



Mansfield
District Council

Mansfield District Council

Green Infrastructure Supplementary Planning Document (SPD)

Adopted March 2024

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1. Introduction	4
Purpose of the Supplementary Planning Document	4
Status of the SPD and production process	4
What is 'Green Infrastructure?'	5
Background	6
2. Proposed Guidance Areas	6
Content of the SPD	6
3. National Context	7
The National Planning Policy Framework (NPPF)	8
National Planning Practice Guidance (NPPG)	8
The Green Infrastructure Framework	10
4. Local Context	13
Mansfield Local Plan	13
Neighbourhood Plans	13
Mansfield Green Infrastructure Study	14
5. General principles	16
6. Supplementary Planning Guidance	18
Types of GI to be considered	18
Green Infrastructure design process	19
Functions and key assets	20
GI connections to the wider area	23
Managing impacts on GI	24
Green Infrastructure and Climate Change	25
Improving the quality of Green Infrastructure networks	26
Green Infrastructure and Biodiversity Net gain	30
Sustainable Drainage Systems (SuDS)	31
GI areas in Mansfield District	33
Appendix A - Policy IN2 Green infrastructure	36
Appendix B – Map of all Strategic Green Infrastructure	37
Appendix C – Recreation based Green Infrastructure	38
Appendix D – Heritage based Green Infrastructure	39
Appendix E – Green Infrastructure and Climate Change mitigation areas	40
Appendix F – Green Infrastructure and ecological networks	41

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1. Introduction

Purpose of the Supplementary Planning Document

- 1.1 This Supplementary Planning Document (SPD) seeks to add further detail to policies contained within the Adopted Mansfield District Local Plan 2013 - 2033¹. In particular, the SPD seeks to elaborate on the Green infrastructure (GI) policy (IN2) but will also add further detail to policies: IN3 (Protection of community open space and outdoor sports provision); IN4 (New community open space and outdoor sports provision); IN5 (allotments); and, IN6 (Designated local green space).
- 1.2 Other policies in the local plan that refer to the provision of GI include: Policy S4 (Urban regeneration); Policy P4 (Comprehensive development); Policy P5 (Climate change and new development); Policies CC1 to CC4 (Climate Change) and various development site allocations.
- 1.3 The SPD is aligned with the Biodiversity Net Gain SPD in so far as new GI can help to secure improvements in biodiversity and new areas of biodiversity can form part of a wider area of GI. It should also be read in conjunction with the district council's Planning Obligations SPD².
- 1.4 The SPD will provide more detailed guidance when planning applications are submitted or being developed. The SPD does not form part of the adopted development plan but is a material planning consideration in decision taking.
- 1.5 This SPD is designed to assist prospective developers and applicants by providing guidance on how proposals can demonstrate they have met the requirements of planning policy related to GI in the Mansfield district. The SPD seeks to increase certainty in relation to GI in the development process and also ensure that GI provision, protection and maintenance is based on a clear and consistent approach.

Status of the SPD and production process

- 1.6 The National Planning Policy Framework (NPPF) sets out that supplementary planning documents (SPDs) are documents which add further detail to the policies of the development plan. They are a material consideration when determining planning applications but do not form part of the statutory development plan.

¹ <https://www.mansfield.gov.uk/local-plan/adopted-local-plan-2013-2033>

² <https://www.mansfield.gov.uk/spd>

- 1.7 The SPD has been prepared in accordance with the Planning and Compulsory Purchase Act 2004³ and the associated Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)⁴. The document is also prepared in accordance with the National Planning Policy Framework and National Planning Practice Guidance (NPPG).
- 1.8 The NPPG (Paragraph: 008 Reference ID: 61-008-20190315) identifies that SPDs should build upon and provide more detailed advice or guidance on policies in the Local Plan. They cannot, however, introduce new planning policies nor add unnecessarily to the cost of development. The NPPG also confirms that SPDs are normally excluded from the requirement for a Sustainability Appraisal (005 Reference ID:11-005-20190722).
- 1.9 Sections 11 to 16 of the Town and Country Planning (Local Planning) (England) Regulations 2012 (1) set out the legal requirements for the preparation of SPDs. In summary these require:
- A consultation period of at least 4 weeks to allow any person to make representations about the SPD;
 - A consultation statement setting out who has been consulted, a summary of the key issues raised and how these comments have been addressed in finalising the SPD.
- 1.10 The SPD was adopted by Mansfield District Council on 5 March 2024.

What is 'Green Infrastructure?'

1.11 Green infrastructure is:

“...a network of multi-functional green space and other green features, urban and rural, which can deliver quality of life and environmental benefits for communities.” (Town & Country Planning Association)⁵

1.12 GI is made up of networks of natural and managed green spaces i.e. parks, countryside, walking, cycling and bridleway routes and ecological networks. Green infrastructure can appear in many forms including formal and informal open spaces, playing fields, woodlands, allotments, private gardens, green roofs and sustainable drainage systems (SuDS). It also includes rivers, streams, canals and other water bodies (sometimes called 'blue infrastructure'). For the purposes of this SPD, all references to Green Infrastructure shall incorporate 'blue-infrastructure'.

³ <https://www.legislation.gov.uk/ukpga/2004/5/contents>

⁴ <https://www.legislation.gov.uk/uksi/2012/767/contents/made>

⁵ <https://www.tcpa.org.uk/green-infrastructure-definition>

Background

- 1.13 Good quality GI provides multi-functional benefits that support healthy communities, economic regeneration and resilience to climate change. GI networks also provide essential ecosystem services such as clean air and water, and flood protection. Thoughtful provision of GI can also enhance provision of Biodiversity networks providing habitats for flora and fauna and movement networks for animals and birds. Its protection and enhancement are important for supporting the delivery of sustainable places.

2. Proposed Guidance Areas

Content of the SPD

- 2.1 Based on the above it is considered that the SPD should provide more detailed guidance than Local Plan Policy IN2 covering the following matters:
1. Providing a 'checklist' of GI considerations integral to any scheme.
 2. Setting out the process – stages that developers and other site promoters should follow to ensure that GI can be satisfactorily built into new development
 3. Explaining how the 'functions and key assets' of the GI network can be protected and enhanced (policy IN2 1(a))
 4. Explaining how GI connections could be made from development to the wider area (policy IN2 1(b))
 5. Explaining what constitutes 'adverse GI impacts' and how to avoid them (policy IN2 1(c))
 6. Elaborating on how GI can contribute to climate change mitigation and improve our overall resilience to climate change impacts (policy IN2 1(d))
 7. Identifying gaps in GI that development could remedy or GI in poor condition that could be improved (local examples)
 8. More detailed guidance on achieving new GI or improvements to existing GI:
 - a. How new GI should be considered in new developments (on or off site); and
 - b. Developer requirements in demonstrating that the GI policy has been complied with.
 9. Setting out how GI will be secured by developer contribution / legal agreement (IN2(2))
 10. An indication (map based) of the key GI areas based on the 13⁶ strategic green infrastructure networks or areas within the Adopted Local Plan and

⁶ A 14th area of Green Infrastructure could be delivered as part of the mixed use development at Lindhurst.

those in the Green Infrastructure Study⁷ (Recreation, Nature Conservation, Climate Change, Historical Importance and visual & landscape character)

11. How the GI SPD links in with the Green Infrastructure Study. Most particularly:

- To identify GI opportunities where the Strategic sites identified in the study provide the potential.
- To elaborate on the 'Conserve, Create, Enhance and Restore' approach.

3. National Context

3.1 There is no specific legislation requiring the provision of GI. However, Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that:

“.....where in making any determination under the planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material consideration indicates otherwise”.

3.2 The policies of the Local Plan (in particular IN2 and IN4) seek the provision of GI and development should therefore accord with this unless outweighed by material considerations.

3.3 Developers and the Council need to have regard to protected species and habitats that are identified at the national or local level on existing or proposed Green Infrastructure sites.

3.4 Other relevant legislation includes:

- Natural Environment and Rural Communities Act (NERC 2006)
- The Countryside and Rights of Way Act 2000
- National Parks and Access to the Countryside Act 1949
- The Environment Act 1990
- The Environment Act 2021
- Wildlife & Countryside Act 1981 (as amended)

3.5 The SPD has been prepared in the context of national policy and guidance. The key elements of which are set out below:

⁷ <https://www.mansfield.gov.uk/local-plan/evidence-support-local-plan-1/3>

The National Planning Policy Framework (NPPF)

- 3.6 The NPPF 2021 (Paragraph 20) states that Strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for:

“... (d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.”

- 3.7 The NPPF (Paragraph 92) promotes healthy and safe communities and states that planning policies should:

“...enable and support healthy lifestyles... for example through the provision of safe and accessible green infrastructure, sports facilities...”

- 3.8 In relation to the importance of GI in respect of climate change resilience, adaptation and mitigation NPPF Paragraph 154 states:

“...new development should be planned for in ways that:

(a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and..

(b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the government’s policy for national technical standards.

- 3.9 In the context of air quality and pollution the NPPF states:

“.....Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement.....”

- 3.10 In summary, the NPPF encourages the provision and maintenance of Green Infrastructure.

National Planning Practice Guidance (NPPG)

- 3.11 The National Planning Practice Guidance (NPPG) considers provision of Green Infrastructure. In the context of adapting to and mitigating climate change, the NPPG states that:

“....This could be achieved in a variety of ways, for example:....

