BAYA GROUP LTD

ECOLOGYSOLUTIONS

Part of the ES Group

LAND TO THE WEST OF CLATTERBURY LANE, CLAVERING, ESSEX

Biodiversity Net Gain Assessment

December 2023
11745.BNG.vf1

ecology solutions for planners and developers

CONTENTS

PLANS

APPENDICES

1. INTRODUCTION

1.1. Background & Proposals

1.1.1. Ecology Solutions was commissioned in October 2023 by BAYA Group on behalf of E&A Securities to assess, through the application of the Biodiversity Metric 4.0 Calculation Tool, the net change in biodiversity for the proposed development at Land to the West of Clatterbury Lane, Clavering, Essex (see Plan ECO1).

1.1.2. The Biodiversity Net Gain Assessment has been prepared in support of a planning application, comprising an 'Outline application with all matters reserved except access for up to 28 dwellings (Class C3) including public open space, sustainable drainage systems, landscaping and associated infrastructure and development'.

1.2. Site Characteristics

1.2.1. The site is situated in the northeast of the village of Clavering in Essex, at the junction of Stickling Green Road and Arkesden Road (Clatterbury Lane). To the immediate east of the site is an overflow car park belonging to The Cricketers Pub, in addition to an animal feed and furniture store, the latter being situated southeast of the site. Residential and arable land extends eastward beyond Clatterbury Lane. An arable field also bounds the western site boundary with further cropland situated to the north, beyond Stickling Green Road, residential properties, and a commercial estate. A field of modified grassland is located to the south of the site with an area of hardstanding to the immediate southeast.

1.2.2. The site primarily comprises neutral grassland, with lowland mixed deciduous woodland present along the northern boundary. Native hedgerows and treelines are present along the western, southern, and eastern site boundaries (see Plan ECO2).

1.3. Biodiversity Net Gain Report

1.3.1. This document assesses the level of Biodiversity Net Gain within the site. This report has been prepared with due consideration to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)[1][2] in relation to Biodiversity Net Gain. This assessment is based on the results of the habitat survey completed, as set out in the Ecological Assessment, dated November 2023.

[1] CIEEM (2019). *Biodiversity Net Gain. Good Practice Principles for Development, A Practical Guide.*
[2] CIEEM, CIRIA, IEMA (2016). *Biodiversity Net Gain: Good Practice Principles for Development.*

2. BIODIVERSITY METRIC 4.0

2.1. The Biodiversity Metric 4.0 was released on 24 March 2023 and uses habitat features as a proxy measure for capturing the value and importance of nature. It uses calculations to assess the importance of each habitat based on its size, ecological condition, and location.

2.2. Measurements for habitats pre-development were calculated using QGIS. Assessments regarding the habitats present, as well as their condition, were based on information gathered during survey work.

2.3. Measurements for the post-development situation were calculated using the 'Proposed Site Plan (Drawing No: BH002_SP.01, Nov 2023)' provided by BAYA Group (see Appendix 1) and the 'Strategic Landscape Masterplan (Drawing No: 1055-DLA-ZZ-DR-L-0001, Rev P02, 01/12/23)' provided by Dutch Landscape Architects (see Appendix 2).

3. METHOD FOR CALCULATING POST-DEVELOPMENT STATUS

3.1. The metric runs calculations based on all areas within the site. The metric is designed to provide habitats which are accurately reflective of those proposed in the 'Proposed Site Plan' and 'Strategic Landscape Masterplan'.

3.2. Owing to the outline nature of the development, assumptions have been made as to the expected future land use within the site, using the 'Proposed Site Plan' and 'Strategic Landscape Masterplan' as a guide. Discussions with BAYA Group and Dutch Landscape Architects have taken place to ensure that this assessment captures the vision of the current proposals.

3.3. One assumption relates to the proposed residential gardens. It was assumed that not all of these areas would include lawns and flower beds. Some are expected to be largely unvegetated, comprising largely of paving. Thus, the overall area of proposed residential gardens has been split 90:10 between Vegetated Garden and Unvegetated Garden.

3.4. The proposed habitats and their metric counterparts are illustrated in Table 3.1.

Proposed Habitat	**BNG Metric Habitat Classification**
Buildings, roads, footpaths and associated infrastructure	Developed Land; Sealed Surface
Amenity grassland	Modified Grassland
Amenity Planting	Introduced Shrub
Gardens	Vegetated Garden / Unvegetated Garden
Attenuation pond	Ponds (Non-Priority Habitat)
Swale	Sustainable Drainage System
Trees	Individual Trees (Urban)

Table 3.1. Reconciliation of landscape strategy and metric habitat types.

4. RESULTS AND DISCUSSION OF METRIC

4.1. This section should be read in conjunction with the Biodiversity Metric calculation tool which has been provided separately.

4.2. Baseline Habitat (Pre-Development)

4.2.1. Table 4.1 below summarises the habitats present on-site pre-development. A baseline total of 10.71 habitat units and 2.89 hedgerow units are present within the site pre-development (see Plan ECO3).

