

FPCR | environment
& design



Appendix D Biodiversity Net Gain Report

Client

Bellway Homes

Project

**Cronton Road,
Cronton**

Date

December 2025

CONTENTS

1.0	NON-TECHNICAL SUMMARY	1
2.0	INTRODUCTION	2
3.0	LEGISLATION AND POLICY	3
4.0	METHODOLOGY	5
5.0	RESULTS	8
6.0	PROPOSALS	0
7.0	BIODIVERSITY NET GAIN CALCULATION	3
8.0	CONCLUSION	4
9.0	APPENDIX D1: SUREVY RESULTS	5
10.0	APPENDIX D2: CONDITION ASSESSMENTS	7
11.0	APPENDIX D3: RIVER CONDITION ASSESSMENT RESULTS	11

FIGURES

Figure 1: Baseline Habitats

Figure 2: Proposed habitats

Figure 3: Habitat Retention

Figure 4: Baseline Habitat Condition and Distinctiveness

Figure 5: Proposed Habitat Condition and Distinctiveness

Rev	Issue Status	Prepared/Date	Approved/Date
-	Final	PA/02.12.54	IH/ 09.12.54

1.0 NON-TECHNICAL SUMMARY

Report Scope and Methodology
FPCR were commissioned by Bellway Homes to undertake a Biodiversity Net Gain (BNG) assessment of Land at off Cronton Road, Cronton, to provide a baseline biodiversity score for the Site and compare this to proposals. Site proposals are for a outline application of up to 120 dwellings, with public open space, landscaping, sustainable drainage system (SuDs) and associated infrastructure. This assessment has been informed by a survey of the habitats present onsite, including condition assessments, undertaken on in January and April 2025.
Baseline
The Site is dominated by low distinctiveness modified grassland in poor condition. Habitats of higher biodiversity value, including the watercourses, hedgerows, other neutral grassland, individual trees and wet woodland, were recorded at the boundaries of the Site.
Proposals
Individual habitat type and condition targets within the proposed scheme have been informed by the Illustrative Landscape Masterplan (13294-FPCR-XX-XX-DR-L-0001 LANDSCAPE MASTERPLAN). The iterative design process, which led to the sites Illustrative Masterplan has sought to retain and buffer the higher distinctiveness habitats recorded at the boundary of the Site. The exception is the species poor hedgerow H2 and its associated mature tree resource which will be lost to facilitate access and appropriate visibility spays for the Site. A replacement species rich hedgerow will be planted outside the visibility splay. In total four pedunculate oak standards will be lost from the hedgerow (one large and three medium sized). A medium sized sycamore located along ditch D2 will also be lost to proposals. Proposals include the creation of wildflower meadow grassland, scrub, species-rich hedgerows, amenity grassland, native and non-native street trees. Realistic and deliverable proposed conditions have been targeted for these habitats. Proposals also include the enhancement of the boundary watercourses, through improvements to bank side vegetation and minor in-channel modifications.
Results
The Site will result in a 23% loss in habitat units, a 114.53% gain in hedgerow units and a 22.84% gain in watercourse units. An additional 4.29 units will be required to deliver a 10% gain in area habitat units. The required units can be delivered via one, or a combination of the following methods: habitat creation or enhancements on additional land under landowner control, the purchase of biodiversity units from a registered offsite provider, or statutory credits as a last resort. This assessment has therefore demonstrated that the proposals cannot deliver an onsite gain for area-based habitats that is compliant with national and local policy requirements.

2.0 INTRODUCTION

- 2.1 The following Ecological Impact Assessment (EclA) has been prepared by FPCR Environment and Design Ltd. (FPCR) on behalf of the Bellway Homes to accompany an outline planning application for the development of Cronton road, Cronton (Central OS Grid Ref: Central OS Grid Ref: SJ 49041 88316) herein referred to as 'the Site'.
- 2.2 This report accompanies an Ecological Impact Assessment (EclA) for the Site which has been undertaken to inform the development proposals and to provide recommendations for mitigation and enhancement. This report should therefore be read in conjunction with the accompanying EclA report (FPCR, 2025).

Site Context

- 2.3 The site is 4.32ha in extent and comprising a single field of intensively managed grassland, bound by native and non-native hedgerows, tree lines individual trees and a small area of wet woodland. To the north the Site is bordered by a small brook, which features rough grassland, scrub and individual trees on its margins.
- 2.4 The landscape beyond the site to the north and west is predominantly rural, consisting of arable and pasture. The built-up area of Cronton is located to the east of the site and a Public Right of Way (PRoW) runs through the site.

Proposals

- 2.5 The proposals for the site are to seek outline planning permission for up to 120 dwellings, with public open space, landscaping, sustainable drainage system (SuDs) and associated infrastructure.

Report Scope and Objectives

- 2.6 This Biodiversity Net Gain Report is based on the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance. The scope and objectives of this report are to:
- Summarise the results of the baseline UKHab Survey undertaken on the Site and to present the results of habitat condition assessment surveys following the Defra Statutory Biodiversity Metric Technical Guidance.
 - Provide an overview of the proposed habitats following completion of the scheme.
 - Present the results of the Statutory Biodiversity Metric assessment completed for the proposals.
 - Demonstrate the capacity for the proposals to demonstrate a net gain in biodiversity through the Statutory biodiversity Metric.

3.0 LEGISLATION AND POLICY

The Environment Act 2021

- 3.1 In England, biodiversity net gain is required under statutory frameworks introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). Under this framework, the majority of planning permission grants will be deemed to have been granted subject to a general biodiversity gain condition. This will require an objective for developments to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of all on-site habitats.
- 3.2 This is a pre-commencement condition requiring the provision of a Biodiversity Gain Plan to be submitted and approved before works can be commenced, but after planning permission has been granted.
- 3.3 In principle, the grant of planning permission is not within the scope of BNG, however it is important to consider as part of the consenting body's decision-making process how a scheme will be able to demonstrate BNG after permission is granted. Therefore, this biodiversity net gain report presents the results of a Biodiversity Net Gain assessment that has been completed in order to demonstrate how the proposals can be compliant with the requirements of the Environment Act.

Biodiversity Net Gain Hierarchy

- 3.4 The statutory framework allows for the 10% biodiversity gain to be delivered through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits. However, as set out in Articles 37A and 37D of the Town and Country Planning (Development Management Procedure) (England) Order 2015, development must consider the biodiversity net gain hierarchy when designing scheme proposals. This sets out hierarchy of actions as follows:
 - a) First, for all medium, high and very high distinctiveness habitats, the avoidance of any adverse effects.
 - b) Where these can't be avoided, mitigating any adverse effects on medium, high and very high distinctiveness habitats.
 - c) Then, for all on-site habitats (including low distinctiveness), adverse effects should be compensated by in accordance with the following hierarchy:
 - Prioritising the enhancement of existing habitats; then
 - Creation of on-site habitats;
 - Allocation of registered off-site unit gains; then
 - Purchase of biodiversity credits
- 3.5 Proposals must demonstrate how the biodiversity hierarchy has been applied to or provide the reasons for any deviation. This biodiversity net gain hierarchy is distinct from the mitigation hierarchy set out by CIEEM which is addressed in the accompanying Ecological Impact Assessment (FPCR, 2025) where relevant.

National Planning Policy Framework

- 3.6 The National Planning Policy Framework (NPPF) 2024 seeks to ensure that the planning system contributes to and enhances the natural and local environment, protect and enhance biodiversity and geodiversity by:

"187. d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

193. when determining planning applications, local planning authorities should apply the following principles: ...

193. d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."

Mandatory Biodiversity Net Gain Minimum Reporting Requirements

- 3.7 The Government's BNG Planning Practice Guidance (PPG)¹ sets out the minimum requirements of any planning application subject to mandatory BNG to present as part of any submission in order to validate the application. For ease of reference, the minimum information required has been set out in Table 1 below.
- 3.8 Additional detail and information appropriate to the application is provided within this report in order to assist Carlisle City Council in their decision-making process and to provide confidence that the scheme will be able to demonstrate a mandatory BNG through the provision of a Biodiversity Gain Plan following receipt of planning permission, in accordance with the PPG.

Table 1: Checklist of Minimum BNG Reporting Requirements for Planning Application Validation

Minimum Requirements in BNG PPG	Statement of Relevance to the Site
<i>Confirmation that the Site is believed to be subject to the mandatory BNG condition.</i>	The Site does not meet any of the exemption criteria and so it is understood that the site will be subject to the mandatory BNG condition.
<i>The pre-development biodiversity value of the Site, either on the data of application or an earlier proposed date (as appropriate).</i>	The accompanying Statutory Metric completed for the scheme provides the pre-development biodiversity value of the Site. The values are also presented within this report.
<i>Where an earlier date is proposed, provide the reasons for proposing that date.</i>	The 'relevant date' is proposed to be the latest date that a Site survey was completed during which observations were made to check if any significant changes in habitats had occurred. For the Site, this will be 16th April 2025. This is considered to be an appropriate date as it is

¹ Gov.uk (2024), Biodiversity Net Gain. Available at: Biodiversity net gain - GOV.UK

Minimum Requirements in BNG PPG	Statement of Relevance to the Site
	within the date that ecological data is considered valid (two years, as recommended by CIEEM).
<i>The completed metric calculation showing the calculations of the pre-development biodiversity value of the on-site habitat on the data of application (or proposed earlier date) including the publication date of the biodiversity metric used.</i>	The Statutory Biodiversity Metric, published in July 2025, was used to calculate the pre-development value of the Site. The completed metric has been provided alongside this BNG report.
<i>A statement whether activities have been carried out prior to the date of application (or proposed date), that result in loss of on-site biodiversity value (degradation).</i>	This statement confirms that FPCR and Bellway Homes are not aware of any habitat degradation on-site.
<i>A description of any irreplaceable habitat (as set out in column 1 of the Schedule to the Biodiversity gain Requirements (Irreplaceable Habitat) Regulations 2024) on the Site, that exists on the date of application (or an earlier proposed date)</i>	This statement confirms that no irreplaceable habitat has been identified on-site.
<i>Plan(s), drawn to an identified scale and showing the direction of North, showing on-site habitat existing on the date of application (or earlier proposed date) including any irreplaceable habitat (if applicable).</i>	Figure 1 shows the baseline habitats present on-site on the proposed relevant date (16th April 2025). This includes the minimum requirement to show an identified scale and north arrow.

