

MKA
ECOLOGY

Biodiversity Gain Plan

Wood Green Common, Haringey

Site	Wood Green Common, Haringey
Project number	138323
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Declaration of compliance



The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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1. EXECUTIVE SUMMARY

In January 2024, MKA Ecology Ltd was commissioned to undertake a Biodiversity Net Gain (BNG) assessment for a planning application for the Wood Green Common Multi-Use Games Area (MUGA). This BNG assessment has been prepared to address the aims of the Environment Act 2021 and to detail how the biodiversity enhancements in the proposed scheme will lead to an overall benefit to biodiversity.

The proposed development constitutes the removal of an area of modified grassland to allow for the construction of a new MUGA and associated landscaping (planning application reference: HGY/2023/2701). The proposed development area is limited in extent, however does include off-site habitat creation, including the provision of medium distinctiveness habitats such as other neutral grassland and significant urban tree planting. Sustainable Drainage Systems (SuDS) are also proposed, comprising rain gardens and bioswales. New areas of developed land and introduced shrub planting are also included within the proposals, along with the enhancement of the native hedgerows in the wider Wood Green Common area.

To provide an objective assessment of the potential value of the proposed biodiversity enhancements, the Defra Statutory Biodiversity Metric (Defra, 2023) has been applied. The measures, a proxy for biodiversity that use habitat types and their areas, are compared before (the existing condition) and after the completion of the proposed development.

The proposed landscaping for the Wood Green Common MUGA project results in a biodiversity net loss of 82.04%, due to the loss of modified grassland within the development footprint. To mitigate against this significant net loss, off-site habitat provision within the wider Wood Green Common Site has been provided. This assessment exercise has calculated that the proposed development, inclusive of off-site gains, is likely to lead to a net gain of 0.94 biodiversity units, provided that the proposed habitats are created, managed and maintained appropriately. This constitutes a net gain percentage of 554.04% in habitat units within the metric. This net gain in habitats units has been achieved, despite the overall loss in area of modified grassland within the planning application site, through the provision of medium distinctiveness habitats in the wider Wood Green Common Site, including other neutral grassland creation and urban tree planting.

The proposals also include the enhancement of hedgerows in the wider Site through increased species diversity and infilling, which will result in an increase of 0.36 biodiversity units. This continues a net gain of 9.20% in hedgerow units. In order to satisfy the rules of the Biodiversity Net Gain assessment, proposals should result in at least a 10% net gain across each type of unit present. As such, it is recommended that measures should be explored to secure additional hedgerow gains so as to demonstrate a significant increase in biodiversity across all unit types.

It should be noted that the predicted net-gain in biodiversity is reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future. It will be critical to ensure that appropriate management activities are put in place in order to achieve the desired condition of the proposed habitats. It is recommended that measures to ensure the successful creation and long-term management of proposed habitats are outlined in a Landscape and Ecology Management Plan (LEMP) for the Site.

2. INTRODUCTION

2.1. Purpose

This Biodiversity Net Gain (BNG) Plan is submitted for the approval of London Borough of Haringey to show how a 10% net gain for biodiversity will be achieved at the Site, as set out within the Environment Act 2021.

The purpose of this assessment is to review the existing biodiversity value of the Site, comparing this to the proposed landscape plans and calculating an overall biodiversity net change for the Site. The primary method of calculating this change will follow the Defra Statutory Biodiversity Metric (Defra, 2023). The aim of using this method is to demonstrate whether the proposed development and landscape plans will deliver a net gain in biodiversity.

The process of achieving and assessing Biodiversity Net Gain should follow the below principles and rules, as set out within *Biodiversity Net Gain, Good Practice Principles for Development* (Baker et al., 2019) (Table 1) and *The Statutory Biodiversity Metric – User Guide (draft)* (Defra, 2023) (Table 2).

This Biodiversity Gain Plan is in line with British Standard BS8683.

Table 1: The UK's good practice principles for biodiversity net gain (Baker et al., 2019)

Principle	In practice
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
2. Avoid losing biodiversity that cannot be offset elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve NNL/net gain.
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to net gain. Achieve net gain in partnership with stakeholders where possible.
4. Address risk	Mitigate difficulty, uncertainty and other risks to achieving net gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between losses occurring and gains being fully realised.
5. Make a measurable net gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.

Principle	In practice
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: • Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels • Enhancing existing or creating new habitat • Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
8. Create a Net Gain legacy	Ensure Net Gain generates long-term benefits by: • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity • Planning for adaptive management and securing dedicated funding for long-term management • Designing Net Gain for biodiversity to be resilient to external factors, especially climate change • Mitigating risks from other land uses • Avoiding displacing harmful activities from one location to another and • Supporting local-level management
9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Table 2: Biodiversity net gain rules (Defra, 2023)

Rule	In practice
1	The trading rules of this biodiversity metric must be followed.
2	Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
3	To accurately apply the biodiversity metric formula, you must use the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.
4	In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.

