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**LAND AT THE OLD VICARAGE FIELD AND THE OLD ESTATE YARD,
CHURCH ROAD, TURNERS HILL**

Ecological Impact Assessment,
Shadow Habitats Regulations Assessment
and Baseline Biodiversity Net Gain Assessment

May 2025

Report ref: SWE-P23-0006-R1

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PROJECT: Land at the Old Vicarage Field and The Old Estate Yard, Church Road, Turners Hill

CLIENT: Elivia Homes Eastern

REPORT REF: SWE-P23-0006-R1

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DATE OF ISSUE: April 2025

PROJECT DESCRIPTION: Demolition of existing buildings and the development of 40 dwellings (including affordable housing) with open space, access, parking, drainage, landscaping and other associated works as well as the creation of a new community car park and replacement parking for Lion Lane residents.

REPORT SCOPE: Ecological Impact Assessment, Shadow Habitats Regulations Assessment and baseline Biodiversity Net Gain assessment. This report is not intended to form part of an Environmental Impact Assessment further to The Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

BIODIVERSITY NET GAIN STATEMENT

Will the biodiversity gain condition apply? - yes

Pre-development biodiversity value on date of application? – 11.19 habitat units and 5.31 hedge units.

Date of assessment – 19th May 2025

Has an earlier date been used? - No

Is the completed Metric attached? - Yes, version published on 23.7.24

Has degradation occurred? - No

Does the site contain irreplaceable habitats? - No

Is a scaled habitat map included? - Yes, see Drawing 0006-1205-2



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1.0 INTRODUCTION AND METHODS

Introduction

- 1.1 Sam Watson Ecology was appointed by Elivia Homes Eastern to carry out an Ecological Impact Assessment (EIA), shadow Habitats Regulations Assessment (HRA) and baseline Biodiversity Net Gain (BNG) assessment of a proposal to redevelop the site known as Land at the Old Vicarage Field and The Old Estate Yard, Church Road, Turners Hill (approximate central grid reference TQ 34013 35608), which is proposed to be developed for housing.
- 1.2 The site is located approximately centrally within the village of Turners Hill, West Sussex, adjacent to the north of the B2110 Paddockhurst Road. The site encompasses part of the garden of the vicarage and the field immediately to the north. Also included are a small field and area of informal car parking along the eastern side. The site also includes part of the western sides of the three fields to the north of the main development site, which will be used to create a drainage connection required for the site.
- 1.3 To the south of the site, beyond the E2110 is Turners Hill primary school, with existing build development to the east of the site. The wider landscape is characterised by fields demarcated by hedgerows, which are used for arable and pastoral farming. Blocks of woodland, many ancient, are also a character of the landscape in which the site is located.

2025 update

- 1.4 The surveys outlined below formed the baseline against which the proposed development has been designed, and a walkover of the site was also carried out on 15th April 2025 to confirm that it continues to be largely unchanged. Nevertheless, in order to ensure that Mid Sussex District Council are provided with the necessary information to inform the determination of the planning application, surveys to update the baseline are being carried out across 2025 and the results will be submitted to the council in due course.

Methods

Desk study

- 1.5 A preliminary ecological appraisal of the site was carried out originally by WSP which included a request to the Sussex Biodiversity Records Centre in December 2018 for records they held of protected and notable species within 2km of the site, bat records within 5km of the site and records of non-statutory sites designated for nature conservation within 2km of the site.



1.6 This desk study was supplement in 2022 by a search of freely available online resources, such as the 'MAGIC' database managed by Natural England¹, and a review of the adopted Turners Hill neighbourhood plan 2014 – 2031.

Phase 1 habitat survey

1.7 A Phase 1 habitat survey was carried out of the main development site on 11th August 2020, with additional detail regarding the habitats noted incidentally during other visits to the site, also recorded. A walkover of the main development site to check for any significant changes in the habitats was carried out on 27th April 2022 concurrently with a Phase 1 survey of the habitats in the fields to the north, through which the drainage connection is proposed to be created, and again on 15th April 2025.

1.8 The methodology for the habitat surveys was based on the Phase 1 approach devised by the former Natural Conservancy Council (now Natural England), and updated periodically by the Joint Nature Conservation Committee¹. This technique categorises and maps the broad habitat types present within the site and targets areas of more interest or that would benefit from further survey. Additional detail was also gathered in the form of representative lists of species compiled for each habitat (an 'extended' Phase 1 survey). In order to facilitate the completion of the statutory BNG assessment, the results of the Phase 1 survey have been adapted to follow the UKHabs approach, with condition assessments completed of each habitat where necessary.

1.9 During the surveys attention was given to identifying any habitats of 'Principal Importance' (HPI) further to Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, (i.e. 'Priority Habitat' types). These were identified based on the descriptions set out by the Biodiversity Reporting and Information Group².

1.10 In addition, hedgerows within the site were also assessed for their potential to meet the ecological criteria of an 'Important' hedgerow as defined by the Hedgerows Regulations 1997, by noting the number and type of native woody species present (as listed on Schedule 3 of the Regulations), and recording the presence of relevant hedgerow features, such as ditches, banks, standard trees, lack of gaps, parallel hedgerows and connections with other hedgerows/woodlands/ponds.

1.11 Throughout the habitat surveys, the potential for the site to support protected and/or notable species, such as reptiles, was also assessed. The site was also searched for evidence of badgers *Meles meles*, including setts, latrines, 'push-throughs' and foraging evidence concurrently with the habitat surveys.

¹ JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*

² BRIG (ed. Ant Maddock) (2008). "UK Biodiversity Action Plan Priority Habitat Descriptions"



Reptile survey

1.12 As the site was assessed to have the potential to support common, but partially protected reptile species, a survey to confirm the presence or likely absence of reptiles was carried out in 2021. This was carried out based on the methodology set out within the 1999 Froglife guidance³ and involved placing out 68 pieces of artificial refugia in the form of sheets of corrugated bitumen approximately 50 x 100cm in size, around the site on 18th August 2020 (see Drawing 0006-3004-1 for the location of the refugia).

1.13 Following a short 'bedding in' period, the site was revisited on eight occasions between 1st and 23rd September 2020 so that the refugia could be checked for reptiles. Checks of the refugia were planned to be carried out during periods of favourable weather when reptiles could reasonably be expected to be active, i.e. warm days with a temperature above 9°C and with an absence of heavy or continuous rain.

Bats – static detector survey

1.14 A survey to assess the extent of use of the site by bats and by which species has been carried out. The site was assessed during the initial habitat survey as having low suitability habitat for bats and survey guidance⁴ recommends that for such habitat, surveys covering spring, summer and autumn should be carried out. In this instance, due to the relatively small size of the site, it was decided to redeploy the transect survey effort (now call a night-night bat walkover) towards undertaking an enhanced static detector survey. Whilst this approach means that much of the spatial data regarding bat activity within the site would not be collected, analysis of data from a night-time bat walkover beyond species identification is now discouraged by the 2023 survey guidance, in any event. Furthermore, given the relatively small size of the site is it reasonable to assume that bats would make use of use of all of the site boundaries.

1.15 Two static Anabat detectors⁵ were deployed on the site for each survey period (see Drawing 0006-3004-1 for the location of the detectors). The same locations are used for all the surveys, for consistency, including the 2025 update survey. The detectors are set to record from 30 minutes before sunset until 30 minutes after sunrise the following morning, each night there are in place. For each deployment, the detectors are in place for a minimum of five nights during which bats could reasonably be expected to be active.

³ Froglife (1999) *Reptile survey: an introduction to planning, conducting and interpreting surveys for snakes and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.

⁴ Prevailing survey guidance in 2020 and 2022 was - Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. (3rd edn). The Bat Conservation Trust, London. This was updated in 2023 as - Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London. This latter version forms the prevailing guidance for the 2025 updates surveys, although the survey effort for habitats of low suitability for bats remains broadly the same in both documents.

⁵ Variously the Anabat express, swift and ranger detectors



1.16 The summer survey was carried out across the nights of 12th to 16th August 2020. The autumn survey was carried out across the nights of 8th to 12th September 2020. The spring survey for the north location was carried out across the nights of 4th and 8th May 2022. The west detector failed to record during this period and so a replacement detector was deployed across the nights of 19th and 23rd in order to capture data from the later part of May 2022.

Bats - building survey

1.17 In order to investigate the potential use of the existing buildings by bats for roosting, an internal and external survey of the buildings was carried out across two visits to the site. The first was on 15th September 2020 and included all the buildings other than the garage that is present in the garden of the vicarage. This building was subsequently surveyed on 23rd September 2020.

1.18 The methodology for these surveys was based on the prevailing Bat Conservation Trust guidance and involved an assessment of the overall suitability of each building to support roosting based on the presence, number and suitability of features that bats might exploit as a roost site. This includes exterior features such as gaps behind fascia/barge boards and soffits, loose, missing or hanging coverings such as roof tiles and lead flashing, cracks in brickwork or panelling, and weatherboarding. The interior of each building was also inspected to check for evidence of bats including droppings, feeding remains, staining, and any bats themselves.

Bats – tree roost potential assessment

1.19 The trees within the site which were identified for removal to facilitate the development proposed in 2022 were subject to a ground-based assessment of their potential to support roosting bats on 2nd November 2022, based on the criteria given below⁶ –

Negligible Potential:	Trees which lack any significant opportunities for bats to roost.
Low Potential:	Trees with minor roosting opportunities such as loose bark plates, small cracks in limbs or sparse ivy cover.
Medium Potential:	Trees with medium roosting opportunities such as significant areas of flaking bark, dense ivy cover or relatively large splits or cracks.
High Potential:	Trees with major roosting opportunities such as woodpecker holes or large, deep cracks or fractures, thereby having the potential to support roosting bats all year round.

1.20 Any trees identified as having medium or high roosting potential based on the above, were then surveyed in detail at the same time using a Rigid Seesnake endoscope to check the

⁶ Adapted from the 2016 Bat Survey Good Practice Guidelines. The 2025 survey will be based on the revised method set out in the updated 2023 version of the guidance.



features present for evidence of bats. This survey was carried out by Samuel Watson, who is registered on Natural England bat survey class licence CL18 ref: 2015-11529-CLS-CLS

Dormouse survey

1.21 As the site was assessed to have the potential to support hazel dormouse *Muscardinus avellanarius* a detailed survey to confirm the presence or likely absence of this species was carried out in 2022. The methodology for the survey was based on the guidelines set out in the Dormouse Conservation Handbook⁷ and involved 56 dormouse nest tubes being installed in suitable habitat on 10th May 2022 (see Drawing 0006-3004-2). The equipment was then checked for evidence of dormouse on 30th May and 6th October 2022.

