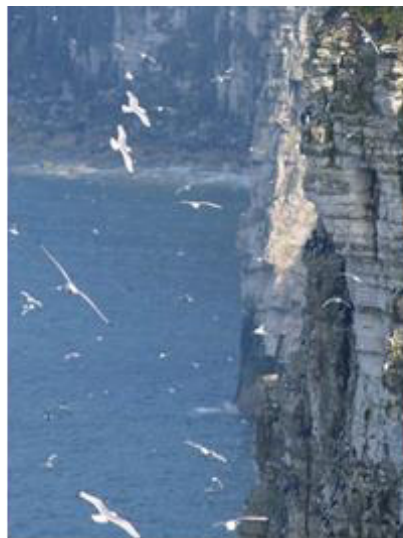




Biodiversity Net Gain Report

Land at Duck's Nest , Arborfield

For

David Wilson Homes (Southern)

Report Ref.: DWH001-020-008/002/001

September 2024

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Project Number	Report No.
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Figure 1b Baseline Habitats (SANG Biodiversity Net Gain)

Figure 2a Post Development Habitats (Residential Development Biodiversity Net Gain)

Figure 2b Post Development Habitats (SANG Biodiversity Net Gain)

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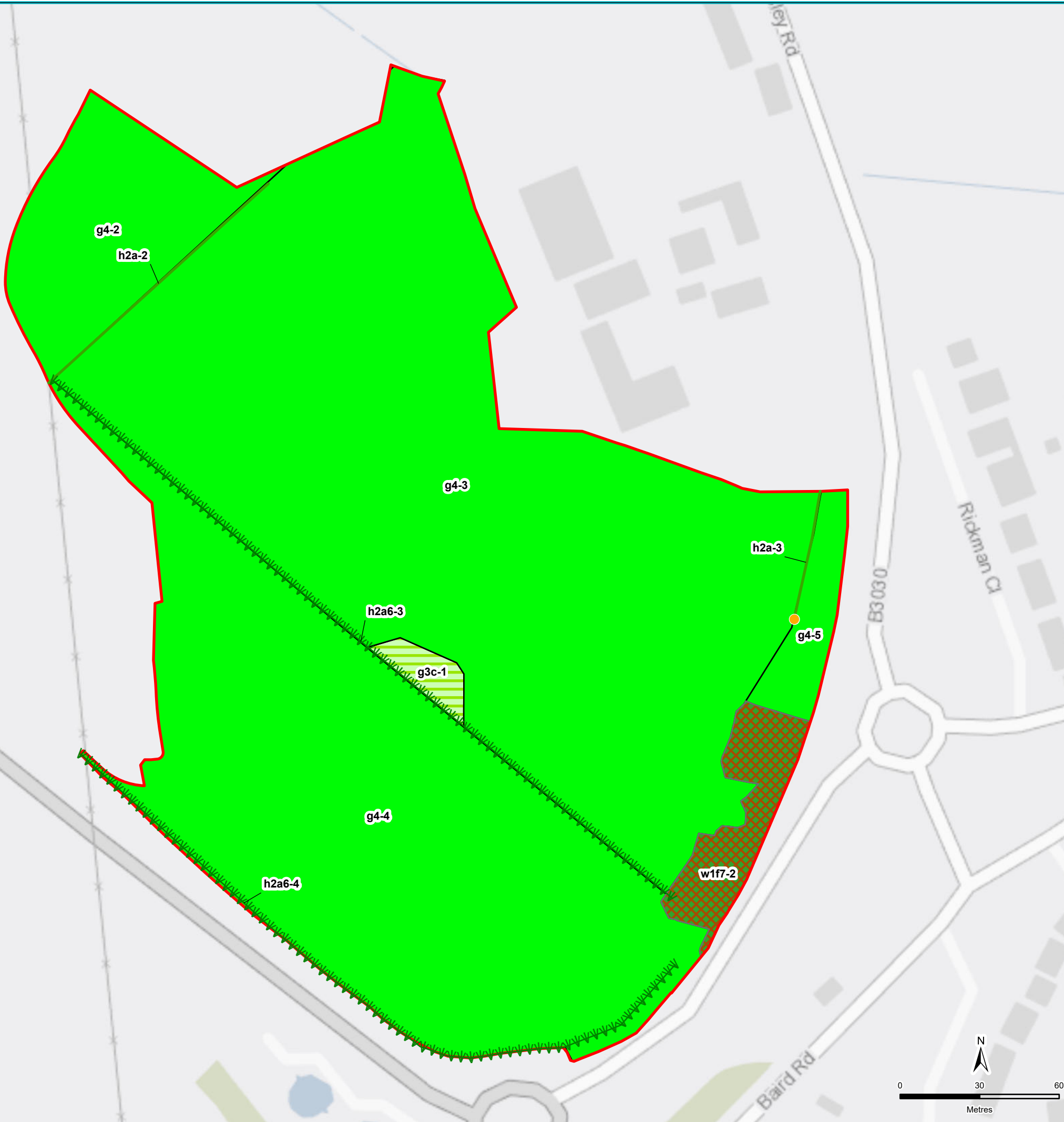
- Legend
- Rural Tree
 - h2a - Native Hedgerow
 - h2a6 - Other Native Hedgerow
 - g3c - Other Neutral Grassland
 - g4 - Modified Grassland
 - w1f7 - Other Lowland Mixed Deciduous Woodland
 - Site Boundary

