



Essex County Council



Northumbria
University
NEWCASTLE

Designing and Delivering Good Green and Blue Infrastructure

Planning Guidance
Appendices

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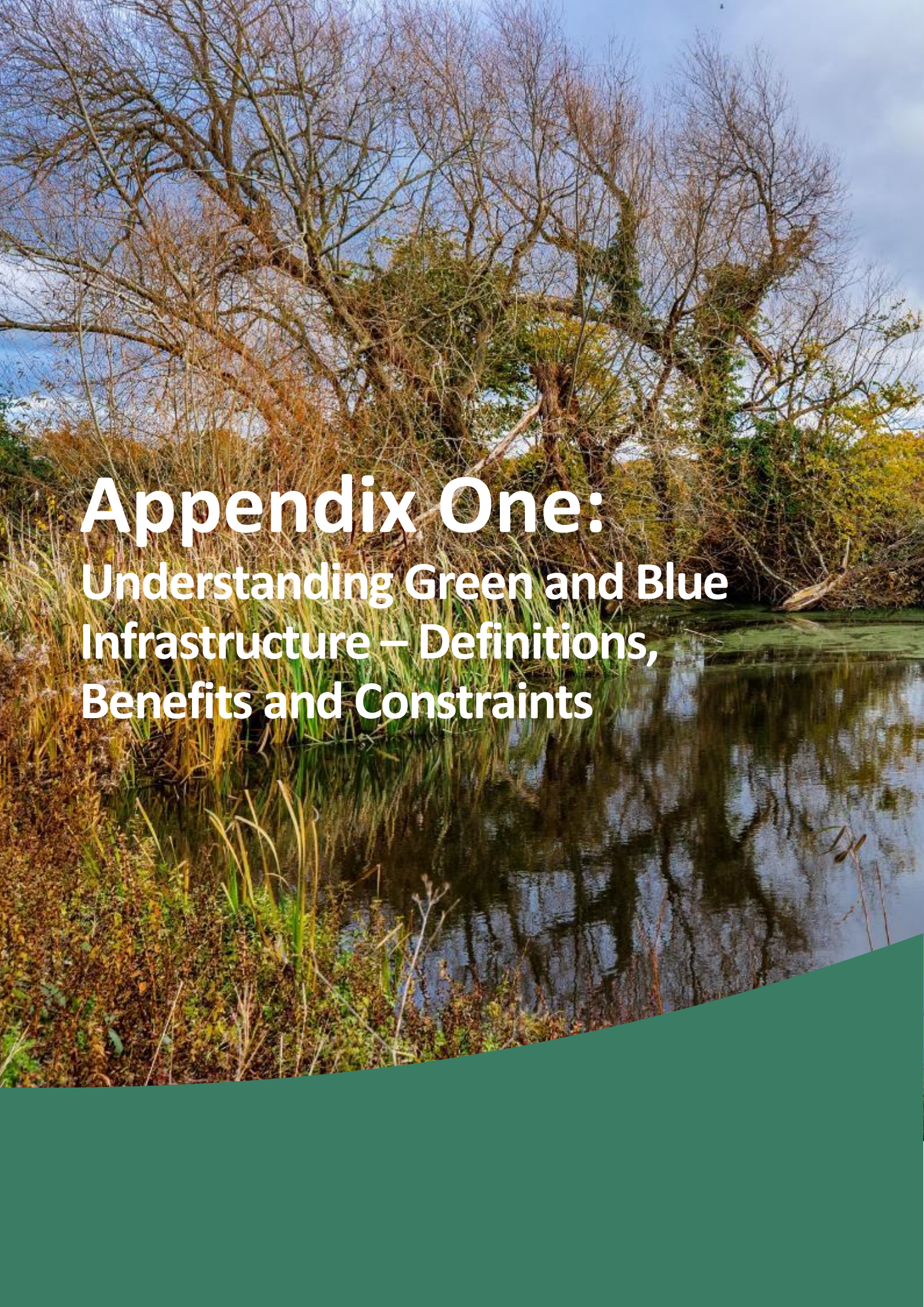
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Appendix One:

Understanding Green and Blue Infrastructure – Definitions, Benefits and Constraints

1.1 What is Green and Blue Infrastructure

- 1.1.1 Green Blue Infrastructure (GBI) is a diverse and managed network of green and blue spaces that include our natural assets, wildlife habitats, and environmental features. GBI includes parks and gardens, amenity greenspace, natural and semi-natural urban greenspaces, green corridors, water (coast, rivers, lakes, and ponds) and other public spaces as diverse as allotments and city farms (Essex GI Strategy, 2020 and Essex GI Standards, 2022). The Essex GBI network also includes the Green Belt¹.
- 1.1.2 The National Planning Policy Framework (NPPF) does not directly define GBI. However, it does define GI as: A network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. Blue infrastructure, such as rivers, streams, and other water bodies, is also considered part of GI.' (NPPF Annex 2: Glossary, page 73).
- 1.1.3 The key message from these definitions is that Green and Blue Infrastructure (GBI) should be considered as critical infrastructure. It needs to be specifically and proactively managed to deliver multiple benefits. This necessarily involves pursuing a multifunctionality agenda for GBI delivering for nature recovery, biodiversity, health and well-being and wider environment net gains, enhancing natural, social and financial capitals.

1.2 What are the benefits and constraints of Green and Blue Infrastructure

- 1.2.1 The design and delivery of multifunctional GBI (Figure 1) can generate multiple benefits at and across different scales (Figure 2). However, multifunctionality does require the identification and assessment of trade-offs which is a matter of choice and priorities. It means making choices about what is most important within a transparent and evidence-led decision-making process to reconcile trade-offs in line with national, county, district and neighbourhood priorities and challenges, set within the political and place contexts within which decisions are made. It is important to see nature not as a problem, but as something valuable that actively contributes to growth in a sustainable way. Pursuing a multifunctional agenda is important in changing traditional perceptions of nature as a constraint into an asset (section 3.1: Appendix 2).
- 1.2.2 It is also important to recognise the constraints of GBI in the current political climate. Viability as defined in the NPPF, and lack of flexible funding (capital and revenue) can threaten GBI opportunities in developments. Moreover, recent changes in environmental policy requiring mandatory 10% biodiversity net gain (BNG) may impact on the monies available for GBI. Here, there is an important opportunity to connect.

¹ Green Belts are acknowledged as a component of the network of GI, but their main objective is to prevent urban sprawl and countryside encroachment. They are largely undeveloped, brownfield, agricultural land, or in some cases wild or greenspace around urban areas, often with limited public access.

Local Nature Recovery Networks, BNG and GBI to maximise multifunctional wins, in meeting several priorities, using them as hooks² and creating bridges³.

- 1.2.3 Appendix 2 identifies examples within Essex of the key hooks (mechanisms to engage a specialist audience) and bridges (mechanisms to engage multiple audiences)⁴ for changing the way nature and GBI are viewed. They provide initial pathways to help engage different audiences based on their priorities to value the functions that GBI performs and the associated benefits. However, they only provide initial traction to engage. It is important to then move from this initial 'persuasion' to delivery, whether it be via policy, plans, programmes or projects⁵. Successful delivery then leads to exemplar projects and learning with future champions who can then further improve the way GBI is designed and delivered. It's equally important to learn from unsuccessful projects, as these lessons are often overlooked. This is a crucial aspect of adaptive management.

Figure 1: Image of Allotment in Essex



² Hooks are specific terms or points that link environmental issues to the priorities of a particular sector or group. For example, a clause in a planning policy mentioning "place-making" or legal duties like "duty to cooperate."

³ Bridges are broad concepts that appeal across multiple stakeholders and help create common understanding and collaboration across different sectors. Examples include "climate emergency" or "nature-based solutions."

⁴ Hooks can be legislation, plans, terms that are priorities for a specific audience and thus provide important starting points to build conversations. Bridges are similar but instead of being for a specific audience are terms that unite multiple audiences and or publics.

⁵ This is developed conceptually in [Scott et al 2022 Mainstreaming the Environment: Exploring pathways and narratives to improve policy and decision-making People and Nature 4 \(1\) 201-217](#)

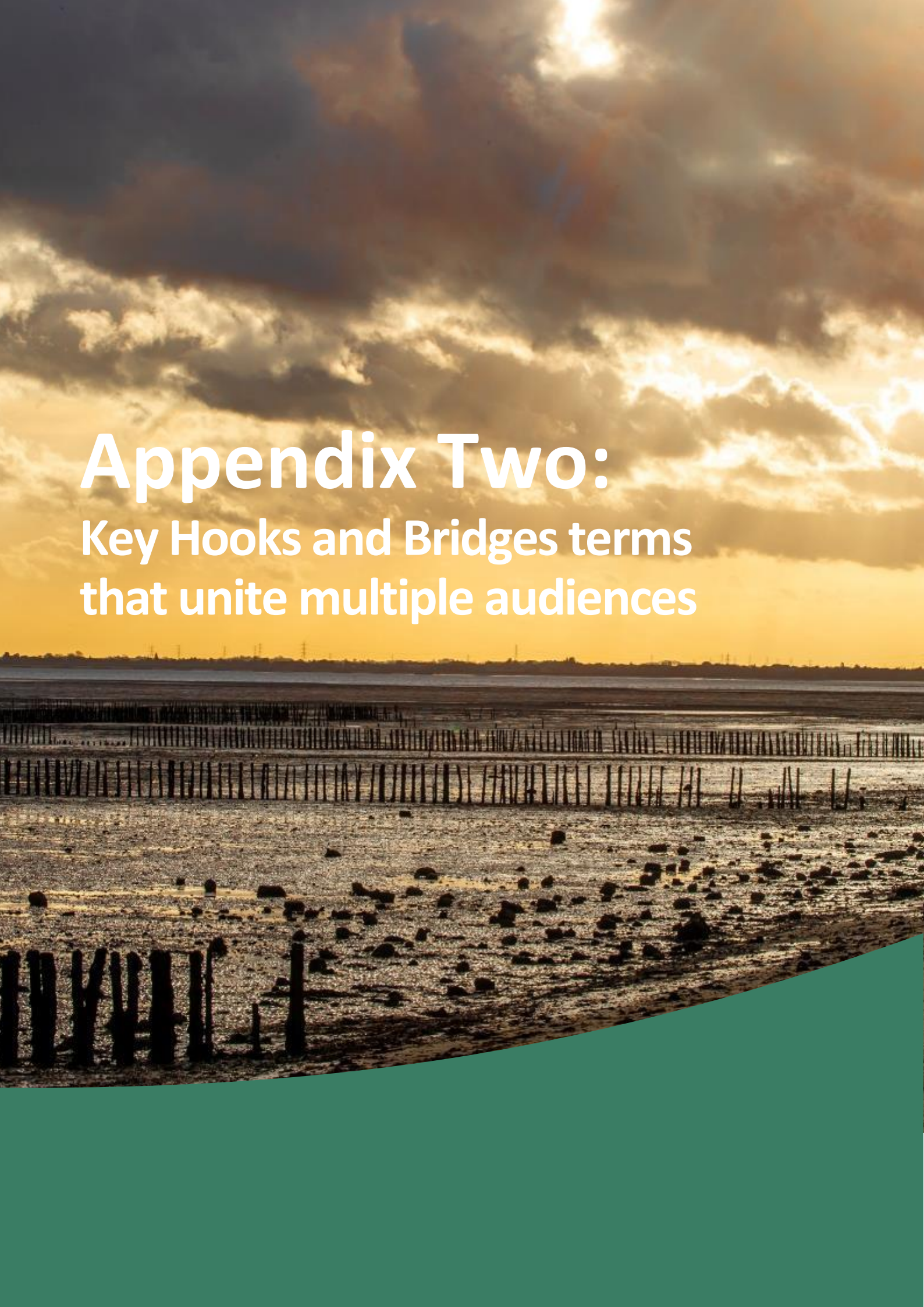
Figure 2: Benefits of Green and Blue Infrastructure (Source: Carbon 180)



Figure 3: Multifunctional GBI across different development scales (Source: adapted from East Ayrshire Council Local, 2024⁶)



⁶ East Ayrshire Council (2024) [Local Development Plan 2 - Green Infrastructure Strategy](#), Non-Statutory Planning Guidance.



