Huddersfield Bus Station (Phase 2)

Biodiversity Net Gain Assessment

Willmott Dixon Construction Ltd

July 2024

Ecus Ltd

Report to: Willmott Dixon Construction Limited
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Report Title: Huddersfield Bus Station (Phase 2)
Biodiversity Net Gain Assessment

Version: *V2.0*
Issue Date: July 2024
Report Ref: 21287

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Version	Author	Description	Date
V0.1	James Storey	Initial Draft	01.07.2024
V0.2	Sarah Thresher	Quality Assurance (QA) Check 1	19.07.2024
V0.3	James Storey	Updates following QA1	19.07.2024
V0.4	James Grundy	Quality Assurance (QA) Check 2	24.07.2024
V1.0	James Storey	Final Version for Issue	24.07.2024
V2.0	James Storey	Section 4.3 update	29.07.2024

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Contents

Executive Summary

Ecus Limited (Ltd) was commissioned by Willmott Dixon Construction Ltd in January 2024 to undertake a Biodiversity Net Gain Assessment (BNGA) for Huddersfield Bus Station, Upperhead Row, Huddersfield, HD1 1JN, central Ordnance Survey National Grid Reference (NGR): SE 14204 16569, hereafter referred to as 'the Site'. The Site is displayed in Figure 1. This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post-development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) *'Statutory Biodiversity Metric User Guide'* (SBM) (February 2024).

The proposals comprise the transformation of the bus station, including interior concourse building refurbishment and reconfiguration, changes to the bus circulatory area, improvements to the approach to the bus station off Henry Street, and construction of a new canopy area adjacent to Upperhead Row. This BNGA relates to Phase 2 of the development only, covering the area denoted as the '*Phase 2 Boundary'* within the Bryan G Hall '*Combined Phasing Plan'* (Drawing Reference: HBS-BGH-Z0-XX-DR-C0024, dated May 2024).

Ecus Ltd was also commissioned to undertake a Preliminary Ecological Appraisal (PEA) of the Site *('Huddersfield Bus Station – Preliminary Ecological Appraisal'* Ref. 21287 V2.0 dated July 2024) (PEA, Ecus 2024) along with habitat condition assessments in order to inform the BNGA. An Arboricultural Report of the Site *('Huddersfield Bus Station - BS 5837:2012 Arboricultural Report, Impact Assessment and Method Statement'* Ref. 21287 V1.0 dated May 2024) (Arboricultural Report, Ecus 2024) was also undertaken at the Site which informed condition assessments for baseline trees. Soft landscaping proposals are taken from Pick Everard *'Landscape Masterplan'* (Drawing Reference: 221655-PEV-XX-00-DR-L-0301, dated May 2024) and SGP Architects *'Proposed Roof Plan'* (Drawing Reference: 202335-SGP-ZZ-ZZ-DR-A-131102(P06), dated June 2024), both hereafter referred to as the *'Proposed Site Plan'*.

Post-development, the proposed habitats on-Site produced a biodiversity value of 0.40 HU, representing an increase of 0.10 HU which equates to a 31.82% net gain, which exceeds the statutory requirement for 10% net gain post development. Despite this, the trading rules for the SBM have not been met due to no compensatory habitat measures being in place to offset losses of urban trees at the Site.

In order to satisfy the trading rules as set out in the SBM, the loss of urban trees is required to be compensated with 'Same broad habitat or a higher distinctiveness habitat required'. As such, it is recommended that urban trees are planted to the minimum value of 0.06 HU in order to satisfy the trading rules for the Site post-development.

At the time of writing, off-site compensation through direct delivery of off-site habitat enhancements at a suitable location (agreed between the client and the Local Planning Authority) involving a mutually agreed

financial contribution towards the maximum value of 0.06 HU will be secured. Off-Site compensation through planting of urban trees to the value of 0.06 HU would be required in order to satisfy the trading rules as set out in the SBM. It should be noted that any changes made to the *'Proposed Site Plan',* would need to be fully reflected in a revised BNGA and any relevant updates should be made to the compensation proposals.

The production of a Habitat Management and Monitoring Plan (HMMP) is recommended to ensure the Site habitats deliver the habitat scores listed within this BNGA. This includes management of post-development habitats to the condition required to deliver the BNG score specified in accordance with the condition assessment methodology.

1. Introduction

1.1.1 Ecus Limited (Ltd) was commissioned by Willmott Dixon Construction Ltd in January 2024 to undertake a Biodiversity Net Gain Assessment (BNGA) for Huddersfield Bus Station, Upperhead Row, Huddersfield, HD1 1JN, central Ordnance Survey National Grid Reference (NGR): SE 14204 16569, hereafter referred to as 'the Site'. The Site is displayed in Figure 1. This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) *'Statutory Biodiversity Metric User Guide'* (SBM) (February 2024).

