

22/01221/F | Proposed development of the site including, internal and external alterations of Listed House building and conversion of lodges fronting Westbury Park; demolition of buildings and the erection of new buildings to provide an integrated Retirement Community (Class C2) for older people; together with landscaping, car parking, refuse and other associated works (major). | St Christopher's School Westbury Park Bristol BS6 7JE

Summary (25 April 2022)

- 1. The city has declared climate and ecological emergencies and pledged to become carbon neutral by 2030 and double tree canopy cover by 2046. But all this is meaningless unless we take every opportunity we can to deal with these emergencies and achieve these pledges now, and in specific ways.
- 2. It is not good enough to assert that the need for more housing takes precedence over all else. The National Planning Policy Framework is clear that the importance of green Infrastructure as one of three overarching, interdependent objectives economic, social and environmental has equal status to the other two objectives. Furthermore, there is no reason why developments cannot incorporate existing trees as BCS9 requires.
- 3. The applicant has failed to demonstrate that it has considered the Mitigation Hierarchy: Avoid, Minimise, Remediate, Compensate. This provides a cascading decision-making process in which only if the preceding choice is unavailable is the next one considered.
- 4. Likewise, no attempt appears to have been made to comply with BCS9 Green Infrastructure, which states that 'Individual green assets should be retained wherever possible and integrated into new development.' In this context "possible" does not mean what is expedient to the development.
- 5. Instead, the applicant has moved straight on to the provisions of DM17: Development Involving Existing Green Infrastructure, which allow for replacement trees to be provided *'where tree loss or damage is essential to allow for appropriate development'*, even though they have not shown that the removal of trees is indeed *'essential'*.
- 6. Where tree removal is "essential", DM17 states "replacement trees of an appropriate species should be provided". There is no policy basis for satisfying DM17 simply by contributing monetary compensation in the form of Section 106 payment. Trees should be replaced in accordance with the replacement rate laid out in the Planning Obligations SPD. As such replacement sites must be identified in accordance with the Planning Obligations SPD, which states that tree sites will be 'identified through the planning approval process.'
- 7. BCS13: Climate Change states that 'development should adapt to climate change through measures including: ...the use of green infrastructure to minimise and mitigate the heating of the urban environment.' Clearly the removal of 58 trees, with all the ecological and environmental benefits that they provide not being recovered for decades, is not in compliance with BCS13.
- 8. There is little evidence that DM15: Green Infrastructure Provision has been considered or applied, in particular there is an expectation that a development should improve



connectivity to existing Strategic Green Infrastructure Networks.

- 9. Even if the removal of trees were shown to be '*essential*' and '*compensate*' was the only option left after the previous requirements of the Mitigation Hierarchy have been exhausted, there is no realistic prospect that any of the trees lost will ever be replaced offsite. As a result, these proposals fail because they do not comply with planning policies, in particular with DM17.
- 10. The site is also within the West of England Nature Recovery Network Woodland network (model)¹ and so falls within the ambit of DM19 which makes it clear that development which has a 'harmful impact on the nature conservation value' of the adjacent SNCI and the Woodland Network, 'will not be permitted.'
- 11. All these factors have an impact on the Biodiversity Net Gain calculation which we discuss below. Quite apart from the arithmetic and other errors we have identified, the applicant has failed to give sufficient weight to the strategic importance of the site or properly measured the true extend of the Urban Tree habitat. They have also omitted the baseline hedgerow habitat and failed to take the opportunity to factor in new Urban Tree habitat offsite as well as failing to account for the likely delay between the development being started and new habitat being created.
- 12. When their errors are corrected, their calculation shows a biodiversity net loss of 8.08%.

The planning context - see Appendix 1.

Bristol Tree Replacement Scheme (BTRS) Analysis

DM17: Development Involving Existing Green Infrastructure states that 'Where tree loss or damage is essential to allow for appropriate development, replacement trees of an appropriate species should be provided'. The mechanism for achieving this is called the Bristol Tree Replacement Standard (BTRS).

