



Guidance for Applicants

Green Infrastructure in New Residential Developments (Policy HP9), 2023 Update

Planning Services

July 2023

Version Control

July 2023 update:

Cost figures for off-site GI updated using Spons External Works and Landscape Price Book 2023 and CPI February 2023.

Updated average household size (2021 Census)

Addition of references to Biodiversity Net Gain and the biodiversity objective (Environment Act 2021).

December 2021 update:

Revised definition of green infrastructure to reflect NPPF 2021.

Inclusion of new text to support the development of living roofs and walls as items of green infrastructure.

Additional text to provide guidance on the use of SuDS features as green and blue infrastructure where they support biodiversity and appropriate habitat creation.

To provide the annual uplift in prices – at 3% as of August 2021.

Inclusion of a three-year review of prices in addition to annual CPI update.

Clarification on the developer contribution where on and off site provision is proposed for developments where 100% of the housing qualifies for the children's/young people discount.

Deletion of Appendix 3c – examples now in the main body of the document.

Consequential changes to page numbers and paragraphs

October 2020 - Original document published

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1.0 Introduction

1.1 This Guidance for Applicants sets out Wyre council's requirements for compliance with Wyre Local Plan (WLP) Policy HP9 – Green Infrastructure in New Residential Developments. It describes how the requirement for on-site green infrastructure provision should be calculated and the circumstances in which off-site provision will be supported. In doing so, the guidance also establishes basic design principles including the importance of designing appropriate play provision for children and young people. Although the Local Plan emphasises the priority given to on-site green infrastructure provision, where appropriate it does allow for a financial contribution to be paid for off-site provision. The method for calculating off-site financial contributions is explained in this guidance.

1.2 Green infrastructure is defined in the National Planning Framework 2021 as:

A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities, and prosperity.

1.3 In applying Policy HP9 the council will wish to ensure that proposed green infrastructure is consistent with this definition and so is designed to provide beneficial multi-functional green and blue space. According to the Town and Country Planning Association, such benefits can include:

- Supporting mental and physical health
- Encouraging active travel
- Cooling urban areas during heat waves
- Attracting investment
- Reducing water run-off during flash flooding
- Carbon storage
- Providing sustainable water management opportunities

1.4 At the time of writing (July 2023), the council is undertaking a full review of its green infrastructure evidence base. It is envisaged this update will utilise the Green Infrastructure Principles recently published by Natural England. The 2024 update of this guidance for applicants will take full account of the expected new strategic framework for green infrastructure in Wyre.

2.0 Policy HP9 - Green Infrastructure in New Residential Developments

- 2.1 Wyre Local Plan Policy HP9 (see Appendix 1) establishes the council's planning policy for the provision of green infrastructure within residential developments where there is a net gain of 11 or more dwellings. The policy provides the basis for identifying the "Total Green Infrastructure Requirement" (TGIR) a scheme should deliver based on applying a standard per 1,000 population against six types of green infrastructure:
- Parks and gardens
 - Amenity greenspace
 - Natural and semi-natural green space
 - Children and young people play area
 - Allotments
 - Playing pitches
- 2.2 A general description of each of the typologies is given in Appendix 2.
- 2.3 Policy HP9 allows for a flexible approach to the application of the TGIR in terms of the type of green infrastructure provided. It also recognises that in some cases some of the green infrastructure typologies may not be relevant to the scheme in question.
- 2.4 For the avoidance of doubt, green infrastructure refers to publicly accessible space. It does not include private space such as a garden within a residential curtilage. Also for the avoidance of doubt, the Local Plan policy requirement for green infrastructure is separate from the requirement for Sustainable Drainage Systems, although there may be overlap with the provision of natural/semi-natural green space which may incorporate Sustainable Drainage Systems features as part of a design-led green/blue infrastructure strategy. In addition landscaping is also a separate policy requirement but can be counted as green infrastructure where designed as an integral part of amenity green space. Each case will be considered on its merits, however the council will wish to make sure the overall green infrastructure contribution is not diluted by these elements to the extent that the remaining green infrastructure fails to meet the purposes of the policy, particularly in terms of the provision of play space. All green infrastructure should be able to perform the function expected of it in terms of scale, type, design and location.
- 2.5 It is important to emphasise that the planning of green infrastructure should be an integral part of the design process. Green infrastructure should be properly integrated into developments and, where appropriate – for instance where the green infrastructure is located on the edge of the site – the local area. The

design process should take into account the design principles and requirements established by this document and any good practice relating to green infrastructure provision. Further guidance on design is set out below.

- 2.6 The council will expect applicants in applying Policy HP9 to demonstrate in their planning application how green infrastructure provision has been incorporated into the scheme design process. In addition the area(s) which are to be considered as green infrastructure should be clearly indicated on a plan of an appropriate scale along with the total amount for each green infrastructure type in square metres.
- 2.7 Although this guidance is focused on the application of Policy HP9, applicants are advised that the provision of green infrastructure will also necessitate a consideration of the wider local plan policy framework, including policies related to climate change, design, landscaping, ecology and managing surface water.
- 2.8 For the avoidance of doubt, Policy HP9 applies to all residential developments proposing a net gain of 11 dwellings or more. This includes conversions and changes of use. In these cases, the provision of on-site green infrastructure may be restricted by the size of the building curtilage or practical considerations. Where on-site provision is not possible or appropriate, applicants for conversions or changes of use should make a contribution for off-site provision in accordance with the guidance below.
- 2.9 Also for the avoidance of doubt, where the provision – on or off site – of green infrastructure has been approved as part of a scheme and that scheme is later amended, the council will apply Policy HP9 and this guidance to the revised scheme. This may entail an amendment to the on-site green infrastructure required or a financial contribution. Where it is not possible or appropriate to amend the on-site green infrastructure, the council will apply the guidance relating to off-site developer contributions where the revised scheme results in a higher green infrastructure requirement than that originally approved.
- 2.10 At the time of writing, the government propose to introduce Biodiversity Net Gain (BNG) for large residential sites for applications submitted from November 2023 (date to be finalised). At present, it is understood that green infrastructure provided to comply with Policy HP9 may also provide BNG benefits as long as this is appropriately captured by the BNG Metric and the proposed habitat is itself appropriate. However, the precise nature of the relationship between BNG provision and other policy requirements has yet to be defined by the government. Applicants are therefore encouraged to seek advice from the local planning authority if this is likely to be an issue.
- 2.11 This guidance should be taken, in part, as evidence of the council's application of the amended biodiversity objective (the conservation and enhancement of

biodiversity) introduced by the Environment Act 2021 in as so far as it relates to the provision and design of green infrastructure including natural/semi-natural green space and blue (water) infrastructure.

