

Environment Team
Planning Services
PO Box 5006
Bath BA1 1JG

Gaia
Widcombe Hill
Bath
BA2 6AE
26th January 2012

Dear Ms Brewer,

Formal Objection to Temporary Tree Preservation Order 2011

We write to object to the temporary tree preservation order placed on three trees (T1, T2 and T3) at our home. The reasons for the objection are listed in detail in this letter. They are, in summary:

1. The criteria for making a Tree Preservation Order, as stated in Part VIII of the Town and Country Planning Act 1990, are not met.
2. There are safety concerns about the current trees.
3. The temporary TPOs prevent us as citizens from living in alignment with the Number 1 strategic objective in BANES Core Strategy, its Local Strategic Partnership Sustainable Community Strategy and numerous national policies including the Climate Change Act 2008. The Council is preventing the implementation of its own strategies.
4. The proposed scheme is entirely in line with these strategies in that it maintains the "linkages of green infrastructure" of the area, provides for a net increase in trees, increases amenity, has a positive impact on air borne pollutants, removes the current safety risks and generates a hugely positive environmental gain.
5. Implicit Consent to the tree works was given when the original planning application for the solar array was given.

We understand the importance of visual amenity and have addressed this in our application by committing to replace the three trees with beautiful, blossom producing fruit trees.

We believe passionately that the proposal we submitted enables the creation of a sustainable home which uses solar power and grows its own organic food. Placing TPOs on the trees in question kills this opportunity to create a low impact way of living stone dead.

We are the parents of two young children. Their adult world will be far more affected by climate change than we can even imagine. That is why we must act now to create environmentally sustainable homes and power sources. In our proposal, future generations will be able to enjoy the visual amenity of the fruit trees AND enjoy the organic food they produce AND have carbon-saving power; if the TPOs are retained, they will have a far thinner experience.

We remain committed to engaging with the council to find a positive way forward. We will also take our case to the highest levels possible should this be necessary.

Yours sincerely

Mark and Adrienne Baptist

Objections

Objection 1: The criteria for making a Tree Preservation Order, as stated in Part VIII of the Town and Country Planning Act 1990, are not met.

The following table itemizes the criteria used to validate a TPO, notes government guidance in “Tree Preservation Orders: A Guide to the Law and Good Practice” at <http://www.communities.gov.uk> , articulates why the criteria is not valid in this case and directs the reader to further information provided in the appendix

Tree Preservation Order Criterion	Government Guidance (“Tree Preservation Orders: A Guide to the Law and Good Practice”)	The Trees For Which a Temporary TPO Has Been Made.
Overall Amenity	<p>“TPOs should be used to protect selected trees and woodlands if their removal would have a significant impact on the local environment and its enjoyment by the public.”</p> <p>“It would be inappropriate to make a TPO in respect of a tree which is dead, dying or dangerous.”</p>	<p>The overall amenity of the area will be improved by the proposal to remove the trees in that:</p> <ol style="list-style-type: none"> 1. planting fruit blossom trees to replace the current trees will provide a beautiful display or flowers and then fruit. Blossom trees are not common in the area and so would add variety as well as aesthetic appeal and biodiversity. 2. the enablement of solar power and heat <ol style="list-style-type: none"> a. provides public amenity in that it addresses community concerns regarding climate change. b. Is at least 1200% better for the environment each year than the retention of the current trees. <p>The tree surgeon who assessed the trees states: “the existing trees provide poor amenity value which will deteriorate over time given their poor form, structure, strength and risk of infection.”</p> <p>These trees have manifest faults which present a safety risk to pedestrians and motorists in the area.</p>
Visibility	<p>If the trees “cannot be seen or are just barely visible from a public place, a TPO might only be justified in exceptional circumstances”.</p>	<p>The trees are not visible at all from the centre of Bath. We include photographs demonstrating that they are either not visible at all or barely visible along most of Widcombe Hill and the areas that face it.</p>
Individual impact	<p>“The mere fact that a tree is publicly visible will not itself be sufficient to warrant a TPO. The LPA should also assess the tree's particular importance by reference to its size and form, its future potential as an amenity, taking into account any special factors such as its rarity, value as a screen or contribution to the character or appearance of a conservation</p>	<ol style="list-style-type: none"> 1. The trees have poor form. An extract from the tree surgeon’s report states “none of the trees can be said to have good form .. as a group they are all compromised structurally.” 2. The trees do not have future potential as an amenity: <ol style="list-style-type: none"> a. “The structural faults are in major limbs and as such the future amenity they offer is compromised” (Tree Surgeon) b. The proximity of the trees to a large retaining wall (one is only 22cm away) combined with the trunk expansion rate

