

Polytunnels Planning Guide

June 2018

Contents

	Page
Section 1: Introduction	1
Role and purpose of the planning guide	1
What are polytunnels?	1
The increasing use of polytunnels	1
Table top and raised bed growing	2
Section 2: Planning context	4
Polytunnels and planning control	4
Associated development	5
Planning policy context	5
Section 3: Planning issues	8
List of common planning issues	8
Section 4: Detailed assessment of planning issues	9
Economic need and impact	9
Commercial economic benefits	10
Wider benefits to the rural or national economy	10
Local tourism and leisure	11
Landscape and visual impacts	11
Protected landscapes	13
Landscape mitigation	13
Listed buildings, historic parks and gardens and Scheduled Ancient Monuments	14
Residential amenity	15
Proximity to dwellings: mitigation	15
Noise	16
Plastic sheeting	17
Lighting	17
Negative visual impacts	17
Highway safety and access	18
Public rights of way	18
Water	20
Flood risk	20
Surface water drainage, water quality & pollution prevention	20
Water resources	21
Biodiversity	23
Archaeology	23
Section 5: Planning application requirements	25
Design and access statements	25
Landscape or visual impact assessments	26
Social impact assessments	26
Economic assessments	26
Flood risk assessments	27
Water resources studies/audits	27
Ecological appraisals/nature conservation assessments	28
Statement of community consultation	29
Other information	29

Section 6: Pre-application planning guidance	30
Temporary planning permissions	30
Pre-application advice	30
Whole farm plans	31
<hr/>	
Appendices	
Appendix 1: Economic criteria – business case	
Appendix 2: Economic balance sheet analysis	
Appendix 3: Former UDP policies (superseded by Core Strategy)	

Section 1: Introduction

Role and purpose of planning guide

- 1.1 With the continued increase in the use of polytunnels for agricultural soft fruit production within the county, Herefordshire Council has prepared this planning guide to help potential developers prepare their planning applications. It will also provide useful information to officers of the council and other interested parties, local residents for example, on how the council expects the many planning considerations to be addressed within applications for planning permission.
- 1.2 The Poly tunnels Planning Guide 2018 replaces and updates the Poly tunnels Supplementary Planning Document (SPD) 2008 and prior to that, a previous voluntary code of practice. It will assist in clarifying which types of poly tunnel development will require planning permission and highlight the planning policy issues and requirements such proposals will be expected to address. It will expand upon and provide more detailed planning guidance on a number of relevant, but non poly tunnel-specific Core Strategy policies.
- 1.3 This poly tunnels guide will provide invaluable planning advice, however it has not been through a formal public consultation process or sustainability appraisal and therefore cannot constitute a formal SPD.

What are polytunnels?

- 1.4 Typically a poly tunnel consists of galvanised steel hoops covered with transparent polythene sheeting and is used for crop protection from the weather. There are various sizes with differing materials used in their construction and also have variations in their methods of fixing to the ground. How they are assembled and the level of on-site construction required also differs depending on the type of poly tunnel used. Many tunnels used in soft fruit production tend to be 'multispan' structures, where two or more tunnels are linked to form a much larger structure. Technology in this area is expanding apace and additional extras such as ventilation kits, irrigation systems or windows, as well as alternative materials, have been introduced.
- 1.5 This planning guide is primarily concerned with the farm-scale commercial use of poly tunnels for crop protection, where they are used for the production of soft fruit. Poly tunnels provide the benefits of extending the growing season by protecting the crops from inclement weather, widening the variety of crops grown and providing some protection against pests and diseases, thus reducing the need to spray fungicides and other crop protection chemicals. Poly tunnels also enable harvesting to continue uninterrupted throughout the season in reasonable working conditions. Other benefits to soft fruit producers will be identified later in this document.

The increasing use of polytunnels

- 1.6 Food security is an issue of concern for the UK. It is important that quality food is produced in Herefordshire in order to meet our own needs and those of global markets. The challenge in the 21st century is to increase productivity, maximise output and adapt to a changing climate. Soft fruits grown in Britain, such as raspberries and strawberries, have become an important and successful rural business. Defra statistics¹ show that home fruit production has steadily increased

¹ Defra Horticulture Statistics 2015

since 2005 and reached 777 thousand tonnes (worth £695 million) in 2015. This was an increase of 9.6% on 2014, driven by demand for soft fruit, larger yields and a longer growing season. This contributed to nearly 18% of the total UK supply of fruit in 2015, 3.5% higher than in 2014, showing increases in nearly all sections.

- Strawberries were worth £284 million in 2015, up 16% on 2014, the highest recorded value. Production reached a new high of 115 thousand tonnes, up 11% on 2014
- Raspberries were worth £124 million in 2015, an increase of 14% on 2014, with production falling by 2.9%, against the record high of 2014 to 17 thousand tonnes
- Cherries were worth £14 million in 2015, equivalent to 2014, with production rising by 18% to a new high of 4.7 thousand tonnes

- 1.7 In 2015, agriculture, forestry and fishing accounted for a greater proportion of gross added value (GVA) in Herefordshire (8%) than in England and the West Midlands (1%). In 2016 this was the county's largest industry with 2,410 business, accounting for 24% of total businesses in Herefordshire.
- 1.8 The local authority breakdown for key crop areas on agricultural holdings shows that in Herefordshire between 2010 and 2013, the amount of land used for the commercial growing of fruit and vegetables grew by 8%².
- 1.9 The success of the British fruit growing industry can be largely attributed to the use of the polytunnel (sometimes called a Spanish tunnel), which was introduced into British farming in 1993. Before this, British soft fruit was seen as an unreliable product, which was subject to the vagaries of the unpredictable weather conditions and was prone to disease and damage. Today, the polytunnel is used to protect 80% of the soft fruit sold through the supermarkets. It provides protection not only to strawberries, raspberries and blackberries, but to tomatoes, onion, potatoes, peppers and flowers. This means that British growers can produce consistently high quality fruit which the supermarkets demand, over several months of the year. The DEFRA website outlines a number of advantages to this method of fruit production.
<http://adlib.eversite.co.uk/adlib/defra/content.aspx?id=000HK277ZX.0C8ZP2JTQEA6BM>

Table top and raised bed growing

- 1.10 Recently soft fruit production has evolved and many growers are using the 'table top' method of production, whereby crops are grown in raised beds. The plants grow in substrate bags or trays containing coir, peat or coco peat which sit on platforms, raised a few feet above ground level. The raised beds are connected to a system that irrigates the crops and provides necessary nutrients. Such crops are grown within a polytunnel-protected environment.
- 1.11 As the crops are not grown in the ground, there is no need to rotate them in the usual way. Although this method of production requires significant financial investment, it could also reduce landscape and visual impacts. Table top growing requires less land and without the need for rotation, this means that in future these polytunnels could be located in the least sensitive landscapes.
- 1.12 In terms of planning, the use of table top growing methods will mean that polytunnels and their associated infrastructure could be erected on a more long-term basis. In addition, it would seem logical to suggest that since plants are grown in substrate,

² Herefordshire Facts & Figures 2017

the location of the tunnels would not be soil dependent and they could potentially be located in non-agricultural environments. Although it is recognised that being near to a reliable water source is necessary for irrigation and a significant amount of land is likely to be required.

Section 2: Planning context

Polytunnels and planning control

- 2.1 Is planning permission required for polytunnels? The erection of polytunnels to support sustainable food delivery has become an important part of the approach to soft fruit farming. Whether they are development will depend on the individual circumstances such as the extent, size, scale, permanence, movability and the degree of attachment to the land of the polytunnels. Whilst their planning status has been open to interpretation, it has been accepted through the courts that if a polytunnel proposal is of significant size, has a substantial degree of permanence and physical attachment to the ground then it does constitute development that requires planning permission.
- 2.2 The question of whether or not polytunnels require planning permission is found not in legislation but in case law around tests relating to size, permanence and physical attachment. Whilst the law has been open to interpretation, it has been accepted that if a polytunnel proposal is of significant size, has a substantial degree of permanence and physical attachment to the ground, then development requires planning permission. This position was established at the end of 2006 when the High Court heard an appeal by the Hall Hunter Partnership against a decision by the Secretary of State dismissing two appeals involving enforcement notices relating to polytunnels and other various related works and development at Tuesley Farm, near Godalming in Surrey. One of the enforcement notices was against the construction of 40 hectares (99 acres) of 'Spanish' style agricultural polytunnels. In dismissing the appeal, Mr Justice Sullivan ruled that the polytunnels did constitute 'development'. He highlighted the substantial degree of their physical attachment to the ground, the work and man-hours required to erect and dismantle them, their degree of permanence, and their size and cumulative impact. Conversely there will be smaller, occasional examples of polytunnels that do not require planning permission (e.g. small structures covering for plants/crops in gardens or allotments, low tunnels, French tunnels and cloches /sheeting covering plants in fields at ground level for agricultural use).
- 2.3 For any proposed development, not just polytunnels, the size of an agricultural holding is important. If a holding is of five or more hectares, then there are certain permitted development rights under the Town and Country Planning (General Permitted Development) Order 2015. Part 6 relates to agricultural and forestry development and allows for the erection of a 'building' which is reasonably necessary for the purposes of agriculture within that unit. Thus a polytunnel may be covered by this and would not require planning permission, with only a prior notification being needed. However, if several are proposed, then there are restrictions on size and siting. Regulations state that the area such a 'building' can cover is 465 m².
- 2.4 Finally, where there is uncertainty over the need for planning permission or prior notification, contact should be made with the council's development management officers, who will be able to provide case specific advice. The local planning authority is responsible for deciding whether any type of planning permission is required for a particular development. In cases of doubt, a procedure known as a lawful development certificate exists and this may be submitted to a local planning authority by a grower to establish whether planning permission is required.