1.1.2 The proposals comprise the transformation of the bus station, including interior concourse building refurbishment and reconfiguration, changes to the bus circulatory area, improvements to the approach to the bus station off Henry Street, and construction of a new canopy area adjacent to Upperhead Row. This BNGA relates to Phase 2 of the development only, covering the area denoted as the '*Phase 2 Boundary'* within the Bryan G Hall '*Combined Phasing Plan'* (Drawing Reference: HBS-BGH-Z0-XX-DR-C0024, dated May 2024).

1.1.3 Ecus Ltd was also commissioned to undertake a Preliminary Ecological Appraisal (PEA) of the Site *('Huddersfield Bus Station – Preliminary Ecological Appraisal'* Ref. 21287 V2.0 dated July 2024) (PEA, Ecus 2024) along with habitat condition assessments in order to inform the BNGA. An Arboricultural Report of the Site *('Huddersfield Bus Station - BS 5837:2012 Arboricultural Report, Impact Assessment and Method Statement'* Ref. 21287 V1.0 dated May 2024) (Arboricultural Report, Ecus 2024) was also undertaken at the Site which informed condition assessments for baseline trees. Soft landscaping proposals are taken from Pick Everard *'Landscape Masterplan'* (Drawing Reference: 221655-PEV-XX-00-DR-L-0301, dated May 2024) and SGP Architects *'Proposed Roof Plan'* (Drawing Reference: 202335-SGP-ZZ-ZZ-DR-A-131102(P06), dated June 2024), both hereafter referred to as the *'Proposed Site Plan'* which covers the area denoted as *'Phase 2 boundary'* in Figure 1.

1.1.4 This report details the results of the BNGA using biodiversity metric calculations which have been completed based on the PEA (Ecus, 2024) and area calculations of the post development habitats taken from the *'Proposed Site Plan'*. The methodologies employed and all survey findings are described along with an evaluation and assessment of the ecological value of the Site. Any recommendations with regard to ensuring BNG are also detailed as required.

1.2 Biodiversity Net Gain Assessment

1.2.1 Under the Environment Act 2021, developments are required to achieve 10% Biodiversity Net Gain

(BNG) to ensure that biodiversity post-development is greater than that present pre-development (enforceable from February 2024 for most sites). BNG calculations are conducted by assessing the condition of habitats on a site and then comparing the anticipated changes in biodiversity value based on the development proposals. A BNGA follows the mitigation hierarchy, which sets out that everything possible must be done to firstly avoid, secondly minimise and thirdly restore/rehabilitate losses of biodiversity on Site. Only as a last resort are residual losses compensated for through biodiversity offsetting, whereby the loss of biodiversity is compensated for via new habitat creation off-Site or by paying a financial sum to an offset provider. BNGA should adhere to the BNG good practice principles (Appendix 1).

1.2.2 BNGAs account for biodiversity losses, which previously could not be fully assessed nor mitigated for, via legal and planning systems. Whilst some species are extensively protected, many and most habitat types are not; with the consequence that development can be 'legally compliant' but still result in biodiversity loss. BNGA guards against this, enabling development to contribute towards the national and global target of halting biodiversity loss (DEFRA, 2011) and towards local and national strategies (listed below with full details provided in Appendix 2) for conserving and enhancing wildlife. BNGAs allow stakeholders to demonstrate adherence to national legislation and local policy concerning biodiversity.

1.3 Relevant Legislation and Policy

1.3.1 This BNGA has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England including:

- UK Government's 25 Year Environment Plan (Defra, 2018);
- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (Defra, 2011);
- National Planning Policy Framework (NPPF) (DLUHC, 2023);
- The Natural Environment and Rural Communities (NERC) Act (HMSO, 2006);
- The Environment Act (Defra, 2021); and,
- Kirklees Biodiversity Action Plans (LBAP).

2. Methodology

2.1 Background

2.1.1 This BNGA uses the industry recognised best practice methodology within the (DEFRA) '*Statutory Biodiversity Metric User Guide'* (SBM) (February 2024).

2.1.1 The SBM uses habitat features as a measure for the value and importance to nature. The following information on each habitat are required for the metric inputs:

- Type;
- Area/length;
- Distinctiveness (automatically calculated);
- Irreplaceable Habitat;
- Condition; and,
- Strategic significance.

