BMD

TOWN & COUNTRY PLANNING ACT 1990

SECTION 78 APPEAL

APPEAL BY GREAT LAKES UK LTD

REF: APP/C3105/W/20/3259189

LAND TO THE EAST OF M40 AND SOUTH OF A4095,

CHESTERTON, BICESTER, OXFORDSHIRE OX26 1TE

BIODIVERSITY PROOF OF EVIDENCE

OF JAMES PATMORE CEcol CEnv MCIEEM BSc *Hons*

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1. INTRODUCTION

1.1 Qualifications and Experience

1.1.1 My name is James Patmore, I am the Director of Ecology at Bradley Murphy Design Limited (BMD) of Hatton Technology Park, Hatton, Warwickshire CV35 8XB, a practice of landscape architects, urban designers, ecologists and master planners.

1.1.2 I am a Chartered Ecologist and Chartered Environmentalist and also hold full membership of the Chartered Institute of Ecology and Environmental Management (CIEEM) with over 18 years' experience as a practising ecological consultant. I hold a Bachelor of Science (Honours) degree in Environmental Science from the University of Birmingham. I have undertaken Biodiversity Impact Assessments (BIA) for a wide range of schemes including residential, commercial and mixed-use including review and use of a range of biodiversity metric methods.

1.1.3 I have experience in providing biodiversity-led input to the master planning process for a range of large-scale residential, mixed use and commercial developments across the country and also nationally important infrastructure projects. The process includes the collation of robust ecological baseline data, a thorough ecological impact assessment and identifying appropriate mitigation and compensation to ensure a Biodiversity Net Gain is achieved.

1.1.4 I confirm that the opinions expressed in my evidence are my true and complete professional opinions irrespective of by whom I am instructed.

1.1.5 The structure of my proof is as follows:

- Section 2 provides a summary of the baseline biodiversity features of the Site, including the findings and observations of my own verification survey;

- Section 3 provides a review of the WSP Ltd Biodiversity Net Gain assessment including a summary metric to present the full net gain position to date;

- Section 4 provides a comparison metric using the baseline data, my professional judgement and the default settings of the Biodiversity Metric 2.0;

- Section 5 provides a response to the Parishes Against Wolf (PAW) Statement of Case with regard to Biodiversity Net Gain further to my review set out in section 3 and 4; and

- Section 6 provides a summary and conclusion.

1.2   Scope and Nature of Evidence

1.2.1   On 11th November 2019, Great Lakes UK Limited submitted an application for full planning permission to Cherwell District Council (CDC) for the development of part of the existing golf course at Bicester Hotel, Golf and Spa on land situated to the east of M40 and south of A4095, Chesterton, Bicester to provide a new family-focused leisure resort. CDC marked the application as received on 13th November 2019 after which it was validated and made public on 25th November 2019.

1.2.2   The description of development is as follows:

"Redevelopment of part of golf course to provide new leisure resort (sui generis) incorporating waterpark, family entertainment centre, hotel, conferencing facilities and restaurants with associated access, parking and landscaping".

1.2.3   The Application was considered by CDC's Planning Committee on 12th March 2020, at which members resolved to refuse planning permission. The Decision Notice (Ref CD3-1) was issued by CDC on 19th July 2020.

1.2.4   The decision to refuse consent for the Proposed Development has been appealed by the applicant in September 2020. There is no reason for refusal on biodiversity grounds and this is not an issue that is being pursued by CDC.

1.2.5   I have been commissioned to undertake an independent review of the Biodiversity Net Gain assessment prepared for the Proposed Development in response to matters raised in the Parishes Against Wolf (PAW) statement of case dated 27th November 2020 which has alleged the following:

- The baseline assessment for the Site has skewed the value of the existing habitats;

- The habitat creation proposals are unrealistic and ambitious;

- There are numerical errors and oversights in the calculations;

- An independent review indicates that the proposals will not achieve the net gain figure claimed nor the 10% net gain benchmark now targeted by Cherwell District Council and would actually result in a net loss;

- Although it is not a reason for refusal in this case, PAW consider that the Proposed Development fails to address how adverse impacts on biodiversity can be appropriately mitigated for.

1.2.6   The main scope of my evidence provided in this proof and its associated appendices is as follows:

- A summary of the biodiversity baseline at the Site;

- A review of the submitted WSP metric; and

- A comparison metric based on the current Biodiversity Metric 2.0.

1.2.7   My proof of evidence demonstrates that:

- The Proposed Development has been developed as part of a landscape-led approach with careful regard to the baseline biodiversity and the ecological context of the surrounding area;

- In general, the Site is dominated by low value biodiversity assets;

- No high value biodiversity asset would be lost as a result of the Proposed Development;

- High value biodiversity assets are avoided and protected as an outcome of the Proposed Development;

- Biodiversity Net Gain is achieved by the Proposed Development with the consequential benefits for biodiversity and the environment; and

- The net gain position is secured through appropriate long-term maintenance and management.