1.22 The dormouse survey was carried out by Geoff Moxon, who holds a Natural England dormouse survey licence ref: 2016-27151-SCI-SCI.

Other fauna

1.23 Any incidental observations of other fauna noted during the various survey visits was also recorded. Detailed surveys of the site for evidence of badger *Meles meles* were also carried out concurrently with the habitat surveys.

⁷

Bright, Morris & Mitchell Jones (2006). *Dormouse Conservation Handbook, 2nd edn.* English Nature Publications.



2.0 RESULTS – DESK STUDY

Designations

2.1 The desk study information confirmed that no part of the site was the subject of a statutory or non-statutory nature conservation designation. The site is, however, located within 7km of the Ashdown Forest Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Area (SPA) (see map produced by WSP at Appendix 1). The Ashdown Forest is designated primarily on the basis of its heathland interest and is of international importance for its flora and fauna, which includes Dartford warbler *Sylvia undata* and nightjar *Caprimulgus europaeus*, which underpin its designation as an SPA. The potential for indirect effects on this site arising from the proposed development with reference to the obligations placed on decision makers enshrined in the Conservation of Habitats and Species Regulations 2017 (as amended) is provided later in this report at section 5.

2.2 Turners Hill SSSI, which is approximately 120m to the west of the site, is a geological designation and not considered further in this report.

2.3 Although not a statutory designation, the woodland at the extreme northern end of the site at which the proposed drainage connection terminates, is identified on the MAGIC website as being ancient, semi-natural woodland. At the national level, paragraph 193 c) of the National Planning Policy Framework states –

“c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”

Fauna

2.4 In addition to designated sites, the WSP report included maps of the protected and notable species records obtained (other than birds), which are included at Appendix 1.

2.5 None of the records shown on these drawings are located within the site boundary.



3.0 RESULTS - HABITAT SURVEY

3.1 The following habitat types were identified in the site:

- Species-poor, neutral grassland
- Species-poor, semi-improved grassland
- Amenity grassland
- Improved grassland
- Hedgerows
- Arable
- Ancient woodland
- Bramble scrub
- Non-hedgerow trees
- Buildings and hardstanding

3.2 Each habitat is mapped on Drawing 0006-1206-1, and described in more detail below with reference to the dominant or more notable species identified. A list of higher plants recorded on the site is provided at Appendix 2.

Species-poor, neutral grassland

3.3 This is the most abundant habitat on the site and is present in the larger field within the main development area and also the fields to the north and east of this. It would appear that these areas are unmanaged or receive infrequent mown surveys. Graminoids such as cock's-foot, red fescue, perennial eye grass, meadow foxtail, Yorkshire fog, false oatgrass, common bent and sweet vernal grass are common to all the grasslands. Herbs such as red clover, common sorrel, creeping thistle, ribwort plantain, broadleaved dock, yarrow, common mouse-ear, creeping buttercup, cat's-ear, hogweed, nettle and dandelion were also found in these grasslands. Where these grasslands differ is in the community of weak 'indicator' species present which can suggest a grassland has not been subject to the highest levels artificial 'improvement' through the addition of fertilisers. The main field has a higher diversity of these species, with fewer in the field to the north and only scattered examples in the field to the east. Collectively, indicator species recorded include lesser stitchwort, greater bird's-foot-trefoil, common knapweed, oxeye daisy, and rarely also cuckooflower and field woodrush.

Species-poor, semi-improved grassland

3.4 A narrow belt of this habitat was recorded towards the eastern side of the main development site. The area appears to have been a former allotment, but does not appear to have been actively cultivated following the first site visit in 2020. Amongst the remnant crops of things like rhubarb and raspberry, a tussocky grassland was recorded. This has a



similar composition of grasses to the neutral grassland detailed above, but with species including shepherd's purse, fat hen, common fleabane, redshank, yarrow, smooth sow-thistle, hoary willowherb and germander speedwell also recorded.

Amenity grassland

3.5 Short, regularly mown amenity grassland is a feature of those parts of the gardens at the southern of the site that are included in the site boundary. They are generally dominated by the grasses: perennial ryegrass, red fescue, Yorkshire fog, common bent. Field wood rush is also present but rarely. Herbs recorded include daisy, greater and ribwort plantain, cat's-ear, and locally abundant lesser trefoil.

Improved grassland

3.6 The only area of this habitat is within the northern most field, where sheep have been seen grazing at times. It has a similar species composition to the amenity grassland.

Hedgerows

3.7 An account of the species and features within each hedgerow is given in Table 1 below. An assessment is also made of the potential for each hedgerow to be classified as Important in accordance with the ecological criteria of the 1997 Hedgerows Regulations.

Table 1 – hedgerow assessment

Hedgerow reference ¹	Woody species present ²	Woody species ³	Species richness	Features present ⁴	Likely classification ⁵
H1a	Not applicable – ornamental hedgerow containing Cherry laurel, holly, elder				
H1b	Oak, elder, hawthorn, holly	4	Species-poor	Trees, no gaps	Important – dormouse confirmed
H2	Holly, hawthorn, beech, oak,	3	Species-poor	Trees, no gaps, bank	Important – dormouse confirmed
H3	Holly, garden privet, beech, Wilson's honeysuckle, hawthorn, lilac, ash, hazel	3	Species-poor	No gaps	Important – dormouse confirmed
H4	Ash, holly, cherry, garden privet, hazel, hawthorn, Wilson's honeysuckle	5	Species-rich	Trees, no gaps, bank, PRoW	Important – dormouse confirmed
H5	Not applicable – ornamental hedgerow containing cherry laurel, holly, Leyland cypress, Norway maple, Wilson's honeysuckle, beech, yew, ash, sweet chestnut, snowberry, hazel, garden privet				
H6	Holly, ash	2	Species-poor	Trees, no gaps	Not Important – property boundary
H7	Not applicable – ornamental hedgerow containing Cherry laurel				



H8	Not applicable – ornamental hedgerow containing cherry laurel, western red cedar, sweet chestnut, Leyland cypress, hazel, holly, beech, snowberry, elm				
H9	Not applicable – ornamental hedgerow containing cherry laurel				
H10	Oak, holly, hawthorn, ash, sycamore, silver birch, hazel, dog rose	4	Species-poor	Trees, no gaps, bank, PRoW	Important – dormouse confirmed
H11	Hawthorn, goat willow, blackthorn, oak, holly, hazel, silver birch, sycamore, Portuguese laurel	5	Species-rich	Trees, no gaps, bank	Important – dormouse confirmed
H12	Hazel, goat willow, blackthorn, hawthorn, ash	5	Species-rich	Trees, no gaps, ditch	Important – dormouse confirmed
H13	Beech, holly, hazel, oak, cherry	5	Species-rich	Trees, no gaps, bank	Important – dormouse confirmed
H14	Not applicable – ornamental hedgerow containing, lilac, hazel, holly				
H15	Beech	Non-native and ornamental hedgerow	Species-poor	None	Not Important
H16	Not applicable – ornamental hedgerow containing cherry laurel				

1 - as denoted on Drawing 0006-1206-1

2 - species in brackets are not included on Schedule 3 and are not therefore included in the assessment of Importance or species-richness (where applicable)

3 - average number of native woody species, as defined by Part II of Schedule 1

4 - defined by Schedule 1

5 - assessment against ecological criteria of the 1997 Hedgerows Regulations

Arable

3.8 One of the fields to the north of the main development site is used for arable cultivation. A cereal crop was present in the field in November 2022. Other species that have been recorded in this field include black grass, smooth meadow grass, field forget-me-not, groundsel, Yorkshire fog, dandelion and broadleaved willow herb.

Woodland

3.9 As detailed at 2.3, the proposed drainage connection discharges into the upper reaches of the river Medway in an area of ancient, semi-natural woodland at the very northern end of the site. A photo of this area is included below. It is understood that the outfall will be created within the existing field access track (see photo) and so there will be no direct impact on the ancient woodland habitat.



3.10 In addition to this, there is a small block of secondary woodland at the junction of hedgerows H2 and H3. This has a closed canopy of mainly holly with some hazel. There is little or no understory and the ground flora is dominated by ivy. There is also dumped garden waste in the woodland.

Bramble scrub

3.11 There are two pockets of this habitat. They are characterised by bramble thickets, interspersed by creeping thistle, cock's-foot, bracken, nettle, buddleia, Yorkshire fog, false oatgrass and ivy.

Non-hedgerow trees

3.12 Away from the hedgerows, trees recorded on the site include silver birch, ash, domestic apple, eucalyptus, holly and yew.

Buildings and hardstanding

3.13 The buildings are described under section 2.5 below. The areas of hardstanding have a gravelled or bitumen surfaced and are used mainly for informal car parking and access. This habitat is largely devoid of vegetation expect at the edges and in cracks and gaps in the surface. Where this has been colonised species recorded include knotgrass, ribwort plantain,



forget-me-not, germander speedwell, groundsel, Yorkshire fog, perennial ryegrass and dandelion.



4.0 RESULTS – FAUNA

Reptile survey

4.1 The prevailing weather conditions during each check of the refugia are provided in Table 2. In summary, no reptiles of any species were recorded during the survey.

Table 2 – reptile survey results

Date	Time		Temperature		Cloud Cover	Weather description
	Start	Finish	Start	Finish		
01/09/2020	15:32	15:50	18	18	50%	Sunny and warm
08/09/2020	09:40	10:00	18	19	60%	Gentle breeze
10/09/2020	16:33	16:58	16	16	70%	Cloudy with some sun, warm but starting to cool off
15/09/2020	16:05	16:30	26	26	10%	Sunny, tins warm
17/09/2020	09:42	10:04	17	17	0%	Warm and sunny
22/09/2020	11:25	11:40	20	21	40%	Sunny, dry
23/09/2020	10:00	10:30	16	16	70%	Overcast, sunny intervals

Bats – static detector survey

4.2 The results of the bat survey are provided in Table 3 below. The location of the detectors within the site is shown on Drawing 0006-3004-1. Each ‘registration’ equates to a sound file that is up to 10 seconds in length and may contain several individual bat ‘passes’. Note that a survey ending e.g. 17th April, would include calls recorded between midnight and sunrise on the 18th.

