



Essex County Council



Northumbria
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NEWCASTLE

Designing and Delivering Good Green and Blue Infrastructure

Planning Guidance

Acknowledgements

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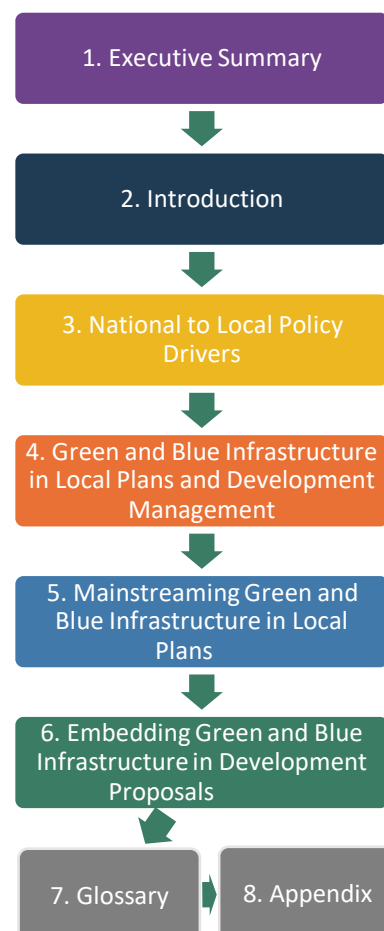
To Note:

This is an evolving document that will be updated to reflect significant changes in both national and local authority guidance and delivery practices and legislation.

This diagram summarises the main chapters of the guidance to support easy navigation and orientation, helping users identify where strategic context, policy guidance and practical implementation advice are located.



An overview of document structure:



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1.1 Executive Summary

- 1.1.1 This guidance provides a strategic and practical framework for embedding Green and Blue Infrastructure (GBI) into planning policy and development management across Essex. It supports planners, developers, and decision-makers in integrating GBI from early visioning and policy development through to site design, implementation, and long-term stewardship. The guidance advances the current resources on GI by identifying distinctive stages of the planning and development pipeline showing how to translate agreed GBI principles into delivery
- 1.1.2 GBI is defined as a connected network of green spaces (such as parks, woodlands, urban trees, and the Green Belt) and blue spaces (such as rivers, lakes, and Sustainable Drainage) that deliver multiple benefits, supporting biodiversity, climate resilience, public health, and placemaking. The National Planning Policy Framework (NPPF) and Essex GI Strategy (2020) recognise GBI as multifunctional and essential to achieving sustainable development. Full definitions are provided in the [Appendix 1](#).

1.2 Key Principles of the Guidance

- 1.2.1 ***Integrated Planning***
The guidance is designed to be read as a whole, supporting joined up thinking between planning policy and development management to ensure GBI is considered consistently across all stages of the planning process.
- 1.2.2 ***Multifunctional Infrastructure***
GBI should be recognised as critical infrastructure, complementing grey infrastructure, and embedded in placemaking and placekeeping strategies to support climate resilience, biodiversity, health, and wellbeing.
- 1.2.3 ***Strategic Asset: - Opportunity space but with trade offs***
GBI must be viewed as an opportunity. While it can deliver multiple benefits, trade-offs must be identified and managed transparently, based on local context and community priorities.
- 1.2.4 ***Delivery Mechanism for LNRS and BNG***
GBI plays a key role in delivering statutory requirements such as Local Nature Recovery Strategies (LNRS) and Biodiversity Net Gain (BNG) and should be aligned with these frameworks from the outset.
- 1.2.5 ***Monitoring and Evaluation***
There is a recognised evidence gap in tracking the long-term benefits of GBI. The guidance emphasises the need for robust monitoring frameworks and performance indicators to assess outcomes and inform adaptive management.
- 1.2.6 ***Climate-Resilient Planting***
Species selection should reflect site conditions and future climate scenarios. Planting schemes must be designed to thrive in urban, rural, and coastal settings, and withstand extreme weather. The Beth Chatto Gardens offer a practical model for “right plant, right place” principles.
- 1.2.7 ***Essex Foundations***
The Essex GI Strategy (2019) and Essex GI Standards (2022) provide a strong foundation for this guidance. These documents outline nine core standards for good GBI planning and delivery, including mainstreaming, multifunctionality, connectivity, and stewardship.

1.3 Benefits and Constraints of Green and Blue Infrastructure

- 1.3.1 GBI can deliver a wide range of benefits supporting biodiversity, climate resilience, health, and placemaking, when designed to be multifunctional (see Figure 1). However, delivering multifunctional GBI involves balancing and managing competing priorities and navigating constraints such as funding, viability, resourcing and legislative and policy changes (e.g. Biodiversity Net Gain).
- 1.3.2 GBI should be viewed as a strategic asset (an opportunity), not a constraint. Using targeted engagement tools such as **hooks** (ways to engage specialist audiences, such as climate change) and **bridges** (ways to connect with broader audiences, such as BNG and Local Nature Recovery), can help align GBI with local priorities and build wider support.
- 1.3.3 Full details and examples are provided in **Appendix 1** and examples of hooks and bridges, are provided in **Appendix 2**.

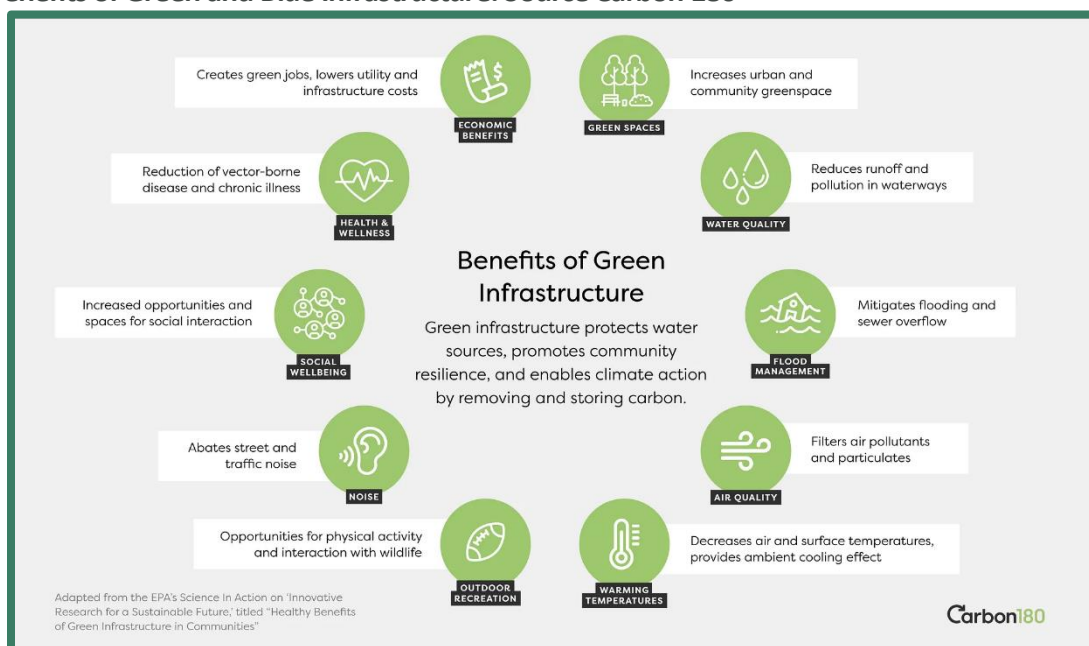
1.4 Who this document is for?

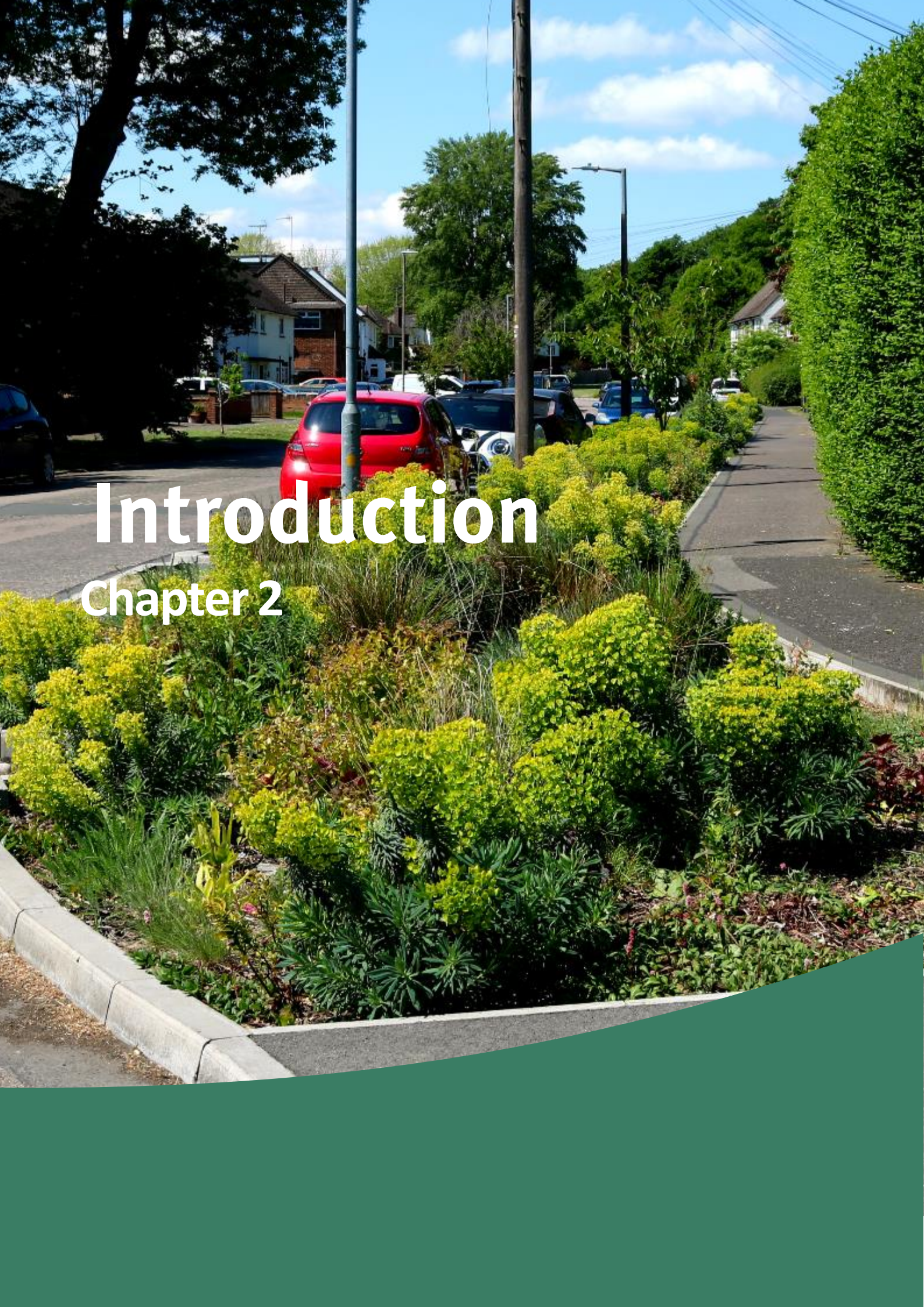
- 1.4.1 This guidance is targeted at the following users:
 - Planning Policy Officers – Support for embedding GBI in strategic planning (see **Chapter 5**).
 - Developers & Development Management Officers – Practical advice for integrating GBI into site design and planning applications (see **Chapter 6**).
 - Elected Members, Landowners & Communities – Shared understanding of good GBI and its role in delivering Essex's priorities.

1.5 Scope of the Guidance

- 1.5.1
 - Defines good quality GBI in policy and development proposals
 - Supports Essex's priorities: climate, biodiversity, nature recovery, health and growth
 - Builds on national guidance with Essex-specific planning advice
 - Informed by latest policy, research, and practice
 - Strategic in focus; signpost to technical design recourse
 - A "living" document that evolves with policy and evidence

Figure 1: Benefits of Green and Blue Infrastructure: Source Carbon 180



A photograph of a suburban street scene. In the foreground, there is a concrete curb and a lush garden bed filled with various green plants and bright yellow flowers. To the right, a paved sidewalk runs alongside a tall, dense green hedge. In the background, a red car is parked on the street, and other vehicles are visible further down the road. Residential houses and trees are also visible under a blue sky with scattered white clouds.

Introduction

Chapter 2

2.1 Purpose of the Guidance

- 2.1.1 This guidance provides a clear and joined-up view of the planning journey for Green and Blue Infrastructure (GBI), from strategic policy through to on-the-ground delivery. It supports users in understanding how GBI can be embedded throughout different stages of the planning process; from local plan preparation to planning applications and site implementation. By doing so, it ensures GBI is considered consistently and effectively throughout development.
- 2.1.2 The guidance builds on the [principles](#) and [process guides](#) set out in [Natural England's Green Infrastructure Framework](#) and the [Essex GI Standards](#), translating them into practical, locally tailored advice. Please note that [Appendix 4](#) provides a list of such information sources that this guidance builds upon. It shows how these national and county-level frameworks can be applied and delivered in real-world planning and development contexts, offering best practice, accessible tools, examples, and support for improved GBI delivery across Essex. The guidance is not intended to replace existing information / guidance sources but is complementary in nature, helping users navigate and apply them more effectively.

2.2 Who This Guidance Is For

- 2.2.1 This guidance is intended for all those involved in shaping, delivering, and assessing GBI in Essex. It is particularly relevant to:
- **Planning Policy Officers**, who will find detailed support in **Chapter 5: Integrating GBI into Local Plan Preparation**, which outlines how to embed GBI into strategic and other planning documents and policies.
 - **Developers and Development Management (DM) Officers**, who are both signposted to **Chapter 6: Embedding GBI in Development Proposals**. This chapter provides practical advice on how to incorporate GBI into site design and how to assess planning applications to ensure GBI is effectively considered.
- 2.2.2 The guidance also supports elected members, landowners / developers and planning applicants more generally, and communities by offering a shared understanding of what good GBI looks like and how it contributes to Essex's wider priorities - from local plan preparation through to planning applications and development delivery.

2.3 Scope of guidance

- 2.3.1 This guidance clarifies what good quality GBI involves in both policy (such as local plans and infrastructure delivery plans) and development proposals. It also shows how it can help deliver on Essex's strategic priorities around climate change, biodiversity, local nature recovery, economic growth, and health and well-being.
- 2.3.2 It goes beyond existing national guidance by offering an Essex-proofed locally specific planning component, with the potential to inform future updates to national frameworks. This guidance brings together and draws on the latest national planning guidance¹, Essex priorities² and wider academic research³ to provide a robust, and up-to-date source of good practice. It is a "living" document that evolves over time as legislation, policies, tools, and evidence develop.

¹ This includes [the National Planning Policy framework \(NPPF\)](#), [National Planning Practice Guidance \(NPG\)](#), and [National Green Infrastructure Framework](#).

² This includes : [Essex Green Infrastructure Standards](#); [Essex Green Infrastructure Strategy](#); [BNG SPD](#); [Essex Design Guide](#); [Essex SuDs Design Guide](#)

³ Research as part of the mainstreaming green infrastructure project <https://mainstreaminggreeninfrastructure.com/>

- 2.3.3 While strategic in nature, this guidance is not a technical design manual. For those seeking more detailed design or delivery advice, a range of supporting resources are referenced throughout.

2.4 Stakeholder Engagement and Guidance

- 2.4.1 This guidance was developed in collaboration with the Essex County Council Green Infrastructure (ECC GI) team, ECC spatial planning team, and Northumbria University. It also involved six Local Planning Authorities (LPAs)⁴ in Essex in designing two online three-hour workshops⁵ held in July 2024, with LPAs and other stakeholders. The outputs from these workshops have directly shaped the structure, content and priorities of this guidance.
- 2.4.2 The discussions emphasised the importance of aligning GBI with wider agendas such as climate resilience and nature recovery and highlighted the importance of tools ([Green infrastructure Planning Policy Assessment](#), [Building with Nature](#), [Health Impact Assessments](#), [National Green Infrastructure Framework](#) and [Urban Greening Factor](#)) and approaches that support multifunctionality, viability, and long-term stewardship. For further detail on the workshops and the key messages identified, see [Appendix 3 – Stakeholder Engagement in Developing the Guidance](#).

2.4.4 Addressing Constraints and Conflicting Priorities to Engagement and Action

- 2.4.4.1 Whilst this guidance will not solve all the constraints to GBI (discussed in [Appendix 1](#)), such as limited resources and funding, it can help manage conflicting priorities. This, in turn, can prevent GBI being designed in isolation at sites and in policies, and ensure long-term sustainability and resilience.

2.4.5 Using hooks/bridges as catalysts to mainstream GBI delivery in policy and development

- 2.4.5.1 GBI is one of the key delivery mechanisms for achieving multifunctional benefits, driving positive improvements in climate resilience, nature recovery and health and well-being, while also helping to meet a wide range of economic and social policy priorities across Essex. These priorities can be approached through what are known as “hooks” and “bridges”. The idea comes from Scott et al. (2018)⁶, who describe hooks as any concept or term that connects with a specific audience’s daily work priorities and uses GBI to show how it can help with achieving that. Bridges are also concepts or terms that are understood and used in practice by multiple groups and then GBI is adapted to show its benefits therein. In practice, hooks are useful for starting conversations, like showing how green spaces support mental health or reduce flood risk, while bridges help build partnerships and encourage joined-up thinking, working towards a common goal. Using both together helps avoid duplication, confusion, and/or working in silos.
- 2.4.5.2 Effective engagement should lead to clear actions, whether through policies, plans, programmes, or projects, and the examples in [Appendix 2](#) show how hooks and bridges can support this in Essex. Strong delivery creates exemplar case studies and future champions who

⁴ The 6 LPAs include Uttlesford, Colchester, Southend-on-Sea-, Basildon, Rochford and Tendring.

⁵ Workshop 1: Explored challenges and opportunities in integrating GBI into planning. Workshop 2: Focused on planning policy, GBI implementation, and stewardship using a case study.

⁶ This is developed conceptually in Scott et al 2018 [Mainstreaming ecosystem science in spatial planning practice: Exploiting a hybrid opportunity space](#) Land Use Policy Volume 70 Pages 232-246

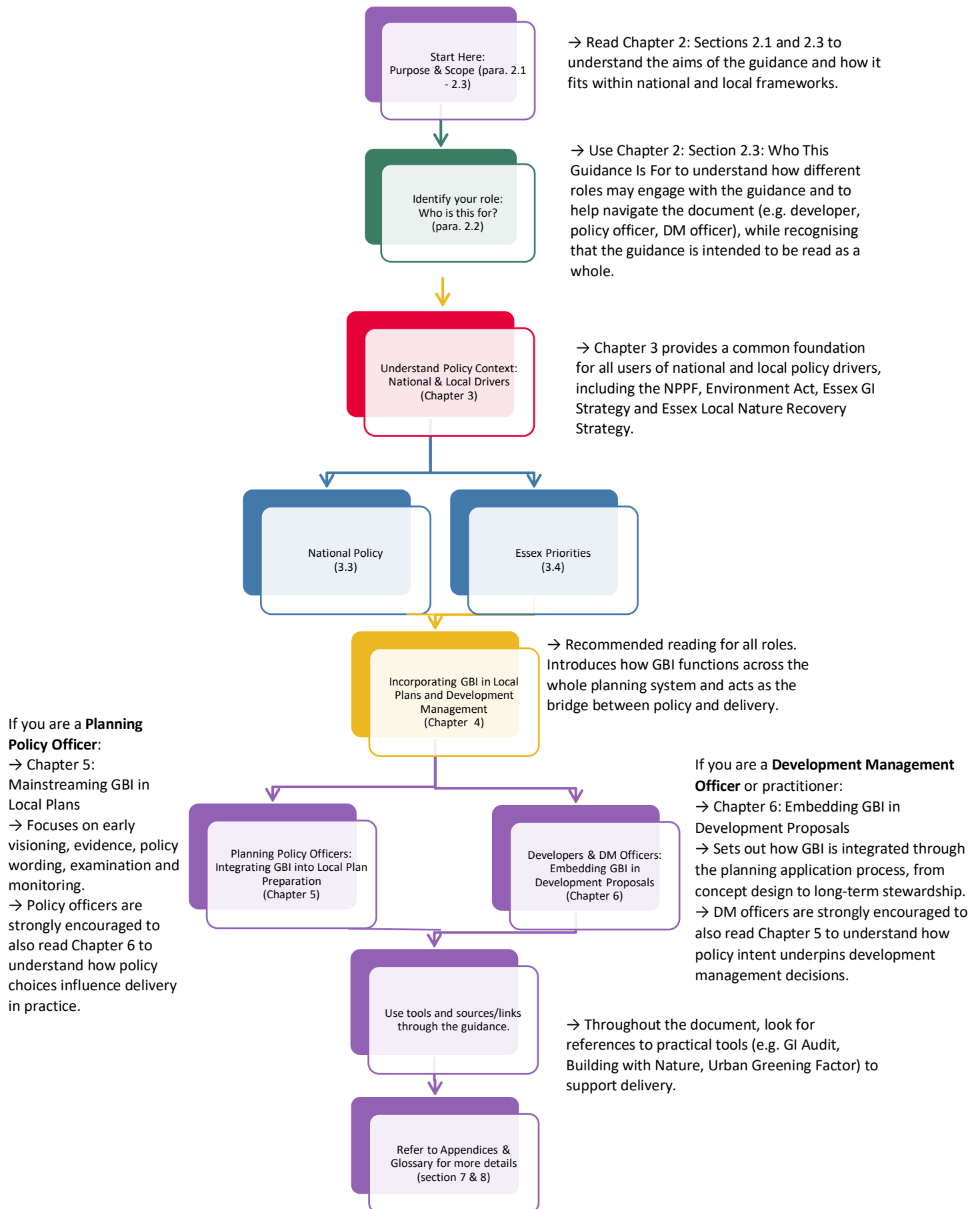
can help improve how GBI is designed, planned and delivered. Equally, projects that face challenges or do not go as planned offer important lessons, helping improve future practice and guide continuous development.