	area.”	<p>will cause the retaining wall to fail over time. This wall runs alongside Widcombe Hill, which is a major pedestrian route to/from town, the University and local schools. This wall is already showing signs of being put under pressure by the root system of the tree in that it is exhibiting a visible bow which can only worsen over time.</p> <p>3. The trees are not rare – beech and sycamore proliferate in the area.</p>
Wider impact	The significance of the trees in their local surroundings should also be assessed, taking into account how suitable they are to their particular setting, as well as the presence of other trees in the vicinity.	<p>1. The proposal refers to 3 trees; there are 70 trees within 20 metres of our property and hundreds of others within 100 metres. These trees include Beech and Sycamore, as well as Ash, Yew, and Chestnut.</p> <p>2. The specific trees in question are not locally scarce with others examples nearby.</p> <p>3. They are also not suited to a urban garden and being close to the road - their leaves, know to be slow to rot, creates a slippery surface for pedestrians and motorists autumn</p>

Objection 2: There are safety concerns about the current trees.

There are significant structural and positional weaknesses in the trees that creates the risk of injury and damage to property and persons

T1 double trunked with included bark (a sign of increased weakness) and will become an increasing safety hazard with time

T1 is within 22cm of a 1.6 metre high retaining wall and leans across Widcombe Hill, a thoroughfare used as a key pedestrian route to Bath University, a bus route from the city to Ralph Allen Secondary School and a main artery into the city.





The mortar in the wall is showing evidence of cracking and the wall is exhibiting a visible bow which can only worsen over time.



T2 shows evidence of a weak fork which threatens telephone wires, a telegraph pole and the neighbour's garden. This tree is a Beech known to have poor tensile strength.



T3 is only 1m from the retaining wall and has rubbing trunks which will be a potential future source of infection and the risk of compression building in the tight union is high.



All of the trees, which are already exhibiting signs of strain, will become larger over time increasing the likelihood of damage to persons or property, and certainly within the next 10 years.



We also include a photograph of a recently felled beech that is of similar age and also of structurally poor form which shows clear evidence of “included bark” and the resultant loss in strength.



Objections 3 & 4:

- ***The temporary TPOs prevent us as citizens from living in alignment with the Number 1 strategic objective in BANES Core Strategy, its Local Strategic Partnership Sustainable Community Strategy and numerous national policies including the Climate Change Act 2008. The Council is preventing the implementation of its own strategies.***
- ***The proposed scheme is entirely in line with these strategies in that it maintains the “linkages of green infrastructure” of the area, provides for a net increase in trees, increases amenity, has a positive impact on air borne pollutants, removes the current safety risks and generates a hugely positive environmental gain.***

The No 1 Objective in the B&NES Core Strategy is “to pursue a low carbon and sustainable future in a changing climate”

Climate Change is a Key Strategic Issue that is being addressed by the B&NES Core Strategy and is articulated in the Core Strategy document as follows:

*“There is a need to tackle the causes and effects of climate change through **lower carbon lifestyles; limiting our use of increasingly scarce resources; reducing our dependency on fossil fuels** especially in light of ‘peak oil’ concerns; making sure that our area is resilient to climate change, particularly the potential for flooding. We will need to adopt environmentally friendly practices such as **making buildings more energy efficient, increase the use of renewable energy, reduce car use and grow more local food.** We will also need to ensure that the natural environment is maintained and enhanced to maximise opportunities for mitigation. **This will enable us to contribute to meeting the national, statutory carbon reduction target of 45% by 2020 from 1990 levels.**”*

1. Placing a temporary TPOs on the three trees prevent addressing a significant community concern of climate change

Our current home already has a condensing boiler, is double glazed, cavity wall insulated and loft insulated with a rain water harvesting system in place. We intend to install solar thermal and PV installations to reduce our carbon footprint further.

