

Sustainability Matters

- **What** is the GI Framework
- **Why** are we focussing on green infrastructure & biodiversity
- **What** is the Vision & Aims
- **Where & How** can we improve green infrastructure & increase biodiversity
- **What** is next
- Q&A



Marc Tomes CMLi
*Chartered Landscape Architect
Director / Co-owner Allen Scott
Working with Manor Royal since 2015*



What is the GI Framework?

This framework is intended to set the right direction for us to protect and enhance the valuable green infrastructure (GI) across Manor Royal.

It also outlines a list of clear actions to deliver the vision and strategic aims.



Vegetated boundaries on private land that contribute to the public realm

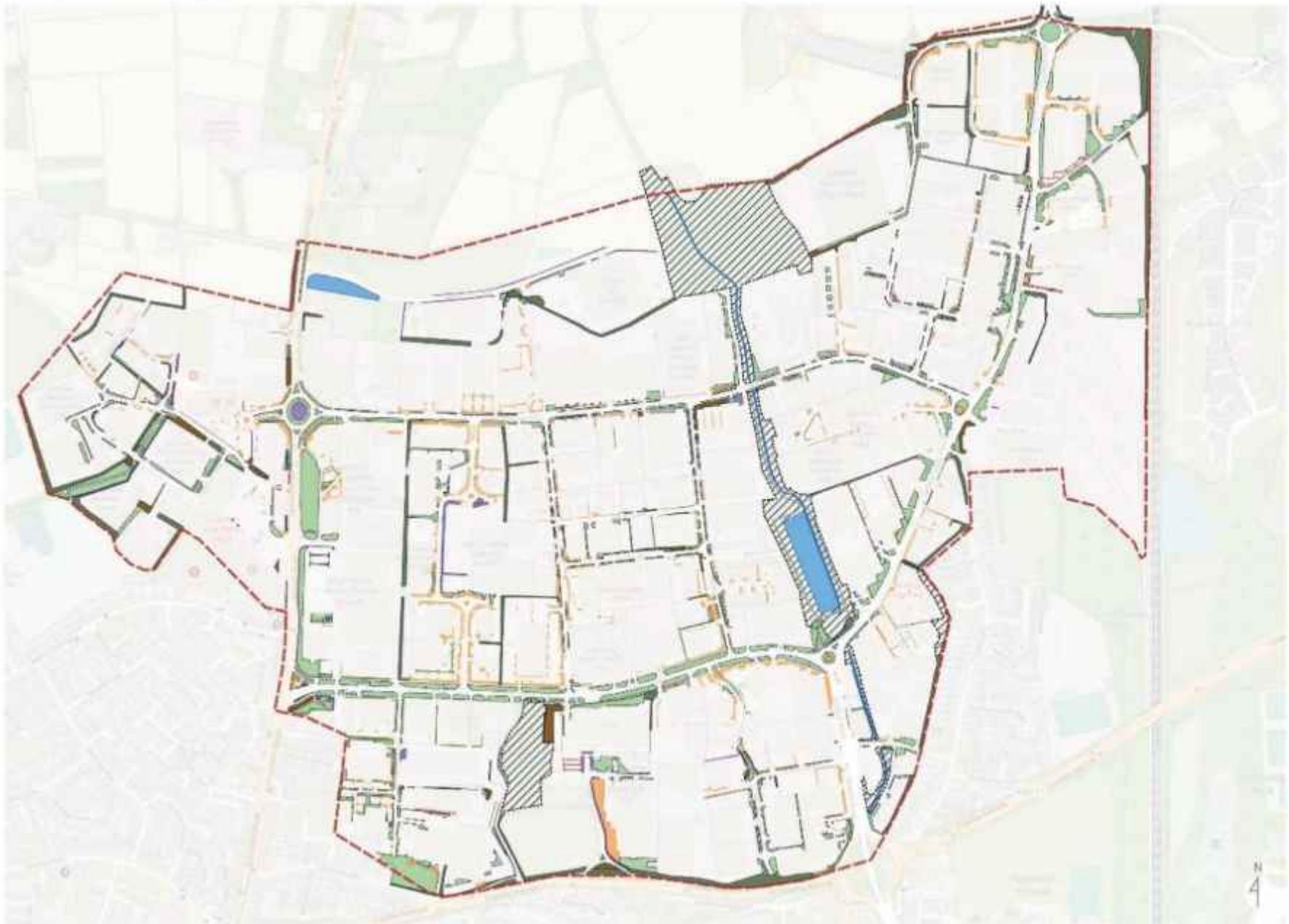
Parks and open spaces within publicly accessible land

Roundabouts and verges within publicly accessible land

Linear corridors such as Crawter's Brook

Tree canopy cover across Manor Royal (based on digital mapping)





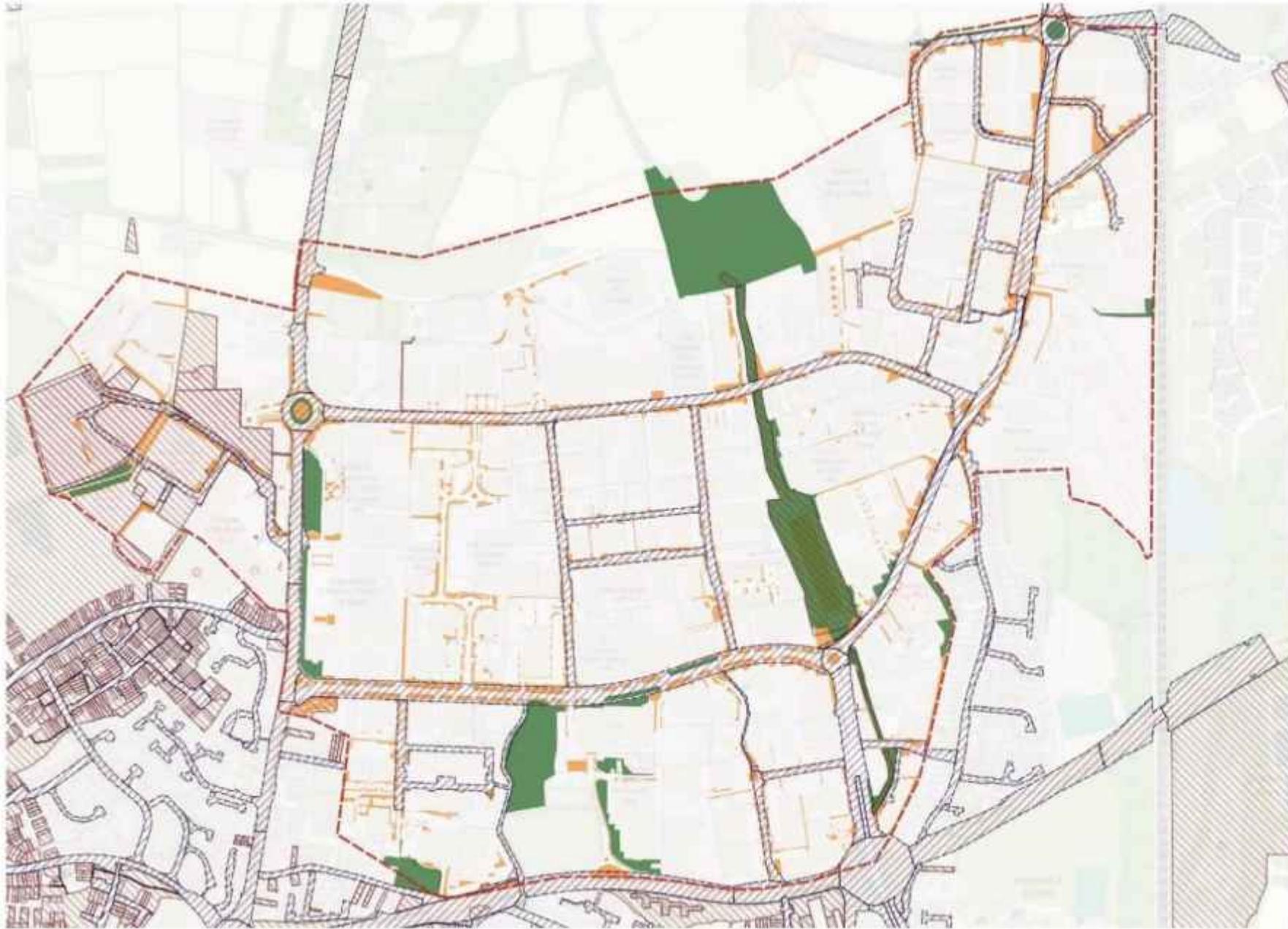
- MANDE BOVA
- WOODLAND
- LINEAR MATURE NATIVE VEGETATION
- NATIVE HEDGEROW
- HEDGE
- SCRUB
- AMENITY SHRUB AND GROUND COVER
- FLOWER RICH PERENNIAL / HERBACEOUS PLANTING
- SPECIES RICH MEADOW GRASS
- AMENITY GRASSLAND
- OPEN WATER
- RAIN GARDENS AND VEGETATED
- OPEN SWALES AND UNPLANTED DETENTION
- WATER FEATURES
- OPEN AGGREGATE AND GRANULAR PAVING
- SEMI PERMEABLE PAVING
- GREEN FACEDS
- INSECT HOTELS
- INCIDENTAL GREENING

