

1 Green Infrastructure Plan

1.1 Introduction

1.1.1 The Greensand Trust was commissioned in early 2023 by the BLCNPSC to produce a 'Green Infrastructure Plan' (GI Plan) as part of the Barton-le-Clay Neighbourhood Plan. A 'Parish Level GI Plan,' using the methodology developed by the Bedfordshire and Luton Green Infrastructure Consortium, was an ideal way of ensuring that the environment is adequately considered as part of the Neighbourhood Plan process and an excellent way to engage people in the parish.

1.1.2 The GI Plan was presented to BLCNPSC in October 2023 and the full final report is at Annex C.

1.2 What is 'Green Infrastructure'?

1.2.1 As set out in the [Bedfordshire and Luton Strategic Green Infrastructure Plan \(2006\)](#), Green Infrastructure (GI) is the network of green spaces, access routes, wildlife habitats, landscapes and historic features which provide:

1.2.1.1 A healthy and diverse environment.

1.2.1.2 Attractive places to live and visit.

1.2.1.3 A good quality of life.

1.2.1.4 A sustainable future.

1.2.2 Green infrastructure assets include:

1.2.2.1 Accessible Greenspaces.

1.2.2.2 Country parks.

1.2.2.3 Green corridors.

1.2.2.4 Urban parks and gardens Habitats for wildlife including nature reserves, Sites of Special Scientific Interest and County Wildlife Sites. Historic parks and gardens and historic landscapes Scheduled Ancient Monuments Waterways and water bodies, including flooded quarries public rights of way and cycleways.

1.2.2.5 Allotments.

1.2.2.6 Children's play space.

1.2.2.7 Formal sports facilities.

1.2.2.8 Cemeteries.

1.2.3 It is important to plan the green infrastructure network in the same way that we plan other networks and facilities, so that we can safeguard and enhance the environment and meet the needs of a wide range of people, both now and in the future. Green infrastructure also provides social and economic benefits, including:

1.2.3.1 Places that can be used as a focus for community activity and events.

1.2.3.2 Opportunities to keep fit and healthy.

1.2.3.3 Helps support the local economy, including village shops and pubs.

1.2.3.4 Links between town and country helping people in rural areas access facilities.

1.2.3.5 Helps reduce the use of cars.

1.3 Aim of this Plan

1.3.1 The aim of the GI Plan is to identify the key existing natural, historic, cultural and landscape assets, accessible greenspace, and rights of way and to plan new features that will provide a connected network of green infrastructure for the benefit of present and future generations.

1.3.2 It will help the local community to protect and where possible enhance the landscape, biodiversity, and the historic environment, improve access and links for people and wildlife.

1.4 Methodology and Statement of Community Involvement

1.4.1 The methodology to produce the Parish GI Plan is based on a two-stage process:

1.4.1.1 Stage 1. Initial mapping and analysis of GI Assets, initial consultations involving key stakeholders and villagers and development of a draft plan.

1.4.1.2 Stage 2. Further community engagement and finessing of draft plan before agreeing final plan by the BLCNPSC and its inclusion in this NP.

1.5 Consultations

1.5.1 As discussed in the Introduction to this NP, the NP process began in 2012 before stalling and restarting in 2022. The feedback/comments from early (2013/14) parish consultations on Neighbourhood Plans and, in particular, GI topics, have been reviewed by the Greenland Trust and the BLCNPSC, and remain extant, and are supported by recent parish consultations.

1.5.2 The events in Table 1 below were attended by the Greensand Trust with the specific aim to gather information on GI issues that concern villagers. In addition, GI issues have been discussed at other Community Involvement Strategy events e.g., BLCNPSC Q&A stands outside of the Coop supermarket. At these events there has been a concerted effort to engage a cross section of the community, particularly the younger cohorts. The community event on 8 May 2023 had colouring sheets to attract younger members of the community and the event on Bonfire night had a free raffle to attract the 'Gen Z¹' cohort.

Venue	Date	Details	Attendance/ Response
GI Plan Survey	2013	Specific questionnaire to residents based on GI	66 completions
St Nicholas Church Fete	Jun 2013	Stall with maps and opportunities to comment.	Attendance = 200+ (overall fete – good level of engagement on stall)
Stakeholder Workshop	Sept 2013	Attended by representatives of key groups and organisations. Reviewed community input and made own input.	16 attendees
Landowners/ Farmers' Workshop	Jul 2014	Attended by main local landowners and farmers. Introduction to GI Plan Opportunity to understand their operations and aspirations.	3 landowners, BLCPC, GST
Christmas Lights Switch-on 2022	26th Nov 2022	Stand alongside NP information. Engagement on what people value, issues and problems, projects, and aspirations.	Attendance of event = several hundred. 35 visited stall. 26 directly engaged
Community Event	8th May 2023	Stand as part of large community event. Engagement on proposed policies and projects.	Attendance of event = several hundred. 36 directly engaged.

