

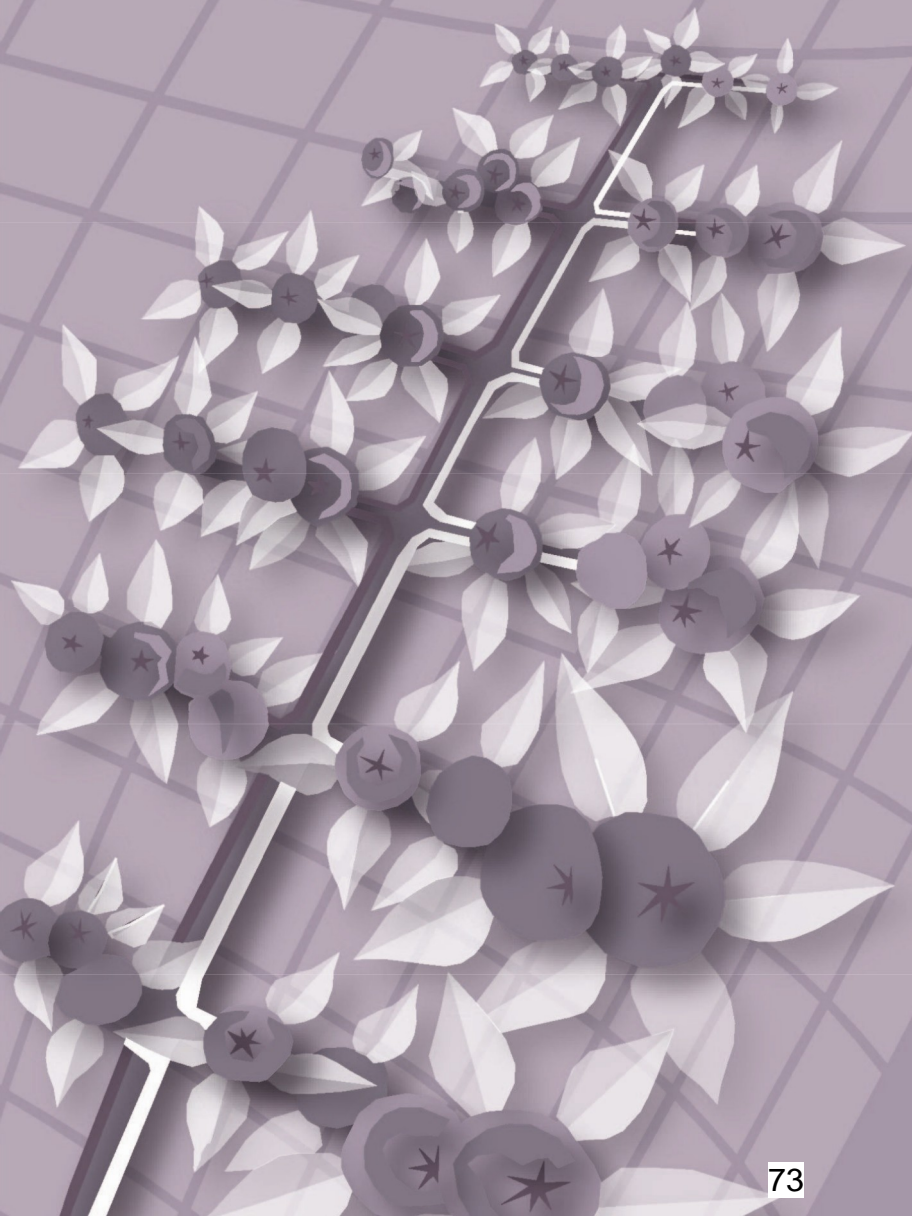
PAN 06

Food Growing and Development

Updated September 2020

Brighton & Hove City Council's Local Development Framework

Planning Advice Note



Food Growing and Development

Updated September 2020

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Food Growing and Development

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1. Introduction

Brighton & Hove first adopted a Planning Advisory Note (PAN) in 2011 to encourage developers to include space for food growing in new developments. Since then, the City Plan Part One has been adopted (2016) and Part Two of the City Plan (Development Management and Site Allocations) is now being brought forward. This update to the PAN illustrates how the current and emerging local planning policy framework can be implemented and sets out good practice examples to demonstrate how food growing can be successfully integrated in most new developments across the city.

The timing of the PAN update is even more relevant in the light of the 2020 COVID19 pandemic which has highlighted the importance of protecting food resilience in the city, ensuring access to healthy foods and the significant health benefits of food growing.

Using this PAN

This Planning Advice Note (PAN) is primarily aimed at developers, their designers, architects, landscape designers and consultants, and local authority planning officers. It provides guidance and best practice advice and illustrations on how to implement policy requirements relating to food growing and contribute to making Brighton & Hove a sustainable food city.

It will also be of interest to organisations and individuals managing local food growing spaces. Other local authorities are welcome to share the information.

The guidance is supported by case studies to show how even small-scale development can incorporate food growing into developments.

We hope the PAN will inspire developers to embrace the opportunities of food growing in their new development to create places that people will be proud of living or working in; provide a chance to address some of the inequalities in access to productive green spaces; and create viable developments that meet high standards of sustainability.

Acknowledgements

We would like to thank the development professionals and the food growing community in Brighton and Hove for contributing and commenting on the revision of the PAN, which has been co-produced with Brighton & Hove Food Partnership thanks to funding from the Esmée Fairbairn Foundation and expertise from Sustain.



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2. Brighton and Hove – a Sustainable Food City

The Vision

Brighton and Hove is a city with a long history of sustainable food work and is a member of the Sustainable Food Cities network. This Planning Advice Note (PAN) gives some ideas and inspiration on how development can help achieve the vision for a city where citizens, whether residents, employees, students or visitors value their food. Daily exposure to food growing will raise awareness of the value of food and increase understanding of how to cook and eat more healthily. Food plants will be a normal part of the landscape.

Food growing can be woven into the fabric of development sites and the urban environment on whatever scale is appropriate. The PAN illustrates how this can be achieved. (Larger scale agriculture projects and formal allotments are beyond its scope.)

The ambition for new development in the city to incorporate productive growing spaces within its design will help achieve the following key Brighton and Hove development principles:

- Achieving a high quality design
- Delivering sustainability
- Creating healthy communities

In other words, a place where investors will continue to want to invest and people will want to live, work and visit.

Benefits of integrating food growing in new development

Social, economic and environmental benefits

Food growing spaces contribute to the City's green infrastructure network providing important benefits¹, such as:

- Biodiversity – space and habitat for wildlife with access to nature for people;
- Amenity – places for outdoor relaxation and play;
- Climate change adaptation – for example flood alleviation and cooling urban heat islands; air quality improvement;² increased food resilience & food security;
- Environmental education;
- Improved health and well-being – lowering stress levels and providing opportunities for exercise;
- Local distinctiveness – enhancing the special qualities of an area.

¹ See case studies in Sustain (2014) Planning sustainable cities for community food growing, https://www.sustainweb.org/publications/planning_sustainable_cities/#

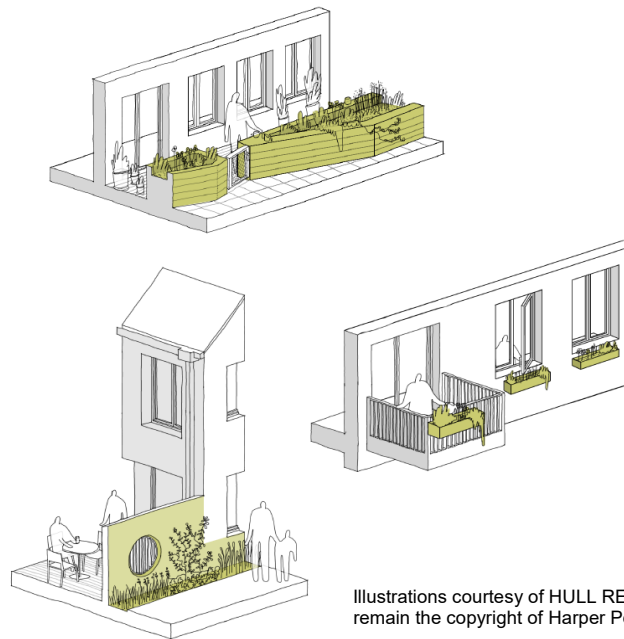
² A Low Carbon Route Map, Planning and Measuring Emission Savings for Climate Challenge Fund Projects (2011) Keep Scotland Beautiful & The Scottish Government. CCF Food Low Carbon Food Map at www.keeptoscotlandbeautiful.org/climatechallengefundfood

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Making space for planting

Hull Residential Design Guide



Illustrations courtesy of HULL RESIDENTIAL DESIGN GUIDE remain the copyright of Harper Perry Ltd and Hull City Council

Even on small sites, there are many opportunities to create spaces for planting and growing. This could be on an individual basis or collective shared arrangement such micro-allotments.

The developer benefits from integrating food growing in their development by:

- Creating a more marketable development;
- Building up a reputation for quality developments that people want to live or work in;
- Incorporating sustainable drainage;
- Creating a role for future occupiers to have a stake in the success of the development;
- Conforming to planning policy by demonstrating how they meet sustainability principles and meeting open space standards;
- Complementing the Brighton food scene.

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Development Economics

House builders can opt to demonstrate the quality of their homes and give householders the confidence that new homes are well designed, built and cost effective to run by gaining accreditation through the BRE Home Quality Mark (HQM)³. Credits are awarded for the provision of food growing space within the development. HQM is part of the BREEAM family of quality and sustainability standards (Appendix 3).

