

BIODIVERSITY NET GAIN (BNG) ASSESSMENT

Land to Rear of 32 Church Street, Weldon, Corby, NN17 3JY



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March 2024-V1

Biodiversity Net Gain- 32 Church Street, Weldon, Corby, NN17 3JY

1. Introduction

1.1 Greenleaf Ltd has been commissioned by Alpine Planning Ltd in regard to ecological matters relating to a planning application submitted to North Northamptonshire Council for a single residential dwelling and garage with a private garden, parking spaces, patio and driveway via an existing gated entrance off Church Road. The site is centred at grid reference: SP930894. The proposal includes landscaping to include new tree and shrub planting and species rich grassland within the red line boundary which extends to 1,380m² or 0.138ha.

1.2 Biodiversity Net Gain- Paragraph 170 of the National Planning Policy Framework (NPPF-2021) states that 'Planning policies and decisions should contribute to and enhance the natural and local environment by ... minimising impacts on biodiversity and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.' Furthermore, North Northamptonshire's Joint Core Strategy 2011-2031 requires developments to demonstrate that a biodiversity net gain can be achieved.

1.3 In order to demonstrate measurable biodiversity net gain, the statutory Defra Metric Small Sites Calculation Tool has been used to calculate the biodiversity value of the Site both for the pre-development and post-development scenarios. The statutory Biodiversity Defra Metric is considered to be the emerging national standard and therefore appropriate to apply for this proposed development. There is also no existing locally derived metric that can be applied. A small residential site is defined in the statement as one providing less than 10 dwellings on a site smaller than 1hectare. For non-residential schemes, a small site is defined as where the floor space that is to be created is less than 1000m² or where the site area is less than one hectare.

2. Site Description

2.1 The application site is situated in the village and civil parish of Weldon on the outskirts of Corby in the north Northamptonshire District. The site is located approximately 10km west of Oundle and 10km north-east of Kettering. The site is accessible from a gated entrance off Church Street and the nearest main road is the A43 approximately 0.4km north. The application site comprises a roughly rectangular shaped parcel of land extending to approximately 930m².

2.2 The land within the site forms an area of vegetated garden to the rear of the existing dwellings and is laid mostly to amenity lawn with a range or ornamental plants and shrubs. The proposed location of the dwelling is within a clearing of the scattered trees with sparse understory and with frequent brush and stone piles. A number of semi-mature trees require removal to facilitate the new access and footprint of the buildings, approximately 11 in total.

2.3 On the basis of the information reviewed, it is clear that the site does not contain any identified nature conservation designations. The closest identified statutory ecological designation to the site is Cowthick Quarry (SSSI) approximately 1.2km south-west of the site. The site does not contain any priority habitats but is adjacent to a block of broadleaved deciduous woodland to the immediate east and which is a UK Priority Habitat.

3. Baseline Conditions

3.1 A UK Habitats site survey was undertaken in order to complete the pre-development net gain calculation to establish the biodiversity value of the Site, quantified by the number of biodiversity units.

3.2 The internal areas of the site are formed almost entirely by modified grassland forming part of the garden to the existing dwelling and a number of mature and semi-mature scattered trees. The garden contains a range of ornamental plants and shrubs including daffodil, snow drop, primrose, viburnum, laurel, bamboo, privet, wild strawberry, comfrey, fuchsia, rhododendron, crocosmia, and snowberry. A 2m high timber post and featheredge fence, encroached with creeping ivy, runs along the east boundary with the woodland, a brick wall forms the south boundary with the proposed access and the north boundary is formed by scattered trees and scrub vegetation with a post and rail fence along Oundle Road.