4.2.2. Habitats were classified based on their conformity to UK habitat classifications[3] and condition assessments were completed for habitats and hedgerows identified within the site. The Biodiversity Metric 4.0 User Guide[4] and Technical Annex 1[5], in addition to professional judgment were used to inform the habitats' condition criteria.

[3] UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at https://www.ukhab.org).
[4] Natural England (2023). *The Biodiversity Metric 4.0, User Guide,* Natural England Joint Publication JP039.
[5] Natural England (2023). *The Biodiversity Metric 4.0 – Technical Annex 1: Condition Assessment Sheets and Methodology,* Natural England Joint Publication JP039.

Baseline habitat	Baseline Biodiversity Units	Condition Criteria / Pass or Fail / Indicator Score		Condition	Ecological Features and Condition Notes	After Works
Other Neutral Grassland	8.71	Neutral Grassland Medium Distinctiveness		Moderate (3 / 6 condition criteria passed = Moderate)	Neutral grassland dominates the site and covers an area of approximately 1.1ha. The grassland comprises primarily of a tall sward of False Oat-grass *Arrhenatherum elatius.* The grassland passes a total of three out of six condition criteria, resulting in a Moderate condition. There are fewer than 10 vascular plant species per square metre and thus, Condition Criterion F is failed. It is presumed that the grass is mown approximately once per year, due to the presence of a lawnmower and grass cuttings within the site. This has allowed the development of a tall sward. Sward height, however, is not sufficiently varied to pass Criterion B. The grassland also fails Criterion E due to the presence of species indicative of sub-optimal condition, including Common Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense*, Spear Thistle *Cirsium vulgare*, Broadleaved Dock *Rumex obtusifolius*, Wood Dock *Rumex sanguineus*, Cow Parsley *Anthriscus sylvestris,* Creeping Buttercup *Ranunculus repens* and Common Ragwort *Senecio jacobaea*.	6.85 units lost 0.21 units retained 1.65 units enhanced
		A – Good representation of habitat type. Appearance and composition of vegetation closely matches characteristics of specific grassland. Indicator species are present	Pass			
		B – Sward height is varied	Fail			
		C – Bare ground covers 1-5% of area	Pass			
		D – Bracken *Pteridium aquilinum* cover less than 20% and scrub cover less than 5%	Pass			
		E – Cover of species indicative of sub-optimal condition and physical damage less than 5% of area	Fail			
		F – More than 10 vascular plant species per m^2, including forbs	Fail			

					The grassland will largely be lost to the development but areas in the west, south and east are to be retained and / or enhanced.	
Lowland Mixed Deciduous Woodland	2.01	Lowland Mixed Deciduous Woodland High Distinctiveness		Moderate (Total condition indicator score = 30 / 39 = Moderate)	Lowland mixed deciduous woodland covers approximately 0.17ha of the site. The woodland is species rich and Elms *Ulmus* sp. occur abundantly throughout, reaching mature heights. Canopy species include Elms, Ash *Fraxinus excelsior* and Sycamore *Acer pseudoplatanus*. Smaller species and shrubs include Field Maple *Acer campestre*, Blackthorn *Prunus spinosa*, Hazel *Corylus avellana*, Hawthorn *Crataegus monogyna* and Wayfaring Tree *Viburnum lantana.* The ground flora constitutes Common Nettle, Ivy *Hedera helix* and Ground Ivy *Glechoma hederacea.* Standing and fallen deadwood was also recorded within the woodland and on the margins bordering the grassland. Litter was noted within the woodland. The woodland is of Moderate condition, achieving a condition indicator score of 30 / 39. The majority of the woodland will be enhanced and approximately 0.06 ha lost, to facilitate access into the site.	0.66 units lost 1.35 units enhanced
		A – Age distribution of trees	2			
		B – Wild, domestic, and feral herbivore damage	2			
		C – Invasive plant species	3			
		D – Number of native tree species	3			
		E – Cover of native tree and shrub species	3			
		F – Open space within woodland	3			
		G – Woodland regeneration	2			
		H – Tree Health	3			
		I – Vegetation and ground flora	1			
		J – Woodland vertical structure	3			
		K – Veteran trees	1			
		L – Amount of deadwood	3			