Table 1. Community Involvement – GI Plan.

1.5.3 Based on the feedback from consultations with villagers, GI planning and review has been divided into four themes:

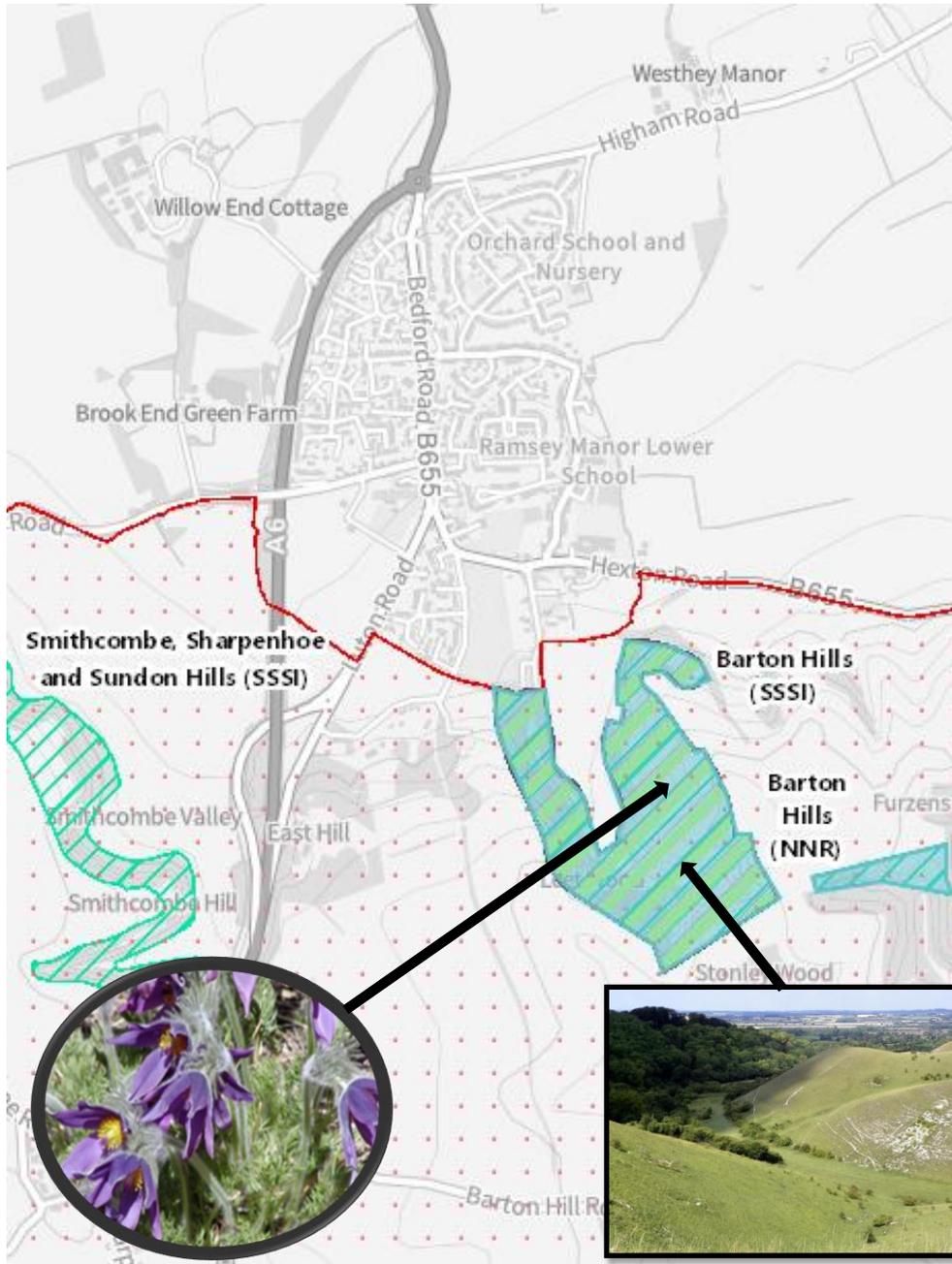
- 1.5.3.1 Landscape/Environment.
- 1.5.3.2 Biodiversity.
- 1.5.3.3 Historic Environment.
- 1.5.3.4 Access, open space, and recreation.