2.5 How to use the guidance.

- 2.5.1 This guidance is structured to support a wide range of users involved in planning, designing, and delivering Green and Blue Infrastructure (GBI) in Essex. Whether you are preparing a local plan, assessing a planning application, or designing / developing a site, the document is designed to help you navigate the planning process with GBI in mind. **To ensure effective use, the guidance should be read in full. This enables users to understand GBI delivery within their own area of work, while also recognising how it relates to and interacts with other stages of the planning and development process. The chapters are interdependent and collectively support a coordinated, integrated approach to GBI planning and implementation.**
- 2.5.2 Figure 2 provides a step-by-step overview of how to use the guidance. It outlines the key stages in the planning journey, helping users identify relevant chapters, understand their role in the wider process, and apply practical tools. The guidance is intended to be read as a whole. The flowchart provides suggested pathways through the document depending on role, while encouraging users to engage with chapters beyond their immediate responsibilities to support a more integrated and effective planning process.



Figure 2: Summary of how to navigate this guidance and what it includes



A photograph of a grassy field with many young, thin trees planted in rows. In the background, there are houses and a clear blue sky. The foreground is filled with green grass and small white daisies.

National to Local Policy Drivers

Chapter 3

3.1 What does current policy for GBI mean for Planning and Development Practice?

- 3.1.1 This chapter summarises the key messages from existing National Government and Essex County guidance that relate to the design, planning, delivery and stewardship of GBI. **It is important to state that GBI guidance currently has no statutory footing albeit with important exceptions in areas of green belt, biodiversity (net gain) and preparation of nature recovery strategies. Additionally, the safeguarding of designated sites and areas remains a critical element of existing policy frameworks.**

3.2 National

- 3.2.1 At the National Level, the National Planning Policy Framework, which shapes all development in England recognises the importance of GI in meeting some of the challenges the UK faces, aligning with the requirements of the Environment Act, 2021 and the goals of the 25 Year Environment Plan.

3.2.1 [National Planning Policy Framework \(NPPF\) \(December 2024 version\)](#)

- 3.2.1.1 The key focus of the NPPF is on **GBI being designed strategically to deliver multifunctional benefits** whether for biodiversity, (paragraphs 187 and 188); health and well-being (paragraph 96c); climate change (paragraphs 164a and 20d) or air quality (paragraph 199). However, **there are no statutory regulatory requirements for green infrastructure which is why the hooks and bridges in [Appendix 2](#) are so important to use**, particularly for GBI's value as a delivery mechanism for statutory policies for biodiversity and nature recovery.

- 3.2.1.2 Paragraph 20(d) is influential indicating that **strategic policies must outline a plan to provide "sufficient provisions" for GI**. In terms of nature, paragraphs 192a b and 159 confirms the **importance of habitat networks as part of nature recovery** delivering net gains, whilst paragraph 188 stresses the need to take a **strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries**. Paragraph 137 stresses **the importance of early design using design codes or guidance**.

- 3.2.1.3 There is notably less emphasis on blue infrastructure but **paragraph 182 stresses that major developments should incorporate sustainable drainage systems and, where possible, provide multifunctional benefits**.

3.2.2 [National Planning Practice Guidance](#)

- 3.2.2.1 National Planning Practice Guidance (Paragraph 008) stresses the need for **"GI opportunities and requirements to be considered at the earliest stages of development proposals**, as an integral part of development and infrastructure provision, and taking into account existing natural assets and the most suitable locations and types of new provision". It also emphasises that **"GI requires sustainable management and maintenance if it is to provide benefits and services in the long term. Arrangements for funding need to be identified as early as possible, and factored into the design and implementation, balancing the costs with the benefits**. Local community engagement can assist with management and tailoring provision to local needs".

3.2.3 [Environment Act 2021](#)

3.2.3.1 The [Environment Act 2021](#) is important in providing a **statutory footing for securing 10% biodiversity net gain in developments⁷ and the preparation of Local Nature Recovery Strategies⁸** which have a **due regard function for all stakeholders in local plans⁹**. From April 2026, this framework is strengthened through the full operational integration of LNRS into planning and BNG processes, reinforcing their role in guiding where and how nature recovery should be delivered. In both components GBI will play a key delivery role, particularly where it is incorporated within LNRS and subsequently used to inform and support BNG outcomes.

3.2.4 [National Design Guide](#)

3.2.4.1 The [National Design Guide](#) (updated 2021) also confirms the important **strategic and multifunctional roles that GI has in good design and placemaking** (paragraphs 77 and 92).

3.2.5 [Climate Change Committee 2023 Report](#)

3.2.5.1 In responding to the [climate change committee 2023 report¹⁰](#) the government have set out the following requirements for local authorities¹¹.

- Planning policy should be reformed to ensure that climate resilience is a priority, with mandatory adaptation interventions on all built-environment project applications (delivery 2024). The government will use the National Planning Policy Framework (NPPF) and sector-specific National Policy Statements to guide new infrastructure proposals at local and government levels. Developers must ensure their projects align with these guidelines to meet government and local authority requirements.
- Government should adopt recommendations for revised technical standards for Sustainable drainage systems (SuDS) in England, to ensure that SuDS are multifunctional systems that support biodiversity, improve water quality, and provide green space for people.
- Introduce an urban greenspace target to reverse the decline and ensure towns and cities are adapted to more frequent heatwaves (2022). The government aims to ensure everyone is within a 15-minute walk of green or blue space, along with enhancing urban parks and integrating green spaces into development plans. This means developers must incorporate GBI and nature-friendly designs into new developments, following guidelines in the National Model Design Code to meet environmental goals and support climate resilience.
- Provide a mechanism for setting out place-based targets for urban green space and unplanned impermeable urban surfaces in towns and cities (2024). The 25 Year Environment Plan commits to stronger GI standards, supported by Natural England's Green Infrastructure Framework to improve local green and blue spaces. It is recommended that developers follow these standards, using tools like the [Urban Greening Factor](#), to enhance GBI in major developments and manage risks from impermeable surfaces.

⁷ BNG is calculate for developments using a Defra designed biodiversity metric (from April 2024 this affects both large and small developments <https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development>)

⁸ Useful FAQs about LNRS is provided by Planning Advisory Service here <https://www.local.gov.uk/pas/topics/environment/nature-recovery-local-authorities/local-nature-recovery-strategies/FAQs-August-2023>

⁹ Further strengthening of the status of LNRS in planning policy is expected in revised NPPF.

¹⁰ The role of the Climate Change Committee is to provide independent, evidence-based advice to the UK Government on climate policy and monitoring progress. Key functions included advising on emissions targets, reporting on progress towards carbon budgets, and assessing the UK's progress on climate adaptation.

¹¹ [Government response to the Climate Change Committee 2023 report to Parliament – progress in adapting to climate change - GOV.UK \(www.gov.uk\)](#)

3.2.5.2 The role and contribution of GBI in responding to climate change is extremely important and covers many different dimensions. Trees and other vegetation are valuable for locking up carbon and releasing oxygen, thereby contributing positively to air quality. GBI can provide effective, natural solutions to managing flood risk, including through purpose-designed sustainable drainage solutions. In carrying out their ongoing planning work, local authorities can play a key part in responding to local and wider climate emergencies by planning and delivering good quality GBI, particularly where multifunctional approaches are employed, in line with the adopted GBI standards and principles, as referenced in the section below. The NPPF (2023) also requires local authorities to take climate change into account and give this considerable weight across planning, through both Local Plans and in planning decisions.

3.3 Essex County

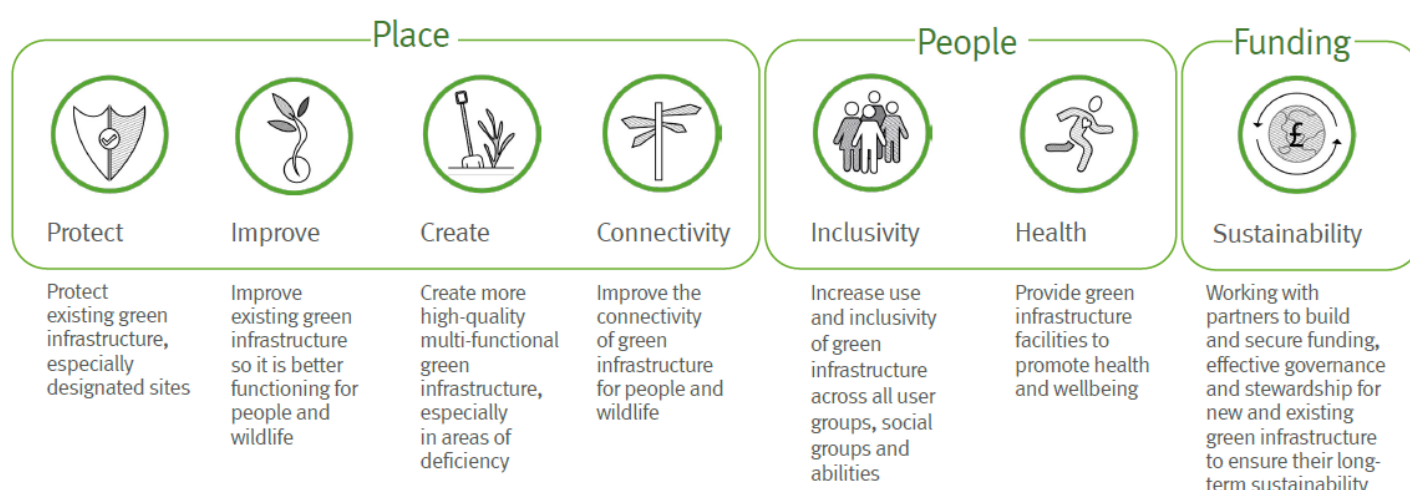
3.3.1 The key local guidance on GBI comes from the [Essex GI strategy \(2020\)](#) and [Essex GI Principles and Standards](#) (2022).

3.3.2 [Essex GI Strategy](#)

3.3.2.1 The GI Strategy has a **vision to protect, develop and enhance a high quality connected green infrastructure network that extends from our city and town centres, and urban areas to the countryside and coast and which is self-sustaining and is designed for people and wildlife.** This is important in highlighting GBI to be managed as an urban, rural and coastal asset.

3.3.2.2 The seven objectives focus **on protecting, enhancing, more, better, inclusive, joined up and well-maintained GBI** (Figure 3). As a non-statutory strategy this helps inform the design of district development and infrastructure plans with an emphasis on ensuring that policies are worded as strongly as possible and GBI features in chapters outside those specific to environment, reflecting its multifunctional attributes. In such respects they may require going over and above minimum national requirements as specified in the NPPF and NPPG in order to meet the needs of Essex.

Figure 3: GI objectives: (Source: Essex GI Strategy (2020))



3.3.3.1 The GI standards comprise nine distinctive but interrelated standards (Table 1). These build on the GI strategy work and collectively identify the core ingredients necessary for good GBI policy and development proposals. These should be integrated into all strategic and operational planning processes and associated policies alongside existing/future key priorities. **Significantly, this is not a pick and mix menu; rather all these standards need to be met collectively to optimise outcomes.**

Table 1: GI Standards (Source: Essex GI Standards (2022))

GI Principles		GI Standards
	1. Mainstreaming and Integration	The Placemaking and Place-keeping policies in Local Plans recognise GI as a key delivery mechanism. GI functions and associated benefits are recognised and valued in key strategic documents and policies, beyond those with an environmental scope.
	2. Evidence-led	The planning, design and delivery of GI is evidence-led using natural capital and ecosystem service assessments, and GI GIS mapping to ensure appropriate place-based GI interventions are being implemented and enhanced.
	3. Multifunctionality	GI interventions are designed, planned and delivered to enhance multifunctionality and deliver multiple benefits to people and biodiversity in both rural and urban areas.
	4. Early Engagement	There are early collaboration and engagement with all relevant stakeholders, partners and communities to support the delivery of effective and connected GI.
	5. Managing different expectations	Differing views need to be identified early and managed effectively and in a transparent manner to secure both short- and long-term outcomes.
	6. Health, Wellbeing and Social Equity	GI is designed to meet different people's needs (including physical and mental health), providing accessibility to GI, green spaces and local amenities, while ensuring GI is inclusive to all. This includes: Targeting GI interventions to those groups and areas most in need as part of a place-keeping agenda. Reducing health and wellbeing inequalities between different populations e.g. access to green space and ecosystem service benefits.
	7. Connectivity	GI interventions are designed, planned and delivered and connected across multiple scales; from the wider landscape scale network to more local and neighbourhood scales including green corridors habitat and nature recovery networks to enhance connectivity for people, wildlife and habitats.

GI Principles		GI Standards
	8. Strong policy wording and commitment	Policy for GI is strongly worded with a commitment to positive action(s) as reflected in statutory plans and industry/local guidance and supported by incentives and clear guidance about what success looks like.
	9. Stewardship	The long-term management and stewardship plans are identified at the early stage with the necessary funding and monitoring components in place.

3.3.3.2 Table 1 identifies an important process-led approach for designing, planning and delivering GBI within plans and developments. Particular attention needs to be placed on effective early engagement with key stakeholders and developing a sound evidence base using mapping of natural capital assets; ideally using one common platform across all local authorities. The multifunctional nature of GBI does mean confronting and managing different priorities within an evidence-led and transparent process for identifying and assessing trade-offs based on context, needs and regulation. **Designing and enforcing clear and robust development plan policies are key to achieving good GBI outcomes and thus particular attention is needed to ensure maximum integration across the different functional chapters involving GBI rather than a standalone GBI policy in the environment section¹².** Finally, GBI needs long term management commitments identified from the outset.

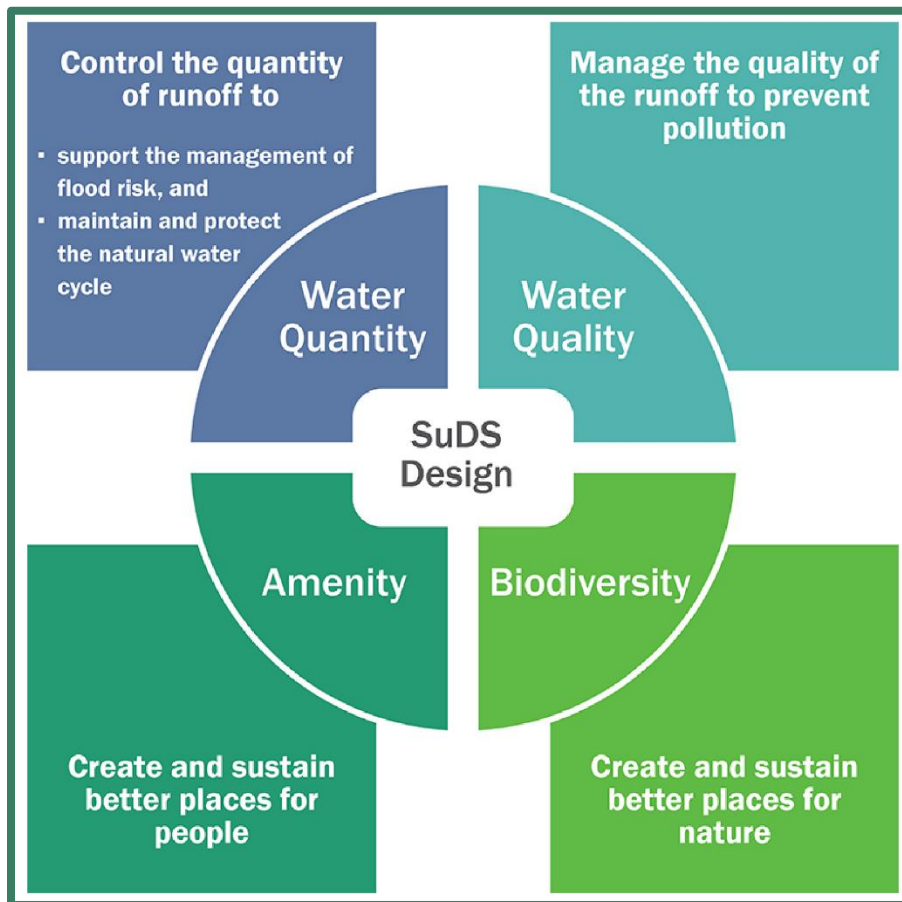
3.3.4 [Essex SuDS Design Guide](#)

3.3.4.1 The [SuDS design guide](#) supports sustainable development through combining water management with green space with benefits for amenity, recreation and wildlife set within the wider umbrella of nature-based solutions. SuDS are more sustainable than conventional surface water drainage methods as they can mitigate many of the adverse effects that stormwater run-off has on the environment (Figure 4)¹³. The Council has a statutory consultation role as lead local flood authority (LLFA) since 2015 on all major developments regarding surface water drainage. However, it is important that SuDS are integrated with GI interventions as part of a multifunctional land use agenda (Figure 5).

¹² A range of good policy exemplars across UK are contained in the [Green Infrastructure Policy Assessment toolkit. \(worksheet 5\)](#)

¹³ See CIRIA Suds manual 753 https://www.susdrain.org/resources/SuDS_Manual.html. See also NPPG <https://www.gov.uk/guidance/flood-risk-and-coastal-change#para55>

Figure 4: SuDS Deliver Multiple Benefits (Source: Essex County Council, 2025)



3.3.4.2 Green features such as ponds, bioretention areas, wetlands, and well-planned swales can offer opportunities for the establishment of habitat and the introduction of blue/green corridors across a site. When designed well, these SuDS components can deliver multifunctional benefits, supporting biodiversity alongside wider environmental and social outcomes. For instance, Figure 5 gives an example of the potential structural variability and biodiverse SuDS planting design, demonstrating how functional drainage infrastructure can also support landscape quality, education and wellbeing:

- The appearance of ponds should be as "natural" as possible, contributing to attractive and accessible open spaces.
- It's crucial to plant native species in the marginal vegetation and planting areas next to SuDS.
- Native, drought-tolerant wildflowers are seeded and plug-planted on "biodiverse" green roofs.
- Varying substrate depths to create a habitat for micro "stepping stones."
- Mini water wheels, water shoots, and captivating water sculptures are examples of SuDS elements that encourage natural play and child-led learning, supporting physical activity and connection with nature.
- Maximising the amount of dead wood that can be found or kept in moist or dry areas for the benefit of lichen, mosses, fungi, and invertebrates.

- Aquatic and land-based wildlife should be encouraged to thrive within the SuDs and its marginal regions, reinforcing their role as living, functioning landscapes.

3.3.4.3 This approach reflects the Essex SuDS Design Guide and related work on people centred green and blue infrastructure delivery, reinforcing the role of SuDS as both essential infrastructure and high quality, inclusive public space.