Placing a temporary TPO on the trees maintains the shading that prevents the alternative energy systems from working efficiently. Replacing the trees will increase the CO₂ saved by a factor of 1200% compared to the CO₂ sequestered by the existing trees. (This has been calculated with help from a local solar expert, the Centre for Alternative Technology and the Woodland trust)

Shading has a disproportionate impact on the efficiency of solar arrays and the whole system will only operate at the efficiency of the lowest performing panel. Therefore reducing shading to a minimum is critical to the success of solar systems

We note that the Council is supportive of low-carbon initiatives including two that have come out of Transition Bath Energy Group of which I am a member and contributor – namely the Bath Homes Fit for the Future (part-funded by B&NES) where Bath homeowners can showcase their energy efficient homes and the Energy Efficient Widcombe (also supported by B&NES) whose purpose is to support the local community in making their homes more efficient.

See Appendix for further details

2. Temporary TPOs on the trees reduce biodiversity and reduce our ability to lower our carbon footprint through more local food production

Our aim is to create an allotment style garden that will enable us to:

- a) Grow a large proportion of our own food so reducing “food miles”, the number of journeys we take in a car to buy food and the wasted packaging in which shop-bought food is shipped. It will also enable us to produce organically grown food and so both increase the nutritional value of each item grown and reduce the family’s exposure to pesticides;
- b) Increase the biodiversity of the site by planting a variety of the flowering plants, fruit trees and vegetable species that will encourage bees, insects and other wildlife;
- c) Increase soil quality by introducing crop rotation with plants such as beans that will “nitrogenise” the soil.

However, the existing trees create a large “dead zone” all around them due to the shade cast by their canopies and the moisture/goodness they suck out of the ground. The soil around them is of poor quality and we have made numerous attempts to grow plants under the canopy but are continually having to replace them. Those that manage to survive grow into poor form specimens.

Having taken advice from a horticulturalist, we have been told that it would be impossible to achieve the allotment style garden we had planned should the particular trees in question remain in situ. Moreover, the current trees would support only a fraction of the biodiversity that would be achieved by an allotment style

We propose working with the council to develop a horticultural plan and tree replanting scheme that will increase the local biodiversity and so increase the wider environmental benefit immediately and for the long term future.

- 3. Placing temporary TPOs on the three trees is also in conflict with achieving the Local Strategic Partnership Sustainability Community Strategy**

See Appendix

- 4. Placing temporary TPOs on the three trees reduces our contribution to meeting the UK legally binding targets through Climate Change Act 2008**

The UK set legally binding framework to tackle the dangers of climate change by setting legally binding targets. Placing temporary TPOs reduces the contribution we collectively can make, to achieving these targets.

Objection 5: Implicit Consent to the tree works was given when the original planning application for the solar array was given.

Our original detailed planning application (Reference: 11/02874/FUL) included PV and Solar Thermal installations on the roof. Given the orientation and the obvious shading of the solar array by the trees, there was implicit consent to fell or do works to the trees in the original planning application.

Appendices

Contents:

1. **Detail Underpinning Objections**
2. **Tree Surgeon Report**
3. **Original Supporting Letter submitted as part of the original Application for Tree Works**

Detail Underpinning Objections

Objection 1

Amenity Value

Safety Risk – please see Objection 2 in main body

Visibility

- The trees in question are difficult to see from any angle and we include photographs taken from all the approaches to the trees in question to support this.
- They are obscured by other trees from almost all points when descending Widcombe Hill and due to the narrowing of that particular section of Widcombe Hill to single lane, provide no visual amenity to drivers who need to focus on safety.





- Coming up Widcombe Hill, they are also obscured by other trees and so once again provide little in the form of amenity



- From Perrymead / Lyncombe Hill, they are subsumed in the other trees surrounding our property



- Walking past the trees on the pavement, the only way to enjoy their amenity is look directly up as they are above and behind a high retaining wall almost 2 metres tall
- The trees are not visible from the city centre due to the contours of the land.

