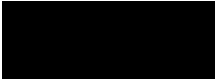


NHDC DECARBONISATION PROJECT- NORTH HERTS LEISURE CENTRE

Biodiversity Net Gain Assessment

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Prepared for:
Willmott Dixon Construction Ltd on behalf of North Hertfordshire District Council

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1 INTRODUCTION

1.1 Purpose and scope of this report

- 1.1.1 RPS was commissioned by Willmott Dixon Construction Limited on behalf of North Hertfordshire District Council (NHDC) to undertake a Biodiversity Net Gain (BNG) assessment of a parcel of land located at North Herts Leisure Centre, Baldock Road, Letchworth Garden City SG6 2ER which forms part of the NHDC Decarbonisation Project.
- 1.1.2 The proposal is for decarbonisation works, comprising the introduction of external rendering, new air source heat pump enclosures, glass reinforced plastic enclosure, photovoltaic panels, substation and hard and soft landscaping.
- 1.1.3 RPS undertook the UK Habitat (UKHab) Survey in 2024 for the Preliminary Ecological Appraisal (RPS, 2025a).
- 1.1.4 This report addressed the concept of Biodiversity Net Gain (BNG) and provides:
- Details of the UK Habitat Survey Map;
 - Assessment of baseline ecological value; and
 - Assessment of the post-development value.

1.2 Biodiversity Net Gain and Methods

- 1.2.1 Biodiversity Net Gain is defined in Baker *et al* (2019)¹ as:
"Development that leaves biodiversity in a better state than before"
- 1.2.2 The requirement for developments to seek to achieve BNG arises from the National Planning Policy Framework (NPPF), which states in Para. 193 (d) that:
- 1.2.3 *'When determining planning applications, local planning authorities should apply the following principles: ...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...'*
- 1.2.4 There is no single set method for quantifying the assessment of BNG, but one method is the use of biodiversity calculators to assess the biodiversity value of habitats pre- and post-development based on habitat type, distinctiveness and condition.
- 1.2.5 A biodiversity index is derived for the baseline and for the proposed development, and BNG is considered to be achieved where an increase in value is delivered (on or offsite), and where habitats of a higher value are not replaced exclusively with habitats of a lower value.
- 1.2.6 Defra made available its beta test update of its BNG assessment tool in July 2021 and updated to Statutory Version in December 2023. The Statutory Biodiversity Metric Tool July 2024 v1.0.3 (Natural England, 2024a) has been used for the assessment in this report.

Condition Assessment

- 1.2.7 During the UKHab Survey, a habitat condition assessment was undertaken for the habitats present within the project boundary. The appropriate 'condition sheet' was first selected via the Table TS1-

r, J., Hoskins, R. & Butterworth, T. (2019). *Biodiversity Net Gain – good practice principles for development*. Ciria, London.

1a in the technical supplement provided in The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology, July 2024 (v1.0.2) (Natural England, 2024b).

1.2.8 The condition sheet was then used to assess the individual habitats by comparing how they scored against pre-set condition assessment criteria. The criteria describe what components are needed for the habitat to be of good, moderate or poor value.

1.2.9 Each habitat was scored the following:

- 1 – Poor;
- 2 – Moderate; and
- 3 – Good.

1.2.10 The calculator allows these to be further divided and provides categories for fairly good and fairly poor. The ecologist undertaking the assessment used their professional judgement, considering the habitat condition assessment criteria, to decide when it was suitable to use these categories.

1.2.11 It should be noted that some habitats with low or no ecological value are given a fixed score and do not need assessing.

2 PRE-DEVELOPMENT HABITATS

2.1 UK Habitat Survey

- 2.1.1 The UK Habitat Survey of the site was undertaken as part of the PEA (RPS, 2025a) in 2024. The survey was conducted by RPS Consultant Ecologist, Toni Winbourne.
- 2.1.2 The habitats are described in turn, with specific reference to guidance on habitat conditions, and are mapped in **Figure 1**.