Figure 5: Multifunctional Benefits of SuDS (Source: Essex SuDS Design Guide)



3.5 Essex Local Nature Recovery Strategy

3.3.5.1 The [Essex Local Nature Recovery Strategy](#) (LNRS), published in July 2025 under the Environment Act 2021, is now a statutory requirement and a key component of the national [Nature Recovery Network](#). It is one of 48 Local Nature Recovery Strategies across England which collectively form a nationwide network full of opportunities for nature recovery. In line with [Defra's guidance](#) on what Local Nature Recovery Strategies should include, the primary goal of the LNRS is to identify

the best places to create, protect, and improve habitats, focusing on areas that offer the greatest benefits for nature and the wider environment.

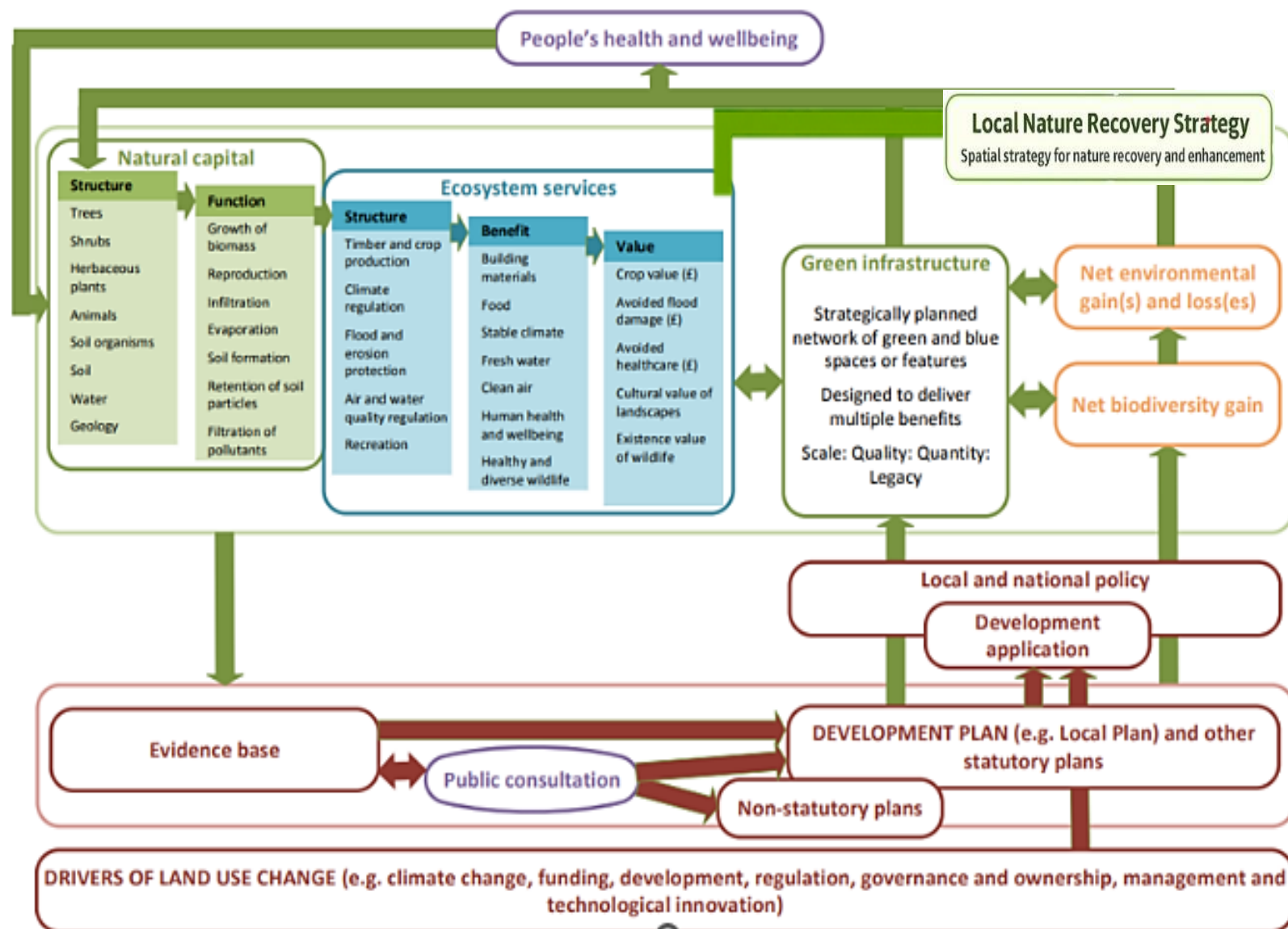
3.3.5.2 With the Essex LNRS now in place, it provides a clear evidence-led framework to guide investment and action in nature recovery. The strategy includes:

- [Interactive mapping](#), identifying strategic locations for habitat creation, enhancement and connectivity.
- Locally agreed priorities for nature recovery
- Habitat specific actions that can be taken at all scales to help nature thrive

3.3.5.3 The LNRS directly supports the delivery of GBI by identifying priority areas where GBI can have the most impact. Strengthening the links between the LNRS, BNG, and the wider GBI network helps ensure that nature recovery is not treated in isolation but is integrated into broader planning and development processes. LPAs will need to reflect LNRS priorities in their local plans, safeguarding key areas and enabling delivery through policies, programmes, and projects as well as development management decisions. This joined-up approach helps restore nature, enhance biodiversity, and support sustainable development, making GBI more targeted, effective, and aligned with national and local priorities. Figure 6 illustrates how the LNRS, BNG, and GBI interact.



Figure 6: Conceptual framework detailing the relationship between Natural Capital, Ecosystem Services, Local Nature Recovery and Green Infrastructure in land use planning



3.3.6 Biodiversity Net Gain Duty

- 3.3.6.1 Under the Environment Act 2021 there is a statutory requirement for developments to secure a 10% net biodiversity gain on (ideally) or off-site. This requirement is established through [Schedule 7A of the Town and Country Planning Act 1990](#) (as inserted by the Environment Act 2021 and amended by the Levelling Up and Regeneration Act 2023), which sets out the statutory framework for securing mandatory biodiversity net gain through the planning system. The Act has also reinforced the ‘Biodiversity Duty,’ requiring local authorities in England to actively consider how they can conserve and enhance biodiversity more widely across all functions carried out.¹⁴ Development viability and deliverability are important considerations, as the NPPF recognises, and accordingly, a [2025 evidence study](#) was carried out in Essex to test the viability of delivering 10% and higher levels of BNG (up to 20%) for new developments. It is important that work related to the GBI network and LNRS are joined up to help ensure that BNG delivers multifunctional benefits. It is also important that in pursuing on-site BNG, other environment net gains are secured as part of the development process supporting the provision and delivery of GBI over the long term. There is an inherent risk that if each of these strategies are pursued separately important synergies with GBI will be lost.
- 3.3.6.2 Local authorities have the potential to strengthen BNG, LNRS and GBI delivery through their responsibilities under the Biodiversity Duty. These key actions ensure that local authorities contribute to the broader goal of protecting and enhancing biodiversity in their area:
1. **Conserve and Enhance Biodiversity:** [Local authorities must actively consider how their policies and decisions can help conserve and enhance biodiversity.](#)
 2. **Develop and Implement Policies:** [They need to create and implement policies that support biodiversity goals.](#)
 3. **Manage Land:** [Local authorities should manage their land and buildings in ways that promote biodiversity, such as maintaining green spaces and protecting habitats.](#)
 4. **Educate and Raise Awareness:** [They should educate the public and raise awareness about the importance of biodiversity.](#)
 5. **Report on Actions:** [Local authorities are required to publish a biodiversity report by January 2026 and update it every five years.](#)

3.3.7 Active Essex

- 3.3.7.1 Active Essex aims to foster healthier, more active communities across Essex, Southend, and Thurrock. Their mission is to harness the power of physical activity and sport to transform lives, through the delivery of the [Active Design Guidance](#) Principles by Sport England. These principles are intended to inspire and guide the development of cities, towns, villages, neighbourhoods, buildings, streets, and open spaces. This includes the [Active Environment Principle](#) which requires developers to create attractive and accessible spaces for everyone that promote physical activity and healthy living. This involves:

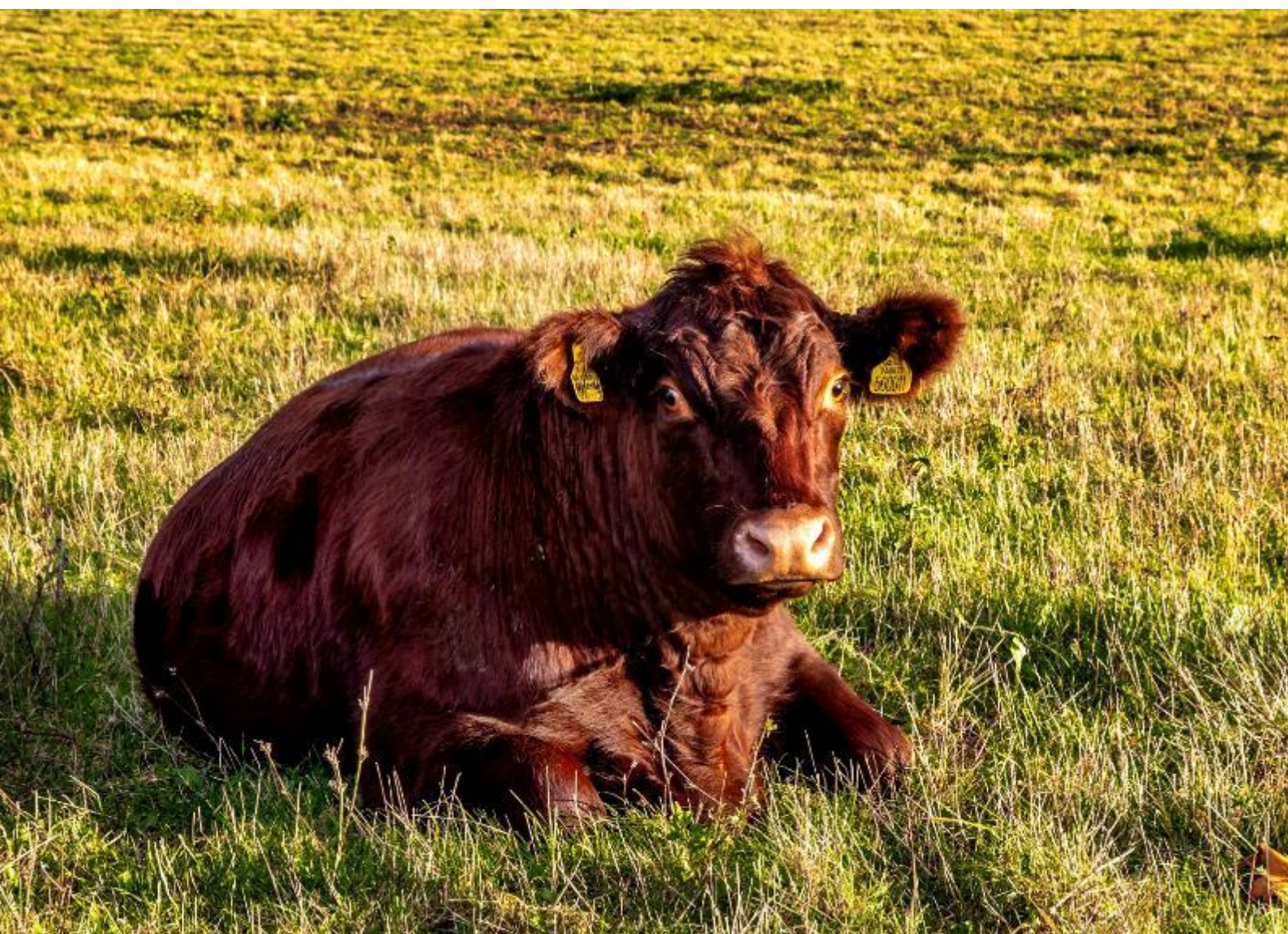
¹⁴ This duty is outlined in Section 41 of the Natural Environment and Rural Communities Act.
<https://www.legislation.gov.uk/ukpga/2006/16/section/40>

3.3.7.1
cont.

1. **Creating High-Quality Places and Spaces:** Creating and maintaining high-quality public spaces that encourage physical activity, such as parks, playgrounds, and sports facilities. Ensuring that public spaces are inviting, safe, and conducive to physical activity. This aligns with the Essex GI Standards 'Multifunctionality' principle 3 (pages 32-37, 38-43 of the technical guidance).
2. **Supporting Active Travel:** Designing environments that make walking, cycling, and other forms of active travel easy and attractive. This relates to Essex GI Standards 'Increased connectivity' principle 7 (pages 65-68, 69-72 of the technical guidance).

Maintaining Activity: [Developing and managing spaces in a way that encourages ongoing use and activity](#). This emphasises the importance of designing environments that support ongoing physical activity through thoughtful planning and design. This relates to both the Essex GI Standards Principles above and the 'Health, Wellbeing and Social Equity' principle 6 (pages 56-60, 61-64 of the technical guidance).

3.3.7.2 The core goal of the Active Environment principle is to ensure "activity for all," making physical activity both accessible and attractive to everyone. This principle emphasises providing opportunities for outdoor activities that connect people with nature, ultimately enhancing their health and wellbeing.





Green and Blue Infrastructure in Local Plans and Development Management

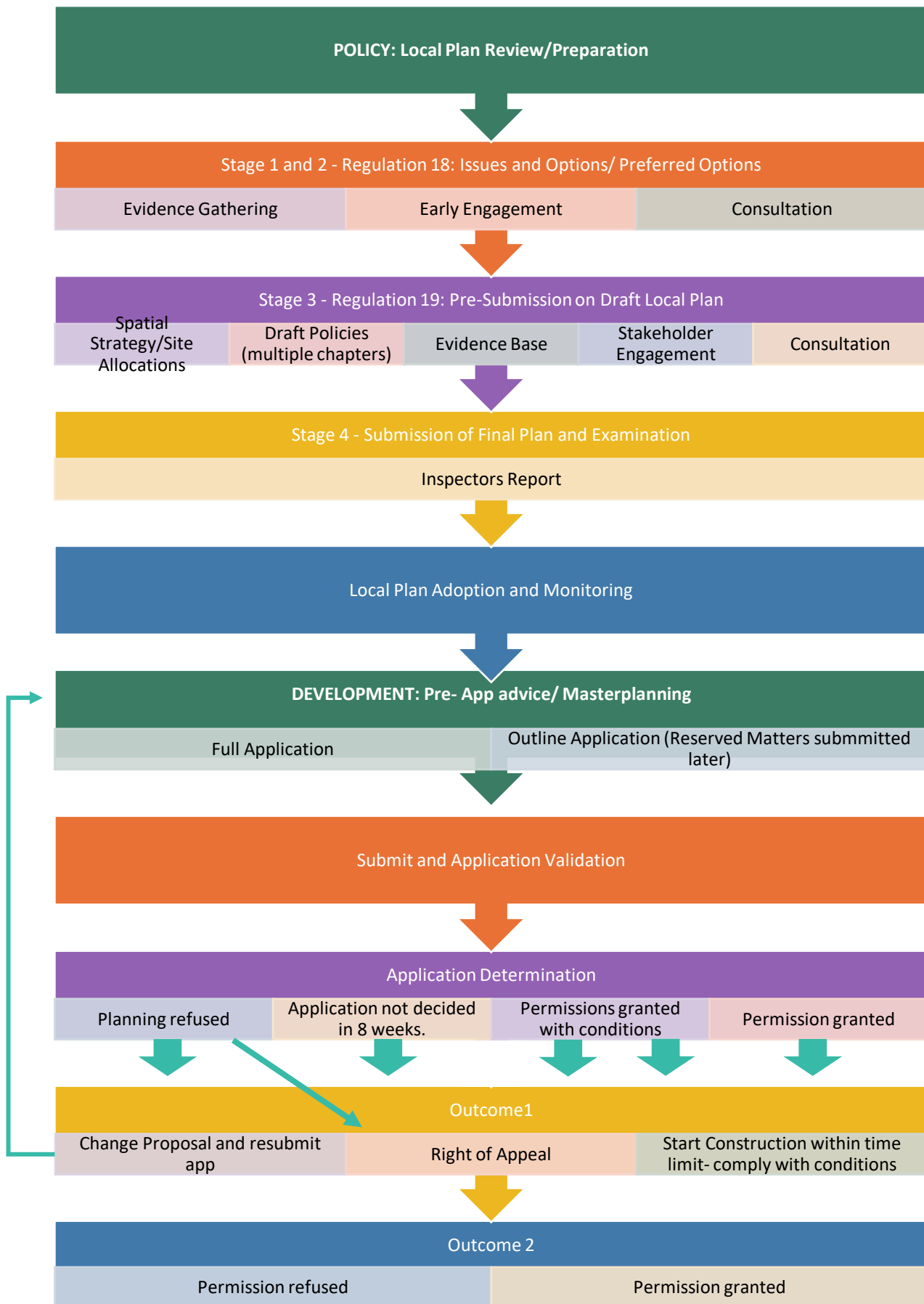
Chapter 4

4.1 Incorporating GBI in Local Plans and Development Management

- 4.1.1 Local plans provide the approved and statutory long-term plan for an area. In Essex there is a two-tiered authority approach, with the County Council and two Unitaries responsible for aspects of wider strategic planning functions such as minerals & waste, highways, nature and GI. The twelve District, Borough and City Councils and two Unitaries currently prepare local plans using guidance from national (NPPF/NPPG) and Essex County Council. These plans contain both strategic and local policies, and major site allocations, to meet housing and wider societal needs as appropriate.
- 4.1.2 It is unclear how these local plans will be affected under the proposed devolution for Essex, which includes the creation of a Combined County Authority and three to five unitary authorities.
- 4.1.3 The local plan provides a statutory framework for future land use decisions as practised through development management processes (planning applications and other consents). There is a presumption in favour of the local plan unless material considerations dictate otherwise. **This reinforces the importance of ensuring that GBI has a strong and coherent set of policies that deliver collectively across the climate, nature, health and wellbeing agendas moving away from a simple standalone GI policy residing in the environment chapter.** Figure 7 highlights the relationship between planning stages, stressing how the Development Plan (Local Plan or UDP) provides the framework for planning applications. This also illustrates the overall sequential process through which GBI may be planned, designed, refined and delivered.
- 4.1.4 The following Chapters will delve into the process of enhancing and ensuring the delivery of high-quality GBI. Chapter 5 will focus on local plan preparation, which aligns with Chapter 6, addressing the integration of good GBI design into developments.



Figure 7: From Policy to Project – Flowchart of Key Planning Stages





Planning for GBI Mainstreaming Green and Blue Infrastructure in Local Plans

Chapter 5

5.1 Mainstreaming GBI into Local Plan Preparation

- 5.1.1 Figure 8 adapts the process journey maps from Natural England's [GI framework Process Guide for Local Authorities](#) to Essex local plan preparation and provides an important evolution of what a good policy process looks like.