4.3 Registrations listed as *Myotis* and *Plecotus* are from bats within these genera, but which it has not been possible to confidently identify to species level. Similarly, registrations listed under NyctEpte are ‘big bats’ from the genera *Nyctalus* or *Eptesicus*. Registrations identified as common/soprano pipistrelle had a peak frequency at or around 50kHz and could not be confidently attributed to either species as a result. Whilst it is difficult to be confident as to which species of *Myotis* bat detected, analysis of these calls suggests the likely detection of Daubenton’s bat *Myotis daubentonii*.



Table 3 – bat survey results

	Summer 2020				Autumn 2020				Spring 2022				Total for all surveys	
	North		West		North		West		North		West			
Common pipistrelle	222	90.61%	345	71.88%	1133	87.97%	4512	98.47%	324	84.82%	4813	98.26%	11349	95.57%
Common or soprano pipistrelle	2	0.82%	10	2.08%	11	0.85%	1	0.02%	0	-	4	0.08%	28	0.24%
Soprano pipistrelle	3	1.22%	6	1.25%	17	1.32%	16	0.35%	2	0.52%	4	0.08%	48	0.40%
<i>Myotis</i> species	3	1.22%	13	2.71%	74	5.75%	26	0.57%	39	10.21%	33	0.67%	188	1.58%
Daubenton's bat	2	0.82%	6	1.25%	0	-	0	-	0	-	0	0.00%	8	0.07%
Noctule	0	-	0	-	0	-	2	0.04%	12	3.14%	0	-	14	0.12%
Serotine	2	0.82%	2	0.42%	0	-	0	-	0	-	0	-	4	0.03%
NyctEpte	0	-	0	-	7	0.54%	3	0.07%	0	-	31	0.63%	41	0.35%
<i>Plecotus</i> species	9	3.67%	75	15.63%	46	3.57%	22	0.48%	1	0.26%	12	0.24%	165	1.39%
Unidentified bat	2	0.82	23	4.79	0	0.00	0	0.00	4	1.05	1	0.02	30	0.25%
Total number of files	245		480		1288		4582		382		4898		11875	

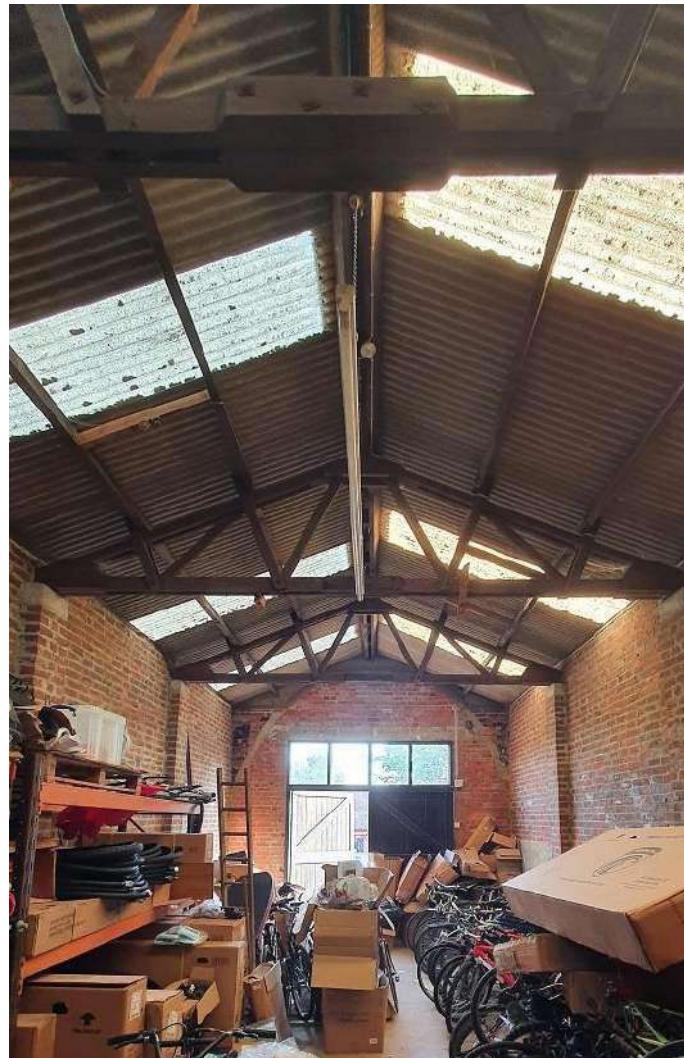


Bats – building survey

4.4 The buildings on the site are all relatively small, ancillary structures, used variously as a garage, workshop and for storage. The garage adjacent to the vicarage (see photo below) is of brick construction with a modern timber frame and clay tiles lined with bitumen roofing felt. A skylight was noted. It has an internal enclosed room that creates a partially enclosed space above, although there is no distinct roof void present. Externally it lacks soffit boxes and is in good repair, with no clear roosting opportunities identified. Overall, this building was assessed to have negligible roosting potential and no evidence of bats was found.



4.5 The other buildings on the site fall into two categories. One is of red brick construction with a metal frame and corrugated sheet roof (see photo below). It lacks a contained roof void, being open to the roof internally. The interior is understood to be accessed regularly and is well lit due to the presence of several transparent roof sheets. Overall, this building was assessed to have negligible roosting potential and no evidence of bats was found.

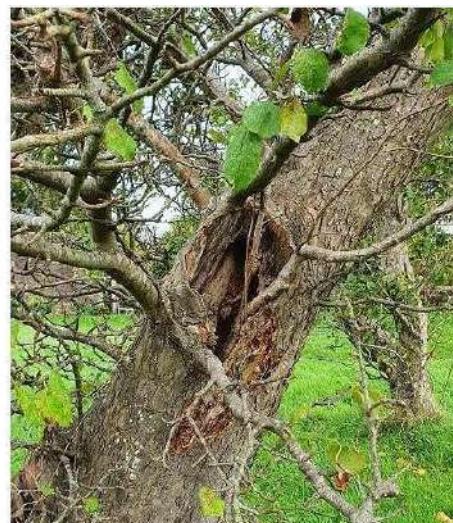


4.6 The other buildings (see examples in the photo below) have a wooden frame with single skin wood or corrugated metal walls and roof. None has an enclosed roof void and all are assessed to have negligible roosting potential and no evidence of bats was found.



Bats – tree roost potential assessment

4.7 The majority of the trees proposed to be removed were assessed to have negligible bat roosting potential, being structurally uniform and lacking features bats could exploit for roosting. A small number of trees had a light covering of ivy, but this only elevates their potential to the 'low' category. One tree, an apple, was assessed to have high roosting potential due to the presence of several large cavities as shown in the photos below. Each of these was inspected and no evidence of bats was found.





Dormouse survey

4.8 The results of the dormouse survey are provided in Table 4 below, with the location of any evidence found shown on Drawing 0006-3004-2.

Table 4 – dormouse survey results

Date	Results
30/05/2022	1no dormouse nest
06/10/2022	3no dormouse nests, and 1no dormouse nest containing 1 adult dormouse

Results – other fauna

4.9 No evidence of any other protected or notable fauna was found during the habitat survey or other visits to the site, in particular no evidence of badgers has been found. There are no ponds within the site and so there is no scope for the site to be used for breeding by great crested newts. The nearest off-pond identified from online mapping is some 120m to the south, on the opposite side of the B2110. The nearest record of great crested newts on the MAGIC website is c.1.5km east. Given the spatial separation of these two locations from the site, the likelihood that great crested newts are present within the site is assessed to be negligible.

4.10 Finally, although not confirmed during the survey, there is scope for the site to be used by a typical range of common 'garden' bird species for nesting. However, the site is unlikely to support nesting by rare species or those which would elevate the site's value above a background level that is applicable to much in the wider landscape.



5.0 SHADOW HABITATS REGULATION ASSESSMENT

5.1 As detailed at section 2.1 above, the site is within 7km of the Ashdown Forest SPA and SAC (and SSSI). The protection afforded to this designation under the Conservation of Habitats and Species Regulations 2017 (as amended) means that the competent authority, in this instance Mid Sussex District Council (MSDC), are required to carry out an assessment of the scope for the proposal, either individually or in combination with other plans or projects, to have a significant effect on the designation if permitted. If such an effect is likely, MSDC are required to undertake an Appropriate Assessment (AA) of the proposal to assess whether it could have a negative effect on the integrity of the designation and whether mitigation could be employed to prevent this or reduce it to an insignificant level.

5.2 Given the site's proximity to the Ashdown Forest, it is reasonable to assume that the proposed development will be assessed as likely to have a significant effect which will need to be mitigated in order to ensure there is no adverse effect on the integrity of the designation.

5.3 MSDC provide information on their approach to the provision of mitigation if required⁸. This focuses on a development making a contribution towards the provision off-site of Suitable Alternative Natural Greenspace (SANG) and/or Strategic Access, Management and Maintenance (SAMM) as part of the S106 agreement for a development. It is understood that agreement has already been reached between the applicant and MSDC to secure this, which should therefore allow MSDC, when undertaking the AA⁹ for the development, to conclude that it is unlikely to give rise to an adverse effect on the integrity of the Ashdown Forest SPA and SAC.

⁸ <https://www.midsussex.gov.uk/planning-building/protecting-ashdown-forest/>

⁹ Following the ruling by the CJEU in the matter of People Over Wind and Sweetman v Coillte Teoranta (C-323/17)



6.0 IMPACT ASSESSMENT AND MITIGATION

Methodology

6.1 Ecological Impact Assessment is the process of identifying, quantifying and evaluating potential effects of development-related or other proposed actions on habitats, species and ecosystems. The point of reference for this process when evaluating the site has been the Chartered Institute for Ecological and Environmental Management's guidelines for EclA¹⁰, with expert judgment used as required during this process. The findings of the assessment are intended to assist the competent authority in understanding the ecological effects arising from the proposal when determining an application for consent.

Designated sites

Impact assessment

6.2 The desk study confirmed that no part of the site was the subject of a nature conservation designation. An assessment of the implications for the Ashdown Forest SSSI, SPA and SAC is provided at section 5.

6.3 Whilst the site is identified on the MAGIC website as being within Impact Risk Zones for surrounding SSSI's, the supporting information on the website does not identify residential development of the type and quantum proposed, as requiring the local planning authority to consult with Natural England on the planning application.

Habitats

Impact assessment

6.4 The plant species and assemblages of plant species found in the site are common and widespread throughout much of lowland Britain and are typical of a site of this type and location. The only habitats with a recognised higher conservation status are the hedgerows, some of which are likely to be Important under the 1997 Hedgerows Regulations. These, and hedgerows H6 and H15, are also likely to meet the criteria for status as a Habitat of Principal Importance (HPI) further to section 41 of the NERC Act on the basis that each contains greater than 80% native species. Hedgerows are a common feature of the wider landscape, however, and none of those within the site was found to have ecological interest that is considered to elevate its value above the site level.

