



21ST CENTURY ALLOTMENTS IN NEW DEVELOPMENTS

Practical, design-led and policy-based guidance for planners and developers who are looking to include allotments in new developments





CONTENTS

Introduction	4
Terms used in this document	6
Planning and managing the new allotment site	8
Designing the new allotment site	12
Allotment site design and policy	19
FAQS	26



INTRODUCTION

Welcome to 21st Century Allotments in New Developments from The National Allotment Society.

Well-designed allotments in new developments can help councils and developers meet their statutory duties and the planning priorities required for the sustainable development of local communities. With a long-standing tradition of community management, allotments are a low risk investment with few long term commitments.

This guide provides design-led, policy-based, guidance for planners and developers who are looking to include allotments in new developments. You might be a planner, civil engineer, architect or project manager. You could be working on various stages of a new development e.g., a single housing estate, a series of new 'garden villages', or a new industrial development where allotments in the immediate residential surroundings can help to achieve biodiversity net gain. Councils and developers are increasingly recognising that allotments (as a form of green space infrastructure) have multiple benefits - extending beyond their primary role of local food production - which can help to deliver a wide range of statutory duties and policy targets in one fell swoop. The average price premium for a property with the visual amenity of a view over green space is \pounds 6,164, whilst the indicative health savings/ benefits from every physically active visit to a green space are between \pounds 3.36 and \pounds 14.34.⁽¹⁾

For councils: including allotments in new developments helps towards meeting their statutory duty to provide allotments under Section 23 of the Small Holdings and Allotments Act (1908) and achieve many local and central government targets for sustainable, well designed and thriving healthy communities.

For developers: including allotments in new developments can help discharge mandatory requirements via a low-cost low commitment input and which is popular with the public; demand for allotments is high, new sites fill up fast and bring social life and identity to a new development.

Allotments work well in new developments, particularly as there is high demand and a desire for allotments to be part of local communities, but also because allotments are recognised as part of wider heritage and local character. The '21st Century Allotment Design' elements recommended in this guide enhance new developments by providing public amenity value, and green space, whilst incorporating gently into the local vernacular and identity. When designed well and within NAS guidelines, allotments embrace the existing landscape and the character of a new development, creating community pride - not least in the taste of fruit/vegetables and the scent of flowers grown there - a habitat for wildlife and a legible point of orientation for all members of the community.

This guide comprises 4 sections:

- Planning and managing the new allotment site
- Designing the new allotment site
- Allotment design and national policies
- FAQS, sources of further information

We hope you find this guide helpful, we welcome feedback and suggestions for future editions. Please share information about your new site (including photos) with us, so that we can share examples of good practice.

Further advice and one-to-one guidance

In addition to this guide, The National Allotment Society offers a bespoke 'Allotments in New Developments' service to planners and developers. Please contact head office to discuss your requirements.

 H.M. Treasury (2022) The Green Book: Central Government Guidance on Appraisal and Evaluation. HMSO. (p.83)

TERMS USED IN THIS DOCUMENT

Most of the technical terminology in this guide will already be familiar to planners and developers. This glossary is provided for non-specialists unfamiliar with allotments and/or planning/development.

21st **Century Allotment Design:** A design principle from The National Allotment Society for new allotment sites. The principle embraces productive, inclusive, accessible, functional allotment sites which maximise plot numbers and improve biodiversity. Enabling all members of a community to participate safely in allotment gardening is the key principle of '21st Allotment Site Design'. This approach is design-led and embraces policy and partnership opportunities which can give the green light to funding and resources.

Active Design: Planning for health and well-being through sport and healthy activities such as allotment gardening. Active Design looks at the opportunities to encourage and promote physical activity through the design and layout of the built environment to support a step change towards healthier and more active lifestyles. See 'Active Design: Planning for health and well-being through sport and physical activity.' Sport England, supported by Public Health England (2015).

Active Travel: Encouraging walking and cycling for everyday journeys rather than solely for leisure or fitness. Key to active travel is offering convenient, accessible and affordable ways to move more and be healthy, e.g. walking to school or cycling to work. See 'Active Travel England' - the government's executive agency responsible for improving the standards of cycling and walking infrastructure in England.

Biodiversity Net Gain: Biodiversity net gain is an approach to development where habitats for wildlife must be left in a measurably better state than they were in before the development. The government intends biodiversity net gain to be mandated at a minimum of 10% net gain through the Environment Act from November 2023. The regulations will apply to development for which planning permission is granted (or deemed to be granted) under the Town and Country Planning Act (TCPA) 1990; and Nationally Significant Infrastructure Projects (NSIPs) consented under the Planning Act 2008.

Ecosystem Services: Also referred to as Natural Capital or Nature's Services, Ecosystem Services are contributions (both direct and indirect)

from ecosystems and which maintain life on Earth. Human life cannot survive without Ecosystem Services. The following ecosystem services are provided by allotments: carbon capture; soil erosion prevention; increased soil fertility; enhanced/increased biodiversity; provision of green space; decomposition and nutrient cycling; pollination. Allotment sites are very good examples of multiple ecosystem services provision in a compact area size.

Inclusive Design: The principles of Inclusive Design enable everyone to participate equally, confidently and independently in everyday activities. Inclusive Design aims to remove the barriers that create undue effort and separation. See "The Principles of Inclusive Design: They include You." Commission for the Built Environment (2006).

Natural Surveillance: A planning and design process undertaken to reduce crime and perception of crime. Designing the situation/placement of physical features, people and activities in order to maximise their visibility, e.g. siting allotments close to footpaths or roads, or within visible range of buildings.

Self-Management: A process by which allotment plot-holders manage their allotment site, usually via a legal agreement as a constituted allotment association. Permitted by Allotments Act (1908) Section 29(1). Selfmanagement permits communities to undertake day-to-day management local assets, with the council taking an oversight role. NAS can provide help and support in this specialist area of allotments governance.