2.2 Biodiversity Metric Inputs

Habitat Type and Area/Length

Baseline

2.2.1 The Site was surveyed on 16th February 2024 by Senior Ecologist Katie Smith BSc (Hons) ACIEEM and Consultant Ecologist James Storey BSc MSc.

2.2.2 The Site visit included an ecological walkover survey using the UK Habitat Classification (UKHab) system (Butcher *et al*. 2020) and was conducted as part of the PEA survey. The habitats present within the Site were identified and classified according to the UK Habitat Classification system which closely aligns with the SBM. The baseline habitats are denoted within the '*Phase 2 boundary'* as displayed in Figure 1.

2.2.3 The SBM uses a classification system based mainly on the UKHab, with input from other systems including the Water Framework Directive (WFD) Lakes Typology (UKTAG, 2003), the European Nature Information System (EUNIS) habitat type hierarchical view (EEA, 2019), Natura 2000 Annex I habitats (JNCC, 2019) and habitats specific to the SBM.

2.2.4 The area/length covered by each habitat type was mapped using the QGIS 3.28.0 Geographical Information System (GIS).

Post-Development

2.2.5 Proposals for the Site have been analysed and habitats present post-development have been

based on the *'Landscape Proposals – Detailed Planting Plan & Planting Schedule'* and using best knowledge of the likely habitats to be retained, created and enhanced.

2.2.6 The post-development habitats were classified according to the habitat classification system used by the SBM.

Habitat Distinctiveness

2.2.7 For all baseline and post-development habitats the distinctiveness of each habitat type is automatically calculated within the SBM.

Habitat Condition

2.2.8 The condition of a habitat is a measure of the biological 'working-order' of a habitat type judged against the perceived ecological optimum state for that particular habitat. The condition assessments were undertaken using the DEFRA '*The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology*' spreadsheet (February 2024).

Baseline

2.2.9 Following the UKHab ecological walkover survey at the Site the condition of each habitat type was assessed and categorised as either Good, Moderate or Poor.

2.2.10 If a habitat type varied in condition within the Site this was recorded and mapped.

Post-development

2.2.11 The condition of habitats post-development has been assigned based on assumptions of likely habitat condition in line with the condition assessment criteria.

Habitat Strategic Significance

2.2.12 The SBM accounts for whether the habitat is situated in an area locally identified as significant for nature.

2.2.13 Data on areas and habitats locally identified as significant for nature were obtained from the following sources:

- Multi-Agency Geographical Information for the Countryside (MAGIC) website for mapped statutory designated sites (https://magic.defra.gov.uk/magicmap.aspx);
- Derbyshire Biological Records Centre (DBRC) and Nottinghamshire Biological and Geological Records Centre (NBGRC) for data relating to non-statutory designated sites for nature conservation within and adjacent the Site; and,
- Habitats listed within the Lowland Derbyshire Biodiversity Action Plan (LBAP).

2.3 Biodiversity Metric Calculations

2.3.1 Biodiversity metric calculations provide a numerical score for the value of existing habitats on the Site and their likely value post-development in Habitat Units (HU), Hedgerow Units (HeU) and Watercourse Units (WU), in order for the impact of the proposed development to be quantitatively assessed.

2.3.2 Using the SBM, habitat values are calculated based on whether they occur commonly or whether they are rare, their area (ha) (or length (km) for linear features such as hedgerows), condition and importance within the local area, usually identified from local relevant planning policies or documents. This gives individual baseline HU, HeU and WU.

2.3.3 Individual trees are classified as either Urban Tree or Rural Tree, depending on the extent of urbanisations around them. The size of a tree is either Small, Medium, Large or Very Large, dependent on the diameter at breast height (centimetres). A biodiversity metric area equivalent (hectares) is automatically calculated within the SBM dependent on the tree size, however this area measurement is not included within the total habitat area (in ha) of the Site.

2.3.4 The post-development value can also be calculated for habitats where factors including time to target condition and difficulty of creation/enhancement are also taken into consideration. The values for area habitats and linear habitats are calculated separately. This provides an overall picture of the biodiversity net gain or loss as a result of a development. To achieve biodiversity net gain, all three of HU, HeU and WU are treated separately, the individual gains cannot be combined to form an overall gain for the Site.

2.4 Trading Rules

2.4.1 The SBM considers distinctiveness as described earlier and using this data, SBM applies trading rules that require that any habitat loss is replaced on a ‘like for like’ or ‘like for better’ basis. The trading rules are detailed below in Table 1.