Figure 8: Process Journey for Policy (Adapted Natural England 2022)

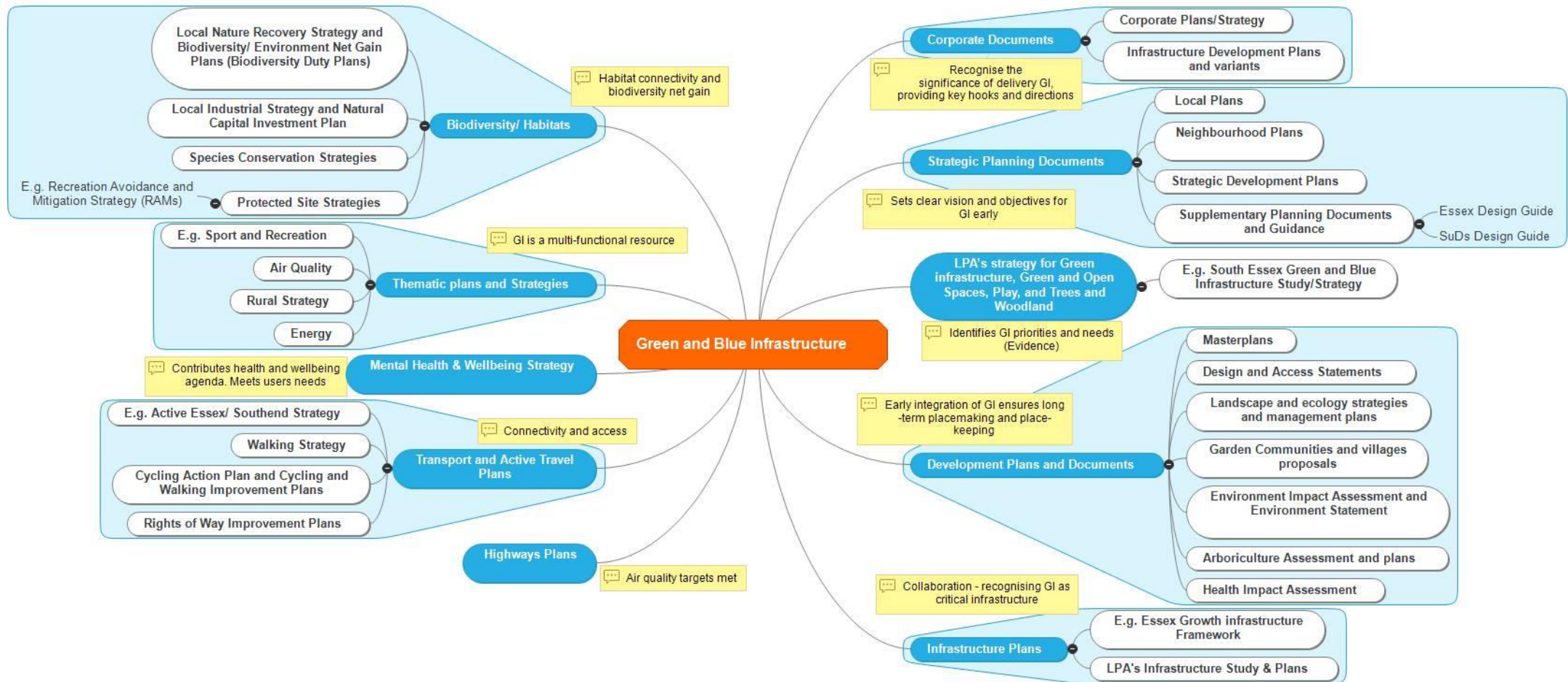
Process Journey Stages	Process Journey headline action	Related to which Local Plans Stages
 Stage 1	Partnerships – early engagement.	Early Scoping, Stage 1 and 2 - Regulation 18: Issues and Options/ Preferred Options
 Stage 2	Vision informed by strategic content - A high-level vision for GBI in the area.	Stage 1 and 2 - Regulation 18: Issues and Options/ Preferred Options
 Stage 3	Evidence There are a number of tools available that can build a robust evidence base for the delivery of GBI such as Natural England GI Framework , NATURE Tool , UGF - see Appendix 4 for further list of tools.	Stage 1 and 2 - Regulation 18: Issues and Options/ Preferred Options and Stage 3 - Regulation 19: Pre-Submission on Draft Local Plan
 Stage 4	Plan strategically and develop Green and Blue Infrastructure policies and targets. (Policy Design). Use GIPAT policy matrix good policies' examples (worksheet 5) to help Sustainability assessment. See Appendix 4 for list of relevant tools.	Stage 3 - Regulation 19: Pre-Submission on Draft Local Plan
 Stage 5	Integrating Green and Blue Infrastructure Strategy – mapping exercise of GBI to other strategies; GBI link to other strategies, as shown in Figure 9 embed in Local Plans, Design Guides, validation checklists.	Stage 3 - Regulation 19: Pre-Submission on Draft Local Plan
 Stage 6	Managed valued monitored and evaluated (Monitoring and Evaluation). From the targets identified in stage 4, set benchmarks and key performance indicators to evaluate GBI policy performance and ensure effective management and maintenance.	Local Plan Adoption and Monitoring including KPIs on multiple benefits and policy integration and also more qualitative based metrics including community feedback/satisfaction.

5.2 Mainstreaming GBI in the local plan

- 5.2.1 **GBI should be embedded in, and inform, local authority plans as captured in Figure 9 including the corporate strategy and infrastructure delivery plans as part of the mainstreaming process; reinforcing the key message that GBI is part of our critical infrastructure.** It is important to develop and enhance these connections and synergies within other planning strategies through the active and ongoing involvement of relevant officers to strengthen the overall resilience and integration of GBI policies and plans. Working groups should be established around the bridges of placemaking and placekeeping (stewardship) to address cross-cutting issues, including GBI. It is important to avoid creating a GBI working group in its own silo. Hence an initial first step is to map the council's relevant strategies in a similar way to that shown in Figure 9, to understand where GBI is included or absent and identify its potential use through engaging with key players whose actions either impact upon, or are affected by, GBI. From this mapping and stakeholder analysis phase, improved policy design, testing and delivery can be secured. Here the approach is one rooted on what GBI can do to address the challenges these plans seek to address. This brings the hooks and bridges and working group into operation (**Appendix 2**).
- 5.2.2 As recognised in National Planning Practice Guidance (**NPPG: par 008**), GBI needs to be considered at the **earliest stage of the planning policy process** alongside all other infrastructure and development considerations. This should also include aspects of stewardship and long-term management.
- 5.2.3 Colchester City Council's emerging new Local Plan (2025–2041) exemplifies a thematic approach to local plan development, as detailed in **Appendix 9: Case Study 1**. This plan includes a focus on an environmentally led approach to sustainable development, (focusing on GBI) to enhance the city's green network and waterways, align growth with environmental enhancement, and ensure environmental quality drives development.



Figure 9: GBI network of relationships with other plans and strategies (Source: Essex GI Standards 2022 adapted)



5.3 The Challenges and Lesson Learnt from Local Plan Preparation

- 5.3.1 A workshop held in July 2024 focussed on some of the challenges in the development of local plans (Figure 10). **Key challenges identified related to evidence quality and proportionality; sufficient engagement with all the necessary public, private and voluntary stakeholders; coordination issues among departments and stakeholders; and difficulties in keeping up with policy requirements and enforcing GI standards. Resource constraints and limited knowledge, particularly within smaller teams, can significantly impede the ability to conduct comprehensive studies. This, in turn, affects the effective delivery and ongoing maintenance of GBI.** Without adequate resources, teams may struggle to gather the necessary data, perform detailed analyses, and implement best practices.
- 5.3.2 Lessons learned from local plan preparation emphasise the importance of proactive GBI planning from the outset, set within clearly defined objectives. Key points include:
- Connect individual green and blue spaces to form a cohesive network and unpacking the challenges of retrofitting GBI in urban areas while balancing other requirements like cycle lanes.
 - Engage local authorities' teams across multiple policy domains such as open spaces, transport, regeneration and health and associated stakeholders.
 - Topic papers are valuable for helping to summarise the evidence and informing local plans.
 - Build strong leadership and political support at officer and member level.
 - Enable joint working and funding from different departments, linking GBI to public health benefits to gain broader support.
 - Develop clear communication and education to raise awareness about GBI benefits.
- Make connections between BNG, LNRS and GBI rather than treat them in isolation.
- 5.3.3 The workshop discussions identified opportunities from the local plan preparation including utilising existing work and resources, such as studies by Essex Wildlife Trust, to support GBI planning. Along with the creation of a central database to share data and evidence, creating flexible, strong and clear policies and strategies to better incorporate GBI and connectivity into local plans. Community engagement is essential, involving the public and stakeholders in the planning process to ensure successful implementation. **Appendix 5** provides an example of the list of stakeholders to engage.
- 5.3.4 The following stages ensure that the Local Plan is comprehensive, inclusive, and aligned with national, regional and local policies and priorities.

Figure 10: Screenshot from workshop on GI July 2024. The post it notes summarised the discussions and highlighted the need for wider involvement of other teams across the council as well as wider public, making sure that there is an evidence base to support the policies together with the necessary staff skills to both develop and interpret it. Issues to do with stewardship and funding are important to build in early

what are the challenges in preparing a local plan and how have you tried to address them



5.4 Partnership – (Early Scoping & Regulation 18)

5.4.1 The initial early scoping and Regulation 18 consultation phase is critical to capturing stakeholder priorities to help inform the evidence base and policy priorities. During this phase, **forming effective partnerships that involve and integrate economic, social, and environmental interests benefiting from GBI investment is essential.** It is important to engage at the earliest possible stage with a wide variety of stakeholders, going beyond the traditional responses to the document hosted on a website. The number of engagement responses to local plans is generally low, so the way the process is framed and communicated can be very important in generating responses and attracting comments from diverse groups, moving away from the focus on objections to more supportive statements. In many ways, enabling stakeholders to help shape the initial plan from the outset will help build a strong foundation, boosting the evidence base for the local plan and also identifying potential areas of conflict to be addressed therein. It is important that early engagement is undertaken with the public before significant capital is invested in a development plan draft by officers. **Thus, the issues and options document need to be less prescriptive.**

5.4.2 Following a good-practice participatory process highlighted in the [Essex GI Standards](#) Principle 4 (page 47), local plan preparation ensures various stakeholders are engaged. This process ensures that diverse perspectives are considered, leading to more comprehensive and effective planning. This aligns with Natural England's [Process Journey for Local Planning Authorities](#), key partnership actions to include:

1. **Building Strong Partnerships and Shared Vision:** Collaborate with stakeholders, including local communities, developers, and environmental organisations, to ensure a shared vision for GBI. It is recommended to undertake a profile of your stakeholders of who will be affected by or influence your plan. An example of either a basic or more detailed stakeholder mapping is shown in the Process Journey table 3 and 4.
2. **Engaging Early and Continuously:** Involve partners early in the planning process and maintain ongoing two-way communication to gather input and feedback, align goals and actions throughout whole process. Develop an engagement and communication plan to conduct workshops, surveys, public consultations and other forms of communication and engagement to gather input and build consensus.
3. **Sharing Data and Resources:** Exchange information, data, and resources to support evidence-based decision-making according to place-based and people-based priorities and efficient use of resources.
4. **Coordinating Efforts:** Work together to integrate GBI strategies into local plans and development projects, ensuring consistency and maximising impact.

Monitoring and Evaluation: [Collaboratively monitor and evaluate the effectiveness of GBI initiatives, adjusting as needed to achieve desired outcomes. Capture lessons learnt including good and poor practice.](#)

5.4.3 This inclusive approach helps create well-rounded and sustainable local plans that address the needs of all stakeholders.

- 5.4.4 It is during this phase of the local plan that understanding the challenges and assessing how GBI can help with addressing these challenges is important.
- 5.4.5 Understanding from these various plans the different evidence sources is also important together with starting to build a collective vision for the kind of places the local plan will deliver.
- 5.4.6 The Castle Point Plan 2023–2043: Issues and Options Consultation as set out in **Appendix 9: Case Study 2** illustrates how early engagement can shape a local plan that reflects both environmental priorities and community needs. The Issues and Options Consultation identified strong public support for protecting green spaces, enhancing biodiversity, and improving access to nature. It also highlighted specific challenges such as maintaining GBI, achieving BNG in urban areas and opportunities like linking landscapes through the South Essex Estuary PARK project. These insights demonstrate the value of structured engagement in embedding GBI from the outset.

5.5 Vision – (Regulation 18)

- 5.5.1 Given GBI’s multifunctional credentials, it is important that the policy response extends beyond one stand-alone policy in the environment section. Moreover, GBI needs to be recognised as critical infrastructure supporting a range of social, health, economic and environmental outcomes. Thus, the mainstreaming of GBI becomes a central purpose if it is to achieve its potential. Realisation of a local vision that embraces the overarching nature and multiple benefits of GBI requires recognition and the backing of both political and other senior leaders in LPAs, that will also engender action across and beyond a local authority, together with partners, developers, other sectors and the wider community. It is important to set out the **role GBI can play in delivering across the spectrum of policies through embedding multifunctional GBI as part of the wider vision and objectives for the local plan area.**
- 5.5.2 Creating a clear and strong long-term vision needs to be informed by:
- The **findings from the mapping exercise** of existing plans and strategies recommended in Chapter 5: section 5.1.
 - **Policy requirements** - meeting requirements of National, Essex County and Local policies and principles detailed in chapter 3: sections 3.2 – 3.4.
 - **Co-created priorities and needs** - incorporating the outputs from the inclusive partnership engagement in chapter 5: section 5.4, viewing these as opportunities to integrate GBI investments with local planning priorities, such as health, highways and transport, education, nature recovery, and climate change.
 - Recognising the inevitable trade-offs and winners and losers involved in any prioritisation process within clear and transparent decision-making processes.
 - The **high- level evidence** gathered as part of chapter 5: section 5.6.

- 5.5.3 Developing a vision requires flexibility to adapt to new information as the local plan evolves through the various stages of the local plan development. **The vision will need to set clear, achievable goals for GBI delivery and ensure alignment with broader local and regional planning objectives and sustainability goals.** Ensure to communicate the GBI vision to the public and stakeholders through various channels.
- 5.5.4 As mentioned, the local plan vision, objectives and the development of good GBI policies need an **up to date, robust but proportionate evidence base** to justify them, and which also serves as a **baseline to measure progress and success.**

5.6 Evidence – (Regulation 18 and 19)

- 5.6.1 The evidence base is critical for the planned policies but needs to be proportionate and draw upon work at county scales. Here LNRS and GBI work will be of particular value.
- 5.6.2 [Assess Current Assets: GI Audit](#)
- 5.6.2.1 It is important to identify and map existing GBI assets within the local plan area and any GBI assets that cross local authority boundaries. Map out green spaces, water bodies, and other natural features. This stage might be considered as establishing a baseline position. [Green Essex](#) (2022) provides a powerful spatial analysis of GBI provision via an ARC GIS database together with visual storylines to help build this up. Supporting this at a national level, there is [Natural England's GI mapping tool](#)¹⁵ which provides extra data layers, but it is limited by its reliance on public open-source data at national level. Crucially, the [Essex Local Nature Recovery Strategy \(ELNRS\) mapping](#) can and should provide evidence of GBI assets. These maps highlight areas important for nature conservation, biodiversity and ecological networks (including [b-lines](#)), which can be integrated into GBI planning. Supporting the strategic placement and justification of GBI initiatives by identifying key habitats and ecological networks, LNRS maps should be used support the justification and strategic placement of GBI initiatives. Local Wildlife Sites mapping and data are also available at LPA level and should be integrated into this process. Together, these resources help mainstream GBI into local planning and ensure alignment with wider nature recovery goals.
- 5.6.2.2 The most effective way to record GBI assets is through identifying the different ecosystem services they provide. A useful example is provided by [Newport](#). Once these have been mapped it may be useful to also assess the quality of the GBI assets as an effective baseline. Currently a lot of the evidence data, such as those listed in **Appendix 6**, does not do this.
- 5.6.3 [Call for 'Green' Sites](#)
- 5.6.3.1 **Regulation 18 phase will also include a call for sites for major developments but in keeping with the precedent set by the South Downs National Park Authority there is value in having a [call for nature sites](#) for GBI over and above that already covered in the LNRS.**

¹⁵ A useful presentation is here <https://www.youtube.com/watch?v=eCNTqrp0YkI>

5.6.3.1 Uttlesford District Council undertook a 'call for sites' in the winter/spring of 2021. For the first time, the Council also asked for 'green sites' to be submitted to the Council as part of their regulation 18 phase. This marked a new and proactive approach to integrating nature recovery into spatial planning. Here the driver was to identify, protect and enhance areas/sites that can contribute to nature recovery and biodiversity enhancement. This initiative aimed to meet biodiversity net gain requirements and support local environmental goals. By mapping and prioritising these sites, councils can better plan for sustainable development and conservation efforts.

5.6.3.2 Although no green sites were submitted during the 2021 winter/spring call, the initiative itself was a valuable step forward. It demonstrated a commitment to embedding environmental priorities into the planning process and highlighted the importance of early engagement with landowners and stakeholders. The experience presents a valuable opportunity to refine and build on this innovative mechanism, helping to unlock its full potential in future planning efforts.

5.6.4 Public Surveys and Values

5.6.4.1 Local authorities may find it helpful to undertake surveys of public use of, and value attached to, existing GBI and place-based assets to strengthen the evidence base. Here evidence from neighbourhood plans may provide important community input such as within [Copford and Easthorpe](#) (in Essex). Furthermore, there is an opportunity to use the local green space designation, as stated in the NPPF (para103, 107-108), where these designations can be applied to locally valued green spaces. Standard surveys of use are perfectly acceptable, although it is important to target households rather than carrying these out on site. [Participatory GIS](#) can be a useful way of capturing existing patterns of recreational use helping improve cultural ecosystem services mapping¹⁶. However, it is also important to follow mandatory requirements for public engagement over the plan-making processes, which should involve the public from the outset, ideally in carefully managed, deliberative and inclusive processes. Examples of good public engagement practice in Plan-making using a thematic GBI approach, as carried out by Tendring, Colchester and Uttlesford Councils (Essex) can be found using the respective Councils' websites and Local Plan evidence bases, including relevant Topic Papers, statements of consultation etc.

5.6.4.2 **Appendices 6.1 – 6.3** provides hyperlinks to key National, Essex County and Local evidence sources to help build a robust evidence base to help justify the GBI policies as part of the Regulation 18 and further build upon during Regulation 19.

5.6.5 Sustainability Appraisal

5.6.5.1 As part of the plan-making process, the sustainability appraisal also needs to be an integral part of Regulation 18 and 19 processes and indeed to strengthen them and local plan justification. GBI has strong sustainability credentials and clearly should feature in the priorities/alternatives that are being assessed. Sustainability Appraisals (SA) can review the

¹⁶ A useful open access paper by Kirby Scott and Walsh (2023) for Newcastle's green belt contains a replicable method <https://www.tandfonline.com/doi/full/10.1080/26395916.2023.2276752>

significant positive impact of local plan policies for delivering good-quality GBI and its multifunctional benefits when considered against the SA Framework. It also makes recommendations so can help to improve policies. However, government is reviewing the planning system and proposing to replace SA, Strategic Environmental Assessments (SEA), and Environmental Impact Assessments (EIA) with Environmental Outcome Reports (EOR) under the planning reforms. The transition to EORs is anticipated to streamline local planning processes by utilising more consistent data, enhancing assessment transparency, and making it easier for planners to evaluate environmental impacts while focusing on achieving better environmental outcomes. Business as usual is the key message for the time being. Therefore, the SA should run alongside the plan-making process and should not be used to justify the preferred options.

5.6.6 **Conclusion: Establishing a Strong Foundation for GBI Policy Development**

- 5.6.6.1 The early stages of Local Plan preparation, especially during scoping and Regulation 18, are a key opportunity to make sure GBI is built into the plan from the beginning. While a separate GI topic paper (chapter 5: section 5.8) may not be needed at this point, the plan's overall vision and strategic introductory chapters should already reflect the importance of GBI and its mainstreaming into policy.
- 5.6.6.2 The main aim is to use evidence and engagement to shape SMART, strong, clear GBI policies. These should support both big-picture strategies and site-specific actions, and link closely with wider environmental goals like BNG, LNRS and other policy goals like active travel, health and wellbeing and housing targets. By involving the right people early and aligning with existing plans and data, local plans can deliver greener, healthier, and more resilient places.

5.7 Policy Design (Regulation 19)

- 5.7.1 The Regulation 19 phase is much more formalised and prescribed by the legislation and is based on whether the local plan meets the test of soundness and whether it is legally compliant. There is little opportunity to comment in support of a local plan or suggest improvements. However, there is an opportunity to turn the more negative aspect of consultation processes to also elicit responses that address areas of support and contention. These more positive aspects of consultation responses are often missing and can help to justify stated positions.
- 5.7.2 In response to stakeholder consultation and the evidence base, multifunctional policies for GBI should be developed ensuring that the SA (Chapter 5: section 5.6.4) is used effectively. Additionally, Neighbourhood Plans and similar community-led initiatives can play a crucial role in shaping these policies by leveraging local knowledge and interest, tailoring them to local contexts, and enhancing community engagement. These plans enable communities to identify and prioritise green space provisions, as outlined in NPPF paragraphs 106-108.
- 5.7.3 Policies should protect, create and enhance GBI functions collectively. Planning policies should also safeguard and enhance habitats that are essential for bees and other pollinators, ensuring

their role in supporting biodiversity and ecosystem services. Crucially, **GBI should not be designed or delivered as a single stand-alone policy intervention**. Due to GBI's integral and multifunctional nature, it necessarily impacts upon several policy areas which require explicit policy interventions in relevant chapters/sections of a local plan or other strategy document **including provisions for its long-term maintenance** (e.g., economic development, transport, communities, green belt; health and well-being).