2.2 Results: Pre-development habitats (on-site)

g4 - Modified grassland

- 2.2.1 Managed modified grassland was present on the west and north sides of the site. The grassland was generally species poor and had a low sward height. The grassland was dominated by perennial rye (*Lolium perenne*) and white clover (*Trifolium repens*), and included cock's foot (*Dactylis glomerata*), hawkweed (*Hieracium sp.*), dandelion (*Taraxacum officinale*), daisy (*Bellis perennis*), ragwort (*Jacobaea vulgaris*), creeping buttercup (*Ranunculus repens*), dove's-foot crane's-bill (*Geranium molle*), bristly ox-tongue (*Helminthotheca echioides*), nettle (*Urtica dioica*), self-heal (*Prunella vulgaris*), and greater plantain (*Plantago major*).
- 2.2.2 This would be classified as Modified Grassland *moderate* condition, as it meets the essential criteria and fails to meet the following criteria:
- Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed; and
 - 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.

200- Trees

- 2.2.3 Five medium (>30 cm and ≥60 cm) urban trees were scattered throughout the modified grassland. This included Scots pine (*Pinus sylvestris*), non-native conifer and field maple (*Acer campestre*).
- 2.2.4 These were assigned *moderate* condition, as they failed to meet the following criteria:
- There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height; and
 - Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.

g4.128 - Modified grassland- tall sward

- 2.2.5 This grassland was present on the northeastern edge of the site, it was unmanaged and as such contained a tall sward height. The species present were the same to that described above
- 2.2.6 This would be classified as Modified Grassland *good* condition, as it meets the essential criteria and only fails to meet the following criteria:

- 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.

h3h – Mixed scrub

- 2.2.7 A small patch of mixed scrub was present on the eastern site boundary, it included bramble (*Rubus fruticosus*), butterfly bush (*Buddleja sp.*), dog rose (*Rosa canina*), dogwood (*Cornus sp.*), and traveller's joy (*Clematis vitalba*).
- 2.2.8 This would be classified as being of *Moderate* condition, as it failed the following criteria:
- The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat; and
 - There are clearings, glades or rides present within the scrub, providing sheltered edges.

u.847 – Urban. Introduced shrub

- 2.2.9 A small patch of introduced shrub was present in the east of the site, this was dominated by butterfly bush.
- 2.2.10 Two small trees were present here, however, did not meet the minimum size to be classified as individual trees.
- 2.2.11 A condition assessment of this habitat type is not required in accordance with the Statutory Biodiversity Metric Condition Assessments, being of a low value, by default.

u1c – Artificial Unvegetated - Unsealed Surface

- 2.2.12 Artificial unvegetated- unsealed surface within the site included gravelled areas to the north and northeast of the site.
- 2.2.13 A condition assessment of this habitat type is not required in accordance with the Statutory Biodiversity Metric Condition Assessments, being of a very low value, by default.

u1c.81 – Artificial Unvegetated – Unsealed Surface, Ruderal or Ephemeral

- 2.2.14 A small section of ruderal vegetation was present adjacent to the north-eastern part of the leisure centre. The habitat included nettle, white clover, dock (*Rumex sp.*), creeping thistle (*Cirsium arvense*), ivy (*Hedera helix*) and bramble.
- 2.2.15 Under the BNG metric, this habitat would most closely relate to sparsely vegetated land – tall forbs. This habitat does require a condition assessment and has been completed below.
- 2.2.16 This would be classified as being of a *moderate* condition, failing to meet the following criteria:
- The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.

u1b5 – Buildings

- 2.2.17 The site contains a large building which is currently being used as a leisure centre with internal swimming pool, gym, squash courts, sauna and a cafe. It is constructed of brick with a flat roof. The building is in good condition.

- 2.2.18 A condition assessment of this habitat type is not required in accordance with the Statutory Biodiversity Metric Condition Assessments, being of very low value, by default.

u1b6 – Other developed land (hardstanding)

- 2.2.19 The site contains access roads, a carpark and sealed walkways.
- 2.2.20 A condition assessment of this habitat type is not required in accordance with the Statutory Biodiversity Metric Condition Assessments, being of a very low value, by default.