Table 1: Trading Rules within the SBM

Distinctiveness Group	Trading Rules
Very High	Bespoke compensation likely to be required
High	Same habitat required
Medium	Same broad habitat or a higher distinctiveness habitat required

Distinctiveness Group	Trading Rules
Low	Same distinctiveness or better habitat required
Very Low	Compensation not required

2.5 Assumptions and Limitations

2.5.1 For strategic significance, all habitats on the Site have been considered 'Area/compensation not in local strategy/no local strategy' as they do not qualify as priority habitats, are not identified on any strategic plans and are not considered to be ecologically desirable based on the location of the Site and surrounding landscape.

2.5.2 Calculations are based upon the partial loss of modified grassland, developed land; sealed surface and urban trees to be replaced by introduced shrub, other green roof and developed land; sealed surface habitats, and the enhancement of retained modified grassland.

2.5.3 The condition and size of the baseline urban trees have been classified based on information contained within the PEA and Arboricultural reports (Ecus Ltd, 2024).

2.5.4 The condition of post-development habitats has been estimated based on the criteria within the '*The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology'* (Natural England, 2024) and based on reasonable assumptions for the habitat types taking into account feasibility, the locality, and their extent within the Site.

2.5.5 The quantification of biodiversity is one of a number of factors to be considered when assessing the impact of the proposed development on biodiversity. Note that this BNGA does not cover potential impacts of the proposed development on protected species and designated sites. These are outlined within the PEA Report (Ecus, 2024).

2.5.6 The information contained within this report is considered valid for a period of 18 months from the date of the February 2024 PEA survey visit (CIEEM, 2019). If the development has not commenced by August 2025, it is recommended that the Site is fully re-surveyed to determine if there have been any significant changes to baseline habitats within that timeframe.

3. Findings and Evaluation

3.1 Baseline Habitats

3.1.1 Baseline habitats recorded for the Site comprise Urban – Developed land; sealed surface, Urban – Introduced shrub, Grassland – Modified grassland and Individual trees – Urban tree (see Figure 1).

3.1.2 No Hedgerow Units (HeU) or Watercourse Units (WU) were recorded as present at the Site.

3.1.3 The total area covering Phase 2 of the works at the Site has been calculated at 0.2 ha. The habitat type, distinctiveness, condition, area and HU of the area habitats are provided within Table 2. Baseline area habitats have a biodiversity value of 0.30 HU.

Table 2: Site Baseline Area-based Habitats, Condition and Habitat Units

Habitat Type	Distinctiveness	Condition	Area (ha)[1]	Habitat Units
Urban - Developed land; sealed surface	Very low	Condition Assessment N/A	0.170	0.00
Urban – Introduced shrub	Low	Condition Assessment N/A	0.005	0.01
Grassland – Modified grassland	Low	Poor	0.024	0.05
Individual trees – Urban tree	Medium	Moderate	0.0244	0.20
Individual trees – Urban tree	Medium	Poor	0.0122	0.05
Total Habitat Units (HU)				**0.30[1]**

3.1.4 A summary of the habitat condition assessment criteria passed or failed for habitats where a condition assessment is applicable in the SBM is provided in Appendix 3.

[1] *Note that three decimal places have been used for habitat areas to provide accuracy given the size and context of the proposals.*

3.2 Post-Development Biodiversity

3.2.1 The following calculations present a version of the completed design stage biodiversity metric calculations based on the post-development proposals shown in the *'Proposed Site Plan'* and using best knowledge of the likely habitats to be retained, created and enhanced. A summary of the calculations is provided in Appendix 4.

3.2.2 It is anticipated that partial loss of developed land; sealed surface, modified grassland and urban tree (approx. three trees) habitat within the Site will be required to facilitate the Phase 2 of the proposals, with the rest of the habitats on-Site being retained.

3.2.3 Post development habitat creation has been predicted to include 'Urban – Developed land; sealed surface' and Urban – Other green roof'. Predicted development habitats are mapped in Figure 2.

3.2.4 The predicted habitat type, condition, area and HU of the post-development habitats are provided within Table 3. Post-development, the area-based habitats estimated a biodiversity value of 0.40 HU.

Table 3: The Site Post-development Area-based Habitats, Condition and Habitat Units

Habitat Type	Distinctiveness	Condition	Area (ha)[2]	Habitat Units
Retained				
Urban - Developed land; sealed surface	Very low	Condition Assessment N/A	0.107	0.00
Urban – Introduced shrub	Low	Condition Assessment N/A	0.005	0.01
Individual trees – Urban tree	Medium	Moderate	0.0244	0.20
Created				
Urban – Introduced shrub	Low	Condition Assessment N/A	0.010	0.02

[2] *Note that three decimal places have been used for habitat areas to provide accuracy given the size and context of the proposals.*

Habitat Type	Distinctiveness	Condition	Area (ha)[2]	Habitat Units
Urban – Other green roof	Low	Condition Assessment N/A	0.06	0.12
Enhanced				
Grassland – Modified grassland	Low	Moderate	0.017	0.06
Total Habitat Units (HU)				**0.40[3]**

3.2.5 A summary of the habitat condition assessment criteria passed or failed for post-development habitats where a condition assessment is applicable in the SBM is provided in Appendix 3.