BASE MAP AND DATA FROM OPENSTREETMAP AND OPENSTREETMAP FOUNDATION (CC BY SA) @ [HTTPS://WWW.OPENSTREETMAP.ORG](https://www.openstreetmap.org) AND CONTRIBUTORS

Note: Excludes standard trees

GI SURFACE TYPES





- MANOR ROYAL
- BNG FEATURES
- UGF FEATURES
- CBC LAND OWNERSHIP
- WCC LAND OWNERSHIP

CBC LAND OWNERSHIP DATA FROM CRAWLEY BOROUGH COUNCIL

HIGHWAY BOUNDARY AND WCC LAND OWNERSHIP DATA FROM WEST SUSSEX COUNTY COUNCIL WHO GIVE NO WARRANTY TO THE ACCURACY OF THIS DATA. OWNERSHIP TO BE CONFIRMED BEFORE ANY ON SITE WORKS BEGIN.

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BNG & UGF POTENTIAL SHOWN WITH COUNCIL OWNED LAND

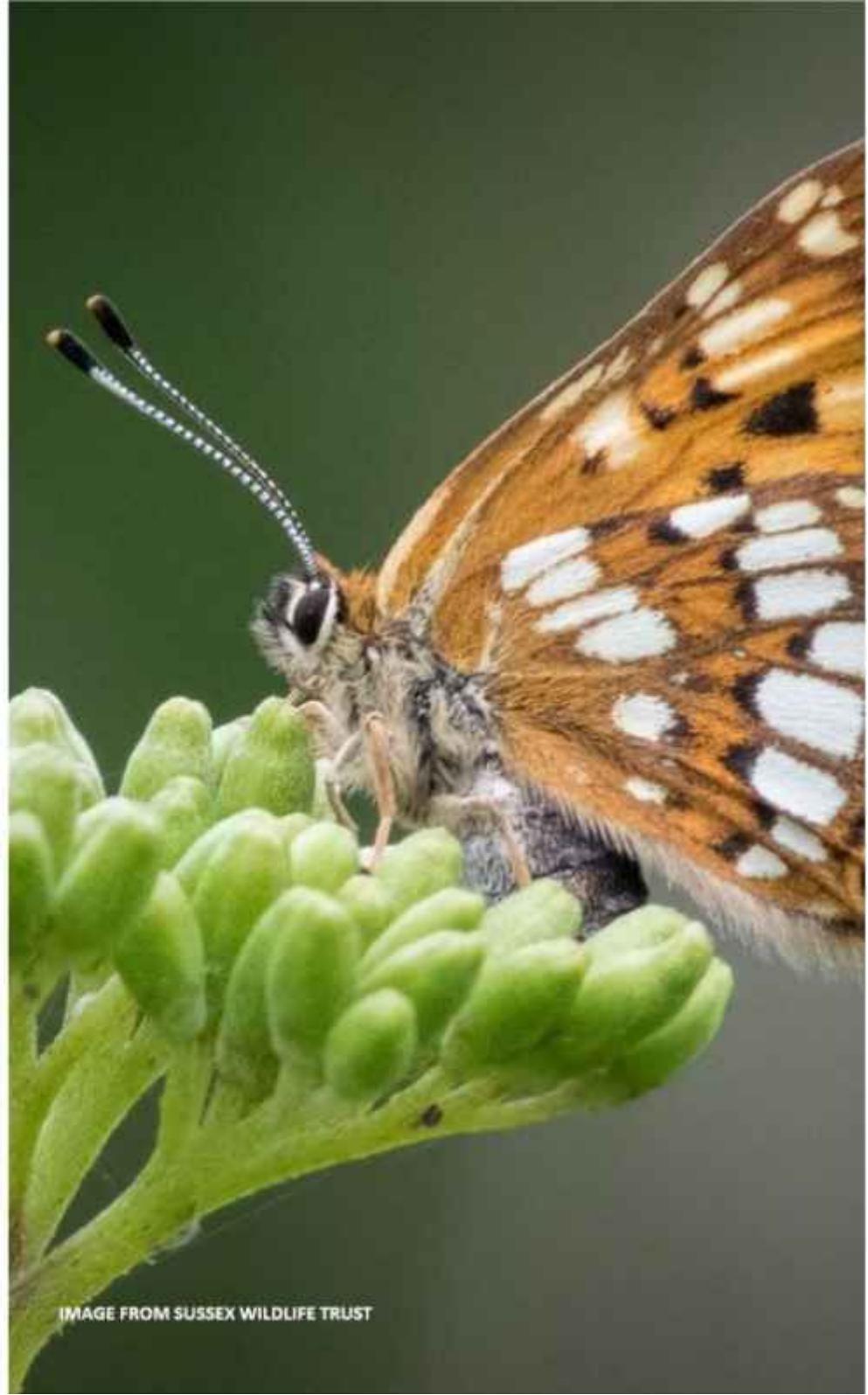
What have we been assessing?

BIODIVERSITY OPPORTUNITY

Biodiversity Net Gain (BNG) is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development.

URBAN GREENING OPPORTUNITY

The Urban Greening Factor (UGF) is a planning tool used to evaluate and increase green infrastructure in development projects by calculating the quantity and quality of green elements. It assigns a target score to new developments, which is calculated by multiplying the area of different green features by their specific weightings and dividing the total by the site's area.



Why bother?

“Urban green spaces alone support 2.1 million people in meeting their weekly physical activity needs.

This is estimated to be worth £5.6 billion and to avoid health service costs of around £1.4 billion.

The importance of high-quality GI is already recognised in the government commitment, contained in the Environmental Improvement Plan, that everyone should live within 15 minutes of green and blue space.”