3 POST-DEVELOPMENT HABITATS

3.1 Post-development habitats (on-site)

- 3.1.1 This section of the report looks at the habitats which are to be created during the construction phase of the development and provides reasoning as to their habitat classification and condition category, as was completed for the pre-development habitats.
- 3.1.2 The below habitats are in accordance with the Landscape Planting Plan (RPS, 2025b) (**Figure 2**).
- 3.1.3 The post-development areas were informed by the North Herts Leisure Centre- Sketch Site Plan P04 (Saunders Boston Architects, 2025).

Small Native Urban Trees

- 3.1.4 Twenty-eight native small urban trees (stem diameter breast height >7.5 cm) are proposed within the landscaping plan for the development, all situated within the modified grassland in the north and east of the site. Utilising the urban tree calculator, small trees are represented by a measure of 0.114002114 ha (excluded from total area calculation).
- 3.1.5 As greater than three condition assessment criteria will be achieved, the condition has been assigned as 'moderate' (**Table 1**). This must be met within 27 years in accordance with The Statutory Biodiversity Metric Calculation Tool.
- 3.1.6 They will consist of native species and provide suitable foraging and nesting space for invertebrates and foraging opportunities for birds.

Table 1. Future urban tree habitat condition assessment

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The tree is a native species (or at least 70% within the block are native species).	Yes
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes
C	The tree is mature (or more than 50% within the block are mature).	Yes
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	No
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	X
Passes 2 or fewer criteria	Poor (1)	

Mixed Scrub

- 3.1.7 An area of 0.027 ha of modified grassland will be enhanced to mixed scrub. The mixed scrub will be planted with a mix of native species.
- 3.1.8 As three condition assessment criteria will be achieved, the condition has been assigned as 'moderate' (**Table 2**). This must be met within 5 years in accordance with The Statutory Biodiversity Metric Calculation Tool.
- 3.1.9 The mixed scrub will consist of native species and provide suitable foraging and nesting space for invertebrates, birds and small mammals.

Table 2 Future mixed scrub habitat condition assessment

Condition Assessment Criteria		Criterion passed (Yes or No)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). - At least 80% of scrub is native, - There are at least three native woody species, - No single species comprises more than 75% of the cover (except hazel (<i>Corylus avellana</i>), common juniper (<i>Juniperus communis</i>), sea buckthorn (<i>Hippophae rhamnoides</i>) or box (<i>Buxus sempervirens</i>), which can be up to 100% cover).	Yes
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.	No
C	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Yes
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	No
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Yes
Passes 5 criteria		Good (3)
Passes 3 or 4 criteria		Moderate (2) X
Passes 2 or fewer criteria		Poor (1)

4 CONCLUSIONS / SUMMARY

- 4.1.1 The site, pre-development comprised a number of habitats, of varying quality. Modified grassland of moderate and good condition, tall forbs of moderate condition, urban trees of moderate condition, mixed scrub of moderate condition and developed land/unvegetated unsealed areas of very low quality.
- 4.1.2 Considering all of the above, the pre-development score for the site is calculated to be **1.48 habitat units**.
- 4.1.3 As part of the ongoing development of the scheme, the mitigation hierarchy has been followed as to ensure that biodiversity impacts are minimised as much as possible.
- 4.1.4 **Avoid:** The habitats of highest value have been retained and will be enhanced and restored. For example, a majority of the grassland and the urban trees and within the site ownership boundary have been excluded from the red line of the proposal.
- 4.1.5 **Minimise:** In order to minimise the impact of biodiversity loss as much as possible, vegetation removal required for works has been minimised as much as feasible.
- 4.1.6 **Mitigate:** In order to mitigate for the loss of pre-development habitats, a number of native urban trees and mixed scrub will be planted within the post-development scheme.
- 4.1.7 **Offset:** Based on all of the above, the scheme meets the minimum requirement of +10% BNG, and so, at this time, no offsetting has been considered.
- 4.1.8 The final BNG score for the site is a gain of **+0.15 habitat units, or +10.24%**.