- 5.7.4 Consequently, it is important to co-design policies with relevant personnel working in those policy areas to ensure consistency and coherence rather than relying on a single isolated GBI policy in the environment chapter to be used in development management processes. Figure 11 provides a useful output, using work from Central Scotland for adaptation¹⁷. Here the different functions and characteristics of GBI that need to be considered are identified and translated within a suite of “model policies” across Central Scotland development plans and supplementary guidance. Water (blue infrastructure), Habitats, Access, Open Space and Stewardship are the key areas of policy included here, together with a more generic GI policy position. These should be adapted and applied to the local Essex context rather than simply cut and pasted.

Figure 11: Model GI Policies (Source: Hislop et al 2019 650)



- 5.7.5 For those wanting more detailed information on GI policies, a freely available GIPAT [policy matrix](#) has been developed which showcases a range of good, medium and weak performing GI policies which have been scored across 27 assessment criteria. This is available for LPAs to

¹⁷ Hislop et al 2019 <https://www.tandfonline.com/doi/full/10.1080/14649357.2019.1678667>

use to inform good local plan policy formulation and assessment. **Here policy examples are focussed on both the coverage of policy as well as the strength of policy wording.** The strength of policy wording is a significant consideration here given their role in decision-making priorities. The GI policy matrix in its full version was applied to help develop the Essex GI strategy in 2020.

- 5.7.6 Natural England's [GI Framework](#) also includes case studies with examples of Policy wording, including Uttlesford District Council's emerging Local Plan Core Policy 39: Green and Blue Infrastructure Policy¹⁸. As mentioned, the local plan should not include a standalone GBI policy but integrate into a breadth of policies throughout the local plan which highlight the requirements of the core documents, plans and strategies to be submitted as part of the planning application as set out in Figure 13 (6.2). For example:

"All large/major scale developments will be required to submit a Green Infrastructure plan setting out how the development will connect to existing GBI and demonstrate how the development will contribute to the delivery of the GBI Strategy, Biodiversity Net Gain, local nature recovery, and the management, monitoring and funding for the lifetime of the development."

- 5.7.7 The Uttlesford Local Plan 2021-2041: Regulation 19 (**Appendix 9: Case Study 3**) highlights the journey from policy design to approval, emphasising stakeholder engagement, evidence-based decisions, and public consultations. The plan includes detailed policies on GBI, climate change, sustainable transport, and biodiversity, ensuring GBI is prioritised in major developments.

5.8 Green and Blue Infrastructure (GBI) Strategy / GBI Topic Paper (Regulation 19)

- 5.8.1 Many local authorities incorporate GBI strategies into their Local Plans to address environmental challenges and opportunities. Based on the evidence collected in section 5.6 and the engagement (section 5.4), the development of a GBI Strategy can achieve several goals. It consolidates the review of the current state of GBI assets. It identifies gaps in their provision. It outlines actions to enhance the current provision. Additionally, and importantly, it supports key local plan policies that aims to deliver sustainable development and enhance the natural environment. It can be produced as part of a local plan topic paper or as an evidence base document. In so doing it is important to explicitly recognise the economic, social and health benefits of GBI supporting its multifunctionality credentials. Furthermore, it should be framed as a key delivery mechanism for LNRS priorities, working synergistically with BNG and Green Belt strategies to support nature recovery, climate resilience and sustainable place making.

¹⁸ <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/downloads/process-guide-and-journeys-2024/Green%20Infrastructure%20Policy%20Examples%20-%20Appendix%209.pdf>

- 5.8.2 Integrating a GBI Strategy into a Local Plan and creating a local plan topic paper both involve structured steps to ensure they are comprehensive, well-researched, and aligned with planning policies, effectively addressing environmental, social, and economic goals. This includes:
- 5.8.2.1 **Defining the Scope and Purpose:** Start by clearly outlining the GBI topic and its relevance to the Local Plan within the context of the LNRS. Set out how the GBI topic paper supports and helps to deliver LNRS priorities, while also responding to local plan objectives. Clearly state the purpose and objectives of the topic paper and what it aims to achieve. This provides a clear direction for the research and writing process and reinforces the relationship between strategic nature recovery and multifunctional GBI.
 - 5.8.2.2 **Data analysis and interpretation:** Building upon the outcomes from implementing sections 5.2 to 5.6 and review of the national, regional, and local policies listed under Chapter 3: sections 3.2 – 3.4 analyse and interpret the data. Perform a gap analysis to identify areas for improvement and assess the potential impacts of proposed policies or changes on the community and environment. This analysis helps in understanding the current situation and the implications.
 - 5.8.2.3 **Draft the Topic Paper/Strategy:** Write the topic paper, starting with an introduction that provides an overview of the GBI topic, its importance, and the objectives of the paper. Explain the methodology used for data collection and analysis, present the key findings, outline the proposed vision, policies and actions, and conclude with a summary of the main points and next steps.
 - 5.8.3 **Develop deliverable action plans** that outline specific projects, timelines, responsibilities, and resource requirements, including funding sources. This will need to include mechanisms to monitor progress and evaluate the effectiveness of GBI initiative, that could align with the monitoring and evaluation of the local plan (section 5.9).
 - 5.8.3.1 **Review and Revise:** Have the draft reviewed by colleagues and stakeholders for feedback. Share the draft with the public and incorporate their feedback where appropriate. This iterative process ensures the topic paper is comprehensive and well-informed
 - 5.8.3.2 **Finalise and Publish:** Make necessary revisions based on feedback, ensuring the final document is clear, concise, and well-organised. Publish the topic paper as part of the local plan documentation, making it accessible to all stakeholders.

5.9 Monitoring and Evaluation (Local Plan Adoption and Monitoring)

- 5.9.1 Often, monitoring and evaluation are bolted on to policy processes rather than identified at the outset to identify what good GBI looks like and how it is to be measured and evidenced. Of particular importance is the need to devote sufficient resources to its successful undertaking so that lessons can be learnt and mitigations put in place if needed. Key

performance indicators covering both quantitative and qualitative measures should be identified and used; ideally co-designed by wider stakeholders. In the long run, good evaluation saves time and money. It is also important that evaluation measures and assesses what is valued rather than simply valuing what is most easily measured.

- 5.9.2 Overall, the Tendring Colchester Border Garden Community (TCBGC) Development Plan Document (DPD) (**Appendix 9: Case Study 4**) highlights the critical role of strategic planning, collaboration, and adaptability in integrating GBI into urban development projects, meeting both local and county-wide standards. The joint effort by multiple local authorities ensured a comprehensive approach to development and GBI integration. Clear strategic objectives provided a framework for sustainable development, while community involvement in planning and management was crucial for success. The plan also includes mechanisms for monitoring progress and adapting strategies to remain responsive to emerging challenges and opportunities.

5.10 Integrating Green and Blue Infrastructure beyond the local plan

- 5.10.1 Mainstreaming GBI necessarily involves going beyond the local plan processes. Having mapped the different plans and strategies that affect or are affected by GBI (Figure 9) and having identified the strategic and local challenges that can be addressed by GBI and having built a multidisciplinary partnership to support the local plan, it is important that the momentum is maintained in monitoring and review processes and its effective delivery through development management processes. This should not be viewed as a one-time exercise.
- 5.10.2 Moreover, the local plan should be seen as an umbrella to help support the delivery of multiple plans and strategies rather than simply shape development management outcomes. Thus, it is important that the multifunctional components of GBI are incorporated into these other plans and strategies where they might not currently be present.
- 5.10.3 Here the role of a resilient partnership group is critical, crossing departmental boundaries; for example, establishing meetings to help with integration and address challenges associated with climate, nature and health and well-being. It has long been recognised that silo working is a problem but often there are not the structures for its resolution.
- 5.10.4 In essence, the message here advocates for a comprehensive and integrated approach to GBI, ensuring it is embedded in various plans and strategies that guide or give material weight to GBI as part of development management delivery through strong partnerships and continuous collaboration.





Embedding Green and Blue Infrastructure in Development Proposals

Chapter 6

6.1 Designing Good Green and Blue Infrastructure into Developments

6.1.1 Figure 12 adapts the process journey maps from Natural England's [GI framework Process Guide for Developers and Design Teams](#) to the context of Essex and its development management processes, illustrating an important evolution in what constitutes good development and design.

Figure 12: Process Journey for Development and Design (Adapted Natural England 2022)

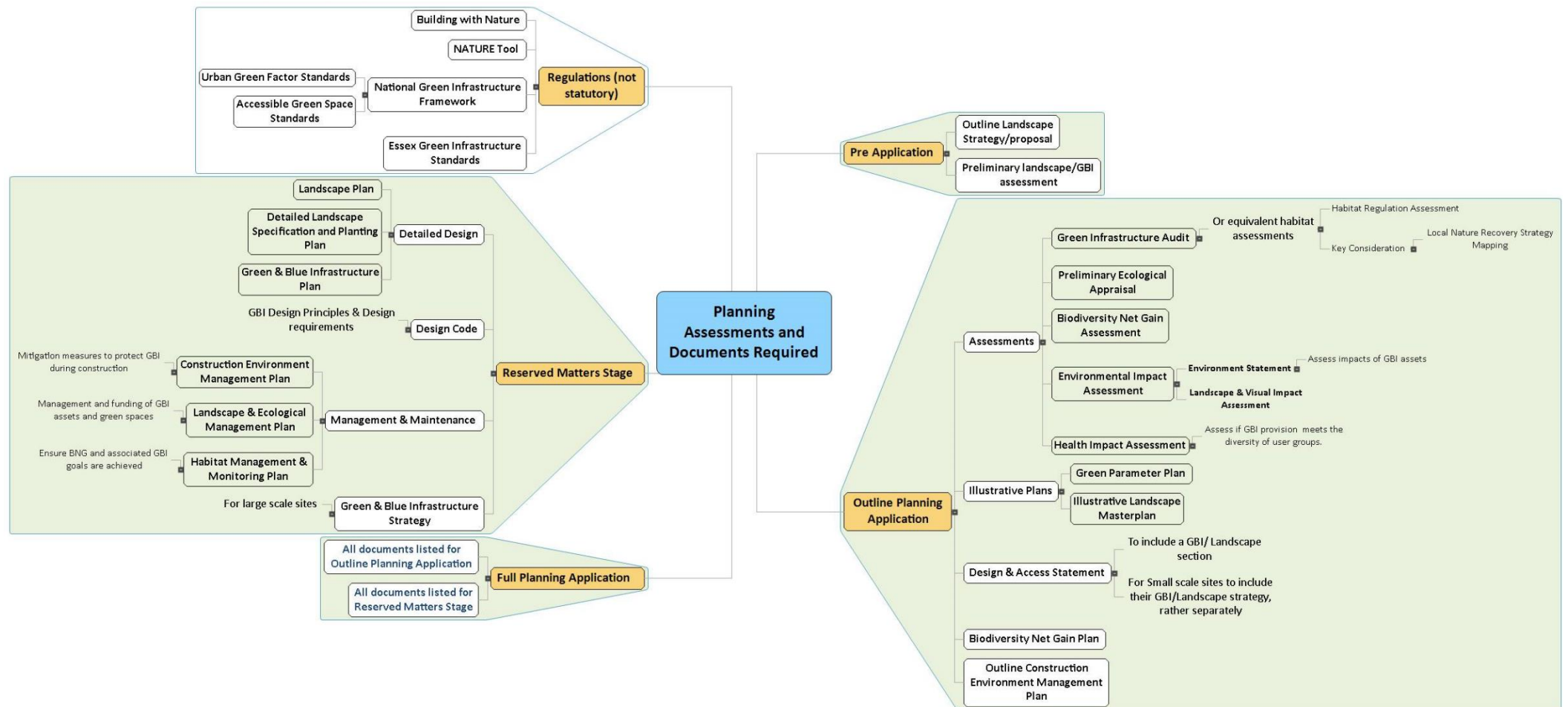
<i>Process Journey Stages</i>	<i>Process Journey headline action</i>	<i>Related to which DM/Planning Application Stage</i>
Stage 1	<u>Strategic definition</u> - Create a strategic concept for GBI within the site and its connectivity beyond the site.	Pre-application, Masterplanning. Outline Planning Application, Full Application
Stage 2	<u>Preparation and briefing</u> - Review GBI provision and establish specific outcomes for GBI and outline these in the project brief.	Pre-application, Masterplanning. Outline Planning Application, Full Application
Stage 3	<u>Concept design</u> - Identify and develop concept designs for GBI interventions	Pre-application, Masterplanning. Full Planning application, or Outline-Reserved Matters
Stage 4	<u>Funding and obligations</u> - planning conditions, obligations, or the CIL etc. to secure and fund GBI.	Outline Planning Application, Full Planning application, or Reserved Matters
Stage 5	<u>Technical design and manufacturing</u> - detailed GBI proposals as part of planning applications.	Full Application or Reserved Matters (Outline Planning Application)
Stage 6	<u>Construction and inspection</u> - impacts on existing GBI avoided, or minimised and compensated.	Outline Planning Application, Full Application or Reserved Matters
Stage 7	Handover - Community involvement and hand over a maintenance and management plan to the appropriate stakeholder. (<u>Stewardship: maintenance and management</u>)	Full Application or Reserved Matters
Stage 8	Actively Monitor - performance, use and maintenance.	Upon delivery, <u>monitoring, and enforcement</u>

6.2 Mainstreaming GBI in Core Planning Application Documents

6.2.1 GBI should be thoroughly considered and integrated into a wide range of assessments, strategies, and plans necessary for the approval of planning applications. This aligns with the broader approach outlined in paragraph 5.10.4. This integration is crucial to ensure that GBI elements are effectively incorporated into urban development projects, enhancing environmental sustainability and community well-being. As illustrated in Figure 13, this approach not only supports ecological balance but also promotes social and economic benefits, making it critical infrastructure for urban planning.



Figure 13: The Key assessment and plans required at each planning application stage that should integrate GBI



6.3 Strategic Definition (All Planning Application Stages)

- 6.3.1 **The key to designing and delivering good development projects lies in having a robust set of approved policies including GBI in local plans supported by relevant guidance which provide clarity and consistency for developers, applicants and residents alike.**
- 6.3.2 **As stated in the NPPG: GBI should be considered at the earliest stage of the planning process alongside other infrastructure and development considerations.** This should also include aspects of stewardship and long-term management (NPPG; par008).
- 6.3.3 Building on the foundation of robust policies (Chapter 5: section 5.2.1), the need for early integration (Chapter 5: section 5.2.2), and the GBI vision for the local plan area (Chapter 5: section 5.5), applicants, especially at the pre application stage, should draw on relevant policies, GBI strategies, and local plan evidence to develop a strategic concept for GBI within the site. This concept should reflect the landscape led, multifunctional approach underpinning the Plan's GBI vision and consider how the site connects to wider ecological and GBI networks. In this way, the strategic definition at site level acts as a translation of the overarching GBI vision into a clear and deliverable framework, providing a roadmap for the design, development and long-term integration of GBI.

6.4 Optimising Green and Blue Infrastructure Benefits: Key Tools and Building Regulations

- 6.4.1 It is also important that effective tools are used to help optimise GBI. Here [Building with Nature](#) and the [NATURE tool](#) provide complementary value in helping ensure that developments produce quality GBI maximising ecosystem services. Essex County Council GI strategy (2020) and standards (2022) have received Building with Nature accreditation, thereby reflecting excellence in GBI policy development.
- 6.4.2 Another important tool that has global recognition and is increasingly being used in the UK is the [urban greening factor](#). It is urban-based and uses generic weighting factors for individual green /blue features in a development that cumulatively generates a score that then can be compared with development plan policies. For example, the [London Assembly Plan Policy G5](#) recommends “a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development”. However, the GSF does not take account of the social and cultural components of nature or work well in peri-urban/rural spaces. Its value does lie in generating multiple benefits in developments which are easy to view and calculate. This is perhaps why globally, and in the UK, it has increasing support in planning policy.
- 6.4.3 In addition to these tools, the [Fields in Trust](#) (FIT) [Standards](#) provide a nationally recognised benchmark for the quantity and accessibility of green space. These standards recommend minimum levels of provision—such as 2.4 hectares of outdoor sport space and 0.6 hectares of equipped play space per 1,000 population—and are widely used by local authorities to guide

open space planning. FIT Standards are particularly useful in ensuring equitable access to green space and can be integrated into local planning frameworks alongside qualitative tools like Building with Nature.

- 6.4.4 Furthermore, it is also important that building regulations and compliance with any other regulatory aspects such as permits and licenses¹⁹ integrate with the development management process to optimise the use and management of GBI options wherever possible. This is particularly important for GBI features such as green roofs, living walls and SuDS.

6.5 Preparation and Briefing (All Planning Application Stages)

- 6.5.1 Given that GBI performs across several policy areas, it is important to try to maximise the multifunctional gains from any development project from the outset. It is recommended to conduct a GI audit (or equivalent, whether through a Preliminary Ecology Appraisal or Biodiversity Net Gain Assessment) to evaluate the existing GBI, highlighting its functions and benefits, constraints and opportunities. A GI audit can also support a Habitats Regulations Assessment (HRA). While it's not a formal part of the HRA process, it can provide useful information, like where green space already exists or where new space could reduce pressure on protected nature sites. This helps show how a plan or project can avoid or reduce harm to sensitive habitats.
- 6.5.2 The new statutory requirement for achieving 10% [Biodiversity Net Gain](#) (BNG) from developments²⁰ is now a key consideration together with the potential to secure wider environment net gains using Natural England's wider [Benefits from Nature net gain tool](#) or the [NATURE](#) tool. Both help developers and LPAs assess a project's impact on key ecosystem services as part of achieving wider environment net gains and nature recovery.
- 6.5.3 Recent [national consultations](#) (May 2025) on BNG have proposed exemptions for small sites, including potential removal of requirements for developments below certain thresholds. While these changes aim to streamline planning for minor developments, they may reduce the formal biodiversity obligations for small-scale proposals. Local planning authorities should therefore consider strengthening local policy including encouraging GBI integration, to ensure that small sites still contribute meaningfully to nature recovery. *See Chapter 7: Glossary for definitions of 'small sites' and 'major developments'.*
- 6.5.4 Whatever tool is used, and with particular reference to achieving Biodiversity Net Gain, it is important that all stakeholders respect and adhere to the [mitigation hierarchy](#) (Figure 14), where avoiding harm to existing GBI must be a primary consideration. The [Biodiversity Gain Hierarchy](#) should also be applied, ensuring avoidance takes precedence, followed by on-site delivery, with off-site measures only used where necessary. Here the link with BNG is

¹⁹ This includes species licenses from Natural England <https://www.gov.uk/guidance/wildlife-licences> or for water use and extraction from the Environment Agency for example. <https://assets.publishing.service.gov.uk/media/5fb3a39dd3bf7f37d7e7270e/environmental-permitting-core-guidance.pdf>

²⁰ The biodiversity metric is used to assess the BNG contribution under the Environment Act (2021). Applicants are required to deliver 10% BNG on developments <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides> including additional guidance for small sites.

important, as avoid should take precedence before considering any BNG solution and then on site BNG should take precedence from off site where possible.

6.5.5 For any planning development the following steps should be considered as part of good mitigation hierarchy practice.

- Assess the current quantity and condition of natural assets with the development footprint and what ecosystem services they are providing to society. (Ideally the LNRS habitat mapping should provide this information or undertake a GI audit).
- Do everything possible first to avoid harmful impacts.
- Minimise predicted impacts on biodiversity and ecosystem services.
- Determine whether creation of additional assets or restoration or improvement of natural assets could enhance the benefits flowing to society in the context of development.
- As a last resort, compensate for losses that cannot be avoided, preferably within the development footprint.

If this does not generate the most benefits, then these can be provided elsewhere.²¹

6.5.6 The [Essex LNRS](#) (July 2025) identifies which locations will benefit from action to achieve the greatest impact on nature recovery, such as [habitat creation strategic opportunity areas](#) and will promote action in these areas. Therefore, offsite BNG will be targeted by the Essex LNRS in order to contribute to the Nature Recovery Network (NRN).