1.2.8   Aspects of architectural design and detailing, drainage/flood risk, highways and transport, landscape assessment, golf provision and planning are addressed in the evidence of the following:

- Planning: Chris Goddard, DP9

- Highways & Transport: Philip Bell, Motion

- Architecture & Design: Nick Rayner, EPR

- Drainage & Flood Risk: Richard Bettridge, Motion

- Landscape Impact Assessment: Richard Waddell, BMD

- Golf: John Ashworth, John Ashworth Associates including Appendix from Howard Swan, Swan Golf Designs

2. BIODIVERSITY BASELINE

2.1 Background

2.1.1 In the Planning Committee Report (Ref CD3-3) CDC's Case Officer confirmed that CDC Ecology raised no objection to the planning application as the submitted surveys within the accompanying Environmental Statement and updates were all sufficient in scope and depth at the current time and confirmed the acceptability of the Proposed Development. A habitat management and monitoring plan (Ref CD2-2) had been produced which was accepted. The CDC Ecology officer requested the workings for the net gain assessment and these were provided by WSP (Ref CD2-6), along with further comments addressing habitat condition and habitat management proposals for the retained and created habitats. CDC Ecology responded to the WSP comments with further email correspondence on 2nd March 2020 for clarification on lighting and this was addressed.

2.1.2 The CDC Planning officer further concluded at paragraph 9.198 of the Planning Committee Report when considering the development proposals in respect of ecological impacts that:

'Officers are satisfied, on the basis of the advice from the Council's Ecologist and the absence of any objection from Natural England, and subject to conditions, that the welfare of any European Protected Species found to be present at the site and surrounding land will continue and be safeguarded notwithstanding the proposed development and that the Council's statutory obligations in relation to protected species and habitats under the Conservation of Habitats & Species Regulations 2017, have been met and discharged.'

2.1.3 Notwithstanding CDC's satisfaction with ecology matters, PAW has advanced contrary allegations regarding baseline assessment and Biodiversity Net Gain in its Statement of Case.

2.1.4 In light of this, I have been instructed by the Appellant to provide a further independent review of the work already undertaken by WSP which CDC has already scrutinised. For these purposes, I have examined all of the relevant material that WSP complied (Ref CD2-1 and CD2-6). I also undertook my own further ecological verification visit to the Site on 5th January 2021. My walkover of the Site followed the Phase 1 Habitat Methodology (JNCC, 2010) with the aim of further

verifying for myself the current baseline data that has already been collected, and assessing the existing condition of the habitat types present and considering the presence of/potential for protected and notable species. My verification report is presented in Appendix B, but it should be read in conjunction with the work already performed by WSP and scrutinised and confirmed by CDC.

2.2 Methodology

2.2.1 A Preliminary Ecological Appraisal of the Appeal Site was undertaken by WSP in 2018 and this was included as part of the Environmental Statement supporting the planning application. The habitats present on Site were assessed to JNCC (2010) habitat types and are presented on the 'Phase 1 Habitat Survey' plan (Dated October 2019) which identify the baseline habitats (pre-development) for the Biodiversity Net Gain assessment (see Appendix A).

2.3 Biodiversity Features of the Site

2.3.1 In summary, the original ecological baseline assessment concluded that the majority of the Site was assessed to be of low biodiversity value, comprising of approximately 68% of low value amenity grassland (JNCC code - J1.2) associated with the managed golf course facility.

2.3.2 Small areas of higher value habitat features were present including standing water (G2), broadleaved mixed plantation woodland (A1.1.2 and A1.3.2), broad-leaved parkland/scattered trees (A3.1) and hedgerows (J2.1.2, J2.3.1 and J2.3.2).

2.3.3 My verification survey has confirmed that there had been little change in the habitat distribution and type identified previously on Site and that broadly the habitat conditions assigned in 2019 were appropriate. In summary:

- Amenity grassland – the Site is dominated by amenity grassland to the extent stated in the WSP baseline assessment, with the grassland mown short and intensively managed. As set out in more detail in Appendix B the amenity grassland is considered to be of low diversity value and is considered to be poor condition with regard to habitat criteria relevant to this habitat type.

- Smaller areas of higher value features (in terms of habitat distinctiveness) remain including various plantation woodlands, scattered parkland trees and standing water. As set out in more detail in Appendix B these features are generally considered to be poor condition with moderate condition afforded to standing water.

2.3.4   As to concerns expressed in the PAW SoC that the baseline assessment artificially supressed values of habitat, I consider there is no basis for this claim. Further to my own verification survey, I can confirm that the habitats at the Site have all been appropriately assessed with regard to habitat distinctiveness and also current condition. The majority of habitats do not meet the higher level condition criteria (with regard to best practice habitat criteria (at the time of WSP assessment) relevant to the habitat type, see Appendix B for further detail) due to being of low ecological value and not being specifically managed for ecological objectives at present.

2.3.5   I agree with the habitat condition statements that WSP set out in their Response to Comments document (Ref CD2-6), particularly;

"The woody habitats lack a diverse age and height structure and significant dead wood is absent."

"All habitats (except perhaps some of the limited areas of habitat to the peripheries of the site that would not be affected by the development) are subject to very intensive management (including frequent mowing and fertilizer application), as well as significant recreational pressure through use of golf."

