



Building
with Nature

Standards Framework

(BwN 2.0)



Foreword



The United Kingdom is one of the most nature depleted countries in the world. According to researchers at the Natural History Museum, the UK only has half its natural biodiversity left. Over the last 50

years, much of our wildlife-rich habitat has been lost or degraded and over 40% of UK species have declined.

Despite efforts to reverse these losses in the last decade this trend is continuing and we are now living through an ecological and climate emergency.

The way we collectively use land and design, construct and manage our built environment contributes to these emergencies. Furthermore, our built environment does not always meet our collective health and social needs or expectations, often we trade-in natural functions and systems for a compromised and less effective placemaking reality. It need not be this way.

As built environment professionals, investors and stakeholders, we have the opportunity and responsibility to make sure the places we deliver for individuals to live, work and spend time in are sustainable, interactive and function for both people and wildlife. We can make sure they help address the crisis, not contribute to it. Put simply, it is within our power to do better.

The Building with Nature Standards Framework responds to this challenge. The Standards Framework is a tried and tested means of defining high-quality green infrastructure. It signposts a way through policy, planning, procurement and management, to deliver places that are good for people and wildlife.

Born out of a strong partnership between Gloucestershire Wildlife Trust and the University of the West of England, and now overseen by a Standards Board comprised of green infrastructure experts and representatives from industry, government, professional bodies, and other key stakeholders, the Standards Framework and Building with Nature Accreditation provides a means to showcase the best policies, projects and practice.

As Chair of the Standards Board, I am delighted to present the Standards Framework and, on behalf of Building with Nature, invite you to join us on our mission to make high-quality green infrastructure integral to placemaking in the UK, maximising benefits for both people and nature now and for the future.



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Chair, Building with Nature Standards Board

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About the Standards Framework

This document (the Standards Framework) describes the individual Standards that collectively form a definition of high-quality green infrastructure. It also gives an overview of the Building with Nature Assessment and Accreditation process allied to the recognition of the Standards Framework's application on a development or policy.

The main purpose of the document is to introduce and develop the reader's understanding of the Building with Nature benchmark, and in-turn the qualities that define good green infrastructure. So that it may inform the design, delivery and maintenance of good green infrastructure outcomes.

It is aimed at professionals looking to build their knowledge of Building with Nature and how it defines high-quality green infrastructure, with a view to applying

the Standards and seeking Accreditation.

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Helping create better places for people and wildlife



Contents

Pages 4 - 7

Building with Nature Overview

Introduction

How Building with Nature Accreditation works

Scope of Building with Nature - What can it assess and when should it be used?

Introduction to the Building with Nature Standards

Pages 8 - 14

CORE Standards

Standard 1 Optimises Multifunctionality and Connectivity

Standard 2 Positively Responds to the Climate Emergency

Standard 3 Maximises Environmental Net Gains

Standard 4 Champions a Context Driven Approach

Standard 5 Creates Distinctive Places

Standard 6 Secures Effective Place-keeping

Pages 15 - 17

WELLBEING Standards

Standard 7 Brings Nature Closer to People

Standard 8 Supports Equitable and Inclusive Places

Pages 18 - 21

WATER Standards

Standard 9 Delivers Climate Resilient Water Management

Standard 10 Brings Water Closer to People

Pages 22 - 24

WILDLIFE Standards

Standard 11 Delivers Wildlife Enhancement

Standard 12 Underpins Nature's Recovery

Building with Nature overview

Introduction

Building with Nature is for policy makers, developers, asset owners and other professionals^[1] who want to play their part in making high-quality green infrastructure^[2] integral to placemaking in the UK and in doing so put nature at the heart of development in a way that is good for people and for wildlife.

Building with Nature does this through a framework of best practice Standards that collectively defines a benchmark of good green infrastructure and how to deliver it. Policy and development that meets the Standards Framework provides more sustainable, people and wildlife friendly places. It also helps reduce planning risk by ensuring development is aligned with current and emerging policy themes for climate change, nature recovery and people's wellbeing.

The Building with Nature approach couples the Standards Framework with voluntary assessment and third party accreditation. This provides independent quality assured recognition, in the form of an accredited Award, of high-quality green infrastructure policy and development and the benefits it brings to communities and the natural world.

Steered by a Board^[3] of experts, the Standards Framework is developed and maintained by practitioners and policy makers, academia and end users and have been tried and tested on multiple

schemes and planning policy documents throughout the UK.

In summary, through assessment and accreditation, a Building with Nature Award offers a means of recognising and valuing policy and development that goes beyond standard practice to deliver multifunctional spaces for new and existing communities, spaces that are:

- close to nature;
- deliver cost effective ecosystem services, e.g. water management and flood prevention;
- are supportive of Nature's recovery; and
- adapted for and resilient to climate change.

You can discover how Building with Nature is being used on real-life development projects and policy by visiting the Awarded projects list on our website: www.buildingwithnature.org.uk/projects.