3. HABITATS

3.1. Present – baseline condition

A Preliminary Ecological Appraisal (PEA) was conducted by MKA Ecology Ltd on 24 March 2023 (MKA Ecology Ltd, 2023) in order to inform the baseline habitats present. This survey included both the application boundary and the wider Wood Green Common boundary in order to address off-site habitat provisions. An update condition assessment of the baseline habitats was undertaken on 23 January 2024. More information on how the habitat conditions were assigned is provided in Appendix 1.

The application boundary encompasses approximately 0.085 ha and comprises entirely of modified grassland. The off-Site Wood Green Common areas encompasses approximately 0.7 ha and comprises a large open grassland common space, a children's playground, a pergola, introduced shrub areas, native hedgerows, lines of trees and hardstanding, in the form of pathways. The habitats on-site and off-site were mapped during the PEA and are presented in Figure 1. The areas occupied by each habitat type are detailed in Table 4 in the next section.

Please note that any impacts on designated sites and protected species that may result from the development have been addressed in the PEA, which also outlines plans for mitigation and enhancement where required (MKA Ecology Ltd, 2024).

3.2. Future – proposed landscape and enhancements

The proposed development constitutes the removal of modified grassland to allow for the construction of a Multi-Use Games Area (MUGA) and associated landscaping (planning application reference: HGY/2023/2701). The development of this MUGA is associated with the Wood Green Common enhancement project, that isn't subject to a planning application. The close relationship between these two projects allows for biodiversity net gains to be implemented off-site. The location and extent of these habitats within the planning application boundary and within the wider Wood Green Common Site are presented in Figure 2.

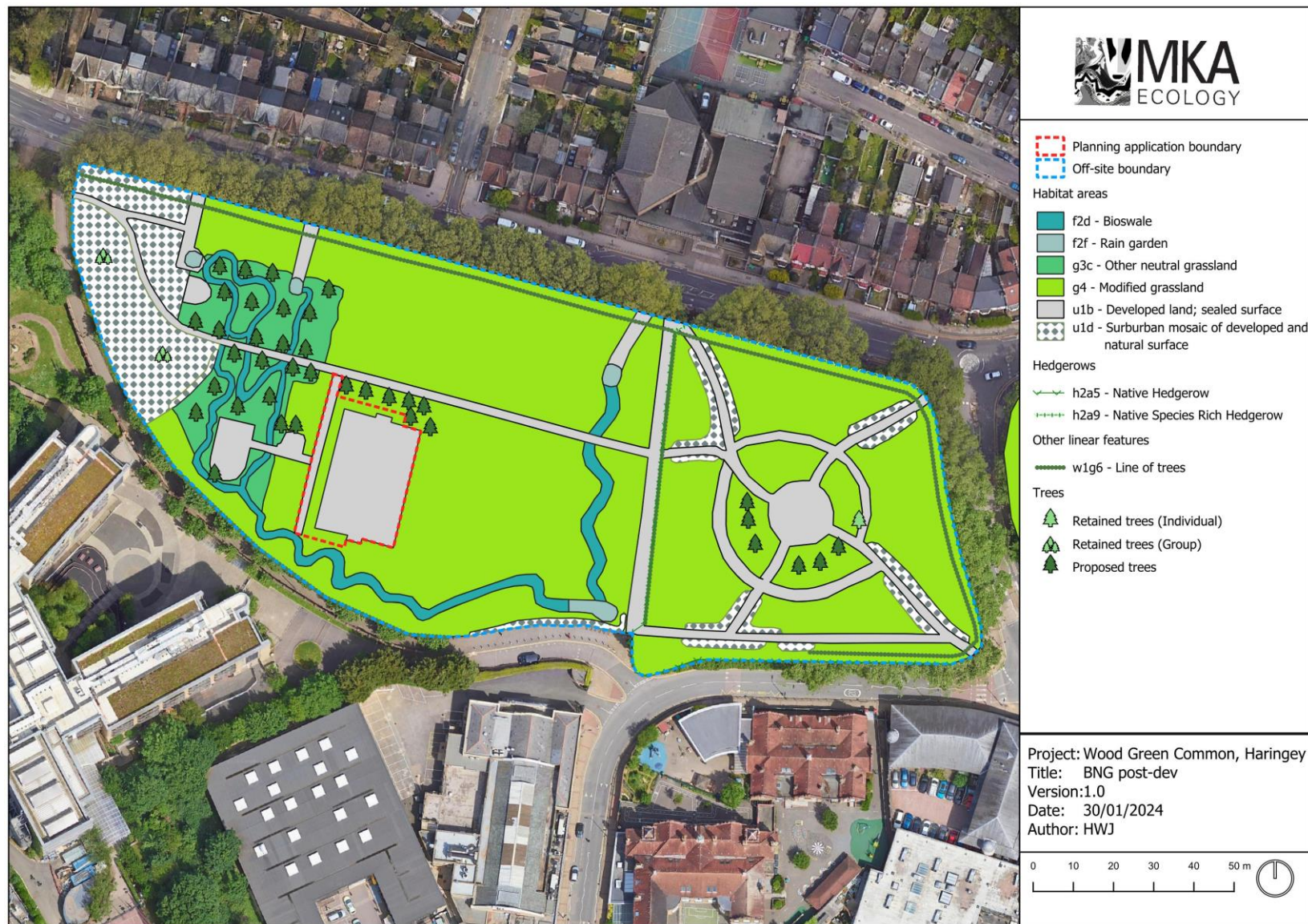
The proposed Wood Green Common enhancement project involves the provision of medium distinctiveness habitats in the form of other neutral grassland and significant urban tree planting. Sustainable Drainage Systems (SuDS) are proposed, comprising rain gardens and bioswales. New areas of developed land and introduced shrub planting are also included within the proposals, along with the enhancement of the native hedgerows in the wider Wood Green Common area.