In our view, the obligation imposed by DM17 to provide '*replacement trees of an appropriate species*' falls wholly on the applicant. DM17 states that tree sites will be '*identified through the planning approval process*' so this obligation cannot be considered discharged unless the applicant has identified all the suitable new planting sites required. Merely entering into a S106 agreement to pay for the trees to be planted does not discharge the applicant's obligations under DM17.

The AIA identifies 121 trees on site of which 39 are in tree groups. The applicant proposes removing 58 to include 18 trees in the tree groups. We calculate that under BTRS, this will require 165 replacement trees to be planted (see **Appendix 3**). The applicant proposes planting 128 trees on site which means that new sites will need to

¹ <u>https://awt.maps.arcgis.com/apps/webappviewer/index.html?id=5cc11efcac3e448aa7e9ef2067b571a1</u>



be found offsite to plant 37 trees. Table 1 gives a breakdown of the cost of planting 37 replacement trees offsite.

| BTRS T | ree Planting Cost | tings | |
|---------------------------|-------------------|--------------|-------------|
| Replacement Trees (Select | BTRS | | |
| Standards) | 165 | | |
| Planned Onsite Planting | 128 | | |
| Net Offsite Planting | 37 | | |
| Offsite BTRS Planting | £ / Tree | Tree Nos. | Cost |
| Tree in Open Ground | £765.21 | 37 | £28,312.77 |
| Tree in Hard Standing | £ 3,318.88 | 37 | £122,798.56 |

Table 1 BTRS planting cost calculation

If the per tree cost is indexed to February 2022 this will increase to £996.83 for trees planted in open ground and £4,323.46 for trees planted in hard standing. Given the lack of available open ground sites, it is likely that most new sites will have to be found in areas of hard standing. Thus, if no sites are identified, at the very least compensation must be charged at the higher rate of £122,798.56 (indexed).

Whilst we estimate that there are only 26 tree planting sites currently available within a mile of St Christopher's,² they are all sites where a tree once grew. This means that planting in these sites would not replace what will be lost because of this proposal; there will be no net increase in tree cover overall, even if all the other outstanding S106 agreements also 'competing' for these sites are ignored. The developer's proposal to mitigate the loss of these trees by planting new trees offsite is therefore unviable and unrealistic because there are insufficient alternative new sites currently available.

Also, the site is located just within the border of Area Committee One, which decides on S106 expenditure on sites within its area, so the choice of possible sites is likely to be further limited to just those within Area Committee One.

Our Biodiversity Net Gain analysis

Under Biodiversity Metric 3.0 (BM 3.0)³, the habitat area of an Urban Tree is assigned to one of three Root Protection Area (RPA) sizes (Table 2).

2

https://bristoltrees.space/trees/home.xq?_path=search/tree&state=Available%20for%20Sponsorship&range=1609&latitude=51.476940&longitude=-2.613686

³ BNG 3.1 has just been issued - http://publications.naturalengland.org.uk/publication/6049804846366720



| Size | Diameter at Breast Height (cm) | Stem Diameter (cm) | RPA (radius in metres) | Area equivalent (ha) | No. of Trees equivalent to 1 ha |
|--------|--------------------------------------|--------------------------|------------------------------|-------------------------|--|
| Small | 30cm | 10cm | 1.2m | 0.0005 ha | 2,000 trees |
| Medium | 90cm | 30cm | 3.6m | 0.0041 ha | 244 trees |
| Large | 150cm | 50cm | 6 m | 0.113 | 89 trees |

TABLE 7-2: Urban tree size by girth and their area equivalent

 Table 2 Table 7-2 from the Biodiversity Metric 3.0 User Guide

However, no guidance is given how to assign any given tree to these categories⁴. We use the MS Excel[©] formula: =*IF(RPA<20 cm, "Small", IF(RPA>=40 cm, "Large", "Medium")*). On this basis and using the data contained in the applicant's Arboricultural Impact Assessment⁵ (AIA), we calculate that the habitat area of the 121 Urban Trees growing on this site cover an area of 0.9265 hectares. Table 3 breaks this down as follows:

| Size | Count | Actual RPA (ha) | Metric Area (ha) | % Discount |
|--------|-------|-----------------|---------------------|------------|
| Small | 18 | 0.0159 | 0.0081 | 49% |
| Medium | 34 | 0.0816 | 0.1384 | -70% |
| Large | 69 | 1.0167 | 0.7800 | 23% |
| | 121 | 1.1142 | 0.9265 | 16.8% |

Table 3 Urban Tree habitat areas by size

This is nearly 17% less than the actual total calculated RPA of the trees on the site. We calculate that the combined tree canopy cover of these trees is 0.5185 hectares, 26% of the site.