Green Space: Generally, green space refers to land which is vegetated and situated in an urban area, e.g. allotments, parks, playing fields and gardens. Collectively, these spaces are referred to as green space infrastructure.

Green Space Infrastructure - see Green Space.

Local Food: Food grown/produced within a short distance of where it is consumed. Allotments are a good example of local food: plot-holders grow food at the allotment which they consume at home and share with people in their social networks.

Public Amenity Value: See also Visual Amenity. Those public amenities which are desirable and influence/enhance people's appreciation and enjoyment of an area.

Visual Amenity: An area's backdrop, views and surroundings. Allotments and green space are forms of visual amenity, providing character and distinctiveness to an area's identity.



PLANNING AND MANAGING THE NEW ALLOTMENT SITE

Planning the new allotment site

The National Planning Policy Framework⁽²⁾ expects developer preapplication engagement and front-loading with both the Local Planning Authority and the local community. Community participation in design processes can start to establish a sense of ownership; community management of the allotment site is more likely to be an outcome when the future community is involved in the design process from the start.⁽³⁾

The following 'three steps to planning a new allotment site' advocate a well thought through strategic and managed approach to creating an allotment site in a new development. These stages will likely overlap, so ensure you thoroughly complete each and every stage for successful outcomes. Focusing on these three steps (rather than retrofitting) will ensure a smooth transition to a new allotment site which is accessible, cultivatable, legally robust and which has plot-holders ready to get gardening and manage the site. The National Allotment Society can provide help and support with all three steps.

(2) Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework. HMSO.

(3) Ministry of Housing, Communities & Local Government (2021) National Design Guide: Planning practice guidance for beautiful, enduring and successful places. HMSO.

Three steps to planning a new allotment site

STEP I. LOCAL COUNCIL INVOLVEMENT

Communication with (or within) the local council should begin as soon as possible and focus on these core areas:

- Whether the allotment site will be adopted by the council
- If there is an existing waiting list or if one needs to be opened
- Planning for community management of the allotment site (Self-Management)

STEP 2. SOIL

It may sound obvious, but fruit and vegetables do actually need a good standard of aerated topsoil to grow and thrive! Soil compaction should be evaluated as a matter of inclusivity and health & safety when planning a new allotment site, because less physically-able people might not be able to do the by-hand heavy labour required to bring compacted soil to a cultivatable standard. Compaction of topsoil by heavy plant machinery is the biggest complaint from plot-holders on allotments in new developments and the reason why many give up. If a developer cannot avoid soil compaction during building works, an undertaking and budget commitment should be made to import and spread topsoil onto the new plots prior to the new allotment site opening.

A slow or delayed handover of the new site to plot-holders can lead to rapid soil erosion and swathes of pernicious weeds. To protect against this, a commuted sum (from the developer to the council) should be agreed upon so that, if a delayed handover occurs, remedial action can be taken. The National Allotment Society can provide examples of good practice.

Protecting soil for new allotments

Fence off the area designated for the allotment site during development works to prevent compaction by heavy plant machinery and soil erosion via weathering. Follow the principles of DEFRAs "Construction Code of Practice For The Sustainable Use of Soils on Construction Sites".

Topsoil should only be imported onto the finished allotment site layout after all allotment infrastructure and facilities have been installed and only as a last resort when compaction has occurred. Use British Standard 3882 "Specification For Topsoil".

STEP 3. FUTURE PLOT-HOLDER INVOLVEMENT AND CONSULTATION

A settled group of plot-holders gardening on suitable plots and managing the site into the long term should be the key focus of planning a new

Self-Management: The fabric of allotments

"The communal management of a shared resource or facility by an organisation controlled by the community whom it benefits."⁽⁴⁾

Setting up self-management is a process and involves e.g. setting up a lease and starting an allotment society. Consultation with prospective plot-holders is an essential part of this stage. Well thought out and well implemented Self-Management is encouraged by the National Allotment Society. We can provide model documents, good practice examples and attend meetings to help form the allotment society.

Getting self-management in place before the new allotments open will permit the council and developer to stand back from day-today involvement when the new allotment site opens, whilst the community gains a direct involvement in the management of local assets.

(4) Ministry of Housing, Communities & Local Government (2021) National Design Guide: Planning practice guidance for beautiful, enduring and successful places. HMSO. allotment site. Getting this right from the start creates a site which fits the needs of the community, is popular with the wider public in the new neighbourhood, has an attractive and distinctive character and is made to last. Consult with plot-holders on design, infrastructure and facilities to create an allotment site which is safe, inclusive and does not require further works after it opens.

Plot-holder consultation

Listening to the people who will be gardening on the new allotments leads to happy plot-holders and avoids unwanted infrastructure, so there are cost savings as well as good publicity for planners and developers who consult.

Lack of consultation leads to inappropriate and unusable infrastructure on allotment sites. A classic example is the installation of raised gardening beds for people with disabilities without consulting the plot-holders who are actually going to use them. Disability takes many forms, can be hidden, and/or relate exclusively to ageing, so "one size fits all" does not work with raised gardening beds because people have unique attributes. Consult with plot-holders before starting any infrastructure and facilities in order to create an allotment site which is safe, has inclusive design features throughout and which does not require further works after it opens.



DO's and DON'Ts of new allotment site consultation

DO consult on site design, infrastructure and facilities

DO expect the unique local vernacular and character to be part of the design brief, leading to a site made to last and popular with plot-holders and the wider community

DO invite the National Allotment Society to consultation meetings. We can share examples of good practice from around the UK and keep the meeting focussed on the task at hand

DON'T expect essentials such as toilets to be addedluxuries or use these as bargaining tools

DON'T ignore the views of plot-holders during the planning stages. This can lead to an unusable allotment site which quickly becomes an abandoned eyesore in the new development

MANAGING THE NEW ALLOTMENT SITE

Allotment sites need long-term oversight and daily management. However, few developers wish to be involved beyond the initial building period and more councils are increasingly looking towards cost neutral allotments.