Individual Impact

Extracts from the tree surgeon's report:

"None of the trees can be said to have good form. It is possible that they have re-grown with poor form as a result of damage early in their lives, possibly, in the case of the Beeches, as the result of squirrel damage. As a group they are all compromised structurally. The structural faults are in major limbs and as such the future amenity they offer is compromised"

"T1. This tree is large and leans over the road. Its branches stretch across the road and will require pruning not to become a nuisance to the drivers of high vehicles. It is a Sycamore, when dropped so its leaves are large, slow to rot and slippery. The tree's form is double trunked with the union of the trunks being just above ground level. The union of this fork is not ideal. It is tight and has included bark. The fork is less likely than most unions to stand up well to the tree's future growth as each year's annual growth causes pressure to build up between the tight trunks and the included bark is a potential place for infection to the tree. If this basal union becomes weak, the large trunk which leans over the road may become a danger to traffic. This indicates that the tree has less to offer in future amenity than many trees of similar size."

"T2 has a very tight fork at 6 metres where the tree splits into 2 trunks. There are large bulges in the wood to be seen below the fork. These bulges are clear signs of the tree struggling to cope with a weak fork. One of the trunks of this fork threatens telephone wires, a telegraph pole and the neighbour's garden. This tree is a Beech. Beech wood is known to have poor tensile strength. This tree would require its trunks to be considerably shortened to make them safer. This decreases the future amenity the tree has to offer and it is debatable how worthwhile it is to retain a tree with a major structural fault, especially in view of occupier's liability legislation."

"T3. This tree has poor form. It divides into 3 stems at 4.5 metres height. Two of its trunks rub together above a tight union. This fault could have been corrected early in the tree's life by good pruning but now the size of the wounds made would put the tree at considerable risk of infection from decay at a point in its structure that is critical for strength. The rubbing trunks will be a potential future source of infection and the risk of compression building in the tight union is high. Beech is not a very decay resistant wood since Beech forms no heart wood."

Objection 3 and 4

My wife and I are passionately committed to living in an environmentally sustainable way. To this end we have devoted professional and personal time to furthering this cause: I am a member of Transition Bath and my wife is a former CSR Director for Allied Domecq. I work from home when possible and my wife travels to work by bike. We are also fully supportive of and taking action to help achieve, the Local Strategic Partnership's Sustainable Community Strategy and the draft Core Strategy (currently in consultation).

Our current home has a condensing boiler, is double glazed, cavity wall insulated and loft insulated with a rain water harvesting system in place.

To further improve its environmental credentials, we received planning permission (Reference: 11/02874/FUL) to make changes to our property which will reduce our carbon footprint and make us more sustainable.

These changes include the installation of 4kW PV solar system, a solar thermal system, additional insulation, more efficient appliances and upgraded glazing for solar gain/reducing heat loss. All of these changes will help us to reduce our reliance on fossil fuels.

According to the figures provided by locally based PV installer Ace Energy, the proposed system could save 1855 kg of CO₂/year with no shading. The shading of the existing trees reduces the CO₂ saved by 309kg/year.

According to the Woodland Trust and the Centre for Alternative Technology – and taking a generous view on the level of carbon sequestering by trees – each tree is only contributing to a reduction of 4 kg CO₂ / year.

So the three trees in question are, at best, only saving 12 kg CO₂ / year

Given that the 3 trees are south-facing and produce direct shade it is reasonable to conclude they contribute 80% of impact of shading. Therefore the net CO₂ benefit in the solar thermal and PV arrays by 1200% more than the carbon sequestered by the existing trees.

This figure becomes greater when we take into account our desire to replace the trees with others which will also be sequestering CO₂

Shading has a disproportionate impact on the efficiency of solar arrays and the whole system will only operate at the efficiency of the lowest performing panel

Please note some Relevant extracts from the Local Strategic Partnership Sustainable Community Strategy.