Associated Development

- 2.5 The development of polytunnels, particularly those on a large scale, will invariably also involve other ancillary works or buildings. These may include, for example; seasonal workers' accommodation, toilet blocks, sewage treatment facilities, utility buildings, recreational facilities, storage facilities, drainage or irrigation works. Planning applications for polytunnels should include such associated developments to allow an understanding of the full extent of the proposed development. This will enable a comprehensive assessment of all relevant planning issues.
- 2.6 Where planning applications for ancillary works and polytunnels are to be submitted separately, then the application for polytunnels should come in advance of applications for associated developments, since it is the presence of the tunnels which dictates the necessity for other related proposals. Each of these applications will then be determined taking into account the cumulative effect of the development as a whole. (See also para 2.5 above regarding the prior notification procedure.)
- 2.7 This guide includes advice on water resources and the need to avoid flood risk, together with the likely need for drainage works or water collection facilities to be included in applications for polytunnel developments. Planning policy guidance for associated buildings is guided by both national and local planning policies and is therefore not covered in this document.

Planning policy context

- 2.8 When planning applications are submitted to the local planning authority they must be determined in accordance with the local development plan, unless material considerations indicate otherwise³. In Herefordshire the overarching development plan is the Herefordshire Local Plan Core Strategy 2011 – 2031 (adopted in October 2015).
- 2.9 The Localism Act 2011 changed the powers of local government in England. The aim of the act was to facilitate the devolution of decision-making powers from central government control to individuals and communities. It gave local people greater powers to shape development by having a direct role in the development of planning policies at local level. Parishes can prepare Neighbourhood Development Plans. These allow the local community to create a vision and planning policies for the use and development of land in an area, so long as these are in accordance with the Herefordshire Core Strategy. These can be general or more detailed, depending on what is important to local people. This may include guidance specific to polytunnel development.

Review of National Policy

- 2.10 In February 2016, the Department for Communities and Local Government (DCLG) and the Department for Environment, Food and Rural Affairs (DEFRA) opened a rural planning review. Views were invited about the effectiveness of the current planning system in rural areas and improvements that could be made. Participants were asked questions about their experiences of various aspects of the current planning system.
- 2.11 Issues raised by respondents on polytunnels related to planning professionals not giving sufficient weight to the importance of polytunnels for protection, production of high quality produce and the extension of the growing seasons to meet customer demand for home grown produce. Other respondents were concerned about the visual and environmental effect of polytunnels.

³ <http://www.rtpi.org.uk/media/686895/Material-Planning-Considerations.pdf>

- 2.12 As a result of these responses, the government is consulting on extending the thresholds for agricultural permitted development rights; this is to support more flexibility in adapting to changing markets and technology and to further support farming efficiency and productivity. The government is asking whether the thresholds set out in Class A, Part 6 of Schedule 2 to the General Permitted Development Order 2015 should be amended and, if so:
- What would be appropriate thresholds including size and height?
 - What prior approvals or further conditions would be required?
 - Are there any other changes in relation to the thresholds that should be considered?
- 2.13 In relation to issues raised concerning polytunnels, the government proposes to amend guidance to make it clear that appropriate weight should be given to the agricultural and economic need for the proposed polytunnels. Circumstances where polytunnels can play an important role include: to provide protection for plants or young livestock; to secure improved quality produce; and to extend the growing season to provide greater opportunity to home grown produce.
- 2.14 The following table shows a list of the Core Strategy policies that could be of relevance to proposals for polytunnel development within the county and outlines examples of issues they cover. There will be a number of these policies which are only relevant in certain instances.

Key Core Strategy policies	Issues addressed through policies
SS1 Presumption in favour of sustainable development	<ul style="list-style-type: none"> ▪ Positive approach to sustainable development ▪ Proactive engagement to secure development will improve social, economic & environmental conditions ▪ Where there are no specifically relevant policies, decisions will take into account: whether the adverse impacts of granting permission would outweigh the benefits when assessed against national policy; and whether specific elements of national policy indicate that development should be restricted.
SS52 employment provision	<ul style="list-style-type: none"> ▪ Support for continued development of farming, food and drink sectors ▪ Diversification of the county's business base where there is no adverse impact on the community or local environment
SS6 environmental quality and local distinctiveness	<ul style="list-style-type: none"> ▪ Conservation and enhancement of environmental assets ▪ Maintain and improve effectiveness of important ecosystems ▪ Development should demonstrate an integrated approach to planning and environmental considerations ▪ Management plans and local conservation objectives relating to internationally and nationally important areas will be material considerations ▪ Local assessments, other DPDs, NDPs and SPDs should inform decisions
SS7 addressing climate change	<ul style="list-style-type: none"> ▪ Proposals to include measures which mitigate their impact on climate change
RA6 rural economy	<ul style="list-style-type: none"> ▪ Employment generating proposals which diversify the rural economy will be supported ▪ Planning applications will only be permitted where they are of an appropriate scale, do not cause unacceptable effects on nearby residents, do not generate unacceptable traffic

	impacts, and do not undermine the achievement of water quality targets.
MT1 traffic management, highway safety and promoting active travel	<ul style="list-style-type: none"> ▪ Development proposals should incorporate a number of specified principle requirements covering movement and transportation
E1 employment provision	<ul style="list-style-type: none"> ▪ Employment proposals will be encouraged where they: are appropriate in connectivity, scale, design and size; make better use of brownfield land; are appropriate extensions to existing businesses
LD1 landscape and townscape	<ul style="list-style-type: none"> ▪ Sets out criteria surrounding conservation, restoration and enhancement of landscape and townscape when considering development proposals.
LD2 biodiversity and geodiversity	<ul style="list-style-type: none"> ▪ Sets out how developments should conserve, restore and enhance the biodiversity and geodiversity assets of the county.
LD3 green infrastructure	<ul style="list-style-type: none"> ▪ Development proposals should protect, manage and plan for the preservation of existing and delivery of new green infrastructure. Sets out objectives to be achieved.
LD4 historic environment and heritage assets	<ul style="list-style-type: none"> ▪ Set out requirements for the protection, conservation and enhancement of heritage assets and their settings
SD1 sustainable design and energy efficiency	<ul style="list-style-type: none"> ▪ Development proposals should create safe, sustainable, well integrated environments for the community. A number of requirements are set out.
SD3 sustainable water management and water resources	<ul style="list-style-type: none"> ▪ Measures for sustainable water management will be required to be an integral element of new development
SD4 wastewater treatment and river water quality	<ul style="list-style-type: none"> ▪ Development should not undermine the achievement of water quality targets within the county.

Section 3: Planning issues

3.1 The following list is not exhaustive, but outlines the planning issues that most frequently arise when applications for planning permission are being considered:

- **Economic need and impacts**

Planning issues include the potential economic advantages and disadvantages to both the individual grower and to the wider local and national economies and the potential impacts on local tourism and leisure industries or on local services, for example.

- **Landscape and visual impacts**

The long distance views and prominence of polytunnels in the landscape are an important considerations, particularly where a development is proposed in an AONB or close to a listed building or other sensitive area.

- **Residential amenity**

Those living close to polytunnels may be adversely affected by negative visual impact, or general nuisance caused by odour emissions, dust, smoke, chemical fumes, noise or increased traffic movements for example.

- **Transport**

Any highway safety issues should be considered, particularly since polytunnel developments are frequently associated with increased heavy vehicular traffic along narrow country lanes.

- **Water**

Flood risk and surface water run-off should be carefully addressed, as should potential adverse impacts on local water resources. Active management techniques and mitigation measures proposed should also be taken into account. Careful management using drains and gullies will allow surface water run-off to be diverted into watercourses where it can be used for irrigation. SuDS features need to be incorporated to ensure that sufficient treatment stages are incorporated so that the discharged water meets quality objectives.

- **Biodiversity**

Ecological surveys or analyses will provide essential information on how an expanse of polytunnels may affect the biodiversity of an area and its effects on wildlife.

- **Public Rights of Way**

Both the use and enjoyment of public rights of way should not be adversely affected by the erection of polytunnels and the Herefordshire Council has a legal duty to assert and protect the rights of the public in these respects.

- **Archaeology**

Polytunnels and, more often, their associated works, such as the installation of irrigation systems and the creation of access roads or hard standings, have the potential for impacting on archaeological interests.

Section 4: Detailed assessment of planning issues

- 4.1 The following section sets out in detail how the various planning issues previously outlined should be considered by the applicant at the pre-application stage and by the council once applications have been submitted.
- 4.2 Although there are often many planning issues that need to be considered when assessing the appropriateness of a polytunnel scheme, the two key issues which must be balanced are: economic benefits/impacts and landscape impacts. It is therefore these that are first discussed below, followed by a number of other planning considerations that must be fully addressed in order that all potential issues surrounding an application can be adequately considered. Although the list is comprehensive, it may not be exhaustive, depending on the particular circumstances of the proposal.