For over 100 years community management has been at the heart of allotments⁽⁵⁾. Known as the 'Self-Management of Allotments', this is a legally binding long-term management agreement, usually via a Lease. Plotholders form a legal entity (usually an allotment society) through which they can manage the allotment site.

Self-management works well and is economically sustainable when a 'peppercorn lease' is arranged; the allotment society then collects and retains plot rental income to reinvest in the long-term upkeep and maintenance of the site and facilities. Self management is different from 'community stewardship' models (where a body is created to manage an entire portfolio of green spaces and built assets) and is more effective in the case of allotments.

Allotment sites which are self-managed tend to be more robust because day-to-day management tasks can be undertaken swiftly and cooperatively by the gardeners themselves, thus preventing thorny problems from arising, and with a strong resilient community forged along the way.

Getting self-management underway should be a key aim of the planning and consultation process. It is strongly recommended to form an allotment society prior to the allotment site opening, because:

- Self-management can begin on the day the allotment site opens
- New plot-holders have an understanding of what is expected of them and can seek training/support if required to ensure their new allotment society functions well and legally
- The developer does not have to take further action beyond creating the physical site and infrastructure; the council does not have to undertake day-to-day allotment management and instead can assume an oversight and monitoring role.

Benefits of NAS membership for a newly formed allotment society:

- Initial legal advice
- Regional network
- Free allotmenteers liability insurance
- Members-only section of the NAS website
- Bespoke allotment society insurance - 25% discount via our broker (e.g. public liability insurance)
- Welcome Pack of 16 leaflets on allotment management topics
- Quarterly magazine
- Discount seeds scheme
 with Kings Seeds
- Horticultural advice

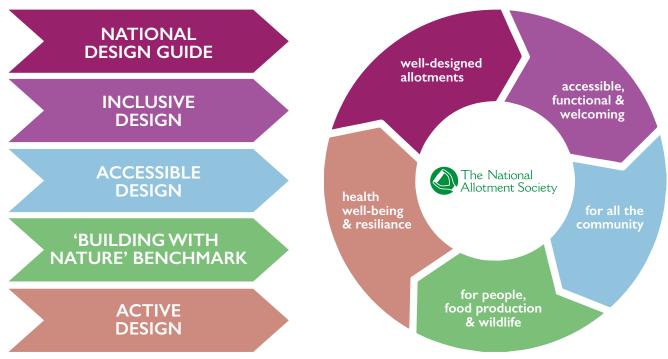
(5) Self-Management of allotments is permitted under the Allotments Act (1908) Section 29(1).

DESIGNING THE NEW ALLOTMENT SITE

Defining '21st Century Allotment Design'

21st Century Allotment Design embraces productive, inclusive, accessible, functional allotment sites which maximise plot numbers and improve biodiversity. This approach is design-led and embraces policy and partnership opportunities which can give the green light to funding and resources. Enabling all members of a community to participate safely in allotment gardening is the key principle of 21st allotment site design. Economically and environmentally sustainable features are 'designed-in'. More costly and less-desirable infrastructure is 'designed-out'. When designing 21st Century Allotment sites, the National Allotment Society encourages early consultation with potential plot-holders and ambitious design creativity, to deliver bespoke local sites which are welcoming and reflect the local vernacular.

DESIGN OUTCOMES



Follow the policies and benchmarks shown to create an allotment site to meet the needs of a community and achieve key policy targets. See also in this guide '21st Century Allotment Design: Policy Alignments' which aims to help Planners meet policy targets via the creation of allotment sites.

Getting started

Installation of allotment site infrastructure should always begin from below ground level and then upwards, to ensure underground

infrastructure is in place first. This means always beginning the design process with water and drainage; both a communal rainwater harvesting system and a mains supply (see below), plus field drains if required. This should be followed by: toilet facilities; plot layout (although not necessarily in a traditional grid); communal haulage ways and parking areas for bikes/vehicles/deliveries; plot-holders sheds; communal buildings; and finally, fencing, hedging and perimeter security. NAS can provide detailed guidance on all infrastructure. Cabling and pipework for the wider development should not be installed under the land allocated for the allotment site.

Rethinking the traditional grid layout

The available location for an allotment site within a new development might not always be a perfect square or rectangle; allotment sites do not need to be linear or follow the traditional square grid layout and its pathways. For example, the initial start-up cost and ongoing maintenance can be reduced by installing fewer communal paths. A traditional allotment site might have excessive internal communal paths between plots and the perimeter edge of the site, when this is not actually necessary. A single central haulage way will serve well as a communal path.

Plot sizes to suit all the community across the life course

It is good practice to offer a variety of plot-sizes as this permits people with less time and/or the ability to be able to participate in allotments throughout the life course. Do take care, however, to avoid negative stereotyping of people when you consider plot sizes and do consult with plot-holders: not all young families require a smaller plot and there is a rich vein of active older people who can cultivate a standard size plot with ease. Designing-in easy flexibility of plot sizes to make a site inclusive for every member of the community over time should be the desired outcome.



There is no minimum size for an allotment plot and the maximum size is 1012 square metres in law. The National Allotment Society recommends 250 square metres as the basic template for the subdivision of allotment land where appropriate. This size is generally well recognised and understood by the public; originating from what is still often known as the historical 'ten pole' or 'standard' plot. Applying this method permits subdivision on a temporary basis into smaller plots and can flexibly increase into larger plot sizes as required in the future, depending on needs and demand. Designing to 250 square metres presents a wellrecognised design characteristic as well as an economical and permanent infrastructure for paths, haulage way and water supply facilities.

Climate change adaptation: water

Water is a vital ecosystem service and must be at the heart of 21st Century Allotment site design because our climate is changing and water is becoming an ever more scarce and expensive resource. Communal rainwater harvesting and storage infrastructure is now less an option and more a requirement of the above-ground infrastructure installation process, around which the rest of the infrastructure and facilities should dovetail.