¹ This includes local planning authorities, landscape architects, ecologists, engineers, construction site managers, transport planners and other professionals involved in built environment policy, design, implementation and long-term management and maintenance.

² One example of a definition of Green Infrastructure is that provided by The Town and Country Planning Association, here: www.tcpa.org.uk/green-infrastructure-definition.

³ Details and members of the Building with Nature Standards Board can be viewed on the Building with Nature website.

How Building with Nature Accreditation works

Achieving a Building with Nature Award is a three stage process of application, assessment and accreditation.

1. **Application** involves a decision by an interested party to specify/target a Building with Nature Award for a policy or planning document, development project or site. An Applicant (the party commissioning an assessment) and their team will familiarise themselves with the Standards Framework and appoint an Approved Assessor. The Approved Assessor^[4] will collaborate with the Applicant and their team to check the policy/project's eligibility for an Award, undertake an optional initial review^[5] against the Standards and register the policy/project with Build with Nature Ltd, prior to starting the formal assessment.
2. **Assessment** involves the formal evaluation of an eligible (registered) development project, existing site or policy/planning document by an Approved Assessor against the requirements of the twelve Standards. Depending on the scope of the project, and particularly for new developments, Assessment can be an iterative, multi-stage process of gathering and evaluating project/policy information. Once an Assessment is ready, the Approved Assessor will submit it to Building with Nature for accreditation.
3. **Accreditation** involves the evaluation of the Approved Assessor's assessment by Building with Nature for the purpose of reaching an Award decision. The evaluation involves auditing the assessment and supporting evidence against the requirements of the twelve Standards. If the accreditation results in a positive Award decision, Building with Nature grant a certificate confirming the Award.

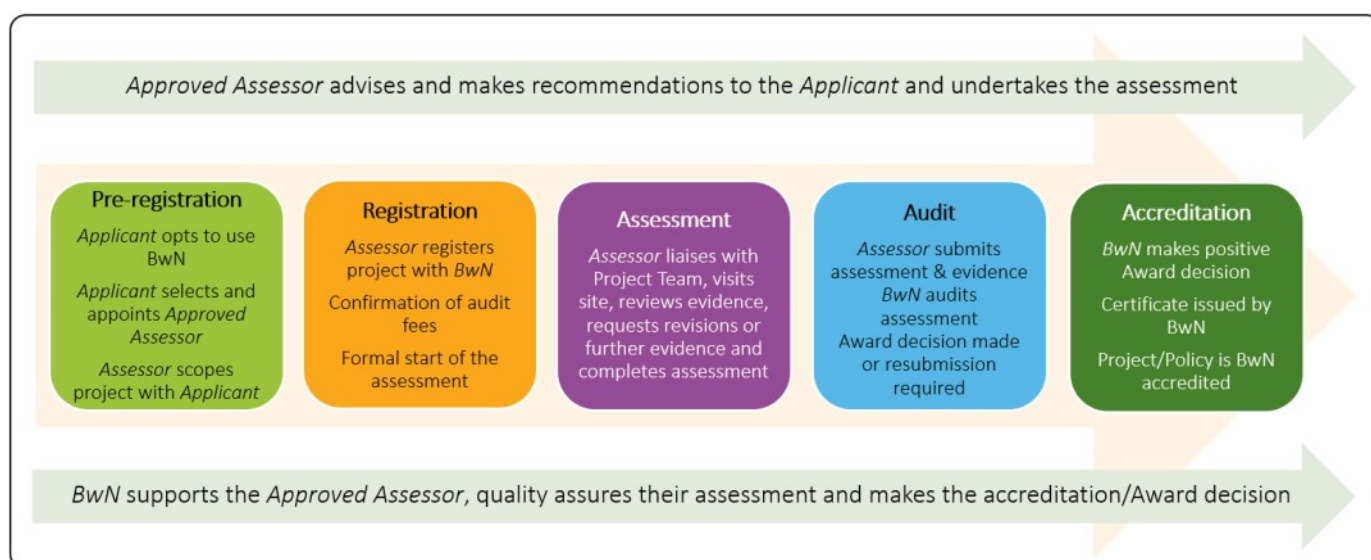


Figure 1 – Overview of the tasks and responsibilities at each stage of the assessment and accreditation process

⁴ An Approved Assessor is an individual who holds a valid Building with Nature Assessor Qualification, having received training on the Building with Nature Standards, and is listed by Building with Nature to offer assessment services. Approved Assessors have access to technical guidance and support from Building with Nature on interpreting the Standards. They are best placed to determine the eligibility of a project/policy for an Award and support applicants engaged with the BwN process.

⁵ An Initial Review involves a high-level overview of the project/policy by an Approved Assessor to gauge with greater certainty its eligibility for Building with Nature assessment and Award. The outcome of this Initial Review is a brief overview of the strengths and weaknesses of the project/policy regarding the design and delivery of high-quality green infrastructure.

Scope of Building with Nature - What can it assess and when should it be used?

The Building with Nature Standards Framework can be used to assess and accredit a single development, multi-phase development, or policy or planning related document.