		M – Woodland disturbance	1			
Hedgerows						
Baseline habitat	**Baseline Biodiversity Units**	**Condition Criteria / Pass or Fail / Indicator Score**		**Condition**	**Ecological Features and Condition Notes**	**After Works**
Line of Trees	1.21	Treelines TL1 / TL2		Good (5 / 5 condition criteria passed = Good)	Treeline TL1 is located along the southern site boundary and is situated between two fences. The treeline comprises mature Hawthorn, Elder *Sambucus nigra*, Hazel and Elms. Treeline TL2 extends along the eastern site boundary, south of Hedgerow H2. This treeline is also located between two fences and comprises mature Hawthorn and Elms. Both treelines pass all condition criteria, achieving a Good condition. Both treelines are to be retained entirely.	1.21 units retained
		A – At least 70% of trees are native	Pass			
		B – Continuous canopy with gaps making up less than 10% of total area and no gap being more than 5m wide	Pass			
		C – One or more trees has veteran features	Pass			
		D – There is an undisturbed naturally vegetated strip of at least 6m on both sides	Pass			
		E – At least 95% of trees are in a healthy condition. There is little or no evidence of an adverse impact on tree health	Pass			
Native Hedgerow with Trees	1.28	Hedgerow H1		Good (9 / 10 condition criteria passed = Good)	Hedgerow H1 is a native hedgerow with trees and extends along the western site boundary. The hedgerow comprises Elms, Hazel, Elder, and Blackthorn. This hedgerow is to be entirely enhanced.	1.28 units enhanced
		A1 – Height	Pass			
		A2 – Width	Pass			
		B1 – Gap - hedge base	Pass			
		B2 – Gap - hedge canopy continuity	Pass			

		C1 – Undisturbed ground and perennial vegetation	Pass			
		C2 – Nutrient enriched perennial vegetation	Fail			
		D1 – Invasive and neophyte species	Pass			
		D2 – Current damage	Pass			
		E1 – Tree class	Pass			
		E2 – Tree health	Pass			
Species-rich Native Hedgerow	0.40	Hedgerow H2		Good (7 / 8 condition criteria passed = Good)	Hedgerow H2 is a species-rich native hedgerow, situated along the northeastern site boundary, adjacent to an off-site overflow car park. The hedgerow constitutes Hawthorn, Elder, Bramble *Rubus fruticosus*, Ash, Sycamore, and Elm. This hedgerow is to be entirely enhanced.	0.40 units enhanced
		A1 – Height	Pass			
		A2 – Width	Pass			
		B1 – Gap - hedge base	Pass			
		B2 – Gap - hedge canopy continuity	Pass			
		C1 – Undisturbed ground and perennial vegetation	Pass			
		C2 – Nutrient enriched perennial vegetation	Fail			
		D1 – Invasive and neophyte species	Pass			
		D2 – Current damage	Pass			

Table 4.1 Summary of baseline habitats and hedgerows on-site.

Post-Development

4.2.3. Tables 4.2 and 4.3 below summarise the habitats proposed on-site post-development, which are illustrated on Plan ECO4 and in Appendices 1 and 2. Plan ECO5 illustrates the retention, enhancement and loss of habitats and hedgerows on-site as part of the development.

4.2.4. The retention and enhancement of habitats and hedgerows on-site has been maximised where possible to reduce losses and increase gains, a core concept of the proposals. The landscape strategy includes the enhancement of the majority of existing woodland, with minor losses to facilitate access to the site. Additionally, an area of neutral grassland along the western and southern site boundary is to be enhanced, as are both hedgerows. The treelines will be retained entirely.

4.2.5. The landscape strategy will provide new habitats including amenity grassland, amenity planting, vegetated and unvegetated gardens, an attenuation pond, sustainable drainage feature and individual trees.

4.2.6. The proposed development will result in a net loss of 5.82 habitat units, which equates to a net loss of -54.36% in habitat units. Trading rules for high, medium and low distinctiveness habitats are not satisfied.

4.2.7. Despite this loss, the development will result in a net gain of 0.83 hedgerow units, which equates to a net gain of +28.90% in hedgerow units. Trading rules are all satisfied.

4.2.8. To satisfy habitat trading rules and to achieve positive Biodiversity Net Gain, compensatory habitat is required. The loss of lowland mixed deciduous woodland (a high distinctiveness habitat) requires the same habitat as compensation and it would not be feasible to establish this within the site, considering the small area available. The loss of neutral grassland (a medium distinctiveness habitat) requires the same broad habitat or a higher distinctiveness habitat as compensation. The proposed habitats are primarily of low distinctiveness (Modified Grassland, Vegetated Garden, Introduced Shrub and Sustainable Drainage System). Those habitats which are more distinct (Ponds (Non-Priority Habitat) and Urban Trees) are not of the same broad habitat type. Therefore, newly created habitats would not be able to off-set the loss of existing grassland. Thus, off-site compensation will be required to satisfy these trading rules. Satisfying the high and medium distinctiveness trading rules would inevitably satisfy the low distinctiveness trading rule.

4.2.9. The new (draft) Uttlesford Local Plan requests minimum biodiversity net gains of 20% for developments, although this is not yet adopted policy, compared to the 10% set out in the Environment Act 2021, a threshold which is expected to become mandatory in January 2024. To achieve a Biodiversity Net Gain for the development, off-site compensation will be required.