1.5.4 This approach allows the different elements of green infrastructure to be considered individually, in detail, as well as part of the integrated GI 'network.'

¹ Born 1997-2012 (11-26 years old).

1.6 Landscape and Biodiversity²

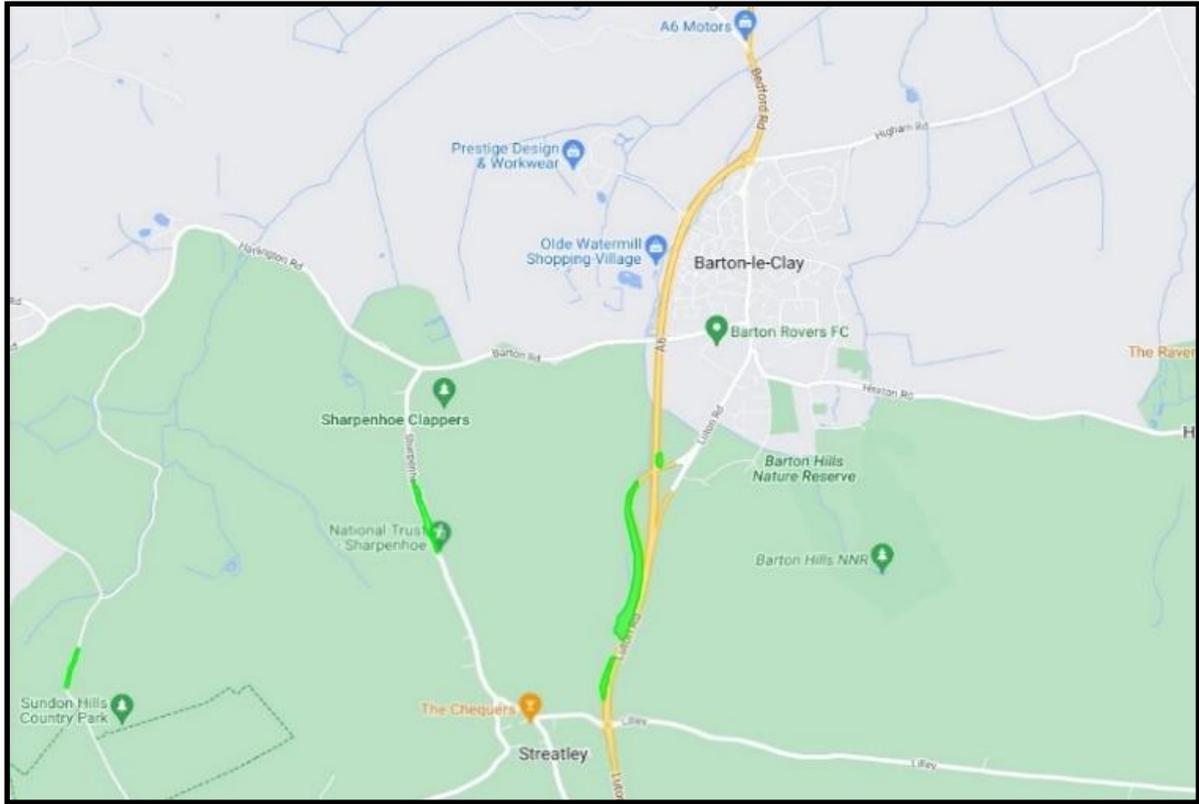
1.6.1 The parish is rich in wildlife and biodiversity, and the Barton Hills, that sit in the southern part of the neighbourhood area of interest, is an Area of Outstanding Natural Beauty (AONB)³ which includes a National Nature Reserve (NNRs), Sites of Special Scientific Interest (SSSI) (see Map 1) and a Roadside Nature Reserves (RNR) (see Map 2).



Map 1 – National Landscapes (Red dotted area), NNR/SSSI.

² Biodiversity the different kinds of life in an area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems to maintain balance and support life. WWF definition.

³ [Bedfordshire and Luton Biodiversity Recording and Monitoring Centre](#)



Map 2 – Barton Bypass RNR.