The '4 Plot Water Harvesting System' from The DRY Project is a site-wide design system of small, shared rainwater collection and storage areas centred within every four allotment plots. This method enables rainwater harvesting on a small, aesthetically pleasing scale which is replicated across the site. Sufficient rainwater for sharing across 4 plots can be achieved using this method, which is practical for daily usage, easily maintained by plot-holders and helps foster community spirit. This design is explained in greater detail in the NAS leaflet "New Allotment Site Design for Sustainable Rainwater Collection, Storage and Distribution".

Even with well-planned rainwater harvesting systems integrated into the design of the allotment site, new sites will always require installation of a mains water supply. This is to enable plot-holders who cannot fetch and carry water, for hygiene reasons (relating to hand washing, toileting and health & safety) and also to ensure there is a clean water supply for successful seed germination. Depending upon the size of plots, plan to install a water tap for every 4-8 plots. When installing and maintaining a mains water supply to allotments there is a duty to comply with the Water Supply (Water Fittings) Regulations 1999, this is explained in detail in NAS leaflet 'Water Use on Allotments'.

Toilets

A toilet is essential for all allotment sites and *must* be accessible to all plotholders and visitors. Installation is essential prior to the new allotment site opening. Many sites choose to have a compost toilet, however, do ensure your consultation with plot-holders establishes that there is willingness to manage this option. Mains toilets are the other option. Both are discussed in detail in the NAS leaflet 'Toilet Options for Allotment Sites'. Knowing that there are toilet facilities on an allotment site permits all members of the community to participate in allotments. Getting a local celebrity to open a new



allotment site toilet always makes for great PR for a new allotment site!

Communal building and social area

The creation of an allotment society and successful self-management by the community of plot-holders can be encouraged, enhanced and secured into the long term by the provision of a shared-use facility on the allotment site. Economically, a communal building makes good sense: many Self-Managed allotment sites become financially sustainable by operating an allotment site shop selling gardening sundries.⁽⁶⁾

This enables further long-term investment in the site and reduces the need for council involvement in the management and oversight of allotments. Depending on the local vernacular, identity and character, communal buildings can take the forms of a pavilion or low impact building (e.g. load bearing straw bale walls, solar panels).

Sheds on plots: how to prevent sprawl

Sheds are vital for storage and shelter from the weather all year round on an allotment site. Yet sprawling sheds and outbuildings can quickly run out of control leading to an eyesore, creating excess shadowing over neighbouring plots and a local development issue for the site managers. However, installing one small shed per plot during site design can help prevent these problems. The bulk purchase of sheds as part of a wider development is a relatively low-cost investment helping to mitigate the management of long term sprawl of self-built sheds and enables further rain water harvesting. Many new plot-holders do not have the DIY skills or physical ability to erect a shed, hence, installing sheds meets the design principles of accessibility and inclusivity.

Providing sheds can be a source of good publicity for councils and developers as this illustrates consideration for new plot-holders and the wider community.

'Designing-in' and enhancing local ecosystem services

Allotment sites deliver a wide range of physical ecosystem services, e.g. carbon capture, soil erosion prevention, increased soil fertility, enhanced/ increased biodiversity, provision of green space, decomposition and nutrient cycling, and pollination. These can be appraised against a range of potentially harmful externalities present in the wider community, such as air pollution and waste.

However, designing-in some additional features as part of a new allotment site's wider design characteristics can increase ecosystem service outputs at scale within a compact area size, in terms of ecosystem economics and returns on investment for councils and developers. For example, designing-in a pond, mixed-species native hedging, a wildlife meadow, a community orchard, community composting area, delivery bays for locally donated wood chips/leaf mould/manure and sources of alternative energy. These are all positive design enhancements to allotment sites and are recommended by NAS as ambitious 21st Century Allotment Design.

However, each of these features requires long term management, maintenance and goodwill to ensure their success into the future. Consultation with potential plot-holders is essential, as is being realistic about the effort required by a volunteer-run allotment society, which should be explained carefully along with highlighting the positive outcomes for the site and wider community. NAS can share positive examples of such features working well in allotment communities.

'Designing-out' negative features

Designing a 21st Century Allotment site brings an opportunity to design-out some characteristics which can prevent the safe enjoyment of allotment gardening and/or cause a long-term management headache. Excluding these features does not affect the productivity of the allotment site. Instead, this leads to a more enjoyable and safer place - especially for children and vulnerable people - and can also help create a safer habitat for wildlife.

The following are not recommended for inclusion in 21st Century Allotment Design:

- Glass in greenhouses: cold frames and cloches: broken glass, especially when shattered and lurking in soil, causes innumerable injuries to allotment gardeners, their visitors, domestic pets and wildlife. Safer alternatives are poly-tunnels and/or greenhouses and cold frames made with polycarbonate.
- Bonfires: there is increasing evidence of the effects of burning and smoke upon air pollution and lung disease. Including a community

Advanced guidance on infrastructure and facilities

The National Allotment Society has a range of leaflets relating to the installation of infrastructure on allotment sites:

- New Allotment Site
 Design for Sustainable
 Rainwater Collection,
 Storage and Distribution
- Introduction to Sustainable Water Collection and Use on Allotments
- Advanced Sustainable
 Water Collection and
 Irrigation on Allotments
- Ground Level Rainwater
 Collection on Allotments
- Health & Safety on
 Allotments
- Toilet Options for Allotment Sites

NAS can provide site-specific advice and good practice examples.

composting area within the site design and providing at least one compost bin per plot will reduce the need for bonfires.

 Internal fencing between plots: fencing between plots is not a practical necessity on allotment sites and only creates shadowing between plots and long-term maintenance and management. Additionally, where bare metal is used to fence between plots, this can be hazardous.

NAS can provide examples of good practice and text for exclusionary clauses for leases and tenancy agreements to avoid future management and maintenance issues.