3.0 How is the On-Site Green Infrastructure Requirement Calculated?

- 3.1 Policy HP9 identifies the quantity standard for each of the six green infrastructure types expressed as hectares per 1,000 population. The amount of green infrastructure to be provided is a function of the expected population of the new development (scheme assumed population) and the quantity standard for each of the six green infrastructure types. Once the figures for each type are calculated for a development these can be summed to provide a Total Green Infrastructure Requirement (TGIR) for the Scheme.
- 3.2 Policy HP9 and its introductory text recognises that not all typologies will apply to all types of residential development. In this context, the council accept that in calculating the Total Green Infrastructure Requirement the typology “Children and young people play area” can normally be omitted for the following development types:
- Properties specifically designed for older people (over 55 yrs)
 - Sheltered housing
 - Extra care housing
 - Student housing
 - 1 bed properties
- 3.3 For all residential developments there are three fundamental elements to calculating the on-site Total Green Infrastructure Requirement:
- i) Calculate the scheme population.
 - ii) Calculate the green infrastructure requirement for each of the six typologies based on the requirement per 1,000 population established by Policy HP9.
 - iii) Calculate the Total Green Infrastructure Requirement.
- 3.4 To assist applicants, the council has produced a green infrastructure calculator in the form of a downloadable Excel spreadsheet. The spreadsheet automatically calculates the scheme assumed population based on inputted house types/number of dwellings, and hence calculates the Total Green Infrastructure Requirement. An example is provided at Appendix 3. The spreadsheet is available from <https://www.wyre.gov.uk/general-information/green-infrastructure-advice-applicants/1>

- 3.5 The methodology behind the calculation is explained in the following paragraphs.

Step 1 – Calculate the scheme population

- 3.6 The first step is to estimate the population of the scheme. There are two basic options, depending on whether or not the house types (defined by the number of bedrooms) are known:

Option (a) - Where house types are known:

- 3.7 Where house types are known, calculate the scheme estimated population for each size of property (defined by number of bedrooms) based on the average household size for each relevant property type. Household size by property type is derived from the 2011 Census for Wyre as set out in table 1 below. Note that although data from the more recent 2021 Census is available this does not include data on household size by the number of bedrooms. For this update of the guidance the 2011 figures are used as the change in average household size in Wyre between the 2011 and 2021 censuses is minor.

Table 1 – Household Size by Number of Bedrooms in Wyre

No. beds	Household size (persons)
1	1.30
2	1.74
3	2.42
4	2.95
5+	3.35

- 3.8 Worked Example: A scheme consists of 100 houses with the following property size profile:
- 38 x 2 bed
 - 44 x 3 bed
 - 10 x 4 bed
 - 8 x 5 bed

Using the above method, Table 2 gives the following population for each property type:

Table 2 – Worked Example

Bed size	No. of properties	Average household size	Population (rounded)
2 bed	38	1.74	66
3 bed	44	2.42	106
4 bed	10	2.95	30
5 bed	8	3.35	27
Total estimated scheme population	100	n/a	229

Option (b) - Where house types are not known:

- 3.9 Where house types are not known, for instance where an outline planning application is being considered, deriving the scheme population is a simple matter of multiplying the average household size for Wyre (2021 Census) by the proposed number of properties. The average household size for Wyre from the 2021 Census is known and stands at 2.21 (rounded) persons. Thus for a 100 dwelling scheme, the population is calculated as $100 \times 2.21 = 221$.
- 3.10 The calculation at outline stage should therefore be regarded as a guide to the green infrastructure requirement. The council will require a further iteration of this calculation based on the actual number and type of dwellings proposed at reserved matters stage. However, for an outline application, the applicant will be expected to demonstrate that this guide figure can be appropriately accommodated. The council will impose a condition on outline permissions to require reserved matters applications to provide for green infrastructure based on the actual number and type of dwellings proposed, in accordance with Policy HP9.
- 3.11 Once the population has been calculated, the approach to calculating the guide required amount of green infrastructure is set out in step 2 below.

Step 2 - Calculate the required amount of Green Infrastructure

- 3.12 To calculate the amount of green infrastructure required, the green infrastructure standard for each of the six typologies is multiplied by the assumed population of the development with the result divided by 1,000.

- 3.13 By way of example, an estimated scheme population of 229 persons would create a Total Green Infrastructure Requirement of 0.90ha (rounded) as set out below in Table 3:

Table 3 – Green Infrastructure Requirement - Worked Example

Green infrastructure type	Green infrastructure standard*	Calculation	Green infrastructure requirement (hectares)**
Parks and gardens	0.4	$0.4 \times 229/1,000$	0.09
Amenity open space	0.4	$0.4 \times 229/1,000$	0.09
Natural and semi	1.5	$1.5 \times 229/1,000$	0.34
Children and young	0.18	$0.18 \times 229/1,000$	0.04
Allotments	0.25	$0.25 \times 229/1,000$	0.06
Playing pitches	1.20	$1.20 \times 229/1,000$	0.28
Total Standard	3.93		
Total Green Infrastructure Requirement			0.90

* Hectares (ha) per 1,000 population ** Rounded

- 3.14 The Policy allows for the Total Green Infrastructure Requirement to be “spent” on the most appropriate forms of green infrastructure within the typologies. Thus in the above example, the Total Green Infrastructure Requirement of 0.90ha could be used to develop (within the scheme) amenity open space, natural/semi-natural green space and a play area.
- 3.15 Where a scheme includes property types that are excluded from the requirement for play space for children and young people this element of the calculation is set to zero.

4.0 Green Infrastructure Types

- 4.1 Policy HP9 provides for flexibility in the type green infrastructure to be provided drawn from the list of six green infrastructure typologies. To determine the most appropriate type and design of green infrastructure, applicants are advised to seek pre application advice from the council’s Development

Management Team who will liaise with the council's Parks and Open Spaces Team.

- 4.2 In the majority of cases, on-site provision is likely to be in the form of amenity green space, natural/semi-natural space and children's play space.

Amenity Greenspace

- 4.3 Areas of amenity greenspace should normally be planned to include a usable grassed area for informal recreation and shrub and tree planting in a ratio of 80% grassed area and 20% planting. Planting should utilise native species or alternatively suitable non-native tree species with equivalent bio-diversity, eco system services and green infrastructure benefits.

- 4.4 Amenity areas should be properly planned spaces and may include the following features:

- Benches or picnic tables.
- Waste disposal bins.
- Signage as appropriate.
- Fencing with gate.
- Cycle stand.
- Footpaths to provide good accessibility to the host development and, if appropriate, surrounding area.