Created Habitats				
Proposed Habitat	**Landscape Plan Habitat**	**Target Condition**	**Biodiversity Units Delivered**	**Target Condition Notes**
Modified Grassland	Amenity grass	Moderate	0.07	Areas of amenity grassland are to be established throughout the site, adjacent to new housing, roads and paths. This grassland will likely be managed to maintain an amenity aesthetic and, as such, constitute a short sward length. These areas will be sown with a native species mix to ensure that at least six vascular plant species, including two forbs, are present per square metre. This will satisfy Condition Criterion A, which is essential for Moderate condition. Scattered scrub will account for less than 20% of the grassland and bare ground will not cover more than 10% of the area. Bracken cover within the grassland will be kept to below 20% cover and there will be an absence of invasive non-native plant species. This will result in Condition Criteria A, C, E, F and G being passed, resulting in a Moderate condition.
Ponds (Non-Priority Habitat)	Attenuation pond	Moderate	0.23	An attenuation pond is proposed within the southwest of the site and will provide functional drainage whilst being beneficial to wildlife. A portion of the pond will retain water for prolonged periods of the year. The pond will be managed to ensure that less than 10% of the water surface is covered by duckweed or filamentous algae. The pond will not be artificially connected to other waterbodies such as agricultural ditches and artificial pipework. Water levels will be allowed to fluctuate naturally throughout the year. No non-native plant species will be present, and the pond will not be artificially stocked with fish. Finally, the surface of the pond will be no more than 50% shaded by adjacent trees and scrub. This will result in 6 / 8 condition criteria being passed, achieving a Moderate condition.
Developed Land; Sealed Surface	Buildings, roads and footpaths / associated hardstanding	N/A	0	This includes all new buildings, roads, paths and associated infrastructure. A condition assessment is not applicable to this habitat type.
Introduced Shrub	Amenity planting	N/A	0.03	This includes amenity planting areas too large to be considered ornamental hedgerow. A condition assessment is not applicable to this habitat type.

Sustainable Drainage Feature	Swale	Moderate	0.03	Swale is proposed in the west of the site, adjacent to existing neutral grassland which is to be enhanced. The interior of the feature will be largely devoid of vegetation, thus Condition Criterion A, requiring a varied vegetation structure, will not be satisfied. The area towards the feature's perimeter, however, will transition into the surrounding neutral grassland and contain plant species that are beneficial to wildlife. The planting mix will be native, and the species suited to wetland or riparian situations. Invasive non-native species will not be present. This will result in 4 / 5 condition criteria being passed, thus resulting in a Moderate condition.
Unvegetated Gardens	Residential gardens	N/A	0	Residential gardens are assumed to be a mix of vegetated (90% of total garden area) and unvegetated (10% of total garden area). A condition assessment is not applicable to these habitats.
Vegetated Gardens	Residential gardens	N/A	0.45	
Individual Trees	Urban Trees	Moderate	0.20	Sixteen individual small trees are currently proposed within the site, adjacent to the attenuation pond and throughout the built form. A Moderate condition is considered appropriate for these trees.
Created Hedgerows				
Proposed Hedgerow	**Landscape Plan Habitat**	**Target Condition**	**Biodiversity Units Delivered**	**Target Condition Notes**
Non-native and Ornamental Hedgerow	Amenity hedge	Poor	0.16	New ornamental hedgerows will be planted throughout the site.

Table 4.2. Summary of post-development habitats and hedgerows on-site.

Enhanced Habitats					
Baseline Habitat	**Baseline Condition**	**Proposed Habitat**	**Target Condition**	**Biodiversity Units Delivered**	**Target Condition Notes**
Other Neutral Grassland	Moderate	Other Neutral Grassland	Good	2.22	Existing grassland in the west and south of the site will be enhanced. Currently the grassland fails Condition Criteria B, E and F and achieves a Moderate condition score. The grassland will be managed to ensure a varied sward height, thus passing Condition Criterion B. Species indicative of sub-optimal condition will be removed as necessary to pass Condition Criterion E. Furthermore, additional native species will be sown across the grassland to ensure that 10 or more vascular plant species per square metre are present, including forbs that are characteristic of the habitat type. This will pass Condition Criterion F. The above enhancements will result in 6 / 6 condition criteria being passed, thus achieving Good condition.
Lowland Mixed Deciduous Woodland	Moderate	Lowland Mixed Deciduous Woodland	Good	1.46	Woodland either side of the proposed access road will be enhanced. Currently, the woodland archives a condition indicator score of 30 / 39, meeting Moderate condition. Three additional indicator points are required to achieve a Good condition. The removal of litter from within the woodland would allow for an additional indicator point to be secured. Access to the woodland will be restricted to avoid ground compaction from trampling and the accumulation of litter in the future. A species-rich plant mix will be planted within the woodland to bolster the existing ground flora and establish a recognisable woodland National Vegetation Classification (NVC) plant community. This will provide a further indicator point. Furthermore, restricting herbivore access (such as Muntjac *Muntiacus reevesi*) to the woodland will result further indicator point. The above enhancements will result in a condition indicator score of 33 / 39, thus achieving Good condition.