Map Centre Grid Reference: 476229E 166169N
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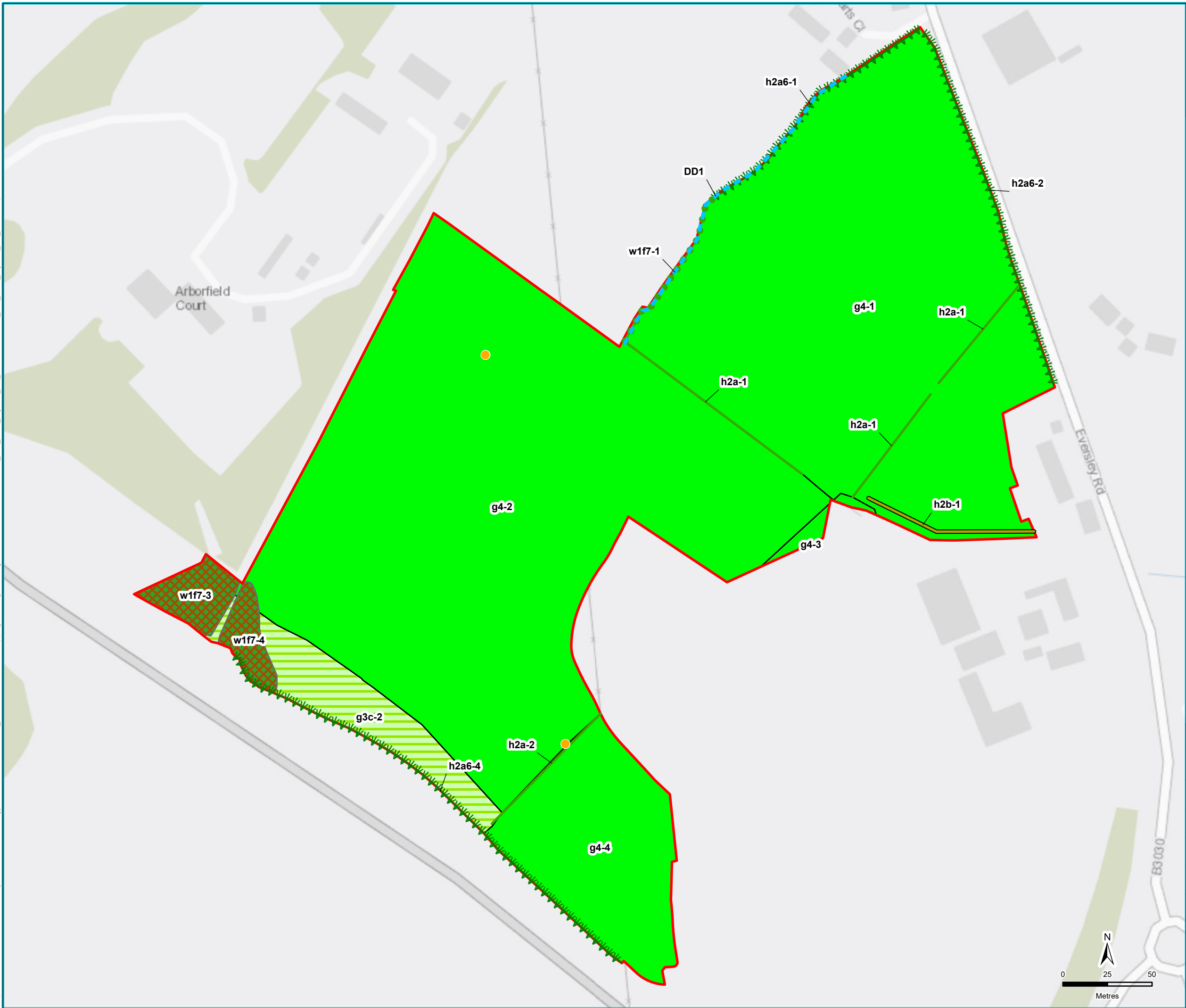
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David Wilson Homes	
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1a	

