50	0.625	0	2.50	0.00	0.00	0.00	See appendix C (Main Site)		
3		Native hedgerow - associated with bank or ditch	0.219	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	1.75	0	0	0.00	0.00	0.22	1.75	See appendix C (Main Site)		
4		Native hedgerow - associated with bank or ditch	0.973	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	7.78	0.973	0	7.78	0.00	0.00	0.00	See appendix C (Main Site)		
5		Native hedgerow - associated with bank or ditch	0.148	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	1.18	0	0.148	0.00	1.18	0.00	0.00	See appendix C (Main Site)		
6		Native hedgerow with trees - associated with bank or ditch	0.287	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	3.20	0	0	0.00	0.00	0.27	3.20	See appendix C (Main Site)		
7		Native hedgerow with trees - associated with bank or ditch	0.276	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	3.31	0.276	0	3.31	0.00	0.00	0.00	See appendix C (Main Site)		
8		Native hedgerow with trees - associated with bank or ditch	0.188	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	2.28	0	0.188	0.00	2.28	0.00	0.00	See appendix C (Main Site)		
9		Native hedgerow with trees - associated with bank or ditch	0.13	High	Poor	Area/compensation not in local strategy/ no local strategy	Like for like or better	0.78	0.13	0	0.78	0.00	0.00	0.00	See appendix C (Main Site)		
10		Native hedgerow with trees	0.021	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	0.17	0	0	0.00	0.00	0.02	0.17	See appendix C (Main Site)		
11		Native hedgerow with trees	0.258	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	2.06	0.258	0	2.06	0.00	0.00	0.00	See appendix C (Main Site)		
12		Native hedgerow with trees	0.289	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	2.31	0	0.289	0.00	2.31	0.00	0.00	See appendix C (Main Site)		
13		Native hedgerow with trees	0.85	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	3.40	0	0.85	0.00	3.40	0.00	0.00	See appendix C (Main Site)		
14		Native hedgerow	0.309	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	1.24	0	0	0.00	0.00	0.31	1.24	See appendix C (Main Site)		
15		Native hedgerow	1.308	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	5.23	1.308	0	5.23	0.00	0.00	0.00	See appendix C (Main Site)		
16		Native hedgerow	0.819	Low	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	3.28	0	0.819	0.00	3.28	0.00	0.00	See appendix C (Main Site)		
17		Species-rich native hedgerow - associated with bank or ditch	0.08	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	0.96	0	0	0.00	0.00	0.08	0.96	See appendix C (Main Site)		
18		Species-rich native hedgerow - associated with bank or ditch	1.235	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	14.82	1.235	0	14.82	0.00	0.00	0.00	See appendix C (Main Site)		
19		Species-rich native hedgerow - associated with bank or ditch	0.186	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	1.90	0	0.186	0.00	1.90	0.00	0.00	See appendix C (Main Site)		
20		Species-rich native hedgerow with trees - associated with bank or ditch	0.883	V High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like	14.13	0.883	0	14.13	0.00	0.00	0.00	See appendix C (Main Site)		
21		Species-rich native hedgerow with trees - associated with bank or ditch	0.138	V High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like	2.21	0	0.138	0.00	2.21	0.00	0.00	See appendix C (Main Site)		
22		Species-rich native hedgerow with trees	0.12	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	1.44	0	0	0.00	0.00	0.12	1.44	See appendix C (Main Site)		
23		Species-rich native hedgerow with trees	1.006	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	12.07	1.006	0	12.07	0.00	0.00	0.00	See appendix C (Main Site)		
24		Species-rich native hedgerow with trees	0.208	High	Moderate	Area/compensation not in local strategy/ no local strategy	Like for like or better	2.50	0	0.208	0.00	2.50	0.00	0.00	See appendix C (Main Site)		
25		Species-rich native hedgerow with trees	0.089	High	Poor	Area/compensation not in local strategy/ no local strategy	Like for like or better	0.53	0	0.089	0.00	0.53	0.00	0.00	See appendix C (Main Site)		
26		Species-rich native hedgerow	0.113	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	0.90	0.09	0	0.72	0.00	0.02	0.18	See appendix C (Main Site)		
27		Species-rich native hedgerow	0.329	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	2.63	0.329	0	2.63	0.00	0.00	0.00	See appendix C (Main Site)		
28		Species-rich native hedgerow	0.422	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	Same distinctiveness based or better	3.38	0	0.422	0.00	3.38	0.00	0.00	See appendix C (Main Site)		
29																	
30																	
31																	
32																	
33																	
			11.82					99.41	T.48	3.32	67.43	23.03	1.04	8.94			

[illegible]

Project Name: Land North-west of Southwater				Map					
C-1 On-Site WaterC' Baseline									
Conditions / Show Columns				Conditions / Show Rows					
Main Menu									
				Watercourse summary					
				Total Net Unit Change		2.99			
				Total Net % Change		28.85%			
				Trading Rules Satisfied		Yes ✓			

Appendix C

Baseline condition assessment sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)													
UK Habitat Classification (UKHab) Habitat Type													
Grassland - Modified grassland													
Habitat Description													
Southwater Grassland													
ukhab - UK Habitat Classification													
On-site or off-site, site name and location	On site	Survey date and Surveyor name		NC									
		Survey reference (if relating to a wider survey)		Numbers refer to target notes in UKHAB survey									
Limitations (if applicable)		Habitat parcel reference											
		5	22, 24, 26	3,15,18	52,56,61,63,69,70,72,7	86,87	83,92,96,98						
		Grid reference											
Condition Assessment Criteria													
		Criterion passed (Yes or No)										Notes (such as justification)	
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	No	No	No	No	No	No						5,22,24,26: <6 species per sq/m. Rye-grass dominated. All others: <6 species per sq/m. (formerly 'semi-improved')
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No	No	No	No	No	No						All parcels heavily grazed by cattle
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Yes	Yes	Yes	Yes	Yes						5,86,87: Small patches around streams only. <20% of area. All others: None
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	Yes	Yes	Yes	Yes	Yes						<5% in all parcels
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	Yes	Yes	Yes	Yes	Yes						<10% in all parcels
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	Yes	Yes	Yes	Yes	Yes						Absent in all parcels
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	Yes	Yes	Yes	Yes	Yes						Absent in all parcels
Essential criterion achieved (Yes or No)		No	No	No	No	No	No						
Number of criteria passed		5	5	5	5	5	5						
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/√											
Passes 6 or 7 criteria including passing essential criterion A	Good (3)												
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)												
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	Poor	Poor	Poor	Poor	Poor	Poor						
Suggested enhancement interventions to improve condition score													
Footnotes													
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> .													
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.													
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.													
Footnote 4 – Wildlife and Countryside Act 1981 (as amended).													

Condition Sheet: POND Habitat Type													
Habitat Type													
Lakes - Ponds (priority habitat)													
Lakes - Ponds (non-priority habitat)													
Lakes - Temporary lakes ponds and pools (H3170) [Use this condition sheet for Temporary ponds and pools, use Lake condition sheet for Temporary lakes]													
Lakes - Ornamental lake or pond [Use this condition sheet for Ornamental ponds, use Lake condition sheet for Ornamental lakes]													
Habitat Description													
ukhab – UK Habitat Classification													
For ponds (non-priority) – see the Statutory Biodiversity Metric Technical Annex 2.													
On-site or off-site, site name and location	Survey date and Surveyor name		Survey reference (if relating to a wider survey)										
Limitations (if applicable)	Habitat parcel reference												
	4	55	74										
Grid reference													
Condition Assessment Criteria												Notes (such as justification)	
Criterion passed (Yes or No)													
Core Criteria - applicable to all ponds (woodland ¹ and non-woodland):													
A	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	N	N	N									
B	There is semi-natural habitat (moderate distinctiveness or above) completely surrounding the pond, for at least 10 m from the pond edge for its entire perimeter.	N	N	N									
C	Less than 10% of the water surface is covered with duckweed <i>Lemna</i> spp. or filamentous algae.	N	N	N									
D	The pond is not artificially connected to other waterbodies, such as agricultural ditches or artificial pipework.	Y	N	Y									
E	Pond water levels can fluctuate naturally throughout the year. No obvious artificial dams*, pumps or pipework.	Y	N	Y									
F	There is an absence of listed non-native plant and animal species ³ .	Y	Y	Y									
G	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Y	Y	Y									
Additional Criteria - must be assessed for all non-woodland ponds:													
H	Emergent, submerged or floating plants (excluding duckweed)* cover at least 50% of the pond area which is less than 3 m deep.		Y	Y									
I	The pond surface is no more than 50% shaded by adjacent trees and scrub.		N	N									
Number of criteria passed		4	3	5									
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√											
Results for woodland ponds which require assessment of 7 core criteria													
Passes 7 criteria	Good (3)												
Passes 5 or 6 criteria	Moderate (2)												
Passes 4 or fewer criteria	Poor (1)	Y											
Results for non-woodland ponds which require assessment of 9 criteria													
Passes 9 criteria	Good (3)												
Passes 6 to 8 criteria	Moderate (2)												
Passes 5 or fewer criteria	Poor (1)		Y	Y									
Suggested enhancement interventions to improve condition score													
Footnote 1 - A woodland pond will be surrounded on all sides by woodland habitat.													
Footnote 2 - This excludes natural dams such as those created by Eurasian beaver <i>Castor fiber</i> .													
Footnote 3 - Any species included on the Water Framework Directive (WFD) UKTAG GB High Impact Species List should be absent: WFD UKTAG (2021) <i>Classification of aquatic alien species according to their level of impact</i> [online]. Available from:													

Condition Sheet: SCRUB Habitat Type			
Habitat Types			
Heathland and shrub - Blackthorn scrub Heathland and shrub - Gorse scrub Heathland and shrub - Hawthorn scrub Heathland and shrub - Hazel scrub Heathland and shrub - Mixed scrub Heathland and shrub - Dunes with sea buckthorn (H2160) Heathland and shrub - Willow scrub			
Habitat Description			
Scrub along Worthing Road			
For Dunes with sea buckthorn see:	Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (jncc.gov.uk)		
For other scrub types see:	ukhab – UK Habitat Classification		
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Y	Mature native scrub with at least 3 native species
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Y	Mature scrub with a multiple age ranges
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y	No invasive species
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N	Roadside embankment and grazed grassland adjacent
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	No clearings or glades present
		Number of criteria passed	3
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	3	
Passes 2 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Condition Sheet: SCRUB Habitat Type			
Habitat Types			
Heathland and shrub - Blackthorn scrub Heathland and shrub - Gorse scrub Heathland and shrub - Hawthorn scrub Heathland and shrub - Hazel scrub Heathland and shrub - Mixed scrub Heathland and shrub - Dunes with sea buckthorn (H2160) Heathland and shrub - Willow scrub			
Habitat Description			
Christ Hopsital scrub			
For Dunes with sea buckthorn see:		Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (jncc.gov.uk)	
For other scrub types see:		ukhab – UK Habitat Classification	
On-site or off-site, site name and location	Christ's Hospital	Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	6
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ - At least 80% of scrub is native, - There are at least three native woody species ² , - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	N	Mature native scrub with less than 3 native species
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	N	Limited age range
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y	No invasive species
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	N	Roadside embankment and grazed grassland adjacent
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	No clearings or glades present
Number of criteria passed			1
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	1	
Passes 2 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			

Condition Sheet URBAN Habitat Type			
Condition Sheet Sparsely vegetated land - Ruderals/Ephemeral Urban - Allotments Urban - Biodiverse green roof Urban - Bloswale Urban - Cemetaries and churchyards Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable drainage system (SuDS) Urban - Vacant or derelict land Urban - Bare ground			
Habitat Description TN 23 & TN 11			
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab - UK Habitat Substrate Guide
On-site or off-site, site name and location	On-site	Survey date and Surveyor name	NC
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	TN23
Condition Assessment Criteria Core Criteria - must be assessed for all urban habitat types:		Criterion passed (Yes or No)	Notes (such as justification)
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	Contiguous vegetation structure across parcels of ruderal ephemera;
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Yes	Varied species across parcel.
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Yes	None recorded
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:			
D	The parcel shows spatial variation and forms a mosaic of bare substrate PLUG: - At least four early successional communities (a) to (i); Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland; (i) pools.		
Additional Criteria - must be assessed for Bloswale and SuDS habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.		
Additional Criterion - must be assessed for Intensive green roofs only:			
F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).		
Additional Criterion - must be assessed for Biodiverse green roofs only:			
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.		
Essential criteria relevant for habitat type achieved (Yes or No)			Yes
Number of criteria passed			Yes
Condition Assessment Result	Condition Assessment Score	Score Achieved +/-	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bloswale, SuDS and Green roofs):			
* Passes all 3 core criteria; AND * Meets the requirements for Good condition within criterion C.	Good (3)	Good	
* Passes 2 of 3 core criteria; OR * Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
* Passes 0 or 1 of 3 core criteria.	Poor (1)		
Results for Green roofs and Open mosaic habitat on previously developed land (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):			
* Passes all 3 core criteria; AND * Meets the requirements for Good condition within criterion C; AND * Passes additional criterion relevant to specific habitat type (D, F or G).	Good (3)		
* Passes 2 or 3 of 4 criteria; OR * Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
* Passes 0 or 1 of 4 criteria.	Poor (1)		
Results for Bloswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):			
* Passes all 3 core criteria; AND * Meets the requirements for Good condition within criterion C; AND * Passes all additional criteria relevant to specific habitat type (Group E)	Good (3)		
* Passes 3 or 4 of 5 criteria; OR * Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
* Passes 2 or fewer of 5 criteria.	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			

Condition Sheet: WOODLAND Habitat Type															
UK Habitat Classification (UKHab) Habitat Type															
Woodland and forest - Lowland beech and yew woodland															
Woodland and forest - Lowland mixed deciduous woodland															
Woodland and forest - Native pine woodlands															
Woodland and forest - Other coniferous woodland															
Woodland and forest - Other Scot's pine woodland															
Woodland and forest - Other woodland; broadleaved															
Woodland and forest - Other woodland; mixed															
Woodland and forest - Upland birchwoods															
Woodland and forest - Upland mixed ashwoods															
Woodland and forest - Upland oakwood															
Woodland and forest - Wet woodland															
Habitat Description															
Web - UK Habitat Classification This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: Woodland Wildlife Toolkit (eviva.org.uk)															
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.															
On-site or off-site, site name and location	Southwater	Survey date and Surveyor name	NC	Habitat parcel reference											
Limitations (if applicable)	Survey reference (if relating to a wider survey)	Reference number refers to target notes on UKHAB plan	Grid reference												
			1	2	4	7	12	53	57						
Condition Assessment Criteria															
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator											Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	3	2	2	1	3	3					
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	3	3	1	1	2	3	2					
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, and other invasive species ³ >10% cover.	3	2	3	3	3	2	3					
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	3	3	3	2	3	3					
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understorey shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understorey shrubs are native ⁵ .	<50% of canopy trees and <50% of understorey shrubs are native ⁵ .	2	2	2	3	2	3	3					
F Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁶ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or <40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁶ .	3	3	3	3	3	3	3					
G Woodland regeneration	All three classes present in woodland ⁷ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁷ .	No classes or coppice regrowth present in woodland ⁷ .	2	2	2	2	2	3	3					
H Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁸ .	11% to 25% tree mortality and/or crown dieback or low-risk pest or disease present ⁸ .	Greater than 25% tree mortality and/or any high-risk pest or disease present ⁸ .	3	2	2	2	3	2	2					
I Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	1	2	2	1	2	3					
J Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	2	2	2	1	2	3					
K Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	1	1	1	1	2	2					
L Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	2	2	2	2	2	3	3					
M Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .	2	2	2	2	2	2	2					
Total Score (out of a possible 39)				29	28	27	26	25	33	35					
Condition Assessment Result		Condition Assessment Score		Result Achieved											
Total score >32 (33 to 39)		Good (3)		mod	mod	mod	mod		good	good					
Total score 26 to 32		Moderate (2)													
Total score <26 (13 to 25)		Poor (1)							poor						
Suggested enhancement interventions to improve condition score															

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Jahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)	Survey reference (if relating to a wider survey)			
Grid reference	Habitat parcel reference			
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	All hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	Gaps <0.5m
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	Gaps <10%
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of 'WCA') and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ³ , as well as the BSBI website ⁴ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁵ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage on all hedgerow
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (for morphology of tree present (for example, young, mature, veteran and or ancient) ⁶), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved		Moderate		
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow with ditch				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Jahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)	Survey reference (if relating to a wider survey)			
Grid reference	Habitat parcel reference			
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	All hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	Gaps <0.5m
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	Gaps <10%
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of 'WCA') and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ³ , as well as the BSBI website ⁴ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁵ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage on all hedgerow
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (for morphology) of tree present (for example, young, mature, veteran and/or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved		Moderate		
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow with trees and ditch				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Jahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)		Survey reference (if relating to a wider survey)		
Grid reference		Habitat parcel reference		
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	Hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn Prunus spinosa suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	Gaps >0.5m
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	Canopy gaps less than 10% in total
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles Urtica spp., cleavers Galium aparine and docks Rumex spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁶ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (for morphology) of tree present (for example, young, mature, veteran and/or ancient ⁷), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Yes	Young and mature trees present
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	No	Some damage from livestock
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow with trees				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Lahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)		Survey reference (if relating to a wider survey)		
Grid reference		Habitat parcel reference		
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	Hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn Prunus spinosa suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	Gaps >0.5m
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	Canopy gaps less than 10% in total
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles Urtica spp., cleavers Galium aparine and docks Rumex spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁶ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class for morphology of tree present (for example, young, mature, veteran and/or ancient ⁷), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Yes	Young and mature trees present
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	No	Some damage from livestock
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow with trees TN13.17.05				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Jahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)	Survey reference (if relating to a wider survey)			
Grid reference	Habitat parcel reference			
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	Hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	No	Outgrown in several sections
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	No	Partially outgrown and gaps >10% of length
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of 'WCA') and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ³ , as well as the BSBi website ⁴ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁵ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (for morphology) of tree present (for example, young, mature, veteran and/or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Yes	Young and mature trees present
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	No	Some damage from livestock
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition sheet HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Species-rich native hedgerow Species-rich native hedgerow - associated with bank or ditch Species-rich native hedgerow with trees Species-rich native hedgerow with trees - associated with bank or ditch				
Habitat Description				
Native Hedgerow with trees TNGD				
See the Statutory Biodiversity Metric Technical Annex 2 and UK Habitat Classification: Jahab - UK Habitat Classification				
On-site or off-site, site name and location	Southwater onsite	Survey date and Surveyor name	NC	
Limitations (if applicable)		Survey reference (if relating to a wider survey)		
Grid reference		Habitat parcel reference		
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.				
This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook.				
Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1. Height	>1.5 m average along length	The average height of woody growth estimated from base of stems to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	Yes	Hedgerows >1.5m in height
A2. Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	All hedgerows >1.5m in length
B1. Gap - hedge base	Gap between ground and base of canopy >0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	No	Outgrown in several sections
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	No	Partially outgrown and gaps >10% of length
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length. Measured from outer edge of hedgerow, and is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	No	Closely grazed or limited field margins
C2. Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	Species indicative of enriched ground
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of 'WCA') and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ³ , as well as the BSBI website ⁴ where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁵ .	Yes	None recorded
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes	>90% free of damage
Additional group - applicable to hedgerows with trees only				
E1. Tree class	There is more than one age-class (for morphology) of tree present (for example, young, mature, veteran and/or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	Yes	Young and mature trees present
E2. Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	No	Some damage from livestock
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.				
Condition categories for hedgerows without trees				
Category	Category Requirements	Metric Score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 4 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2		
Poor	Fails a total of more than 4 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Condition categories for hedgerows with trees				
Category	Category Requirements	Metric score		
Good	No more than 2 failures in total, AND No more than 1 failure in any functional group.	3		
Moderate	No more than 5 failures in total, AND Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2		
Poor	Fails a total of more than 5 attributes, OR Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved				
Suggested enhancement interventions to improve condition score				

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Types			
Line of trees			
Line of trees – associated with bank or ditch			
Ecologically valuable line of trees			
Ecologically valuable line of trees – associated with bank or ditch			
Habitat Description			
Line of trees/line of trees associated with bank or ditch. TN 8,21			
See the Statutory Biodiversity Metric User Guide. This assessment is based on the Hedgerow Survey Handbook ¹ . For further clarifications please refer to the Handbook. Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.			
On-site or off-site, site name and location	Southwater on site	Survey date and Surveyor name	NC
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	At least 70% of trees are native species.	Yes	>70% species native
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Yes	Gaps>10%
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Yes	Mature trees with ecological niches present
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice ² .	Yes	Grazing on adjacent land
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	No	Some disease in Ash and damage from livestock present
		Number of criteria passed	4
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Mod	
Passes 2 or fewer criteria	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			

Tree Ref	Age	Species (Latin)	Stem Dia (mm)	Comments	Native	Medium	Canopy cover	Continuous canopy	Eco Notes	Damage	Score	Size	Condition	Lost	Veteran
T1	M	Oak	680	Poorly lifted over path, stubs	Y	Y	Y	Y	N	Y	5	Large	Good		
T2	M	Ash	380	Multi-stemmed at 0.5m, partially suppressed, Ash dieback present	Y	Y	Y	Y	N	Y	5	Medium	Good		
T3	M	Ash	740	Established basal sucker, dead wood, partially suppressed, Ash dieback present	Y	Y	Y	Y	Y	Y	6	Large	Good		
T4	M	Ash	370	Old coppice, trunk scars, partially suppressed, Ash dieback present	Y	Y	Y	Y	N	Y	5	Medium	Good		
T5	M	Ash	850	Multiple cavities at pruning points, historic damage, partially suppressed, Ash dieback present	Y	Y	Y	Y	Y	N	5	Large	Good		
T6	M	Oak	960	Dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T7	M	Turkey Oak	720	Ivy clad		Y	Y	Y	Y	Y	5	Large	Good		
T8	M	Ash	900	Established basal sucker, old pollard at 1.5m, dead wood, partially suppressed, Ash dieback present	Y	Y	Y	Y	Y	Y	6	XL	Good		
T9	M	Ash	360	Old coppice, trunk scars, sparse canopy, Ash dieback present	Y	Y	Y	Y	Y	Y	6	Medium	Good	Y	
T10	M	Ash	750	Ivy clad, heavily reduced in the past, Ash dieback present	Y	Y	Y	Y	Y	N	5	Large	Good		
T11	M	Oak	600	Ditch north side, clad in dead ivy, multiple Inonotus fungal fruiting bodies, reduced house side	Y	Y	Y	Y	Y	Y	6	Large	Good		
T12	M	Oak	450	Ivy clad, partially suppressed	Y	Y	Y	Y	Y	Y	6	Medium	Good		
				Multiple fungal fruiting bodies at base, ivy clad, multiple cavities, historic damage, partially suppressed, Ash dieback present, significant dead wood over road											
T13	M	Ash	800	Ivy clad, dead wood, branch cavities	Y	Y	Y	Y	Y	N	5	Large	Good		
T14	M	Oak	900	Ivy clad, significant dead wood, yellowing foliage	Y	Y	Y	Y	Y	Y	6	XL	Good		
T15	M	Oak	850	Ivy clad, significant dead wood, historic damage, partially suppressed	Y	Y	Y	Y	Y	Y	6	Large	Good		
T16	M	Oak	1050	Ivy clad	Y	Y	Y	Y	Y	Y	6	XL	Good		
T17	M	Oak	890	Ivy, significant dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
				Ivy clad, significant dead wood, historic damage, partially suppressed											
T18	M	Oak	1100	Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T19	M	Oak	580	Old pollard at 2m, ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good		
T20	M	Oak	970	Old pollard at 2m, ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T21	M	Oak	950	Old pollard at 2m, ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T22	M	Oak	770	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T23	M	Oak	960	Ivy clad, multiple bracket fungi on trunk, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T24	M	Oak	1240	Dead wood, snags	Y	Y	Y	Y	Y	Y	6	XL	Good		
T25	M	Oak	880	Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T26	M	Oak	840	Ivy, dead wood, peeling bark	Y	Y	Y	Y	Y	Y	6	Large	Good		
T27	M	Oak	830	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
				Old pollard at 2m, ivy clad, significant dead wood, poorly lifted/stubs											
T28	M	Oak	1020	Trunk swelling/wound, distorted trunk, significant dead wood, sparse canopy	Y	Y	Y	Y	Y	N	5	XL	Good		
T29	M	Oak	720	Old pollard at 1.5m, ivy clad, twin stem, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T30	M	Oak	1180	Dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T31	M	Oak	800	Epicormic growth, trunk wounds/scars, dead wood, partially suppressed	Y	Y	Y	Y	Y	Y	6	Large	Good		
T32	M	Field maple	430	Ivy clad, partially suppressed, dieback present	Y	Y	Y	Y	Y	N	5	Medium	Good		
T33	M	Ash	560	Ivy clad, significant dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good		
T34	M	Oak	800	Clad in dead ivy	Y	Y	Y	Y	Y	Y	6	Large	Good		
T35	M	Oak	800	Lower canopy cut back from cable, dead wood	Y	Y	Y	Y	Y	N	5	Large	Good		
T36	M	Oak	980	Large trunk wound with exposed heartwood, significant dead wood, previously reduced	Y	Y	Y	Y	Y	N	5	Large	Good		
T37	M	Oak	850	Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T38	M	Oak	1040	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T39	M	Oak	650	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T40	M	Oak	700	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T41	M	Ash	480	Off site, dieback present	Y	Y	Y	Y	N	Y	5	Medium	Good		
				Inonotus hispidus fungal fruiting body on ground, branch cavities, multiple woodpecker holes, significant dead wood, dead leader, partially suppressed, dieback present											
T42	M	Ash	680	Ivy clad, split branch	Y	Y	Y	Y	Y	Y	6	Large	Good		
T43	M	Oak	880	Suppressed, dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good		
T44	M	Oak	400	Significant dead wood, stubs	Y	Y	Y	Y	Y	Y	6	Large	Good		
T45	M	Oak	800	Ivy clad, trunk wound/cavity, significant dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T46	M	Oak	600	Buttress root cavity	Y	Y	Y	Y	Y	Y	6	Large	Good		
T47	M	Oak	820	Plotted manually, significant dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T48	M	Oak	920	Twin stem, dieback present	Y		Y	Y	N	Y	4	Small	Moderate		
T49	EM	Ash	270	Basal cavity, established basal sucker, dead wood, dieback present	Y	Y	Y	Y	Y	Y	6	Large	Good		
T50	M	Ash	620	Off site, upper stem wounds	Y	Y	Y	Y	Y	Y	6	XL	Good		
T51	M	Oak	900	Growing over metal fence & barb wire, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T52	M	Oak	830	Ground compaction, dead wood, snags	Y	Y	Y	Y	N	Y	5	XL	Good		
T53	M	Oak	1130	Buttress root cavity, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T54	M	Oak	1260	Basal cavities, fungal fruiting bodies between buttress roots, trunk decay, significant dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	Y	
T55	M	Oak	1020	Basal cavities, significant dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T56	M	Oak	1130	Veteran, large trunk wound/hollow/lost leader - lightning strike, brown rot	Y	Y	Y	Y	Y	Y	6	Large	Good		Y
T57	M	Oak	730	Branch cavity, significant dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T58	M	Oak	670	Old pollard at 3m, ivy clad, dead wood	Y	Y	Y	Y	N	Y	5	XL	Good		Y
T59	M	Oak	1270	Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T60	M	Oak	900	Significant dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		
T61	M	Oak	1150	Dead wood, partially suppressed, lifted	Y	Y	Y	Y	Y	Y	4	Medium	Moderate		
T62	EM	Purple Sycamore	400	Dead, multiple fungal fruiting bodies, nest?		Y	Y	Y	Y	Y	5	Large	Good		
T63	M	Dead Ash	850	Multi-stemmed	Y	Y	Y	Y	N	Y	4	Small	Moderate		
T64	EM	Ash	180	Veteran, fungal fruiting bodies at base, ivy clad, epicormic growth, old pollard at 2m, historic damage, dead wood	Y	Y	Y	Y	Y	N	5	XL	Good		Y
T65	M	Oak	1320	Restricted access, old pollard at 5m, significant dead wood	Y	Y	Y	Y	Y	N	5	XL	Good		
T66	M	Oak	1200	Ivy clad, dieback present	Y	Y	Y	Y	Y	Y	5	Small	Good		
T67	EM	Ash	210	Twin stem, ivy clad	Y	Y	Y	Y	Y	Y	6	Medium	Good		
T68	M	Field maple	400	Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T69	M	Oak	800	Multiple fungal fruiting bodies, dead wood, branch cavity	Y	Y	Y	Y	Y	Y	6	XL	Good		
T70	M	Oak	1150	Ivy clad, significant dead wood, branch cavity	Y	Y	Y	Y	Y	Y	6	XL	Good		
T71	M	Oak	1050	Veteran, large old pruning wound with exposed heartwood, significant dead wood, historic damage, restricted access	Y	Y	Y	Y	Y	N	5	XL	Good		Y
T72	M	Oak	1800	Ivy clad, dead wood	Y		Y	Y	Y	Y	5	Medium	Good		
T73	EM	Ash	300	Trunk wounds, old pollard at 2m, dieback present	Y	Y	Y	Y	Y	N	5	Medium	Good		
T74	M	Ash	530	Old coppice, dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good		
T75	M	Oak	530	Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good		
T76	M	Oak	800	Significant dead wood, partially suppressed	Y	Y	Y	Y	Y	Y	6	Large	Good		
T77	M	Oak	810	Buttress root cavity, pruning wound cavity, significant dead wood	Y	Y	Y	Y	Y	N	5	Large	Good		
T78	M	Oak	640	Branch cavities, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good		Y
T79	M	Oak	1190	Dessicated fungal fruiting bodies at base, buttress root damage, old pollard, dead wood, branch cavity	Y	Y	Y	Y	Y	Y	6	XL	Good		Y
T80	M	Oak	1180	Trunk wound, ivy, dead wood	Y	Y	Y	Y	Y	Y	6	Small	Good		
T81	M	Field maple	250		Y	Y	Y	Y	Y	Y	6	Small	Good		

			Ivy clad, basal cavity, twin stem, trunk wound with exposed heartwood, hollow, Inonotus hispidus fungal fruiting bodies, dieback present	Y	Y	Y	Y	Y	Y	6	Small	Good	
T82	M	Ash	220 In hedge, basal suckers	Y	Y	Y	Y	N	Y	5	Medium	Good	
T83	M	Holly	300 Buttress root damage, historic damage, stag headed	Y	Y	Y	Y	Y	N	5	XL	Good	Y
T84	M	Oak	940 Dead wood, lifted	Y	Y	Y	Y	Y	Y	6	Large	Good	
T85	M	Oak	780 Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
T86	M	Oak	430 Twin stem, dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good	
T87	M	Oak	500 Possible old pollard at 2m, dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good	
T88	M	Oak	120 Old coppice, dead wood, dieback present	Y	Y	Y	Y	Y	Y	6	Small	Good	
T89	M	Ash	900 Upper trunk cavity, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	
T90	M	Ash	Old trunk wound with exposed heartwood and staining, dead top	Y	Y	Y	Y	Y	N	5	Medium	Good	
T91	M	Oak	820 Cavity, dead wood, dieback present	Y	Y	Y	Y	Y	N	5	Large	Good	
T92	M	Ash	550 Suppressed, dead wood	Y	Y	Y	Y	Y	N	5	Medium	Good	
T93	M	Oak	Veteran, large trunk wound with exposed heartwood, significant historic storm damage, cavities	Y	Y	Y	Y	Y	Y	6	XL	Good	Y
T94	M	Oak	1030 Veteran, basal cavity, trunk cavities, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	Y
T95	M	Oak	1100 Off site, old pollard at 3m, dead wood	Y	Y	Y	Y	Y	N	5	XL	Good	Y
T96	M	Oak	200 Ivy	Y	Y	Y	Y	Y	Y	5	Small	Good	
T97	M	Young's weeping birch	590 Ivy clad, multi-stemmed, trunk wounds	Y	Y	Y	Y	Y	Y	6	Medium	Good	
T98	M	Willow	Ivy, old pollard at 2m, stem wound with exposed heartwood, significant dead wood	Y	Y	Y	Y	Y	N	5	XL	Good	Y
T99	M	Oak	1200 Ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	
T100	M	Oak	450 Twin stem, cavities in both, ivy clad, dieback present	Y	Y	Y	Y	Y	Y	6	Medium	Good	Y
T101	M	Ash	850 Ivy clad, significant dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
T102	M	Oak	850 Ivy clad, branch cavity	Y	Y	Y	Y	Y	Y	6	Large	Good	
T103	M	Oak	1300 Ivy clad, dead wood, branch cavity	Y	Y	Y	Y	Y	Y	6	XL	Good	
T104	M	Oak	1210 Ivy, dead wood, woodpecker hole	Y	Y	Y	Y	Y	Y	6	XL	Good	
T105	M	Oak	400 Multi-stemmed, old pollard at 1.5m	Y	Y	Y	Y	Y	N	5	Medium	Good	
T106	M	Willow	800 Ivy clad, branch cavity	Y	Y	Y	Y	Y	Y	6	Large	Good	
T107	M	Oak	1000 Ivy clad, cavity, dying	Y	Y	Y	Y	Y	Y	6	XL	Good	
T108	M	Oak	650 Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
T109	M	Oak	400 Dead wood	Y	Y	Y	Y	Y	Y	5	Medium	Good	
T110	EM	Hazel	650 Dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
T111	M	Oak	200 Dead wood	Y	Y	Y	Y	Y	Y	5	Small	Good	
T112	EM	Hawthorn	800 Dead, fungal fruiting bodies	Y	Y	Y	Y	Y	Y	6	Large	Good	
T113	M	Ash	200 Dieback present	Y	Y	Y	Y	Y	Y	5	Small	Good	
T114	EM	Ash	180 Plotted manually, twin stem, dieback present	Y	Y	Y	Y	Y	Y	5	Small	Good	
T115	EM	Ash	1600 Twin stem, trunk cavity, historic damage, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	Y
T116	M	Oak	1160 Off site, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	
T117	M	Oak	200 Partially suppressed	Y	Y	Y	Y	Y	Y	5	Small	Good	Y
T118	SM	Oak	600 Off site	Y	Y	Y	Y	Y	Y	5	Large	Good	
T119	M	Leyland cypress	830 ^{Dead} Unmanaged, includes Ash, Field maple, Hawthorn, Oak with understorey of Blackthorn, Holly, Elder, Hazel	Y	Y	Y	Y	Y	N	5	Large	Good	
T120	M	Oak	500 3 trees, some ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G1	EM	Mixed	840 middle tree clad in dead ivy	Y	Y	Y	Y	Y	Y	6	Large	Good	
G2	M	Oak	Oak, Hawthorn, Ash (with dieback), some ivy clad, ground compacted, dead wood			Y	Y	Y	Y	4	Medium	Moderate	
G3	M	Oak	400 Oak, Hawthorn, Ash (with dieback), ivy clad, dead wood	Y	Y	Y	Y	Y	Y	5	Medium	Good	
G4	EM	Mixed	600 Oak, Ash (with dieback), ivy clad	Y	Y	Y	Y	Y	Y	6	Large	Good	2 x good large
G5	EM	Mixed	Unmanaged, includes Hazel, Leyland cypress, Pear, Cherry, Horse chestnut, Lilac, Privet		Y	Y	Y	N	Y	4	Medium	Moderate	
G6	M	Mixed	700 Oak, Hawthorn, Hazel, ivy clad	Y	Y	Y	Y	Y	Y	6	Large	Good	
G7	M	Mixed	630 Hawthorn and Ash (with dieback)	Y	Y	Y	Y	N	Y	5	Large	Good	
G8	M	Mixed	500 Multi-stemmed	Y	Y	Y	Y	N	Y	5	Medium	Good	
G9	M	Goat willow											
G10	M	Goat willow											
G11	M	Oak	970 2 trees, smaller tree ivy clad, historic damage, dead wood	Y	Y	Y	Y	Y	N	5	XL	Good	
G12	M	Mixed	270 Holly & Hawthorn, ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Small	Good	
G13	EM	Mixed	300 Multi-stemmed Hazel & Field maple	Y	Y	Y	Y	N	Y	4	Medium	Moderate	
G14	M	Mixed	Predominantly Oak with Hawthorn, Field maple (trunk cavity), Ash (with dieback), ivy clad, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G15	EM	Mixed	Willow, Blackthorn, Hawthorn, Goat willow, Hazel, Oak, Holly, Spindle			Y	Y	N	Y	3	Medium	Moderate	
G16	EM	Oak	430 2 trees, dead wood	Y	Y	Y	Y	Y	N	4	Medium	Moderate	
G17	M	Oak	600 3 trees with dead wood and 1 dying	Y	Y	Y	Y	Y	Y	6	Large	Good	
G18	M	Oak	600 2 trees, ivy clad, significant dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G19	M	Oak	3 trees, largest ivy clad & twin stemmed at a metre, dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	
G20	EM	Mixed	1000 Blackthorn, Field maple, Hawthorn, Hazel, Goat willow, Oak, Ash (dieback present)			Y	Y	N	Y	3	Small	Moderate	
G21	M	Oak	590 3 trees, significant dead wood	Y	Y	Y	Y	Y	Y	6	Medium	Good	
G22	EM	Mixed	Blackthorn, Field maple, Hawthorn, Spindle, Goat willow, 200 Oak, Privet, Ash (dieback present)	Y	Y	Y	Y	N	Y	4	Small	Moderate	
G23	EM	Poplar	450 Off site, old pollard at 4m	Y	Y	Y	Y	N	Y	4	Medium	Moderate	
G24	EM	Mixed	350 1 Hawthorn, 1 Ash (dieback present)	Y	Y	Y	Y	N	Y	4	Medium	Moderate	
G25	M	Mixed	500 Off site, old pollard at 1.5m	Y	Y	Y	Y	N	Y	5	Medium	Good	
G26	M	Oak	750 3 trees, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G27	M	Oak	900 4 trees, smallest off site (not plotted), dead wood	Y	Y	Y	Y	Y	Y	6	XL	Good	
G28	EM	Mixed	300 Off site, Field maple (trunk cavity), Hawthorn, Ash (dieback)	Y	Y	Y	Y	Y	Y	5	Medium	Good	
G29	EM	Ash	380 Lifted, significant dieback	Y	Y	Y	Y	N	Y	4	Medium	Moderate	
G30	EM	Mixed	250 Predominantly Ash (dieback) with Hawthorn	Y	Y	Y	Y	N	Y	4	Small	Moderate	
G31	M	Ash	Fungal fruiting bodies, trunk cavities, significant dead wood, dieback, cut back from overhead cables	Y	Y	Y	Y	Y	N	5	Medium	Good	
G32	M	Oak	800 2 trees, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G33	M	Oak	850 Off site, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G34	M	Mixed	500 Off site Field maple, Hawthorn, Hazel, Blackthorn, Holly	Y	Y	Y	Y	N	Y	5	Medium	Good	
G35	EM	Mixed	Unmanaged hedge includes Blackthorn, Hazel, Hawthorn, Elder and trees: Goat willow, Oak, Ash (dieback), Hazel	Y	Y	Y	Y	N	Y	4	Medium	Moderate	3x moderate medium
G36	M	Mixed	Unmanaged includes mature trees, Ash (dieback), Oak, Hazel, Plum, Hawthorn, Field maple, Elder	Y	Y	Y	Y	N	Y	5	Medium	Good	
G37	EM	Small leaved lime	980 Off site, restricted access, multi-stemmed			Y	Y	Y	Y	4	XL	Moderate	
G38	EM	Mixed	Sporadic remnants of hedge, predominantly Hawthorn with Field maple, Oak, Ash (dieback)			Y	Y	Y	Y	4	XL	Moderate	
G39	M	Oak	750 2 trees, dead wood	Y	Y	Y	Y	Y	Y	6	Large	Good	
G40	M	Oak	1000 2 trees, dead wood	Y	Y	Y	Y	Y	N	5	XL	Good	
G41	M	Mixed	Northern ivy clad, Field maple (old pollard at 2m), dead wood		Y	Y	Y	Y	Y	5	Large	Good	
G42	M	Oak	3 trees, partially off site, exercise equipment attached to southern two trees, middle tree (largest), dead wood	Y	Y	Y	Y	N	Y	5	Medium	Good	
G43	M	Mixed	Off site, includes Hazel, Sycamore, Norway maple, Ash (trunk wound/cavity), some ivy clad	Y	Y	Y	Y	N	Y	5	Medium	Good	
G44	EM	Mixed	Unmanaged, predominantly off site, includes Horse chestnut, Holly, Hazel, Blackthorn, Beech, Ash	Y	Y	Y	Y	N	Y	4	Large	Moderate	
G45	EM	Mixed	Unmanaged, predominantly off site, includes Goat willow, Leyland cypress, Hawthorn, Blackthorn										
G46	M	Mixed	Includes 3 off site Oak trees, unmanaged Hawthorn, Blackthorn, Elder, Willow, Ash (dieback)		Y	Y	Y	N	Y	4	Medium	Moderate	
G47	M	Field maple	450 Remnant hedge, multi-stemmed at 1.5m	Y	Y	Y	Y	N	Y	5	Medium	Good	
G48	EM	Mixed	300 Hawthorn, Field maple, Blackthorn, Elder	Y	Y	Y	Y	N	Y	4	Medium	Moderate	
G49	EM	Mixed	Oak, Hawthorn, Blackthorn, Field maple, Norway maple, Sycamore and mature Oak & Field maple	Y	Y	Y	Y	N	Y	4	Small	Moderate	2x small moderate
G50	EM	Mixed	Dense, unmanaged includes Oak, Blackthorn, Field maple, Scots pine, Cherry, Elder	Y	Y	Y	Y	N	Y	4	Medium	Moderate	

G51	EM	Mixed	Unmanaged, predominantly Oak with Scots pine and Field maple	330				Y	Y	N	Y	3	Medium	Moderate		
G52	M	Mixed	Unmanaged with Blackthorn, Hawthorn, Field maple, Hazel, Holly, Oak, Ash (dieback), Sycamore	800		Y	Y	Y	Y	Y	Y	6	Large	Good		
G53	M	Hawthorn	2 trees, multi-stemmed	450		Y	Y	Y	Y	N	Y	5	Medium	Good		
G54	M	Mixed	Unmanaged, predominantly Oak with Sycamore, Ash (dieback), Lime, Hawthorn, False acacia, Lawson cypress, Norway maple, Laurel, ivy clad	600			Y	Y	Y	Y	Y	5	Large	Good		
G55	EM	Mixed	Unmanaged plantation includes Scots pine, Ash (dieback), Oak, Hawthorn, Sycamore (saplings), Elder	250				Y	Y	N	Y	3	Small	Moderate		
G56	M	Ash	2 trees, southern one significant dieback and ivy clad, partially suppressed	200		Y	Y	Y	Y	N	Y	5	Small	Good		
G57	EM	Mixed	Unmanaged, predominantly Laurel with Oak, Sycamore, Cherry, Ash	600				Y	Y	Y	Y	4	Large	Moderate		
G58	EM	Mixed	Unmanaged, predominantly Ash (dieback), with Oak, Blackthorn, Hawthorn, Field maple	300		Y		Y	Y	Y	Y	5	Medium	Good		
G59	M	Ash	Significant dieback, cavities, dead wood, partially suppressed	400		Y	Y	Y	Y	N	Y	5	Medium	Good		
G60	M	Hawthorn	Remnant hedge, multi-stemmed, not all plotted	300		Y	Y	Y	Y	Y	Y	6	Medium	Good	2 medium good	
G61	EM	Mixed	Unmanaged Blackthorn, Hawthorn, Elder, Holly, Oak, some ivy clad	300		Y		Y	Y	N	Y	4	Medium	Moderate		
G62	EM	Mixed	Unmanaged Field maple, Hawthorn, Elder, Hazel, Oak, occasional mature tree	400		Y		Y	Y	N	Y	4	Medium	Moderate		
G63	M	Coriscan pine	6 trees, leaning, cavities, dead wood, snags	900		Y	Y	Y	Y	N	Y	5	XL	Good		
G64	M	Mixed	Unmanaged, Larch, Ash (dieback), Lime, Hawthorn, Oak, Field maple, Blackthorn, Hazel, Elder	1000		Y	Y	Y	Y	Y	Y	6	XL	Good	Loss included within woodland loss	
G65	M	Mixed	Not all trees plotted, Ash (dieback) & Oak with occasional Holly, Hawthorn, Hazel, Elder	400			Y	Y	Y	Y	Y	5	Medium	Good		
G66	M	Mixed	Unmanaged, dense, Oak, Field maple, Holly, Elder, Blackthorn, Hawthorn, Hazel	600		Y	Y	Y	Y	N	Y	5	Large	Good		
G67	M	Mixed	1 twin stem Oak, 1 Ash (larger) with established basal sucker (with fungal fruiting bodies), branch cavities, dieback	840			Y	Y	Y	N	Y	4	Large	Moderate		
G68	M	Ash	2 trees, dieback, larger with trunk cavity, other multi-stemmed	500		Y	Y	Y	Y	Y	Y	6	Medium	Good		
G69	M	Mixed	Ash with Hawthorn & Hazel	500		Y	Y	Y	Y	N	Y	5	Medium	Good		
G70	M	Oak	Dead wood, partially suppressed, occasional Field maple, Hawthorn, Blackthorn, Ash	950		Y	Y	Y	Y	N	Y	5	XL	Good		
G71	M	Oak	2 trees, significant dead wood, larger tree with basal cavity	1000		Y	Y	Y	Y	N	Y	5	XL	Good		
G72	EM	Mixed	Hedge but several developed into trees (not plotted) includes Field maple, Ash (dieback), Buckthorn, Blackthorn, Hazel, Goat willow, Elder, Spindle	300				Y	Y	Y	Y	4	Medium	Moderate		
G73	EM	Mixed	Predominantly Elm (Dutch elm disease) with Buckthorn, Blackthorn, Hawthorn, Field maple, Hazel, Oak	300		Y		Y	Y	Y	N	4	Medium	Moderate		
G74	EM	Mixed	Predominantly Elm (Dutch elm disease) with Plum, Hawthorn, Field maple, Hazel	200		Y		Y	Y	Y	Y	5	Small	Good		
G75	EM	Mixed	Unmanaged, Field maple, Elm (Dutch elm disease), Ash (dieback), Hawthorn, Blackthorn	250		Y		Y	Y	Y	Y	5	Small	Good		
G76	M	Oak	2 trees, eastern manually plotted, ivy clad, dead wood, historic damage, branch cavities	900		Y	Y	Y	Y	Y	Y	6	XL	Good		
G77	M	Mixed	2 Oak & 1 Field maple, ivy clad, historic damage on central tree				Y	Y	Y	Y	Y	5	Small	Good		
G78	M	Mixed	2 Oak & 1 Field maple, eastern Oak ivy clad, dead wood				Y	Y	Y	N	N	3	Small	Moderate		
G79	M	Mixed	Oak & Pear, ivy clad				Y	Y	Y	N	N	3	Small	Moderate		
G80	EM	Holly	Part of hedge, dieback			Y		Y	Y	N	Y	4	Small	Moderate		
G81	M	Oak	2 trees, dead wood (significant in southern tree), southern tree ivy clad	950		Y	Y	Y	Y	N	Y	5	XL	Good		
G82	M	Oak	2 trees, ivy clad, dead wood	1000		Y	Y	Y	Y	Y	Y	6	XL	Good		
G83	M	Ash	2 off site trees, heavily reduced, dieback			Y	Y	Y	Y	N	Y	5	Small	Good		
G84	M	Oak	2 trees, lifted, reduced			Y	Y	Y	Y	N	Y	5	Small	Good		
G85	M	Mixed	Off site includes Field maple, Cherry, Holly, Leyland cypress, Blackthorn, Ash (dieback & reduced)	500			Y	Y	Y	N	Y	4	Medium	Moderate		
G86	M	Mixed	Off site Oak & Ash				Y	Y	Y	N	Y	4	Small	Moderate	4x small moderate	
G87	M	Mixed	4 Oak & 1 Wild Service Tree, dead wood				Y	Y	Y	N	N	3	Small	Moderate		
G88	EM	Mixed	Round a pond includes Oak, Ash, Field maple, Hawthorn	400		Y		Y	Y	N	Y	4	Medium	Moderate		
G89	M	Mixed	Off site Pear & 2 Leyland cypress	600		Y	Y	Y	Y	N	Y	5	Large	Good		
G90	M	Mixed	Predominantly Leyland cypress with Elder	500			Y	Y	Y	Y	Y	5	Medium	Good		
G91	EM	Ash	4 trees, most plotted manually, partially suppressed	250		Y		Y	Y	Y	N	4	Small	Moderate	4x small moderate	
G92	M	Mixed	Unmanaged, old farm equipment, tyres, debris/spoil scattered within RPA's includes Oak, Horse chestnut, Ash (dieback)	900		Y	Y	Y	Y	N	Y	5	XL	Good		
G93	M	Mixed	Unmanaged Field maple, Hawthorn, Hazel, Ash (dieback) around pond	600			Y	Y	Y	N	Y	4	Large	Moderate		
G94	EM	Mixed	Unmanaged includes Field maple, Hawthorn, Blackthorn, Ash (dieback)	400				Y	Y	Y	N	3	Medium	Moderate		
G95	M	Ash	550 3 trees, ivy clad, dead wood, dieback			Y	Y	Y	Y	N	Y	5	Medium	Good		
G96	M	Mixed	1000 3 trees, dead wood, historic damage				Y	Y	Y	Y	Y	5	XL	Good		
G97	EM	Mixed	Unmanaged includes Hawthorn, Field maple, Blackthorn, Elder, Hazel	400				Y	Y	N	Y	3	Medium	Moderate		
G98	M	Mixed	Off site includes Lawson cypress, Holly, Weeping willow, Hawthorn	400		Y	Y	Y	Y	N	Y	5	Medium	Good		
G99	M	Ash	2 trees, recent branch failure, historic damage, branch cavities in pruning wounds, water shoots, dieback			Y	Y	Y	Y	Y	Y	6	Small	Good		
G100	EM	Mixed	Unmanaged Hawthorn, Field maple, Holly, Silver birch, Hazel around pond	470		Y		Y	Y	N	Y	4	Medium	Moderate		
G101	M	Oak	2 trees, dead wood			Y	Y	Y	Y	Y	Y	6	Small	Good		
G102	M	Mixed	Southern side largely maintained as a 1.5m hedge includes Blackthorn, Hawthorn, Field maple, Hazel, Oak and Aspen	530			Y	Y	Y	Y	Y	5	Medium	Good		
G103	M	Goat willow	300 Partially suppressed				Y	Y	Y	Y	Y	6	Medium	Good		
G104	M	Mixed	1 Oak (old pollard at 3m), 1 Ash (established basal sucker, dieback)			Y	Y	Y	Y	Y	Y	6	Small	Good		
G105	M	Mixed	900 2 Oak, 2 Field maple, dead wood, some ivy clad				Y	Y	Y	Y	Y	5	XL	Good		
G106	M	Mixed	Several ivy clad, part of hedge includes Field maple & Hawthorn			Y	Y	Y	Y	N	Y	5	Small	Good		
G107	M	Mixed	610 2 Field maple, 1 Oak, partially suppressed				Y	Y	Y	N	Y	5	Large	Good		
G108	M	Mixed	850 1 Oak , 1 Ash (dieback) dead wood			Y	Y	Y	Y	Y	Y	6	Large	Good		
G109	M	Oak	2 trees, minor dead wood			Y	Y	Y	Y	Y	Y	6	Small	Good		
G110	M	Mixed	400 Predominantly Ash with Field maple & Oak, ivy, dead wood			Y	Y	Y	Y	Y	Y	6	Medium	Good		
G111	M	Mixed	Unmanaged, predominantly Field maple with Hawthorn, Elder, Ash (dieback), Oak, Willow some fallen from	600		Y	Y	Y	Y	Y	Y	6	Large	Good		
G112	M	Mixed	300 Predominantly Holly with Hawthorn, part of hedge			Y	Y	Y	Y	Y	Y	6	Medium	Good		
G113	M	Oak	1200 2 trees, ivy clad			Y	Y		Y	N	Y	5	XL	Good		
G114	M	Mixed	Unmanaged, mainly on embankment slope includes Ash (dieback), Oak, Hazel, Hawthorn, Field maple, Elder, Willow	600		Y	Y	Y	Y	N	Y	5	Large	Good		
G115	M	Mixed	Unmanaged includes Oak, Hawthorn, Silver birch, Willow (some partially collapsed)	500		Y	Y	Y	Y	Y	Y	6	Medium	Good		
G116	M	Mixed	350 Unmanaged, ivy clad, trunk wounds/cavities			Y	Y	Y	Y	N	Y	5	Medium	Good		
G117	M	Mixed	Unmanaged, mainly on embankment slope predominantly Ash (dieback) with Hawthorn, Field maple, Elder, ivy clad	300		Y	Y	Y	Y	N	Y	5	Medium	Good		