- a. Climate change poses significant and urgent challenges for the area. Changing weather patterns and rising energy prices mean that we are all being forced to consider different choices about how we live our lives.
- b. Working towards a low carbon economy and making sure that our area is resilient to climate change means changing how we think and act now.
- c. The Partnership is committed to tackling the causes of climate change and to help manage the effects. The national, statutory carbon reduction target has recently been increased to 34% by 2020 and 80% by 2050 and so there is an increasing sense of urgency to reduce our carbon emissions.
- d. There is a growing consensus about that fact that we have either already reached or are very close to what is known as 'peak oil', which means that oil supply will dwindle and become increasingly expensive. ...Reducing our dependency on all fossil fuels, through plans to cut carbon emissions will help with this problem and our resilience planning needs to include the impact of peak oil on the supply of goods and services. This Strategy recognises that addressing the causes and effects of climate change cuts across all the themes and priorities.
- e. We are also anticipating that social trends and lifestyle changes will also affect the way we live ...Other environmentally friendly practices such as making homes more energy efficient, the uses of renewable energy, less inefficient car use and growing more local food will become the norm rather than the exception.
- f. (Under Objectives, p20) CO₂ will be reduced and a robust approach to renewable energy will be encouraged.
- g. Plans across B&NES will achieve carbon reduction and make sure that B&NES is equipped to deal with the unavoidable changes that climate change and peak oil will make to day to day lives.
- h. Locality: A low carbon lifestyle is within everyone's reach and will help ensure local prosperity and wellbeing.
- i. We will seek to achieve energy and resource efficiency in all of our buildings, including providing more local services and encouraging initiatives such as home working to reduce the number of miles travelled.
- j. There will be a move towards a low carbon economy through an increased focus on local needs and services and work with communities will take place to prepare for the impact of climate change on local community life.

Tree Surgeon Report

Marshall Tree Services

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SN13 9PX

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www.trees.uk.com

Bath and North East Somerset Council
The Guildhall
High Street
Bath BA1 5AW

3rd November 2011

Dear Sirs,

This letter is in support of a notification to remove five trees and reduce a sixth one made by Mr Baptist of Gaia, Widcombe Hill, Bath.

Mr Baptist's notification is made because of reasons that are broader than simply arboricultural or visual amenity reasons. However, he appreciates any decision you may reach to make a Tree preservation order or not to make one will be based on current tree protection legislation, which places considerable emphasis on visual amenity and on the present and future condition and safety of trees. For this reason, I am writing this letter to argue that for you to make no objection to Mr Baptist's notification would be a reasonable step under current legislation.

I am a tree surgeon and arboricultural consultant with 8 years of qualified experience in tree surgery and four years experience in arboricultural consultancy. In 2006 I attained the highest marks in the country in the Arboricultural Associations annual examinations for their Tech. Cert. Arbor. A. Qualification.

Section 198(1) of part VIII of the town and country planning act 1990 states that: Local Planning Authorities may make a Tree Preservation Order (TPO) if it appears to them to be "Expedient in the interests of amenity to do so." "Amenity" is not defined, nor are the circumstances in which it may be expedient to make a TPO. This gives Local Planning Authorities considerable discretion and gives room for consideration of the amenity offered by well functioning renewable energy sources.

The Act gives 3 key criteria for assessing amenity value:

- 1 Visibility
- 2 Individual impact
- 3 Wider impact

Under point 1(visibility); these trees are not as visible as many trees. They are behind a high wall on a road which has high walls on either side. One has to be looking up –a direction in which drivers and pedestrians rarely look- in order to see much of any of the trees since they are behind a raised retaining wall. Little of the trees can be seen by

a pedestrian and a driver might be have more pressing priorities than looking at trees at this point in the road where the road is not too wide and there are often parked cars ahead.

Point 2 (Individual impact); some trees are more visible than others. A thorough assessment of each tree's visibility on its own merits may be required to fully grasp the situation, however in brief: Tree 5 has very limited visibility form the road and Tree 2 is almost completely hidden by Tree 1 and Tree 3. No tree has particularly good visibility because of the fact that they are behind a high retaining wall.

“Tree preservation orders: a guide to the law and good practice” -The Stationary Office, 2000, chapter 3.3, page 11, states that “The LPA should also assess the tree's particular importance with reference to its size and form, its future potential as an amenity...” Here there are quite a lot of factors that point towards the trees not offering as good amenity as many other trees.

None of the trees can be said to have good form. It is possible that they have re-grown with poor form as a result of damage early in their lives, possibly, in the case of the Beeches, as the result of squirrel damage. As a group they are all compromised structurally. The structural faults are in major limbs and as such the future amenity they offer is compromised.