¹⁰

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.



- 6.5 Grassland dominates the site and whilst some contains a degree of floral interest, none of the species is rare or particularly notable, and the assemblages recorded are not considered to indicate that any of the grasslands are of elevated conservation importance. As such all the grasslands are assessed to have value at the site level only.
- 6.6 A small area of ancient woodland is included within the site boundary, but this is *de minimums* in the context of the quantum of this habitat in wider countryside and region more generally. As such, and notwithstanding the status of all ancient woodland in the planning system, the defined area of this habitat within the site is not considered to be of value above the site level in its own right.
- 6.7 All of the other habitats recorded are considered have value that is limited to the site level only.

Mitigation

- 6.8 Other than the statutory requirement to deliver a 10% net gain in biodiversity as part of the development, no specific mitigation for the impact of the proposed development on the existing habitats is assessed to be required.

Bats – static detector survey

Impact assessment

- 6.9 Five species of bat were detected within the site during the remote detector surveys, together with registrations of bats from the *Myotis* and *Plecotus* genera and also 'big bats' from the *Nyctalus* or *Eptesicus* genera. Of the species confirmed soprano pipistrelle and noctule are an SPI. Common pipistrelle accounted for the majority of registrations at just over 95%, with no other species or genera accounting for more than 2%.
- 6.10 Overall, the bat activity detected is likely to be typical for the local area and there is no evidence in the data to indicate that the site is a particularly important resource for bats or that would indicate that the site is likely to be of greater value to bats than much of the surrounding landscape. The value of the site to bats is therefore assessed as being limited to the site level only.

Mitigation

- 6.11 In order to minimise the impact of the proposed development on bat activity, it would be recommended to design a lighting scheme for the site that is sensitive to bats so that they can continue to commute along the boundary vegetation post-development.



6.12 There is no legal requirement to provide lighting within a development and so in accordance with the ecological mitigation hierarchy, the first option should be to avoid entirely the installation of artificial lighting. If the installation of external lighting is unavoidable, the lighting scheme, as demonstrated through the production of vertical and horizontal lux contour maps, should show that it will not generate greater than 0.5lux at the base of any of the site boundaries or existing tall (>2m), linear vegetation. Furthermore, bollard lighting should be avoided if possible, and columns and/or solar waymarkers (with a 'bat cap') used in preference. Fixtures should have no or a very low UV component and produce light with a low colour temperature of 2700k. In addition, external lighting on new buildings should also be sensor controlled (e.g., passive infrared) so that it is only illuminated when required.

6.13 Case studies in Warwickshire have shown that red light is preferable when minimising the impact on bats and is readily accepted by residents once they understand the reason for this decision. The potential use of this should therefore be investigated at the detail design stage.

Dormouse

Impact assessment

6.14 Dormouse is an SPI and is afforded full protection under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended). Regulation 43 of these states:

"43.— (1) A person who—

- (a) deliberately captures, injures or kills any wild animal of a European protected species,*
- (b) deliberately disturbs wild animals of any such species,*
- (c) deliberately takes or destroys the eggs of such an animal, or*
- (d) damages or destroys a breeding site or resting place of such an animal, is guilty of an offence.*

(2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—*
- (i) to survive, to breed or reproduce, or to rear or nurture their young; or*
- (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or*

(b) to affect significantly the local distribution or abundance of the species to



which they belong.”

6.15 It is also an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a dormouse whilst it is occupying a place of shelter or protection, and to obstruct access to such a place.

Mitigation

6.16 The proposed development will result in a direct impact on habitat currently supporting this species due to the removal of hedgerow H3, the area of secondary woodland and pockets of bramble scrub. Other hedgerows will be affected, including hedgerow H5, but these are assessed to be of only limited value to this species due to the high non-native component.

6.17 In accordance with the protection afforded to this species under the Habitats Regulations, a derogation licence issued by Natural England will be required for any work that affects habitats in which this species could be present. Natural England require at least like-for-like replacement for any suitable habitat that is lost.

6.18 Hedgerow H3 is c75m in length and the other areas of suitable habitat equate to approximately a further c50m of hedgerow. In order to compensate for this impact, the landscape masterplan and strategy (Fabrik drawing ref: D3162-FAB-00-XX-DR-L-1000, included at Appendix 3) proposes to create a new hedgerow along the full length of the proposed drainage connection going north from the main development site. This means some 380m of new, native hedgerow will be created, achieving well in excess of the minimum like-for-like requirement. In addition to this, the landscape strategy also proposes to supplement the retained hedgerows with new native planting. Hedgerow H2 in particular is suboptimal for dormouse as it has several large gaps due to a lack of an understory. Augmenting this with additional native planting to create a dense hedgerow with a wide base, will significantly increase its value to this species.

6.19 With the creation of extensive new hedging and enhancement of the existing hedgerows, designed into the proposed development, the overall impact of the scheme on dormouse is considered to be a net increase in habitat that is significant at the site level.

Other fauna

Impact assessment

6.19.1 No evidence of reptiles or badgers was found during the surveys and there is assessed to be negligible risk of site being used by terrestrial phase great crested newts. No evidence of bats roosting in the buildings was found and only one tree was assessed to have greater than low roosting potential. A detail survey of this did not find any evidence that it is used by bats for roosting. The site is therefore assessed to have negligible value to these receptors



and no significant impact is considered likely. Use of the site by birds for nesting is likely to occur, but this is unlikely to constitute a resource that is of value above the site level.



7.0 BIODIVERSITY NET GAIN ASSESSMENT

7.1 In order to assess the probable impact of the proposal on the measured biodiversity value of the site, a quantitative assessment of the likely change has been carried out using the Statutory Biodiversity Metric Calculation Tool, published by the Government on 23.7.24.

Baseline assessment

7.2 A scaled, pre-development habitat map of the site following the UKHabs approach is provided on Drawing 0006-1205-2. Condition assessments for habitats that require it, are provided at Appendix 4. The conditions of the habitats; bramble scrub and developed land, sealed surface, are locked in the Metric.

7.3 The completed Metric is provided together with this report. This indicates that the site has **a pre-development baseline habitat value of 11.19 habitat units (HaU) and a hedge baseline value of 5.31 hedge units (HeU)**.

Biodiversity net gain

7.4 It is assumed that the planning consent for the proposal, if granted, will be subject to the statutory Biodiversity Condition. As such, details of how the proposal will achieve the mandatory 10% net gain in biodiversity required by the Environment Act 2021, will be agreed via the approval of a Biodiversity Gain Plan submitted pursuant to this condition.

7.5 Nevertheless, in order to quantify the likely quantum of enhancement required to achieve 10% net gain, an assessment of possible post-development biodiversity interventions has also been completed. The on-site habitat creation is shown on Drawing 0006-1405-1 and is based on the landscape masterplan prepared by Fabrik (ref: D3162-FAB-00-XX-DR-L-1000, Appendix 3). In addition, off-site habitat creation and enhancement is also proposed in the fields to the north as also shown on Drawing 0006-1405-1.

7.6 Based on these parameters, the Metric indicates that the development would result in an overall loss of 0.99 HaU and a net gain of 2.61 HeU. **This is equivalent to an 8.83% net loss in habitat-based biodiversity and a 49.28% net gain in hedge-based biodiversity.** To achieve a 10% net gain a further 2.11 HaU is required and it is understood that the applicant has reached an agreement to carry out further enhancement to off-site land to deliver this and also ensure trading rules are satisfied.



8.0 ADDITIONAL RECOMMENDATIONS

Nesting birds

8.1 In order to avoid legislative constraints relating to nesting birds, it is recommended to carry out any clearance works, such as vegetation removal and soil stripping, outside the peak bird nesting season, which typically runs from mid-February to August inclusive, although some bird species will nest all year-round if conditions are suitable. If the work is programmed for during the peak nesting period, a prior survey by a suitably experienced ecologist is recommended to identify if any nesting constraints are present at that time. If an active nest is identified within an area to be affected by any works, it is likely that it would have to remain in situ and unaffected until such time as a re-survey confirmed that it was no longer in active use, at which point it is likely that it could be removed.

Enhancement

8.2 Although not required for legislation compliance, the NPPF¹¹ at paragraph 180(d) states '*opportunities to improve biodiversity in and around developments should be integrated as part of their design*'. The following enhancements are therefore recommended to meet this policy requirement:

- Install 5 bird boxes on the new building or retained trees within the development.
- Install 5 bat boxes on the new building or retained trees within the development.
- Install 2 insect boxes/habitats within the development.
- Each enclosed garden should include at least one gap at the base of a boundary fence, 13x13cm in diameter, to allow hedgehogs to permeate the development.

¹¹

Ministry of Housing, Communities and Local Government (last revision September 2023). National Planning Policy Framework.



- Study area
- × Reptile refugia
- ➡ Static bat detector

Sam Watson Ecology 45 Bull Street ASL Banbury OX18 2DT Samwatsonecology@gmail.com 07971 555192	 SWE
Project - Land at Old Vicarage Field, Turners Hill	
Client - Elvia Homes Eastern	
Title - 2020 reptile survey	
Date - April 25 Drawing - 0006-3004-1 Rev -	



- Study area
- Dormouse survey tube
- Dormouse tube with nest
- Dormouse tube with nest and adult

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SWE

Project - Land at Old Vicarage Field, Turners Hill	
Client - Elvia Homes Eastern	
Title - 2023 dormouse survey	
Date - April 25	Drawing - 0006-3004-2
Rev -	