1.7 Barton Hills NNR/SSSI

1.7.1 The Barton Hills NNR/SSSI is steeply sloping chalk pasture, which has a wide variety of grasses and flowers – see Map 8. A chalk stream, the Barton Springs, along the valley floor adds wetland flora. Six orchid species have been recorded, including the fragrant orchid and bee orchid. Other notable plants are the pasqueflower⁴, field fleawort and a dwarf form of hairy violet. Butterflies, including the rare Duke of Burgundy and Chalk Hill Blue, can also be spotted. A large population of red kites also resides within the parish boundaries.

1.7.2 Barton-le-Clay supports CBCs aims to ensure appropriate management of sites and to explore opportunities for enhancing the wildlife resource of our area through its [Nature Conservation Strategy 2015](#) and CBLP 2015 – 2035 (Policy EE3).

1.8 Central Bedfordshire Landscape Character Assessment (CBLCA)

1.8.1 Barton-le-Clay has a varied and distinctive landscape which has been described and classified in the [CBLCA](#):

⁴ The pasqueflower (*Pulsatilla vulgaris*). It classified as a Priority Species in the UK Biodiversity Action Plan and as Vulnerable in Britain on the Red Data List.

1.8.1.1 ([Landscape Character Area 5B – Barton-le-Clay Clay Vale](#)). The northern part, covering almost two thirds of the area, is low-lying clay vale defined by Gault Clay geology.

1.8.1.2 [Land Character Area 9C: The Clappers Chalk Escarpment](#). A chalk escarpment that marks the distinction between the low-lying, flat terrain of 5B (to the north) and the undulating dip slope chalk landscape 10C (to the south).

1.8.1.3 [Landscape Character Area 10C Rolling Chalk Farmland](#)). The prominent chalk escarpment immediately to the south of the village.

1.8.2 The CBLCA contains a 'Strategy' for each Landscape Character Areas, plus a series of 'Landscape Management Guidelines.' These are summarized below:

1.8.2.1 LCA 5B. The overall strategy for the Barton-le-Clay Clay Vale is for enhancement/renewal of the landscape. Enhancing the condition of the landscape by restoring and repairing elements that have been lost or degraded (such as the hedgerow network) could significantly strengthen the character of the vale. In addition, there is scope for introducing new landscape elements such as woodland creation particularly aligning the main transport corridors. Also, to conserve and enhance the setting of significant historic landscape assets.

1.8.2.2 LCA 9C. The overall strategy for The Clappers Chalk Escarpment is to conserve and enhance the landscape. The aim should be to conserve the dramatic landform and prominent views, the wealth of important historic and biodiversity features and its value as a recreational resource. This could be attained through appropriate and ongoing management to improve the condition of the landscape.