- *through the provision of multi-functional green infrastructure, which can reduce urban heat islands, manage flooding and help species adapt to climate change – as well as contributing to a pleasant environment which encourages people to walk and cycle.....⁸*

3.12 In the context of ‘uncertainty and climate risks through adaptation, the NPPG states:

“The impact of climate change needs to be taken into account in a realistic way. In doing so, local planning authorities will want to consider:

- *identifying no or low cost responses to climate risks that also deliver other benefits, such as green infrastructure that improves adaptation, biodiversity and amenity.....⁹*

3.13 The Natural Environment sections of the NPPG contain multiple references to Green Infrastructure. It reinforces its importance as a natural capital asset with multiple benefits including:

“.....enhanced wellbeing, outdoor recreation and access, enhanced biodiversity and landscapes, food and energy production, urban cooling, and the management of flood risk.”

3.14 The NPPG also recognises that GI can benefit the economy through helping to create high quality environments that are attractive to businesses and investors. It can help to achieve well-designed places through enhancing local landscape character, contributing to a sense of place and natural beauty.

3.15 It can also promote healthy and safe communities The NPPG states:

“Green infrastructure can improve the wellbeing of a neighbourhood with opportunities for recreation, exercise, social interaction, experiencing and caring for nature, community food-growing and gardening, all of which can bring mental and physical health benefits.Green infrastructure can help to reduce health inequalities in areas of socio-economic deprivation and meet the needs of families and an ageing population. It can also help to reduce air pollution and noise.¹⁰”

3.16 In the context of mitigating climate change the NPPG recognises that:

⁸ Paragraph: 004 Reference ID: 6-004-20140612

⁹ Paragraph: 005 Reference ID: 6-005-20140306

¹⁰ Paragraph: 006 Reference ID: 8-006-20190721

“Green infrastructure can contribute to carbon storage, cooling and shading, opportunities for species migration to more suitable habitats and the protection of water quality and other natural resources. It can also be an integral part of multifunctional sustainable drainage and natural flood risk management¹¹.”

- 3.17 The NPPG emphasises the links between Green Infrastructure and conserving and enhancing the natural environment including securing net gains for biodiversity.
- 3.18 The NPPG also gives extensive guidance on how GI can be incorporated in plan making and decision taking.

The Green Infrastructure Framework

- 3.19 The Green Infrastructure Framework¹² is a commitment in the Government’s 25 Year Environment Plan (DEFRA). It supports the greening of towns and cities and connections with the surrounding landscape as part of the Nature Recovery Network. Networks of green and blue spaces and other natural features are encouraged because of the benefits they bring in terms of nature and climate, health and prosperity.
- 3.20 The GI Framework seeks to help local planning authorities and developers meet requirements in the NPPF by considering GI in local plans and new development. It seeks to support better planning for good quality GI, and help to target the creation or improvement of GI, particularly where existing provision is poorest. It is considered by the government to be a core component of creating and maintaining sustainable places for the 21st century and supporting delivery of Biodiversity Net Gain and Local Nature Recovery Strategies. The Green Infrastructure Framework (GIF) was launched by Natural England on 31st January 2023.
- 3.21 On 31st January 2023, Defra launched the cross-Government Environmental Improvement Plan 2023¹³ (EIP23), the first five yearly refresh of the original 25 Year Environment Plan. EIP23 sets out a comprehensive delivery plan for the government’s approach to halting and then reversing the decline in nature, with progress measured against stretching interim targets. It builds on the vision in the 25 Year Environment Plan and sets out a delivery plan for each of the goals and targets. It is considered there may be the potential for some cross cutting themes between this plan and the GI Framework.

¹¹ Paragraph: 050 Reference ID: 7-050-20140306

¹² <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx>

¹³ <https://www.gov.uk/government/publications/environmental-improvement-plan>

The Climate Crisis – a guide for local authorities on planning for climate change guidance

3.22 The Climate Crisis – a guide for local authorities on planning for climate change guidance¹⁴ is a resource for local authorities jointly put together by the Town & Country Planning Association and Royal Town Planning Institute. The guidance includes a case study hub of examples of how local planning authorities have addressed climate change in their local plan policies including Green/Blue Infrastructure.

Natural England Guidance

3.23 Natural England has produced a variety of publications to assist Local Planning Authorities and developers with effective delivery of Green Infrastructure. Some of the main guidance areas include:

3.23.1 Natural England Planning and Design Guide¹⁵: The purpose of the Green Infrastructure Planning and Design Guide is to provide evidence based practical guidance on how to plan and design good green infrastructure. It complements the National Model Design Code and National Design Guide and can be used to help planners and designers develop local design guides and codes with multifunctional green infrastructure.

3.23.2 Process Journey Guidance¹⁶. Natural England has produced guidance for Neighbourhood Planning Groups, Local Planning Authorities and Developers. The guidance on process journeys seeks to address such issues as developing a green infrastructure strategy, seeking to successfully incorporate green infrastructure into a development proposal or making long term plans for a local area. The process journeys seeks to help embed Green Infrastructure informed decision making across and between organisations.

3.23.3 Green Infrastructure standards¹⁷: The Green Infrastructure Standards are a key component of the Green Infrastructure Framework. They define what good green infrastructure 'looks like' for local planners, developers, parks and greenspace managers and communities, and how to plan it strategically to deliver multiple benefits for people and nature.

3.23.4 Green Infrastructure principles¹⁸: Natural England has developed a set of GI Principles that underpin the GI Framework. The Principles are intended to provide a baseline for different organisations to develop stronger green

¹⁴ [The Climate Crisis – a guide for local authorities on planning for climate change - Town and Country Planning Association \(tcpa.org.uk\)](https://www.tcpa.org.uk)

¹⁵ [GI Design Guide \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

¹⁶ [GI Process Journeys \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

¹⁷ [GI Standards \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

¹⁸ [Green Infrastructure Principles \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

infrastructure policy and delivery. The principles cover the Why, What and How to do good green infrastructure.

3.23.5 Green Infrastructure Mapping tool: The GI mapping tool provides a useful source of evidence and can be used to demonstrate where GI is most needed within the community.

Other guidance

3.24 Other public realm guidance is available and relevant to informing the contribution that GI can make to the built and natural environment. This includes transportation guidance produced by Nottinghamshire County Council concerning the contribution that street trees¹⁹ can make to GI²⁰.

3.25 Other relevant historic Government guidance includes: 'Making Space for Nature: A review of England's Wildlife Sites and Ecological Network' (DEFRA); and, Biodiversity 2020: A strategy for England's wildlife and ecosystem services (DEFRA).

3.26 Sport England in conjunction Active Travel England (ATE) and the Office for Health Improvement and Disparities (OHID) has produced 'Active Design guidance'²¹. This sets out how the design of environments can help people lead more physically active and healthy lives.

¹⁹ www.nottinghamshire.gov.uk/media/3765118/appendix-d-street-tree-list.pdf

²⁰ www.nottinghamshire.gov.uk/transport/roads/highway-design-guide

²¹ [Active Design | Sport England](https://www.sportengland.org/active-design/)

4. Local Context

Mansfield Local Plan

- 4.1 The Mansfield District Local Plan 2013 – 2033²² was adopted in September 2020. The Local Plan’s ‘Vision’ sets out the council’s desire that by 2033:

“...Bus, cycle and pedestrian routes will have been improved providing attractive green infrastructure through the urban areas connecting to the wider countryside.....”

- 4.2 Objective 7 of the Local Plan seeks to:

“Improve the health and wellbeing of the district’s population and reduce health inequalities by ensuring residents and visitors have better opportunities to take exercise through convenient access to a range of good quality green space, green corridors, trails, leisure and community facilities and the countryside through appropriately designed places and well planned green infrastructure..”

- 4.3 Policy IN2 is the primary policy relating to ‘Green Infrastructure’. A copy of the policy is attached as Appendix A. In summary, the policy seeks to protect, maintain and enhance existing GI and to seek to provide new areas of GI through on-site provision or financial contribution. In particular, the policy seeks to support healthy communities, economic regeneration and resilience to climate change. The policy justification identifies that GI networks provide essential ecosystem services such as clean air and water and flood protection. It also indicates that the protection and enhancement of GI are important for supporting the delivery of sustainable places.

Neighbourhood Plans

- 4.4 Mansfield district has only one Neighbourhood Area for the Parish of Warsop. Preparations for a Neighbourhood plan are only at a very early stage and are not sufficiently advanced to have any detailed policy requirements in relation to Green Infrastructure and is not currently part of the development plan. Any Green Infrastructure policies within ‘made’ NPs will become part of the development plan.