58 of the trees on the site will be removed. These have a habitat area of 0.3301 hectares leaving 0.5964 hectares or urban tree habitat to be retained.

Biodiversity Net Gain evidence has finally been produced to support this applicant - a report produced by Ethos Environmental Planning dated February 2022. Using this, we have been able to reproduce their calculation subject to the following observations:

⁴ We have commented on this - <u>https://bristoltreeforum.org/2021/07/25/valuing-our-urban-trees/</u>

⁵ 22_01221_F-ARBORICULTURAL_IMPACT_ASSESSMENT-3162696 - dated 18 February 2022.



- 1. The Applicant has calculated the baseline habitat area of the Urban Tree habitat at 0.46 hectares but gives no explanation of how they arrive at this figure. They do not report what area of this habitat (or indeed, of any habitat) will be retained.
- 2. We do not agree that the habitats on this site have Low Strategic Significance. As the Biodiversity Net Gain Results report observes, 'the site is adjacent to the Clifton and Durdham Downs Site of Nature Conservation Interest (SNCI). This SNCI and Wildlife Corridor form part of the Bristol Wildlife Network and as such Policy DM19 in the Bristol Local Plan (adopted 2011) applies.' Given its extensive, largely native, canopy cover (around 26%), the site is effectively part of this wildlife corridor. The site is also within the West of England Nature Recovery Network Woodland network (model). We have assigned Medium Strategic Significance to all habitats.
- 3. We have also factored in a three-year delay in starting habitat creation to allow for the construction period.
- 4. We have adjusted the Urban Tree habitat creation from 0.35 hectares to 0.0127 hectares as the is the correct habitat area allowed for planting 128 Small new trees on site. The fact that some may reach an eventual Medium to Large size is irrelevant when creating this new habitat.
- 5. We have calculated that under the Bristol tree Replacement Scheme (BTRS) a further 37 trees will have to be planted off site. We have assumed that these will be Small-sized Standards and allowed for 0.0167 hectares to be created off site. We have used the same parameters as those used for the onsite habitat creation and allowed for a three-year delay and set the spatial risk to *Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss.* This will create 0.46 habitat units.
- 6. The total habitat units (HUs) created in Table 6 or the report is incorrect. The column adds up to 5.03 HUs not 7.75 as Ethos reports. The habitat areas created total 2.59 hectares, not 2.24.
- 7. Four ornamental hedges are identified in the AIA. We estimate that they have a combined length of about 77 metres. These are not included on the applicant's calculation. We have factored them into our baseline calculations.
- 8. As we have observed, no retained baseline habitat areas are provided. However, setting aside those habitats whose areas are additional to the ground-based habitats Urban Trees and the Green roofs the other habitats cover 1.99 hectares which is the declared size of the whole site. This suggests that no baseline habitats (save for Urban Trees) will be retained.

Subject to the above we have adopted the other habitats and parameters used in the applicant's BM 3.0 calculation. A summary of our calculations is set out in **Appendix 2**.

Even on the basis of the applicant's own analysis (but factoring in the arithmetical area errors), we calculate that the current proposals show a loss of 0.39 baseline habitat units, a net loss of 7.16% of biodiversity.



