



**Biodiversity Net Gain Calculation of Garages at Lynton
Grange, Fortis Green, Hornsey, London, N2 9EU**

Commissioned by M J Planning

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1 Executive Summary

1.1 Proposed Development

The proposal will entail the demolition of the existing structures on site (lock up garages and all hardstanding) and redevelopment to provide 5 new residential units with a central communal courtyard area with perennial planting, shrubs, modified grassland areas, SUDs paving/grasscrete, private amenity gardens and a driveway access. The proposition also includes landscaping to the rear building façade as well as an extensive green roof.

1.2 Net Gain Calculation Method

A Biodiversity Net Gain Calculation was carried out in December 2022 for the site, the calculation covered the proposed development area. The calculation was made using the Small Sites Biodiversity Metric (SSM), which was published by Natural England in 2022.

Information on habitat types and areas on site prior to and post development were input into the SSM. This information was obtained from the following sources:

- Site visit carried out by Green Shoots Ecology in September 2022.
- Calculations of total areas of each habitat type on site before the proposed development were calculated using QGIS, Google Earth and notes from the September site visit
- Calculations of the total site area and total areas of each habitat type on site, post-development, were provided by the client.

1.3 Result of Net Gain Calculation

Based on the information input into the SSM the proposed development would result in:

An overall increase in Area Based Habitat Units from 0.00 to 0.0502, a net gain of 100%

An overall increase in Linear Based Habitat Units from 0.00 to 0.3336, a net gain of 100%

The SSM table shows the details of areas and habitats/linear features included in the calculation.

The percentage net gains shown above are dependent on the planting/habitat enhancement on site being carried out as described in this report.

1.4 Discussion

There will be a gain of 0.0502 Area Based Habitat Units. This will be achieved by the creation of 2 extensive green roofs on the bike sheds, ground based green wall on rear façade of building, 8x new small trees, shrub and perennial planting beds, modified grassland, and grasscrete paving in the communal courtyard. The newly created habitats will enhance ecological biodiversity.

There will be a gain of 0.3336 Linear Based Habitat Units. This will be achieved by adding hedges of native species - species rich hedgerow (33 m) and native (yew) hedgerow (23 m).

2 Details of completion of the Small Sites Biodiversity Metric (SSM)

2.1 Factors to be included in calculation of the SSM

To carry out a Biodiversity Net Gain calculation with the SSM there are number of factors which need to be included.

- The area of each habitat needs to be calculated and the length of any linear features such as hedgerows.
- The strategic significance of the habitat needs to be recorded (within area formally identified in local strategy, location ecologically desirable but not in local strategy or area/compensation not in local strategy/ no local strategy.
- The aimed for condition of some habitat types post-development based on criteria listed in the SSM. Habitats are recorded as poor, fairly poor, moderate, fairly good, or good condition.

2.2 Explanation of calculation of data included in the SSM

2.2.1 Sources of information for the SSM

Information on habitats prior to development was calculated using:

- Site visit carried out by Green Shoots Ecology in September 2022 and examination of Google Earth.

From the site visit the habitats on site are known and their condition and other features could be assessed.

QGIS was used to calculate areas of each habitat parcel on site prior to development.

Information on habitats post development was obtained from:

- habitat type and areas provided by the client
- the client's landscaping plan

2.2.2 Details of data input into the SSM

The SSM includes specific habitat types which can be chosen. In cases where the habitat to be input does not appear to specifically match any of the habitats in the SSM or appears to match more than one, Habitat Definitions Version 1.0 (2018) is examined for a detailed definition of the habitats given in the SSM and the habitat in question is input as that with the detailed description most closely matching the habitat on site.

2.2.3 Details of Retention of Habitats

All existing habitats on site will be cleared.