Natural England GI Framework



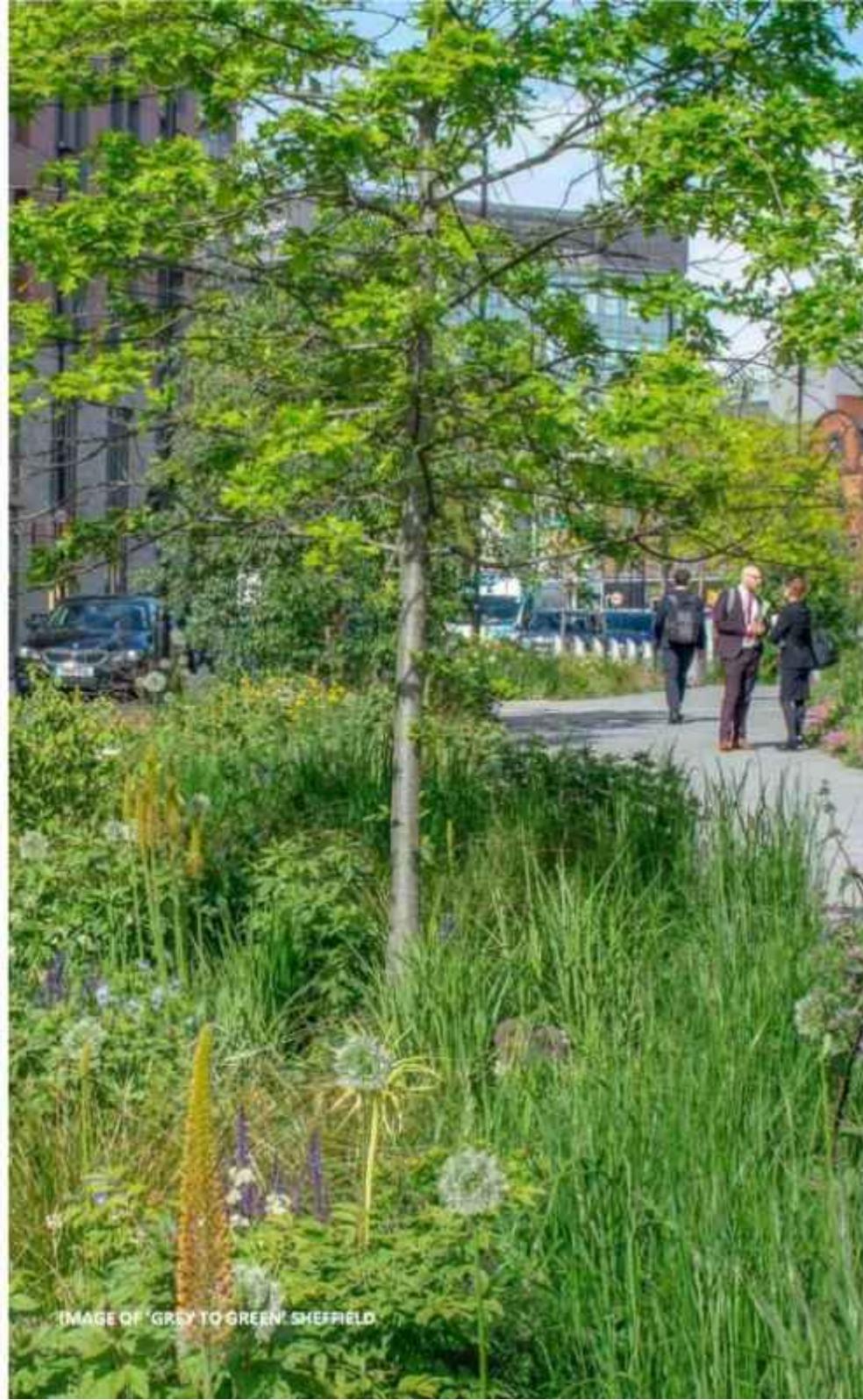
The BID's ambition

Manor Royal BID has several initiatives focused on protecting, improving, and maintaining green infrastructure in the area.

The Sustain & Renew theme within the business plan aims to:

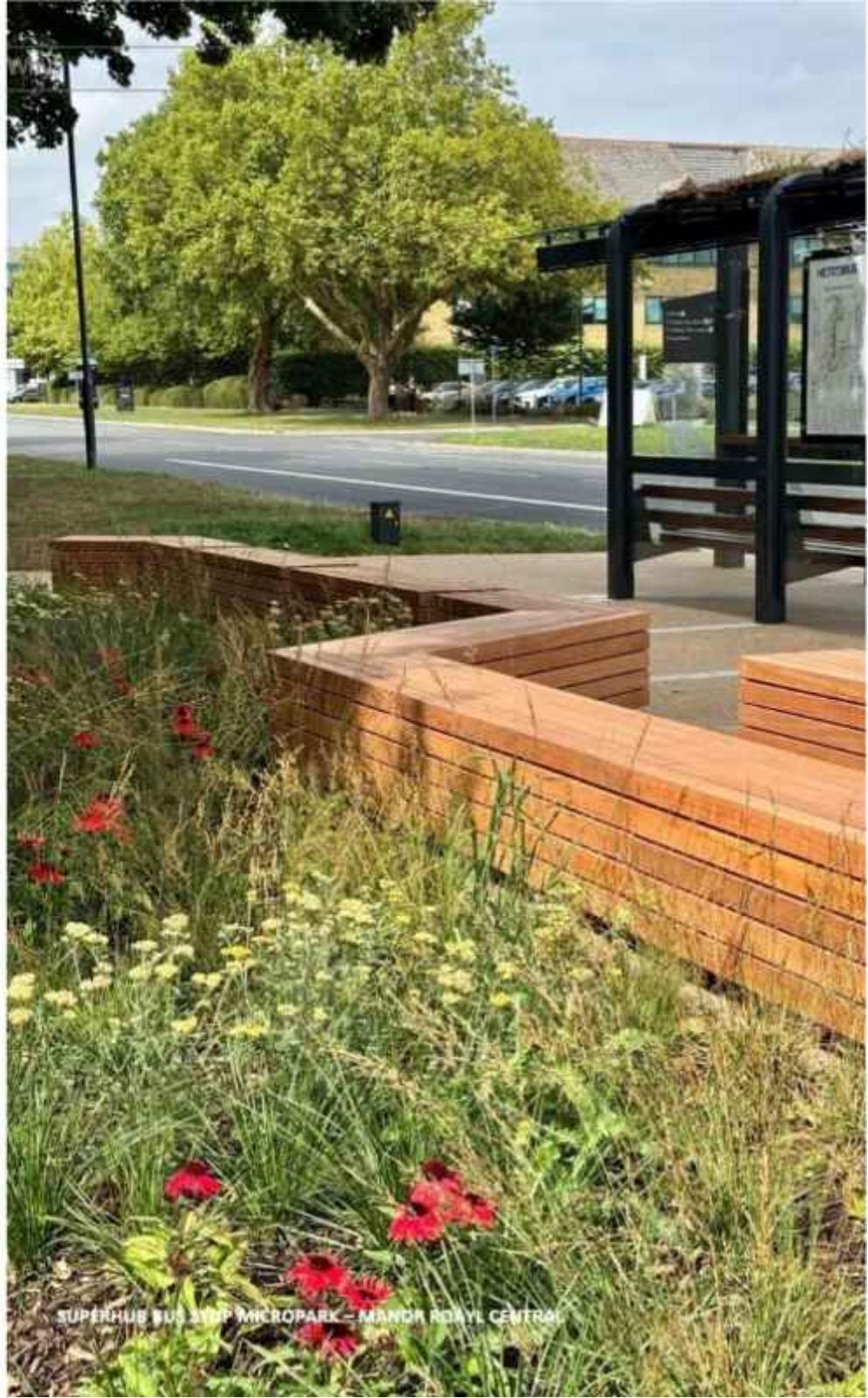
- **Enhance green spaces with planting and maintenance schemes that support biodiversity.**
- **Promote sustainable travel by providing incentives and guidance for businesses to adopt greener commuting options.**
- **Support net-zero goals through collaborative energy initiatives and forums.**
- **Encourage environmental responsibility by offering advice and incentives for businesses to become more sustainable.**

This GI Framework focuses on the first bullet point, but also encompasses those others.



The BID's ambition

“Anyone working within Manor Royal should be within 5mins walking distance of a quality public space”