Appendix Two:

Key Hooks and Bridges terms
that unite multiple audiences

Agenda /Hook /Bridge	Comment	Key Audiences
Climate Emergency /Net Zero (bridge)	Planning policy should be reformed to ensure that climate resilience is a priority, with mandatory adaptation interventions on all built-environment project applications. (Government response to Climate Change Committee report 2023⁷). Committed to achieving net zero by 2050 and to combating climate change. Good GBI outlined in the Essex Climate Action Commission report, Net Zero: Making Essex Carbon Neutral, will assist in implementing climate change adaptation and mitigation strategies and contribute to achieving the carbon net zero target. Specifically: • 30% of all land in Essex will enhance biodiversity and the natural environment by creating natural green infrastructure. • To increase urban greening – 30% greening of our towns, villages, and new developments by 2040. • Create a Climate Focus Area (CFA) involving 6 LPAs with the Blackwater and Colne River catchment area) to accelerate action and provide exemplars, for learning and innovation: adopting sustainable Land stewardship practices: 100% by 2030 and Natural Green Infrastructure: 30% by 2030. To ensure effective implementation, these requirements should be enshrined in adopted Local Plans, supported by robust evidence of need, viability, and deliverability.	Local communities Elected members Planners Developers Engineers (Flood and highways) Landowners and Farmers Environmental NGOs Local Authorities Climate and Nature Recovery Partnerships
Biodiversity emergency (bridge/hook)	The need to make space for nature and meet the requirements in national planning policy and the Environment Act, 2021 to deliver mandatory Biodiversity Net Gain (BNG) provides a key hook. It is important that this is embedded in the wider nature recovery	Ecologists Developers Planners Environmental NGOs Landowners and Farmers

⁷ [Government response to the Climate Change Committee 2023 report to Parliament – progress in adapting to climate change - GOV.UK \(www.gov.uk\)](#)

and associated [local nature recovery strategy](#). Furthermore, the Environment Act gives all local authorities a [duty](#) to protect and enhance biodiversity with a reporting requirement.

Local Planning Authorities
Natural England

Environmental Standards and SANG (bridge)	Natural England provides national guidance on green space standards and environmental requirements , including the designation and delivery of Suitable Alternative Natural Greenspace (SANG) to mitigate recreational pressure on protected sites. Their standards and advice serve as a key mechanism to embed multifunctional GI into development, ensuring biodiversity protection, public access to nature, and alignment with statutory environmental duties. This guidance can be used to justify the inclusion of GI in Local Plans and planning applications, particularly where development may impact designated sites.	Planners Developers Environmental NGOs Local Communities Highways Essex Health and Wellbeing Board Landowners Ecologists Local Authorities Natural England Climate and Nature Recovery Partnerships
Public Health/ Wellbeing /Active Lives (bridge)	Covid19 response to people's health and wellbeing has highlighted the importance of GBI as a natural health service. Essex Design Guide: Building for healthy life; mental health, Essex Livewell accreditation scheme for developers; Active Essex ⁸ and Working well provide 4 key opportunities to link GBI projects into. Health impact assessments provide a further opportunity to ensure access to greenspace. An urban greening project in Leonard Circus, Hackney revealed £1.762m of health benefits annually – increasing activity leading to a decrease in health issues ⁹ ;	Communities Integrated Health Boards Planners Highways Essex Health and Wellbeing Board Local Authorities
Natural Capital (bridge)	Key concept that ties in with the other capital and can therefore be used in decision making. Ties in with the HM Treasury green book for project assessment and appraisal.	Planners Developers Elected Members Decision Makers Landowners Environmental NGOs

⁸ Active Design principles, such as Active Environments takes a fresh look at the opportunities to encourage and promote sport and physical activity through the design and layout of our built environment - <https://www.activeessex.org/health-wellbeing/active-environments/>

⁹ https://www.treconomics.co.uk/wp-content/uploads/2018/08/GBU_Street-Tree-Cost-Benefit-Analysis-2018.pdf

		Local Authorities Natural England
Green Growth (hook)	Aims to ensure natural assets are sustainable and provide economic benefit; ensuring that high quality developments are delivered that people would want to live in now and in the future. Essex County Council has undertaken a green skills gap project which highlights the need for green growth and employment opportunities using GBI. Green	Developers Businesses Universities and Colleges Elected members Local Authorities
Business Improvement Districts (hook)	growth is intrinsic to our future growth in Essex to ensure we meet our target for a net zero county by 2035 ¹⁰ . Here GI provides increased spend in town centres, increased property values and increased GVA ¹¹ Local projects like developing Colchester BID Beth Chatto Gardens as a community green space helps integrate economy and community.	
<u>The Taskforce on Nature-related Financial Disclosures</u> (TNFD) (hook)	Guidance that encourages and enables business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities. Recommendations provide pathways for action. Here natural capital accounting is proposed as useful tool to facilitate this. Nature positive as a concept has become increasingly used but beware of greenwashing.	Businesses Local Authorities
Levelling up agenda (hook) currently declining in impact due to new Labour Government.	Essex has produced its own Levelling up White Paper in 2022 with key principles: Both place-based and cohort-focused. A shared endeavour Long-term. Cross-cutting. Structural About sustainable change – Driven by a diversity of approaches. This is supported by : Everyone's Essex Levelling Up Plan . A focus on placemaking	Elected members Local Communities Planners Developers Social services Local Authorities

¹⁰ <https://www.essex.gov.uk/sites/default/files/2023-10/The%20Essex%20Sector%20Development%20Report%20-%20Autumn%202023%20-%20Accessible.pdf>

¹¹ https://www.uk100.org/sites/default/files/2021-07/UK100%20PCAN%20report%20extracts%20-%20Nature%20based%20solutions%20-%20FINAL_0.pdf

and placekeeping with investment in a better environment, whether it's a park, GI, flood defences, Sustainable Drainage or to improve water management. This investment will also create jobs and growth contributing to Levelling Up the economy and addressing areas of deficit.

Placemaking and place keeping (bridge)	The Essex Design guide provides a set of principles and pathways to optimising placemaking and Place keeping interventions including GI and SuDs. The placekeeping hook is also about reinvesting in the most deprived areas of Essex.	Planners Developers Elected members Local communities Local Authorities
Flood and Water Management (bridge)	GI can provide many benefits for flood and water management. The Essex Sustainable Drainage Design guide support the utilisation of GI and Sustainable Drainage Systems (SuDs) to be developed together to maximise benefits through multifunctionality- they do this by helping to reduce flood risk whilst providing biodiversity and amenity benefits. The Essex Water Strategy ¹² promotes a shift in how we use land, emphasising the importance of working with nature and being mindful of water supply and quality when using or developing land.	Planners Developers Local communities Landowners and Farmers Local Authorities
Community led projects (bridge)	Example of Islington Pocket Park financial framework. scale up urban greening for climate adaptation building on local residents' interests and challenges. Here an example of problems with mopeds led to a major funding initiative. Within Essex see examples of Bee Friendly Wivenhoe and Friends of Hester Place Burnham on Crouch.	Local communities Elected members Planners Ecologists. Local Authorities
National Planning Policy Framework (hook/bridge)	The NPPF requires developments to enhance the natural environment, providing a direct entry point for integrating GBI into planning. Clauses on environmental standards and biodiversity net gains link GBI to development priorities. It promotes sustainable development and climate change	Planners Developers Local communities Ecologists Local Authorities Natural England

¹² <https://www.essexclimate.org.uk/water-strategy-for-essex>

mitigation, encouraging strategic planning and collaboration across sectors.

Planning Reforms: Development and Nature Recovery. (hook/bridge)	The proposed planning reforms for Development and Nature Recovery will have environmental obligations: Ensuring housing and infrastructure projects meet environmental standards and contribute to nature recovery. Incorporating ecological elements like swift bricks, bat boxes, hedgehog corridors, native plants, and sustainable drainage systems. With the potential to use pooled contributions from development projects to deliver large-scale environmental improvements	Planners Developers Local communities Ecologists Landowners. Local Authorities
Land Use Framework (hook/bridge)	Land Use Framework with evaluating land use impacts on biodiversity and soil quality. Promoting sustainable land use practices that support ecological health. Considering the specific ecological characteristics of different areas in land use planning.	
Land Stewardship and Nature Recovery (bridge)	Farmers play a pivotal role in delivering GBI through sustainable land management, habitat creation, and participation in agri-environment schemes. Their stewardship supports biodiversity, climate resilience, and access to nature across rural and peri-urban landscapes. Engaging farmers in GBI delivery, particularly through initiatives like LNRS, BNG, and natural capital approaches, helps embed environmental benefits into land use planning and supports wider strategic goals such as Net Zero and nature recovery.	Landowners and Farmers Local Authorities Environmental NGOs Natural England Elected Members Developers (rural schemes) Climate and Nature Recovery Partnerships
Sustainable Employment Land and GI Integration (bridge)	Large-scale industrial estates and business parks present significant opportunities to embed GBI into employment land. Through strategic landscaping, SuDS, biodiversity enhancements, and green travel corridors, these developments can contribute to climate resilience, employee wellbeing, and local nature recovery. GBI integration also supports corporate sustainability goals and aligns with planning policy expectations for multifunctional green space in non-residential developments.	Developers Landowners Planners Economic Development Teams Employers and Business Park Managers Engineers (Flood, Transport, Utilities) Local Authorities Environmental NGOs

A scenic landscape photograph of a rural area. In the foreground, there is a vibrant green field. Behind it, a line of trees with autumn foliage in shades of yellow and orange separates the field from a darker, brownish field. In the background, a small town or village is visible on a hill, with a prominent white building. The sky is a clear, deep blue with some light clouds. The text "Appendix Three: Stakeholder Engagement in Developing the Guidance" is overlaid in white, bold, sans-serif font on the left side of the image.

Appendix Three:

Stakeholder Engagement in Developing the Guidance

3.1 Online Workshop Information

- 4.1.1 This guidance was co-developed through a collaborative process led by Essex County Council's GI and Spatial Planning teams and Northumbria University, in partnership with six Essex Local Planning Authorities. Two online workshops held in July 2024 provided the foundation for this work, engaging planners and stakeholders in structured discussions. The first workshop (2 July 2024) focused on identifying challenges and opportunities for integrating GBI into local plans, from early evidence gathering to policy development and delivery. The second workshop (9 July 2024) built on these findings, exploring three priority themes of policy, implementation, and stewardship through a live case study of the Tendring Colchester Borders Garden Community.
- 4.1.2 The workshops provided a platform for planners and stakeholders to share experiences, identify barriers, and co-develop solutions. Discussions emphasised the importance of embedding GBI across the planning process, aligning it with wider policy agendas, and using recognised tools to support delivery. The insights gathered directly shaped the structure and priorities of this guidance.

Full agendas for both workshops are included in:

- Appendix 3.4 – Workshop 1 Agenda: 2 July 2024
- Appendix 3.5– Workshop 2 Agenda: 9 July 2024

The headline messages from stakeholders are summarised below.