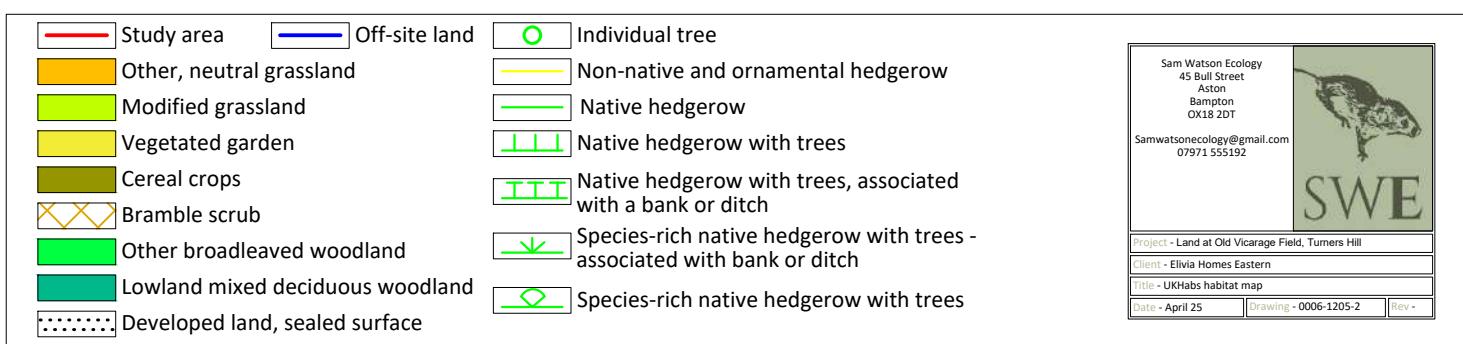


Study area	Hardstanding
SpN Species-poor, neutral grassland	Building
SpSI Species-poor, semi-improved grassland	Fence
I Improved grassland	Species-poor hedgerow without trees
A Amenity grassland	Species-poor hedgerow with trees
A Arable	Species-rich hedgerow with trees
Bramble scrub	Ornamental hedgerow
Secondary woodland	Boundary undefined
Ancient woodland	Non-hedgerow tree

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Project - Land at Old Vicarage Field, Turners Hill
Client - Elvia Homes Eastern
Title - Habitat map
Date - April 25 Drawing - 0006-1205-1 Rev -

SWE





Study area Off-site land

Sam Watson Ecology 45 Bull Street Ashton Bampton OX18 2DT Samwatsonecology@gmail.com 07971 555192	
Project - Land at Old Vicarage Field, Turners Hill	
Client - Elvia Homes Eastern	
Title - On-site parcel references	
Date - April 25	Drawing - 0006-1205-3
Rev -	



Study area Off-site land

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SWE

Project - Land at Old Vicarage Field, Turners Hill
Client - Elvia Homes Eastern
Title - Off-site parcel references
Date - April 25 Drawing - 0006-1205-4 Rev -



- Study area — Off-site land
- Developed land, sealed surface
- Modified grassland
- Vegetated garden
- Other, neutral grassland
- Lowland mixed deciduous woodland - retained

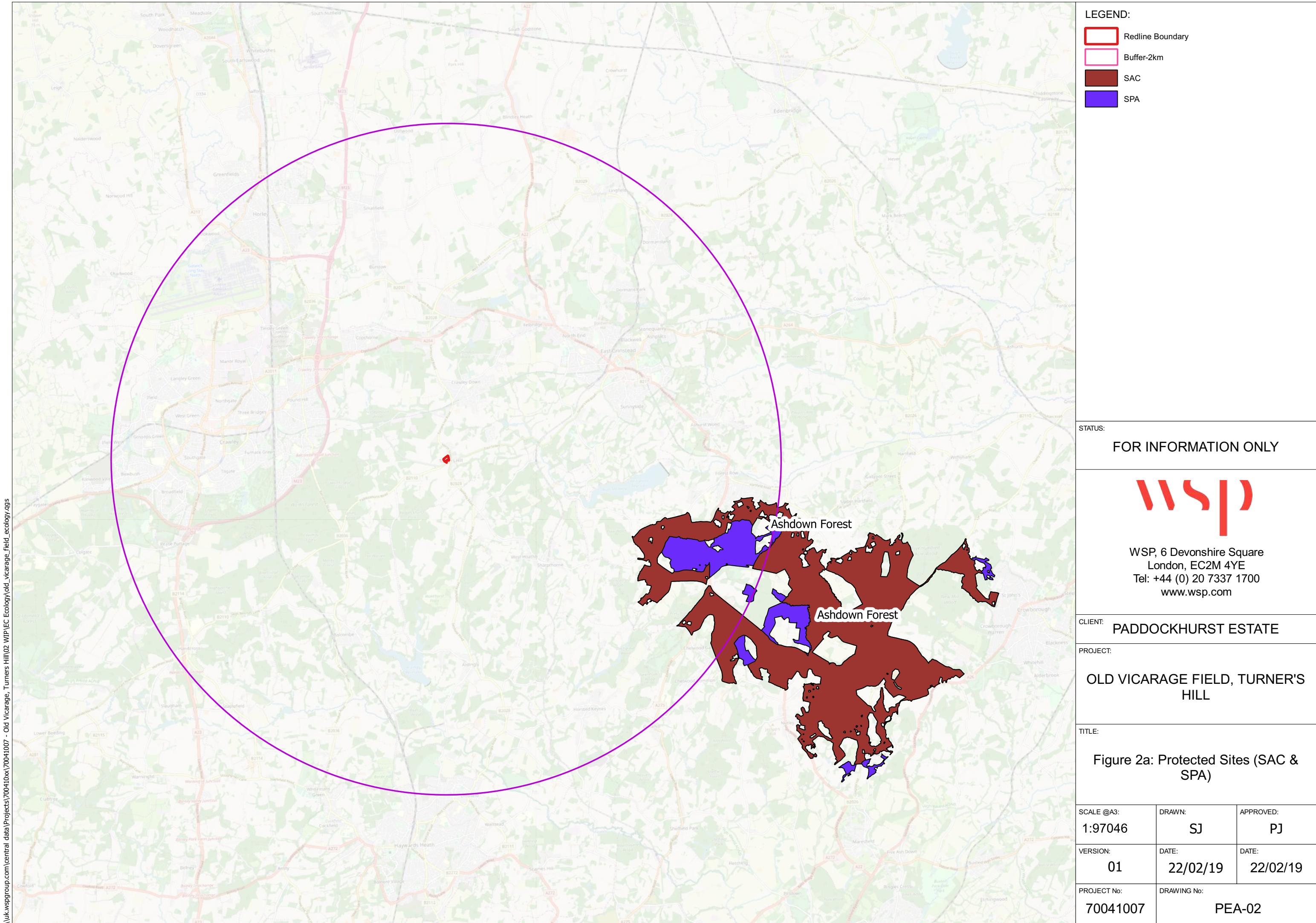
Sam Watson Ecology
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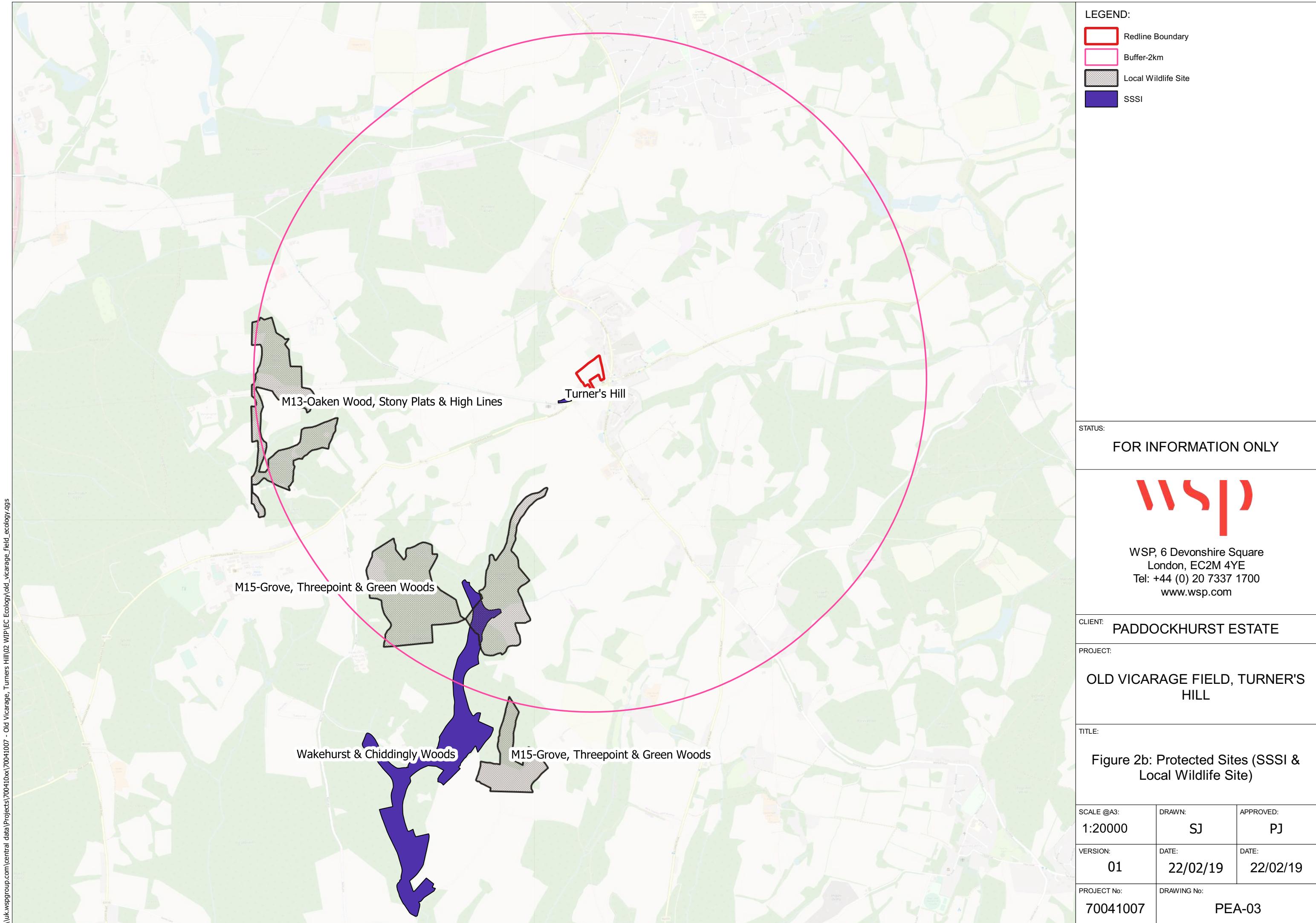