3.2.6 Taking into account the reasonable assumptions and estimates made within this report; the construction of the proposed development is predicted to result in a net unit increase of 0.1 HU which is a net percentage change of 31.82% as detailed in Table 4. The trading rules for the SBM have not been met due to no compensatory habitat measures being in place to offset losses of urban trees at the Site.

Table 4: Summary of Biodiversity Net Gain Calculations

	Baseline Units	Proposed Units	Change in Units	% Change in Units
Habitat Units (HU)	0.30	0.40	0.10	31.82%

[3] *Note the sum of columns may differ from the total units stated. This is due to rounding and is not considered significant. The totals stated reflect those calculated within the Biodiversity Metric Calculator Tool.*

4. Discussion and Recommendations

4.1 Summary of Biodiversity Net Gain Delivery

4.1.1 Post-development, the proposed habitats on-Site produced a biodiversity value of 0.40 HU, representing an increase of 0.10 HU which equates to a 31.82% net gain, which exceeds the statutory requirement for 10% net gain post development. Despite this, the trading rules for the SBM have not been met due to no compensatory habitat measures being in place to offset losses of urban trees at the Site.

4.2 Recommended Changes

4.2.1 In order to satisfy the trading rules as set out in the SBM, the loss of urban trees is required to be compensated with 'Same broad habitat or a higher distinctiveness habitat required'. As such, it is recommended that urban trees are planted to the minimum value of 0.06 HU in order to satisfy the trading rules for the Site post-development.

4.3 Off-Site

4.3.1 Without significant changes to the Site layout and provision of a soft landscaping plan which affords much larger areas for habitat retention and compensation, it is considered unlikely that the trading rules as set out in the SBM would be satisfied.

4.3.2 At the time of writing, off-site compensation through direct delivery of off-site habitat enhancements at a suitable location (agreed between the client and the Local Planning Authority) involving a mutually agreed financial contribution towards the maximum value of 0.06 HU will be secured. Off-Site compensation through planting of urban trees to the value of 0.06 HU would be required in order to satisfy the trading rules as set out in the SBM.

4.4 Habitat Management and Monitoring

4.4.1 It should be noted that any changes made to the '*Proposed Site Plan'*, would need to be fully reflected in a revised BNGA and any relevant updates should be made to the compensation proposals.

4.4.2 The production of a Habitat Monitoring and Management Plan (HMMP) is recommended to ensure the Site habitats deliver the habitat scores listed within this BNGA. This includes management of post-development habitats to the condition required to deliver the BNG score specified in accordance with the condition assessment methodology.

4.5 BNG Principles

4.5.1 Appendix 1 details the BNG good practice principles (CIEEM, CIRIA, IEMA, 2016) which should be adhered to when undertaking BNG assessments in association with proposed developments. The actions within Appendix 1 should be taken into account throughout the design stage of the development at this Site.