"Habitats exhibit low species diversity and are relatively recent in origin. The assessment has been made based on professional judgement informed by the Farm Environmental Plan criteria assessment."

2.3.6   As set out in the WSP Response to Comments document (Ref CD2-6) the CDC Ecology Officer acknowledges that with regard to the current baseline condition *"much of this is amenity grassland which is of limited ecological value.*"

2.3.7   Therefore, the assertion made in the PAW SoC regarding undervalued baseline are considered unfounded. This matter is considered further in Section 5.

3. BIODIVERSITY NET GAIN ASSESSMENT 2019

3.1 Introduction

3.1.1 This Section provides a review of the methods, results and recommendations associated with the Biodiversity Net Gain assessment undertaken by WSP in 2019 in support of the Proposed Development in light of the criticisms made by PAW, albeit these are not made by CDC.

3.2 Background

3.2.1 The Biodiversity Net Gain assessment report for the Proposed Development was prepared by WSP in December 2019 (Ref CD2-1). The 2019 report sets out the methods, results and recommendations for the Biodiversity Net Gain assessment undertaken in support of the Proposed Development (see Appendix C). As I would expect, not all of the detailed workings of the Biodiversity Net Gain assessment are included in the 2019 report (which instead presents the analysis in a series of summary tables), but the workings were submitted during the course of the planning application appended to WSP responses to comments from the CDC Ecology Officer (Ref CD2-6), dated 28th February 2020 (Appendix D).

3.2.2 These two sources of information have been used to undertake the following review.

3.3 Methodology

3.3.1 The methodology used to assess the Biodiversity Net Gain position of the Proposed Development followed the Defra (2012) methodology and also guidance from BRE (2018) and CIEEM, IEMA & CIRIA (2016). The full methodology for the assessment is presented in the appendices of the 2019 Report (see Appendix C).

3.3.2 At the time that the assessment was undertaken, these methodologies were appropriate. The Biodiversity Net Gain assessment process for the Proposed Development started before the formal release of the more recent metric, Biodiversity Metric 2.0. The assessment was undertaken using WSP's internal toolkit, based on the Defra 2012 metric

3.3.3   The WSP responses to comments document (Appendix D) includes detailed data table summaries extracted from that internal toolkit.

3.3.4   It is possible to track the WSP calculations using the two sources of information (as detailed in Section 3.4 below). As CDC were satisfied with all of this information, it was clearly not considered necessary by WSP to present it all in the manner I have done below, but in light of PAW's Statement of Case I set out the information in more detail.

3.4   Overall Net Gain Result

3.4.1   In summary, to calculate the change in biodiversity (in terms of biodiversity unit value) resulting from a development, the first step is to survey and then divide up the Site into distinct parcels of each habitat type. The information is then used to calculate the baseline (or pre-intervention) 'biodiversity unit' value for each habitat parcel using a calculation tool. The output of the tool will give the biodiversity unit value of the habitats on Site before the development.

3.4.2   The next step involves using the design plans for the Proposed Development to calculate the biodiversity unit value for the habitats that are expected to be retained after the works are finished, plus the values for any enhanced or newly created habitats (including onsite and offsite provisions).

3.4.3   The change in biodiversity is then worked out by subtracting the Site's baseline biodiversity unit value from the sum of the post-intervention values for retained, created and enhanced parcels of the same habitat type. If needed, this figure can then be combined with any offsite gains or losses to give a final biodiversity value from which Biodiversity Net Gain or loss for the Proposed Development can be assessed.

3.4.4   As described in Section 2 above, the biodiversity baseline position for the Proposed Development was appropriately established and it has now been further recently verified (Appendix A and Appendix B), with the illustrative masterplan for the Proposed Development indicating a range of habitat retentions, enhancements and also creation. WSP converted the proposed habitats into

appropriate JNCC Phase 1 Habitat categories to provide the post-development habitat plan (Appendix F) used to calculate the areas of post development habitat types.

3.4.5   The above approach for calculating the balance of biodiversity units has been followed by WSP and the results derived from the method used are summarised in Table 3.1 below for area-based biodiversity units and also for linear units.

3.4.6   The results demonstrate a significant positive biodiversity unit position post-development compared to the pre-development position of +15.13 units, namely a 27% net gain.

3.4.7   Linear based biodiversity units have also been reviewed and these are presented in Table 3.2. The results demonstrate a significant positive linear unit position post-development compared to the pre-development position of +638.5 units, namely a 117% gain.

Table 3.1 – Biodiversity Net Gain Results; Area Based Habitats – WSP 2019

Stage	Habitats	Area (Ha)	Biodiversity Units
Pre-development	Baseline	18.39	55.86
Post-development	Retained	4.28	20.76
	Enhanced	2.75	19.16
	Created	11.36	31.07
	Totals	**18.39**	**70.99**

Table 3.2 – Biodiversity Net Gain Results; Linear Based Habitats – WSP 2019

Stage	Habitats	Length (m)	Linear Units
Pre-development	Baseline	182	546
Post-development	Retained	124	372
	Created	812.50	812.50
	Totals	936.50	1184.50

3.4.8   With regard to Table 3.1, it is clear that the higher value habitats have been appropriately retained in the Proposed Development in the fact that 4.28 ha of retained habitat features accounts for 37% of the existing baseline value. The large balance of the net gain achieved within the Proposed Development is derived from the enhancement of the existing amenity grassland through conversion to a neutral semi-improved grassland, to be implemented through appropriate management over a timescale of 6-10 years. The areas of enhancement, creation (on existing habitats) and temporary loss (during construction) and then creation are illustrated on the Post development Habitats Plan (Appendix F) and Illustrative Masterplan (Appendix E).