Location of new allotment site(s) within the new development

A well-designed allotment site makes for a pleasant and sociable inclusion in a new development, without any need for screening/obscuring or seclusion on the periphery of the development site. Generally, the public do value allotment sites and their garden aesthetic as part and parcel of the character of a neighbourhood, along with the associated contribution to the natural world and interconnected networks of green space infrastructure.

However, allotments designed into the outer spatial periphery of a new development can be vulnerable targets for intruders, vandalism and crime. This can affect social inclusion, as vulnerable users can be deterred from taking up plots and existing plot-holders can be driven to quit. A site which is miles from the nearest houses, and which can only be reached by car, will increase carbon emissions and deter potential users without access to a vehicle.

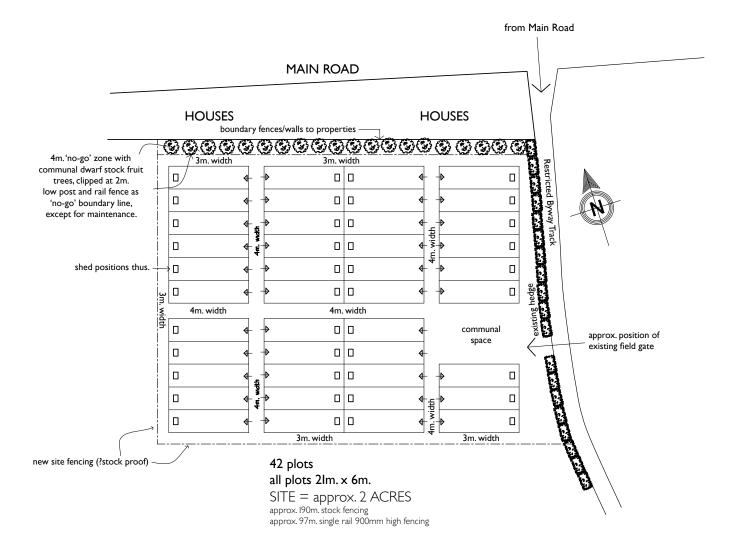
By applying the spatial design principles of 'The 20 Minute Neighbourhood' and integrating allotments into the heart of the new development's built design, social inclusion and durability can be designedin to ensure ongoing access for all and without increasing car use.

A well thought-out integration of the allotment site into the wider landscape as part of a wider network of accessible and interconnected green space infrastructure ensures that allotments are a part of the development and the connecting wider landscape rather than being apart from it. This locating principle also enables the allotment site to thrive long-term, as this design method maximizes natural surveillance from homes, passers-by and people participating in active travel modes.

The 20 Minute Neighbourhood

20 minutes is the maximum time that people are willing to walk to meet their daily needs (10 mins each way). This approach is about creating attractive, interesting, safe, walk-able environments in which people of all ages and levels of fitness are happy to travel actively for short distances from home to the destinations that they visit and the services they need to use day-to-day; e.g. shopping, school, community and healthcare facilities, places of work, green spaces and more. These places need to be easily accessible on foot, by cycle or by public transport and accessible to everyone, whatever their budget or physical ability, without having to use a car. This approach can be adapted to rural areas by creating a network of villages which collectively provide services (7)

(7) Town & Country Planning Association (2021) 20 Minute Neighbourhoods: Creating Healthier, Active, Prosperous Communities An Introduction for Council Planners in England. London: TCPA.



Taking every opportunity for natural surveillance can be achieved by locating the allotment site close to housing, footpaths and cycle routes as well as public transport routes. This interconnection with active design in turn enables plot-holders and their visitors to take active travel routes to and from the allotment site, e.g. walking and cycling.

Sustainable Drainage Systems (SuDS)

Although it can be tempting to locate allotments in a SuDS zone (because they are not a priority compared to homes or priority services) do bear in mind that the ability to grow food can be affected by contaminated flood waste for years, e.g. E. coli bacteria in soil. If an allotment site is lost due to ongoing flood damage the council will need to step in and provide replace allotment plots - in this respect a more environmentally sustainable location external to a SuDS is actually more economically sustainable too.

ALLOTMENT SITE DESIGN AND POLICY

The National Design Guide⁽⁸⁾ is a central component of the government's current planning practice guidance. Allotments are specifically included in

the NDG as sites of food production, learning and community engagement' and within the wider concept of green infrastructure: a network of multifunctional urban and rural green and blue space which is capable of delivering a wide range of environmental and quality of life benefits. The design contents of the NDG serve as a guide. However, the National Planning Policy Framework⁽⁹⁾ makes it clear that all Local Planning Authorities should prepare 'design guides' or 'design codes' consistent with the principles set out in both the National Design Guide and the National Model Design Code (Part I:The Coding Process)⁽¹⁰⁾.

The NDG provides ten interactive 'design characteristics' and uses a technical coding process for creating high-quality places, along with an expectation that councils and developers should allow for suitable degrees of variety and tailoring to suit local circumstances.



10 characteristics of well-designed places

(National Design Guide Extract)

Allotments can help planners and developers to achieve 9 of the NDGs '10 Characteristics of a Well Designed Place'. These alignments with allotments are outlined (below) in detail along with each technical 'characteristic' and its specific technical 'code'. Planners may wish to use this information as a resource when evaluating the inclusion of allotments in new developments. Developers may find this information useful when looking to design new allotment sites in-line with government expectations of well-designed places.

Context: C1/2. The well-recognised aesthetic of flourishing and productive allotments enhances new developments by providing public

(8) Ministry of Housing, Communities & Local Government (2021) National Design Guide: Planning practice guidance for beautiful, enduring and successful places. HMSO.

(9) Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework. HMSO.

(10) Ministry of Housing, Communities & Local Government (2021) National Model Design Code Part 1:The Coding Process. HMSO. amenity value and enhancing public space, whilst incorporating gently into the local vernacular. Allotments in contemporary Britain help to address social, health and environmental needs, e.g. by providing mental health benefits from interpersonal interaction with green infrastructure, pleasant public spaces and a habitat for wildlife in the local community.