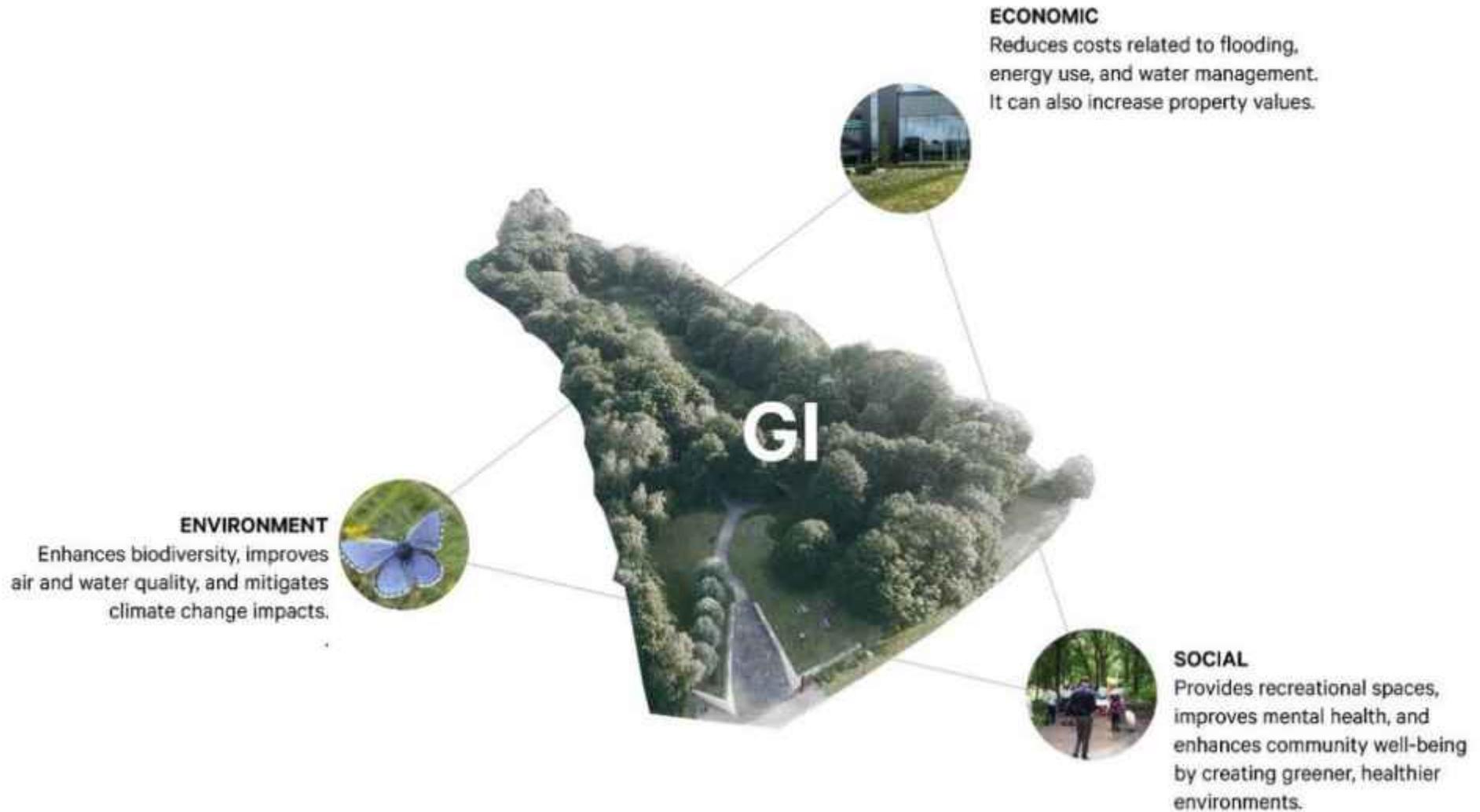


SUPERHUB BUS STOP MICRO-PARK – MANOR ROYAL CENTRAL

GI Benefits



GI Benefits - potential



Vision statement

TO MAINTAIN, PROTECT & IMPROVE THE GREEN INFRASTRUCTURE OF MANOR ROYAL

Our Mission

By bringing more nature into Manor Royal, we'll enhance biodiversity, strengthen our economy, & create a healthier, more sustainable environment for everyone, now and in the future.

As part of this, our goal is to:

**ENHANCE THE
EXISTING HABITATS
FROM 'POOR'
TO 'MODERATE'
CONDITION**

**GENERATE A BNG
UPLIFT OF 32.4
HABITATS UNITS
(+37.72%) & 36.15
LINEAR UNITS
(153.01%)**

**INCREASE THE
URBAN GREENING
FACTOR FROM 0.29
TO 0.70 (+41.4%)**

How will we do it?

The Green Infrastructure (GI) Framework provides the strategic direction and actions needed to achieve this vision and its goals.

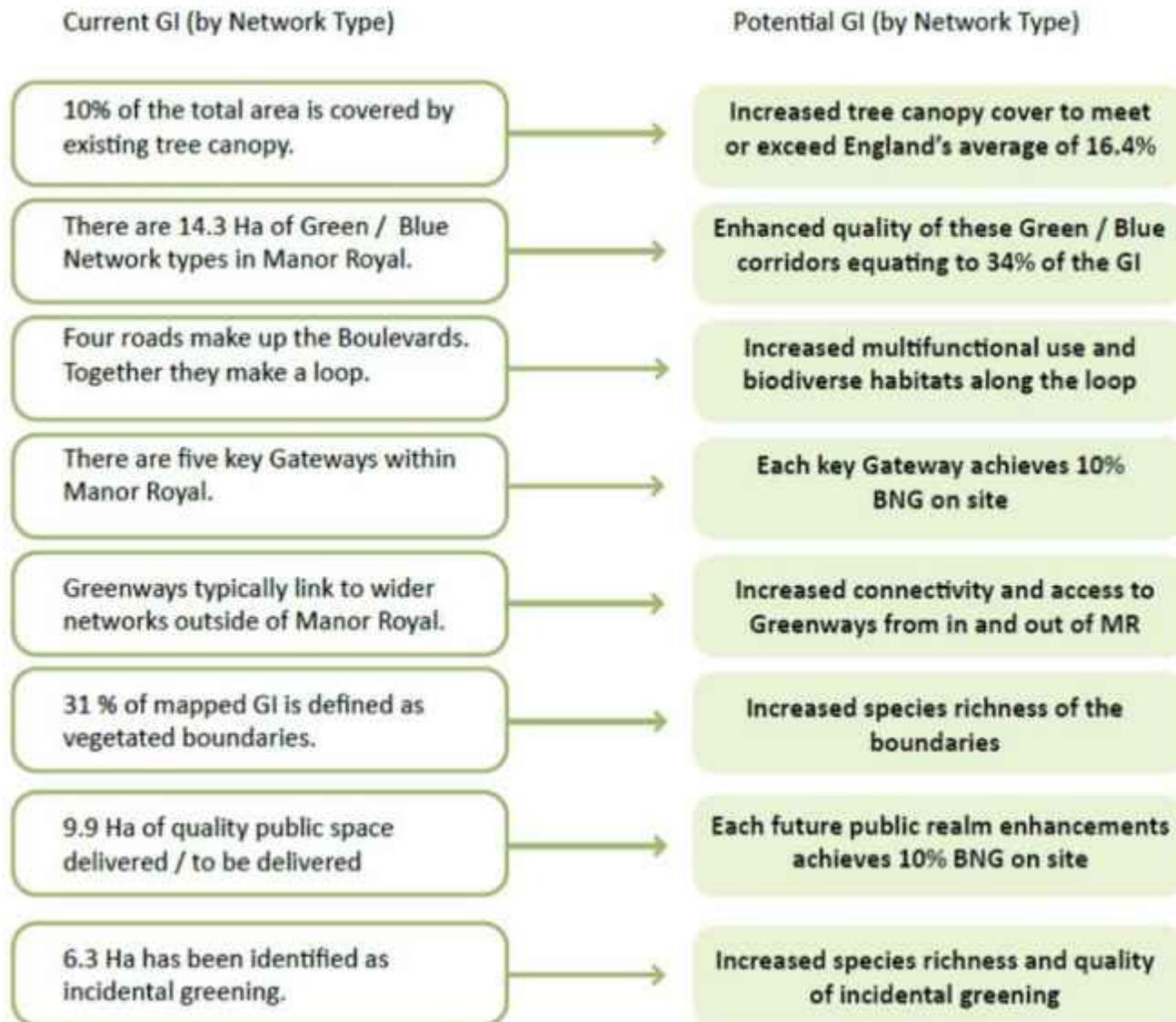
Delivering this vision will take time. Biodiversity Net Gain (BNG) schemes typically span around 30 years, and it will require partnership, collaboration, and the shared commitment of both public and private stakeholders working alongside the Manor Royal BID to help the area reach its full potential.

Through diligence, patience, and persistence, the BID will take the necessary steps to implement this GI Framework and will report regularly on progress toward its goals.