²² <https://www.mansfield.gov.uk/local-plan/adopted-local-plan-2013-2033>

Mansfield Green Infrastructure Study

- 4.5 Mansfield District Council prepared a Green Infrastructure Study as part of the evidence base for its Local Plan in 2018. The study broadly set out:
- How strategic green infrastructure networks have been identified;
 - Descriptions, and reasons for, designation of strategic GI areas / networks and recommended actions for conserving and improving each network;
 - Background information used to identify the district's strategic GI networks broad functions and services that the district's strategic GI networks provide; and
 - Cross-boundary connections.
- 4.6 The Green Infrastructure Study recognised that just as growing communities require infrastructure (roads, schools, healthcare, employment etc.) GI also needs to be protected and enhanced in line with growth. Green infrastructure must also be viewed as an important asset that can be strengthened through and integrated with development.
- 4.7 Other specific components of GI were considered as part of the Local Plan evidence base, these included 'Community open spaces', playing pitches, Local Green Spaces and areas of biodiversity. Matters pertaining to biodiversity are covered in a separate Biodiversity Net Gain SPD prepared by Mansfield District Council.
- 4.8 Finally, the Council is aware that an updated Recreation Impact Assessment²³ (RIA) on the Clumber Park Site of Special Scientific Interest has been undertaken as evidential work contributing towards the emerging Bassetlaw Local Plan and the Newark & Sherwood Amended Allocations DPD. As a result, Natural England have updated their advice to indicate they wish to be consulted on applications within a 10km zone from the SSSI rather than the current 5.9 KM and thus includes a significant part of the district of Mansfield. Natural England have also highlighted the importance of neighbouring authorities to work in partnership towards both a future Local Nature Recovery Strategy and a Green Infrastructure Strategy which would identify a package of mitigation measures, including Suitable Alternative Natural Green Space (SANGs), Biodiversity Net Gain off-setting areas and land management agreements which will all contribute to the Nature Recovery Network. It is recognised that the study work in 2018 will help towards this future work. In the meantime, it is considered this SPD can help towards giving guidance to

²³ [Clumber Park SSSI Recreation Impact Assessment \(bassetlaw.gov.uk\)](https://www.bassetlaw.gov.uk)

developers who will fall within 10 Km Impact Risk and where potential impacts of a development cannot be ruled out depending on the scale and nature of development proposed. A map showing the zone of influence (Fig 7.2) has been produced by Newark & Sherwood District Council as part of their Habitats Regulations Assessment²⁴.

²⁴ <https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/local-development-framework/amended-allocations-and-development-management-dpd/Habitat-Regulation-Assessment-September-2023---being-printed.pdf>

5. General principles

- 5.1 Mansfield District Council are committed to embedding high quality, sustainable and multifunctional green infrastructure into new development in order to add value. There are many types of Green Infrastructure within the District which contribute to this network.
- 5.2 Green Infrastructure should seek to deliver multiple benefits including:
- Protection, enhancement and provision of recreation space - including open spaces (e.g. parks, amenity spaces, natural green space, outdoor sports provision), disused railways, cycle and walking routes (public rights of way), allotments and accessible woodland
 - Nature conservation – including enhancement and provision of designated and non-designated habitats and protection of species (including networks for movement of species), ecosystem functions and biodiversity.
 - Soils and geodiversity – including protecting existing and providing new soil resources.
 - Climate change – contributing to the mitigation of, and adaptation to, climate change including enhanced tree coverage, areas to regulate rain infiltration, green areas for flooding, carbon sequestration, energy production, temperature control and routes that encourage sustainable travel.
 - Historic landscapes and heritage assets - protecting the sites and settings of Scheduled Monuments, listed buildings, registered parks, historic graves, historic pathways and ancient hedgerows.
 - Landscape – protecting and enhancing important landscape character areas including separation between settlements and trees, woodland, heathlands and hedgerows that contribute to the Landscape character.
 - Design - Green infrastructure can contribute to the high quality places and spaces as part of urban design.
 - Community involvement - Green infrastructure can provide focus for social inclusion, community development, young person's education and lifelong learning.
 - Economy - Green infrastructure can improve the local economy by creating attractive places for investment, living, working, and to visit. High quality GI also helps increase the potential for increased land and property values.
 - Health – Green and blue infrastructure can offer substantial physical and mental health benefits. This includes areas of tranquillity.
 - Air Quality and noise reduction – Green and Blue infrastructure can help to address air quality issues through providing distance separation and species that help to trap pollutants. Substantial GI also helps to mitigate noise reduction.

- Blue infrastructure – GI includes ‘blue infrastructure’ which can contribute to amenity, water management, water quality and hydrological connections.
- Community involvement – GI can provide opportunities local communities and all people including: food provision, creation of meeting places & spaces and access to nature for all life stages.

5.3 Green Infrastructure improvements should be genuinely cross boundary in terms of improving linkages beyond development site boundaries and also beyond local authority administrative boundaries where development abuts these.

6. Supplementary Planning Guidance

- 6.1 The SPD sets out eleven areas which supplement policy IN2 of the adopted Mansfield Local Plan.
- 6.2 The guidance is set out below.

Types of GI to be considered

- 6.3 There are multiple types of GI within the Mansfield District. Each development will have a different impact on GI and will allow a variety of opportunities to protect, enhance and deliver new GI. New development should seek to accord with policy IN2 when considering the balance between the protection and enhancement of GI and the need for new development.
- 6.3.1 The Local Plan refers to several typologies of GI including: networks of natural and managed green spaces (parks, countryside, the water environment (blue infrastructure) and ecological networks. Evidence contained in the Green Infrastructure Study which underpins policy IN2 indicates further GI types including: protected sites, wildlife habitats and networks, river corridors, sustainable drainage systems, historic settings and other green heritage assets and green corridors with walking, cycling and bridleway routes.
- 6.3.2 The list of GI is not exhaustive and other forms of play, recreation, open spaces and accessible links can add value to the GI network.
- 6.3.3 In addition to strategic GI, there are opportunities to incorporate green features on a micro scale. Opportunities include: Living roofs and walls, Green boundary features, Wildlife-friendly garden boundaries, Bat roosting / bird nesting boxes, Ponds, hedgerows, trees and flowers, Wildlife-sensitive lighting, Wildflower lawns, Wildlife ponds, Reptile habitats, Bug hotels, and Micro-wildlife corridors.

GI SPD 1 – Types of Green Infrastructure to be considered

All new developments should consider the impact on existing GI and opportunities to provide new or enhanced existing Green Infrastructure of the right type in the right place. The following types of Green Infrastructure in Mansfield District should be considered in the following ways:

- **Woodlands, hedgerows and trees - Green infrastructure should enhance existing woodlands, hedgerows and trees and create new areas linking existing woodlands;**

- **Waterways - Green infrastructure should improve corridors along waterways (canals, rivers and other watercourses) and by linking water areas;**
- **Sport and recreation - Green infrastructure should create new formal and informal recreation opportunities;**
- **Natural environment - Green infrastructure should seek to integrate with the natural features and habitats;**
- **Flood plains and drainage areas - mitigation measures and sustainable drainage systems such as swales, balancing ponds, green roofs, ditches and ponds can contribute to GI;**
- **Urban green spaces - Green infrastructure should accommodate nature, wildlife and heritage and cultural assets, and provide for sport and recreation within urban green spaces;**
- **Heritage landscapes. The quality of GI can be enhanced by the presence of heritage features within a heritage landscape, such as within Conservation Areas, Scheduled Monuments, archaeological remains and their settings;**
- **Landscape character – Green infrastructure should contribute to the conservation, improvement and management of the local and wider landscape including countryside areas and links from the urban area; and**
- **Habitats of importance for their Biodiversity - Green infrastructure should maintain and enhance biodiversity resulting in a net gain of protected species and habitats and species and should support nature to recover and thrive everywhere, in towns, cities and countryside.**

Green Infrastructure design process

6.4 The process for assessing and delivering Green Infrastructure should be an integral part of development proposals in advance of submitting a planning application. A checklist approach for applicants and developers is provided to show how the design process can ensure that new development maximises opportunities for new well-integrated high quality GI whilst protecting existing GI provision.

6.4.1 Developers will be expected to follow a process in order to arrive at an appropriate design solution. The early stages of the process involve assessing the baseline situation and what opportunities exist locally to protect, enhance and provide new GI. There should also be consideration of the Council's evidence base (including reference to the Council's Green Infrastructure Study which identifies strategic green infrastructure networks and routes in the District and is accompanied by maps of the key locations).

6.4.2 The checklist identified in guidance GI SPD 2 below sets out the key steps to incorporating GI in the design process.

GI SPD 2 – Green Infrastructure in the Design process

When considering how best to protect GI and provide or enhance GI as part of designing development proposals, the following process checklist should be followed.

- 1. Seek pre-application advice and discussions with Mansfield District Council**
- 2. Consider the impacts on existing GI within the development site and how best to protect or enhance these**
- 3. Consider the opportunities on site that the proposed development could bring in enhancing GI**
- 4. Identify the characteristics of GI within and near to the site**
- 5. Consider the existing evidence base including the Green Infrastructure Study and associated maps to identify the location and nature of GI. Where possible seek to identify local aspirations of the Council and wider community for the provision and enhancement of GI**
- 6. Use information from steps from 1 to 4 above to identify the best opportunities for creating and / or enhancing green infrastructure on site and extending into wider GI networks**
- 7. For developments where community consultation is carried out at the pre-application stage this should be utilised to engage with the community to identify the potential GI improvements as part of wider pre-application community involvement**
- 8. Submit the planning application**

For major developments, the process for considering and arriving at GI solutions should be clearly set out in the accompanying Design and Access statement.

For small scale developments (defined as minor applications) applicants, developers and promoters are encouraged to follow steps 1 to 5 above in order to assess any potential implications.

Functions and key assets

6.5 Policy IN2 1(a) of the adopted Mansfield Local Plan indicates that:

“Development proposals within or adjoining areas of strategic green infrastructure (as shown on the Policies Map) will be supported, provided it can be satisfactorily demonstrated that:

a. the functions and key assets of the green infrastructure network are protected and reasonable opportunities for enhancement of these are secured to deliver a diverse range of benefits for people and wildlife...”