[illegible]

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater South	Unique river section reference:	1
GPS of MoRPh5	TQ 14900 26844	River section length:	~163
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	0	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	-2	
BANK FACE			
C1	Bank face riparian vegetation structure	2	
C2	Bank face tree feature richness	0	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	1	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	0	
C7	Bank face artificial bank profile extent	-3	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	2	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	2	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	3	
E7	Channel bed siltation	-3	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	0	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.279	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	0.926	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Fairly Poor	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Heavily cattle poached			
Suggested enhancement interventions to improve the river condition score			
Remove cattle grazing from riparian zone			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater South	Unique river section reference:	2
GPS of MoRPh5	TQ 14908 27038	River section length:	~198
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	4	
B2	Bank top tree feature richness	3	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	3	
C2	Bank face tree feature richness	3	
C3	Bank face natural bank profile extent	1	
C4	Bank face natural bank profile richness	1	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	4	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	1	
D2	Channel margin aquatic morphotype	1	
D3	Channel margin physical feature extent	1	
D4	Channel margin physical feature richness	1	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	4	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	3	
E7	Channel bed siltation	-3	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	0	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	1.401	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	1.318	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Suggested enhancement interventions to improve the river condition score			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater South	Unique river section reference:	3
GPS of MoRPh5	TQ 14947 27271	River section length:	~167
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	3	
B2	Bank top tree feature richness	4	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	2	
C2	Bank face tree feature richness	2	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	3	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	2	
D4	Channel margin physical feature richness	2	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	3	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	3	
E7	Channel bed siltation	-2	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	-2	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	1.219	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	0.708	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Suggested enhancement interventions to improve the river condition score			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	1
GPS of MoRPh5	TQ 15855 28260	River section length:	~161
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	3	
B2	Bank top tree feature richness	4	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	3	
C2	Bank face tree feature richness	2	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	2	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	-4	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	1	
D4	Channel margin physical feature richness	1	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	3	
E3	Channel bed hydraulic features richness	1	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	2	
E7	Channel bed siltation	-4	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	-4	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	-2	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.344	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	2.059	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Heavily cattle poached			
Suggested enhancement interventions to improve the river condition score			
Remove cattle grazing from riparian zone			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	2
GPS of MoRPh5	TQ 15651 28597	River section length:	~173
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	0	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	-2	
BANK FACE			
C1	Bank face riparian vegetation structure	2	
C2	Bank face tree feature richness	1	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	2	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	2	
C7	Bank face artificial bank profile extent	-4	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	1	
D2	Channel margin aquatic morphotype	1	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	-1	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	1	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	2	
E7	Channel bed siltation	-4	
E8	Channel bed reinforcement extent	-2	
E9	Channel bed reinforcement severity	-2	
E10	Channel bed artificial features severity	-4	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	-0.514	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	1.702	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Fairly poor	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Heavily cattle poached			
Suggested enhancement interventions to improve the river condition score			
Remove cattle grazing from riparian zone			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	3
GPS of MoRPh5	TQ 15744 28447	River section length:	~163
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	4	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	1	
C2	Bank face tree feature richness	2	
C3	Bank face natural bank profile extent	0	
C4	Bank face natural bank profile richness	0	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	-4	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	2	
E2	Channel bed tree features richness	0	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	2	
E6	Channel bed material richness	-4	
E7	Channel bed siltation	0	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	0	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.174	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	2.879	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Fairly poor	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Heavily cattle poached			
Suggested enhancement interventions to improve the river condition score			
Remove cattle grazing from riparian zone			

Appendix D

Proposed condition assessment sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
Habitat Description			
Amenity grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	N	Low species diversity expected due to heavy disturbance
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Regular management expected for amenity grassland
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scrub is likely to be present due to high levels of anticipated management
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	High levels of use anticipated, 5%< damage is likely
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Y	High levels of management should maintain bareground <10%
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	No bracken is likely to be present due to high levels of anticipated management
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Y	No INNS are likely to be present due to high levels of anticipated management
Essential criterion achieved (Yes or No)			N
Number of criteria passed			4
Condition Assessment Result		Condition Assessment Score	Score Achieved *//
Passes 6 of 7 criteria including essential criterion A		Good (3)	
Passes 4 of 7 criteria including essential criterion A		Moderate (2)	
Passes 3 or fewer criteria, A or		Poor (1)	Y
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> ,			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Other neutral grassland			
Habitat Description			
Open Green space species rich grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Meadow style grassland seeding should maintain indicator species
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Management will maintain a variety of sward heights
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Grassland managed as a meadow and sward richness will be maintained
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Grassland managed as a meadow and sward richness will be maintained
E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	Y	No INNS present on site, appropriate management should maintain absence
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Y	Proper meadow management should maintain a high species richness
Essential criterion for Good condition achieved (for non-acid)		Y	
Number of criteria passed		6	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A	Good (3)	Y	
Passes 3 or 4 criteria, including essential criterion A	Moderate (2)		

[illegible]

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
Habitat Description			
Amenity grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	N	Low species diversity expected due to heavy disturbance
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	Regular management expected for amenity grassland
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	No scrub is likely to be present due to high levels of anticipated management
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	High levels of use anticipated, 5%< damage is likely
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Y	High levels of management should maintain bareground <10%
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	No bracken is likely to be present due to high levels of anticipated management
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Y	No INNS are likely to be present due to high levels of anticipated management
Essential criterion achieved (Yes or No)		N	
Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Passes 6 or 7 criteria including	Good (3)		
Passes 4 or 5 criteria including	Moderate (2)		
Passes 3 or fewer criteria;	Poor (1)	Y	
Suggested enhancement interventions to improve condition score			
Footnotes			
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex</i>			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Other neutral grassland			
Habitat Description			
Open Green space species rich grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Meadow style grassland seeding should maintain indicator species
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Management will maintain a variety of sward heights
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Grassland managed as a meadow and sward richness will be maintained
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Grassland managed as a meadow and sward richness will be maintained
E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	Y	No INNS present on site, appropriate management should maintain absence
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Y	Proper meadow management should maintain a high species richness
Essential criterion for Good condition achieved (for non-acid)		Y	
Number of criteria passed		6	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including	Good (3)	Y	
Passes 3 - 5 criteria, including	Moderate (2)		
Passes 2 or fewer criteria;	Poor (1)		

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Other neutral grassland			
Habitat Description			
Development species rich grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Meadow style grassland seeding should maintain indicator species
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Management will maintain a variety of sward heights
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y	Grassland managed as a meadow and sward richness will be maintained
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Grassland managed as a meadow and sward richness will be maintained
E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	N	Close to residential or recreational areas so likely to face heavier disturbance
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	Higher levels of management and disturbance reduces likeliness of high species richness
Essential criterion for Good condition achieved (for non-acid)		N	
Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including	Good (3)		
Passes 3 - 5 criteria, including	Moderate (2)	Y	
Passes 2 or fewer criteria;	Poor (1)		

Condition Sheet: URBAN Habitat Type					
Habitat Types					
Sparsely vegetated land - Ruderal/Ephemeral					
Habitat Description					
SUDS					
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:				UKHab – UK Habitat Classification	
Condition Assessment Criteria			Criterion passed (Yes or No)	Notes (such as justification)	
Core Criteria - must be assessed for all urban habitat types:					
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	Species mix and composition unknown at this stage, assumed contiguous wetland habitat		
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Y	Species rich planting for wetland habitats		
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	No INNS present on site, appropriate management should maintain absence		
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:					
D	The parcel shows spatial variation and forms a mosaic of bare substrate				
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:					
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .	Y	Mainly native species will be proposed		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	Y	Wetland species will be planted		
Additional Criterion - must be assessed for Intensive green roofs only:					
F	The roof has a minimum of 50% native and non-native wildflowers.				
Additional Criterion - must be assessed for Biodiverse green roofs only:					
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm				
Essential criteria relevant for habitat type achieved (Yes or No)				Y	
Number of criteria passed				4	
Condition Assessment Result		Condition Assessment Score		Score Achieved x/✓	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic)					
• Passes all 3 core criteria;		Good (3)			
• Passes 2 of 3 core criteria;		Moderate (2)			
• Passes 0 or 1 of 3 core criteria.		Poor (1)			
Results for Green roofs and Open mosaic habitat on previously developed land					
• Passes all 3 core criteria;		Good (3)			
• Passes 2 or 3 of 4 criteria;		Moderate (2)			
• Passes 0 or 1 of 4 criteria.		Poor (1)			
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for					

[illegible]

Condition Sheet: ORCHARD Habitat Type				Return to "Selecting condition sheet" tab
UK Habitat Classification (UKHab) Habitat Type				
Grassland - Traditional orchard				
Habitat Description				
Orchard				
ukhab – UK Habitat Classification				
On-site or off-site, site name and location		Survey date and Surveyor name		
Limitations (if applicable)		Survey reference (if relating to a wider survey)		
Grid reference		Habitat parcel reference		
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)	
A	Presence of ancient ¹ and/or veteran ¹ trees. Note - this criterion is essential for achieving Good condition.	N	No ancient or veteran trees will be present after 30 years	
B	Presence of deadwood in or on trees, or on the ground: at least 20% of mature trees have deadwood associated with them. Some examples of deadwood are: standing, attached and fallen trees or limbs; dead stems; branches and branch stubs greater than 10 cm diameter; and internal cavities. The types and distribution of deadwood provide a range of habitats suitable to support a wide assemblage of saproxylic invertebrates. Note - this criterion is essential for achieving Good condition.	Y	Appropriate management should maintain some deadwood to boost orchard biodiversity	
C	Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and/or scattered scrub growing between trees can be beneficial to biodiversity, however these occupy less than 10% of ground cover.	Y	Appropriate management should maintain orchard free of scrub	
D	There is evidence of formative and/or restorative pruning to maintain longevity of trees.	Y	Appropriate management should maintain healthy fruit trees	
E	At least 95% of the trees are free from damage caused by humans or animals, for example browsing, bark stripping or rubbing on non-adjusted ties.	Y	Appropriate management should maintain healthy fruit trees	
F	Grassland is not overgrazed, poaching is not evident around the trees, with no more than 10% of trees poached under the canopy.	Y	Grassland won't be grazed.	
G	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.	Y	Species rich meadow grassland will be sown	
H	There is an absence of invasive non-native plant species ² (as listed on Schedule 9 of WCA ³) and species indicative of suboptimal condition ⁴ make up less than 10% of ground cover.	Y	No INNS present on site, appropriate management should maintain absence	
Essential criteria achieved (required for good condition - Yes or No)		N		
Number of criteria passed		7		
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved x/√		
Passes 6- 8 criteria, including essential criteria A and B.	Good (3)			
Passes 4 or 5 criteria; OR Passes 6 or 7 criteria but fails an essential criterion.	Moderate (2)	Y		
Passes 3 or fewer criteria.	Poor (1)			
Suggested enhancement interventions to improve condition score				
Footnotes				
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)				
Footnote 2 - Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement.				
Footnote 3 - Wildlife and Countryside Act 1981 (as amended).				
Footnote 4 - Species indicative of suboptimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> and common nettle <i>Urtica dioica</i> . There may be additional relevant species local to the region and/or site.				

Condition Sheet: WOODLAND Habitat Type					
UK Habitat Classification (UKHab) Habitat Types					
Woodland and forest - Lowland beech and yew woodland Woodland and forest - Lowland mixed deciduous woodland Woodland and forest - Native pine woodlands Woodland and forest - Other coniferous woodland Woodland and forest - Other Scot's pine woodland Woodland and forest - Other woodland; broadleaved Woodland and forest - Other woodland; mixed Woodland and forest - Upland birchwoods Woodland and forest - Upland mixed ashwoods Woodland and forest - Upland oakwood Woodland and forest - Wet woodland					
Habitat Description					
Proposed woodland					
UKHab - UK Habitat Classification This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: Woodland Wildlife Toolkit (syva.org.uk)					
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.					
On-site or off-site, site name and location		Survey date and Surveyor name			
Limitations (if applicable)		Survey reference (if relating to a wider survey)			
Grid reference		Habitat parcel reference			
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	2 age ranges will be present
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	2	Brower damage is present on trees around the site boundary, likely some trees will experience browser damage
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ >10% cover.	3	No INNS present on site, appropriate management should maintain absence
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	At least 5 native species will be present
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understorey shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understorey shrubs are native ⁵ .	<50% of canopy trees and <50% of understorey shrubs are native ⁵ .	3	>80% of the canopy will be native
F Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁶ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁶ .	3	Small woodland with 0% open space
G Woodland regeneration	All three classes present in woodland ⁷ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁷ .	No classes or coppice regrowth present in woodland ⁷ .	1	Young woodland forming boundaries to site, unlikely to have all age classes in condition timeframe
H Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁸ .	11% to 25% tree mortality and/or crown dieback or low-risk pest or disease present ⁸ .	Greater than 25% tree mortality and/or any high-risk pest or disease present ⁸ .	3	Appropriate management should maintain the health and integrity of the trees
I Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	No NVC community in or around where woodland will be planted, unlikely to establish within condition timeframe
J Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	1	Young woodland only likely to have one storey
K Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	Young woodland will not have Veteran trees
L Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	1	Appropriate management should allow for fallen and standing deadwood
M Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .	2	On old agricultural land, will have high soil nutrients, some enrichment likely
Total Score (out of a possible 35)				26	
Condition Assessment Result		Condition Assessment Score		Result Achieved	
Total score >32 (33 to 39)		Good (3)		Moderate	
Total score 26 to 32		Moderate (2)			
Total score <26 (13 to 25)		Poor (1)			

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Other neutral grassland			
Habitat Description			
Development species rich grassland			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Meadow style grassland seeding should maintain indicator species
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	Management will maintain a variety of sward heights
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens².	Y	Grassland managed as a meadow and sward richness will be maintained
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	Grassland managed as a meadow and sward richness will be maintained
E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	N	Close to residential or recreational areas so likely to face heavier disturbance
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N	Higher levels of management and disturbance reduces likeliness of high species richness
Essential criterion for Good condition achieved (for non-acid)		N	
Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved */√	
Acid grassland types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)		
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional	Good (3)		
Passes 3 or 4 criteria, including essential criterion A and additional	Moderate (2)	Y	
Passes 2 or fewer criteria, including essential criterion A and additional	Poor (1)		

Condition Sheet: ORCHARD Habitat Type			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Traditional orchard			
Habitat Description			
Orchard			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location		Survey date and Surveyor name	
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference		Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	Presence of ancient ¹ and or veteran ¹ trees. Note - this criterion is essential for achieving Good condition.	N	No ancient or veteran trees will be present after 30 years
B	Presence of deadwood in or on trees, or on the ground: at least 20% of mature trees have deadwood associated with them. Some examples of deadwood are: standing, attached and fallen trees or limbs; dead stems; branches and branch stubs greater than 10 cm diameter; and internal cavities. The types and distribution of deadwood provide a range of habitats suitable to support a wide assemblage of saproxylic invertebrates. Note - this criterion is essential for achieving Good condition.	Y	Appropriate management should maintain some deadwood to boost orchard biodiversity
C	Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and or scattered scrub growing between trees can be beneficial to biodiversity, however these occupy less than 10% of ground cover.	Y	Appropriate management should maintain orchard free of scrub
D	There is evidence of formative and or restorative pruning to maintain longevity of trees.	Y	Appropriate management should maintain healthy fruit trees
E	At least 95% of the trees are free from damage caused by humans or animals, for example browsing, bark stripping or rubbing on non-adjusted ties.	Y	Appropriate management should maintain healthy fruit trees
F	Grassland is not overgrazed, poaching is not evident around the trees, with no more than 10% of trees poached under the canopy.	Y	Grassland won't be grazed.
G	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.	Y	Species rich meadow grassland will be sown
H	There is an absence of invasive non-native plant species ² (as listed on Schedule 9 of WCA ³) and species indicative of suboptimal condition ⁴ make up less than 10% of ground cover.	Y	No INNS present on site, appropriate management should maintain absence
Essential criteria achieved (required for good condition - Yes or No)		N	
Number of criteria passed		7	
Condition Assessment Result (out of 8 criteria)	Condition Assessment Score	Score Achieved *//	
Passes 6- 8 criteria, including essential criteria A and B.	Good (3)		
Passes 4 or 5 criteria; OR Passes 6 or 7 criteria but fails an essential criterion.	Moderate (2)	Y	
Passes 3 or fewer criteria.	Poor (1)		

Condition Sheet: SCRUB Habitat Type			
Habitat Types			
Habitat Description			
Proposed mixed scrub			
For Dunes with sea buckthorn see:		Dunes with sea-buckthorn (Dunes with Hippophae rhamnoides) - Special Areas of Conservation (incc.gov.uk)	
For other scrub types see:		ukhab – UK Habitat Classification	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).¹ - At least 80% of scrub is native, - There are at least three native woody species², - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i>, common juniper <i>Juniperus communis</i>, sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i>, which can be up to 100% cover).	Y	Mixed native species planting and management for diversity will maintain good example of habitat
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Y	Mixed native species planting and management for diversity will maintain good range of ages as scrub is cleared on rotation to allow for young plants to grow
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Y	No INNS present on site, appropriate management should maintain absence
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Y	Scrub is within rough/meadow grassland and on woodland edges allowing for ecotones
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N	Scrub will not be extensive enough for true clearings and glades
		Number of criteria passed 4	
Condition Assessment Result (out of 5)	Condition Assessment Score	Score Achieved x/√	
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	Y	
Passes 2 or fewer criteria	Poor (1)		

Condition Sheet: URBAN Habitat Type			
Habitat Types			
Sparsely vegetated land - Ruderal/Ephemeral			
Habitat Description			
SUDS			
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab – UK Habitat Classification
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all urban habitat types:			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	Species mix and composition unknown at this stage, assumed contiguous wetland habitat
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Y	Species rich planting for wetland habitats
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	No INNS present on site, appropriate management should maintain absence
Additional Criterion - must be assessed for Open mosaic habitat on previously developed land only:			
D	The parcel shows spatial variation and forms a mosaic of bare substrate		
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .	Y	Mainly native species will be proposed
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	Y	Wetland species will be planted
Additional Criterion - must be assessed for Intensive green roofs only:			
F	The roof has a minimum of 50% native and non-native wildflowers.		
Additional Criterion - must be assessed for Biodiverse green roofs only:			
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm		
Essential criteria relevant for habitat type achieved (Yes or No)			Y
Number of criteria passed			4
Condition Assessment Result	Condition Assessment Score	Score Achieved x1/√	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic)			
• Passes all 3 core criteria;	Good (3)		
• Passes 2 of 3 core criteria;	Moderate (2)		
• Passes 0 or 1 of 3 core criteria.	Poor (1)		
Results for Green roofs and Open mosaic habitat on previously developed land			
• Passes all 3 core criteria;	Good (3)		
• Passes 2 or 3 of 4 criteria;	Moderate (2)		
• Passes 0 or 1 of 4 criteria.	Poor (1)		
Results for Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for			
• Passes all 3 core criteria;	Good (3)		
• Passes 3 or 4 of 5 criteria;	Moderate (2)	Y	
• Passes 2 or fewer of 5 criteria.	Poor (1)		

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Types			
Individual trees – Urban trees			
Habitat Description			
Street Trees			
Individual trees (description applied to the urban or rural environment):			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Y/N	Some trees will be native, some trees won't be
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	All trees are individual and pass this condition
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N	Trees will not be mature in 30 years
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y	Trees will be managed according to British Standards and should not fail this condition
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	Trees will likely be too young and healthy to form proper ecological niches
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	All trees will be oversailing at least 20% vegetation
Number of criteria passed		3 or 4	
Condition Assessment Result (out of 6)		Condition Ass	Score Achieved ×/✓
Passes 5 or 6 criteria		Good (3)	
Passes 3 or 4 criteria		Moderate (2)	Y
Passes 2 or fewer criteria		Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat			

Condition sheet: WOODLAND Habitat Type					
UK Habitat Classification (UKHab) Habitat Types					
Woodland and forest - Lowland beech and yew woodland Woodland and forest - Lowland mixed deciduous woodland Woodland and forest - Native pine woodlands Woodland and forest - Other coniferous woodland Woodland and forest - Other Scot's pine woodland Woodland and forest - Other woodland; broadleaved Woodland and forest - Other woodland; mixed Woodland and forest - Upland birchwoods Woodland and forest - Upland mixed ashwoods Woodland and forest - Upland oakwood Woodland and forest - Wet woodland					
Habitat Description					
Proposed woodland					
UKHab - UK Habitat Classification This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here: Woodland Wildlife Toolkit (syva.org.uk)					
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.					
On-site or off-site, site name and location		Survey date and Surveyor name			
Limitations (if applicable)		Survey reference (if relating to a wider survey)			
Grid reference		Habitat parcel reference			
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	2 age ranges will be present
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in less than 40% of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	2	Brower damage is present on trees around the site boundary, likely some trees will experience browser damage
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ >10% cover.	3	No INNS present on site, appropriate management should maintain absence
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	3	At least 5 native species will be present
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understorey shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understorey shrubs are native ⁵ .	<50% of canopy trees and <50% of understorey shrubs are native ⁵ .	3	>80% of the canopy will be native
F Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁶ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁶ .	3	Small woodland with 0% open space
G Woodland regeneration	All three classes present in woodland ⁷ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁷ .	No classes or coppice regrowth present in woodland ⁷ .	1	Young woodland forming boundaries to site, unlikely to have all age classes in condition timeframe
H Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁸ .	11% to 25% tree mortality and/or crown dieback or low-risk pest or disease present ⁸ .	Greater than 25% tree mortality and/or any high-risk pest or disease present ⁸ .	3	Appropriate management should maintain the health and integrity of the trees
I Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	No NVC community in or around where woodland will be planted, unlikely to establish within condition timeframe
J Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	1	Young woodland only likely to have one storey
K Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	Young woodland will not have Veteran trees
L Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	1	Appropriate management should allow for fallen and standing deadwood
M Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ .	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground ¹⁴ .	2	On old agricultural land, will have high soil nutrients, some enrichment likely
Total Score (out of a possible 35)				26	
Condition Assessment Result		Condition Assessment Score		Result Achieved	
Total score >32 (33 to 39)		Good (3)		Moderate	
Total score 26 to 32		Moderate (2)			
Total score <26 (13 to 25)		Poor (1)			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater South	Unique river section reference:	1
GPS of MoRPh5	TQ 14900 26844	River section length:	~163
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	0	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	-2	
BANK FACE			
C1	Bank face riparian vegetation structure	2	
C2	Bank face tree feature richness	0	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	1	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	0	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	2	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	2	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	3	
E7	Channel bed siltation	-3	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	0	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.51	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	0.926	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Suggested enhancement interventions to improve the river condition score			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	1
GPS of MoRPh5	TQ 15855 28260	River section length:	~161
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	3	
B2	Bank top tree feature richness	4	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	3	
C2	Bank face tree feature richness	2	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	2	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	1	
D4	Channel margin physical feature richness	1	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	3	
E3	Channel bed hydraulic features richness	1	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	2	
E7	Channel bed siltation	-4	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	-4	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	-2	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.652	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	2.059	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Suggested enhancement interventions to improve the river condition score			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	2
GPS of MoRPh5	TQ 15651 28597	River section length:	~173
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	0	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	2	
C2	Bank face tree feature richness	1	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	2	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	2	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	1	
D2	Channel margin aquatic morphotype	1	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	-1	
CHANNEL BED			
E1	Channel aquatic morphotype richness	0	
E2	Channel bed tree features richness	1	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	0	
E6	Channel bed material richness	2	
E7	Channel bed siltation	-4	
E8	Channel bed reinforcement extent	-2	
E9	Channel bed reinforcement severity	-2	
E10	Channel bed artificial features severity	-4	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	-0.053	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	1.702	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Fairly poor	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Heavily cattle poached			
Suggested enhancement interventions to improve the river condition score			
Remove cattle grazing from riparian zone			

Condition + Encroachment Reporting Sheet: RIVERS and STREAMS			
River Condition Assessment (RCA) + Encroachment results for: Priority rivers, Other rivers and streams,			
Site name/location:	Southwater North	Unique river section reference:	3
GPS of MoRPh5	TQ 15744 28447	River section length:	~163
Rivers and streams form naturally draining networks within the wider landscape. A long history of channel modification and artificial water body creation has led to widespread loss of naturally formed and functioning habitats. The River Condition Assessment (RCA) method requires one or more MoRPh5 sub-reach sample(s) for a longer length of channel, the river(or canal) section, that has consistent condition throughout and is represented by a single line within the Biodiversity Metric tool. This sheet provides information about the <u>full river (or canal) section length</u> based on a site walkover plus representative RCA (MoRPh5) results for this section.			
THE RESULTS OF THE 32 RCA INDICATORS FOR EACH RIVER SECTION SHOULD BE INSERTED BELOW WITH NOTES TO EXPLAIN RECOMMENDATIONS FOR THE WHOLE CHANNEL LENGTH:			
Condition Assessment Criteria		RCA Index values	Notes / Justification
RCA INDEX ID	RCA INDEX NAME	Insert values -4 to 0 OR 0 to 4; Highlight those >2 OR <-2	Explain where significant, the influence of high/low RCA indices on overall river condition
BANK TOP			
B1	Bank top vegetation structure	2	
B2	Bank top tree feature richness	4	
B3	Bank top water-related features	0	
B4	Bank top NNIPS cover	0	
B5	Bank top managed ground cover	0	
BANK FACE			
C1	Bank face riparian vegetation structure	1	
C2	Bank face tree feature richness	2	
C3	Bank face natural bank profile extent	3	
C4	Bank face natural bank profile richness	2	
C5	Bank face natural bank material richness	1	
C6	Bank face bare sediment extent	1	
C7	Bank face artificial bank profile extent	0	
C8	Bank face reinforcement extent	0	
C9	Bank face reinforcement material severity	0	
C10	Bank face NNIPS cover	0	
CHANNEL MARGIN			
D1	Channel margin aquatic vegetation extent	0	
D2	Channel margin aquatic morphotype	0	
D3	Channel margin physical feature extent	0	
D4	Channel margin physical feature richness	0	
D5	Channel margin artificial features	0	
CHANNEL BED			
E1	Channel aquatic morphotype richness	2	
E2	Channel bed tree features richness	0	
E3	Channel bed hydraulic features richness	0	
E4	Channel bed natural features extent	0	
E5	Channel bed natural features richness	2	
E6	Channel bed material richness	-4	
E7	Channel bed siltation	0	
E8	Channel bed reinforcement extent	0	
E9	Channel bed reinforcement severity	0	
E10	Channel bed artificial features severity	0	
E11	Channel bed NNIPS extent	0	
E12	Channel bed filamentous algae extent	0	
Overview of RCA and river section assessment			
River Condition Assessment PRELIMINARY	0.745	River Type and class bands:	K - Straight/sinuuous, coarsest SA, average SI
River Shape index:	2.879	Is the river channel OVERDEEP? If yes, what supporting evidence is provided?	No
River Condition Assessment FINAL CLASS:	Moderate	IS THE RCA FINAL CLASS MODIFIED ? If yes, why and what supporting evidence is provided?	
Summary of Encroachment and recommendations			
Suggested enhancement interventions to improve the river condition score			

ANNEX B

2026 Bat Survey Report

LAND NORTH-WEST OF SOUTHWATER, HORSHAM
INTERIM BAT SURVEY REPORT

Prepared for Berkeley Strategic Land Ltd

by

Hankinson Duckett Associates

HDA ref: 2090.78

May 2026

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APPENDICES

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B	Building Photographs
C	Bat Activity Transect Coverage and Automated Detector Location Plan
D	Bat Activity Survey Summary Plan

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes an interim bat survey report carried out within approximately 116ha of land north-west of Southwater, West Sussex, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference TQ154274. The study was commissioned by Berkeley Strategic Land Ltd in April 2025.

1.1.2 The site lies on the north-western edge of the village of Southwater and comprises a series of arable fields, semi-improved grassland fields, and improved grassland fields bordered by hedgerows, treelines and fence lines. Other habitats present include areas of broadleaved woodland, mixed woodland, and tall ruderal vegetation. In addition, Marlpost Gill flows in a southerly direction through the western part of the site and a second stream flows east to west through the north. The site is bordered to the west by agricultural land and Two Mile Ash road and associated residential properties, beyond which are arable fields; to the north by the A24, industrial units, and agricultural land; to the south by Kirsty's Wood, and Bonfire Hill road with associated residential properties and grassland fields; and to the east by Worthing Road, beyond which is the settlement of Southwater.

1.1.3 The location and boundary of the site are shown in *Appendix A*.

1.2 Legislative context

1.2.1 All UK bat species are protected as 'European Protected Species' (EPS) under the 2017 Conservation of Habitats and Species Regulations (as amended). In relation to an EPS, the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

1.2.2 In addition, all UK bats are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

1.2.3 If works are planned that are likely to constitute an offence under the current legislation, an application for a derogation licence should be made to Natural England.

1.2.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also identified as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Section 40 of the Act, together with planning policy and guidelines, require planning authorities to regard these species as a material consideration in the planning process.

1.3 Development proposals

1.3.1 Outline planning application, with all matters reserved (except for primary access to the highway) for a phased development comprising: the demolition of existing buildings and the construction of residential dwellings (including affordable housing) (Use Classes C2 and C3); a mixed-use neighbourhood centre (Use Classes E and F); education facilities (Use Class F1(a)); business and employment floorspace (Use Classes B2, B8 and E(g)); redevelopment of existing agricultural buildings including construction of a building for community use (Use Class F2); improvements to public rights of way; sports pitches; gypsy and traveller pitches/plots; public open space; landscaping, and associated infrastructure.

1.4 Scope and purpose of the report

1.4.1 Bat surveys, including bat roost and bat activity surveys, have previously been carried out at the site by HDA between June 2021 and August 2022. Confirmed and possible occasional/transitory bat day roosts were recorded within three buildings and nine trees for individual/low numbers of Common Pipistrelle, Soprano Pipistrelle, Brandt's bat, Bechstein's bat and unidentified bat species. The bat activity surveys recorded low to moderate levels of bat activity across the site, with species recorded including Common Pipistrelle, Soprano Pipistrelle, Noctule, *Myotis* sp. bat, Brown Long-eared bats, Serotine, Leisler's bat, Barbastelle and Nathusius' Pipistrelle bat (HDA, 2022).

1.4.2 In recognition of the continued presence of suitable habitats on site, the time that has elapsed since the 2021/2022 survey, the proposed development of the site, and within the legislative context set out in *Section 1.2*, the suite of bat surveys was subsequently updated to confirm use of the site by roosting, foraging and commuting bats, and to determine the need for any licensing or mitigation in relation to bats. Specifically, the aims of the study are:

1. To identify potential bat roosts in structures and trees within the site, where potentially affected by the proposed development;

2. To provide an assessment of the importance of the site for foraging and commuting bats;
3. To determine any further survey, mitigation and/or licensing requirements relating to bats; and
4. To provide outline recommendations for any mitigation and/or enhancement required to ensure that the development avoids adverse impacts on bats and, where possible, provides enhancements to support the long-term favourable conservation status of bats in accordance with nature conservation legislation, planning policy and the 2006 NERC Act.

Please note that this is an interim report and will be updated in 2026 on completion of the Phase 2 bat roost surveys.

2 METHODOLOGY

2.1 Introduction

- 2.1.1 The methodology followed in relation to all bat survey work undertaken is consistent with legislation and good practice guidelines set out by the Bat Conservation Trust (BCT, 2023) at the time of survey. The following sections detail the suite of surveys undertaken to inform the proposed development and the results of these surveys are provided in *Section 3*.

2.2 Phase 1 bat scoping survey

- 2.2.1 A Phase 1 bat scoping survey was undertaken of all buildings and trees within the site on the 5th, 10th, 18th and 19th March 2026 by Clare Bird MCIEEM, Charlotte Grant and Kate Thatcher of HDA. The buildings and trees within and immediately adjacent to the site were assessed for their potential to support roosting bats and classified according to their potential. The methodology for each has been outlined below.

Phase 1 building survey

- 2.2.2 All buildings within the site were inspected externally from ground level using binoculars and a powerful torch to identify and investigate any potential entry and exit points such as missing roof tiles, loose fascias and lifted lead flashing, and to look for evidence of entry/exit in the form of staining, discolouration and/or scratch marks.
- 2.2.3 Internally, buildings were searched exhaustively where possible, to look for evidence of current or former occupation by bats. A powerful torch was also used to investigate any accessible cavities, crevices and recesses in each building.
- 2.2.4 In view of the findings of the internal/external inspections, the potential of the buildings to support roosting bats ('confirmed roost', 'high', 'moderate', 'low' or 'negligible') was

assessed in accordance with current best practice guidelines at the time of the survey. Assessment of bat roosting potential requires consideration of a number of criteria, including the design and construction of the building or structure, the size and location of potential features and access points, the position of the building or structure, aspect, geographical location, surrounding land use, adjacent landscape linkages and historic bat surveys undertaken.

Phase 1 tree survey

2.2.5 All trees within and adjacent to the site were inspected from ground-level with the aid of binoculars and a powerful torch to identify potential features suitable for use by roosting bats. Potential features include splits, cracks and cavities, peeling bark, woodpecker holes, broken branches and a covering of Ivy where this is of a sufficient age to provide a suitable microclimate between the tree and Ivy stem(s).

2.2.6 In accordance with best practice guidelines at the time of the surveys (BCT, 2023), trees were placed into one of following four categories based on the nature, size, location and quality of features present in each tree and surrounding habitat:

- *Negligible suitability* – Trees with no or negligible features for roosting bats;
- *Low suitability (PRF-L)* – Trees supporting features only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat;
- *Moderate or higher suitability (PRF-M)* - Trees supporting features suitable for multiple bats and may therefore be used by a maternity colony; or
- *Known or confirmed bat roost.*

2.3 Phase 2 bat roost surveys

2.3.1 The results of the Phase 1 bat roost scoping survey of buildings and trees were used to determine the need for Phase 2 survey work of buildings and trees potentially affected by the emerging development proposals. Emergence/climbing surveys are proposed to be undertaken in 2026 to determine presence/probable absence of roosting bats and, where present, identify species and numbers. On completion of the Phase 2 roost surveys, this interim report will be updated.

2.4 Phase 2 bat activity survey

Bat activity transects

2.4.1 In order to provide an assessment of the importance of the site for foraging and commuting bats, dusk activity surveys were undertaken between April to October 2025. Due to the size of the site, the site was divided into two survey area transects. The survey area transect locations are shown in *Appendix C*.

2.4.2 Surveyors carrying hand-held bat detectors¹ walked transects of the site, with listening stops at regular intervals for periods of up to 5 minutes. Visual observations of bats and bat call registrations were noted, recording time, location, activity and, where known, species. Recordings of foraging and/or commuting activity made using digital devices were subsequently analysed to determine the identity of any unconfirmed species recorded during the surveys. Times and dates of surveys are given in *Table 1* below, along with weather conditions.

Table 1: Details of 2025 bat activity surveys

Date	Transects	Sunset	Time	Conditions
14/05/2025	1 & 2	20:48	20:48 – 23:29	Dry, 0% cloud cover, Beaufort Scale = 2, 19-12°C
26/08/2025	1 & 2	19:59	19:59 – 22:45	Dry, 20% cloud cover, Beaufort Scale = 2, 20-15°C
06/10/2025	1 & 2	18:27	18:50 – 21:28	Dry, 30% cloud cover, Beaufort Scale = 1, 16-10°C

Automated surveys

2.4.3 Nine programmable electronic bat detectors² were positioned in strategic locations for a minimum of five nights on seven occasions between April and October 2025 to provide an indication of bat activity across the site. Specifically, to:

1. Provide an indication of the frequency of species-specific bat activity across the bat active period in the following locations:
 - a. Along the treeline associated with the Downs Link aligned north-west to south-east in the south of the site, proposed for public open space and sports pitches (A in *Appendix C*);
 - b. Along Two Mile Ash Gill an area of ancient woodland in the south-west of the site, bordered by grassland fields to the east proposed to be lost to the development (B in *Appendix C*);
 - c. Along the eastern margin of Courtland Wood an area of ancient woodland in the south-west of the site, bordered by grassland fields to the east proposed to be lost to the development (C in *Appendix C*);
 - d. Along hedgerows in the west of the site, to be partially removed to accommodate access points and bordered by grassland fields proposed to be lost to the development (D in *Appendix C*);
 - e. Along the western margin of Smith's Copse an area of ancient woodland on the eastern site boundary, bordered by grassland fields to the west proposed to be lost to the development (E in *Appendix C*);

¹ Elekon Bat Logger M2 Bat Detector.

² Anabat Swifts & Rangers used with 'Analook and Kaleidoscope' software.

- f. Along hedgerows on the western site boundary, and bordered by fields to the east proposed to be lost to the development (F in *Appendix C*);
 - g. Along hedgerows in the north of the site, to be partially removed to accommodate access points and bordered by grassland fields proposed to be lost to the development (G in *Appendix C*);
 - h. Along woodland margins in the north-east of the site, to be partially removed to accommodate a main access route and bordered by grassland fields proposed to be lost to the development (H in *Appendix C*); and
 - i. Along a woodland margin in the north of the site, to be partially removed to accommodate a main access route and bordered by grassland fields proposed to be lost to the development (I in *Appendix C*).
2. Identify any differences in species-specific bat activity at the seven locations.
 3. To provide an overview of bat activity across the bat active period at the site.

2.4.4 The detectors were programmed to record all bat activity. Details of the dates of the automated bat detector deployment are provided in *Table 2* below, and the location of each detector deployed is shown in *Appendix C*.

Table 2: Details of Phase 2 automated bat detector surveys

Deployment and collection dates	Static Locations
25.04.2025 – 02.05.2025	A to I – deployed for 7 nights (Locations A to I ran for 7 nights)
14.05.2025 – 19.05.2025	A to I – deployed for 5 nights (Location A ran for 3 nights & Locations B to I data corrupted)
19.06.2025 – 24.06.2025	A to I – deployed for 5 nights (Locations A to G & I ran for 5 nights & Location H ran for 3 nights)
08/07/2025 - 15/07/2025	A to I – deployed for 7 nights (Locations A & C to G data corrupted, Locations B ran for 5 nights & Locations H & I ran for 7 nights)
14.08.2025 - 20.08.2025	A to I – deployed for 6 nights (Locations A & D ran for 3 nights, Location B ran for 4 nights, Locations C, E & F ran for 2 nights, Location G ran for 5 nights, Location H failed to record & Location I ran for 6 nights)
16.09.2025 – 22.09.2025	A to I – deployed for 6 nights (Location A failed to record, Locations B & E ran for 3 nights, Locations C & D ran for 4 nights, Location F ran for 2 nights, Locations G to I ran for 6 nights)
16.10.2025 – 21.10.2025	A to I – deployed for 5 nights (Locations A & E to I ran for 5 nights, Location B ran for 2 nights, Location C ran for 4 nights, Location D failed to record)

2.5 Limitations of surveys

2.5.1 During the automated activity survey, the static detectors at Location H in August 2025, Location A in September 2025 and Location D in October 2025 failed to record, and the static detector data collected in Locations B to I in May 2025 and Locations A and C to G in July 2025 became corrupted preventing detailed analysis³. This is not however considered to be a significant limitation to the overall findings of the bat activity survey as: (i) the majority of automated detectors deployed frequently recorded over the intended five consecutive nights in the majority of locations, and this additional information was subject to analysis; (ii) the automated detectors were well distributed around the site and recorded for an extensive period over the season during which bats are active; (iii) the automated surveys were complimented by the walked activity transects, which were successfully implemented with no limitations encountered; (iv) the first activity transect survey was carried out on the 14th May 2025 during the period of missing data, and subsequently some information is available on bat activity levels during this period; and (v) the majority of habitats of higher interest to foraging and commuting bats are proposed to be retained within the development proposals including the majority of the deciduous woodland, hedgerows and mature trees. It is therefore considered that the findings of the bat activity survey work allow for a proportionate assessment of the likely importance of the site for foraging and commuting bats, and to form the basis of the recommendations provided in *Section 5* of this report.

2.5.2 No other limitations were encountered over the course of the surveys, and all surveys followed best practice guidelines at the time of survey (BCT, 2023) and were conducted at an appropriate time of year, under favourable weather conditions and with an appropriate level of survey effort in terms of the number of survey visits undertaken.

3 RESULTS

3.1 Phase 1 building scoping survey

3.1.1 All buildings identified as having potential to support roosting bats within the site are described in *Table 3* below and their locations are given in *Appendix A*. Photograph references relate to the photographs provided in *Appendix B*.

³ Despite multiple attempts by different IT specialists, the data was found to be irretrievable.