Design and Residential Amenity

Food growing contributes to high quality design and the provision of a good standard of amenity for existing and future residents within housing developments. Food growing spaces are places where residents feel more involved with their surrounding open space and take more care of their environment. Designing food growing into residential developments helps make cities more liveable and this has a particular relevance in a lockdown situation (e.g. Covid19). This is most relevant on high density developments with little or no private open space. Amenity spaces can be designed flexibly so that the option to grow food can be taken at any time.

Regeneration and Community Development

Communal food growing spaces foster community cohesion and inclusion by providing opportunities for social interaction and active leisure. Whilst these gardens have a common goal of growing food, they also improve the local area and contribute to successful regeneration.

Sustainability

Food growing spaces contribute to achieving policies on mitigating and adapting to the effects of climate change and other sustainability priorities.

Health and Wellbeing

The activity of growing food offers people the chance to take exercise, reduce stress and get fresh air whilst the harvest increases access to fresh and healthy fruit and vegetables. Many health centres, hospitals and charities recognise the health benefits of urban agriculture in preventing illness and triggering healing responses.

Education, Skills and Enterprise

Small-scale food growing spaces provide a learning environment for young and old to develop transferable skills that increase skills and employability. Food growing in schools has been shown to help children and young people achieve learning, skills, health and well-being outcomes.

³ <https://www.homequalitymark.com/>

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Continuous Productive Urban Landscapes Speculative drawing for a typical UK street

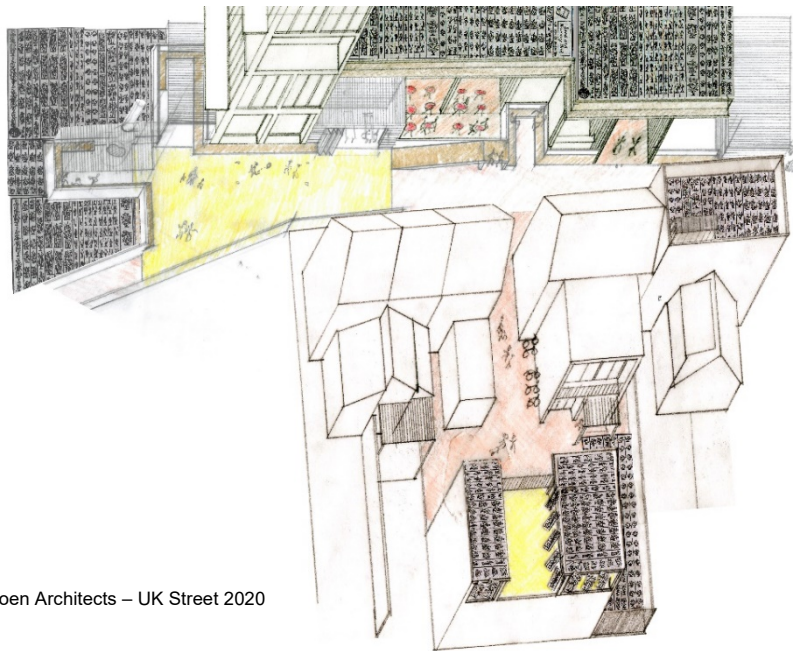


Image credit: Bohn&Viljoen Architects – UK Street 2020

An interpretation of a typical UK street with food growing incorporated in rooftop gardens and other outdoor spaces. The image demonstrates the potential use of space within dense, multi-story urban areas.

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3. Planning Policy Framework

As a city, Brighton & Hove was the first to adopt a Planning Advisory Note in 2011 to encourage developers to include space for food growing in new developments. Since then, the City Plan Part One has been adopted and a Part Two Plan (Development Management and Site Allocations) is being brought forward. This update illustrates how the current local planning policy framework can be implemented.

The PAN builds upon and provides more detailed advice and guidance on how to implement policies set out in the city's adopted development plan, the Brighton and Hove City Plan, which strongly supports the provision of on-site food growing initiatives. As such, the PAN will be used to determine planning applications and will have some weight as a material consideration in decision-making.

The PAN does not introduce new planning policies neither is it intended to add unnecessarily to the financial burdens on development. Indeed, the intention is to ensure that the design and management of outdoor amenity space already required as part of a good development is food friendly.

Planning Policy Framework

This Planning Advice Note reflects the National Planning Policy Framework (NPPF) and also supports the delivery of the Brighton & Hove City Plan. The following policies **specifically refer to food growing** in their wording or supporting text:

Adopted City Plan Part One policies:

- DA7 Toads Hole Valley
- SA4 Urban Fringe
- SA5 South Downs
- SA6 Sustainable Neighbourhoods
- CP8 Sustainable Buildings
- CP12 Urban Design
- CP13 Public Streets and Spaces
- CP16 Open Space
- CP18 Healthy City

Emerging policies in the Proposed Submission City Plan Part Two:

- DM1 Housing Quality, Choice and Mix
- DM4 Housing and Accommodation for Older Persons
- DM19 Maximising Development Potential
- DM22 Landscape Design and Trees
- DM37 Green Infrastructure and Nature Conservation
- H1 Housing Sites
- H2 Housing Sites Urban Fringe

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The PAN also supports Supplementary Planning Documents, specifically:

- Nature Conservation and Development SPD10 (and any further update)
- Sustainable Drainage SPD16
- Design Guide for Extensions and Alterations SPD12 Update
- Urban Design Framework SPD (forthcoming)

Appendix 1 outlines in more detail the planning policies which are most relevant to food growing and which provide the wider policy context for the PAN.

Planning Considerations

For developers:

- ❖ Give early consideration in landscaping proposals to the location of food growing spaces, the use of productive trees, other edible planting, together with structures needed to facilitate food growing, such as storage for tools and equipment, water supply and irrigation e.g. water butts can be integrated as part of a cohesive design for the development as a whole.
- ❖ Note that there are very few development proposals which could not find some space for some food planting.
- ❖ Landscape design which offers flexibility will enable garden space to be adapted for food growing or general planting according to occupiers' interests in the future.
- ❖ Vacant sites awaiting redevelopment may be suitable for 'meanwhile' gardens with potential benefits for the community in the interim.
- ❖ Commit to entering into and adhering to planning conditions/Section 106 obligations requiring on-going management and maintenance to ensure spaces will be managed successfully once the development is completed.
- ❖ All residential planning applications involving new builds and conversions within the city require a completed Brighton & Hove sustainability checklist. See extract at Appendix 2
- ❖ Some development schemes will require a Health Impact Assessment to be undertaken. This includes consideration of how a development supports access to green space, exercise, and healthy food.
- ❖ Remember that incorporating food growing spaces and provision will also help to meet other policy requirements around sustainability and biodiversity.

For the Council

- ❖ Draw attention to the policy requirements and the planning considerations mentioned above early on in planning application discussions, ideally at the pre-application stage.
- ❖ Consider the use of appropriate planning conditions, Section 106 Legal Agreements or Informative notes that can be attached to planning consents to ensure food growing in developments, and their on-going maintenance.
- ❖ If not included in drawings submitted with an application, in some cases it may be appropriate to secure (through condition or S106 agreement) the identified space for food growing, either alongside or as part of / instead of wider open space uses.

Edible Landscape within Urban Development

Blatchford Community Park, Canada



Image credit: Blatchford Community Park, Canada

Artist impression of part of a sustainable redevelopment site which balances social, economic and ecological outcomes

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4. Design for food growing

This section demonstrates a range of different food growing spaces and how they can be successfully incorporated into scheme designs showcasing some good practice examples.

Outdoor amenity space includes private gardens, balconies, communal open space and general landscaped areas within any development. The ideal is to build in flexibility to the design and to also consider initial and ongoing management to enable the users to become as involved as they would like. Solutions need not require additional expenditure unless the developer chooses to be particularly ambitious. Opportunities include using edible plants in amenity landscaping through to communal gardens.

Representation of a range of different design types would eventually have a cumulative impact across neighbourhoods on biodiversity, amenity and food awareness. So not all elements need to be designed into each and every development.

Design options

Six types of edible designs are described in this section:

- A: Edible landscaping
- B: Outdoor amenity space
- C: Orchards
- D: Therapeutic gardens
- E: School gardens; and
- F: Meanwhile gardens

Edible Landscaping

Andernach Edible City



Photo credit: Stadt Andernach/Maurer



An 'edible city' with food growing in public spaces and where ornamentals might usually be planted. Vegetables were planted around the grounds of the city wall, fully accessible to the public.

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A: Edible Landscaping

At its simplest, edible landscaping is the use of food producing plants where ornamental plants might have been used.

This approach is suitable at a landscape scale for larger developments and can also provide a solution on more restricted sites where perhaps only limited amenity space can be provided.

On a larger development, edible landscaping could be adopted in addition to the provision of specific food growing space that may have been a policy requirement and in addition to other types of landscaping that might be required.

Over time, the green networks of Brighton and Hove could become edible routes through the cumulative contribution of new developments using productive trees and plants in their landscaping schemes. Such planting could be within development site boundaries or in the public realm.