Typically it is applied to green infrastructure projects allied to some form of property-led development in the UK, i.e. residential, commercial, or mixed-use development. It is best suited to 'major' or 'significant' sites (10+ dwellings; 0.5 hectares or more; 1000+ square metres of floor space) and 'strategic' sites, such as major regeneration schemes or urban extensions.

It can also be applied to standalone green infrastructure projects, i.e. a park or nature reserve or external retrofit of an urban area undergoing some form of landscape re-development.

It is important to appreciate that the application of the Standards and pursuit of an Award cannot be used as a means to mitigate unacceptable adverse impacts on existing habitat and wildlife. As a result, there will be some development projects / sites ineligible for an Award^[6]. The Standards and accreditation provide a pathway for and recognition of early and sustained engagement in the design, implementation and long-term stewardship of high-quality green infrastructure – in short, they focus on the opportunities to put existing and planned-for habitat and wildlife at the heart of development for the benefit of people and nature.

An application for an Award can be made at any stage in the life cycle of a development or policy (proposed/

new or existing) and the type of Award is determined by the stage.

There are four types of Building with Nature Award:



- **Design Award**, used to accredit projects at an early stage of design, for example an outline planning application in larger schemes
- **Full Award**, used to accredit projects, or phases of a multi-phase project, at the detailed design stage (e.g. for a full planning or reserved matters application) and at post-completion in-use
- **Policy Award**, used to recognise strategic policy documentation that commits to high-quality GI
- **National Award**, used to spotlight a specific awarded project (typically completed and in-use)

Applicants of new development in particular are advised to work with the Standards as early as possible to maximise the benefits of doing so in a cost-effective way. That should include establishing accreditation as a target in the project brief and using the Standards to inform the project strategies^[7] through early engagement with an Approved Assessor.



A listing of Approved Assessors and their contact details can be found at:

www.buildingwithnature.org.uk.

⁶ There are circumstances where a project is unlikely to be eligible for a Building with Nature Award due to the potential for unacceptable adverse impact on or loss of wildlife on a site which is subject to a development proposal. For example, where a development will affect irreplaceable habitats or species to the degree that its overall environmental or climate impact is deemed significantly damaging/negative. Potential BwN applicants should consult with an Approved Assessor to assist in determining the eligibility of a sensitive site for an Award.

⁷ As defined in the RIBA Plan of Work 2020, where the project is part of a property-led development.

Introduction to the Building with Nature Standards

The Building with Nature Standards Framework 2.0 involves twelve Standards, arranged across four groups. There are six **Core Standards** and three themes, **Wellbeing, Water and Wildlife**, containing two Standards in each.

The six Core Standards create a solid foundation for the delivery of high-quality green infrastructure through design, planning and development.

The Standards in the Wellbeing, Water and Wildlife themes build on this foundation. Collectively they distinguish a 'high-quality' green infrastructure approach from a more traditional approach to the design and delivery of open and green space.



Image: Oakfield, Swindon - courtesy of Nationwide Building Society

A Building with Nature Award requires a development, policy or planning document to have **met all twelve Standards**. This demands that Applicants take a holistic approach to their green infrastructure proposal, one that considers the interactions and interdependencies of the themes the Standards convey.

The Standards do not require policies, projects and green infrastructure solutions to solve all societal challenges. They seek to encourage an approach that goes beyond the traditional to one that is a 'connected' solution to such challenges, using the potential of a project or policy, and a site and its surroundings to meet the qualities and characteristics defined in the Standards.

The Standards are **interdependent** but there is no implicit weighting across the themes, a project/policy may have to balance the Wellbeing with the Water and Wildlife qualities. For example placing limits on access to nature and seasonal enjoyment to prioritise climate resilient water management and space for nature.

One of these qualities can have a higher priority without undermining the others or compliance with the Standards. As a user these types of scenarios require sound judgement on whether a proposed solution is balanced and effective given the constraints or opportunities available to the project/policy.

The pages that follow outline each of the twelve Standards by theme. Each theme is introduced with an outline of the Standards in that theme and a summary of their collective purpose. This section also includes the **principles** that define high-quality green infrastructure in the context of that theme. These principles reflect the qualities that green infrastructure must demonstrate if it is to be deemed BwN compliant.

The introduction to a theme is followed by the individual Standards. All twelve Standards are structured in the same way and include the Standard itself, i.e. the green infrastructure outcome the project/policy must demonstrate. The **Purpose** of the Standard, i.e. its aim and a summary of the benefits a Standard-compliant project/policy can deliver. The **Key Characteristics**, i.e. the physical attributes and stakeholder responsibilities that define a 'good' project. These Characteristics are presented in the form of questions and the responses to these enable the Approved Assessor to determine whether the project's green infrastructure meets the Standard.

NOTE: The Key Characteristics in this version of the Standards Framework are taken from the Building with Nature User Guide for Developments. They are not therefore fully representative of the Key Characteristics applicable to an assessment of a policy or planning document.