4.0 METHODOLOGY

Habitat Survey

- 4.1 A preliminary baseline habitat survey was undertaken on 3rd January 2025 by Ian Hunter (MCIEEM, Botanical Society of Britain and Ireland's (BSBI) Field Identification Skills Competency (FISC) Level 5) following UKHab Classification System². An update walkover to confirm habitat classification and condition was undertaken on 16th April 2025 by D Smith (BSBI FISC level 4).
- 4.2 The survey comprised a systematic walk over of the Site to classify the habitat types and collect a representative species list for each habitat. Habitats were mapped in the field, using the QField app, along with additional notes regarding the current 'condition'³ of the habitat, completed in accordance with the Statutory Biodiversity Metric Condition Assessments⁴.

² UKHab Ltd (2024). UK Habitat Classification Version 2.01(at <https://UKHab.org>)

³ Condition' is one of the measures of the quality of a habitat used within the DEFRA biodiversity metric. It takes into account key physical characteristics and typical species of a particular habitat type.

⁴ Defra (2023). "The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology" November 2023" Access [online] (Available at: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>)

- 4.3 Species lists were compiled for individual areas and assessments of abundance were made using the DAFOR scale. Vascular plant nomenclature follows Stace (2019)⁵.
- 4.4 During the surveys the hedgerows were surveyed to determine the hedgerow type and condition. To achieve this the length of the hedgerow was walked, and the woody species present recorded. In line with the hedgerow regulations, the number of native woody species within 30m sample sections was recorded, with 1-3 sample sections recorded depending on the length of the hedgerow. A record of the veteran, mature and young tree standards was taken for each hedgerow and a record of the length of each horizontal gap within the hedgerow. In addition to the above, any hedgerow trees of medium size or above (>30cm DBH) within all hedgerows which were to be lost to proposals were mapped as individual trees.
- 4.5 Where species are referred to in the text, the common name for the species is used, with the associated scientific name provided within the botanical species lists for the Site in Appendix D1, Appendix D1a provides the results of the hedgerow surveys.

Habitat Condition Assessments

- 4.6 Defra has developed a metric based on evaluating each individual habitat's value within the Statutory Biodiversity Metric. All habitats/habitat compartments on site have been assessed using the technical guidance document provided by Defra for use with their biodiversity metric. The guidance provides a list of criteria for a range of broad habitat types which are used to determine whether habitat fall into a 'poor', 'fairly poor', 'moderate', 'fairly good' or 'good' condition score.

River Condition Assessment

- 4.7 The River Condition Assessment (RCA) field survey was completed by an experienced ecologist with over 4 years' experience in ecological consultancy and accredited in conducting River Condition Assessment survey using MoRPh methodology.
- 4.8 The survey was undertaken on 16th April 2025, working downstream during low flow with weather conditions as overcast, gusts of winds and light rain, the temperature was 8°C.
- 4.9 One watercourse was identified on Site, Dog Clog Brook referred as sub reach 1 passing along the northern Site boundary entering from the east and flowing out to the west. It measured less than 5m wide with a survey length of approximately 159m within the redline boundary. This resulted in 1 sub-reach being surveyed for the watercourse, comprised of 5 x 10m modules (MoRPh5).
- 4.10 Dog Clog Brook was identified as 'other river and stream' type H (straight/sinuuous), a non-priority river type.

Biodiversity Net Gain Calculation

- 4.11 The Statutory Biodiversity Metric, published in February 2024, has been used for this scheme. The Statutory Metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value ("biodiversity units") of a proposed development site before and after development. It treats the area-based habitats and linear features such as hedgerows

⁵ Stace, C (2019) *New Flora of the British Isles*. 4th edn. C&M Floristics

and lines of trees separately, and is based on pre-determined values, along with published written guidance set by a Natural England-led team of experts.

- 4.12 The aim of biodiversity offsetting is to compensate for significant adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken, according to the mitigation hierarchy as required by the NPPF.
- 4.13 To facilitate this, the Site has been mapped and digitised using the Statutory Biodiversity Metric QGIS Template, with the existing habitats identified and areas automatically generated. In accordance with the Statutory Biodiversity Metric User Guide, habitats have been defined under UKHab.
- 4.14 On Site post-development habitats were based on the submitted Illustrative Landscape Masterplan (13294-FPCR-XX-XX-DR-L-0001 LANDSCAPE MASTERPLAN). The post development habitat types and condition were assigned in line with the recommend enhancement measures in these areas. Proposed habitats were mapped and digitised into the latest Biodiversity Metric QGIS Template to generate areas for each of the habitats proposed for enhancement.
- 4.15 These pre- and post-development habitat areas were then inputted into the Statutory Biodiversity Metric Calculation tool. The metric then provides a habitat distinctiveness score for each of the baseline and proposed habitats which are pre-assigned scores based on the habitat type.
- 4.16 The strategic significance of the habitats was also assessed for both the pre- and post-development habitats based on the location of the site, its proximity to existing areas of biodiversity interest and its setting within wider habitat corridors.
- 4.17 The metric then assigns a range of pre-assigned factors to each of the proposed habitats. These have been advised by subject knowledge experts and are universal multipliers generated by the metric itself for the following variables relevant to habitat creation, enhancement or restoration proposals:
 - Difficulty of creating or restoring/enhancing a habitat: This pre-assigned score is based on how difficult a particular habitat type is to create or restore/enhance.
 - Temporal risk: this is the 'time to target condition' for any particular habitat and determines how long a particular habitat type is likely to take to reach the condition score that the desired condition score assigned to it.
 - Spatial risk: this score is based on the distance between the site of habitat loss and any habitats creation or enhancement proposals at any offsite offsetting solutions.
- 4.18 Full details of the calculation methodology are provided in Statutory Biodiversity Metric – User Guide⁹.

Habitat Trading Rules

- 4.19 Within the metric a set of trading rules are applied, the aim of these rules is to ensure that any loss of habitat is replaced on a 'like for like' or 'like for better' distinctiveness basis.
- 4.20 The trading summary draws data from across the metric and presents the data in a standard way to determine whether or not the trading principles set out in Rule 3 of the user guide have

⁹ <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

been adhered to. This trading summary avoids the need to track the changes in habitat type and condition on an individual parcel by parcel basis, which is not practical, particularly on larger sites. Table 2, below summarises the trading rule requirements for each distinctiveness band.

Table 2: Habitat Trading Rules and associated habitat compensation requirements

Baseline Habitat Distinctiveness	Distinctiveness of Replacement Habitat Required by Trading Rules
Very High	Losses of these habitats are not able to be assessed within the metric. A bespoke assessment and compensation package must be agreed.
High	These habitats must be replaced on a like-for-like basis with the same habitat type as impacted by the scheme.
Medium	These habitat types must be replaced with units from the same broad habitat type, or any habitat from a higher distinctiveness band.
Low	These habitat types can be replaced with any other low distinctiveness habitat type, or any habitat from a high distinctiveness band.
Very Low	No replacement is required for these land uses.

Limitations

- 4.21 Detailed botanical surveys of the grasslands have not been undertaken, as the recorded composition of the grasslands was such that a robust assessment of criterion A of both the low and medium distinctiveness condition assessments was possible without quantitative data.
- 4.22 No further limitations specific to this report influenced this assessment.

5.0 RESULTS

Strategic Significance

- 5.1 There are three levels of strategic significance:
- Highly strategically significant ('formally identified in local strategy') – pre and post development habitats are subject to a 15% multiplier;
 - Medium strategic significance (Location Ecologically Desirable but not in Local strategy) – pre and post development habitats are subject to a 10% multiplier; and,
 - Low strategic significance (Area not in local strategy) – No multiplier.
- 5.2 The Liverpool City Region LNRS is currently in development and will provide a framework for meaningful, ecologically robust habitat delivery through BNG. In the absence of Local Nature Recovery Network Strategies, national and local guidance has been consulted to assign strategic significance. This has included the MEAS Guidance note on Biodiversity Net Gain in the Liverpool City Region, the LCR Ecological Network Explorer Map and the Statutory Biodiversity Metric User Guide.