3.4.9   The broad area measures for each pre/post development habitat type used in the WSP calculation have been checked using GIS. All of the measures are broadly representative of those presented on both the illustrative masterplan and the post-development habitat plan

3.4.10   As noted in the 2019 report, since completion of the original assessment there were minor variations to the illustrative masterplan, but none that has been considered significant to the outputs of the Biodiversity Net Gain assessment.

3.4.11   It should also be recognised that the assessment is based on the proposed layout which is common place at this stage of a planning application. At a time when the final layout is confirmed post-planning in terms of any design detail, the assessment would be updated to account for the final area measures and layouts. This requirement is usually secured by appropriately worded

planning condition. The metric to be used (see Section 4 for further consideration of this point) should be agreed with CDC to ensure consistency with local policy and other schemes being assessed in the district. It is considered that this would likely be the Biodiversity Metric 2.0.

3.4.12   Having reviewed the series of supporting habitat plans, namely the predevelopment plan (Appendix A), the post development habitat plan (Appendix F) and the Illustrative Masterplan (Appendix E), I consider it is clear how the Proposed Development achieves biodiversity net with regard to the overall areas of retention, creation and enhancement.

3.4.13   In essence, the construction of the Proposed Development involves the use of 11.36 ha of existing habitat. The metric accounts for what is then created (including the areas that would be the new building/hardstanding). The biodiversity unit (BU) balance between the value of the existing habitat to be lost (29.08 BU) to that created (31.07 BU) in itself provides a small gain of +1.99 BU due to higher value habitats being replaced for the lower value habitats that are lost. The 4.28 ha of retained habitat (no change) continues to provide +20.76 BU, but there is an enhancement of an additional 2.75 ha of existing habitat. The majority of this area (some 2.48 ha) is subject to the conversion from existing amenity grassland to a higher value neutral semi-improved grassland) and overall enhancement provides +19.16 BU.

3.4.14   The overall net gain change is +15.13 BU, resulting in a 27% net gain on the baseline position as summarised in Table 3.3. This is considered to be a significant net gain (i.e. above 10%) as defined by BREEAM (2018) and also exceeds the 10% net gain requirements recently endorsed by CDC.

Table 3.3 – Biodiversity Net Gain Overall Change Summary – Area Based Habitats

Baseline (Overall)	Baseline Loss	Retained	Retained - Enhanced	Created	Net Change
55.86 BU (18.39 ha)	29.08 BU (11.36 ha)	20.76 BU (4.28 ha)	19.16 BU (2.75 ha)	31.07 BU (11.36 ha)	+15.13 (27.09%)

3.4.15   The overall result and calculation for the Proposed Development is presented on a single sheet at Appendix G. This is a modified version of a BMD internal metric used for BREEAM 2018 assessments. The sheet aims to present the full balance of the overall 2019 calculation in one location to aid review.

3.5   Habitat Creation and Enhancement Proposals – detailed review

3.5.1   The net gain position described in Section 3.4 above reflects the enhanced and proposed habitat types based on the target condition, any difficulty to enhance/create and the time period to create/enhance. The 2019 report/WSP responses to CDC Ecology comments provides the assigned values for the various habitats which form the post development BU calculation.

3.5.2   The attributes for each proposed habitat type have been reviewed and are summarised in Table 3.5 (creation) and Table 3.6 (enhancement). I consider the proposed attributes for each habitat type appear to be broadly consistent with the best practice relevant to the time of the assessment (BREEAM, 2018). As such, I am satisfied that no proposed habitat creation or enhancement has been exaggerated, nor any unrealistic targets or timeframes have been set based on the best practice guidance followed at the time of assessment.

3.5.3   Where best practice requires professional judgements to assign the time to target, the proposed enhancement time to target attributes set by WSP are realistic when compared to the time to creation target for the corresponding/or similar habitat types; for example the time to target for the enhancement of the amenity grassland to semi-improved neutral grassland has been set to the

same timeframe as creation of semi-improved neutral grassland, allowing an extended timeframe to ensure the targeted enhancement is achieved.

