



21/05580/F | Waterfront Square Millennium Square Bristol

Redevelopment to provide a mixed-use development comprising office (Class E) with ground floor food and beverage uses, retail, non-residential institutions (Class E) and public house, wine bar, drinking establishment, hot food takeaway (Sui Generis), hard and soft landscaping, cycle parking and associated works (Major).



The Bristol Tree Forum is unable to support this application as currently formulated.

Summary

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. The applicant's proposals will result in a reduction of **94.38%** of the biodiversity provided by the site's tree habitat. The application should be rejected because it fails to achieve even the zero net gain currently required by the LPA, let alone the 10% which will be required when the Environment Act 2021 takes effect.
3. All the benefits that these trees have provided since they were planted and all those that they will continue to bring for many more years will be lost.
4. 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.
5. Likewise, no attempt has been made to comply with **BCS9 - Green Infrastructure**, which states that 'Individual green assets should be retained wherever possible and integrated



into new development.’ 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. There is little evidence that **DM15: Green Infrastructure Provision** has been considered or applied.
7. 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: Development Involving Existing Green Infrastructure**.

Background

This 0.27 hectare site is in Hotwells & Harbourside ward and falls within the City Docks Conservation Area. It is registered on the Council’s asset register. The 13 trees on the site are also listed on the Council’s asset register.¹ We estimate that they were planted sometime around 2000.

We calculate that they provide tree canopy cover of almost 29%.² Hotwells & Harbourside has just 9.7% tree canopy cover³, one of the lowest levels of canopy cover in the city which is 18.4%.

As well as providing ‘*a high level of amenity to the area*’⁴, these trees also provide important ecoservices: they provide nearly 64 square metres of canopy cover to shade us, mitigate rainwater runoff and absorb pollution. Since being planted they have also sequestered the equivalent of over 16 tonnes of carbon. If these trees are saved, they will continue to do so, even as our city grows hotter and suffers more and more extreme weather events. If they are lost, we estimate that at least 96 new trees⁵ will need to be planted to replace their lost ecoservices, which will take at least 28 years. Sadly, there is little realistic hope that this replacement tree planting can happen.

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

¹ <https://bristoltrees.space/Tree/search/tree?latitude=51.449329&longitude=-2.599268&range=40&x=Find> & <https://opendata.bristol.gov.uk/explore/dataset/trees/table/?q=LLYOAM>

² <https://bristoltrees.space/Tree/sitecode/BTF-054>

³ <https://bristoltrees.space/trees/treecover-map.xq>

⁴ 21_05580_F-TREE_SURVEY_AND_CONSTRAINTS_PLAN-3063264 - see the Arboricultural Consultant’s Comments

⁵ The calculation is based on the average DBH (35 cm) of the 12 trees being removed and replaced by Prunus avium street trees which will replace the CO₂e lost after 28 years - <https://bristoltrees.space/trees/tree-benefits/interactive.xq?>



goals of the Framework may be achieved - are set out below. This is the case whether or not the relevant sections of the Environment Act 2021 have been enabled by the time this application is decided.

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 changed to 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.

Furthermore, with the introduction of a new paragraph 131, trees are made an integral part of this:

Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

Paragraph 174 states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); ...

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;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air,



water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans ...

Paragraph 180 states:

When determining planning applications, local planning authorities should apply the following principles:

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;

a) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

b) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸⁶³ and a suitable compensation strategy exists; and

c) 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.

The status of habitat and biodiversity has also been given greater emphasis. Paragraph 181c) 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 publication of Biodiversity Metric 3.0, (BM3.0), a new way of measuring and accounting for biodiversity losses and gains resulting from development or land management change has been adopted. Net Gain is defined 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 the mitigation hierarchy.

3. The Mitigation Hierarchy

Ideally, development should always be planned around existing trees whatever their size or quality. This is because an established tree that is retained offers far more benefits and ecoservices than newly planted trees (no matter how many are planted), whose potential will take decades to be realised, if indeed it ever is.

The mitigation hierarchy provides a cascading decision process: only if the preceding choice is unavailable is the next one considered.