3.3 Modified grassland forms the main site habitat. The grassland present supports a high proportion (approximately 50% or more) of Perennial Rye-grass (*Lolium perenne*), with scattered rarely occurring Meadow Grasses *Poa* sp. Forbs were recorded to be similarly scattered and include nipplewort (*Lapsana communis*), ground ivy (*Glechoma hederacea*), white clover (*Trifolium repens*), daisy (*Bellis perennis*), bristly ox-tongue (*Helminthotheca echioides*), creeping thistle (*Cirsium arvense*), nettle (*Urtica dioica*), ribwort plantain (*Plantago lanceolata*), docks (*Rumex spp*). Flowering plants included white dead nettle (*Lamium album*), herb Robert (*Geranium robertium*), cleavers (*Galium aparine*), buttercup (*Ranunculus repens*), purple dead nettle (*Lamium purpureum*) and Dove's foot cranesbill (*Geranium molle*).

3.4 Tall ruderal vegetation is frequent interspersed within the site margins, fences, walls and scrub belt to the north. Species included bramble (*Rubus fruticosus*), blackthorn (*Prunus spinosa*), common nettle (*Urtica dioica*), Lords and Ladies (*Arum maculatum*), teasel (*Dipsacus fullonum*), hogweed (*Heracleum mantegazzianum*), garlic mustard (*Alliaria petiolate*), cow parsley (*Anthriscus sylvestris*) and willowherb (*Chamerion angustifolium*).

3.5 South-east of the site is a substantial area of woodland which extends into the site itself. The woodland forms part of a Tree Preservation Area (TPO/75/2). The site contains a range of semi-mature and mature scattered trees including ash (*Fraxinus excelsior*), field maple (*Acer campestre*), sycamore (*Acer pseudoplatanus*), holly (*Ilex aquafolium*), olive and cypress (*Cupressus leylandii*).

3.6 The habitat descriptions below should be read in conjunction with this plan and any associated Target Notes. Habitats identified during the survey are all classified as vegetated garden (amenity lawn, ornamental plants and shrubs etc.) and a number of scattered trees of varying ages.

4. BNG Assessment

4.1 Baseline habitat survey information and the proposed site layout plan have been used to calculate the post-development scenario calculation. The calculator requires that habitat distinctiveness and condition are determined together with the area of habitat that will be affected (or the length of habitat when considering linear features such as hedgerows). There are no existing habitats on site requiring a habitat condition assessment.

4.2 Relevant policies and policy maps, particularly those concerning green infrastructure provision and habitat connectivity / wildlife corridors, that might affect the positioning and type of habitat created were also reviewed. Taken together, the above calculations will identify the net gain/loss in

'biodiversity unit' (BU) terms. Following the initial calculation, the proposed development is reviewed to help achieve further BU through habitat retention, creation and enhancement, both within and off-site (if appropriate). The outcome of the above process then determines whether the proposed development is likely to result in an overall BU loss or gain. BNG of 10% for small sites is not mandatory until April 2024 and so only a 1% net gain or more is needed to be demonstrated.

4.3 A detailed planting and landscaping schedule is not submitted with the application, however a plan showing the proposed areas of modified grassland, shrubs and trees is shown in Figure 4 of Appendix 1 and showing the proposed habitats along with a habitat map by area and calculation using the statutory Biodiversity Defra Metric (supporting Excel worksheet provided).

5. Habitat Loss

5.1 The proposal requires the loss of approximately 1,380m² of vegetated garden to facilitate the proposed access, buildings, driveway, patio and area of species rich amenity grassland creation.

6. Habitat Creation/Enhancement

6.1 In terms of enhancement the vegetated gardens will be laid to lawns using Germinality WFG20 lawn mix which is species rich. To the front of the dwelling will be further grassland using the same seed type.

The proposal also includes the planting of a minimum of 10 small trees and 5 medium size class trees as indicated on the proposal plan in Figure 4.