Identity: I 1/2/3. Having performed a sustained role in local landscape aesthetics for over two hundred years, allotment gardens are a key expression of local character and identity. With their mixture of abundant and colourful vegetable beds, ponds, wildlife and areas to socialise, allotments provide a unique inclusive texture to a locale. New allotment sites within new developments can benefit from well-designed attractive and high-quality buildings (e.g. communal pavilion or shed constructed in the local vernacular) which become tomorrow's heritage and develop the character of a new development. Allotments, with their unique purpose and the practices undertaken therein are instantly recognisable. They provide a highly distinctive and beautiful garden aesthetic, reflecting and developing a strong and coherent local identity and character:

When designed well and within NAS guidelines of '21st Century Allotments', they embrace the existing landscape and aesthetic of a new development, creating community pride (not least in the taste of fruit/ vegetables and scent of flowers grown there), a habitat for wildlife and a legible point of orientation for all members of the community.

Built Form: B1/2/3. By applying National Allotment Society guidelines, allotments sites and individual allotment garden plots can be designed in a variety of ways to retain and reflect a distinct, attractive local aesthetic and heritage for the future. Allotment site design can be scaled to match and blend with a coherent pattern of development without losing a sense of place or inclusion and accessibility.

Movement: M2/3. When allotment sites are spatially embedded into local communities, movement can be undertaken by active travel to/from/ within the allotment site. Internal infrastructure (e.g. plot layout, raised gardening beds) can be designed in-line with NAS guidelines to ensure accessibility and ease of movement in gardening practices for people with a wide variety of health situations. Provision for vehicular access/ deliveries can be located considerately, consistently and conveniently with sensibly integrated 'green infrastructure' enhancements. Allotment sites act as part of green corridors for wildlife and perform as part of a community's environmental heritage. Allotment sites contribute to air quality improvements and other ecosystem services because they are comprised of natural features such as cultivated vegetation, water (ponds) and hedges.

National Design Guide Coding Process for Allotments:

Context C1/2 Identity I1/2/3 Built Form B1/2/3 Movement M2/3 Nature N1/2/3 Uses U3 (Homes &) Buildings H2 Resources R2/3 Lifespan L1/2/3 **Nature:** N1/2/3. Allotment sites are a fully immersive individual and community interaction with the natural world in its entirety. Allotments contribute to quality of life for people and a habitat for wildlife, creating a clear sense of place that is both public and private; a natural place to escape to. It is difficult to get closer to nature in a built environment than on an allotment site; a highly distinct integration of nature and people, resulting in a place with strong local identity and character. With food production as their *raison d'etre*, allotments encourage physical activity and promote health, well-being and social inclusion via attractive, safe and accessible green spaces.

Allotments integrate existing natural features into a multifunctional green space infrastructure network that supports quality of place, biodiversity and water harvesting/conservation/management, and which addresses climate change. Cultivation of allotments prioritises nature, with their ecological patchwork habitat flourishing to ensure a healthy natural local environment that supports, enhances and improves biodiversity via allotments' unique growing practice of cultivating both edible and ornamental plants.

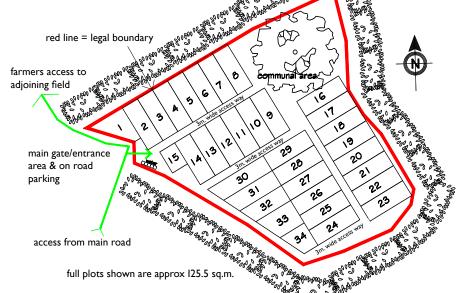
Allotments are a site of informal socially situated learning about the natural world, its protection and preservation, in which children (often via play) and adults learn via intergenerational social processes about the provenance of food, addressing climate change, enhancing and improving biodiversity, seed saving, composting, craft skills, resource cycles/management and other forms of sustainable practices. In addition, allotments serve as green corridors, green lungs, carbon sinks and perform ecosystem services.

Uses: U3. Allotments form part of the socially inclusive local services and facilities which support daily life in a well-designed place. By spatially locating allotments into the integrated heart of the built design, social inclusion can influence the design process to ensure ongoing access for all. Allotments encourage social interaction and cooperation, e.g. plotholders sharing gardening tasks and learning from one another across generations. People from a wide variety of backgrounds garden together on allotments sites, hence, allotment sites are an important generator of social integration in contemporary communities and as they have done as part of local history, heritage and character. All age groups are susceptible to loneliness, the ongoing social cooperation and interactions which take place on the contiguous individual plots of allotment gardens - whether a quick chat at the water point or the development of deep and enduring friendships which last decades - help to combat loneliness.

[Homes and] Buildings: H2. Communal buildings on allotments contribute to identity, heritage and character and relate positively to open spaces. Allotments are both public space and private space, with opportunities for personal privacy *and* social interaction within a unique spatiality and aesthetic. Buildings on allotments can serve and develop the community by contributing to social interaction and inclusion, e.g. a communal pavilion/building provides essential shelter for people working directly with nature and is safe and secure, thus, contributing to inclusion. Well-designed, low-impact, sustainable buildings on allotments are adaptable to changing needs and climate and are integrated appropriately within the allotment garden design and wider local context.

Resources: R2/3. Allotments provide a wide range of ecosystem services; they are long standing examples of places where natural resources are conserved and protected to address climate change; there is use of circular economies. Indeed, allotments could not exist and thrive without these

everyday practices. This takes place via allotment gardening practices such as reducing human activity on the climate system (e.g. water use reduction and sustainable gardening practices), regenerating natural systems (e.g. composting, rainwater harvesting), elements of the circular economy (e.g. reusing, swapping and sharing products and materials within the allotment community along with the sharing of allotment grown food with people beyond the



allotment site). With careful consideration of materials and construction techniques, communal pavilions/buildings on allotment sites can meet net zero whilst contributing to local character and context.