3.2 Key Messages from Stakeholders

The workshops highlighted ten priorities for strengthening GBI in planning and delivery:

- Integrate GBI into policy and development vision and objectives.
- Create strongly worded, robust and deliverable GBI policies.
- Ensure GBI is recognised as a multifunctional asset and embedded across multiple policy areas and not treated in isolation.
- Balance and improve quality of housing development with GBI to improve place-making and community well-being.
- Ensure the use of strong evidence to demonstrate the benefits and viability of GBI.
- Use effective planning tools to support design and delivery of GBI and coordinate across departments. For example, utilising tools such as [Green Infrastructure Planning Policy Assessment](#), [Building with Nature](#), [Health Impact Assessments](#), [National Green Infrastructure Framework](#) and [Urban Greening Factor](#).
- Foster and invest in deliberative community involvement at all stages of the policy cycle including the outset.
- Identify and plan for the resources needed to support GBI delivery. This includes appropriate funding, staffing, and long-term investment to

ensure not only successful implementation but also ongoing stewardship and maintenance which is often neglected.

- Recognise current political, financial, and staffing constraints, to help set realistic expectations about what can be delivered and maintained, ensuring ambitions are achievable and sustainable over time.
- Recognising the importance of active participation ensuring GBI principles are upheld during Appeals and Examinations in Public (EiPs) helps secure long-term delivery and maintain policy integrity.

3.3 Workshop One Agenda

Pre-workshop Task – Building that Evidence Base

Tuesday 2 nd July 2024		MS Teams
	11:00	WELCOME & PURPOSE and BOUNDING Jayne Rogers and Rich Cooke
	11:10	Group Discussions Introduction - Instructions For Breakout Sessions - World Cafe Format
	11:20	Transfer to your breakout group
	11:25	BREAKOUT SESSIONS – MAINSTREAMING GBI
		Through The Planning Process: • Three Rooms with Virtual Tables for Each Challenge using The Jamboard Preworkshop Task. ○ Room 1 – Early-stage local plan preparation – scoping, early engagement/evidence work. ○ Room 2 – Local Plan (Reg 18 and 19) stage ⊖ Room 3 – Implementation stage – DM/ Masterplanning etc. • You will rotate between the 3 above rooms with a chance to add to previous discussions.
		You will spend 30 minutes in each room.
	12:55	Group Feedback And Next Steps (for workshop 2)
	13:15	CLOSE

3.4 Workshop Two Agenda

Process Journey to Development

Tuesday 9 th July 2024	MS Teams	
	10:00	Welcome
	10:05	Recap of Workshop One
	10:10	Purpose of Today
	10:15	Process Journeys and Introducing a Development Site Case Study
	10:25	Introducing Breakout Sessions & Transfer to Rooms
	10:35	Breakout Sessions Three rooms will explore different aspects of the garden community. Discussion 1 - Explore challenges and opportunities. • Room 1: Policies for delivering green and blue infrastructure (project viability). • Room 2: Green and blue infrastructure design and delivery components. • Room 3: Stewardship.
	11:05	5 Minute Break
	11:10	Breakout Sessions Discussion 2 - Identify actions to secure sustainability / resilience / evolution of good GBI.
	11:50	Group Feedback and Next Step
12:05		Close



Appendix Four:

Further Reading and Useful Tools

4.1 Standards

- 4.1.1
- [Essex GI Standards \(2022\)](#).
 - National GI Framework and their Local Plan [Process journey](#), [Design Code](#) and [Urban Greening Factor and Accessible Green Space \(ANGSt\)](#). The process journeys for LAs, Neighbourhood Plans and Developments and design should help embed GI informed decision making across and between organisations.
 - [Building with Nature](#) - is the leading standard and certification scheme for high quality green infrastructure.
 - [Building Research Establishment Environmental Assessment Method \(BREEAM\)](#) is a well-known approach for appraising the sustainability performance of new developments. The technical BREEAM standards set out individual assessment criteria for particular aspects of green infrastructure such as active travel, ecology, open space, and sustainable drainage. The standards are published at www.breeam.com where further information can also be found on the processes and fees involved in BREEAM.

4.2 GI Tools

- 4.2.1 There are numerous tools available to review GI provision for policy planning, during the design process, to delivery:
- Signpost to NERC Mainstreaming GI Policy Planning Assessment Tool and the paper on what good GI policy looks like - <https://mainstreaminggreeninfrastructure.com/project-page.php?green-infrastructure-planning-policy-assessment-tool>
 - Nature Smart Cities Business Model

There are numerous tools available to review GI provision for policy planning, during the design process, to delivery:

[Public Health and Landscape: creating healthy places \(Landscape Institute\)](#)

Position statement of the Landscape institute setting five principles for healthy places. Principle 1; healthy places improve air, water and soil quality, incorporating measures that help us to either adapt to climate change or mitigate its impact on us. Principle 2: Healthy places help overcome health inequalities and promote healthy lifestyles. Principle 3: Healthy places relax people, increase social interaction and reduce anti-social behaviour, isolation and stress. Principle 4: Healthy places optimise opportunities for working, learning and development. Principle 5: Healthy places are restorative, uplifting and healing for both physical and mental health conditions.

Building with Nature

12 BwN Standards define "what good looks like" by offering a set of quality standards for placemaking and place-keeping, covering themes of Wellbeing, Water and Wildlife.

The PARKS Alliance - Making Parks Count - The Case for Parks

The case illustrates how parks in England deliver over £6.6bn of health, climate change and environmental benefits each year including £2.2bn in avoided health costs alone and are worth £140 per year to each urban resident.

The Green Infrastructure Framework Principles and Standards for England

The Green Infrastructure Framework comprises: Green Infrastructure Principles: the why, what and how of good green infrastructure. Green Infrastructure Standards: guidance on national standards for green infrastructure quantity and quality. Green Infrastructure Maps: mapped environmental, socio-economic datasets to support the standards. Green Infrastructure Planning and Design Guide: practical, evidence-based advice on how to design good quality green infrastructure. Green Infrastructure Process Journeys: guides on how to apply all the products in the Green Infrastructure Framework.

Urban Greening How-To Toolkit for Local Authorities, Councillors and Officers.

Produced by the RECLAIM Network Plus*, this resource provides science-backed guidance and practical steps for local authorities and developers to plan and deliver urban greening interventions. It includes fact sheets on air quality, heat, biodiversity, flood risk, and health; recommended actions; design considerations; performance data (e.g., 63% pollution reduction); common pitfalls; funding routes and advice; community engagement approaches; and case studies.

** RECLAIM (Reclaiming Forgotten Cities - Turning cities from vulnerable spaces to healthy places for people) is a £1.45m UKRI (EPSRC, NERC, AHRC) funded Network+ grant. It is led by the University of Surrey's Global Centre for Clean Air Research (GCARE) in collaboration with the UK Centre for Ecology & Hydrology, Universities of Bath, Bangor and Warwick.*

Tree Equity Score UK

This tool provides a spatial dataset that measures the distribution of urban tree canopy against indicators of social need, helping to identify areas where investment in GBI can deliver the greatest benefits. By combining environmental and socio-economic data, it supports

Official Statistics

Access to green and blue space in England

evidence-based planning, prioritisation and targeting of tree planting and greening interventions to address inequalities in access to nature, urban heat, air quality and health outcomes.

Defra has recently published updated official statistics on household access to green and blue infrastructure within a 15-minute walk. The data shows that around 84% of households in Essex have access to at least one green or blue space within this distance, with access significantly higher in rural areas than in urban areas. These statistics are the first to directly report on the government's '15-minute commitment', using improved methodology to map access to parks, natural areas, waterways and public rights of way. This resource provides a valuable evidence base for local authorities and practitioners assessing green and blue infrastructure provision and planning improvements to meet the Environmental Improvement Plan goals.





Appendix Five:

- List of Stakeholders

5.1 List of stakeholders

4.1.1 This is not an exhaustive list but an example of potential stakeholders to engage.

Local Authority	• Planning Departments (Policy, Development Management/ EPOA), Spatial Planning, Growth and Development, Minerals and Waste, Essex Housing/ Essex Developers Forum/ ASELA • GI/Landscape/Ecologist/Open Spaces/ Country Parks/ BNG Officers • Lead Local Flood Authority • Essex Highways/Transport/ PRoW/Local Access Forum • Health and Wellbeing and Public Health • Place Services Active Essex/Southend/Thurrock
Government Agencies	• Natural England • Environment Agency Forestry Commission
Partnerships	• Essex Local Nature Partnership • Essex Health and Wellbeing Board • Essex Association of Local Councils • Rural Community Council of Essex Natural Landscape
NGOs	• Essex Wildlife Trust • RSPB • Woodland Trust Essex Rivers
Local Community Groups	Local Community Groups
Utility and Water Companies	• Anglian Water • Essex and Suffolk Water Thames Water
Landowners and Business	• Farmers Clusters • County Landowners Association Essex Chambers of Commerce
Other	

A photograph of a coastal town. In the background, a tall, modern brick apartment building stands out against a clear blue sky. Below it, a dense cluster of traditional houses with white walls and dark roofs is built into a hillside. In the middle ground, a harbor area features several boats, including a white sailboat and a green fishing boat. A wooden pier or breakwater runs along the water's edge. The foreground is a field of tall, dry grass. The text 'Appendix Six. Evidence Data Sources for GBI' is overlaid in white, bold font across the middle of the image.

Appendix Six.

Evidence Data Sources for GBI

6.1 National Level Evidence

National Level Data Currently Used and Endorsed by Government Agencies

[MAGIC](#) – Natural England MAGIC stands for Multi-Agency Geographic Information for the Countryside. This website provides authoritative geographic information about the natural environment from across government.

[GI framework interactive mapping tool](#) Defra and Natural England have developed an England-wide Green Infrastructure mapping database, bringing together data from around 50 sources of environmental and socio-economic data. It will provide an England level baseline and assist local authorities and other stakeholders to assess green infrastructure provision. This also includes index of multiple deprivation data.

[Natural Character Area Mapping tool](#) (Natural England) now contains a mapping interactive profile which describes each of England's 159 National Character Areas (NCAs). Each NCA represents an area of distinct and recognisable character at the national scale. Their boundaries follow natural lines in the landscape, not county or district boundaries. This makes them a good framework for decision-making and planning for future change.

[Local Nature Recovery Strategy data viewer](#) - This data viewer provides Responsible Authorities and interested parties with access to national scale open data held by the Secretary of State for Environment, Food and Rural Affairs to assist in the preparation of their Local Nature Recovery Strategies (LNRS).

[People and Nature Surveys](#) - The People and Nature Surveys for England gather evidence and trend data about people's access, understanding and enjoyment of nature, and how it contributes to wellbeing.

[Natural Capital Atlas \(Essex edition\) 2020/2021](#) These atlases provide an "off the shelf" natural capital evidence base for each county or city region. They can be added to and built on.

Environment Agency Catchment [Explorer](#) provides information about the water environment and river basin management plans.

UK Centre for Ecology and Hydrology [Land Cover maps 2021](#). Land Cover datasets describe the UK land surface in 2021. These were produced by classifying satellite images from 2021. The 2020 and 2021 editions provide more detail than ever before, as a high-resolution 10m product is available.

[ORVAL](#) reports values and visit estimates for existing and new greenspaces that are derived from a sophisticated model of recreational demand in England and Wales. These numbers are predictions of a model and not actual counts of visits to a particular greenspace or actual measures of the welfare which that greenspace provides.

[Ecosystems Knowledge Network](#) – Tools Assessor provides free summary information of tools about ways that show the value of the natural environment in society.

Fields in Trust insight - They create insight and data to understand the important role parks and green spaces can play in creating a healthier, happier society. This includes Green Space Index, revaluing parks and green spaces.

OHID Spatial Planning for Health: An evidence resource for planning and designing healthier places - Project commissioned by PHE (Public Health England) to address the need for UK-centric evidence review that analyses and demonstrate the links between health and the built and natural environment. This review attempts to provide an overview, based on the umbrella review methodology outlined in this document, of the strength of the evidence of the impacts on health of the built and natural environment with the purpose to inform action and policy.