7. Habitat Creation/Enhancement

7.1 Tree Planting:

A total of 10 trees to be planted as replacements for the 11 trees to be removed as detailed in the arboricultural report. This will incorporate 5 medium sized tree specimens (30-60cm DBH) and 5 small sized trees (<30cm DBH). The location of the 5 medium sized trees is shown in Figure 4 of Appendix 1 as labelled and the remaining 5 trees scattered around the margins of the garden. Suitable tree specimens would include:

- Oak-*Quercus robur*
- Silver Birch-*Betula Pendula*
- Field Maple-*Acer campestre*
- Sycamore- *Acer pseudoplatanus*
- Holly- *Ilex aquafolium*
- Beech- *Fagus sylvatica*
- Magnolia-
- Horse Chestnut- *Aesculus hippocastanum*

7.2 Grassland Seeding:

The boundary garden which borders the dwelling on three sides will be seeded with Germinality WFG20 species rich amenity grass. This would make a positive contribution towards a biodiversity net gain.

Ground Preparation

Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success so aim to control weeds and produce a good quality

seed bed before sowing. To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll, or tread, to produce a firm surface. Loamy soils are easily worked and can usually be prepared for seeding in either the autumn or spring.

Sowing

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

First Year Management

Most of the sown meadow species are perennial and are slow to establish. Soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, are great for bugs, and they will die before the year is out. Avoid cutting the annual weeds until mid to late summer, especially if the mixture contains Yellow Rattle, or has been sown with a nurse of cornfield annuals. Then cut, remove and compost. Early August is a good time. This will reveal the young meadow, which can then be kept short by grazing or mowing through to the end of March of the following year. Dig out any residual perennial weeds such as docks.

Management Once Established

In the second and subsequent years sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing. Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed. Loamy soils tend to be more fertile, encouraging the growth of grasses. Increasing the frequency of mowing or grazing to remove surplus grass can help to maintain a balanced sward structure with a good flower content and this will facilitate the target of achieving good habitat condition assessment.