Tree 1. This tree is large and leans over the road. Its branches stretch across the road and will require pruning not to become a nuisance to the drivers of high vehicles. It is a Sycamore, when dropped so its leaves are large, slow to rot and slippery. The tree's form is double trunked with the union of the trunks being just above ground level. The union of this fork is not ideal. It is tight and has included bark. The fork is less likely than most unions to stand up well to the tree's future growth as each year's annual growth causes pressure to build up between the tight trunks and the included bark is a potential place for infection to the tree. If this basal union becomes weak, the large trunk which leans over the road may become a danger to traffic. This indicates that the tree has less to offer in future amenity than many trees of similar size.

Tree 2. This tree has a very tight fork at 6 metres where the tree splits into 2 trunks. There are large bulges in the wood to be seen below the fork. These bulges are clear signs of the tree struggling to cope with a weak fork. One of the trunks of this fork threatens telephone wires, a telegraph pole and the neighbour's garden. This tree is a Beech. Beech wood is known to have poor tensile strength. This tree would require its trunks to be considerably shortened to make them safer. This decreases the future amenity the tree has to offer and it is debatable how worthwhile it is to retain a tree with a major structural fault, especially in view of occupier's liability legislation.

Tree3. This tree has poor form. It divides into 3 stems at 4.5 metres height. Two of its trunks rub together above a tight union. This fault could have been corrected early in the tree's life by good pruning but now the size of the wounds made would put the tree at considerable risk of infection from decay at a point in its structure that is critical for strength. The rubbing trunks will be a potential future source of infection and the risk of compression building in the tight union is high.

Tree 4. This tree will always be a problem to the visibility of the nearby street light. Like the other Beeches in this application, it lacks a clear leader and has tight unions. It also has an unusual naturally grafted branch, entirely included into its trunk at 3 metres. This branch

shows signs of considerable decay. Decay at this point in the centre of the tree's trunk will not be good in the long term, especially in a tree that is so close to motorists and the general public.

Tree 5. Once again this Beech tree has tight unions, one of which shows signs of stress (at 3.5 metres). It also has a basal fork between two trunks and another trunk has been removed at ground level, leaving a large wound which shows early signs of decay. Beech is not a very decay resistant wood since Beech forms no heart wood. Decay may well spread to the whole base of the tree in future.

Point 3 (Wider Impact). These trees are not locally scarce. There are other trees of their species within a stone's throw. They are also not ideally suited to their setting, being large trees so close to a main road and shading out a suburban garden. Their leaves are known to be slow to rot and will lie on the highway every autumn.

Tree 6 -the smaller Beech tree- has had its form very much influenced by the presence of its larger neighbours. It has grown rather spindly. If its neighbours are removed, the tree will look unusual and will also be higher than desired for the solar panels. It is prudent to reduce this tree to the height of the nearby Yew and to maintain it at this height.

Overall this is admittedly a one sided case I am making. However, whatever may be said in favour of the trees' contribution to amenity, it is clear that they are suboptimal specimens. They are far from being rare species. They have structural faults that will reduce their future contribution to amenity. They are not of ideal size and form for their setting and their loss would be less significant than the loss of many other trees. Mr Baptist hopes that the council will take into account the sub optimal nature of the trees and their sub optimal contribution to amenity in making an assessment of the expedience of the trees' being protected or not.

Thank you for considering these points.

Yours faithfully,

Paul Marshall BA Hons, Tech. Cert. Arbor A.

Supporting Letter as part of our original Application for Tree Works

Gaia
Widcombe Hill
Bath
BA2 6AE
17th November 2011

Dear Sir/Madam

My wife and I are passionately committed to living in an environmentally sustainable way. To this end we have devoted professional and personal time to furthering this cause: I am a member of Transition Bath and my wife is a former CSR Director for Allied Domecq. I work from home when possible and my wife travels to work by bike. We are also fully supportive of and taking action to help achieve, the Local Strategic Partnership's Sustainable Community Strategy and the draft Core Strategy (currently in consultation). We would like to highlight the extracts from this strategy that pertain most directly to the content of this letter; these are listed in Appendix A.

We moved house in December 2009 with the objective of living in a more environmentally sound house than the Georgian town house we formerly owned. Our current home is double glazed, cavity wall insulated and loft insulated with a rain water harvesting system in place.