It is these proposed habitats that will form the basis of the calculation of 'net-change' in biodiversity using the Defra metric (see Section 4).

Figure 1: Existing Habitat Map (MKA Ecology Ltd, 2023)



Figure 2: Biodiversity Net Gain Plan Map (Produced from plan courtesy of Robert Bray Associates, 2023)



4. METHODOLOGIES

4.1. Biodiversity Net Gain assessor

This BNG assessment was conducted by Henry Wyn-Jones, Graduate Ecologist at MKA Ecology Ltd. Henry has one years' experience conducting BNG assessments and is considered a competent assessor under the Statutory Biodiversity Metric requirements (Defra, 2023). The Biodiversity Gain Plan has been reviewed and approved by Rory Roche ACIEEM, Senior Ecologist at MKA Ecology Ltd. Rory has over seven years' experience as an ecologist and five years of experience conducting BNG assessments.

To establish whether the proposed development will contribute positively to biodiversity we use the Defra Statutory Biodiversity Metric (Defra, 2023). This method uses habitat as a proxy for biodiversity and its primary application is to provide planners and developers with a method of establishing how much and what type of habitats should be created or enhanced in order to ensure that the proposed development results in a net gain for biodiversity. Habitats are assigned the following scores:

- Distinctiveness: A measure of the type and importance of a habitat.
- Condition: A measure of the present or predicted condition of a habitat type.
- Strategic significance: How a habitat is regarded within Local Planning Policy.

Habitat distinctiveness is automatically assigned in the Statutory Biodiversity Metric. Please see Appendix for further information on how habitat condition and strategic significance was assigned in this assessment.

For proposed habitats, where there is an attempt to predict the habitat type following establishment additional handicaps or risk scores are imposed representing the following factors:

- Difficulty: More difficult habitats incur a greater risk.
- Time to condition: In general, it takes longer for habitats to reach a better condition, plus certain habitats by their very nature take longer to create or restore.
- If the creation or enhancement of habitats is delayed, an additional risk score is applied. This will not apply in the present case.
- If habitats are created off-site, an additional risk score is applied. This will apply in the present case.

The multipliers used in habitat assignment in the Biodiversity Net Gain Metric are detailed further in Table 3 below.

Table 3: Multipliers used in the calculation of Biodiversity Net Gain

Multiplier	When applied	Description
Distinctiveness	Before and after	A measure of the type of habitat, automatically assigned within the Metric 3.0. Habitats with greater value are assigned a higher score.
Condition	Before and after	The condition of the habitat. Uses the Technical Supplement (<i>Panks et al. 2021a</i>); Higher levels of condition give rise to greater values. In some cases, no condition assessment is required and these habitats are automatically allocated a score.
Strategic significance	Before and after	Whether a habitat is important within its local context.
Time to target condition	After	Used to account for the fact that habitat creation as part of a development is rarely instant. A 'handicap' is applied, with habitats that take longer to establish resulting in a greater reduction.
Difficulty of creation/restoration	After	Habitats that are more difficult to create/restore cause a reduction in the biodiversity unit as they are associated with a greater risk of failure.
Spatial risk	After	Habitat that is created at a greater distance away from the development site carries a greater risk of removing other natural habitats.
Advanced and delayed habitat creation	After	Used to account for situations where there is a mismatch between a negative impact on biodiversity and work to create or enhance the 'post-intervention habitats'. This can either be in the form of habitat creation occurring in advance or being delayed beyond the point of baseline losses.

4.2. Trading Summary

The Defra Statutory Biodiversity Metric includes a Trading Summary which must be satisfied to achieve a positive outcome in the Net Gain assessment. The trading rules ensures that habitat losses are compensated for on a “like for like” or “like for better” basis. Newly created or enhanced habitats should achieve a higher distinctiveness and/or condition than those lost. More information is provided in Table 2 (see Rule 3).

Further details on how the metric is calculated is provided in the aforementioned publications, with more site-specific detail provided in Appendix 1 and Appendix 2.