Table 3.5 – Review of post development created habitat attributes

Source	Phase 1 Habitat Type	Distinctiveness	Target Condition	Difficulty to create/ enhance	Time to create (yrs)
WSP[1]	A1.1.2: Woodland: Broadleaved – plantation	Medium	Good	Low	20
BREEAM[2]				Low	20
WSP	A1.3.2: Woodland: Mixed – plantation	Medium	Good	Low	20
BREEAM				Low	20
WSP	A2.1: Scrub – dense continuous	Medium	Good	Low	5
BREEAM				Low	5
WSP	A3.1: Parkland/scattered trees – broad-leaved	Medium	Good	Low	20
BREEAM				Low	20
WSP	B2.2: Semi-improved neutral grassland	Medium	Good	Low	10
BREEAM				Low	5 or 10
WSP		High	Moderate	High	10

BREEAM	B5: Marshy Grassland			High	5 or 10
WSP	G1: Standing water (created)	High	Good	Medium	<1
BREEAM				Medium/low	0
WSP	J1:2 Amenity Grassland (created)	Low	Poor	Low	2
BREEAM				Low	2
Sources 1.WSP Net Gain assessment report 2019/WSP Responses to CDC Ecology Comments 2020 2. BREEAM 2019 - GN36-0.0-BREEAM-CEEQUAL-HQM-Ecology-Assessment-Issues-Route-2-Appendix-C.					

Table 3.6 – Review of post development enhanced habitat attributes

Source	Phase 1 Habitat Type	Distinctiveness	Target Condition	Difficulty to create/ enhance	Time to create/ enhance (yrs)
WSP[1]	A1.1.2: Woodland: Broadleaved – plantation	Medium	Good	Low	10
BREEAM[2]				Low	SQE[3]
WSP	A1.1.2: Woodland: Mixed – plantation	Medium	Good	Low	10
BREEAM				Low	SQE
WSP		Medium	Good	Low	10

BREEAM	A3.1: Parkland/scattered trees – broad-leaved			Low	SQE
WSP	B2.2: Semi-improved neutral grassland	Medium	Good	Low	10
BREEAM				Low	SQE
Sources 1.WSP Net Gain assessment report 2019/WSP Responses to CDC Ecology Comments 2020 2. BREEAM 2019 - GN36-0.0-BREEAM-CEEQUAL-HQM-Ecology-Assessment-Issues-Route-2-Appendix-C 3. To be determined by the Suitably Qualified Ecologist based on quality of existing habitat and aim of creating/enhancing to a target of good condition.					

3.5.4   The habitat proposals would be established and managed, in accordance with the objectives and operations outlined in the Landscape Maintenance & Management Plan (CD1-20) and the Habitat Management and Monitoring Plan (CD2-2), to ensure successful establishment and long-term maturity of the features proposed as part of the development and to ensure that the projected net gain is achieved in the timeframes stated.

3.5.5   With regard to running water, the WSP Biodiversity Net Gain Assessment (Ref CD2-1) states that -

"An assumption of the change in ecological value calculation is that the loss of 315.5m running water has been compensated for by the creation of 466.0m of swale habitat, mapped as area-based marshy grassland. In the context of BNG, area-based habitat cannot provide direct quantifiable compensation for the loss of running water linear habitat. Existing running water on site comprises heavily modified ditch features that appear to regularly dry out. The swales incorporated within the landscape plan will be vegetated with native marshy grassland species and contained with ditches. They are considered to represent an ecologically equivalent habitat (likely of greater value) and therefore provide compensation for the loss of running water habitat.

It is therefore deemed appropriate to override the outcome of a quantifiable net loss of linear watercourse habitat with an outcome of net gain for watercourse habitat. To avoid double counting the biodiversity value generated by created swale habitat, the total area of these features (0.1 ha) has been removed from the area-based biodiversity unit calculation."

3.5.6   I agree with the above assumption. Given the current condition of the ditches at site (see Appendix B for further detail of these features) a marshy grassland swale feature as shown on the post development habitat plan (Appendix F) compensates for the loss. The approach of linear and area-based habitats being separately assessed to the assumed compensation in this case is considered appropriate. Attempting to account for the above within the metric would over-complicate the process.

4. COMPARISON METRIC – BIODIVERSITY METRIC 2.0

4.1 Introduction

4.1.1 The Biodiversity Metric 2.0 (Natural England, 2019) is the recent successor to the biodiversity metric published by Defra in 2012. The Biodiversity Metric 2.0 builds upon the original metric and advances the ability to account for and measure biodiversity losses and gains.

4.1.2 In order to test the calculations of the WSP 2019 report and to present the biodiversity data against this more recent method, the Biodiversity Metric 2.0 has been completed based on the information reviewed in Section 2 and 3 above using a verified and transparent metric.

4.2 Overall Summary and Findings

4.2.1 The completed Biodiversity Metric 2.0 for the Proposed Development (presented in Appendix H) confirms that the Proposed Development would continue to achieve a significant positive net gain. It demonstrates the delivery of +10.65 BU, a net gain of 17.14%.

4.2.2 As set out below the calculations in the Biodiversity Metric 2.0 (at Appendix H) include additional multipliers (including ecological connectivity and strategic significance) and also updated time to target condition and condition default scores (as compared to the Defra 2012 metric). This inevitably results in some changes in the overall BU achieved by the Proposed Development as compared to WSP 2019 report. The key changes are identified in Table 4.1 and summarised below.

Table 4.1 – Comparison of WSP Biodiversity Net Gain Report and the Biodiversity Metric 2.0. Area Habitat Biodiversity Units.