To further improve its environmental credentials, we have recently applied for, and received, planning permission (Reference: 11/02874/FUL) to make changes to our property which will reduce our carbon footprint and make us more sustainable.

These changes include the installation of 4kW PV solar system , a Solar Thermal system, additional insulation, more efficient appliances, upgraded glazing for solar gain/reducing heat loss and the installation of a wood burning stove. All of these changes will help us to reduce our reliance on fossil fuels.

When we applied for planning permission, we omitted a request to remove some trees of mixed quality. We decided to make this request now as a result of extensive research into the net environmental benefits of specific trees compared to solar power, the differential effects on biodiversity of a variety of species and the impact on our ability to grow our own food.

The conclusion of this research was that it was hugely beneficial, from a sustainability perspective, to remove some trees to enable the PV Solar and Solar Thermal to work effectively and to increase the home grown food production and biodiversity at the site. Our rationale is as follows:

There are over 70 trees within 20m of our property. Aside from making some contribution to the amenity of the area, we are delighted to have their oxygen generating and CO2 reducing capabilities.

However, 6 of these trees are problematic in that they prevent the proposed environmental measures in the approved planning application being implemented effectively.

Issue 1: hugely reduced efficiency of the PV Solar and Solar Thermal

According to the figures provided by locally based PV installer Ace Energy, the proposed system could save 1855 kg of CO₂/year with no shading.

The shading of the existing trees reduces the CO₂ saved by 309kg/year.

According to the Woodland Trust and the Centre for Alternative Technology – and taking a generous view on the level of carbon sequestering by trees – each tree is only contributing to a reduction of 4 kg CO₂ / year.

So the existing trees (e.g. 5) are, at best, only saving 20 kg CO₂ / year

In conclusion, the *annual benefit* to the environment is 1500% greater by removing the specific trees.

Issue 2: prevention of food production and reduction of biodiversity

Our aim is to create an allotment style garden that will enable us to:

1. grow a large proportion of our own food so reducing “food miles”, the number of journeys we take in a car to buy food and the wasted packaging in which shop-bought food is shipped. It will also enable us to produce organically grown food and so both increase the nutritional value of each item grown and reduce the family’s exposure to pesticides;
2. increase the biodiversity of the site by planting a variety of the flowering plants, fruit trees and vegetable species that will encourage bees, insects and other wildlife;
3. increase soil quality by introducing crop rotation with plants such as beans that will “nitrogenise” the soil.

However, the existing trees create a large “dead zone” all around them due to the shade cast by their canopies and the moisture/goodness they suck out of the ground. The soil around them is of poor quality and we have made numerous attempts to grow plants under the canopy but are continually having to replace them. Those that manage to survive grow into poor form specimens.

Having taken advice from a horticulturalist, we have been told that it would be impossible to achieve the allotment style garden we had planned should the particular trees in question

remain in situ. Moreover, the current trees would support only a fraction of the biodiversity that would be achieved by an allotment style garden.

Please note that we intend to replace any removed trees with fruit trees to allow CO2 sequestering to compensate for any loss from the existing tree removal.

Installing PV and Solar Thermal systems are clearly contributing to both the BaNES's No.1 strategic objective in the Draft Core Strategy to "Pursue a low carbon and sustainable future in a changing climate" as well as The Local Strategic Partnership Sustainable Community Strategy. Aside from the elements listed in Appendix A, we would like highlight the following extracts:

1. P106 "Retrofitting measures to existing buildings to improve their energy efficiency and adaptability to climate change and the appropriate incorporation of micro-renewables will be encouraged".
2. P107 "All planning applications should include evidence that the standards below will be addressed: • Maximising energy efficiency and integrating the use of renewable and low-carbon energy.
3. The emissions from Bath and North East Somerset for 2006 were 1,072,000 tonnes. Of these, 437,000 tonnes was from energy use in homes. By 2020, these emissions need to be reduced by 34% and by 80% by 2050 to meet the statutory national targets¹¹. It is clear from this that significant change in how we live; work and travel will need to take place during the timeframe of this strategy (Sustainable Community Strategy 2009 - 2026).
4. The Sustainable Community Strategy: We provide the leadership to help our communities to help people reduce carbon emissions across the area by 45% by 2026.
5. We develop a Sustainable Energy Strategy for the area to enable the development of clean, local, sustainable energy sources and systems.
6. The new leadership forum will need to identify and resolve perceived and actual conflicts between competing objectives, for example: building preservation vs. energy efficiency; new build costs vs. higher environmental standards; local green energy generation vs. planning objections; thinking local with local markets and shops and less travel vs existing patterns of behaviour.