CORE Standards



- Standard 1** Optimises Multifunctionality and Connectivity
- Standard 2** Positively Responds to the Climate Emergency
- Standard 3** Maximises Environmental Net Gains
- Standard 4** Champions a Context Driven Approach
- Standard 5** Creates Distinctive Places
- Standard 6** Secures Effective Place-keeping

SUMMARY

The six Core Standards provide the foundation for distinguishing green infrastructure from a more conventional approach to the design and delivery of open and green space. Their purpose is to define some of the fundamental, underpinning aspects that the design and delivery of green infrastructure shall embody and follow. This includes sympathetic placing and connection with the local environment, responding to the climate and biodiversity emergencies in a positive way and future safeguarding of their functions and benefits.

PRINCIPLES

A project that can be described using the following qualities is one that delivers green infrastructure that meets the Building with Nature Core Standards:

- **Multifunctional** - individual features in combination contribute to a network of multiple benefits
- **Connected** – provides or fills a missing natural link in the landscape for the benefit of nature and people
- **Sympathetically placed** – reflects and/or creates a sense of place, considerate to the context and character of the local environment and priorities of its people and wildlife
- **Resilient** – responds to the climate emergency in a positive, contributory way
- **Responsibly managed** – has a sustainable mechanism to support its life-long function and benefits
- **Environmentally sensitive** – mitigates its own local impact and improves the quality of the immediate natural environment

LINKED STANDARDS

The CORE Standards link very closely with the themes of Wellbeing, Water and Wildlife and complement the Standards for each of these categories. As they form the foundations of what good green infrastructure looks like, projects that meet the CORE Standards can go some way to meeting the purpose and requirements of all the other Standards.



Optimises Multifunctionality and Connectivity



CORE Standard

01

The green infrastructure optimises multifunctionality and connectivity within the boundary of the project and links with existing and planned for green infrastructure in the surrounding area.

PURPOSE

As key principles of green infrastructure, multifunctionality and connectivity recognise that green infrastructure can fulfil a wide range of functions and diverse benefits to both human populations and nature. The needs of the economy, society and the natural world are better served when interactions between functions are emphasised. This Standard therefore aims to ensure that green infrastructure features form and contribute to creating an optimal multifunctional network within the development and wider area, contributing towards the restoration, creation and enhancement or expansion of these networks to achieve the maximum benefits for people, wildlife and environment.

KEY CHARACTERISTICS

1. Has the project team identified:
 - a. All existing green infrastructure on the site and ecological networks adjacent to and beyond the site boundary?
 - b. Gaps/opportunities in local green infrastructure provision and need?
 - c. Local strategies and plans for nature recovery and developing with nature, or other longer term 'planned for' development or green infrastructure proposals?
 - d. Suitable opportunities for the implementation of new green infrastructure features?
2. Has the above been considered in the design either directly or in such a way as to:
 - a. Contribute to the creation and/or maintenance of a network of multifunctional green infrastructure?
 - b. Integrate collectively to form an effective link (or stepping-stone) to ecological features/networks beyond the development boundary?
 - c. Future-proof their adaptability to providing optimal multifunctionality and connectedness?
3. Have any long-term planned for proposals, e.g. future cycle networks, SuDS or potential ecological enhancements that fit with local strategies/plans for nature recovery, been adequately future proofed to ensure their implementation?

Positively Responds to the Climate Emergency



CORE Standard

02

The green infrastructure is designed to be climate resilient by incorporating mitigation and adaptations that respond to the impacts of climate change. The green infrastructure is designed to promote low carbon behaviours and contributes to achieving zero carbon development by optimising carbon sequestration and demonstrating low carbon approaches to design, construction and long-term maintenance.

PURPOSE

The purpose of this Standard is to minimise the vulnerability and exposure of the green infrastructure to wider climate-related hazards and impacts and ensure it maximises opportunities to contribute to net zero carbon goals and nature recovery. It aims to achieve this through an assessment of the climate change risk to the site and then prioritising solutions that mitigate those risks and their impacts without contributing to them further. In doing so the green infrastructure and the people and wildlife that rely on it, can be more resilient and adapted to climate change and positively contribute toward low or zero carbon living.

KEY CHARACTERISTICS

1. Has the project team identified the risks and their impact to the site and its users and natural systems, from exposure and vulnerability to climate-related hazards?
2. Have the identified risks been ranked according to their severity and likelihood of impact on the green infrastructure and the users and wildlife it intends to serve?
3. Do proposed and/or existing green infrastructure and landscape solutions respond positively to the identified and prioritised risks?

Does it showcase a green infrastructure vision that:

- a. Offers mitigation of and/or adaptation to the climate-related hazard(s), ideally through nature-based solutions, commensurate to project scale?
- b. Delivers more climate-resilient green infrastructure/development?
- c. Promotes low or zero carbon user behaviours?
- d. Is part of or aligned with a strategy to deliver zero carbon development (or net zero ready development) at a site or local region/city level?