4.3. Mapping habitats

Current habitats were mapped and areas calculated using QGIS during the PEA (see Section 3.1 for details of habitat types). The areas of the proposed habitats were calculated using QGIS using a digitised and geo-referenced version of the Landscape Planting Palette (Robert Bray Associates, 2023) and habitat areas provided by the landscaping team.

4.4. Hedgerows

Hedgerows, given their unique linear characteristic and their position as 'edge habitats' are treated as linear features in the Statutory Biodiversity Metric calculator and are calculated as 'biodiversity metres'. The metrics calculated for hedgerows have therefore been calculated and presented separately.

4.5. Rivers and streams

Rivers and streams, given their linear form and important role in habitat connectivity, are treated as linear features in the Statutory Biodiversity Metric calculator and are calculated as 'biodiversity metres'. The metrics calculated for rivers and streams have therefore been calculated and presented separately. No rivers are present on site and therefore this category is omitted in this assessment.

4.6. Habitat degradation

It is confirmed that the baseline habitats have not been significantly altered or modified since 30 January 2020 and, as such, it is appropriate to assess the baseline habitats in their current condition.

4.7. Sharing data

Relevant ecological data collected during baseline habitat and protected species surveys at the Site will be shared with Greenspace Information for Greater London (GiGL) following submission of this Biodiversity Gain Plan.

4.8. Assumptions and constraints

Several assumptions are made to enable this Biodiversity Net Gain assessment. The primary assumptions are listed below:

- The net gains in biodiversity that are estimated are reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future; this is particularly true of the other-neutral grassland and bioswale habitats;
- It is assumed that there will be no time delay in establishing the off-site habitats; and
- Proposed tree canopy areas have been calculated using the "Tree helper" within the Metric calculator tool. As per The Statutory Biodiversity Metric: User guide (Draft) (Defra, 2023) size classes for newly planted street trees have been categorised as 'small'.

No relevant constraints were encountered during the Site visit which may influence the baseline assessment of habitats present.

Table 4: Attribution of multiplier levels to each habitat type at present and for the proposed development

Habitat type and area	Multiplier (and score)					
	Distinctiveness (automatically assigned)	Condition	Strategic significance	Time to target condition	Difficulty of creation/ enhancement	Spatial risk
<i>Current habitats (On-site)</i>						
Modified grassland 0.0852 ha	Low (2)	Poor (1)	Low (1)	-	-	-
<i>Habitats to be retained (On-site)</i>						
Modified grassland 0.0153 ha	Low (2)	Poor (1)	Low (1)	-	-	-
<i>Proposed habitats (On-site)</i>						
Developed land; sealed surface (hardstanding) 0.0699 ha	Very low (0)	NA (0)	Low (1)	0 years (1.00)	Low (1)	On-site
<i>Current habitats (Off-site)</i>						
Developed land; sealed surface (hardstanding) 0.1263 ha	Very low (0)	N/A (0)	Low (1)	-	-	-
Vegetated garden 0.1816 ha	Low (2)	N/A (0)	Low (1)	-	-	-
Introduced shrub 0.0356 ha	Low (2)	N/A (0)	Low (1)	-	-	-
Modified grassland 1.3077 ha	Low (2)	Poor (1)	Low (1)	-	-	-
Urban tree 0.0041 ha	Medium (4)	Poor (1)	High (1.5)	-	-	-

Habitat type and area	Multiplier (and score)					
	Distinctiveness (automatically assigned)	Condition	Strategic significance	Time to target condition	Difficulty of creation/ enhancement	Spatial risk
Urban tree 0.0448 ha	Medium (4)	Moderate (2)	High (1.5)	-	-	-
<i>Habitats to be retained (Off-site)</i>						
Developed land; sealed surface (hardstanding) 0.1263 ha	Very low (0)	N/A (0)	Low (1)	-	-	-
Vegetated garden 0.1309 ha	Low (2)	N/A (0)	Low (1)	-	-	-
Introduced shrub 0.0356 ha	Low (2)	N/A (0)	Low (1)	-	-	-
Modified grassland 1.0793 ha	Low (2)	Poor (1)	Low (1)	-	-	-
Urban tree 0.0041 ha	Medium (4)	Poor (1)	High (1.5)	-	-	-
Urban tree 0.0448 ha	Medium (4)	Moderate (2)	High (1.5)	-	-	-
<i>Proposed habitats (Off-site)</i>						
Developed land; sealed surface 0.0758 ha	Very low (0)	N/A (0)	Low (1)	0 years (1.00)	Low (1.00)	Inside LPA/NCA
Introduced shrub 0.0101 ha	Low (2)	N/A (0)	Low (1)	1 year (0.965)	Low (1.00)	Inside LPA/NCA
Other neutral grassland 0.1095 ha	Medium (4)	Moderate (2)	High (1.15)	5 years (0.837)	Low (1.00)	Inside LPA/NCA
Bioswale 0.0800 ha	Low (2)	Moderate (2)	High (1.15)	1 year (0.965)	Medium (0.67)	Inside LPA/NCA