6.5.1 The strategic GI sites are identified in the Mansfield District Green Infrastructure Study. There are thirteen Strategic Green Infrastructure networks currently identified in Mansfield District. These include:

- Warsop and Meden Vale
- Oxclose Woods
- Woodhouse
- Meden Valley
- Timberland Trail
- Sherwood
- Cauldwell
- Mansfield Way
- Berry Hill
- Vicar Water
- Clipstone to Warsop
- Maun Valley
- Warsop Vale

6.5.2 Each of the networks identified have ‘functions and assets’ attributed to them, these are set out in detail in Appendix A of the ‘Green Infrastructure Study’ - “Strategic GI networks: assets, functions and enhancement needs”. Maps of the strategic network are also set out in the GI study. The maps identify the whole areas of GI and subdivide them into smaller parcels identifying the functions and assets of each parcel. The tables in appendix A make some recommendations as to how the parcels could be enhanced.

6.5.3 It is not the intention of this SPD to reiterate findings and recommendations of the Green Infrastructure Study, but to set out guidance to supplement the Local Plan Policy how to maximise the assets functions and enhancement needs of each of these GI networks, these are set out in detail in the Green Infrastructure Study.

6.5.4 A further ‘potential area of strategic GI has been identified at Lindhurst. This is dependent on the detailed design of a mixed use development which has the potential to deliver GI as part of a wider master plan.

GI SPD 3 – GI functions and assets

All development proposals, including those that directly impact on areas of existing identified GI should seek to protect their assets and functions. This includes those on site and those adjacent to the development.

The following Green Infrastructure Assets should be protected and enhanced:

- **Recreation and commuting – open space, allotments, and walking, cycling, horse riding and multi-user routes**
- **Landscape character and amenity – landscape policy zones, landscape features and public amenity areas (e.g. paths, open space, etc.)**
- **Climate change mitigation areas²⁵**
- **Heritage assets – Scheduled Monuments, listed buildings and conservation areas and their settings and the historic landscape**
- **Nature conservation - designated sites, habitats and habitat opportunity areas. Also include ecological networks made up of a combination of designated sites and areas of habitat outside these designations**

The following functions should be protected and where possible enhanced:

- **Allowing movement of people for commuting, leisure and recreation purposes**
- **Allowing movement of wildlife along corridors and providing locations for habitats to form and thrive**
- **Avoiding flood risk through protection of floodplains and the storage and regulation of surface water**
- **Assisting climate change by creating woodland and other green areas that provide shade and store carbon**
- **Providing green areas that protect heritage assets, landscapes and their settings including protecting underground artefacts and visual settings for built heritage assets**
- **Strengthen ecological networks, allow for ecosystem functioning and reduce fragmentation of habitats**
- **Deliver Biodiversity Net Gain requirements**
- **Contribute to cross species objectives such as pollinator strategies**
- **Integrate with the Nature Recovery Network and Local Nature Recovery Strategies**
- **Help achieve targeted individual species recovery**
- **Provide an opportunity to link with Natural Capital**
- **To provide opportunities for communities to be physically active allowing positive impacts on people’s mental and physical health and well-being**

Where development is proposed within or adjoining²⁶ areas of Strategic Green Infrastructure as identified in the Mansfield Local Plan and Green Infrastructure Study, developers should add value to those areas by seeking to

²⁵ This can include areas which address the causes and effects of climate change such as increased tree planting and flood attenuation measures. This list is not exhaustive.

²⁶ ‘Adjoining’ the GI network includes areas where is close enough to impact upon that network.

implement the enhancement needs identified for those particular areas as set out in Appendix A of the Green Infrastructure Study.

GI connections to the wider area

6.6 Policy IN2 (b) requires new development to provide and maintain good quality connections to, and within, the green infrastructure network for people and wildlife. The policy seeks to improve accessibility and ensure new GI links are created and / or gaps restored.

6.6.1 The GI network maps in the 'Green Infrastructure' study show the location of the strategic areas of GI. A key function of Green Infrastructure is that it forms a 'network of multi-functional green space. Value is added where the network is connected.

6.6.2 The District Council has collected evidence of gaps in the strategic GI network where opportunities exist to improve the network.

GI SPD 4 – Connected Green Infrastructure

Where development proposals are located within or adjacent to Strategic Green Infrastructure, opportunities to bridge any physical gaps in GI or provide meaningful connections to existing GI should be explored.

No development should cause harm to the integrity of identified areas of Green Infrastructure by allowing built development to encroach on the connectivity of GI networks. Where operational development (buildings or engineering operations) is proposed, it should be demonstrated that this does not have an adverse impact on the integrity of the Green Infrastructure.

Opportunities should be explored to enhance the quality of sites, expansion of existing sites and connection of isolated sites through creation of new or expanded corridors and stepping stones. The key aim should be for bigger, better and more joined up GI.

The following methods of connecting GI within and outside of development proposals should be explored:

- **New Walking and cycling routes for commuting and / or improved trails for multi-user access for leisure and recreation²⁷**
- **New ecological links through use of existing and new hedgerows, trees and woodlands, meadows, semi-natural grasslands**

²⁷ Subject to deterring inappropriate access to sensitive sites that could adversely harm important biodiversity or be a risk to site users.

- **New formal and informal sports and open spaces that link new and existing networks including sports, leisure & recreation, allotments, and natural play areas**
- **Using waterways including rivers, streams and connected ponds and lakes. This could include re-naturalising watercourses.**

Managing impacts on GI

6.7 Policy IN2(c) of the Mansfield Local Plan seeks to avoid “...*significant adverse impacts on sensitive landscape, ecological and heritage assets and their setting...*”

6.7.1 The policy does not specifically identify what constitutes a significant detrimental impact or how these can be avoided as part of development proposals.

6.7.2 The key ways of avoiding adverse impacts on Green Infrastructure are through approaches that seek to Conserve, Create, Enhance and Restore areas.

GI SPD5 - Optimising impacts on GI

All new developments should seek to add value and avoid adverse impacts to existing Green Infrastructure. The following approaches should be pursued:

Conserve:

Approaches will be supported that protect the functions, features, connectivity, and/or distinctiveness of existing areas of GI. Distinctive GI areas can include those that are valued for their landscape quality, biodiversity value, heritage assets, including their setting, recreational value and / or visual amenity.

Create:

Approaches will be supported that prioritise the creation or re-creation of GI features as part of new development proposals or areas where these have been lost (through management practices, development or neglect). New development should seek to identify and rectify gaps in the existing GI network that result in a lack of connectivity.

Enhance:

Approaches will be supported which improve the function of existing key features or areas within the strategic GI network. This could be through the creation of larger, better quality and better linked GI areas that result in more-connected areas for wildlife.

Restore:

Approaches will be supported that focus on repairing or re-establishing features and areas that are in a state of decline.

Manage:

New and existing areas of GI within new developments should be designed so that they are accessible for future maintenance and management of the key features and areas.

Adverse impacts should be avoided in all cases. Adverse impacts arising from new development include those that would:

- **reduce the size of existing areas of GI**
- **have an adverse impacts on the quality of existing areas of GI or**
- **would truncate the network of linked spaces or make the movement of people and / or wildlife more difficult**
- **reduce accessibility for any members of the community and reduced ability for high quality people-nature connections**

Green Infrastructure and Climate Change

6.8 Policy IN2 1(d) of the Mansfield Local Plan seeks to encourage opportunities to improve resilience to the impacts of climate change.

6.8.1 Protection and development of Green Infrastructure is an effective strategy for both mitigation of and adaptation to the impacts of climate change.

6.8.2 GI makes places more resilient and adaptive to climate change and helps to meet zero carbon and air quality targets. Green Infrastructure can contribute to mitigating the causes of, and providing resilience to the impacts of climate change in the following ways:

- carbon capture and sequestration in new vegetation (urban trees and woodlands)
- providing meaningful alternatives to the use of private cars through provision of routes for walking and cycling and other sustainable modes of transport
- urban cooling through provision of vegetation
- water attenuation (including sustainable drainage systems)
- preserving areas capable of accommodating flood water
- improving the natural qualities of river corridors to prevent bank erosion and controlling invasive non-native species that can impact on bank erosion

6.8.3 There is a substantial amount of evidence that demonstrates the impacts of climate change are affecting Mansfield District. This includes evidence of the extent of flooding provided through Environment Agency flood maps and Strategic Flood Risk Assessment.

GI SPD6 – Green Infrastructure and Climate Change

Provision of new and improvements to existing, Green Infrastructure should seek to address the causes and effects of climate change. The following measures will be sought wherever feasible in new developments:

- **Creation of linked footpaths and cycle routes that encourage commuting, leisure and recreation journeys as part of GI networks within and beyond development sites.**
- **Provision of trees, hedgerows and creation of new woodlands to maximise carbon storage, flood water management and provide urban cooling**
- **Sustainable drainage systems that attenuate the flow of water**
- **Retention and restoration of floodplains and creation of new features that regulate downstream flows such as the creation of balancing lakes that form part of the linked network of GI**
- **Greening of river corridors and bankside vegetation to prevent bank erosion and reduce run-off**
- **Provision of green roofs and walls to provide micro wildlife habitats and regulate surface water run-off**
- **Provision of urban farms and allotments to minimise food miles**
- **Renewable energy generation (such as ground-source heat pumps) can be incorporated into green and blue space**
- **Blue spaces (such as ponds, lakes and rivers) which can have a cooling impact and reduce urban temperatures**
- **Creation and restoration of natural habitats can help to sequester carbon**

Improving the quality of Green Infrastructure networks

6.9 Policy IN2 1(e) of the Mansfield Local Plan seeks to encourage opportunities to improve the GI network to improve ecosystem networks and services and healthy neighbourhoods.