- 5.3 Within the Knowsley district, habitats within or identified by the following areas/plans are considered to be of high strategic significance within the metric:
- Statutory protected sites (e.g. SAC, SPA, Ramsar and SSSI, NNR and LNR);
 - Locally designated sites, including Local Wildlife Sites (LWS), Sites of Biological Importance (SBI);
 - Local Nature Recovery Strategy (when published);
 - Liverpool City Region Ecological Network Nature Improvement Areas and Core Biodiversity Areas;
 - North Merseyside Biodiversity Action Plan Habitats (with the exception of Urban Green Infrastructure and Urban Grasslands that are classified as modified grassland);
 - Knowsley Strategic Green Links (as defined in policy CS8 of the Knowsley Local Plan Core Strategy).
- 5.4 The Site is also mapped under the Urban broad habitat opportunity layer which states: *Wooded habitat creation and enhancement in urban open spaces such as orchards, street trees, micro-woods, urban woodland and hedgerows.*
- 5.5 Informed by the above the calculations have been undertaken on the assumption that the following habitat interventions would be of high strategic significance:
- Enhancement of existing woodland habitats;
 - The planting of urban trees.
- 5.6 All other habitat creation and enhancement measures are of low strategic significance.

Habitats

- 5.7 A summary description and baseline conditions of the baseline habitats is provided in Table 3 below. Baseline habitats are mapped on Figure 1, along with the parcel references listed in table 3. Figure 4 shows the baseline condition and distinctiveness plan.
- 5.8 No irreplaceable habitat was identified on Site during the surveys.
- 5.9 Botanical species lists can be found in Appendix D1. Full survey results, baseline condition assessment scores and baseline unit scores are provided in Appendix D2. Appendix D3 provides the River Condition Assessment results.

Table 3: Baseline Habitats

Ref	Habitat type	Condition	Description	Photo
Area based Habitats				
Low Distinctiveness				
M1	Modified Grassland	Poor	The majority of the Site was assessed as g4 modified grassland. The grassland was species-poor with a uniform sward throughout. The grassland is dominated by perennial rye-grass with frequent Italian rye-grass, occasional to frequent Yorkshire fog and occasional to locally frequent creeping bent. The community featured an almost absence of herbs, with only dandelion noted as a rarity. The sward was species-poor, visually assessed as containing an average of 4-5 species per m ² and no herbs. As a result, the community was assessed as being as in poor condition, failing essential criterion A. The community also failed on sward height	
Medium distinctiveness				

Ref	Habitat type	Condition	Description	Photo
ONG	Other Neutral Grassland	Poor	A narrow strip of other neutral grassland is present along the northern boundary of the site adjacent to watercourse R1. The grassland was classified as g3c5 <i>Arrhenatherum</i> grassland. This grassland dominated by cock's-foot with frequent Yorkshire-fog and common couch, and occasional creeping bent of false oat-grass. Herbaceous diversity was limited to occasional cow parsley, nettle, common ragwort and creeping thistle. Bramble was occasional, with rare broadleaved dock and common hogweed. The community was assessed as being in poor condition, failing essential criterion A due to the lack of other neutral grassland indicators and overall species richness. The community also failed on sward height and scrub encroachment.	
BS1	Bramble Scrub	N/a	An area of bramble scrub is present on the northern boundary of the site. The area is dominated by bramble with occasionally occurring false oat—grass. Yorkshire fog Hawthorn <i>Crataegus monogyna</i>, Sycamore <i>Acer pseudoplatanus</i>, Pedunculate oak <i>Quercus robur</i>, Wild cherry <i>Prunus avium</i>, Elder <i>Sambucus nigra</i> all occur rarely.	

Ref	Habitat type	Condition	Description	Photo
MS1	Mixed Scrub	Poor	An area of mixed scrub is present in the south of the site. The scrub canopy contains abundant Bramble, Frequent Pedunculate oak occasional ash, hawthorn, sycamore, wild cherry blackthorn, Grey willow, downy birch and Japanese rose. The understory contains abundant False oat-grass, Common couch, frequent Rosebay willowherb and occasional Soft-rush, Nipplewort Common ragwort. The community was assessed as being in poor condition, failing all criteria with the exception of Criterion A.	
T	Individual Trees	Good and Moderate	Mature trees were a common habitat feature recorded on the boundary of the Site. These occurred within the linear habitats H1 and Lot1 (not mapped on figure 1), with ten free standing trees recorded and an additional four within hedgerow H2, which have been mapped on Figure 1 as they are being lost to facilitate access. Six of the mapped trees were classified as large (>60cm dbh) eight as medium (>30cm dbh) and three as small (>7.5cm dbh). Seven of the trees were assessed as being in good condition and seven in moderate condition.	
High distinctiveness				

Ref	Habitat type	Condition	Description	Photo
W1	Wet Woodland	Moderate	An area of wet woodland is present along the western border of the site, with about a fifth of the total woodland recorded within the Site boundary. The woodland was recorded along the margins of a pond and featured a canopy of frequent alder, occasional goat willow and rare grey willow. The understorey contains Common ivy, Cleavers, Common nettle, Great willowherb, Cow parsley, Creeping thistle, False oat-grass, Nipplewort, Creeping buttercup, Reed canary-grass and Bramble. The woodland was assessed as being in moderate condition scoring poorly on deadwood, ground flora, veteran trees,	
Linear Habitats				
H3 H4	Non-native and ornamental hedgerow		Two non-native hedgerows were recorded within the Site. H3 was a sycamore dominated hedgerow recorded along a garden boundary. H4 was a garden privet hedge also recorded along an offsite garden boundary	
Low distinctiveness				

Ref	Habitat type	Condition	Description	Photo
H2 H5	Native Hedgerow	Poor Moderate	Hedgerow H2 was a species poor hedge featuring abundant hawthorn and four pedunculate oak standards. Two species were recorded on average within the 30m sample points. The hedgerow was assessed as being in poor condition failing on height, width, undisturbed ground, canopy and base gaps H5 was a short 10m length of hawthorn hedge along an offsite garden boundary. This hedgerow does not meet the definition of a hedgerow as it is less than 20m in length. As such, the hedgerow was not assessed against the hedgerow regulations criteria, but has been mapped to capture its value.	
LoT1	Line of Trees	Moderate	Line of Trees LoT1 was recorded on the south-western site boundary and featured four mature ash and three pedunculate oak standards. In addition, three young goat willow and one wych elm standards were noted. The habitat was assessed as being in moderate condition, failing on the lack of a naturally vegetated strip and the presence of ash dieback.	
Very High distinctiveness				
H1	Species Rich native hedgerow with Trees associated with bank or ditch	Good	Hedgerow H1 was recorded on the western site boundary. Hawthorn and blackthorn were co-dominant, recorded along with hazel dog-rose, three mature pedunculate oak and two ash standards. An average of four species were recorded within the 30m sample points and as such the hedgerow was classified as a species rich hedgerow type. A dry ditch was also present running alongside the ditch. The hedge was assessed as being in good condition passing all criteria.	
Watercourses				

Ref	Habitat type	Condition	Description	Photo
High Distinctiveness				
R1	Other Rivers and Streams	Poor	The watercourse passes along the northern boundary of the Site, between the onsite modified grassland field and offsite grassland and arable fields, with areas of rough other neutral grassland, bramble scrub and individual trees directly adjacent to the watercourse. The surveyed sub-reach scores well on its channel bed material richness, with gravel-pebble, sand, and silt all recorded. The highest scoring negative index was the NNIPS cover on the bank top with Himalayan balsam present on both bank sides, with cover of managed ground scoring moderately high. Low scoring positive indices included bank top and face tree feature richness, water-related features and channel margin and bed aquatic morphotype richness. The river shape index indicates that the sub reach is disconnected from its floodplain and is considered over-deep. The final condition score as defined by Cartographer was Fairly Poor, which has been reduced to Poor due to the over deepness assessment in accordance with MoRPh guidance. Riparian zone encroachment was recorded along both banks due to the intensively managed agricultural habitats present within 10m of both bank tops.	
Medium Distinctiveness				

Ref	Habitat type	Condition	Description	Photo
D1	Ditch	Poor	Ditch D1 runs westwards from the south extent of hedgerow H1 and featured a wet channel approximately 1.5m wide. No aquatic vegetation was noted but reed canary-grass and soft-rush were noted as marginals. The banks featured a rough grassland community characterised again by reed canary-grass, with locally frequent patches of rosebay willowherb and occasional bramble, ivy and alder saplings. The ditch was assessed as being in poor condition, failing on water quality, low diversity, lack of marginal vegetation and shading. The ditch was considered to have major riparian zone encroachment along both banks as agricultural habitats are rescent within 5m of the bank top.	
D2	Ditch	Poor	Ditch D2 was recorded on the south-western boundary between Lot1 and H2. The ditch featured a narrow wet channel approximately 0.5m wide. No aquatic vegetation was noted and reed canary-grass was rare at the margins. The banks featured a rough grassland community featuring common couch, with occasional bramble. A large pedunculate oak standard and a small and a medium sycamore were recorded on the banks of the ditch. The ditch was assessed as being in poor condition, failing on water quality, low diversity and lack of marginal vegetation. The ditch was considered to have major riparian zone encroachment along both banks as agricultural habitats are rescent within 5m of the bank top.	

6.0 PROPOSALS

- 6.1 Individual habitat type and condition targets are outlined within this section and have been informed by the Illustrative Landscape Masterplan (13294-FPCR-XX-XX-DR-L-0001 LANDSCAPE MASTERPLAN) and ecological professional judgement.
- 6.2 Proposed habitats are shown on Figure 2 while proposed condition and distinctiveness plan is shown on Figure 4. The proposals are summarised below, with broad creation, enhancement and management methods outlined in Table 4, as subject to detailed design.