Maximises Environmental Net Gain



CORE Standard

03

The green infrastructure is designed to actively mitigate any unavoidable harmful environmental impacts of development on soil and air quality and to minimise light and noise pollution. In addition, it delivers environmental net gains, including improving air and water quality and wherever possible includes quiet spaces for people and wildlife.

PURPOSE

The primary purpose of this Standard is to ensure new development uses green infrastructure to help mitigate any unavoidable residual harms to the local environment resulting from development, particularly from new sources of air or noise pollution and soil degradation. As with all Standards, the purpose here is to secure benefits that go beyond statutory minimums and encourage greater enhancement of the local environment for people and wildlife, which in-turn aids individual wellbeing, social cohesion, community wellbeing and supports wildlife.

KEY CHARACTERISTICS

1. Have unavoidable harmful environmental impacts caused by the new development been mitigated through its green infrastructure features?
2. Does the green infrastructure serve to improve the local environment by delivering environmental net gains with regards to air, water and soil quality and, where there is scope, space for people and wildlife?
3. Where applicable, have local priorities identified for environmental net gain been reflected in the project design*?

*This can be demonstrated if the project is meeting the linked Building with Nature Standards, in particular Standard 04 *Champions a Context Driven Approach*.

Champions a Context Driven Approach

 | CORE Standard

04

The green infrastructure positively responds to the local context, including the physical environment, such as landscape and urban character and social, economic and environmental priorities, including the evidenced needs and strengths of existing and future local communities.

PURPOSE

The purpose of this Standard is to ensure from the outset that the project team and development's green infrastructure features take account of and is shaped by existing local policy, physical landscape and community priorities. In this way, the development's green infrastructure can contribute to delivering the aims of the local context and its strategic objectives: Particularly those relating to ecological constraints and opportunities, natural water management and the social and cultural benefits of green infrastructure, as well as opportunities to enhance quality of life.

KEY CHARACTERISTICS

1. Have the project team identified the local policy and physical context priorities and directly engaged with local stakeholders?
2. How do the identified priorities and stakeholder feedback inform the green infrastructure layout, features and design?
Do they:
 - a. Maximise opportunities to address these priorities?
 - b. Achieve connectivity to and enhancement of the wider environment?
 - c. Positively respond to the identified needs and strengths of the local community?

Creates Distinctive Places



CORE Standard

05

The green infrastructure is integral to the project and is designed to reinforce local distinctiveness and/or create a distinctive sense of place.

PURPOSE

The purpose of this Standard is to ensure the design of green infrastructure, alongside any built form, is integral to the creation of a great place and used to reinforce the distinctiveness of the local area. Place distinctiveness can add to the vitality of a place, which in turn impacts positively on people feeling a sense of belonging and pride in where they live; attributes that can contribute directly to health and wellbeing^[1]. Furthermore, the quality of the spaces around and relationship with the built environment is as important as the buildings themselves, yet the potential of green infrastructure is not always realised and often this is to the detriment of good placemaking, communities and the natural environment.

KEY CHARACTERISTICS

1. How does the green infrastructure design and its features combine, alongside any built forms, to create place distinctiveness?
Specifically does it:
 - a. Retain existing features that reflect and enhance landscape character, if this character has been identified as being locally distinctive or 'special'?
 - b. Maintain and enhance features that improve integration with the surrounding area e.g. existing hedgerows or wildlife corridors?
 - c. Include new features that add value to existing heritage and historic features, where these features are important to place distinctiveness?
 - d. Incorporate features or use landscape topography that protect or enhance valuable views into and out of the site; and enhance the setting of development, within and beyond the site boundary?
 - e. Use the flow of water and therefore topography and geology of the site, to create a dynamic landscape of greater interest, as well as one of an enhanced and connected water management system (i.e. a SuDS Landscape)?

Secures Effective Place-keeping



CORE Standard

06

The green infrastructure is subject to management arrangements that demonstrate a commitment to effectively implement, establish and maintain features at all stages of the development process. This should include details of funding, governance, maintenance, monitoring, remediation and, where appropriate, community involvement and stewardship.

PURPOSE

The purpose of this Standard is to ensure early and effective planning for and implementation of management, maintenance and monitoring of green infrastructure. This is critical if we want to secure the functions and benefits that green infrastructure is valued for. This Standard ensures that adequate provision is made for how green infrastructure will be managed and maintained, including the responsibility for these activities and their funding and, where appropriate, engaging local communities and citizens to fulfil this purpose and benefit from it.

KEY CHARACTERISTICS

1. Does the green infrastructure design use layout, orientation and features that lend it to a passive and/or less interventional, more resource efficient approach to management and maintenance?
2. Is there an effective mechanism in place for the long-term management and maintenance of the green infrastructure features?

Does or will this mechanism have:
 - a. A governance structure that can adopt and adapt the management plan to ensure it delivers the green infrastructure outcomes and benefits?
 - b. Funding, or a mechanism for future funding, to secure the long-term management and maintenance arrangements?
 - c. Appropriately trained and qualified personnel to manage and maintain the green infrastructure features (or a means to access and secure such expertise)?