Natural/Semi-Natural Space

- 4.5 Natural/semi natural green infrastructure is distinguishable from amenity greenspace by virtue of the degree of management or intervention. Natural/semi-natural green infrastructure will typically contain freely growing flora with limited if any management. This contrasts with managed amenity greenspace such as a regularly mown grassed area.
- 4.6 Natural/semi-natural green infrastructure should be planned to clearly provide biodiversity benefits and may incorporate Sustainable Drainage System (SuDS) features such as ponds and swales. However, applicants should be aware that the requirement expressed in Local Plan policy CDMP2 Flood Risk and Surface Water Management for the implementation of Sustainable Drainage Systems is separate from the requirement for green infrastructure and the council will wish to ensure that each development incorporates sufficient appropriate green infrastructure that is functional and usable for residents.
- 4.7 Where Sustainable Drainage System features are proposed as part of the GI solution, they should be designed as natural/semi natural green space that provides clear and lasting ecological benefits, maximising their biodiversity

potential whilst providing a community resource that supports recreation and education, habitats and wildlife. This includes ensuring the appropriate management and maintenance of the feature(s) in question which should provide long term ecological benefits.

- 4.8 Poor water quality reduces the likelihood of creating valuable wildlife habitats. Therefore, in designing SuDS features that provide clear and sustainable ecological benefits, regard should be had to the quality of water within and/or passing through the system. Addressing the matter of pollutants and ensuring clean water in surface SuDS features is a critical requirement for delivering ecological value. In addition, SuDS features should be well designed to give an attractive appearance to the development whilst providing opportunities for wildlife. It is strongly recommended that appropriate ecological advice is sought to inform SuDS design in order to achieve a positive ecological outcome.
- 4.9 Typically, natural/semi-natural green infrastructure within a development site could include where appropriate in each case:
- Woodland and orchards.
 - Land deliberately planted or containing a mixture of planted and freely growing assemblages.
 - Rocks and bare soil where natural succession is allowed to freely occur.
 - Water features such as ponds, swales and ditches and associated vegetation such as reed beds and living roofs and walls, taking into account the advice above.
 - Opportunities for public access such as boarded walkways.
- 4.10 A living roof is created when a planting scheme is established on a roof structure. Living roofs can be designed as recreational spaces to be enjoyed by people or as ecological features to support wildlife or a combination of both. Living roofs can be broadly broken down into Intensive or Extensive systems. Intensive systems are generally those types which are used as recreational spaces and often include similar features to traditional parks and gardens such as shrubs, trees, paving, lawns and even water features. Extensive green roofs are normally intended to be viewed from another location as visual or ecological features, and are usually not trafficked. The more prevalent types of green roof which have hardier, more drought tolerant species of plants such as sedums, mosses, and wildflowers fall within the Extensive type.
- 4.11 A living roof may be termed “green” where planting is undertaken as part of the construction of the host building, or “brown”, where the roof surface is left to self-vegetate.

4.12 Living roofs may include different vegetation types, soils and hard landscaping materials such as aggregate and stones. They can have a variety of colours and textures.

4.13 Living roofs may be designed to have a specific function. A roof may be designed to create a particular habitat (biodiverse roof), store rainwater (blue/green roof) as part of a Sustainable Drainage System and may be combined with solar panels (biosolar roof)

4.14 Living or green walls are similar but as the name suggests involves planting on walls as opposed to roofs. As with living roofs, living walls can be designed in different ways and may utilise climbing plants which can be either rooted into the ground or into planter boxes and may be grown directly onto the building façade or be trained against wires or trellises. Alternatively, a system of pockets or troughs that support plants can be used. The benefits of living roofs and walls include:

- Surface water management - covering otherwise impermeable surfaces and absorbing and slowing down storm water. They can reduce the volume and smooth out peak flows, whilst simultaneously removing some pollutants.
- Urban cooling - reducing the temperature of a building's exterior, as well as the rooms within, by shade, insulation, albedo (reflectivity) and evapotranspirative cooling (the cooling which occurs when water is evaporated from leaves). Insulation provided by green roofs and green walls can also reduce heat loss from a building in winter. These effects can, in turn, reduce energy consumption for cooling and heating. The shading and cooling of buildings also reduces the urban heat island (UHI) effect.
- Biodiversity - depending on the nature of the planting, living roofs can provide habitats that can be colonised by a range of plants and animals, particularly wild bees, beetles, spiders, birds and bats. Green roofs and walls are accepted habitat types in the current BNG Metric (Defra, v4.0) although their value in terms of habitat units may be limited. However, they may offer biodiversity solutions in certain circumstances.
- Air quality - vegetation reduces air pollutants by filtering and capturing particulates (i.e. soot, which is produced mainly by diesel vehicles) and absorbing and breaking down gases (including nitrogen dioxide). Green walls in particular, offer the potential to reduce air pollution at street level.
- Health and wellbeing – living roofs can offer multiple physical and mental health and wellbeing benefits, providing visual relief, improving air quality, providing tranquillity through noise reduction, and, in cases where direct

access can be gained, provide additional greenspace for people to relax and encounter nature.

- Potential for carbon sequestration - carbon is stored in soils and vegetation as organic matter, and the ability of soils to become a net store of carbon is well-established. In general, the deeper the growing medium the greater the potential to store carbon.
- Noise reduction – although of more limited benefit, high-density growing media (soils and substrates) absorb sound well.

4.15 Proposals that include living roofs and walls must include an appropriate and on-going maintenance regime, including how access to the roof or wall will be gained to undertake the necessary maintenance tasks. Where green roofs and walls are planned as part of a scheme to meet Biodiversity Net Gain the habitat value should be secured for at least 30 years by legal agreement in-line with the appropriate regulations and guidance and fully detailed, including management and monitoring arrangements, in a Biodiversity Gain Plan.

4.16 Natural/semi-natural green infrastructure may be designed and located to provide an extension into the site of existing adjacent natural/semi-natural green space. Good quality and appropriately located natural/semi-natural green infrastructure can provide ecosystem services and contribute to the council's policies on ecology/biodiversity (CDMP4 Environmental Assets) and climate change (SP2 Sustainable Development). As such, given that natural/semi-natural green space forms a significant element of the Total Green Infrastructure Requirement, the council will wish to ensure that developments provide significant levels of natural/semi-natural green infrastructure.

4.17 Natural and semi-natural green infrastructure can be planned together with other green infrastructure types such as amenity space to as part of an area of informal greenspace that provides multiple benefits.

Play Space for Children and Young People

4.18 The Total Green Infrastructure Requirement will normally include a requirement for play provision. The British Psychological Society's Division of Educational and Child Psychology states that child-led play is a critical enabler of children's holistic development and wellbeing. Getting the right type and design of play provision is therefore an important aspect of delivering new developments.

4.19 In applying Policy HP9 the council will require applicants to create well-designed, inventive, sustainable and durable play solutions that address the development of physical activity, learning and social inclusion for all abilities with an appropriate degree of challenge. Equipment and play areas should

allow children and young people to be creatively stimulated in a safe and fun environment.