1. Avoid - Where possible, habitat damage should be avoided.
2. Minimise - Where possible, habitat damage and loss should be minimised.
3. Remediate - Where possible, any damage or lost habitat should be restored.
4. Compensate - As a last resort, damaged or lost habitat should be compensated for.

4. Local planning policies

Local planning authorities have a duty to consider both the protection and planting of trees (an important part of Green Infrastructure) when considering planning applications. The potential impact of development on all trees is therefore a material consideration. The following key planning policies relate to this application:⁶

a. BCS9: Green infrastructure

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

Where habitat damage cannot be avoided (which we would dispute), BTRS and the Biodiversity Metric are two tools which the planning authority can use to 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

⁶ [https://www.bristol.gov.uk/documents/20182/34540/Core+Strategy+WEB+PDF+\(low+res+with+links\)_0.pdf](https://www.bristol.gov.uk/documents/20182/34540/Core+Strategy+WEB+PDF+(low+res+with+links)_0.pdf)



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. DM15: Green infrastructure provision

The provision of additional and/or improved management of existing trees will be expected as part of the landscape treatment of new development. The design, size, species and placement of trees 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.

We have set out Bristol's planning policies as they relate to trees in more detail here - [Planning obligations in relation to trees in Bristol](#).

c. DM17: Development involving existing green infrastructure

Trees DM17 also recognises the important status of trees.

All new development should integrate important existing trees. Development which would result in the loss of Ancient Woodland, Aged trees or Veteran trees will not be permitted.

Where tree loss or damage is essential to allow for appropriate development, replacement trees of an appropriate species should be provided...

Due to their characteristics and value, Aged and Veteran trees are considered to be of relatively greater importance than other trees and even trees of a similar species. Aged trees, by definition, have developed characteristics associated with great age and often have particular landscape and townscape value. Veteran trees are considered to have particularly important nature conservation value. Both will often have significant visual amenity, and potentially historic and cultural importance. As such their loss or harm will not be permitted, and the design and layout of development will be expected to integrate them into development.

Trees are considered valuable multifunctional green infrastructure assets. The policy seeks to protect the most valuable trees and in line with the Core Strategy approach to green infrastructure assets, mitigate for the loss of other important trees by securing replacement trees on-site or in the public realm. The tree compensation standard set out in this policy provides a suitable mechanism to determine the appropriate level of mitigation where loss of trees is proposed as part of development.



The council's Planning Obligations Supplementary Planning Document sets out the circumstances when off-site tree provision will be necessary. Where trees are to be provided off-site, planning obligations will be sought to provide the appropriate number of replacement trees, utilising the approach set out in the Supplementary Planning Document...

Where trees are present on a development site a British Standard 5837 Tree Survey 'Trees in relation to Construction survey' and related survey information should be submitted along with an application for planning permission.

Tree survey analysis

The applicant has produced a Tree Survey and Constraints Plan Summary (AIA) dated 6 October 2021. It is based on a survey undertaken in accordance with BS 5837:2012 on 23 March 2020, so uses evidence that is now nearly two years old. It will need to be updated and be amended to meet the requirements for Arboricultural Impact Assessments.

There are 12 Tulip trees on the site. Each is enclosed within its own Leylandii hedge nine metres square.⁷ Nine of the trees have been classified under BS 5837:2012 as Category B2 (see Figure 1 below). Two others are classified as C2 and one is category U. One further tree died and has been removed.

BS 5837 Main Category Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;

Category B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years;

Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;

Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

Figure 1 BS5837:2012 Tree quality categories (extracted from Appendix E in the AIA)

As the applicant's arboriculturist notes, *they provide a high level of amenity to the area*. It is proposed that all the trees and the hedges will be removed.

We understand from the applicant that it is exploring the possibility of transplanting the B2 trees to other locations. If this is the only option left because there is no possibility that the

⁷ The Preliminary Ecological Appraisal, 21_05580_F-PRELIMINARY_ECOLOGICAL_APPRIASAL-3063396, identifies the species as red cedar, *Thuja plicata*



trees can be retained, then we would support this, albeit that transplanting is both expensive and not always successful. We are also concerned that there are unlikely to be any suitable sites available in the vicinity. Should this happen, provision will need to be made to ensure that any transplanted trees that fail will be replaced in accordance with DM17.