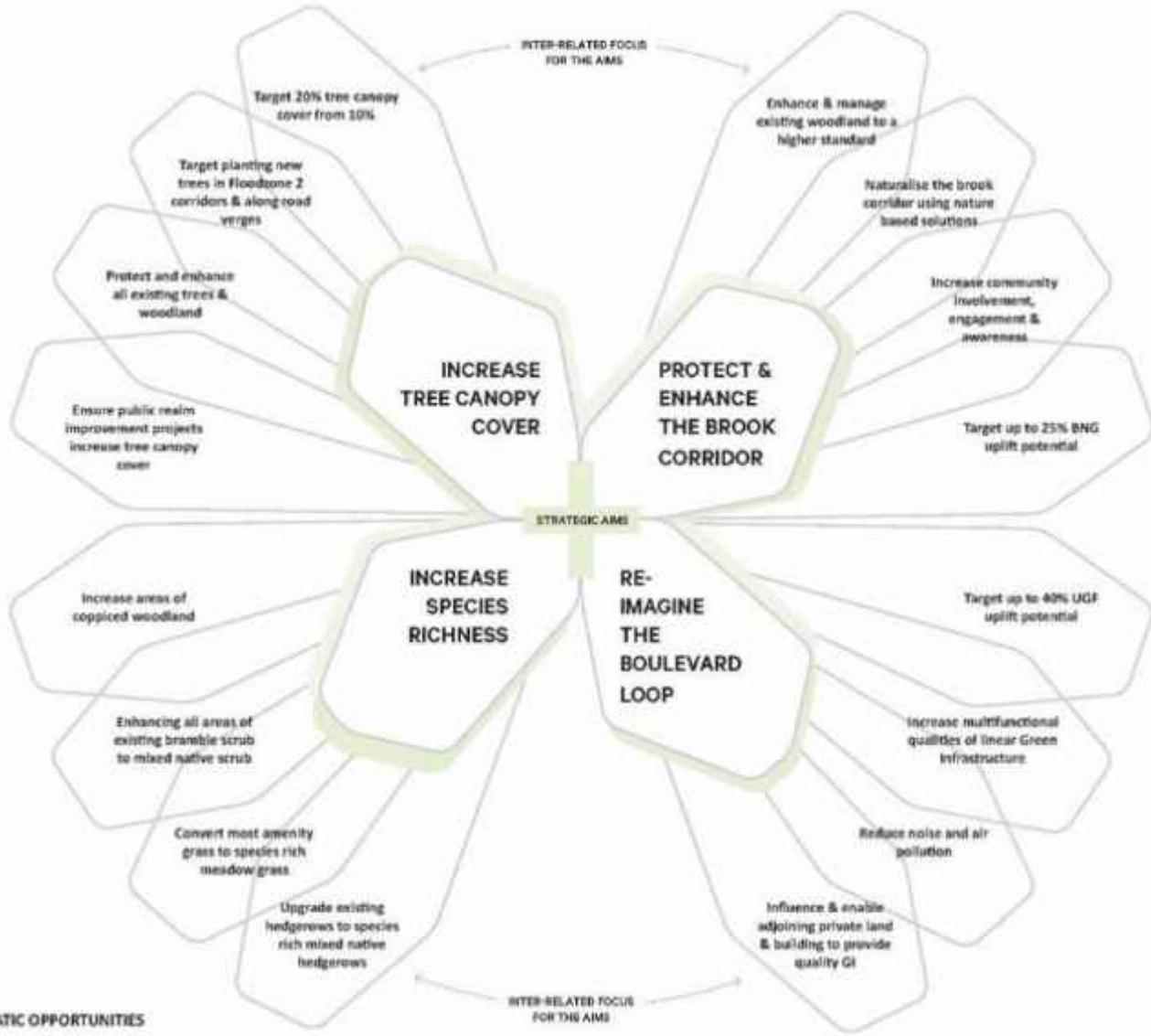
The BID is committed to delivering the vision and achieving these goals through:

- **Implementation of the Projects Pack;**
- **Ongoing investment in management and maintenance; and**
- **Strong partnerships with public and private sector organisations.**

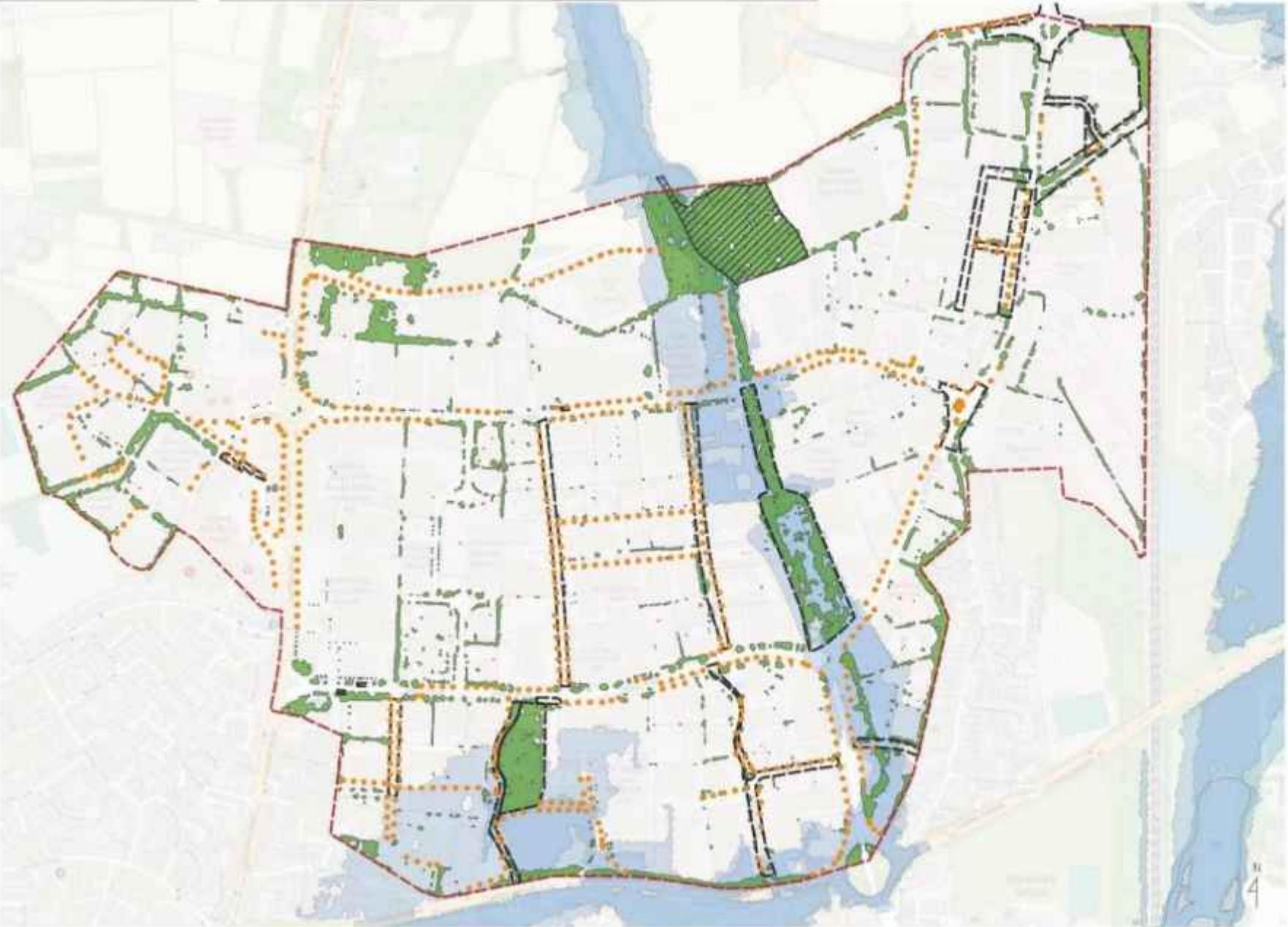
The delivery of this GI Framework is multi-faceted, and so too are the ways in which we will monitor and measure its progress and success.