| | Habitat units | 5.42 |
|--|----------------|---------------|
| On-site baseline | Hedgerow units | 0.00 |
| | River units | 0.00 |
| On site nest intermention | Habitat units | 5.03 |
| On-site post-intervention | Hedgerow units | 5.32 |
| (Including habitat retention, creation & enhancement) | River units | 0.00 |
| On site not % showns | Habitat units | -7.16% |
| On-site net % change | Hedgerow units | 100.00% |
| (Including habitat retention, creation & enhancement) | River units | 0.00% |
| | | |
| | Habitat units | 0.00 |
| Off-site baseline | Hedgerow units | 0.00 |
| | River units | 0.00 |
| Off gits most intermention | Habitat units | 0.00 |
| Off-site post-intervention | Hedgerow units | 0.00 |
| (Including habitat retention, creation & enhancement) | River units | 0.00 |
| | | |
| Total nat unit change | Habitat units | -0.39 |
| Total net unit change | Hedgerow units | 5.32 |
| (including all on-site & off-site habitat retention, creation & enhancement) | River units | 0.00 |
| Total an site not % shange plug off site surplug | Habitat units | -7.16% |
| Total on-site net % change plus off-site surplus | Hedgerow units | 100.00% |
| (including all on-site & off-site habitat retention, creation & enhancement) | River units | 0.00% |
| | | |
| Trading rules Satisfied? | | ading Summary |

Table 1 Applicant's BNG 3.0 calculation corrected

If we adjust the calculation based on our observations above, then our calculation of baseline biodiversity shows a loss of 0.81 habitat units, a net loss of 8.08% of biodiversity.

| St Christopher's Square Return to results Return to results menu | | |
|--|----------------|---------------|
| | Habitat units | 10.07 |
| On-site baseline | Hedgerow units | 0.08 |
| | River units | 0.00 |
| On site post intervention | Habitat units | 9.20 |
| On-site post-intervention | Hedgerow units | 5.26 |
| (Including habitat retention, creation & enhancement) | River units | 0.00 |
| On site not 9/ showns | Habitat units | -8.58% |
| On-site net % change | Hedgerow units | 6110.25% |
| (Including habitat retention, creation & enhancement) | River units | 0.00% |
| | | |
| | Habitat units | 0.00 |
| Off-site baseline | Hedgerow units | 0.00 |
| | River units | 0.00 |
| | Habitat units | 0.05 |
| Off-site post-intervention | Hedgerow units | 0.00 |
| (Including habitat retention, creation & enhancement) | River units | 0.00 |
| | | |
| The factor of any if all any set | Habitat units | -0.81 |
| Total net unit change | Hedgerow units | 5.18 |
| (including all on-site & off-site habitat retention, creation & enhancement) | River units | 0.00 |
| | Habitat units | -8.08% |
| Total on-site net % change plus off-site surplus | Hedgerow units | 6110.25% |
| (including all on-site & off-site habitat retention, creation & enhancement) | River units | 0.00% |
| | | |
| Trading rules Satisfied? | No - Check Tr | ading Summary |

Table 2 BTF BNG 3.0 calculation



Appendix 1 - The planning context

The National Planning Policy Framework (the Framework), the Mitigation Hierarchy and Bristol's core planning policies, BCS9 - Green Infrastructure, DM15: Green Infrastructure Provision and DM17 Development Involving Existing Green Infrastructure - the local policies upon which the goals of the Framework may be achieved - are set out below. This is the case whether the relevant sections of the Environment Act 2021 (EA 2021) have been enabled by the time this application is decided or not.

1. The National Planning Policy Framework

This Framework seeks to ensure that new development is sustainable. It stresses the importance of green Infrastructure as one of three overarching, interdependent objectives - economic, social and environmental. This means that sustainable environmental development is no less important than the economic and social development objectives.

The whole emphasis of the environmental objective has become much more imperative with the publication of the latest version of the Framework last July. It now reads:

an environmental objective - to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

The status of habitat and biodiversity has also been given greater emphasis. Paragraph 181 c) now makes it clear that:

development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

2. Biodiversity Net Gain

With the recent publication of Biodiversity Metric 3.0⁶ (BM3.0), a new way of measuring and accounting for biodiversity losses and gains resulting from development or land management change has been adopted. The biodiversity metric defines Net Gain as an:

... approach to development that aims to leave the natural environment in a measurably better state than beforehand. This means protecting existing habitats and ensuring that lost or degraded environmental features are compensated for by restoring or creating environmental features that are of greater value to wildlife and people. It does not change the fact that losses should be avoided where possible, a key part of adhering to a core environmental planning principle called

⁶ <u>http://publications.naturalengland.org.uk/publication/6049804846366720</u>



the mitigation hierarchy.