Habitat Retention – BNG Hierarchy

- 6.3 Figure 3 shows the habitat retention plan. The vast majority of the site comprises low distinctiveness grassland habitats. The habitats of higher biodiversity value, including the watercourses, hedgerows, other neutral grassland, individual trees and wet woodland, were recorded at the boundaries of the Site.
- 6.4 The iterative design process, which led to the sites Illustrative Masterplan has sought to retain and buffer these higher distinctiveness habitats recorded at the boundary of the Site. The exception is the species poor hedgerow H2 and its associated mature tree resource which will be lost to facilitate access and appropriate visibility spays for the Site. A replacement species rich hedgerow will be planted outside the visibility splay. In total four pedunculate oak standards will be lost from the hedgerow (one large and three medium sized). A medium sized sycamore located along ditch D2 will also be lost to proposals.
- 6.5 Calculations have assumed that small scale impacts to the stream R1 will occur from a potential drainage outfall into the watercourse. This has been accounted for in this assessment via the addition of 'watercourse encroachment' in the post intervention metric for the impacted sub-reach.

Habitat Creation and Enhancement – Outline Habitat Management and Monitoring Plan (HMMP)

- 6.6 Table 4 below, outlines the proposed habitats within the site, which have been determined, determined from the illustrative Landscape Masterplan (13294-FPCR-XX-XX-DR-L-0001). Outline habitat creation and ongoing management prescriptions have been included for each habitat to demonstrate how measures will meet the specified habitat creation and condition criteria required. This has been provided to highlight how the onsite measures secured by subsequent approvals could contribute to satisfactorily discharging the Biodiversity Net Gain condition.

Table 4: Outline Habitat Creation, Enhancement and Management Proposals

Habitat	Description	Condition
Other Neutral Grassland – 'Meadow Grassland'	The existing habitat will be cultivated, harrowed and rolled to produce a fine tilth. The grasslands will then be seeded with a wildflower rich seed mix suitable for sowing into existing grassland or green hay from a suitable local source. Following seeding the bed will be rolled to ensure good seed contact. The	Poor

	wildflower mix should include yellow rattle, which will control excessive grass growth. Ongoing management will involve 1-2 cuts per year, with the grassland left un-mown during the summer and any arisings removed. Poor condition is targeted, to allow for failure to pass essential criterion A of the Medium Distinctiveness Grassland Condition Assessment.	
SuDS Basin – Wetland grassland	The SuDS basins to the north of the site have been assumed to be seeded with a wildflower rich wet grassland mix and managed to support other neutral grassland in Poor condition. Creation and management will follow the prescriptions outlined above, with an appropriate wet grassland seed mix used in creation.	Poor
Mixed scrub	Smaller areas of mixed scrub creation are proposed within the wider Site. Moderate condition is targeted with the overriding principle being the creation of a structurally diverse scrub community. The woody species mix will incorporate a range of locally native scrub species, planted at variable densities. The smaller areas of scrub located centrally within the Site are targeted in poor condition, delivered via ongoing management to limit growth of pernicious weeds and annual-biennial strimming of edges to limit scrub encroachment and encourage botanical diversity. Moderate condition is targeted within the northern section of the site through periodic felling/coppicing to ensure a mixture of age classes.	Moderate - Poor
Modified Grassland – Amenity Grassland and Turf	Areas of grassland within POS managed for amenity use. These areas have been mapped as modified grassland in poor condition. This is the equivalent of the standard species poor amenity grassland.	Poor
Individual Trees – open space trees	These will be included through the areas of public open space. A total of 61 specimens will be planted. The trees have been assumed to be native species which allows moderate condition to be targeted. The pruning regime should be minimal and should allow the trees to retain more than 75% of their expected canopy. Replacement of any failed specimens should be carried out on a like-for-like basis.	Moderate
Individual Trees – Street trees	A total of 41 street trees have been included within the calculations. As these will comprise of a mixture of non-native and evergreen specimens, poor condition is targeted.	Poor
Ornamental shrubs	Ornamental shrubs will be included around the residential areas to soften the development. Species should be selected which provide benefits to wildlife such as food source or shelter habitat.	N/A

Other Rivers and Streams	Calculations have accounted for the enhancement of Watercourse R1, recorded to the north of the site. For illustrative purposes this assessment has assumed that this can be achieved by reducing encroachment in the riparian zone by the creation of wildflower grassland and scrub within 10m of the bank top within the Site. An increase in condition for the watercourse is also targeted, with minimal measures required to provide a condition uplift to Fairly Poor. This could involve removing the trash from the watercourse, to be replaced with a natural feature such as deadwood. This in turn may increase hydraulic feature richness. Other possible enhancements which would also increase condition are to the following RCA indices: B4 & C10: Control or eradication of the Himalayan balsam present on both bank tops and the bank face would improve index B4 and C10. However short term and long-term eradication may be difficult, as it would be dependent on how prevalent the plant is upstream and working with landowners along the watercourse. B3: Creation of a pond(s) along the left bank top B2 & C2: Introducing bank top and face wood features such as a deadwood D1, D2 & E1: planting of a range of species along the channel margins and within the channel itself	
Ditches	Enhancement of ditch D1 has been accounted for by improving riparian zone encroachment by the creation of wildflower grassland within 5m of the bank top within the Site.	Poor
Species Rich native hedgerow / Species-rich native hedgerow with trees	The creation of new native species rich hedgerows and species rich-hedgerows with trees, with the planting mix should include a diverse mixture of native woody species, planted in staggered double rows. Management should allow for hedgerow growth of at least 1.5m in height and width. At least 1m of ground cover either side of the hedgerow should remain undisturbed, and hedgerow cutting should be done on rotation to allow for a continual supply of flowering and fruiting bushes.	

Significant Onsite Biodiversity Gains

- 6.7 It is considered that all of the creation and enhancement measures outlined in table 4 above, with the exception of the modified grassland in poor introduced shrub, would constitute 'significant onsite gains', as defined by the .gov guidance¹⁰. The Biodiversity Net Gain Condition, attached to any planning permission for the proposed development would secure the creation

¹⁰ <https://www.gov.uk/guidance/make-on-site-biodiversity-gains-as-a-developer>

and ongoing management and monitoring of these habitats for a minimum of 30 years, via the approval of a detailed Habitat Management and Monitoring Plan (HMMP).

Outline Monitoring Requirements

- 6.8 The Site will be monitored at varying degrees from establishment and through its long-term management. Initially the Site will be monitored in years 1, 2, 3 & 5 by suitably experienced ecologists to review how the establishment of the proposed habitat enhancement is progressing. The key observations during this period will be to determine whether habitats are successfully improving and whether replacement planting or reseedling may be required.
- 6.9 Following that, during years 10-30, monitoring of the Site will be undertaken every 5 years beginning at year 10. The key elements of this monitoring will be to review whether the long-term management practices have achieved and maintained target habitat type and condition. During this period, adaptive management measures will be reviewed to determine whether there are any opportunities to alter management to encourage additional habitat enhancements.

7.0 BIODIVERSITY NET GAIN CALCULATION

- 7.1 The Statutory Biodiversity metric has been submitted with the application, and the headline summary results are given below.

On-site baseline	Area habitat units	12.76	
	Hedgerow units	3.20	
	Watercourse units	1.26	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	9.74	
	Hedgerow units	6.86	
	Watercourse units	1.55	
On-site net change (units & percentage)	Area habitat units	-3.02	-23.65%
	Hedgerow units	3.66	114.53%
	Watercourse units	0.29	22.84%

Photograph 1: Statutory Biodiversity Metric Headline Results

- 7.2 At present, the on-site baseline consists of 12.76 habitat units, 3.2 hedgerow units and 1.26 watercourse units, as such future approvals will require a total of 14.04 habitat units, 3.52 hedgerow units and 1.39 watercourse units to deliver a 10% gain. At present, based on the submitted landscape masterplan, on-site post intervention consists of 9.74 habitat units, 6.86 hedgerow units and 1.55 watercourse units, which is the equivalent to a 23% loss in habitat units, a 114.53% gain in hedgerow units and a 22.84% gain in watercourse units. An additional 4.29 units will be required to deliver a 10% gain in area habitat units.

Habitat Trading

- 7.3 The habitats to be lost to proposals – principally modified grassland, with smaller areas of scrub, other neutral grassland, individual trees and native hedgerows are of medium to low distinctiveness. The proposed habitat creation and enhancement adequately compensates for the losses to the medium distinctiveness habitats, with only low distinctiveness habitats remaining uncompensated for. As such the 4.29 units required to deliver a 10% gain can be of any habitat type.

Offsite Compensation

- 7.4 In order to achieve a net gain of 10% for the scheme offsite compensation will be required via one or a combination of the following methods: habitat creation or enhancements on additional land under landowner control, the purchase of biodiversity units from a registered offsite provider, or statutory credits as a last resort.