Lifespan: L1/2/3. Social cooperation is the engine of the allotment, with a long and successful history of community management of allotment sites by the gardeners themselves ('self-management'). Well thought through self-management of allotments contributes to the resilience, attractiveness and beauty of allotments as well as building a resilient long-term community of gardeners. An allotment society is best placed to enable solutions to changes over time, e.g. ensuring ageing gardeners have access to adaptable tools and newer technologies should they require them. When carefully planned, the community management of allotments leads to a sense of ownership and belonging to those who garden there and to a welcoming and pleasant allotment site for visitors and the public.

21st Century Allotment Design: policy alignments

The National Planning Policy Framework (NPPF), specifically mentions allotments three times: i) allotments should be considered by Local Planning Authorities to be part of healthy and safe communities; ii) clarification that allotments are not considered development in Green Belt; iii) allotments are specifically excluded from the definition of "previously developed land".

Additionally, allotments are included in or align with a wealth of policies, guidance, methodologies, and accreditation schemes relating to design. Planners may wish to apply the information in the table (below) as a resource when evaluating the inclusion of allotments in new developments. Developers may find this information useful when looking to design new allotment sites in line with government's mandatory requirements and expectations for well- designed places.

TITLE	INTENTION
HEALTH	
"Using the planning system to promote healthy weight environments: Guidance and supplementary planning document template for local authority public health and planning teams." Public Health England and Partners. (2020)	Created in response to requests from local authorities. Aims to provide practical support for local authorities looking to use the planning system to achieve important public health outcomes around diet, obesity and physical activity. Includes a framework/ starting point for local authorities. Allotments specifically included. Keywords: Allotments; Green Space; Open Space; Active Design; Health.
"Building for a Healthy Life: A design code for neighbourhoods, streets, homes and public spaces." (previously Building for Life 12) "Design for Life." (2020)	How to assemble neighbourhoods and new settlements by thinking about and applying 12 key considerations. Keywords: Allotments; Allotments in Larger Developments; Character of New Spaces; Integrated Neighbourhoods; Distinctive Places; What Green Looks Like.
"Putting Health into Place." NHS England and NHS Improvement Partnership: NHS, Public Health England, Town and Country Planning Association, The King's Fund, The Young Foundation (2019)	How to create healthier new communities with lessons from NHS England's "Healthy Towns Programme." Uses 10 Key Principles & Learning Points. Allotments specifically included. Keywords: Green Space; Community Governance and Stewardship; Healthy Eating; Food Growing; Leisure Spaces For All.
"Spatial Planning for Health: An evidence resource for planning and designing healthier places." Public Health England (2017)	Aims to inform the design of places from a health improvement perspective. Provides overview of health impacts from the built and natural environment with the purpose to inform action and policy. Allotments specifically included. <i>Keywords: Allotments; Urban</i> <i>Agriculture; Local Amenities; Community Food Infrastructure; Green</i> <i>Space; Green Infrastructure; Open Space.</i>
ACTIVE DESIGN	
"Active Design: Planning for health and well- being through sport and physical activity." Sport England, supported by Public Health England (2015)	Innovative set of design guidelines to get more people physically active via suitable design and layout. Embeds the principles of Public Health England's "Everybody Active, Every Day." Allotments specifically included. <i>Keywords: Allotments; Productive</i> <i>Landscapes; Open Space</i> .

INCLUSIVE DESIGN	
"The Principles of Inclusive Design:They include You." Commission for the Built Environment (2006)	To champion design that creates places that everyone can use. Keywords: Inclusive; Flexibility; Diversity; Difference.
"A Design for Life: Urban Practices for an Age friendly City." Manchester School of Architecture & Pozzoni Architecture (2021)	Ensuring that older people are not marginalised by urban policies, developments and designs. Free e-book (162 pages) with examples of good design practice from the UK and around the globe. Keywords: Age Inclusive; Green Space; Engaging Older People in Green Space Design.
GREEN INFRASTRUCTURE	
"Improving access to green space: A new review for 2020" Public Health England (2020)	Offers policy, practice and research recommendations. Allotments specifically included. <i>Keywords: Allotments; Green Space;</i> <i>Green Infrastructure; Access.</i>
"Environmental Improvement Plan 2023: First Revision of the 25-Year Environmental Plan" DEFRA (2023)	10 goals to improve environmental quality. Includes overview of Nature Recovery Strategies; roles of interconnected green infrastructure and green space. Keywords: climate change mitigation and adaptation; green infrastructure; green space.
''The Green Infrastructure Framework'' Natural England (2023)	Provides a structure to analyse where green space in urban environments is needed most. Keywords: Allotments; Green Infrastructure; Urban Greening Factor.
LOCAL FOOD PRODUCTION, SECURI	TY AND RESILIENCE
"Edible Garden Cities."Town & Country Planning Association (2019)	Highlights key points for consideration and offers signposts to sources of further detailed information. Keywords: Allotments; Sustainable Food Systems; Local Food Systems; Landscape Led Approach; Food Sensitive Architecture; Green Infrastructure; Health Outcomes.
"Every Mouthful Counts." Sustain (2019)	Shapes ideas and provides solutions on the role of food, farming, land use and cities. Keywords: Resilience Planning; Climate and Nature Emergency; Local Food; Food Waste; Integrate Food into City Design.
BIODIVERSITY AND BIODIVERSITY NE	T GAIN
"Building with Nature Standards Framework BwN 2.0." Building with Nature (2021)	The first evidence-based benchmark for high-quality green infrastructure in the UK. (Version 2.0: 2021). Helps developers and planners deliver climate-responsive designs and policies, as well as tangible long-term benefits including wildlife enhancements, improved health and well-being, and sustainable water management. <i>Keywords: Context Driven; Multifunctional;</i> <i>Green Infrastructure.</i>
"Enabling a Natural Capital Approach (ENCA)." Department of Environment, Food and Rural Affairs (2020)	Guidance for policy and decision makers to help them consider the value of a natural capital approach for people and the economy. For example, allotments provide ecosystem services and non-market value (green space, amenity) and in this guidance are categorised as green Infrastructure. <i>Keywords:</i> <i>Allotments; Green Infrastructure; Ecosystem Services; Natural Assets;</i> <i>Place-Making.</i>