Metric	Baseline Pre	Retained	Created	Enhanced	Total Post	Net change
WSP	55.86 BU	20.76 BU	31.07 BU	19.16 BU	70.99 BU	+15.13 (27.09%)
Biodiversity Metric 2.0	62.16 BU	23.02 BU	24.41 BU	25.38 BU	72.82 BU	+10.65 (17.14%)

4.2.3   With regard to Table 4.1, the following are notable:

- The biodiversity baseline for pre-development is slightly elevated under the Biodiversity Metric 2.0 due to additional multipliers for ecological connectivity and strategic significance that account for slight increases across the habitat values, so resulting in a cumulative increase

- The total post development unit score is a similar range.

- With regard to habitat creation, broadly the units achieved for each habitat from creation are similar, but with some slight elevations due to the multipliers for strategic significance under the Biodiversity Metric 2.0. There is reduction in the score achieved for broad-leaved woodland creation (reduced from 13.08 units to 6.78 units) when using the Biodiversity Metric 2.0 due to an increase in the default time to target being longer and risk multipliers being higher. This reduces the overall unit scores achieved, but this does not affect the overall position of the Proposed Development delivering a significant gain.

- With regard to habitat enhancement proposals there is an increase in the score under Biodiversity Metric 2.0 because it accounts for cumulative gains associated with the additional multipliers with regard to better connected habitats as a result of enhancement. Units achieved through the enhancement of the amenity grassland to semi-improved is

also increased under Biodiversity Metric 2.0 even with an extended time to target of 15 years.

4.2.4   With regard to hedgerows, the units achieved by the Proposed Development using the Biodiversity Metric 2.0 continue to demonstrate that a significant net gain in hedgerow units will be achieved, with a score of +3.65 units which is a 158.68% gain over the baseline.

4.2.5   The Biodiversity Metric 2.0 uses a revised methodology for hedgerow calculations. A direct comparison with the WSP results based on the Defra 2012 methodology is not feasible.

4.2.6   I have identified that a section of retained hedge (116m) was labelled in the data tables in the WSP Response to Comments (CD2-6) as intact - native species rich hedgerow, whereas it is species-poor hedge and tree as described in the ecological baseline and as also depicted in the Phase 1 habitat plan (Appendix A). This would have no effect on the WSP metric score as the hedge would still be set to good condition by default and as such achieve the linear units stated. In the Biodiversity Metric 2.0 presented at Appendix H, I have relabelled the hedgerow to reflect its attributes, set with regard to distinctiveness and condition.

4.2.7   In summary, the overall significant biodiversity enhancement is achieved through the avoidance of impacts to higher value habitat, retention of higher value habitat features, enhancement of lower value retained habitats through appropriate long-term management and the creation of higher value habitats to replace the value of the habitat lost. The result of the Proposed Development is a significantly enhanced area of habitat mosaic with improved connectivity continuing to support the protected species present at the Site such as great crested newt and grass snake.

4.2.8   It should also be recognised that the use of a metric provides a numerical means to assess the biodiversity net gain achieved by a development. It does not account for other biodiversity enhancements achieved by a scheme such as those associated with protected species (e.g. for great crested newt), specific features installed within new landscaping/habitat areas such as bird

boxes, bat boxes, habitat piles, log piles, etc which would be included in the detailed landscape designs for the Proposed Development and which will enhance the biodiversity of the site.

4.2.9   Further checking of the metric results also occur when a permitted scheme is implemented (as indicated in the WSP 2019 Report) to ensure that the final designs continue to achieve a net gain and that all habitat areas are accounted for. In this case, for example the illustrative design includes a green/biodiverse roof the benefits for which have yet to be included in any metric calculation.   At the stage of implementation, one would expect such areas like the green/biodiverse roof to also be included in the metric as part of the overall habitat creation (replacing the corresponding allocated built development area which currently scores 0 units) either as low distinctives (for sedum type green roofs) or medium distinctiveness for biodiverse roofs supporting a more diverse plant mix (depending on the type and extent fixed in the detailed discharge of conditions).

5. RESPONSE TO PARISHES AGAINST WOLF STATEMENT OF CASE

5.1 Introduction

5.1.1 The original PAW objection to the planning application appended to The Parishes Against Wolf Statement of Case (PAW SoC) (CD14-1) stated that;

"The Parish Councils have serious and fundamental concerns about the applicant's approach to understanding and assessing the biodiversity impacts of the proposals, especially in terms of aiming to achieve net gains. The baseline assessment of the site assumes that the 'managed' grassland (and other flora) of a golf course will be of little biodiversity value because it is regularly cut and cleared. Whilst this might be true of the tightly cut greens; the rough at the edges of the playing areas and the landscaping in between is mature and has the potential to hold a reasonable biodiversity value or at least semi-natural habitat. With the baseline set too low then the proposed biodiversity returns will appear greater than they are in reality. The Parish Councils submit that the applicants ought to be asked to reassess the existing biodiversity value of the site and reassess the impacts and proposed benefits, before any decision can properly be made."

5.1.2 The PAW SoC expands this purported concern and covers 5 main areas of claimed objection, the 5th of which is said to be a *"failure to demonstrate compliance with national and local policy on biodiversity."* In summary the PAW SoC raises the following points which I address below with reference to my review of the biodiversity baseline and the Biodiversity Net Gain position as set out in Section 2 to 4.