6.5.7 It is acknowledged that on-site BNG delivery may not always be feasible, particularly for small sites. In such cases, off-site solutions can offer added value, including the protection of locally important habitats. Proposals must clearly apply the Biodiversity Gain Hierarchy to justify off-site delivery, demonstrating that all reasonable efforts have been made to achieve positive biodiversity outcomes. This approach supports transparency, aligns with regulatory expectations, and reinforces sustainable, landscape-led GBI planning.



Figure 14: Mitigation Hierarchy: adapted from National Infrastructure Commission Natural Capital and Environment Net Gain recommendations (pages 6, 12 and 20) ²²



6.5.8 Green and Blue Infrastructure: Outcomes and Design Principles

6.5.8.1 Building on the strategic definition, vision, and evidence from the GI audits or equivalent, as well as lessons learned from other developments and local inspirations, aim to identify the key outcomes for placemaking and placekeeping ²³. These outcomes will form the foundation of your development of GBI design principles.

²² The National Infrastructure Commission is now the National Infrastructure and Service Transformation Authority. Their site was archived on 7 March 2025, and reports are available on the National Archives website. <https://webarchive.nationalarchives.gov.uk/ukgwa/20211113152241/https://nic.org.uk/studies-reports/natural-capital-environmental-net-gain/>

²³ Placemaking focuses on creating vibrant, inclusive, and functional spaces that enhance the quality of life for residents. Placekeeping ensures the long-term sustainability and maintenance of these spaces, preserving their value for future generations.

6.5.8.2 By drawing on lessons learnt from other developments in the UK and abroad, it can adopt best practices and innovative solutions that have proven effective elsewhere. These lessons help us avoid common pitfalls and leverage successful strategies. While local inspirations can play a crucial role in shaping our approach, by considering the unique characteristics and needs of our community, to ensure that our GBI design principles are relevant and tailored to the local context (Figure 15). Here, consideration of the physical parameters of the site: condition, constraints, opportunities and base data from the GI audit (or equivalent) are necessary. This includes active engagement with community members and stakeholders to gather their insights and aspirations.

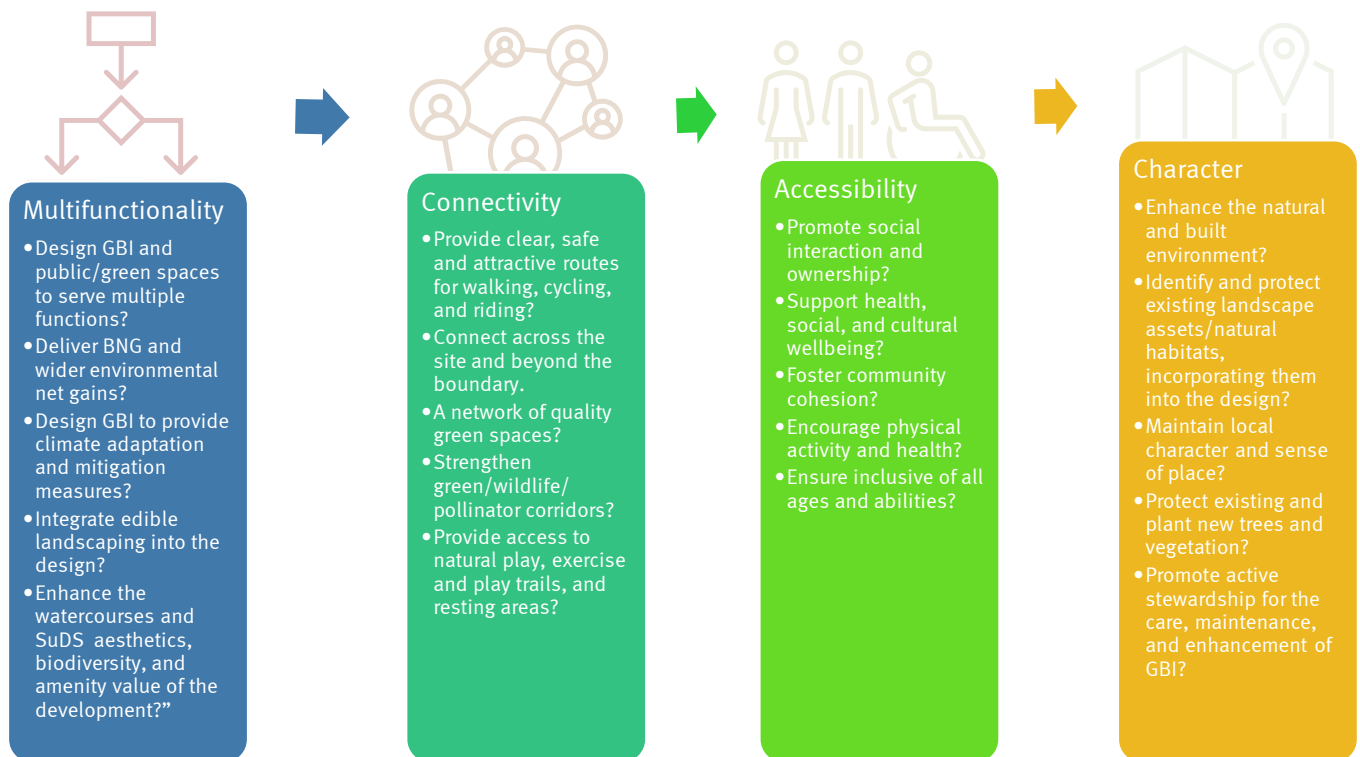
6.5.8.3 **Drafting GBI design principles** - It is recommended to write at least 4-10 concise statements that reflect your insights that are specific, actionable, and easy to remember. Then, validate and refine these statements by testing them with stakeholders to ensure they are clear, relevant, and useful. Refine them based on the feedback received. Example statements include:

- **User-Centric:** Always prioritise the needs and experiences of the user.
- **Simplicity:** Strive for simplicity in design to enhance usability.
- **Consistency:** Maintain consistency across all elements to create a cohesive experience.
- **Accessibility:** Ensure designs are accessible to all users, regardless of their abilities.

6.5.8.4 Then convert these statements into concise, guiding GBI design principles. The GI designs principles should provide clear guidance for actions and decision, ensuring that all stakeholders understand the objectives and processes. Additionally, these principles must incorporate the elements outlined in Figure 15, ensuring a holistic approach to GBI development (this is not an exhaustive list).



Figure 15: GBI Design Principles Checklist



6.5.8.5 These GBI Design principles will guide the planning, design, and implementation of GBI projects, ensuring they align with the strategic vision, objectives and community needs. They serve as a framework for decision-making, helping us create spaces that are not only beautiful and functional but also sustainable and resilient.

6.6 Concept Design (All Planning Application Stages)

- 6.6.1 GBI can be integrated into planning applications at various scales, from strategic frameworks to individual homes. The key considerations for the concept design include connecting new developments to the existing green network/LNRS and filling landscape gaps. Management of all green areas, whether public or private, should also be considered.
- 6.6.2 Spatial planning methods are essential for designing GBI, considering the flows and dynamics that connect people, plants, and animals. GBI also plays a crucial role in building a sense of place and identity.
- 6.6.3 Mapping existing features like paths, ponds, and woods is important and where possible quality assessments should be undertaken. The LNRS provides a valuable starting point. Parks and squares should be designed around these existing features to enhance the landscape. Stakeholder involvement is crucial for shaping greenspace planning and design.

6.6.4 Preapplication Process

- 6.6.4.1 The preapplication process provides an important opportunity to optimise the multifunctional GBI potential of any development. However, this does require active involvement of environment, planning, water, transport, access, open space, health and housing officers to help achieve the necessary integration and quality. Issues to do with BNG and nature recovery should be discussed with reference to the mitigation hierarchy (Figure 14, section 6.4.5) as well as how the development might contribute to climate change adaptation and health and wellbeing as integral parts of overall project viability and deliverability. While there is a distinction between major developments and small sites, it is generally expected that small sites will rely more on off-site BNG mitigation due to space and feasibility constraints.
- 6.6.4.2 As part of this process, or as an activity in its own right, depending on the scale of the application, developers can benefit from public engagement to help co-design aspects of initial masterplans, including illustrative landscape masterplans. This engagement can also help identify key development issues and inform both the GBI Strategy and the GI Parameter Plan (as listed in Figure 13).
- 6.6.4.3 A GBI Parameter Plan is a spatial framework that sets out the key principles and components of existing and proposed GBI within a development site. It is typically prepared at the concept or master-planning stage and guides the integration of GBI into the overall site design. The plan should illustrate how a connected network of GBI and landscaping will be designed, delivered, and managed to achieve multifunctional benefits, including biodiversity, climate resilience, and placemaking.
- 6.6.4.4 As part of the planning application, all applicants are encouraged to consider how their proposals can contribute to the protection and enhancement of existing GBI or the delivery of new GBI, in line with the mitigation hierarchy set out in Figure 14, regardless of the scale of development. Local Plan policies should already support this by requiring the retention of open space and the integration of green infrastructure into new developments.
- 6.6.4.5 The following considerations apply to all applications. These are examples (but not exhaustive):
- a) **Recreational Impact:** Assess how the development may affect nearby Country Parks, Ancient Woodlands, Protected/Designated Sites, and LNRS opportunity areas. Mitigation should include natural elements such as habitat restoration, buffer zones, and sustainable visitor management strategies. These should be detailed in the Environment Statement or Design and Access Statement.
 - b) **Site Assessment:** Submit a Preliminary Ecological Assessment, GI audit, and relevant habitat/species surveys to inform design. Existing GBI features should be retained and integrated into the proposal wherever possible with strongly worded commitments made for the retention of features.
 - c) **Replacement GBI Requirements:**
Where the removal of high-value GBI is unavoidable and not addressed by

Biodiversity Net Gain (BNG) legislation, applicants must provide details of a suitable replacement location. This should include:

- a. **For small (minor) development sites:** Taking into consideration space and feasibility constraints, small sites are expected to either:
 - i. Provide open space on-site where feasible, or
 - ii. Contribute a financial sum toward the provision or enhancement of GBI off-site, in line with Local Plan policies and open space standards.
- b. **For large-scale (major) developments:** Applicants must submit:
 - i. A clear rationale for why removal is necessary, referencing relevant Local Plan policies on the protection and retention of open space and GBI²⁴ and demonstrating that avoidance and minimisation options have been exhausted in line with the mitigation hierarchy.
 - ii. Mapping and baseline data of the proposed replacement site, including habitat type, condition, and connectivity to existing GBI networks.
 - iii. A commitment to deliver replacement GBI to an equal or enhanced ecological, recreational, accessibility, and landscape value.
 - iv. Details of long-term management and stewardship arrangements to ensure the sustainability of the replacement GBI.

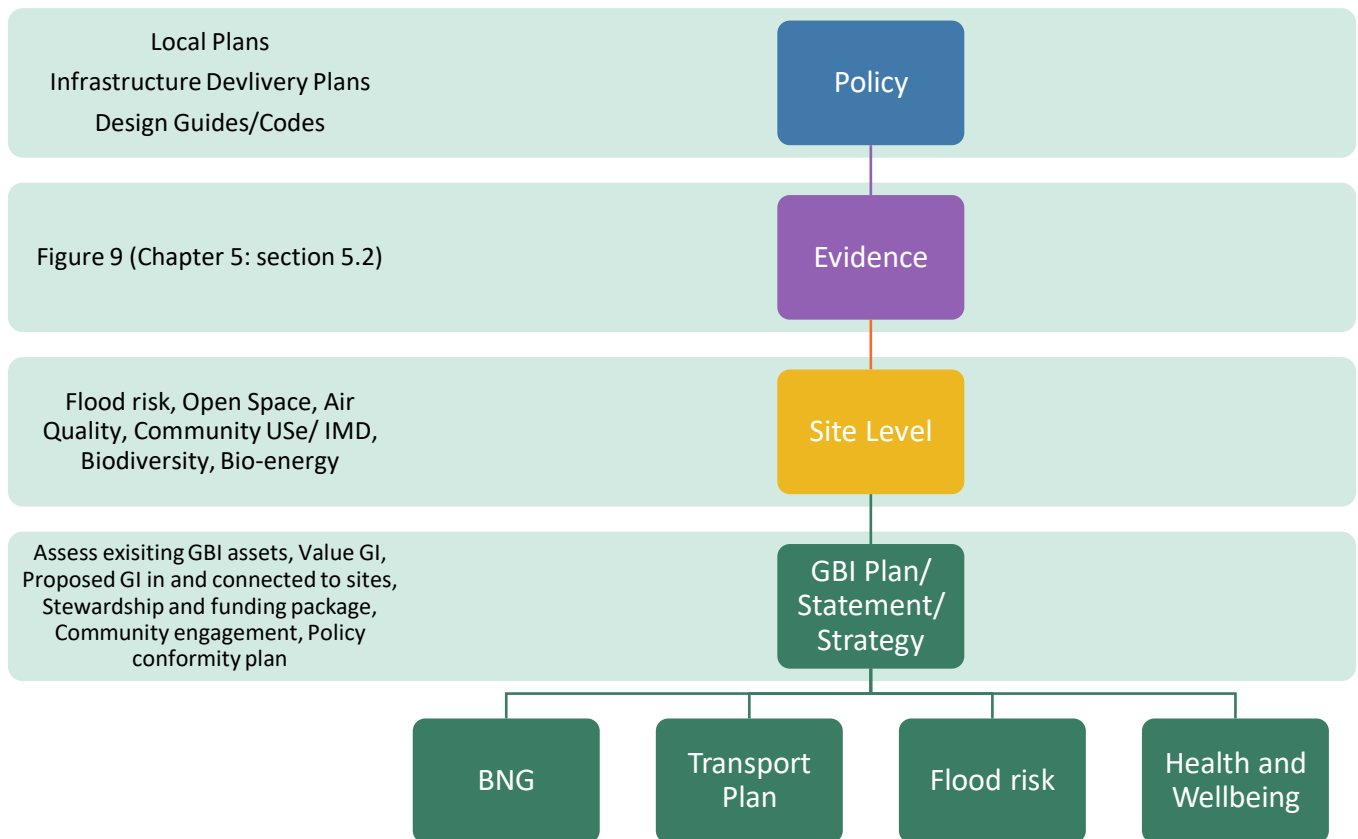
Evidence that the replacement contributes to wider strategic objectives, such as LNRS priorities, Nature Recovery Networks, or local GI strategies.

6.6.5 [Planning Application/Masterplan](#)

6.6.5.1 Figure 16 details a flow chart for development design (plus refinement) and development management processes. Given the multifunctional role of GBI highlighted earlier within its definition and application in development plan policies, a GBI plan or statement could serve as an integrating tool for all the environmental components of a development at site level as well as demonstrating compliance with other key strategic plans and statutory requirements such as BNG and LNRS.

²⁴ These policies require that development proposals do not result in the loss of open space unless it can be clearly shown that the space is surplus to requirements or that equivalent or better provision will be made in a location that serves the same community.

Figure 16: Draft flow diagram for GBI within planning applications



6.6.5.2 Appendix 9: Case Study 5 regarding the Tendring Colchester Borders Garden Community (TCBGC) is a prime example of the planning application and masterplan process, demonstrating the transition from local plan policies to detailed masterplanning and development design, emphasising high standards of urban design and GBI. The TCBGC aims to create a sustainable, resilient, and vibrant community, integrating 50% open space and multifunctional GBI.

6.6.6 Green and Blue Infrastructure Plan

6.6.6.1 It is recommended that the GBI Plan be submitted to and approved by a Landscape Specialist or other suitably qualified professional at the Local Planning Authority before any development begins. The GBI Plan sets out the strategic design and spatial arrangement of GBI features, typically presented as an illustrative drawing. It provides a structured framework for identifying, locating, and integrating GBI elements within a site, ensuring alignment with broader policy objectives and ecological networks. The plan articulates a clear vision for how GBI will function both spatially and strategically across the development area. The submission of a GBI plan at each stage or type of planning application has its own benefits. For instance: **Pre-application stage:** Submitting an outline plan early can help identify any major issues and get initial feedback. This can save time and resources by addressing potential concerns before formal applications are made.

6.6.6.2 Then there are two main routes for submitting a planning application, and each offers different opportunities for presenting GBI proposals:

2. **Outline and Reserved Matters Applications (Two-Stage Approach)**

1. Outline Planning application: This stage establishes the principle and strategic parameters of the development, including the high-level approach to GBI. Submission at this stage should set out the strategic vision for GBI, its intended functions, and how it responds to policy requirements and the wider green infrastructure and ecological network. The purpose is to enable the Local Planning Authority to assess the acceptability of the proposed approach in principle, rather than detailed design.
2. Then at the Reserved matters stage requires the submission of detailed proposals for specific aspects of the development, including the layout, landscaping and detailed design of GBI. This stage allows for a detailed review of how the approved outline GBI principles are translated into on the ground delivery, ensuring all elements are fully designed, coordinated and capable of long-term implementation and management.

3. **Full Planning Application (Single-Stage Approach)**

Full Planning application: Here, a detailed plan is required to be submitted as part of the comprehensive application. This stage involves a complete and thorough review of the entire development proposal, ensuring that all aspects are in compliance with regulations and standards.

6.6.6.3 For **small (minor) developments**²⁵ the GI/ Landscape plan can be part of the Design and Access Statement. This approach can streamline the planning process for small sites by integrating GBI considerations into the overall design framework. It ensures that essential elements like multifunctionality, biodiversity, connectivity, and community engagement are addressed without the need for a separate, detailed GBI plan.

6.6.6.4 For **large-scale (major) developments**,²⁶ this plan should detail the locations of existing and new planting, any advance planting around construction sites, the implementation timeline for each GBI aspect, and the quality standards for construction and maintenance. The development must follow the approved plan unless changes are agreed upon in writing by the authority.

6.6.6.5 A GBI plan must include a clear outline of the development area, defining boundaries. It should identify and mark existing features that will remain, informing the overall design. The plan must specify the types of new planting, its functional and connectivity. Additionally, it should incorporate any new design elements, such as street furniture, play and sport facilities and new and existing paths. Noting the direction of North is essential to understand how sunlight and shadows will affect the landscape.

²⁵ For definition of small developments criteria see 6.1 Glossary

²⁶ For definition of large-scale developments criteria see 6.1 Glossary

- 6.6.6.6 Using Natural England's [Green Infrastructure Planning and Design Guide](#) and the [Essex Design Guide](#) they both offer practical, evidence-based guidance that emphasises the importance of landscape character and local distinctiveness in GBI design. It provides advice on creating GBI features as part of a larger network and focuses on delivering ecosystem services that benefit nature, health, climate change, water management, and prosperity (as shown in Figure 5 for naturalised SuDs within a development). The guide also recommends tools like Biodiversity Net Gain, [Accessible Green Space Standards](#), and [Urban Greening Factors](#) to support good design, and includes case studies to illustrate these principles in practice. including the strategic integration of GBI within development layouts (see Figure 17).
- 6.6.6.7 Including all these components ensures a comprehensive and visually appealing GBI plan.
- 6.6.6.8 An example of how these principles are applied in practice is provided by the Chelmsford Garden Community (Zone 1) Green and Blue Infrastructure Strategy and Plan (**Appendix 9: Case Study 7**). This case study demonstrates best practice in the preparation of a strategic GBI Plan for large-scale developments, with principles adaptable to other major schemes. It shows how treating GBI as primary infrastructure and setting out a clear spatial framework from outline through to detailed design helps guide phasing, delivery and long-term multifunctional benefits.

Figure 17: Illustration - [GBI within the Essex Design Guide](#)



6.7 Funding and Obligations (Full & Outline Planning Application & Reserved Matters)

- 6.7.1 Figure 18 details the documents that are required for the different stages of the planning process that often require suitable worded conditions (as set out in **Appendix 8**). New requirements such as BNG impose extra documentary requirements, and it becomes increasingly important that there is ONE integrating plan/statement that provides a gateway for these as represented in Figure 18.