When the EA 2021 takes effect most planning applications will be required to achieve at least a 10% net gain of a site's baseline biodiversity.

3. The Mitigation Hierarchy

The hierarchy means that mitigation options regarding potential damage to biodiversity should be applied iteratively in order of preference, where any adverse environmental effects should firstly be avoided, then minimised, mitigated, and only as a last resort, with clear justification, compensated for; but enhancement must be secured wherever possible.⁷ See also the British Standard for Biodiversity (BS 42020: 2013)⁸.

4. Local planning policies

Local Planning Authorities have a duty to consider both the protection and planting Green Infrastructure when considering planning applications. The potential impact of development on biodiversity is therefore a material consideration. These are the key planning policies which relate to this application.⁹

a. BCS9 - Green Infrastructure

BCS9 states that 'Individual green assets should be retained wherever possible and integrated into new development.'

When considering any planning proposal, the planning authority must ensure that:

- the integrity and connectivity of the strategic green infrastructure network will be maintained, protected and enhanced.
- opportunities to extend the coverage and connectivity of the existing strategic green infrastructure network are taken.
- individual green assets are retained wherever possible and integrated into new development.
- appropriate mitigation of the lost green infrastructure assets is required.
- development should incorporate new and/or enhanced green infrastructure of an appropriate type, standard and size.
- where on-site provision of green infrastructure is not possible, contributions will be sought to make appropriate provision for green infrastructure off site.

b. BCS13 - Climate Change

Development should contribute to both mitigating and adapting to climate change, and to meeting targets to reduce carbon dioxide emissions...

⁷ <u>https://www.rtpi.org.uk/media/1563/biodiversityinplanningpracticeadvice2019.pdf</u> page 20.

⁸ BS 42020:2013 British standard for Biodiversity - Code of Practice for Planning and development. (BSI, 2013)

https://www.bristol.gov.uk/documents/20182/34540/Core+Strategy+WEB+PDF+(low+res+with+links)_0.pdf.



Development should adapt to climate change through measures including:

- Site layouts and approaches to design and construction which provide resilience to climate change.
- Measures to conserve water supplies and minimise the risk and impact of flooding.
- The use of green infrastructure to minimise and mitigate the heating of the urban environment.
- Avoiding responses to climate impacts which lead to increases in energy use and carbon dioxide emissions.

These measures should be integrated into the design of new development.

New development should demonstrate through Sustainability Statements how it would contribute to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions by means of the above measures.

c. DM15: Green Infrastructure Provision

The provision of additional and/or improved management of biodiversity will be expected as part of the landscape treatment of new development. The design, size and placement of habitats provided as part of the landscape treatment will be expected to take practicable opportunities to:

- connect the development site to the Strategic Green Infrastructure Network, and/or Bristol Wildlife Network
- assist in reducing or mitigating run-off and flood risk on the development site
- assist in providing shade and shelter to address urban cooling
- create a strong framework of street trees to enclose or mitigate the visual impact of a development.

d. DM17: Development Involving Existing Green Infrastructure

DM17 also recognises the importance of habitats which are considered valuable multifunctional green infrastructure assets - and makes provision for their preservation and replacement.

e. Policy DM19: Development and Nature Conservation

Bristol contains a wide range of important nature conservation sites that contribute to a varied stock of natural habitats and species. The city has two sites of international importance. One is the Avon Gorge SAC.

DM19 makes it clear that Development which would be likely to have any impact upon habitat, species or features, which contribute to nature conservation in Bristol will be expected to:

- i. Be informed by an appropriate survey and assessment of impacts; and
- ii. Be designed and sited, in so far as practicably and viably possible, to avoid any



harm to identified habitats, species and features of importance; and

iii. Take opportunities to connect any identified on-site habitats, species or features to nearby corridors in the Wildlife Network.

Where loss of nature conservation value would arise development will be expected to provide mitigation on-site and where this is not possible provide mitigation off-site. Development on or adjacent to sites of nature conservation value will be expected to enhance the site's nature conservation value through the design and placement of any green infrastructure provided.

The proposed development is also on an SNCI. DM19 makes it clear that development which would have a harmful impact on the nature conservation value of a Site of Nature Conservation Interest will not be permitted.