OHID Improving access to green space: A new review for 2020 - There is increasingly compelling evidence showing that access to greenspaces matter for our health. Report highlights evidence and actions to help local areas consider how good-quality greenspace can support the delivery of health, social, environmental and economic priorities, at a relatively low cost.

DEFRA - official statistics for access to green space in England - The Access to Green Space in England is an official statistic in Development to measure people's access to measure people's access to green infrastructure.

RECLAIM Resources of Available Materials - The RECLAIM Resources section provides a searchable library of materials related to Green and Blue Infrastructure, sustainability, and nature-based solutions. The collection includes national and international academic papers, technical reports, guidance documents, videos, case studies, and practical examples. These resources offer evidence and insights that can support policy development, design practice, and decision-making across a range of GI themes.

- 6.1.1 The Local Authority process journey from Natural England's GI framework provides a list of further national evidence available.¹³

¹³ <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/downloads/process-guide-and-journeys-2024/Data%20Wish%20List%20for%20GI%20Strategy%20-%20Appendix%202.pdf>

6.2 Essex County Level Evidence

County Evidence

[Essex Local Nature Recovery Strategy](#). The emerging strategy will include interactive maps that shows the baseline mapping presenting all the areas of particular importance for nature in Essex. Along with an opportunity map presenting 15% and demonstrating all the strategic opportunities, including connectivity of the different habitat type creations in addition to the existing habitats. The urban opportunities identify the potential locations for any type of new habitat creations.

[Greater Essex Growth and Infrastructure Framework 2016-2036](#) - The framework illustrates the infrastructure needed, provides a summary of growth patterns through 2036, and projects expected costs and funding shortfalls. According to the requirements set forth by the local authorities' provision standards, new development will increase the need for 1,585 hectares of new green space.

[Essex Forest Initiative Mapping](#) of the locations of trees planting through the delivery of the project since 2020/21, to help identify where tree planting has taking place across Essex that can help identify potential opportunity areas – upon request via Environment@essex.gov.uk.

[Green Essex Story Map](#) originally developed to inform the Essex GI Strategy (2020), the Green Essex Story Map provides a spatial analysis through the GIS mapping of the distribution of green infrastructure across Essex, drawing on over 40 open data sets, giving a baseline understanding of the cover of all types of GI (non-accessible and accessible) in 2020.

[Essex GI Strategy \(2020\)](#) - The strategy is informed by consultation with stakeholders, including public feedback and expert input. This ensures that the strategy reflects the needs and priorities of the community. This includes mapping and Spatial Analysis (Green Essex StoryMap). The relationship between GI provision and the multiple functional and benefits for local communities. These components collectively provide a comprehensive evidence base that supports the strategic planning and implementation of green infrastructure in Essex.

[Essex Open Data](#) is a free and open data sharing portal where anyone can access, upload and use data relating to the County of Essex, including the topic of climate, Environment and Land. With links to tools and data on:

- [Flooding Risk Tool](#) – mapping to check flood risk in your area.
- Essex water - A report on the water companies' draft Water Resource Management Plans, showing calculated projections for Essex from 2024/25 to 2049/50.
- Essex Resident Survey Dashboard & Reports, which includes environment.
- Essex Area Profiles provides the latest available data for local authorities in Essex. This is drawn from official sources such as Government statistics, the Office for National Statistics and Nomis.
- Essex District Mapping Tool - enabling the quick creation of choropleth maps (coloured across a scale) to display district level data, using Microsoft Excel without the need for QGIS.

- Joint Strategic Needs Assessment – Physical Environment Dashboard.

[ECC Public Rights Of Way Interactive Map](#) – is an interactive map of Public Rights of Way and is for general purposes only. This is not the statutory Definitive Map which is held at County Hall. District, Borough, City, Town and Parish councils must also keep copies for their particular areas.

[Essex Fields Club](#) managed by the Essex Biological Record Services providing access to 5,477,956 records for 15,331 species across a wide range of groups. Although there is a charge to access this data.

[The Sustainable Drainage Systems Design Guide For Essex](#) - provides essential evidence for local plans by outlining standards for sustainable drainage systems (SuDS) that manage flood risks, protect water quality, and support climate change adaptation. It promotes integrating green infrastructure and biodiversity into drainage solutions, aligning with local planning objectives and national standards. This ensures new developments are resilient, environmentally friendly, and compliant with broader regulatory requirements.

[Essex Healthy Places Guidance: Access to open and green spaces](#) - There is a growing evidence base around the positive benefits to health and wellbeing from open green and blue spaces. These include positive impacts on mental and physical health.

[Assessing the strength of communities in Essex: the Essex Community Needs Index 2020](#) - Essex County Council's Research and Citizen Insight Team worked with Oxford Consultants for Social Inclusion (OCSI) to develop our understanding of communities across Essex. The work – conducted between March and June 2021 - focused on examining the position of different communities across Essex on a national 'community needs index'. This work allows us to compare communities across Essex, assess local communities against national benchmarks, and explore some of the factors that drive different levels of community need in different parts of the county.

[Essex Design Guide](#) - provides evidence for local plans by offering comprehensive guidelines that ensure high-quality, sustainable development. It aligns with the National Planning Policy Framework (NPPF) and integrates socio-economic themes, new highways standards, and SuDS to support resilient infrastructure. The guide emphasises understanding the context of development sites, promoting designs that enhance local character and identity. It also includes case studies and best practices, helping planners incorporate proven strategies into local plans.

Sub-county Level

[South Essex Strategic Green and Blue Infrastructure Study](#) - Prepared on behalf of the South Essex local authorities; sets a vision for GBI across South Essex and provides high-level objectives, strategic opportunities, and policies, driven by a co-ordinated approach. It will inform local plans.¹⁴

¹⁴ <https://localplan.southend.gov.uk/sites/localplan.southend/files/2021-08/Vol2: South-Essex-Strategic-Green-and-Blue-Infrastructure-Study-Appendix.pdf>

6.3 Local Level Evidence

County Evidence

Natural capital assessments

Open space and sports studies

- Playing Pitch Strategy and Action Plan - Assessment of outdoor sport facility needs across the city, identifying current levels of provision and comparing this with current and likely future levels of demand, to provide a strategic framework that ensures the provision of outdoor sports facilities meets local needs of existing and future residents.
- City wide open space assessment
- [Parks and Green Spaces Strategy i.e. Southend: 2015-2020](#) - Sets out key themes, standards and actions that will be undertaken to ensure parks and green spaces continue to play an important role for the health, wellbeing and economy of the city.
- [SANG and Country Park Study](#) - This study, commissioned by Uttlesford District Council (2024) identifies opportunities for Suitable Alternative Natural Greenspace (SANG) and new country parks to mitigate recreational pressure on Hatfield Forest, while supporting biodiversity, climate resilience, and access to green space.

Local Wildlife Sites Studies - Review of existing and potential new Local Wildlife Sites to inform the development plan.

- Biodiversity baseline study (sample of sites)
- Biodiversity Assessment - Colchester City Council commissioned a [biodiversity assessment](#) to evaluate the ecological impact of proposed site allocations. The study informed site selection and Place policies by recommending mitigation, enhancement, and BNG measures. It also involved a strategic assessment of Colchester city and identified strategic biodiversity areas.

Landscape Character /Sensitivity Assessments - Provides a detailed understanding of the character of the landscape and provides advice on the sensitivities of the landscape and capacity to accommodate development. Provides guidance on opportunities to help protect and enhance landscape character.

Habitat Regulation Assessment (HRA) - evaluates the potential impacts of plans or projects on protected European sites/ habitats sites to ensure their conservation. This assessment identifies measures to mitigate adverse effects on the integrity of habitats sites, ensuring that development is sustainable and compliant with environmental regulations.

Green and Blue Infrastructure Strategy/Audit/Study.

1. [i.e. South Essex Strategic Green and Blue Infrastructure Study](#) - Prepared on behalf of the South Essex local authorities; sets a vision for GBI across South Essex and provides high-level

objectives, strategic opportunities, and policies, driven by a co-ordinated approach. It will inform local plans.¹⁵

2. [Uttlesford Green and Blue Infrastructure \(GBI\) Strategy \(2023\)](#) sets out the potential for delivering GBI priorities as part of Uttlesford's Local Plan and online interactive map.

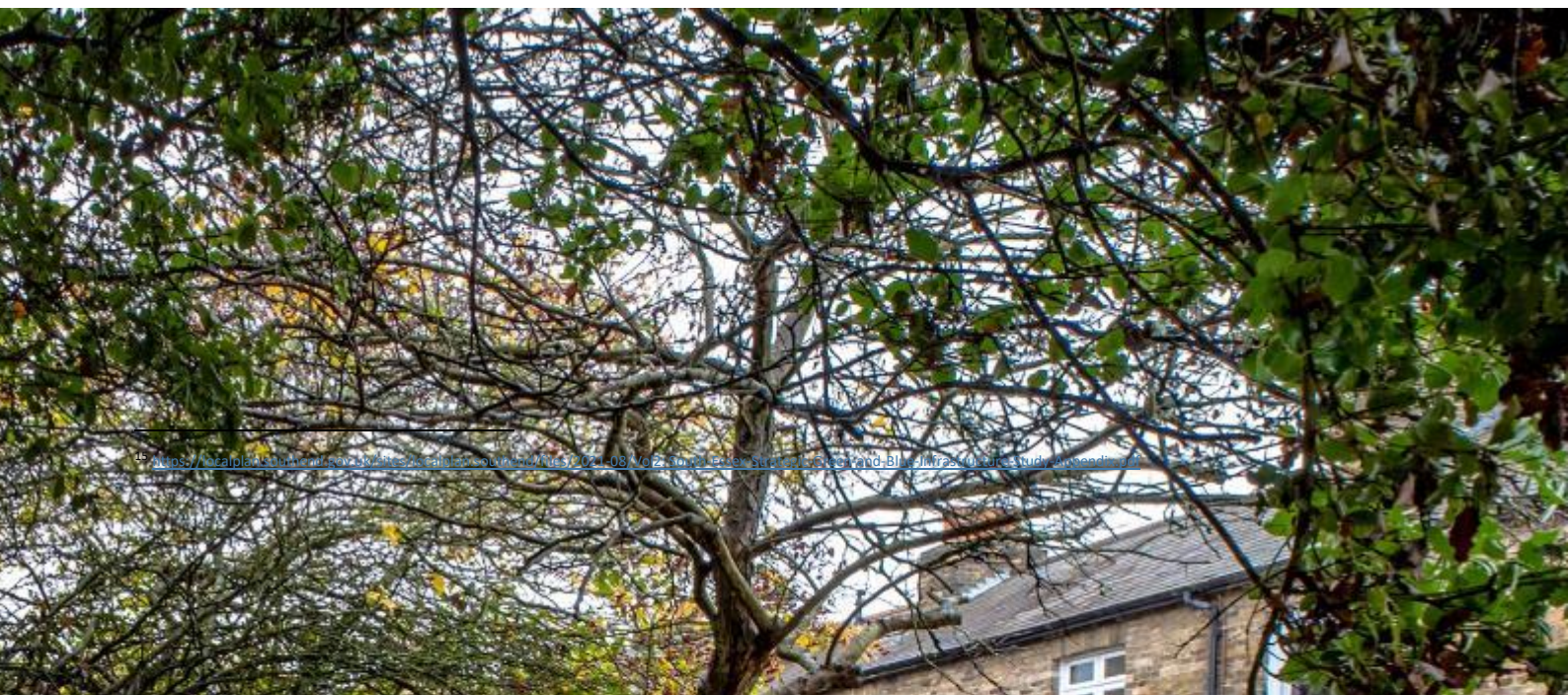
Climate Change Study – Some may choose to rely on the [Essex Net Zero evidence base](#) and due to produce local guidance note for applicants in due course.