Table 3: Results of Phase 1 bat scoping survey of buildings (including key findings of previous bat surveys, where appropriate)

Building	Description	Findings	Bat roost potential
B1 (Photo 1)	A single-storey, metal frame hay shelter with open sides and a pitched corrugated metal roof.	External The roof is generally very well sealed with no gaps for crevice dwelling bats. Internal The building is light due to the lack of walls, is likely to fluctuate in temperature and does not contain suitable roosting features. Evidence of bat activity None recorded.	Negligible
B2 (Photos 1 & 2)	Single-storey, single skinned cattle shed with wooden panelling, open sides, windows, and pitched corrugated metal roof. A single skinned, breeze block extension with a corrugated metal roof is attached to the western elevation.	External The building is likely to fluctuate in temperature due to the lack of walls and the presence of a metal roof. Internal Building open, well-lit and likely to fluctuate in temperature. Evidence of bat activity None recorded.	Negligible
B3 & B4 (Photos 2 & 3)	Two large, single-storey, single skinned sheds comprising three walls constructed of breezeblock bases and open wooden panelling tops and pitched asbestos roofs.	External No suitable features for roosting bats recorded. Internal Building open on one side, well-lit and likely to fluctuate in temperature. Evidence of bat activity None recorded.	Negligible
B5 (Photo 4)	Bridge going underneath footpath with brick walls and iron girders as ceiling.	External No suitable features for roosting bats recorded. Internal Limited gaps in from missing mortar and gaps between the brickwork. Evidence of bat activity None recorded.	Low
B8 (Photo 5)	A single skinned, single-storey, corrugated metal shelter with two open sides and a pitched, corrugated asbestos roof with no lining.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded.	Negligible
B9 (Photos 6 & 7)	Single-storey, single skinned corrugated metal building with two open sides and a sloping corrugated metal roof.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded	Negligible

B10 (Photo 7)	Single-storey, shelter with concrete supports, open sides and a pitched corrugated asbestos roof.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded	Negligible
B11 (Photos 6 - 9)	A single-storey disused milking room, with solid breeze block walls and a pitched asbestos roof.	External: Potential bat roosting features are limited to gaps between corrugated sheeting on the roof and walls and gaps around the doors. Internal: Ceiling has an inaccessible void above. Evidence of bat activity None recorded.	Low
B12 (Photos 7, 8 & 10 - 14)	A T-shaped single skinned, brick cow shed. Comprising a two-storey building with a pitched tiled roof lined with roofing felt and brick and waney edge boarding walls. Connected to the building is a large single-storey cattle shed with a pitched tiled roof which is unlined.	External Potential bat roosting features include multiple lifted and missing tiles, open doorways and gaps under rafters and between the waney edge boarding. Internal Access to the second storey of the building was limited due to the condition of the floor. The ceiling between the first and second floors in the two-storey section of the building is boarded above and below the rafters to form a cavity within which occasional holes are present. In addition, the walls are lined with waney edge boarding that have gaps leading to cavities between the internal and external wall. The two-storey section of the building is constructed in a traditional method with mortise and tenon joints. Evidence of bat activity Below one mortise and tenon joint on the ground floor of the two-storey section of the building was staining and approximately 100 bat droppings. The 2022 emergence surveys recorded day roosts for up to six Common Pipistrelle bats, one Soprano Pipistrelle and possibly one <i>Myotis</i> sp. bat (call indicative of Brandt's bat) (HDA, 2022).	Confirmed roost
B13 & B14 (Photo 15)	Two single-storey, metal frame shelters with two open sides and pitched corrugated metal roofs.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity: None recorded	Negligible
B15 (Photo 16)	A large single-storey barn with a double pitched, corrugated asbestos roof and walls constructed of a single skinned breeze block base above which were wooden slated walls.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded.	Negligible

B16 (Photos 1 & 2)	A single-storey grain store, with single-skinned corrugated metal walls and a sloping corrugated metal roof.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded.	Negligible
B17 (Photo 17)	A single-storey static caravan, with plastic walls and a pitched roof covered with roofing felt.	External No suitable features for roosting bats recorded. Internal No suitable features for roosting bats recorded. Evidence of bat activity None recorded.	Negligible

3.2 Phase 1 tree survey

3.2.1 All trees identified as having potential to support roosting bats within the site are described in *Table 4* below and their locations are given in *Appendix A*. Tree numbers align with the Arboricultural Impact Assessment (Ruskin, 2026).

Table 4: Results of Phase 1 bat scoping tree survey

Tree ref*	Species	Findings	Bat roost potential
T5	Ash	South-eastern aspect trunk cavity at 8m. Northern aspect trunk cavity at 1.5m. South-western aspect trunk cavity at 8m. Southern aspect branch cavities at 5m and 8m. Southern aspect tear-out wound at 9m.	Moderate or higher bat roost potential (PRF-M)
T6	Oak	Of an age that suitable roost features may be present that were not visible from ground level	Low bat roost potential (PRF-I)
T7	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T10	Ash	Western aspect branch cavity at 6m. South-western aspect branch cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T11	Oak	Western aspect small branch cavity at 4m. South-western aspect small branch cavity at 6m. Eastern aspect small trunk cavity at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T12	Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T13	Ash	Western aspect trunk cavity at 6m. South-western aspect branch cavity at 6m. South-western aspect branch cavity at 12m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T14	Oak	Southern aspect branch cavity at 7m. South-western aspect deadwood with lifted bark at 7m. Western aspect occluded wood at 7m. Ivy covered and of an age that further suitable roost	Low bat roost potential (PRF-I)

Tree ref*	Species	Findings	Bat roost potential
		features may be present that were not visible from ground level.	
T15	Oak	Western aspect occluded wood at 10m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T16	Oak	Western aspect branch cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T17	Oak	Southern aspect branch cavity at 2m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T18	Oak	North-western aspect trunk cavity at 5m. Western aspect possible trunk cavity at 5m. North-eastern aspect dead branch with cavities. South-western aspect possible branch cavity at 10m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T19	Oak	North-eastern aspect two branch cavities at 6m. Western aspect trunk cavity at 10m. Western aspect occluded wood at 8m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T20	Oak	Eastern aspect trunk cavity at 2m. Eastern aspect split branch at 5m. Eastern aspect branch cavity at 4m. North-western aspect trunk cavity at 5m. Southern aspect possible branch cavities at 5m and 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T21	Oak	Eastern aspect branch cavity at 10m. North-western aspect branch cavity at 8m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T22	Oak	Southern aspect branch cavities at 5m and 12m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T23	Oak	Eastern aspect collar around broken branch at 7m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T24	Oak	Western aspect tear-out at 12m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T25	Oak	Southern aspect woodpecker hole at 6m. South-western aspect branch cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T26	Oak	Southern aspect split branch with cavities at 6m. Western aspect split branch at 7m. Western aspect branch cavity at 5m. Northern aspect possible cavity at 5m. Eastern aspect hole at end of branch at 4m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T27	Oak	Southern aspect branch cavity and occluded wood at 10m.	Low bat roost potential

Tree ref*	Species	Findings	Bat roost potential
		Northern aspect possible trunk cavity with occluded wood at 10m.	(PRF-I)
T28	Oak	Southern aspect peeling bark at 2m. Southern aspect cut branch with lifted bark and large holes at 4m. Eastern aspect trunk cavities at 7m. Southern aspect possible branch cavity at 10m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level	Moderate or higher bat roost potential (PRF-M)
T29	Ash	Western aspect occluded wood around missing branch at 8m. Northern aspect possible trunk cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T30	Oak	North-western aspect split in cut branch at 2m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T31	Oak	Southern aspect possible branch cavity at 4m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T32	Field Maple	Southern aspect small tear-out at 8m. Southern aspect loose bark and cracked branch at 10m.	Low bat roost potential (PRF-I)
T35	Oak	Ivy plating. Southern aspect possible trunk cavity at 2m. Knot hole in branch on eastern aspect at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T36	Oak	Western aspect branch cavity at 9m. North-western aspect occluded wood around dead branch at 4m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T37	Oak	Western aspect trunk cavity at 3m. Western aspect branch cavity at 3.5m South-eastern aspect likely hollow trunk with holes at base and at 3m.	Moderate or higher bat roost potential (PRF-M)
T38	Oak	Southern aspect branch cavities at 3.5m to 4m. Western aspect trunk cavity at 5m. South-eastern aspect trunk cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T39	Oak	Western aspect tear-out with cavity at 3m. Eastern aspect branch cavity at 3m. Northern aspect occluded wood and branch cavity at 3m.	Moderate or higher bat roost potential (PRF-M)
T40	Oak	Southern aspect branch cavity at 5m. Western aspect 2 x woodpecker hole in branch at 5m.	Moderate or higher bat roost potential (PRF-M)
T42	Ash	Southern aspect woodpecker holes at 7m and 10m. South-eastern aspect 6 x woodpecker holes between 2-10m. Western aspect branch cavities at 2m and 6m. North-eastern aspect branch tear-out at 2.5m.	Moderate or higher bat roost potential (PRF-M)

Tree ref*	Species	Findings	Bat roost potential
T43	Oak	Southern aspect branch tear-out with possible cavities at 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T45	Oak	Multiple areas of exposed bark around dead branches.	Low bat roost potential (PRF-I)
T46	Oak	Southern aspect trunk cavity at 2m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T47	Oak	Western aspect branch cavity at 7m. Eastern aspect branch cavity at 7m. South-eastern aspect branch cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T48	Oak	Eastern aspect dead branch with peeling bark at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T50	Ash	Western aspect 2x possible branch cavities at 5m. Western aspect possible branch cavity at 7m. North-eastern aspect lifted bark at 8m.	Low bat roost potential (PRF-I)
T52	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T53	Oak	North-western aspect branch cavity at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T54	Oak	South-western aspect branch cavity at 2.5m. Western aspect branch cavity at 4m. Northern aspect 3 x woodpecker holes at +10m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T55	Oak	North-western aspect 2 x trunk cavities at 4m. Eastern aspect 2 x branch cavities at 8m. Northern aspect trunk cavity at 4m. Eastern aspect trunk cavity at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T56	Oak	Western aspect split branch at 5m. North-western aspect peeling bark at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T57	Oak	Split trunk from 0-10m	Moderate or higher bat roost potential (PRF-M)
T58	Oak	Western aspect trunk cavity at 3m. Western aspect peeling bark at 4m. Western aspect possible branch cavity at 9m. Southern aspect trunk cavity at 4m. Southern aspect split branches and branch cavities at 4-5m. Northern aspect trunk cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
T59	Oak	Southern aspect branch cavities at 6m and 8m. Eastern aspect hole in dead branch at 5m. North-eastern aspect dead branch with splits at 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Confirmed bat roost

Tree ref*	Species	Findings	Bat roost potential
		Evidence of bat activity: In 2022 this tree was identified as Tree 207, from which a day roost for up to 2 Common Pipistrelle bats was recorded (HDA, 2022).	
T60	Oak	Eastern aspect branch cavity at 9m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T61	Oak	Eastern aspect split branches with possible cavities at 7m and 8m. Southern aspect branch cavity at 10m. Northern aspect trunk cavity at 14m.	Moderate or higher bat roost potential (PRF-M)
T63	Dead Ash	Northern aspect trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
T65	Oak	South-western aspect possible branch cavity at 7m. North-eastern aspect branch cavity at 5m. Northern aspect split branch at 4m. South-eastern aspect split branch at 5m.	Moderate or higher bat roost potential (PRF-M)
T68	Field Maple	Northern aspect possible trunk cavity at 4m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T69	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T70	Oak	Western aspect branch cavity at 8m. Eastern aspect branch cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T71	Oak	Northern aspect trunk cavity at 5m. Northern aspect multiple small branch cavities. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T72	Oak	Northern aspect multiple branch cavities. Eastern aspect split branch with occluded wood at 4m. Southern aspect branch cavity at 3m. South-western aspect split branch with multiple crevices at 4m. Southern aspect branch cavity at 7m. Southern aspect trunk cavity at 2m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level	Moderate or higher bat roost potential (PRF-M)
T74	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level	Low bat roost potential (PRF-I)
T75	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level	Low bat roost potential (PRF-I)
T76	Oak	Southern aspect split branch at 4m.	Low bat roost potential (PRF-I)
T77	Oak	Limited dead branches with cracks. North-western aspect branch cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)

Tree ref*	Species	Findings	Bat roost potential
T78	Oak	Western aspect 3x trunk cavities at 3m. North-western aspect trunk cavity at 4m. Eastern aspect trunk cavities at 3m and 6m.	Moderate or higher bat roost potential (PRF-M)
T79	Oak	Western aspect branch cavities at 4m and 8m. South-western aspect woodpecker hole at 6m. Southern aspect branch cavity at 8m.	Moderate or higher bat roost potential (PRF-M)
T80	Oak	Multiple branch cavities. Of an age that further suitable roost features may be present that were not visible from ground level	Moderate or higher bat roost potential (PRF-M)
T82	Ash	Southern aspect branch cavity at 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level	Moderate or higher bat roost potential (PRF-M)
T84	Oak	Eastern aspect branch cavity at 7m. Eastern aspect split branch with woodpecker hole and occluded wood at 6-7m. South-eastern aspect 2x branch cavities and peeling bark at 5m. Western aspect branch cavity at 7m. Evidence of bat activity: In 2022 this tree was identified as Tree 254, from which features with characteristic staining and scent of bats was recorded, which were not possible to exhaustively inspect (HDA, 2022).	Probable bat roost
T85	Oak	Southern aspect 2x branch cavities at 5m and 6m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T86	Oak	Southern aspect possible branch cavity at 5m. Eastern aspect possible branch cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level	Low bat roost potential (PRF-I)
T87	Oak	South-eastern aspect trunk cavity at 3m. Eastern aspect trunk cavity at 4m. Eastern aspect branch cavity at 3.5m.	Moderate or higher bat roost potential (PRF-M)
T98	Willow	Limited branch splits. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T99	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T101	Ash	South-western aspect trunk cavity at 6m. South-western aspect 2x woodpecker holes at 8m.	Moderate or higher bat roost potential (PRF-M)
T102	Oak	Southern aspect small dead branch with hole around at 7m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
T103	Oak	Northern aspect branch cavity at 9m. North-eastern aspect branch with split end at 9m. South-eastern aspect split branch at 6m.	Moderate or higher bat roost

Tree ref*	Species	Findings	Bat roost potential
		Southern aspect occluded wood at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	potential (PRF-M)
T104	Oak	Eastern aspect split branch at 6m. Eastern aspect trunk cavity at 12m. Western aspect split/crack in branch at 10m. South-eastern aspect branch cavity at 6m. Southern aspect possible branch cavity at 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T105	Oak	Western aspect woodpecker hole at 8m. South-western aspect split branch at 5m. Eastern aspect 2x branch cavities at 4m and split branch at 10m. Southern aspect branch cavity at 6m.	Moderate or higher bat roost potential (PRF-M)
T108	Oak	Eastern aspect branch cavity at 3m. Eastern aspect 1m long split with lifted bark at 4m. North-eastern aspect branch cavity at 6m. Eastern aspect branch cavity at 8m. South-eastern aspect 2x woodpecker holes at 5m and 6m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T111	Oak	Southern aspect branch cavities at 3-6m. Northern aspect branch cavity at 4m. Western aspect branch cavity at 6m. North-western aspect occluded wood at 6m.	Moderate or higher bat roost potential (PRF-M)
T116	Oak (off-site)	Western aspect branch cavities at 5m and 8m. South-western aspect branch cavity at 6m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T117	Oak	Northern aspect branch cavity at 4m. North-eastern aspect branch cavity at 7m. Southern aspect trunk cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
T121	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
W1a	Dead Ash	North-eastern aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
W1AA	Oak	Western aspect tear-out in trunk with large hole at 15m.	Moderate or higher bat roost potential (PRF-M)
W1AB	Field Maple	Eastern aspect trunk cavity at 1.5m.	Moderate or higher bat roost potential (PRF-M)
W1AC	Sycamore	Southern aspect 2x trunk cavities at base.	Moderate or higher bat roost potential (PRF-M)

Tree ref*	Species	Findings	Bat roost potential
W1AD	Sycamore	Northern aspect woodpecker hole at 2.5m.	Moderate or higher bat roost potential (PRF-M)
W1AE	Hornbeam	Eastern aspect trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
W1AF	Field Maple	Western aspect large trunk cavities at 7m and 10m, likely hollow between.	Moderate or higher bat roost potential (PRF-M)
W1AG	Field Maple	Southern aspect possible trunk cavity at 3m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
W1ah	Field Maple	Multiple trunk cavities between 8-10m.	Moderate or higher bat roost potential (PRF-M)
W1ai	Field Maple	Northern aspect trunk cavity at tear-out at 3m.	Low bat roost potential (PRF-I)
W1Aj	Ash	South-eastern aspect trunk cavity at 6m. Evidence of bat activity: In 2022 this tree was identified as Tree 188, from which a probable day roost for 2 Common Pipistrelle and 1 Soprano Pipistrelle bats were recorded (HDA, 2022).	Probable bat roost
W1AK	Sycamore	Southern aspect branch cavity at 3m.	Moderate or higher bat roost potential (PRF-M)
W1b	Sycamore	Large cavity in trunk.	Moderate or higher bat roost potential (PRF-M)
W1c	Field Maple	Eastern aspect large cavity in trunk at 1-2m.	Moderate or higher bat roost potential (PRF-M)
W1d	Sycamore	Northern aspect hollow trunk at 1.5m.	Moderate or higher bat roost potential (PRF-M)
W1e	Sycamore	Southern aspect hollow trunk at 3m.	Moderate or higher bat roost potential (PRF-M)
W1f	Field Maple	Northern aspect hollow trunk at 0-3m.	Moderate or higher bat roost potential (PRF-M)
W1g	Sycamore	Multiple trunk cavities on 4 stems.	Moderate or

Tree ref*	Species	Findings	Bat roost potential
			higher bat roost potential (PRF-M)
W1h	Sycamore	South-eastern aspect trunk cavity at 3m.	Low bat roost potential (PRF-I)
W1I	Sycamore	Southern aspect trunk cavity at 2m. Western aspect hollow trunk at 1.5m.	Moderate or higher bat roost potential (PRF-M)
W1J	Sycamore	Eastern aspect trunk cavity at 2m. Southern aspect trunk cavity at 10m. South-western aspect trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
W1k	Sycamore	North-eastern aspect trunk cavity at 2m. South-eastern aspect trunk cavity at 8m.	Moderate or higher bat roost potential (PRF-M)
W1L	Sycamore	South-eastern aspect trunk cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
W1m	Field Maple	South-eastern aspect multiple trunk cavities on 1 trunk between 2-4m.	Moderate or higher bat roost potential (PRF-M)
W1N	Sycamore	Hollow base on western aspect. Eastern aspect trunk cavity at 3m. Southern aspect trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
W1O	Sycamore	South-eastern aspect trunk cavity at 2m.	Low bat roost potential (PRF-I)
W1P	Sycamore	Western aspect trunk cavity at base. Western aspect trunk cavity at 2m. Eastern aspect trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
W1Q	Silver Birch	Hollow stem at base on southern aspect.	Moderate or higher bat roost potential (PRF-M)
W1R	Sycamore	Multiple trunk cavities.	Moderate or higher bat roost potential (PRF-M)
W1S	Sycamore	Multiple small cracks and crevices.	Low bat roost potential (PRF-I)
W1T	Sycamore	South-eastern aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
W1U	Sycamore	North-eastern aspect trunk cavity at 5m.	Moderate or

Tree ref*	Species	Findings	Bat roost potential
		Western aspect trunk cavity between 2m and 4m.	higher bat roost potential (PRF-M)
W1V	Plane	North-eastern aspect occluded wood at 7m.	Moderate or higher bat roost potential (PRF-M)
W1X	Willow	Northern aspect woodpecker hole at 15m. Western aspect woodpecker hole at 8m.	Moderate or higher bat roost potential (PRF-M)
W1Y	Sycamore	South-eastern aspect trunk cavity at 0.5m.	Moderate or higher bat roost potential (PRF-M)
W1Z	Hornbeam	South-eastern aspect woodpecker hole at 10m. Southern aspect woodpecker hole at 8m.	Moderate or higher bat roost potential (PRF-M)
W2A	Oak	Southern aspect trunk cavity at 4m.	Low bat roost potential (PRF-L)
W2b	Sycamore	Southern aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
W2C	Oak	Southern aspect hole at branch tear-out at 6m. Eastern aspect possible hole on branch below dead branch.	Moderate or higher bat roost potential (PRF-M)
W2d	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-L)
W2e	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-L)
W2F	Sycamore	North-eastern aspect trunk cavity. Western aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
W2g	Corsican Pine	Eastern and western aspects multiple trunk cavities.	Moderate or higher bat roost potential (PRF-M)
W2h	Ash	Northern aspect large hole at 5m.	Moderate or higher bat roost potential (PRF-M)
W2i	Ash	Southern and north-western aspects occluded wood at 3-4m.	Moderate or higher bat roost potential (PRF-M)
W2j	Pine	South-eastern aspect trunk cavity at 8m.	Moderate or

Tree ref*	Species	Findings	Bat roost potential
		Southern aspect branch tear-out with hole at 4.5m.	higher bat roost potential (PRF-M)
W2k	Oak	Southern aspect trunk cavity at 12m. North-western aspect hole under branch at 12m. Northern aspect tear-out wound at 15m.	Moderate or higher bat roost potential (PRF-M)
W2L	Oak	Western aspect multiple cavities at 5-6m.	Moderate or higher bat roost potential (PRF-M)
W2m	Hazel	Western aspect woodpecker holes at 7m and 9m. Southern aspect knot hole at 6m.	Moderate or higher bat roost potential (PRF-M)
W2N	Beech	Northern aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
W2O	Oak	Southern aspect 2x branch cavities at 6m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
W5b	Oak	Eastern aspect branch cavity and split at 9m. South-eastern aspect branch cavity at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
W6a	Dead tree (off-site)	Multiple trunk cavities and peeling bark.	Moderate or higher bat roost potential (PRF-M)
W7a	Oak (off-site)	Multiple broken branches with splits.	Moderate or higher bat roost potential (PRF-M)
G2a	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G2b	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G2c	Oak x2	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G2d	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G3a	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G3b	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G3c	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G4a	Oak,	Ivy covered that suitable roost features may be	Low bat roost

Tree ref*	Species	Findings	Bat roost potential
	Hawthorn	present that were not visible from ground level.	potential (PRF-I)
G5a	Ash, Hawthorn, Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G6a	Oak	Southern aspect possible branch cavity at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G6b	An Ash and adjacent standing deadwood	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G6c	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G6d	Ash	Western aspect trunk cavity at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G7a	Horse Chestnut x3	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G8a	Mixed species	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G8b	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G9a	Ash and Hawthorn	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G9b	Ash	Northern aspect small branch cavities at 7m and 10m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G10a	Goat Willow	South-eastern aspect trunk cavity at 1.5m. North-eastern aspect tear-out wound at 5m. North-eastern aspect trunk cavities at 1m and 4m. Western aspect large trunk split at 1m.	Moderate or higher bat roost potential (PRF-M)
G10b	Ash	Western aspect split branch at 2m. Western aspect possible branch cavity at 3m.	Low bat roost potential (PRF-I)
G11a	Oak	Southern aspect split branch at 4m. Southern aspect 2x split branches at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G11b	Oak	Northern aspect branch cavity at 1m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G13a	Hazel	South-western aspect trunk cavity at 2m. Eastern aspect splits in bark at 2m.	Low bat roost potential (PRF-I)
G14a	Oak x2	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G14b	Oak	Southern aspect trunk cavity at 8m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)

Tree ref*	Species	Findings	Bat roost potential
G14c	Field Maple	Northern aspect occluded wood at 1.5-3m. Southern aspect large trunk cavity at 2m. South-eastern aspect large trunk split at 0-2m. Northern aspect possible branch cavity at 4m. Evidence of bat activity: In 2022 this tree was identified as Tree 20, from which a probable day roost for 2 Common Pipistrelle bats was recorded (HDA, 2022).	Probable bat roost
G14d	Oak	Western aspect branch split at 4m. Western aspect hollow branch at 7m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G16a	Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G17a	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G17b	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G17c	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G18a	Oak x2	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G19a	Oak x3	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G19b	Dead Oak	Peeling bark. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G21a	Oak	Southern aspect occluded wood at 10m. South-western aspect dead branch with cracks at 8m. Northern aspect split branch at 15m.	Low bat roost potential (PRF-I)
G21b	Dead Oak	Multiple splits, peeling bark and trunk cavities.	Moderate or higher bat roost potential (PRF-M)
G21c	Dead Oak	Multiple splits and peeling bark on trunk.	Moderate or higher bat roost potential (PRF-M)
G26a	Oak	Western aspect broken branch with possible cavity at 4m. South-eastern aspect cavity at tear-out at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G27a	Oak	South-eastern aspect branch cavity at 7m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G27b	Oak	Northern aspect branch tear-out at 5m. Northern aspect dead branch with possible bark peeling at 5m. South-eastern aspect 2x occluded wood at dead branches at 4m.	Low bat roost potential (PRF-I)
G28a	Field Maple	Trunk cavity between 0-3m which may lead upwards.	Moderate or higher bat

Tree ref*	Species	Findings	Bat roost potential
	(off-site)		roost potential (PRF-M)
G29a	Ash (off-site)	Multiple trunk and branch cavities.	Moderate or higher bat roost potential (PRF-M)
G30a	Group of Hawthorn and Ash	Northern aspect several trunks with occluded and small trunk cavities between 0.25-2m.	Low bat roost potential (PRF-I)
G31a	Ash	Multiple branch and trunk cavities.	Moderate or higher bat roost potential (PRF-M)
G31b	Ash	Hollow trunks, peeling bark and branch cavities.	Moderate or higher bat roost potential (PRF-M)
G31c	Ash	Western aspect 4x branch cavities. South-western aspect branch cavity at 7m. Eastern aspect woodpecker hole at 10m.	Moderate or higher bat roost potential (PRF-M)
G32a	Oak	Western aspect 2x bird boxes. Western aspect possible branch cavity at 12m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G33a	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G33b	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G33c	Oak	Western aspect possible trunk cavity at 5m. Western aspect branch cavity at 10m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G33d	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G34a	Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G34b	Oak	North-western aspect trunk cavity at 4m.	Low bat roost potential (PRF-I)
G35a	Hazel	Peeling bark and eastern aspect with large split branch.	Low bat roost potential (PRF-I)
G35b	Hazel	Northern aspect splits in trunk at 5m. Northern aspect possible branch splits and cavities. Southern aspect peeling bark at 2m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G35c	Willow	Western aspect branch cavity at 3m. Northern aspect large split in branch at 2-3m. Northern aspect peeling bark.	Moderate or higher bat roost potential (PRF-M)

Tree ref*	Species	Findings	Bat roost potential
G35d	Willow and Hazel	Southern aspect large trunk cavity at 3m. Peeling bark	Moderate or higher bat roost potential (PRF-M)
G35e	Willow	Northern aspect split branch at 4m.	Low bat roost potential (PRF-I)
G35f	Hazel	Southern aspect large trunk cavity at 2-3m and possibly hollow base. Eastern aspect large split leader at 2-5m. Southern aspect branch cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
G35g	Hazel	Potentially hollow trunk. Southern aspect trunk cavity at 0.5m.	Moderate or higher bat roost potential (PRF-M)
G35h	Hazel	Northern aspect hollow trunk at 0.5-1.5m.	Moderate or higher bat roost potential (PRF-M)
G36a	Oak	Eastern aspect limited lifted bark at 4m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G38a	Ash	Southern aspect branch cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
G38b	Holly	Multiple holes and peeling bark.	Moderate or higher bat roost potential (PRF-M)
G38c	Field Maple x3	Northern aspect hollow stems at 2m.	Moderate or higher bat roost potential (PRF-M)
G39a	Oak	Multiple trunk cavities.	Moderate or higher bat roost potential (PRF-M)
G39b	Oak	Northern aspect trunk cavity at 2m. Northern aspect branch cavity with occluded wood at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G40a	Oak	South-western aspect branch cavity at 6m. South-eastern aspect 2x branch cavities at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G41a	Field Maple (off-site)	North-eastern aspect splits in a broken branch at 2m. North-western aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
G42a	Oak	Southern aspect possible trunk cavity at 4m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G42b	Oak	North-eastern aspect possible trunk cavity at 6m.	Low bat roost

Tree ref*	Species	Findings	Bat roost potential
	(off-site)	Of an age that further suitable roost features may be present that were not visible from ground level.	potential (PRF-I)
G46a	Ash	Eastern aspect hollow stems leading upwards and potentially leading to branch cavity 1m from stem. Eastern aspect woodpecker hole at 6m. Eastern aspect branch cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
G46b	Hawthorn x5	Hollow stems at 1-2m.	Moderate or higher bat roost potential (PRF-M)
G47	Field Maple	Southern aspect 3x small branch and trunk cavities at 2m.	Low bat roost potential (PRF-I)
G48a	Hawthorn	North-eastern aspect occluded wood at 4m.	Moderate or higher bat roost potential (PRF-M)
G48b	Field Maple	Southern aspect trunk cavity at 5m with split below. North-eastern aspect branch cavity.	Moderate or higher bat roost potential (PRF-M)
G48c	Field Maple	South-eastern aspect split in trunk at 3-4m. Northern aspect 2x branch cavities at 3m.	Moderate or higher bat roost potential (PRF-M)
G54	Oak, Sycamore, Ash, Lime	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G56a	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G59a	Ash	North-eastern aspect trunk cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64a	Oak	Western aspect tear-out wound at 9m and dead split branch at 7m. Southern aspect split branch at 8m. South-western aspect trunk cavity at 2m and branch cavity at 3m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64AA	Oak	Northern aspect trunk cavity at base. Northern aspect 2 x possible trunk cavities at 4m.	Low bat roost potential (PRF-I)
G64AB	Dead tree	Hollow trunk	Moderate or higher bat roost potential (PRF-M)
G64AC	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AD	Oak	Northern aspect split in branch facing down at 6m. Northern aspect woodpecker hole at 15m.	Moderate or higher bat roost potential (PRF-M)

Tree ref*	Species	Findings	Bat roost potential
G64AE	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AF	Oak	Southern aspect branch cavity facing down at 10m. Split branches on multiple aspects. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64AG	Hawthorn	Western and southern aspects trunk cavities at 0.5m – possibly hollow.	Moderate or higher bat roost potential (PRF-M)
G64AH	Field Maple	Western aspect trunk cavity and possibly hollow at 1m. Eastern aspect cracks in trunk at 0.5m.	Moderate or higher bat roost potential (PRF-M)
G64AI	Oak	Northern aspect peeling bark at 10m. Southern aspect branch cavity at 8m and peeling bark at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64AJ	Hawthorn	Large split in leading branch Trunk cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
G64AK	Field Maple	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AL	Oak	Eastern aspect split branch at 2m. Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AM	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AN	Field Maple	Hollow trunk with splits.	Moderate or higher bat roost potential (PRF-M)
G64AO	Ash	Western aspect woodpecker hole at 3m.	Moderate or higher bat roost potential (PRF-M)
G64AP	Mixed species	Multiple trees of age and size. Multiple branch cavities. Multiple trees with ivy covering that suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64AQ	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64AR	Hawthorn	Western aspect hollow trunk at 0.5m.	Moderate or higher bat roost potential (PRF-M)
G64b	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64c	Ash	Western aspect branch cavity at 8m.	Low bat roost

Tree ref*	Species	Findings	Bat roost potential
			potential (PRF-I)
G64d	Ash	Northern aspect trunk cavity at 5m.	Low bat roost potential (PRF-I)
G64e	Ash	Southern aspect branch cavities at 5m and 8m.	Low bat roost potential (PRF-I)
G64f	Ash	North-western aspect trunk cavity at 15m. Eastern aspect possible branch tear-out cavity at 12m.	Moderate or higher bat roost potential (PRF-M)
G64g	Ash	Southern aspect facing down possible branch cavity at 7m. Eastern aspect trunk cavity at 8m.	Low bat roost potential (PRF-I)
G64h	Standing deadwood	Small cracks along trunk on all aspects.	Low bat roost potential (PRF-I)
G64I	Hawthorn	Hollow trunk with multiple holes.	Moderate or higher bat roost potential (PRF-M)
G64J	Field Maple	North-eastern aspect hollow trunk with large crack at 2-3m. Southern aspect 2x branch cavities at 5m and 6m.	Moderate or higher bat roost potential (PRF-M)
G64K	Oak	Peeling bark. Northern aspect occluded wood at 7m. Southern aspect branch cavity facing down at 10m and possible branch cavity at 5m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64L	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64m	Oak	Western aspect occluded wood at 6m. Northern aspect trunk cavity at 7m. North-western aspect woodpecker hole at 7m. Eastern aspect trunk cavity at 7m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64n	Ash	Northern aspect occluded wood at 8m and possible trunk cavity at 12m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64O	Standing deadwood	Peeling bark and cracks in trunk.	Low bat roost potential (PRF-I)
G64p	Silver birch	Western aspect trunk cavity at 2m.	Low bat roost potential (PRF-I)
G64Q	Oak	Southern aspect standing deadwood and splits. Northern aspect 2x woodpecker holes at 10-11m. South-eastern aspect trunk cavity at 10m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G64R	Ash	Northern aspect trunk cavity at 0.5m.	Low bat roost potential (PRF-I)
G64S	Hawthorn	Southern aspect split trunk leaning north.	Low bat roost

Tree ref*	Species	Findings	Bat roost potential
			potential (PRF-I)
G64T	Standing deadwood	Multiple small cracks in trunk.	Low bat roost potential (PRF-I)
G64U	Hawthorn	South-western aspect trunk cavity at 0.5m.	Low bat roost potential (PRF-I)
G64V	Ash	Eastern aspect possible trunk cavity at 8m.	Low bat roost potential (PRF-I)
G64W	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64X	Field Maple	Possible hollow trunk. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G64Y	Field Maple	Eastern aspect occluded wood at 4-6m. Western aspect split trunk from 5-8m.	Moderate or higher bat roost potential (PRF-M)
G64Z	Field Maple	South-western aspect split trunk from base.	Moderate or higher bat roost potential (PRF-M)
G67a	Ash	Hollow trunk. South-eastern aspect tear-out wound at 3m. Eastern aspect branch cavities at 5m and 6m. Western aspect branch cavity at 10m. North-eastern aspect branch cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
G68a	Ash	Eastern aspect trunk cavity at 3m. North-eastern aspect occluded wood at 3m. Northern aspect 3x possible branch cavities at 8m.	Moderate or higher bat roost potential (PRF-M)
G69a	Ash	Northern aspect branch cavity at 8m.	Low bat roost potential (PRF-I)
G69b	Ash	Northern aspect trunk cavity at 5m.	Low bat roost potential (PRF-I)
G70a	Oak	Southern aspect trunk cavity at 4m.	Low bat roost potential (PRF-I)
G70b	Oak	Eastern aspect split branch with occluded wood at 8m.	Low bat roost potential (PRF-I)
G70c	Oak	Northern aspect hole at dead branch facing east at 9m. Western aspect branch cavity at 4m. Southern aspect lifted bark around dead branch at 4m.	Moderate or higher bat roost potential (PRF-M)
G70d	Oak	Northern aspect trunk cavity at 3m. Northern aspect possible lifted bark around dead branch at 3.5m. Northern aspect branch cavity at 3.5m. South-western aspect trunk cavity at 6m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G70e	Ash x2	Eastern aspect multiple hollow stems at 3m and 4m.	Moderate or higher bat roost

Tree ref*	Species	Findings	Bat roost potential
			potential (PRF-M)
G70f	Oak	Northern aspect 3x branch cavities at 4m. South-western aspect tear-out at 4m.	Moderate or higher bat roost potential (PRF-M)
G70g	Oak	Eastern aspect branch cavity at 7m. Southern aspect upwards facing branch cavity at 7m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G70h	Oak	Western aspect branch cavity at 6m.	Moderate or higher bat roost potential (PRF-M)
G70i	Field Maple x3	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G71a	Oak	North-eastern aspect tear-out with hole above at 6m. Eastern aspect trunk cavity at 4m and occluded wood at 8m. Southern aspect branch cavities at 5m and 6m. Western aspect trunk cavity at 4m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G71B	Oak	Southern aspect branch cavity at 3m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G72a	Willow and Blackthorn	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G73a	Ash, Hawthorn and Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G76a	Oak	Limited Ivy plating. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G76b	Oak	Eastern aspect possible trunk cavity at 12m. Northern aspect hole in branch at 10m. Northern aspect facing down trunk cavity at 10m. Western aspect possible branch cavity at 10m.	Moderate or higher bat roost potential (PRF-M)
G77a	Field Maple	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G77b	Oak	Northern aspect branch cavity at 8m. Western aspect split branches at 5m and 6m. North-eastern aspect split branch at 10m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G77c	Oak	Western aspect branch cavity at 7m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G78a	Oak	Northern aspect split branch at 8m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G78c	Oak	Northern aspect 2x possible trunk cavities at 5m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G79a	Pear	Ivy covered that suitable roost features may be	Low bat roost

Tree ref*	Species	Findings	Bat roost potential
		present that were not visible from ground level.	potential (PRF-I)
G79b	Oak	Limited Ivy plating.	Low bat roost potential (PRF-I)
G81a	Oak	South-western aspect branch cavity at 10m. Eastern aspect peeling bark and 2 trunk cavities at 3m. Ivy plating. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G81b	Oak	Eastern aspect possible branch cavity at 10m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G82a	Oak	Limited Ivy plating. South-western aspect occluded wood on branch Western aspect small branch cavity at 8m. South-western aspect branch cavity at 8m.	Low bat roost potential (PRF-I)
G82b	Oak	Eastern aspect branch cavity at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G87a	Oak	Southern aspect trunk cavity at 2m. North-western aspect 2x small trunk cavities at 4m. South-eastern aspect branch cavity at 6m. Northern aspect branch cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
G87b	Wild Service Tree	Southern aspect trunk cavity at 1m.	Moderate or higher bat roost potential (PRF-M)
G87c	Oak	North-eastern aspect branch cavity at 5m.	Low bat roost potential (PRF-I)
G87d	Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G87e	Oak	South-western aspect branch cavity at 7m. Southern aspect branch cavity at 6m. Northern aspect branch cavity at 5-6m.	Moderate or higher bat roost potential (PRF-M)
G88a	Ash	Limited Ivy plating.	Low bat roost potential (PRF-I)
G92a	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G92b	Ash	Northern aspect trunk cavities at 1m, 3m and 8m.	Moderate or higher bat roost potential (PRF-M)
G92c	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G92d	Ash	Northern aspect trunk cavity at 0.5m. Hollow base. Southern aspect multiple trunk and branch cavities. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G92e	Ash	North-eastern aspect branch cavity at 7m. Ivy covered that further suitable roost features may be	Moderate or higher bat

Tree ref*	Species	Findings	Bat roost potential
		present that were not visible from ground level.	roost potential (PRF-M)
G92f	Ash	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G92g	Ash	South-western aspect branch cavities at 4m and 8m. Eastern aspect branch cavities at 5m.	Moderate or higher bat roost potential (PRF-M)
G94a	Field Maple	Northern aspect split in trunk at 1m.	Moderate or higher bat roost potential (PRF-M)
G94b	Field Maple	North-eastern aspect trunk cavity at 1m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G94c	Field Maple	Western aspect 3x small branch cavities at 4m.	Low bat roost potential (PRF-I)
G94d	Field Maple	Northern aspect trunk cavities at 1m and 2m.	Moderate or higher bat roost potential (PRF-M)
G95a	Ash	North-eastern aspect branch cavity at 4m. South-western aspect possible branch cavity at 4m.	Moderate or higher bat roost potential (PRF-M)
G95b	Oak	North-eastern aspect branch cavity at 4m (on one tree). Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G96a	Oak	Multiple dead branches with peeling bark. Western aspect trunk cavity at 3m. Southern aspect branch cavity at 6m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G96b	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G96c	Oak	Western aspect split branch with occluded wood at 7m. North-western aspect split leader with possible cracks at 4m. Western aspect branch cavity at 5m.	Moderate or higher bat roost potential (PRF-M)
G97a	Hawthorn	Multiple small cavities and peeling bark.	Low bat roost potential (PRF-I)
G99a	Ash	South-western aspect trunk cavity at 6m. Eastern aspect branch cavity at 5m. Northern aspect split branch at 6m.	Moderate or higher bat roost potential (PRF-M)
G99b	Ash	Eastern aspect trunk cavities at 6m and 10m. Eastern aspect branch cavities at 11m. Northern aspect trunk cavity at 7m.	Moderate or higher bat roost potential (PRF-M)
G101a	Oak	South-western aspect branch cavity at 8m.	Moderate or

Tree ref*	Species	Findings	Bat roost potential
		Northern aspect branch cavity at 8m. Of an age that further suitable roost features may be present that were not visible from ground level.	higher bat roost potential (PRF-M)
G101b	Oak	Western aspect branch cavity at 6m. Of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G102a	Oak, Blackthorn, Hawthorn, Hazel and Aspen	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G102b	Willow	Northern aspect branch cavity at 4m. North-eastern aspect branch cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
G102c	Oak	North-eastern aspect split branch at 4m.	Low bat roost potential (PRF-I)
G103a	Goat Willow	Northern aspect trunk cavities at 3m and 4m.	Moderate or higher bat roost potential (PRF-M)
G104a	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G105a	Oak	South-eastern aspect branch cavity at 6m. Northern aspect branch cavity at 6m. Western aspect trunk cavities at 4m and 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G105b	Oak and Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G106a	Hawthorn	Multiple small trunk and branch cavities.	Low bat roost potential (PRF-I)
G106b	Field Maple	Northern aspect trunk cavity at 1m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G107a	Field Maple	Eastern aspect possible trunk cavity at 4m.	Low bat roost potential (PRF-I)
G108a	Oak	South-western aspect branch cavity at 5m. Eastern aspect split branch at 5m.	Moderate or higher bat roost potential (PRF-M)
G108b	Ash	Northern aspect 2x woodpecker holes at 6m.	Moderate or higher bat roost potential (PRF-M)
G109a	Oak	Eastern aspect branch cavity at 5m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)

Tree ref*	Species	Findings	Bat roost potential
G109b	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G111a	Field Maple	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G113a	Oak	Eastern aspect branch cavity at 7m. Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G113b	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G114a	Ash	2x trunks interjoined between 0-8m.	Moderate or higher bat roost potential (PRF-M)
G114c	Willow, Hazel and Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G115a	Willow	Western aspect trunk cavity at 6m.	Moderate or higher bat roost potential (PRF-M)
G116a	Ash	Multiple small cavities. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G117b	Ash	North-eastern aspect split in trunk at 8m.	Moderate or higher bat roost potential (PRF-M)
G120a	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G120b	Ash	Eastern aspect trunk cavities at 4m and 8m. Eastern aspect branch cavity at 10+m.	Moderate or higher bat roost potential (PRF-M)
G120c	Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G120d	Ash	North-eastern aspect branch cavities at 4m and 5m. Western aspect branch cavities at 6m and 7m.	Moderate or higher bat roost potential (PRF-M)
G120e	Oak	Northern aspect branch cavity at 4m.	Low bat roost potential (PRF-I)
G122a	Oak	Southern aspect 2x possible branch cavities at 4m. Western aspect possible branch cavity at 5m.	Low bat roost potential (PRF-I)
G122b	(off-site)Oak	Of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G122c	Oak	Western aspect trunk cavity at 3m. Southern aspect 2x branch cavities.	Moderate or higher bat roost potential

Tree ref*	Species	Findings	Bat roost potential
			(PRF-M)
G122d	Field Maple	Multiple trunk cavities.	Moderate or higher bat roost potential (PRF-M)
G124a	Field Maple	Southern aspect multiple small trunk cavities. Northern aspect trunk cavity at 2m.	Moderate or higher bat roost potential (PRF-M)
G128a	Willow	Eastern aspect branch cavity at 4m.	Low bat roost potential (PRF-I)
G130a	Goat Willow	North-eastern aspect trunk cavity at 2m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
G130b	Willows	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G145a	Oaks	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G145b	Oak	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G145c	Oak	Northern aspect branch cavity at 4m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G145d	Ash	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G145e	Whitebeam	South-western aspect hollow trunk from 0-1m.	Moderate or higher bat roost potential (PRF-M)
G146a	Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G152A	Ash (Off-site)	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
G152b	Hazel (Off-site)	Western aspect 2x woodpecker holes at 6m.	Moderate or higher bat roost potential (PRF-M)
G152c	Hazel (Off-site)	North-western aspect branch cavity at 3m.	Moderate or higher bat roost potential (PRF-M)
H4a	Oak	North-western aspect occluded wood, branch cavities and splits at 10m. Eastern aspect branch cavities at 10m and 12m. Of an age that further suitable roost features may be present that were not visible from ground level. Evidence of bat activity: In 2022 this tree was identified as Tree 53, from which	Probable bat roost

Tree ref*	Species	Findings	Bat roost potential
		features with characteristic staining and scent of bats was recorded, which were not possible to exhaustively inspect (HDA, 2022).	
H4b	Oak	Eastern aspect possible branch cavity at 15m. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
H4c	Oak	Ivy covered and of an age that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
H48a	Hawthorn	South-eastern aspect small branch cavity at 4m. Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
H50a	Group of 2x Ash	Ivy covered that suitable roost features may be present that were not visible from ground level.	Low bat roost potential (PRF-I)
H58a	Oak	Southern aspect branch cavities at 2m and 3m. Peeling bark. Ivy covered and of an age that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
H67a	Field Maple	Eastern aspect large trunk cavity at 3m. Ivy covered that further suitable roost features may be present that were not visible from ground level.	Moderate or higher bat roost potential (PRF-M)
A	Ash (off-site)	Northern aspect branch cavity at 3m.	Low bat roost potential (PRF-I)

* Additional bat roosts were recorded in 2022, in Trees 95, 216 and 217 (HDA, 2022). These trees are no-longer present on site.

3.2.2 All other trees within and immediately adjacent to the site were assessed as having negligible potential to support roosting bats.

3.3 Bat activity

3.3.1 Details of the date and time of bat activity transect surveys, along with weather conditions and sunset times, are provided in *Table 1*. The areas covered during each survey visit included all boundaries, hedgerows, stream corridors and woodlands.

3.3.2 A visual summary of bat foraging and commuting activity recorded during the surveys has been provided in *Appendix D*. In total, six species/species groups were recorded during the transect surveys including Common Pipistrelle, Soprano Pipistrelle, Noctule and *Nyctalus/Cnephaeus*, *Plecotus* and *Myotis* species bats. A summary of each species/species group recorded, their activity and an estimation of numbers using the site during any one survey is provided in *Table 5* below.

Table 5: Summary of bat activity during transect surveys

Species / species group	Activity summary	Approx. number recorded*
Common Pipistrelle	Common Pipistrelle was the most frequently recorded species during the activity surveys. The majority of Common Pipistrelle activity was associated with the woodland parcels in the north of the site. Common Pipistrelle were also recorded on a regular basis using woodlands, treelines and hedgerows bordering fields in the remainder of the site. It is expected that up to 9 Common Pipistrelle bats could have been using the site for foraging and commuting at any one time.	9
Soprano Pipistrelle	Soprano Pipistrelle was the second most recorded species during the activity surveys. The majority of Soprano Pipistrelle activity was associated with the woodland parcels in the north of the site. Soprano Pipistrelle were also recorded on a regular basis using woodlands, treelines and hedgerows bordering fields in the remainder of the site. It is expected that 2 Soprano Pipistrelle bats could have been using the site for foraging and commuting at any one time.	2
<i>Myotis</i> sp. bat	<i>Myotis</i> sp. bat was recorded on an occasional basis during the activity surveys. The majority of the foraging activity relates to Smith's Copse in the east of the site and a hedgerow junction in the south of the site. <i>Myotis</i> sp. bat were also recorded on an occasional basis using woodlands, treelines and hedgerows bordering fields in the remainder of the site. It is expected that up to 1 <i>Myotis</i> sp. bats could have been using the site for foraging and commuting at any one time.	1
<i>Plecotus</i> sp. bat	<i>Plecotus</i> sp. bat was recorded on four occasions in association with hedgerows and woodland parcels in the north of the site. Survey results indicate that no more than 1 <i>Plecotus</i> sp. bat was using the site at one time. It should be noted that <i>Plecotus</i> sp. calls are very quiet, and <i>Plecotus</i> sp. bats do not always echolocate when hunting, <i>Plecotus</i> sp. bat are subsequently less regularly recorded by bat detectors. It is, therefore, possible that higher (but not substantially higher) numbers of <i>Plecotus</i> sp. bats may have been using the site than were recorded.	1
Noctule	Noctules were recorded on one occasion in association with a hedgerow junction in the south-east of the site. It is expected that up to 1 Noctule bats could have been using the site for foraging and commuting at any one time.	1
<i>Nyctalus</i> / <i>Cnephaeus</i> sp. bat	<i>Nyctalus</i> / <i>Cnephaeus</i> sp. bat was recorded on three occasions in association with hedgerows and woodland parcels, with the recordings scattered across the site. It is expected that up to 1 <i>Nyctalus</i> / <i>Cnephaeus</i> sp. bat was using the site at any one time.	1

* This is an approximation of the number of bats of any one species/species group estimated to have been using the site during any one visit.