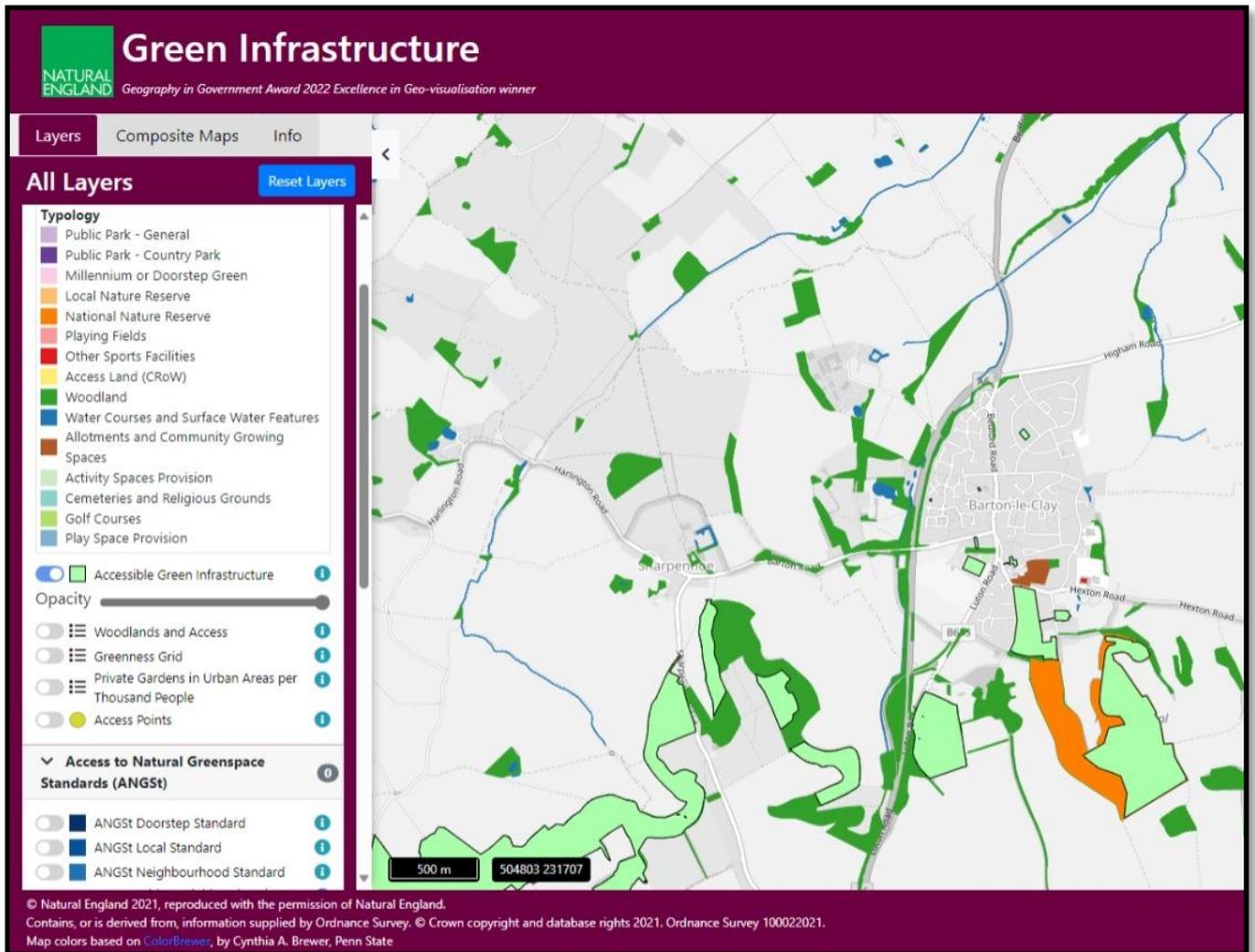
1.8.2.3 LCA 10C. The overall strategy for the Barton Hill is to enhance the landscape of the chalk dip slope and to conserve its strong rural character and role as a landscape setting.

1.8.3 In support of each Strategy, there are a series of guidelines for New Developments.

1.9 The Chilterns Conservation Board

1.9.1 The Chilterns Conservation Board (Chilterns National Landscape) has a duty under the Countryside and Rights of Way Act 2000 to prepare an National Landscapes Management Plan. The plan, entitled '[Caring for the Chilterns Forever and for Everyone](#)' and its policies are a material consideration in the determination of planning applications in the Neighbourhood Plan Area that are within the National Landscapes.

1.9.2 The [Natural England GI Framework \(2022\)](#) also provides excellent Landscape data about the parish (see Map 3) and GI Planning and Design Guidance.



Map 3 – Screen shot showing 'Accessible Green Infrastructure' spaces within the parish boundaries.

1.10 Tree Preservation

1.10.1 Trees make a significant contribution to enhancing biodiversity and help to mitigate climate change through absorption of carbon dioxide (CO₂) and oxygen production during photosynthesis. Trees also contribute positively to the social wellbeing and general health⁵, and therefore need to be protected.

1.10.2 The village has a wide range of different species of tree, some unusual, such as those detailed in Map 4 below and Table 2, and those subject to a Tree Preservation Order (TPO), e.g. an Indian Bean Tree (SB/TPO/93/00005). The parish council aims to review the tree stock within the Neighbourhood Plan Area to determine whether trees of special note and not already protected, need to be protected with a TPO.

1.10.3 Protection of trees in the parish is provided in several ways:

⁵ [The Case for Trees in Development and the Urban Environment.](#)

1.10.3.1 Conservation Area. Trees in the parish Conservation Area are protected under Section 211 of the Town and Country Planning Act 1990⁶,

1.10.3.2 Tree Preservation Orders (TPOs)⁷. Under the Town and Country Planning (Tree Preservation)(England) Regulations 2012, and it is illegal to carry out works e.g., cutting down, pruning or activities that could damage the tree (including its roots), without permission and can result in a fine of up to £20,000.

1.10.3.3 Local Green Space Designation. This provides special protection against development for green areas of particular importance to local communities.

1.10.4 The parish council will endeavour to pursue enforcement action for any unauthorised work on a protected tree and will request the Tree Officer CBC to carry out an audit of TPOs in the Neighbourhood Plan Area to ensure that details in the TPO Register are current and comply with the Town and Country Planning (Tree Preservation)(England) Regulations 2012.