2.2.4 Conditions for Habitats

Under the small sites metric habitats pre-development are automatically given a condition by the metric. For post-development habitats, some habitats only contribute to the site value if they reach a certain condition. For the site there are six habitats being added for which this applies. These are as listed below. These will need to reach at least a moderate condition to contribute to the site ecological value in the metric. To do this these habitats will need to fulfil enough of the criteria shown in the tables below (see Annex 3) to qualify as moderate or good:

- Green roof
- Ground based green wall
- Modified grassland (amenity grassland area & grass within grasscrete areas)
- Native species rich hedgerow
- Native hedgerow

3 References

Green Shoots Ecology (September 2022) - Preliminary Roost Assessment at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU

Natural England Joint Publication JP040 (2022) Small Sites Metric (SSM) – Calculation Tool: User Guide

Natural England Joint Publication JP039 (2022) – The Biodiversity Metric 3.1 - auditing and accounting for biodiversity TECHNICAL SUPPLEMENT

Natural England Joint Publication JP039 (2022) – The Biodiversity Metric 3.1 - auditing and accounting for biodiversity USER GUIDE

The UK Habitat Classification Working Group (May 2018) – Habitat Definitions Version 1.0

4 Annexes

Annex 1 - On-site Habitats Prior to Development

Annex 2 - On-site Habitats Post Development

Annex 3 - Condition Assessment Sheets Post Development (not required for SSM Pre Development)

Annex 1 - On-site Habitats on 30 September 2022 - Prior to Development



Map Data from Google

Map data provided by client



Annex 3 - Condition Assessment Sheets Post Development (assessments not required for Pre-Development habitats on Small Sites Metric table)

Green roof

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban - Allotments Urban - Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/offsite	On-site
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Urban - Extensive green roof with substrate of minimum settled depth of 80mm. In order to maximise the impact on biodiversity, green roof WB native wildflower blanket, by Bauder, will be used (36 species of native wildflower plants) including the following indicative selection: Achillea millefolium, Armeria maritima, Bellis perennis, Campanula glomerata, Campanula rotundifolia, Centaurea cyanus, Centaurium erythraea, Dianthus deltoides, Echium vulgare, Galium verum, Geum rivale, Linaria vulgaris, Lotus corniculatus, Lychnis flos-cu-culi, Papaver rhoeas, Pilosella aurantiaca, Prunella vulgaris, Rhianthus minor, Saponaria officinalis, Scabiosa columbaria, Sedum acre, Silene uniflora, Silene vulgaris, Thymus polytricus. See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification

CORE CRITERIA - applicable to all urban habitat types :			
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.	N	Only a single ecotone.
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	Y	Upto 36 flowering species to be supported.
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).	Y	Complete absence of invasive non-native species on site.
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.		

ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		
4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.	N	Roof mostly 80 mm depth only
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			Y
Number of criteria passed			2 of 4
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓	
If 3 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)		
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 3 core criteria	Poor (1)		
If 4 criteria assessed:			

• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)	✗	
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)	✓	
• Passes 0 or 1 of 4 criteria	Poor (1)	✗	

Green wall

Condition Sheet: URBAN Habitat Type			
UKHab Habitat Type			
Sparsely vegetated land - Ruderal/ephemeral Urban – Allotments Urban – Biodiverse green roof [Use Urban condition sheet as default. Where there are areas of grassland, scrub or other habitat above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Bioswale Urban - Cemeteries and churchyards [Use Urban condition sheet as default. Where there are areas of grassland, woodland or scrub above the minimum mappable area threshold, record and assess these as the relevant habitat type] Urban - Façade-bound green wall Urban - Ground based green wall Urban - Intensive green roof Urban - Open mosaic habitats on previously developed land Urban - Rain garden Urban - Sustainable urban drainage feature [in the context of the Biodiversity Metric, this habitat type refers to open SUDS with vegetation and/or open water] Urban - Vacant / derelict land / bare ground			
Site name/location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/offsite	On-site
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Urban - Ground based green wall: Self-twining climbing plants rear façade of the building (species including Hydrangea petiolaris, Parthenocissus henryana, Pileostegia viburnoides) and to fenceline (species including Roas new dawn, Trachelospermum jasminoides) or similar.			
See UKHab			

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types :			
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.	N	Only a single ecotone.
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	Y	Climbing plants to rear façade of building (3 species) and fenceline (2 species). 5 species total so relatively diverse.
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).	Y	Complete absence of invasive non-native species on site.
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.		
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			

4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)		
4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.		
Essential criterion 2&3 achieved? (must be achieved to score a good condition for non biodiverse green roofs) (Y/N)			Yes
Number of criteria passed			1 of 3
Condition Assessment Result	Condition Assessment Score	Score Achieved ✕/✓	
If 3 criteria assessed:			
• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3	Good (3)	✕	
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)	✓	
• Passes 0 or 1 of 3 core criteria	Poor (1)	✕	
If 4 criteria assessed:			

• Passes 3 of 3 core criteria; AND • Meets the requirements for good condition within criteria 2 and 3; AND • Passes additional criterion 4a or 4b	Good (3)		
• Passes 2 of 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for good condition within criteria 2 and 3	Moderate (2)		
• Passes 0 or 1 of 4 criteria	Poor (1)		

Modified grassland (along access path)

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/offsite	On-site
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Grassland - modified grass: Area of amenity grassland, species poor, and regularly managed/mown and likely to have high footfall/bikes etc as used as an access path to site.			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	N	Species poor amenity grassland.
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 insects, birds and small mammals to live and breed.	N	Grassland regularly managed and mown.
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous	Y	No scrub on site.