Benefits:

- Embraces the public's engagement with food and the environment
- Raises awareness of food and makes it publicly accessible and available
- Major sustainability benefits such as water management, carbon capture, barrier to pollution and habitats and food sources for wildlife providing a higher level of biodiversity than in many open spaces
- Vertical growing increases habitat types in an urban area, reduces air pollution, provides some thermal efficiency

Edible hedgerows and trees

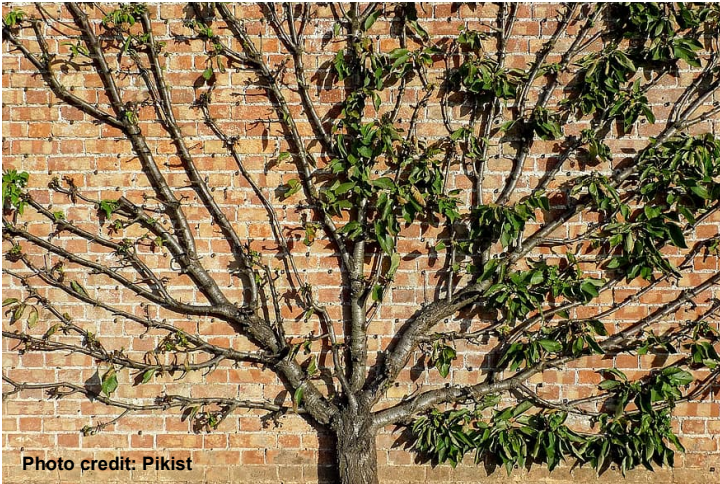
Hedges can be created from fruit and nut trees to provide screens, shelter or boundaries. Public facing site boundaries are particularly suitable to give edible plants a higher profile. Edible hedgerows or productive trees could form part of the comprehensive design of larger developments such as business parks, as well as residential, and on routes between.

Image: [Saunders Park Edible Garden](#), Brighton. Edible hedge planted Feb 2019 follows a border line and includes rosemary, red, black and white currants, jostaberry, gooseberry, quince and blackberry.



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Vertical growing

External walls are best used for training espaliered and climbing edible plants growing in soil or large containers. Advantage should be taken of south and west facing walls for fruiting trees, including those needing protection from frosts. Historic walled kitchen gardens provide inspiration which can be adapted to the scale of development. Suitable on all types of development with minimal investment.

Well trained fruit trees are space efficient, productive and attractive all year round.



Living walls however, require modular planting systems attached to the walls, irrigation systems and an intensive maintenance regime. They can be used in high specification building design to increase building performance but they require substantial investment and high maintenance to be successful.

Some modular planting systems include productive plants such as salads and herbs. Maintenance of productive living walls is high as they will require harvesting and seasonal replanting and therefore will need to be accessible.

They will also have a dormant period during the winter when plant growth will, at best, be slow and allowance will need to be made for the unattractive appearance of the walls at this time.

Edible landscape – Possible locations:

Large greenfield site	Residential urban fringe	Residential development on previously developed land	Care homes, sheltered/retirement units	Health facilities	Student Housing	Mixed use development	Education	Office development	Business parks	Retail, tourism and hospitality;	Hotels / Visitor Accommodation
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🍇	🍇	🍇	🍇	🍇	🍇	🍇	🍇	🍇	🍇		

Edible Landscape 🍏

Edible hedgerows 🍇

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B: Outdoor amenity space

Benefits:

- Slows down rainwater run off - Sustainable Drainage Systems (SUDS)
- Increases biodiversity
- Sequesters carbon
- Provides benefits of green space in a densely developed urban environment for physical and mental health
- Occupiers of developments are more likely to take care of their surroundings where they benefit directly from the produce grown
- The open space becomes a productive space with a purpose
- In the case of roof gardens, increases energy efficiency by providing highly insulated roofs

The requirement of planning policy to provide outdoor amenity space in new development can be achieved through a wide range of formats according to the scale and type of development and the nature of its future occupiers. We look here at potential options including integrating ornamental with edible planting, communal gardens i.e. shared food growing spaces, small individual plots or mini allotments, roof gardens (see below), internal atriums/courtyards and balconies.

Integrating ornamental with edible planting

Traditional gardening styles of cottage and potager gardening, as well as forest gardening, embrace this mixed approach. Cropping can be integrated within areas of soft landscaping with a minimum cost outlay. Integrating ornamental with edible planting is an approach which is suitable across all development types and scales.

Forest gardening principles can be applied in dense urban areas where often the open space has partial shade during the day. Perennial ground level plants, shrubs, trees and climbers offer a wide range of edible plants which can be grown, subject to light levels. Species are chosen for their beneficial effects on each other, creating healthy systems that maintain fertility. With a greater use of perennials, and little need for digging, weeding or pest control, this is a low maintenance, way of gardening that might provide design solutions to sites that are in partial shade.

This approach will only require a small number of people to get involved in managing the food growing space and is a low maintenance regime. Larger sites could include a mix of landscapes such as more formal gardens or individual plots that require higher maintenance by either residents or contractors.

An integrated ornamental and edible communal amenity space can include the planting of fruit, nut trees and vines, both freestanding and espaliered against walls. Beds can include perennial edible shrubs such as artichoke, currants, herbs, rhubarb and fruit alongside ornamental plants. Planting could include native species of plants that would be suitable for Brighton and Hove.

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Communal gardens

A communal or community garden is a growing site not based at an allotment or school, where people grow collectively or are allocated a small individual plot (they are sometimes referred to as mini allotments but are not statutory, i.e. protected by the Allotment Act).

The garden is established by, or with a community of users - a community may be a local area or a particular group of people e.g. employees, residents, service users. Community Gardens can be located on housing developments, places or work, on 'meanwhile' or temporarily available land and in community centres.

The aim is to create attractive amenity space for all occupiers of the development to enjoy, so an important consideration is the provision of seats and shelter as part of a well-designed garden.



Community Garden

A community garden accessed by a group of volunteers who share responsibility for the whole space. Food is grown throughout the garden and the produce is shared amongst the volunteers.



Mini Allotments

Individual raised beds could be used as mini allotments whereby an individual is responsible for one food growing space in a shared area.

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Roof gardens

Roof terraces can be designed to be accessible for food growing provide food growing areas for staff on office buildings or for residents on residential developments. Roof terraces can also be provided on smaller scale residential buildings or on stepped development.

Load bearing capacity and access should be addressed at the design stage. Large containers full of compost and plants together with people using the garden add considerable weight.

The design will need to create a suitable microclimate taking into consideration strong and salt laden winds and sunshine. Wind breaks and shading may be needed to prevent food plants drying out, as winds tend to be stronger at high level. Wooden structures decay at a faster rate than on less exposed sites. Avoid solid walls which can pose problems with turbulence. Fruit and vegetables will grow well with the high light levels but remember to provide shelter for people to sit and enjoy the garden. Access will need to be considered for maintenance too.

Trees require deeper soils than shrubs and perennials. Beds for growing should be incorporated into the roof at the time of design/construction. Containers can be added after completion or in conversion projects but may then look uncoordinated and lack an integrated irrigation system.

Intensive green roofs need regular maintenance, relatively deep soils and an irrigation system. Consideration should be given to storage of materials and equipment and composting of waste plant material.

Roof Garden

One Brighton Development



A pioneering example of incorporating food growing in developments; 28 rooftop mini allotments were included for residents in One Brighton, a low carbon development built in 2009.

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Atriums/courtyards

Buildings with atriums or courtyards with adequate exposure to sunlight can create opportunities for food growing. Such situations will often create micro-climates allowing plants such as tomatoes and citrus fruits to be cultivated. Ground level beds or raised beds can be used, as well as wall climbing plants. Consideration for the irrigation system and control of water run-off is part of the design stage.

These gardens will be seen up close, requiring high maintenance. Suitable for a range of developments such as hotels, business, offices, health and residential care.

Growing Area in an Internal Courtyard Bainbridge Island, Washing State USA



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Private amenity space

Balconies

Balconies can provide small spaces to grow a limited selection of plants and are particularly suited to higher density residential developments. Aspect is critical. North facing balconies overshadowed by other buildings will only be able to grow a limited variety of food plants (e.g. salads). In contrast, balconies in full sun with their plants in containers will need copious watering. Balconies overhanging from the property above may prevent rain from reaching containerised plants below.

Containers / window boxes can also be incorporated into balcony design. Railings and structures joining neighbouring balconies can be designed to support climbing / espaliered plants for shade, shelter and privacy. Loading capacity should be addressed at the design stage. There will be strict weight restrictions on balconies suspended out from the building. The provision of a balcony in a housing development can inspire an interest in plants and add to residential amenity.

Food Growing on a Private Balcony

Vertical Veg, United Kingdom



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Private Gardens





























Photo credit: Gillian Morgan


Developments of housing with private gardens provide opportunities for establishing a framework of edible landscaping as described in the edible hedges/trees and orchards sections.


Properties could have planters with suitable soil for edible crops if there are restrictions on growing in the open soil. Even where space is limited there are design solutions which can encourage residents to grow their own.


Bin storage frame used as a growing space


Outdoor amenity space – Possible locations:

Large greenfield site	Residential urban fringe	Residential development on previously developed land	Care homes, sheltered / retirement units	Health facilities	Student Housing	Mixed use development	Education	Office development	Retail, tourism and hospitality;	Hotels / Visitor Accommodation
  	   	    			 	  		 	 	 


Integrated gardens 

Communal gardens 

Roof gardens 

Internal Atriums/ courtyards 

Balconies 

Private gardens 

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C: Orchards

Benefits

- Easily identifiable produce and easy to consume.
- Can be the focus of community (school, residents etc) events e.g. apple day.
- Protects genetic diversity by planting local species.
- High amenity value with seasonal interest, an advantage over other more traditional amenity trees.
- A wide variety of trees are available to suit a range of situations, even where an amenity tree may not be appropriate.

Orchards can be created even where the availability of land is limited. An on-site orchard can be planted with just 5 trees or more.

Fruit trees can be grown on dwarfing rootstock to keep them small. Family apple and pear trees which grow different varieties on one tree can be planted on small sites; fruit trees can be trained against walls as espaliers or grown as screening. Development proposals for extensions which require the felling of a tree provide the opportunity to plant a productive tree as a replacement and will provide an investment for the future.