Economic need and impact

- 4.3 A fundamental argument in favour of polytunnels is the economic benefit, (primarily for farmers, but also for the wider local or national economy through the associated supply chain), which can be derived from their use, resulting in the production of high value fruit or vegetables.
- 4.4 Food production and processing businesses are major employers. The UK food and farming sector is worth £108 billion to the economy, representing around 3.9 million jobs. The narrow economic base inherited from pre-industrial times largely persists in Herefordshire, which retains a strong dependency on food production, processing, rural resource management and tourism. The use of polytunnels in soft fruit production in the county shows how the agricultural sector can achieve significant growth and productivity gains through the use of these new growing techniques.
- 4.5 Planning policies at national, and local levels recognise the importance of the agricultural sector. The NPPF at section 3 seeks to promote strong rural economies through (amongst other things): the support of sustainable growth and expansion of businesses in rural areas and the promotion of development and diversification or agricultural and other land-based rural businesses
- 4.6 The Core Strategy's overall development strategy was produced in the light of the need to promote a diverse and strengthening rural economy, whilst protecting its quality landscapes and making sustainable use of natural resources. Policy SS5 deals with employment provision generally and seeks to promote the continuing development of the more traditional sectors such as farming and food and drink manufacturing. The supporting text at paragraph 3.71 specifically refers to the increased use of polytunnels, which has enabled many farmers to stay in business over recent years.
- 4.7 The economic argument is of particular importance when polytunnel developments are proposed in AONBs. In such instances an applicant must show clear evidence that the development is necessary in terms of providing direct benefits to the local community for example in relation to local services or facilities, particularly in the light of any potential harm to the landscape which may be identified. Where applications relate to undesignated landscapes these economic arguments are still appropriate since economic benefits to the county (and the UK) are important planning considerations, alongside environmental ones.

Commercial economic benefits

4.8 The soft fruit industry has, both within previously submitted planning applications/appeals and through general information (such as that produced by British Summer Fruits) outlined the potential economic benefits of producing fruit under cover and these arguments can be produced as part of a planning application. (Where information is commercially sensitive this will be treated confidentially by the council and any associated paperwork kept out of publicly available files.) The following points were derived primarily from the British Summer Fruits website (www.britishsummerfruits.co.uk) and may be relevant to a planning application:

- *Demand for high quality produce* – It is no longer realistic or economic to grow crops such as strawberries in the UK climate to the standards of reliability and quality demanded by today's customers without tunnel protection. This situation also applies to other UK grown crops such as tomatoes, onions, carrots, potatoes, peppers and flowers. *Production Yield and Costs* – Prior to the introduction of polytunnels, only 50% of an average yield consisted of class 1 fruit. Protecting fruit under tunnels has increased this to 90%. Protected soft fruit on average produces 30-35% improved class 1 yield versus outdoor non-protected production. This makes growing the crop economically viable.

- *Demand and supply* – UK consumers are now demanding a reliable, year-round supply of soft fruits. Where crops are grown in the open air, production is unpredictable due to rainfall preventing harvesting and spoiling fruit. Poly tunnel growing enables a longer supply of fresh and quality fruit, which is grown and sold in this country.

- *Growth and diversification of agricultural sector* – The British soft fruit industry has used polytunnel systems to lengthen the growing season from six weeks to eight months or more. This has significantly reduced the amount of soft fruit imported into the UK, ensuring that the British soft fruit industry is economically successful.

Wider benefits to the rural or national economy

4.9 In addition to the commercial/business economic benefits of producing crops under tunnels, there may also be economic benefits to both the economy of the wider rural community and the agricultural economic prosperity of the country as a whole. It is those benefits to the local or national economy that are likely to carry the more weight in the determination of a planning application than those economic benefits to individual businesses. Therefore properly evidenced statements of such advantages should be an important component of any planning application.

Employment and the rural economy

4.10 The soft fruit industry is labour intensive compared to many other parts of the agricultural sector. Temporary staff are taken on to work on fruit farms where polytunnels extend the growing season and can be employed for longer parts of the year than was previously the case before the introduction of tunnel growing. Much of the labour used is temporary foreign labour. During harvesting, these seasonal workers are brought in to a growing area. At this time they make some contribution to the local economy by spending money in local shops and businesses and make use of local services, for example. In addition soft fruit enterprises will purchase goods and services from elsewhere both locally and in the UK, helping to support jobs in supplier companies.

Impact on local services.

4.11 The number of additional employees required to work on fruit farms has resulted in an increase in inward migration to rural areas. In some areas this has increased pressures on local services and infrastructure such as schools, police and doctors' surgeries. Conversely, it can be said that local services are better supported (buses, shops, pubs, schools etc.) and that such support is helping to keep these services alive in rural locations, where they have previously struggled to remain economically viable. The positive or negative influence of an increase in local populations, whether temporary or permanent, should be addressed as part of the assessment of the economic effects that polytunnel proposals may have on localities.

Pesticide usage

4.12 The use of polytunnels results in significant reductions in moisture related diseases such as botrytis, downy mildew and black spot, meaning that fewer quantities of pesticides to control these types of diseases have to be purchased and used. This is beneficial not only for the economic viability of the farm, but also for the environment.

Reduction in food miles

4.13 Increasing land supply will have the effect of reducing foreign imports. This will in turn impact upon international transportation of fruit by air and road at a time when food miles are generally increasing due to demand for more fruit and the distance we drive for it. Whilst the contributions that individual farms make are relatively small, it is considered that weight should be attributed to their share of this overall national economic benefit.

Local tourism and leisure

4.14 In addition to the economic points raised above, there is another side to the economic impacts of polytunnels, which must also be considered. Landscapes, particularly those that are specifically protected, are an important focus for tourism and other leisure visits to the countryside of Herefordshire, bringing income to the wider rural economy. The visual impacts of polytunnel use could affect these interests. However, it is acknowledged that there is little current statistical evidence produced by the council or others on the effect of polytunnels on tourism.

Planning guideline1: economic benefits

The benefits of polytunnels in enabling the production of increased quantities and qualities of soft fruit, the sustainability benefits of reducing food miles and the positive contribution to the rural economy are all matters to which considerable weight will be accorded in the balance of considerations.

Landscape and visual impacts

4.15 In Herefordshire where the high quality of the landscape is part of the intrinsic character of the area, the visual impact of polytunnels is often the most significant negative planning issue in connection with this type of development. The much valued landscape assets are irreplaceable and must be conserved if sustainable development is to be achieved. It is the council's ambition to regenerate rural areas and encourage sustainable development in living communities, whilst recognising the need to protect the historic landscape character and identity.

4.16 Applications for polytunnels will be expected to fully address the landscape impacts of the proposal, both individually and in the context of other similar developments within visual proximity of the proposal site. The NPPF, para 132 states that when considering the impact of a designated heritage asset, great weight should be given

to the asset's conservation. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification.

- 4.17 The policies of the Core Strategy (policies LD1 to LD4) provide the guidance necessary to enable applicants to ensure that their development proposals comply with environmental quality objectives. These promote the use of landscape assessment as part of the development management process, to increase awareness of the countryside's character and to ensure that future development is compatible with that character.
- 4.18 It is often inevitable that proposals for development in the countryside will alter the appearance of the landscape. However, the council's planning policies and associated text detail the importance of ensuring that change should be appropriate to its setting and not be allowed to overwhelm and destroy the inherent character of the landscape. The landscape's ability to accept a polytunnel development without undue harm should be a prime consideration.
- 4.19 The capacity of different landscape types to accommodate change should be assessed. Some landscapes may be less sensitive, such as those that are intensively farmed, and should be able to tolerate a wider range and higher (although not unlimited) level of change. Development of polytunnels in such areas would reduce the risk of weakening their intrinsic characteristics.
- 4.20 With polytunnel developments, it is most often the large scale, cumulative impact and prominent visibility of such schemes that causes harm to landscape character. One of the major objections raised to polytunnel development is the sheer scale of coverage of land in any one area. The effect on the landscape can be significant and therefore the cumulative impact of tunnel developments will be fully considered during the planning application process.
- 4.21 Encouraging growers to take a 'whole farm plan' approach to planning for polytunnels (see Section 6) would help the local planning authority to assess the potential cumulative impact of a number of closely located applications, in addition to the impact of rotating polytunnels on one farm at different stages in the fruit growing process. However, it is recognised that growers are increasingly turning to table top type tunnels, which will have a greater degree of permanence. The idea is to clarify where an applicant can and cannot erect polytunnels and under what restrictions. The 'whole farm approach' is promoted by the local planning authority, particularly during pre-application discussions, or where it is understood that polytunnels are likely to be erected on different parts of a farm at different times and where there are contiguous farms using polytunnels to prevent a large cumulative effect of large blocks of polytunnels. Pre-application procedures are set out in Section 6.

Planning guideline 2: cumulative impact - limits to polytunnel coverage

The local planning authority will normally seek to secure, via an appropriate legal mechanism (usually a planning condition), a limit as to the total area of an agricultural holding or unit that may accommodate polytunnels. This will be determined on a case by case basis in order to minimise adverse landscape impacts.