8.0 CONCLUSION

- 8.1 Baseline habitats were identified, mapped using the UKHab Classification system during surveys in January and April 2025 (Figure 1). Condition Assessments were undertaken, based on condition criteria as set out in the Statutory Biodiversity Metric User Guide. An illustrative Biodiversity Net Gain calculation was then completed for the Site, using the Statutory Biodiversity Metric. Post-development habitats were interpreted from the illustrative Landscape masterplan (13294-FPCR-XX-XX-DR-L-0001 LANDSCAPE MASTERPLAN), with realistic and deliverable habitat creation and enhancement measures proposed.
- 8.2 The baseline has been calculated at 12.76 habitat units, 3.2 hedgerow units and 1.26 watercourse units. 9.74 habitat units, 6.86 hedgerow units and 1.55 watercourse units, which is the equivalent to a 23% loss in habitat units, a 114.53% gain in hedgerow units and a 22.84% gain in watercourse units.
- 8.3 To achieve a net gain of 10%, subsequent approval(s) will require an additional 4.29 units of any area habitat type, to deliver a 10% gain in area habitat units.
- 8.4 In order to achieve a net gain of 10% for the scheme offsite compensation will be required via one or a combination of the following methods: habitat creation or enhancements on additional land under landowner control, the purchase of biodiversity units from a registered offsite provider, or statutory credits as a last resort.
- 8.5 Given the above, it is concluded that proposals can deliver a biodiversity net gain for the scheme, which would be secured by the Biodiversity Net Gain Condition, attached to any planning permission for the proposed development.

9.0 APPENDIX D1: SUREVY RESULTS

Species Lists are provided separately in Excel Format in the following workbooks:

Appendix D1a: provide the results of the hedgerow surveys, together with the hedgerow condition assessments.

Species Lists of other Habitats

Grasslands

Common Name	Scientific Name	M1	ONG1
Perennial Rye-grass	<i>Lolium perenne</i>	a	
White Clover	<i>Trifolium repens</i>		
Broad-leaved Dock	<i>Rumex obtusifolius</i>		r
Common Nettle	<i>Urtica dioica</i>		o
Common Ragwort	<i>Jacobaea vulgaris</i>		o
Creeping Buttercup	<i>Ranunculus repens</i>		
Creeping Thistle	<i>Cirsium arvense</i>		o
Curled Dock	<i>Rumex crispus</i>		
Greater Plantain	<i>Plantago major</i>		
Spear Thistle	<i>Cirsium vulgare</i>		
Yorkshire-fog	<i>Holcus lanatus</i>	o -f to s	f
Cock's-foot	<i>Dactylis glomerata</i>	o	a
False oat-grass	<i>Arrhenatherum elatius</i>	r	o
Meadow foxtail	<i>Alopecurus pratensis</i>	r	
Common couch	<i>Elytrigia repens</i>	r	f
Creeping bent	<i>Agrostis stolonifera</i>	o lf	o
Italian rye-grass	<i>Lolium multiflorum</i>	f	
Timothy	<i>Phleum pratense</i>		r
Red fescue	<i>Festuca rubra</i>	r	
Dandelion	<i>Taraxacum officinale agg.</i>	r	
springy turf moss	<i>Rhytidiadelphus squarrosus</i>	r	
Common hogweed	<i>Heracleum sphondylium</i>		r
Bramble	<i>Rubus fruticosus agg.</i>		o
Alder	<i>Alnus glutinosa</i>		r
Cow parsley	<i>Anthriscus sylvestris</i>		o
Hawthorn	<i>Crataegus monogyna</i>		r
Rosebay willowherb	<i>Chamaenerion angustifolium</i>		r

Wet Woodland

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Ground Flora
Woody Species						
Alder	<i>Alnus glutinosa</i>	f		r	f	
Grey willow	<i>Salix cinerea</i>	r				
Goat willow	<i>Salix caprea</i>	o				
Ground Flora						
Common ivy	<i>Hedera helix</i>					o
Cleavers	<i>Galium aparine</i>					o
Common nettle	<i>Urtica dioica</i>					f
Great willowherb	<i>Epilobium hirsutum</i>					lf

Cow parsley	<i>Anthriscus sylvestris</i>					r
Creeping thistle	<i>Cirsium arvense</i>					r
False oat-grass	<i>Arrhenatherum elatius</i>					o
Nipplewort	<i>Lapsana communis</i>					r
Creeping buttercup	<i>Ranunculus repens</i>					o
Reed canary-grass	<i>Phalaris arundinacea</i>					lf
Bramble	<i>Rubus fruticosus agg.</i>					r

Bramble Scrub

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Ground Flora
Woody Species						
Bramble	<i>Rubus fruticosus agg.</i>		a			
Hawthorn	<i>Crataegus monogyna</i>			1		
Sycamore	<i>Acer pseudoplatanus</i>	2				
Pedunculate oak	<i>Quercus robur</i>				3	
Wild cherry	<i>Prunus avium</i>			1		
Elder	<i>Sambucus nigra</i>					
Ground Flora						
False oat-grass	<i>Arrhenatherum elatius</i>					o
Yorkshire-fog	<i>Holcus lanatus</i>					r

Mixed Scrub

Common Name	Scientific Name	Upper canopy	understory	young tree	sapling	Ground Flora
Woody Species						
Bramble	<i>Rubus fruticosus agg.</i>		a			
ash	<i>Fraxinus excelsior</i>		1		1	
Hawthorn	<i>Crataegus monogyna</i>				1	
Sycamore	<i>Acer pseudoplatanus</i>	1				
Wild cherry	<i>Prunus avium</i>	2	o		1	
Blackthorn	<i>Prunus spinosa</i>				1	
Japanese Rose	<i>Rosa rugosa</i>					
Grey willow	<i>Salix cinerea</i>				1	
Downy birch	<i>Betula pubescens</i>					
Pedunculate oak	<i>Quercus robur</i>		8			
Ground Flora						
Rosebay willowherb	<i>Chamaenerion angustifolium</i>					r
Soft-rush	<i>Juncus effusus</i>					r
False oat-grass	<i>Arrhenatherum elatius</i>					o
Common couch	<i>Elytrigia repens</i>					o
Nipplewort	<i>Lapsana communis</i>					r
Common ragwort	<i>Jacobaea vulgaris</i>					r
Hart's-tongue	<i>Asplenium scolopendrium</i>					r
Male-fern	<i>Dryopteris filix-mas</i>					r

Watercourses

Common Name	Scientific Name	R1 banks	D1	D2
Himalayan balsam	<i>Impatiens glandulifera</i>	f		
Cow parsley	<i>Anthriscus sylvestris</i>	o		r

Sycamore	<i>Acer pseudoplatanus</i>	r		
Reed canary-grass	<i>Phalaris arundinacea</i>	o	o	o
Bramble	<i>Rubus fruticosus agg.</i>	o la	o	o
Common nettle	<i>Urtica dioica</i>	f	o	
Lesser celandine	<i>Ficaria verna</i>	o		
Snowdrop	<i>Galanthus nivalis</i>	r		
Creeping buttercup	<i>Ranunculus repens</i>	r		
Broad-leaved dock	<i>Rumex obtusifolius</i>	o		
Yellow iris	<i>Iris pseudacorus</i>	r		
Common couch	<i>Elytrigia repens</i>		r	
Common ivy	<i>Hedera helix</i>		o	
Soft-rush	<i>Juncus effusus</i>		r	
alder	<i>Alnus glutinosa</i>		r	
Rosebay willowherb	<i>Chamaenerion angustifolium</i>		lf	
Great willowherb	<i>Epilobium hirsutum</i>			r
Sycamore	<i>Acer pseudoplatanus</i>			r
Common hogweed	<i>Heracleum sphondylium</i>			r

10.0 APPENDIX D2: CONDITION ASSESSMENTS

Modified Grassland

Condition Criteria	Criteria	Notes
There are 6-8 vascular plant species per m2 present, including at least 2 forbs . Note - this criterion is essential for achieving Moderate or Good condition.	Fail	clearly less than 6 and no herbs
Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Fail	all short
Some scattered scrub (including bramble <i>Rubus fruticosus agg.</i>) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Pass	
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.	Pass	
Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)2.	Pass	borderline but bare patches in sward frequent in January. Pass in April

Condition Criteria	Criteria	Notes
Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass	
There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Pass	
Total Passes	5	
Condition	Poor	

Other Neutral Grassland

Condition Criteria	ONG1	
	Criteria	Notes
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). Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Fail	false oat but no indicators
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.	Fail	
Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ¹ .	Pass	
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%.	Fail	scrub encroachment
Combined cover of species indicative of sub-optimal condition ² 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 ³ (as listed on Schedule 9 of WCA ⁴) are present, this criterion is automatically failed.	Pass	
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 2 and 4 cannot contribute towards this count). N.B. this criterion is essential for achieving Good condition for non-acid grassland types only.	Fail	
Total Passes	2	

Condition Criteria	ONG1	
	Criteria	Notes
Condition	Poor	

Wet Woodland

Condition Criteria	Woodland
	W1
Age Distribution of Trees 3 - three age classes 2 - two age classes 1 - one age class	2
Herbivore Damage 3 - no significant browsing 2 - significant browsing pressure <40% 1 - significant browsing pressure >40%	3
Invasive Plant Species 3 - No invasive species 2 - invasive species <10% cover AND NO rhododendron or Cherry Laurel Present 1 - invasive species >10% cover or/and Rhododendron or cherry laurel present.	3
Number of Native Species 3 - 5+ native trees and/or shrubs 2 - 3-4 native trees and/or shrubs 1 - 2- native trees and/or shrubs	2
Cover of Native Species 3 - >80% of canopy & understorey native 2 - 50-80% of canopy & understorey native 1 - <50% of canopy & understorey native	3
Open Space 3 - 10-20% temporary open space If woodland area <10ha 0-20% temporary open space = Good 2 - 21-40% temporary open space 1 - <10% or >40% temporary open space	3
Woodland Regeneration 3 - 3 age classes 2 - 1-2 age classes 1 - No classes or coppice regrowth	2
Tree Health 3 - <10% mortality, no pests/disease, no dieback 2 - 11-25% mortality, low risk pest or disease present 1 - >25% mortality, high risk pest or disease present	3
Vegetation & Ground Flora 3 - Recognisable NVC community including ancient flora specialists 2 - Recognisable NVC community at ground level 1 - No recognisable NVC community	1