Many fruit and nut trees will be productive soon after planting and will not only become more productive with time but will gain in biodiversity value. Sussex varieties will grow well in the local climate and soil.

On small sites, trees will need training, pruning, watering and feeding - being more suitable for individual care or written into a professional landscaping contract. Trees can be allowed to grow more naturally on larger sites.

Photo credit: Brighton Permaculture Trust



Orchards:

Planted on land surrounding a housing estate, Brighton

Orchards / fruit trees – Possible locations:

Large greenfield site	Residential development Major/minor	Residential extensions	Care homes, sheltered/retirement units	Health facilities	Education

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D: Therapeutic gardens

Benefits

- Private space for contemplation and family relationships
- Communal activity with shared objectives
- Mental & physical well being
- Activating memories of food and growing

Therapeutic gardens are usually secure and private in courtyard settings with high visibility from inside the development.

Design should take into consideration the garden's high amenity value and the provision of places for visitors and residents to sit.

Paths should enable use by all residents and the garden should have level access. Therapeutic gardens mostly provide an opportunity to grow herbs amongst other plants with sensory interest. A display fruit and vegetable garden will help conversations and jog memories with dementia patients. Poisonous plants must be avoided.

Responsibility for maintenance will depend on the nature of the centre. Although gardens will generally be the responsibility of contract gardeners, sessions run for service users may be led by experienced gardeners. There may be therapeutic benefits for volunteer gardeners from amongst family and friends, but this will need organising.

Gardening at the Dementia Project, Brighton



A quiet, secluded garden with temporary, accessible growing spaces

Therapeutic gardens – Possible locations:

Care homes, sheltered/retirement units	Health facilities

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E: School gardens

Benefits

- Supporting curriculum learning by weaving food growing across the curriculum for different school years.
- Improving physical health & mental well-being of pupils by learning about healthy eating and increasing attainment levels.
- Encouraging enterprise skills & improving behaviour by generating pride in selling the food grown or processed.
- The aim is to get children growing, cooking and eating; learning good habits and skills from an early age.
- Children will pass their knowledge onto to adults.

Designing an urban school or nursery garden is much the same as any communal growing space.

A common design is for each class to have a raised bed accessible from hardstanding. Planting beds will need to be narrower than usual to enable children to reach across.

New schools in dense urban areas that have to provide their playgrounds and sports facilities on the roof will need to follow the advice for roof gardens. Composting bins, water butts and storage areas are essential. A greenhouse is useful in a sunny, south-facing position, sheltered from strong winds. A wetland area will increase biodiversity. This could also be in a raised bed if the ground is unsuitable.

If there is space it is a good idea to design an outside teaching area with seats under shade. Gates, entrances, paths and surfaces should enable access by a full range of pupils with special needs. It is important that plants are not poisonous or irritants. Schools will want the design to promote sustainability in the sourcing of plants and materials.

School Forest Garden



Hertford Junior School, Brighton



Photo credit: Brighton Permaculture Trust

Permaculture forest garden built on the school grounds. The design included a forest garden, shelter belts, edible plantings, a wildlife pond and outdoor learning areas.

School gardens– Possible locations:

Schools	Nurseries
	

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F: Meanwhile gardens

Benefits



- Opens up vacant sites and reduces the impact of hoarding that is normally placed around a development site, sometimes for many years.
- Can be a successful way for developers to engage with local communities with initial facilitation organised by the developer through local organisations.
- Provides residents with an opportunity to demonstrate an interest in growing.
- Meanwhile gardens can be a stepping stone for new growers to find a more permanent site.

Temporary or “meanwhile” gardens on sites pending redevelopment can be created with containers such as builders’ bags, boxes or skips.

These are planted and can be moved to other vacant sites when the site is required for development. Suitable for hardstanding.

Temporary gardens are likely to be more appropriate in containers as planting directly into the soil, e.g. on previously developed land, may not be appropriate due to concerns regarding safety and potential contamination.

Meanwhile gardens – Possible locations:

Large greenfield site	New residential development on previously developed land
	

Temporary Garden in Portable Containers Kings Cross, London



Photo credit: John Sturrock

Tips, crates and other portable containers can create thriving meanwhile gardens. These containers were moved to another temporary site.

Some suggestions for suitable locations

This is not a comprehensive range of possibilities and we would welcome more designs.

	Edible Landscape	Public realm	Edible hedgerows	Vertical walls	Integrated Gardens	Communal gardens	Roof gardens	Internal Atriums/ courtyards	Balconies	Private gardens	Orchards	Therapeutic gardens	School gardens	Meanwhile gardens
Large greenfield site	✓	✓	✓		✓	✓				✓	✓			✓
Residential urban fringe Major/minor	✓		✓	✓	✓	✓	✓			✓	✓			
Residential development on previously developed land Major/minor	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓			✓
Care homes, sheltered/retirement units	✓		✓	✓		✓		✓				✓		
Health facilities	✓		✓			✓						✓		
Student Housing	✓		✓				✓		✓					
Mixed use development (including residential)) Major/minor	✓	✓	✓	✓		✓	✓		✓					
Education			✓	✓	✓						✓		✓	
Office development Major/minor	✓	✓	✓				✓	✓						
Industrial premises	✓		✓											
Retail, tourism and hospitality	✓	✓					✓	✓						
Hotels / Visitor Accommodation	✓	✓					✓	✓						

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5. Practical considerations

How food growing can be successfully incorporated into new developments will be subject to a range of factors dependent on the purpose, scale and location of the development. It will be rare to find there is no opportunity to integrate edible planting into the design. However, there are some key considerations to ensure the planting will be successful into the future.

The following factors should be taken into consideration at design stage:

- Space
- Access
- Aspect and light
- Water
- Energy
- Wind
- Soil/growing medium
- Compost
- Contamination
- Pollution
- Storage
- Planting

Space

Ideally, food growing would take place in the open ground in private or communal gardens. Some developments may have no open ground available but could consider utilising rooftops, walls or balconies as growing spaces. Raised beds and containers could also provide solutions.

Some developments may have limited space in which case landscaping could include productive plants such as herbs, fruit trees, climbing edibles, hedgerows or a green roof.

Land that is considered unsuitable for buildings i.e. land susceptible to subsidence or awkward pockets may be suitable for the food growing space.

Raised Beds

Reasons for building raised beds might include presence of contaminated, compacted or thin soil, to protect archaeological remains, to introduce a variety of different soils, to provide growing space where there is hardstanding or on roofs or to enable easier access for gardeners with limited mobility. It is generally preferable for reasons of aesthetic and management to grow communally in the open soil. If privatised plots form the design model rather than communal gardens, the opportunity for a sense of community and enjoyment of food growing and sharing may be lost. Management issues may also arise if individually allocated beds become disused.

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Courtyard of Residential Development incorporating raised beds

Wellend Villas, Brighton



Photo credit: Lou Parkinson

Raised beds and growing containers for food growing in private and secluded central courtyard for communal access

Whilst there are several advantages for growing vegetables in raised beds, beds can dry out quickly so an easy source of water is required. Conversely, raised beds will slow water run-off from areas of hardstanding, contributing to a sustainable drainage scheme. Compost will also need to be replaced after a period.

Raised beds of wooden construction will eventually fall apart. Robust and long-lasting materials and high quality of construction should be used. It will be important to consider whose responsibility it will be to repair and replace the beds.

Beds can be built at different heights to be more inclusive (and to allow deep rooting plants). Some gardeners may need to sit on the edge and reach into the bed. To allow a raised bed to be accessed from both sides would generally require the bed to be around 1 metre wide. This width enables all areas of the bed to be reached without standing in the bed. There are no rules for the length although ideally they should be orientated to run north to south so that they receive even sunlight levels. A long bed can be subdivided for sharing. Raised beds do not need to be rectangular!

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Containers

Containers are likely to be high maintenance and will require regular, often daily watering depending on their size, location and planting. They may be the best solution for placing on hardstanding or for use in meanwhile gardens.

Access

The food growing space must be accessible both for people and materials.

Consider who the growing space will be used by and how they will be able to reach it through the development (e.g. staff, residents, general public, elderly people, children, vulnerable users, etc.). For example, will access paths to and between food growing plots allow for people of all ages and abilities to take part (levels, widths, surfaces, heights). Where the bed will be mainly used by children, narrow beds up to 120cm wide will enable children to access from both sides. Heavyweight or dirty materials such as compost and tools may need to be taken through the development – a particular issue for rooftop or balcony growing.

Raised Beds Accessible by Path Robert Lodge, Brighton



The communal garden is on one level with access to raised beds. The sides of the beds are wide enough to sit on so gardening can be done whilst sitting down and benches throughout mean the space is widely accessible.

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Aspect and light

Food plants require exposure to direct sunlight during the growing period. Ideally growing spaces should be south or west facing and not permanently shaded from direct sun by other structures, buildings, or trees.

In partial shade, areas for food growing will need careful design choice of suitable plants and full shade should be avoided. (see Appendix 4 for planting suggestions)

Natural surveillance from homes that overlook the space will increase security as well as provide an attractive outlook.

Wind

Adequate shelter needs to be planned into any growing space to allow crops to thrive. Exposure to wind, especially salty sea wind, can damage plants and hinder their growth. Building materials must also be robust and structures well secured. This is an issue for all growers in the Brighton and Hove area, but particular consideration is needed on roof gardens and balconies and sites exposed to coastal winds.

Water

Any food growing will need a reliable water supply. The incorporation of rainwater collection into any design is preferable, both for sustainability but also for plant health. Easy access to mains water may be necessary as a backup for dry weather or if rainwater collection is not possible. Reliance on mains water, if not monitored, can lead to over watering and wastage and future occupiers will have to pay the water bills.