6.9.1 The Mansfield Green Infrastructure Study sets out the ‘enhancement needs’ for each of the thirteen strategic areas of Green Infrastructure. The principles underpinning these enhancements can be applied to new areas of Green Infrastructure. The nature of the enhancement will depend on the nature,

scale and location of the development proposal and the type of GI within and adjacent to the site.

6.9.2 GI Improvement measures are wide ranging and can serve many functions including: improving accessible routes, biodiversity enhancements, play and open space betterment, climate change adaptation, sustainable drainage and enhancing the setting of heritage assets. Provision of play and open spaces and new pedestrian and cycle links can contribute towards improved physical and mental health.

GI SPD7 - Improving the quality of GI networks

New development proposals that have a direct or indirect impact on Strategic GI networks identified in the Local Plan should seek to contribute towards the 'Recognised enhancement needs' identified in the Mansfield Green Infrastructure Study 2018.

Where development has an impact on areas of Green Infrastructure not identified as 'Strategic' in the Mansfield Local Plan, development proposals should consider how quality could be improved or existing high quality areas maintained. This includes measures such as:

- **Improving the quality of existing GI and open spaces through better drainage, enhanced tree and other planting, restoring natural grassland, woodlands and other distinctive habitats**
- **Creating new ponds and water areas**
- **Creating new accessible walking and cycling links and / or enhancing and better integrating existing routes and encouraging multi-user trails**
- **Connecting areas of GI through the location of new open spaces and corridors**
- **Deliver mechanisms to discourage harmful recreational access to areas of sensitive high quality Green Infrastructure**
- **Improving ecological links and connections to allow movement of fauna**
- **Reinforcing and improving field boundaries that are retained on site**
- **Introducing opportunities for enhanced Bio-diversity**
- **Provide Sustainable Drainage Systems which contribute towards water attenuation, bio-diversity and visual amenity**
- **Providing a GI context for heritage assets and having regard to the significance of heritage assets and their setting.**

When designing and implementing open space provision as part of GI, the following approach should be pursued:

- **Primary and secondary entrances are positioned so they are easy to locate from roads and/or main paths leading to the open space**

- Routes into open spaces are safe and welcoming (e.g. good visibility and surveillance, accessible to all users and signage is easy to read and accessibly positioned)
- Routes through and around the site are safe and provide appropriate smooth surfacing and minimise difficult slopes.
- Routes take account of access to facilities and seating areas.
- Routes are accessible for all including people with mobility, sensory and learning needs, mental health needs, people with pushchairs and older people.
- Parking provision of an appropriate scale for larger areas of open space.

The 'recognised enhancement needs' identified above are not exhaustive. Further assessment at a more site-specific level may be required in order to inform the most appropriate improvement opportunities.

Each site will have different GI solutions dependent on the nature, scale and location of development proposals. Solutions should be based on an assessment of on-site and nearby GI and tailored to seeking the optimum solution.

GI improvements should be made within and adjacent to new development and where this is not feasible or desirable as close as possible to the proposal.

Long term Maintenance of GI

- 6.10 Policy IN2 (f) seeks to secure future management of any GI features created. The policy indicates that GI features should be financially secured through an agreed management plan. Maintenance and monitoring of Green Infrastructure is essential to ensure its long-term retention. The mechanism for securing the delivery of areas of GI will normally be through planning conditions and / or Section 106 Planning Obligations, this includes where off-site compensation is sought.
- 6.10.1 Mansfield District Council supports planning applications that are accompanied by a 'Green Infrastructure Management Plan'. Planning applications for major development (including Outline and Detailed applications and reserved matters) should include plans or a written explanation of how Green Infrastructure will be enhanced as part of the submission. In most cases, Mansfield District will apply a condition or Section 106 obligation to ensure conformity with the agreed Green Infrastructure proposals.
- 6.10.2 Where a full Green Infrastructure Management Plan is not submitted (for example on outline planning applications where final design details are not

known), a condition will be sought that seeks to ensure that the development in question cannot be commenced unless a Green Infrastructure Management Plan is submitted to and approved by the local planning authority as part of the reserved matters application. It is the responsibility of the applicant / site promoter / developer to devise the strategy and to be clear how it will deliver Green Infrastructure.

- 6.10.3 Where a Green Infrastructure Management Plan has been submitted and agreed, planning conditions or Section 106 obligations will be used to secure the GI enhancement, maintenance and monitoring agreed through the plan.
- 6.10.4 Where financial contributions are required in order to deliver and subsequently maintain GI this will be secured through a Section 106 agreement. The amount of contribution will be dependent on the scale and nature of development. Where long term management is proposed by a Management Company, this should be made clear during the early stages of decision making and will be secured through legal agreement.
- 6.10.5 The Council has prepared a supplementary planning document on Planning Obligations. This contains further guidance relating to Green Infrastructure, community open space, playing pitch provision and allotments. It addresses planning contributions for community open spaces, allotments, sports pitches and wider green infrastructure (GI) requirements. The Planning obligations SPD indicates that on-site provision and / or off-site contributions may be required for one, or a combination, of these types of green space provisions. This will depend on, for example: location, type, and size of development, and what need there is nearby.
- 6.10.6 The long-term management and maintenance of GI is critical to achieving multifunctionality. GI benefits can be delivered across administrative boundaries. This means that the management of one site can affect the ability of another. As a consequence there is a need to take a strategic view of GI management across and between areas and networks.
- 6.10.7 At a site level, management and maintenance considerations must be included early in the design process. Developers should positively manage GI to provide benefits into the future. In developments implemented in phases, this should be a consideration long term.
- 6.10.8 Involving local communities and local stakeholders in discussions on long term management and delivery can be valuable. This has to be matched by appropriate resources and funding.

GI SPD 8 – Securing GI in the long term

A. Mansfield District Council will use planning conditions and Section 106 legal agreements to secure the provision, maintenance and long term

monitoring of Green Infrastructure required as part of development proposals.

- B. Detailed Planning applications that require GI should be accompanied by a Green Infrastructure Management Plan to set out goals for provision of GI, the means by which these goals will be achieved, their maintenance and monitoring. Planning conditions or Section 106 legal agreements will be used to ensure compliance with the Green Infrastructure Management Plan.**
- C. Where development proposals are accompanied by a robust Green Infrastructure Management Plan that has been agreed, conditions will be attached to secure compliance with it.**
- D. Where outline planning applications are permitted, a planning condition will normally be applied that seeks submission of a detailed Green Infrastructure Management Plan at reserved matters stage.**
- E. Where Green Infrastructure improvements are proposed off-site, Section 106 agreements will be required to ensure delivery and on-going maintenance. In some circumstances the council will consider the use of ‘Conservation covenants’ to secure off-site delivery.**

Green Infrastructure and Biodiversity Net gain

6.11 In addition to the Green Infrastructure SPD, Mansfield District Council have produced a Biodiversity Net Gain SPD which sets guidance on how developers can seek to deliver BNG as part of new development. In particular, the SPD seeks to elaborate on the Biodiversity policy NE2.

6.11.1 There are opportunities for new Green Infrastructure to accommodate Biodiversity Net Gain and for BNG solutions to become part of wider GI solutions themselves to incorporating Green Infrastructure. Some forms of GI lend themselves to incorporating Green Infrastructure.

6.11.2 The Planning Practice Guidance recognises that:

“...High-quality networks of multifunctional green infrastructure contribute a range of benefits, including ecological connectivity, facilitating biodiversity net gain and nature recovery networks and opportunities for communities to undertake conservation work.”

6.11.3 The ‘Green Infrastructure’ and ‘Biodiversity Net Gain²⁸’ Supplementary Planning Documents have been prepared separately, however, they should be read in conjunction, along with the Planning Obligations SPD in order to

²⁸ <https://www.mansfield.gov.uk/downloads/file/5285/adopted-sustainable-drainage-systems-suds-spd>

deliver mutual benefits. Mansfield District Council is participating in the development of a 'Local Nature Recovery Strategy' and has a recently adopted Biodiversity Opportunities Map²⁹ (BOM) for the district.

GI SPD 9 - Green Infrastructure and Biodiversity Net Gain

Where new development is required to provide Biodiversity Net Gain³⁰, opportunities should be explored to provide the BNG within areas of Green Infrastructure. Options for delivering BNG in Green Infrastructure include:

- **Multi-functional habitats on green buildings roofs and terraces**
- **Tree-lined streets and the retention of hedgerows within developments**
- **As part of Sustainable Drainage Systems which enhance biodiversity for example by incorporating ditch habitats and pond networks**
- **Natural Green Spaces within open spaces**
- **Creating larger-scale natural habitats within informal open spaces, country parks and play areas – subject to no adverse impacts resulting from public access**
- **An extensive network of green and blue corridors and natural habitat**
- **Linear routes for cyclists and pedestrians containing opportunities for habitat creation**
- **Transport links (streets, railway lines, cycleways etc.) that include verges of priority habitat, hedgerow, wildflower-rich grassland along railway lines, roads, streets, and pedestrian and cycle networks**
- **Providing refuges and corridors for climate sensitive species within the landscape and individual sites including pollinator corridors**

Sustainable Drainage Systems (SuDS)

6.12 Mansfield District has received funding from Severn Trent Water to carry out Sustainable Drainage Systems as part of the redevelopment of Mansfield Town Centre.