Figure Title

Baseline Habitats
(Residential Development
Biodiversity Net Gain)



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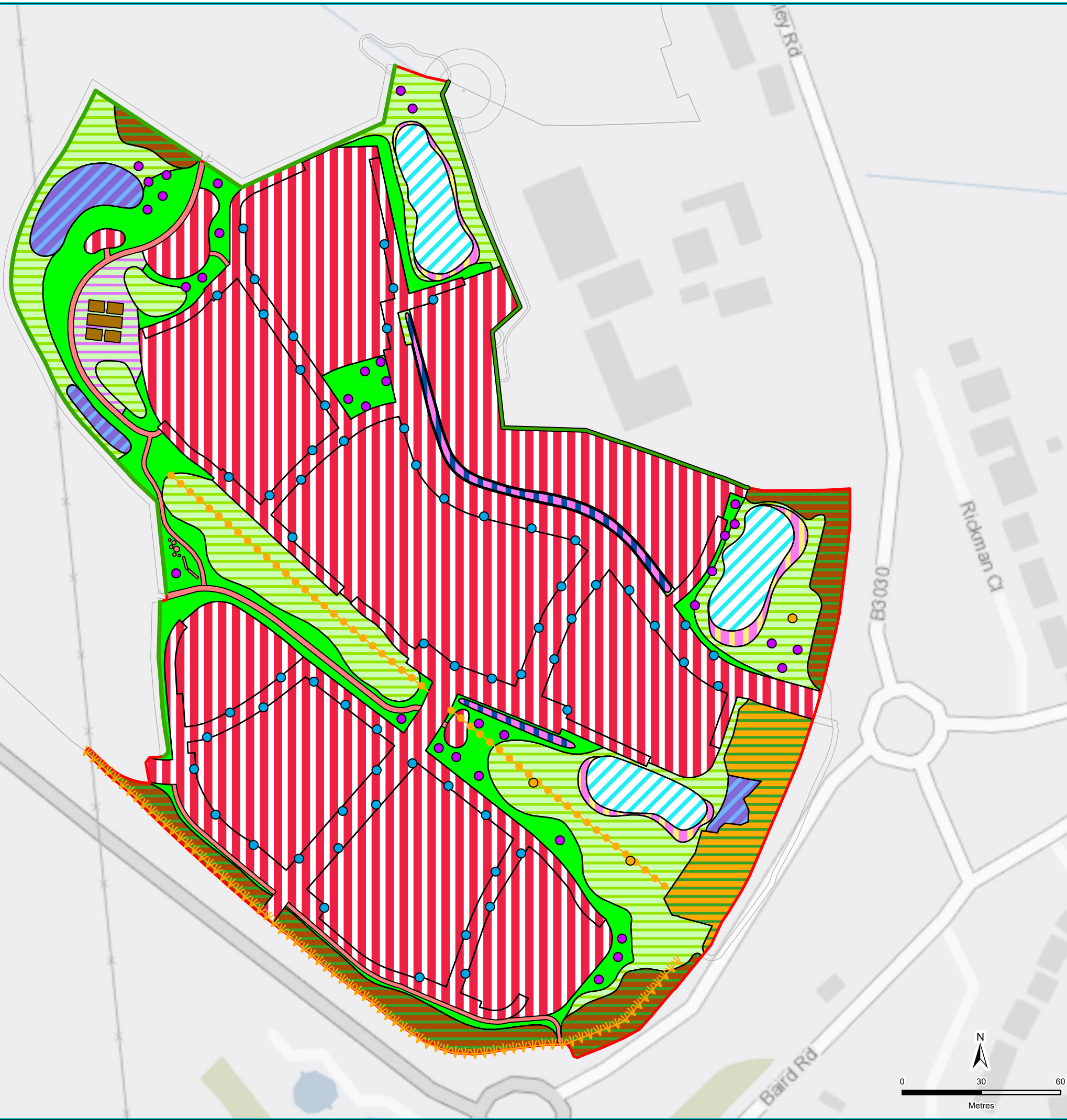


- Legend
- Rural Tree
 - h2a - Native Hedgerow
 - h2a6 - Other Native Hedgerow
 - h2b - Non-native and Ornamental Hedgerow
 - w1f - Lowland Mixed Deciduous Woodland
 - Dry Ditch
 - g3c - Other Neutral Grassland
 - g4 - Modified Grassland
 - w1f7 - Other Lowland Mixed Deciduous Woodland
 - Site Boundary

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Date 27/09/2024	Date 27/09/2024
Client David Wilson Homes	
Figure Number 1b	
Figure Title Baseline Habitats (SANG Biodiveristy Net Gain)	

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However, this map is not intended to represent a scaled landscape survey so should not be used to pin-point accurate engineering work or as a basis for detailed site planning.