WELLBEING Standards



Standard 7 Brings Nature Closer to People

Standard 8 Supports Equitable and Inclusive Places

SUMMARY

One of the key tenets of Building with Nature’s mission is maximising the benefits that high-quality green infrastructure can deliver for people when it is put at the heart of placemaking. By bringing nature closer to people we not only build great places for us to live, work and play, but we make development a force for societal good. Realising these benefits ensures that green infrastructure is a major contributor towards better health and wellbeing outcomes in our communities and helps to reduce the social and economic cost to our society from lost opportunities. The purpose of the Wellbeing Standards is therefore to take advantage of the opportunity that development offers to use green infrastructure to support people’s mental and physical health and build a sense of belonging and encourage active stewardship.

PRINCIPLES

A project that can be described using the following qualities is one that delivers green infrastructure that meets the Building with Nature Wellbeing Standards:

- **Accessible** - for all to use and enjoy, bringing people closer to nature
- **Inclusive** - of local people and engaged with and sympathetic to their needs and strengths
- **Seasonal** - offers enjoyment for all, at all times of the year
- **Healthy** – helps reduce health inequalities in existing communities
- **Social** - creates a sense of social cohesion and sustainability
- **Distinctive** – contributes to a sense of place, where people are more likely to feel a sense of belonging and pride

LINKED STANDARDS

Standard 07 links closely with Standard 10, *Brings water closer to people*, given water is a natural habitat for plant and animal species. Meeting Standard 10 therefore goes some way to complying with Standard 07. Likewise, the actions necessary to *support equitable and inclusive places* (Standard 08) overlap with those needed to ensure the green infrastructure *optimises multifunctionality and connectivity* (Standard 01), *champions a context driven approach* (Standard 04) and *secures effective place-keeping* (Standard 06).



Brings Nature Closer to People



WELLBEING Standard

07

The green infrastructure is close to where people live, work, learn, play and/or visit and is designed to optimise use and enjoyment for everyone across the year, to maximise health and wellbeing outcomes and to promote active living for existing and future communities.

PURPOSE

The purpose of this Standard is to ensure green infrastructure features are available and accessible to all, at all times, optimising their use and enjoyment. It builds on evidence that the quality of green infrastructure can impact on its usability and attractiveness to individuals and communities and there are key indicators that impact on the quality of green infrastructure, including proximity, aesthetics, amenities and landscape character. This association is particularly evident in more urban and deprived areas^[1].

KEY CHARACTERISTICS

1. Are there an appropriate range of green features and/or spaces provided for the scale, type and locality of the development?
2. Is the green feature and/or space 'accessible' to communities of people at all times of the year?
3. Where there are green spaces, do they utilise hard and soft features to create a welcoming and safe environment?
4. Are there 'active travel' routes within and/or through the development?
5. Do the green features emphasise and/or use seasonal differences to stimulate interest and promote year-round use?

Supports Equitable and Inclusive Places



WELLBEING Standard

08

The green infrastructure is designed to encourage and enable everyone, including those from vulnerable or excluded groups, to use and enjoy it, to help reduce health inequalities and to build a shared sense of community and belonging.

PURPOSE

This Standard aims to ensure that green infrastructure is used to enhance social cohesion and overcome cultural barriers, encouraging all people to use and enjoy such features. Access to high-quality green infrastructure promotes inclusivity, healthy lifestyles, community cohesion and socially sustainable communities. The Standard places a particularly strong emphasis on ensuring the development accommodates the needs of community groups who are vulnerable to social exclusion, who may ordinarily be excluded from the use and enjoyment of green infrastructure.

KEY CHARACTERISTICS

1. Has the project / project team determined and appreciated the socio-demographic composition of an existing community, or the planned-for community ?
2. Have health inequalities and social determinants of health, as identified in local policy or public health data, been considered?
3. Does the design/site use the above as a principal reference point to inform what features to retain, enhance, or create to:
 - a. Respond effectively to the needs and strengths of existing or future local people?
 - b. Address barriers and ensure usability for groups at risk of social exclusion or with different needs and social and cultural preferences?
 - c. Provide flexibility and resilience to changes in interest and focus at the local level?

WATER Standards



Standard 9 Delivers Climate Resilient Water Management

Standard 10 Brings Water Closer to People

SUMMARY

The Water Standards encourage the effective management and use of the water that falls on and flows through the site in ways that minimise risk and impacts of flooding and drought, improve water quality and create or enhance features for the benefit of people and wildlife. The Standards recognise that by using a range of blue infrastructure and Sustainable Drainage System features and enhancing the physical connectivity between them, the capacity to contribute to water management is increased. In addition, from a landscape perspective, a sub-catchment approach represents the best strategy to water management: rehydrating the landscape through interception, reducing the risk from and impacts of flooding and the demand for additional water to maintain green infrastructure. Moreover, when green infrastructure is designed as an integral part of our environment it delivers multifunctional benefits to through new habitat, climate mitigation and adaptation benefits and distinctive placemaking characteristics.