Irrigation systems may be built into the planting areas to ensure water is directed where it is most needed.

Consideration should also be given to water delivery and storage systems to ensure risk of Legionella is controlled.

Retrofitting infrastructure will generally require planning consent for future occupiers, so ensure the correct infrastructure is installed during construction.



Photo credit: Greg Pye

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Energy

Power for lighting, tools, any social area or an area for food preparation and cooking should be considered at design stage. Retrofitting would trigger not only the need for planning consent for future users but significant investment. Solar power may be an option.

Soil/growing medium

Soil is an essential component for growing food which will vary according to the setting. Rooftop or container growing may require a more lightweight free draining growing medium. Building rubble and subsoil should be cleared from areas to be used as gardens. On difficult sites it may only be possible to dig out tree pits or beds and fill with an approved planting medium.

Contaminated Land

Soil in urban settings may need to be checked for contamination and quality.

The suitability of the land for growing food should be assessed as previous or current land use could have created contamination of the soil. It is the developer's responsibility to ensure any risks posed are appropriately managed. Depending on the circumstances, soil contamination can be overcome by use of containers or raised beds or by replacing soil.

Contaminated Land Led to the Implementation of Raised Beds Brighton Greenways



After this public site in Brighton was found to have contaminated soil, raised beds made of recycled materials were implemented as an alternative.

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Composting

All food growing requires on-going inputs to maintain the fertility of the growing medium.

On larger sites, provision of on-site composting should be designed in from the outset. This will also help manage organic 'waste' generated within the development. On restricted sites space could be allocated for a Hot bin which is roughly the same size as a wheelie bin. Houses that have individual gardens can also include space for composting. Developments which consist of flats can include communal composting space – Brighton & Hove is unique in running a community composting scheme on 25 sites across the city.

If developers would like to incorporate a community composting facility which could form part of a new development, adding a unique selling point and helping to reduce carbon footprint, technical guidance on dimensions needed for a communal compost bin can be found at

<https://bhfood.org.uk/resources/food-and-planning-advice/>

Community Composting for Local Residents

Brighthelm, Brighton



Photo credit: Brighton and Hove Food Partnership

Composting bins are provided for residents to manage household food waste. The product of which is used by those growing food in their private gardens/balconies. The bins require maintenance and usage instructions.

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Pollution

Air quality: designers should assess whether the site would be affected by air pollution and choose the design of food growing space accordingly such as internal courtyards/balconies/roofs, planting barrier hedges. Parts of Brighton, Hove and Portslade, and part of Rottingdean High Street, are in an Air Quality Management Area⁴.



Photo credit Gillian Morgan

Storage areas and seats built into the ends of raised beds

Storage

Adequate provision for the storage of tools and equipment will need to be integrated into the design. Retrofitting infrastructure will generally require planning consent so it is best to show solutions on the development's planning application.

Planting

Planting of perennial plants, herbs and fruit and nut trees will provide the structure of the design. Annual edible plants require more maintenance than ornamental plants and edible perennials such as fruiting shrubs and trees are easier to manage. If little or no maintenance is to be provided, consider using wild fruiting species such as wild plums, blackthorn, cherry, crab apple, hazel and using species local to Sussex. Fruit trees trained as espaliers, cordons, fans and stepovers, require twice yearly pruning. Consideration should be given in design and management to the ultimate height and the spread of canopy and roots. Fruit trees can be grown on dwarfing rootstock for constrained sites. On highly visible amenity areas think about edible flowers and plants for all year interest. Take care not to use poisonous or toxic plants in a design that encourages users to pick produce.

Cost

There is no reason for a food growing scheme to cost more than a non-edible scheme, but a key consideration is the cost of repairs and maintenance. These will be reduced if the original provision has been well thought out, is well designed and robust. The cost depends on the size, ambition and type of growing space being created.

It may be necessary to purchase suitable soil, on the other hand, fruit trees may be less expensive than amenity trees. The developer may decide to fund a facilitator to set up a group or provide weekly sessions to support the growers in gaining the necessary skills to maintain the space.

Once a project is up and running, small pots of funding may be available or growers can source materials (compost, manure, building materials) locally. Growers are often keen to be actively involved in identifying project needs and can be effective in sourcing free materials.

⁴ <https://uk-air.defra.gov.uk/aqma/list?la=B&country=all&pollutant=all>

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Food growing projects can deliver substantial cost benefits to developments (reduction in grounds maintenance costs, increased responsibility for keeping public areas clean and tidy, security and surveillance).

Funding for Maintenance Wellend Villas, Brighton



Photo credit: Lou Parkinson

The gardening group formed as a sub-group of the resident's association at Wellend Villas.

They applied for an initial grant through Southern Housing's Community initiatives fund to set up the communal garden. The group have led on the development of the garden, the planting and care and are actively looking into further funding for ongoing maintenance.

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6. Management and Maintenance

Management and maintenance are also key considerations at the design stage to ensure that the benefits of including a food growing space within new development are realised and can be ongoing. Information is set out in this section to assist developers, landowners and occupants with this matter.

Actions through the planning system which can help to ensure risk is managed at the planning stage of development are:

- ❖ Requiring applicants to submit landscape management plans showing how the food growing space will be managed and maintained with the planning application; and
- ❖ Using planning conditions, S106 planning agreements and Informatives that will secure management systems to be put in place prior to the occupation of the development.

Management responsibility

Adequate resourcing for long-term management and maintenance should be considered from the outset because this will influence the appropriate type of landscaping / food growing spaces provided. The responsibility for ongoing management is also an important matter:

- Who has ultimate responsibility for the land e.g. developer, freeholder?
- How will on-going management and maintenance of the growing areas be arranged - by a caretaker, external contractor or estate manager representing the landowner or by the residents / occupiers of the development?

Once schemes are complete, on-going maintenance is an important factor in ensuring the open space is well used, valued and safe. Getting aspects of the design right in the first place will help ensure future success.

Involvement of urban food growers with experience of management and maintenance in the initial design stage could be beneficial, especially if they are likely to have an ongoing role in helping to establish the garden. This means not only thinking about the layout and aesthetics but also the needs of the users.

Prior to occupation, it would be advantageous to put a system in place for allocation of space, training, advice etc. It is more likely that interest would be generated and maintained if garden plots were run as clubs with a knowledgeable grower from the community.

On developments where the developer has a long-term interest in the success of the scheme (in reputational terms or due to land ownership) the professional support of an experienced gardener is valued in terms of social cohesion and shared responsibility for the new development. Social landlords tend to take this approach as they have a more long-term interest than traditional developers. This is changing as private developers work on masterplans for larger sites to be developed over many years. A commitment to long term success could entail employing a gardener or bringing in an experienced grower to encourage the new occupiers and provide them with ongoing, regular support for at least a year until they have gained confidence. On a residential site the facilitator could start gardening clubs and encourage residents to get to know each other by being out in the garden, growing and sharing food.

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Ongoing maintenance

- What role is there for the occupants of the development?
- Who will be growing the food?

Each design option will have its own maintenance regime. Where there is an easily identifiable community of users (e.g. residents, schools), they may wish to have a hands-on role in growing. Hospitality businesses (cafes/hotels/restaurants) may employ a dedicated food grower to provide crops as part of being a sustainable food business. Where the community of users has a more passive engagement with the setting e.g. on a business park, it may be more appropriate to start with landscape contractors. (The table below illustrates the relationship between different types of food growing and maintenance regimes). Developers could investigate local options to provide ongoing maintenance on their behalf.

In developments with temporary, seasonal or transient residents e.g. student accommodation, rented flats for single people, low maintenance edible landscape may be more appropriate. Green roofs installed here could have the potential to be retrofitted to a roof garden (loading, access, water etc) should the nature of the occupants change over the life of the building.

There is always the possibility that eventual users will not buy into such food growing projects. This is why it's important to work through these matters at design stage to create a resilient design.

Different models for managing ongoing maintenance will require different things from the landowner in order to deliver a meaningful project. The degree to which a site is self-managed by occupiers through to the use of contractors where there is no obvious user group may alter over time. For example, contractors would maintain areas of specialised design or carry out structural work and residents would do the daily growing.

Four main models are considered here, but there may be scope for mixed options, so long as responsibilities are clear.

- Landowner control
- Community-led projects
- Partnership projects
- Meanwhile spaces

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Landowner control

Landowners employ contractors to implement and manage the landscape plan. Requires a landscape regime that is affordable for tenants into the future.

“Community” led projects

a) Self-managed shared space

Led by occupiers of the development e.g. residents on a housing development, employees in a business park or office roof garden.

These projects depend on passion and activism of a group of people who are determined to grow food locally. Arrangements could be a garden committee with a constitution or a general users forum for the whole development. They will often sit under a development user group or a residents' association. Any ground rules for use of the growing space will be set by the landowner and then the garden will be self-managing.

The landowner, occupier or estate management company can assist growers by:

- Engaging with all the occupiers to ensure buy in and inclusivity.
- Promoting the project through resident/staff newsletters,
- Giving permission and providing a simple agreement outlining expectations (lease, licence, terms of use). Many groups operate without a formal lease or a licence, however, it is good practice to set out the basics in writing around the terms of the agreement.
- Liaising with grounds maintenance contractors to review maintenance of the food growing area, agree working practices and demarcation of responsibilities e.g. structural work to be undertaken by the contractors.
- Identifying a key contact in the site management organisation to liaise with growers.
- Advising on any need for public liability insurance, risk assessment for activities or open events, health and safety implications of the site.
- Clarity over responsibility for repairs & renewals.

Larger social housing developers may have a community engagement officer; smaller developments may provide support through a local organisation with community growing expertise for the first year to ensure a successful start. It may be an idea to offer taster sessions or workshops to inspire occupants.