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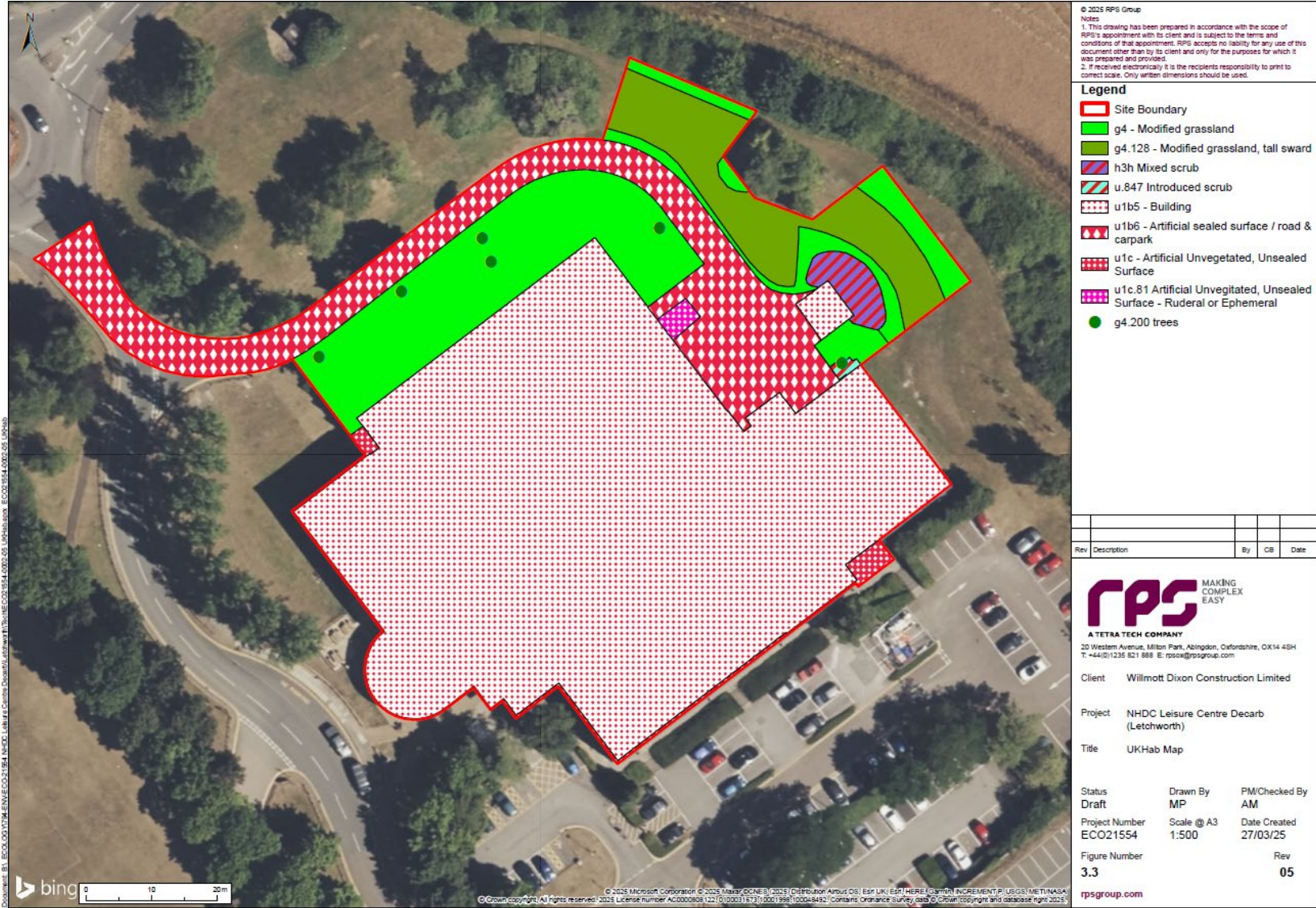


Figure 1 Pre-development habitat plan

Figure 2. Landscape Planting Plan (RPS 2025b)