Figure 18: Expected documents at different stages of the planning application process
(Sources: Updated from Essex GI Standards (2022))

Scoping Opinion	Outline	Reserved Matters	Full	Discharge of Conditions	Documents Expected
	Yes				GI Audit/ Assessment
	Yes	Yes	Yes	Yes	Biodiversity Gain Plan ²⁷
Yes					Landscape and Visual Impact Assessment
	Yes				Preliminary Ecological Appraisal
	Yes				Illustrative Landscape Plan/ GI Parameter Plan
	Yes	Yes	Yes		Landscape/ GBI plan
		Yes			Green Infrastructure Strategy/ or part of Landscape and Ecology strategy
	Yes	Yes	Yes		Design and Access Statement
		Yes	Yes	Yes	Landscape and Ecology Management Plan
		Yes	Yes	Yes	Habitat Monitoring and Management Plan (if significant on-site enhancement are proposed)
		Yes	Yes	Yes	Construction Environmental Management Plan
Yes					Environment Impact Assessment
	Yes	Yes	Yes		Health Impact Assessment

6.7.2 The following assessments present valuable opportunities to evaluate the functions and benefits of existing GBI assets, identify areas where enhancements are needed, and pinpoint potential sites for new GBI projects. They can also emphasise the importance of connecting

²⁷ NB some provisional BNG information (early draft plan or BNG statement) may be required earlier in the planning application process

both existing and new GBI assets to form a cohesive network, which is crucial for ecosystem resilience and functionality. These assessments can help to identify GBI as part of effective mitigation and enhancement measures for any development.

6.7.3 [Environment Impact Assessment/ Environment Statement](#)

6.7.3.1 An Environmental Impact Assessment (EIA) should accompany planning applications for developments that are likely to have a significant effect on the environment by virtue of their nature, size or location.

6.7.3.2 EIA can help determine the most effective areas for GBI by evaluating both the current and anticipated environmental and social conditions in urban and rural areas. The EIA can help identify appropriate measures for avoiding or reducing significant adverse effects on the functionality of GBI assets and can also assist in identifying measures for compensating/off-setting unavoidable significant adverse effects on GBI assets to protect the overall integrity of the surrounding GBI network. As well as establishing how GBI can contribute to environmental planning objectives.

6.7.3.3 GBI can be considered as part of an EIA scoping opinion. The scoping process identifies which environmental topics should be assessed in detail, such as landscape, Character/Landscape and Visual Impact, BNG/ecology, climate change, water environment, air quality, access/health and wellbeing/socioeconomics, traffic and transport and construction impacts. GBI, particularly in relation to biodiversity, flood risk, recreation, health, landscape or connectivity topics, should be scoped in to assess both the potential impacts on existing green and blue spaces and the opportunities for enhancement. This includes evaluating how new GBI features could mitigate adverse effects or add ecological, social, and climate resilience value.

6.7.3.4 Including GBI at the scoping stage ensures it is considered early, alongside other environmental factors, and supports a more integrated and resilient design approach. It recommended that the EIA scoping should:

- Assess the functionality and value of existing GBI assets within and around the site.
- Identify appropriate measures to avoid or reduce significant adverse effects on GBI.
- Propose compensation or offsetting strategies for unavoidable impacts, ensuring the integrity of the wider GBI network is maintained.

Explore how GBI can contribute to broader environmental planning objectives, including climate adaptation, biodiversity recovery, and community wellbeing.

6.7.4 [Health Impact Assessments](#)

6.7.4.1 Health Impact Assessments (HIA) put people and their health at the heart of the planning process. An HIA supports the planning system to address local health, and wellbeing needs and tackle inequalities through influencing the wider determinants of health. A HIA will help to

assess if the GBI provision of a development meets the diversity of user groups, whose needs may vary according to age, abilities, interest, or cultural beliefs.

6.7.4.2 In practice, HIA can complement EIA by increasing the understanding of how environmental changes affect human health. For example, GBI features assessed in an EIA for ecological value can also be evaluated in an HIA for their contribution to mental wellbeing, physical activity, and social cohesion.

6.7.4.3 Both HIA and EIA follow structured stages: screening, scoping, assessment, reporting, and monitoring. With the aim to identify potential impacts early and propose mitigation strategies.

6.7.4.4 The HIA key stages, each offering opportunities to embed and enhance GBI.

1. **Screening:** Identify whether the development is likely to have health impacts linked to GBI, such as access to green space, air quality, physical activity, or mental wellbeing.
2. **Scoping:** Define which population groups may be affected by changes to GBI and what specific health outcomes are relevant (e.g. reduced access to nature, increased urban heat, or loss of recreational space). This ensures GBI is considered in relation to equity and inclusion.
3. **Assessing:** Evaluate how proposed changes to GBI will impact health, quantifying benefits such as improved wellbeing from new green space, or identifying risks from reduced access or ecological degradation.
4. **Reporting:** Engage stakeholders to co-develop recommendations that protect or improve GBI. This may include design changes, mitigation measures, or commitments to long-term stewardship of green spaces to support community health.

Monitoring and Evaluating: Establish indicators to track how GBI contributes to health outcomes over time (e.g. usage rates, biodiversity levels, air quality improvements).

6.7.5 Funding/Planning Decision

6.7.5.1 All projects will necessarily involve a planning officer assessment and decision (under delegated powers if non-controversial) or referring to the planning committee with supporting report and officer recommendation. As stated, the development plan is the principal mechanism for making a decision based on policy compliance.

6.7.5.2 **Most planning applications are approved but with conditions and/or agreements.** Here Section 106 planning agreements and/or Community Infrastructure Levy (dependent on whether an authority has a CIL charging schedule) are important tools within which GBI benefits might be secured²⁸.

6.7.5.3 New GBI must be provided either on-site (generally paid for by the developer) or through financial contributions. The contribution size will depend on the development scale, and the

²⁸ See Essex County Council guidance <https://www.essex.gov.uk/planning-land-and-recycling/planning-and-development/planning-advice-and-guidance/community>

resulting GBI must be multi-functional and located as close as possible to the development it serves. If on-site provision is impractical, or if enhancing nearby existing facilities is more effective, a commuted payment may be accepted to purchase, layout, and maintain open space or improve existing provisions.

- 6.7.5.4 In some cases, contributions may also be required to support protected site mitigation strategies, such as the provision or enhancement of Suitable Alternative Natural Greenspace (SANGs), Strategic Access Management and Monitoring (SAMM), or other habitat mitigation schemes. These are particularly relevant where development may increase recreational pressure on designated sites such as Special Protection Areas (SPAs) or Special Areas of Conservation (SACs). Contributions to such strategies should be clearly justified through Habitats Regulations Assessment (HRA) and aligned with local or sub-regional mitigation frameworks.
- 6.7.5.5 Pooling contributions from multiple developments may be necessary for strategic GBI facilities like a Country Park. Following the [Community Infrastructure Levy \(Amendment\) \(England\) \(No. 2\) Regulations 2019](#), local planning authorities can pool section 106 contributions from multiple developments without numerical limitation, subject to the statutory tests for planning obligations. The Community Infrastructure Levy may also provide a source of funding where appropriate. Other potential sources of funding could include public sector grants, local delivery vehicles and partnership, and National/ heritage Lottery for instance.
- 6.7.5.6 It is recommended that a **Landscape Ecological Management Plan** is secured through suitably worded condition explains how the management and funding of GBI assets and green spaces will be handled for the development's lifetime (further details can be found in 6.9.9).

6.8 Technical Design and Manufacturing (Full & Outline Planning Application & Reserved Matters)

6.8.1 [Outline Planning Application/ Reserved Matter GBI Design](#)

- 6.8.1.1 It is often the case that a detailed GBI Plan and/or GBI/Landscape strategy are not required at the outline planning application stage and are instead addressed at the reserved matters stage. This approach allows developers to first establish the principle of development and gain approval for the general scale and nature of the project without incurring the costs and effort associated with detailed designs.
- 6.8.1.2 At the outline stage, the focus is on determining whether the proposed development is acceptable in principle. Once outline permission is granted, the detailed aspects, including landscaping, are then submitted and reviewed during the reserved matters stage 1. This phased approach provides flexibility and ensures that detailed designs align with the approved outline plans.

6.8.2 Full Planning Application GBI Design

- 6.8.2.1 A full planning application requires all detailed plans, including the GBI/landscape plan or strategy, to be submitted upfront. This is because a full application provides comprehensive details about the proposed development including the retained and new GBI and Landscaping layout, planting specification and schedule, as well as its management and maintenance, allowing the planning authority to make a fully informed decision. Unlike outline applications, which establish the principle of development and defer detailed aspects to the reserved matters stage, a full application includes all specifics from the outset.
- 6.8.2.2 This approach ensures that all elements, including GBI and its landscaping, are considered together, providing clarity and certainty for both the developer and the planning authority. It also helps avoid potential disputes or delays that might arise if detailed plans were submitted later.

6.8.3 Green and Blue Infrastructure/Landscape Strategy

- 6.8.3.1 For **small (minor) development sites**, building upon the existing GBI Plan as recommended for the concept design as part of the Design and Access Statement will allow essential GBI elements to be integrated without the need for an extensive strategy, ensuring the development will still contribute to the GBI vision, outcomes and principles as outlined in the previous stages to deliver multifunctionality, biodiversity, connectivity, and community wellbeing. However, small developments may not require a comprehensive GI/Landscape strategy, as integrating essential elements can be achieved through simpler planning processes. First, the small site should consider site-specific opportunities, identify natural features, and determine any limitations. Identify any GBI features, as even small-scale GBI can enhance sustainability. Smaller sites can contribute towards the strengthening of existing green and blue networks. The Urban Green Factor provides many simple measures such as rain gardens, green roofs, can be applied and guide small scale developments.
- 6.8.3.2 GBI can be described and illustrated in documents and assessments required for planning applications, such as the Design and Access Statement, layout and landscape plans, planting schemes and Environmental Impact Assessment.
- 6.8.3.3 **Large (major) developments** should provide a detailed GBI/Landscape strategy. This is because larger projects are often more complex in nature and may have a more significant impact on the environment and community, and a comprehensive strategy ensures that all aspects of GBI and landscape are thoroughly planned and implemented. This includes detailed assessments, designed for multifunctional uses and benefits, connectivity, and community engagement and wellbeing.
- 6.8.3.4 The GBI/Landscape strategy should encompass several key elements to ensure a sustainable and beneficial development. It must be based on the Essex GI Strategy (2020) and Essex GI Standards (2022) and any local GBI strategies and include mitigation measures from the ecological assessment and GI audit of the site.

6.8.3.5 The strategy should include the key principles as set out in Figure 19.

Figure 19: Key principles to be considered as part of a GBI/Landscape Strategy



6.8.3.6 By tailoring the GBI approach to the size and impact of the development, both small and large projects can effectively contribute to the overall:

- GI Vision (Strategic definition),
- GI outcomes and principles (Preparation and briefing),
- concept design,
- environmental sustainability,
- community wellbeing, and
- quality of life.

6.8.4 Design Code

6.8.4.1 For **large, scaled sites**, the development's GBI vision, principles and strategy or plan can significantly shape a development's Design Code. Embedding all these elements mentioned for developing a GBI vision to a GBI Plan/Strategy for the site can create a cohesive framework that supports the development's environmental, social, and economic objectives.

6.8.4.2 As set out in Figure 20, a Developments Design Code should include the following themes/topics where GBI can be integrated, for example:

Figure 20: Examples of how GBI can be integrated with the Development's Design Code

Introduction	Embed the GBI Design principles.
•Ensure the GBI vision, outcomes and design principles are incorporated and guide the design elements within the Developments Design Guide. •Natural England's GI Framework - Green Infrastructure Planning and Design Guide	
Context	The value of the environment.
•Include an assessment of existing natural features and environmental characteristics, identifying opportunities for enhancing GBI.	
Identity/Character	Identify and describe different character areas within the development.
•Define character areas with specific GBI features, like green corridors, parks, and community gardens, tailored to each area's unique needs, specifying their unique features and design requirements	
Movement	Ensuring connectivity within the development and to surrounding areas.
•Plan for green corridors and pathways that promote active transportation and connect different parts of the development. •Consideration of soft landscaping of parking areas. •Viability for dual purpose street furniture and storage (i.e. Planter/bench or green roofs on bike/bin storage).	
Nature/GBI	Ensure that nature and the historic landscape is woven into the design of places.
•Incorporate requirements for multifunctional GBI, such as parks, gardens, street trees, hedgerows, SuDS, and green roofs. Incorporate pollinator, climate-resilient planting schemes using species adapted to drought, wind, and variable conditions •Open Space and play provision and design. Using Accessible Green Space Standard. •Meet BNG and LNRS requirements.	
Built Form	Provide guidelines for building design.
•Provide guidelines for incorporating GBI elements in building designs, such as green walls and rooftop gardens.	
Public Spaces	Detail the design and layout of public spaces, including parks, squares, and streetscapes.
•Detail the integration of GBI in public spaces, including street trees, green roofs, and SuDS, to enhance aesthetics and functionality. •Urban Greening of the public realm - Using Urban Greening Factor.	
Use	Mix of uses that support everyday activities, including to live, work and play.
•Ensuring access to green spaces near homes, workplaces, and educational institutions supports social interaction, relaxation, and outdoor learning.	
Homes and Buildings	Homes and buildings are functional, accessible and sustainable.
•The provision of private open space including gardens and balconies.	
Resource	Include measures for sustainability, such as energy efficiency, water management, and waste reduction.
•Highlight GBI's role in achieving sustainability goals, such as improving air quality, managing Flooding, and climate resilience.	
Lifespan	Implementation strategy and phasing plan.
•Outline a phased approach for implementing GBI, ensuring it is integrated from the early stages of development through to completion, including GBI management, maintenance and monitoring for the lifetime of the development.	

6.8.4.3 The Design Code should incorporate a diverse range of GBI features that contribute to climate resilience, biodiversity, and placemaking. These may include naturalised SuDS, green roofs and walls, edible landscapes, pollinator corridors, and multifunctional open spaces. Integrating features such as rain gardens, bioswales, and permeable paving can support water management while enhancing visual appeal and ecological value. Street trees and hedgerows can provide shade, improve air quality, and strengthen habitat connectivity. These elements should be designed to complement the site's character and support active travel, health, and wellbeing. Together, they form a cohesive GBI network that delivers long-term environmental and social benefits, aligned with Essex's GI Standards and the principles of multifunctionality and connectivity.

6.8.4.4 All new developments should incorporate measures that support bees and other pollinators as part of their Biodiversity Net Gain and green infrastructure delivery. Practical examples for developers include:

- Planting a variety of nectar-rich species to provide flowers from early spring through late autumn. Prioritise native plants such as foxgloves, ivy, and wildflower mixes, alongside garden favourites like lavender, marigold, and sunflowers.
- Creating Wildflower Habitats: Establish wildflower meadows or strips along boundaries, verges, and open spaces to enhance foraging opportunities.
- Providing Nesting and Overwintering Sites: Incorporate undisturbed soil patches, log piles, leaf litter, twig bundles, compost heaps, and bee hotels to create safe habitats.
- Maintaining Natural Areas: Leave some spaces untidy with nettles, brambles, and rough grasses, and retain seed heads and fallen leaves to offer food and shelter.
- Reducing Mowing: Cut grass less frequently and leave areas uncut to allow nectar-rich plants such as clovers and dandelions to bloom.
- Avoiding Chemicals: Eliminate pesticide and herbicide use, adopting integrated pest management and natural alternatives. Encourage wildlife such as hedgehogs to help control pests.
- Incorporating Pollinator Corridors: Connect green spaces to allow safe movement of pollinator species across the development.

Developers should refer to best-practice resources for plant selection and habitat design:

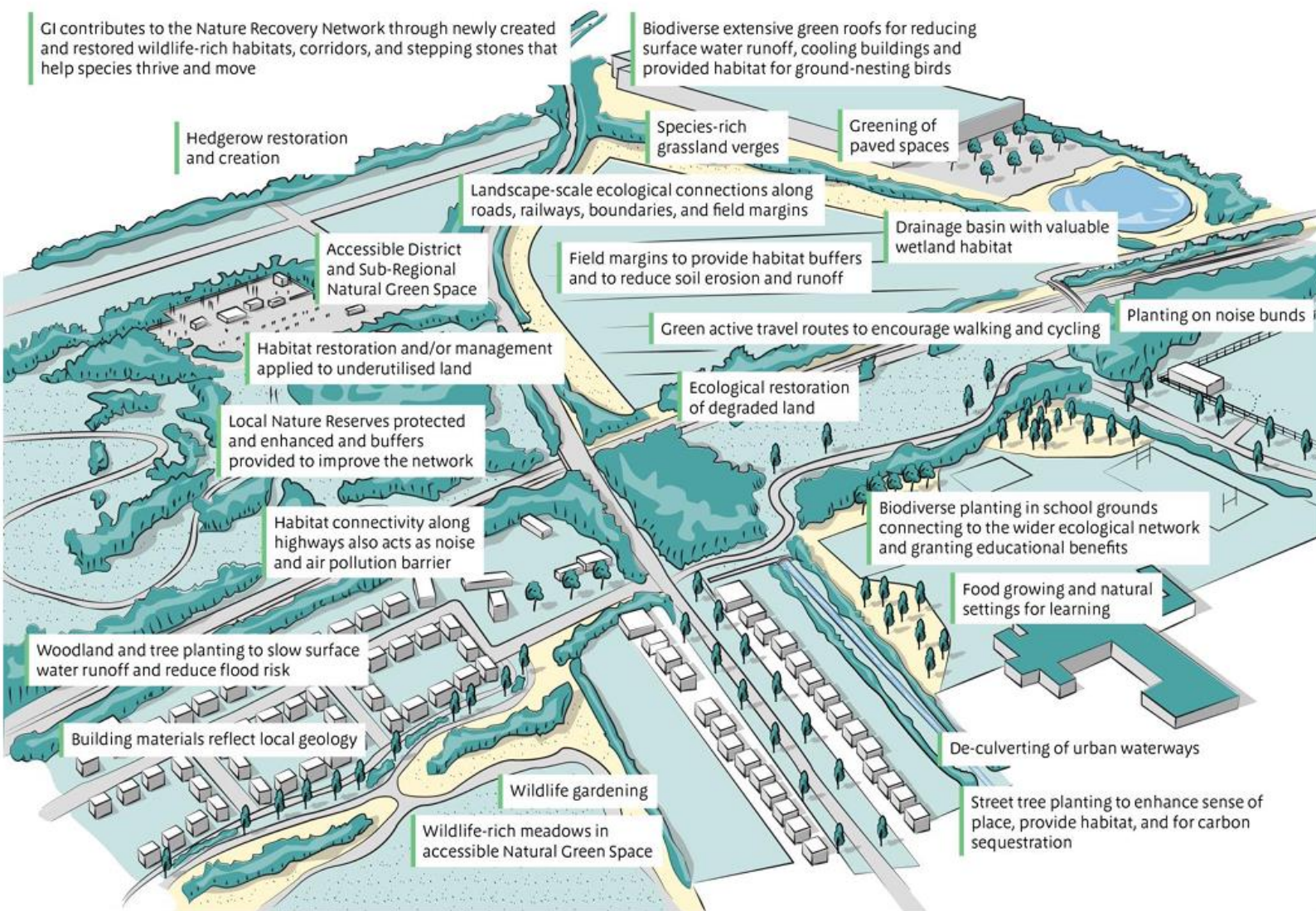
- [RHS Plants for Pollinators](#)
- [Bee Friendly Trust – Creating Spaces](#)
- [British Beekeepers Association – Gardening for Bees](#)
- [Wildlife Trusts – Best Plants for Pollinators](#)
- [Planting for Pollinators – Welsh Government](#)

6.8.4.5 As part of the GBI vision and strategy embedded in the Design Code, planting schemes should also be designed to enhance climate resilience. This includes selecting suitably hardy species that are drought-tolerant, wind-resistant, and suited to changing weather patterns. Planting

should reflect site-specific conditions such as soil type, exposure, and orientation. The principle of “right plant, right place,” as demonstrated by the [Beth Chatto Gardens](#) in Essex, offers a practical model for sustainable planting²⁹. Examples of [climate-resilient species](#) suitable for Essex include *Achillea millefolium* (Yarrow), *Stipa tenuissima* (Mexican Feather Grass), *Lavandula angustifolia* (Lavender), and *Sorbus aucuparia* (Rowan).

6.8.4.6 Examples of GBI design considerations can be found in [Appendix 7](#). Additionally, [Natural England’s Green Infrastructure Planning and Design Guide](#) offers practical advice on planning and designing effective GBI, helping to develop local design codes that prioritise multifunctional GBI. This is illustrated in Figure 21, which is taken from Natural England’s guide and shows how GBI can be designed to deliver multiple functions in both suburban and urban areas.