5.1.3 The main allegations made are as follows:

- The baseline assessment is said to have skewed the value of the existing habitats;

- It is said there are unrealistic and ambitious habitat creation proposals;

- There are said to be numerical errors and oversights in the calculations;

- It is said that an independent review indicates that Proposed Development will not achieve the net gain figure claimed nor the 10% net gain benchmark now targeted by Cherwell District Council; and

- Whilst noting biodiversity is not a reason for refusal in this case, PAW claim that they consider that the Proposed Development fails to address how adverse impacts on biodiversity can be appropriately mitigated for.

5.1.4   These points are considered in more detail in the Sections below

5.2   Baseline Assessment

5.2.1   As set out in detail in Section 2, I consider that the baseline habitats and condition have been appropriately assessed. My verification assessment at Appendix B further confirm this, and provides further information on the habitats present at the Site.

5.2.2   The original PAW objection expressed a concern that the baseline assessment of the Site assumed all habitats are of low ecological value due to management of grassland. PAW referred to landscape areas associated with the rough edges of and in between playing areas as being likely to hold reasonable biodiversity value and, as such, they claimed the baseline was set too low.

5.2.3   There is no basis for this concern. The higher value of rough grassland areas, woodland plantations, scattered trees and pond features are captured in the WSP Biodiversity Net Gain Metric with regard to 'habitat distinctives' scores. The PAW objection fails to recognise that the biodiversity value of those features is assigned in the baseline as summarised in Table 5.1 below. As covered in more detail in Section 2 the condition of each habitat type is then assessed, based on set criteria for each habitat type. The condition score is then assigned based on the corresponding criteria achieved.

Table 5.1 – Comparison of WSP Biodiversity Net Gain Habitat Distinctiveness and BREEAM Default.

Phase 1 Habitat Type	WSP Report Distinctiveness[1]	Default Distinctiveness[2]
A1.1.2: Woodland: Broadleaved – plantation	Medium	Medium
A1.3.2: Woodland: Mixed – plantation	Medium	Medium
A2.1: Scrub – dense continuous	Medium	Medium
A3.1: Parkland/scattered trees – broad-leaved	Medium	Medium
A3.2: Parkland/scattered trees – coniferous	Medium	Medium
A3.2: Parkland/scattered trees – mixed	Medium	Medium
B2.2: Semi-improved neutral grassland	Medium	Medium

B6: Poor semi-improved grassland	Low	Low
G1: Standing water	High	High
J1:3 Amenity Grassland	Low	Low
J1.4: Introduced Scrub	Low	Low
J4: Bare ground	Low	Low
Sources 1.WSP Net Gain assessment report 2019/WSP Responses to CDC Ecology Comments 2020 2. BREEAM 2019 - GN36-0.0-BREEAM-CEEQUAL-HQM-Ecology-Assessment-Issues-Route-2-Appendix-C		

5.2.4   As defined in the BREEAM guidance (2018) habitat distinctiveness is

"*A measure of biodiversity that has regard for the number and variety of species found there (richness and diversity), how rare the species are, and how many species the habitat supports that are not common elsewhere.*"

5.2.5   The BREEAM guidance (2018) then goes on to define the distinctiveness band assigned to particular habitats (based on Defra guidance). The BREEAM method assigns these by default to each JNCC habitat type as set out in the supporting appendices to the BREEAM methodology (BREEAM, 2019).

5.2.6   In summary these are as follows:

- **High distinctiveness**

    Habitats of Principal Importance i.e., those which meet the criteria to qualify as Habitats of Principal Importance (JNCC 2011).

- **Medium distinctiveness**

Other semi-natural habitats that do not fall within the scope of Habitats of Principal Importance definitions e.g., all other areas of woodland (e.g. mixed woodland), other grassland (e.g. semi-improved grasslands), uncultivated field margins, road verge and railway embankments (excluding those that are intensively managed)

- **Low distinctiveness**

Improved grassland, arable fields (excluding uncultivated margins), built-up areas, domestic gardens, disturbed bare ground, verges associated with transport corridors.

5.2.7 As summarised in Table 5.1, the distinction in value has been made between low value habitats (i.e. the close mown/fertilised amenity grassland) and those of higher value such as the rougher grassland associated with the banks along the western edge of the Site and other features such as the ponds.

5.2.8 As set out in my own verification assessment (Appendix B), the majority of the grassland area is amenity grassland mown short with only small areas of rough grassland. These rougher grass areas have been captured separately in the Biodiversity Net Gain as either poor semi-improved grassland or neutral semi-improved grassland.

5.3 Habitat Creation Proposals

5.3.1 The detailed review completed at Section 3 indicates that the proposed habitat creation and enhancement proposals are in line with the best practice and the assessment to calculate net gain was undertaken by WSP in accordance with the relevant metric applicable at that time.