Opportunities for improving existing GI Network Types



STRATEGIC AIMS & THEMATIC OPPORTUNITIES



- MANOR ROYAL
- FLOOD ZONE 2
- FLOOD ZONE 3
- - - NEW TREE PLANTING WITHIN SIGNATURE PROJECTS AND HOTSPOTS WHERE POSSIBLE
- LOCAL WILDLIFE SITE
- EXISTING TREE CANOPY PROTECTED & ENHANCED (INDICATIVE)
- POTENTIAL NEW TREE CANOPY (INDICATIVE)

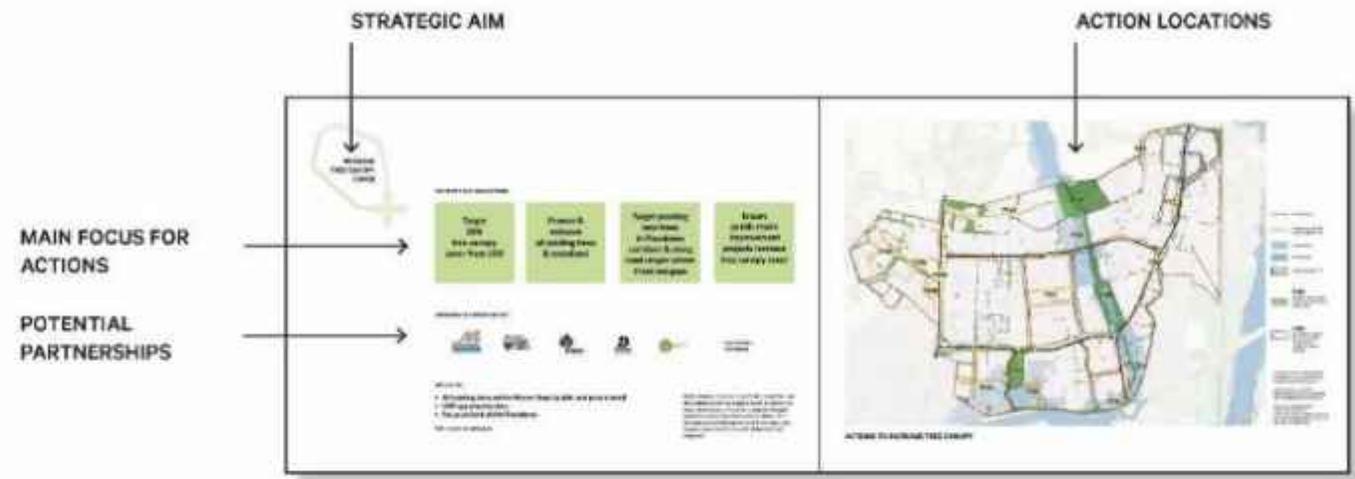
LOCAL WILDLIFE SITE BOUNDARIES PROVIDED BY SUSSEX BIODIVERSITY RECORD CENTRE (SABRC) LDM.

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NATIONAL TREE MAP - © BLUESKY INTERNATIONAL LIMITED

INCREASE TREE CANOPY COVER



TASKS FOR BID

ASSESSMENT OF POTENTIAL BENEFITS (THOSE TICKED HAVE POTENTIAL)

PRIORITY (IF TICKED)

STRATEGIC AIM FOR ACTIONS

REFERENCE FOR ACTION

ACTION DESCRIPTION

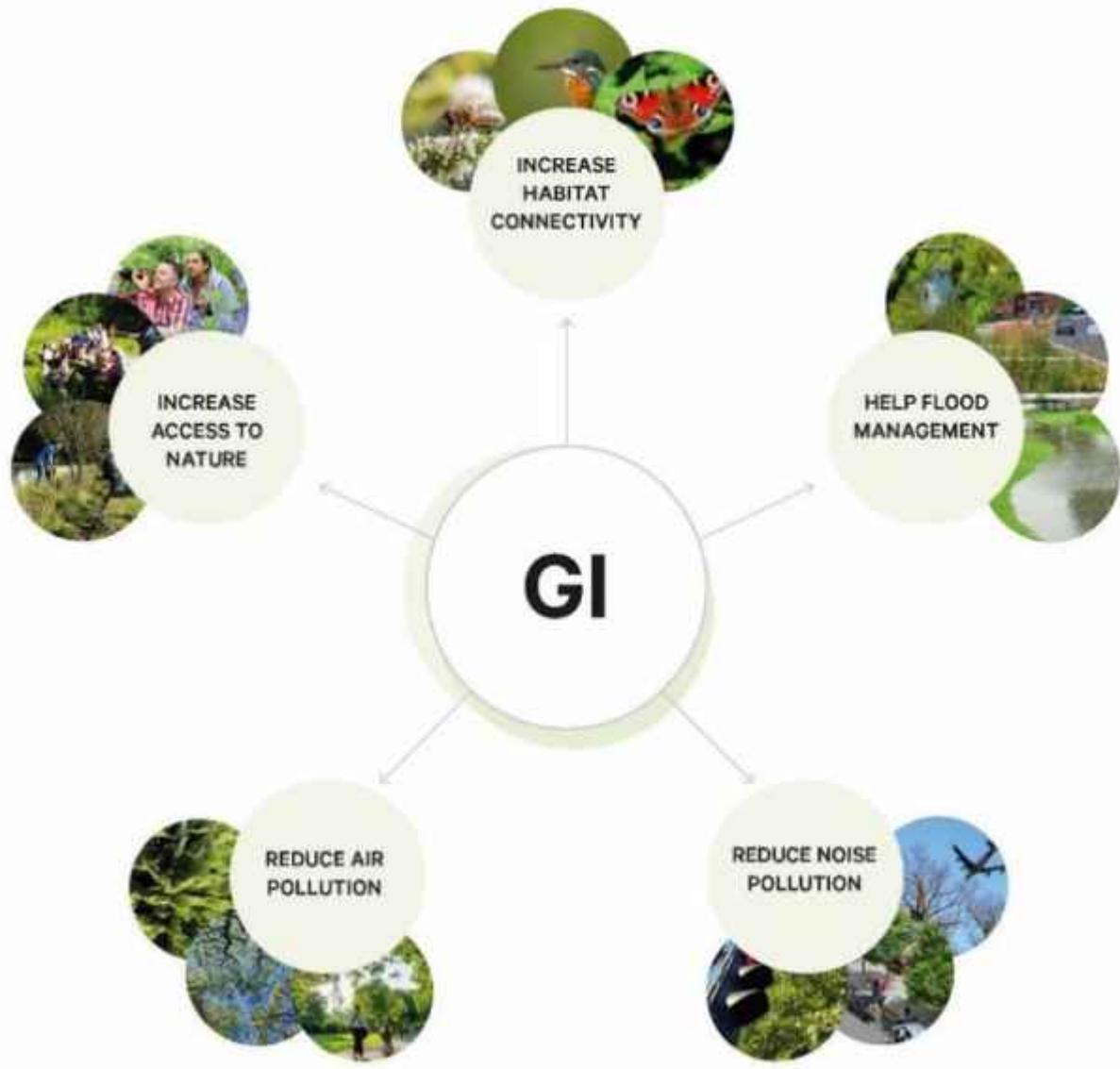
NO	ACTION	ESTIMATED COST	DATE COMPLETION	STATUS	STRATEGIC AIM	POTENTIAL BENEFITS	PRIORITY	QUICK WIN
101	Plant 100 trees in the central area of the site	£10,000	2020	Planned	Target 2020	✓	✓	✓
102	Plant 100 trees in the central area of the site	£10,000	2020	Planned	Target 2020	✓	✓	✓
103	Plant 100 trees in the central area of the site	£10,000	2020	Planned	Target 2020	✓	✓	✓
104	Plant 100 trees in the central area of the site	£10,000	2020	Planned	Target 2020	✓	✓	✓
105	Plant 100 trees in the central area of the site	£10,000	2020	Planned	Target 2020	✓	✓	✓

POTENTIAL TASKS FOR OTHERS

QUICK WIN (IF TICKED)