SWE

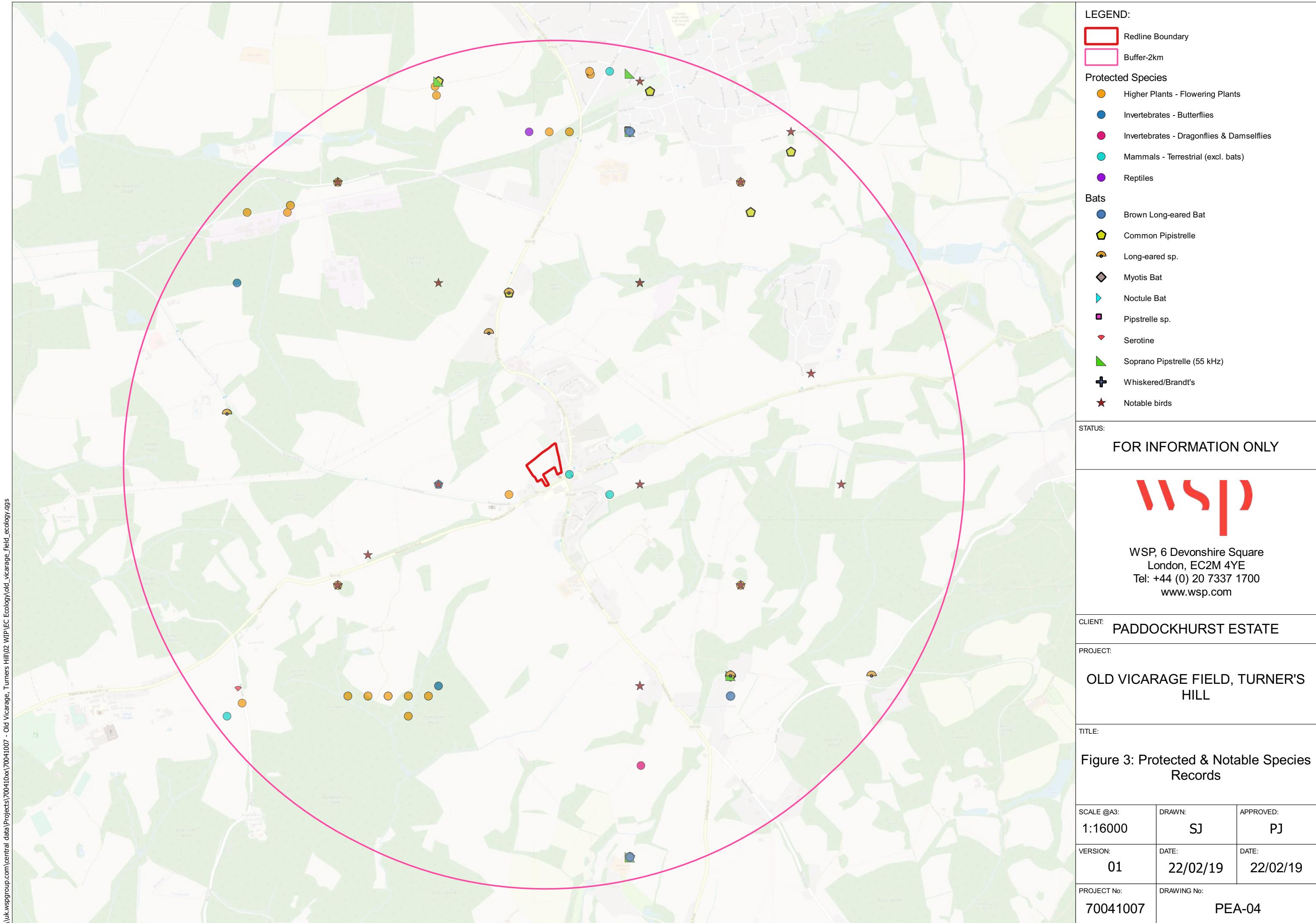
Project -	Land at Old Vicarage Field, Turners Hill
Client -	Elvia Homes Eastern
Title -	Illustrative post-development habitat creation
Date -	May 25
Drawing -	0006-1405-1
Rev -	A



APPENDIX 1









APPENDIX 2

Common name	Scientific name
American willowherb	<i>Epilobium ciliatum</i>
Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Blackthorn	<i>Prunus spinosa</i>
Box	<i>Buxus sempervirens</i>
Bracken	<i>Pteridium aquilinum</i>
Bramble	<i>Rubus fruticosus</i>
Cherry	<i>Prunus spp.</i>
Cherry laurel	<i>Prunus laurocerasus</i>
Cleavers	<i>Galium aparine</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common bent	<i>Agrostis capillaris</i>
Common fleabane	<i>Pulicaria dysenterica</i>
Common ragwort	<i>Senecio jacobaea</i>
Common sorrel	<i>Rumex acetosa</i>
Creeping buttercup	<i>Ranunculus repens</i>
Creeping cinquefoil	<i>Potentilla reptans</i>
Cuckoo flower	<i>Cardamine pratensis</i>
Curly dock	<i>Rumex crispus</i>
Dog rose	<i>Rosa canina</i>
Foxglove	<i>Digitalis purpurea</i>
Garden privet	<i>Ligustrum ovalifolium</i>
Germander speedwell	<i>Veronica chamaedrys</i>
Glaucous sedge	<i>Carex flacca</i>
Greater bird's-foot-trefoil	<i>Lotus pedunculatus</i>
Ground ivy	<i>Glechoma hederacea</i>
Hard rush	<i>Juncus inflexus</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Hemp agrimony	<i>Eupatorium cannabinum</i>
Herb Robert	<i>Geranium robertianum</i>
Holly	<i>Ilex aquifolium</i>
Hornbeam	<i>Carpinus betulus</i>
Horse chestnut	<i>Aesculus hippocastanum</i>
Ivy	<i>Hedera helix</i>
Japanese barberry	<i>Berberis thunbergii</i>
Jointed rush	<i>Juncus articulatus</i>



Lesser stitchwort	<i>Stellaria graminea</i>
Male fern	<i>Dryopteris filix-mas</i>
Marsh thistle	<i>Cirsium palustre</i>
Meadow foxtail	<i>Alopecurus pratensis</i>
Meadow vetchling	<i>Lathyrus pratensis</i>
Mugwort	<i>Artemisia vulgaris</i>
Nettle	<i>Urtica dioica</i>
Oak	<i>Quercus robur</i>
Oval sedge	<i>Carex ovalis</i>
Pendulous sedge	<i>Carex pendula</i>
Perennial ryegrass	<i>Lolium perenne</i>
Portuguese laurel	<i>Prunus lusitanica</i>
Purple sycamore	<i>Acer pseudoplatanus f. Purpureum</i>
Red fescue	<i>Festuca rubra</i>
Self-heal	<i>Prunella vulgaris</i>
Silver birch	<i>Betula pendula</i>
Soft rush	<i>Juncus effusus</i>
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>
Timothy	<i>Phleum pratense</i>
Tufted hairgrass	<i>Deschampsia cespitosa</i>
Tufted vetch	<i>Vicia cracca</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Whitebeam	<i>Sorbus aria</i>
Willow	<i>Salix spp.</i>
Wintergreen barberry	<i>Berberis julianae</i>
Yarrow	<i>Achillea millefolium</i>
Yew	<i>Taxus baccata</i>
Yorkshire fog	<i>Holcus lanatus</i>



Appendix 3

TREES WITHIN THE DEVELOPMENT

TREE PLANTING WILL BE USED WITHIN THE STREET SCENE AS A MEANS OF ADDING STRUCTURE, SEASONAL COLOUR AND TO BENEFIT LOCAL WILDLIFE.

ONCE MATURE, THE CANOPIES OF THE TREE PLANTING WILL HELP TO BREAK THE ROOF LINE OF THE NEW HOUSING IN VIEWS FROM THE SURROUNDING CONTEXT.

ILLUSTRATIVE PLANTING PALETTE:

Trees

Street: *Carpinus betulus 'Frans Fontaine'*, *Prunus avium 'Plena'*
Corner Planting between Dwellings: *Amelanchier arborea 'Robin Hill'*, *Prunus accolade*



FRONT GARDENS

FRONT GARDENS TO THE NEW DWELLINGS WILL BE PLANTED TO PROVIDE SOFTENING TO THE STREET SCENE, SEASONAL VARIATIONS IN COLOUR AND INCLUDE SPECIES OF BENEFIT TO WILDLIFE.

FRONTAGE PLANTS WILL COMPRIZE SINGLE SPECIES HEDGE PLANTING AND/OR A MIXTURE OF ORNAMENTALS, GRASSES AND PERENNIALS.

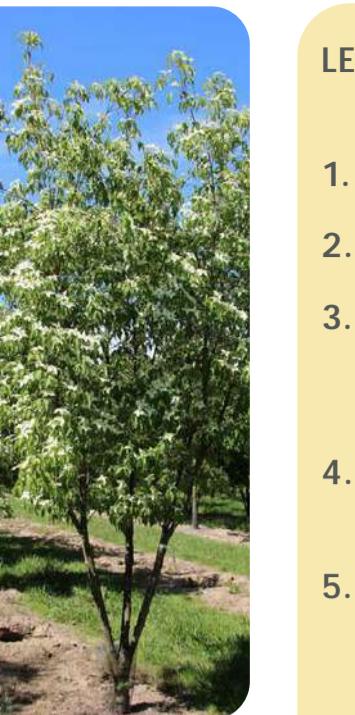
ILLUSTRATIVE PLANTING PALETTE:

Hedgerow

Ligustrum ovalifolium, *Prunus lusitanica*

Planting

Brunnera macrophyllum 'Jack Frost', *Viburnum davidii*, *Dryopteris filix mas*, *Carex morrowii 'Ice Dance'*, *Hebe Caledonia*, *Pervovskia 'Blue Spire'*, *Echinacea purpurea*, *Salvia caradonna*, *Lavandula angustifolia 'Hidcote'*



LEGEND:

1. RETAINED VEGETATION
2. REMOVED VEGETATION FOR ACCESS
3. PROPOSED NATIVE PLANTING TO CHURCH ROAD FRONTAGE, CONTINUING THE EXISTING STREET VERNACULAR
4. PROPOSED PLANTING TO SOFTEN AND FRAME THE LANDSCAPE SETTING
5. NEW OR ENHANCED NATIVE BUFFER HEDGE PLANTING TO MAINTAIN AND STRENGTHEN THE EXISTING FIELD BOUNDARY VERNACULAR AND PROPOSED SWALES
6. BLOCK PAVING TO PROPOSED RESIDENTIAL STREET AND DRIVEWAYS, (PERMEABLE WHERE REQUIRED)
7. ORNAMENTAL PLANTING TO RESIDENTIAL FRONTAGES
8. PEDESTRIAN GATE/STYLE AND LOCKABLE VEHICLE GATE ACCESS, FOR MAINTENANCE
9. REINFORCED TURF ACCESS ROUTE FOR MAINTENANCE
10. 'PLAY ON THE WAY' L.A.P AREAS
11. MACADAM TO ENTRANCE ROAD AND CAR PARK
12. FLAG PAVING TO RESIDENTIAL ENTRANCES
13. TIMBER BOLLARDS TO MITIGATE VEHICULAR ACCESS TO PAVEMENTS, PLAY AREAS AND SWALES
14. BAT & BIRD BOXES INSTALLED WHERE APPROPRIATE
15. ACCESS PATH FOR RESIDENTS OF LION LANE ALONG THE EXTENT OF THE EASTERN BOUNDARY
16. BANK TO ENTRANCE ROAD WITH RETAINING TERRACES
17. PROPOSED LARGER SCALE BEECH TREE TO REPLACE EXISTING TPO STUMP TO CHURCH ROAD FRONTAGE

PLAY & RECREATION

THE CENTRAL, EQUIPPED LOCAL AREA OF PLAY, (LAP) PROVIDES OPPORTUNITIES FOR PLAY CLOSE TO THE PROPOSED DWELLINGS

A CLOSE MOWN GRASSED AREA WITH APPROPRIATE SENSORY BOUNDARY PLANTING WILL INCLUDE TIMBER BALANCE ELEMENTS AND BOULDERS.