- Strategic Flood Risk Assessment
- LA Sustainability Guidance and Checklist - The purpose of this guidance is to help applicants meet LA's goals of becoming net zero carbon by 2030, as well as building strong and integrated communities across new and existing places.
- Urban Heat Strategy – i.e. [Southend Urban Heat Strategy 2022](#) - Sets out key areas vulnerable to heat stress together with demographic and socio-economic data to identify priority areas for local authority action.
- Air Quality Action Plan - Outlines the actions to be taken to improve air quality in the local area.

[Smart Southend](#) – An interactive tool including Local Health Profile Tool and OHID Fingertips Tool.

Infrastructure Delivery Plan (IDP) - Outlines the necessary infrastructure projects to support growth and development. It ensures that all necessary infrastructure, including GBI and other environmental projects are identified, planned, funded, and integrated into development strategies, making development more efficient and effective.

Green Belt Assessment - Evaluates the current status and effectiveness of green belt land in fulfilling its designated purposes, such as preventing urban sprawl and preserving natural landscapes. This assessment is conducted through a detailed analysis of the land against criteria set out in planning policies and it can help identify areas that can support environmental projects.



¹⁵ <https://localplan.southend.gov.uk/infrastructure-and-environment/infrastructure/2024-08/02/Smart-Essex-Study-on-Green-and-Blue-Infrastructure-Study-Appendix.pdf>





BIOSWALE

WHAT ARE THEY

Bioswales are vegetated, shallow, landscaped depressions designed to capture, treat, and infiltrate stormwater runoff as it moves downstream.

IMPORTANCE

They are typically sized to treat the water quality event, also known as the "first flush," which is the first and often most polluted volume of water resulting from a storm event.

BENEFIT

Bioswales are arguably the most effective type of green infrastructure facility in slowing runoff velocity and cleansing water while recharging the underlying groundwater table.

Informative link: [National Association of City Transportation Officials](https://www.nacso.org/what-we-do/infrastructure/bioswales/)

*Avoids the need to sink a soakaway

Informative link: <https://www.nacso.org/what-we-do/infrastructure/bioswales/>

BOX PLANTERS



*Great for small-spaces : They're available in a variety of shapes and sizes.

*Perfect for greening on hard surfaces: The box planter legs are completely lifted from the ground, when water does drain out, it will usually dry quickly since it's not trapped between two surfaces.

*Fewer pests: Thanks to their height, box planters are often out of reach for ground-dwelling. Insect pests may still find your crops, but the small space close at hand means they're easier to control.

*Helps combat soil-borne diseases: Box planters thrive when using light, rich soil. A sterile container mix results in the prevention of common diseases associated with in-ground greening.

*Easy access for those who find bending and stooping difficult.

Informative link: <https://learn.earteasy.com/articles/5-easy-tips-for-planting-in-planter-boxes/>

GREEN CORRIDOR

ENVIRONMENTAL BENEFITS

- **Increased biodiversity** by having more green areas in the urban environment.
- Promotion of **non-polluting mobility**: bicycles or scooters, for example.
- **Reduced air pollution and noise pollution** in the city.
- Helps **prevent heat islands** from forming, effectively lowering the temperature.
- Contributing to a better **storm water management**.



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HUMAN BENEFITS

- Improve human **quality of life**
- Promote **physical activity**- along the linear pathways.
- Enhance **mental wellbeing**- from being surrounded by nature.

Informative link: <https://www.iberdrola.com/sustainability/green-corridor>



This Photo by Unknown Author is licensed under CC BY-ND

GRASS PAVING

Also known as
PERMEABLE PAVING

POSITIVES

1. Doesn't produce a 'heat island'.
2. It can be made using **recycled materials**.
3. Since water and precipitation seep through the pavement, there won't be any ice formation on it. Even in freezing temperatures, hence it is a **safe surface for driving and walking**.
4. The **pavement stays cool in the summers** due to the circulation of precipitation and water.

Permeable pavements have a porous surface that is composed of concrete, open pore pavers or asphalt with an underlying stone reservoir. They help in managing stormwater efficiently by re-establishing a natural hydrologic balance and reducing the volume of runoff.

NEGATIVES

1. **More expensive** than traditional pavements.
2. **Maintenance requirements**: It is prone to clogging if the water in the reservoir isn't drained out properly. The sand and fine particles that can block the space between the pavers must be removed using an industrial vacuum.
3. They aren't ideal for building **airport runways and highways** as they are weaker than traditional pavements.

Informative link: [GreenBlue.com](https://www.greenblue.com)



GREEN ROOF (non-accessible)

The most common non-accessible green roof is a **Sedum Roof** – these living roofs have reduced maintenance planting (low growing succulents from the sedum, or stonecrop, family) that grows very slowly, much like a moss.

- ✓ **Thermal performance** as plants absorb the sun's energy, reducing the temperature of the roof in summer, and by locking heat inside in the colder winter.
- ✓ Provides a microclimate for insects, birds and other species
- ✓ Carbon dioxide is reduced, and air quality is improved
- ✓ Reduces the amount of rainwater surface runoff
- ✓ Can last longer than conventional roofs (as the roof membrane is protected by the plants)
- ✓ Provide good sound insulation using the combined effect of soil, plants and trapped layers of air.

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Informative link: <https://www.fibrearchitects.co.uk/sedum-roofs-what-are-the-benefits/>



GREEN ROOF (accessible)

Green roofs involve a high quality waterproofing membrane, root repellent system, drainage system, filter cloth, a lightweight growing medium, and plants.

- ✓ New amenity spaces
- ✓ Aesthetic improvement
- ✓ Stormwater management
- ✓ Reduce heat island effect
- ✓ Improve air quality

This photo by Unknown Author is licensed under CC BY-SA-NC

Informative link: <https://greenroofs.org/about-green-roofs>



Good for
privacy

Reduces
noise
pollution



Barrier to
air
pollutants

GREEN SCREENS (HEDGEROW BARRIERS)

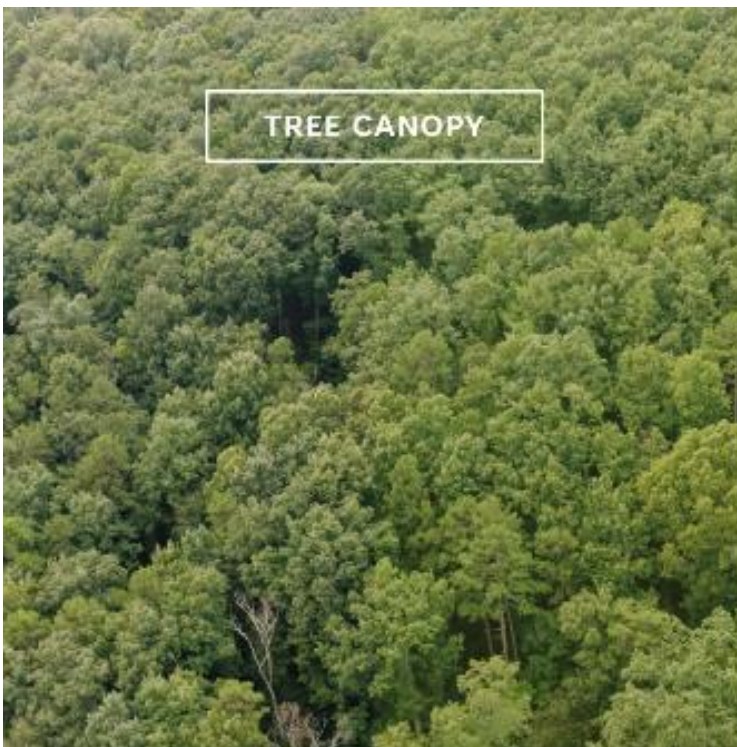
General Hedgerow facts:

They support approximately 80% of our woodland birds, 50% of mammals and 30% of butterflies.

In areas lacking woodland, many species of birds depend on hedgerows.

Altogether, healthy hedgerows support over 2,000 species of wildlife, including vulnerable and endangered creatures like hedgehogs, dormice and bats.

Informative link: <https://www.capitalgardens.co.uk/blog/hedge-fund-the-value-of-green-screens-and-how-to-plant-them/>



TREE CANOPY

- ✓ **Removal of pollutants** from the air, soil and water
- ✓ Release of water vapour into the atmosphere which **cools the surrounding areas**, mitigating the urban heat island effect
- ✓ Interception of rainfall and **reduction of stormwater runoff** (and thus, reducing the costs related to infrastructure required to manage runoff)
- ✓ Energy savings and reduced greenhouse gas emissions due to **shade provided**
- ✓ **Carbon sequestration**
- ✓ Potential **increased property values**

Informative link: www.edmondsh.gov

(GRASSLAND) MEADOW



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(GRASSLAND) MEADOW

Grasslands are home to all kinds of plants and animals you won't find anywhere else.

Healthy grasslands are full of colour, whether it's butterflies with brightly-patterned wings or wildflowers dotted among green grasses. **What you'll see depends on the type of soil in the area.** On chalk grassland, you'll find marbled white butterflies flitting around and, on neutral or acid soils, you might see red and black six-spot Burnet moths lurking.

Informative link: www.rspb.org.uk



This Photo by Unknown Author is licensed under CC BY-SA

GREEN WALLS

Green Walls are 100% Customisable. More complex than just plants on a wall, they can also be turned into living artwork, e.g., a customised pattern, a logo, or something abstract and unique.

Benefits

- ✓ **Improve air quality**
- ✓ **Reduce deterioration, cracks and fissures** as it helps reduce temperature fluctuations and protecting the building from heavy rain and UV radiation.
- ✓ **Reduces energy costs**
- ✓ **Reduce noise levels**

Informative link: www.learningwithexperts.com

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Informative link: www.wwf.org.us

WILDFLOWERS ARE OUR NATIVE FLOWERS, THAT ARE UNALTERED BY PEOPLE

WILDFLOWER MEADOW

Great for biodiversity	Potential to mitigate flooding	Can help fight climate change
Provide food for pollinators	Can help fight diseases (medicinal)	

Image by Unknown Author is licensed under CC-BY



ORCHARD

INC. COMMUNITY SIZED ORCHARDS

Orchards are areas of trees and shrubs planted for food, usually fruit.



PARKLETS

Parklets are public seating platforms that convert the side of the pavement, into vibrant community spaces.

- distinctive design that incorporates seating, greenery, and/or bike racks.
- accommodates demand for public space in commercial areas.
- their presence has also been shown to increase foot traffic, and in some cases revenues, for adjacent businesses.

Informative link: <https://nacto.org>

POCKET PARK

A Pocket Park is an accessible green space developed on "a piece of land of up to 0.4 hectares (although many are around 0.02 hectares, the size of a tennis court)". [Gov.uk]

COST BENEFIT

The smaller costs associated with these projects when regenerating a neighbourhood.

SOCIAL BENEFIT

Provides the ideal setting for local relaxation and mental wellbeing.

ECO BENEFIT

Creating a green space or a sort of buffer zone that separates itself from the surrounding environment.