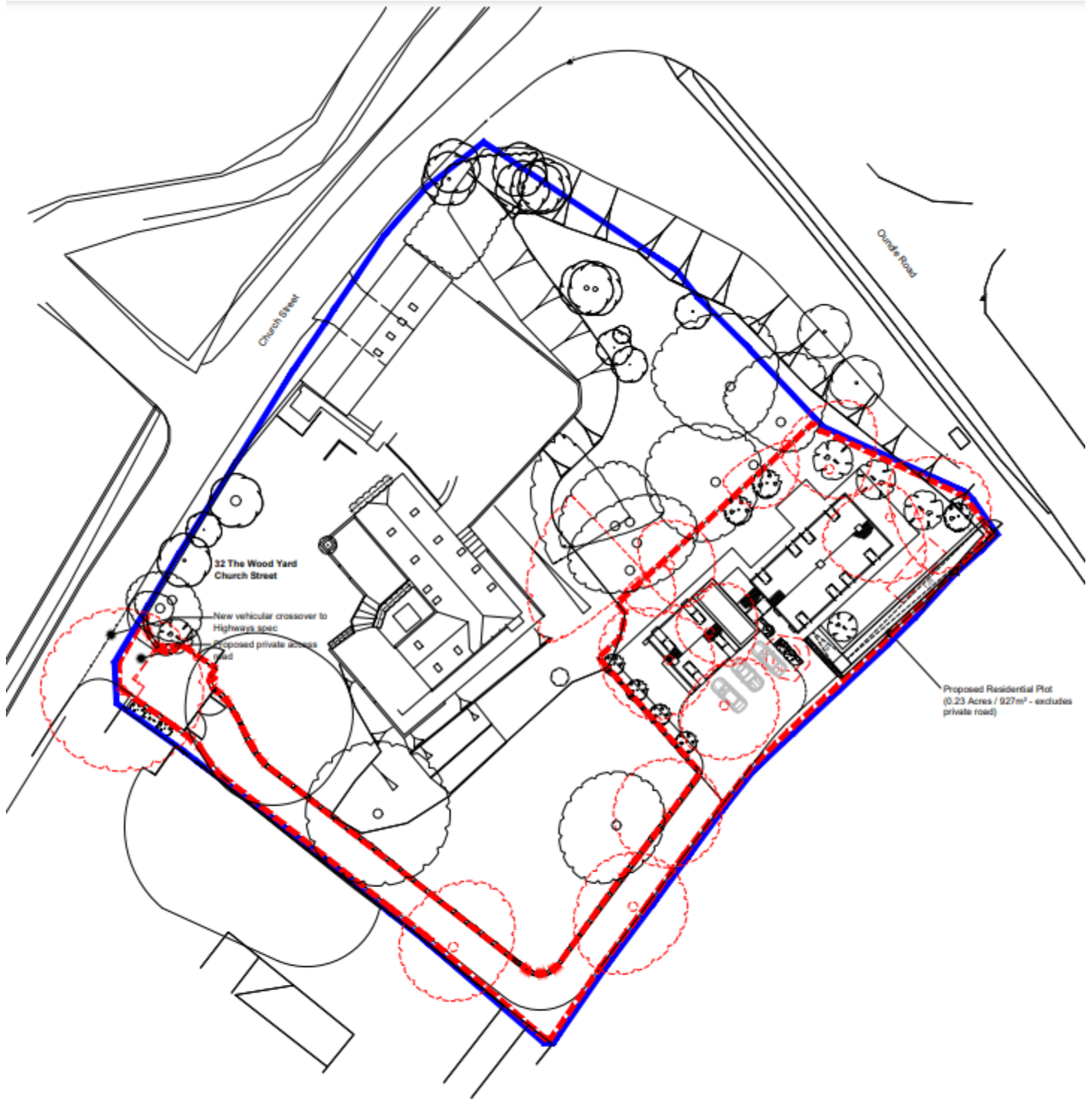
8. BNG Result

8.1 Implementation of the above habitat enhancements shows a biodiversity net gain of approximately **+12% (0.85) habitat units**. The scheme is therefore considered to be policy compliant with the BNG net gain of 10% which is not yet mandatory but will become mandatory on the 2nd April 2024. Further details will be required to be provided by way of a suitably worded planning condition for the implementation of the habitat management and monitoring plan HMMP.

APPENDIX 1



Figure 1- Existing Site Layout Plan



02 - Proposed Site Plan (Scale 1:250 @ A0)

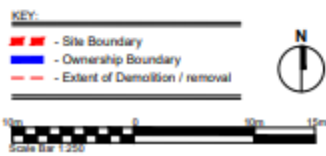


Figure 2- Proposed Site Layout Plan and Trees Marked for Removal



Figure 3. *Proposed development site location (Google Earth, March 2022)- Habitat Baseline*



Figure 4- Proposed Layout Plan with BNG Enhancements



D1 - Proposed Site Boundary Treatments (Scale 1:200 @ A0)

	Site Boundary
	Ownership Boundary
	Proposed Retained Stone Wall
	Proposed Stone Wall (Standard) To 1.8m in Height
	Existing Retained Brick Wall
	Proposed Brick Retaining Wall at Grade Only Meet Manufacture Code
	Proposed Laurel Hedge/Screen
	Proposed Metal Fence Combined With Hedge/Screen
	Proposed Timber Fence 1.8m Tall
	Proposed Planting Zone
	Proposed Vehicle Gate 1.8m Tall
	Proposed Pedestrian Gate 1.8m Tall