Habitat type and area	Multiplier (and score)					
	Distinctiveness (automatically assigned)	Condition	Strategic significance	Time to target condition	Difficulty of creation/ enhancement	Spatial risk
Rain garden 0.0075 ha	Low (2)	Good (3)	High (1.15)	5 years (0.837)	Low (1.00)	Inside LPA/NCA
Urban tree 0.1547 ha	Medium (4)	Poor (1)	High (1.15)	10 years (0.700)	Low (1.00)	Inside LPA/NCA
<i>Current hedgerows and lines of trees (Off-site)</i>						
H1: Native hedgerow 0.289 km	Low (2)	Moderate (2)	High (1.15)	-	-	-
LOT1: Line of trees 0.561 km	Low (2)	Poor (1)	High (1.15)	-	-	-
LOT2: Line of trees 0.100 km	Low (2)	Poor (1)	High (1.15)	-	-	-
<i>Hedgerows and lines of trees to be retained (Off-site)</i>						
H1: Native hedgerow 0.220 km	Low (2)	Moderate (2)	High (1.15)	-	-	-
LOT1: Line of trees 0.561 km	Low (2)	Poor (1)	High (1.15)	-	-	-
LOT2: Line of trees 0.100 km	Low (2)	Poor (1)	High (1.15)	-	-	-
<i>Hedgerows and lines of trees to be enhanced (Off-site)</i>						
H1: Species-rich native hedgerow 0.069 km	Medium (4)	Moderate (2)	High (1.15)	5 years (0.837)	Low (1.00)	Inside LPA/NCA

5. RESULTS

5.1. Biodiversity net gain (On-site)

The overall comparison of biodiversity units is presented in Table 5 below. The calculator used to derive these figures is provided at Appendix 2.

Table 5: Results of on-site biodiversity metric calculations

Habitat	Biodiversity units (current)*#	Biodiversity units (proposed) *#	Biodiversity net-change*#	Net percentage change	Trading rules met
Habitats	0.17	0.03	-0.14	-82.04%	No

* Habitat areas are calculated as biodiversity hectares; hedgerows and rivers as biodiversity metres

Figures rounded to two decimal places

Under the current proposals, there will be a net loss of 0.14 biodiversity units. This net loss in biodiversity will occur as the existing areas of modified grassland will be removed and replaced with the proposed MUGA. According to biodiversity net gain rules, losses of low distinctiveness habitat such as modified grassland must be replaced with habitats of the same or higher distinctiveness. In order to meet these trading rules and mitigate for the loss in biodiversity within the planning application Site, off-site gains must be utilised. These off-site gains will be made within the wider Wood Green Common Site, which is not included within the aforementioned planning application.

5.2. Biodiversity net gain (Off-site)

The overall comparison of biodiversity units off-site is presented in Table 6 below. The calculator used to derive these figures is provided at Appendix 2.

Table 6: Results of off-site biodiversity metric calculations

Habitat	Biodiversity units (current)*#	Biodiversity units (proposed) *#	Biodiversity net-change*#	Net percentage change	Trading rules met
Habitats	3.48	4.56	1.08	31.14%	Yes
Hedgerows	2.85	3.11	0.36	9.20%	Yes

* Habitat areas are calculated as biodiversity hectares; hedgerows and rivers as biodiversity metres

Figures rounded to two decimal places

Under the current landscaping proposals for the off-site Wood Green Common Site there is predicted to be a gain of 31.14% in habitat units. This substantial gain is achieved through extensive tree-planting

across the Site and the provision of higher distinctiveness other neutral grassland habitat in the place of low distinctiveness modified grassland. Bioswales and rain gardens also contribute to the net gain whilst acting as important ecological features within urban area.

The project retains the existing hedgerows and lines of trees, which hold considerable biodiversity value at the Site. Whilst new hedgerow planting is not included within the development proposals, it does include the enhancement of 0.069km of the native hedgerow, resulting in a higher distinctiveness species-rich native hedgerow being present within the wider Site post development. The change in hedgerow units from the enhancement of this habitat is 0.36 units, resulting in a net percentage change of 9.20%.

5.3. Biodiversity net gain (Overall)

Table 7: Results of biodiversity metric calculations

Habitat	Biodiversity units (current)*#	Biodiversity units (proposed) *#	Biodiversity net-change*#	Net percentage change	Trading rules met
Habitats	3.65	4.59	0.94	554.04%	Yes
Hedgerows	2.85	3.11	0.36	9.20%	Yes

* Habitat areas are calculated as biodiversity hectares; hedgerows and rivers as biodiversity metres

Figures rounded to two decimal places

An overall Biodiversity Net Gain of 554.04% is predicted for the project. The net gain in habitat units is achieved despite the overall loss in area of modified grassland within the planning application Site, which is mitigation for through the provision of medium distinctiveness habitats such as other neutral grassland and urban tree planting in the off-site development proposals.