ACTION PLAN TO INCREASE CANOPY COVER

REF	ACTION	WHAT THE BID CAN DO	WHAT OTHERS CAN DO	PRIORITY	QUICK WIN	POTENTIAL BENEFITS				
						INCREASE BIODIVERSITY CONNECTIVITY	REDUCE AIR POLLUTION	REDUCE NOISE POLLUTION	IMPROVED MANAGEMENT	INCREASE ACCESS TO NATURE
TC01	Protect and enhance woodland within Crawler's Brook (link / crosses with Action CB03 and SR02)	<ul style="list-style-type: none"> Investment in ongoing coppicing Informing / interpretation about the value of woodland Monitor success and growth of canopy cover 	<ul style="list-style-type: none"> Help and input with ongoing management from Sussex Wildlife Trust CBC to support and approve 	✓	✓	✓			✓	✓
TC02	Protect and enhance woodland within Magpie Wood	<ul style="list-style-type: none"> Support and encourage 	<ul style="list-style-type: none"> Investment in ongoing coppicing by land owner Help and input with ongoing management from Sussex Wildlife Trust 	✓		✓			✓	✓
TC03	Protect and enhance woodland within Rowley Wood	<ul style="list-style-type: none"> Support and encourage 	<ul style="list-style-type: none"> Investment in ongoing coppicing by land owner Help and input with ongoing management from Sussex Wildlife Trust 	✓		✓			✓	✓
TC04	More trees along Manor Royal Road (link / crosses with BL Strategic Aim and actions)	<ul style="list-style-type: none"> Identify location for new trees Invest in underground services / utilises survey and follow guidance Liaise with WSCC and CBC in relation to tree species and locations Refer to guidance in GI Framework, the appendix and in CBC guidance / policy Could be linked to enhancing amenity grass verges (subject to timing) Monitor success and growth of canopy cover 	<ul style="list-style-type: none"> WSCC to support and approve new tree planting within grass verges 	✓	✓	✓	✓	✓		✓



POTENTIAL BENEFITS				
INCREASE HABITAT CONNECTIVITY	REDUCE AIR POLLUTION	REDUCE NOISE POLLUTION	HELP FLOOD MANAGEMENT	INCREASE ACCESS TO NATURE



FOCUS FOR AIM AND ACTIONS:

Enhance & manage existing woodland to a higher standard than existing

Naturalise the brook corridor using NbS (nature based solutions)

Increase community involvement, engagement & awareness

Target up to 25% BNG uplift within the People's Park

PARTNERSHIP OPPORTUNITIES:



+ Land Owners
+ Businesses

ENHANCE WOODLAND

Enhance the areas of lowland mixed deciduous woodland and wet woodland from poor to moderate condition which will increase the areas biodiversity value.

10-20 year coppice rotation, arranged to ensure at least two years of growth between each block, some cutting retained as wildlife habitat.

Other tree species thinned in year 5 to 10 to ensure growth of quality trees. Some fallen or standing deadwood left to enhance biodiversity.

**ADD EPHEMERAL SCRAPES**

Ephemeral scrapes to provide valuable habitat for a variety of wildlife.

Scrapes should be dug in autumn, shallow but varied depth so that the varied depth and profiles encourage a higher diversity of invertebrates, amphibians and plants, no uniformity and at least 20m² in surface area. Ideally at least one within sight of the boundary for public viewing.

**PROTECT COMMUNITY AND BIODIVERSITY VALUE**

Continuing to support volunteering / partnerships and provide opportunities for the community to get involved in removal of invasive species and enhancement works.

Invasive species such as Clematis sp. and Buddleia should be removed from site and monitored regularly. Bramble bushing on biannual rotation to control the spread should be carried out to allow the ground flora to colonise.

**NATURALISE THE BROOK**

Various options to naturalise the canalised brook from re-engineering the alignment through to dropping the existing concrete (see next page)



Areas of swardy grass within the southern entrance to Pease's Park can be enhanced to species rich grass. See Ainc. Breeding species rich vegetation.

Opportunities to enhance GI

45



- MANOR ROYAL
-  CCIC LAND OWNERSHIP
 -  EXISTING LOCAL WILDLIFE SITE
 -  PROTECT & ENHANCE WOODLAND
 -  ENHANCEMENT THROUGH NATURALISING THE BROOK
 -  ENHANCEMENT THROUGH SPHERICAL SCAPES (INDICATIVE)
 -  ENHANCEMENTS TO BROOK VEGETATION WITHIN CCIC LAND NORTH OF FLOWING WAY
 -  ENHANCEMENTS TO VEGETATION AT FRONTAGE TO PEOPLE'S PARK

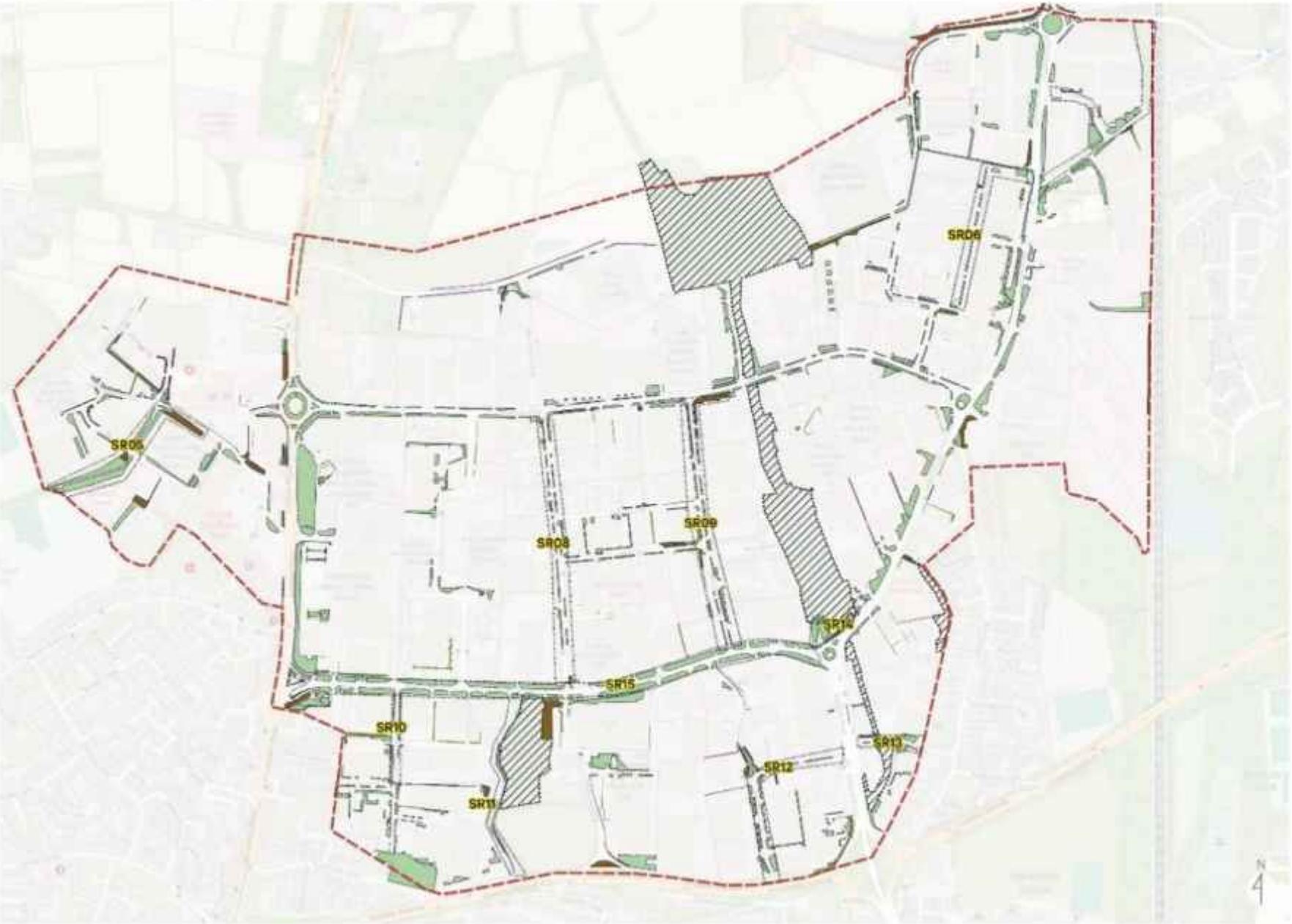
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NATIONAL TREE MAP - © BLUEKEY INTERNATIONAL LIMITED



ACTIONS TO PROTECT & ENHANCE CRAWTER'S BROOK



- MANOR ROYAL**
- SR01**
BRAMBLE SCRUB TO BE ENHANCED TO MIXED SCRUB
- SR02**
AMENITY GRASS TO BE ENHANCED TO SPECIES RICH MEADOW GRASS
- SR03**
WOODLAND TO BE ENHANCED
- SR04**
NATIVE HEDGEROW TO BE ENHANCED TO SPECIES RICH NATIVE HEDGEROW
- SR04**
HEDGE WITH POTENTIAL TO BE REPLACED TO WITH SPECIES RICH NATIVE HEDGEROW
- TARGETED HOTSPOTS AND PROJECT AREAS