Condition Criteria	Woodland
	W1
Woodland Vertical Structure 3 - Three or more storeys or a complex woodland 2 - Two storeys 1 - One or no defined storeys	1
Veteran Trees 3 - 2+ veteran trees per ha 2 - 1 veteran tree per ha 1 - no veterans	1
Amount of Deadwood 3 - 50%+ of plots have deadwood 2 - 25-50% of plots have deadwood 1 - <25% of plots have deadwood	1
Disturbance and enrichment 3 - No nutrient enrichment or damaged ground 2 - <1ha of nutrient enrichment and /or less than 20% of woodland has damaged ground 1 - >1ha of nutrient enrichment and/or >20% of woodland has damaged ground	2
Total score	27
Condition	Moderate

Scrub Condition assessment

Condition Criteria	Scrub Reference
	Sc1
The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range).1 - At least 80% of scrub is native, - There are at least three native woody species2, - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> or box <i>Buxus sempervirens</i> , which can be up to 100% cover).	Pass
Seedlings, saplings, young shrubs and mature (or ancient or veteran2) shrubs are all present.	Fail
There is an absence of invasive non-native plant species3 (as listed on Schedule 9 of WCA4) and species indicative of sub-optimal condition5 make up less than 5% of ground cover.	Fail – Japanese Rose
The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Fail
There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail
Condition	Poor

Line of Trees

Condition Criteria	Line of trees
	LoT1
At least 70% of trees are native species.	Pass
Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Pass
One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Pass
There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice.	Fail
At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Fail – Ash die back
Condition	Moderate

Ditch

Condition Criteria	Ditch Reference	
	D1	D2
The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	Fail
A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Fail	Fail
There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	Pass
A fringe of marginal vegetation is present along more than 75% of the ditch.	Fail	Fail
Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	Pass
Sufficient water levels are maintained: as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Pass	Pass
Less than 10% of the ditch is heavily shaded.	Fail	Pass
There is an absence of non-native plant and animal species.	Pass	Pass
Condition	Poor	Poor

11.0 APPENDIX D3: RIVER CONDITION ASSESSMENT RESULTS

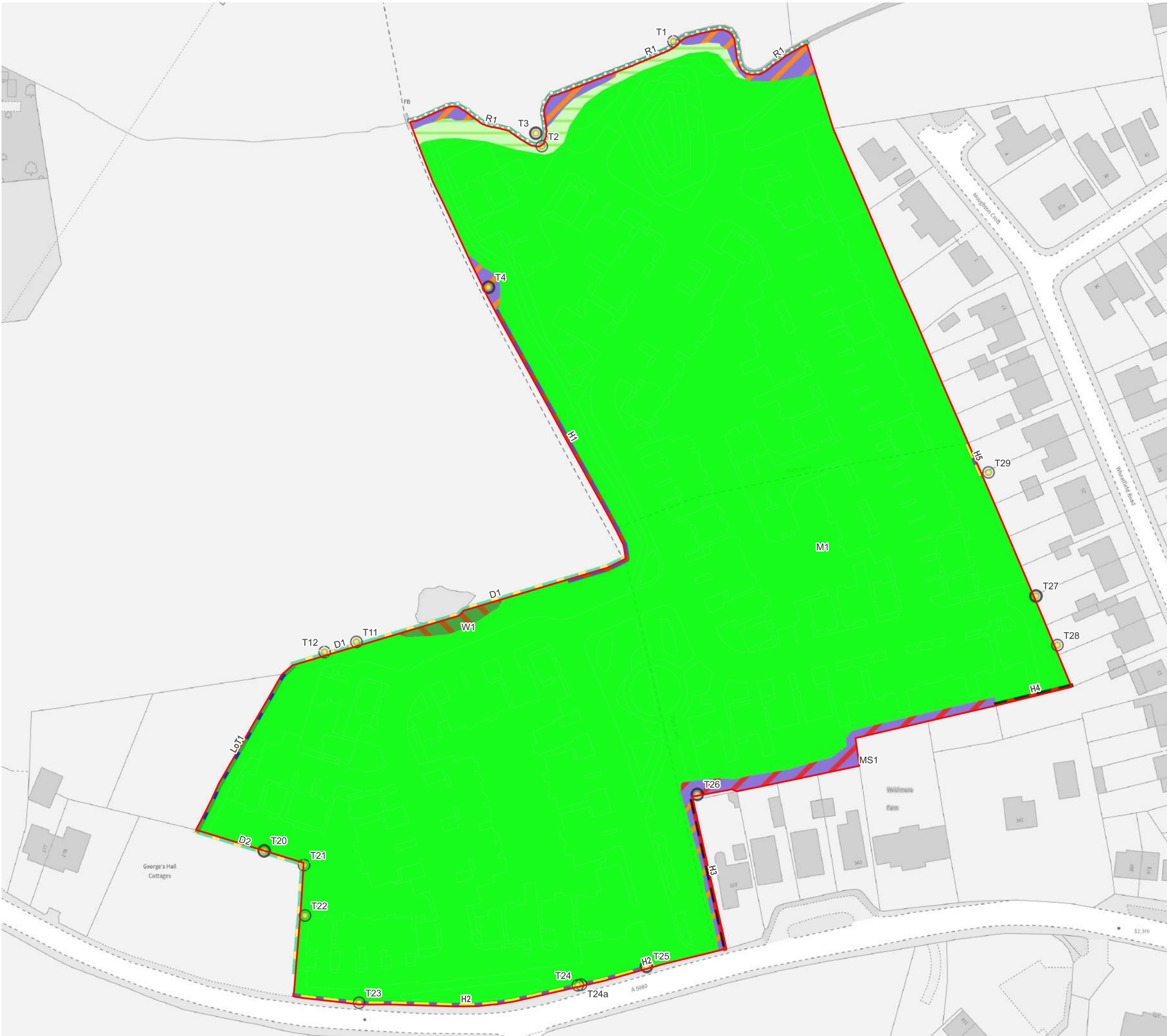
Condition Assessment Criteria		RCA Index Values
RCA Index ID	RCA Index Name Green = Positive and Red = Negative scoring indices	Subreach 1 (SR1)
		Baseline Score
Bank Top		
B1	Bank top vegetation structure	2
B2	Bank top tree feature richness	0

B3	Bank top water-related features	0
B4	<i>Bank top Non-Native-Invasive Species (NNIPS) cover</i>	-3
B5	<i>Bank top managed ground cover</i>	-2
Bank face		
C1	Bank face riparian vegetation structure	1
C2	Bank face tree feature richness	0
C3	Bank face natural bank profile extent	2
C4	Bank face natural bank profile richness	2
C5	Bank face natural bank material	1
C6	Bank face bare sediment extent	1
C7	<i>Bank face artificial bank profile extent</i>	0
C8	<i>Bank face reinforcement extent</i>	0
C9	<i>Bank face reinforcement material</i>	0
C10	<i>Bank face NNIPS cover</i>	-1
Channel Margin		
D1	Channel margin aquatic vegetation	1
D2	Channel margin aquatic morphotype	0
D3	Channel margin physical feature extent	2
D4	Channel margin physical feature richness	1
D5	<i>Channel Margin artificial features</i>	0
Channel Bed		
E1	Channel aquatic Morphotype richness	0
E2	Channel bed tree feature richness	1
E3	Channel bed hydraulic feature richness	2
E4	Channel bed nature features extent	1
E5	Channel bed natural features richness	1
E6	Channel bed material richness	3
E7	<i>Channel bed siltation</i>	0
E8	<i>Channel bed reinforcement extent</i>	0
E9	<i>Channel bed reinforcement severity</i>	0
E10	<i>Channel bed artificial features severity</i>	-2
E11	<i>Channel bed NNIPS extent</i>	0
E12	<i>Channel bed filamentous algae extent</i>	0
Is the Watercourse Over Deep?		Yes
Preliminary Condition Score		0.4899
Final Condition Score (including over deepness assessment)		Poor

FPCR Environment and Design Ltd

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH
Company No. 07128076. [T] 01509 672772 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100019980.