The potential application of BTRS

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).⁸

We calculate that **33 replacement** trees will be needed to replace the trees being lost. Given that there are unlikely to be any suitable new open ground tree-planting locations available within one mile of the site, we calculate that (if suitable sites can be found), tree pits will need to be installed. It would cost **£140,834.99** to plant the 33 replacement trees needed to comply with BTRS. This figure has been indexed to December 2021.⁹

In our view, the obligation imposed by DM17 to provide ‘replacement trees of an appropriate species’ falls wholly on the applicant. This obligation cannot be considered discharged unless the applicant has identified suitable new planting sites. Merely entering into a S106 agreement to pay for the trees to be planted does not discharge the applicant’s obligations under DM17.

We estimate that there are only three tree planting sites currently available within a mile of the site.¹⁰ All are sites where a tree once grew. This means that planting in these sites would not replace what will be lost as a result 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 nearby. This application should be refused because it fails to comply with planning policies BCS9 & DM17.

The Biodiversity Net Gain analysis

No Biodiversity Survey, Report or biodiversity metric calculation has been produced. We have asked if one has been prepared but we suspect it has not because the Local Planning Authority (LPA) does not, as yet, require this because the site is not in or adjacent to any of the sites listed in Part 1, section 3 of the Planning Application Requirements Local List 1st December

⁸ <https://www.bristol.gov.uk/documents/20182/34520/SPD%20Final%20Doc%20Dec2012.pdf/daf75908-50fd-4138-afed-770310a6a431> - p20.

⁹ $(£3,301.88 \times 33) \times (317.7/245.8) = £140,834.99$. 245.8 is the RPI index in January 2013 and 317.7 is the RPI index in December 2021.

¹⁰ [Tree planting locations within one mile of the site](#) (14 February 2022)



2017.¹¹ However, when Part Six of the Environment Act 2021¹² takes effect, sites such as this will be expected to show at least a 10% biodiversity net gain in any event. We urge the LPA to require this report to be prepared now, in advance of the legal obligation to do so.

Notwithstanding this, we have undertaken our own calculation using Biodiversity Metric 3.0.¹³ This is based on the following baseline Urban habitats, all of which have the highest strategic significance - *Within area formally identified in local strategy*:

1. Developed land; sealed surface	0.258 ha	Condition N/A	0 Habitat Units
2. Urban Tree (the 12 trees)	0.0561 ha	Condition Good	0.77 Habitat Units
3. Introduced shrub (the hedging)	0.012 ha	Condition Poor	0.03 Habitat Units
Total			0.80 Habitat Units

We have also allowed for new habitat by the creation of new Urban Tree habitat comprising the 33 Small-sized trees required under BTRS to be planted offsite. This will create 0.05 new Habitat Units if and when these trees are planted - we have allowed for a notional three-year delay in our calculation. These are the headline results - a loss of 94.38% of existing habitat:

On-site baseline	Habitat units	0.80
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
On-site net % change (including habitat retention, creation & enhancement)	Habitat units	0.00%
	Hedgerow units	0.00%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.05
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.76
	Hedgerow units	0.00
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-94.38%
	Hedgerow units	0.00%
	River units	0.00%

Figure 2 Headline biodiversity net gain results

¹¹

<https://www.bristol.gov.uk/documents/20182/33956/Planning+applications+local+list+of+requirements/cb90237a-1980-4d7a-b1c3-88fa56326e3b>

¹² <https://www.legislation.gov.uk/ukpga/2021/30/part/6/enacted>

¹³ publications.naturalengland.org.uk/publication/6049804846366720



The application should be rejected because it fails to achieve even the neutral net gain currently required by the LPA, let alone the 10% which will be required when the Environment Act 2021 takes effect.

A copy of our BNG 3.0 calculation can be made available on request.

Bristol Tree Forum
14 February 2022