4.20 Play areas and the equipment they contain should be seen as an integral part of the overall scheme design.

4.21 The 'Fields in Trust' (FiT) guidance on sport and play in England identifies minimum sizes for equipped/designated play areas as follows:

- **Local Area for Play (LAP)** - 0.01ha (minimum activity zone of 100 sq.m) with a 5m buffer between the activity zone and the boundary of dwellings.
- **Local Equipped Area for Play (LEAP)** - 0.04ha (minimum activity zone of 400 sq.m) with a 20m buffer between the activity zone and the boundary of dwellings.
- **Neighbourhood Equipped Area for Play (NEAP)** - 0.1ha (minimum activity zone of 1,000 sq.m including at least 465sq.m hardstanding) with a 30m buffer between the activity zone and the boundary of dwellings.

4.22 Play facilities may be complemented by the provision of other outdoor provision orientated towards sports such as Multi Use Games Areas (MUGA) and skateboard parks which are larger areas with a minimum activity zone of 1,000 sq m (0.1ha) with a 30m buffer to dwellings.

4.23 Although the above categorization of play facilities can be a useful starting point for designers, the council is concerned that applying such a rigid categorization could limit the imaginative and innovative design of play areas.

4.24 The basic principle is that the size and design of a play area should reflect the scale of residential scheme proposed. The greater the assumed scheme population, the larger and more diverse the play space needs to be - in terms of the types and amount of equipment and the nature of informal landscaped play areas - to cater for a wider range of age groups and a more diverse play and interaction experience (see Table 4 below).

4.25 For larger developments where there is a green infrastructure requirement for play provision, the council will expect such provision to be designed to appeal to a broad range of age groups from younger children (e.g. 4-6 years old), through age groups where children are beginning to play independently, older children and teenagers over the age of 14.

4.26 The following table provides a *benchmark* guide for applicants to assist with the planning of green infrastructure within housing schemes. It is based on the above guidance published by 'Fields in Trust', adapted to take into account the policy framework established by Policy HP9. Each site and green infrastructure proposal will be considered according to its local circumstance and the

principles embodied in this guidance. Applicants are strongly encouraged to seek advice from the council on the intended approach to green infrastructure, including play provision, at the earliest opportunity.

Table 4 – Guidance Play Provision – Children and Young People

Proposed development (dwellings)	Type of play area(s)	Minimum activity zone*	Typical characteristics
25-99	LAP	100m ²	Designed for very young children.
100 - 200	LAP LEAP	100m ² 400m ²	<p>Play should be designed for young and older children, incorporating a wider range of equipment and opportunities for informal play.</p> <p>For sites in this bracket there should be some consideration of the needs of older children and young people, including places to meet and socialize.</p> <p>Play areas may be separated by intended age group or combined.</p> <p>For sites in this bracket different types of play provision may be located on different parcels of land or may form distinct areas within the same location. In some cases a linear space with areas aimed at different age groups or abilities may be appropriate.</p>
201-500	LAP LEAP	100m ² 400m ²	Larger schemes should incorporate the widest range of play options aimed at a wide range of ages and abilities. Play areas should include those types of equipment typically associated with LAPs and LEAPs, but also include increased opportunities for informal play and sport such as hard surfaced areas, basketball hoops, skate ramps and

Proposed development (dwellings)	Type of play area(s)	Minimum activity zone*	Typical characteristics
			shelters and areas where young people can meet and socialize. For sites in this bracket different types of play provision may be located on different parcels of land or may form distinct areas within the same location. In some cases a linear space with areas aimed at different age groups or abilities may be appropriate.
501+	LAP LEAP NEAP	100m ² 400m ² 1,000m ²	As for the above but with the additional requirement for a greater focus on older children and young people including provision typically associated with a NEAP including hard surfacing for ball games. Provision is likely to be located throughout the site to provide good access to residents and may include more than one location for one of more of the types (e.g. 3 LAPs, 2 LEAPs).

* The minimum activity zone excludes any necessary buffer to nearby properties.

- 4.27 The above table should be used as a guide only, with the precise size and design, including number and types of equipment to be agreed with the council. The type and scale of play provision should be commensurate with the scale of the development proposed, taking into account the possibility of the future phases coming forward on larger sites. In large or phased developments play provision should be implemented in the early phases of development to ensure that the needs of new residents are met. In some cases a temporary play facility may be constructed to accommodate the play needs of new resident children and young people until the land is made available for the permanent facility.
- 4.28 Where a residential development is between 11 and 24 dwellings inclusive normally the council will not expect a small play area to be established. Instead, the children's play contribution will be "spent" on one of the other typologies as

allowed for by Policy HP9 to ensure that the full Total Green Infrastructure Requirement is provided on such smaller sites.

4.29 The council will expect play areas to be appropriately designed for a range of age groups and abilities where possible. Guidance on design principles is set out below. In the case of larger developments (100+ dwellings) it may be appropriate for separate play areas to be developed that cater for specific age groups (e.g. a LAP-style play area and LEAP-style play area). In considering the size, design and number of play areas appropriate to a proposed development, the council will take into account:

- a) The scale and layout of the development to which the proposed play area(s) relate;
- b) The age range being catered for;
- c) The level and type of equipment/area deemed to be most suitable;
- d) Accessibility between the play area(s) and proposed development and, if appropriate, the surrounding neighbourhood; and
- e) The proximity to existing play facilities outside of the site, including the condition and range of equipment on offer.

Sports Pitches

4.30 Where sports pitches are to be provided the council will require applicants to consider the need for supporting infrastructure including car parking and changing rooms/toilets. It will be particularly important that sports provision is appropriately located to provide good accessibility by different modes of movement including car, public transport, bicycle, and on foot. The location of sports pitches will need to ensure the amenity of local residents and users of non-residential property is protected. Where sports pitches are proposed, the council will have regard to any formal or informal pitch size standards (for instance those established by Fields in Trust) for the intended use. For sports pitches the council will require applicants to provide a robust management plan that should cover matters such as maintenance and operation responsibilities.

Allotments

4.31 The National Allotment Society report that allotments provide multiple benefits:

- Social Capital;
- Contact with nature;
- Improved physical and mental well-being;
- Providing a sense of achievement – acquiring new knowledge and developing new skills; and
- Providing fresh, local, seasonal produce.

4.32 Where allotments are to be provided the council will require applicants to consider the need for supporting infrastructure including car parking and toilets. Ideally allotments should be located within a site where there is good accessibility by public transport, bicycle, and on foot. The location of allotments will need to ensure that the amenity of local residents and users of non-residential property is protected, including hours of use. The council will require applicants to provide a robust management plan that should cover matters such as maintenance and operation responsibilities. Where allotments are proposed, the council will require applicants to consider ground conditions, including ensuring that the soil is of an appropriate type and quality, and drainage.

4.33 Requirements for new allotments include:

- Plot sizes in the region of 100 – 110 sq m.
- Surfaced pathways of at least 1.5m width to accommodate wheelchairs.
- Fencing with gates of at least 1.5m width.
- Appropriate drainage including using opportunities to harvest and/or recycle water.
- Sufficient number of standpipes for the number of plots.
- Car parking nearby.
- Land should be free from contamination and suitable for the intended use unless any contamination can be appropriately mitigated
- Land should be free, or made free, from restrictive covenants and rights of way.
- Consideration should be given to the need for allotments to be accessible and usable by those with a mobility or other impairment.