Enhanced Hedgerows					
Baseline hedgerow	**Baseline Condition**	**Proposed Hedgerow**	**Target Condition**	**Biodiversity Units delivered**	**Target Condition Notes**
Native Hedgerow with Trees	Good	Species-rich Native Hedgerow with Trees	Good	1.82	As Hedgerow H1 is already in Good condition, the hedgerow will be enhanced by type rather than condition. Additional species will be planted within the hedgerow to ensure that five or more native woody plant species are present. This would allow for the hedgerow to be classified as species-rich.
Species-rich Native Hedgerow	Good	Species-rich Native Hedgerow with Trees	Good	0.53	As Hedgerow H2 is already in Good condition, the hedgerow will be enhanced by type rather than condition. This enhancement will involve the planting of native tree species within the hedgerow to provide both ecological and screening value.

Table 4.3. Summary of habitat and hedgerow enhancements on-site.

5. EVALUATION

5.1. The Principles of Evaluation

Biodiversity Net Gain – Good Practice Principle for Development

5.1.1. CIRIA, CIEEM and IEMA have developed principles of good practice to achieve Biodiversity Net Gain. These principles provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature through sustainable development. There are ten principles in total, and all principles must be applied together as one approach. The ten principles are set out below.

5.1.2. **Principle 1. Apply Mitigation Hierarchy.** Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensation for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.

5.1.3. **Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere.** Avoid impacts on irreplaceable biodiversity; these impacts cannot be offset to achieve no net loss or net gain.

5.1.4. **Principle 3. Be inclusive and equitable.** Engage stakeholders early, and involve them in designing, implementing, monitoring, and evaluating the approach to net gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.

5.1.5. **Principle 4. Address risks.** Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.

5.1.6. **Principle 5. Make a measurable net gain contribution.** Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.

5.1.7. **Principle 6. Achieve the best outcomes for biodiversity.** Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when:

- Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.
- Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
- Achieving net gain locally to the development while also contributing towards nature conservation priorities at local, regional, and national levels.
- Enhancing existing or creating new habitat.

- Enhancing ecological connectivity by creating more bigger, better and joined areas for biodiversity.

5.1.8. **Principle 7. Be additional.** Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).

5.1.9. **Principle 8. Create a net gain legacy.** Ensure net gain generates long-term benefits by:

- Engaging stakeholders and jointly agreeing practical solutions that secure net gain in perpetuity.
- Planning for adaptive management and securing dedicated funding for long-term management.
- Designing net gain for biodiversity to be resilient to external factors, especially climate change.
- Mitigating risks from other land uses.
- Avoiding displacing harmful activities from one location to another.
- Supporting local-level management of net gain activities.

5.1.10. **Principle 9. Optimise sustainability.** Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

5.1.11. **Principle 10. Be transparent.** Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Lawton's Principle

5.1.12. Principles for enhancing England's wildlife sites were developed as part of the Lawton Review[6]. Across the UK, these principles can be used to design Biodiversity Net Gain activities to boost wildlife sites. They are:

- Improving the quality of wildlife sites;
- Increasing the size of the wildlife sites;
- Enhancing connections between, or joining up wildlife sites;
- Creating new wildlife sites; and
- Reducing pressure on wildlife sites.

5.2. Post-Development Evaluation

5.2.1. The site's contribution to Biodiversity Net Gain has been assessed with due regard to the principles outlined and discussed above.

5.2.2. The landscape strategy includes new habitats, including amenity grassland, amenity planting, vegetated and unvegetated garden, an attenuation pond, sustainable drainage feature and individual trees. Existing grassland and woodland will be enhanced, as will both hedgerows, increasing the value of these habitats to wildlife. Both treelines will be retained. Considering the small size of the site, effort has been made to maximise the retention and enhancement of ecological features.

[6] Department for Environment, Food and Rural Affairs (2010). *Making Space for Nature: A Review of England's Wildlife Sites*, DEFRA.

Site Baseline	Habitat Units	10.71
	Hedgerow Units	2.89
Post-intervention	Habitat Units	4.89
	Hedgerow Units	3.72
Total Net Unit Change	Habitat Units	-5.82
	Hedgerow Units	+0.83
Total Net Percentage Gain	**Habitat Units**	**-54.36%**
	Hedgerow Units	**+28.90%**

Table 5.1. Summary of Biodiversity Net Gain results.

5.2.3. The new (draft) Uttlesford Local Plan requests minimum Biodiversity Net Gains of 20% for developments, although this is not yet adopted policy compared to the 10% set out in the Environment Act 2021, a threshold which is expected to become mandatory in January 2024. To achieve a Biodiversity Net Gain for the development, off-site compensation will be required.

6. SUMMARY AND CONCLUSIONS

6.1. Ecology Solutions was commissioned in October 2023 by BAYA Group on behalf of E&A Securities to assess, through the application of the Biodiversity Metric 4.0 Calculation Tool, the net change in biodiversity for the proposed development at Land to the West of Clatterbury Lane, Clavering, Essex.