The primary role of the landowner's representative in securing a long-term future for the edible planting is to identify the need and aspiration for food growing among new or existing occupiers of the development. Measures need to be put in place to sustain the project in the case of leadership change.

Benefits of community managed growing spaces:

- Local residents have support from the landowner from the beginning of the project.
- Spaces can be designed to accommodate food growing from occupation of the development.
- Less outgoing expenditure on third party organisations.
- Empowering to communities.
- Clear demonstration to residents of landlord investing in the community.

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Community-Led Gardening Project

Albion Community Garden, Brighton



Photo credit: Albion Community Association

Managed by Albion Community Association, this communal garden was built as part of the Brookmead Extra Care residential scheme built by Brighton & Hove City Council. The community organisation organise events and gardening activities and a joint composting scheme.

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b) Individually allocated beds

When planning the garden, a decision needs to be made about whether all or some of the growing plots are communal or whether they are allocated to individuals. If the latter, then a decision should be made about who gets the plots – first come first served or priority to those without gardens or who have children. It is also good practice to have a simple agreement and to charge a notional annual fee, so that if the garden or plot is not used then it can be reallocated.

This can be managed by the estate management company or by an on-site organisation/manager. Estate management companies tend not to have experience of managing shared facilities such as gardens. Experience of renting car parking spaces does not transfer well to allocating and managing individual growing plots. Having a growing plot is treated as a private transaction rather than a method of managing a shared space for all to enjoy as part of the amenity of the development. If a bed is unallocated and no longer generating an income, it is taken out of service to the detriment of the overall provision of open space within the development.

Partnership Projects

In many situations there could be a combination of local organisations and individuals interested in setting up the growing project. For example, a local organisation or charity may have secured external funding to support food growing in the area and be looking for suitable locations. Even if a local lead for the project isn't forthcoming from the on-site community, a food growing project may still be welcomed in the area.

Often, partner organisations can act as an intermediary to support resident involvement, facilitate workshops and deliver training sessions. In this case, the role of the landowner is primarily to work with the partner organisation to ensure that it consults meaningfully with the local community.

As estate management organisations tend to have limited experience of resident/employee involvement, this option reduces the burden from their staff team. They may assist by:

- Promoting the project locally and through resident / staff newsletters
- Giving permission and providing a simple partnership agreement outlining expectations.
- Liaising with grounds maintenance teams to alter maintenance of the area.
- Supporting the development of a group to take on the long-term site management.

Meanwhile spaces

Many sites with future plans have been used for temporary food growing under the idea of 'meanwhile uses'. In this situation it is important that growers understand this temporary nature and that a licence is set up. It is also worth thinking about a notice period in relation to the growing season and the transferability of any materials or growing beds that are built.

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Edible planting in the public realm

Stanford and Cleveland Community Garden, Brighton



Photo credit: Stanford and Cleveland Community Garden

This 30ft by 20ft community garden is situated on an open street corner. It won the Best Community Garden award 2014. It shows passers-by that it is possible to grow your own food which includes fruit trees and soft fruit.

<https://community21.org/partners/prestonpark/directory/food/14067>

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Maintenance of Edible Spaces				
	Maintenance requirement <ul style="list-style-type: none"> • L Low • M Medium • H High 	Grounds maintenance contractors	Self-managed and / or contract gardeners for all or part	Individual occupiers
Edible Landscaping	L	Y		Y if incorporated within individual plots/ gardens.
Forest Gardens	M		Y	
Communal gardens	H		Y Potential for residents to take on management for all or some communal amenity open space.	Y if raised beds allocated to individuals
Roof gardens	H		Y Potential for staff or residents to take responsibility for areas under direction from facilities manager	Y if raised beds allocated to individuals
Internal Atriums / courtyards	H	Y		
Orchards	L		Y Pruning under specialist guidance	Y if trees distributed across private gardens
Therapeutic gardens	H		Y Potential for user groups to participate in gardening activities led by professional	
School gardens	H		Y Lead member of staff to organise & train other staff to carry out tasks and run educational sessions. Potential for parent/carers to be involved; holiday cover needed for watering; involvement of corporate volunteering teams for major tasks.	
Meanwhile gardens	M		Y Community group leases site from developer	

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Resources

Planning and Food Growing

Sustain (2014) Planning sustainable cities for community food growing, https://www.sustainweb.org/publications/planning_sustainable_cities/#

TCPA Practical Guides – Guide 8: Creating health promoting environments <https://www.tcpa.org.uk/tcpa-practical-guides-guide-8-health>

TCPA 2019, [Practical Guide on “Edible Garden Cities”](#). This practical guide provides an overview of the policy requirements, background principles and current practices for embedding sustainable food systems from the outset in new development.

Blog on productive urban landscapes from Katrin Bohn (<http://blogs.brighton.ac.uk/pulr/>)

Viljoen, A. & Bohn, K. (eds.) (2014) Second nature urban agriculture: Designing productive cities. United Kingdom: Routledge.

Design & technical

https://www.sustainweb.org/publications/grow_more_food_top_tips/

<https://www.sustainweb.org/publications/urbanfarmingtoolkit/>

https://www.sustainweb.org/publications/edible_cities/

Greenspace Scotland, 2013, *Our Growing Community Resource Pack* developed to help Scottish communities explore new places and more ways to grow their own fruit and vegetables. <https://www.greenspacescotland.org.uk/food-growing-publications>
https://drive.google.com/file/d/12ty4r_sJ2mz4OtiVukKzoxAWL-VpgUpd/view

Environmental Protection UK, 2014, *Growing edible Crops*. produced to explain the potential health risks of growing edible crops where the condition of the soil may not be known and to provide information on what can be done to reduce these risks. <https://www.environmental-protection.org.uk/resource/growing-edible-crops/>

https://www.groundwork.org.uk/wp-content/uploads/2019/08/Air_Quality_GI_Toolkit_for_Schools.pdf

<https://www.farmgarden.org.uk/system/files/workplacegrowing12014.pdf>

<https://cris.brighton.ac.uk/ws/portalfiles/portal/4752412/Mikey+Tomkins.pdf>

Management

https://www.sustainweb.org/publications/capital_growth_what_we_learned/

https://www.sustainweb.org/publications/edible_estates/

Practical guide to help urban food growers incorporate wildlife-friendly practices and principles into their gardens. https://www.sustainweb.org/publications/london_grows_wild/

<https://www.groundwork.org.uk/themes/landscape-design-and-management/>

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Appendix 1 Policy Framework

National Policy

The National Planning Policy Framework

The National Planning Policy Framework specifically recognises the role of food in creating healthy communities. Local planning authorities should ensure the provision of safe and accessible green infrastructure, access to healthier food and allotments to achieve healthy, inclusive and safe places which enable and support healthy lifestyles (paragraph 91).

The Framework confirms that the creation of high-quality buildings and places is fundamental to what the planning and development process should achieve. (NPPF para 124)

National Planning Practice Guidance

Planning Practice Guidance recognises the multiple functions of green infrastructure:

- Building a strong, competitive economy
- Achieving well-designed places
- Promoting healthy and safe communities

This PAN has been compiled to ensure that opportunities for recreation, exercise, social interaction, experiencing and caring for nature, community food-growing and gardening can improve the wellbeing of our neighbourhoods and bring mental and physical health benefits to residents as required by national guidance.

Planning Practice Guidance also highlights the role of planning in creating a healthier food environment.

“Planning can influence the built environment to improve health and reduce obesity and excess weight in local communities. Local planning authorities can have a role by supporting opportunities for communities to access a wide range of healthier food production and consumption choices.”

National Design Guide

The National Design Guide 2019⁵ sets out the characteristics of well-designed places and demonstrates what good design means in practice. It is based on national planning policy, and forms part of the Government’s collection of planning practice guidance. It covers the built form as well as the quality of the spaces between buildings.

In summary, the National Design Guide sees well-designed places as those that are integrated within a network of greenspaces. Public, shared and private outdoor spaces should contribute to biodiversity, water management, climate change mitigation and resilience. It recognises that the inclusion of activities such as play, food production, recreation and sport will also have benefits for health, well-being and social inclusion. However, it is not enough for spaces to be well designed at the outset; maintenance and management regimes should be based on an understanding of the

⁵ MHCLG, 2019, National Design Guide Planning practice guidance for beautiful, enduring and successful places
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835212/National_Design_Guide.pdf

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costs for occupants or users, to ensure longevity. “Well-designed places consider management and maintenance regimes from the early stages of the design process.”

This PAN reflects some key principles relating to the definition of good design and the relationship between buildings and spaces.

Public Health

Public Health England include “Access to fresh, high quality affordable food” as a healthy community indicator in their health and urban planning toolkit.⁶

NHS England guide, “Principles 4-8 Design, deliver and manage”⁷ looks at how communities can be designed in a way that encourages people to live healthier, more sustainable lives. The guide covers the key elements of developing healthy places including a significant chapter on healthier eating, access to affordable healthy food and food growing.

- “Development partners should work with the community to create and sustain areas in new developments where food could be grown.”

Include opportunities to grow food

New developments provide an opportunity to embed food growing in the local environment from the outset. When people grow food in allotments or community gardens and at home they can learn about horticulture and healthier eating and gain access to affordable vegetables and fruit. They are able to connect with nature, meet and share with neighbours, engage in physical activity and enhance the appearance of their neighbourhood. (NHS, 2019)

⁶ <http://www.apho.org.uk/resource/view.aspx?RID=93163>

⁷ NHS, (2019) Putting Health into Place: Principles 4 - 8 Design, Deliver and Manage
<https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns/>

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Brighton and Hove City Plan

Brighton and Hove City Plan Part One (2016)⁸

Creating a more sustainable city is at the heart of the vision and strategy for the City Plan. The Strategy for the future of Brighton & Hove identifies the need to tackle the causes and effects of climate change. Adopting environmentally friendly practices such as growing more local food is one of the ways this can be achieved.