4.34 Assuming an average plot size of 100 sq m, 1,700 sq m (0.17 ha) could provide 13 plots at 1,300 sq m with 400 sq m of circulation/servicing space/flexibility.

4.35 Allotments are likely to be suitable for larger schemes where circumstances allow. For instance, a scheme of 300 houses would create a Total Green Infrastructure Requirement of circa 2.61 ha, of which some 0.17ha is attributable to allotments, with the remaining 2.44 ha available for other forms of green infrastructure provision.

Parks and Gardens

4.36 Parks and gardens are classed by Fields in Trust as informal outdoor space alongside amenity green space and natural/semi-natural space. The quality guidelines suggested by Fields in Trust are:

- Parks to be of Green Flag status.
- Appropriately landscaped.

- Positive management.
- Provision of footpaths.
- Designed so as to be free of the fear of harm or crime.

4.37 Parks would normally be of a civic scale with a minimum size of 0.5 hectares in size and act as a destination for the local community large enough to host events that bring people together. A typical park space is likely to contain other green infrastructure types such as play facilities and natural/semi-natural greenspace. It will contain grassed areas for informal games and recreation, multiple locations for seating, pathways and shelters. Larger parks can include appropriately planted garden areas that are designed for quiet contemplation, relaxation and the appreciation of nature. Alternatively, garden areas may be designed as part of more informal amenity grassed space (see above). Parks and gardens will be a consideration on larger schemes. Using the Total Green Infrastructure Requirement methodology described above, a typical 100 dwelling scheme would generate a Total Green Infrastructure Requirement of 0.87ha (based on the average household size). A specific dwelling mix may generate a different figure). This would be sufficient for the creation of a small park/garden with play facilities and/or natural/semi-natural green space.

5.0 Design

General Considerations

5.1 Care will need to be taken with the location of green infrastructure particularly that which will be used regularly by the community. Green infrastructure areas should be attractive places that provide a welcoming and stimulating environment and applicants are encouraged to be imaginative in their approach to design. In locating and designing green infrastructure, the following general design principles should be taken into account. Green infrastructure should:

- Where possible be designed to form part of – and link into - the wider green infrastructure network local to a site.
- Where possible and appropriate incorporate existing landscape and natural features, taking opportunities to enhance and protect biodiversity.
- Be designed to be easily accessible by prospective users, including being designed to be accessible by those with restricted mobility or physical impairment, including consideration of footpath material and gradient.
- Be carefully located such that natural surveillance can be utilised as part of creating a safe environment.
- Be appropriately drained and free of surface water flood risk.
- Be located away from areas of air or noise pollution or pollution caused by odour, e.g. main roads, industrial uses.

- Preferably be on level ground. Where green infrastructure is provided on sloping ground cross-sections should be provided to demonstrate that it can be considered to be useable.
- Be located such that disturbance to residents both new and existing is minimised or capable of appropriate management.
- Be located and designed to allow for ease of maintenance and management.

5.2 Building for Life 12 provides a useful mechanism through which the design of places and the integration of open space and the built form can be considered (see Appendix 5 for a link to the Building for Life web site).

Trees

- 5.3 Trees are an important component of green infrastructure. They can be integrated into publically accessible green infrastructure to support ecological, health and climate change mitigation and adaptation benefits, the latter where trees provide shading and personal cooling opportunities. To maximise adaptation benefits trees must be of appropriate size, location and orientation.
- 5.4 Trees should be provided in line with the “right tree, right place” philosophy to ensure that trees of appropriate species are planted and that the appropriate maintenance and management regime is put in place from the outset.
- 5.5 The overall aim should be to ensure that newly planted trees are successful in the long term with healthy and strong growth.
- 5.6 With this in mind when planning a tree planting regime, applicants will be required to demonstrate how the following general considerations have been applied:

a. Location, including:

- Local climate;
- Soil type, permeability and compaction; and
- Potential conflicts with other uses.

b. Tree selection and tree suitability, including:

- Health and condition of the tree;
- Age and species of tree;
- Size of the tree when mature;

- Resilience, including resilience to changing climate conditions and resilience to actual or potential pests and disease that may arise from a changing climate; and
 - Species diversity if required to mitigate risks to tree health.
- c. Planting, establishment and on-going management and maintenance. There should be a clear and appropriate strategy for the care and management of existing and new tree cover, including replacement of new trees lost in the first five years from planting.
- d. Opportunities to provide ecosystem services, including but not limited to climate change mitigation and adaptation, habitat creation and surface water attenuation. In this context, tree species and planting should be appropriate to the function that the tree or group of trees is expected to play, for instance the species of a tree planted to provide shading and cooling to a building may be different from that planted to play a role in attenuating surface water run-off.
- 5.7 When planning green infrastructure, regard should be had to the retention of, and integration with, existing flora including trees and hedgerows where this is possible and appropriate.
- 5.8 Proposed tree cover should utilise appropriate native species or alternatively suitable non-native tree species with equivalent bio-diversity, eco system services and green infrastructure benefits.
- 5.9 The design of site layouts should ensure that trees are given adequate space for growth over their expected lifespan. New trees and those to be retained should be appropriately protected during the construction phase.

Play Areas

- 5.10 Play areas should be located and designed according to the five overarching principles and ten design principles outlined below.

Overarching principles:

- a) A successful play space is a place in its own right, specially designed for its location.
- b) Designers should take a holistic perspective on designing for play.
- c) Well-designed play spaces are good for all of the community, not just children.
- d) Play areas should consider the play needs of children of a range of ages in an appropriately designed environment.

- e) Play spaces should be designed to positively encourage inclusive play.

Successful play spaces require designs that:

- a) Are 'bespoke' designed to enhance its setting;
 - b) Are well located in the best possible and most appropriate place;
 - c) Make use of natural elements where possible;
 - d) Provide a wide range of play experiences so children can play in different ways;
 - e) Are accessible and usable by children whose mobility may be impaired or who may have a mental health condition;
 - f) Meet community needs;
 - g) Allow children of different ages to play together;
 - h) Build in opportunities to experience risk and challenge;
 - i) Are sustainable and capable of being appropriately maintained; and
 - j) Allow for change and evolution through flexible design and layout.
- (Play England, Design for Play, 2008)

5.11 It is critical that play areas are designed to be inclusive such that all children are provided with opportunities to engage with different play experiences. The following principles provide a useful guide to designing for inclusive play:

- a) There should be a clear route through the playground. Ideally there should be two or more routes so there is interest in moving around the space.
- b) A variety of accessible high points should be built-in to play areas. These can be landscaped mounds, decks and climbing units.
- c) Sensory experiences involving sound, touch, smell and visual stimulation are vital.
- d) At least one rotating play item should be highly accessible (e.g. inclusive roundabout).
- e) Locate dynamic pieces in easy reach of entrance points and access routes.
- f) Where children may not be able to access a challenging climbing unit, ensure they can get close, ideally with a route that allows them to be in the heart of the action if they so choose.
- g) For a site to be truly inclusive it still needs to provide challenge to those children who require it.
- h) Water and sand can provide a play experience. A hardstanding access point to a sand space increases inclusion.
- i) Build-in quiet areas that have gentle sensory experiences that benefit young children or children who need time out away from high tempo action.