Planning guideline 3: landscape character zones

The local planning authority may seek to define distinct landscape character zones within each agricultural holding or unit and may secure, via an appropriate legal mechanism (normally a planning condition), a limit as to the total area of polytunnels which each distinct landscape character zone can accommodate.

Protected landscapes

- 4.22 Areas of Outstanding Natural Beauty are national statutory landscape designations. Local planning authorities have a duty of care to protect, conserve and enhance the natural beauty and character of these nationally important, high quality landscapes. The National Planning Policy Framework, para 115 refers to the great weight that should be afforded to the need to conserve landscape and scenic beauty in AONBs.
- 4.23 The Core Strategy sets out the importance of the concepts of conservation, restoration and enhancement in the strategic approach to landscape management. Policy LD1 provides guidance for development in areas of important landscape value, such as AONBs, through the protection of the areas' character and by enabling appropriate uses, design and management.
- 4.24 In addition to the NPPF, the council's Core Strategy, and any Neighbourhood Development Plans, the local planning authority will also need to take account of other statutory documents including AONB Management Plans and also the landscape character assessments which have been prepared by the council, during the determination of a planning application.
- 4.25 Whilst it is the case that not all polytunnels require planning permission, some have argued that there should be a blanket ban on polytunnel development in AONBs. This is not a feasible option. There may be instances where small scale tunnel developments may be acceptable and it should be acknowledged that AONBs are working landscapes where farming and other businesses should be allowed to thrive where there are no significantly detrimental impacts on the intrinsic natural beauty and character of the protected landscape. Each application within the AONB will be decided on its merits, and the potential impact on the AONB will be considered along with the wider economic and social benefits. Consideration will also be taken into account to the cumulative effect of polytunnel development within the AONBs.

Planning guideline 4: areas of outstanding natural beauty

Where polytunnel development is proposed and where economic benefits are being weighed against landscape impact, priority will be afforded to protecting the natural beauty of AONBs.

Landscape - mitigation

- 4.26 Clearly where it is considered by the local planning authority that a polytunnel proposal would cause unacceptable harm to the landscape, it will be refused. However, where it is considered that a development can be made acceptable, by limiting the size of polytunnel blocks to break up its total mass or by other mitigation measures, this may be reflected in a conditional planning permission. Depending upon the proposal concerned, these mitigation options could include:

4.27 (i) *Landscaping/screening*

A condition could be attached to a planning permission stating that some form of tree planting is necessary to screen the polytunnels. However, in Herefordshire, the nature of the rolling topography can often mean that tree screening is not successful in hiding the potential glare of fields of plastic sheeting, since the tunnels are visible from nearby high ground. Similarly, tree screening can be inappropriate in sensitive landscapes where the normal pattern of low vegetative cover (such as maintained hedgerows) may be detrimentally altered if tall trees are used to disguise polytunnel developments. Tree screening, where it is considered appropriate, can provide the opportunity to re-establish historic field patterns; however this can take decades to become truly effective. If it is possible within the business plan for a farm to identify areas where new polytunnels are likely to be required in the next 2/3 years, then potentially planning permissions can be obtained in advance (using the whole farm approach) so that landscaping schemes involving new planting can be implemented before the polytunnels are erected, giving them time to become effective.

4.28 Pre-application consultation with the conservation officers of the council and their subsequent recommendations should be taken into account and conditions will be imposed on planning permissions as appropriate.

4.29 (ii) *Use of non-reflective materials*

Some experiments have taken place using different coloured or less- reflective alternatives to the usual type of plastic tunnel sheeting, however, results have sometimes proved disappointing due to poor light levels reaching the plants beneath and no marked reduction in the negative impacts of the tunnels' appearance. However, with technology continually developing this situation may change in the future. Planning applicants should ensure that the technical specifications of the tunnels are detailed, including the type of material proposed as a covering to the metal frames.

Planning guideline 5: landscape impact – mitigation

The local planning authority will not allow polytunnels to be erected in areas or individual fields that create a significant visual intrusion within the landscape and where their impacts cannot satisfactorily be mitigated by a landscaping scheme comprising indigenous species in the medium term.

4.30 (iii) *Periods of coverage*

When crops do not need to be protected, all polythene should be removed from the metal hoops of the tunnels during these periods of the year to help minimise the visual impacts of the development. Up to date information about crop requirements must be included in the assessment of each case.

Planning guideline 6: polythene removal

The local planning authority will normally attach a planning condition to any grant of planning permission ensuring that polytunnels are not covered with polythene during certain period(s) of each calendar year.

Listed Buildings, Historic Parks and Gardens, Scheduled Ancient Monuments

4.31 The erection of polytunnels, construction of reservoirs and other associated works (such as the access roads and hard standings) are likely to have a significant impact

on the landscape and setting of designated and other national or regionally important sites. These impacts will be assessed at the pre-determination stage of a planning application and, where appropriate, propose mitigation measures to address any adverse impacts.

- 4.32 The effect of a development on the character and setting of listed buildings is a particular material consideration in determining planning applications, since there are a plethora of such buildings throughout the Herefordshire countryside. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires the local planning authority to have special regard to the desirability of preserving listed buildings or their settings. The NPPF, paras 132 and 133 set out the exceptional circumstances of achieving substantial public benefits, whereby significant harm to or loss of designated heritage assets may be sufficient to outweigh the adverse impacts. The Core Strategy similarly contains policy LD44 which seeks to protect the historic environment and heritage assets. Whether or not a polytunnel development would adversely affect such a building should be assessed by a relevant historic buildings/conservation expert, who will provide guidance to the council to determine whether or not impacts are sufficiently detrimental to warrant refusal of an application on these grounds or suggest mitigation measures where necessary.

Planning guideline 7: designated heritage assets

When considering proposals for polytunnel development and their effect on the significance of designated heritage assets, great weight should be given to the asset's conservation. Proposals which would result in substantial harm or loss of designated heritage assets such as grade II listed buildings or historic parks and gardens and SAMs should be exceptional. Substantial harm or loss of heritage assets of the highest significance (SAMs, grade I and II* and registered parks and gardens) only be refused, unless it can be demonstrated that such loss or harm is necessary to achieve substantial public benefit that outweigh the harm or loss.

(NPPF, paras. 132 & 133)

Residential amenity

- 4.33 In areas where polytunnels are erected close to dwellings, local residents are frequently aggrieved by a number of issues which affect their residential amenity, including:

Proximity to dwellings – mitigation

- 4.34 A condition could be imposed stating that polytunnels should not be erected within a certain distance of dwelling houses, for example 50 metres, depending on the scheme in question. Deviations from this general safeguarding distance may be permitted in exceptional circumstances and where topography and natural screening of the site allows. The distance of 50 metres was previously used in the Polytunnel Voluntary Code of Practice.

Planning guideline 9: residential amenity – distance from dwellings (buffer zones)

No polytunnels or associated development (works, storage, servicing accesses, toilets etc.) shall be sited within a minimum distance of 30

metres of the boundary of any residential curtilage or 50 metres of any dwelling whichever distance is the greater.

- 4.35 If such a requirement is part of a permission, then it will also be made clear through the use of planning conditions, that any 'buffer zone' must be kept free from all associated storage and not be used for general activities connected with the operation of the tunnel growing or harvesting. This requirement only relates to the associated operations of the polytunnel development. Normal agricultural operations including crop growing and access to fields or crops for management will not be excluded. This is necessary to ensure that the amenities of those living nearby are not detrimentally affected by noise and adverse visual impacts of the storage of tunnel associated materials. Consultation on the original Polytunnel SPD revealed that existing buffer zones are kept free of tunnels; however the space is frequently made use of for a range of other associated activities which can impact adversely upon their residential amenities.

Planning guideline 10: residential amenity – buffer zones

The local planning authority will attach a planning condition ensuring that any 'buffer zones' around polytunnels are permanently kept free from associated storage and are not used for other activities connected with the operation of the polytunnel development.

- 4.36 In addition to providing 'buffer zones' around the margins of polytunnel sites where they are close to residential properties, it may also be appropriate to impose conditions relating to the maximum acceptable height of the tunnels in sensitive locations. Tunnel heights can vary significantly depending on the crop being grown and the methods of production. To clarify the maximum permitted height would ensure that residential amenities can be protected.

Planning guideline 11: polytunnel height

The local planning authority may attach a planning condition to any grant of planning permission controlling the height of the polytunnel(s) above existing ground level.

Noise

- 4.37 Noise can be created by machinery operations, construction and by wind and rain upon the polythene. It can also be created by an increase in vehicular movements. Those living in close proximity to agricultural polytunnels have indicated that there is an appreciable amount of noise generated by the weather and also by the, often significant, numbers of fruit pickers during the harvesting season. As well as general noise, this can be exacerbated by the use of radios being played at high volume. It is reported that the majority of such noise occurs during the early hours of the morning and later in the evening when pickers arrive and depart the fields.
- 4.38 In order to alleviate noise impacts, Environmental Health legislation is the standard control mechanism, however planning conditions can also be attached to permissions which regulate the times when noise-generating activities can take place. This is particularly relevant if polytunnels are located close to residential properties. In addition to planning conditions, good management can help alleviate potential problems particularly those associated with the playing of music close to

residential properties and should be practised by growers in order to help maintain respectful relationships with those who live close to the tunnels. Growers are therefore encouraged to put in place employment policies that reduce noise disruption to adjacent dwellings.