THE APPROACH TO PLAY IS INTENDED TO BE EXPLORATIVE, NON PRESCRIPTIVE AND TO STIMULATE IMAGINATIVE PLAY.



CHURCH ROAD FRONTAGE AND SITE ENTRANCE

THE PROPOSED RETAINING TERRACES TO THE CHURCH ROAD FRONTAGE WILL CONTINUE THE EXISTING LINE OF PLANTING AND TO SOFTEN AND FRAME THE ENTRANCE ROAD.

NATIVE PLANTING WILL BE SET BETWEEN THE RETAINING WALLS TO BETTER SITE THE STRUCTURE WITHIN THE EXISTING LANDSCAPE SETTING.

WALL FACING MATERIALS WILL BE CHOSEN TO ECHO THE LOCAL VERNACULAR.

ILLUSTRATIVE PLANTING PALETTE:

Trees

Acer campestre, *Betula pubescens*, *Carpinus betulus*

Hedgerow

Corus sanguinea, *Corylus avellana*, *Ligustrum vulgare*, *Ilex aquifolium*, *Viburnum opulus*.



ILLUSTRATIVE LANDSCAPE MASTERPLAN DEVELOPMENT PARCEL

ILLUSTRATIVE WALL FACING:



BOUNDARY TREATMENTS

DWELLING AND OPEN SPACE BOUNDARIES WILL BE DEFINED USING A VARIETY OF METHODS TO PROVIDE SECURITY WHILST RESPECTING THE SURROUNDING CONTEXT. HEDGEHOG HOLES WILL ALSO BE ADDED TO REAR GARDEN FENCES.

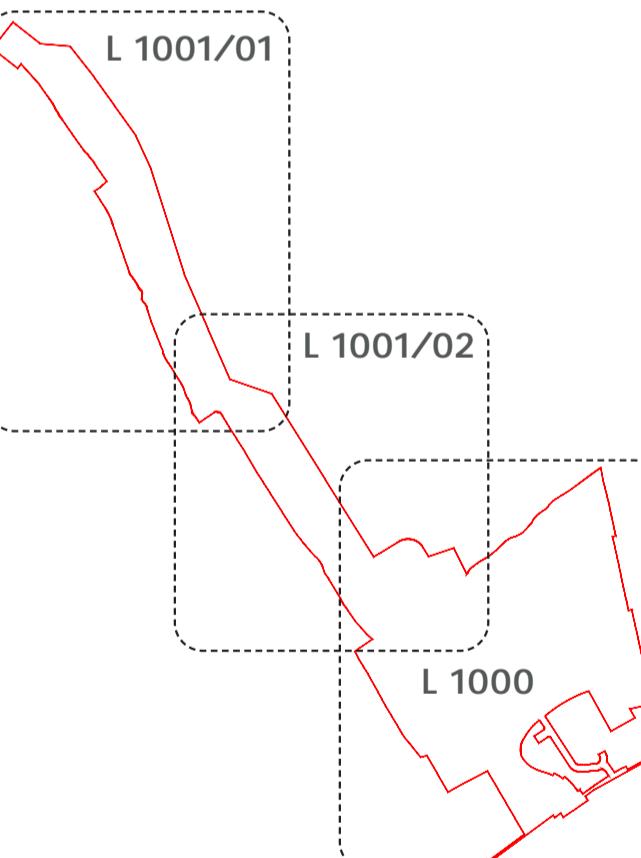
ILLUSTRATIVE BOUNDARIES PALETTE:

Typical gardens:

- Eastern and southern boundaries: Timber post and rail fence with hedgerow
- Car Parks and Play Areas: Timber bollards and knee rails
- Prominent gardens: Brick walls (to Architects detail)



LOCATION PLAN:



PL01	Issued for Planning	10b	APP. DATE
REV.	DESCRIPTION		30.04.2025

fabrik

PROJECT TITLE
CHURCH ROAD, TURNERS HILL, WEST SUSSEX
DRAWING TITLE

COLOUR LANDSCAPE MASTERPLAN AND STRATEGY
ISSUED BY Alton T: 01420 593 250
DATE APRIL 2025 DRAWN AS
SCALE@A1 N.T.S. CHECKED TRB
STATUS PLANNING APPROVED AS
DWG. NO. D3162 FAB 00 XX DR L 1000 (SHEET 1 OF 2)

Notes:
1. This drawing is the property of fabrik ltd. It must not be copied or reproduced without written consent.
2. Only figured dimensions are to be taken from this drawing. All contractors must visit site and be responsible for taking and checking all dimensions related to the works shown on this drawing.

TREES WITHIN THE NORTHERN PARCEL

TREE PLANTING WILL BE USED WITHIN THE NORTHERN PARCEL AS A MEANS OF BOLSTERING THE EXISTING TREE LINED EDGE, ADDING SEASONAL COLOUR AND ENHANCING LOCAL BIODIVERSITY.

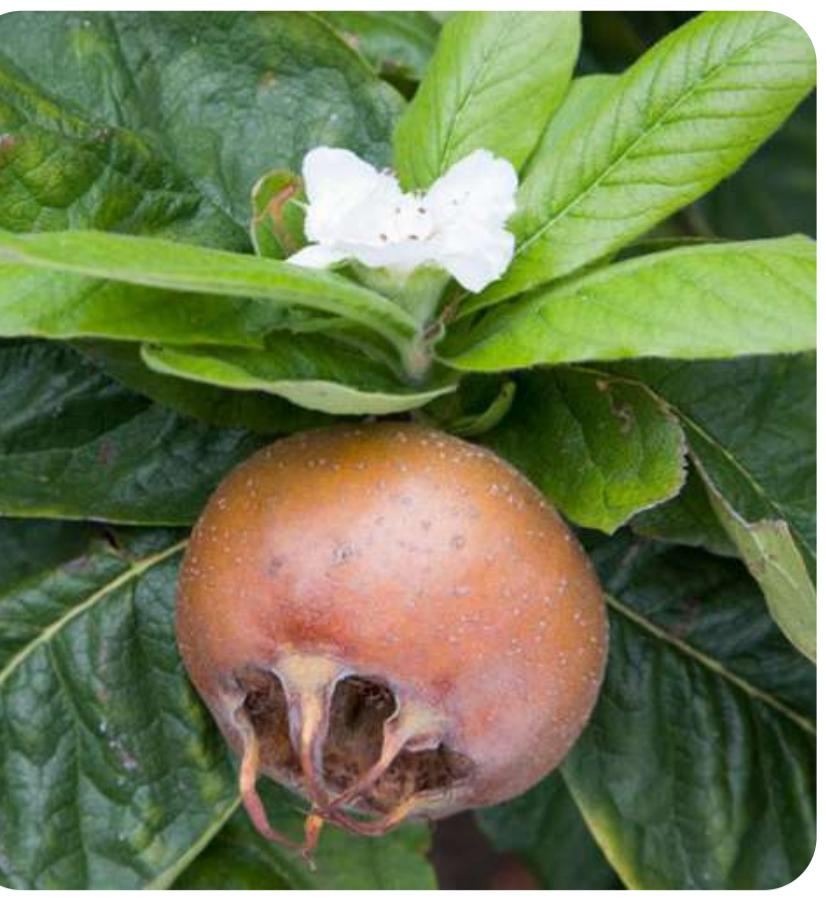
ONCE MATURE, THE CANOPIES OF THE TREE PLANTING WILL HELP TO INTERCONNECT THE EXISTING AND PROPOSED PLANTING WITHIN THE WIDER LANDSCAPE SETTING.

ILLUSTRATIVE PLANTING PALETTE:

Trees

Garden:
Acer rubrum, Acer campestre, Alnus glutinosa, Carpinus betulus, Prunus avium

Local Fruiting Species:
Mespilus germanica (Medlar 'Nottingham') Malus evereste (Crabapple)



RETAINED VEGETATION

THE SCHEME PROPOSES THE REMOVAL OF A SMALL NUMBER OF TREES, TREE GROUPS AND PART OF THE BOUNDARY HEDGEROWS TO ALLOW ACCESS TO THE SITE.

IN ORDER TO MITIGATE THIS, THE PROPOSALS INCLUDE NEW TREE AND HEDGEROW PLANTING THAT WILL HELP TO REINSTATE THE CHURCH ROAD BOUNDARY, ASSIMILATE THE NEW HOUSING WITHIN THE LANDSCAPE AND TO PRESERVE LOCAL CHARACTER.

THE MAJORITY OF TREES AND TREE GROUPS WILL BE RETAINED, THUS PRESERVING THE EXISTING WIDER LANDSCAPE SETTING TO THE BOUNDARIES.