5. References

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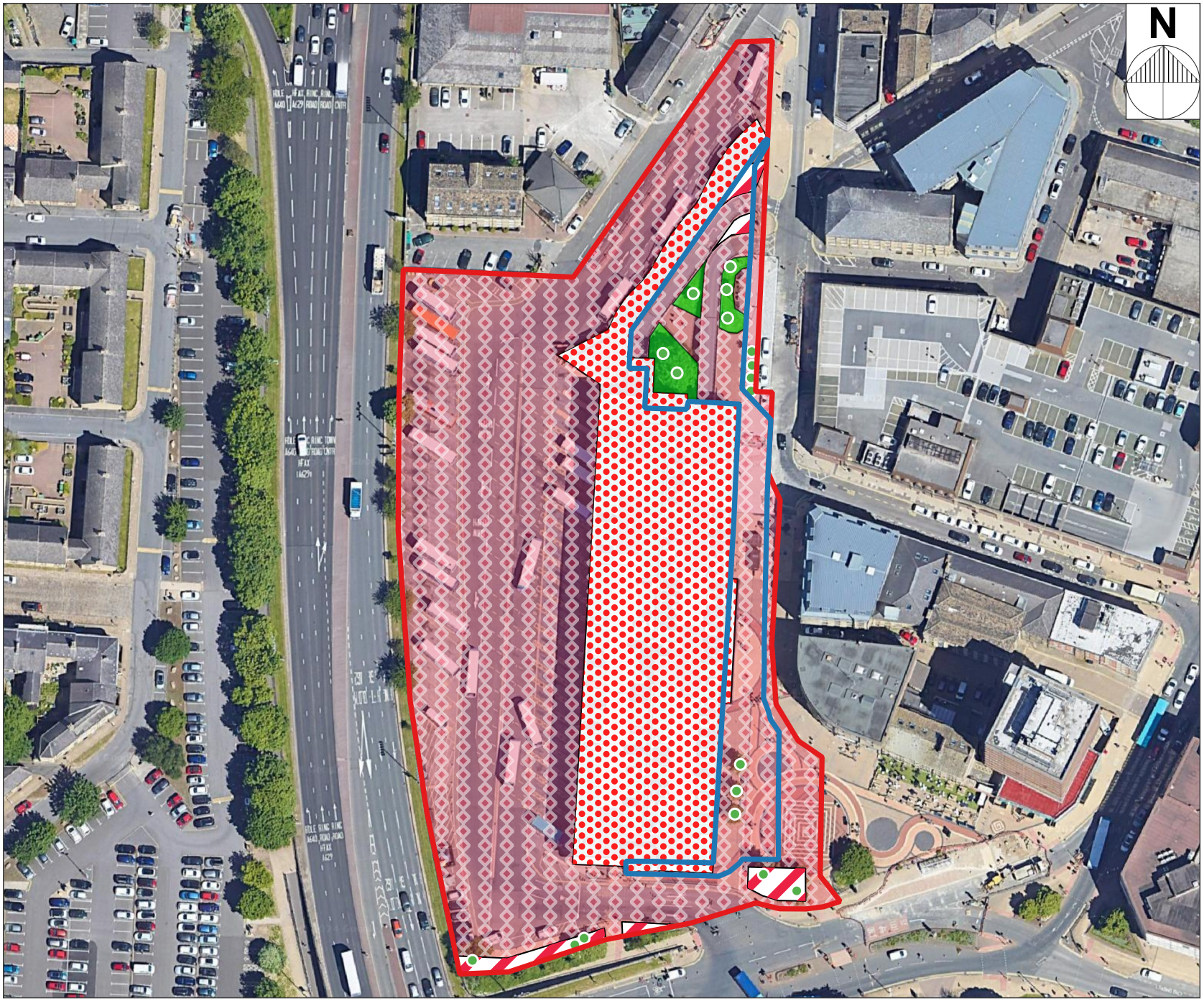
Figure 1: Baseline Habitat Map



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Key

- Site boundary
- Phase 2 boundary
- Grassland - Modified grassland
- Urban - Introduced shrub
- Urban - Developed land; sealed surface
- Urban - Developed land; sealed surface
- Individual trees - Urban tree

0 10 20 30 40 50 m

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Biodiversity Net Gain Assessment