The aim is for all new development, whether large or small, to incorporate sustainable design features. All development proposals including conversions, extensions and changes of use will be expected to demonstrate how the development encourages food growing (Policy CP8 Sustainable Buildings). Productive planting in the public realm also contributes to an attractive city (CP13 Public Streets and Spaces).

The City Plan promotes and supports access to healthier lifestyles including access to healthy food. Planning will contribute to this city-wide objective by recognising, safeguarding and encouraging the role of allotments; garden plots within developments; small scale agriculture and farmers markets in providing access to healthy, affordable locally produced food options. (CP18 Healthy City). There are strong links between this policy and the City Plan policies on Urban Design (CP12); Public Streets and spaces (CP13); and Open space (CP16) where urban design, the provision, design of and access to open space (including natural green space) and the design of the public realm can encourage more active lifestyles.

The City Plan recognises that space for local food growing provides an opportunity to improve the environment and help to develop community cohesion and improve health outcomes (SA6 Sustainable Neighbourhoods). It also recognises that larger scale developments offer specific opportunities, e.g. the development of Toad's Hole Valley and Court Farm (Policy DA7 – Toad's Hole Valley) and new landscaping at Valley Gardens (Policy SA3 Valley Gardens). New allotments and local food production in the urban fringe will contribute to city's green network (Policy SA4 Urban Fringe).

Open space standards are set for new development (CP16 Open Space). Community gardens and community open space initiatives will help provide access to nature, local food growing and health benefits as well as social cohesion. If on-site food growing is designed to provide flexibility in use it will be able to adapt to changes in trends. A standard has been set for 'allotment' provision, however, it is recognised that, for many developments, innovative solutions will need to be found to help meet the city's open space requirements. This PAN provides ideas on how this might be achieved.

⁸ https://www.brighton-hove.gov.uk/sites/brighton-hove.gov.uk/files/FINAL%20version%20cityplan%20March%202016compreswith%20forward_0.pdf

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Proposed Submission City Plan Part 2 (April 2020)⁹

The City Plan Part Two states that the provision of useable outdoor amenity space is part of securing good design and a good standard of residential development in the city. This is a requirement for all scales of residential development (DM1 Housing Quality, Choice and Mix). Not only does this improve the health, well-being and general quality of life of the city's residents, it has the potential to support and enhance local biodiversity.

It is accepted that in some schemes it may be difficult to provide outdoor amenity space whilst maximising development potential (DM19) but there are many ways of achieving this e.g. gardens, balconies, patios, roof terraces and shared amenity spaces in flatted forms of development. This PAN shows how these amenity areas can also provide space for food growing.

Communal space and suitably landscaped outdoor space for informal recreation, including space that gives residents the ability to grow plants and food is a requirement in residential accommodation to meet the specific accommodation needs of older people (DM4 Housing and Accommodation for Older Persons).

Landscape plans which accompany planning applications should facilitate greater flexible and multi-functional use including food growing where practicable. High quality planting and landscape materials appropriate to the site and its proposed use including the planting of native species, new trees, hedges and the use of permeable hard landscape materials are all part of good design. In addition, plans should include provision for viable long-term maintenance and durable materials and include a funded maintenance plan. (DM22 Landscape Design and Trees)

On major and public realm schemes a Green Infrastructure plan and details of structural landscaping, which contribute to the existing overall landscape quality of an area, will need to be agreed with the council prior to the determination of a planning application. (DM22 Landscape Design and Trees)

⁹ <https://www.brighton-hove.gov.uk/content/planning/planning-policy/city-plan-part-two>

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Other City Strategies

The provision of new food growing spaces is part of wider strategic initiative to work towards a sustainable food system in the City coordinated through Brighton & Hove Food Partnership whose members include representatives from the public health team at NHS Brighton & Hove, the City Council, Food Matters and for a Councillor from the Sustainability Cabinet.

Brighton & Hove Food Partnership is a member of the UK Sustainable Food Cities (SFC)¹⁰ network. This is a growing movement of over 50 towns, cities, boroughs and regions that share the same approach for transforming food, food culture and who recognise the role of food as a catalyst for change in addressing key economic, environmental and social issues.

The Brighton and Hove Food Strategy Action Plan

The Brighton and Hove Food Strategy¹¹ aims to achieve a healthy, sustainable and fair food system for everyone in the city and beyond. Launched in 2006, refreshed in 2012 and 2018, the Action Plan sets out how collectively as a city we will achieve a vision of a healthy, sustainable and fair food system for Brighton and Hove. The action plan is based on community engagement involving almost 100 partners including 26 separate City Council departments, and a year-long consultation with over 600 people to gather commitments and ideas from across the city and beyond. The strategy has been adopted by Brighton & Hove City Council and the Local Strategic Partnership. The Planning Advisory Note 2011 was a key achievement of the action plan.

The Brighton and Hove Food Strategy Vision

Our vision is a city where everyone has the opportunity to eat healthy food from sustainable sources

- It is a city where residents know where their food comes from, understand and celebrate the delicious diversity of food that changes with the seasons and feel a connection to the people and the surrounding land and sea that provide it.
- It is a place where everyone feels confident in cooking nutritious meals, where people are healthier and where, from a young age, we learn to grow food and to cook using fresh ingredients. [...]
- Everyone lives within walking distance of a source of fresh, affordable food that has been farmed, caught or harvested in a sustainable way. [...]
- Communities have access to land and buildings to support food production through joint-buying or other community investment initiatives.

Milan Urban Food Policy Pact

Brighton and Hove is a signatory city to the Milan Urban Food Policy Pact¹², an international agreement committing to healthy, sustainable food.

“Acknowledging that urban and peri-urban agriculture offers opportunities to protect and integrate biodiversity into city region landscapes and food systems, thereby contributing to synergies across food and nutrition security, ecosystem services and human well-being;”

¹⁰ <http://sustainablefoodcities.org>

¹¹ <https://bhfood.org.uk/wp-content/uploads/2018/11/Final-FULL-WEB-Food-Strategy-Action-Plan.pdf>

<https://bhfood.org.uk/resources/food-strategy/>

¹² <http://www.milanurbanfoodpolicypact.org/text/>

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Appendix 2 Brighton & Hove Checklists

Health Impact Assessment Checklist

A Health Impact Assessment guidance and checklist has been produced by the council. This checklist brings together various local planning policy requirements relating to health and aims to support applicants who are either required to undertake HIA, or who are required to demonstrate how their development minimises adverse impacts and maximises positive impacts on health.

The guidance can be found on the council website:

<https://www.brighton-hove.gov.uk/content/planning/planning-applications/planning-policy-advice-and-guidance>

Sustainability Checklist

The sustainability checklist is an online tool that is required to be completed for all residential planning applications. The following extracts from the checklist are of relevance to growing food

Water

Does the development include proposals to:

- Incorporate rainwater butts
- Incorporate rainwater harvesting system
- Incorporate grey water recycling system
- Carry out feasibility study for rainwater harvesting and/or grey water recycling

Building standards

Will any dwellings be evaluated under a certified scheme to assess sustainability?

- No Certification scheme will be used
- Home Quality Mark one star
- Home Quality Mark two star
- Home Quality Mark three star
- Home Quality Mark four star
- Home Quality Mark five star
- PassivHaus
- Other, please specify

Growing food

Is there provision for food growing included on the development site?

Where is it located?

- Roof
- Ground level
- Other, please specify

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Details of food-growing space

- Raised beds (sqm)
- Allotment (sqm)
- Dedicated area on ground level (sqm)
- Communal growing space (sqm)
- Fruit trees (specify number of trees)
- Nut trees (specify number of trees)

Will introduced soil be prepared to BS Top Soil Standard?

Will fruit trees be planted away from busy roads?

Will there be a gardener to oversee these facilities?

Waste

Will composting facilities will be provided?

The checklist can be found on the council website:

<https://www.brighton-hove.gov.uk/content/planning/planning-applications/sustainability-checklist>

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Appendix 3 Building accreditation schemes

BREEAM Communities

BREEAM Communities is a framework for considering the issues and opportunities that affect sustainability at the earliest stage of the design process for a development. The scheme addresses key environmental, social and economic sustainability objectives that have an impact on large-scale development projects. Certain developments within Brighton & Hove are required to meet BREEAM standards. The following extracts are of relevance to food growing.

Category SE 02 – Demographic needs and priorities

Criteria CN2 Local needs and requirements.

The community and appropriate stakeholders are consulted on the local needs and requirements that are desired as part of the proposed development. Their views are then prioritised in order of desirability (low, medium and high) taking into account the local authority's strategy for the local area eg. for:

- allotment space or places growing fresh fruit and vegetables

Category GO 04 – Community management of facilities

Criteria CN1 Community facility.

All community facilities being developed during the construction phases will be managed and procedures will be in place to allow handover to a responsible party at project completion.

This could include community buildings, allotments, meeting places, areas of public access, or any other facility agreed by the community.

BREEAM Communities technical manual (2017) can found as follows:

https://www.breeam.com/communitiesmanual/content/resources/otherformats/output/10_pdf/20_a4_pdf_screen/sd202_breeam_communities_1.2_screen.pdf

Home Quality Mark (HQM)

The Home Quality Mark is a certification scheme for new homes. Developers can pursue this if they chose to do so, however it is not a local requirement. The following extracts are of relevance to food growing.