LEGEND:

1. RETAINED VEGETATION
2. REMOVED VEGETATION FOR ACCESS
3. PROPOSED PLANTING TO SOFTEN AND FRAME THE LANDSCAPE SETTING
4. NEW OR ENHANCED NATIVE BUFFER HEDGE PLANTING TO MAINTAIN AND STRENGTHEN THE EXISTING FIELD BOUNDARY VERNACULAR AND PROPOSED SWALES
5. PEDESTRIAN GATE/STYLE AND LOCKABLE VEHICLE GATE ACCESS, FOR MAINTENANCE
6. REINFORCED TURF ACCESS ROUTE FOR MAINTENANCE
7. 'PLAY ON THE WAY' L.A.P AREAS
8. SPECIES RICH MEADOW WITH MOWN PATH AND TREE CLUSTERS
9. DAMP MEADOW MIX TO SWALE AND BASIN PLANTING
10. TIMBER BOLLARDS TO MITIGATE VEHICULAR ACCESS TO PAVEMENTS, PLAY AREAS AND SWALES
11. BAT & BIRD BOXES INSTALLED WHERE APPROPRIATE
12. BUFFER PLANTING FOR DORMOUSE HABITAT
13. POST & RAIL BOUNDARY TO S.U.D.S BASIN



ILLUSTRATIVE LANDSCAPE MASTERPLAN (EXTRACT) NORTHERN SECTION

BOUNDARY PLANTING

THE MAJORITY OF THE BOUNDARY PLANTING WILL BE RETAINED WITH NEW AREAS OF NATIVE OR SCRUB PLANTING PROPOSED TO BETTER SITE THE DEVELOPMENT WITHIN THE EXISTING LANDSCAPE SETTING.

INFILL SECTIONS OF NATIVE PLANTING WILL ENHANCE THE EXISTING BOUNDARY HEDGES AND PROVIDE ADDITIONAL SPECIES FOR DORMOUSE HABITAT CREATION. BAT & BIRD BOXES WILL BE INCLUDED WHERE APPROPRIATE ACROSS THE DEVELOPMENT.

NORTHERN SWALES BOUNDARY

THE NORTHERN BOUNDARIES ADJACENT TO THE SWALES WILL BE DEFINED THROUGH HEDGEROW AND TREE PLANTING REFLECTING THE EXISTING LANDSCAPE CHARACTER WITH TIMBER POST AND RAIL AS FIELD BOUNDARIES TO THE EAST.

ILLUSTRATIVE PLANTING PALETTE:

Trees
Acer campestre, Betula pubescens, Carpinus betulus

Hedgerow

Corinus sanguinea, Corylus avellana, Ligustrum vulgare, Ilex aquifolium, Viburnum opulus.



S.U.D.S PROVISION

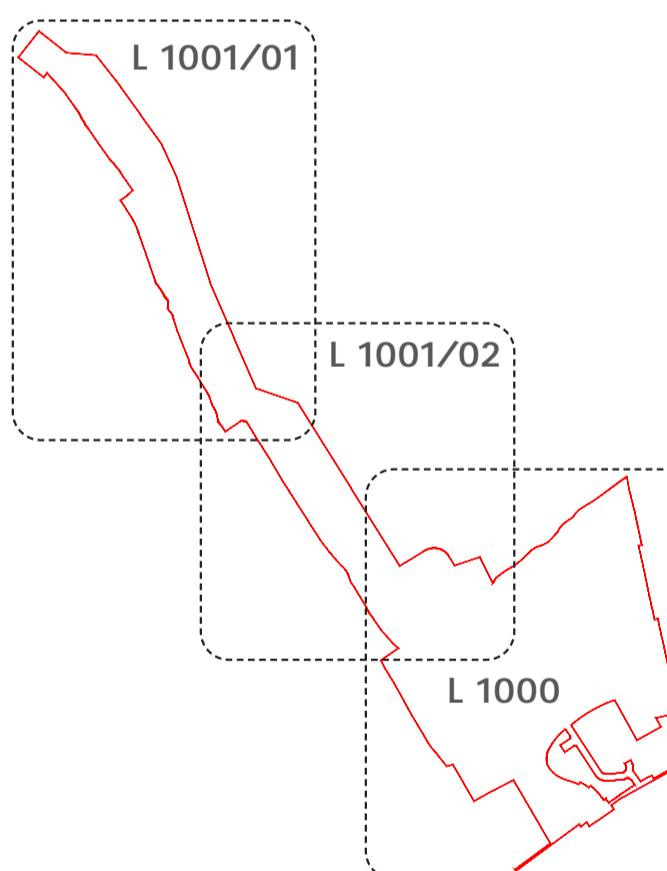
THE DRAINAGE STRATEGY WILL INCLUDE A SERIES OF INTERCONNECTED SWALES THAT WILL BE PLANTED WITH A MIX OF SPECIES RICH MEADOW AND NATIVE PLANTING APPROPRIATE TO THE SEASONALLY WET CONDITIONS.

THE AIM WILL BE TO CREATE AND MANAGE THE SWALES AND BASIN TO ENHANCE BIODIVERSITY WHILST ENSURING THEY FUNCTION EFFECTIVELY IN TERMS OF SURFACE WATER MANAGEMENT.

THE SURROUNDING MEADOW PLANTING WILL UNIFY THE PROPOSALS WITH THE WIDER LANDSCAPE SETTING.



LOCATION PLAN:



PL01	Issued for Planning	REV.	DESCRIPTION	10b	APP. DATE
					30.04.2025

fabrik

PROJECT TITLE
CHURCH ROAD, TURNERS HILL, WEST SUSSEX
DRAWING TITLE

COLOUR LANDSCAPE MASTERPLAN AND STRATEGY
ISSUED BY Alton T: 01420 593 250

DATE APRIL 2025 DRAWN AS
SCALE@A1 N.T.S. CHECKED AS
STATUS PLANNING APPROVED AS

DWG. NO. D3162 FAB 00 XX DR L 1001 (SHEET 2 OF 2)

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APPENDIX 4 - ON-SITE HABITATS CONDITION ASSESSMENTS

Other, neutral grassland condition assessment

Condition Assessment Criteria		Parcel 1	Parcel 2
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.	No - sward lacks sufficient flora diversity to meet this criterion	No - sward lacks sufficient flora diversity to meet this criterion
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)	Yes	Yes
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes	Yes
D	Cover of bracken <i>Yes Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Yes – bracken not recorded and scrub is less than 5%	Yes – bracken not recorded and scrub is less than 5%
E	Combined cover of species indicative of suboptimal condition and physical damage accounts for less than 5% of total area.	Yes – species are less than 5% of area	Yes – species are less than 5% of area
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type	Yes	Yes
		5 of 6 criteria passed, but not essential criterion A = poor condition	5 of 6 criteria passed, but not essential criterion A = poor condition

Modified grassland condition assessment

Condition Assessment Criteria		Parcel 4	Parcel 5
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	Yes	Yes
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.	Yes	Yes
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).	Yes - scrub not recorded	Yes - scrub not recorded
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 - no evidence of damaging management activities was recorded	Yes - no evidence of damaging management activities was recorded
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Yes	Yes
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes – species not recorded	Yes – species not recorded
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Yes	Yes
		7 of 7 criteria passed, including essential criterion A = good condition	7 of 7 criteria passed, including essential criterion A = good condition

Other woodland, broadleaved condition assessment

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Parcel 8
A	Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	1
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
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
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.	1
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	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 ⁷ .	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 ⁷ .	1
G	Woodland regeneration	All three classes present in woodland ⁸ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	1
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present ⁹ .	3
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.	2
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
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

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
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 .	1
				Score	22 = poor condition

Individual tree condition assessment

Tree No*	T9	G15-1	G15-2	G15-3	T24	T29	T30	T31	G32-1	G32-2	G32-3	G32-4
The tree is a native species	Y - Oak	Y - Hawthorn	Y - Hawthorn	Y - Hawthorn	Y - Hawthorn	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak
The tree is mature*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
The tree canopy is predominantly continuous	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
There is little or no evidence of an adverse impact on tree	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Natural ecological niches	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Canopy oversailing vegetation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Score	6 = good	5 = good	5 = good	5 = good	5 = good	6 = good	6 = good	6 = good	6 = good	6 = good	6 = good	6 = good
Tree size class*	Very large	Medium	Medium	Medium	Medium	Large	Large	Very large	Large	Large	Large	Large

*based on the information in arboricultural assessment and method statement report prepared by Barrel Tree Consultancy ref: 21102-AA-CA, dated 11th September 2024

Tree No*	T33	T34	T35	T36	T37	T38	T39	G40
The tree is a native species	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Oak	Y - Hawthorn
The tree is mature*	Y	Y	Y	Y	Y	Y	Y	Y
The tree canopy is predominantly continuous	Y	Y	Y	Y	Y	Y	Y	Y
There is little or no evidence of an adverse impact on tree	Y	Y	Y	Y	Y	Y	Y	Y
Natural ecological niches	N	Y	Y	N	Y	Y	Y	N
Canopy oversailing vegetation	Y	Y	Y	Y	Y	Y	Y	Y
Score	5 = good	6 = good	6 = good	5 = good	6 = good	6 = good	6 = good	5 = good
Tree size class*	Medium	Large	Very large	Small	Large	Large	Very large	Small

Hedge condition assessment

Attributes and functional groupings		Criteria - the minimum requirements for 'favourable condition'	Criteria description	H1b	H2	H3	H4
A1.	Height	>1.5 m average along length	The average height of woody growth	Yes	Yes	Yes	Yes
A2.	Width	>1.5 m average along length	The average width of woody growth	Yes	Yes	Yes	Yes
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	Vertical 'gappiness' of woody growth	Yes	No	Yes	Yes
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of woody growth	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species	For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
Hedgerow category				Good	Good	Good	Good

APPENDIX 5 - OFF-SITE HABITATS CONDITION ASSESSMENTS

Other, neutral grassland condition assessment

Condition Assessment Criteria		Parcel 1
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.	No - sward lacks sufficient flora diversity to meet this criterion
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)	Yes
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	No – extensive bare ground present
D	Cover of bracken Yes <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Yes – bracken not recorded and scrub is less than 5%
E	Combined cover of species indicative of suboptimal condition and physical damage accounts for less than 5% of total area.	Yes – species are less than 5% of area
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type	No
		3 of 6 criteria passed, but not essential criterion A = poor condition

Modified grassland condition assessment

Condition Assessment Criteria		Parcel 3
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	No
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 – sward is uniformly short due to grazing
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).	Yes - scrub not recorded
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 - no evidence of damaging management activities was recorded
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Yes
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes – species not recorded
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Yes
		5 of 7 criteria passed, but not essential criterion A = poor condition

Hedge condition assessment

Attributes and functional groupings		Criteria - the minimum requirements for 'favourable condition'	Criteria description	H1	H2	H3	H4
A1.	Height	>1.5 m average along length	The average height of woody growth	Yes	Yes	Yes	Yes
A2.	Width	>1.5 m average along length	The average width of woody growth	Yes	Yes	Yes	Yes
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	Vertical 'gappiness' of woody growth	Yes	Yes	Yes	Yes
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of woody growth	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species	For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Yes	Yes	Yes	Yes
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.	Yes	Yes	Yes	Yes
Hedgerow category				Good	Good	Good	Good



Photos