6.0 Timing of Provision

- 6.1 It is important that green infrastructure is provided at the earliest practical opportunity to ensure that new residents are able to access the benefits that open space provides as soon as possible. This is a particularly important matter when dealing with a large scale development likely to be developed in phases and over a period of years. With this in mind, careful thought will need to be given within the design process to the location of green infrastructure, including locating green infrastructure in more than one location within the site and/or the development of temporary areas of green infrastructure (including children's play). The details of timing / phasing will be agreed through negotiation, at the time of the planning application or as a requirement of the associated section 106 agreement or through planning condition.
- 6.2 Applicants for planning permission will be expected to demonstrate how their scheme for green infrastructure, including children's play, responds to the principles set out above and the detail of this guidance.

7.0 Maintenance and Management

- 7.1 Policy HP9 (4) states that where on-site provision is provided, developers must provide details of its long-term management. This should include details of the management body and funding to ensure the green and blue infrastructure, including any SuDS features deemed to be acceptable as part of the GI solution, can be maintained and managed to an appropriate standard in perpetuity (the council does not adopt green infrastructure). To this end, a management plan must be submitted and agreed in writing by the council (either at the time of the planning application or at the requirement of the associated section 106 agreement or planning condition) to ensure the use of the green infrastructure provided remains appropriate in terms of its use, condition and public safety. In some cases a parish or town council may be willing to accept the management and maintenance responsibility subject to the appropriate legal and financial considerations. Where this is the case the council will expect applicants to enter into dialogue with the parish/town council to ascertain whether or not this is a reasonable and practical approach.

8.0 Off-Site Provision – Financial Contribution

- 8.1 In line with Policy HP9, the council expect green infrastructure provision to be on-site, although a financial contribution for off-site provision may be acceptable where appropriate. Off-site provision via a financial payment is only likely to be acceptable in a very limited range of circumstances such as financial viability (justified by reference to Local Plan Policy SP6 Viability) or physical site constraints (including where a small site is being developed at a

high density such as a scheme of flats/apartments, or where a conversion/change of use with a net gain of 11 dwellings or more is proposed) and only where there is an identifiable opportunity for new/improved green infrastructure within a reasonable walking distance from the application site (as established by the accessibility standards in Policy HP9) or is otherwise deemed to be appropriate.

- 8.2 The accessibility standards are to be regarded as “straight line” distances. However, in applying these distances the council will take into account local features and obstacles to pedestrian and cycle movement to ensure that any off-site provision is appropriately safely accessible.
- 8.3 Normally, payments will be held by the council for future spend on green infrastructure provision in accordance with the terms of an agreement made under section 106 of the Town and Country Planning Act 1990 (as amended) (s106 agreement). As the intended spend may not always be ready to commence on receipt of the relevant contributions, the council will expect to be able to retain contributions for a period of a minimum of 10 years from the date of payment.
- 8.4 The approach to calculating the financial contribution for off-site green infrastructure provision is based on the following principles:
- a) The commuted sum method is based on dwelling types and assumed scheme population (occupants) as this reflective of likely pressure on local green infrastructure resources.
 - b) It is understood that the end use of the commuted sum monies may be unknown, particularly in terms of the green infrastructure types paid for.
 - c) The costs of providing green infrastructure off-site will necessarily be an estimate. This estimate should be based on professional standards/costings and/or real world examples in Wyre.
 - d) The method should comply with the Community Infrastructure Levy regulations.
- 8.5 The commuted sum contribution will be based on a cost per occupant translated into a cost per dwelling based on number of bedrooms.
- 8.6 The council has estimated costs associated with delivering two of the green infrastructure typologies and it is considered that these are representative of typical on-site green infrastructure provision. These types are:
- Amenity open space
 - Children’s play in the form of a LEAP

Amenity Open Space

8.7 Costs based on Spon's External Works and Landscape Price Book 2023 (quarter 1 2022 base) (updated to 2023 prices based on the February 2023 Consumer Price Index including housing costs measure of inflation at 9.2%). It is assumed costs will be focused on three aspects of amenity open space creation:

- Grass
- Shrubs
- Trees

8.8 Assumed costs are as follows:

- Grass = £673 per 100m²
- Shrub planting = £5,089 per 100m²
- Trees = £336 per tree

(See Appendix 4 for a breakdown of the costs).

8.9 By way of example, these (rounded) costs would provide 100m² of grassed amenity area as follows:

Table 5 – Amenity Area Assumed Costs (Grass and Shrubs)

General amenity area of 100m²	£
Assuming 80m ² Grass	538
Assuming 20m ² Shrub Planting	1,018
Tree Planting (1no.)	336
Total	1,892

8.10 Amenity open space may be laid out in a formal manner with seating, bins etc. These costs equate to £10,144 per 100m² (see Appendix 4 for details).

8.11 Bringing this together, the assumed cost of providing 100 m² of amenity open space is as follows:

Table 6 – General Amenity Area – Overall Costs

Item	£
General amenity area of 100m ²	1,892
Other items of 100m ²	10,144
Total for 100m²	12,036
Total for 1m²	120.00 (rounded)

Children's Play

- 8.12 The cost for children's play is based upon experience in Wyre. It is assumed that a LEAP will contain at least six items of equipment with impact absorbing surfacing, fence, gate, bin and seating. The standard types of equipment generally include a multi-activity play/climbing unit (this may be one large unit or two smaller units, one unit aimed at toddlers one at slightly older children), swings for both younger and older children, rotating items and rocking items.
- 8.13 The experience in Wyre is that the cost for a typical LEAP is £72,000 including surfacing, fencing and gates. If a standard LEAP activity zone is a minimum of 400m² (as per the Fields in Trust guidance) this cost would give a figure of £180.00 m².

Amenity Open Space and Children's Play

- 8.14 Bringing the above together gives:

Table 7 – Amenity Open Space and Children's Play – Overall Costs

Typology	Cost per 1m ²
Amenity green space	120.00
Children's play (LEAP) 400m ²	180.00
Total	300.00

- 8.15 Costs will be revised annually by the Consumer Prices Index (CPI) measure of inflation and will be reviewed every three years.

Calculating the Green Infrastructure Contribution

8.16 Policy HP9 sets out the green infrastructure requirement in hectares per 1,000 population for six green infrastructure typologies. When summed, these individual requirements equate to a Total Green Infrastructure Requirement of 3.93ha.per 1,000 population. This requirement averaged out across the six typologies equates to 0.655ha/1,000 population or 6.55m² per person (Table 8).