Legend

- Proposed Open Space Tree
- Proposed Street Tree
- Retained Tree
- h2a - Native Hedgerow
- h2a(11) - Proposed Hedgerow with Tree
- h2a6 - Other Native Hedgerow (Retained)
- Existing Tree to be Retained
- f2d - Aquatic Marginal Vegetation
- f2d (1191) - Aquatic Marginal Vegetation (Bioswale)
- g3c - Other Neutral Grassland
- g3c(21) - Traditional Orchard
- g4 - Modified Grassland
- h3h - Mixed Scrub
- r1 (1190) - Standing Open water and Canals (SUDS)
- u1 (845) - Built up areas and Gardens (Ground Level Planters)
- u1b - Developed land - Sealed Surface
- u1c - Artificial unvegetated Unsealed Surface
- w1f7 - Other Broadleaved Woodland
- w1f7 - Other Broadleaved Woodland (Retained)
- Site Boundary

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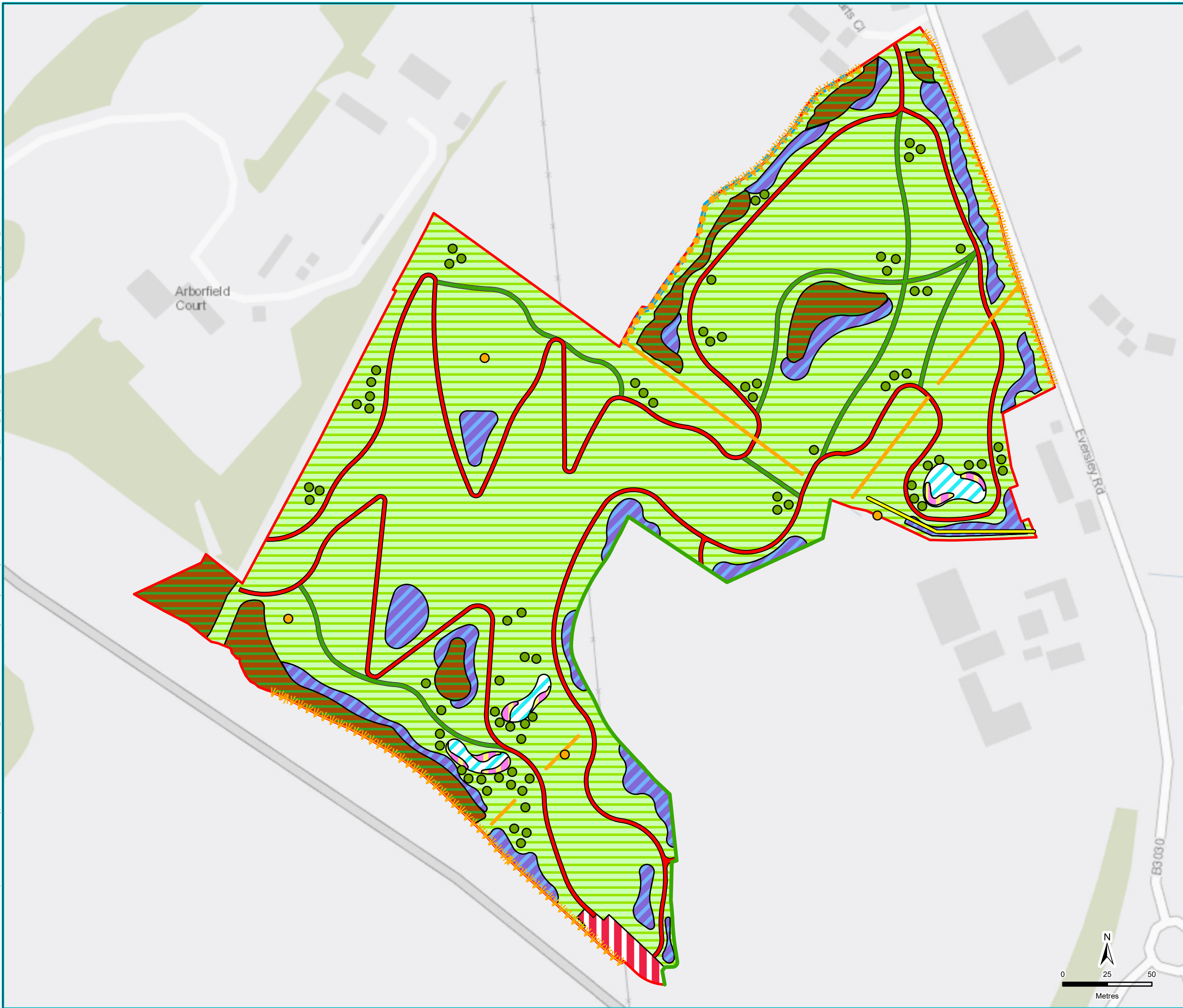
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Client
David Wilson Homes