Planning guideline 12: residential amenity – noise

The local planning authority will refuse planning applications that would result in an undue loss of amenity by way of unacceptable noise to the occupiers of residential properties. All polytunnel developments will be expected to include appropriate measures to mitigate noise impact to an acceptable level.

Plastic sheeting

- 4.39 There are concerns over the impacts of sections of plastic sheeting coming away from the tunnel frames in high winds and blowing onto adjacent properties and into roads. The plastic can become particularly brittle when it has been used over several seasons due to the effects of sunlight and heat.
- 4.40 The majority of plastic sheeting used to cover polytunnels is not yet biodegradable and is therefore difficult to dispose of once it is superfluous to needs. The typical lifespan for the thicker plastics is up to five years. Section 34 of the Environmental Protection Act 1990 imposes a duty of care on persons concerned with handling waste, including keeping waste to a minimum and to sort and store waste safely and securely. Growers in the county do have the option of using a business which collects and recycles agricultural waste plastics.
- 4.41 Conditions may be added to planning permissions to ensure that waste plastic is disposed of promptly once it is no longer required, to avoid nuisance to the local environment and amenities.

Lighting

- 4.42 Where artificial lighting either for growing or for security is proposed, this should be kept to the minimum necessary and included within the planning application. There can be adverse impacts on the amenities of those living near to the site as a result of light spillage, which may be mitigated through careful positioning, screening or limitations on brightness.

Planning guidance 13: external lighting

The local planning authority will normally attach a planning condition requiring the submission for approval of full details of all external lighting (if any) to be installed upon the site (including upon the external elevations of the building(s) or polytunnel(s).

Negative visual impacts

- 4.43 This is particularly problematic when the tunnels are in close proximity to domestic curtilages. It is because the tunnels can be substantial in height; highly visually intrusive because of the white, reflective appearance of the plastic and they usually cover large expanses of land that problems are caused for those living close by.

Additionally, the polytunnel frames often remain in place during the winter months over several years and can still have a negative visual impact on the locality.

Planning guideline 14: redundancy of polytunnels

**The local planning authority will attach a condition to a planning permission stating that:
'In the event of the polytunnels hereby permitted becoming redundant, they should be removed from the application site within a period of six months, including their supporting structures and any other structures, fixtures and fittings within them.'**

Highway safety and access

- 4.44 The primary cause for concern amongst residents living close to polytunnels is the increase in the number and frequency of lorry movements on narrow rural lanes both during the harvesting season and when the tunnels are erected or dismantled. Some residents, however, state that a high level of HGV movements occurs during most months of the year. Such lorries, particularly large articulated ones, have caused worries over highway safety, noise (especially early in the morning and later in the evenings), damage to highway surfaces and their verges and small narrow bridges over time and the mud and dust in the roads causing hazardous driving conditions. In addition to lorries, local residents have also noted that when fruit pickers are being employed during harvesting, there is also general increase in the number of cars and buses on rural lanes, used to transport employees to the fields, which again is a cause for concerns over highways safety.
- 4.45 Full consultation should take place with the local highways authority prior to the determination of planning applications to ensure that issues of highway safety are addressed. Where appropriate planning conditions should be imposed as recommended.
- 4.46 Some large-scale developments may require a Transport Assessment/Study. This will be dependent upon existing and anticipated vehicular movements, including heavy or large vehicles. However, in all other instances applications should be accompanied by a written statement (which could be incorporated in the Design and Access Statement) which addresses the amount and type of traffic to be generated and the adequacy of the local highway network to cater with that traffic both in terms of design and capacity. Other matters such as the adequacy of the vehicular means of access(es) to the application site and the adequacy or otherwise of visibility splays should be addressed.

Planning guideline 15: highway safety

The applicant will need to demonstrate that the vehicular means of access(es) and the local highway network (in terms of both design and capacity) are adequate to cater with the traffic generation, addressing both numbers and types of vehicles.

Public Rights of Way

- 4.37 The public rights of way service of the Herefordshire Council has a legal duty to assert and protect the rights of the public to the use and enjoyment of any public right of way (PROW) in the county (section 130 Highways Act 1980). In addition, NPPF

paragraph 75 recognises that rights of way are an important recreational facility, which local authorities should protect and enhance. Local rights of way in Herefordshire are part of our heritage and form a major recreational resource. They help boost tourism and contribute to local rural economies, in addition to providing a convenient means of travel. If polytunnels directly affect Public Rights of Way an assessment will be required to accompany the application.

4.38 Polytunnels can have significant impacts on public rights of way since they are often located in fields crossed by these access routes. They can affect both the use and enjoyment of a PROW. Over the last few years the council has received numerous legitimate reports from members of the public describing the impact of polytunnels on their use and enjoyment of public paths in the county. The main problems encountered are:

- the obstruction of the PROW by polytunnel support frames, plastic sheeting, growing beds, wires and ancillary materials such as boxes, irrigation pipes and sundry tools and equipment;
- water run-off leading to waterlogged surfaces;
- the day to day farming operations associated with polytunnel crop production, including heavy and light mechanical vehicles, over spraying with chemicals and water and erecting and removing frames and plastic sheeting;
- damage to the surface of paths caused by vehicles;
- the loss of long distance views from a PROW crossing land covered by tunnels;
- the loss of short distance views available to the public from the PROW crossing land covered by tunnels;
- the impact on views from a distant PROW over land covered by polytunnels;
- litter and general mess associated with a labour intensive operation;
- lack of sufficient toilet and washing facilities for polytunnel workers leading to 'misuse' of adjoining hedges and woodlands;
- noise and dust associated with increased machinery movement in the area; and
- the destruction of natural and historic features such as path surfaces, hedgerows and ditches etc.

4.39 In addition to complying with relevant legislative requirements in relation to public rights of way, applicants should be mindful of the potential impacts of polytunnels on such paths and measures which can be taken to mitigate these.

Planning guideline 16: public rights of way

There shall be no polytunnels erected within 2 metres of the centre line of a public right of way and no polytunnels sited within 3 metres of the centre line of a bridleway. These distances are to be taken as minimum requirement and whilst applications will be considered on their merits, issues such as surface water run-off, safety and impact on views will require greater distances.

4.40 Where distant views over polytunnels are available from a PROW, the guidance is as follows: consideration should be given to impacts on both the local tourist economy and on those who choose to live and work in Herefordshire, particularly in designated areas such as AONBs and Conservation Areas.

Water

4.41 Polytunnel development raises implications for surface water management, drainage and pollution, flood risk and biodiversity. The severity of these implications can be dramatically reduced by the implementation of practical, common sense measures that could be implemented through the planning process.

Flood risk

4.42 There is a risk of increased surface water run-off with the use of polytunnels because of the impermeable layer that plastic sheeting on a large scale can create. This is similar to the surface water run-off problems created in urban areas by roads and hard surfacing etc. However, it is acknowledged that spaces between polytunnels are likely to be grassed down and available for infiltration. Additionally, long-term table top polytunnels have integrated rainwater capture and recycling built into them and will reduce the level of surface water run-off leaving the field. However, where there is an increase in run-off, particularly during periods of heavy rainfall, this can result in a greater risk of localised flooding. Indeed this problem has previously been reported by those living close to existing polytunnel development, who consider that the flooding of nearby roads has become a more frequent problem since the tunnels have been erected.

4.43 The susceptibility of land to flooding is a material consideration when assessing planning applications. This applies to polytunnels just as it does to other forms of development. Both the Government's planning guidance the Core Strategy set out the importance that is attached to the management and reduction of flood risk in the planning process, recognising the uncertainties that are inherent in the prediction of flooding and that flood risk is expected to increase as a result of climate change.

4.44 The Core Strategy recognises that changes to rainfall patterns, land management and land use, combined with more frequent occurrence of extreme weather events, will present increased flood risk, but that its impacts can be avoided or reduced through good planning and land management. Therefore, the susceptibility of land to flooding and surface water management are material considerations when assessing planning applications.

4.45 The Strategic Flood Risk Assessment (2009) (SFRA), aims to ensure that planning policies and development land allocations will not increase the risk of flooding both within developments and in the surrounding area, and to identify and promote measures that will minimise flood risk and/or enhance flood resilience. Development proposals should be located in accordance with the Sequential Test and Exceptions Tests (where appropriate) and have regards to the SFRA for Herefordshire. Policy SD3 provides additional requirements of new developments and the sustainable management of water and water resources. The SFRA is in the process of being updated.

Planning guideline 17: fluvial floodplains

No polytunnels shall be sited within the fluvial floodplain (i.e. the 1% plus climate change fluvial floodplain extent).

Surface water drainage, water quality and pollution prevention

4.46 Growers have made significant investment in water management, since water availability is fundamental to the success of soft fruit businesses and therefore

summer rainfall (when tunnel sheets are on) is often captured and recycled to ensure that sufficient water is available for irrigation throughout the growing season. Active water management is required as mitigation to prevent harm to existing watercourses, ecological assets, soil erosion and wherever possible create new benefits. In general terms the slowing up of water before it enters watercourses is a principle to be followed. The use of sustainable drainage systems (SuDS) slows water flow and filters out nutrients and sediment before it enters the watercourses.