Table 8 – Green Infrastructure Standard Per Person

Green infrastructure type	Green infrastructure standard	M ²	Per person m ²
Parks and gardens	0.4	4,000	4
Amenity open space	0.4	4,000	4
Natural and semi natural	1.5	15,000	15
Children and young people	0.18	1,800	1.8
Allotments	0.25	2,500	2.5
Playing pitches	1.20	12,000	12
Total Green Infrastructure Requirement	3.93	39,300	39.3
Average	0.655	6,550	6.55

8.17 Using the above cost of £300.00/m² for amenity and play space, the cost per person would be **£1,965.00** (6.55 x £300.00). By averaging out the requirement and costs this approach captures a financial contribution that can be spent across any of the six typologies and directly relates to the requirement as if it were to be provided on-site.

8.18 Calculating the financial contribution is therefore a matter of identifying the scheme dwelling mix and assumed population as per the calculation for on-site provision.

8.19 As set out in §3.2 above, in some cases the council may waive the requirement for the provision of children's play space. However, such developments will still need to contribute to the other green infrastructure typologies. Where this is the case and a developer contribution for off-site provision is deemed to be the most

appropriate way of delivering green infrastructure, the council will take the deduction of children's play space into account. For example where 1 bed housing is proposed as part of a mix of dwellings, the following approach will apply:

- The standard for children's play is 0.18ha per 1,000 population.
- Deducting this from the Total Green Infrastructure Requirement of 3.93ha gives 3.75ha per 1,000 population over five typologies.
- This equates to an average of 0.75ha per 1,000 population across the five typologies or 7.5m² per person.
- Using the above cost of £120.00 m² for amenity green space gives a cost per person for one bed properties of **£900.00** (7.5 x £120.00).

8.20 The cost per person can be represented as a cost per dwelling based on household size and bedroom size, as follows (Table 9):

Table 9 – Developer Contributions by Person and Dwelling (rounded)

Dwelling size (no. beds)	Average household size (Wyre)	Contribution per person £	Contribution per dwelling £
1	1.3	900.00	1,170.00
2	1.74	1,965	3,419.00
3	2.42	1,965	4,755.00
4	2.95	1,965	5,797.00
5+	3.35	1,965	6,583.00

8.21 Table 10 below provides a worked example of a financial contribution for a 50 dwelling scheme with 1-bed properties as part of the dwelling mix.

Table 10 – Developer Contributions Worked Example (rounded)

Dwelling size (no. beds)	Dwellings	Average household size	Contribution per person £	Cost per dwelling £	Total contribution £
1	5	1.3	900.00	1,170	5,850
2	15	1.74	1,965	3,419	51,286
3	20	2.42	1,965	4,755	95,106
4	5	2.95	1,965	5,797	28,984
5+	5	3.35	1,965	6,583	32,914

Dwelling size (no. beds)	Dwellings	Average household size	Contribution per person £	Cost per dwelling £	Total contribution £
TOTAL	50				£214,140

Example only. Figures may not sum exactly due to rounding.

- 8.22 If an outline planning application is submitted and off-site provision accepted in principle, the estimated financial contribution should be based on the following formula:

Proposed number of dwellings x average household size for Wyre of 2.21 x £1,965.

Table 11 below shows a worked example where house types are unknown.

Table 11 – Developer Contributions – House Types Unknown

Estimated number of dwellings	Average household size (borough)	Population	Contribution per person*	Estimated financial contribution
50	2.21	110.5	£1,965	£217,132

Example only. May not sum exactly due to rounding.

- 8.23 The final contribution will be calculated when the number and type of dwellings (by bedrooms) is known. The council will require an appropriate planning obligation at outline stage to this effect. A related condition may also be required.

Mixed on-site and off-site provision

- 8.24 Policy HP9 allows for a development to provide an element of on-site provision that is less than the Total Green Infrastructure Requirement, with the balance being provided in the form of a commuted sum. The level of commuted sum will be dependent on the extent of the on-site provision (in hectares). The financial contribution is calculated as follows:

- Calculate the Total Green Infrastructure Requirement as set out above.
- Divide the Total Green Infrastructure Requirement (in m²) by the scheme assumed population to give the Total Green Infrastructure Requirement per person m².
- Calculate the residual green infrastructure provision by deducting the on-site provision from the Total Green Infrastructure Requirement

- d) Divide the residual green infrastructure provision (in m²) by the Total Green Infrastructure Requirement per person and multiply by £1,965 to give the financial contribution.

8.25 This can be shown by example assuming a 50 dwelling scheme with a dwelling profile of:

1 bed – 5 properties

2 bed – 15 properties

3 bed – 20 properties

4 bed – 5 properties

5 bed - 5 properties

This profile gives a population of 112.5 and a TGIR of 0.44ha, or 4,400m². This equates to 39.11m² per person. If on-site provision is 0.20 ha then the residual Total Green Infrastructure Requirement would be 0.24ha or 2,400m² (0.44 – 0.20). 2,400m² is equivalent to the green infrastructure requirement for 61.37 persons (2,400/39.11). At a rate of £1,965 per person, the financial contribution is £120,592 (61.37 x 1,965).

8.26 Where a mixed on-site/off-site approach is taken the financial contribution does not include a discount for excluded properties defined by §3.2 unless said properties make up 100% of the housing being delivered.

Appendix 1 - Wyre Local Plan Policy HP9 – Green Infrastructure in New Residential Developments

1. Residential development resulting in a net gain of 11 dwellings or more will be required to make appropriate provision of sufficient high quality green infrastructure for its residents in accordance with the typologies and standards where relevant as set out below:

Typology Provision	Quantity Standard per 1000 population (ha)	Urban Accessibility Standard (metres)	Rural Accessibility Standard (metres)
Parks, gardens	0.40	720	1200
Amenity greenspace	0.40	720	720
Natural and semi natural greenspace	1.50	2000	2000
Children and young people play area	0.18	480	720
Allotments	0.25	960	960
Playing pitches	1.20	1200	1200
Total Green Infrastructure Requirement	3.93	n/a	n/a

2. Based on the 'Total Green Infrastructure Requirement' the Council will determine the most appropriate type(s) and means of open space provision, having regard to –
 - a) the need to create functional and meaningful green infrastructure spaces;
 - b) the most up to date assessment of green infrastructure requirements and provision;
 - c) the location and character of the site; and
 - d) the type of residential development proposed.

3. Green infrastructure should be provided on site. Where appropriate, the Council will accept a financial contribution towards improving the quality and accessibility of nearby existing green infrastructure in lieu of on-site provision.
4. Where green infrastructure is provided on site developers must provide details of its long term management such as the establishment of a management company.
5. The incremental development of a large site through a number of proposals for less than 11 dwellings will not be permitted.