6.2. The Biodiversity Net Gain Assessment has been prepared in support of a planning application, comprising an 'Outline application with all matters reserved except access for up to 28 dwellings (Class C3) including public open space, sustainable drainage systems, landscaping and associated infrastructure and development'.

6.3. The Biodiversity Metric 4.0 was used to calculate the pre-development baseline units. A total of 10.71 baseline habitat units and 2.89 hedgerow units are present pre-development. The proposed development will result in a net loss of 54.36% in habitat units and a net gain of 28.90% in hedgerow units. Trading rules for habitats are not satisfied.

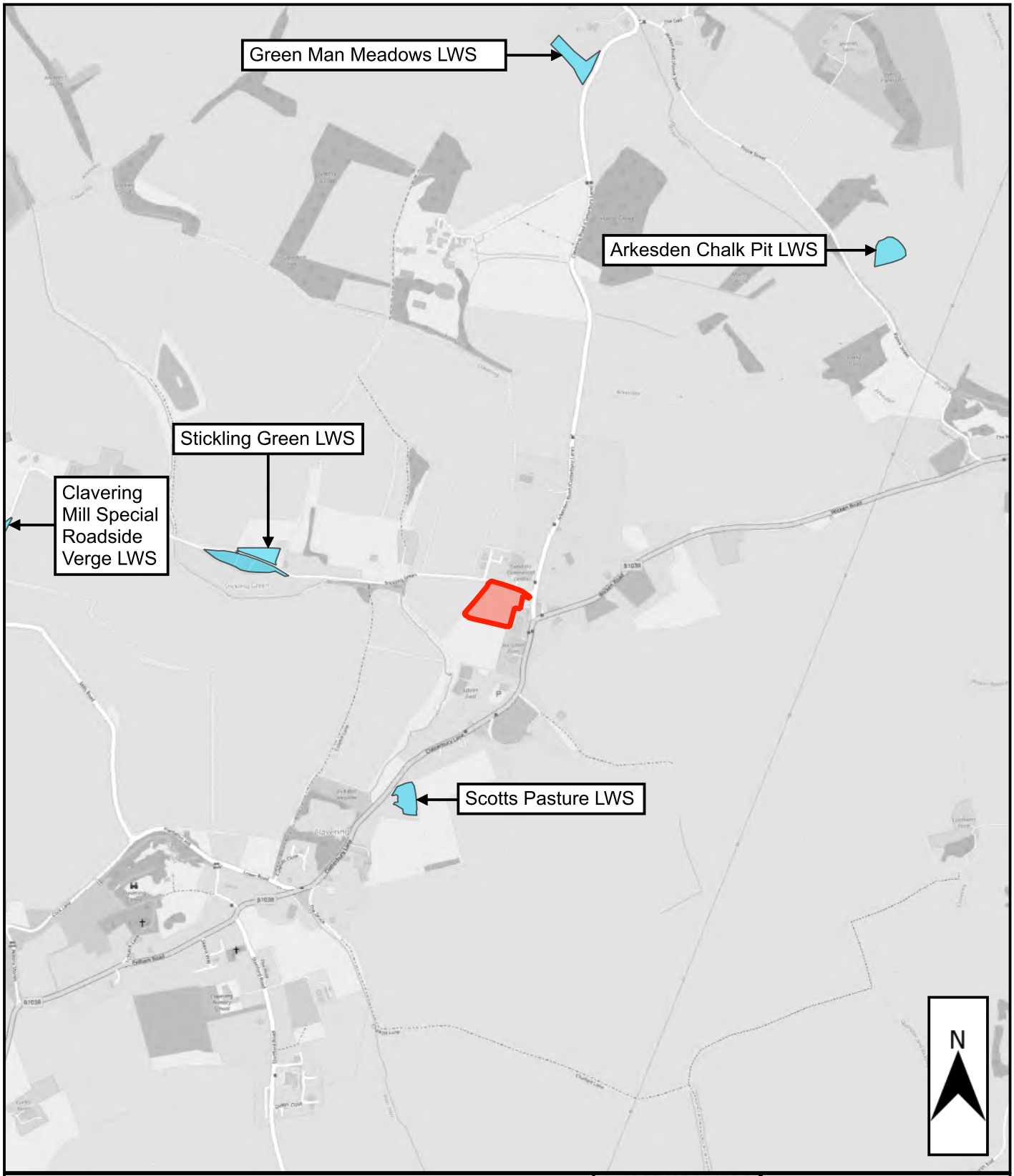
6.4. The landscape scheme has been designed to maximise retention and enhancement of existing habitats where possible. New habitats will include amenity grassland, amenity planting, vegetated and unvegetated garden, an attenuation pond, sustainable drainage feature and individual trees. The provision of these habitats and enhancements will be of benefit to wildlife.