	(more than 90%) cover should be classified as the relevant scrub habitat type.		
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.	N	Erosion caused by high levels of access likely.
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	No bare ground on site.
6	Cover of bracken less than 20%.	Y	No bracken on site.
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	No invasive non-native species identified in the lawn grassland area.
Essential criterion 1 achieved (Y/N)			N
Number of criteria passed			3
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)	×	
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)	×	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)	✓	

Modified grassland (in grasscrete areas)

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UKHab Habitat Type(s)			
Grassland - Modified grassland			
Site name/location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/offsite	On-site
Central grid reference of habitat		Unique polygon reference	
Limitations (if applicable)		Metric 3.0 survey reference (if condition assessment of this polygon relates to a wider habitat survey)	
Habitat Description			
Amenity area of unsealed, vegetated grasscrete with modified grassland species poor with erosion caused by high levels of footfall/access. The grasscrete area has been split between artificial unvetated, unsealed surface and modified grassland (less than 50%) to best represent the unsealed 'vegetated' surface as not listed as an option in the metric.			
See UKHab			
Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	N	Species poor amenity grass.
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 insects, birds and small mammals to live and breed.	N	Grasscrete area will be regularly managed.
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous	Y	No scrub on site.

	(more than 90%) cover should be classified as the relevant scrub habitat type.		
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.	N	Expect high levels of erosion caused by high levels of access.
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	N	No bare ground expected in grassed areas of grasscrete.
6	Cover of bracken less than 20%.	Y	No bracken on site.
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Y	No invasive species on site.
Essential criterion 1 achieved (Y/N)			N
Number of criteria passed			3
Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓	
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)	X	
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)	X	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)	✓	

Species rich native hedge

Condition sheet: HEDGEROW Habitat Types			
UKHab Habitat Type			
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Native species rich hedgerow Native species rich hedgerow - associated with bank or ditch Native species rich hedgerow with trees Native species rich hedgerow with trees - associated with bank or ditch			
Site name/Location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/off site	On-site
Habitat's central grid reference		Unique polygon reference(s)	
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessmen t of this polygon relates to a wider habitat survey)	
Habitat Description			
Native species rich hedgerow: Mixed native species rich hedgerow (height 200 cm) consists of dense planting for screening including: Acer campestre, Prunus spinosa, Corylus avellina, Euonymus Europaeus, Viburnum opulus, Cornus sanguinea, Crataegus monogyna or similar.			
See Table TS1-3 of the Technical Supplement.			
Condition Assessment Criteria			
A series of ten attributes, representing key physical characteristics, are used for this assessment. The attributes, and the minimum criteria for achieving a favourable condition in each, are defined. The attributes use similar favourable condition criteria to the Hedgerow Survey Handbook and the handbook is the recommended source of reference for assessing individual hedgerow attributes.			
Hedgerow favourable condition attributes			

Attributes and functional groupings (A, B, C, D & E)		Criteria (the minimum requirements for 'favourable condition'	Description	Condition Achieved (Y/N)	Notes/Justification
Core groups - applicable to all hedgerow types					
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	Y	Plans state hedge will be 2m high.
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice⁴).	N	unlikely to reach this width
B1.	Gap - hedge base	Gap between ground and base of canopy	This is the vertical gappiness of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.	Y	Will be dense planting

		<0.5 m for >90% of length (unless 'line of trees')	Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).		
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness, but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	No gaps
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	N	Not present
C2.	Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.	Y	Managed site, nettles and similar unlikely

D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.	Y	Managed site, invasive species unlikely to be allowed to develop
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	Y	Site is managed and residential unlikely to be damaged

Additional group - applicable to hedgerows with trees only

E1.	Tree age	At least one mature tree per 30m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species.	This criterion addresses if there are sufficient mature trees (within the scope of planning timescales) which are of higher value to biodiversity.		
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		

	tree health by damage from livestock or wild animals, pests or diseases, or human activity.			
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Each attribute is assigned to one of five functional groups (A – E), as indicated in Table TS1-2 and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the ‘favourable condition’ criteria according to the approach set out in Table TS1-3.