B - Proposed Stone Wall To Match Existing Graded Up To 1.8m Tall



G - Closed Timber Fence 1.8m Tall



C - Proposed Vehicle Gates 1.8m Tall



H - Proposed Planting



D - Existing Retained Brick Wall



J - Proposed Brick Retaining Wall To Grade with Metal Grate/rope Over



L - Proposed Metal Fence 1.2m Tall



K - Proposed Pedestrian Gate 1.8m Tall



A - Existing Retained Stone Wall



F - Proposed Laurel Hedge/Screen with Metal Fence as Item C



I - Existing and Retained Boundary Condition Fronting Outside Road

- The existing building has been built on a steep slope and has been designed to sit on a part of a hillside. The building is situated on a steep slope and the ground level is not uniform. All construction work must be done in accordance with the relevant codes of practice and to a standard which is in accordance with the relevant codes of practice.
- While the drawing can be used as a guide for the construction of the boundary treatments, it is not intended to be a detailed specification. All construction work must be done in accordance with the relevant codes of practice and to a standard which is in accordance with the relevant codes of practice.
- Repeat all areas and dimensions precisely to the satisfaction of the relevant authorities.
- Do not scale from this drawing. If you have any queries, please contact the relevant authorities.
- The contractor is responsible for obtaining all necessary permissions and approvals.
- All proposed construction is to be done in accordance with the relevant codes of practice.
- It is the responsibility of the client to ensure that all proposed planting is done in accordance with the relevant codes of practice and that the works are done in accordance with the relevant codes of practice.
- All relevant party wall agreements are to be obtained and agreed in writing before any work commences.
- Exclude any agreements with utility companies to be agreed and done in accordance with the relevant codes of practice.
- Unless otherwise stated, all materials to be used must be of a standard which is in accordance with the relevant codes of practice and that the works are done in accordance with the relevant codes of practice.



Figure 5- Proposed Boundary Treatments



Figure 5.- Gated access off Church Street (left), amenity lawn (right)



Figure 6.- Scattered trees and scrub to north boundary (left), scattered trees within garden (right)



Figure 7.- Location of proposed dwelling and garage (left), ivy clad trees within garden (right)



Figure 8.- Location of proposed dwelling and garage (left), east boundary fence (right)



Figure 9. North-east corner of garden (left), dwelling and barn to the west (right)

APPENDIX 2- BNG Small Site Results Summary (See Excel Metric for full details)

Sheet Name	Site Details
1. Planning authority:	North Northamptonshire District Council
2. Site name:	Land to Rear of 32 Church Street, Weldon
3. Applicant:	Alpine Planning Ltd
4. Planning application type:	Full planning consent
5. Planning application reference:	
6. Metric completed by (name & job title):	James Hodson- Senior Ecologist
7. Date of metric completion:	29 February 2024
8. Revision number:	V1
9. Masterplan document title / drawing number:	280/001

Net Gain Targets

10. Targeted % increase in Units	<i>10a. Habitat</i>	10.00
	<i>10b. Hedgerow</i>	10.00
	<i>10c. River</i>	10.00


11. Targeted increase in Units if baseline value is zero - agreed with local planning authority	<i>11a. Habitat units</i>	0.00
	<i>11b. Hedgerow units</i>	0.00
	<i>11c. River units</i>	0.00

Site Name:	Land to Rear of 32 Church Street, Weldon
Sheet Name	Desktop Assessment

Development

14. Select the type of proposed development. If Other provide details at Q.24 below	Residential	Site area must be less than 10,000 m2
15. Site area (m ²)	1380	
N/A		
17. Number of dwellings proposed within the development site	Between 1 - 9 dwellings	

Designated sites and priority habitats

18. Any designated sites on or within 500m of the site?	No	
19. Any priority habitats on or within 500m of the site?	Within 500m of site boundary	Consider using main metric tool 
20. List the designated sites and/or priority habitats	Broadleaved Deciduous Woodland	
21. Information sources used for assessment of designated sites and priority habitats (See guidance)	Magic.gov.uk and NBRC	

Site walkover

22. Site walkover completed?	Walkover completed by qualified ecologist	
23. Date of site walkover - DD/MM/YY	16/01/2024	Site walkover data valid until 16/07/24
24. Who completed the walkover? (Name and job title)	James Hodson- Senior Ecologist	

Site Name	Land to Rear of 32 Church Street, Weldon
Sheet Name	Headline Results

Headline Results

Headline	BNG Targets Met ✓
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Trading Rules	Trading Rules Satisfied ✓
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Next steps	Submit metric to LPA
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Baseline Units	Habitat units	0.7627	
	Hedgerow units	Zero Units Baseline	
	River units	Zero Units Baseline	