Figure Number
2a

Figure Title
Post Development Habitats
(Residential Development
Biodiversity Net Gain)

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- Legend
- Retained Tree
 - Urban Tree
 - Dry Ditch
 - h2a - Native Hedgerow
 - h2a - Native Hedgerow (Retained)
 - h2b - Non-native and Ornamental Hedgerow (Retained)
 - h2a6 - Other Native Hedgerow (Retained)
 - Existing Tree to be Retained
 - f2d - Aquatic Marginal Vegetation
 - g3c - Other Neutral Grassland
 - g3c (64) - Other Natural Grassland (Mown)
 - h3h - Mixed Scrub
 - r1 - Standing Open Water and Canals
 - u1b - Developed Land, Sealed Surface
 - u1e - Built Linear Features
 - w1f7 - Other Broadleaved Deciduous Woodland
 - Site Boundary

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Date	Date
27/09/2024	27/09/2024
Client	
David Wilson Homes	
Figure Number	
2b	
Figure Title	

Post Development Habitats
(SANG Biodiveristy Net Gain)

1. Introduction

1.1 Context

- 1.1.1 Biodiversity net gain (BNG) is a way to contribute to the recovery of nature while developing land, aiming to leave habitats in a better state than before. The purpose of the assessment is to quantify the biodiversity losses and gains arising from the proposed development, with the overall aim of achieving $\geq 10\%$ net gain as required under the Environment Act 2021.

1.2 Project Description

- 1.2.1 David Wilson Homes (Southern) proposes a residential development at an area of land at Duck's Nest Farm, Arborfield. A hybrid planning application is being submitted to Wokingham Borough Council comprising:
- A full application for the change of use of land from agricultural land to provide an area of Suitable Alternative Natural Greenspace (SANG), including the details of associated landscaping, planting, drainage measures, parking, walking routes and other works associated with the creation of the SANG.
 - An outline application with all matters reserved other than access into the site for a residential development of up to 135 dwellings, open space, internal accesses and parking, drainage measures, landscaping and all other associated works.

- 1.2.2 The proposals described above are hereafter referred to collectively as "the development".

1.3 Ecology Background

- 1.3.1 A Preliminary Ecological Appraisal (PEA) of the site and a wider survey area, including a UK Habitat classification (UKHab) survey and habitat condition assessments to inform BNG assessment was carried out by Thomson Environmental Consultants in April 2022 (Thomson Environmental Consultants, 2022).
- 1.3.2 An updated UKHab survey and habitat condition assessments were carried out by Thomson Environmental Consultants in September 2024 (Thomson Environmental Consultants, 2024).

1.4 Site Description

- 1.4.1 The development will be located on an area of farmland (Grid Reference SU760664), south of Arborfield Cross with the A327 running along the western boundary. The area impacted by the development will hereafter be referred to as "the site".

1.5 The Brief and Objectives

- 1.5.1 David Wilson Homes (Southern) commissioned Thomson Environmental Consultants on 10th September 2024 to update the existing BNG calculations for the residential development and

the Suitable Alternative Natural Greenspace, which included moving the existing calculations to the Defra Statutory Biodiversity Metric (Defra, 2023a).

1.6 Limitations

- 1.6.1 This report and post-development scenario are based on the boundary shown on the Landscape Strategy Plan "DL102" provided by David Wilson Homes (Southern) on 17th September 2024, which is visualised in Appendix 2. Subsequent changes to this layout will result in a requirement to reassess the biodiversity metric calculations for the development.

2. Legislation and Planning Policy Considerations

2.1 Legislation

- 2.1.1 The Environment Act 2021 provides a framework to improve and protect the natural environment. Section 90a states that *"The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage [10%]."*
- 2.1.2 The Act also requires that both on-site and off-site enhancements will need to be maintained for a period of at least 30 years following completion of a development.