3.4 Phase 2 automated activity surveys

3.4.1 The dates during which the automated detectors were deployed are provided in Table 2. The locations in which the automated bat detectors were placed during each deployment are shown on the plan in Appendix C.

3.4.2 Nine automated detectors were placed around the site on seven separate occasions to give an indication of the species using different areas of the site and relative levels of activity throughout the night⁴. A summary of bat activity recorded during the automated surveys in each location is provided below in *Table 6*. In total, eight species/species groups were recorded during the automated surveys: Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, *Plecotus* sp. bat, *Myotis* sp. bat, Noctule, *Nyctalus/Cnephaeus* sp. bat and Barbastelle.

Table 6: Summary of bat activity recorded by the automated detectors

Location	Month	Activity summary
A		The automated detector at Location A recorded bat activity along the treeline associated with the Downs Link aligned north-west to south-east in the south of the site.
	April 2025	A total of 1929 bat recordings were attained over 7 nights, an average of 276 bat recordings per night. Common Pipistrelle was the most frequently recorded species (83.7% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (13.2% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat, Barbastelle, <i>Plecotus</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Noctule and Nathusius' Pipistrelle were also recorded on an infrequent basis (1.0%, 0.9%, 0.5%, 0.3%, 0.2% and 0.2% of recordings, respectively).
	May 2025	A total of 1737 bat recordings were attained over 3 nights, an average of 579 bat recordings per night. Common Pipistrelle was the most frequently recorded species (82.1% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (14.8% of recordings). Soprano Pipistrelle was considered to have low activity levels. Barbastelle, <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat and Nathusius' Pipistrelle were also recorded on an infrequent basis (2.1%, 0.5%, 0.3% and 0.2% of recordings, respectively). A single <i>Nyctalus/Cnephaeus</i> sp. bat pass was also recorded.

⁴ Nights on which individual detectors failed to record, or data was corrupted is discussed in *Section 2.5: Limitations*, above.

Location	Month	Activity summary
	June 2025	A total of 756 bat recordings were attained over 5 nights, an average of 151 bat recordings per night. Common Pipistrelle was the most frequently recorded species (79.2% of recordings). Common Pipistrelle was considered to have low to moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (11.4% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Plecotus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and Noctule were also recorded on an infrequent basis (3.2%, 2.4%, 2.0%, 1.2% and 0.7% of recordings, respectively).
	July 2025	Data unavailable.
	August 2025	A total of 3097 bat recordings were attained over 3 nights, an average of 1032 bat recordings per night. Common Pipistrelle was the most frequently recorded species (65.0% of recordings). Common Pipistrelle was considered to have moderate activity levels. <i>Myotis</i> sp. bat and Soprano Pipistrelle were the second and third most frequently recorded species/species groups (19.3% and 13.4% of recordings, respectively). Both species/species groups were considered to have low activity levels. <i>Plecotus</i> sp. bat, Barbastelle, <i>Nyctalus/Cnephaeus</i> sp. bat and Noctule were also recorded on an infrequent basis (1.2%, 0.5%, 0.4% and 0.1% of recordings, respectively).
	September 2025	Data unavailable.
	October 2025	A total of 794 bat recordings were attained over 5 nights, an average of 159 bat recordings per night. Common Pipistrelle was the most frequently recorded species (44.8% of recordings). Common Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat and Soprano Pipistrelle were the second and third most frequently recorded species/species groups (30.4% and 18.0% of recordings, respectively). Both species/species groups were considered to have low activity levels. Barbastelle and <i>Plecotus</i> sp. bat were also recorded on an infrequent basis (5.7% and 0.1% of recordings, respectively). A single Nathusius' Pipistrelle bat pass was also recorded.
B	The automated detector at Location B recorded bat activity along Two Mile Ash Gill an area of ancient woodland in the south-west of the site, bordered by grassland fields to the east.	

Location	Month	Activity summary
	April 2025	A total of 644 bat recordings were attained over 7 nights, an average of 92 bat recordings per night. Common Pipistrelle was the most frequently recorded species (76.1% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle was the second most frequently recorded species (17.1% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat was recorded on an infrequent basis (5.9% of recordings). A couple <i>Plecotus</i> sp. bat, Noctule and <i>Nyctalus/Cnephaeus</i> sp. bat passes were also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 217 bat recordings were attained over 5 nights, an average of 43 bat recordings per night. Common Pipistrelle was the most frequently recorded species (89.9% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle, <i>Myotis</i> sp. bat and <i>Plecotus</i> sp. bat were recorded on an infrequent basis (5.1%, 2.3% and 1.8% of recordings, respectively). A couple <i>Nyctalus/Cnephaeus</i> sp. bat passes were also recorded.
	July 2025	A total of 1419 bat recordings were attained over 7 nights, an average of 203 bat recordings per night. Common Pipistrelle was the most frequently recorded species (76.3% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. <i>Myotis</i> sp. bat and Soprano Pipistrelle were the second and third most frequently recorded species/species groups (14.2% and 7.3% of recordings, respectively). Both species/species groups were considered to have low activity levels. <i>Plecotus</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat and Noctule were also recorded on an infrequent basis (1.2%, 0.8% and 0.2% of recordings, respectively).
	August 2025	A total of 151 bat recordings were attained over 4 nights, an average of 38 bat recordings per night. On one night however no bat passes were recorded. Common Pipistrelle, Soprano Pipistrelle and <i>Myotis</i> sp. bat were the most frequently recorded species/species groups (44.4%, 33.1% and 17.9% of recordings, respectively). All species/species groups were considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat was recorded on an infrequent basis (2.6% of recordings). Single/couple of Barbastelle and <i>Plecotus</i> sp. bat passes were also recorded.

Location	Month	Activity summary
	September 2025	A total of 1319 bat recordings were attained over 3 nights, an average of 440 bat recordings per night. Common Pipistrelle was the most frequently recorded species (91.1% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle, <i>Myotis</i> sp. bat and <i>Plecotus</i> sp. bat were recorded on an infrequent basis (4.5%, 3.9% and 0.4% of recordings, respectively). A couple of <i>Nyctalus/Cnephaeus</i> sp. bat passes were also recorded.
	October 2025	A total of 29 bat recordings were attained over 2 nights, an average of 15 bat recordings per night. <i>Myotis</i> sp. bat, Soprano Pipistrelle and Common Pipistrelle bat were recorded on an infrequent basis (55.2%, 23.6% and 17.2% of recordings, respectively).
C		The automated detector at Location C recorded bat activity along the eastern margin of Courtland Wood an area of ancient woodland in the south-west of the site, bordered by grassland fields.
	April 2025	A total of 7869 bat recordings were attained over 7 nights, an average of 1124 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.6% of recordings). Common Pipistrelle was considered to have high to moderate activity levels. Soprano Pipistrelle and <i>Myotis</i> sp. bat were the second and third most frequently recorded species/species groups (9.6% and 9.2% of recordings, respectively). Both species/species groups were considered to have moderate to low activity levels. <i>Plecotus</i> sp. bat, Barbastelle, Noctule and <i>Nyctalus/Cnephaeus</i> sp. bat were also recorded on an infrequent basis (0.3%, 0.2%, 0.1% and 0.0% of recordings, respectively).
	May 2025	Data unavailable.
	June 2025	A total of 4196 bat recordings were attained over 5 nights, an average of 839 bat recordings per night. Common Pipistrelle was the most frequently recorded species (91.3% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (5.0% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Myotis</i> sp. bat, Nathusius' Pipistrelle, <i>Plecotus</i> sp. bat and Noctule were also recorded on an infrequent basis (2.2%, 0.6%, 0.5%, 0.1% and 0.1% of recordings, respectively).
	July 2025	Data unavailable.
	August 2025	A total of 1382 bat recordings were attained over 2 nights, an average of 691 bat recordings per night. Common Pipistrelle was the most frequently recorded species (72.5% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle was the second most frequently recorded species (15.3% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and Noctule were also recorded on an infrequent basis (6.3%, 3.0%, 1.6%, 1.2% and 0.1% of recordings, respectively).

Location	Month	Activity summary
	September 2025	A total of 866 bat recordings were attained over 4 nights, an average of 217 bat recordings per night. Common Pipistrelle was the most frequently recorded species (50.7% of recordings). Common Pipistrelle was considered to have low activity levels. <i>Plecotus</i> sp. bat and Soprano Pipistrelle were the second and third most frequently recorded species/species groups (27.8% and 15.1% of recordings, respectively). Both species/species groups were considered to have low activity levels. <i>Myotis</i> sp. bat, Barbastelle, <i>Nyctalus/Cnephaeus</i> sp. bat and Noctule were recorded on an infrequent basis (4.3%, 1.2%, 0.3% and 0.3% of recordings, respectively). A couple of Nathusius' Pipistrelle bat passes were also recorded.
	October 2025	A total of 54 bat recordings were attained over 4 nights, an average of 14 bat recordings per night. On one night however no bat passes were recorded. <i>Myotis</i> sp. bat, Soprano Pipistrelle and Common Pipistrelle bat were recorded on an infrequent basis (44.4%, 27.8% and 24.1% of recordings, respectively). A couple of Barbastelle bat passes were also recorded.
D	The automated detector at Location D recorded bat activity along hedgerows in the west of the site, bordered by grassland fields.	
	April 2025	A total of 3186 bat recordings were attained over 7 nights, an average of 455 bat recordings per night. Common Pipistrelle was the most frequently recorded species (88.4% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (9.2% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat, Barbastelle, <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (1.1%, 0.8%, 0.4% and 0.1% of recordings, respectively). A single <i>Nyctalus/Cnephaeus</i> sp. bat pass was also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 1710 bat recordings were attained over 5 nights, an average of 342 bat recordings per night. Soprano Pipistrelle and Common Pipistrelle were the most frequently recorded species (52.6% and 44.3% of recordings, respectively). Both species were considered to have moderate to low activity levels. <i>Plecotus</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat and <i>Myotis</i> sp. bat were also recorded on an infrequent basis (1.4%, 1.1% and 0.6% of recordings, respectively).
	July 2025	Data unavailable.
	August 2025	A total of 1097 bat recordings were attained over 3 nights, an average of 366 bat recordings per night. Common Pipistrelle and Soprano Pipistrelle were the most frequently recorded species (66.7% and 31.4% of recordings, respectively). Both species were considered to have moderate to low activity levels. <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Plecotus</i> sp. bat and Barbastelle were also recorded on an infrequent basis (0.7%, 0.5%, 0.3% and 0.3% of recordings, respectively).

Location	Month	Activity summary
	September 2025	A total of 1757 bat recordings were attained over 4 nights, an average of 439 bat recordings per night. Common Pipistrelle was the most frequently recorded species (76.5% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle was the second most frequently recorded species (18.5% of recordings). Soprano Pipistrelle was considered to have low activity levels. Barbastelle, <i>Plecotus</i> sp. bat, <i>Myotis</i> sp. bat and Nathusius' Pipistrelle were recorded on an infrequent basis (2.3%, 1.7%, 0.6% and 0.3% of recordings, respectively). Single/couple of Noctule and <i>Nyctalus/Cnephaeus</i> sp. bat passes were also recorded.
	October 2025	Data unavailable.
E		The automated detector at Location E recorded bat activity along the western margin of Smith's Copse an area of ancient woodland on the eastern site boundary, bordered by grassland fields.
	April 2025	A total of 3389 bat recordings were attained over 7 nights, an average of 484 bat recordings per night. Common Pipistrelle was the most frequently recorded species (80.0% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (16.9% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat and Barbastelle were recorded on an infrequent basis (2.5%, 0.3% and 0.2% of recordings, respectively). A single Noctule bat pass was also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 3258 bat recordings were attained over 5 nights, an average of 652 bat recordings per night. Common Pipistrelle was the most frequently recorded species (65.1% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (33.4% of recordings). Soprano Pipistrelle was considered to have moderate to low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Myotis</i> sp. bat and <i>Plecotus</i> sp. bat were recorded on an infrequent basis (1.0%, 0.2% and 0.2% of recordings, respectively). A couple of Noctule bat passes were also recorded.
	July 2025	Data unavailable.

Location	Month	Activity summary
	August 2025	A total of 1745 bat recordings were attained over 2 nights, an average of 873 bat recordings per night. Common Pipistrelle was the most frequently recorded species (75.1% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle was the second most frequently recorded species (14.7% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Plecotus</i> sp. bat, <i>Myotis</i> sp. bat, Barbastelle and Noctule were also recorded on an infrequent basis (3.7%, 3.3%, 1.9%, 1.0% and 0.3% of recordings, respectively).
	September 2025	A total of 1189 bat recordings were attained over 3 nights, an average of 396 bat recordings per night. Common Pipistrelle was the most frequently recorded species (81.3% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle, <i>Myotis</i> sp. bats, <i>Plecotus</i> sp. bat and Barbastelle were recorded on an infrequent basis (8.9%, 6.2%, 2.5% and 0.7% of recordings, respectively). Single/couple of Noctule, Nathusius' Pipistrelle and <i>Nyctalus/Cnephaeus</i> sp. bat passes were also recorded.
	October 2025	A total of 399 bat recordings were attained over 5 nights, an average of 80 bat recordings per night. Common Pipistrelle and Soprano Pipistrelle were the most frequently recorded species (47.9% and 43.1% of recordings, respectively). Both species were considered to have low activity levels. <i>Myotis</i> sp. bats and Barbastelle were recorded on an infrequent basis (7.5% and 1.3% of recordings, respectively). A single <i>Nyctalus/Cnephaeus</i> sp. bat pass was also recorded.
F		The automated detector at Location F recorded bat activity along hedgerows on the western site boundary, bordered by arable fields to the east.
	April 2025	A total of 2183 bat recordings were attained over 7 nights, an average of 312 bat recordings per night. Common Pipistrelle was the most frequently recorded species (97.3% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle, <i>Myotis</i> sp. bats, <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (1.2%, 0.8%, 0.4% and 0.1% of recordings, respectively). Single/couple of Nathusius' Pipistrelle and Barbastelle bat passes were also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 379 bat recordings were attained over 5 nights, an average of 76 bat recordings per night. Common Pipistrelle was the most frequently recorded species (87.9% of recordings). Common Pipistrelle was considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, Soprano Pipistrelle, Noctule and <i>Myotis</i> sp. bat were recorded on an infrequent basis (7.4%, 2.9%, 0.8% and 0.8% of recordings, respectively). A single <i>Plecotus</i> sp. bat pass was also recorded.

Location	Month	Activity summary
	July 2025	Data unavailable.
	August 2025	A total of 84 bat recordings were attained over 2 nights, an average of 42 bat recordings per night. Common Pipistrelle, Soprano Pipistrelle, <i>Myotis</i> sp. bat and <i>Nyctalus/Cnephaeus</i> sp. bat were recorded on an infrequent basis (76.2%, 10.7%, 4.8% and 4.8% of recordings, respectively). Single/couple of Noctule and <i>Plecotus</i> sp. bat passes were also recorded.
	September 2025	A total of 154 bat recordings were attained over 2 nights, an average of 77 bat recordings per night. Common Pipistrelle was the most frequently recorded species (62.3% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle, <i>Plecotus</i> sp. bat, Barbastelle and <i>Myotis</i> sp. bat were also recorded on an infrequent basis (13.0%, 11.0%, 7.8% and 5.8% of recordings, respectively).
	October 2025	A total of 51 bat recordings were attained over 5 nights, an average of 10 bat recordings per night. Common Pipistrelle, Barbastelle, Soprano Pipistrelle and <i>Myotis</i> sp. bat were recorded on an infrequent basis (51.0%, 21.6%, 9.8% and 9.8% of recordings, respectively). Single/couple of Noctule, <i>Nyctalus/Cnephaeus</i> sp. bat and <i>Plecotus</i> sp. bat passes were also recorded.
G		The automated detector at Location G recorded bat activity along hedgerows in the north of the site, bordered by grassland fields.
	April 2025	A total of 1368 bat recordings were attained over 7 nights, an average of 195 bat recordings per night. Common Pipistrelle was the most frequently recorded species (96.2% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle, <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat and Barbastelle were recorded on an infrequent basis (1.5%, 0.8%, 0.7%, 0.4% and 0.2% of recordings, respectively). A couple of Noctule passes were also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 590 bat recordings were attained over 5 nights, an average of 118 bat recordings per night. Common Pipistrelle was the most frequently recorded species (91.7% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, Soprano Pipistrelle and <i>Myotis</i> sp. bat were recorded on an infrequent basis (5.6%, 1.4% and 0.8% of recordings, respectively). Single Noctule, Barbastelle and <i>Plecotus</i> sp. bat passes were also recorded.
	July 2025	Data unavailable.

Location	Month	Activity summary
	August 2025	A total of 527 bat recordings were attained over 5 nights, an average of 105 bat recordings per night. Common Pipistrelle was the most frequently recorded species (86.3% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Noctule, Soprano Pipistrelle, <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Plecotus</i> sp. bat and Barbastelle were also recorded on an infrequent basis (6.3%, 2.1%, 2.1%, 1.3%, 1.3% and 0.6% of recordings, respectively).
	September 2025	A total of 5437 bat recordings were attained over 6 nights, an average of 906 bat recordings per night. Common Pipistrelle was the most frequently recorded species (75.1% of recordings). Common Pipistrelle was considered to have moderate activity levels. <i>Myotis</i> sp. bat and Soprano Pipistrelle was the second and third most frequently recorded species/species groups (17.4% and 6.4% of recordings, respectively). Both species/species groups were considered to have moderate to low activity levels. Barbastelle, <i>Plecotus</i> sp. bat and <i>Nyctalus/Cnephaeus</i> sp. bat were recorded on an infrequent basis (0.7%, 0.3% and 0.1% of recordings, respectively). A couple of Noctule and Nathusius' Pipistrelle bat passes were also recorded.
	October 2025	A total of 51 bat recordings were attained over 5 nights, an average of 10 bat recordings per night. Common Pipistrelle, Soprano Pipistrelle and <i>Myotis</i> sp. bat were recorded on an infrequent basis (72.5%, 11.8% and 9.8% of recordings, respectively). Single/couple of <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and Nathusius' Pipistrelle bat passes were also recorded.
H		The automated detector at Location H recorded bat activity along woodland margins in the north-east of the site, bordered by grassland fields.
	April 2025	A total of 2577 bat recordings were attained over 7 nights, an average of 368 bat recordings per night. Common Pipistrelle was the most frequently recorded species (82.7% of recordings). Common Pipistrelle was considered to have moderate activity levels. Soprano Pipistrelle was the second most frequently recorded species (12.5% of recordings). Soprano Pipistrelle was considered to have moderate to low activity levels. <i>Plecotus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and Noctule were also recorded on an infrequent basis (2.4%, 1.3%, 0.5%, 0.4% and 0.1% of recordings, respectively).
	May 2025	Data unavailable.

Location	Month	Activity summary
	June 2025	A total of 680 bat recordings were attained over 3 nights, an average of 227 bat recordings per night. Common Pipistrelle was the most frequently recorded species (70.4% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle and <i>Nyctalus/Cnephaeus</i> sp. bat were the second and third most frequently recorded species/species groups (14.9% and 11.6% of recordings, respectively). Both species/species groups were considered to have low activity levels. <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (1.6% and 1.0% of recordings, respectively). Single/couple of <i>Myotis</i> sp. bat and Barbastelle bat passes were also recorded.
	July 2025	A total of 1414 bat recordings were attained over 7 nights, an average of 202 bat recordings per night. Common Pipistrelle was the most frequently recorded species (73.1% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle was the second most frequently recorded species (16.5% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (4.2%, 3.5%, 1.6% and 1.1% of recordings, respectively). A couple of Barbastelle bat passes were also recorded.
	August 2025	Data unavailable.
	September 2025	A total of 6177 bat recordings were attained over 6 nights, an average of 1030 bat recordings per night. Common Pipistrelle was the most frequently recorded species (86.6% of recordings). Common Pipistrelle was considered to have high activity levels. Soprano Pipistrelle was the second most frequently recorded species (10.5% of recordings). Soprano Pipistrelle was considered to have moderate to low activity levels. <i>Myotis</i> sp. bat, Barbastelle and <i>Plecotus</i> sp. bat were recorded on an infrequent basis (2.2%, 0.3% and 0.3% of recordings, respectively). A couple of Noctule bat passes were also recorded.
	October 2025	A total of 51 bat recordings were attained over 5 nights, an average of 10 bat recordings per night. Common Pipistrelle, Soprano Pipistrelle and <i>Myotis</i> sp. bat were recorded on an infrequent basis (70.6%, 11.8% and 11.8% of recordings, respectively). Single <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and <i>Plecotus</i> sp. bat passes were also recorded.
I	The automated detector at Location I recorded bat activity along a woodland margin in the north of the site, bordered by grassland fields.	

Location	Month	Activity summary
	April 2025	A total of 53 bat recordings were attained over 7 nights, an average of 8 bat recordings per night. <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Soprano Pipistrelle, Common Pipistrelle and Barbastelle were recorded on an infrequent basis (34.0%, 26.4%, 20.8%, 7.5% and 7.5% of recordings, respectively). A couple of <i>Plecotus</i> sp. bat passes were also recorded.
	May 2025	Data unavailable.
	June 2025	A total of 424 bat recordings were attained over 5 nights, an average of 85 bat recordings per night. Common Pipistrelle was the most frequently recorded species (64.2% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle, <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (13.9%, 8.3%, 5.2%, 4.7% and 3.5% of recordings, respectively). A single Barbastelle bat pass was also recorded.
	July 2025	A total of 1416 bat recordings were attained over 7 nights, an average of 202 bat recordings per night. Common Pipistrelle was the most frequently recorded species (73.4% of recordings). Common Pipistrelle was considered to have moderate to low activity levels. Soprano Pipistrelle was the second most frequently recorded species (16.4% of recordings). Soprano Pipistrelle was considered to have low activity levels. <i>Nyctalus/Cnephaeus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Plecotus</i> sp. bat and Noctule were recorded on an infrequent basis (4.4%, 3.7%, 1.3% and 0.8% of recordings, respectively). A single Barbastelle bat pass was also recorded.
	August 2025	A total of 497 bat recordings were attained over 6 nights, an average of 83 bat recordings per night. Common Pipistrelle was the most frequently recorded species (52.7% of recordings). Common Pipistrelle was considered to have low activity levels. Soprano Pipistrelle, <i>Plecotus</i> sp. bat, <i>Myotis</i> sp. bat, <i>Nyctalus/Cnephaeus</i> sp. bat, Barbastelle and Noctule were also recorded on an infrequent basis (14.9%, 13.1%, 8.5%, 6.2%, 3.8% and 0.8% of recordings, respectively).
	September 2025	A total of 49 bat recordings were attained over 6 nights, an average of 8 bat recordings per night. Common Pipistrelle, <i>Myotis</i> sp. bat, Soprano Pipistrelle, Noctule and <i>Plecotus</i> sp. bat were recorded on an infrequent basis (53.1%, 14.3%, 12.2%, 10.2% and 8.2% of recordings, respectively). A single Barbastelle bat pass was also recorded.
	October 2025	A total of 91 bat recordings were attained over 5 nights, an average of 18 bat recordings per night. Common Pipistrelle, Soprano Pipistrelle, <i>Plecotus</i> sp. bat and <i>Myotis</i> sp. bat were recorded on an infrequent basis (44.0%, 28.6%, 14.3% and 12.1% of recordings, respectively). A single Noctule bat pass was also recorded.

- 3.4.3 Common Pipistrelle was the most frequently recorded species relating to 78.0% of all bat passes recorded, with all locations being used by foraging bats of this species on at least an occasional basis. Soprano Pipistrelle followed by *Myotis* sp. bat were the next most recorded bat species (13.2% and 5.6% all bat recordings, respectively), with generally similar patterns of activity to the Common Pipistrelle bats however at much lower numbers. *Plecotus* sp. bat, *Nyctalus/Cnephaeus* sp. bat, Barbastelle, Noctule and Nathusius' Pipistrelle were all recorded on an individual/occasional basis (1.3%, 1.0%, 0.6%, 0.2% and 0.1% of all bat recordings, respectively).

4 SUMMARY AND IMPACT ASSESSMENT

4.1 Bat roosting habitat

- 4.1.1 Based on the Phase 1 bat scoping survey undertaken and the historical survey data the following bat roosts are located within the site:

- B12 supports a confirmed occasional/transitory roost for low numbers of Common Pipistrelle and an individual Soprano Pipistrelle. In addition, B12 supports a probable occasional/transitory roost for an individual Brandt's bat;
- Tree W1Aj (Tree 188 in 2022) supports probable occasional/transitory roosts for two Common Pipistrelle bats and an individual Soprano Pipistrelle;
- Trees G14c (Tree 20 in 2022) and T59 (Tree 207 in 2022) support confirmed/probable occasional/transitory roosts for two Common Pipistrelle bats; and
- Trees H4a (Tree 53 in 2022) and T84 (Tree 254 in 2022) support probable bat roosts for unidentified bat species.

Emergence/climbing surveys are proposed to be undertaken of B11, B12, G64AB, G64AD, G64AF, G64AG, G64AH, G64AI, G64AJ, G35c and T101 in 2026 to determine presence/probable absence of roosting bats and, where present, identify species and numbers. On completion of the Phase 2 roost surveys, this interim report will be updated.

4.2 Foraging and commuting bats

- 4.2.1 The suite of bat activity transect and automated detector surveys confirmed the presence of at least eight bat species/species groups using the site for foraging and commuting. The species/species groups recorded were: Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, *Plecotus* sp. bat, *Nyctalus/Cnephaeus* sp. bat, *Myotis* sp. bat, Noctule and Barbastelle. The plan in *Appendix D* provides an overview of bat activity recorded during the transect surveys.

- 4.2.2 The majority of activity recorded related to Common Pipistrelle with up to nine individuals considered to be using the site at any one time. Soprano Pipistrelle, Noctule, *Myotis* sp. bat, *Plecotus* sp. bat and *Nyctalus / Cnephaeus* sp. bat were recorded consistently but with much lower levels of activity in comparison to the Common Pipistrelle bats. Barbastelle and Nathusius' Pipistrelle bats were recorded inconsistently on the automated detectors only throughout the surveys.

4.2.3 The majority of the bat activity recorded during the walkover activity surveys focused on the boundary vegetation, where woodland, mature trees and hedgerows form interfaces with the grassland and arable fields, particularly in the north of the site. With regards to the findings of the activity transect and automated detector survey work, the level of bat activity is considered to be low to moderate, with the majority of the activity relating to Common Pipistrelle bats, with only low/ very low levels of activity recorded for the other species present. As a whole, the site is considered to be of no more than low district interest for foraging and commuting bats.

4.2.4 Notwithstanding the above, any development proposals for the site should seek to maintain and, where possible, enhance foraging and commuting opportunities for all species of bats using the site in accordance with nature conservation legislation, planning policy and the 2006 NERC Act. Recommendations to maintain and enhance the value of the site for bats are provided in *Section 5* below.

5 RECOMMENDATIONS

5.1 This section identifies measures to be implemented during development of the site in order to avoid, mitigate and compensate potential impacts on bats, and to maintain the favourable conservation status of the local bat population. In addition, recommendations for enhancement of the site for roosting and foraging bats are included in accordance with 2024 NPPF and the 2006 NERC Act.

5.2 Roosting bats

5.2.1 Current knowledge suggests that proposed development of the site will result in the loss of, or damage or disturbance to the roost sites identified in B12. However, this assessment will be reviewed on completion of the 2026 emergence/climbing surveys⁵ and this interim report updated. A European Protected Species (EPS) licence would need to be obtained from Natural England prior to the commencement of any works affecting buildings and trees containing bat roosts. The licence would need to be accompanied by a detailed method statement describing how the favourable conservation status of bats at the site will be maintained, including information on how loss of roost sites will be compensated and timing of works to minimise impacts on bats. Mitigation would centre on:

- Creation of appropriately designed and sited new roosting opportunities for bats, proportionate to those being lost; and
- Implementation of works affecting roost sites at a time of year when bats are least susceptible to disturbance/likely to be present, employing sensitive working practices.

⁵ Proposed of B11, B12, G64AB, G64AD, G64AF, G64AG, G64AH, G64AI, G64AJ, G35c and T101.

5.3 Foraging and commuting bats

- 5.3.1 The site is considered as a whole to be of no more than low district importance for foraging and commuting bats. The site is expected to comprise a significant proportion of foraging habitat for low numbers of Common Pipistrelle bats and provides foraging habitat for low numbers of at least seven other species/species groups on a more occasional or infrequent basis.
- 5.3.2 A number of the bat species identified (Barbastelle, Soprano Pipistrelle and Noctule (and Brown Long-eared bat)) are listed as Species of Principal Importance under Section 41 of the 2006 NERC Act and therefore the effects of development on foraging and commuting habitat are a material consideration in the planning process.
- 5.3.3 The emerging development proposals (Illustrative Masterplan, KPK 2026) show the retention of the majority of the woodland habitats within the site and the hedgerows and treelines bordering and crossing the site. In addition, large areas of public open space are proposed in the north-west and south-west of the site, which will provide a mosaic of habitats of interest to bats including new areas of meadow grassland, scrub and tree planting and creation of aquatic habitats. The development of the site will however result in the loss of limited areas of foraging habitat within the development areas where buildings and hardstanding takes the place of areas currently dominated by grassland fields of limited value for foraging bats. Although it is expected that the proposed gardens and areas of open space within the development areas will provide new opportunities for foraging bats as these mature, in order to maximise future opportunities for foraging and commuting bats within areas of informal open space, it is recommended that the following measures are included in the landscape strategy for these areas of the site:
- Linear features such as hedgerows and treelines should be retained wherever possible and enhanced through infilling of gaps or provision of complementary scrub and tree planting. Where loss is unavoidable, for example at road or footpath access points, loss should be minimised and compensatory habitat provided at an appropriate location elsewhere.
 - Where possible, new linear features such as hedgerows and treelines should be created to improve connectivity between areas of suitable roosting and foraging habitat within the site and the wider area.
 - Landscape proposals within areas of open space across the site should seek to include high quality habitat for foraging bats. This might include shrub planting, creation of areas of rough and meadow grassland, orchard, woodland and marginal vegetation and/or use of native species-rich hedgerows and treelines along boundaries.

- Maintenance of standing deadwood and decaying trees/branches where safe to do so in order to maintain and encourage future natural opportunities for roosting bats.
- Creation of new wetland habitats including reedbeds, ponds and drains either as stand-alone features or as part of the surface water drainage strategy. These habitats are capable of supporting large numbers of invertebrates, providing a valuable foraging resource for bats.
- Formal planting schemes in residential areas should seek to include pollen and nectar-rich species in order to encourage invertebrate prey for bats.
- Securing the long-term integrity of high-quality habitats through inclusion within a long-term management strategy.

5.3.4 The site is currently subject to limited light spill, which is restricted to off-site residential areas bordering the site. The integrity of retained and new foraging and commuting habitat, both within the proposed development areas and its surrounds, should be conserved through the sensitive use of lighting throughout the construction and operational phases of the proposed development. In accordance with the Bat Conservation Trust and Institute of Lighting Practitioners guidance (BCT and ILP, 2023) this could be achieved through employment of a selection of the following measures in the vicinity of retained/newly created areas of suitable foraging habitat and in the vicinity of trees and buildings providing opportunities for roosting bats:

- Use of only the minimum amount of light required for safety and amenity, minimising upward reflected light.
- No bare bulbs or upward-pointing lights. The spread of light should be kept near or below the horizontal (luminaires with a negligible or zero Upward Light Ratio).
- Use of LED luminaires with warm white narrow-spectrum bulbs <2700k to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm.
- Avoidance of light-spill into adjacent areas through luminaire design or with accessories, such as hoods, cowls, louvres and shields to direct the light.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- For pedestrian lighting, use of waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges should be considered. The use of bollard or low-level downward-directional luminaires is strongly discouraged.
- Where necessary, use of embedded road lights to illuminate roadways and light only high-risk stretches of roads such as crossings and merges.

- Limiting the times that lights are on to provide some dark periods for wildlife through use of timers and/or automatic dimmers to reduce lighting outside times of peak use.

5.3.5 It is recommended that all detailed external lighting proposals are reviewed at appropriate design stages by a suitably qualified ecologist. This could be secured via a condition of planning consent.

6 CONCLUSION

6.1 Current knowledge suggests that proposed development of the site will result in the loss of, or damage or disturbance to the roost sites identified in B12. However, this assessment will be reviewed on completion of the 2026 emergence/climbing surveys of B11, B12, G64AB, G64AD, G64AF, G64AG, G64AH, G64AI, G64AJ, G35c and T101 and this interim report updated.

6.2 Measures are described for the maintenance and enhancement of current opportunities provided by the site for foraging and commuting bats. These include sensitive lighting design and planting and habitat creation works.

6.3 Subject to the implementation of the measures described in *Section 5*, it is considered that the favourable conservation status of the local bat population would be maintained and, through long-term provision of higher quality roosting and foraging habitats, potentially enhanced. This would ensure compliance with the nature conservation objectives of the 2017 Conservation of Habitats and Species Regulations (as amended) and the 2006 NERC Act and the guidance underpinning the 2024 National Planning Policy Framework.

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Document Title: Interim Bat Survey Report
Commissioning Party: Berkeley Strategic Land Ltd

Issue	Description	Date of Issue	Signed
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	Personnel	Position
Author	Clare Bird MCIEEM	Associate Ecologist
Approved for issue	Sarah Thornton-Mills MCIEEM	Principal Ecologist

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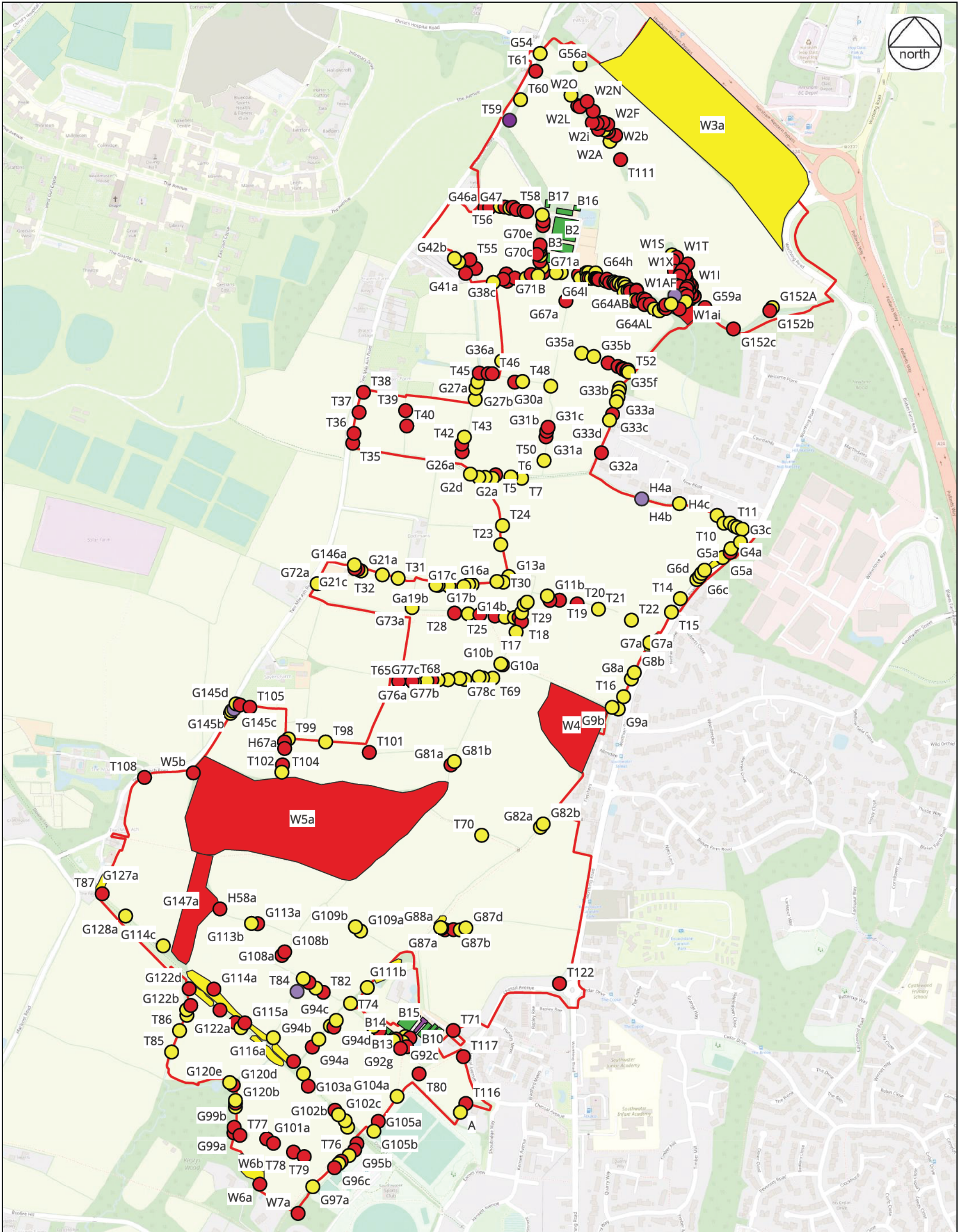
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APPENDIX A

Phase 1 Bat Roost Survey Summary Plan



KEY

Site boundary

Individual trees/ tree groups/ woodlands

- Confirmed bat roost
- Probable bat roost
- Moderate or higher bat roost potential (PRF-M)
- Low bat roost potential (PRF-I)

Buildings

- Confirmed bat roost
- Low bat roost potential
- Negligible bat roost potential

Map data from OpenStreetMap 2026-05-19

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2026 Phase 1 Bat Roost Survey Summary Plan

SCALE AT A3:
NTS

DATE:
May 2026

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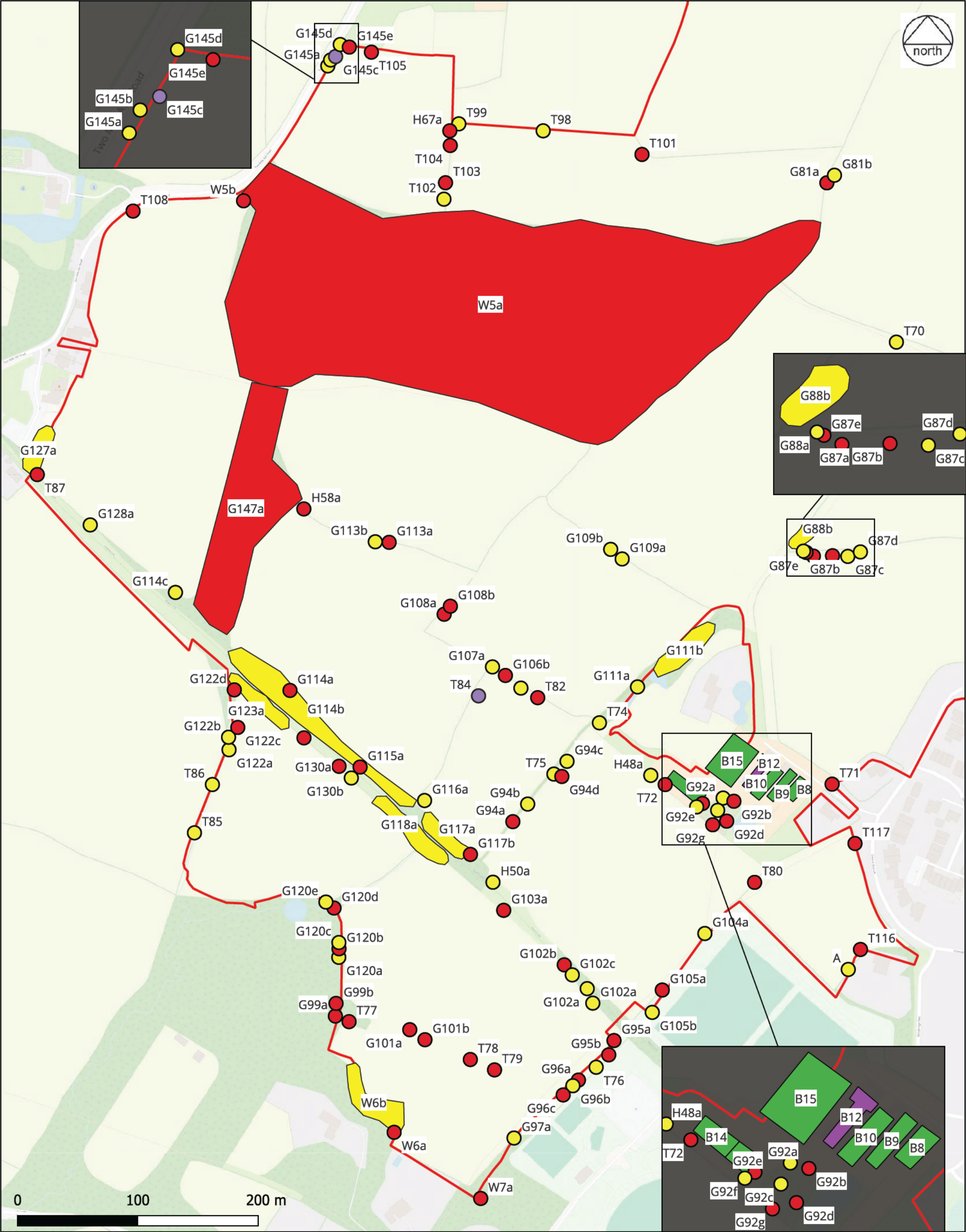
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KEY

Site boundary

Individual trees/ tree groups/ woodlands

- Confirmed bat roost
- Probable bat roost
- Moderate or higher bat roost potential (PRF-M)
- Low bat roost potential (PRF-I)

Buildings

- Confirmed bat roost
- Low bat roost potential
- Negligible bat roost potential

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2026 phase 1 Bat Roost Survey Summary Plan, South

SCALE AT A3:
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DATE:
May 2026

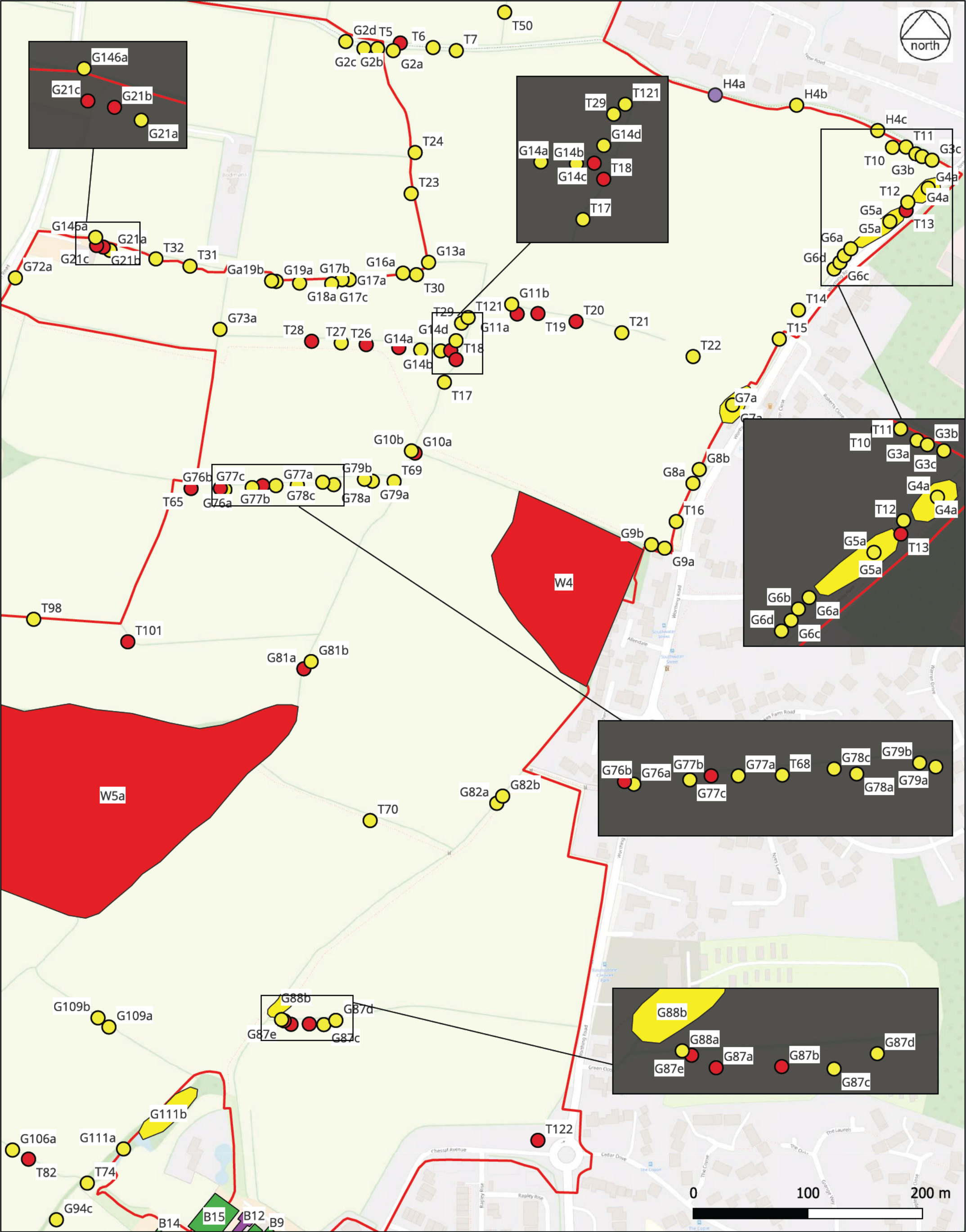
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KEY

- Site boundary
- Individual trees/ tree groups/ woodlands
- Confirmed bat roost
- Probable bat roost
- Moderate or higher bat roost potential (PRF-M)
- Low bat roost potential (PRF-I)

Buildings

- Confirmed bat roost
- Low bat roost potential
- Negligible bat roost potential

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PROJECT:
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TITLE:
2026 Phase 1 Bat Roost Survey Summary Plan, Middle

SCALE AT A3:
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APPENDIX B

Building Photographs



Photo 1: Southern and eastern elevations of B1 in the centre of the image, with northern elevation of B2 in left-side of photo and southern and eastern elevations of B16 in right side of photo.



Photo 2: Southern and eastern elevations of B3 in the centre of the image, with northern elevation of B4 in left-side of photo and southern and eastern elevations of B2 and B16 in right side of photo.



Photo 3: Northern and eastern elevations of B4 in the centre of the image, with southern elevation of B3 in right side of photo.



Photo 4: Southern elevation of B5.



Photo 5: Northern and eastern elevations of B8.



Photo 6: Northern and eastern elevations of B9, with B11 in right side of photo.



Photo 7: Northern elevation of B10 in centre of image, with eastern elevations of B12 and B11 in right side of photo and western elevation of B9 in left side of photo.



Photo 8: Eastern and northern elevations of B11 in forefront, with northern and eastern elevations of B12 in rear of photo.



Photo 9: Southern and western elevations of B11.



Photo 10: Western and southern elevations of B12.