The habitat gains are dependent on the proposed habitats being subject to appropriate management and maintenance in order to achieve the proposed target conditions, a summary of which has been included at Appendix 1, where appropriate. As set out within the Environment Act 2021, a management plan should provide guidance on habitat creation, management and maintenance for 30 years. To ensure the successful creation, management and maintenance of the habitats within the Site post development, it is recommended that a Landscape and Environmental Management Plan (LEMP) is produced prior to the commencement on the proposed development.

5.4. Recommendations

As per Rule 2 of the Biodiversity Net Gain Assessment rules (Table 2 above), biodiversity unit outputs for each type of unit must not be summed, traded, or converted between types such that there is a requirement to deliver at least a 10% net gain across each type of unit. Given that the proposal will

result in a gain in hedgerow units of 9.20%, it is recommended that measures should be explored to secure additional hedgerow gains through additional hedgerow creation or enhancement to ensure that the proposed development is able to demonstrate a significant increase in biodiversity across all unit types.

Recommendation 1

Consider additional hedgerow planting or enhancement in order to secure a 10% net gain in hedgerow units.

The overall net gain in biodiversity units predicted in this assessment is reliant on the successful restoration and/or creation of habitats and their maintenance for the foreseeable future. It is important that habitats meet the target condition estimated in this assessment and this will require careful consideration during both the planning and construction phase.

It is therefore recommended that a LEMP is produced for the Site. This will outline measures for the successful creation and management of habitats for a minimum of 30 years to ensure the target conditions for each habitat type is reached as outlined in this assessment.

Recommendation 2

Produce a LEMP for the Site covering a minimum of 30 years post-development.

6. CONCLUSIONS

The proposed landscaping for the planning application for the Wood Green Common MUGA results in a biodiversity net loss of 82.04%, due to the limited extent of the Site and the loss of modified grassland. To mitigate against this loss, substantial net gains in both habitat and hedgerow units are delivered within the wider Wood Green Common Site. Much of this is achieved through extensive tree-planting and provision of medium distinctiveness habitats.

The BNG assessment has calculated that the proposed development is likely to lead to a net gain of 0.94 biodiversity units, provided that these habitats are created, managed and maintained appropriately. This constitutes a net gain percentage of 554.04% for biodiversity units. This net gain, as demonstrated by the Defra metric, indicates that the proposal will provide an enhanced environment for biodiversity overall.

The BNG assessment has also calculated that the proposed development is likely to lead to a net gain of 0.34 hedgerows units, provided that these habitats are created, managed and maintained appropriately. In order to satisfy the rules of the Biodiversity Net Gain assessment, proposals should result in at least a 10% net gain across each type of unit present. Given that the proposal will result in a gain in hedgerow units of 9.20%, it is recommended that measures should be explored to secure additional hedgerow gains so as to demonstrate a significant increase in biodiversity across all unit types.

The net gains in biodiversity estimated are reliant on the successful restoration and/or creation of habitats *and* their maintenance for the foreseeable future. Accordingly, a LEMP should be developed in order to ensure the successful creation, management and maintenance of the habitats within the Site post development.

In addition to meeting the targets for BNG, further ecological features such as bird boxes, bat boxes, invertebrate houses and log piles will be included in the Site design. Whilst not considered within the current metrics, these features will further enhance the Site for priority species and help deliver a sustainable development.

7. REFERENCES

Baker, J, Hoskin, R, Butterworth, T. (2019) *Biodiversity Net Gain, Good Practice Principles for Development*. CIRIA: London.

Department for Environment Food and Rural Affairs (Defra) (2023) *Statutory Biodiversity Metric -user guide*. Defra, London.

Greater London Authority (2021) *The London Plan*. Greater London Authority: London.

London Borough of Haringey Council (2017) *Local Plan: Strategic Policies*. London Borough of Haringey Council.

MKA Ecology Ltd (2024) *138323 Wood Green Common, Haringey - Preliminary Ecological Appraisal*. MKA Ecology Ltd, Cambridge

Robert Bray Associates (2023) *Wood Green Common: Planting Palette*. Robert Bray Associates

8. APPENDICES

Appendix 1: Assignment of biodiversity metric multipliers

Strategic significance

The Site does not fall in a priority area, or comprise priority habitats, formally identified in the Haringey Council Local Plan (2017). Strategic significance was set to 'low' for all baseline habitats and newly created habitats, with the exception of urban trees, meadows (other neutral grassland) and urban greening (SUDS) which were set to 'high' due to the explicit mention of these habitats and their value for biodiversity within the London Plan (2021).

Condition

The below tables detail the rationale for the condition assessments made for each habitat type.

Current habitats (on-site)

Grassland - Modified grassland

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria	
1	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. NB - this criterion is essential for achieving Moderate or Good condition.	Less than 6 species per m ² recorded in this habitat.	x
2	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.	Grassland is currently evenly mown to a short sward.	x
3	Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.	No scrub present within grassland.	✓
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	No physical damage evident.	✓
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	The cover of grass is even with no areas of bare ground present.	✓

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria	
6	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	No bracken present.	✓
7	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	No invasive non-native species recorded.	✓
Condition: Poor Passes five of seven criteria, however it fails essential criterion 1.			