2.2 National Planning Policy

- 2.2.1 The National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing & Communities, 2023) sets out the Government's planning policies for England and how these should be applied. In relation to BNG, it states:
- Paragraph 180: *"Planning policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."*
 - Paragraph 186: *"When determining planning applications, local planning authorities should apply... opportunities to improve biodiversity in and around developments... as part of their design, especially where this can secure measurable net gains for biodiversity."*

2.3 Local Planning Policy

- 2.3.1 Policy CP3 of the Wokingham Borough Core Strategy Development Plan (2010) states *"Planning permission will be granted for developments that ... maintain or enhance the ability of the site to support fauna or flora including protected species."*

3. Methodology

3.1 Background

- 3.1.1 The calculations were carried out using the Defra Statutory Biodiversity Metric calculation tool (Defra, 2023a).
- 3.1.2 This report provides the BNG calculations for the residential development and the SANG separately.
- 3.1.3 The metric calculation tool determines the net change in BNG units by subtracting the baseline biodiversity value score from the post-development biodiversity value. If this number is positive, the works have achieved a biodiversity net gain. If the number is negative, there is a net loss.
- 3.1.4 Area based habitats, hedgerows and rivers/streams are considered separately to account for the differences in their ecological values and functions.
- 3.1.5 This assessment also follows the Chartered Institute for Ecology and Environmental Management's (CIEEM's) Good Practice Principles for Biodiversity Net Gain (CIEEM, 2016).

3.2 Baseline Formula

- 3.2.1 The baseline biodiversity value calculation represents the pre-development biodiversity value of the site as it was at the time that the baseline habitat survey was undertaken.
- 3.2.2 To calculate the baseline biodiversity value, habitat distinctiveness and condition are given numerical 'scores' which are multiplied with hectares or kilometres of habitat. The formula for calculating baseline biodiversity units is as follows:

$$(AxDxQxS) = AHBU$$

Where:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition
- S = Strategic significance
- AHBU = Area or length-based habitat biodiversity units

Distinctiveness

- 3.2.3 Each habitat parcel is assigned a multiplier based on habitat distinctiveness. This includes "*consideration of species richness and rarity; the extent to which the habitat is protected by designations; and the degree to which a habitat supports species rarely found in other habitats*" (Defra, 2023b).
- 3.2.4 Habitats such as hard standing and buildings are assumed to have very low distinctiveness and are not included.

Condition

3.2.5 To enable the calculation of BNG units, an assessment of the condition of each habitat was made in the field in accordance with the statutory biodiversity metric condition assessments (Defra, 2023c). These sheets provide a series of condition assessment criteria, specific to each habitat type. Once all applicable criteria have been assessed, a condition score of good, moderate or poor is applied, based on the scoring instructions provided within the condition sheets.

3.2.6 The condition of habitats such as hard standing and buildings is not assessed.

Strategic Significance

3.2.7 The location of habitat parcels is factored into the calculation based on whether it has been identified as significant for nature conservation within local plans and strategies.

3.3 Post-Development Formula

Habitat Creation

3.3.1 The first formula covers habitat creation:

$$((AxDxQxS)x(RxT)x(S)) = AHBU$$

Where:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition
- R = Difficulty/risk factor
- T = Time to target factor
- S = Strategic significance
- AHBU = Area or length-based habitat biodiversity units

Habitat Retention and Enhancement

3.3.2 The second formula is used to calculate habitat retention and enhancement. This is where a habitat is retained but the condition is improved. This is calculated as follows:

$$(((APxDPxQP) - (ABxDBxQB))x(RxT)) + (ABxDBxQB)x(S) = AHBU$$

3.3.3 If some habitat is retained, but the condition remains the same, then the following formula applies:

$$(APxDPxQP) - (ABxDBxQB)$$

In both cases:

- A = Area (ha) or length (km)
- D = Distinctiveness
- Q = Condition

- R = Difficulty/risk factor
- T = Time to target factor
- S = Strategic significance
- P = Post-development
- B = Baseline
- AHBU = Area or length-based habitat biodiversity units

3.3.4 Distinctiveness, condition and strategic significance are all scored as for the baseline calculations.

Difficulty/Risk Factor

3.3.5 The risk associated with the creation or enhancement of a given habitat is assigned a difficulty multiplier to account for the uncertainty and risk of failure inherent in any action to create new habitat due to the unique physical and ecological features of every site.

Time to Target Factor

3.3.6 The time scale of the creation/enhancement of habitats is assigned a temporal risk multiplier (0-30years+) to compensate for the fact that there will not be an instant change in habitats or conditions and there may be a biodiversity deficit until the habitat has matured.