Photo 11: Western elevation of B12.



Photo 12: Internal view of central section of B12.



Photo 13: Internal view of northern section of B12 (with bat droppings below this mortise and tenon joint – see Photo 14).



Photo 14: Bat droppings on floor below this mortise and tenon joint.



Photo 15: Northern and eastern elevations of B13 and B14.



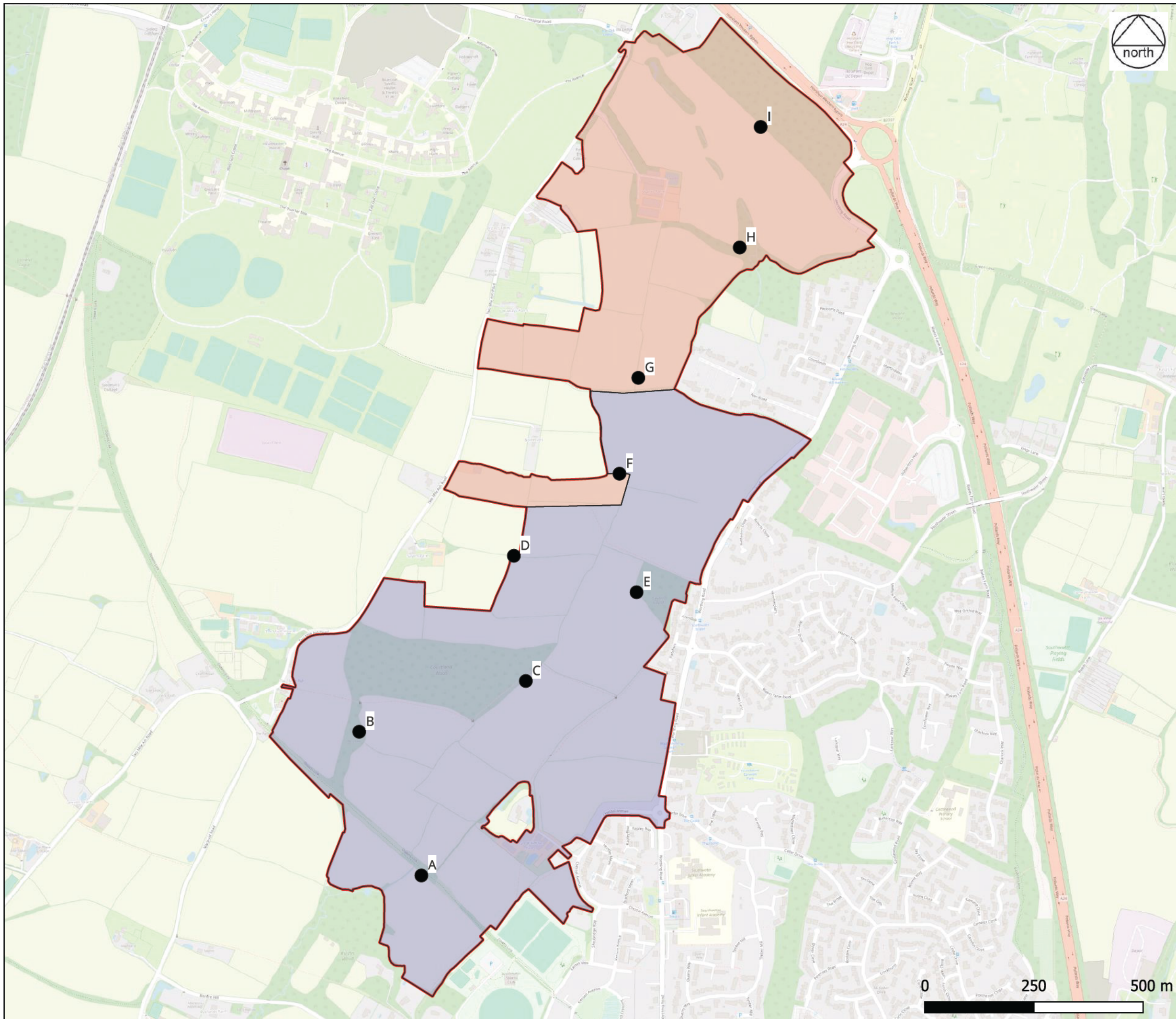
Photo 16: Southern elevation of B15.



Photo 17: Southern and eastern elevations of B17.

APPENDIX C

Bat Activity Transect Coverage and Automated Detector Location Plan



KEY

- Site boundary
- Statics
- Bat Transect Area**
 - Transect 1
 - Transect 2

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
Bat Activity Transect Coverage and Automated
Detector Location Plan

SCALE AT A3:
See scale bar

DATE:
May 2026

2090.78 / 42

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Licence no. AR187372

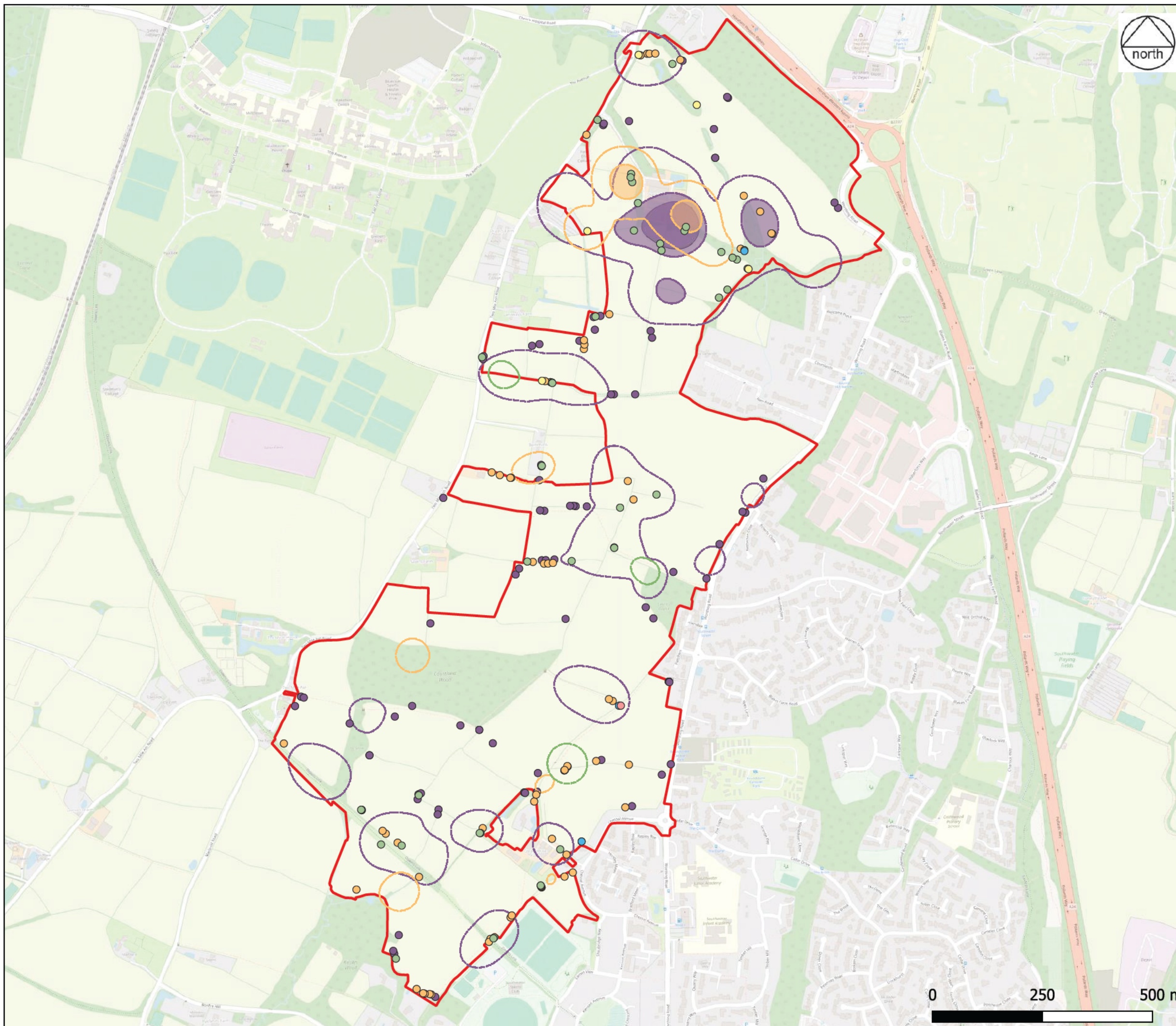
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APPENDIX D

Bat Activity Survey Summary Plan



KEY

Site boundary

Noctule

● Single bat pass

Nyctalus/Cnephaeus sp. bat

● Single bat pass

Plecotus sp. bat

● Single bat pass

Myotis sp. bat

● Single bat pass

Occasional bat pass/ foraging activity

Soprano Pipistrelle

● Single bat pass

Occasional bat pass/ foraging activity

Moderate foraging activity

Common Pipistrelle

● Single bat pass

Occasional bat pass/ foraging activity

Moderate foraging activity

High foraging activity

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
Bat Activity Survey Summary Plan

SCALE AT A3:
See scale bar

DATE:
May 2026

2090.78 / 41

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Landscape Architecture
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ANNEX C

2026 Wintering and Breeding Bird Survey Report

LAND NORTH-WEST OF SOUTHWATER, HORSHAM
BREEDING AND WINTERING BIRD ASSESSMENT

Prepared for Berkeley Strategic Land Ltd

by

Hankinson Duckett Associates

HDA ref: 2090.78

May 2026

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B	Breeding Bird Survey Results Summary Table
C	Wintering Bird Survey Results Summary Table
D	Site Evaluation Methodology

1 INTRODUCTION

1.1 Introduction and site description

1.1.1 This report describes the results of updated breeding and wintering bird surveys carried out within approximately 116ha of land north-west of Southwater, West Sussex, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference TQ154274. The study was commissioned by Berkeley Strategic Land Ltd in April 2025.

1.1.2 The site is split into a main site and a smaller area. The main site lies on the north-western edge of the village of Southwater and comprises a series of arable fields, semi-improved grassland fields, and improved grassland fields bordered by hedgerows, treelines and fence lines. Other habitats present include areas of broadleaved woodland, mixed woodland, and tall ruderal vegetation. In addition, Marlpost Gill flows in a southerly direction through the western part of the site and a second stream flows east to west through the north. The main site is bordered to the west by agricultural land and Two Mile Ash road and associated residential properties, beyond which are arable fields; to the north by the A24, industrial units, and agricultural land; to the south by Kirsty's Wood, and Bonfire Hill road with associated residential properties and grassland fields; and to the east by Worthing Road, beyond which is the settlement of Southwater.

1.1.3 The smaller area of the site measures approximately 1.35ha in size and is located approximately 800m to the north-west of the main site near Christ's Hospital railway station. This area comprises part of a grassland field and is bordered to the north by woodland; to the east by grassland fields; to the west by a public right of way and access road with residential properties and Christ's Hospital station car park beyond, and to the south by residential properties.

1.1.4 This report covers the breeding bird and wintering bird surveys of the main site carried out between March 2025 and March 2026. The location and boundary of the main site are shown in *Appendix A*.

1.2 Development proposals

1.2.1 The site is subject of an outline planning application, with all matters reserved (except for primary access to the highway) for a phased development comprising: the demolition of existing buildings and the construction of residential dwellings (including affordable housing) (Use Classes C2 and C3); a mixed-use neighbourhood centre (Use Classes E and F); education facilities (Use Class F1(a)); business and employment floorspace (Use Classes B2, B8 and E(g)); redevelopment of existing agricultural buildings including construction of a building for community use (Use Class F2); improvements to public rights of way; sports pitches; gypsy and traveller pitches/plots; public open space; landscaping, and associated infrastructure.

1.3 Legislative context

1.3.1 All species of bird are protected through Part 1, Sections 1 to 8, of the 1981 Wildlife and Countryside Act (as amended). Subject to the provisions of Part 1 it is an offence to:

- Intentionally kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird whilst that nest is in use or being built;
- Take or destroy an egg of any wild bird;
- Possess or be in control of any live or dead wild bird, or anything derived from such a bird; and/or
- Possess or be in control of an egg of a wild bird, or any part of such an egg.

1.3.2 In addition, selected species of particular nature conservation interest included in Schedule 1 of the Act are afforded a higher level of protection, with significantly higher penalties applying where an offence is committed. In addition to the basic level of protection described above, it is an offence to:

- Intentionally disturb any wild bird included in Schedule 1 whilst it is building a nest or is in, on or near a nest containing eggs or young; and/or
- Disturb dependent young of such a bird.

1.3.3 Some bird species are afforded additional protection under the 2017 Conservation of Habitats and Species Regulations (as amended). The 2017 Regulations allow for the setting up of Special Protection Areas (SPAs) where internationally important populations occur of bird species included on Annex 1 of the Council Directive 79/409 EEC on the Conservation of Wild Birds.

1.3.4 Many bird species are scarce and/or have undergone significant declines in recent years and these are listed as priority species on the UK Biodiversity Action Plan (BAP) and listed as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Section 40 of the NERC Act and planning policy requires that these bird species are a material consideration in the planning process.

1.3.5 The UKBAP and birds listed as Species of Principal Importance generally reflect those 'red listed' by the RSPB in their publication '*Birds of Conservation Concern*' (BoCC) (RSPB, 2021).

1.4 Scope and purpose of the report

1.4.1 A breeding and wintering bird survey undertaken during 2021 and 2022 (HDA, 2022) recorded a number of bird species of conservation concern (BoCC [RSPB, 2021]),

Species of Principal Importance and species specially protected under Schedule 1 of the 1981 Wildlife and Countryside Act occurring within the site. The site overall was considered to be of up to high local value for birds, on the basis of its fairly large size and the presence of breeding and wintering birds of conservation concern included on the RSPB's red and amber lists, and listed on the UKBAP and as Species of Principal Importance under the 2006 NERC Act. The site did not meet the requisite scores, either wholly or in part, for qualification as a candidate SPA, SSSI or Local Wildlife Site (LWS).

1.4.2 In recognition of the continued presence of suitable habitat within the site, the time that has passed since the 2022 breeding and wintering bird surveys were carried out, and the legislative context set out in *Section 1.3* above, updated breeding and wintering bird surveys were carried out at the main site between March 2025 and March 2026. This report presents the survey findings in the context of the site and proposed development in order to determine:

- The bird species using the site;
- Their status (wintering, breeding or otherwise);
- The approximate number and distribution of species meeting nature conservation criteria;
- The nature conservation interest of the site for breeding and wintering birds; and
- The potential effects of the proposed development on the ornithological interest of the site.

2 DESK STUDY

2.1 Designated Sites

2.1.1 Information on statutory and non-statutory designated areas located in the vicinity of the site and its surrounds has been collated from various sources including the 'Multi Agency Geographic Information for the Countryside' (MAGIC) online database (magic.defra.gov.uk) and Sussex Biodiversity Record Centre (SxBRC). The results are described below.

Statutory designated areas

Internationally designated areas

2.1.2 No internationally designated areas such as Special Protection Areas (SPAs) or Special Areas of Conservation (SACs) are located within 10km of the site.

Nationally designated areas

2.1.3 There are no National Nature Reserves (NNRs) falling within 5km of the site.

2.1.4 Three Sites of Special Scientific Interest (SSSIs) are located within 5km of the site, none of which are designated primarily for their ornithological interest. These comprise:

- Slinfold Stream and Quarry SSSI located approximately 3.9km to the north-west of the site at its closest point. This 1.93ha SSSI is designated for its geological interest;
- St Leonard's Park Ponds SSSI located approximately 4.2km to the north-east of the site. This 4ha SSSI supports species-rich ponds along a wooded stream; and
- St Leonard's Forest SSSI located approximately 4.5km to the north-east of the site. This 84.5ha SSSI comprises remnants of formerly more extensive deciduous woodland with examples of high forest and a varied ground flora. The presence of 'Atlantic' bryophytes within the SSSI indicate the continuity of woodland cover in this area for the past 5000 years.

2.1.5 There are no Local Nature Reserves (LNRs) within 5km of the site.

Non-statutory designated areas

2.1.6 One Local Wildlife Site (LWS) is located within the site, namely Courtland Wood LWS. This 5.8ha LWS supports a relatively small area of semi-natural broadleaved woodland with conifer introductions, which supports a ground flora with a good number of ancient woodland indicators. The location of Courtland Wood is shown on the plans provided in *Appendix A*.

2.1.7 In addition, five further LWSs lie within 2km of the site, these include:

- Sparrow Copse LWS located approximately 460m to the north-west of the main site. This 8.5ha LWS supports Ash and Maple woodland situated on the slopes of a stream valley;
- Southwater Country Park Complex LWS located approximately 550m to the south-east of the site. This 25ha LWS comprises a mosaic of habitats which support a number of rare and scarce species;
- High Wood LWS located approximately 1.4km to the north-west of the site. This 10.1ha LWS supports an area of ancient woodland;
- The Downs Link, Nutham Wood and Greatsteeds Farm LWS located approximately 1.6km to the south-east of the site. This 35.1ha LWS comprises a range of habitats including herb-rich meadow and ancient semi-natural woodland; and
- Chesworth Farm LWS located approximately 1.8km north-east of the site. This 41.6ha borders the river Arun and comprises of semi-improve neutral grassland, species-rich hedgerows and wetland habitats, including rush pasture which supports the Nationally Rare plant Cut-grass. It also supports a large number of bird species.

2.1.8 Seventy-nine units of woodland included on Natural England's Ancient Woodland Inventory are located within 2km of the site. Three of these units are located within the site including

Smith's Copse, Courtland Wood and Two Mile Ash Gill. The locations of areas of woodland included in Natural England's Ancient Woodland Inventory are shown on the plans provided in *Appendix A*.

2.2

Existing Bird Records

2.2.1

SxBRC provided 3402 bird records for the area within 2km of the site during the 2025 desk study, relating to 63 species. There are fourteen records potentially associated with the site. These include a single record of Cuckoo from 2015 and one record of Lesser Spotted Woodpecker from 2020; however, both are low-resolution records relating to 100m² grid reference squares that only partially pertain to the site. There are also records of Whitethroat (2024), two records of Nightingale (2022), Willow Warbler (2024), Firecrest (2020), Red Kite (2019), Stock Dove (2016), Kestrel (2020), and two records each of House Sparrow and Starling (2020). These records are of lower spatial resolution, relating to 1 km² grid reference squares that also only partially overlap the site. Notable bird species for which records were provided for the desk study area are listed in *Table 1* below:

Table 1: Notable bird species recorded within the desk study area

Common Name	Scientific Name	Annex I ¹	WCA 1 ²	NERC 41 ³	BOCC5 (2021) ⁴
Barn Owl	<i>Tyto alba</i>				Green
Bittern	<i>Botaurus stellaris</i>				Amber
Black Redstart	<i>Phoenicurus ochruros</i>				Amber
Black Tern	<i>Chlidonias niger</i>				Conservation Concern
Black-headed Gull	<i>Chroicocephalus ridibundus</i>				Amber
Bullfinch	<i>Pyrrhula pyrrhula</i>				Amber
Cetti's Warbler	<i>Cettia cetti</i>				Green
Common Scoter	<i>Melanitta nigra</i>				Red
Corn Bunting	<i>Emberiza calandra</i>				Red
Cuckoo	<i>Cuculus canorus</i>				Red
Duncock	<i>Prunella modularis</i>				Amber
Firecrest	<i>Regulus ignicapilla</i>				Green
Grey Partridge	<i>Perdix perdix</i>				Red
Grey Wagtail	<i>Motacilla cinerea</i>				Amber
Hawfinch	<i>Coccothraustes coccothraustes</i>				Red
Herring Gull	<i>Larus argentatus</i>				Red
Hobby	<i>Falco subbuteo</i>				Green
House Martin	<i>Delichon urbicum</i>				Red
House Sparrow	<i>Passer domesticus</i>				Red
Kestrel	<i>Falco tinnunculus</i>				Amber
Kingfisher	<i>Alcedo atthis</i>				Green
Lapwing	<i>Vanellus vanellus</i>				Red
Lesser B.b. Gull	<i>Larus fuscus</i>				Amber

Lesser Redpoll	<i>Carduelis cabaret</i>				Red
Lesser Sp. Woodpecker	<i>Dendrocopos minor</i>				Red
Linnet	<i>Carduelis cannabina</i>				Red
Little Egret	<i>Egretta garzetta</i>				Green
Mallard	<i>Anas platyrhynchos</i>				Amber
Marsh Tit	<i>Poecile palustris</i>				Red
Meadow Pipit	<i>Anthus pratensis</i>				Amber
Merlin	<i>Falco columbarius</i>				Red
Mistle Thrush	<i>Turdus viscivorus</i>				Red
Mute Swan	<i>Cygnus olor</i>				Green
Nightingale	<i>Luscinia megarhynchos</i>				Red
Pochard	<i>Aythya ferina</i>				Red
Red Kite	<i>Milvus milvus</i>				Green
Redstart	<i>Phoenicurus phoenicurus</i>				Amber
Reed Bunting	<i>Emberiza schoeniclus</i>				Amber
Ring Ouzel	<i>Turdus torquatus</i>				Red
Sandpiper (Common)	<i>Actitis hypoleucos</i>				Amber
Skylark	<i>Alauda arvensis</i>				Red
Song Thrush	<i>Turdus philomelos</i>				Amber
Spoonbill	<i>Platalea leucorodia</i>				Amber
Spotted Flycatcher	<i>Muscicapa striata</i>				Red
Starling	<i>Sturnus vulgaris</i>				Red
Stock Dove	<i>Columba oenas</i>				Amber
Swift	<i>Apus apus</i>				Red
Tawny Owl	<i>Strix aluco</i>				Amber
Tree Pipit	<i>Anthus trivialis</i>				Red
Tree Sparrow	<i>Passer montanus</i>				Red
Turtle Dove	<i>Streptopelia turtur</i>				Red
Wheatear	<i>Oenanthe oenanthe</i>				Amber
Whinchat	<i>Saxicola rubetra</i>				Red
White-fronted Goose	<i>Anser albifrons</i>				Red
Whitethroat	<i>Sylvia communis</i>				Amber
Willow Tit	<i>Poecile montanus/montana</i>				Red
Willow Warbler	<i>Phylloscopus trochilus</i>				Amber
Woodcock	<i>Scolopax rusticola</i>				Red
Woodlark	<i>Lullula arborea</i>				Green
Yellowhammer	<i>Emberiza citrinella</i>				Red

Notes:

- 1 Species listed in Annex I of Council Directive 79/409/EEC on the conservation of wild birds
- 2 Species specially protected under Schedule 1 of the 1981 Wildlife and Countryside Act
- 3 Species included in the UK Biodiversity Action Plan and Species of Principal Importance under the 2006 NERC Act
- 4 Species included in the Birds of Conservation Concern Red and Amber lists (RSPB, 2021)

3 METHODOLOGY

3.1 Field survey

3.1.1 Both breeding and wintering bird surveys were carried out to inform the ornithological assessment of the site. The methodologies for the breeding and wintering bird surveys undertaken are described below.

3.1.2 Breeding bird survey

3.1.2.1 The field survey methodology used for the breeding bird survey broadly followed the territory mapping methods outlined by Bibby, Burgess, Hill & Mustoe (2000) carried out over five visits.

3.1.2.2 On each visit a route was followed that allowed all parts of the main site and adjacent land to be surveyed. To avoid bias, routes were varied slightly from visit to visit. The survey area was split into two transects with each survey involving one surveyor covering each transect. The surveys were carried out by Nick Chambers, Claire Cornhill and Isaac West of HDA, ecologists experienced in bird surveys. During the surveys all aural or visual bird encounters were noted and other notable evidence of birds, such as raptor kills and owl pellets, was searched for and recorded during the survey.

3.1.2.3 Where species meeting the nature conservation criteria given in *Section 3.3* below were recorded these were mapped using standard BTO notation. Particular attention was given to recording evidence of breeding (e.g. song, display or territorial disputes) and recording different individuals of the same species simultaneously, indicating separate breeding territories. Birds not meeting the nature conservation criteria were simply recorded as present and a subjective assessment of abundance was made.

Timing of visits

3.1.2.4 Surveys were generally carried out in dry and bright weather conditions with low winds, thereby maximising the opportunity to record bird activity. All visits were timed to coincide with highest periods of bird activity (i.e. avoiding early afternoon), and included a visit during the peak breeding season for most species. The time, date and weather conditions for each visit are shown in *Table 2*.

Table 2: Breeding bird survey timings and weather conditions

Visit	Visit dates	Time	Weather conditions
1	2 nd May 2025	06:00 - 11:15	11-17°C, clear (5% cloud).
2	20 th May 2025	05:45 - 10:15	8-15°C, sunny (0% cloud).

Visit	Visit dates	Time	Weather conditions
3	3 rd June 2025 (South transect)	05:45 - 10:30	11-15°C, light cloud (40% cloud).
	10 th June 2025 (North transect)	05:30 - 10:00	12-19°C, overcast (100% cloud), moderate wind.
4	19 th June 2025	06:00 – 10:30	15-20°C, sun (0% cloud).
5	3 rd July 2025	05:30 - 09:30	11-18°C, sun (0% cloud).

3.1.2.5 A total of approximately 45.75 hours between all surveyors was spent recording birds over the five visits for the breeding bird survey.

3.1.3 Wintering bird survey

3.1.3.1 The field survey methodology used for the wintering bird survey broadly followed the territory mapping methods outlined by Bibby, Burgess, Hill & Mustoe (2000) carried out over six visits.

3.1.3.2 On each visit a route was followed that allowed all parts of the site and immediately adjacent habitat to be surveyed. To avoid bias, routes were varied slightly from visit to visit. The survey visits were carried out by Nick Chambers and Isaac West of HDA. During the surveys, all aural or visual bird encounters were noted and other notable evidence of birds, such as raptor kills and owl pellets, was searched for and recorded during the survey.

3.1.3.3 Where species meeting the nature conservation criteria given in *Section 3.3.1* below were recorded these were mapped using standard BTO notation. Birds not meeting the nature conservation criteria were simply recorded as present and a subjective assessment of abundance was made.

Timing of visits

3.1.3.4 Surveys were generally carried out in dry and bright weather conditions with low winds, thereby maximising the opportunity to record bird activity. The time, date and weather conditions for each visit are shown in *Table 3*.

Table 3: Wintering bird survey timings and weather conditions

Visit	Visit dates	Time	Weather conditions
1	28 th November 2025	11:30 - 16:30	6°C, overcast (50% cloud).
2	23 rd December 2025	10:00 – 15:30	7°C, cloudy (75% cloud).
3	26 th January 2026	11:30 - 16:00	8°C, cloudy, damp (90% cloud).

Visit	Visit dates	Time	Weather conditions
4	5 th February 2026	10:00 - 15:00	9°C, overcast (100% cloud), occasional rain.
5	19 th February 2026	10.30 - 16:00	8°C, overcast (80% cloud).
6	17 th March 2026	10:45 – 15:30	12°C, partly cloud (60% cloud).

3.1.3.5 A total of approximately 30 hours was spent recording birds over the six visits for the wintering bird survey.

3.2 Interpretation of territory mapping results

3.2.1 Interpretation of the breeding bird field survey data follows the guidelines given for the territory mapping method in Bibby, Burgess, Hill and Mustoe (2000).

3.2.2 For territorial bird species of nature conservation interest, during the breeding bird survey the presence of a species in the same location on a minimum of two visits is generally taken to constitute a breeding pair, although in some instances a cautious approach has been applied when estimating the number of breeding pairs, including consideration of observations made during the extensive suite of wider ecological survey work carried out at the site. For other species alternative measures were applied again following Bibby, Burgess, Hill & Mustoe (2000). All species recorded at the boundaries of the site have been included within the analysis.

3.3 Conservation evaluation

3.3.1 The ornithological importance of the site is assessed in two ways: firstly the conservation status of individual species is assessed by reference to the following criteria:

- Species specially protected under the 2017 Conservation of Habitats and Species Regulations (as amended) as listed on Annex 1 of the EU Birds Directive (Codified version: 2009/147/EC) (EC, 2009);
- Species specially protected under Schedule 1 of the 1981 Wildlife and Countryside Act (HMSO, 1981);
- Species included in the Birds of Conservation Concern red and amber lists (RSPB, 2021); and
- Species included in the UK Biodiversity Action Plan (BAP)/Species of Principal Importance identified under the Natural Environment and Rural Communities (NERC) Act 2006.

3.3.2 Secondly, the species assemblage of all birds is assessed with regard to published guidance on: (a) the selection of biological Sites of Special Scientific Interest (SSSIs) (*Appendix D: Drewitt et al., 2015*); and (b) the *Sussex Local Wildlife Site Selection Criteria* (Sussex Biodiversity Records Centre and Sussex Local Wildlife, undated).

3.4 Limitations

- 3.4.1 No constraints were encountered during the survey and it is considered that the survey findings allow a robust assessment of the likely importance of the site for breeding and wintering birds.

4 RESULTS

4.1 Breeding bird survey

- 4.1.1 A total of 42 bird species were recorded during the breeding bird survey, of which 30 are considered to be either breeding or hold a significant proportion of a breeding territory (either wholly or in part) in association with the site. A complete list of recorded birds and a description of their distribution across the site is given in *Appendix B*. *Table 4* lists all species thought to hold significant breeding territories within the site. For species meeting nature conservation criteria, *Table 4* also provides an estimate of the number of breeding territories or pairs of each species within the site. For species not meeting nature conservation criteria, a simple estimate of abundance has been made (Abundant/Frequent/Occasional/Rare).

Table 4: Breeding bird species at Land North West of Southwater 2nd May – 3rd July 2025

Common name	Latin name	Notes on breeding/occurrence	No. territories/ breeding pairs associated with site*
Blackbird	<i>Turdus merula</i>	Frequent: Individuals and pairs recorded in hedgerows and woodland habitats throughout the site.	n/a
Blackcap	<i>Sylvia atricapilla</i>	Occasional: Moderate numbers occasionally recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Blue Tit	<i>Parus caeruleus</i>	Frequent: Pairs and family groups frequently recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Bullfinch	<i>Pyrrhula pyrrhula</i>	Occasional: Low numbers recorded in association with scrub and hedgerows in the north and south of the site, with up to 2 breeding pairs present.	2
Carrion Crow	<i>Corvus corone</i>	Frequent: Frequently recorded throughout the site with up to 260 birds recorded as individuals, pairs and groups, particularly in association with mature trees and the cattle sheds in the north of the site.	n/a

Chaffinch	<i>Fringilla coelebs</i>	Occasional: Encountered in fairly low numbers across the site in association with woodlands and hedgerows.	n/a
Chiffchaff	<i>Phylloscopus collybita</i>	Occasional: Moderate number of pairs recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Dunnock	<i>Prunella modularis</i>	Frequent: Regularly recorded in association with woodland edges, hedgerows and scrub across the site, with up to seventeen breeding territories.	17
Feral Pigeon	<i>Columba livia (domest.)</i>	Frequent: Regularly recorded in association with the cattle sheds in the north of the site.	n/a
Goldcrest	<i>Regulus regulus</i>	Occasional: Recorded during most survey visits, in particular within Courtland Wood, with a maximum count of 6 individuals.	n/a
Goldfinch	<i>Carduelis carduelis</i>	Rare: Recorded in small groups across the site in association with mature trees.	n/a
Great Spotted Woodpecker	<i>Dendrocopos major</i>	Occasional: Individuals recorded in association with woodland, hedgerows and treelines.	n/a
Great Tit	<i>Parus major</i>	Frequent: Pairs and family groups frequently recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Greenfinch	<i>Carduelis chloris</i>	Rare: Individuals recorded in association with trees and off-site gardens, with up to three breeding territories partially overlapping the site.	Up to 3
Green Woodpecker	<i>Picus viridis</i>	Occasional: Individuals recorded in association with woodland, hedgerows and treelines.	n/a
House Sparrow	<i>Passer domesticus</i>	Occasional: Small numbers recorded primarily in association with off-site residential development in the east of the site, with up to four breeding pairs overlapping the site boundary.	Up to 4
Jackdaw	<i>Corvus monedula</i>	Frequent: Regularly recorded with a maximum count of up to approximately 500 individuals, in association with grassland habitats across the site, mature trees, and the cattle sheds in the north of the site.	n/a

Jay	<i>Garrulus glandarius</i>	Rare/variable: Occasionally recorded in association with trees and woodland throughout the site.	n/a
Linnet	<i>Carduelis cannabina</i>	Occasional: Up to 3 pairs recorded in hedgerows and tree habitats in the south of the site.	3
Long-tailed Tit	<i>Aegithalos caudatus</i>	Occasional/variable: Family groups of up to 4 recorded occasionally in association with woodland, trees and boundary habitats across the site.	n/a
Magpie	<i>Pica pica</i>	Frequent: Frequently recorded throughout the site with a maximum count of 17 individuals. Generally associated with woodland, hedgerows and adjacent grassland habitats.	n/a
Pheasant	<i>Phasianus colchicus</i>	Occasional: Small numbers recorded across the site in association with woodland, grassland and arable habitat.	n/a
Robin	<i>Erithacus rubecula</i>	Frequent: Moderate number of individuals and pairs recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Song Thrush	<i>Turdus philomelos</i>	Frequent: Regularly recorded in woodland and boundary habitats throughout the site, with 11 territories identified.	11
Swallow	<i>Hirundo rustica</i>	Rare: Individuals/ small groups recorded foraging in the south of the site.	Up to 2
Treecreeper	<i>Certhia familiaris</i>	Occasional: Regularly recorded in small numbers, largely in association with Courtland Wood.	n/a
Tree Sparrow	<i>Passer montanus</i>	Rare: Recorded on one occasion in a hedgerow in the south of the site. ¹	Up to 1
Whitethroat	<i>Sylvia communis</i>	Occasional: Recorded in association with hedgerows and scrub mainly in the centre of the site, with 6 breeding pairs recorded.	6

¹ Although Tree Sparrow was only recorded during one survey visit, it was also identified once in the same location during another protected species survey by another experienced surveyor, and has been recorded as a breeding pair on a precautionary basis.

Woodpigeon	<i>Columba palumbus</i>	Frequent/variable: Recorded across the site on all survey visits with a maximum count of 126 individuals. Associated with woodland, hedgerow, scrub and grassland habitats.	30-40
Wren	<i>Troglodytes troglodytes</i>	Frequent: Frequently recorded in association with hedgerow, woodland and scrub habitats across the site.	41

* Only species meeting nature conservation criteria holding breeding territories over the site are considered in this column.

4.1.2 A further 12 species, not including species simply flying over, were also recorded using land within the site during the 2025 breeding bird survey which are considered unlikely to breed or hold distinct territories over the site. These include species either recorded as single birds, during one survey visit only, or in unsuitable breeding habitat. Such records may relate to species breeding nearby and using the site on an occasional basis for feeding, loafing, etc. *Table 5* below details these species.

Table 5: Non-breeding bird species at Land North-west of Southwater 2nd May – 3rd July 2025

Common name	Latin name	Notes on breeding/occurrence
Buzzard (Common)	<i>Buteo buteo</i>	Rare: One to two individuals occasionally recorded foraging over the site.
Canadian Goose	<i>Branta canadensis</i>	Rare: Low numbers recorded during one survey visit.
Garden Warbler	<i>Sylvia borin</i>	Rare: Recorded during one survey visit in the north of the site.
Grey Heron	<i>Ardea cinerea</i>	Rare: Recorded during one survey visit.
Lesser Whitethroat	<i>Sylvia curruca</i>	Rare: One bird recorded in the north of the site on one survey visit.
Mistle Thrush	<i>Turdus viscivorus</i>	Rare: Occasionally recorded in scrub in the north of the site, and on the site boundary in the south of the site.
Nuthatch	<i>Sitta europaea</i>	Rare: Small numbers recorded in association with woodland in the south of the site.
Pied Wagtail	<i>Motacilla alba</i>	Rare: Individuals recorded in arable and grassland habitat.
Rook	<i>Corvus frugilegus</i>	Frequent/variable: A maximum count of 100 individuals recorded foraging in grassland and roosting around the cattle sheds in the north of the site.
Sparrowhawk	<i>Accipiter nisus</i>	Rare: Recorded on one occasion in the north of the site.
Starling	<i>Sturnus vulgaris</i>	Occasional/variable numbers: A maximum count of 25 foraging birds, in association with boundary and open habitats across the site.
Stockdove	<i>Columba oenas</i>	Rare: Two breeding pairs recorded in woodland and mature tree habitat in the south of the site.

4.2 Wintering bird survey

4.2.1 A total of 38 bird species were recorded during the wintering bird survey. A complete list of birds recorded during the wintering bird survey and a description of their distribution across the site is given in *Appendix C*. *Table 6* lists all species recorded in association with the site, together with an indication of the maximum number of individuals of species of conservation interest recorded using the site on any one visit.

Table 6: Wintering bird species at Land North West of Southwater 28th November 2025 - 17th March 2026

Common name	Latin name	Notes on occurrence
Blackbird	<i>Turdus merula</i>	Occasional: Moderate numbers recorded in association with woodland, scrub and hedgerow habitats across the site.
Blue Tit	<i>Parus caeruleus</i>	Frequent: Individual birds and small parties recorded in association with woodland, scrub and hedgerow habitats across the site.
Buzzard (Common)	<i>Buteo buteo</i>	Rare: A single individual recorded foraging over the site during four of the six survey visits.
Carrion Crow	<i>Corvus corone</i>	Abundant: Regularly recorded throughout the site, often around the cattle sheds and adjacent mature trees in the north of the site, and in association with grassland, arable and woodland habitats, with an average count of 176 individuals.
Chaffinch	<i>Fringilla coelebs</i>	Occasional/variable: Up to 23 individuals recorded on 4 survey visits foraging in association with hedgerow, grassland and arable habitat across the site.
Chiffchaff	<i>Periparus ater</i>	Rare: One individual recorded in association with woodland on one occasion.
Collared Dove	<i>Streptopelia decaocto</i>	Rare: Low numbers recorded during two survey visits.
Dunnock	<i>Prunella modularis</i>	Occasional: Up to 13 individuals recorded during any one survey visit in association with hedgerow and scrub habitats across the site, with an average count of 9 individuals.
Feral Pigeon	<i>Columba livia (domest.)</i>	Frequent: Consistently recorded in association with the cattle sheds in the north of the site, with an average count of 51 individuals.
Fieldfare	<i>Turdus pilaris</i>	Rare: Recorded during 2 survey visits in association with grassland and hedgerows, with a maximum count of 27 individuals.
Goldcrest	<i>Regulus regulus</i>	Rare: A maximum of two individuals recorded in association with woodland and mature trees.
Goldfinch	<i>Carduelis carduelis</i>	Occasional: Recorded during 5 survey visits, with a maximum of 20 individuals recorded with mature tree and hedgerow habitats across the site.

Great Spotted Woodpecker	<i>Dendrocopos major</i>	Rare: Up to 2 birds recorded during 3 of the survey visits in association with woodland and hedgerow habitats across the site.
Great Tit	<i>Parus major</i>	Frequent: Pairs and small parties recorded in association with woodland and hedgerow habitats across the site during all 6 survey visits.
Green Woodpecker	<i>Picus viridis</i>	Rare: A single bird recorded during four of the survey visits in association with woodland, grassland and hedgerow habitats across the site.
Greenfinch	<i>Carduelis chloris</i>	Rare: One bird recorded in association with mature tree and hedgerow habitat on the site boundary in the north-west of the site.
Grey Heron	<i>Ardea cinerea</i>	Rare: One bird recorded on one occasion.
Grey Wagtail	<i>Motacilla cinerea</i>	Rare: Four individuals recorded foraging in arable habitats.
Jackdaw	<i>Corvus monedula</i>	Abundant: Up to 200 recorded in association with grassland and woodland across the site, and in mature trees around the cattle sheds in the north of the site, with an average count of 115.
Jay	<i>Garrulus glandarius</i>	Rare: Up to three individuals recorded during three survey visits in association with woodland habitats and tree groups across the site.
Kestrel	<i>Falco tinnunculus</i>	Rare: One bird recorded on one occasion foraging over grassland habitat.
Linnet	<i>Carduelis cannabina</i>	Occasional: Recorded during 5 of the survey visits, mainly in association with mature trees and hedgerows in the centre and south of the site, with a maximum count of 20 individuals, and an average of 9 individuals recorded per visit.
Long-tailed Tit	<i>Aegithalos caudatus</i>	Rare: A group of 8 recorded in association with woodland habitat during one survey visit.
Magpie	<i>Pica pica</i>	Occasional: Between 1 and 18 individuals recorded across the site during each visit, in a variety of habitats including woodland and grassland.
Meadow Pipit	<i>Anthus pratensis</i>	Rare/ variable: recorded during 2 survey visits with a maximum count of 82.
Mistle Thrush	<i>Turdus viscivorus</i>	Rare: Single birds recorded during 3 survey visits in association with woodland and copses.
Nuthatch	<i>Sitta europeaea</i>	Rare: Recorded on one occasion in association with woodland.
Pied Wagtail	<i>Motacilla alba</i>	Occasional: Groups of up to 25 individuals recorded foraging in arable habitat.
Redwing	<i>Turdus iliacus</i>	Frequent: Recorded in moderate numbers during 5 of the survey visits, with a maximum count of 70 individuals and an average of 28 individuals recorded.
Robin	<i>Erithacus rubecula</i>	Frequent: Regularly recorded in association with woodland, scrub and hedgerow habitats across the site.

Rook	<i>Corvus fruilegus</i>	Rare: A maximum of 3 individuals recorded foraging in grassland.
Skylark	<i>Alauda arvensis</i>	Rare/ variable: Recorded during 4 survey visits foraging in arable habitat, with a maximum count of 5 individuals.
Song Thrush	<i>Turdus philomelos</i>	Occasional: Recorded during all 6 survey visits in association with woodland and copses, with an average count of 3 individuals.
Starling	<i>Sturnus vulgaris</i>	Frequent/ variable: Recorded across four survey visits, with a maximum count of 23 individuals and an average of 9 individuals recorded.
Treecreeper	<i>Certhia familiaris</i>	Rare: One bird recorded on one occasion in woodland.
Woodcock	<i>Scolopax rusticola</i>	Rare: One bird recorded on one occasion in woodland edge habitat.
Woodpigeon	<i>Columba palumbus</i>	Abundant: Recorded regularly in a variety of habitat types, with large numbers associated with woodland and plantation habitat in the north of the site, with an average count per survey visit of 194 individuals.
Wren	<i>Troglodytes troglodytes</i>	Occasional: Regularly recorded in association with woodland, scrub and hedgerow habitats across the site, with a maximum count of 11 individuals.

5

EVALUATION

5.1 Importance of individual species

5.1.1 Breeding bird survey

5.1.1.1 *Table 7* lists the species recorded during the survey that are thought to hold breeding territories on or over the site which meet at least one of a range of criteria relating to statutory protection or conservation importance. Species recorded during the survey but not thought to hold significant territory on or over the site are excluded from *Table 7* and, unless specifically mentioned, are not used in the evaluation of the importance of the site for individual breeding bird species.

Table 7: Species recorded holding breeding territories on or over the site that meet at least one of a range of criteria relating to statutory protection or conservation importance.

Species	Annex 1 EU Birds Directive ¹	Schedule 1 Wildlife & Countryside Act 1981 ²	UK BAP/ NERC 2006 ³	Birds of Conservation Concern ⁴
Bullfinch				Amber
Dunnock				Amber
Greenfinch				Red
House Sparrow				Red
Linnet				Red
Song Thrush				Amber
Tree Sparrow				Red
Whitethroat				Amber
Woodpigeon				Amber
Wren				Amber

Notes on Table 7:

- 1 Species listed on Annex 1 of the EU Birds Directive (Codified version: 2009/147/EC) (EC, 2009). The 2017 Conservation of Habitats and Species Regulations (as amended) allow for the setting up of Special Protection Areas (SPAs) where internationally significant populations exist.
- 2 Species specially protected by Schedule 1 of the 1981 Wildlife and Countryside Act (as amended).
- 3 Priority Species included in the UK Biodiversity Action Plan (BAP) (UKBP, 2007)/ Species of Principal Importance under the 2006 Natural Environment and Rural Communities (NERC) Act.
- 4 Species included in the Birds of Conservation Concern 5 red and amber lists (RSPB, 2021). Red list – rapidly declining species and species of global conservation concern. Amber list – moderately declining species, rare breeders, internationally important and localised species, and those with an unfavourable conservation status in Europe.

5.1.1.2 No species included on Annex 1 of the EU Birds Directive or Schedule 1 of the 1981 Wildlife and Countryside Act (as amended) were recorded nesting or holding significant breeding territories on or over the site during the 2025 breeding bird survey.

5.1.1.3 Ten of the species recorded breeding in association with the site are included in the Birds of Conservation Concern (BoCC) red or amber lists (RSPB, 2021). Although inclusion on these lists does not confer special statutory protection or present any special legal constraints on development, the species concerned are all of conservation importance and therefore mitigation would be required if large populations of such species are likely to be affected by development of the site. This is not the case for the Land North West of Southwater site.

5.1.1.4 Four red-listed bird species were recorded breeding within or holding significant breeding territory over the site; Greenfinch, House Sparrow, Linnet and Tree Sparrow. All four species are included on the red list under the criteria of having undergone severe (>50%) declines in UK breeding populations in the long-term, defined as the time from the first BoCC assessment in 1969. Greenfinch is also listed as having undergone a severe decline in the short term (over 25 years), and Tree Sparrow is also listed as having undergone a moderate breeding range decline in the long-term. Greenfinch, House Sparrow and Linnet remain relatively common and widespread in Britain however and the site holds only a very small proportion (<0.01%) of their UK breeding populations. Although the population of Tree Sparrow has stabilised since experiencing large declines in the late twentieth century due to changes in agricultural practice, the bird remains rare in Sussex, with few recent records of breeding pairs (BTO). Table 8 below shows the UK population of the red listed bird species in relation to the number of territories or breeding pairs supported by the site.

Table 8: Breeding populations of red listed bird species

Species	UK Breeding Population (based on Musgrove <i>et al.</i> , 2013)	No. territories supported by site	Proportion of UK population supported by site (%)
Greenfinch	1,700,000 pairs	3	0.0002
House Sparrow	5,300,000 pairs	4*	<0.0001
Linnet	430,000 territories	3	0.0007
Tree Sparrow	200,000 territories	1	0.0005

* Represents maximum number of breeding pairs expected to hold territories associated with the site based on counts of individuals.

5.1.1.5 Six other bird species meeting nature conservation criteria were considered to hold breeding territories within the site: Bullfinch, Dunnock, Song Thrush, Whitethroat, Woodpigeon and Wren. Bullfinch, Dunnock, Song Thrush and Whitethroat are included on the BoCC amber list due to moderate (25% to 50%) breeding population declines over the long-term. Woodpigeon and Wren are included on the BoCC amber list as the UK population of these species are considered to be of international importance, making up over 20% of the total European populations. All remain relatively common and widespread in Britain however and the site holds only a very small proportion (<0.01%) of their UK breeding populations. *Table 9* below shows the UK population of the amber listed bird species in relation to the number of territories or breeding pairs supported by the site.