Proposed habitats (on-site)

Other Habitats

Habitat	Condition	Comments
Urban – Developed land; sealed surface (hardstanding)	N/A	Pre-assigned condition in metric.

Current habitats (off-site)

Grassland - Modified grassland

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria	
1	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. NB - this criterion is essential for achieving Moderate or Good condition.	Less than 6 species per m ² recorded in this habitat.	x
2	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.	Grassland is currently evenly mown to a short sward.	x
3	Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area.	No scrub present within grassland.	✓
4	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.	Areas of physical damage evident.	x
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	The cover of grass is even with no areas of bare ground present.	✓
6	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	No bracken present.	✓

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria	
7	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	No invasive non-native species recorded.	✓
Condition: Poor		Passes four of seven criteria, however it fails essential criterion 1.	

Urban tree groups

Condition Assessment criteria		T1	T2	T3
1	More than 70% of trees are native species.	x	✓	✓
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	✓	✓	✓
3	More than 50% of trees are mature or veteran.	x	x	x
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	x	x	x
5	Management regime has encouraged micro habitat sites for birds, mammals and insects e.g. presence of deadwood, cavities or loose bark etc.	x	x	x
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	✓	✓	✓
Overall condition		Poor	Moderate	Moderate

Hedgerow H1: Native hedgerow

Condition Assessment criteria		Rationale for Meeting Condition Assessment Criteria	
A1	Height: Greater than 1.5m average along length	✓	
A2	Width: Greater than 1.5m average along length	x	
B1	Gap - hedge base: Gap between ground and base of canopy less than 0.5m for more than 90% of length	✓	
B2	Gap - hedge canopy continuity: Gaps make up less than 10% of total length and no canopy gaps greater than 5m	x	
C1	Undisturbed ground and perennial vegetation: Greater than 1m width of undisturbed ground with perennial herbaceous vegetation for more than 90% of length (measured from outer edge of hedgerow), is present on at least one side of the hedge	Amenity grassland and hardstanding present along full length of hedgerow.	x
C2	Undesirable perennial vegetation: Plant species indicative of nutrient enrichment of soils dominate less than 20% cover of the area of undisturbed ground	No undesirable species recorded.	✓
D1	Invasive and neophyte species: More than 90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	No invasive non-native species present.	✓

Condition Assessment criteria		Rationale for Meeting Condition Assessment Criteria	
D2	Current damage: More than 90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Hedgerow surrounding by managed grassland or hardstanding and is heavily managed.	x
*	Condition: Moderate Fails four attributes. No more than one in each functional group.		

Lines of trees

Condition Assessment criteria		LOT1	LOT2
1	At least 70% of trees are native species.	x	✓
2	Tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.	x	✓
3	One or more trees has veteran features and/or natural ecological niches for vertebrates and invertebrates.	✓	x
4	There is an undisturbed naturally-vegetated strip of at least 6m on both sides.	x	x
5	At least 95% of the trees are in a healthy condition. There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or disease, or human activity.	x	x
Overall condition		Moderate	Moderate

Other habitats

Habitat	Condition	Comments
Urban - Developed land; sealed surface (buildings and hardstanding)	NA	Pre-assigned condition in metric.
Urban – vegetated garden	NA	Pre-assigned condition in metric.
Urban- introduced shrub	NA	Pre-assigned condition in metric.

Proposed habitats (off-site)

Grassland – Other neutral grassland

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria
1	<i>The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. NB - This criterion is essential for achieving moderate condition for non-acid grassland types only.</i>	The areas of species rich grassland will be established using species matching those included within the UKHab description of neutral grassland habitats.
2	<i>Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating</i>	Maintenance of this habitat will be provided within the LEMP, with recommendations relating to the creation of varying sward heights with each

	<i>microclimates which provide opportunities for insects, birds and small mammals to live and breed.</i>	area of grassland. Provided this is followed, it is considered that this criterion can be met.
3	<i>Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.</i>	Maintenance of this habitat is provided within the LEMP, with recommendations relating to the repair of any bare ground. Provided this is followed, it is considered that this criterion can be met.
4	<i>Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.</i>	Maintenance of this habitat is provided within the LEMP, with recommendations relating to the removal of scrub species and bramble. Provided this is followed, it is considered that this criterion can be met.
5	<i>Combined cover of species indicative of suboptimal condition 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.</i> <i>If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA5) are present, this criterion is automatically failed.</i>	Maintenance of this habitat is provided within the LEMP, with recommendations relating to the removal of non-native species that develop. Despite this, given the high levels of recreational pressure resulting in damage to the current grassland at the site it is predicted this is likely to occur once this habitat is created, especially given its location next to a children's play area.
6	<i>There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count).</i> <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i>	The grassland will be sown with Emorsgate EM3 Special General Purpose Meadow seed mix which is unlikely to meet the species goal for this essential criterion.
*	Target Condition: Moderate Meets four of the criteria passing essential criteria 1 but failing essential criteria 6.	