Appendix 2 – Green Infrastructure Typology Description

Green Infrastructure Type	Description	Examples
Parks and Gardens	Landscaped areas of general recreation, suitable for the holding of community events and supportive of local flora and fauna. May contain one or more of the other GI types.	Urban parks, country parks, formal gardens (including designed landscapes).
Amenity Greenspace	Publically accessible areas within communities for informal activities. May include areas of biodiversity value. Should include where appropriate, areas of tree, shrub and flower planting. Preference for a smaller number of larger areas rather than a large number of smaller areas.	Informal recreation spaces, housing green spaces, village greens, other incidental space.
Natural and semi-natural urban greenspace*	Land, water and geological features that are accessible on foot to large numbers of residents and have a natural character including those that may have been naturally colonised by plants and animals and designed/managed sites. . Natural and semi-natural open space can frequently be found within other open space types.	Woodland (coniferous, deciduous, mixed) and scrub, grassland (e.g. meadow), heath or moor, wetlands (e.g. marsh), open and running water, wastelands (including disturbed ground), bare rock habitats (e.g. cliffs, quarries, pits).
Children and young people	Areas designed for the purpose of play and social interaction for younger children (up to the age of 12) and teenagers including equipped play areas and youth shelters.	Play areas (including LAPs, LEAPs and NEAPs), outdoor basketball hoops, areas to mix and socialise (e.g. shelters).
Allotments	Secure areas for people who wish to grow their own produce, including food and flowers. May include	Allotments, community gardens, city (urban) farms.

Green Infrastructure Type	Description	Examples
	facilities such as toilets and re-cycling.	
Playing Pitches	Publically accessible formal areas for sporting activities including bowls, football, tennis and rugby. May include facilities such as changing rooms and toilets.	Tennis courts, bowling greens, sports pitches (including artificial surfaces), golf courses, athletics tracks, school playing fields, other institutional playing fields, other outdoor sports areas.

* There is no “official” definition of natural and semi natural green space. The description given in the table above is based on Providing Accessible Natural Greenspace in Towns and Cities A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision, published by English Nature, itself referencing previous work in the form of Harrison, C, Burgess, J, Millward, A, and Dawe, G (1995) Accessible Natural Greenspace in Towns and Cities English Nature Research Report 153, English Nature

Appendix 3 On-Site Green Infrastructure Calculator – Worked Examples

3a. Green infrastructure calculator for housing schemes where house types are known

This example assumes a 50 dwelling scheme. Five 1 bed properties are proposed as part of the scheme dwelling mix. Where 1 bed properties are proposed the requirement for children's play space is set at zero.

The green infrastructure requirement calculation for each of the six typologies is based on:

Scheme assumed population x Typology Standard (hectares)/1,000

Summing the requirement for each typology gives the Total Green Infrastructure Requirement (TGIR).

(see next page)

1 bed properties – Total Green Infrastructure Requirement

Dwelling size (no. beds)	Dwellings	Av HH Size	Pop.	Green Infrastructure Type	Standard per 1,000 pop	Green Infrastructure Requirement
1	5	1.3	6.5	Parks and gardens	0.4	0.003
				Amenity open space	0.4	0.003
				Natural/semi natural	1.5	0.010
				Children & young	0	0.000
				Allotments	0.25	0.002
				Playing pitches	1.2	0.008
TGIR						0.02

2-bed+ properties – Total Green Infrastructure Requirement

Dwelling size (no. beds)	Dwellings	Av HH Size	Pop.	Green Infrastructure Type	Standard per 1,000 pop	Green Infrastructure Requirement
2	15	1.74	26.1	Parks and gardens	0.4	0.042
3	20	2.42	48.4	Amenity open space	0.4	0.042
4	5	2.95	14.75	Natural/semi natural	1.5	0.159
5+	5	3.35	16.75	Children & young	0.18	0.019
				Allotments	0.25	0.027
	45		106	Playing pitches	1.2	0.127
TGIR						0.42

All properties - Total Green Infrastructure Requirement

Dwellings	50					
Pop.			112.5			
				Green Infrastructure Type	Standard per 1,000 pop	Green Infrastructure Requirement
				Parks and gardens	0.4	0.045
				Amenity open space	0.4	0.045
				Natural/semi natural	1.5	0.169
				Children & young	0.18	0.019
				Allotments	0.25	0.028
				Playing pitches	1.2	0.135
TGIR (All)						0.44

3b. Green infrastructure calculator for housing schemes where house types are not known

The green infrastructure requirement calculation for each of the six typologies is based on:

Green infrastructure standard multiplied by the scheme assumed population (based on the number of dwellings multiplied by the average household size for Wyre) divided by 1,000.

Estimated number of dwellings	Average household size (borough)	Pop.	GI Type	Standard per 1,000 pop	Green Infrastructure Requirement (ha)
30	2.21	66.3	Parks and gardens	0.4	0.027
			Amenity open space	0.4	0.027
			Natural/semi natural	1.5	0.099
			Children & young	0.18	0.012
			Allotments	0.25	0.017
			Playing pitches	1.2	0.080
TGIR					0.26

Where the scheme dwellings profile is not known, the TGIR will be an estimate. The TGIR will need to be recalculated when the scheme dwelling profile is known, for instance at Reserved Matters stage.

Appendix 4 – Amenity Greenspace Assumed Costs

Source: Spon's Landscape and External Works Pricebook 2023 (base quarter 1 2022) as described above and 9.2% inflationary increase as of February 2023. Prices include the north west adjustment (Spons page 31).

Grass for public use including top soil and seeding £673 per 100m²

Shrub provision and planting including top soil £5,089 per 100m²

Tree planting including excavation and supply £336 per tree

Other Items per 100m ²	£
1no. bench or picnic table	907
1no. bin	680
2no. sign	109
40lin m fencing with gate	3,366
1no. cycle stand	91
20m ² footpath @ £55.00/m ²	1,634
Drainage	3,357
Total for 100m ² of other items	10,144

Appendix 5 – Links

British Psychological Society - Children's right to play

<https://www.bps.org.uk/guideline/childrens-right-play>

Building for Life

<http://www.builtforlifelifehomes.org/>

Living roof and walls from design to practice

https://www.designingbuildings.co.uk/wiki/Living_Roofs_and_Walls,_from_policy_to_practice

Fields in Trust

<http://www.fieldsintrust.org/>

The Green Roof Guide

<https://www.greenroofguide.co.uk/what-are-green-roofs/>

[The National Allotment Society](#)

<https://www.nsalg.org.uk/>

[Play England](#)

Natural England GI Standards and Principles

[Green Infrastructure Home \(naturalengland.org.uk\)](#)

Natural England Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation (ENRR526)

<http://publications.naturalengland.org.uk/publication/65021>

Town and Country Planning Association pages on [Green Infrastructure](#)

<https://www.tcpa.org.uk/Pages/Category/green-infrastructure>