Informative link: <https://www.lappset.com>



Intrinsic Benefits of Each Feature

Please refer to the [Essex Green Infrastructure strategy](#) for more information on the outputs of Green Infrastructure

Outputs provided by the following Features																					
		Biodiversity		Productivity		Climate		Microclimate		Health and Wellbeing		Social									
		Connectivity	Habitat Provision	Food Production	Productive Landscapes	Flood stress and in-road water resource management	Control storm protection	Energy & Carbon	Pollution mitigation and removal - Air Quality	Thermal Comfort - Cooling Effect	Sensory	Active Recreation	Green Travel routes	Engagement	Interaction	Access to Nature					
		Herbivory and Culture...	Access to Nature	Interaction	Engagement	Green Travel routes	Anti-reflection	Sensory	Thermal Comfort	Pollution absorption	Energy & Carbon	Food Production	Connectivity								
		0	2	4	6																



- 8.1.1. Since 2019, the ECC GI Team has provided non-statutory planning responses, developing GI-related conditions and comments in collaboration with LPA Development Management teams and, at times, directly with developers. Following recent discussions with Colchester City Council, it was identified that many GI conditions align with standard planning requirements, such as Construction Environment Management Plan (CEMP), Landscape and Ecological Management Plan (LEMP), and Habitat Management and Monitoring Plan (HMMP). To enhance clarity and value, the GI Team introduced a condition requesting a developer 'statement of intention for GBI delivery and management' clarifying GI expectations as part of these submissions.
- 8.1.2. Colchester supported the GI Strategy condition and recommended expanding the criteria to reflect broader requirements, including protection and long-term management of GI. The criteria listed can be deleted as appropriate because the developer has already referenced or included any of the documents mentioned, that satisfactory incorporates GI. The updated conditions are currently being trialled with Colchester and gradually introduced into other LPA planning consultations.

8.2 GBI Conditions

- 8.2.1 The following are recommended conditions for sites over 250 dwellings and strategic commercial sites where we would expect the GI principles to be addressed for a 'green infrastructure strategy' or plan to be submitted at later planning stage. However, these GBI conditions can be applied to smaller sites, where applicable.

8.2.1.1. Condition 1: Statement of intention for GBI delivery and management.

Notwithstanding the details submitted as part of the application, no development shall occur until full details of the proposed GBI/Landscape arrangements and access are submitted via the appropriate document, (such as a Landscape Statement, LEMP, CEMP) and approved in writing by the Local Planning Authority. This Statement should include the following recommendation(s) (to be added to the relevant condition(s)):

- a) Further information to be included in the Construction Environment Management Plan (CEMP) to outline the protection of retained Green Infrastructure (GI), such as trees and hedges, during construction. The CEMP should also detail how new GI will be implemented in phases, in relation to the development's phasing, to allow for early establishment where feasible.

Or

- b) Further information to be included in the Landscape Ecological Management Plan and work schedule to provide details on the management and maintenance operations for a minimum of 10 years. This plan should include:
- a. who is responsible for GI assets (including any surface water drainage system) and the maintenance activities/frequencies.

- b. how management company services for the maintenance of GI assets and green spaces shall be funded and managed for the lifetime of the development.

Or

- c) A statement that the Habitat Management and Monitoring Plan will ensure the agreed biodiversity net gain (BNG) and **associated GI goals** are achieved. It is essential to consider from the outset how GI habitat features will be managed and monitored alongside BNG to ensure effective delivery.

[delete any of the above criteria that is not relevant as appropriate]

Reason:

To ensure measurable net gains and compliance with LPA's *Green and Blue Infrastructure/Green Open Spaces/ Natural Environment [delete as appropriate]* Policy allowing the LPA to discharge its duties under the NPPF (2024). GI must be maintained for the development's lifetime as per the approved Maintenance Plan(s). Appropriate management, maintenance, and funding mechanisms are essential to maintain the GI's value. This ensures GI assets continue to provide high-quality, multi-functional benefits.

Failure to provide the required information before starting work may reduce the development's value, making it undesirable and increasing climate change impacts like flood risk or air pollution.

8.2.1.2. Condition 2: Green Blue Infrastructure Strategy

No works shall take place until a detailed Green Infrastructure/Landscape Strategy for the site, in accordance with the Essex Green Infrastructure Strategy (2020) and Essex GI Standards (2022) and an assessment of the ecological context of the development, has been submitted to and approved in writing by a Landscape specialist at the Local Planning Authority. The scheme should include but not be limited to:

1) Multifunctionality

- a) Demonstrates the delivery of GI through the 'Lawton Principle,' advocating for landscape-led/scale approach for a bigger, better and connected GI and green spaces, enhancing accessibility, biodiversity, and sense of place.

and/or

- b) The development should be designed to deliver GI that supports Biodiversity Net Gain (BNG) and wider environmental net gains, forming an important component of nature recovery networks and the wider landscape-scale GI network.

- (1) A Biodiversity Gain Plan must be submitted and approved, detailing how adverse impacts on GI habitats on-site have been minimised, pre- and post-development biodiversity values, and any offsite habitat provisions. This plan should also illustrate how GI delivery complements and supports BNG measures.

and/or

- c) Demonstrate that the development site/setting has been reviewed for multiple functions and benefits (listed in the Essex GI Strategy (chapter 5.1, page 35) and ensure that green/open spaces are designed to ensure multi- purpose and functional use.

and/or

- d) Tree Planting should be undertaken on site before considering off site mitigation and where possible should include tree lined streets.

- (1) For all new developments, newly planted trees (with a trunk diameter of 6cm or more) must be maintained with weeding, mulching, and watering (60 litres per visit, at least 14 times between May and September) for three years, with regular inspections and removal of stakes and ties after three years.

and/or

- e) GI and SuDs should be developed together to maximise benefits through multifunctionality to reduce flood risk whilst providing biodiversity and amenity benefits.

and/or

- f) Provide details of green roofs or walls, including their maintenance and management plans. Include roof plans and sections that illustrate the relationship between the living roof areas and any photovoltaic arrays.

and/or

- g) The development should incorporate climate resilience into the planting mix. This includes selecting plants for shading, reducing solar glare, improving building energy efficiency, carbon storage and sequestration, flood and water management, and drought-tolerant landscaping.

and/or

2) Connectivity

- h) Travel Infrastructure should give consideration to use of GI features to ensure accessibility across the site.

- (1) The development to retain and enhance access networks to encourage active travel, integrating GI to boost biodiversity and create habitats. This includes incorporating green/wildlife and active corridors, Sustainable Drainage Systems (SuDS), native hedgerows, and other nature-focused features along paths, cycleways, and bridleways.

and/or

- i) Ensure there are good accessible links for all from the development to existing settlements, urban centres, rural areas, active travel networks and green spaces.

and/or

3) Health and Wellbeing and Social equity

- j) Demonstrate how the GI has been designed to provide recreational facilities for different user and age groups. It should deliver social inclusive processes that are open to all and incorporate the knowledge and needs of diverse parties.

and/or

- k) To ensure the community is key in GI delivery, early and continued engagement with key stakeholders and community groups should be undertaken to ensure the GI approach reflects the needs and wants of residents.

and/or

- l) For all new developments, play strategies should be designed based on the character and function of green spaces, incorporating natural elements like landforms, level changes, water, logs, and boulders to create an attractive setting for natural play.

and/or

- m) For all new educational sites, playing fields must be multi-purpose, incorporating green spaces, sensory areas, and features that enhance biodiversity and climate resilience, supporting the curriculum and improving health, wellbeing, and learning outcomes.

and/or

- n) The development should demonstrate consideration of Green Infrastructure (GI) provision, enhancement, and strategic placement to effectively capture, reduce, and remove pollutants such as particulate matter and nitrogen dioxide. This will improve air quality and create healthy environments.

and/or

4) Stewardship/ Maintenance and Management

- n) A statement confirming that the
 - (1) Construction Environmental Management Plan (CEMP) will include details on protecting retained GI during construction and implementing new GI in phases for early establishment.

and/or

- (2) Landscape Ecological Management and Maintenance Plan (LEMP) will detail responsibilities for GI assets, maintenance activities, and funding, management and monitoring of GI assets and green spaces for the development's lifetime, as per the approved LEMP/Maintenance Plans.

and/or

- (3) The Habitat Management and Monitoring Plan will outline the mitigation, compensation, and enhancement measures that contribute to GI delivery, aligning with the 30-year objectives specified in the BNG Plan.

[Multiple options are available, delete any of the above criteria that is not relevant as appropriate]

Reason:

GBI and its connectivity are to be at the heart of decision making at every stage in the planning and design process for all developments from the outset. This ensures GI is integral to place shaping, with GI features at building, street, neighbourhood, and landscape scales contributing to a coherent, high-quality, multifunctional GI network. This network provides environmental, social, and economic benefits within the development and the wider area. Early design that considers local context and policies will better meet local priorities and needs.

The National Planning Policy Framework 2024 paragraph 8c sets environmental protection and enhancement as one of the 3 objectives of the planning system. Paragraph 96(c) states that access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities and (paragraph 164(a)) can deliver wider benefits for nature and support efforts to address climate change.

8.2.1.3. Condition 3: Green Infrastructure Plan (for projects 250+)

No development shall take place until a Green Infrastructure Plan has been submitted to and approved in writing by the Local Planning Authority. The submitted Plan shall include:

- Locations.
- Details of advance planting around construction sites; and

- The timescale for the implementation of each aspect of Green Infrastructure within that phase of development and details of the quality standard of construction and maintenance.

The development shall be carried out and thereafter maintained in accordance with the approved details unless otherwise agreed in writing by the Local Planning Authority.

8.2.1.4. Key Informative¹⁶ to note:

- The GI consultation responses provide a high-level review of the proposals onsite. However, the relevant specialists e.g., ecology and landscape specialists should still be consulted on the information submitted. It should be noted that detailed discharge of condition applications should be referred to technical specialists rather than the GI planning team.



¹⁶ A key informative heading highlights essential details, ensuring clarity and emphasising important points in a planning application response.



Appendix Nine:

Case Studies: Green Infrastructure Best Practices

Examples of effective GI policies and project processes are illustrated in Case Studies 1 to 6, showcasing a diverse range of Green Infrastructure initiatives.

9.1 Local Plan

9.1.1 Here are the following policy case studies:

1. Colchester City Council: Thematic and Innovative environmentally led approach for the Local Plan.
2. Castle Point Regulation 18: Issues and Options
3. Uttlesford: Draft Regulation 19
4. Tendring Colchester Border Garden Community Local Plan.



1. Colchester Local Plan

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION

Colchester City Council's new Local Plan (2025–2041) aims to deliver sustainable development through an environmentally led approach to the development of the emerging local plan, focusing on Green and Blue Infrastructure (GBI). The plan aims to address housing, the economy, community facilities, and infrastructure while conserving and enhancing the natural and historic environment, mitigating and adapting to climate change, and creating well-designed spaces. The vision of success includes a well-balanced, sustainable community which has planning for a better environment at its heart.



The plan's core ambition is to:

- Protect and enhance the city's green network and waterways.
- Align growth with environmental enhancement, ensuring that development contributes positively to climate resilience, biodiversity, and community wellbeing.
- Deliver a place-based strategy where environmental quality is a driver—not a by-product—of development.

WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

Benefits

While the plan is still in development, several early benefits and engagement outcomes have emerged:

- **Environmental Gains:** The plan's approach ensures that new housing allocations will deliver new green spaces, enhance biodiversity, and support climate adaptation.
- **Health and Wellbeing:** By embedding GBI into urban design, the plan supports active lifestyles, mental health, and access to nature.
- **Strategic Site Selection:** Sites are chosen not just for housing capacity but for their potential to deliver environmental and community benefits.

Community Engagement and Feedback

Colchester City Council completed the first phase of engagement for its new Local Plan—called the Issues and Options stage—through an iterative process from November 2023 to July 2024, rather than a single 6-week consultation. This approach allowed for in-depth, themed engagement on key topics including the green network and waterways, site proposals (including offsite biodiversity net gain), the city's vision, net zero carbon buildings, placemaking, and health and wellbeing. Stakeholder feedback is actively shaping the plan, ensuring it reflects local priorities and values.