Urban – Bioswale

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria
1	<i>Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.</i>	The Bioswale areas will include a diverse assemblage of appropriate species, with species selected to provide a varied vegetation structure to maximise the opportunities available for invertebrates and subsequent predatory faunal groups. Despite this a single ecotone of grassland is present for 80% of the total bioswale system.
2	<i>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.</i>	All species to be planted have been selected due to the nectar and pollen they provide to invertebrate species and will comprise of both native and non-native species. Guidance on the species to include within this habitat are provided within the LEMP.
3	<i>Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area.</i>	Maintenance of this habitat is provided within the LEMP, with recommendations relating to the removal of non-native species that develop within these areas. Provided this is followed, it is considered that this criterion can be met.

	NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	
4	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .	The species planting list is comprised of native species.
5	The vegetation is comprised of plant species suited to wetland or riparian situations.	The majority of the bioswales comprise of non-wetland plant species with only the site inlets having aquatic plants (4.125% of total bioswale area)
*	Target Condition: Moderate Passes three of five condition criteria, however it fails additional criteria 5 and only passes two of three core criteria.	

Urban – Rain garden

Condition Assessment Criteria		Rationale for Meeting Condition Assessment Criteria
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	The rain garden areas will include a diverse assemblage of appropriate species, with species selected to provide a varied vegetation structure to maximise the opportunities available for invertebrates and subsequent predatory faunal groups.
2	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.	All species to be planted have been selected due to the nectar and pollen they provide to invertebrate species and will comprise of both native and non-native species. Guidance on the species to include within this habitat are provided within the LEMP.
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Maintenance of this habitat is provided within the LEMP, with recommendations relating to the removal of non-native species that develop within these areas. Provided this is followed, it is considered that this criterion can be met.
4	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .	The species planting list is comprised of native species.
5	The vegetation is comprised of plant species suited to wetland or riparian situations.	The species planting list is comprised of wetland and riparian species.
*	Target Condition: Good Passes all of the core criteria and additional criteria.	

Urban trees

Condition Assessment criteria		Rationale for Meeting Condition Assessment Criteria	
1	More than 70% of trees are native species.	The species including within the planting palette are majority non-native species	x
2	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. Where trees are planted in close proximity, the canopies are likely to form continuous cover once they mature.	✓
3	More than 50% of trees are mature or veteran.	Trees to be planted will initially comprise whip planting and so are young in nature.	x
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Trees management expected to be the same as present, where health and safety requires pruning that reduces the potential canopy.	x
5	Management regime has encouraged micro habitat sites for birds, mammals and insects e.g. presence of deadwood, cavities or loose bark etc.	Trees are not expected to develop ecological niches such as deadwood and cavities within the within the 27 year period to reach target condition.	x
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Met for proposed planting locations of all new groups of trees.	✓
*	Condition: Poor Two criteria out of six met.		

Native species-rich hedgerows (H1 enhanced)

Condition Assessment criteria		Rationale for Meeting Condition Assessment Criteria	
A1	Height: Greater than 1.5m average along length	Should be achievable with appropriate management.	✓
A2	Width: Greater than 1.5m average along length	Might be challenging to achieve across the Site with other landscaping requirements.	x
B1	Gap - hedge base: Gap between ground and base of canopy less than 0.5m for more than 90% of length	Should be achievable with appropriate management.	✓
B2	Gap - hedge canopy continuity: Gaps make up less than 10% of total length and no canopy gaps greater than 5m	Should be achievable with appropriate management.	✓
C1	Undisturbed ground and perennial vegetation: Greater than 1m width of undisturbed ground with perennial herbaceous vegetation for more than 90% of length (measured from outer edge of hedgerow), is present on at least one side of the hedge	Amenity grassland will be present on at least one side of each hedgerow, extending for at least 1m. However, might be challenging to achieve in areas subject to high levels of amenity use.	x
C2	Undesirable perennial vegetation: Plant species indicative of nutrient enrichment of soils dominate less than 20% cover of the area of undisturbed ground	Should be achievable with appropriate management.	✓
D1	Invasive and neophyte species: More than 90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Should be achievable with appropriate management. Hedgerows will comprise native species.	✓

Condition Assessment criteria		Rationale for Meeting Condition Assessment Criteria	
D2	Current damage: More than 90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Might be challenging to achieve in areas subject to high levels of amenity use.	x
*	Condition: Moderate Fails 3 attributes, but none of these in the same functional group.		

Other habitats

Habitat	Condition	Comments
Urban - Developed land; sealed surface (buildings and hardstanding)	NA	Pre-assigned condition in metric.
Urban- introduced shrub	NA	Pre-assigned condition in metric.

Appendix 2: Biodiversity Net Gain Calculator

As attachment.

Please note there is a 'check data' error message in Tabs E-1 and E-2 of the Biodiversity Net Gain calculator. This is believed to be an error in the DEFRA calculator and there is no issues arising from the offsite hedgerow enhancement.



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