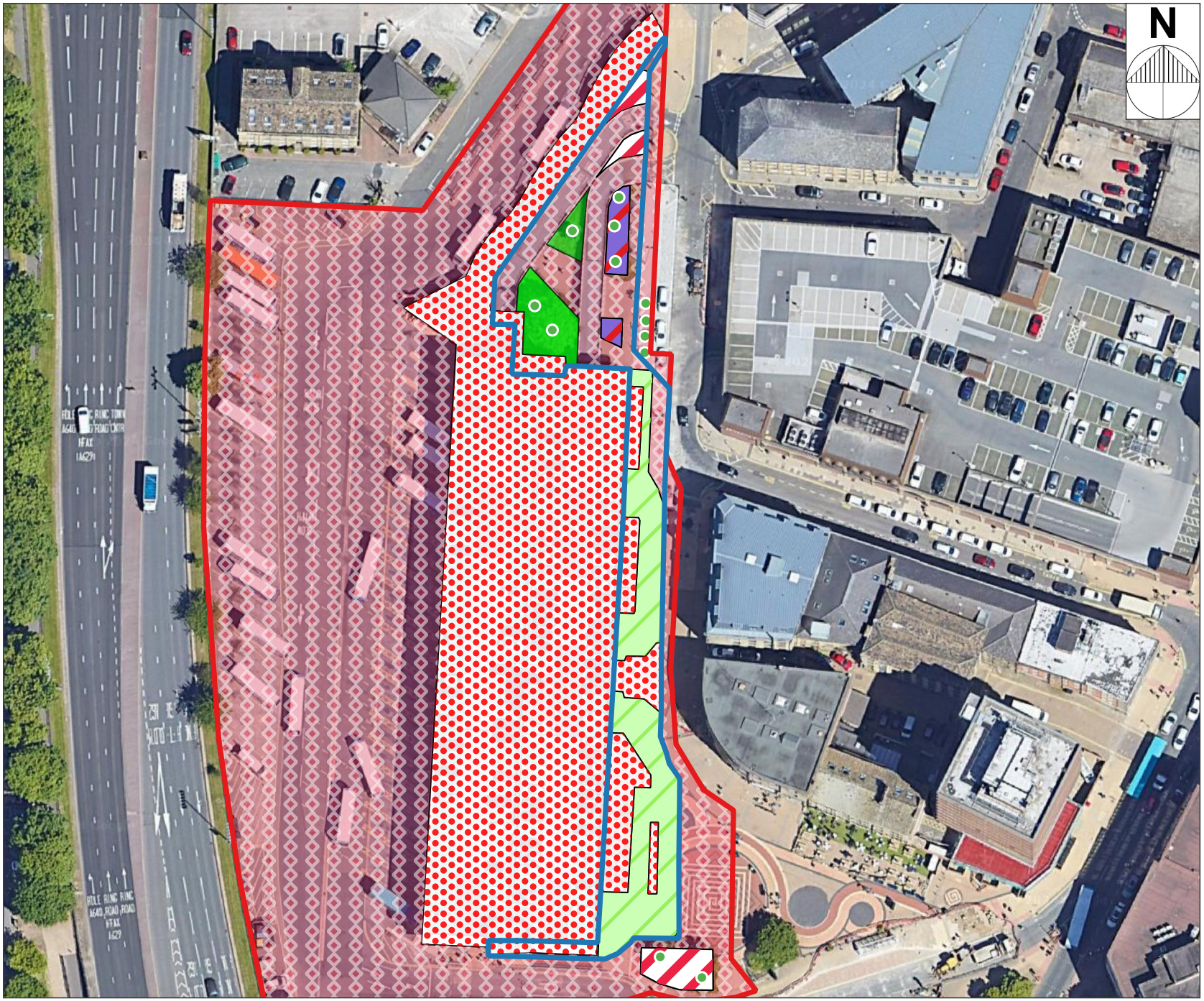
Figure 1
Baseline Habitat Map

A	01.07.2024	JS	ST
Rev	Date	Drawn by	Checked by

Site centred on:	SE 14204 16569

July 2024 | Scale: 1:1,250 @A4 | Drg.Ref: 21287 - ECO - 1 - A

Figure 2: Post-development Habitat Map



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Key

- Site boundary
- Phase 2 boundary
- Grassland - Modified grassland
- Urban - Introduced shrub (proposed)
- Urban - Introduced shrub
- Urban - Developed land; sealed surface
- Urban - Developed land; sealed surface
- Urban - Other green roof
- Individual trees - Urban Tree

0 10 20 30 40 50 m

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Huddersfield Bus Station
Biodiversity Net Gain Assessment

Figure 2
Post-development Habitat Map

A	01.07.2024	JS	ST
Rev	Date	Drawn by	Checked by

Site centred on:	SE 14204 16569

July 2024 | Scale: 1:1,000 @A4 | Drg.Ref: 21287 - ECO - 2 - A

Appendix 1: BNG Good Practice Principles

The BNG good practice principles are based upon issued joint guidance from the Chartered Institute for Ecology and Environmental Management (CIEEM), the Construction Industry Research and Information Association (CIRIA) and Institute for Environmental Management and Assessment (IEMA) (CIEEM, CIRIA & IEMA (2016 and CIEEM, CIRIA & IEMA 2019).

Principle	Description
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 by gains elsewhere	Avoid negative impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or 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, and share the benefits fairly among stakeholders.
4. Address risks	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 the losses occurring and the 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.
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; • Supporting local-level management of Net Gain activities.
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.

Appendix 2: BNG Policy and Legislation

National

UK Government's 25 Year Environment Plan

The UK Government's 25 Year Environment Plan (DEFRA, 2018) states a desire to '*embed a 'net environmental gain' principle for development to deliver environmental improvements locally and nationally*' and plans to consult on making Biodiversity Net Gain a mandatory requirement.
On 14th March 2019, Her Majesty's Treasury confirmed that following consultation, the government will use the forthcoming Environment Bill to mandate BNG for development in England, ensuring that the delivery of much-needed infrastructure and housing is not at the expense of vital biodiversity.