SPATIAL PLANNING	
"The Climate Crisis: A Guide for Local Authorities on Planning for Climate Change" Royal Town Planning Institute, Town & Country Planning Association. (4th Ed. 2023)	Contains principles and good practice guidance on planning permission assessment criteria for the suitability of sites for new developments, including whether the development provides gardens and plots for allotments or other community areas to maximise opportunities for local food sourcing. <i>Keywords:</i> <i>Allotments; Climate Change; Adaptation; Planning.</i>
"Twenty Minute Neighbourhoods: Creating Healthier, Active, Prosperous Communities: An Introduction for Council Planners in England."Town & Country Planning Association (2021)	Case studies and ten principles for success in both urban and rural areas with the concept of complete, compact and connected neighbourhoods. Allotments specifically included. <i>Keywords: Allotments; Complete, Compact and Connected; Green</i> <i>Infrastructure; Local Food Production.</i>
SOIL ON CONSTRUCTION SITES	
"Building on soil sustainability: Principles for soils in planning and construction." Soils in Planning and Construction Task Force (2022)	Highlights key issues that compromise responsible soil management on construction sites and sets out how to address them. Developed by a cross-sector team of scientists and practitioners in consultation with planners and the construction industries. <i>Keywords: Soil; construction; legislation.</i>

This version (June 2023). This chart is updated six monthly by the National Allotment Society, for the latest version contact natsoc@nsalg.org.uk





Q: How do we avoid the new allotments looking messy and affecting the price of the houses we have just built?

A: Allotment sites should be welcoming, productive and part of the wider community rather than causing a problem. Taking a three-phased-approach can help the site remain productive and welcoming whilst preventing unsightliness: i) Your consultation process is an opportunity to explain expectations about the long-term appearance and management of the site. ii) Opting to design-in '21st Century Allotment Design' principles and to design-out less-desirable features (e.g. metal fencing, glass) will get the site started as you mean it to continue. iii) Use of exclusionary clauses in both the lease and tenancy agreement will furnish the allotment society with powers to deal with any issues which might arise. NAS can provide advice and share examples of good practice in these areas.

Q: Who looks after the site after the developer finishes installing the new allotments?

A: A recognised and well-practiced process is for the local council to adopt the allotment site and then lease it to the plot-holders gardening on the site to manage. For this to happen, the plot-holders need to form as an organisation (usually an allotment society). Involve the National Allotment Society early in this process, we have a long history of guiding this process and can support the council and new allotment society to get this off the ground and running well into the future.

Q: What is the alternative to an allotment society running the site?

A: An allotment society managing the new site provides long term community management of a local asset and should be the preferred option for a new allotment site, NAS can help with all aspects of setting up an allotment site from participating in your initial meetings with plotholders, to providing examples of good practice and sample documents. If an allotment society cannot be formed, however, then (generally speaking) the local council will need to consider direct management of the site by its own officers. This will have budgetary and resource implications for the council and will of course mean that the local community does not have direct involvement in the management of a local asset.

Q: Perimeter hedges are better for the environment than fences; can we plant hedges instead of installing fences?

A: Hedges are wonderful for wildlife, form a good security boundary and provide ecosystem services. Do bear in mind the following: careful selection of tree variety will be needed to prevent tall trees overshadowing and sucking nutrients from the growing space of the allotment site; during the initial hedge growing stage you will still need some form of secure perimeter such as fencing and; into the longer term you need to plan who is going to prune and maintain the hedge (and remove any litter) - this should be part of your consultation process with plot-holders when forming an allotment society.

Q: What size plots are best?

A: Be flexible with your plot sizes because plot-holders might need or want to up-size or downsize depending on changing circumstances. Applying 250 square metres as the basic template for your plot sizes is a well-practiced method of having a basic plot size which can easily be increased or decreased. This size and flexibility is well-recognised by the public and works well.

Sources of further information

National Allotment Society "Allotments in New Developments Service". A bespoke service for Planners and Developers. All enquiries are dealt with by NAS Head Office. Contact: natsoc@nsalg.org.uk

Short film about the benefits of allotments, from The National Allotment Society: https://www.youtube.com/watch?v=KCiGjgHcD7k

Building with Nature Standard Accreditation/Award The UK's first Green Infrastructure Benchmark. Defines 'what good looks like', with a simple, easy-to-use framework. Free to download. A BwN Award can provide a development scheme, or policy document, with formal, independent verification of meeting the BwN Standards. https://www.buildingwithnature.org.uk/

Green Infrastructure Resource Library

A unique database of documents, case-studies, videos, tools and other information about green infrastructure and its benefits. Free to use. https://tcpa.org.uk/resources/green-infrastructure-resource-library/

The PERFECT project ('Planning for Environment and Resource Efficiency in European Cities and Towns'). Promotes the contribution of green infrastructure in creating resilient and prosperous regions, by transferring good practice and expertise across the project partnership. https://tcpa.org.uk/collection/perfect/

The School of Natural Building. Design and build service for straw bale buildings. http://schoolofnaturalbuilding.co.uk/

Image credits:

Front cover: Ordnance Survey Open Green Space Layer: OS data $^{\odot}$ Crown copyright and database right 2022

Page 15: Strawbale building at Agbrigg and Bellvue allotments by Barbara Jones SNaB



O'Dell House, Hunters Road Corby, Northamptonshire NN17 5JE

01536 266576 natsoc@nsalg.org.uk www.nsalg.org.uk