Appendix 2

Baseline Calculation

| | | | | Ва | seline Habita | at | | | |
|---------------------|-----------------------------------|-----------|-----------------|-------|---------------|-------|----------------------------------|-------|------------------|
| Broad Habitat | Habitat | Area (ha) | Distinctiveness | Score | Condition | Score | Strategic significance | Score | Habitat Units |
| Grassland | Modified grassland | 0.69 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 1.52 |
| Heathland and Scrub | Bramble scrub | 0.01 | Medium | 4 | Poor | 1 | Medium Strategic Significance | 1.1 | 0.04 |
| Urban | Urban Tree | 0.93 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 8.15 |
| Urban | Developed land; sealed surface | 1.12 | V.Low | о | N/A - Other | о | Medium Strategic Significance | 1.1 | 0.00 |
| Urban | Introduced shrub | 0.08 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 0.18 |
| Urban | Allotments | 0.08 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 0.18 |
| | Total | 2.91 | | | | | | | 10.07 |



Habitat Created

| | | | | 0 | Onsite Habita | t Creat | tion | | | | | |
|---------------------|-----------------------------------|-----------|-----------------|-------|---------------|---------|----------------------------------|-------|---|---------------------------------------|-------------------------------------|-----------------|
| Broad Habitat | Habitat | Area (ha) | Distinctiveness | Score | Condition | Score | Strategic significance | Score | Delay in starting habitat creation/ years | Final time to target multiplier | Difficulty multiplier applied | Habita Units |
| Urban | Developed land; sealed surface | 1.22 | V.Low | 0 | N/A - Other | 0 | Medium Strategic Significance | 1.1 | 3 | 0.899 | 0.67 | 0.00 |
| Grassland | Modified grassland | 0.12 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 3 | 0.867 | 1.00 | 0.23 |
| Grassland | Other neutral grassland | 0.15 | Medium | 4 | Poor | 1 | Medium Strategic Significance | 1.1 | 3 | 0.837 | 1.00 | 0.55 |
| Grassland | Other neutral grassland | 0.03 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.752 | 1.00 | 0.20 |
| Grassland | Other neutral grassland | 0.06 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.752 | 1.00 | 0.40 |
| Heathland and Scrub | Mixed scrub | 0.09 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.752 | 1.00 | 0.60 |
| Lakes | Pond (non- priority habitat) | 0.01 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.808 | 1.00 | 0.02 |
| Heathland and Scrub | Introduced shrub | 0.31 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 3 | 0.867 | 1.00 | 0.59 |
| Urban | Intensive green roof | 0.22 | Medium | 4 | Good | 3 | Medium Strategic Significance | 1.1 | 3 | 0.629 | 0.67 | 1.22 |
| Urban | Extensive green roof | 0.03 | Low | 2 | Poor | 1 | Medium Strategic Significance | 1.1 | 3 | 0.867 | 1.00 | 0.0 |
| Urban | Urban Tree | 0.01 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.343 | 1.00 | 0.0 |
| | Total | 2.25 | | | | | | | | | | 3.9 |
| | | | | | | | | | H | HUs Retaine | d | 5.2 |
| | | | | | | | | | | Total Hus | | 9.2 |



Offsite Habitat Creation

| | | | | | | | | | | 101011103 | | 7.20 |
|---------------|------------|-----------|-----------------|-------|---------------|---------|----------------------------------|-------|---------|---------------------------------------|--|------------------|
| | | | | 0 | ffnsite Habit | at Crea | tion | | | | | |
| Broad Habitat | Habitat | Area (ha) | Distinctiveness | Score | Condition | Score | Strategic significance | Score | habitat | Final time to target multiplier | Difficulty multiplier applied & Spatial Risk Multiplier | Habitat Units |
| Urban | Urban Tree | 0.02 | Medium | 4 | Moderate | 2 | Medium Strategic Significance | 1.1 | 3 | 0.343 | 1 | 0.05 |