⁶ [Section 211 of the Town and Country Planning Act 1990](#)

⁷ [Reg 13 - The Town and Country Planning \(Tree Preservation\) \(England\) Regulations 2012](#)



Map 4 – Trees of Significance – Arnold Recreation Area.

Tree ID.	Species (Common Name)	Age Class	Height (m)	Physiological Condition	Structural Condition
T1	Lime	Mature	18	Normal	Good
T2	Field Maple	Mature	11	Normal	Good
T3	Field Maple	Mature	9	Normal	Good
T4	Silver Birch	Middle aged	10	Normal	Good
T5	Field Maple	Mature	5	Normal	Poor
T6	Hawthorn	Mature	5	Normal	Poor
T6	Field Maple	Mature	6	Normal	Fair
T8	Field Maple	Mature	13	Normal	Fair
T9	Field Maple	Mature	14	Normal	Fair
T10	Whitebeam	Middle aged	6	Normal	Good
T11	Manna Ash	Young	9	Normal	Good
T12	Silver Birch	Mature	12	Normal	Good
T13	Lime	Mature	23	Normal	Good
G1	Lime Sycamore Beech	Mature	18	Normal	Good
G2	Plum Field Maple English Oak, Hazel	Middle aged	6	Normal	Good
G3	Plum Field Maple Wild Cherry Copper Beech Lime	Mature	11	Normal	Good
G4	Field Maple Hawthorn Hazel Plum	Middle aged	6	Normal	Good
G1	Lime Sycamore Beech	Mature	18	Normal	Good

Table 2 – Tree Species – Arnold Recreation Ground.

1.11 Orchards

1.11.1 Although Bedfordshire was never a major fruit growing area, historically there have been a substantial number of traditional orchards in the parish. Unfortunately, these have reduced in numbers as the demands for residential land, the cost and time to maintain an orchard, and the dwindling number of people with knowledge of arboriculture husbandry, especially with fruit trees has meant that there is only one remaining 'orchard' in the village.

1.11.2 In Bedfordshire, agricultural census data shows a decline in the orchard area of 95% since the peak decade of the 1950's - [Bedfordshire and Luton Habitat Action Plan - Traditional Orchards](#). Notwithstanding the challenges of maintaining 'orchards,' it is incumbent on this, and future, generations to retain legacy fruit trees and fruit varieties that might disappear, e.g., the Christmas Pippin⁸.

1.11.3 Trees in Orchard BEDF0191 sits with the village Conservation Area which provides some protection. The feasibility of providing further protection to remaining fruit trees through TPOs will be explored.

⁸ Discussion with Barton le Clay Historical Society.

1.12 Important Hedgerows

1.12.1 Barton-le-Clay and neighbouring villages have traditionally had hedgerows marking boundaries and over recent years many of these have been removed to allow new accesses and new development. Hedgerows are important features in the street scene, many have historic value, and they provide wildlife corridors which encourage biodiversity.

1.12.2 A [Chalk Hills of Bedfordshire Local Hedgerow](#) survey has been carried out and the remaining important hedgerows need to be protected, as far as possible, and where new accesses are required, a minimal amount of hedgerow should be removed and potentially replanted along vision splays where space allows.

1.12.3 New hedges and repairs to existing hedgerows will be encouraged, particularly to sustain and encourage wildlife such as small mammals e.g., the dormouse, butterflies, and moths.

1.12.4 Where any deliberate damage or destruction of an ancient hedgerow occurs, Central Bedfordshire Council would be encouraged and supported to take the appropriate legal remedy.

1.13 Access, Open Space and Recreation

1.13.1 A map (see Appendix 7) has been produced by the Greensand Trust and shows the positions of open spaces within the Neighbourhood Plan Area. Publicly accessible places are those shaded in dark green. The rights of way are marked on the map as they are key to providing access to open spaces as well as providing recreation opportunities. The A6 dual carriageway is a significant barrier to accessing the countryside to the west. There are pedestrian/footpath access point across the A6 to e.g., access the 'The Olde Mill' and Faldo Industrial Estate, but these are not controlled crossings and are extremely dangerous.

1.13.2 There are a reasonable number of Greenspaces throughout the village, although many are small, within developments and irregular in shape, e.g., the stream corridor adjacent to A6. The accessibility and quality of Greenspaces are covered in detail in the main GI Plan at Annex C.