4.47 For additional guidance on sustainable drainage systems, Herefordshire Council has produced the *Sustainable Drainage Systems (SuDS) Handbook 2018* and *Planning Applications: Flood Risk and Drainage Checklist 2018*. These will provide additional guidance to potential developers and the handbook makes specific reference to polytunnels.

4.48 Mitigation management measures could include:

- Discharging runoff to soakaways or using drainage basins to cleanse water and disperse run-off via soakaways.
- Using swales to cleanse water and also to disperse a proportion of the run-off via soakaways
- Providing surface water attenuation such as attenuation basins storage tanks, lagoons or farm storage reservoirs.
- Discharging from surface water attenuation at greenfield discharge rate.
- Discharging into existing drainage ditches or constructing them where they do not exist so there is a logical flow into the greater river system.
- Constructing drainage channels/tile drains/French drains etc. as necessary so that surface water run-off from polytunnel development is captured effectively and directed into attenuation lagoons.

4.49 Applicants are advised to carefully consider the location of polytunnels in their proposals in respect to the proximity of all watercourses/water features and incorporate appropriate attenuation measures and pollution prevention. The risk of pollution and detriment to habitat can be minimised by careful siting of structures and management of drainage and irrigation water to minimise soil erosion and nitrification of waters. Applicants are also advised to include allowances for increased rainfall and the effects of climate change in their proposals. All such information will also need to be provided to Herefordshire Council Land Drainage department as a Surface Water Drainage Strategy.

Planning guideline 18: surface water drainage

A Flood Risk Assessment will be required for all developments over 1 hectare, which should address surface water run-off. Any such drainage report should consider restricting run-off to the Greenfield rates and detail what attenuation is to take place designed to the 1% with climate change standard to prevent flood risk along with how the polytunnels are designed to prevent run-off and erosion issues and pollution of the water environment.

Water resources

4.50 Policy SD3 of the Core Strategy provides guidance on the need to protect the availability and quality of water resources. Water is an essential resource, the pollution of which can have serious effects on drinking water supplies (including private water supplies) and ecology. Inappropriate agricultural activities can be a risk to both surface and groundwater quality and quantity. In particular, groundwater

requires particular protection from both contamination and over-exploitation. The availability of groundwater can be affected by changes in land use such as the increased use of large-scale agricultural polytunnels, which may restrict recharge through increases in impervious surfaces or the diversion of flows. Groundwater forms part of the base flows of watercourses and is vital to ensure the dilution of discharges, maintenance of water supplies and biodiversity. Both water efficiency and water neutrality (betterment) are key elements of the Government's climate change (reduction) agenda.

- 4.51 Policy SD4 of the Core Strategy provides guidance to prospective developers in respect of targets to be achieved for water quality in Herefordshire's rivers. Herefordshire SuDS Handbook provides clarity on the treatment train that is required. There is considerable potential for farmers to capture and store surplus water for future use, thereby reducing the need to abstract water from other sources, while enhancing biodiversity. The water quality of Herefordshire's main rivers and their tributaries is of strategic importance and, in particular, high levels of nutrients along parts of the rivers need to be addressed. This is important to the overall environmental objectives of the Core Strategy.
- 4.52 The Environment Agency, in partnership with Natural England, has developed a Nutrient Management Plan to ensure that the River Wye Special Area of Conservation (SAC) achieves and maintains favourable conditions with respect to phosphate. A Nutrient Management Board was set up in 2015, with the principal objective of identifying and delivering action that result in the achievement of the phosphorous conservation target of the River Wye Special Area of Conservation. The primary mechanism for which is through the delivery of the Nutrient Management Plan.
- 4.53 In some parts of Herefordshire there are issues surrounding 'low flows' of local rivers (information is based on the Environment Agency's Catchment Abstraction Management Strategies (CAMS)), such as the potential loss of flora and fauna and changes in species distribution. Whilst many existing polytunnel businesses and applicants for new polytunnel planning permissions either already use or seek to use trickle irrigation methods, this form of irrigation is currently exempt from requiring an Environment Agency water abstraction licence. However, late in 2017, DEFRA and the Welsh government announced plans to end water abstraction licensing exemptions in England and Wales to allow regulators to manage water more effectively, following a consultation in 2016. Currently, exempt operators, primarily users of trickle irrigation for horticulture, will need to apply for a licence from 1st January 2018. It is expected that most, but not all, trickle irrigation users will be offered a licence if the abstraction is not thought to be environmentally unsustainable.
- 4.54 The Environment Agency does, however, seek detailed information on proposed water use and water management from prospective polytunnels developers, hence these are material considerations in determining whether or not to grant planning permission. This is particularly important in the context of both low flow problem areas and where there may be a potential detrimental impact on the water environment of SSSIs and SACs, as well as Special Protection Areas (SPAs) and Ramsar Sites (such as sedimentation, pollution or adverse impacts on biodiversity). In the case of SAC/SPA/Ramsar sites it may also be necessary for applications to include a Habitats Regulations Assessment (HRA) in line with the EC Habitats Directive (1992).
- 4.55 Planning applications for polytunnels on a significant scale (on sites of 1 hectare or more) should therefore detail the proposed water use in the context of the catchment

area and water management techniques through the production of a detailed Water Resources Study/Audit. In cases where small scale polytunnels are not proposing to use water irrigation from low flow rivers or in areas away from SSSIs or SACs then a brief statement of water use and efficiency techniques could suffice. (For more information on Water Resources Studies and Audits see Section 5).

Biodiversity

4.56 Since the effects on the biodiversity of an expanse of polytunnels, (including effects of irrigation techniques, soil sterilisation, loss of habitat and chemical usage) are not always apparent; any planning application for polytunnels should include an ecological survey/analysis. This should include plans for the protection and enhancement of the biodiversity of the area and proposals for mitigation techniques, in line with the guidance provided in section 11 of the NPPF. Reference should also be made to Core Strategy policy LD2 – biodiversity and geodiversity. The Core Strategy’s objectives will be delivered through supporting development proposals that add to Herefordshire’s biodiversity. During the plan period, Herefordshire Council will review its Biodiversity Supplementary Planning Guidance utilising, in particular, the principles, opportunities and constraints detailed within the *Building Biodiversity into Herefordshire Council’s Local Development Framework 2009*. Further advice on ecological assessments is provided in Section 5.

4.57 The way in which land is reinstated following the cessation of polytunnel use on an area of land is critical in terms of both biodiversity and visual impact. During the assessment of a planning application, the local planning authority will need to be satisfied that there has been detailed consideration of high quality land reinstatement and even improvement of the natural environment. The imposition of a planning condition regarding reinstatement may be deemed necessary if planning permission is granted for the development in question.

Planning guideline 19: ecology

The local planning authority will need to be satisfied that the habitats of protected species (if any) are protected or mitigated.

Planning guideline 20: habitat enhancement

The local planning authority will seek the creation, restoration and enhancement of habitats.

Archaeology

4.58 The development of polytunnels and associated works such as the installation of irrigation systems (reservoirs, pipes etc.) and the creation of access roads and hardstanding areas has the potential for impacting on archaeological deposits and other historic environment interests. It will be important to assess the impact of such proposals in line with policy LD4 – historic environment and heritage assets and, where appropriate, carry out pre-determination investigation or post-determination recording.

4.59 Reservoirs are particularly intrusive elements of a polytunnel development in relation to the historic environment due to the scale of the earthmoving operations involved

and the permanency of the created feature. Careful design of reservoirs will be required to mitigate their impact on the landscape and historical features.

- 4.60 Any associated ground works such as surface water drainage and sustainable drainage systems will be expected to follow the requirements of policy LD4 and any associated planning guidance and evidence base documents.

Section 5: Planning application requirements

- 5.1 In order for a comprehensive planning assessment to be made by the local authority when a planning application is submitted for consideration, it may be necessary for the applicant to supply additional information. This is particularly the case if the application is for large-scale development or where the development site is located in a sensitive area. Pre-application discussions should take place with a development management officer prior to submission to ascertain what additional documentation may be deemed necessary. Applications for planning may fail due to lack of sufficient evidence. Details as to the requirements of a planning application to ensure that it is a valid application can be found on the Council's website.

Design and access statements

- 5.2 Any new development may require an overall design concept to be submitted based on survey and analysis data to establish a framework for the detailed design of the scheme. This will assist in assessing the application against the primary objectives and policies set out in the Core Strategy and relevant Neighbourhood Development Plans. Proposals for larger polytunnel developments should explain the principles that have been adopted for the site and its wider context. An annotated plan should be submitted with a planning application showing the site's relationship with the surrounding pattern and form of land uses and activities, landscape, key characteristics and features.
- 5.3 Relevant adjacent development, particularly if there are existing polytunnels, access to the site, all vehicular and pedestrian movements, natural features including watercourses, hedgerows, trees and any wildlife habitats, views into and out of the site, on-site structures and the form and condition of site boundaries should be addressed.
- 5.4 Where relevant to the proposal, full planning applications for complex or large-scale (for clarification as to what constitutes a large-scale scheme, please contact the development management team for assistance) polytunnel schemes or those which are proposed in sensitive areas should be accompanied by a design statement containing a site appraisal and written explanation. A design statement would typically include the following:
- design principles and design concept;
 - how these are reflected in the layout, scale, visual appearance and landscape;
 - how the design relates to its site and wider area, including how the development has been planned to minimise the effects on the environment; and
 - a summary of the above where this would be of value in public consultation.
- 5.5 Transportation matters should be addressed, including detail of the amount of traffic generated (both hourly and daily) and its type together with an assessment of the adequacy of the local highway network to cater with the traffic generated in terms of both design and capacity. Means of vehicular access(es) to the site, together with the proposed visibility splays will need to be provided.