6.12.1 Well-designed Sustainable Drainage Systems can contribute to Green Infrastructure networks in Mansfield. Nature-based flood-prevention and mitigation schemes have been developed in partnership with Severn Trent Water, these include SuDS schemes within Mansfield town centre and on other development sites within the district. In addition to drainage and flood prevention benefits, the proposals have positive impacts on Green

²⁹ The Biodiversity Opportunities Map can be access here: <https://nottsbag.org.uk/wp-content/uploads/2023/04/The-Mansfield-BOM-Project-Report-FINAL-April2023.pdf>

³⁰ [Understanding biodiversity net gain - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/understanding-biodiversity-net-gain)

Infrastructure and the mental and physical well-being and health of people in Mansfield.

- 6.12.2 These nature-based solutions include swales, raingardens, street trees/planters, permeable paving and inner-city ponds and wetlands.
- 6.12.3 Mansfield District Council has identified a number of potential development sites as potential options to accommodate Sustainable Drainage Systems in partnership with Severn Trent Water.
- 6.12.4 The National Planning Policy Framework encourages the use of SuDS. Well-designed public open space that incorporate SuDS can have multiple benefits including, enhanced bio-diversity, visual appearance, social cohesion and quality of life improvements.
- 6.12.5 The Mansfield Green Infrastructure Study 2018 identifies areas that bring together information on the Environment Agency's fluvial (river and other water body) flood risk and surface water flood risk areas, and other areas with low permeable soils and other surface water flood risk areas. The study also encourages exploring the potential for green sustainable drainage systems priority areas, and areas currently culverted. There is potential for optimising the use of sustainable drainage systems and other areas that seek to combat flooding and the impacts of climate change for Green Infrastructure purposes.
- 6.12.6 Mansfield District Council has produced a 'Sustainable Drainage Systems' SPD³¹ that seeks to set out the Council's approach to delivering SuDS as part of new development.

GI SPD 10 Green Infrastructure and Sustainable Drainage Systems

All new developments should consider the potential to deliver Green Infrastructure that contributes towards Sustainable Drainage Systems (SuDS). The following types of sustainable drainage systems should be considered:

- **swales,**
- **raingardens,**
- **street trees/planters,**
- **permeable paving and**
- **inner-city ponds and wetlands**

Sustainable Drainage systems that create or contribute towards linked networks are encouraged

³¹ <https://www.mansfield.gov.uk/downloads/file/5285/adopted-sustainable-drainage-systems-suds-spd>

Development within Mansfield town centre should seek to complement and contribute towards town centre GI proposals for Sustainable Drainage Systems being developed as part of town centre improvements

GI proposals that incorporate Natural Flood Management (NFM) will be encouraged where these provide improvements to flood risk and wider environmental enhancements.

Proposals on sites identified as options for SuDS in conjunction with Severn Trent Water should seek to ensure that SuDS also makes a contribution towards local provision of new or enhancement of existing Green Infrastructure and be in agreement with the SuDS SPD³².

GI areas in Mansfield District

- 6.13 Policy IN2 of the Mansfield Local Plan 2013 – 2033 identifies thirteen Strategic Green Infrastructure networks in Mansfield District. These are referred to in paragraph 6.5.1 above. A map of the strategic areas of Green Infrastructure is attached as Appendix B. The Strategic GI comprises large rural areas including farmland, woodland, river catchments and other areas of open countryside. Green Infrastructure in the Mansfield District is also made up of other smaller parcels of land that serve various functions. GI can be found in recreation areas, around heritage assets, areas of land that seek to mitigate and the impacts of climate change and contribute to ecological networks.
- 6.13.1 There are multiple sites in Mansfield accommodating various leisure recreation uses (allotments, parks and green spaces); linked trails or other undeveloped areas including restored mineral sites. These are shown in Appendix C.
- 6.13.2 Other Green Infrastructure is formed from heritage assets and their settings. This includes Registered Parks & Gardens (Nottingham Road Cemetery is Grade II listed), Conservation Areas, Scheduled Monuments, Listed Buildings and non-designated heritage assets. Not all of the heritage assets can be considered Green Infrastructure but their settings can make a useful contribution towards the network of linked spaces. Existing Heritage Green Infrastructure is shown on the map in Appendix D.
- 6.13.3 Green Infrastructure can play role in climate change mitigation, adaptation and resilience. The council's Green Infrastructure Study 2018 identified areas of land that had the potential to address climate change issues. These are not exhaustive and the council continues to identify areas that could be used for climate change off-setting or where the provision of Sustainable

³² <https://www.mansfield.gov.uk/downloads/file/5285/adopted-sustainable-drainage-systems-suds-spd>

Drainage Systems could contribute to reducing downstream flooding events following exceptionally high rainfall. Areas of Green Infrastructure and their relationship with potential climate change improvements is shown in Appendix E.

6.13.4 Mansfield District contains a rich network of ecological sites. Many of these sites can contribute towards Green Infrastructure networks within the district, particularly allowing the movement of wildlife. A map of the ecological networks is shown in Appendix F.

GI SPD 11 - GI areas in Mansfield District

Development proposals that are located within or adjacent to existing Green Infrastructure which includes Recreation, Heritage, Climate Change & Sustainable Drainage and ecological networks should explore opportunities to improve their quality, quantity and connectivity.

New development should not cause harm to the quantity, quality, connectivity and integrity of identified areas of Recreation Green Infrastructure. Proposals should consider where areas of recreation GI can be enhanced through measures such as provision of new hard and soft landscaping, improved drainage, provision of new pedestrian and cycling links. Where recreation sites abut other areas of GI, developments should seek to improve connectivity for people and wildlife.

Where new development has an impact on GI containing or surrounding Heritage Assets, no harm to the asset or its setting should result. Opportunities should be explored to provide 'interpretation' of the asset as well as meeting the legal duties not to cause harm to the designated asset or its setting. In addition regard should be given to relevant local plan and national planning policies related to designated, and none designated heritage assets.

Opportunities should be explored to mitigate some of the causes and effects of global warming on areas identified as Climate Change GI. This could include opportunities for new tree planting (for carbon capture), provision of swales (to attenuate filtration to groundwater) or creation of balancing ponds and lakes (for water attenuation).

Opportunities should be explored to improve areas that are identified as Green Infrastructure that contain important ecological networks. New developments should seek to protect and supplement important habitats and create linkages for the movement of wildlife.

Proposals should avoid negative impacts upon existing GI. Built development is permitted provided that reasonable enhancements to the GI network are

made, preferably on site. Enhancements could include greater quantity, improved quality and / or improved linkages.

In all circumstances where new or improved GI is delivered within or close to designated sites such as Sites of Scientific Interest (SSSI), Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) within and close to the administrative boundary of Mansfield District the implications of GI on these designations should be carefully considered.

Appendix A - Policy IN2 Green infrastructure

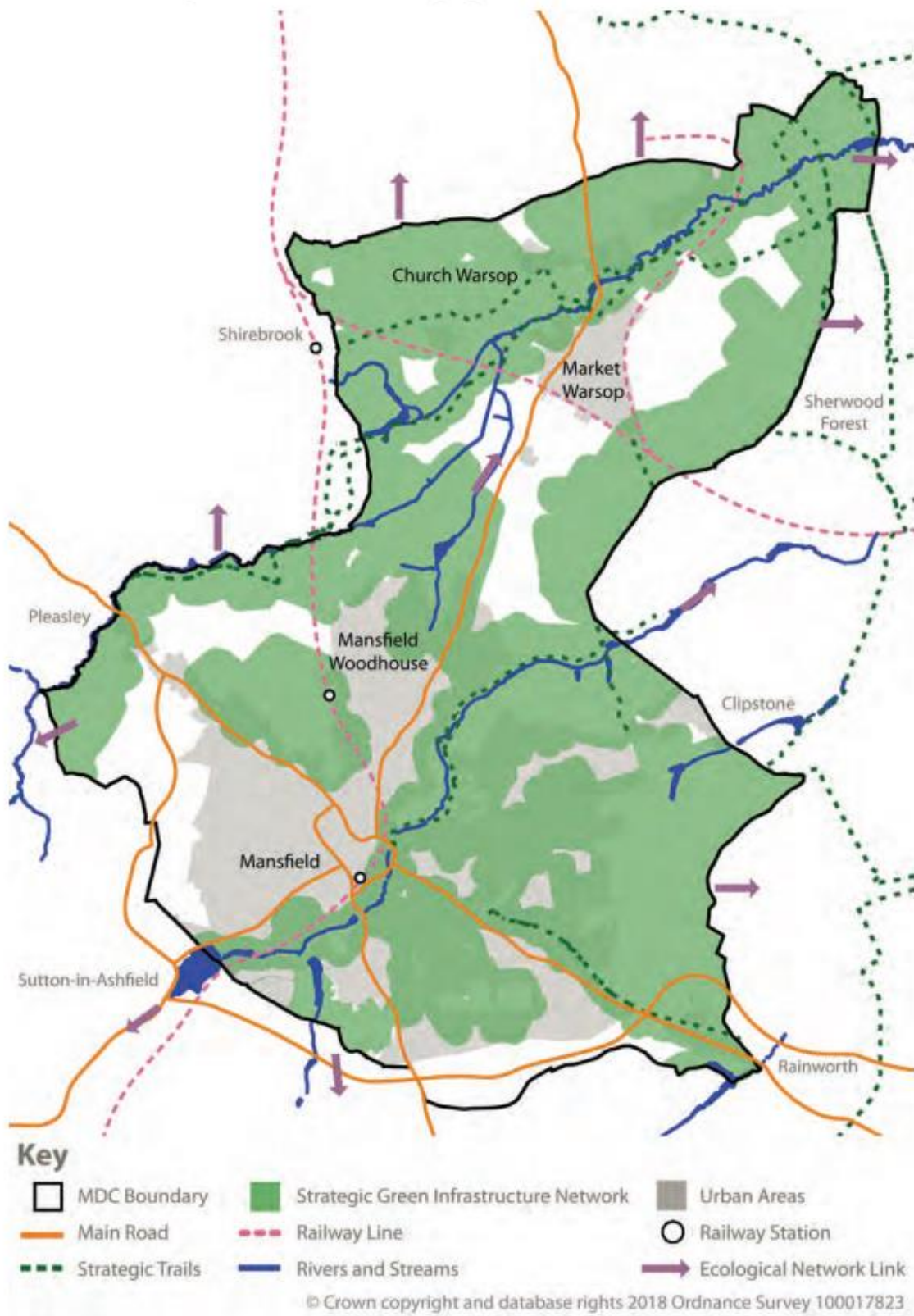
1. Development proposals within or adjoining areas of strategic green infrastructure (as shown on the Policies Map) will be supported, provided it can be satisfactorily demonstrated that:

- a. the functions and key assets of the green infrastructure network are protected and reasonable opportunities for enhancement of these are secured to deliver a diverse range of benefits for people and wildlife;
- b. good quality connections are maintained to, and within, the green infrastructure network for people and wildlife and, where practical, improve accessibility to ensure new links are created and / or gaps restored;
- c. significant adverse impacts on sensitive landscape, ecological and heritage assets and their setting are avoided where possible or at least minimised, including through the use of buffer strips;
- d. opportunities are secured, where feasible, to improve resilience to the impacts of climate change;
- e. the quality of the green infrastructure network is improved, such that it supports improved ecosystem networks and services, and healthy neighbourhoods; and
- f. future management of any features created is financially secured through an agreed management plan.

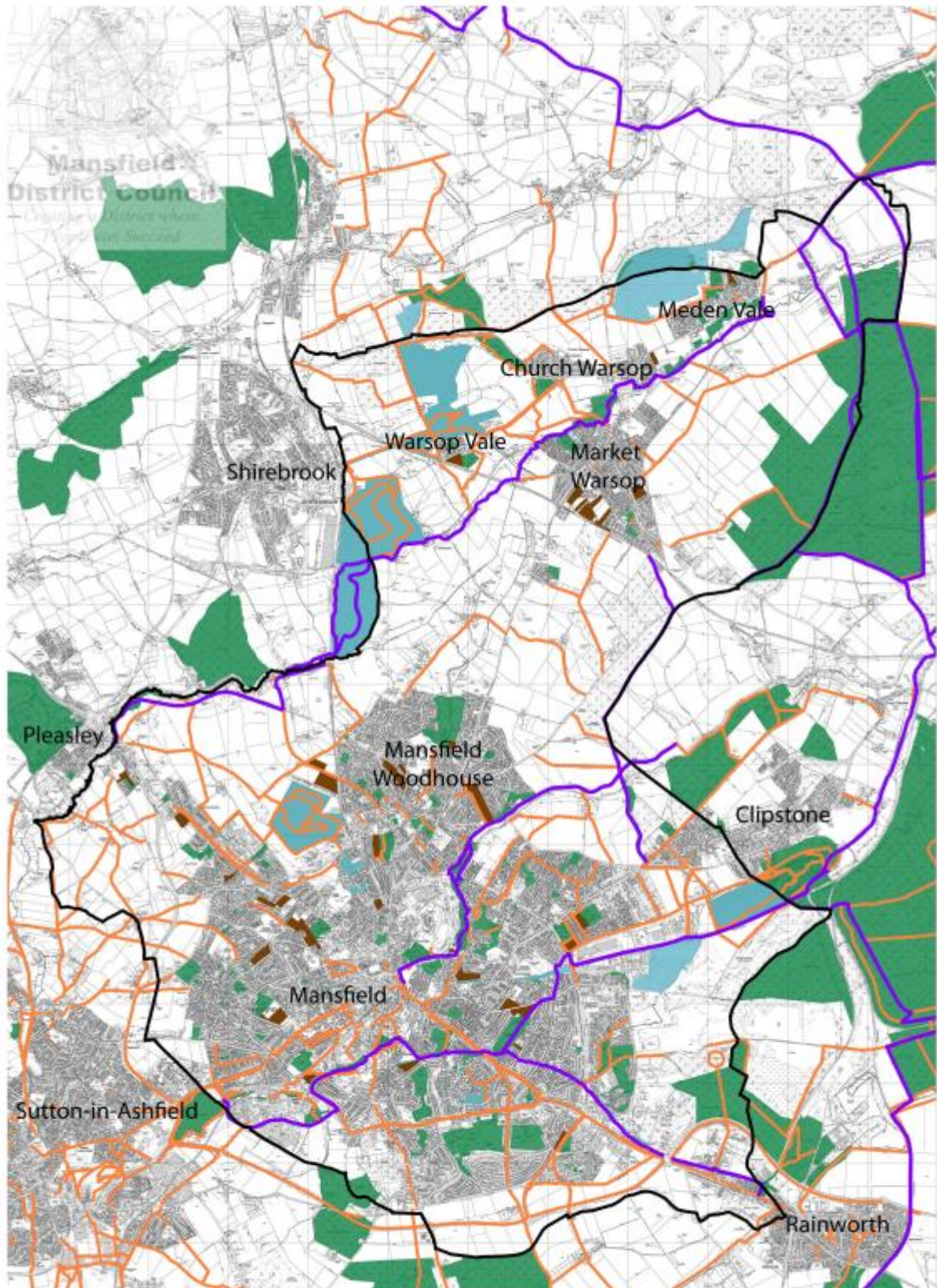
2. On and off-site contributions for new, and where appropriate enhancements to existing, provision will be secured through developer contributions or conditions.

3. Development outside, and not adjoining, the strategic green infrastructure network should, where appropriate, create local green infrastructure or provide links to the strategic network.