PRINCIPLES

A project that can be described using the following qualities is one that delivers green infrastructure that meets the Building with Nature Water Standards:

- **Integrated** – water management is a key part of the green infrastructure function
- **Quantity and quality** - flood and pollution risk is managed close to where rainwater falls
- **Catchment connected** – water storage capacity of land adjacent to, or downstream from, the site is enhanced.
- **Multifunctional** – water is used to create a distinct sense of place and amenity and habitat for people and wildlife.
- **Nature-based** - a diversity of natural features and landscape is used to manage water quantity, water quality and flow in a resilient and resource efficient manner.

LINKED STANDARDS

Standard 10 links to Standard 07, *Brings nature closer to people*, given water is a key habitat for plant and animal species. Meeting Standard 10 therefore goes some way to complying with Standard 07. Likewise, the green infrastructure features used to manage water flow and quality for Standard 09, can form a part of a solution for *delivering wildlife enhancement* and *underpinning nature's recovery* (Standards 11 and 12). Water management features also play their part in a development's *response to the climate emergency* (Standard 02) as a *multifunctional, connected feature* (Standard 01).



Delivers Climate Resilient Water Management

 | WATER Standard

09

The green infrastructure is integral to sustainable drainage using above ground features to manage flood risk, maintain the natural water cycle and improve water quality within the boundary of the project and at a catchment scale. The green infrastructure is designed to be drought resistant and wherever possible, includes measures for the retention and reuse of rainwater.

PURPOSE

The primary purpose of this Standard is to ensure new development uses green infrastructure as a means of above ground water management for regulating water quality and water quantity and flow. Secondary is maximising the multiple benefits that this type of solution can bring in terms of amenity and biodiversity, both on site and beyond the boundary of the development. The Standard seeks to do this by recognising solutions that mimic the role of natural hydrology, managing and using rainwater close to where it falls and creating a controlled flow of clean water at source. This nature-based solution approach to water management avoids an over-reliance on 'grey infrastructure' and delivers multiple benefits including introducing different types of habitats, providing greater resilience to extreme weather events and improving resource efficiency.

KEY CHARACTERISTICS

1. Is green infrastructure integral to the controlled management (flow) of water and improvement of flood risk and water quality on the development (i.e. at source)?
2. Does the green infrastructure and water management system demonstrate the following characteristics?
 - a. Is it designed to be on or at the surface, split-up volumes of water and be managed as a Standard landscape feature?
 - b. Does it consider the wider area (catchment-scale), minimising surface runoff and managing and reducing flood risk and water quality in this context?
 - c. Are features optimised for water storage dispersed, in as many locations within the boundary as possible, to create several smaller sub-catchments and a range of flow control mechanisms?
 - d. Does it have a diversity of features to improve water quality at source, using more and better treatment stages to maximise pollution reduction downstream?

(Continued on page 20)

Delivers Climate Resilient Water Management

 | WATER Standard

(Continued from page 19)

- e. Does it consider connectivity between water management features located on and adjacent to the site?
 - f. Does it have accessible components/features for inspection and regular maintenance?
 - g. Does it have the means to use surface water run-off to effectively minimise potable water demand (where such a demand exists)?
3. Do the green infrastructure features demonstrate resilience in relation to managing the impact of extreme weather events, specifically increased flood and drought risk and severity?
 4. Is the water management system designed and implemented in line with current good practice by appropriately qualified professionals?

Brings Water Closer to People



10

The green infrastructure is designed to integrate water, including areas of standing water, flowing water, seasonal and ephemeral features, to bring additional amenity and wildlife benefits.

PURPOSE

The purpose of this Standard is to ensure that water management constraints and requirements on a project are used as opportunities to enhance the development to create and sustain better places and benefits for people and nature. It seeks to do this through the integration of the water management system within the overall green infrastructure plan. By incorporating above ground natural SuDS as part of a green infrastructure solution a development can exploit opportunities to deliver positive effects for biodiversity and local distinctiveness. In doing so it enhances the aesthetic and functional quality of the development, making it a more attractive, natural place to live and/or work.

KEY CHARACTERISTICS

1. Does the development incorporate blue infrastructure components as an integral part of a connected blue-green infrastructure solution?
Do the blue infrastructure features:
 - a. Use the topography and geology of the site to characterise the water management system?
 - b. Contribute positively to a high-quality environment for people?
 - c. Enhance local distinctiveness, sense of place and opportunities for amenity and biodiversity?
 - d. Retain and integrate (and enhance where relevant) any pre-existing natural and semi-natural water features (where present?)
2. Are green infrastructure features that contribute to water management, designed within a “hierarchy of storage” (to maximise value for biodiversity)?
3. In the case of a retrofit, does the development consider how to integrate SuDS components into an existing landscape and demonstrates innovation in working within the additional constraints of an existing community, landscape and infrastructure?