1.13.3 In summary, whilst the parish has some large, attractive, and accessible Greenspaces on its doorstep, overall provision is poor when size, accessibility, quality, and function are considered and it is vital that new, attractive greenspaces are maintained/created to support the existing population. There is a very clear case for creating more 'natural' green spaces within the parish as this will not only improve quality of life for more local people, but will contribute to wider objectives around nature recovery, climate change, tranquillity, and pollution mitigation.

1.14 Local Green Space Assessment

1.14.1 An assessment of all the green spaces identified within the parish has been carried out by the BLCNPSC and Green Sand Trust⁹ using the [National Planning Policy Framework \(Page 29\)](#) as a guide.

1.14.2 Based on the results of the assessment, see Annex C, and notwithstanding consultations with local landowners, the BLCNPSC recommends that a number of are designated as Local Green Spaces (LGS). Details of the candidate LGS are in the GI Plan and Main BLCNP. The policy on the adoption of Local Green Spaces was introduced in the NPPF Dec 2024 and is an important tool to protect the environment. Local Green Space designation affords the same level of protection as Green Belt status.

1.15 Access Routes

1.15.1 The parish has a reasonable coverage of Public Footpaths, but poorer coverage of Public Bridleways, for which the network is very fragmented [My Central Bedfordshire CBC](#). There are several areas where the status of a route changes, meaning that horse riders and cyclists cannot (legally) use a route in its entirety, while there are other bridleways (e.g., those north of Hexton Road) that end abruptly in the middle of the field.

1.15.2 Two Rights of Way (RoW) are 'severed' by the A6 dual carriageway (Map 14 and Photos 1 & 2) and one by the Hexton Road. Bridleways to the north end in dead ends.



Photo 1 – Bridleway at end of Grange Farm Close and continuing across A6 dual carriageway.



Photo 2 – Footpath off Grange Road and continuing across A6 dual carriageway to the Olde Mill.

1.15.3 In addition to the Public RoW network there are permissive routes; routes where a landowner permits access. While these form extremely valuable links in the network by helping to provide access where otherwise it is not possible (and helping join up gaps in the existing network), these are informal and are not mapped. However, the good will of landowners in providing this access is to be noted and encouraged through dialogue with landowners.

⁹ Barton-le-Clay GI Plan Green Infrastructure Plan (Revised Consultation Version) December 2024 - Local Green Space Assessment.

1.15.4 The following Long-Distance Trails pass through the parish:

1.15.4.1 [Icknield Way](#). The Icknield Way follows part of the Parish boundary below the Streatley Roundabout.

1.15.4.2 [The John Bunyan Trail](#).

1.15.5 The Chiltern Cycleway follows the road along the northern edge of the parish, and links to public bridleways adjoining Barton Hills and Barton Pit.