6.5. To achieve a Biodiversity Net Gain for the development, off-site compensation will be required.

PLANS

PLAN ECO1

Site Location and Ecological Designations



KEY:

- SITE BOUNDARY
- LOCAL WILDLIFE SITE (LWS)

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11745: LAND TO THE WEST OF CLATTERBURY LANE, CLAVERING, ESSEX

PLAN ECO1: SITE LOCATION AND ECOLOGICAL DESIGNATIONS

Rev: A

Dec 2023

PLAN ECO2

Ecological Features

KEY:

- SITE BOUNDARY
- NEUTRAL GRASSLAND
- LOWLAND MIXED DECIDUOUS WOODLAND
- SPECIES-RICH NATIVE HEDGEROW WITH TREES
- NATIVE HEDGEROW WITH TREES
- TREELINE

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PLAN ECO2: ECOLOGICAL FEATURES

Rev: A

Dec 2023

PLAN ECO3

Baseline Habitats

KEY:

SITE BOUNDARY

HABITATS BASELINE

LOWLAND MIXED DECIDUOUS WOODLAND

OTHER NEUTRAL GRASSLAND

HEDGEROWS BASELINE

LINE OF TREES

NATIVE HEDGEROW WITH TREES

SPECIES-RICH HEDGEROW

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PLAN ECO3:
BASELINE HABITATS

Rev: A

Dec 2023

PLAN ECO4

Post-Development Habitats

KEY:

SITE BOUNDARY

HABITATS PROPOSED

- DEVELOPED LAND; SEALED SURFACE
- INTRODUCED SHRUB
- LOWLAND MIXED DECIDUOUS WOODLAND
- MODIFIED GRASSLAND
- OTHER NEUTRAL GRASSLAND
- PONDS (NON-PRIORITY HABITAT)
- SUSTAINABLE DRAINAGE SYSTEM
- VEGETATED GARDEN