Landscape or visual impact assessments

- 5.6 All applicants will be expected to fully address the landscape impacts of a polytunnel proposal, both individually and in the context of other similar developments within visual proximity of the proposal site.
- 5.7 A landscape impact assessment will be necessary for the vast majority of planning applications since it is the potential harm to the landscape of an area which is one of the key planning considerations in such schemes.
- 5.8 A number of landscape and townscape character assessments have been prepared and supported by a Historic Landscape Characterisation and completed conservation area appraisals. The *Landscape Character Assessment Supplementary Planning Guidance 2009 (SPD)* will be reviewed during the plan period. The SPD will build upon the detailed evidence base documentation; including Natural England's Character Areas, as well as the *Urban Fringe Sensitivity Analysis 2010*, *Rapid Townscape Assessments (various)*, *Green Infrastructure Strategy 2010* and other local studies covering architectural and historic environments. In conjunction with the above, relevant Areas of Outstanding Natural Beauty Management Plans and associated guidance also provide more place-specific guidance which should inform development proposals from the outset.

Social impact assessments

- 5.9 The NPPF seeks to support prosperous rural economies, including the growth, expansion and diversification of agricultural and other land-based businesses, so long as the development proposed is sustainable. The potentially large scale of polytunnel developments mean that they can have an adverse impact of the public's enjoyment and use of the landscape. The importance to health and wellbeing that the interaction with the countryside has on people should be assessed, particularly where the site will be seen from public rights of way and popular viewpoints. Proposals should take account of features both within and adjacent to the site, since integration and connection to the surrounding countryside and green infrastructure, together with long term management are key considerations.
- 5.10 In addition, the Core Strategy supports rural tourism and recognises the valuable contribution in terms of social value and quality of life that local landscapes and buildings can bring to the local population and visitors alike.

Economic assessments

- 5.11 Economic arguments as discussed in section 4 above are often technical ones and in order for the local planning authority to assess their validity and importance adequately, they must be set out in robust manner which is fully evidenced. To simply include in the information accompanying a planning application a set of broad statements will not be acceptable.
- 5.12 In instances where the polytunnels proposed are on a small scale, a simple business case may suffice. It is important to clarify requirements with a development management officer prior to the submission of a planning application. The more economic information that can be provided, the better the understanding of an applicant's business venture and associated business case, and its likely impact of the local economy. Appendix 1 provides some helpful background questions which an applicant is encouraged to answer:
- 5.13 A comprehensive economic impact assessment or appraisal should be submitted alongside proposals for large-scale polytunnel schemes. Again, it is essential to

discuss the proposal with a development management officer prior to submission of an application.

- 5.14 In respect of the potential impacts of a large-scale polytunnel development in the AONB, the applicant may find it appropriate to submit a balance sheet analysis of the economic issues and the wider relationship between agriculture and other interests. This would establish the relative contribution of each to the local economy.
- 5.15 Appendix 2 sets out an example of the components of a balance sheet analysis, which could be used to outline how such a study might be structured⁴.
- 5.16 Since it is likely that such in depth economic analyses are likely to be very costly, it may be useful for large-scale growers who anticipate that they will be required to submit such detailed planning applications in the future to work together to produce an economic assessment analysis, thereby reducing costs and avoiding unnecessary duplication of work. This could be particularly relevant in Herefordshire where there are a number of large-scale soft fruit producers in one county. Where a proposal site does not fall within a designated landscape area, it may still be necessary to undertake a similar balance sheet analysis, since the high quality of landscapes throughout the county is one of its primary assets that is afforded specific protection through the Core Strategy.

Flood risk assessments

- 5.17 In areas particularly prone to flooding and in respect of planning applications for larger polytunnel developments (sites of 1 hectare or more), the Environment Agency will be consulted. A Flood Risk Assessment may be necessary in accordance with the requirements of the NPPF, paragraph 103. Where such a Flood Risk Assessment is deemed necessary, it should be appropriate to the scale and nature of the development and should consider:
- (a) flood risk and surface water run-off implications;
 - (b) any increase risk arising elsewhere;
 - (c) measures proposed to deal with these risks and effects, e.g. restricting run-off to the Greenfield rates;
 - (d) explaining what attenuation measures are in place designed to the 1% with climate change standard to prevent flood risk; and
 - (e) how the polytunnels are designed to prevent run-off and erosion issues.

Water resources studies/audits

- 5.18 Planning applications for polytunnels on a significant scale (sites of 1 hectare or more) should detail the proposed water use in the context of the catchment area and water management techniques through the production of a detailed Water Resources Study/Audit. The Water Audit could include the identification of a number of water efficiency measures such as, for example;
- rainwater harvesting from water run-off from the polytunnels and/or re-circulation programmes, and
 - the use of buffer zones around polytunnels to help prevent chemical leaching into streams and nearby watercourses.
- 5.19 This Water Audit will be looked at in detail by the Environment Agency, as part of the application for approval.

⁴ Source: An Investigation into Poly tunnel Development in AONBs and National Parks – The Countryside Agency, January 2006, Entec UK Limited

- 5.20 In cases where small scale polytunnels, not proposing to use water irrigation from low flow rivers or in areas away from SSSIs or SACs, a brief statement of water use and efficiency techniques could suffice.

Ecological appraisals/nature conservation assessments

- 5.21 A wildlife habitat survey carried out by a suitably qualified and experienced ecologist and at an appropriate time of year will be required where a proposal affects a site which is known to have, or is suspected to have, any species protected under the Wildlife and Countryside Act 1981, Conservation of Habitats and Species Regulations 2010 or the Protection of Badgers Act 1992. This will include badgers, bats, certain reptiles and breeding birds. Should habitats or species of significance be identified, further assessment will be required to determine the impact of the development on the wildlife and proposed mitigation to minimise the impact. Applications for the development in the countryside which affect sensitive areas which must be accompanied by ecological assessments and include proposals for long-term maintenance and management.
- 5.22 The following list should enable potential applicants to satisfy the expected level of detail required as part of a tunnel application:
- A records centre search and extended phase 1 habitat survey, conducted at an appropriate time of year and including an assessment of the presence of protected species and, or the potential of the habitats present to support protected species must be submitted with the application. This should include maps showing phase 1 habitats present, distribution of species and the location and type of existing and proposed polytunnels. Any potential impacts on these features should be identified (Note – information on badgers, if present, should be submitted in a separate confidential report.
 - Further protected species surveys at an appropriate time of year will be required for any protected species that have potential to be present or have been found. Pre-application discussion with the county ecologist is recommended to ensure clarity in regard of survey and assessment requirements. A Natural England license is required for any development that would affect a European Protected Species. In addition to protected species, the presence of any priority habitats or species and LBAP habitats and species should also be identified along with any potential impacts.
 - Any European sites such as Special Area of Conservation (SAC) or Special Protection Area (SPA) or nationally designated sites such as Sites of Specific Scientific Interest (SSSIs) within a minimum of 2km of the proposal should be identified, along with any potential impacts upon them. Natural England and the Environment Agency must be consulted as to the need for Habitat Regulations Assessment where a SAC or SPA may be affected. Any locally designated sites of wildlife or geological importance must be identified along with any impacts on them. The assessment must identify and describe potential development impacts likely to affect the species and, or their habitats identified (these should include direct and indirect effects both on-site and off-site during site preparation, construction and subsequent working practices). Where harm is likely, evidence must be submitted to show:
 - How alternative designs or locations have been considered;
 - How adverse effects will be avoided wherever possible;
 - How unavoidable impacts will be mitigated or reduced;
 - How impacts that cannot be avoided or mitigated will be compensated.

- In addition, in accordance with the local authority's duty under Section 40 of the Natural Environment and Rural Communities Act (2006) and the NPPF, section 11 proposals that will enhance, restore or add to biodiversity interests will be welcomed. This could include provision of bird and bat boxes/tubes as well as the planting of native species within landscaping schemes and restoration of habitats.
- The retention of existing trees, hedgerows and other biodiversity features on the site should be sought. A tree survey in accordance with BS5837:2012 Trees in relation to Construction may be required. Pre-application discussion with the county ecologists is recommended to ensure clarity in regard of survey and assessment requirements.
- Opportunities for creation of BAP habitats where appropriate.
- All proposals will require compliance with Herefordshire Council's Core Strategy policies for biodiversity and geodiversity (SS6 and LD2) and relevant government guidance.