Table 9: Breeding populations of amber listed bird species

Species	UK Breeding Population (based on Musgrove <i>et al.</i> , 2013)	No. territories supported by site	Proportion of UK population supported by site (%)
Bullfinch	220,000 territories	2	0.001
Dunnock	2,500,000 territories	17	0.0007
Song Thrush	1,200,000 territories	11	0.0009
Whitethroat	1,100,000 territories	6	0.0006
Woodpigeon	5,400,000 pairs	30-40*	0.0007
Wren	8,600,000 territories	41	0.0005

* Represents maximum number of breeding pairs expected to hold territories associated with the site based on counts of individuals.

5.1.1.6 Of these red and amber listed species, in terms of UK population, conservation status and number of territories associated with the site, the species of greatest nature conservation interest is Linnet, which has an estimated UK breeding population of 430,000 territories (Musgrove *et al.*, 2013). Linnet were recorded in association with trees and hedgerows in the south of the site, with 3 breeding pairs present, which equates to 0.0007% of the UK breeding population. Linnet are widespread in the UK, though are scarce in highland areas. They are most abundant on the east coast of England and Scotland. Linnet numbers fell rapidly in the UK from the late 1960s, but since the mid 1980s have had a period of relative stability. The cause of the Linnet decline in the UK is likely to be associated with an increase in nest failures due to agricultural intensification. Given the species remains widespread throughout Britain, it is considered unlikely that development of the site would have a significant adverse effect on the local Linnet population. Opportunities to maximise the value of the development landscape scheme for Linnet and other birds of conservation interest are described in *Section 6* below.

- 5.1.1.7 The only species of conservation concern recorded during the 2022 breeding bird survey which was not recorded during the 2025 survey was Tawny Owl, an amber listed species (HDA 2022). Although the species was not recorded in the updated survey, it is possible that due to the habitat present the site could still hold part of the territory of a breeding pair. As identified in the 2022 report, in view of the development proposals for the site, which includes the retention of woodland habitats, notably Courtland Wood, as well as native tree planting, it is considered unlikely that development of the site would have a significant adverse effect on the local Tawny Owl population.
- 5.1.1.8 A description of the distribution of red and amber listed birds across the site and the habitats with which they were associated is given in *Appendix B*.
- 5.1.1.9 Bullfinch, Dunnock, House Sparrow, Linnet, Song Thrush and Tree Sparrow are also UK Biodiversity Action Plan (BAP) species and listed as Species of Principal Importance under the 2006 NERC Act. These are all relatively common and widespread red or amber listed species however and the site holds only a very small proportion (<0.01%) of their British breeding populations. Notwithstanding this, where possible development proposals should seek to maintain opportunities for breeding by these species at the site following development. This is discussed further in *Section 6* below.
- 5.1.2 *Wintering bird survey*
- 5.1.2.1 *Table 10* below lists the species recorded using the site during the wintering bird survey which meet at least one of a range of criteria relating to statutory protection or conservation importance. Species simply recorded as flying over the site are excluded from the list.

Table 10: Species recorded using the site during the wintering bird survey that meet at least one of a range of criteria relating to statutory protection or conservation importance.

Species	Annex 1 EU Birds Directive ¹	Schedule 1 Wildlife & Countryside Act 1981 ²	UK BAP/ NERC 2006 ³	Birds of Conservation Concern ⁴
Dunnock				Amber
Fieldfare				Red
Greenfinch				Red
Grey Wagtail				Amber
Kestrel				Amber
Linnet				Red
Meadow Pipit				Amber
Mistle Thrush				Red
Redwing				Amber
Rook				Amber
Skylark				Red
Song Thrush				Amber
Starling				Red
Woodcock				Red

Woodpigeon				Amber
Wren				Amber

Notes on Table 10:

- 1 Species listed on Annex 1 of the EU Birds Directive (Codified version: 2009/147/EC) (EC, 2009). The 2017 Conservation of Habitats and Species Regulations (as amended) allow for the setting up of Special Protection Areas (SPAs) where internationally significant populations exist.
- 2 Species specially protected by Schedule 1 of the 1981 Wildlife and Countryside Act (as amended).
- 3 Priority Species included in the UK Biodiversity Action Plan (BAP) (UKBP, 2007)/Species of Principal Importance under the 2006 Natural Environment and Rural Communities (NERC) Act.
- 4 Species included in the Birds of Conservation Concern 5 red and amber lists (RSPB, 2021). Red list – rapidly declining species and species of global conservation concern. Amber list – moderately declining species, rare breeders, internationally important and localised species, and those with an unfavourable conservation status in Europe.

5.1.2.2 No species included on Annex 1 of the EU Birds Directive were recorded during the wintering bird survey. Two species included on Schedule 1 of the 1981 Wildlife and Countryside Act (as amended) were recorded during the wintering bird survey, namely Fieldfare and Redwing. Schedule 1 listed species receive additional protection against disturbance of active nest sites relative to other breeding birds (see Section 1.3).

5.1.2.3 Fieldfare and Redwing are present in large numbers in Britain during the winter, but only a very small number remain through the summer to breed. The majority of records of Fieldfare and Redwing nesting in Britain occur in Northern and upland Britain. It is therefore extremely unlikely that either Fieldfare or Redwing are breeding on the site, as supported by the findings of the breeding bird survey.

5.1.2.4 Seven red-listed bird species were recorded within the site during the wintering bird survey: Fieldfare, Greenfinch, Linnet, Mistle Thrush, Skylark, Starling and Woodcock. All of these species are included in the red list under the criteria of having undergone a rapid ($\geq 50\%$) decline in UK breeding population over last 25 years and/or in the long-term, defined as the time from the first BoCC assessment (1969), while Fieldfare is also listed for being a breeding rarity. Woodcock is listed on account of having undergone a moderate breeding range decline over the last 25 years and the longer term. All remain relatively common and widespread in Britain however. Table 10 below shows the UK wintering population of the red listed bird species in relation to the maximum numbers recorded using the site during the wintering bird survey.

Table 10: Wintering populations of red listed bird species

Species	UK Population (based on Musgrove <i>et al</i> , 2013)	No. supported by site	Proportion of UK population supported by site (%)
Fieldfare	720,000	27	0.0038
Greenfinch	3,400,000*	1	<0.0001
Linnet	860,000*	20	0.0023
Mistle Thrush	340,000*	1	0.0003
Skylark	3,000,000*	5	0.0002
Starling	3,800,000*	23	0.0006
Woodcock	1,400,000	1	<0.0001

* Wintering population of resident species estimated by doubling numbers of pairs/territories given by Musgrove *et al*. for the UK breed

- 5.1.2.5 Of the red listed birds, in terms of British wintering population, conservation status and number of wintering individuals supported by the site, the species of highest nature conservation interest is Linnet, with the site supporting up to 0.0023% of the UK's wintering population of this species. Despite the rapid decline of its population, Linnets remain relatively common and widespread with a UK population of around 860,000 wintering individuals. Up to 23 Linnet were recorded foraging within the site during any one survey visit, although during some surveys the species was absent.
- 5.1.2.6 The Linnet's population and status is discussed in the breeding bird survey section 5.1.1.6 above. With regard to the wintering population, the site is dominated by grassland and arable fields bordered by hedgerows. Similar habitat is widely available in the wider area, and as such, it is likely that the habitats within the site form only a small part of a much wider foraging range for the individuals recorded during the wintering bird survey and for this species in general. It is therefore considered unlikely that the site is of substantial importance for the populations of Linnet recorded at the site during the wintering bird survey, evidenced by the fluctuating number of birds recorded using the site during the survey.
- 5.1.2.7 Nine amber listed species were recorded wintering at the site: Dunnock, Grey Wagtail, Kestrel, Meadow Pipit, Redwing, Rook, Song Thrush, Woodpigeon and Wren. Dunnock, Grey Wagtail, Kestrel, Meadow Pipit, Redwing and Song Thrush are included on the BoCC amber list due to moderate (25% to 50%) breeding population declines over the past 25 years and/ or long-term. Rook, Woodpigeon and Wren are included on the BoCC amber list as the UK populations of these species are considered of international importance, making up over 20% of the total European populations. All remain relatively common and widespread in Britain however and the site holds only a very small proportion (<0.01%) of their British breeding populations. *Table 11* below shows the UK wintering population of the amber listed bird species in relation to the numbers recorded within the site.

Table 11: Wintering populations of amber listed bird species

Species	UK Population (based on Musgrove <i>et al.</i> , 2013)	No. supported by site	Proportion of UK population supported by site (%)
Dunnoek	5,000,000	13	0.0003
Grey Wagtail	76,000	4	0.0053
Kestrel	92,000	1	0.0011
Meadow Pipit	4,600,000	82	0.0018
Redwing	690,000	70	0.010
Rook	2,400,000	3	0.0001
Song Thrush	2,400,000	6	0.0003
Woodpigeon	10,800,000	310	0.0029
Wren	17,200,000	11	<0.0001

* Wintering population of resident species estimated by doubling numbers of pairs/territories given by Musgrove *et al.* for the UK breeding population.

5.1.2.8 The wintering bird assemblage recorded in the updated surveys remains similar to that recorded during the 2021-2022 surveys (HDA 2022), with one additional bird of conservation concern, Fieldfare, recorded during the updated surveys. No red or amber listed birds recorded during the previous survey were absent during the updated 2025-2026 surveys.

5.1.2.9 A description of the distribution of red and amber listed wintering birds across the site and the habitats with which they were associated is given in *Appendix C*.

5.1.2.10 Dunnock, House Sparrow, Linnet, Skylark, Song Thrush and Starling are also UK Biodiversity Action Plan (BAP) priority species and listed as Species of Principal Importance under Section 41 of the 2006 NERC Act. Although these are all relatively common and widespread species and the site is only likely to support a small proportion of their British wintering populations, where possible development proposals should seek to maintain opportunities at the site for these species following development. This is discussed further in *Section 6* below.

5.2 Importance of the site

5.2.1 Published guidance on the selection of biological SSSIs (Drewitt *et al.*, 2015) provides a method for evaluating assemblages of breeding birds. Sites are eligible for selection as SSSIs if they support an especially good range of bird species characteristic of the habitat. This method has been employed to evaluate the site, using updated national population estimates, described in *Appendix D*.

5.2.2 The avian habitats of greatest interest within the site are Courtland Wood in the south of the site, the network of hedgerows and small parcels of woodland along the field boundaries, and the mature trees adjacent to the cattle sheds in the north of the site. The

grassland and arable fields themselves also provide opportunities for birds favouring open habitats for foraging such as Starling and Woodpigeon. The site does not however qualify as a candidate SSSI, either wholly or in part, for its lowland farmland or woodland bird assemblages, as the site index value scores are substantially below the threshold site index value for these habitats (4 [15%] for farmland and 5 [13%] for woodland), and the number and diversity of notable specialist farmland bird species recorded using the site for breeding and wintering was particularly low.

- 5.2.3 Sussex Biological Record Centre (SxBRC) provides information and advice on how Local Wildlife Sites should be identified in *Sussex Local Wildlife Site Selection Criteria* (SxBRC, 2022). It is not considered that the site meets any of the criteria given for selection on the grounds of its bird assemblage, either wholly or in part, under the criteria for 'species' given below:

CS1 Species Criteria "Sites supporting significant populations or relic populations of internationally, nationally or locally rare species, or species assemblages, will be eligible for selection as a LWS, or may contribute towards eligibility for consideration under the habitat criteria. For these purposes, 'supporting' may be defined as sites that either directly support breeding populations of species or provide a significant ecological function for the life cycle of that species, including resident or migratory species to the Country or region."

- 5.2.4 In summary, the site does not meet the selection criteria for either statutory or non-statutory nature conservation designation on the basis of its ornithological interest either wholly or in part. The site does however support a number of species of nature conservation interest, albeit generally fairly low numbers relative to the extent of the habitats present and these relate to relatively common and widespread species. Similar quality habitat to that found in the site is relatively abundant in the local area and as such the site is considered to be of no higher than high local interest for breeding birds, largely owing to its substantial size. Where possible the development proposals for the site should however seek to include measures to maintain opportunities for populations of the species of nature conservation interest recorded during the survey. These are outlined in *Section 6* below.

6 RECOMMENDATIONS

- 6.1 The site is considered in its entirety to be of up to high local value for birds, on the basis of its fairly large size and the presence of breeding and wintering birds of conservation concern included on the RSPB's red and amber lists, and listed on the UKBAP and as Species of Principal Importance under the 2006 NERC Act. The habitats provided by the site are however relatively abundant in the wider area and all species recorded breeding or wintering at the site are relatively common and widespread in Britain, with the site supporting only a very small proportion of the British breeding or wintering population of

any one species. The site does not meet the requisite scores, either wholly or in part, for qualification as a candidate SPA, SSSI or Local Wildlife Site (LWS).

- 6.2 Notwithstanding the above, where possible, the proposals for the site should seek to maintain and enhance opportunities for bird species of nature conservation interest recorded holding breeding territories on or over the site or wintering within the site during the suite of surveys.

Maintenance of opportunities for wintering and breeding birds

- 6.3 The bird species of highest conservation interest recorded during the surveys in the context of the site is Linnet, which is listed as a Species of Principal Importance under Section 41 of the 2006 NERC Act and as a UKBAP priority species. Linnet populations underwent rapid declines in the second half of the twentieth century before stabilising. Linnets were recorded using the site in low to moderate numbers across both the breeding and wintering bird surveys, however Linnets remain relatively common and widespread in Britain and the site supports only a very small proportion of the British breeding and wintering population of the species. Similar habitat to that found within the site is widely available in the surrounding landscape, and as such, it is likely that the habitats within the site form only a small part of a wider foraging range for the individuals recorded during the bird survey and for the species in general. It is therefore considered unlikely that the site is of significant importance for the population of Linnet recorded at the site, and that a reduction in habitat from the site is unlikely to result in a significant adverse impact on the local conservation status of the species. Where possible development proposals should however seek to maintain and provide new opportunities for Linnets and other birds of nature conservation interest through provision of new high-quality habitats within informal open space (see below).

- 6.4 Although the proposed development will result in the loss of open farmland from the much of the site and small areas of secondary woodland habitat where a road access is provided in the north of the site, the habitat of highest conservation value, Courtland Wood LWS, would be retained. The development would also provide opportunity to create new habitats of high value (both for birds and in their own right), potentially benefitting Linnet, Greenfinch, House Sparrow, Bullfinch and a number of other bird species of conservation concern currently found at the site, and potentially providing opportunities for other species not already present. This could be achieved through the following measures:
- Where possible, retention of existing woodland, scrub, mature trees and grassland within the site, and enhancement of these habitats through sensitive management and complementary planting. Deadwood habitats should be encouraged where safe to do so.

- Retention and enhancement of the existing network of linear habitats within the site including hedgerows, treelines and mature scattered trees. Where this is not possible, alternative habitat corridors should be provided to allow movement of wildlife across and around the site.
- Use of SuDS to create new opportunities for wetland birds. SuDS for the proposed development could be used to provide a range of additional permanent and ephemeral waterbodies, ditches, swales, wet woodland and wet grassland habitats. This could also include restoration/ enhancement of existing ditches.
- Provision of new high value habitats for birds and other wildlife within areas of proposed informal open space such as species-rich meadow and rough grassland, native woodland, species-rich hedgerows, orchard and scrub habitats.
- Planting schemes should use native species where appropriate, using species characteristic of the area, sourced from stock of local provenance where possible;
- Use of high value plants for foraging birds within the landscape planting scheme. This should include fruit and nut producing species in addition to those with high pollen and nectar yields (attracting invertebrate prey);
- Provision of a range of bird boxes situated on new buildings and existing trees within and adjacent to the proposed development area and wider site. Consideration should be given to the provision of Sparrow terraces and Swift boxes on suitable buildings, and Kestrel and Owl boxes on suitable retained mature trees overlooking areas of grassland within informal open space or the adjacent countryside.

6.5 It is recommended that any hedgerow or scrub management works should be carried out during January and/ or February, in order to allow the majority of fruit and nuts to be eaten prior to removal and to avoid impacts on nesting birds (see below).

6.6 The *Illustrative Masterplan* (KPK, 2026), which shows retention of hedgerows and substantial increases in woodland, scrub and meadow grassland planting, indicates that these measures can be achieved by the proposed development. It is recommended that the above measures to maintain and enhance habitats for bird species recorded at the site are incorporated into the detailed design at an appropriate stage and that ongoing management is secured through preparation of a Landscape and Ecological Management Plan.

6.7 Subject to the sufficient implementation of the above habitat retention, creation and enhancement measures it is expected that the opportunities currently provided by the

site for the birds of conservation interest recorded could be maintained and, in some instances, enhanced.

Protection of birds during site clearance works

- 6.8 No birds receiving special protection when nesting under Schedule 1 of the 1981 Wildlife and Countryside Act (as amended) have been recorded breeding at the site. All breeding birds however should be afforded the basic level of protection provided by the Act, i.e. protection of nest sites during the breeding season. It is recommended that any tree felling, ground clearance, hedgerow management, scrub clearance and building demolition works are done outside of the bird nesting season (generally taken as March to September inclusive) to avoid risk of an offence being committed. In the event that this is not possible, these works should be overseen by a suitably qualified ecologist who would check for nesting birds prior to and during works. In the event that nesting birds are present, it will be necessary to delay works in the vicinity of an active nest until nesting is complete.

7 CONCLUSION

- 7.1 Subject to the implementation of sufficient retention, creation and enhancement of habitat for notable bird species recorded within the site as described above, the proposed development of the Land North West of Southwater site is considered unlikely to result in a significant adverse impact on local populations of breeding or wintering birds. Subject to detailed design, the proposals could in fact benefit a range of species of conservation concern recorded using the site including Starling, Linnet, Greenfinch, Song Thrush and House Sparrow.

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	Personnel	Position
Author	Nick Chambers	Senior Ecologist
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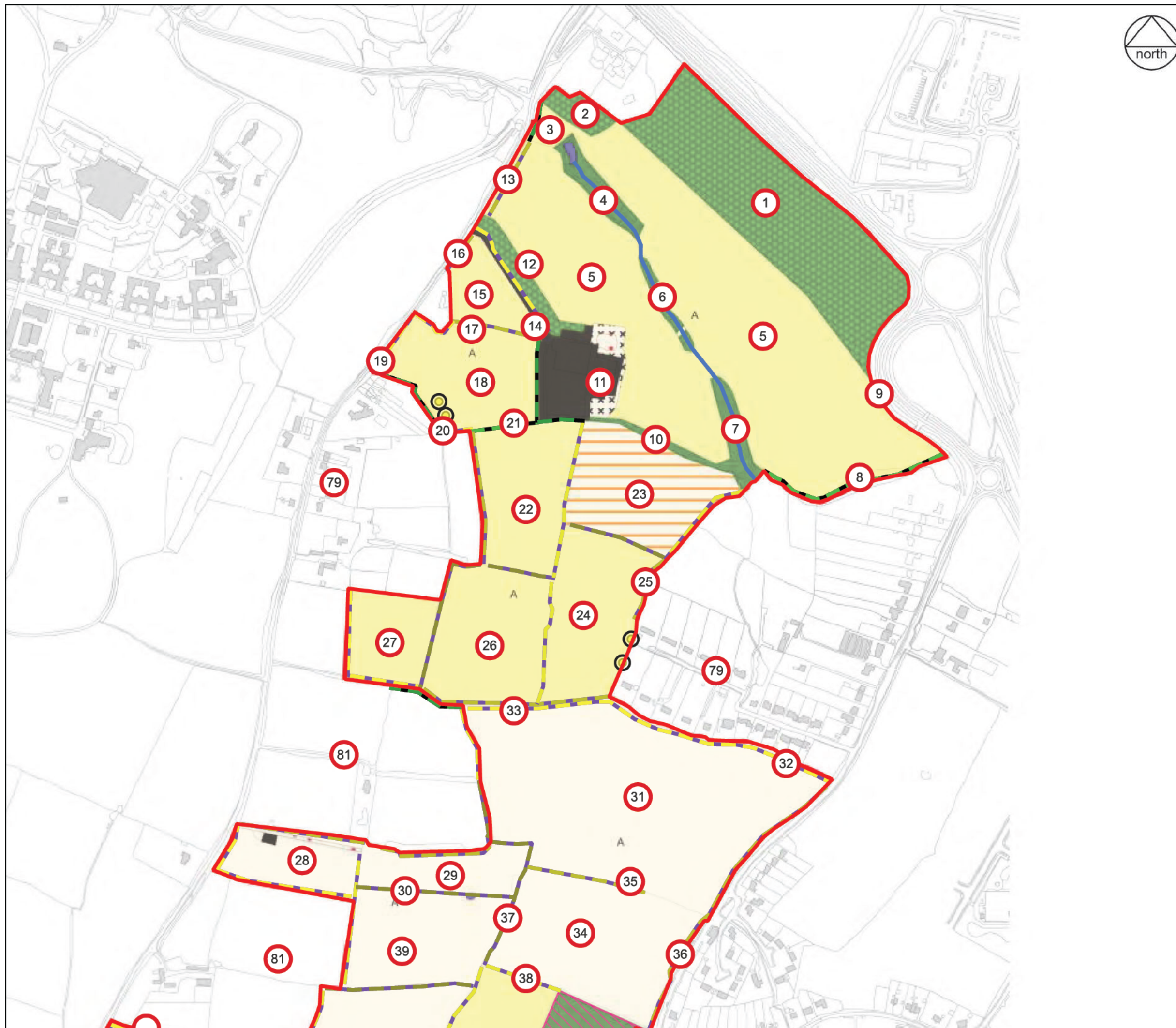
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Appendix A

Phase 1 Habitat Survey Plan and Target Notes



KEY

- Target Note
- Site boundary
- Existing Large Rural Tree
- Streams
- Artificial unvegetated, unsealed surface
- Winter stubble
- Developed land; sealed surface
- Lowland mixed deciduous woodland
- Mixed scrub
- Modified grassland
- Cereal crops
- Other woodland; mixed
- Ponds (non-priority habitat)
- Ruderal/Ephemeral
- Line of trees
- Line of trees - associated with bank or ditch
- Native hedgerow
- Native hedgerow - associated with bank or ditch
- Native hedgerow with trees
- Native hedgerow with trees - associated with bank or ditch
- Ancient Woodland

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2025 UK Habitat Classification Survey Plan –
Main Site North

SCALE AT A3:
NTS

DATE:
January 2026

2090.78 / 19a

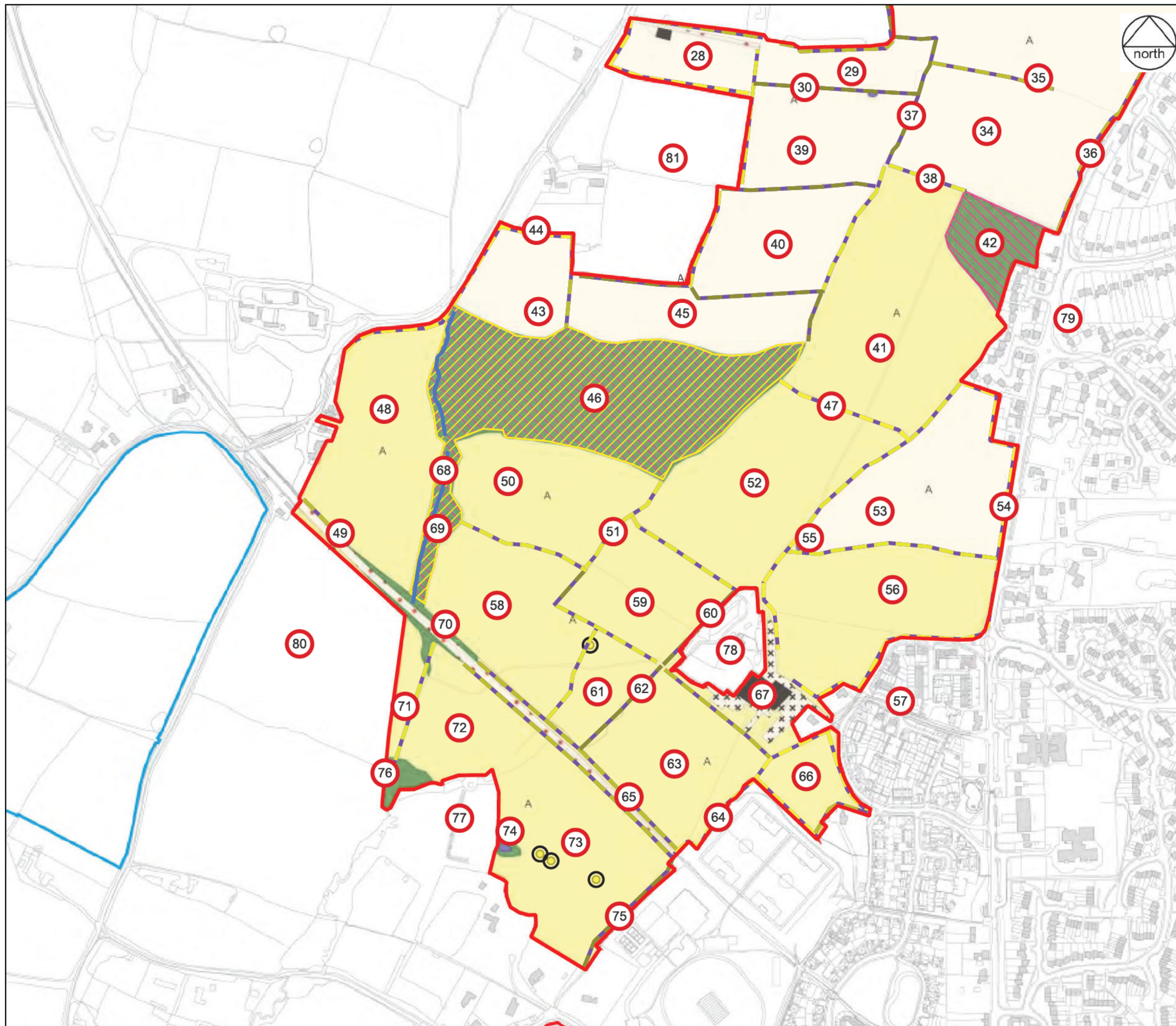
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Landscape Architecture
Masterplanning
Ecology





- KEY**
- Target Note
 - Site boundary
 - Existing Large Rural Tree
 - Streams
 - Artificial unvegetated, unsealed surface
 - A Cereal crops
 - Developed land; sealed surface
 - Lowland mixed deciduous woodland
 - Mixed scrub
 - Modified grassland
 - Ponds (non-priority habitat)
 - Ruderal/Ephemeral
 - Local Wildlife Site
 - Native hedgerow
 - Native hedgerow - associated with bank or ditch
 - Native hedgerow with trees
 - Native hedgerow with trees - associated with bank or ditch
 - Ancient Woodland

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2025 UK Habitat Classification Survey Plan – Main Site South

SCALE AT A3: NTS **DATE:** January 2026

2090.78 / 19b

Target notes:

1. Young mixed woodland along the northern boundary of the site bordered by post and wire fencing. Species include Pedunculate Oak (*Quercus robur*), Wild Cherry (*Prunus avium*), Sycamore (*Acer pseudoplatanus*), Larch (*Larix decidua*), Pine (*Pinus* sp.) and Cedar (*Cedrus* sp.) with a Blackthorn (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*) and Field Maple (*Acer campestre*) understorey. The ground flora below is partly colonised by Ivy (*Glechoma hederacea*) and Bramble (*Rubus fruticosus*), with other species relatively sparse and dominated by grasses including Wood False-brome (*Brachypodium sylvaticum*) and Rough Meadow-grass (*Poa trivialis*) with occasional Lords and Ladies (*Arum maculatum*). Small clearings within the woodland are more species-rich and include grasses including False Oat-grass (*Arrhenatherum elatius*), Cock's Foot (*Dactylis glomerata*) and Rough Meadow-grass with Hard Rush (*Juncus inflexus*), Common Nettle (*Urtica dioica*), Cleavers (*Galium aparine*), Common Vetch (*Vicia sativa*), Cut-leaved Cranesbill (*Geranium dissectum*), Meadow Buttercup (*Ranunculus acris*), Creeping Thistle (*Cirsium arvense*), Pendulous Sedge (*Carex pendula*), Agrimony (*Agrimonia eupatoria*), Black Knapweed (*Centaurea nigra*) and Hedge Woundwort (*Stachys sylvatica*).
2. Small semi-mature woodland copse bordered by post and wire fencing. Mature and semi-mature trees with species including Pedunculate Oak, Ash (*Fraxinus excelsior*), Wild Cherry, Sycamore, Scots Pine (*Pinus sylvestris*) and Common Lime (*Tilia x europaea*) with Hawthorn, Rhododendron (*Rhododendron ponticum*), Elder (*Sambucus nigra*) and Bramble below. The ground flora below is dominated by tall ruderal vegetation and coarse grasses including Common Nettle, Cow Parsley (*Anthriscus sylvestris*), Creeping Thistle, Broadleaved Dock (*Rumex obtusifolius*), False Oat-grass, Bittersweet (*Solanum dulcamara*), Cock's Foot, Montbretia (*Crocsmia x crocosmiiflora*) and Common Agrimony.
3. Area of rough grassland comprising Yorkshire Fog (*Holcus lanatus*), Meadow Foxtail (*Alopecurus pratensis*), Soft Brome (*Bromus hordeaceus*), Smooth Meadow-grass (*Poa pratensis*), Rough Meadow-grass, Perennial Rye-grass (*Lolium perenne*), Barren Brome (*Anisantha sterilis*) and Cock's Foot with forb species including Meadow Buttercup, Cut-leaved Cranesbill, Creeping Cinquefoil (*Potentilla reptans*), Lesser Stitchwort (*Stellaria graminea*), Common Sorrel (*Rumex acetosa*), Curled Dock (*Rumex crispus*), Hogweed (*Heracleum sphondylium*), Dandelion (*Taraxacum officinale*) and Common Nettle. A mature treeline borders the western margin of this area with species including Common Lime, Ash, Pedunculate Oak and Pine with Sycamore and Hawthorn below.
4. Band of mature woodland between two grassland fields comprising Sycamore, Pedunculate Oak, Norway Maple (*Acer platanoides*), Scots Pine and Ash with an understorey of Hazel (*Corylus avellana*) coppice, Elder, Hawthorn, Hornbeam (*Carpinus betulus*) and Holly (*Ilex aquifolium*). Ground flora is present although there is heavy poaching from cattle in places, with species including Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*), Garlic Mustard (*Alliaria petiolata*), Pendulous Sedge, Ground Ivy, Lords and Ladies, Yellow Archangel (*Lamium galeobdolon*), Common Nettle and Bramble. A slow flowing stream flows through the woodland, with a water depth of approximately 10cm at the time of survey, comprising shallow earth banks and an earth base. Due to heavy shading no aquatic vegetation is present within the stream, however the banks are bordered by occasional Pendulous Sedge and Wavy Bitter-cress (*Cardamine flexuosa*) with occasional Cuckoo Flower (*Cardamine pratensis*). At the north-western end of the woodland is a small pond, approximately 5m x 6m, subject to very heavy eutrophication and largely covered by green algae, with few marginal species with the exception of Pendulous Sedge, and with heavy poaching from cattle around the banks.
5. Modified grassland field dominated by Perennial Rye-grass, with a uniform sward of under 10cm and grazed by cattle at the time of survey, with other species including Creeping Thistle, Broad-leaved Dock, Goats-beard (*Tragopogon pratensis*), Greater Plantain (*Plantago major*) and Smooth Meadow Grass (*Poa pratensis*).

6. Sections of above ground stream bordered by Elder, Hazel, Hawthorn and Blackthorn scrub with young Pedunculate Oak and Field Maple trees.
7. Woodland shaw extending from a larger area of off-site woodland to the south. Mature trees include Hybrid Black Poplar (*Populus x canadensis*), Wild Cherry, Ash and Sycamore with Hazel, Field Maple, Hornbeam, Elder, Norway Maple, Holly, Blackthorn and Hawthorn below. The ground flora includes Garlic Mustard, Bluebell, Dog's Mercury, Greater Burdock (*Arctium lappa*), Pendulous Sedge, Common Nettle and Hemlock (*Conium maculatum*), with poached and bare ground in places. A stream courses through the woodland which was dry at the time of survey.
8. Band of mature trees along a wet ditch. Tree species include Ash, Alder (*Alnus glutinosa*), Pedunculate Oak, Hazel coppice, Holly, Hawthorn and Elder. Ground flora below the trees comprises Herb Robert (*Geranium robertianum*), Lords and Ladies, Bracken (*Pteridium aquilinum*), Ground Ivy, Pendulous Sedge and Common Nettle.
9. Wooden post and rail fence bordering the site, beyond which is an embankment associated with Worthing Road.
10. A narrow band of deciduous woodland with a steep sided, dry ditch running through centre. Species composition is similar to that listed in target note 7.
11. A steep sided earth bund separating the grassland field from the farmyard. Species that have colonised the southern end of the bund include tall ruderal species such as Common Nettle, Broadleaved Dock, Creeping Thistle, Spear Thistle (*Cirsium vulgare*) and Bristly Ox-tongue (*Helminthotheca echioides*). The northern end of the bund is dominated by grassland species including Yorkshire Fog, Soft Brome, Rough Meadow-grass, Meadow Foxtail, Barren Brome, Cock's Foot, Perennial Rye-grass, Common Vetch, Grass Vetchling (*Lathyrus nissolia*), Lesser Trefoil (*Trifolium dubium*), Creeping Cinquefoil, Meadow Buttercup, Cut-leaved Cranesbill, Field Bindweed (*Convolvulus arvensis*), Dandelion, Ragwort (*Senecio jacobaea*) and Prickly Sow-thistle (*Sonchus asper*). The farmyard consists of several open sided barns of concrete and corrugated metal, holding cattle at the time of survey, with surrounding concrete hardstanding. To the north-east of the farmyard is a slurry pit.
12. Band of semi-mature plantation woodland bordered by a post and wire fence to north and intact hedgerow to south (the hedgerow is described in target note 14). The woodland is dominated by Pedunculate Oak with occasional Hornbeam, Scot's Pine and Blackthorn. The ground flora comprises grasses including Yorkshire Fog, Cock's Foot and Rough Meadow-grass with Common Nettle and Cleavers.
13. Mature defunct hedgerow, up to 3m wide and 5m tall, with mature Pedunculate Oak standards. Species within the hedgerow include Blackthorn, Hawthorn, Dog-rose (*Rosa canina*), Field Maple, Dogwood (*Cornus sanguinea*), cultivated Hawthorn (*Crataegus* sp.), Elder, Hazel, Holly and Sycamore. Ground flora below the hedge includes Dog's Mercury, Bluebell, Wood Dock (*Rumex sanguineus*), Germander Speedwell (*Veronica chamaedrys*) and Bush Vetch (*Vicia sepium*). A dry ditch is present below the hedgerow which is overgrown with Pendulous Sedge, Great Willowherb (*Epilobium hirsutum*) and Common Nettle.
14. Hardstanding track leading to a farmyard which comprises a number of agricultural buildings associated with a dairy farm. To the north of the track is a managed hedgerow comprising Hawthorn, Field Maple and Elder and to the south is a post and wire fence.
15. Modified grassland field with species including Yorkshire Fog, Creeping Buttercup (*Ranunculus repens*), Rough Meadow-grass, Smooth Meadow-grass, Meadow Foxtail, Sweet Vernal-grass (*Anthoxanthum odoratum*), Smaller Cat's tail (*Phleum bertolonii*), Cock's Foot, Creeping Thistle, Common Nettle, White Clover (*Trifolium repens*), Soft Brome, Red Clover (*Trifolium pratense*), Common Mouse-ear (*Cerastium fontanum*), Creeping Cinquefoil, Common Vetch and Field Speedwell (*Veronica persica*).

16. Mature hedgerow with Pedunculate Oak standards. Further species include Hawthorn, Pedunculate Oak, Blackthorn, Field Maple, Spindle (*Euonymus europaea*), Bramble, Dogwood and Black Bryony (*Tamus communis*). The hedge leads into a post and rail fence bordering an off-site residential property at its southern end.
17. Outgrown hedgerow with large gaps in the middle section, with standards comprising Blackthorn, Hawthorn, Pedunculate Oak, Field Maple, Ash and Elder with Leyland Cypress (*Cupressus × leylandii*) present adjacent to the residential property. The hedgerow becomes more managed, defunct and less diverse at the southern end where it is adjacent to the road.
18. Modified grassland field similar in species composition to target note 15 with mature Oak trees and a short section of dry ditch in the south. Bordering the east of the field is a mature treeline along a post and wire fence with species including mature Pedunculate Oak with younger Ash, Field Maple and Blackthorn with Bramble scrub below.
19. A Bramble dominated hedgerow along the road leads into a scrubby treeline adjacent to off-site residential property with Ash, Horse Chestnut (*Aesculus hippocastanum*), Hawthorn, Sycamore and Hazel, with mature Pedunculate Oak trees at the southern end.
20. Short section of managed hedgerow comprising Blackthorn, Hawthorn and Bramble with a dry ditch below. Common Nettle and Cleavers dominate the ground flora with infrequent Ground Ivy, Wood Avens (*Geum urbanum*) and Cuckoo Flower.
21. Mature treeline of Pedunculate Oak, one recently fallen, with scrubby trees below including Hawthorn, Holly, Field Maple and Ash. A dry ditch runs the length of the treeline and the ground is poached underneath.
22. A modified grassland field with species comprising Perennial Ryegrass, Scented Mayweed (*Matricaria chamomilla*), White Clover, Curled Dock, Timothy (*Phleum pratense*), Creeping Buttercup, Greater Plantain, Ragwort, Spear Thistle, Dandelion, Nipplewort (*Lapsana communis*), Great Willowherb, Smooth Meadow Grass, Selfheal (*Prunella vulgaris*), Scarlet Pimpernel (*Anagallis arvensis*), Common Mouse-ear, Yorkshire Fog and Common Knotgrass (*Polygonum aviculare*). A managed hedgerow borders the field to the east and is dominated by Hawthorn and Blackthorn with Hazel, Dog-rose and Bramble. Ash standards are also present. Along the western boundary of the field is a mature, intact, hedgerow up to 6m tall and 3m wide, with a dry ditch below. The western hedge comprises Blackthorn, Holly, Elder, Hazel, Hawthorn, Field Maple and Small-leaved Lime (*Tilia cordata*), with Ash and Oak standards. The hedgerow to the south is managed to 2m with two Oak standards and a ditch at its base that was dry at the time of survey, with species including Blackthorn, Dogwood, Dog-rose, Hawthorn and Ash. In addition to the grassland species above, Greater Stitchwort (*Stellaria holostea*) and Bluebell are present below the hedge.
23. A fallow arable field, heavily overgrown with ephemeral and ruderal species at the time of survey, including Pineappleweed (*Matricaria discoidea*), Greater Plantain, Common Fleabane (*Pulicaria dysenterica*), Groundsel (*Senecio vulgaris*), Bristly Ox-tongue (*Helminthotheca echinoides*), Redshank (*Persicaria maculosa*), Spear Thistle, Common Nettle, Germander Speedwell, Goosefoot (*Chenopodium* sp.), Greater Willowherb, Scarlet Pimpernel, Shepherds Purse (*Capsella bursa-pastoris*), Creeping Thistle, Black Medick (*Medicago lupulina*), Dandelion, Birds-foot Trefoil (*Lotus corniculatus*), Ragwort, Greater Burdock (*Arctium lappa*), Yorkshire Fog, Creeping Cinquefoil, Broad-leaved dock and Soft Brome, with a mound of spoil in the north-western corner. The hedgerow to the east is unmanaged and includes Oak, Hawthorn, Elder, Field Maple and Bramble.
24. A modified grassland field with species composition similar to target note 22. The northern boundary of the field is bordered by an intact hedgerow with Ash standards. Further species present in the hedge include Hawthorn, Hazel, Elder, Blackthorn, Goat Willow (*Salix caprea*), Grey Willow (*Salix cinerea*), Oak and Bramble. A dry ditch runs below the hedge.
25. Unmanaged hedgerow, up 8m tall, comprising Holly, Hawthorn, Elder, Hazel, Field Maple, Dog-rose, Bramble and Oak standards with a dry ditch below. The hedgerow leads to the south into

a post and rail fence with mature Oak standards along the boundary with off-site residential properties.

26. A modified grassland field with a species composition similar to target note 22. The field is bordered to the east, and south by managed hedgerows dominated by Blackthorn with occasional Dogwood, Hawthorn, Holly, Field Maple and Bramble with Ash and Oak standards, with the hedgerow to the east having a ditch at its base. The hedgerow to the west is partially outgrown with Oak standards and a ditch.
27. A modified grassland field with a species composition similar to target note 22. Along the southern field boundary is a managed hedgerow adjacent to a footpath comprising Blackthorn, Dog-rose, Field Maple, Willow (*Salix* sp.), Hazel, Hawthorn and Bramble. Along the western field boundary is a managed hedgerow comprising Oak standards with Blackthorn, Hazel, Elder, Hawthorn, Dogwood and Bramble. Black Bryony, Lords and Ladies and Bracken are present within the hedge. On the northern boundary is a post and rail fence.
28. A field of Maize with a field margin of up to 2m in width including Grass Vetchling (*Lathyrus nissolia*), Birds-foot Trefoil (*Lotus corniculatus*), Bluebell, Hairy Tare (*Vicia hirsuta*) and St John's Wort (*Hypericum* sp.). An open sided barn is present in the north-west of the field and a bare earth farm track is located along the northern margin of the field. A managed, intact hedgerow comprising Hawthorn, Hazel, Field Maple, Blackthorn, Elder, Turkey Oak (*Quercus cerris*), Ash, Holly, Dog-rose, Privet and Pedunculate Oak with Ash and Oak standards is present along the northern field boundary, with a dry ditch below. Along the southern, eastern and western boundaries are hedgerows with Hawthorn, Hazel, Ash, Rose, Bramble, Blackthorn and Dogwood.
29. A field planted to Maize similar to Target Note 28, with an outgrown hedgerow to the north with Oak standards and Blackthorn and Hawthorn.
30. Intact hedgerow with Oak standards. Blackthorn is dominant, whilst Ash, Dog-rose, Hawthorn, Field Maple, Willow and Hazel are also present. A dry ditch with a small seasonal pond with gently sloping earth banks is also present below.
31. A field planted to Maize, with other species in the cultivated area including Goosefoot, Field Bindweed, Scarlet Pimpernel and Redshank. With grassland margins of up to 4m including Perennial Ryegrass, White Clover, Timothy, Cock's foot, Creeping Buttercup, Field Bindweed, Greater Plantain, Black Knapweed, Creeping Cinquefoil, Greater Stitchwort and Bush Vetch. On the western boundary is an intact Blackthorn dominated hedgerow managed to 2m. Other species present include Ash, Dog-rose, Field Maple, Hazel, Bramble, and Oak. A dry ditch runs along the eastern side of the hedgerow.
32. Intact hedgerow to approximately 2.5m, with species including Hawthorn, Dogwood, Hazel, Elder, Field Maple, Blackthorn, Dog-rose and Bramble with Ivy and Black Bryony. Ground flora below the hedgerow includes Cleavers, Wood Avens, Ground Ivy, Dog's Mercury, Bush Vetch, Common Nettle, Lesser Stitchwort, Germander Speedwell, Silverweed (*Potentilla anserina*), Broadleaved Dock, Bracken, Hogweed, Garlic Mustard, Wood Millet and False Brome. North of the hedgerow is a public footpath and beyond fences and ornamental hedgerows enclosing the gardens of off-site residential properties.
33. A public footpath runs through the site and bordered by hedgerows.
34. A field planted to Maize with grass margins, with species as TN31.
35. Section of hedgerow comprising Pedunculate Oak, Hawthorn, Dog-rose, Hazel, Holly, Blackthorn and Field Maple with mature Pedunculate Oak and Holly trees. Occasional Bluebell and Bracken are present below the hedge.
36. Intact occasionally managed hedgerow on the site boundary, to 4-5m in height. With mature Pedunculate Oak and Ash at the northern end, with other species including Hawthorn, Hazel, Field Maple, Blackthorn, Sycamore, Dog Rose and Bramble. Apple (*Malus* sp.) trees, Cypress

sp., and Horse Chestnut are infrequent. Ground flora below the hedge includes Common Ivy, Germander Speedwell, Greater Stitchwort, Wood Avens, Common Vetch, Dog's Mercury, Wood Millet and Bracken. A dry ditch runs the length of the hedgerow and is dominated by tall ruderal vegetation.

37. Hedgerow with mature standards of Ash and Oak. Hedgerow species include Ash, Dog Wood, Rose (*Rosa* sp.), Bramble, Common Nettle, Honeysuckle, Blackthorn, Hawthorn, Elder, Holly and Field Maple. A dry ditch is present below.
38. Intact hedgerow with dry ditch and public footpath to north. Species within hedgerow include Ash, Common Lime, Hawthorn, Wayfaring Tree (*Viburnum lantana*), Hazel, Blackthorn and Dog Rose. Water Mint (*Mentha aquatica*) is occasionally present within the ditch below.
39. Arable field planted to maize, with grass margins to the north, east and south, with species including Hedge Bindweed, Cock's Foot, Common Knotgrass, Soft Rush (*Juncus effusus*), Burdock, False Oat Grass, Field Bindweed, Black Knapweed, Bird's Foot Trefoil, Creeping Thistle, Goosefoot, Spear Thistle, Scented Mayweed and Compact Rush (*Juncus conglomeratus*), with Oak seedlings and Bramble. The field is bordered by managed hedgerows with mature standards and dry ditches below. A bare earth public footpath/farm track is situation along the western margin of the field.
40. Arable field of Maize. The northern boundary of the field is lined with Oak and Ash standards and an intact hedgerow with species including Blackthorn, Dog-rose, Ash, Hawthorn, Bramble, Hazel, Oak, Field Maple, Holly and Elder. The eastern boundary hedge includes Field Maple, Holly and Blackthorn, with Bracken and White Clover and a ditch at the base. A bare earth public footpath/farm track is situation along the western margin of the field. The field is bordered to the west by a managed intact hedgerow with dry ditch below
41. Cattle grazed modified grassland field, with a sward height under 10cm at the time of survey comprising Perennial Ryegrass, Yorkshire Fog, Broad-leaved Dock, Creeping Buttercup and Field Bindweed.
42. Small area of woodland (Smith's Copse) included on Natural England's Inventory of Ancient Woodland enclosed by a hedgerow and post and wire fence. Woodland trees include Ash and Oak with Hazel coppice, with a thick understorey including Holly, Hawthorn, Blackthorn, Rhododendron, Crab Apple (*Malus sylvestris*) and Field Maple. Many of the more mature trees are clad in Ivy. Ground flora includes Lords and Ladies, Wild Garlic, Bluebell, Wood Anemone (*Anemone nemorosa*), Wood Melick, Herb Robert, Wood Avens, False Brome, Wood Sedge, Pendulous Sedge, Tufted Hair-grass (*Deschampsia cespitosa*) and Common Ivy.
43. Arable field planted to Maize. Bordering the field are intact hedgerows with a grassland field margin of approximately 1m. Species within the field margin include Meadow Foxtail, Cock's Foot, False Oat-grass, Rough Meadow-grass, Annual Meadow-grass (*Poa annua*), Barren Brome, Yorkshire Fog, Ground Ivy, Cowslip (*Primula veris*), Dog's Mercury, Common Ivy, Creeping Cinquefoil, Cut-leaved Cranesbill, Garlic Mustard, Field Horsetail (*Equisetum arvense*), Scarlet Pimpernel, Wood Avens, Cleavers, Bluebell, Common Vetch, Hairy Tare, Wood Dock, Creeping Thistle and Common Nettle.
44. Intact hedgerow including Blackthorn, Dogwood, Field Maple, Willow, Bramble, Hawthorn, Rose, Pedunculate Oak, Lime and Hazel. The hedgerow is approximately 1.5m and 2m tall along most of its length. Mature Oak standards and a semi-mature Ash tree are present in the north-western corner.
45. Arable field planted to Maize. Mostly intact hedgerows with trees border the northern, eastern and western boundaries of the field with species including Hawthorn, Blackthorn, Pedunculate Oak, Elder, Hazel and Dog-rose. Below the hedgerows to the north and east is a dry ditch, overgrown with tall ruderal vegetation.
46. Courtland Wood, a Local Wildlife Site (LWS) of lowland deciduous woodland included on Natural England's Inventory of Ancient Woodland. Mature trees within the woodland include

Pedunculate Oak, Ash, Birch and Willow with an understorey of Hazel coppice, Holly, Lime, Blackthorn, Dogwood, Dogrose (*Rosa Canina*), Field Maple and Small-leaved Lime. The ground flora comprises Wood Speedwell (*Veronica montana*), Bluebell, Wood Dock, Wood Millet (*Milium effusum*), Wood Melick, Herb Robert, Wood Anemone (*Anemone nemorosa*), Wood Avens, Bush Vetch, abundant Wild Garlic (*Allium ursinum*), Pendulous Sedge, Yellow Archangel, Dog's Mercury, Bramble, Stinking Iris (*Iris foetidissima*) and Cleavers. The woodland slopes down to a stream along the western edge and dry ditches are present throughout the woodland. Public rights of way cross the wood from north to south and east to west.