N

02550 m

Redline Boundary

Baseline Habitats

Bramble scrub

Mixed scrub

Modified grassland

Other neutral grassland

Wet woodland

Baseline Hedgerow

Non-native and ornamental hedgerow

Line of trees - associated with bank or ditch

Native hedgerow

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

Baseline Watercourse

Ditches

Other rivers and streams

Baseline Individual Trees

Existing large rural tree

Existing medium rural tree

Existing small rural tree

date		drwn/chkd			
09/12/25		DV / IH			
client					
Bellway Homes Ltd					
project					
Cronton Road, Cronton					
title		scale			
BASELINE HABITAT PLAN		1:1,200 @ A3			
number		rev			
FIGURE 1		-			

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd

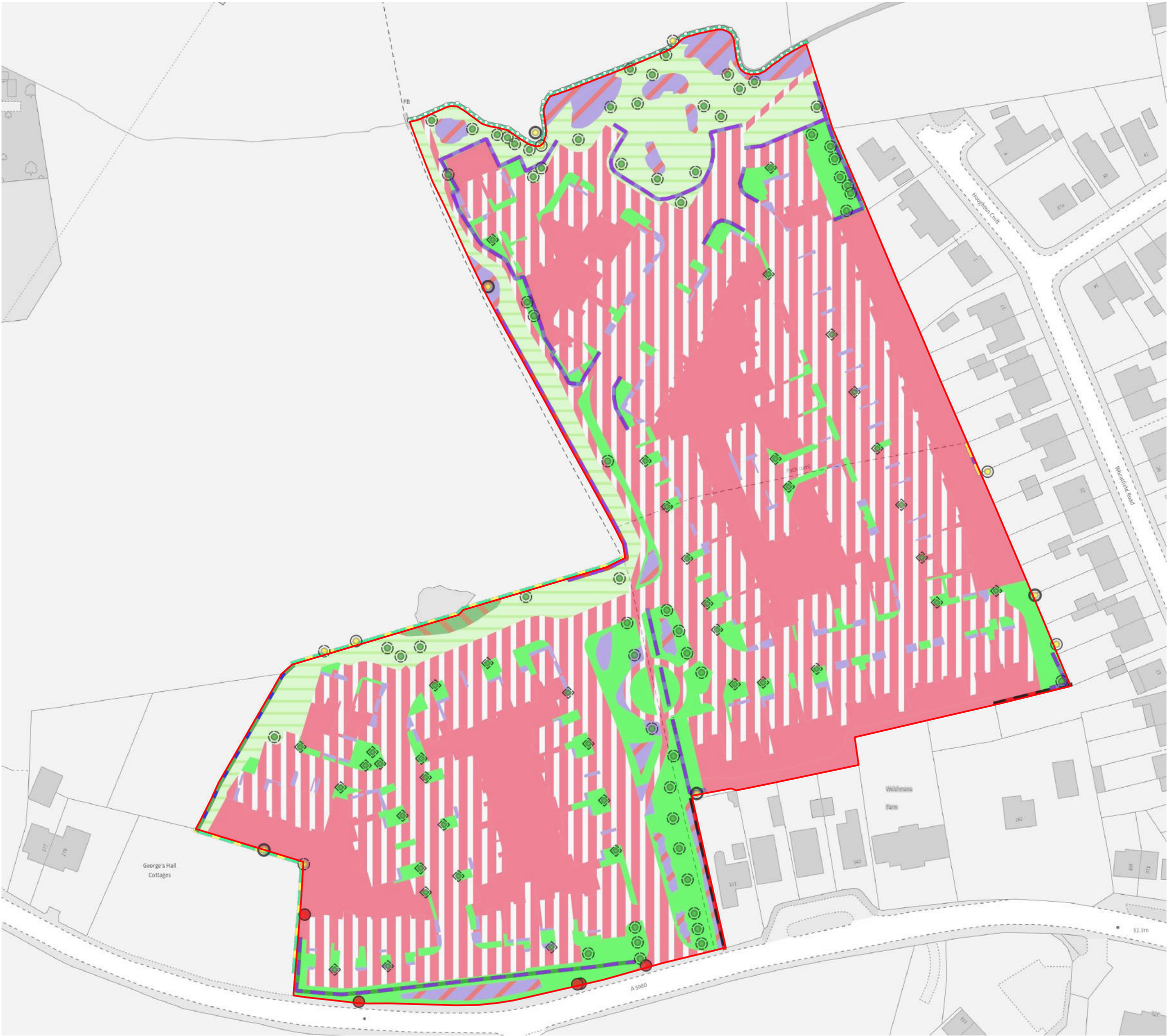
Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

UKHab Materials: © UKHAB LTD. No onward licence implied or provided. All rights reserved <https://ukhab.org/commercial-eula/>

\\fpcr-fs-01\Projects2\13100\13119\GIS\E - BNG\13119 - Statutory Metric-RevC_v1\13119-RevC_v1-Net Gain Habitat Mapping.qgs

t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk

FPCR | environment & design



N

02550 m

Redline Boundary

Proposed Habitats

Developed land; sealed surface

Introduced shrub

Mixed scrub

Modified grassland

Other neutral grassland

Vegetated garden

Wet woodland

Proposed Hedgerows

Non-native and ornamental hedgerow

Line of trees - associated with bank or ditch

Native hedgerow

Species-rich native hedgerow

Species-rich native hedgerow with trees

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

Proposed Watercourse

Ditches

Other rivers and streams

Proposed Individual Trees

Proposed small urban tree

Proposed small rural tree

Retained large rural tree

Retained medium rural tree

Retained small rural tree

Lost rural tree

date

09/12/25

drwn/chkd

DV / IH

client

Bellway Homes Ltd

project

Cronton Road,
Cronton

title

PROPOSED HABITAT PLAN

scale

1:1,200 @ A3

number

FIGURE 2

rev

-

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd

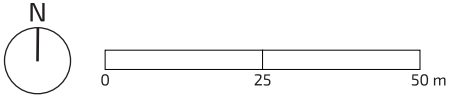
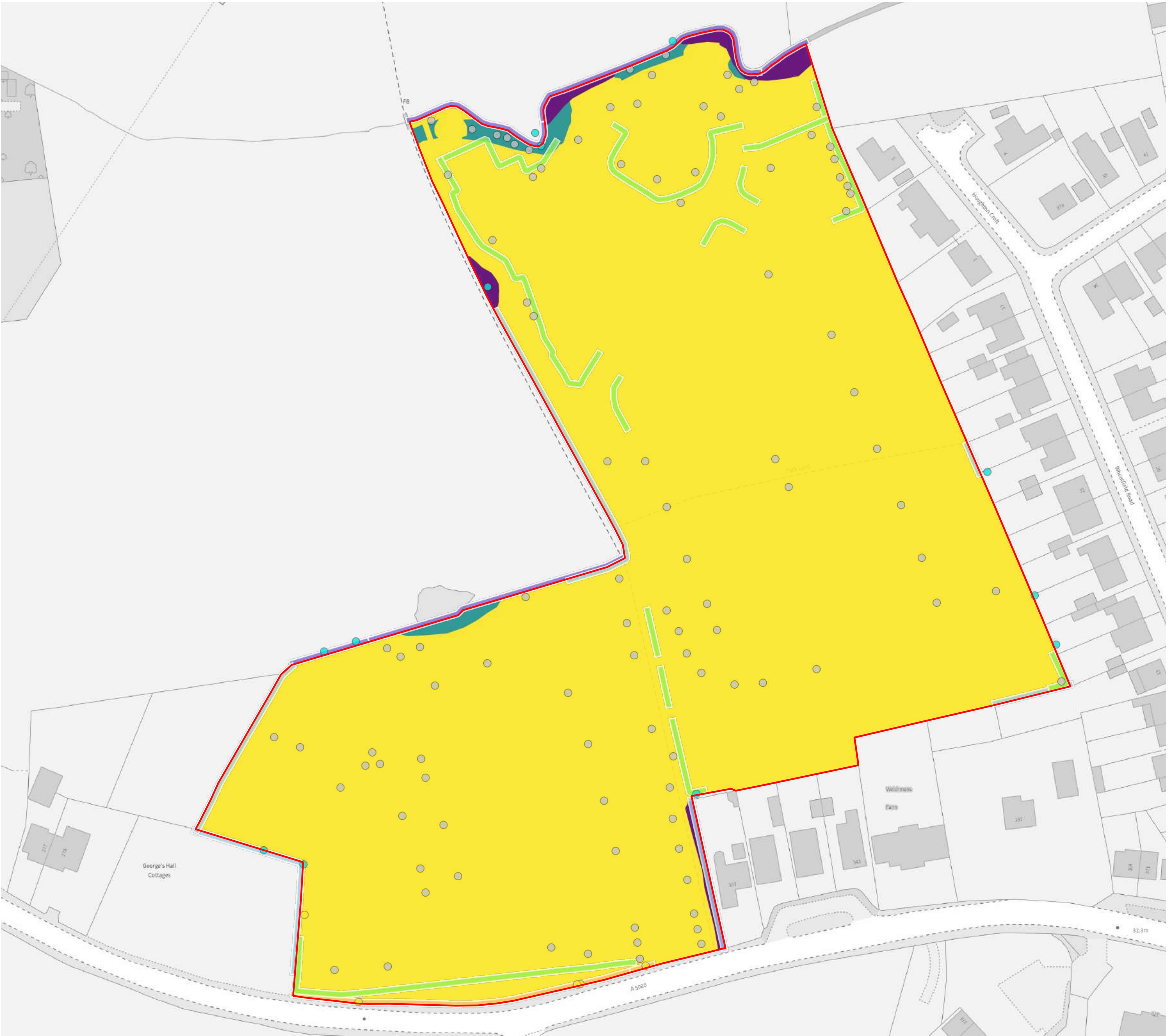
Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com)

UKHab Materials: © UKHAB LTD. No onward licence implied or provided. All rights reserved <https://ukhab.org/commercial-eula/>

\\fpcr-fs-01\Projects2\13100\13119\GIS\E - BNG\13119 - Statutory Metric-RevC_v1\13119-RevC_v1-Net Gain Habitat Mapping.qgs