Statement of community consultation

5.23 Since many proposals for large-scale polytunnel development are likely to produce significant public interest or controversy and can often affect the amenities of nearby residents, where this is likely to be the case, it is advised that the applicant enter into early discussions with Parish Councils and local people in order to discuss any potential problems and solutions before planning permission is sought. Sometimes this will also involve important consultees such as the Environment Agency, Natural England and the council's traffic manager. Planning officers will, at this early stage, advise applicants if their proposals are likely to be considered 'significant' and therefore need to be the subject of specific community involvement measures. This advice is contained formally within the Council's *Statement of Community Involvement*.

5.24 At the application stage, a statement of community consultation should be submitted to the local planning authority detailing how the applicant has approached this and what the outcomes were. This will assist the passage of the application through the planning process.

Other information

5.25 In addition to the aforementioned documents, there may be a variety of other studies or assessments that may need to accompany certain planning applications depending on their scale and location. The council's development management officers will be able to discuss such requirements with potential applicants on a case-by-case basis. It is therefore important for potential developers to engage in pre-application discussions. The following lists sets out the majority of possible additional information that may be required:

- travel plans
- legal agreements
- sustainability appraisal
- listed building or conservation area appraisal
- archaeological assessment
- environmental impact assessment (EIA)
- noise assessment
- public rights of way assessment
- transport assessments

Section 6: Planning application guidance

Temporary planning permissions

- 6.1 Where polytunnels are required for the production of ground grown crops to be rotated on a predetermined regular basis, for example every three years, then it may be reasonable for a time limited planning permission to be granted. Indeed, granting permission for three or four years would provide some certainty to those living or working nearby that the tunnels would not be a permanent feature of the landscape.
- 6.2 However, the lifespan of a crop varies according to crop type and variety. Some strawberries may be re-established after three years, whereas raspberries and cherries will remain in situ for much longer. Therefore any rotation periods must take into account the needs of the crop. To grant permissions limited to two or three years would therefore not be appropriate to the needs of growers, particularly as future crop breeding will improve the productive life of many plant types. In addition, it may not be economically viable for polytunnels and associated infrastructure to be developed for only a short time, then subsequently removed. When an application for planning permission is received, it should be made clear by the applicant that if the tunnels are only required in certain positions for a limited period, then an appropriate time limited planning permission may be considered.

Pre-application advice

- 6.3 Herefordshire Council offers professional, objective advice and information for planning and listed building applications. The pre-planning professional advice service is for anyone wanting to carry out development, such as building work or engineering work or to change the use of land or a building.
- 6.4 A planning officer or building conservation officer can advise on all aspects of the planning process relating to your application, including: whether your proposal is likely to gain planning permission or listed building consent; what the key planning policy issues are; and what you would need to submit with your application.
- 6.5 The cost of this service depends on the type of proposed planning permission submission. You can find more information on Herefordshire Council's pre-planning advice fees page at:
https://www.herefordshire.gov.uk/info/200142/planning_services/66/get_help_making_a_planning_application/5
- 6.6 Please note that the pre-application advice service does not include any consultation with external organisations that may well be statutory consultees in the event that a planning application is submitted. This may have a bearing on the outcome of any future application and applicants are advised to make contact with relevant organisations, some of whom administer their own pre-application advice service. Further advice of relevant organisations can be offered on an informal, without prejudice basis, by the case officer.
- 6.7 It would assist both potential applicants and the local planning authority if a tiered planning approach is taken to large scale polytunnel developments. This would highlight any significant issues at an early stage in the process and identify the likely viability of an application and the required additional information. This would reduce the likelihood of a significantly adverse impact case coming to the application stage,

thus reducing workload pressures within the local planning authority and unnecessary expenditure on the part of the applicant.

- 6.8 The following steps outline the most appropriate way to approach polytunnel development proposals that require planning permission:
1. Pre-application assessment and informal discussion to highlight significant issues and guide what additional information will be required.
 2. A checklist of what information is required for the planning application based on the initial assessment drawn up by the case office in conjunction with the applicant.
- 6.9 It should be made clear during pre-application discussions that although such an assessment will highlight significant issues relating to the proposal it might be necessary to carry out further assessment work to inform the determination, depending on the scale, location and nature of the proposal.
- Whole farm plans**
- 6.10 Whilst applicants have the right to apply for planning permission on the basis of each individual polytunnel or each individual field, it is the view of the local planning authority that it would be preferable for applications relating to large agricultural holdings to be presented as a 'whole farm' application. Such applications ensure a holistic approach rather than a piecemeal approach and give certainty to both the applicant to plan the business and the local community as to the longer-term environmental impacts.
- 6.11 The most appropriate way to approach this matter is for applicants to engage with the local planning authority in pre-application discussions to establish the planning constraints. The applicants would then need to engage with officers of the council, the local community and other bodies (e.g. Environment Agency) to address the identified planning constraints. A sieve-map analysis can then be created whereby one can attempt to agree where upon the holding polytunnels should not be sited (if anywhere). This would normally then leave less sensitive area(s) where polytunnels could potentially be sited. However, this does not mean that all such areas should be covered due to the issue of cumulative landscape impact highlighted earlier within this document.
- 6.12 It is acknowledged that whole farm plans are not useful for all polytunnel development proposals, however, they can be useful on farms where crop rotation methods are employed. Usually if planning permission is granted on a field by field basis, then each time the polytunnels (plastic and frames etc.) are removed, the grower will have to re-apply for planning permission to re-erect them in a few years' time. However, if a whole farm plan planning permission is granted then removal and re-erection of tunnels will not require repeat planning permissions so long as the land in question was appropriately zoned as part of the original permission. This approach is helpful to both nearby homeowners and to growers since it will provide both certainty as to where polytunnel are to be erected and give the grower the opportunity to formulate longer term business plans for the farm holding.

Appendix 1: economic criteria – business case

Polytunnel business case – economic criteria

1.	Estimated acreage?
2. 2a. 2b. 2c.	Estimated tonnage to be grown? Likely market destinations? Use of local hauliers? Source of packaging?
3.	Gross value added – estimated market value of crop?
4. 4a. 4b.	Approximate numbers of people to be employed? Hourly rate x hours per week x number of weeks? Weekend working?
5.	Fulltime/seasonal worker split?
6. 6a. 6b. 6c. 6d. 6e.	Workers information Provide an estimate of age group targeted Provide an estimate of numbers of employees who are single, accompanied by partner and/or with children Likely accommodation provision and location? Nearest shops? Likely use of public transport?
7. 7a. 7b. 7c.	Will any other supporting infrastructure need to be built? If so, what? Likely estimated cost? How would you identify a contractor for the work?
8.	What would the land be used for if not under polytunnels?
9.	Likely impact on existing business, if project not proceeded with?

Appendix 2: economic balance sheet analysis

Suggested components of a balance sheet analysis of the impact of polytunnels on a protected landscape

Aim:

To establish the costs and benefits associated with large-scale polytunnel development in a protected landscape.

Objectives:

1. to determine the contribution of agriculture and tourism to a locality
2. to determine the economic benefits for agriculture attributable to polytunnel use
3. to determine the tourism uplift attributable to the presence of a particular landscape without polytunnels

Method:

1. Literature review
2. Establish economic baseline for both tourism and agriculture (specifically horticulture and polytunnels) – ONS, local authority data etc.
3. Survey tourist authorities/boards/local authority tourism departments applicable to AONBs
4. Perform a 'balance sheet' analysis using figures identified, interpolating where appropriate.

Key study considerations:

Agriculture:

1. Economic uplift attributable to polytunnels – production, labour force etc.
2. National vs. local benefit
3. Growth potential
4. Contribution of polytunnels to local rural economy

Leisure and tourism:

1. Actual and potential leisure and tourism uplift attributable to AONB designation. Establish the baseline position: GDP, trends, number of tourists, number of employees, role in rural economies and visitor surveys of reasons for visits.
2. Is the attractiveness of the AONB based purely on visual quality? Landscape may be just one factor. There are wider considerations such as: season/weather, choice (competing locations) and state of the economy.
3. Indicators of the impacts of polytunnel development in AONBs:
 - number of visitors
 - number of return bookings recorded by B&Bs, hotels, guest houses etc.
 - people active in local tourist economy
 - day trip vs. overnight stays
4. Growth potential
5. Market niches

Appendix 3: Former UDP policies (superseded by Core Strategy)

S1	sustainable development
S2	development requirements
S4	employment
S6	transport
S7	natural and historic heritage
DR1	design
DR2	land use and activity
DR4	environment
DR6	water resources
DR7	flood risk
DR13	noise
E12	farm diversification
E13	agricultural and forestry
T6	walking
T8	road hierarchy
LA1	Areas of Outstanding Natural Beauty
LA2	landscape character and areas least resilient to change
LA3	setting of settlements
LA4	protection of historic parks and gardens
LA5	protection of trees, woodlands and hedgerows
LA6	landscaping schemes
NC1	biodiversity and development
NC2	sites of international importance
NC3	sites of national importance
NC4	sites of local importance
NC5	European and nationally protected species
NC6	Biodiversity Action Plan priority habitats and species
NC8	habitat creation, restoration and enhancement
NC9	management of features of the landscape
HBA4	setting of listed buildings
ARCH1 – 6	archaeology
RST9	Herefordshire and Gloucestershire Canal