47. Intact hedgerow comprising Hazel, Blackthorn, Oak, Field Maple, Dog-rose, Dogwood, Honeysuckle, Hawthorn, Bramble and an Oak standard. Flora at the base of the hedgerow includes Herb Robert, Greater Stitchwort, Soft Rush, Broadleaved Dock, Bush Vetch, Great Willowherb, Pendulous Sedge and Germander Speedwell.
48. Modified grassland field used for cattle grazing with a sward height under 10cm at the time of survey. Species present include Yorkshire Fog, Soft Brome, Smooth Meadow-grass, Creeping Bent (*Agrostis stolonifera*), Barren Brome, Rough Meadow-grass, Cock's Foot, Bulbous Buttercup (*Ranunculus bulbosus*), White Clover, Germander Speedwell and Dandelion. A managed native hedgerow of Hawthorn, Oak and Ash is present on the northern and western boundary, with a ditch below.
49. Scrubby, defunct hedgerow dominated by Bramble and Rose with occasional Elder and Hawthorn. The hedgerow transitions into woodland at the eastern end, with species including Small-leaved Lime, Pedunculate Oak, Whitebeam (*Sorbus aria*) and Hazel. Below the hedgerow Lords and Ladies, Ground Ivy, Cleavers, Dog's Mercury and Common Nettle are present.
50. Rough, modified grassland field, with a sward of approximately 20cm at the time of survey. Species present include Yorkshire Fog, Meadow Foxtail, Sweet Vernal-grass, Annual Meadow-grass, Rough Meadow-grass, Common Mouse-ear, Dandelion, Self-Heal (*Prunella vulgaris*), Meadow Buttercup, Broadleaved Dock, Creeping Buttercup, White Clover, Black Medick, False Brome, Timothy, Dandelion and Perennial Ryegrass and Spear Thistle, with Creeping Thistle abundant in some patches.
51. Intact hedgerow managed to approximately 2.5m in height with species including Hawthorn, Buckthorn (*Rhamnus cathartica*), Blackthorn, Field Maple, Dog-rose and Field-rose (*Rosa arvensis*) with Black Bryony. Ground flora below the hedgerow includes Greater Stitchwort, Herb Robert, Bugle (*Ajuga reptans*), Germander Speedwell, Cleavers, Ground Ivy, Bush Vetch, Garlic Mustard, Wood Dock, Common Sorrel and Common Nettle. A damp ditch is present below the western side of the hedgerow with Water Mint and Hemlock Water-dropwort (*Oenanthe crocata*) present within the ditch.
52. Modified grassland field with a similar species-composition to target note 50. The hedgerow to the south of the field is managed to 2m and comprises Blackthorn, Field Maple and two Oak standards, with a dry ditch at its base.
53. An arable field of Wheat with 3-4m wide field margins comprising Yorkshire Fog, Timothy, Cock's-foot and Field Bindweed. The boundary hedgerows to the west and south are managed to 2m and include Dogwood, Blackthorn and Dog-rose, with ditches at their base.
54. Intact hedgerow dominated by Dogwood although Ash, Blackthorn, Hawthorn, Rose, Bramble, Field Maple and Honeysuckle are also present along with Common Nettle and Dock. Hedgerow becomes more Hawthorn dominated to the north where it encloses the gardens of residential properties. Cypress sp., Ash and Oak standards are more frequent towards the northern end where it borders off-site residential properties.
55. Heavily shaded pond located at a junction of three hedgerows. The pond was dry at the time of survey with a silt/mud base, with Pendulous Sedge on the periphery. Areas of the pond margin have been heavily trampled by cattle, which together with shading has resulted in minimal

marginal vegetation. Trees surrounding the pond are typical of adjoining hedgerows including Field Maple, Hawthorn, Oak and Ash.

56. Cattle grazed modified grassland field with a similar species-composition to target note 50 with additional species including Scentless Mayweed (*Tripleurospermum inodorum*) also present, the grassland had a sward height of 10cm at the time of survey.
57. Area of new housing development situated beyond the site boundary.
58. Cattle-grazed, modified grassland field with a species composition similar to target note 50, the grassland had a sward height of 15cm at the time of survey. Bordered by Blackthorn and Hawthorn dominated hedgerows with Oak standards forming the northern and eastern boundaries. The southern boundary comprises an outgrown hedgerow of Ash, Oak and Aspen (*Populus tremula*) merging into woodland at the western end.
59. Cattle grazed, modified grassland field with heavy poaching around gateways, and a species composition similar to target note 50, the grassland had a sward height of 10cm at the time of survey.
60. Mature, outgrown hedgerow with trees comprising species including Ash, Oak, Hawthorn, Field Maple and Willow. A heavily shaded ditch containing a shallow amount of water at the time of survey, runs below the hedge.
61. Cattle grazed, modified grassland field with species similar to target note 50, the grassland had a sward height of 15cm at the time of survey. A mature Oak standard tree is present in the north-western corner.
62. Intact hedgerow with species including Blackthorn, Hawthorn and Dog-rose with Field Maple, Oak, Ash and Willow standards. A seasonally wet ditch overgrown with Bramble and Common Nettle is present below the hedgerow.
63. Cattle grazed modified grassland field with species including Rough Meadow-grass, Smooth Meadow-grass, Annual Meadow-grass, Meadow Foxtail, Soft Brome, Yorkshire Fog, Creeping Buttercup, Common Mouse-ear and Dandelion, the grassland had a sward height of 10cm at the time of survey. A scrubby hedgerow including Oak, Ash and Bramble is present to the north.
64. Managed, intact hedgerow to approximately 3m, with a number of Oak, Ash and Field Maple standards. Species within the hedgerow include Hawthorn, Elder, Blackthorn, Dog-rose and Field Maple, with Bramble becoming dominant at the southern end. A dry ditch runs below the western edge of the hedgerow, which is dominated by tall grasses and Soft Rush.
65. Outgrown hedgerow with Oak trees and Bramble scrub acting as boundary between field and public footpath.
66. Modified grassland field bordered by fencing and recently planted Hawthorn hedgerow. The grassland is dominated by Perennial Rye-grass, Soft Brome and Yorkshire Fog with occasional Smooth Meadow-grass, Dandelion, Bulbous Buttercup, Common Mouse-ear, Broadleaved Dock and Prickly Sow-thistle, the grassland had a sward height of 10cm at the time of survey. The boundary of the grassland with the property to the east comprises an outgrown, scrubby hedgerow comprising of Elder, Blackthorn, Hawthorn and Bramble with Oak, Ash and Cypress standards, and the recently established native hedgerows to the north and south are managed to approximately 2m.
67. Collection of agricultural buildings within the farmyard of Great House Farm, largely of concrete and corrugated metal construction. Areas of bare ground and tall ruderal vegetation are present throughout.
68. Woodland shaw lining banks of Marlpost Gill and included on Natural England's Inventory of Ancient Woodland. At this point the stream is up to 1m in width and 10cm in depth with a slow flow. The earth banks are steep in places, with less steep areas heavily trampled by cattle.

Heavy shading from the woodland has resulted in minimal/absent aquatic and marginal vegetation, with flora along the stream banks dominated by Wild Garlic and Bluebell. The woodland is dominated by Ash and Pedunculate Oak with Lime, Willow and Birch, and has a sub-canopy of predominantly Hazel, with some Hawthorn, Field Maple, Holly and Blackthorn. Many of the mature trees are covered in Common Ivy (*Hedera helix*). The ground flora further from the stream comprises additional species to those mentioned above including Wood Anemone, Wood Melick, Sticky Mouse-ear (*Cerastium glomeratum*) and Soft Rush.

69. An occasional pond that was dry at the time of survey, with a silty base covered in leaf litter. No aquatic or marginal vegetation was present.
70. Public footpath and cycle path located atop a steep sided earth embankment bordered on both sides by mature outgrown hedgerows with species including Ash, Pedunculate Oak, Hazel and Hawthorn. Narrow grassland margins are present to either side of the footpath supporting species including Soft Brome, Wood False-brome, Hogweed, Greater Stitchwort, Common Ivy, Germander Speedwell, Cleavers, Wood Dock, Cow Parsley, Common Nettle and Ribwort Plantain (*Plantago lanceolata*).
71. Intact hedgerow, managed to approximately 1.5m in height, comprising Hazel, Hawthorn, Holly, Blackthorn and Field Maple with Lombardy Poplar (*Populus nigra x italica*) and Pedunculate Oak standards. A section of Marlpost Gill flows below the hedgerow. The stream was dry at the time of survey.
72. Cattle grazed modified grassland field, with a sward height of approximately 15cm at the time of survey. Species present within the grassland include Meadow Foxtail, Cock's Foot, Soft Brome, Annual Meadow-grass, Rough Meadow-grass, Yorkshire Fog and Lesser Cat's Tail with scattered Creeping Thistle. Forb species are infrequent throughout the grassland and include White Clover, Common Mouse-ear, Thyme-leaved Speedwell (*Veronica serpyllifolia*) and Spear Thistle. A short line of scrub comprising Hazel, Hawthorn, Bramble and a dead tree is present in the east of the field.
73. Cattle grazed modified grassland field similar in species composition to target note 72 and a sward height of approximately 15cm at the time of survey, with scattered Pedunculate Oak standards. Forb species are infrequent and include White Clover, Common Mouse-ear and Spear Thistle.
74. A small pond with gently sloping earth banks and approximately 10cm of water at the time of survey. The pond is heavily shaded by Oak, Hazel, Hawthorn and Field Maple scrub. Aquatic and marginal species present include Lesser Duckweed (*Lemna minor*), Floating Sweet-grass (*Glyceria fluitans*) and Pendulous Sedge with Wavy Bitter Cress, Bluebell and Common Nettle present on the banks.
75. Intact hedgerow lined with standards alongside a dry ditch. The southern end of the hedgerow encloses the grounds of a residential property, where some non-native species are found, such as Cherry Laurel (*Prunus laurocerasus*), Cypress sp. and Apple, among the typical hedgerow species including Holly, Hazel, Ash and Bramble. The section of the hedgerow that does not pertain to the boundary of the property is dominated by Blackthorn with Field Maple, Hawthorn, Hazel, Pedunculate Oak and Horse Chestnut. Ground flora below the hedge includes Wood Avens, Germander Speedwell, Wood Dock, Common Nettle and Cleavers.
76. Culvert where stream (Marlpost Gill) emerges, having been directed beneath the ground. The course of stream at this point is meandering with a silt/earth bottom, with approximately 15cm of water at the time of survey. Banks of stream comprise bare earth and are steep sloping.
77. Off-site broadleaved woodland, named Kirsty's Wood, borders the site to the south. The woodland is dominated by mature Ash and Pedunculate Oak with an understorey of Hazel and Holly with Rhododendron. Ground flora includes Wild Garlic, Bluebell, Wood Melick, Yellow Archangel, Dog's Mercury, Wood Speedwell, Greater Stitchwort and Bramble. A shallow, slow flowing stream (Marlpost Gill) with earth banks flows through the woodland.

- 78. Off-site detached farmhouse and garden.
- 79. Off-site existing residential houses and gardens to the east of the site.
- 80. Off-site grassland fields to the south-west of the site.
- 81. Off-site arable fields and Two Mile Ash Road to the west of the site.

Appendix B

Breeding Bird Survey Results Summary Table

Breeding bird survey results summary table for Southwater 2025:

COMMON NAME*	LATIN NAME	Annex 1 Directive 2009/247/EC	Sched. 1 W&C Act 1982	UK BAP/ Sec.41 NERC Act	BoCC 2021 (Red/ Amber/ Green/ No status)	IBA**	NOTES ON BREEDING/OCCURRENCE	NO. TERRITORIES/ BREEDING PAIRS ASSOCIATED WITH THE SITE***
Blackbird	<i>Turdus merula</i>				Green	0	Frequent: Individuals and pairs recorded in hedgerows and woodland habitats throughout the site.	n/a
Blackcap	<i>Sylvia atricapilla</i>				Green	0	Occasional: Moderate numbers occasionally recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Blue Tit	<i>Parus caeruleus</i>				Green	0	Frequent: Pairs and family groups frequently recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Bullfinch	<i>Pyrrhula pyrrhula</i>				Amber	1	Occasional: Low numbers recorded in association with scrub and hedgerows in the north and south of the site, with up to 2 breeding pairs present.	2
Buzzard (Common)	<i>Buteo buteo</i>				Green	2	Rare: One to two individuals occasionally recorded foraging over the site.	n/a
Carion Crow	<i>Corvus corone</i>				Green	0	Frequent: Frequently recorded throughout the site with up to 260 birds recorded as individuals, pairs and groups, particularly in association with mature trees and the cattle sheds in the north of the site.	n/a
Chaffinch	<i>Fringilla coelebs</i>				Green	0	Occasional: Encountered in fairly low numbers across the site in association with woodlands and hedgerows.	n/a
Chiffchaff	<i>Phylloscopus collybita</i>				Green	0	Occasional: Moderate number of pairs recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Canadian Goose	<i>Branta canadensis</i>					0	Rare: Low numbers recorded during one survey visit.	n/a
Dunnock	<i>Prunella modularis</i>				Amber	0	Frequent: Regularly recorded in association with woodland edges, hedgerows and scrub across the site, with up to seventeen breeding territories.	17
Feral Pigeon	<i>Columba livia (domest.)</i>				Green	0	Frequent: Regularly recorded in association with the cattle sheds in the north of the site.	n/a
Garden Warbler	<i>Sylvia borin</i>				Green	0	Rare: Recorded during one survey visit in the north of the site.	n/a
Goldcrest	<i>Regulus regulus</i>				Green	1	Occasional: Recorded during most survey visits, in particular within Courtland Wood, with a maximum count of 6 individuals.	n/a
Goldfinch	<i>Carduelis carduelis</i>				Green	0	Rare: Recorded in small groups across the site in association with mature trees.	n/a
Great Spotted Woodpecker	<i>Dendrocopos major</i>				Green	1	Occasional: Individuals recorded in association with woodland, hedgerows and treelines.	n/a
Great Tit	<i>Parus major</i>				Green	0	Frequent: Pairs and family groups frequently recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Greenfinch	<i>Carduelis chloris</i>				Red	0	Rare: Individuals recorded in association with trees and off-site gardens, with up to three breeding territories partially overlapping the site.	Up to 3
Green Woodpecker	<i>Picus viridis</i>				Green	0	Occasional: Individuals recorded in association with woodland, hedgerows and treelines.	n/a
Grey Heron	<i>Ardea cinerea</i>				Green	0	Rare: Recorded during one survey visit.	n/a
House Sparrow	<i>Passer domesticus</i>				Red	0	Occasional: Small numbers recorded primarily in association with off-site residential development in the east of the site, with up to four breeding pairs overlapping the site boundary.	Up to 4
Jackdaw	<i>Corvus monedula</i>				Green	0	Frequent: Regularly recorded with a maximum count of up to approximately 500 individuals, in association with grassland habitats across the site, mature trees, and the cattle sheds in the north of the site.	n/a
Jay	<i>Garrulus glandarius</i>				Green	1	Rare/variable: Occasionally recorded in association with trees and woodland throughout the site.	n/a
Lesser Whitethroat	<i>Sylvia curruca</i>				Green	0	Rare: One bird recorded in the north of the site on one survey visit.	n/a
Linnet	<i>Carduelis cannabina</i>				Red	1	Occasional: Up to 3 pairs recorded in hedgerows and tree habitats in the south of the site.	3
Long-tailed Tit	<i>Aegithalos caudatus</i>				Green	1	Occasional/variable: Family groups of up to 4 recorded occasionally in association with woodland, trees and boundary habitats across the site.	n/a
Maggie	<i>Pica pica</i>				Green	1	Frequent: Frequently recorded throughout the site with a maximum count of 17 individuals. Generally associated with woodland, hedgerows and adjacent grassland habitats.	n/a
Mistle Thrush	<i>Turdus viscivorus</i>				Red	0	Rare: Occasionally recorded in scrub in the north of the site, and on the site boundary in the south of the site.	n/a
Nuthatch	<i>Sitta europaea</i>				Green	1	Rare: Small numbers recorded in association with woodland in the south of the site.	n/a
Pheasant	<i>Phasianus colchicus</i>					n/a	Occasional: Small numbers recorded across the site in association with woodland, grassland and arable habitat.	n/a
Pied Wagtail	<i>Motacilla alba</i>				Green	1	Rare: Individuals recorded in arable and grassland habitat.	n/a

Robin	<i>Erithacus rubecula</i>				Green	0	Frequent: Moderate number of individuals and pairs recorded in association with woodland, scrub and hedgerow habitats across the site.	n/a
Rook	<i>Corvus frugilegus</i>				Amber	1	Frequent/variable: A maximum count of 100 individuals recorded foraging in grassland and roosting around the cattle sheds in the north of the site.	0
Song Thrush	<i>Turdus philomelos</i>				Amber	0	Frequent: Regularly recorded in woodland and boundary habitats throughout the site, with 11 territories identified.	11
Sparrowhawk	<i>Accipiter nisus</i>				Amber	2	Rare: Recorded on one occasion in the north of the site.	0
Starling	<i>Sturnus vulgaris</i>				Red	0	Occasional/variable numbers: A maximum count of 25 foraging birds, in association with boundary and open habitats across the site.	0
Stockdove	<i>Columba oenas</i>				Amber	0	Rare: Two breeding pairs recorded in woodland and mature tree habitat in the south of the site.	2
Swallow	<i>Hirundo rustica</i>				Green	1	Rare: Individuals/ small groups recorded foraging in the south of the site.	Up to 2
Treecreeper	<i>Certhia familiaris</i>				Green	1	Occasional: Regularly recorded in small numbers, largely in association with Courtland Wood.	n/a
Tree Sparrow	<i>Passer montanus</i>				Red	1	Rare: Recorded on one occasion in a hedgerow in the south of the site.	Up to 1
Whitethroat	<i>Sylvia communis</i>				Amber	0	Occasional: Recorded in association with hedgerows and scrub mainly in the centre of the site, with 6 breeding pairs recorded.	6
Woodpigeon	<i>Columba palumbus</i>				Amber	0	Frequent/variable: Recorded across the site on all survey visits with a maximum count of 126 individuals. Associated with woodland, hedgerow, scrub and grassland habitats.	30-40
Wren	<i>Troglodytes troglodytes</i>				Amber	0	Frequent: Frequently recorded in association with hedgerow, woodland and scrub habitats across the site.	41

* Species listed in **bold** are considered to hold significant areas of breeding territory over the site during the 2025 breeding season.** Index of Breeding Abundance (IBA) values based on latest robust breeding population data (Musgrove et al., 2013) using criteria from JNCC guidance for selection of biological SSSIs (Drewitt et al., 2020).

** Index of Breeding Abundance (IBA) values based on latest robust breeding population data (Musgrove et al., 2013) using criteria from JNCC guidance for selection of biological SSSIs (Drewitt et al., 2020).

*** Only species meeting nature conservation criteria holding significant breeding territory over the site are considered in this column.

Appendix C

Wintering Bird Survey Results Summary Table

Wintering bird survey results summary table 2025/2026:

COMMON NAME*	LATIN NAME	Annex 1 Directive 2009/247/ EC	Sched. 1 W&C Act 1982	UK BAP/ Sec.41 NERC Act.	BoCC 2021 (Red/ Amber/ Green/ No status)	NOTES ON OCCURRENCE**
Blackbird	<i>Turdus merula</i>				Green	Occasional: Moderate numbers recorded in association with woodland, scrub and hedgerow habitats across the site.
Blue Tit	<i>Parus caeruleus</i>				Green	Frequent: Individual birds and small parties recorded in association with woodland, scrub and hedgerow habitats across the site.
Buzzard (Common)	<i>Buteo buteo</i>				Green	Rare: A single individual recorded foraging over the site during four of the six survey visits.
Carrion Crow	<i>Corvus corone</i>				Green	Abundant: Regularly recorded throughout the site, often around the cattle sheds and adjacent mature trees in the north of the site, and in association with grassland, arable and woodland habitats, with an average count of 176 individuals.
Chaffinch	<i>Fringilla coelebs</i>				Green	Occasional/variable: Up to 23 individuals recorded on 4 survey visits foraging in association with hedgerow, grassland and arable habitat across the site.
Chiffchaff	<i>Periparus ater</i>				Green	Rare: One individual recorded in association with woodland on one occasion.
Collared Dove	<i>Streptopelia decaocto</i>				Green	Rare: Low numbers recorded during two survey visits.
Duncock	<i>Prunella modularis</i>				Amber	Occasional: Up to 13 individuals recorded during any one survey visit in association with hedgerow and scrub habitats across the site, with an average count of 9 individuals.
Feral Pigeon	<i>Columba livia</i> (domest.)				Green	Frequent: Consistently recorded in association with the cattle sheds in the north of the site, with an average count of 51 individuals.
Fieldfare	<i>Turdus pilaris</i>				Red	Rare: Recorded during 2 survey visits in association with grassland and hedgerows, with a maximum count of 27 individuals.
Goldcrest	<i>Regulus regulus</i>				Green	Rare: A maximum of two individuals recorded in association with woodland and mature trees.
Goldfinch	<i>Carduelis carduelis</i>				Green	Occasional: Recorded during 5 survey visits, with a maximum of 20 individuals recorded with mature tree and hedgerow habitats across the site.
Great Spotted Woodpecker	<i>Dendrocopos major</i>				Green	Rare: Up to 2 birds recorded during 3 of the survey visits in association with woodland and hedgerow habitats across the site.
Great Tit	<i>Parus major</i>				Green	Frequent: Pairs and small parties recorded in association with woodland and hedgerow habitats across the site during all 6 survey visits.
Green Woodpecker	<i>Picus viridis</i>				Green	Rare: A single bird recorded during four of the survey visits in association with woodland, grassland and hedgerow habitats across the site.
Greenfinch	<i>Carduelis chloris</i>				Red	Rare: One bird recorded in association with mature tree and hedgerow habitat on the site boundary in the north-west of the site.
Grey Heron	<i>Ardea cinerea</i>				Green	Rare: One bird recorded on one occasion.
Grey Wagtail	<i>Motacilla cinerea</i>				Amber	Rare: Four individuals recorded foraging in arable habitats.
Jackdaw	<i>Corvus monedula</i>				Green	Abundant: Up to 200 recorded in association with grassland and woodland across the site, and in mature trees around the cattle sheds in the north of the site, with an average count of 115.
Jay	<i>Garrulus glandarius</i>				Green	Rare: Up to three individuals recorded during three survey visits in association with woodland habitats and tree groups across the site.
Kestrel	<i>Falco tinnunculus</i>				Amber	Rare: One bird recorded on one occasion foraging over grassland habitat.
Linnet	<i>Carduelis cannabina</i>				Red	Occasional: Recorded during 5 of the survey visits, mainly in association with mature trees and hedgerows in the centre and south of the site, with a maximum count of 20 individuals, and an average of 9 individuals recorded per visit.
Long-tailed Tit	<i>Aegithalos caudatus</i>				Green	Rare: A group of 8 recorded in association with woodland habitat during one survey visit.
Magpie	<i>Pica pica</i>				Green	Occasional: Between 1 and 18 individuals recorded across the site during each visit, in a variety of habitats including woodland and grassland.
Meadow Pipit	<i>Anthus pratensis</i>				Amber	Rare/ variable: recorded during 2 survey visits with a maximum count of 82.
Mistle Thrush	<i>Turdus viscivorus</i>				Red	Rare: Single birds recorded during 3 survey visits in association with woodland and copses.
Nuthatch	<i>Sitta europaea</i>				Green	Rare: Recorded on one occasion in association with woodland.
Pied Wagtail	<i>Motacilla alba</i>				Green	Occasional: Groups of up to 25 individuals recorded foraging in arable habitat.
Redwing	<i>Turdus iliacus</i>				Amber	Frequent: Recorded in moderate numbers during 5 of the survey visits, with a maximum count of 70 individuals and an average of 28 individuals recorded.
Robin	<i>Erithacus rubecula</i>				Green	Frequent: Regularly recorded in association with woodland, scrub and hedgerow habitats across the site.
Rook	<i>Corvus frugilegus</i>				Amber	Rare: A maximum of 3 individuals recorded foraging in grassland.
Skylark	<i>Alauda arvensis</i>				Red	Rare/ variable: Recorded during 4 survey visits foraging in arable habitat, with a maximum count of 5 individuals.
Song Thrush	<i>Turdus philomelos</i>				Amber	Occasional: Recorded during all 6 survey visits in association with woodland and copses, with an average count of 3 individuals.
Starling	<i>Sturnus vulgaris</i>				Red	Frequent/ variable: Recorded across four survey visits, with a maximum count of 23 individuals and an average of 9 individuals recorded.
Treecreeper	<i>Certhia familiaris</i>				Green	Rare: One bird recorded on one occasion in woodland.
Woodcock	<i>Columba palumbus</i>				Red	Rare: One bird recorded on one occasion in woodland edge habitat.
Woodpigeon	<i>Columba palumbus</i>				Amber	Abundant: Recorded regularly in a variety of habitat types, with large numbers associated with woodland and plantation habitat in the north of the site, with an average count per survey visit of 194 individuals.
Wren	<i>Troglodytes troglodytes</i>				Amber	Occasional: Regularly recorded in association with woodland, scrub and hedgerow habitats across the site, with a maximum count of 11 individuals.

Appendix D

Site Evaluation Methodology

Site Evaluation Methodology (taken from Drewitt *et al.*, 2015)

Published guidance by the JNCC on the selection of biological SSSI's (Drewitt *et al.*, 2015) provides a method for evaluating assemblages of breeding birds. Sites are eligible for selection as SSSI's if they support an especially good range of bird species characteristic of the habitat.

Lists of breeding bird assemblages of different habitats can be found below. Each species listed is given an index of breeding abundance (IBA) from 0 to 6, which refers to the current total number of breeding pairs in Britain (Musgrove *et al.*, 2013) as follows:

Breeding Pairs	IBA
>1 million	0
100,000 - 1,000,000	1
10,000 - 100,000	2
1,000 – 10,000	3
100 – 1,000	4
10 – 100	5
1 – 10	6

Where the population of a species falls on the border of two classes, an intermediate value may be given (e.g. 2.5).

The species list for each habitat is made up as follows. All species characteristic of the habitat and with indices of abundance of 4 to 6 (i.e. with a total British population less than 1,000 pairs) are included. Also included are more abundant species which are either primarily associated with this habitat or are associated with more than one habitat, some of which are particularly threatened by habitat change (for example drainage of wetlands or loss of heath or scrub). All species of index 0 (i.e. with more than 1 million pairs) are omitted from the lists.

The index value for a site is calculated by summing the indices of abundance for species breeding in it. A species may be included if it has been recorded as probably breeding in the majority of recent years for which information is available. Species regularly using a site for essential activities (such as feeding) while breeding may be included even if they nest outside the site. To qualify under section 3.8, the index value for a site should exceed the threshold value given for the relevant habitat.

The threshold values were derived as follows. For each habitat, the theoretical maximum score which could be obtained for those species with indices of 1 to 4 was calculated. Those species with scores of 5 and 6 were excluded, as these species with British populations of less than 100 pairs are generally very restricted in geographical distribution. In fact, this also applies to many species with an index of 3 or 4. Although species with indices of 5 and 6 are excluded in the calculation of site threshold values, any such species must be included in the calculation of a site index, as few, if any, will be present at

any one site and inclusion allows the required added importance to be given to the sites used by these rarer species (such sites might also qualify under section 3.2). Even with these rare species included, it is most unlikely that the theoretical maximum score would be achieved at any site because species from all parts of Britain and all subdivisions of the general habitat category concerned are included in its calculation. For most habitats, a site reaching half the theoretical maximum as calculated above would be an especially good example of the breeding bird community. Thus this half-maximum value is the threshold given for each habitat.

The differences in distribution patterns shown by birds make the provision of national values difficult. For some habitats, different values are given for different parts of Britain to make some allowance for this. Even if a single threshold level is given, this may allow for the absences of some species in some parts of the country. It is impracticable to make the very fine geographical divisions which biological purists might suggest. No list is provided for certain habitats (for example cliffs). In these cases, it is envisaged that sites selected on the basis of other criteria (for example see sections 3.2 or 3.5) should provide for adequate population coverage.

Mixed habitats

It is clearly impracticable to give lists for each possible combination of habitats within a site, although it is recognised that many bird species depend on a combination of habitats. Several approaches are possible:

- (i) if one (or more) of the composite habitats reaches the threshold value for that habitat, the whole site may be selected if the other habitats clearly form integral parts of the site;
- (ii) if two habitats are included in one well-defined site, the indices for species which are on both habitat lists and have been recorded for the site should be double-counted; other species score in the usual way; for the site to qualify on this basis, its total score should exceed the qualifying threshold value for the two habitats combined (for example for a woodland and lowland scrub combination $39 + 14 = 53$).

In all cases, local knowledge of the site and its context is essential.

Tables of breeding bird assemblage index values of different habitats – see above text for explanation.

Lowland scrub (excluding heath)

Turtle Dove	2	Grasshopper Warbler	2
Cuckoo	2.5	Nightingale	3
Long-eared Owl	3	Linnet	1
Willow Tit	3	Lesser Redpoll	1
Long-tailed Tit	1	Bullfinch	1
Garden Warbler	1	Yellowhammer	1
Lesser Whitethroat	2	Cirl Bunting	4

Site threshold values

14 (this does not readily apply to Wales, Scotland or Northern England)

Lowland Farmland

Grey Partridge	2	Cuckoo	2.5
Quail	4	Barn Owl	3
Marsh Harrier	4	Magpie	1
Montagu's Harrier	5	Rook	1
Buzzard	2	Swallow	1
Kestrel	2	Tree Sparrow	1
Hobby	3	Yellow Wagtail	2
Corncrake	3	Pied Wagtail	1
Stone-curlew	4	Linnet	1
Lapwing	1	Yellowhammer	1
Curlew	2	Cirl Bunting	4
Crane	5	Reed Bunting	1
Stock Dove	1	Corn Bunting	2.5
Turtle Dove	2		

Site threshold values

S and E England: 26

Wales: 17.5

Rest of Britain: 22

Woodland

Grey Heron	2	Crested Tit	3
Little Egret	4	Coal Tit	1
Honey-buzzard	5	Willow Tit	3
Red Kite	3	Marsh Tit	2
Goshawk	4	Long-tailed Tit	1
Sparrowhawk	2	Wood Warbler	3
Buzzard	2	Garden Warbler	1
Osprey	4	Nuthatch	1
Hobby	3	Treecreeper	1
Black Grouse	3	Fieldfare	6
Capercaillie	4	Redwing	5.5
Woodcock	2	Spotted Flycatcher	2
Stock Dove	1	Nightingale	3
Cuckoo	2.5	Pied Flycatcher	2
Tawny Owl	2	Redstart	1.5
Long-eared Owl	3	Tree Pipit	1.5
Wryneck	6	Siskin	1
Green Woodpecker	2	Lesser Redpoll	1
Great Spotted Woodpecker	1	Common Crossbill	2
Lesser Spotted Woodpecker	3	Scottish Crossbill	2.5
Jay	1	Bullfinch	1
Raven	3	Hawfinch	4
Firecrest	4		

Site threshold values

Northern Scotland: 33.5

Wales: 37.5

Rest of Britain: 39

ANNEX D

Brown Hairstreak Survey Report

LAND NORTH-WEST OF SOUTHWATER, HORSHAM

BROWN HAIRSTREAK SURVEY REPORT

Prepared for Berkley Strategic Land Ltd

by

Hankinson Duckett Associates

HDA ref: 2090.78

May 2026

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HDA Document Control and Quality Assurance Record

APPENDICES

- A UK Habitat Classification Survey Plan
- B Brown Hairstreak Survey Summary Plan

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes the results of a Brown Hairstreak butterfly survey carried out within approximately 116ha of land west of Southwater, West Sussex hereinafter referred to as 'the site'. The centre of the site is located by National Grid Reference TQ154274. The study was commissioned by Berkeley Strategic Land Ltd in April 2025.

1.1.2 The site is split into a main site and a smaller area. The main site lies to the north-west of the village of Southwater, West Sussex and comprises a series of arable fields, semi-improved grassland fields, and improved grassland fields bordered by hedgerows, treelines, and fence lines. Other habitats present include areas of broadleaved woodland, mixed woodland, and tall ruderal vegetation. In addition, Marlpot Gill flows in a southerly direction through the west of this area and a second stream flows east to west through the north. The main site is bordered to the west by agricultural land and Two Mile Ash road and associated residential properties, beyond which are arable fields; to the north by the A24, industrial units, and agricultural land; to the south by Kirsty's Wood and Bonfire Hill road with associated residential properties and grassland fields; and to the east by Worthing Road, beyond which is the settlement of Southwater.

1.1.3 The smaller area of the site measures approximately 1.35ha in size and is located approximately 800m to the north-west of the main site near Christ's Hospital railway station. This area comprises part of a grassland field and is bordered to the north by woodland; to the east by grassland fields; to the west by a public right of way and access road with residential properties and Christ's Hospital station car park beyond, and to the south by residential properties.

1.1.4 The location and boundary of the site are shown on the UK Habitat Classification Survey Plan provided in *Appendix A*.

1.2 Development proposals

1.2.1 The site is currently subject of an outline planning application, with all matters reserved (except for primary access to the highway) for a phased development comprising: the demolition of existing buildings and the construction of residential dwellings (including affordable housing) (Use Classes C2 and C3); a mixed-use neighbourhood centre (Use Classes E and F); education facilities (Use Class F1(a)); business and employment floorspace (Use Classes B2, B8 and E(g)); redevelopment of existing agricultural buildings including construction of a building for community use (Use Class F2); improvements to public rights of way; sports pitches; gypsy and traveller pitches/plots; public open space; landscaping, and associated infrastructure.

1.2 Background and legislative context

1.3.1 The Brown Hairstreak *Thecla betulae* is an elusive species of butterfly with a restricted distribution in the UK, predominantly in the south of England and Wales. Strongholds for the butterfly species include Oxfordshire, Middlesex, Surrey, West Sussex, Wiltshire, Devon and Dorset, with scattered localised populations between.

1.3.2 Brown Hairstreak butterflies can be found within woodland and farmland habitats, at field margins and woodland rides, but require scrub and hedgerows subject to low intensity management containing Blackthorn which is the larval foodplant for Brown Hairstreak caterpillars. Areas which are sheltered, warmer and catch the sun (i.e. those not in a northerly aspect) are preferred over those where direct sunlight is absent for most of the day. Adult foodplants include hedgerow and woodland edge flowers including those of Bramble *Rubus fruticosus*, Common Fleabane *Pulicaria dysenterica* and Hemp Agrimony *Eupatorium cannabinum*. In addition, adults spend much of their time in the canopy of large trees, predominantly Ash *Fraxinus excelsior*, where they mate and feed on aphid honeydew (Butterfly Conservation, 2026).

1.3.3 Brown Hairstreak populations have been subject to substantial and ongoing declines, with an estimated 49% decline in population between 1976 and 2014 (Fox *et al.*, 2015), largely due to a loss of hedgerow and scrub habitats and intensification in hedgerow management. Brown Hairstreak are subsequently identified as a Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act¹. Section 40 of the Act requires that species listed under Section 41 are a material consideration in the planning process.

1.4 Scope and purpose of the report

1.4.1 The desk study carried out as part of the Ecological Appraisal (HDA, 2023) identified records of Brown Hairstreak in the vicinity of the site and during a terrestrial invertebrate survey (ECOSA, 2022) a single female adult Brown Hairstreak was recorded basking on a Bramble leaf in the north of the main site.

1.4.2 Given the nature and extent of the proposed development within the main site, which could affect areas of woodland, scrub, hedgerow and associated grassland habitats, a Brown Hairstreak survey was subsequently carried out of the main site in order to inform an

¹ Brown Hairstreak are also protected against commercial exploitation through Section 9(5) of the 1981 Wildlife and Countryside Act (as amended). Under the Act it is an offence to sell, offer for sale, possess or transport for the purposes of sale or publish advertisements to buy or sell Brown Hairstreak butterflies.

assessment of the likely effects of the proposed development on this species, and this is the subject of this report. The aims of this study are:

- i. To establish the presence/probable absence of Brown Hairstreak within the survey area;
- ii. To assess the relative importance of different parts of the survey area for Brown Hairstreak; and
- iii. To predict likely impacts potentially arising from the proposed development at the site on Brown Hairstreak and give recommendations for impact avoidance, minimisation and mitigation.

2 METHODOLOGY

2.1 Adult Brown Hairstreak are elusive, spending much of their time in the canopy of trees, therefore egg searching is the primary method of surveying for this species. Brown Hairstreak eggs are conspicuous as they are white, round eggs laid on the dark wood of young Blackthorn shoots.

2.2 The methodology used to establish the presence/ likely absence of breeding Brown Hairstreak within the survey area comprised an adapted version of the egg search methodology outlined in *Ng3 'Non-Transect Methods'* from the UK Butterfly Monitoring Scheme (UKBMS) (UKBMS, 2016).

2.3 Potential habitat in the form of Blackthorn scrub and hedgerows was initially assessed as being of 'low', 'medium', or 'high' suitability for Brown Hairstreak. *Table 1* identifies criteria for assessing habitat suitability, as taken from UKBMS (2016). Blackthorn is considered to be of 'high' suitability particularly where there is plentiful new and suckering growth, not in a northerly aspect, and not subject to regular flailing or other management where new growth is lost. Brown Hairstreak eggs can be found on Blackthorn of lower suitability although the likelihood of an area being used by Brown Hairstreak is lower when dominated by 'medium' or 'low' quality Blackthorn habitat. Locations of potential habitat and suitability are shown on the map in *Appendix A*.

Table 1: Habitat suitability for Brown Hairstreak egg laying (UKBMS, 2016)

Suitability	Characteristics
High	> 20% Blackthorn in hedge or on suckers in front of hedge, of which frequent (>25%) young (<3 years old) growth, not flailed recently or not significantly damaged by flailing or stock browsing.
Medium	>20% Blackthorn in hedge, of which only occasional, rare or no (<25%) young (<3 years old) growth, significantly damaged by recent flailing or stock browsing, or too old and leggy. Occasional, rare or no suckers in front of hedge, or suckers significantly damaged by flailing or stock browsing.
Low	5-20% Blackthorn in hedge.

Unsuitable	<5% Blackthorn in hedge.
------------	--------------------------

2.4 Six sample hedges identified as likely supporting the highest proportion/ quality of Blackthorn within each area of the site during the UK Habitat Classification Survey (HDA, 2025) and Hedgerow Survey (HDA, 2022) were subject to searches for Brown Hairstreak eggs, which involved searching the base of young Blackthorn shoots, at a rate of 1 minute per metre of suitable quality of Blackthorn. Transects were carried out along the southern, westerly and easterly aspects of the sampled hedgerows. In accordance with the methodology, higher survey effort was employed in areas with 'high' suitability; if an area of Blackthorn was considered 'high' suitability, the whole section was searched. Areas of 'medium' or 'low' suitability habitat was searched at the same rate as higher quality habitat up to 100m before moving onto the next area of suitable habitat (UKBMS, 2016). Other *Prunus* sp. were searched briefly if present, although these were limited in extent.

2.5 The surveys were conducted on 22nd & 23rd December 2025 by Charlotte Grant, Neve Phillips and Ed Seares of HDA. The temperature ranged between 7-11°C and conditions were overcast and dry, with light wind. Approximately 14 hours were spent undertaking the surveys.

Limitations

2.6 The Brown Hairstreak survey was carried out at an appropriate time of the year during the surveying season for Brown Hairstreak eggs. There had been incidences of frost in the weeks before the survey was undertaken, which could have resulted in some egg mortality, however if Brown Hairstreak are present at the site then this would more likely affect number of eggs encountered rather than their presence.

2.7 Notwithstanding the above, a substantial amount of Blackthorn present within the survey area was subject to survey and it is considered that no significant limitations were encountered during the survey. The survey findings thereby allow a robust assessment of the likely effects of the proposed development on Brown Hairstreak butterflies and to form the basis of the recommendations provided in *Section 5* of this report.

3 RESULTS

3.1 Habitat assessment

3.1.1 The majority of the site comprises unsuitable Brown Hairstreak habitat in the form of agricultural fields. However, there are several areas of Blackthorn scrub and species-rich hedgerows containing Blackthorn and other occasional *Prunus* species. The extent of scrub and hedgerow habitats present within the site is shown on the plan provided in *Appendix A*.

3.2 Egg searches

3.2.1 Hedgerows were surveyed and assessed being categorised in accordance with Table 1 above. Habitats that were deemed suitable were surveyed for the presence of Brown Hairstreak butterfly eggs.

3.2.2 The surveys recorded the presence of Brown Hairstreak butterfly eggs on all hedgerows sampled. The survey results are summarised in Table 2 below and the locations of transects are shown in Appendix B.

Table 2: Brown Hairstreak survey findings

Date of survey	Transect No.	Habitat suitability	No. of eggs recorded
22-12-2025	1	- 55% suitable, high quality - 45% suitable low suitability	21
22-12-2025	2	- 80% suitable, medium quality - 20% suitable, low quality	10
23-12-2025	3	- 25% suitable, high quality - 25% suitable, low quality - 50% unsuitable	10
23-12-2025	4	- 80% suitable, medium quality - 10% suitable, high quality - 10% unsuitable	2
23-12-2025	5	- 90% suitable, medium quality - 10% unsuitable	4
23-12-2025	6	- 50% suitable, high quality - 35% suitable, low quality - 15% unsuitable	17

3.2.3 During the course of the survey, a maximum count of 21 eggs was recorded from any single transect. The records of eggs were generally distributed unevenly, with higher quality habitat providing a higher egg count.

4 SITE EVALUATION

- 4.1 Guidelines from Butterfly Conservation were used to evaluate the importance of the site for Brown Hairstreak butterflies, based on habitat suitability and number of eggs present, in addition to historical factors.
- 4.2 In accordance with Butterfly Conservation guidance, the site is considered to be of importance for Brown Hairstreak butterflies. This is due to the presence of suitable Blackthorn egg-laying habitat within a connected hedgerow network which forms part of a wider breeding landscape. Brown Hairstreak have a low-density colony structure and therefore landscape-scale habitat use is important. Similar habitat to that present within the site is widespread in the surrounding area and the site is therefore likely to contribute functionally to the local population.
- 4.3 Measures are outlined in *Section 5* below by which the proposed development of the site can maintain and enhance opportunities for this species in the long-term.

5 RECOMMENDATIONS

- 5.1 The site supports breeding Brown Hairstreak butterflies and is considered to be of local importance for this species. Where possible areas of suitable habitat should be retained and protected within the scheme. Where retention is not possible it is recommended that planting of new native hedgerows and scrub, including a high proportion of Blackthorn, is implemented.
- 5.2 The emerging proposals shown on the *Illustrative Masterplan* (KPK, 2026) indicate that:
- Woodland: With the exception of loss of approximately 0.02ha of plantation woodland to provide road access into the north of the site, all woodland will be retained. The emerging proposals show planting of an additional 0.47ha of broadleaved woodland habitat, thereby resulting in an increase in this habitat type.
 - Scrub: Scrub habitat supporting Blackthorn is currently limited within the site, with only approximately 0.218ha of mixed broadleaved scrub habitat present. The emerging proposals indicate that although approximately 0.09ha of existing mixed scrub habitat will be lost to the proposed development, a further 5.96ha of mixed scrub habitat will be created thereby resulting in a substantial net gain of this habitat type.
 - Hedgerows: With the exception of limited breakages for site access, the majority of hedgerows within the site will be retained. In addition, the detailed design will provide opportunities for planting of additional hedgerows in association with areas of informal open space in order to achieve a net gain in hedgerow habitat across the site.

- Other: The site is dominated by arable fields and agriculturally modified grassland which provide very limited opportunities for Brown Hairstreak. The emerging proposals indicate that approximately 20ha of relatively species-rich meadow grassland will be created across the site, largely in association with hedgerow and woodland buffers.

5.3 With due regard to the above, the emerging development proposals indicate that it will be possible to maintain and increase the extent of Brown Hairstreak habitat within the site. Notwithstanding this, the measures outlined below should be incorporated into the detailed design and ongoing site management in order to maximise and enhance opportunities for Brown Hairstreak in the long-term:

- New hedgerows should be planted in association with areas of informal open space, with a high proportion of Blackthorn within the hedgerow mix.
- In addition to the planting of new hedgerows, existing retained hedgerows should be enhanced through infilling of gaps including Blackthorn within the hedging mix.
- Where appropriate, new and enhanced hedgerows should be subject to a low-intensity management regime, cutting no more than once every 3-5 years with no more than 50% of hedgerows cut within any given year. This allows for young, suckering Blackthorn to be available to the butterflies between rotational cuts.
- New scrub planting within the site should also include a high proportion of Blackthorn where appropriate. As indicated on the emerging proposals, this could include creation of 'ecotones' along woodland edges, comprising a gradation from woodland, to scrub, to rough and meadow grassland. Ecotones are noted for their ability to support a wide diversity of species.
- Retention and creation of rough and species-rich meadow grassland along hedgerow bases, woodland margins and in association with areas of scrub. This will provide nectar rich herbs and allow Blackthorn to sucker without conflict.

5.4 The *Illustrative Masterplan* (KPK, 2026) indicates that these measures can be achieved by the proposed development. It is recommended that the above measures to maintain and enhance habitats for Brown Hairstreak butterflies are incorporated into the detailed design at an appropriate stage and that ongoing management is secured through preparation of a Landscape and Ecological Management Plan.

6 CONCLUSION

6.1 The site supports breeding Brown Hairstreak butterflies and is considered to be of local importance for this species.

6.2 The emerging development proposals are focussed on areas of arable farmland and agriculturally modified grassland which are generally unsuitable for this species. Where

suitable habitat is present in the form of hedgerows, scrub and woodland these will largely be retained and new areas of woodland, scrub and hedgerow habitat created exceeding those areas to be lost. Furthermore, these will be complemented by enhancement of associated grassland habitats, including retention and creation of rough grassland margins and creation of substantial new areas of species-rich meadow grassland.