5.3.2 In light of Biodiversity Metric 2.0, I have also carried out an assessment against that (as set out in Section 4). This includes revised time to target conditions for some of the habitat types proposed at the Site, with some increases in the time to condition for plantation woodland and grassland communities which are based on more recent evidence for habitat establishment (since the Defra 2012 metric). As demonstrated by the completed Biodiversity Metric 2.0 in Appendix I, even with such extended times to target, a significant net gain in biodiversity units will result from the Proposed Development (i.e. more than 10%). Moreover, of the proposed habitats, only one

is considered to fall within the category of 'High' difficulty to create, namely Marshy Grassland. This is a relatively small area (0.63 ha) and as a result of this category a higher risk factor is consequently associated with ensuring that hydrological conditions will allow successful establishment, so this is fully reflected in the resulting assessment. Based on the current water regime on Site associated with ditches and pond edges in these locations, I am satisfied anyway that establishment of marshy grassland is feasible and practicable over the timeframe of 20 years.

5.4 Alleged Numerical Errors

5.4.1 Using the two sources of information that WSP provided, I have presented the WSP data as a single-sheet metric calculation (as presented in Appendix H). I have not identified any significant errors during this review process. There are a small number of minor errors/discrepancies identified between the two sources of information, but these are inconsequential and I have been able to replicate the summary figures set out in the 2019 report (Appendix C), using the more detailed extracts presented in the WSP response to CDC Ecology comments (Appendix D).

5.5 Allegation that Proposals Do Not Achieve Biodiversity Net Gain

5.5.1 The PAW SoC claims to rely upon an independent review indicates that the Proposed Development will not achieve the stated net gain figure and also not the 10% net gain benchmark adopted by CDC, but a net loss. No such review nor any such supporting evidence is appended to the PAW SoC to support this claim. Therefore, I am not able to address any such claim or review it in my evidence and reserve my position to do so if such a document were to be produced belatedly by PAW in its evidence. I have, however, carried out my own verification review and I can confirm that Proposed Development will achieve a Biodiversity Net Gain as set out in Section 4.

5.5.2 As discussed above and set out in detail in Section 3, at the time of assessment, the proposed habitat creation and enhanced detailed in the WSP metric followed the best practice guidance referenced in the assessment (Defra 2012 & BREEAM, 2018). Therefore, as presented in full

(Appendix G), the details of the WSP Calculation demonstrated a significant net gain in both area and linear based habitats for the Proposed Development.

5.5.3   The Defra 2012 metric has now been superseded by the Biodiversity Metric 2.0 which is considered to represent a significant advancement in accounting for and measuring losses and gains in biodiversity.

5.5.4   I have completed an assessment using the Biodiversity Metric 2.0 and this too indicates that the Proposed Development will achieve a significant net gain in both habitat and hedgerow biodiversity units, as set out in Section 4 and presented at Appendix H.

6.   SUMMARY & CONCLUSION

6.1.1   Further to my independent review of the submitted Biodiversity Net Gain assessment for the Proposed Development (WSP, 2019) my evidence demonstrates that:

- The Site is dominated by low value biodiversity with large areas supporting intensively managed amenity grassland of poor species diversity and structure.

- The Proposed Development will predominately avoid higher value features and retains a mosaic of rough grassland, mixed plantation woodlands and ponds in the northern portion of the Site. These areas will be subject to targeted enhancement and creation to elevate the existing biodiversity value through implementation of appropriate management over a period of time.

- A review of the WSP Net Gain Assessment indicates that a significant net gain will be delivered by the Proposed Development through avoidance of higher value assets were possible, proposed creation of high value habitat features, retention of existing habitat and targeted enhancement of retained habitats to elevate the biodiversity value through improvement in condition. The WSP method of assessment followed best practice at the time of the assessment and clearly demonstrated where the gains are achieved.

6.1.2   I have responded to the biodiversity issues raised in the PAW Statement of Case and demonstrate that:

- The baseline assessment has appropriately assessed the on-site habitats and it includes a distinction between low value habitats associated with intensively managed areas and areas of higher value associated with rough grass edges, ponds and the various woodland/scattered tree areas.

- Proposed habitat creation/enhancement with regard to time to target is achievable and within the parameters of the guidance relevant to the time of assessment. Proposed management and maintenance plans are provided and further management requirements (e.g. control of public access) can be secured through condition.

- The WSP Biodiversity Net Gain figures have been shown to balance with no significant numerical errors identified.

- Through verification of the WSP Net Gain figures a significant net gain is achieved. A comparison metric has been completed (under The Biodiversity Metric 2.0) which also demonstrates that a significant net gain in biodiversity units will be achieved.

7. REFERENCES & BIBLIOGRAPHY

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Appendix A: WSP Baseline Habitat Plan (October 2019)

Appendix B: BMD Ecological Verification Assessment (January 2021)

Appendix C: WSP Biodiversity Net Gain Report (December 2019)

Appendix D: WSP Response to comments from CDC Ecology Officer (February 2020)

Appendix E: Illustrative Masterplan (BMD, 2020)

Appendix F: WSP Post Development Habitat Plan

BMD

Appendix G: BMD BREEAM 2018 Calculation Template – Great Wolf Resort Biodiversity Results 2019

BMD

Appendix H: Biodiversity Metric 2.0 – BMD completed metric for Great Wolf Resort