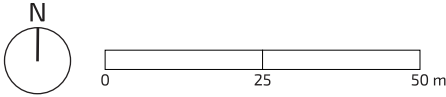
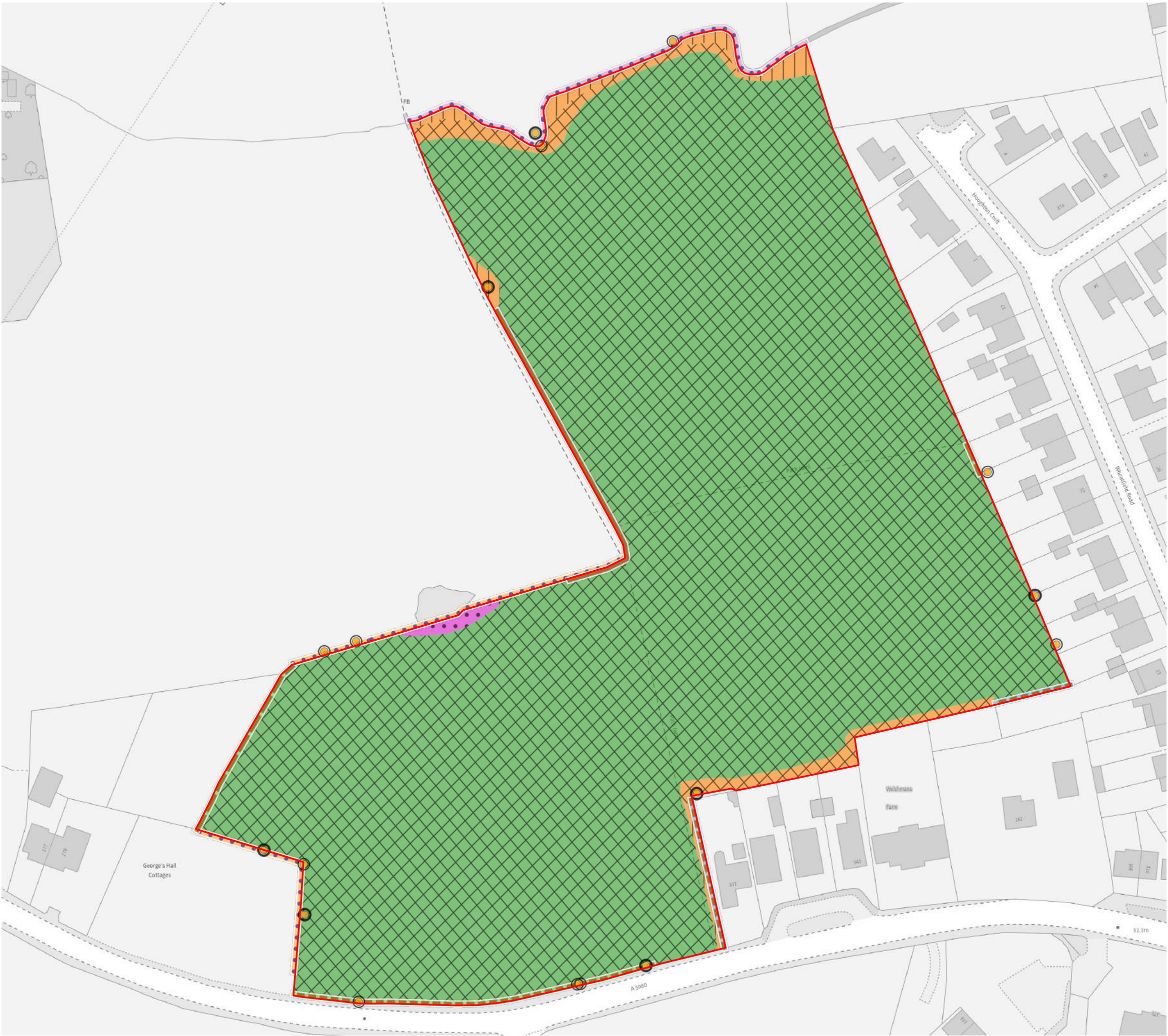
t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk

FPCR | environment & design



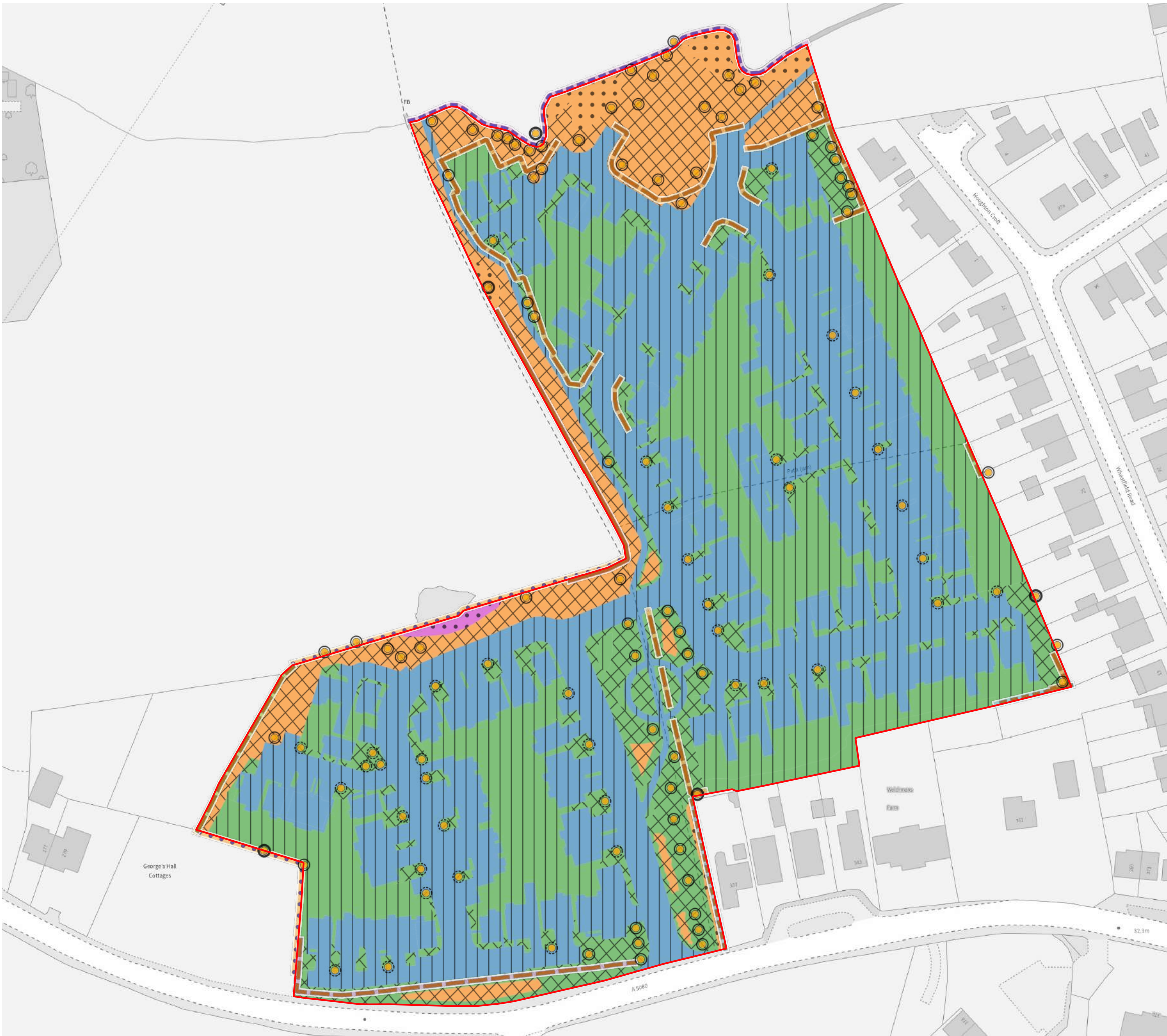
- Redline Boundary
- Habitats
 - Enhanced
 - Retained
 - Lost
- Hedgerows
 - Created
 - Retained
 - Lost
- Watercourses
 - Enhanced
 - Retained
- Individual Trees
 - Created
 - Retained
 - Proposed Lost

date	09/12/25	drwn/chkd	DV / IH
client	Bellway Homes Ltd		
project	Cronton Road, Cronton		
title	HABITAT RETENTION PLAN	scale	1:1,200 @ A3
number	FIGURE 3	rev	-



- Redline Boundary
- Baseline Habitat Condition
 - Moderate
 - Poor
 - Condition Assessment N/A
- Baseline Habitat Distinctiveness
 - High
 - Medium
 - Low
- Baseline Hedgerow Condition
 - Good
 - Moderate
 - Poor
- Baseline Hedgerow Distinctiveness
 - V.High
 - Low
 - V.Low
- Baseline Watercourse Condition
 - Poor
- Baseline Watercourse Distinctiveness
 - High
 - Medium
- Baseline Individual Tree Condition
 - Moderate
 - Good
- Baseline Individual Tree Distinctiveness
 - Medium

date	09/12/25	drwn/chkd	DV / IH
client	Bellway Homes Ltd		
project	Cronton Road, Cronton		
title	BASELINE HABITAT CONDITION AND DISTINCTIVENESS PLAN	scale	1:1,200 @ A3
number	FIGURE 4	rev	-



date
09/12/25

drwn/chkd
DV / IH

client
Bellway Homes Ltd

project
**Cronton Road,
Cronton**

title
**PROPOSED HABITAT CONDITION
AND DISTINCTIVENESS PLAN**

scale
1:1,200 @ A3

number
FIGURE 5

rev
-

FPCR | environment
& design