Figure 21: Design GBI for multi functions in suburbs and urban areas. (Source: Natural England’s GI Planning and Designs Guide Figure 19, page 105)



²⁹ Other supporting guidance from RHS <https://www.rhs.org.uk/science/gardening-in-a-changing-world/climate-change>

6.9 Construction and Inspection (Full & Outline Planning Application & Reserved Matters)

- 6.9.1 A Construction Environmental Management Plan (CEMP) is required at the pre-commencement stage of the planning application process, ensuring approval before construction begins. For a full planning application, a CEMP must be submitted. For an outline planning application, an Outline Construction Environmental Management Plan (OCEMP) is often required, especially for large or sensitive developments, providing a framework for the final CEMP at the reserved matters stage when more details are known.
- 6.9.2 The need for an OCEMP depends on the development's scale and potential environmental impact. While typically required for large-scale projects, small-scale developments may also need one if they are in sensitive areas or if the Local Planning Authority deems it necessary to manage environmental impacts. This ensures early integration of environmental and GBI considerations.
- 6.9.3 To incorporate GBI, the CEMP should outline mitigation measures to protect existing retained GBI, such as trees and hedges, during construction, and enhance green spaces. It should include sustainable practices, water management through naturalised SuDS, biodiversity protection, and procedures for monitoring and maintenance. The CEMP should also detail how new GBI will be implemented in phases, aligned with the development's phasing, to allow for early establishment where feasible. This approach ensures GBI is effectively integrated, promoting sustainability and environmental resilience throughout the development process.

6.10 Stewardship: maintenance and management (Delivery Post planning)

- 6.10.1 **Once a planning application is approved, it is important that there is integration between the planning permission processes and any other regulatory requirements (e.g. [building regulations](#)) and permits (e.g. environment agency ([waste](#)) or Natural England e.g. bats)) including BNG sign off which is now required before any work commences.** The key message here is to check with your local authority for building regulations, BNG sign off and other regulatory agencies for issues associated with environment impacts. Planning permission alone does not give anyone the ability to start work.
- 6.10.2 It is also important that the costing and stewardship arrangements remain in place together with any monitoring requirements as a result of BNG etc. **This requires the provision of sufficient resources and arrangements for monitoring and enforcement and regular reporting on progress with any planning conditions or agreements.** This becomes problematic for off-site BNG as this falls outside of the planning permission process. Given the rapidly changing policy landscape affecting GBI, the enforcement and monitoring aspects will become increasingly significant.

6.10.3 Stewardship (placekeeping) poses significant challenges for GBI. Stewardship policies are often vague and non-committing reflecting a significant policy vacuum in the NPPF. Figure 22 captures some of the key challenges as seen by participants when applying stewardship considerations to a garden village proposal. At the heart of this lies the governance problem/opportunity and the extent to which stewardship aspirations conflict with viability. Here, engaging with the community in the stewardship arrangements is seen as crucial but set within the challenge of securing sufficient resources to ensure that quality GBI is developed and maintained. In this case, BNG is both an opportunity and a threat. Stewardship considerations need to be identified and addressed at the outset of any development proposal with key stakeholders to identify suitable models according to the context not something that is bolted on after approval.



Figure 22: Stewardship challenges from Tendring Garden Village workshop exercise July 2024

What are the challenges and opportunities do you foresee from the Stewardship?



- 6.10.4 People are more likely to use green spaces if they are well maintained. If sites are easier to access, more visible and better used, they will contribute to local people's sense of civic pride, encourage ongoing involvement (i.e., volunteering and formation of 'Friends Of' groups). It is important that management and maintenance provisions for development proposals are considered during early engagement with stakeholders. This could create opportunities for community participation and volunteering regarding GBI management and maintenance, creating a sense of ownership ensuring that GBI is looked after in the long term. It needs both early engagement and collaboration liaising with the Country Parks teams, Outdoor Pursuits Centres, landowners, Parishes, the community and Wildlife Trusts. Long-term management and maintenance often require community efforts supported by agencies in partnership. This could form a stewardship model and for large scale developments a stewardship charter.
- 6.10.5 This model ensures the long-term management and maintenance of assets, including GBI. It involves community involvement, sustainable practices, governance structures, funding mechanisms, and regular monitoring. This approach maintains high-quality, sustainable developments that benefit the community.
- 6.10.6 Potential management and maintenance structures could include (but not limited to):
- Charitable-status Management Trust e.g., Wildlife Trust and Park Trusts
 - Community Development Trusts
 - Management Companies
 - Co-operatives and partnerships
 - Voluntary Organisations
 - Local Authority
 - Or a combination of the above Organisations or mechanisms.
- 6.10.7 Future GBI investment decisions should be built on the value that GBI creates, as part of place making and not just on how much GI assets cost to maintain. Every £1 spent on parks in England generates an estimated £7 in additional value for health and wellbeing and the environment.
- 6.10.8 The Harlow and Gilston Garden Town (HGGT) Stewardship Charter (**Appendix 9: Case Study 6**) demonstrates the importance of long-term GBI management in new communities. By focusing on collaborative stewardship, community involvement, and high environmental standards, this case study highlights the essential role of ongoing stewardship in ensuring the success and sustainability of urban development projects.
- 6.10.9 [Landscape and Ecological Management Plan](#)
- 6.10.10 Before development begins, a landscape ecological management and maintenance plan (LEMP), accompanied by a work schedule for a minimum of 10 years (or aligned to the 30-year BNG requirement)³⁰, must be approved by SuDS and landscape specialists at the Local Planning Authority. The LEMP is a statutory planning requirement and should clearly define

³⁰ Habitat must be secured for at least 30 years through biodiversity net gain obligations or conservation covenants.

responsibilities for managing GBI assets, including detailed maintenance activities and their frequencies.

- 6.10.11 The LEMP will need to translate the strategic and spatial design of GBI features set out in the GBI Plan as required under paragraph 6.6.6, into practical, long-term management actions. It outlines how these features will be maintained, enhanced, and monitored over time to ensure their ecological, social, and landscape benefits are sustained. Paragraph 6.6.6 reinforces the need for a GBI Plan at all planning stages (pre-application, outline, and full), ensuring that GBI is embedded early in the design process. This approach enables the LEMP to be informed by a robust, site-specific GI plan/strategy, supporting continuity from planning through to implementation and long-term stewardship.
- 6.10.12 In addition, the LEMP must include appropriate funding mechanisms to support the lifetime management of GBI assets, helping to prevent degradation and ensuring continued delivery of benefits such as flood mitigation, improved air quality, and climate resilience. A phased approach should be adopted, aligning GBI implementation with construction stages to enable early establishment and integration, where possible. The LEMP should also establish procedures for ongoing monitoring and evaluation, allowing for adaptive management to maintain GBI effectiveness over time.
- 6.10.13 As part of the BNG legal requirement for the delivery of at least 10% net gains, a Habitat Management and Monitoring Plan (HMMP) is required. The HMMP outlines how habitats will be managed, monitored, and maintained to ensure long-term biodiversity improvements. This plan is required for both significant on-site enhancements and off-site gains and must cover a period of at least 30 years from the completion of development. The mitigation, compensation, and enhancement measures specified in the Biodiversity Gain Plan can contribute to GBI delivery and ensure the agreed BNG and associated GBI goals are achieved. It is essential to consider from the outset how GBI habitat features will be managed and monitored alongside BNG to ensure effective delivery.

6.11 Monitoring and Enforcement

- 6.11.1 Historically, monitoring and enforcing GBI presents several challenges, including:
- **Data Consistency and Quality:** Ensuring consistent, high-quality data across different projects and timeframes can be difficult. Inconsistent or outdated data can hinder effective monitoring and enforcement.
 - **Resource Constraints:** Limited financial and human resources can impact the ability to conduct thorough monitoring and enforcement.
 - **Stakeholder Coordination:** Effective GBI management often requires coordination among multiple stakeholders, including local authorities, developers, and community groups, which can be complex.
- Compliance and Accountability:** Ensuring that developers comply with GBI requirements and are held accountable for long-term maintenance.

6.11.2 Combining GBI with BNG and LNRS can help tackle these challenges. For instance, the legal agreement between the landowner and the responsible body for BNG delivery handles monitoring, which can be a planning obligation or a conservation covenant. LPA teams must track who is responsible for implementing Biodiversity Gain Plan, especially when land ownership changes, which can also effectively monitor GBI over time. Together, BNG and LNRS offer a structured framework for planning, implementing, and monitoring GBI, enhancing its effectiveness and ensuring long-term environmental benefits.

6.11.3 Monitoring GBI in developments can be achieved through planning conditions or obligations set by the Local Planning Authority. These could mandate the submission of a monitoring plan before construction begins, detailing how GBI elements will be monitored, the frequency, and methods used. Developers or successors must keep yearly maintenance logs or monitoring reports in line with the approved LEMP, HMMP or Maintenance Plan. These logs must be available for inspection by the Local Planning Authority upon request, demonstrating compliance with GBI requirements and highlighting any issues or necessary adjustments.

Reason: To ensure the GBI is maintained throughout the development's lifetime, as specified in the approved Maintenance Plan, ensuring the GBI assets continue to provide high-quality and multifunctional benefits.

6.11.4 Other approaches could include (but not limited to):

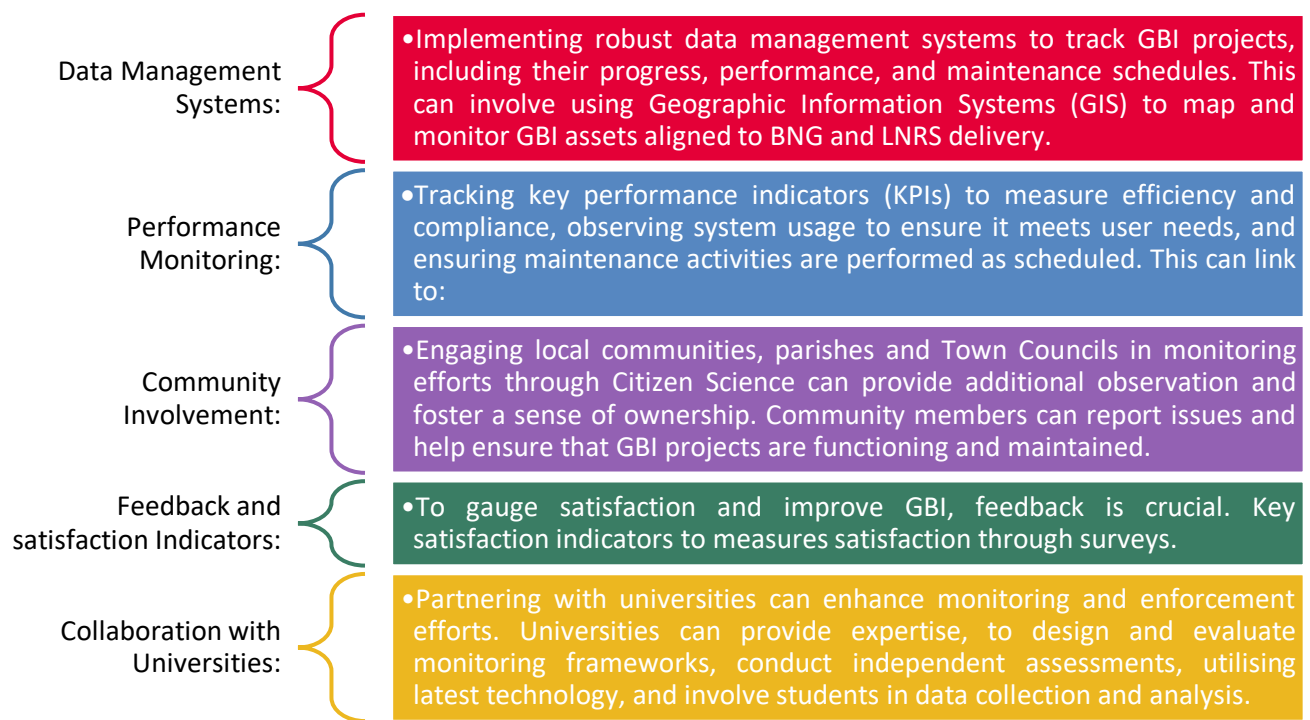
- **Section 106 Agreements:** These are legal agreements between the developer and the local authority. They can include obligations for GBI monitoring, specifying the responsibilities of the developer and any financial contributions required for ongoing monitoring and maintenance.
- **Community Infrastructure Levy (CIL):** A charge that local authorities can impose on new developments to fund essential infrastructure projects, such as roads and schools, and parks. It can support GBI initiatives such as creating green spaces, enhancing biodiversity, and improving water management systems.
- **Monitoring Framework:** The monitoring plan should detail the key performance indicators (KPIs) for GBI, such as biodiversity levels, water quality, and vegetation health. It should also include procedures for data collection, reporting, and review.

Enforcement Mechanisms: The local authority can enforce compliance through regular inspections and, if necessary, take enforcement action if the developer fails to meet the agreed conditions or obligations. This could include negotiating remedial steps, updating documentation, site visits or using enforcement powers (where possible).

6.11.5 [Actively Monitor](#)

6.11.5.1 Local Planning Authorities can also monitor and enforce GBI delivery through various methods, including those set out in Figure 23:

Figure 23: Methods for Monitoring GBI Delivery



6.12 Green and Blue Infrastructure Condition(s)

- 6.12.1 GBI planning conditions are a mechanism to secure, fund, manage and monitor GBI, essential for sustainable development. Ensuring that green spaces are integrated from the outset of development proposals, taking into account existing natural assets and the most suitable locations for new GBI to enhance connectivity, accessibility, and biodiversity. Effective GBI planning involves securing funding through various mechanisms and engaging the community in the planning process. Additionally, ongoing monitoring and maintenance are crucial for the long-term success of GBI, ensuring these spaces continue to benefit urban areas.
- 6.12.2 The standard GBI conditions are set out in **Appendix 8** are designed to assist planning officers and developers in understanding the requirements and expectations in dealing with applications in an efficient and consistent manner. They cover most of the circumstances where conditions will be needed, but they are not exhaustive. Some cases will require one or more of the standard conditions to be amended, or completely new condition to be drawn up.



Glossary

Chapter 7

Key Term/ Phrase	Definition
Biodiversity Net-Gain	Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better state than beforehand
Blue Infrastructure	Known as water infrastructure, is a network of water assets such as rivers, canals, ponds and ditches. Blue infrastructure is concerned with use, quantity and quality of water and other water-related issues including flood risk.
Building Regulations	A set of standards and guidelines that govern the design, construction, and alteration of buildings to ensure safety, health, and accessibility for occupants. They cover various aspects such as structural integrity, fire safety, energy efficiency, and accessibility.
Community Infrastructure Levy	LPA can choose to charge on new developments in their area. The money can be used to support development by funding infrastructure that the council, local community and neighbourhoods want and need.
Conditions	Requirements attached to a planning permission to limit or direct the manner in which a development is carried out.
Design and Access Statement	A report supporting a planning application, explaining how the development suits the site and its setting, and demonstrating adequate access for users. It outlines the development process and justifies the proposal.
Design Code	Is a set of illustrated guidelines detailing specific requirements for developing a site or area, based on a design vision like a masterplan.
Development Management	Development management is the process of pro-actively managing development in a local area to achieve the local planning vision and objectives.
Enforcement Action	Procedures by a local planning authority to enforce planning decisions and control unauthorized development.
Environmental Impact Assessment (EIA)	Certain developments require an EIA and an Environmental Statement to be submitted with the planning application. The EIA evaluates environmental impacts (e.g., ecology, noise, air quality) and suggests mitigation measures, which can be enforced through planning conditions or legal agreements if permission is granted.
Essex Design Guide	This is a reference guide that was established in 1973 by Essex County Council to help create high quality places with an identity specific to its Essex context. There were a 2005 publication and a 2018 edition which seeks to address the evolution of socioeconomic impacts on place-making.
Full Planning Application	A planning application seeking full permission for a development proposal, with no details reserved for later approval.
Green Belt	A policy and land use designation used in land use planning to retain areas of largely undeveloped or agricultural land surrounding or neighbouring urban areas. The main aim of Green Belt policy is to prevent urban sprawl by maintaining land permanently open.

Green/ wildlife Corridor	Green corridors can include railway embankments, riverbanks, heritage and cultural assets and roadside grass verges. Green corridors are linear routes offering recreational and travel opportunities, whilst facilitating wildlife migration.
Green Infrastructure	A strategically planned and delivered network of green spaces in an area which conserves wildlife, natural ecosystem values and functions, sustains clean water and air, and provides a wide array of benefits to people and wildlife. This includes parks, open spaces, woodlands, rivers, and allotments.
Green Roof and Walls	A green roof or wall (also known as a living roof or wall) is where vegetation is intentionally grown and/or habitats for wildlife are established. Green roofs and walls provide different types of biodiversity habitats, water storage capacity, flood alleviation and energy saving potential.
Green Space	Green Spaces are any vegetated areas of land and or water within or adjoining an urban area. Green Infrastructure is the network of different types of green spaces and assets.
Issues and Options Stage	This is often the first stage in the production of the Local Plan Documents in which the Council brings possible issues and options for the LPA area into the public domain, in order to generate responses to aid the development of the 'Preferred Strategy' document. These stages are part of 'early consultation' that leads to a 'Proposed Submission' development document for the statutory public representation period.
Health Impact Assessment	A Health Impact Assessment (HIA) is a tool that evaluates the potential health effects of a policy, program, or project on a population—particularly on vulnerable groups. It helps decision-makers consider health outcomes in planning and development. HIA can highlight how GI—such as parks, green roofs, and sustainable drainage systems—can improve physical and mental health, reduce air pollution, mitigate heat, and promote active lifestyles.
Large Scale/ Major Sites	For housing, it involves 10+ homes or a site of 0.5+ hectares. For non-residential, it includes 1,000m ² + floorspace or a site of 1+ hectare, as defined by the Town and Country Planning (Development Management Procedure) (England) Order 2015. (NPPF, 2024)
Local Plan	Set out a vision and a framework for the future development of the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure – as well as a basis for safeguarding the environment, adapting to climate change and securing good design for the area they cover.
Masterplan	Masterplanning is not required for all planning applications, but it can be beneficial in many cases. A masterplan is a comprehensive planning document that outlines how land should be used and developed. It can range in scale from a small group of buildings to a regional area that takes 10 years or more to implement.

Outline Planning Application	An outline planning application includes only the basic principles of a proposal, with detailed aspects (called 'reserved matters') submitted later if the application is approved. This type of consent approves the concept of development, not the specifics.
Parameter Plan	Parameter plans provide a framework that outlines the key principles for the design and construction of a development site. These plans define the distribution of buildings, roads, and open spaces, as well as the maximum heights and footprints of each development plot.
Planning Obligations/Section 106 Agreement	A Section 106 Agreement is a legally enforceable contract under the Town and Country Planning Act 1990, used to mitigate development impacts that can't be managed through planning conditions.
Pre-Application	Is a service where applicants seek guidance from local planning authorities before submitting a formal planning application. A fee is usually charged, though some authorities offer free informal advice. Applicants submit initial documents, and officers provide written feedback on the proposal's acceptability and suggest improvements. This advice is non-binding and does not guarantee approval.
Regulation 18	The requirement for Local Planning Authorities to notify the public and consult on the preparation of local plans. This regulation ensures transparency and public participation in the planning process to help identify how planning policy can be used to address local issues.
Regulation 19	The stage in the local plan preparation process where the draft plan is published for formal consultation. This allows stakeholders and the public to provide feedback before the plan is submitted for examination on its legal compliance and soundness.
Reserve Matters Stage	Outline planning permission may reserve certain details for later consideration, such as access, appearance, layout, scale, and landscaping. These reserved matters can also include conditions on a full planning permission requiring approval of additional details like materials.
Small Sites	For housing, it involves 1-9 homes or a site less than 1 hectare (if number of homes is unknown then less than 0.5 hectares). For non-residential, it includes less than 1,000m ² floorspace, as defined by the BNG Small Site Metric requirements.
Sustainable Drainage (SuDS)	A sequence of water management practices and facilities designed to drain surface water in a manner that will provide a more sustainable approach than the conventional practice of routing run-off through a pipe to a watercourse.
Urban Greening	Urban greening refers to public landscaping and urban forestry that create mutually beneficial relationships between people and their environments. Urban greening refers to all forms of vegetation such as street trees, open parks and gardens, shrubs, green walls, green roofs, lawn and pervious soils.



Appendix

Chapter 8

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