To support the delivery of its Local Plan, Colchester City Council has developed a set of strategic topic-based and place policies that guide sustainable growth across the district. These policies address key priorities such as promoting health and wellbeing, protecting the environment and green network, and setting out the spatial strategy for housing and employment. Thematic policies further detail approaches to areas including the environment, green and blue infrastructure, landscape, net zero development, homes, economy, community infrastructure, and connectivity ensuring a comprehensive and integrated planning framework.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

The challenges and opportunities section highlights the ongoing balancing act between meeting development needs and safeguarding environmental priorities, while also identifying innovative pathways—such as nature-led site selection and community stewardship—that can turn potential obstacles into long-term gains for people and nature.

Challenges
• Balancing growth and conservation: Ensuring housing targets are met without compromising environmental integrity.
• Delivering offsite BNG: Identifying and managing suitable offsite locations for biodiversity enhancements.
• Long-term maintenance: Ensuring that new green spaces are sustainably managed and funded.
Opportunities
• Innovative site selection: Using GBI potential as a primary filter for development sites.
• Cross-sector collaboration: Engaging health, transport, and environmental sectors in integrated planning.
• Community stewardship: Empowering local groups to co-manage and co-design green spaces.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

The key ingredients for success and wider learning points illustrate how Colchester’s nature-first planning approach, inclusive engagement, and integrated policy design are not only shaping a more sustainable Local Plan but also offering valuable lessons for other authorities aiming to embed Green and Blue Infrastructure into their development strategies.

1. **Environmental Vision as a Starting Point** - Unlike traditional plans, Colchester’s starts with the green network and waterways, not housing numbers. This reframes development as a tool for environmental gain.
2. **Thematic, Iterative Engagement** - The Council’s phased consultation allowed deeper, more focused conversations with stakeholders, improving plan responsiveness and legitimacy.
3. **Integrated Policy Framework** - GBI is not siloed; it’s embedded across themes—health, placemaking, housing, and climate—ensuring a holistic approach to sustainable development.

Wider Learning:

- **Start with nature:** Making GBI the foundation of planning leads to more resilient, liveable places.
- **Engage early and often:** Iterative engagement builds trust and surfaces local knowledge.
 - **Think long-term:** GBI success depends on future stewardship, not just initial delivery.

Case Study 2: Issues and Options

The Castle Point Plan 2023 – 2043: Issues and Options Consultation July – September 2024

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

This case study provides a structured overview of the Castle Point's Local Plan Issues and Options, focusing on the key themes related to GBI, biodiversity and nature recovery. The Castle Point Plan 2023 – 2043: Issues and Options outlined a comprehensive vision for sustainable development in the borough, emphasising the integration of GBI, biodiversity net gain, and nature recovery. This case study explores the key issues and options presented in the plan development stage, highlighting the strategies and initiatives aimed at enhancing the natural environment and improving the quality of life for residents.



Vision and Objectives

The vision for Castle Point includes creating pleasant and connected green spaces that provide opportunities for recreation and interaction with nature. The plan aims to manage and mitigate the impacts of climate change through the introduction of green infrastructure and natural processes.

WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

Benefits

The Castle Point Plan 2023–2043: Issues and Options Consultation (July–September 2024) presents a valuable opportunity to embed Green and Blue Infrastructure (GBI) at the heart of local planning, helping to shape healthier, more resilient communities while delivering environmental enhancements that support biodiversity, climate adaptation, and quality placemaking.

Community Engagement and Feedback

During the initial engagement, residents highlighted the importance of protecting the Green Belt, increasing green spaces, and improving the maintenance of open spaces. There was strong support for biodiversity net gain and ecological protection within new developments.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

The issues and options paper offer a comprehensive overview of the borough, highlighting the key issues that need to be addressed in the local plan. It also outlines potential options for tackling these issues. The table below summarises the GBI, Biodiversity and Local Nature Recovery challenges and opportunities identified at this stage of the local plan process.

Challenges
• Maintaining and enhancing the extensive green infrastructure network, particularly in areas like Thundersley, to improve footpaths and byways for active and leisure travel.
• Protecting the high quality of natural environments, including grasslands, river floodplains, and ancient woodlands, which are crucial for biodiversity and the local economy.
• Protecting the high quality of natural environments, including grasslands, river floodplains, and ancient woodlands, which are crucial for biodiversity and the local economy.
• Ensuring new developments achieve a 10% biodiversity net gain, particularly in

urban areas with low existing vegetation.
• Addressing the decline in the maintenance of open spaces and preventing urban sprawl.
Opportunities
• Leveraging the SEEPARK project to link and nurture landscapes across South Essex, promoting ecological diversity, carbon capture, and opportunities for leisure, tourism, and business
• Enhancing GBI to support biodiversity, improve air quality, and provide recreational spaces. The seafront and marshlands offer unique opportunities for conservation and tourism.
• Implementing multifunctional green spaces that contribute to climate change mitigation, biodiversity, and health and well-being. Sustainable drainage systems (SuDS) can provide both flood management and biodiversity benefits.
• Promoting urban greening and biodiversity net gain sites, such as the Salvation Army Farm, which offers new grassland and coastal grazing marsh habitats. The plan supports the creation of green corridors and the conservation of local wildlife sites.
• Increasing tree planting, improving accessibility to green and blue infrastructure, and protecting floodplains from development. The plan emphasises the importance of local nature recovery strategies and the role of open spaces in urban areas.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

The Castle Point Plan 2023 – 2043 presents a potential forward-thinking approach to sustainable development, prioritising GBI and nature recovery. By addressing the challenges and leveraging the opportunities identified, the plan aims to create a resilient and vibrant environment for current and future generations.

Uttlesford Local Plan 2021-2041: Regulation 19

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

The Uttlesford Local Plan Regulation 19 (2024) outlines a strategic framework for sustainable development in the district, emphasising the integration of multifunctional BBI, biodiversity, and nature recovery. This case study explores the key policies, the journey from policy design to approval, key actions undertaken, and the problems and successes encountered.



WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

Benefits

The Uttlesford Local Plan includes several policies that focus on green infrastructure, biodiversity, and nature recovery:

1. **Core Policy 1: Addressing Climate Change**
 - Requires developments to include GI and sustainable practices to combat climate change.
2. **Core Policy 9 Green and Blue Infrastructure in the North Uttlesford Area**
3. **Core Policy 15: Green and Blue Infrastructure in the South Uttlesford Area**
 - Focuses on creating and enhancing green and blue infrastructure, including new country parkland and public open spaces.
4. **Core Policy 26 Providing for Sustainable Transport and Connectivity**
 - cycling and walking routes should be planned, where possible, as part of the network of multi-functional GI.
5. **Core Policy 37 Sustainable Drainage Systems**
 - SuDS should be designed to be multi-functional to deliver amenity, recreational and biodiversity benefit for the built, natural (including GI) and historic environment.
6. **Core Policy 39: Green and Blue Infrastructure**
 - Prioritises the integration of GBI in major developments, ensuring multifunctionality and accessibility.
7. **Core Policy 40: Biodiversity and Nature Recovery**
 - Supports BNG and the creation of nature recovery networks.
8. **Core Policy 52 and 52a: Good Design Outcomes and Process (for Strategic Allocations)**
 - Emphasises the importance of integrating GBI and ecological enhancements in development designs.
9. **Core Policy 69 New Cemeteries and Burial Space**
 - are designed to make the most of opportunities to integrate within the Green and Blue Infrastructure network.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

Journey from Policy Design to Approval

1. **Policy Design and Consultation**
 - The initial stages involved drafting the Local Plan with input from various stakeholders, including local communities, environmental groups, and government bodies.
 - Public consultations were held during the Regulation 18 stage (October – December 2023) and Regulation 19 stage (August – October 2024) to gather feedback and ensure the plan

met legal and procedural requirements.

2. Key Actions Undertaken

- **Stakeholder Engagement:** Extensive consultations with residents, local businesses, environmental organisations, and neighbouring authorities to gather diverse perspectives.
- **Evidence Gathering:** Conducting studies on biodiversity, GI, and climate change to inform policy decisions.
- **Drafting Policies:** Developing detailed policies that address the needs and concerns raised during consultations.
- **Public Consultation:** Inviting public comments on the draft plan and making necessary revisions based on feedback.
- **Submission and Examination:** Submitting the final plan to the Secretary of State for independent examination, expected to take place in 2025.

Challenges:

- **Balancing Development and Conservation:** Ensuring new developments meet housing needs while protecting green spaces and biodiversity.
- **Public Concerns:** Addressing concerns about the potential impact of development on local environments and communities.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

Successes:

1. **Broad Support for GI:** Strong public and stakeholder support for policies promoting GI.
2. **Enhanced Biodiversity:** Policies requiring BNG have been well-received and are expected to significantly enhance local ecosystems.
3. **Integrated Approach:** Successful integration of GI into development plans, ensuring multifunctional benefits for residents and wildlife.

The Uttlesford Local Plan Regulation 19 (2024) demonstrates a comprehensive approach to sustainable development, prioritising multifunctional GI biodiversity, and nature recovery. Through extensive stakeholder engagement and evidence-based policy design, the plan aims to create a resilient and vibrant environment for current and future generations.

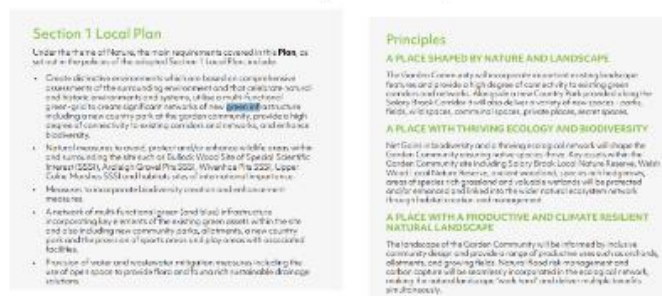
Case Study 4: TCBGC Local Plan

Tendring Colchester Border Garden Community Local Plan - [North Essex Authorities' Shared Strategic Section 1 Plan](#)

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

The Tendring Colchester Border Garden Community (TCBGC) is a strategic initiative in the North Essex Authorities' Shared Strategic Section 1 Plan, adopted in January 2021 by Tendring District Council, Colchester Borough Council, and Braintree District Council. The TCBGC aims to address long-term housing needs while ensuring sustainable development and high-quality living environments through Green and Blue Infrastructure (GBI).

Garden Community Principles for GBI



The plan outlines several key strategies to achieve this and facilitated the development of the TCBGC GBI principles by emphasising place shaping, connectivity, and sustainable development through policies that integrate extensive green spaces, water management systems, and interconnected networks. Examples of these GBI principles include:

- a) Strategic Green Spaces: Enhancing biodiversity, providing recreational opportunities, and improving residents' quality of life.
- b) Water Management: Incorporating sustainable drainage systems (SuDS) to manage water runoff, reduce flood risks, and support aquatic ecosystems.
- c) Connectivity: Interconnecting green and blue spaces to promote wildlife corridors and facilitate pedestrian and cycle routes.

WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

Benefits

Through the joint local plan for TCBGC it can deliver several benefits, including:

- Environmental Benefits: Enhanced biodiversity, improved water management, and increased green cover.
- Social Benefits: Increased recreational spaces, improved mental and physical health for residents, and stronger community bonds.
- Economic Benefits: Potential for increased property values, attraction of new businesses, and job creation in green space management and maintenance.

The key policies in the North Essex Authorities' Shared Strategic Section 1 Plan that secure the delivery of GBI through the delivery of the TCBGC include:

1. Policy SP 6: Infrastructure and Connectivity

- The conditions for a health community through access to green spaces.

2. Policy SP 7: Place Shaping Principles

- Incorporate biodiversity creation and enhancement measures.
- Provide an integrated and connected network of biodiverse public open space and green and blue infrastructure.