The hedgerow condition assessment generates a weighting (score) ranging from 1-3, which is used within the biodiversity metric 3.1. The scores for each are set out in tables TS1-3 and TS1-4 below.

TABLE TS1-3: Hedgerow condition assessment and weighting

Condition categories for hedgerows without trees			
Category	Maximum number of attributes that can fail to meet ‘favourable condition’ criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	3	
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g.	2	

	fails attributes A1, A2, B1 & C2 = Moderate condition).		
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	1	
Score achieved:	2		
Condition categories for hedgerows with trees			
Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3	

Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1, C2 & E1 = Moderate condition).	2	
Poor	Fails a total of more than 5 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	1	

Native hedge (Yew)

Condition sheet: HEDGEROW Habitat Types				
UKHab Habitat Type				
Native hedgerow Native hedgerow - associated with bank or ditch Native hedgerow with trees Native hedgerow with trees - associated with bank or ditch Native species rich hedgerow Native species rich hedgerow - associated with bank or ditch Native species rich hedgerow with trees Native species rich hedgerow with trees - associated with bank or ditch				
Site name/Location	Garages at Lynton Grange, Fortis Green, Hornsey, London, N2 9EU	Onsite/offsite	On-site	
Habitat's central grid reference		Unique polygon reference(s)		
Limitations (if applicable)		Metric 3.1 survey reference (if condition assessment of this polygon relates to a wider habitat survey)		
Habitat Description				
Native hedgerow: Planting to consist of dense hedging (height 120 cm) species: Taxus baccata hedge				
See Table TS1-3 of the Technical Supplement.				
Condition Assessment Criteria				
A series of ten attributes, representing key physical characteristics, are used for this assessment. The attributes, and the minimum criteria for achieving a favourable condition in each, are defined. The attributes use similar favourable condition criteria to the Hedgerow Survey Handbook and the handbook is the recommended source of reference for assessing individual hedgerow attributes.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D & E)	Criteria (the minimum requirements for 'favourable condition'	Description	Condition Achieved (Y/N)	Notes/Justification
Core groups - applicable to all hedgerow types				

A1	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is > 1.5 m height).	N	120 cms height
A2	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (e.g. blackthorn suckers) are only included in the width estimate when they >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice⁴).	N	
B1	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	This is the vertical gappiness of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	Dense at base as is Yew hedge
B2	Gap - hedge canopy continuity	Gaps make up <10% of total length and No canopy gaps >5 m	This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall gappiness, but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	No gaps

C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge. Undisturbed ground should be present for at least 90% of the hedgerow length, greater than 1m in width and must be present along at least one side of the hedge. This criterion recognises the value of the hedge base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	N	
C2.	Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	The indicator species used are nettles (<i>Urtica</i> spp.), cleavers (<i>Galium aparine</i>) and docks (<i>Rumex</i> spp.). Their presence, either singly or together, should not exceed the 20% cover threshold.	Y	Managed site, nettles and similar unlikely
D1	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and for information on invasive non-native species see the GB Non-Native Secretariat website.	Y	Managed site, invasive species unlikely
D2	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).	Y	Managed site, residential - damage unlikely

Additional group - applicable to hedgerows with trees only

E1	Tree age	At least one mature tree per 30m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species.	This criterion addresses if there are sufficient mature trees (within the scope of planning timescales) which are of higher value to biodiversity.		
E2	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). 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.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		

Each attribute is assigned to one of five functional groups (A – E), as indicated in Table TS1-2 and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the ‘favourable condition’ criteria according to the approach set out in Table TS1-3.

The hedgerow condition assessment generates a weighting (score) ranging from 1-3, which is used within the biodiversity metric 3.1. The scores for each are set out in tables TS1-3 and TS1-4 below.

TABLE TS1-3: Hedgerow condition assessment and weighting

Condition categories for hedgerows without trees

Category	Maximum number of attributes that can fail to meet 'favourable condition' criteria in Table TS1-2	Weighting (score)	
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	3	
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & C2 = Moderate condition).	2	
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).	1	
Score achieved:	2		