Post-development Units	Habitat units	0.8566	
	Hedgerow units	0.0000	
	River units	0.0000	

Total net unit change	Habitat units	0.0939	📄
	Hedgerow units	0.0000	📄
	River units	0.0000	📄

Total net % change	Habitat units	12.31%	📄
	Hedgerow units	% target not appropriate	
	River units	% target not appropriate	

Habitats units required to meet target	0.0000
Hedgerow units required to meet target	0.0000
River units required to meet target	0.0000

Site Name	Land to Rear of 32 Church Street, Weldon
Sheet Name	5. Area Habitats

Instructions:
 1. Enter data into 1a. Baseline habitats table
 2. Enter data on habitats to be created into 1b. Habitats to be created
 3. Enter data on habitats to be enhanced into 1c. Habitats to be enhanced
 4. Enter data on individual trees into 1d. Tree area calculator

All Key Rules Satisfied

1a. Baseline habitats

Ref	Habitat		C. Strategic significance	Areas (m ²)			Baseline results		
	A. Broad Habitat	B. Habitat type		D. Total Area	E. Area retained	F. Area enhanced	Total habitat units onsite	Area Lost	Units lost
1	Urban	Vegetated garden	Area/compensation not in local strategy/ no local strategy	1380.00	0.00	0.00	0.28	1380.00	0.276
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
Trees	Individual trees	Urban/rural tree	Formally identified in local strategy	529.03	81.39	0.00	0.4867	447.64	0.4118
Totals (areas excl Trees)				1380.00	0.00	0.00	0.7627	1380.00	0.6878
Error Check 1				Areas Acceptable ✓					
Error Check 2				Areas Acceptable ✓					
Error Check 3				Areas Acceptable ✓					

1b. Habitats to be created

Ref	A. Broad Habitat	B. Habitat type	Condition Assessment		D. Strategic significance	E. Total Area (m ²)	Habitat units created onsite	Comments	
			Acceptable condition options	C. Targeted condition				User comments	LPA comments
1	Grassland	Modified grassland	Moderate, Good	Moderate	Area/compensation not in local strategy/ no local strategy	363.00	0.1259	Area of new modified grassland around house seeded with Germinality WFG20	
2	Urban	Introduced shrub	Condition Assessment N/A	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	120.00	0.0232	Introduced ornamental shrubs at garden entrance	
3	Urban	Developed land, sealed surface	N/A - Other	N/A - Other	Area/compensation not in local strategy/ no local strategy	452.00	0.0000	Area of new driveway	
4	Urban	Developed land, sealed surface	N/A - Other	N/A - Other	Area/compensation not in local strategy/ no local strategy	421.00	0.0000	Footprint of dwelling, garage and patio/paths	
5	Urban	Biodiverse green roof	Moderate, Good	Moderate	Area/compensation not in local strategy/ no local strategy	23.60	0.0106	Dwelling to have a Sedum based green roof with additional species.	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
Trees	Individual trees	Urban/rural tree	Moderate	Moderate	Area/compensation not in local strategy/ no local strategy	2034.72	0.6221		
Totals (areas excl Trees)						1379.60	0.7817		

1d. - Tree area calculator

Tree size (Diameter at breast height)	A. Total number of trees pre development	B. Number of trees retained (but not enhanced)	C. Number of trees enhanced	D. Number of new trees planted post development	Areas			
					Area pre development	Area retained	Area Enhanced by development	Area of new trees planted post development
Small - DBH ≤ 30cm	13	2	0	5	529	81	0	203
Medium - DBH > 30 to ≤ 90cm				5	0	0	0	1831
Large - DBH > 90cm					0	0	0	0
Total	13	2	0	10	529	81	0	2035

1e . Trading Summary

Broad Habitat Type	Trading Rules Satisfied ✓
Distinctiveness Band	Trading Rules Satisfied ✓