Trading Rules

3.3.1 The trading rules are in place to ensure habitat creation and enhancement compensate for specific habitat losses. They are only a requirement up to no net less. Table 4-1 below details the trading rules.

Table 3-1: Biodiversity net gain trading rules

Baseline Habitat Distinctiveness	Area	Hedgerow	Watercourse
Very High	Priority should be given to replacing losses with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type	Priority should be given to replacing losses with watercourse units of the same habitat type
High	Losses must be replaced with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Medium	Losses must be replaced by area habitat units of either medium band habitats within the same broad habitat type or, any habitat from a higher band from any broad habitat type	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Low	Losses must be replaced with area habitat units of the same or higher band	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of a higher band
Very Low	Not applicable	Losses must be replaced with hedgerow units of the same or of a higher band	Not applicable

4. Biodiversity Net Gain Assessment

4.1 Background

4.1.1 The full results of the UKHab survey and habitat condition assessments can be found in the EclA report (Thomson Environmental Consultants, 2024). The baseline and post-development habitats are shown on Figures 1 and 2, respectively.

4.1.2 To demonstrate where the BNG comes from on the development, the calculations have been split to show the BNG associated with the residential development and with the SANG. The full workings of the assessment and calculations are provided within the Statutory Biodiversity Metric calculators.

4.1.3 There is a dry ditch associated with h2a6-1 (see Figure 1b). This ditch was dry in April 2022 and September 2024, which are not considered to be dry months of the year. It is overgrown with terrestrial vegetation and shows no signs of any aquatic vegetation. Therefore, it is considered that it does not hold water for over four months of the year. As such, this ditch has not been included in the baseline assessment.

4.2 Biodiversity Net Gain

4.2.1 The headline results of the BNG assessments are provided in Tables 5-1 and 5-2 below, with full results available in the respective Statutory Biodiversity Metric calculators. For target condition assessment criteria of proposed post-development habitats, see Appendix 1. Multipliers have been applied for distinctiveness, condition, strategic significance, difficulty/risk and time to target, as described in Section 3.

4.2.2 The residential development delivers a net gain of 12.11% in habitat units and 28.12% in hedgerow units.

4.2.3 The SANG development delivers a net gain of 193.61 % in habitat units and 30.16% in hedgerow units.

Table 4-1 Biodiversity net gain headline results (residential development)

	Baseline	Post Development	Unit Change	Change
Habitats	15.33	17.19	1.86	12.11%
Hedgerow	5.29	6.78	1.49	28.12%

Table 4-2: Biodiversity net gain headline results (SANG)

	Baseline	Post Development	Unit Change	Change
Habitats	22.57	66.26	43.69	193.61%
Hedgerow	7.99	10.40	2.41	30.16%

5. Conclusion

- 5.1.1** In the scenario set out in this report, the assessment has concluded that a net gain in biodiversity can be achieved on both the SANG and the residential development, biodiversity trading rules have been satisfied, and the works will meet the requirements of the Environment Act 2021, the NPPF and local planning policy.
- 5.1.2** As per the Environment Act 2021, an HMMP will be required, outlining provisions for habitat creation, management, and monitoring over a 30-year period.

6. References

CIEEM (2016) Biodiversity Net Gain Good Practice Principles for Development. Available here: <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/>

Department for Environment Food & Rural Affairs (Defra, 2023a) Statutory biodiversity metric: calculation tool.

Department for Environment Food & Rural Affairs (Defra, 2023b) Statutory biodiversity metric: user guide. February 2024.

Department for Environment Food & Rural Affairs (Defra, 2023c) Statutory biodiversity metric condition assessments.

Department for Levelling Up, Housing & Communities (2023) National Planning Policy Framework (NPPF). London. December 2023.

Thomson Environmental Consultants (2022). Preliminary Ecological Appraisal, Land at Duck's Nest Farm, Arborfield. Report ref: DWH001-020-0021-001-002.