3. Policy SP 8: Development & Delivery of a New Garden Community in North Essex

- Create significant networks of new green infrastructure, including a new country park.
- Provide a high degree of connectivity to existing corridors and networks and enhance biodiversity.
- Establishment of early stage in the development the appropriate sustainable long-term governance and stewardship arrangements for green spaces.

4. Policy SP 9: Tendring/Colchester Borders Garden Community

- Delivery of high standards and design set with the green framework.
- Develop a network of multi-functional green infrastructure within the garden community.
- Incorporate key elements of existing green assets, including community parks, allotments, and sports areas.
- Establish stewardship arrangements early on in the development.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

Challenges
● Ensuring ongoing community engagement and support for GBI initiatives.
● Balancing development pressures with the need to preserve and enhance natural habitats and environmental sustainability
● Securing funding for the long-term maintenance and enhancement of GBI.
● Navigating regulatory requirements and securing necessary approvals for GBI projects.
● Addressing concerns from various stakeholders regarding the impact of development on natural habitats.
● Ensuring the integration of GBI within budget constraints while maintaining high standards.
Opportunities
● Leveraging technology for better environmental monitoring and management.
● Expanding community-led initiatives for the stewardship of green spaces.
● Enhancing partnerships with local businesses, educational institutions, and environmental organisations.

Journey from Policy Design to Approval

1) Policy Design and Consultation

- The policy design involved extensive consultation with local communities, stakeholders, and environmental experts to ensure the plan met diverse needs and standards. This collaborative approach helped in identifying key areas for GBI integration.

2) Key Actions Undertaken

- Development of strategic green spaces and sustainable drainage systems. The project includes initiatives to protect and enhance local wildlife habitats, aligning with Essex GI Standards for biodiversity.
- The design of the TCBGC incorporates sustainable practices, such as the use of native plant species and the creation of multifunctional green spaces that serve both ecological and social purposes.
- Implementation of community engagement programs to involve residents in the planning and management of GBI, ensuring that the infrastructure meets the needs and preferences of residents.
- Regular monitoring and adaptation of strategies to ensure the long-term success of GBI initiatives.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

The integration of GBI and adherence to Essex GI Standards in the TCBGC can be attributed to several factors:

- Collaborative Planning: The joint effort by multiple local authorities ensured a comprehensive and cohesive approach to development and GBI integration.
- Clear Vision and Objectives: Strategic objectives outlined in the Section 1 Plan provided a clear framework for sustainable development and GBI integration.
- Community Involvement: Engaging local communities in the planning and management process was crucial for the success.
- Adaptability: The plan includes mechanisms for monitoring progress and adapting strategies as needed to ensure the project remained on track and responsive to emerging challenges and opportunities.

This case study highlights the importance of strategic planning, collaboration and community involvement, and adaptability in successfully integrating GBI into urban development projects, meeting both local and county-wide standards.

9.1 Development Projects

9.2.1 Here are the GI developments and project case studies:

5. **Tendring Colchester Border Garden Community:**
6. **Harlow and Gilson Garden Town Stewardship Charter**

Other potential GI projects case studies of interest:

- GI and SuDs Schools Projects - [Schools](#)
- Development - [Goldlay Square, Chelmsford. Green open space. | Place Services](#) and Essex Housing.
- Beaulieu Stewardship example – Further information can be found in [Essex GI Standards Case Study 17, page120](#)
- Retrofit rain garden at Basildon Hospital – Further information can be found in [Essex GI Standards Case Study 7, page110](#)



Case Study 5: Tendring Colchester Borders GC

Tendring Colchester Borders Garden Community -

<https://tcbgardencommunity.co.uk/>

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

The Tendring Colchester Borders Garden Community (TCBGC) is a significant development project aimed at creating a sustainable and vibrant community on the border of Tendring and Colchester. This case study explores the journey from local plan policy to development design, focusing on the vision of success, benefits delivered, challenges and opportunities, key ingredients shaping success, and wider learning points.



The transition from the local plan policies to the detailed development design of TCBGC followed several key steps and milestones. First, the policy framework was established with the adoption of Local Plan Section 1 by Tendring District Council and Colchester City Council in 2021, which includes policies emphasising high standards of urban design and GI to create attractive and sustainable places. The Development Plan Document (DPD), prepared by the councils, underwent extensive consultation and examination, with the Inspector's report awaited. This document includes detailed policies on nature, GI, and community facilities.

In terms of development design, the masterplan for TCBGC outlines the creation of 7,000 to 9,000 homes, employment spaces, schools, health facilities, and community amenities. The design integrates 50% open space and multifunctional GI, promoting ecology and biodiversity. The community will feature extensive green spaces, parks, and areas for play, seamlessly integrated with the built environment.

The vision for TCBGC is to create a community that is sustainable, resilient, and vibrant. Success is defined by:

- **High Quality of Life:** Providing a healthy, attractive, and well-connected environment for residents.
- **Sustainability:** Integrating green and blue infrastructure to support biodiversity, climate resilience, and sustainable living.
- **Community Engagement:** Ensuring active local stewardship and strong community involvement in the development process.

WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

The various benefits delivered by the TCBGC project, and the primary beneficiaries include:

- **Residents:** Access to high-quality housing, green spaces, and community facilities that promote health and well-being.
- **Local Economy:** Creation of employment opportunities and support for local businesses through new commercial spaces.
- **Environment:** Enhanced biodiversity and ecological networks through extensive GI.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

These are the main challenges faced and opportunities available during the development of TCBGC.

Challenges
• Balancing Development and Conservation: Ensuring new developments meet housing needs while protecting green spaces and biodiversity]. • Infrastructure Delivery: Coordinating the delivery of essential infrastructure, such as transport and community facilities.
Opportunities
• Innovative Design: Implementing cutting-edge sustainable design practices and technologies]. • Community Involvement: Leveraging strong community engagement to shape the development and ensure it meets local needs.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

The critical factors that have contributed to the success of the TCBGC project and the lessons learned that can be applied to future developments.

Key Ingredients Shaping Success

- **Strong Leadership:** Effective collaboration between Tendring District Council, Colchester City Council, and Essex County Council.
- **Comprehensive Planning:** Detailed masterplanning and policy frameworks that guide development and ensure high standards.
- **Sustainability Focus:** Emphasis on green and blue infrastructure, biodiversity, and climate resilience.

Wider Learning Points

- **Cross-Authority Collaboration:** Successful delivery of large-scale projects requires strong partnerships and coordination between multiple authorities.
- **Community-Centric Approach:** Engaging local communities early and throughout the development process ensures that the project meets their needs and gains their support.
- **Sustainable Development:** Integrating sustainability into all aspects of planning and design is crucial for creating resilient and vibrant communities.

The TCBGC showcases an innovative approach to sustainable development. By prioritising high-quality design, extensive GBI, and robust community engagement, the project aspires to build a thriving and resilient community.

Case Study 6: Stewardship Charter

Harlow and Gilston Garden Town Stewardship Charter

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

The Harlow and Gilston Garden Town (HGGT) Stewardship Charter aims to ensure the long-term care and management of the new communities created within the Garden Town. The Charter focuses on delivering high-quality living environments through the integration of landscape, ecology, and Green and Blue Infrastructure (GBI). The vision of success includes creating sustainable, resilient communities with enhanced biodiversity, recreational opportunities, and effective water management systems.



WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

- **Environmental Benefits:** The Charter has led to the development of extensive green spaces and sustainable drainage systems (SuDS), enhancing biodiversity and supporting aquatic ecosystems.
- **Community Engagement:** The development process included public consultations and workshops, particularly engaging youth councils to ensure the younger generation's input. This has fostered a sense of ownership and community involvement.
- **Quality of Life:** Residents benefit from improved recreational spaces, better connectivity through pedestrian and cycle routes, and overall enhanced living environments.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

- **Challenges:** Ensuring consistent application of GBI principles across different developments and maintaining long-term financial sustainability.
- **Opportunities:** Leveraging community engagement to foster a strong sense of ownership and exploring innovative funding models to support ongoing stewardship.

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

The key ingredients to shaping success in the Harlow and Gilston Garden Town Stewardship Charter include:

- **Collaborative stewardship**, which involves engaging multiple stakeholders such as local councils, developers, and community members to ensure a unified approach to GBI.
- **Community development** is also crucial, actively involving residents in the planning and development process to create spaces that meet their needs and preferences.
- Additionally, **environmental ambition** setting high standards for environmental practices, including extensive green spaces and effective water management systems.

Key learning points include the importance of inclusive planning, involving diverse community groups to ensure the development meets the needs of all residents, and sustainable practices, emphasizing innovative and sustainable methods in the development and maintenance of GBI for long-term success. Adaptive management is also essential, allowing strategies to be refined based on feedback and changing circumstances.

Case Study 7: Green and Blue Infrastructure Strategy and Plan

Chelmsford Garden Community – Zone 1

WHAT IS THIS GI CASE STUDY AIMING TO DO AND DELIVER. IS THERE A CLEAR VISION OF WHAT SUCCESS LOOKS LIKE?

The Chelmsford Garden Community (CGC) Zone 1 Green and Blue Infrastructure (GBI) Strategy and GBI Plan demonstrate how GBI can be treated as primary infrastructure, shaping the form, character and long-term sustainability of a major new development.

The clear vision is to create a coherent, multifunctional GBI network that delivers nature recovery, climate resilience, sustainable drainage and high-quality places for people. Success is defined by early delivery of strategic green infrastructure, integration with development parcels, and long-term stewardship that supports environmental, health and social outcomes.



WHAT BENEFITS HAVE BEEN DELIVERED AND TO WHO?

Environmental benefits

- Delivery of a connected habitat network comprising woodland, meadow, wetland and green SuDS, linking to the Chelmer Valley and wider Essex Living Landscapes.
- Over 20% Biodiversity Net Gain, with early habitat creation focused within Channels Discovery Park.
- Landscape-led surface water management, providing flood resilience alongside biodiversity and amenity benefits.

Social and health benefits

- Creation of Channels Discovery Park (over 22ha) as a central destination for recreation, play and engagement with nature.
- A comprehensive network of greenways supporting walking, cycling and access to green space from all neighbourhoods.
- Integration of productive landscapes, including community gardens and orchards, supporting wellbeing and social cohesion.

Place-making benefits

- GBI establishes a strong landscape identity for the Garden Community, reinforcing local distinctiveness.
- Development parcels are shaped around green infrastructure, ensuring attractive, usable settings for homes, schools and employment areas.

WHAT KEY CHALLENGES/OPPORTUNITIES REMAIN

Challenges

- Maintaining the strategic integrity of the GBI framework across phased delivery and multiple reserved matters applications.
- Ensuring consistency in quality, implementation and long-term management.

Opportunities

- **Early delivery of strategic GBI assets allows benefits to be realised ahead of full build out.**
- **A clear GBI Plan at outline stage provides certainty while allowing flexibility at detailed design.**

KEY INGREDIENTS SHAPING SUCCESS – AND WIDER LEARNING POINTS

What made this a strong GBI Strategy and Plan

- A landscape-led masterplanning approach, with GBI structuring the development.
- A robust GBI Strategy informed by baseline analysis, policy alignment and local context.
- A clear GBI Plan at outline stage showing locations, connectivity, phasing and functions of GBI.
- Early and advance planting, particularly along boundaries, green corridors and key destinations.
- Alignment with Local Plan policy, Essex GI Standards and wider nature recovery objectives.

Wider learning

- Treating GBI as infrastructure, not mitigation, leads to better environmental and place-making outcomes.
- Clear planning conditions covering locations, advance planting, implementation timescales and quality standards are essential to secure delivery.
- Translating strategic vision into site-specific GBI plans helps ensure long-term multifunctional benefits for people and nature.

This information is issued by:
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The information contained in this document
can be translated, and/or made available in
alternative formats, on request.

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