WILDLIFE Standards



Standard 11 Delivers Wildlife Enhancement

Standard 12 Underpins Nature's Recovery

SUMMARY

The world is experiencing a biodiversity emergency. Nature and the habitats, wildlife and ecosystem functions that embody it - vital to sustaining life on earth - are under ever-increasing stress and destruction from development, land use changes and the climate emergency. The UK only has half of its natural biodiversity left; 40% of species are in decline, 15% are under threat of extinction and there has been a 13% fall in the abundance of nature since 1970 – the UK is one of the most nature depleted countries in the world. It is vital that all new development plays its part in mitigating its own impact and contribute positively and proportionately to nature's sustained recovery. The focus of the Wildlife Standards is to put nature at the heart of development. Working alongside and going beyond statutory requirements for nature, the Standards seek to aid nature's recovery and realise the wellbeing and economic benefits to individuals and society from pursuing nature-based solutions.

PRINCIPLES

A project that can be described using the following qualities is one that delivers green infrastructure that meets the Building with Nature Wildlife Standards:

- **Networked** - Creates and restores effective links to or stepping-stones between local habitats and ecological corridors.
- **Integral** - Treats wildlife and habitat as a fundamentally integral part of a successful built environment.
- **Protects and Enhances** - Values existing habitat and features through their protection and enhancement.
- **Transformative** - Translates a commitment to wildlife, in the form of specification, design intent and management plans, into sustainable, long-life reality.
- **Nature-rich** - Contributes positively to reversing the long-term decline in biodiversity and aids nature's recovery with space for wildlife to flourish.

LINKED STANDARDS

Standard 11 links to Standard 04 *Champions a context driven approach*, Standard 06 *Secures Effective place-keeping* and Standard 09 *Delivers climate resilient water management*, specifically in relation to accounting for the local context and policy and putting in place effective long-term mechanics to secure implementation. Likewise, Standard 12 links very strongly with Standard 01 *Optimises multifunctionality and connectivity*, with respect to identifying, protecting and connecting to local nature-based networks. Meeting these Standards can provide the basis for meeting, in part, Standards 11 and 12.



Delivers Wildlife Enhancement

 | WILDLIFE Standard

11

The green infrastructure optimises long term and climate resilient net benefits for nature, by retaining and enhancing existing ecological assets and creating locally relevant new habitats within the boundary of the project. Wildlife measures are secured at all stages of implementation and where applicable, across multiple phases of development.

PURPOSE

The purpose of this Standard is to seize the opportunity that development offers to enhance existing and create new, linked habitat for wildlife (which previous development and land-use approaches may have overlooked or implemented inappropriately). In turn, it aims to ensure green infrastructure supports the conservation status of priority species and habitats and delivers positive benefits for wildlife, within and beyond the boundary (and life) of the development. This approach, coupled with rigorous arrangements to implementation and monitoring throughout each life cycle stage, is critical to relieving pressures on land use, delivering space for wildlife and reversing the long-term decline in biodiversity, ecosystem health and resilience.

KEY CHARACTERISTICS

1. Does the green infrastructure deliver an enhancement of biodiversity quality and in delivering that has the project followed the mitigation hierarchy approach to habitat and species protection and creation?
2. Are green infrastructure features utilised as an integrated, built-in means to improve the quality of any built asset(s) on the site and optimise the provision for additional wildlife habitat?
3. Is there a commitment to employ appropriate mechanisms* to secure the successful implementation of green infrastructure throughout key stages of the development's life cycle?

*Meeting Standard 06 *Secures effective place-keeping*, can establish a basis for meeting this, specifically key characteristic 02 of that Standard.

Underpins Nature's Recovery

WILDLIFE Standard

12

The green infrastructure creates effective links with existing and planned for ecological features and networks beyond the boundary of the project to support the creation and restoration of resilient ecological networks in the wider landscape.

PURPOSE

The purpose of this Standard is to ensure opportunities to restore and improve the connectivity of existing and planned for habitats are taken. In doing so, new green infrastructure can play its role in sustaining wider ecological networks and nature recovery goals. This Standard encourages and recognises the creation of effective and resilient ecological enhancements within the boundary of the project, but also support for existing and planned for ecological networks and features beyond the boundary, by creating linkages, corridors and 'stepping-stones' to them.

KEY CHARACTERISTICS

1. Have existing and planned for key habitat areas within and on the boundary of the site been identified and protected and, if appropriate, enhanced for the benefit of priority species?
2. Have all existing and planned for, local ecological networks, large-scale areas for wildlife and designated sites of importance for biodiversity beyond the boundary of the site, with which to form effective links with or stepping-stones to and from the site, been identified and protected?
3. Do new green infrastructure features restore, enhance or create effective links with existing on-site habitats (where present), between new and existing on-site habitats and with existing and planned for ecological habitats and networks on and beyond the boundary of the site?
4. Has the site layout, in terms of its green infrastructure features and built form, been orientated to maximise the potential for effective linkages between habitats and enhancement of adjacent and nearby wildlife assets and networks?



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