Appendix B – Map of all Strategic Green Infrastructure

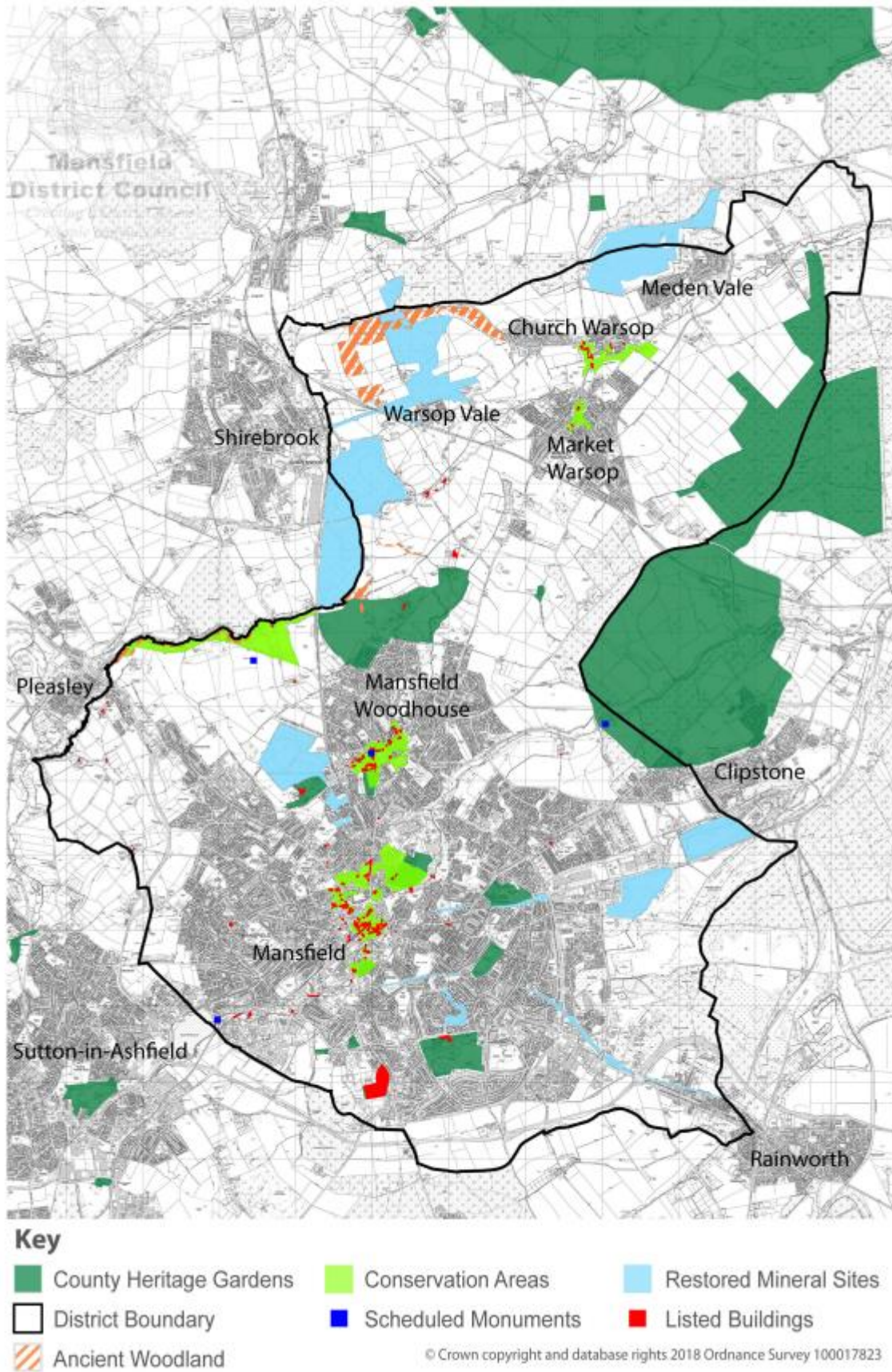


Appendix C – Recreation based Green Infrastructure

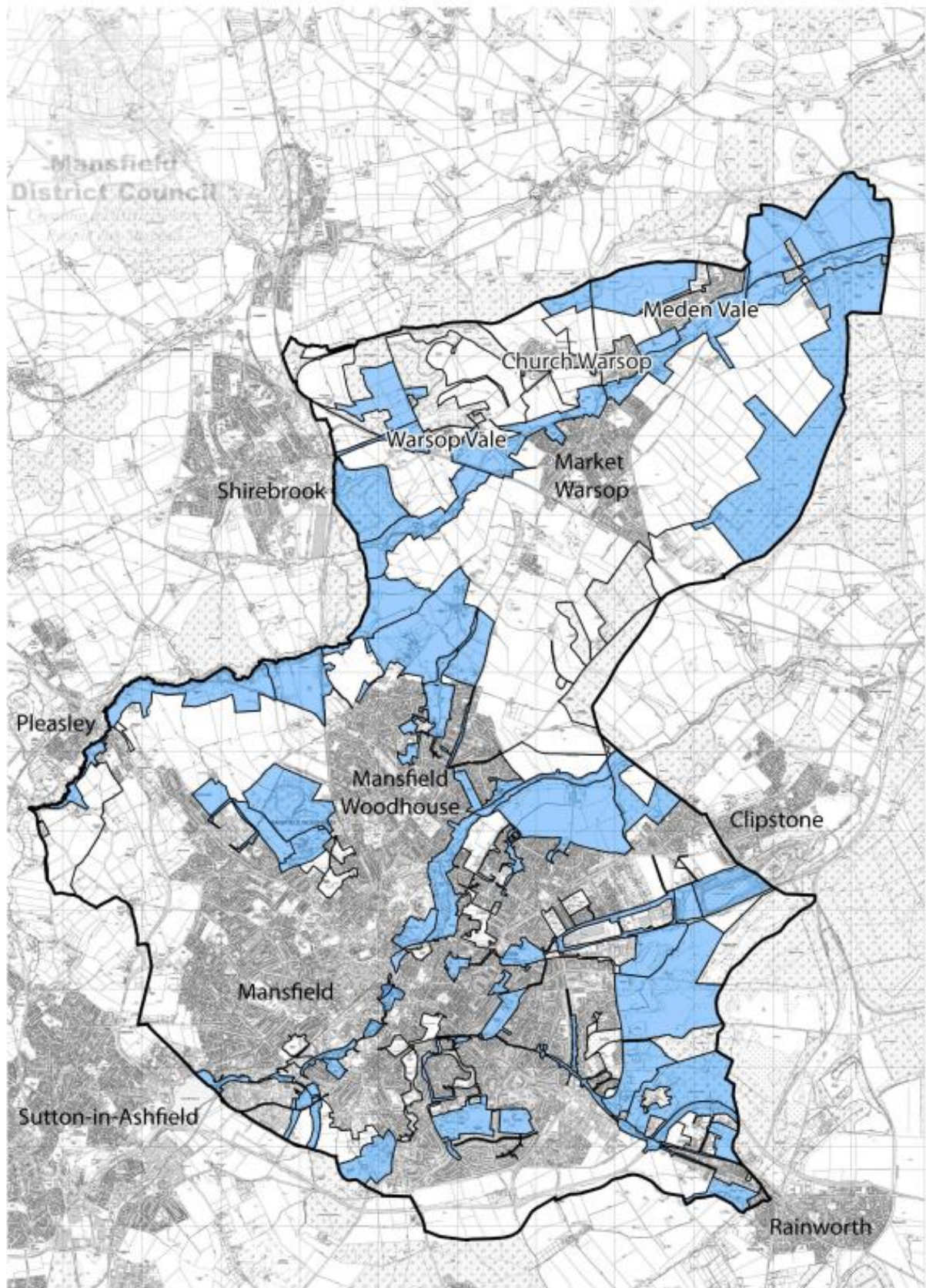


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Appendix D – Heritage based Green Infrastructure



Appendix E – Green Infrastructure and Climate Change mitigation areas



Legend



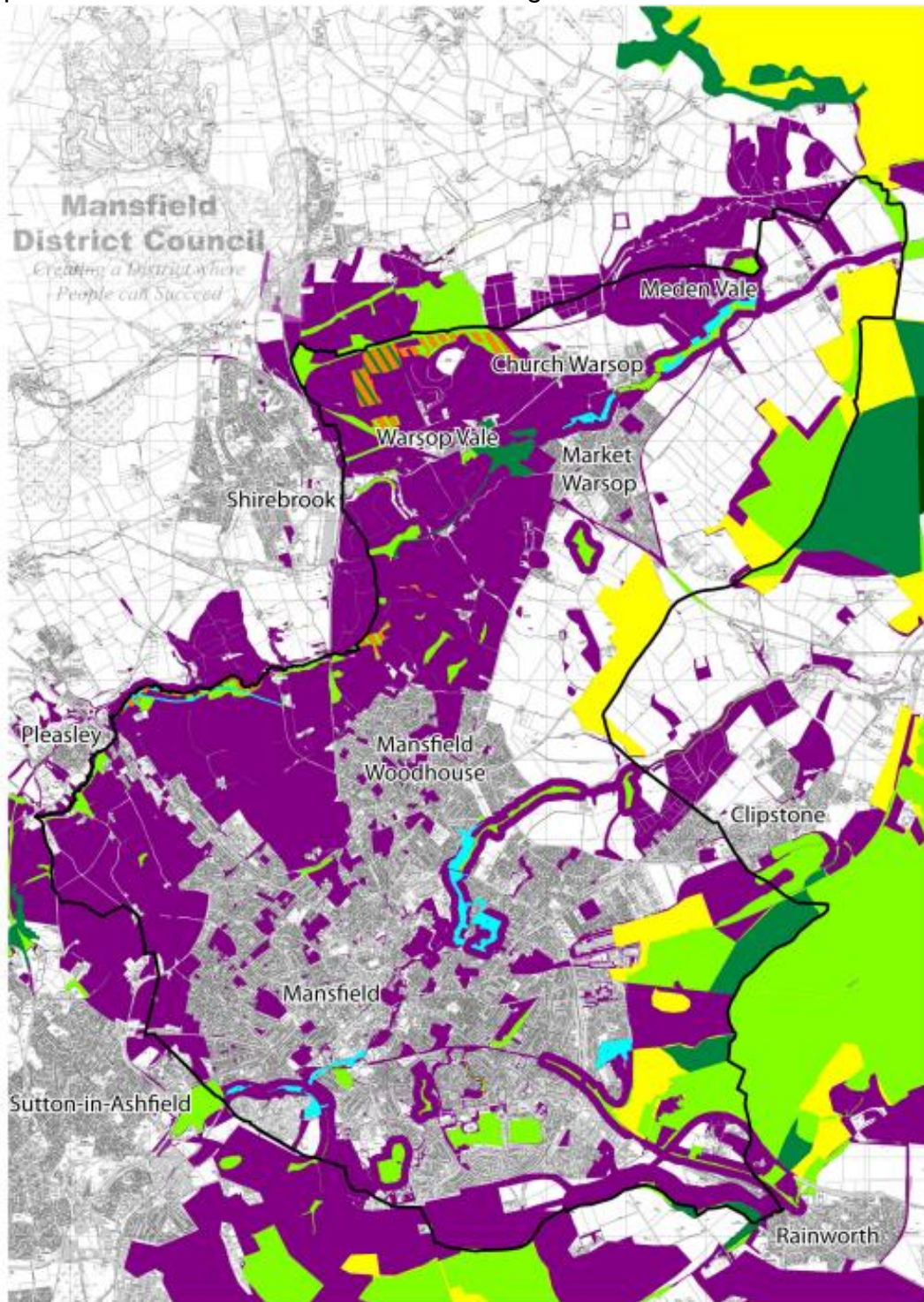
Climate Change



Green Infrastructure

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Appendix F – Green Infrastructure and ecological networks



Key

- | | |
|---|--|
|  Habitats |  Site of Special Scientific Interest (SSSI) |
|  Local Wildlife Site (LWS) |  Special Area of Conservation (SAC) |
|  Local Nature Reserve (LNR) |  Ancient Woodland |
|  Sherwood possible potential Special Protection Area (ppSPA) |  District Boundary |

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