Hedgerow Baseline Habitat and Hedgerow Creation

| ÷ | | | | | | | | | | | | | |
|---|--------|--------------------------------|----------------|-----------------|-------|--------------|----------|----------------------------------|-------|---------|---------------------------------------|------------|-------|
| L | | | | | Ba | seline Hedge | row Ha | bitat | | | | | |
| | Number | Habitat | Length (km) | Distinctiveness | Score | Condition | Score | Strategic significance | Score | | | | Units |
| | 1 | Hedge Ornamental Non Native | 0.08 | Low | 1 | Poor | 1 | Medium Strategic Significance | 1.1 | | | | 0.08 |
| | | | | | He | dgerow Habi | itat cre | ated | | | | | |
| | Number | Habitat | Length (km) | Distinctiveness | Score | Condition | Score | Strategic significance | | habitat | Final time to target multiplier | multiplier | Units |
| | 1 | Native Hedgerow (H1) | 1.36 | Low | 2 | Good | 3 | Medium Strategic Significance | 1.1 | 3 | 0.586 | 1 | 5.26 |



Appendix 3 - BTRS calculation breakdown

| Tree ID | Tree Category | Tree Count | Trees Removed | DBH (cm) | BTRS Tree Replacements |
|------------|------------------|---------------|------------------|-------------|---------------------------|
| | otals | 121 | 58 | (ciii) | 165 |
| T1 | C1 | 121 | 1 | 22 | 2 |
| T2 | B1 | 1 | 1 | 17 | 2 |
| T2 | B1 B1 | 1 | 1 | 5 | 0 |
| | | 1 | 1 | | 3 |
| T5 | C1 C1 | 1 | 1 | 31 | 3 4 |
| T10 | | 1 | | 40 | 4 |
| T11 | A2 | | 1 | 73 | |
| T12 | B2 | 1 | 1 | 20 | 2 |
| T18 | A2 | 1 | 1 | 57 | 5 |
| T20 | B2 | 1 | 1 | 32 | 3 |
| T21 | B2 | 1 | 1 | 50 | 5 |
| T22 | B1 | 1 | 1 | 49 | 4 |
| T23 | B1 | 1 | 1 | 31 | 3 |
| T24 | B1 | 1 | 1 | 44 | 4 |
| T26 | B3 | 1 | 1 | 42 | 4 |
| T27 | C1 | 1 | 1 | 24 | 2 |
| T31 | C1 | 1 | 1 | 20 | 2 |
| T32 | B1 | 1 | 1 | 50 | 5 |
| T33 | C1 | 1 | 1 | 15 | 1 |
| T34 | C1 | 1 | 1 | 44 | 4 |
| T35 | C1 | 1 | 1 | 27 | 2 |
| T36 | C1 | 1 | 1 | 19 | 1 |
| T38 | B1 | 1 | 1 | 35 | 3 |
| T39 | B1 | 1 | 1 | 17 | 1 |
| T42 | B1 | 1 | 1 | 22 | 2 |
| T43 | C1 | 1 | 1 | 18 | 1 |
| T44 | C2 | 1 | 1 | 42 | 4 |
| T45 | C1 | 1 | 1 | 10 | 0 |
| T46 | C1 | 1 | 1 | 6 | 0 |
| T47 | C1 | 1 | 1 | 10 | 0 |
| T52 | A2 | 1 | 2 | 72 | 14 |
| T64 | C1 | 1 | 1 | 15 | 1 |
| T65 | A1 | 1 | 1 | 89 | 8 |
| T71 | B1 | 1 | 1 | 30 | 3 |
| T72 | C1 | 1 | 1 | 25 | 2 |
| T78 | B1 | 1 | 1 | 25 | 2 |
| T79 | C1 | 1 | 1 | 25 | 2 |



| Tree ID | Tree Category | Tree Count | Trees Removed | DBH (cm) | BTRS Tree Replacements |
|------------|------------------|---------------|------------------|-------------|---------------------------|
| T80 | B1 | 1 | 1 | 38 | 3 |
| T81 | C1 | 1 | 1 | 15 | 1 |
| T82 | C1 | 1 | 1 | 10 | 0 |
| G2 | C2 | 4 | 4 | 45 | 16 |
| G7 | C2 | 2 | 2 | 70 | 14 |
| G8 | C2 | 12 | 12 | 24 | 24 |