- 6.3 Measures to maximise the long-term value of retained and newly created habitat for Brown Hairstreak butterflies are summarised in *Section 5* above. Subject to securing these measures at the detailed design stage it is considered that opportunities for Brown Hairstreak can be maintained and enhanced in the long-term.

7 REFERENCES

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	Personnel	Position
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Approved for issue	Adrian Meurer MCIEEM	Director

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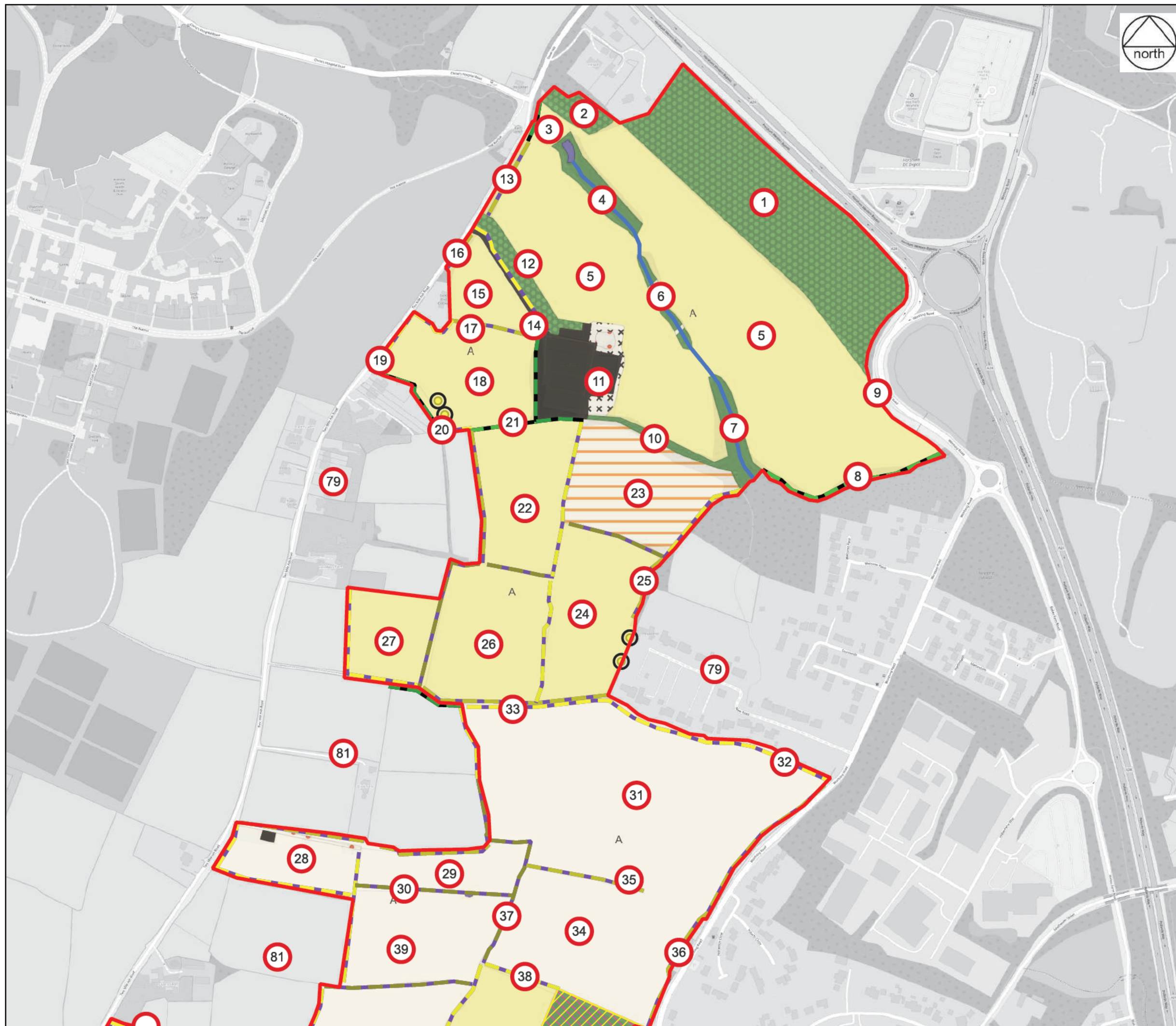
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APPENDIX A

UK Habitat Classification Survey Plan



- KEY**
- Target Note
 - Site boundary
 - Existing Large Rural Tree
 - Streams
 - Artificial unvegetated, unsealed surface
 - Winter stubble
 - Developed land; sealed surface
 - Lowland mixed deciduous woodland
 - Mixed scrub
 - Modified grassland
 - Cereal crops
 - Other woodland; mixed
 - Ponds (non-priority habitat)
 - Ruderal/Ephemeral
 - Line of trees
 - Line of trees - associated with bank or ditch
 - Native hedgerow
 - Native hedgerow - associated with bank or ditch
 - Native hedgerow with trees
 - Native hedgerow with trees - associated with bank or ditch
 - Ancient Woodland

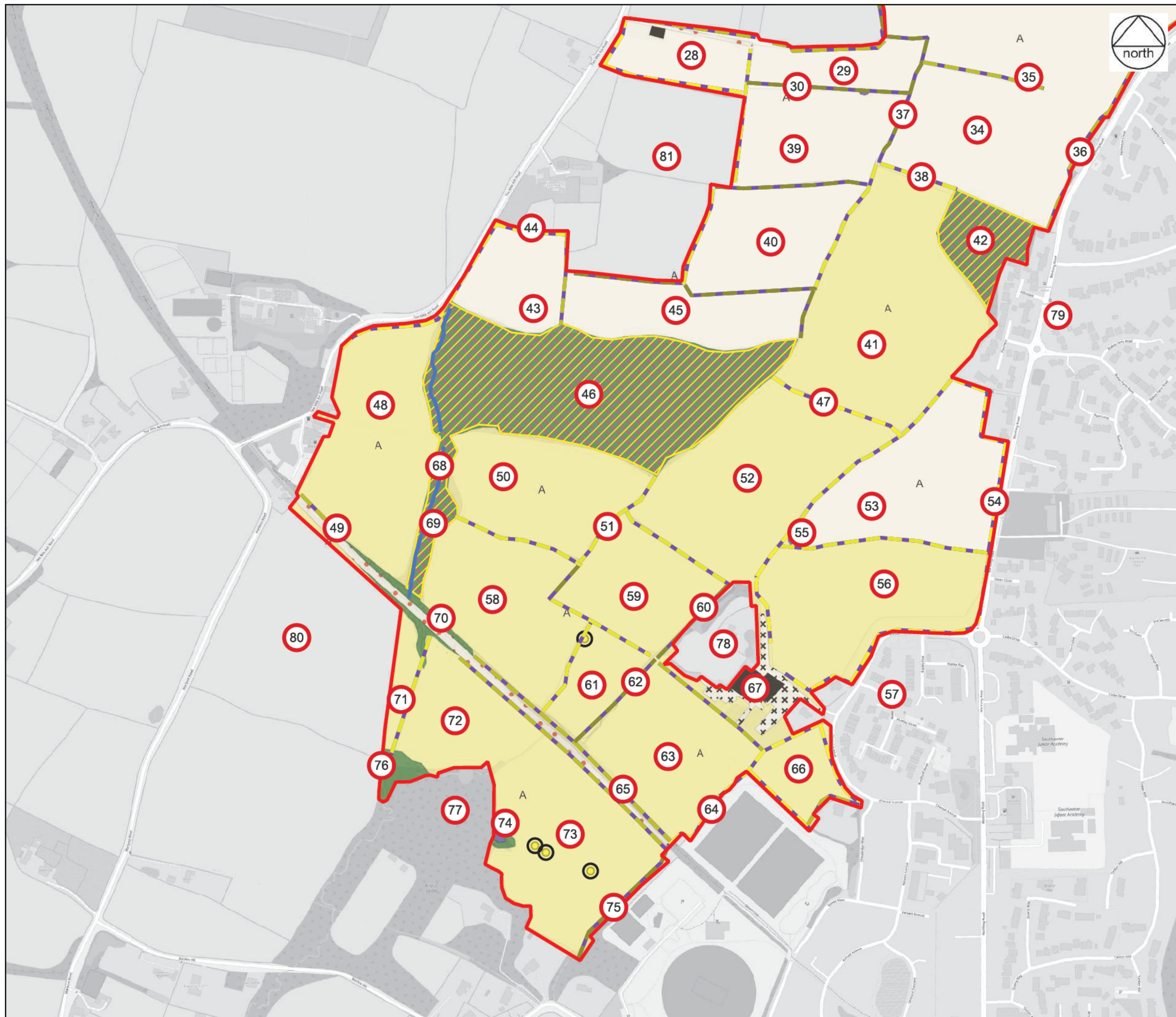
CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2025 UK Habitat Classification Survey Plan – Main Site North

SCALE AT A3: NTS **DATE:** January 2026

2090.78 / 19a



- KEY**
- Target Note
 - Site boundary
 - Existing Large Rural Tree
 - Streams
 - Artificial unvegetated, unsealed surface
 - Cereal crops
 - Developed land; sealed surface
 - Lowland mixed deciduous woodland
 - Mixed scrub
 - Modified grassland
 - Ponds (non-priority habitat)
 - Ruderal/Ephemeral
 - Local Wildlife Site
 - Native hedgerow
 - Native hedgerow - associated with bank or ditch
 - Native hedgerow with trees
 - Native hedgerow with trees - associated with bank or ditch
 - Ancient Woodland

CLIENT:
Berkeley Strategic Land Ltd

PROJECT:
Land North-West of Southwater, Horsham

TITLE:
2025 UK Habitat Classification Survey Plan –
Main Site South

SCALE AT A3:
NTS

DATE:
January 2026

2090.78 / 19b

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Landscape Architecture
Masterplanning
Ecology



Target notes:

1. Young mixed woodland along the northern boundary of the site bordered by post and wire fencing. Species include Pedunculate Oak (*Quercus robur*), Wild Cherry (*Prunus avium*), Sycamore (*Acer pseudoplatanus*), Larch (*Larix decidua*), Pine (*Pinus* sp.) and Cedar (*Cedrus* sp.) with a Blackthorn (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*) and Field Maple (*Acer campestre*) understorey. The ground flora below is partly colonised by Ivy (*Glechoma hederacea*) and Bramble (*Rubus fruticosus*), with other species relatively sparse and dominated by grasses including Wood False-brome (*Brachypodium sylvaticum*) and Rough Meadow-grass (*Poa trivialis*) with occasional Lords and Ladies (*Arum maculatum*). Small clearings within the woodland are more species-rich and include grasses including False Oat-grass (*Arrhenatherum elatius*), Cock's Foot (*Dactylis glomerata*) and Rough Meadow-grass with Hard Rush (*Juncus inflexus*), Common Nettle (*Urtica dioica*), Cleavers (*Galium aparine*), Common Vetch (*Vicia sativa*), Cut-leaved Cranesbill (*Geranium dissectum*), Meadow Buttercup (*Ranunculus acris*), Creeping Thistle (*Cirsium arvense*), Pendulous Sedge (*Carex pendula*), Agrimony (*Agrimonia eupatoria*), Black Knapweed (*Centaurea nigra*) and Hedge Woundwort (*Stachys sylvatica*).
2. Small semi-mature woodland copse bordered by post and wire fencing. Mature and semi-mature trees with species including Pedunculate Oak, Ash (*Fraxinus excelsior*), Wild Cherry, Sycamore, Scots Pine (*Pinus sylvestris*) and Common Lime (*Tilia x europaea*) with Hawthorn, Rhododendron (*Rhododendron ponticum*), Elder (*Sambucus nigra*) and Bramble below. The ground flora below is dominated by tall ruderal vegetation and coarse grasses including Common Nettle, Cow Parsley (*Anthriscus sylvestris*), Creeping Thistle, Broadleaved Dock (*Rumex obtusifolius*), False Oat-grass, Bittersweet (*Solanum dulcamara*), Cock's Foot, Montbretia (*Crocsmia x crocosmiiflora*) and Common Agrimony.
3. Area of rough grassland comprising Yorkshire Fog (*Holcus lanatus*), Meadow Foxtail (*Alopecurus pratensis*), Soft Brome (*Bromus hordeaceus*), Smooth Meadow-grass (*Poa pratensis*), Rough Meadow-grass, Perennial Rye-grass (*Lolium perenne*), Barren Brome (*Anisantha sterilis*) and Cock's Foot with forb species including Meadow Buttercup, Cut-leaved Cranesbill, Creeping Cinquefoil (*Potentilla reptans*), Lesser Stitchwort (*Stellaria graminea*), Common Sorrel (*Rumex acetosa*), Curled Dock (*Rumex crispus*), Hogweed (*Heracleum sphondylium*), Dandelion (*Taraxacum officinale*) and Common Nettle. A mature treeline borders the western margin of this area with species including Common Lime, Ash, Pedunculate Oak and Pine with Sycamore and Hawthorn below.
4. Band of mature woodland between two grassland fields comprising Sycamore, Pedunculate Oak, Norway Maple (*Acer platanoides*), Scots Pine and Ash with an understorey of Hazel (*Corylus avellana*) coppice, Elder, Hawthorn, Hornbeam (*Carpinus betulus*) and Holly (*Ilex aquifolium*). Ground flora is present although there is heavy poaching from cattle in places, with species including Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*), Garlic Mustard (*Alliaria petiolata*), Pendulous Sedge, Ground Ivy, Lords and Ladies, Yellow Archangel (*Lamium galeobdolon*), Common Nettle and Bramble. A slow flowing stream flows through the woodland, with a water depth of approximately 10cm at the time of survey, comprising shallow earth banks and an earth base. Due to heavy shading no aquatic vegetation is present within the stream, however the banks are bordered by occasional Pendulous Sedge and Wavy Bitter-cress (*Cardamine flexuosa*) with occasional Cuckoo Flower (*Cardamine pratensis*). At the north-western end of the woodland is a small pond, approximately 5m x 6m, subject to very heavy eutrophication and largely covered by green algae, with few marginal species with the exception of Pendulous Sedge, and with heavy poaching from cattle around the banks.
5. Modified grassland field dominated by Perennial Rye-grass, with a uniform sward of under 10cm and grazed by cattle at the time of survey, with other species including Creeping Thistle, Broad-leaved Dock, Goats-beard (*Tragopogon pratensis*), Greater Plantain (*Plantago major*) and Smooth Meadow Grass (*Poa pratensis*).

6. Sections of above ground stream bordered by Elder, Hazel, Hawthorn and Blackthorn scrub with young Pedunculate Oak and Field Maple trees.
7. Woodland shaw extending from a larger area of off-site woodland to the south. Mature trees include Hybrid Black Poplar (*Populus x canadensis*), Wild Cherry, Ash and Sycamore with Hazel, Field Maple, Hornbeam, Elder, Norway Maple, Holly, Blackthorn and Hawthorn below. The ground flora includes Garlic Mustard, Bluebell, Dog's Mercury, Greater Burdock (*Arctium lappa*), Pendulous Sedge, Common Nettle and Hemlock (*Conium maculatum*), with poached and bare ground in places. A stream courses through the woodland which was dry at the time of survey.
8. Band of mature trees along a wet ditch. Tree species include Ash, Alder (*Alnus glutinosa*), Pedunculate Oak, Hazel coppice, Holly, Hawthorn and Elder. Ground flora below the trees comprises Herb Robert (*Geranium robertianum*), Lords and Ladies, Bracken (*Pteridium aquilinum*), Ground Ivy, Pendulous Sedge and Common Nettle.
9. Wooden post and rail fence bordering the site, beyond which is an embankment associated with Worthing Road.
10. A narrow band of deciduous woodland with a steep sided, dry ditch running through centre. Species composition is similar to that listed in target note 7.
11. A steep sided earth bund separating the grassland field from the farmyard. Species that have colonised the southern end of the bund include tall ruderal species such as Common Nettle, Broadleaved Dock, Creeping Thistle, Spear Thistle (*Cirsium vulgare*) and Bristly Ox-tongue (*Helminthotheca echinoides*). The northern end of the bund is dominated by grassland species including Yorkshire Fog, Soft Brome, Rough Meadow-grass, Meadow Foxtail, Barren Brome, Cock's Foot, Perennial Rye-grass, Common Vetch, Grass Vetchling (*Lathyrus nissolia*), Lesser Trefoil (*Trifolium dubium*), Creeping Cinquefoil, Meadow Buttercup, Cut-leaved Cranesbill, Field Bindweed (*Convolvulus arvensis*), Dandelion, Ragwort (*Senecio jacobaea*) and Prickly Sow-thistle (*Sonchus asper*). The farmyard consists of several open sided barns of concrete and corrugated metal, holding cattle at the time of survey, with surrounding concrete hardstanding. To the north-east of the farmyard is a slurry pit.
12. Band of semi-mature plantation woodland bordered by a post and wire fence to north and intact hedgerow to south (the hedgerow is described in target note 14). The woodland is dominated by Pedunculate Oak with occasional Hornbeam, Scot's Pine and Blackthorn. The ground flora comprises grasses including Yorkshire Fog, Cock's Foot and Rough Meadow-grass with Common Nettle and Cleavers.
13. Mature defunct hedgerow, up to 3m wide and 5m tall, with mature Pedunculate Oak standards. Species within the hedgerow include Blackthorn, Hawthorn, Dog-rose (*Rosa canina*), Field Maple, Dogwood (*Cornus sanguinea*), cultivated Hawthorn (*Crataegus* sp.), Elder, Hazel, Holly and Sycamore. Ground flora below the hedge includes Dog's Mercury, Bluebell, Wood Dock (*Rumex sanguineus*), Germander Speedwell (*Veronica chamaedrys*) and Bush Vetch (*Vicia sepium*). A dry ditch is present below the hedgerow which is overgrown with Pendulous Sedge, Great Willowherb (*Epilobium hirsutum*) and Common Nettle.
14. Hardstanding track leading to a farmyard which comprises a number of agricultural buildings associated with a dairy farm. To the north of the track is a managed hedgerow comprising Hawthorn, Field Maple and Elder and to the south is a post and wire fence.
15. Modified grassland field with species including Yorkshire Fog, Creeping Buttercup (*Ranunculus repens*), Rough Meadow-grass, Smooth Meadow-grass, Meadow Foxtail, Sweet Vernal-grass (*Anthoxanthum odoratum*), Smaller Cat's tail (*Phleum bertolonii*), Cock's Foot, Creeping Thistle, Common Nettle, White Clover (*Trifolium repens*), Soft Brome, Red Clover (*Trifolium pratense*), Common Mouse-ear (*Cerastium fontanum*), Creeping Cinquefoil, Common Vetch and Field Speedwell (*Veronica persica*).

16. Mature hedgerow with Pedunculate Oak standards. Further species include Hawthorn, Pedunculate Oak, Blackthorn, Field Maple, Spindle (*Euonymus europaea*), Bramble, Dogwood and Black Bryony (*Tamus communis*). The hedge leads into a post and rail fence bordering an off-site residential property at its southern end.
17. Outgrown hedgerow with large gaps in the middle section, with standards comprising Blackthorn, Hawthorn, Pedunculate Oak, Field Maple, Ash and Elder with Leyland Cypress (*Cupressus × leylandii*) present adjacent to the residential property. The hedgerow becomes more managed, defunct and less diverse at the southern end where it is adjacent to the road.
18. Modified grassland field similar in species composition to target note 15 with mature Oak trees and a short section of dry ditch in the south. Bordering the east of the field is a mature treeline along a post and wire fence with species including mature Pedunculate Oak with younger Ash, Field Maple and Blackthorn with Bramble scrub below.
19. A Bramble dominated hedgerow along the road leads into a scrubby treeline adjacent to off-site residential property with Ash, Horse Chestnut (*Aesculus hippocastanum*), Hawthorn, Sycamore and Hazel, with mature Pedunculate Oak trees at the southern end.
20. Short section of managed hedgerow comprising Blackthorn, Hawthorn and Bramble with a dry ditch below. Common Nettle and Cleavers dominate the ground flora with infrequent Ground Ivy, Wood Avens (*Geum urbanum*) and Cuckoo Flower.
21. Mature treeline of Pedunculate Oak, one recently fallen, with scrubby trees below including Hawthorn, Holly, Field Maple and Ash. A dry ditch runs the length of the treeline and the ground is poached underneath.
22. A modified grassland field with species comprising Perennial Ryegrass, Scented Mayweed (*Matricaria chamomilla*), White Clover, Curled Dock, Timothy (*Phleum pratense*), Creeping Buttercup, Greater Plantain, Ragwort, Spear Thistle, Dandelion, Nipplewort (*Lapsana communis*), Great Willowherb, Smooth Meadow Grass, Selfheal (*Prunella vulgaris*), Scarlet Pimpernel (*Anagallis arvensis*), Common Mouse-ear, Yorkshire Fog and Common Knotgrass (*Polygonum aviculare*). A managed hedgerow borders the field to the east and is dominated by Hawthorn and Blackthorn with Hazel, Dog-rose and Bramble. Ash standards are also present. Along the western boundary of the field is a mature, intact, hedgerow up to 6m tall and 3m wide, with a dry ditch below. The western hedge comprises Blackthorn, Holly, Elder, Hazel, Hawthorn, Field Maple and Small-leaved Lime (*Tilia cordata*), with Ash and Oak standards. The hedgerow to the south is managed to 2m with two Oak standards and a ditch at its base that was dry at the time of survey, with species including Blackthorn, Dogwood, Dog-rose, Hawthorn and Ash. In addition to the grassland species above, Greater Stitchwort (*Stellaria holostea*) and Bluebell are present below the hedge.
23. A fallow arable field, heavily overgrown with ephemeral and ruderal species at the time of survey, including Pineappleweed (*Matricaria discoidea*), Greater Plantain, Common Fleabane (*Pulicaria dysenterica*), Groundsel (*Senecio vulgaris*), Bristly Ox-tongue (*Helminthotheca echinoides*), Redshank (*Persicaria maculosa*), Spear Thistle, Common Nettle, Germander Speedwell, Goosefoot (*Chenopodium* sp.), Greater Willowherb, Scarlet Pimpernel, Shepherds Purse (*Capsella bursa-pastoris*), Creeping Thistle, Black Medick (*Medicago lupulina*), Dandelion, Birds-foot Trefoil (*Lotus corniculatus*), Ragwort, Greater Burdock (*Arctium lappa*), Yorkshire Fog, Creeping Cinquefoil, Broad-leaved dock and Soft Brome, with a mound of spoil in the north-western corner. The hedgerow to the east is unmanaged and includes Oak, Hawthorn, Elder, Field Maple and Bramble.
24. A modified grassland field with species composition similar to target note 22. The northern boundary of the field is bordered by an intact hedgerow with Ash standards. Further species present in the hedge include Hawthorn, Hazel, Elder, Blackthorn, Goat Willow (*Salix caprea*), Grey Willow (*Salix cinerea*), Oak and Bramble. A dry ditch runs below the hedge.
25. Unmanaged hedgerow, up 8m tall, comprising Holly, Hawthorn, Elder, Hazel, Field Maple, Dog-rose, Bramble and Oak standards with a dry ditch below. The hedgerow leads to the south into

a post and rail fence with mature Oak standards along the boundary with off-site residential properties.

26. A modified grassland field with a species composition similar to target note 22. The field is bordered to the east, and south by managed hedgerows dominated by Blackthorn with occasional Dogwood, Hawthorn, Holly, Field Maple and Bramble with Ash and Oak standards, with the hedgerow to the east having a ditch at its base. The hedgerow to the west is partially outgrown with Oak standards and a ditch.
27. A modified grassland field with a species composition similar to target note 22. Along the southern field boundary is a managed hedgerow adjacent to a footpath comprising Blackthorn, Dog-rose, Field Maple, Willow (*Salix* sp.), Hazel, Hawthorn and Bramble. Along the western field boundary is a managed hedgerow comprising Oak standards with Blackthorn, Hazel, Elder, Hawthorn, Dogwood and Bramble. Black Bryony, Lords and Ladies and Bracken are present within the hedge. On the northern boundary is a post and rail fence.
28. A field of Maize with a field margin of up to 2m in width including Grass Vetchling (*Lathyrus nissolia*), Birds-foot Trefoil (*Lotus corniculatus*), Bluebell, Hairy Tare (*Vicia hirsuta*) and St John's Wort (*Hypericum* sp.). An open sided barn is present in the north-west of the field and a bare earth farm track is located along the northern margin of the field. A managed, intact hedgerow comprising Hawthorn, Hazel, Field Maple, Blackthorn, Elder, Turkey Oak (*Quercus cerris*), Ash, Holly, Dog-rose, Privet and Pedunculate Oak with Ash and Oak standards is present along the northern field boundary, with a dry ditch below. Along the southern, eastern and western boundaries are hedgerows with Hawthorn, Hazel, Ash, Rose, Bramble, Blackthorn and Dogwood.
29. A field planted to Maize similar to Target Note 28, with an outgrown hedgerow to the north with Oak standards and Blackthorn and Hawthorn.
30. Intact hedgerow with Oak standards. Blackthorn is dominant, whilst Ash, Dog-rose, Hawthorn, Field Maple, Willow and Hazel are also present. A dry ditch with a small seasonal pond with gently sloping earth banks is also present below.
31. A field planted to Maize, with other species in the cultivated area including Goosefoot, Field Bindweed, Scarlet Pimpernel and Redshank. With grassland margins of up to 4m including Perennial Ryegrass, White Clover, Timothy, Cock's foot, Creeping Buttercup, Field Bindweed, Greater Plantain, Black Knapweed, Creeping Cinquefoil, Greater Stitchwort and Bush Vetch. On the western boundary is an intact Blackthorn dominated hedgerow managed to 2m. Other species present include Ash, Dog-rose, Field Maple, Hazel, Bramble, and Oak. A dry ditch runs along the eastern side of the hedgerow.
32. Intact hedgerow to approximately 2.5m, with species including Hawthorn, Dogwood, Hazel, Elder, Field Maple, Blackthorn, Dog-rose and Bramble with Ivy and Black Bryony. Ground flora below the hedgerow includes Cleavers, Wood Avens, Ground Ivy, Dog's Mercury, Bush Vetch, Common Nettle, Lesser Stitchwort, Germander Speedwell, Silverweed (*Potentilla anserina*), Broadleaved Dock, Bracken, Hogweed, Garlic Mustard, Wood Millet and False Brome. North of the hedgerow is a public footpath and beyond fences and ornamental hedgerows enclosing the gardens of off-site residential properties.
33. A public footpath runs through the site and bordered by hedgerows.
34. A field planted to Maize with grass margins, with species as TN31.
35. Section of hedgerow comprising Pedunculate Oak, Hawthorn, Dog-rose, Hazel, Holly, Blackthorn and Field Maple with mature Pedunculate Oak and Holly trees. Occasional Bluebell and Bracken are present below the hedge.
36. Intact occasionally managed hedgerow on the site boundary, to 4-5m in height. With mature Pedunculate Oak and Ash at the northern end, with other species including Hawthorn, Hazel, Field Maple, Blackthorn, Sycamore, Dog Rose and Bramble. Apple (*Malus* sp.) trees, Cypress

sp., and Horse Chestnut are infrequent. Ground flora below the hedge includes Common Ivy, Germander Speedwell, Greater Stitchwort, Wood Avens, Common Vetch, Dog's Mercury, Wood Millet and Bracken. A dry ditch runs the length of the hedgerow and is dominated by tall ruderal vegetation.

37. Hedgerow with mature standards of Ash and Oak. Hedgerow species include Ash, Dog Wood, Rose (*Rosa* sp.), Bramble, Common Nettle, Honeysuckle, Blackthorn, Hawthorn, Elder, Holly and Field Maple. A dry ditch is present below.
38. Intact hedgerow with dry ditch and public footpath to north. Species within hedgerow include Ash, Common Lime, Hawthorn, Wayfaring Tree (*Viburnum lantana*), Hazel, Blackthorn and Dog Rose. Water Mint (*Mentha aquatica*) is occasionally present within the ditch below.
39. Arable field planted to maize, with grass margins to the north, east and south, with species including Hedge Bindweed, Cock's Foot, Common Knotgrass, Soft Rush (*Juncus effusus*), Burdock, False Oat Grass, Field Bindweed, Black Knapweed, Bird's Foot Trefoil, Creeping Thistle, Goosefoot, Spear Thistle, Scented Mayweed and Compact Rush (*Juncus conglomeratus*), with Oak seedlings and Bramble. The field is bordered by managed hedgerows with mature standards and dry ditches below. A bare earth public footpath/farm track is situation along the western margin of the field.
40. Arable field of Maize. The northern boundary of the field is lined with Oak and Ash standards and an intact hedgerow with species including Blackthorn, Dog-rose, Ash, Hawthorn, Bramble, Hazel, Oak, Field Maple, Holly and Elder. The eastern boundary hedge includes Field Maple, Holly and Blackthorn, with Bracken and White Clover and a ditch at the base. A bare earth public footpath/farm track is situation along the western margin of the field. The field is bordered to the west by a managed intact hedgerow with dry ditch below
41. Cattle grazed modified grassland field, with a sward height under 10cm at the time of survey comprising Perennial Ryegrass, Yorkshire Fog, Broad-leaved Dock, Creeping Buttercup and Field Bindweed.
42. Small area of woodland (Smith's Copse) included on Natural England's Inventory of Ancient Woodland enclosed by a hedgerow and post and wire fence. Woodland trees include Ash and Oak with Hazel coppice, with a thick understorey including Holly, Hawthorn, Blackthorn, Rhododendron, Crab Apple (*Malus sylvestris*) and Field Maple. Many of the more mature trees are clad in Ivy. Ground flora includes Lords and Ladies, Wild Garlic, Bluebell, Wood Anemone (*Anemone nemorosa*), Wood Melick, Herb Robert, Wood Avens, False Brome, Wood Sedge, Pendulous Sedge, Tufted Hair-grass (*Deschampsia cespitosa*) and Common Ivy.
43. Arable field planted to Maize. Bordering the field are intact hedgerows with a grassland field margin of approximately 1m. Species within the field margin include Meadow Foxtail, Cock's Foot, False Oat-grass, Rough Meadow-grass, Annual Meadow-grass (*Poa annua*), Barren Brome, Yorkshire Fog, Ground Ivy, Cowslip (*Primula veris*), Dog's Mercury, Common Ivy, Creeping Cinquefoil, Cut-leaved Cranesbill, Garlic Mustard, Field Horsetail (*Equisetum arvense*), Scarlet Pimpernel, Wood Avens, Cleavers, Bluebell, Common Vetch, Hairy Tare, Wood Dock, Creeping Thistle and Common Nettle.
44. Intact hedgerow including Blackthorn, Dogwood, Field Maple, Willow, Bramble, Hawthorn, Rose, Pedunculate Oak, Lime and Hazel. The hedgerow is approximately 1.5m and 2m tall along most of its length. Mature Oak standards and a semi-mature Ash tree are present in the north-western corner.
45. Arable field planted to Maize. Mostly intact hedgerows with trees border the northern, eastern and western boundaries of the field with species including Hawthorn, Blackthorn, Pedunculate Oak, Elder, Hazel and Dog-rose. Below the hedgerows to the north and east is a dry ditch, overgrown with tall ruderal vegetation.
46. Courtland Wood, a Local Wildlife Site (LWS) of lowland deciduous woodland included on Natural England's Inventory of Ancient Woodland. Mature trees within the woodland include

Pedunculate Oak, Ash, Birch and Willow with an understorey of Hazel coppice, Holly, Lime, Blackthorn, Dogwood, Dogrose (*Rosa Canina*), Field Maple and Small-leaved Lime. The ground flora comprises Wood Speedwell (*Veronica montana*), Bluebell, Wood Dock, Wood Millet (*Milium effusum*), Wood Melick, Herb Robert, Wood Anemone (*Anemone nemorosa*), Wood Avens, Bush Vetch, abundant Wild Garlic (*Allium ursinum*), Pendulous Sedge, Yellow Archangel, Dog's Mercury, Bramble, Stinking Iris (*Iris foetidissima*) and Cleavers. The woodland slopes down to a stream along the western edge and dry ditches are present throughout the woodland. Public rights of way cross the wood from north to south and east to west.

47. Intact hedgerow comprising Hazel, Blackthorn, Oak, Field Maple, Dog-rose, Dogwood, Honeysuckle, Hawthorn, Bramble and an Oak standard. Flora at the base of the hedgerow includes Herb Robert, Greater Stitchwort, Soft Rush, Broadleaved Dock, Bush Vetch, Great Willowherb, Pendulous Sedge and Germander Speedwell.
48. Modified grassland field used for cattle grazing with a sward height under 10cm at the time of survey. Species present include Yorkshire Fog, Soft Brome, Smooth Meadow-grass, Creeping Bent (*Agrostis stolonifera*), Barren Brome, Rough Meadow-grass, Cock's Foot, Bulbous Buttercup (*Ranunculus bulbosus*), White Clover, Germander Speedwell and Dandelion. A managed native hedgerow of Hawthorn, Oak and Ash is present on the northern and western boundary, with a ditch below.
49. Scrubby, defunct hedgerow dominated by Bramble and Rose with occasional Elder and Hawthorn. The hedgerow transitions into woodland at the eastern end, with species including Small-leaved Lime, Pedunculate Oak, Whitebeam (*Sorbus aria*) and Hazel. Below the hedgerow Lords and Ladies, Ground Ivy, Cleavers, Dog's Mercury and Common Nettle are present.
50. Rough, modified grassland field, with a sward of approximately 20cm at the time of survey. Species present include Yorkshire Fog, Meadow Foxtail, Sweet Vernal-grass, Annual Meadow-grass, Rough Meadow-grass, Common Mouse-ear, Dandelion, Self-Heal (*Prunella vulgaris*), Meadow Buttercup, Broadleaved Dock, Creeping Buttercup, White Clover, Black Medick, False Brome, Timothy, Dandelion and Perennial Ryegrass and Spear Thistle, with Creeping Thistle abundant in some patches.
51. Intact hedgerow managed to approximately 2.5m in height with species including Hawthorn, Buckthorn (*Rhamnus cathartica*), Blackthorn, Field Maple, Dog-rose and Field-rose (*Rosa arvensis*) with Black Bryony. Ground flora below the hedgerow includes Greater Stitchwort, Herb Robert, Bugle (*Ajuga reptans*), Germander Speedwell, Cleavers, Ground Ivy, Bush Vetch, Garlic Mustard, Wood Dock, Common Sorrel and Common Nettle. A damp ditch is present below the western side of the hedgerow with Water Mint and Hemlock Water-dropwort (*Oenanthe crocata*) present within the ditch.
52. Modified grassland field with a similar species-composition to target note 50. The hedgerow to the south of the field is managed to 2m and comprises Blackthorn, Field Maple and two Oak standards, with a dry ditch at its base.
53. An arable field of Wheat with 3-4m wide field margins comprising Yorkshire Fog, Timothy, Cock's-foot and Field Bindweed. The boundary hedgerows to the west and south are managed to 2m and include Dogwood, Blackthorn and Dog-rose, with ditches at their base.
54. Intact hedgerow dominated by Dogwood although Ash, Blackthorn, Hawthorn, Rose, Bramble, Field Maple and Honeysuckle are also present along with Common Nettle and Dock. Hedgerow becomes more Hawthorn dominated to the north where it encloses the gardens of residential properties. Cypress sp., Ash and Oak standards are more frequent towards the northern end where it borders off-site residential properties.
55. Heavily shaded pond located at a junction of three hedgerows. The pond was dry at the time of survey with a silt/mud base, with Pendulous Sedge on the periphery. Areas of the pond margin have been heavily trampled by cattle, which together with shading has resulted in minimal

marginal vegetation. Trees surrounding the pond are typical of adjoining hedgerows including Field Maple, Hawthorn, Oak and Ash.

56. Cattle grazed modified grassland field with a similar species-composition to target note 50 with additional species including Scentless Mayweed (*Tripleurospermum inodorum*) also present, the grassland had a sward height of 10cm at the time of survey.
57. Area of new housing development situated beyond the site boundary.
58. Cattle-grazed, modified grassland field with a species composition similar to target note 50, the grassland had a sward height of 15cm at the time of survey. Bordered by Blackthorn and Hawthorn dominated hedgerows with Oak standards forming the northern and eastern boundaries. The southern boundary comprises an outgrown hedgerow of Ash, Oak and Aspen (*Populus tremula*) merging into woodland at the western end.
59. Cattle grazed, modified grassland field with heavy poaching around gateways, and a species composition similar to target note 50, the grassland had a sward height of 10cm at the time of survey.
60. Mature, outgrown hedgerow with trees comprising species including Ash, Oak, Hawthorn, Field Maple and Willow. A heavily shaded ditch containing a shallow amount of water at the time of survey, runs below the hedge.
61. Cattle grazed, modified grassland field with species similar to target note 50, the grassland had a sward height of 15cm at the time of survey. A mature Oak standard tree is present in the north-western corner.
62. Intact hedgerow with species including Blackthorn, Hawthorn and Dog-rose with Field Maple, Oak, Ash and Willow standards. A seasonally wet ditch overgrown with Bramble and Common Nettle is present below the hedgerow.
63. Cattle grazed modified grassland field with species including Rough Meadow-grass, Smooth Meadow-grass, Annual Meadow-grass, Meadow Foxtail, Soft Brome, Yorkshire Fog, Creeping Buttercup, Common Mouse-ear and Dandelion, the grassland had a sward height of 10cm at the time of survey. A scrubby hedgerow including Oak, Ash and Bramble is present to the north.
64. Managed, intact hedgerow to approximately 3m, with a number of Oak, Ash and Field Maple standards. Species within the hedgerow include Hawthorn, Elder, Blackthorn, Dog-rose and Field Maple, with Bramble becoming dominant at the southern end. A dry ditch runs below the western edge of the hedgerow, which is dominated by tall grasses and Soft Rush.
65. Outgrown hedgerow with Oak trees and Bramble scrub acting as boundary between field and public footpath.
66. Modified grassland field bordered by fencing and recently planted Hawthorn hedgerow. The grassland is dominated by Perennial Rye-grass, Soft Brome and Yorkshire Fog with occasional Smooth Meadow-grass, Dandelion, Bulbous Buttercup, Common Mouse-ear, Broadleaved Dock and Prickly Sow-thistle, the grassland had a sward height of 10cm at the time of survey. The boundary of the grassland with the property to the east comprises an outgrown, scrubby hedgerow comprising of Elder, Blackthorn, Hawthorn and Bramble with Oak, Ash and Cypress standards, and the recently established native hedgerows to the north and south are managed to approximately 2m.
67. Collection of agricultural buildings within the farmyard of Great House Farm, largely of concrete and corrugated metal construction. Areas of bare ground and tall ruderal vegetation are present throughout.
68. Woodland shaw lining banks of Marlpost Gill and included on Natural England's Inventory of Ancient Woodland. At this point the stream is up to 1m in width and 10cm in depth with a slow flow. The earth banks are steep in places, with less steep areas heavily trampled by cattle.

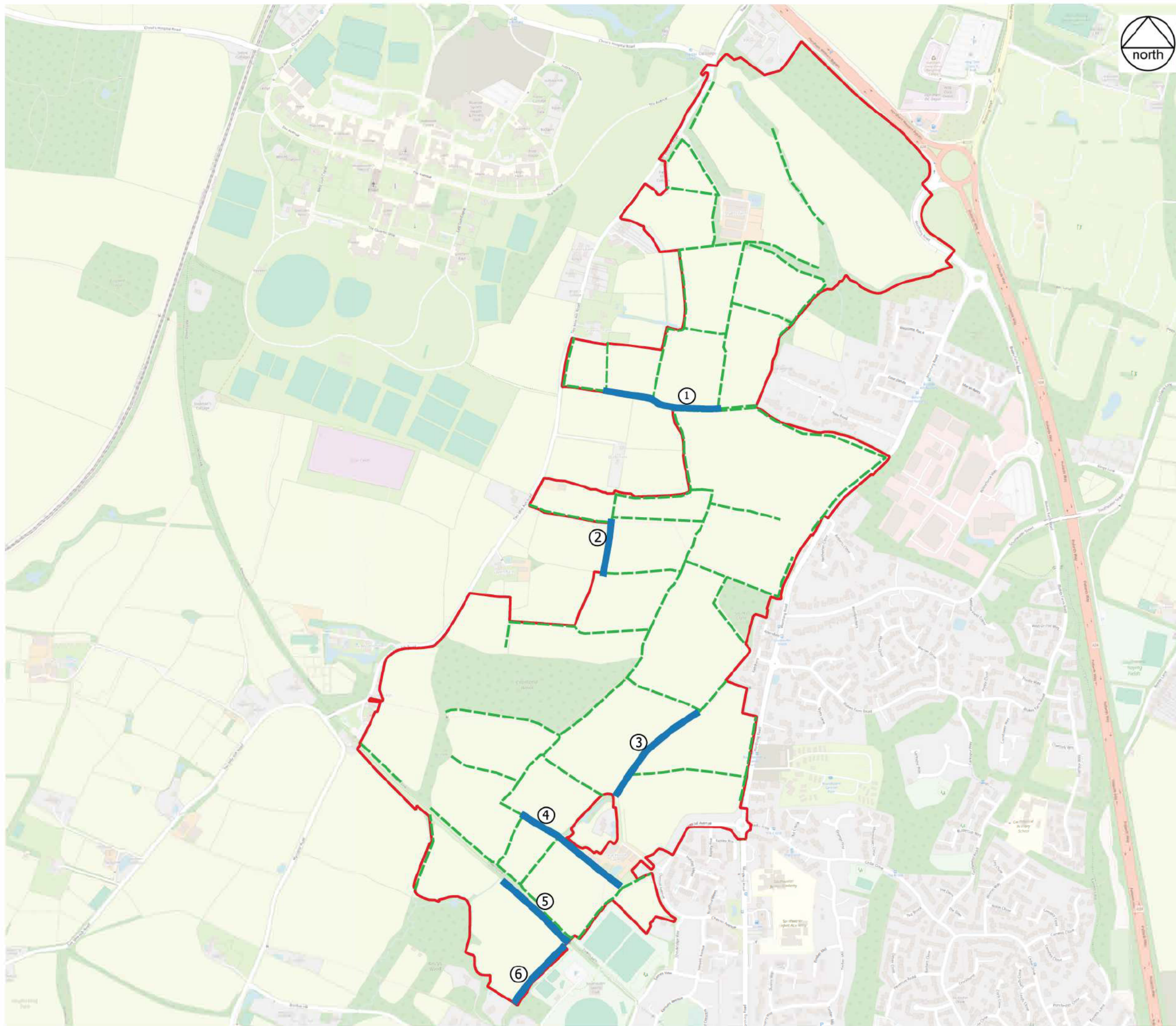
Heavy shading from the woodland has resulted in minimal/absent aquatic and marginal vegetation, with flora along the stream banks dominated by Wild Garlic and Bluebell. The woodland is dominated by Ash and Pedunculate Oak with Lime, Willow and Birch, and has a sub-canopy of predominantly Hazel, with some Hawthorn, Field Maple, Holly and Blackthorn. Many of the mature trees are covered in Common Ivy (*Hedera helix*). The ground flora further from the stream comprises additional species to those mentioned above including Wood Anemone, Wood Melick, Sticky Mouse-ear (*Cerastium glomeratum*) and Soft Rush.

69. An occasional pond that was dry at the time of survey, with a silty base covered in leaf litter. No aquatic or marginal vegetation was present.
70. Public footpath and cycle path located atop a steep sided earth embankment bordered on both sides by mature outgrown hedgerows with species including Ash, Pedunculate Oak, Hazel and Hawthorn. Narrow grassland margins are present to either side of the footpath supporting species including Soft Brome, Wood False-brome, Hogweed, Greater Stitchwort, Common Ivy, Germander Speedwell, Cleavers, Wood Dock, Cow Parsley, Common Nettle and Ribwort Plantain (*Plantago lanceolata*).
71. Intact hedgerow, managed to approximately 1.5m in height, comprising Hazel, Hawthorn, Holly, Blackthorn and Field Maple with Lombardy Poplar (*Populus nigra x italica*) and Pedunculate Oak standards. A section of Marlpost Gill flows below the hedgerow. The stream was dry at the time of survey.
72. Cattle grazed modified grassland field, with a sward height of approximately 15cm at the time of survey. Species present within the grassland include Meadow Foxtail, Cock's Foot, Soft Brome, Annual Meadow-grass, Rough Meadow-grass, Yorkshire Fog and Lesser Cat's Tail with scattered Creeping Thistle. Forb species are infrequent throughout the grassland and include White Clover, Common Mouse-ear, Thyme-leaved Speedwell (*Veronica serpyllifolia*) and Spear Thistle. A short line of scrub comprising Hazel, Hawthorn, Bramble and a dead tree is present in the east of the field.
73. Cattle grazed modified grassland field similar in species composition to target note 72 and a sward height of approximately 15cm at the time of survey, with scattered Pedunculate Oak standards. Forb species are infrequent and include White Clover, Common Mouse-ear and Spear Thistle.
74. A small pond with gently sloping earth banks and approximately 10cm of water at the time of survey. The pond is heavily shaded by Oak, Hazel, Hawthorn and Field Maple scrub. Aquatic and marginal species present include Lesser Duckweed (*Lemna minor*), Floating Sweet-grass (*Glyceria fluitans*) and Pendulous Sedge with Wavy Bitter Cress, Bluebell and Common Nettle present on the banks.
75. Intact hedgerow lined with standards alongside a dry ditch. The southern end of the hedgerow encloses the grounds of a residential property, where some non-native species are found, such as Cherry Laurel (*Prunus laurocerasus*), Cypress sp. and Apple, among the typical hedgerow species including Holly, Hazel, Ash and Bramble. The section of the hedgerow that does not pertain to the boundary of the property is dominated by Blackthorn with Field Maple, Hawthorn, Hazel, Pedunculate Oak and Horse Chestnut. Ground flora below the hedge includes Wood Avens, Germander Speedwell, Wood Dock, Common Nettle and Cleavers.
76. Culvert where stream (Marlpost Gill) emerges, having been directed beneath the ground. The course of stream at this point is meandering with a silt/earth bottom, with approximately 15cm of water at the time of survey. Banks of stream comprise bare earth and are steep sloping.
77. Off-site broadleaved woodland, named Kirsty's Wood, borders the site to the south. The woodland is dominated by mature Ash and Pedunculate Oak with an understorey of Hazel and Holly with Rhododendron. Ground flora includes Wild Garlic, Bluebell, Wood Melick, Yellow Archangel, Dog's Mercury, Wood Speedwell, Greater Stitchwort and Bramble. A shallow, slow flowing stream (Marlpost Gill) with earth banks flows through the woodland.

- 78. Off-site detached farmhouse and garden.
- 79. Off-site existing residential houses and gardens to the east of the site.
- 80. Off-site grassland fields to the south-west of the site.
- 81. Off-site arable fields and Two Mile Ash Road to the west of the site.

APPENDIX B

Brown Hairstreak Survey Summary Plan



KEY

- Site boundary
- Hedgerow network
- Transects
- Transect Number

CLIENT:
Berkley Strategic Land Ltd

PROJECT:
Land North West of Southwater, Horsham

TITLE:
Brown Hairstreak Survey Summary Plan

SCALE AT A3: 1:8500 **DATE:** May 2026

2090.78 / 43

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