Thomson Environmental Consultants Ltd (2024) Ecological Impact Assessment Land at Duck's Nest, Arborfield. Report reference: DWH001-020-008/001/001

Wokingham Borough Council (2010) Adopted Core Strategy Development Plan Document. January 2010. Available online at: <https://www.wokingham.gov.uk/planning-policy/adopted-development-plan/local-plans>

Appendix 1: Post-development Condition Assessment Sheets

Condition Sheets: GRASSLAND Habitat Type - g3c Other neutral grassland - Proposed species-rich/wildflower grassland

Condition Assessment Criteria		Criterion passed (Yes or No)
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.	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 insects, birds, and small mammals to live and breed.	Yes
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Yes
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%.	Yes
E	Combined cover of species indicative of suboptimal condition ³ 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 species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	No
Additional Criterion - must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m ² 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.	No
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		No
Number of criteria passed		5
Condition Assessment Result		Condition Assessment Score
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.		Good (3)
Passes 3 - 5 criteria, including essential criterion A.		Moderate (2)
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.		Poor (1)
		Score Achieved ×/✓

Condition Sheets: GRASSLAND Habitat Type (low distinctiveness) - g4 Modified grassland - Proposed amenity grassland

Condition Assessment Criteria	Condition Description	Criterion passed (Yes or No)
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
B	Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	No
C	Any scrub present accounts for less than 20% of the total grassland area.	Yes
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.	No
E	Cover of bare ground is between 1% and 10%, including localised areas.	No
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%	Yes
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA)	Yes
Overall condition score		4/7
Overall condition		Moderate

Condition Sheets: SCRUB Habitat Type - h3h Mixed Scrub - Proposed woodland edge planting

Condition Assessment Criteria		Criterion passed (Yes or No)
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).	Yes
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	No
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.	Yes
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No
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)	✓
Passes 2 or fewer criteria	Poor (1)	

Condition Sheets: SCRUB Habitat Type - h3h Mixed Scrub - Proposed native scrub mix

Condition Assessment Criteria		Criterion passed (Yes or No)
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).	Yes
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	No
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.	Yes
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Yes
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	No
Number of criteria passed		3
Condition Assessment Result (out of 5 criteria)		Score Achieved *//
Passes 5 criteria		Good (3)
Passes 3 or 4 criteria		Moderate (2)
Passes 2 or fewer criteria		Poor (1)

Condition Sheets: HEDGEROW Habitat Type - h2a Native hedgerow - Proposed native hedgerow

Attributes and functional groupings (A, B, C, D and E)		Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)
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 stem 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
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).	No
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
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
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
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.	Yes

Attributes and functional groupings (A, B, C, D and E)		Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)
Core groups - applicable to all hedgerow types				
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' ⁶ 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 ⁷ .	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. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	Yes
Condition categories for hedgerows without trees				
Category	Category Requirements		Metric Score	Condition
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 <u>Does not fail both attributes</u> 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 <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).		1	

Condition Sheets: WOODLAND Habitat Type - w1f7 - Other broadleaved woodland- Proposed native tree and scrub planting

Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	1
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3
C	Invasive plant species	No invasive species present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species ≥10% cover.	3
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	3
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.	2
G	Woodland regeneration	All three classes present in woodland; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	2

Condition Assessment Criteria					
Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback.	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	2
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	1
J	Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	1
K	Veteran trees	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees 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.	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.	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.	1
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground.	3
Total Score (out of a possible 39)					26
Condition Assessment Result				Condition Assessment Score	
Total score >32 (33 to 39)				Good (3)	
Total score 26 to 32				Moderate (2)	
Total score <26 (13 to 25)				Poor (1)	

Condition Sheets: Urban Habitat Type Biowale - f2d - Aquatic marginal vegetation - Proposed marginal planting, proposed swale and proposed retention basin

Condition Assessment Criteria		Criterion passed (Yes or No)
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.	Yes
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
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
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 .	Yes
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	No
Essential criteria relevant for habitat type achieved (Yes or No)		
Number of criteria passed		
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/√
Results for Bioswale 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)	

Condition Sheets: Orchard Habitat Type - g3c (21) - Traditional Orchard - Proposed community orchard

Condition Assessment Criteria		Criterion passed (Yes or No)
A	Presence of ancient and or veteran trees. Note - this criterion is essential for achieving Good condition.	No
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.	No
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.	Yes
D	There is evidence of formative and or restorative pruning to maintain longevity of trees.	No
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.	Yes
F	Grassland is not overgrazed, poaching is not evident around the trees, with no more than 10% of trees poached under the canopy.	Yes
G	Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.	Yes
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.	Yes
Essential criteria achieved (required for good condition - Yes or No)		No
Number of criteria passed		5
Condition Assessment Result (out of 8 criteria)		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)
Passes 3 or fewer criteria.		Poor (1)

Condition Sheets: Individual trees

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The tree is a native species (or at least 70% within the block are native species).	Yes
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).	Yes
C	The tree is mature (or more than 50% within the block are mature) ¹ .	No
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.	Yes
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	No
Number of criteria passed		3
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	✓
Passes 2 or fewer criteria	Poor (1)	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.		

Appendix 2: Landscape Strategy Plan