Issue 2.1 Identifying Ecological Risks and Opportunities

Title: 04 Comprehensive route - Wider site sustainability

Criteria 12: When determining the optimal ecological outcome for the site, consider the wider site sustainability-related activities and the potential for ecosystem service-related benefits.

For criteria 12, the considerations made as part of determining the optimal ecological outcome for the project must also consider opportunities for integrating ecology with wider site sustainability related activities and ecosystem service related benefits, including but not limited to the following:

1. Landscape, including design, heritage and local character, and green infrastructure.
2. Health and wellbeing:

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- a. Recreational space (including growing space, community agriculture or horticultural and allotment activities). This may feed into the 2.5 Recreational Space issue.

5. Community and end-user engagement and involvement

Issue 2.5 Recreational Space

Title: 05 Growing space

Criteria 6: Up to 3 credits can be awarded where growing space is provided in close proximity to the home. Credits are awarded depending on whether the growing space is private or communal. This space must be in addition to any space used to achieve credits in the 'Private space' or 'Communal space' criteria.

Criteria 7: Where growing space is provided in a communal area, suitable management and maintenance arrangements are in place.

Criteria 8: The local authority and local growing initiatives or groups (where present) have been consulted to determine the demand for, and suitable types of, growing space.

Criteria 9: The outputs of the consultation feed into the provision of growing space.

Title 06 Expert input

Criteria 10: Criteria 6–criteria 9 have been achieved and growing space is being provided.

Criteria 11: Expert input is sought at the design stage to inform the design of the growing space, and their advice feeds into the provision of growing space.

Criteria 12: Growing space is planted with low maintenance species in part of the area, in accordance with the expert input.

The Home Quality Mark Technical Manual can be found as follows:

<https://www.homequalitymark.com/wp-content/uploads/2018/09/HQM-ONE-Technical-Manual-England.pdf>

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Appendix 4 Edible Plants

Edible plants suitable for shade (an indicative selection)

	Light shade	Partial shade	Moderate shade	
Perennial Fruit				
Red, white & black currents	✓	✓		Good for West facing parts of the garden with afternoon sun; East facing parts of the garden with morning sun but shaded in the afternoon.
Gooseberries	✓	✓		
Raspberries	✓	✓		
Rhubarb	✓	✓		
Hazel & cob nuts	✓	✓		
Morello cherries	✓			Recommended for east and north facing walls.
William's pears	✓			
Cooking apples	✓			Early maturing varieties
Pears, apples, plums, cherries				Tolerant of East facing parts of the garden that receive morning sun but shaded in the afternoon.
Elder <i>Sambucus nigra</i>	✓	✓		
Perennial Herbs				
Golden hop <i>Humulus lupulus</i>	✓	✓		A vigorous climber will cover unsightly walls
Golden oregano <i>Origanum vulgare 'Aureum'</i>	✓	✓		
Apple Mint	✓	✓	✓	
Angelica <i>Angelica archangelica</i>	✓	✓		
Sea Kale <i>Crambe maritima</i>	✓	✓		
Wild Strawberry <i>Fragaria vesca</i>	✓	✓		
Sweet cicely <i>Myrrhis odorata</i>	✓	✓		
Red Veined Sorrel <i>Rumex sanguineus</i>	✓	✓	✓	
Babington perennial leek	✓	✓	✓	

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Types of shade

Full sun	More than six hours of direct sun per day at midsummer.
Light shade	A site that is open to the sky, but screened from direct sunlight by buildings or trees.
Partial shade	Three to six hours per day of direct sun at midsummer.
Moderate shade	A site receiving sunlight for two or three hours of direct sunlight each day at midsummer.
Heavy shade	Less than two hours of direct sun per day.

Annual vegetables

The following annual vegetables are all relatively tolerant of light shade when transplanted as young plants. They will be fairly successful in partial shade with some direct sun in midsummer but gardens that rely on these conditions will constrain gardeners.

Beetroot, carrots (baby), chard, kale, kohlrabi, leaf salads, lettuce, peas, runner beans and spinach.

List of perennial fruits suitable for growing outside in suitable locations

South facing parts of the garden are the sunniest and suitable to grow all fruit, especially those that need ripening.

Apples	Kiwi fruit
Apricots	Medlars
Blackberries	Mulberries
Blackcurrants	Peaches
Blueberries	Pears
Cherries	Plums
Figs	Quinces
Gooseberries	Raspberries
Grapes	Redcurrants

Sussex varieties of fruit

<https://sussexappletrees.co.uk/#pg-220-1>

<http://www.sussexfruittrees.co.uk/fruit-varieties/apples/sussex-cultivars/>

Further advice provided by The Royal Horticultural Society is available:

<https://schoolgardening.rhs.org.uk/Resources/Info-Sheet/Planning-a-Fruit-Garden?returnUrl=%2FResources%2FFind-a-resource%3Fso%3D0%26pi%3D40%26ps%3D10%26f%3D2%2C4%3A%26page%3D5>

<https://www.rhs.org.uk/advice/profile?PID=934#section-4>

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Appendix 5 Further Information

Food and planning - advice for developers <https://bhfood.org.uk/resources/food-and-planning-advice/>

Edible Landscaping

Viljoen, A. & Bohn, K. (eds.) (2014) Second nature urban agriculture: Designing productive cities. United Kingdom: Routledge

The term Continuous Productive Urban Landscape (CPUL) was coined by Viljoen and Bohn, working at University of Brighton. CPUL is a network of interconnected green space in which food production is fully integrated into the urban fabric. The aim is to overcome the perceived divide between town and country and, through local production and consumption, encourage healthy and sustainable lifestyles.

Edible hedgerows and trees

<https://www.growveg.co.uk/guides/creating-an-edible-hedge-for-foraging-at-home/>

<https://www.hedgesdirect.co.uk/acatalog/Edible-Hedging-Guide.html>

https://www.theorchardproject.org.uk/guides_and_advice/contamination-issues/

Vertical growing

Advice for small scale community and home growing making effective use of walls growing in containers. <https://verticalveg.org.uk/>

Green walls: <https://www.rhs.org.uk/advice/profile?pid=547>

Outdoor amenity space

Crawford Martin, 2010, "Creating a Forest Garden: Working with nature to grow edible crops", includes a detailed directory of edible trees, shrubs, herbaceous perennials, annuals, root crops and climbers. <https://www.greenbooks.co.uk/creating-a-forest-garden>

<https://www.agroforestry.co.uk/about-agroforestry/forest-gardening/>

<https://spiralseed.co.uk/making-forest-garden/>

<https://www.incredibleedible.org.uk/news/forest-gardens-part-of-incredible-edible-landscapes/>

<https://brightonpermaculture.org.uk/permaculture/what-is-permaculture/>

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Roof gardens

<https://livingroofs.org/intensive-green-roofs/>

<https://greenrooftraining.com/>

Roof gardens and balconies, practical considerations

<https://www.rhs.org.uk/advice/profile?pid=674#section-1>

Green roofs

<https://www.rhs.org.uk/advice/profile?pid=289>

[Green roof and roof garden installations](#)

<https://livingroofs.org/wp-content/uploads/2019/04/LONDON-LIVING-ROOFS-WALLS-REPORT-2019.pdf>

Orchards

<https://brightonpermaculture.org.uk/orchards-and-fruit/our-work-with-orchards-and-fruit/>

<https://brightonpermaculture.org.uk/orchards-and-fruit/sussex-apples/>

https://www.theorchardproject.org.uk/guides_and_advice/things-to-look-out-for-when-planning-an-orchard/

https://www.theorchardproject.org.uk/guides_and_advice/growing-fruit-in-containers/

Therapeutic gardens

https://www.sustainweb.org/news/sep18_sow_the_city/

<https://www.mariecurie.org.uk/blog/a-peaceful-haven-at-the-hospice/159588>

<https://www.maggiescentres.org/how-maggies-can-help/help-available/social/gardening-groups/>

School gardens

<https://schoolgardening.rhs.org.uk/Resources/Info-Sheet/setting-up-a-school-garden?returnUrl=%2FResources%2FFind-a-resource%3Fso%3D0%26pi%3D30%26ps%3D10%26f%3D2%2C12%3A%26page%3D4>

<https://www.schoolfoodmatters.org/why-school-food-matters>

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Practical considerations

Composting

<https://sussexwildlifetrust.org.uk/discover/in-your-garden/sustainable-gardening>

<https://www.rhs.org.uk/advice/profile?pid=444>

<https://www.gardenorganic.org.uk/compost>

<https://bhfood.org.uk/how-to-hub/composting-tips/>

<https://bhfood.org.uk/directory-hub/community-composting/>

Raised beds

<https://www.thrive.org.uk/files/images/Shop/How-to-build-raised-beds.pdf>

<https://www.incredibleedible.org.uk/news/soil-v-raised-beds-some-ideas/>

<https://www.rhs.org.uk/advice/profile?PID=428>

Containers

<https://verticalveg.org.uk/>

Fruit growing <https://www.rhs.org.uk/advice/profile?pid=321>

Maintenance: <https://www.rhs.org.uk/advice/profile?pid=350>

Vegetables <https://www.rhs.org.uk/advice/profile?pid=527>

Management & ongoing maintenance

<https://brightonpermaculture.org.uk/orchards-and-fruit/plant-a-community-or-school-orchard/>

<http://nationalforestgardening.org/benefits-of-forest-gardens/sustainable-food-and-other-produce/>

<https://brightonpermaculture.org.uk/orchards-and-fruit/sussex-apples/>

Sustain, 2014, Edible estates, A good practice guide to food growing for social landlords

https://www.sustainweb.org/publications/edible_estates/?section=