Biodiversity 2020: A strategy for England's wildlife and Ecosystem Services

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (DEFRA, 2011) is the national strategy for biodiversity. This sets out an ambition to halt the loss of biodiversity and see an increase in the area of priority habitats by 200,000 ha by 2020. Biodiversity 2020 sets in policy the objectives to improve our wildlife sites, make them bigger, develop more of them and join them up (summarised as 'Bigger, Better, More and Joined').

National Planning Policy Framework

The revised National Planning Policy Framework (NPPF) (DLUHC, 2023) refers to conserving and enhancing the natural environment. This requires Local Authorities in England to take measures to:

Conserve and enhance biodiversity;

Protect the habitats of these species from further decline;

Protect the species from the adverse effect of development; and

Refuse planning permission for development, if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for.
Although not currently a legal obligation, the NPPF refers to biodiversity and environmental net gains in the following paragraphs:

Transport Infrastructure

- Paragraph 102. "*Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

d) the environmental impacts of traffic and transport infrastructure can be identified assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for ***net environmental gains.****"*

Planning Decisions

- Paragraph 120. "*Planning policies and decisions should a) encourage multiple benefits from both urban and rural land … and taking opportunities to* ***achieve net environmental gains - such as developments that would enable new habitat creation****."*
- Paragraph 174. *"Planning policies and decisions should contribute to and enhance the natural and local environment by: … d) minimising impacts on and* ***providing net gains*** *for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future*

pressures."

- Paragraph 179. "*To protect and enhance biodiversity and geodiversity plans should b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing* ***measurable net gains for biodiversity***."
- Paragraph 180. "*When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; … and d) … opportunities to improve biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure* ***measurable net gains for biodiversity****.*"

Natural Environment and Rural Countryside Act

The Natural Environment and Rural Countryside (NERC) Act (HMSO, 2006) requires public bodies, including local authorities, '*to have regard to the conservation of biodiversity in England when carrying out their normal functions'*.
Section 40 sets out that:

Paragraph 1. *"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity";* and that

Paragraph 3. *"Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat".*

Section 41 sets out that:

Paragraph 1. *"The Secretary of State must… publish a list of the living organisms and types of habitat … of principal importance for the purpose of conserving biodiversity"* based on consultation with Natural England*;* and that

Paragraph 3a. Every planning authority must *"a) take such steps… to further the conservation of the living organisms and types of habitat included in any list published under this section, or (b) promote the taking by others of such steps".*

Environment Act

Schedule 7a of the Environment Act (HMSO, 2021) makes provision for grants of planning permission in England to be subject to a condition to secure that the biodiversity gain objective is met.

Schedule 7a Part 1 sets out that:

(1) The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least the relevant percentage.

(2) The biodiversity value attributable to the development is the total of—

(a) the post-development biodiversity value of the onsite habitat,

(b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development, and

(c) the biodiversity value of any biodiversity credits purchased for the development.

(3) The relevant percentage is 10%.

The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024 should also be consulted which includes several provisions of the Act coming into force on 12th February 2024.

Appendix 3: Completed Habitat Condition Assessment Sheets

Note: The SBM '*Technical Annex 1 - Condition Assessment Sheets and Methodology'* (DEFRA, 2024) should be referred to for the descriptions of each condition assessment criteria.

SBM HABITAT CONDITION ASSESSMENT - AREA & LINEAR HABITATS																
Date		16/02/2024			**Surveyor name(s)**		Senior Ecologist Katie Smith BSc (Hons) ACIEEM and Consultant Ecologist James Storey BSc MSc									
Project/Development Name		Huddersfield Bus Station (Phase 2)			**Limitation(s)**		None									
Habitat Type	**Condition Criterion**													**TOTAL Condition Criteria PASSED**	**Condition** (Poor, Moderate or Good)	
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**			
Baseline																
Developed land; sealed surface															N/A - Other	
Introduced shrub															N/A - Other	
Modified grassland	No	No	Yes	No	No	Yes								2	Poor	
Urban Tree (T1-6)	Yes	Yes	Yes	No	No	Yes								4	Moderate	
Urban Tree (T11-13)	No	Yes	Yes	No	No	No								2	Poor	
Post-development																
Introduced shrub															N/A – Other	
Modified grassland	No	No	Yes	Yes	Yes	Yes								4	Moderate	

Appendix 4: Biodiversity Metric Calculations Summary

Huddersfield Bus Station				
Headline Results	Return to results menu			
Scroll down for final results ⚠				
On-site baseline	*Habitat units*	0.30		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.40		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site net change (units & percentage)	*Habitat units*	0.10	31.82%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Off-site baseline	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.10
	Hedgerow units	0.00
	Watercourse units	0.00
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.10
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	31.82%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

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