HEDGEROWS PROPOSED

- NON-NATIVE AND ORNAMENTAL HEDGEROW
- SPECIES-RICH HEDGEROW WITH TREES

INDIVIDUAL TREES PROPOSED

- SMALL URBAN TREE

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11745: LAND TO THE WEST OF CLATTERBURY LANE, CLAVERING, ESSEX

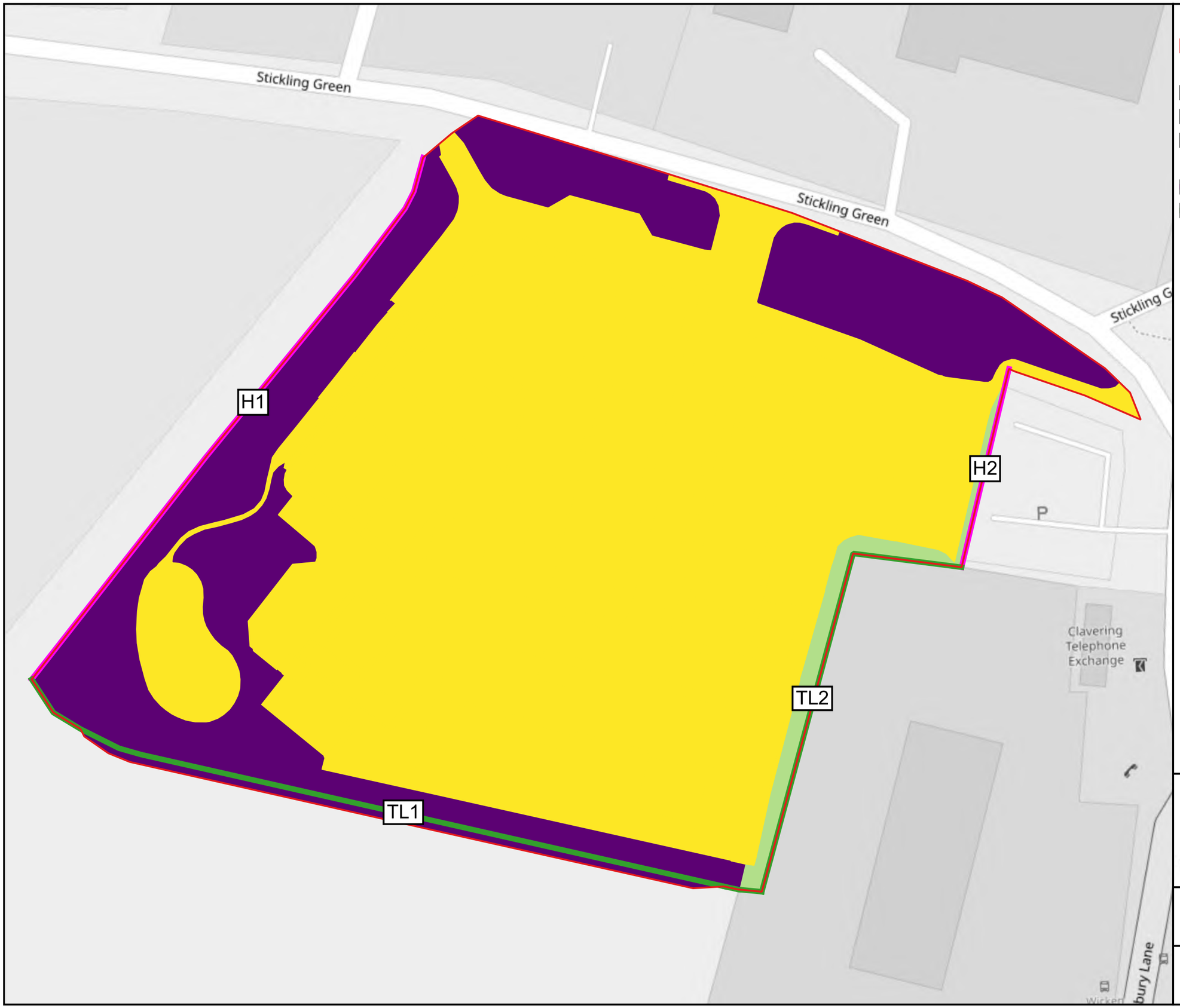
PLAN ECO4:
POST-DEVELOPMENT HABITATS

Rev: B

Dec 2023

PLAN ECO5

Retention, Enhancement and Loss



KEY:

- SITE BOUNDARY

HABITAT RETENTION

- ENHANCED
- RETAINED
- LOST

HEDGEROW RETENTION

- ENHANCED
- RETAINED

N

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APPENDICES

APPENDIX 1

Proposed Site Plan
(Drawing No: BH002_SP.01, Nov 2023)
(BAYA Group)

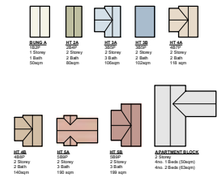
01 Proposed Site Plan
1:1000 @ A3 / 1:500 @ A1

Development Summary

Proposed Development
2no. 1 Bed Flats (50sqm)
4no. 2 Bed Flats (63sqm)
2no. 1 Bed Bungalows
4no. 2 Bed
9no. 3 Bed
4no. 4 Bed
3no. 5 Bed

TOTAL: 28no. Units

Drawing Key



Rev	Description	By	Date
P1	Issued for Planning	MJP	XX.XX.XX

APPRAISAL

Proposed Site Plan

Site
Land to the West of Clatterbury Lane, Clavering, Essex

Date	Drawn	Checked
Nov 2023	MJP	XXX

Scale
1:1000 @ A3 / 1:500 @ A1

Drawing No: BH002_SP.01

Rev:

PROJECTS BAYA

General Notes

General Notes

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Cambridge.
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APPENDIX 2

Strategic Landscape Masterplan
(Drawing No: 1055-DLA-ZZ-DR-L-0001, Rev P02,
01/12/23) (Dutch Landscape Architects)

North

LEGEND

1. A group of existing mature trees will be retained along Stickling Green, The area will be under planted with under-storey shrub species to create a robust buffer to the main road.
2. The existing landscape will be retained and enhanced creating a wildlife meadow with wildlife pond. New banks of shrubs and grasses will provide further enhancement.
3. The existing entrance will be retained and repurposed as a pedestrian only access point.
4. A new pedestrian only access will be created ensuring quick and easy access to the village ameneties.
5. Buffer planting to the site boundaries will help screen views into the site.
6. A nature area will be created from existing grassland with a swale incorporated and informal access routes through.
7. Informal play provisions will be located throughout the POS creating natural & nature friendly play opportunities.
8. A green spine with native trees and grassland to provide a link between the North and South of the site.
9. Private car park to residential block
10. Visitor parking locations
11. Residential rear gardens
12. Retained and enhanced shelterbelt to screen views in
13. Small street trees
14. Swale and pond connected to create an integrated attenuation and wildlife solution
15. Secluded willdife area with native trees, understory planting and wetland access
16. Native tree planting

Landscape Strategy

The masterplan presents a dynamic landscape with an natural open space to the west and housing parcel to the east. The architecture and landscape take inspiration from the local setting. The focus of the design was to create a landscape that follows the key local characteristics while retaining and enhancing the existing mature vegetation.

Secondary roadways create natural shared community spaces with safe and easy access to the western public openspace and the surroudning amenities, embedding the development into the local landscape.

The site levels provide the opportunity to create swales and water features to create a stream edge feel that is key local characteristic of developments currently missing from the site. This in turn allows for the creation of a wildlife pond as well as making use of the existing grassland to create meandering pathways and informal pockets of play within a natural and educational setting.

Within such a contained site it is important to provide areas just for nature, the design helps to ensure that these areas are left undisturbe with an area to the south west of the pond able to create a sanctuary in close proximity to the pond allowing space for both nature and the new development to coexist.

Precedent Images

Land Lying West of Clatterbury Lane, Clavering - Strategic Landscape Masterplan

Scale 1:500 @ A1

0 5 10 20 30 40m

Dutch landscape architects.

Client: BAYA Group

Drawing Number: 1055-DLA-ZZ-DR-L-0001

Revision: P02

Date: 01/12/23

Drawn by/ Chk: TA/WD

Scale: 1:500@ A1

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