We are therefore writing to request permission for the removal of four beech trees and one sycamore and the reduction of a fifth beech. (See "Gaia Tree Location" for plan sketch)

To meet with the council's recommendations in the handling of any tree related activity we have sought the professional advice of a tree surgeon in relation to the quality, safety and amenity of the specific trees.

A copy of his advice and recommendation can be found as part of this application and should be read alongside it as professional input to the application. This can be found as a separate document in the on-line application called "tree surgeon report" – pdf

These trees are in a residential garden and therefore not in a suitable setting – i.e. woodland. Given the numbers of trees in the immediate vicinity, there is little overall amenity impact in their removal, and as such would not have a significant adverse effect upon the local environment. Additionally, their removal would help create an uneven age structure for the future.

According to the tree surgeon every one of the trees has a combination of poor structural form, evidence of decay, major faults or poses a risk to traffic.

According to the tree surgeon: "None of the trees can be said to have good form. It is possible that they have re-grown with poor form as a result of damage early in their lives, possibly, in the case of the Beeches, as the result of squirrel damage. As a group they are all compromised structurally. The structural faults are in major limbs and as such the future amenity they offer is compromised.

...they are suboptimal specimens. They are far from being rare species. They have structural faults that will reduce their future contribution to amenity. They are not of ideal size and form for their setting and their loss would be less significant than the loss of many other trees"

As explained above, our request has a directly calculable net environmental benefit of 1500% per annum and has a multitude of additional benefits with respect to increasing biodiversity and sustainable living.

These benefits are directly aligned to and support the achievement of the Bath Core Strategy and The Local Strategic Partnership Sustainable Community Strategy and the plans and targets within them.

In order to approach this matter in a responsible way, we have discussed it with our local Councillor, Ian Gilchrist, who is very supportive of low-carbon and sustainable initiatives in Bath.

We look forward to your response

Best regards

Mark Baptist

Appendix A: Extracts From Bath Sustainable Community Strategy 2009 – 2025

1. Climate change poses significant and urgent challenges for the area. Changing weather patterns and rising energy prices mean that we are all being forced to consider different choices about how we live our lives.
2. Working towards a low carbon economy and making sure that our area is resilient to climate change means changing how we think and act now.
3. The Partnership is committed to tackling the causes of climate change and to help manage the effects. The national, statutory carbon reduction target has recently been increased to 34% by 2020 and 80% by 2050 and so there is an increasing sense of urgency to reduce our carbon emissions.
4. There is a growing consensus about that fact that we have either already reached or are very close to what is known as 'peak oil', which means that oil supply will dwindle and become increasingly expensive. ...Reducing our dependency on all fossil fuels, through plans to cut carbon emissions will help with this problem and our resilience planning needs to include the impact of peak oil on the supply of goods and services. This Strategy recognises that addressing the causes and effects of climate change cuts across all the themes and priorities.
5. We are also anticipating that social trends and lifestyle changes will also affect the way we live ...Other environmentally friendly practices such as making homes more energy efficient, the uses of renewable energy, less inefficient car use and growing more local food will become the norm rather than the exception.
6. (Under Objectives, p20) CO2 will be reduced and a robust approach to renewable energy will be encouraged.
7. Plans across B&NES will achieve carbon reduction and make sure that B&NES is equipped to deal with the unavoidable changes that climate change and peak oil will make to day to day lives.
8. Locality: A low carbon lifestyle is within everyone's reach and will help ensure local prosperity and wellbeing.
9. We will seek to achieve energy and resource efficiency in all of our buildings, including providing more local services and encouraging initiatives such as home working to reduce the number of miles travelled.
10. There will be a move towards a low carbon economy through an increased focus on local needs and services and work with communities will take place to prepare for the impact of climate change on local community life.