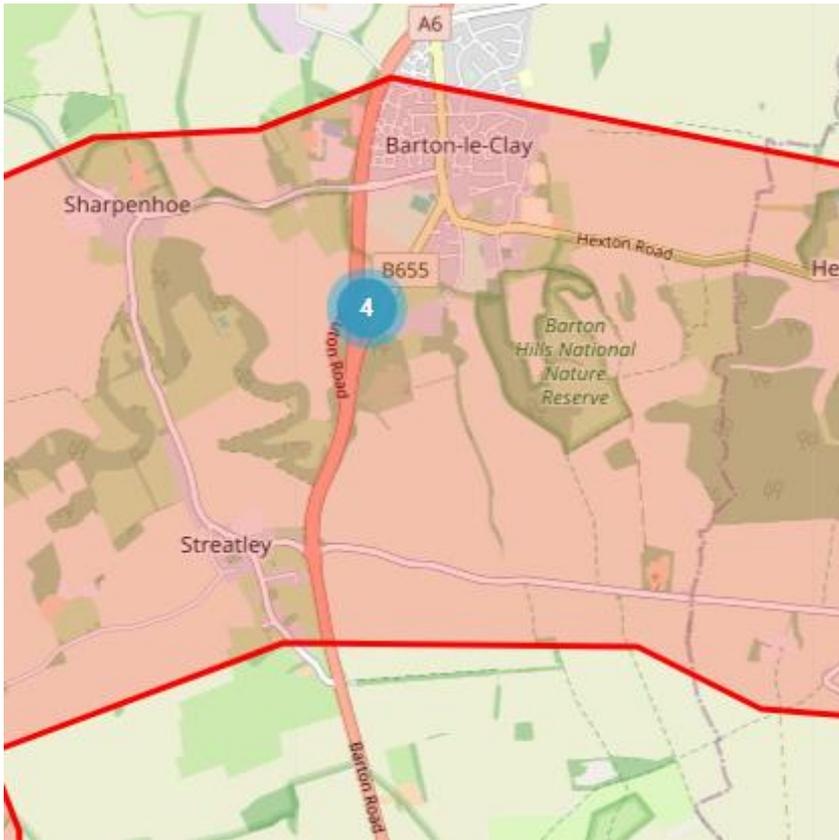
1.16 Developing the GI Network

1.16.1 The [Central Bedfordshire Green and Blue¹⁰ Infrastructure Strategy 2022](#) sets out a vision for the Green and Blue Infrastructure (G&BI) Network for Central Bedfordshire. For the purposes of the BLCNP, G&BI issues are covered by the generic term 'Green Infrastructure' (GI Plans).

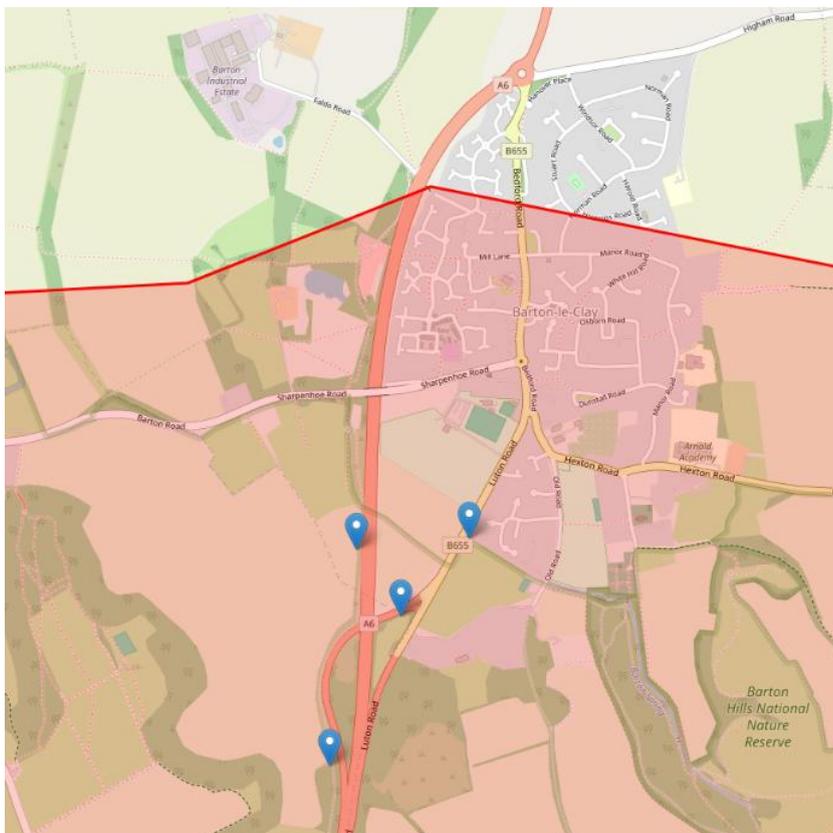
1.16.2 The strategy contains 10 Strategic Opportunity Areas (SOAs) which set a series of prioritised areas for intervention to strengthen Central Bedfordshire's existing network of natural green and blue assets, several of which sit in the Neighbourhood Plan Area, for example:

1.16.2.1 SOA7 deals with 'Pollinator Corridors' often referred to as "['B-Lines' mapped by Buglife](#)" – see Map 5, and are essentially highways for bees and other pollinators. These corridors are created by connecting patches of wildflower-rich habitats, allowing pollinators to move more easily across the landscape. Given that pollinators across the UK are in decline, opportunities to retain Green Spaces and turn over spare margins of land, including road verges, to wildflower, are to be strongly encouraged. Hence the importance of retaining biodiverse areas such as the RNR – see Map 6 where wildflowers have been planted by Barton Countryside Conservation Volunteers.

¹⁰ Green and Blue infrastructure (G&BI) is a term used to describe the network of natural and semi-natural features (including the water environment) within and between urban and rural areas. G&BI is not limited to traditional green spaces, e.g., parks, and can involve various interventions to thread nature into streetscapes or to increase connectivity between G&BI assets.



Map 5 – 'B-Line/Corridor.



Map 5 – 'B-Line' Sites.

1.16.3 Opportunities to support and develop the G&BI Strategy are covered in the main GI Plan at Annex C and in our GI Policies.