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ACTIONS TO INCREASE SPECIES RICHNESS











FOCUS FOR AIM AND ACTIONS:

Target up to
+40%
Urban Greening
Factor (UGF) uplift
Potential

Increase
multifunction
qualities of
linear Green
Infrastructure

Reduce
noise & air
pollution

Influence and
enable adjoining
private land &
buildings to
provide
quality GI

PARTNERSHIP OPPORTUNITIES:

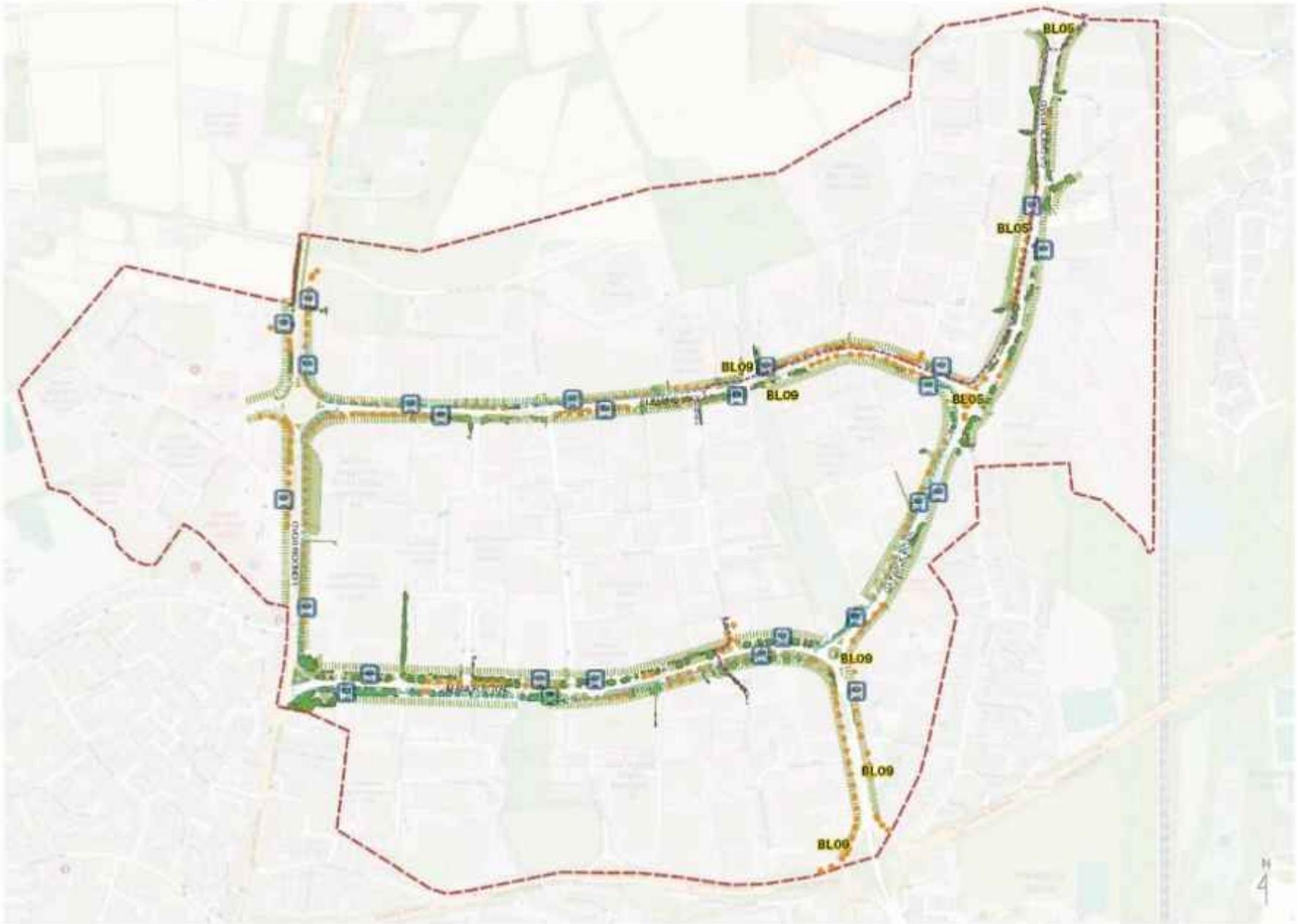


+ Land Owners
+ Businesses

APPLIES TO:

- Manor Royal (Road)
- London Road
- Fleming Way
- Gatwick Road

Note: GI along Manor Royal Road is identified as Structural Landscaping in CBC's Local Plan. Refer to Policy CH7 in the Local Plan.



- MANOR ROYAL
- NATIONAL CYCLE NETWORK ROUTE 21 ALONG BOULEVARD LOOP
- LOCAL CYCLE NETWORK ALONG BOULEVARD LOOP
- BL01** AMENITY GRASS WITH POTENTIAL TO BE ENHANCED TO SPECIES RICH MEADOW GRASS
- BL02** EXISTING TREES PROTECTED
- BL03** POTENTIAL NEW TREES (SUBJECT TO FEASIBILITY)
- BL04** FENCIBLES & BOUNDARIES TO BE ENHANCED
- EXISTING SUPERLEADS STOP
- BL06** FUTURE (POTENTIAL) SUPERLEADS STOPS
- CONTAINS PUBLIC HIGHWAY OR OTHER LEGISLATED UNDER THE LOCAL GOVERNMENT ACT 1972
- BASE MAP AND DATA FROM OSNEDS (MAP APP) OSNEDS (MAP) COURTESY OF SUE WATTS (SUSSEX COUNTY COUNCIL) (MAP) AND COMBINED
- NATIONAL TREE MAP - © BUREAU INTERNATIONAL LIMITED

ACTIONS TO RE-IMAGINE THE BOULEVARD LOOP



ILLUSTRATION OF A RE-IMAGINED MANOR ROYAL BOULEVARD

ACTION PLAN TO RE-IMAGINE THE BOULEVARD LOOP

REF	ACTION	WHAT THE BID CAN DO	WHAT OTHERS CAN DO	PRIORITY	QUICK WIN	POTENTIAL BENEFITS				
						INCREASE HABITAT CONNECTIVITY	REDUCE AIR POLLUTION	IMPROVE BIODIVERSITY	IMPROVE FLOOD MANAGEMENT	INCREASE ACCESS TO NATURE
BL01	Enhance all grass verges along the Boulevard Loop	<ul style="list-style-type: none"> Invest in changes to management of grass verges and follow guidance in this GI Framework Monitor success through additional habitat condition surveys and / or visual observation. Provide information and interpretation about the benefits of wildflowers along road verges 	<ul style="list-style-type: none"> Amenity grass to be enhanced on private land can also follow the guidance within this GI framework 		✓	✓				✓
BL02	Protect and enhance all trees along the Boulevard Loop	<ul style="list-style-type: none"> Invest in ongoing management and maintenance of trees along the Loop Monitor success and growth of existing canopy cover 	<ul style="list-style-type: none"> Support Invest 	✓	✓	✓	✓	✓		✓
BL03	Plant more trees along the the Boulevard Loop (Links with TC04,05,06,07)	<ul style="list-style-type: none"> Identify location for new trees Invest in underground services / utilises survey and follow guidance Liase with WSCC and CBC in relation to tree species and locations Refer to guidance in GI Framework, the appendix and in CBC guidance / policy Could be linked to enhancing amenity grass verges (subject to timing) Monitor success and growth of canopy cover 	<ul style="list-style-type: none"> WSCC to support and approve new tree planting within grass verges 	✓	✓	✓	✓	✓		✓
BL04	Improve boundary treatments along Boulevard Loop	<ul style="list-style-type: none"> Invest in enhancing vegetation within public land along boundaries and follow guidance in this GI Framework Advocate for this approach to land owners / Or invest in this and incorporate boundary treatments along loop within ongoing management and maintenance of the BID Monitor success through additional habitat condition surveys and / or visual observation. 	<ul style="list-style-type: none"> Boundary treatments to be enhanced on private land can also follow the guidance within this GI framework 			✓	✓	✓		✓



THE NEW CRAWLEY

A Vision of the Future

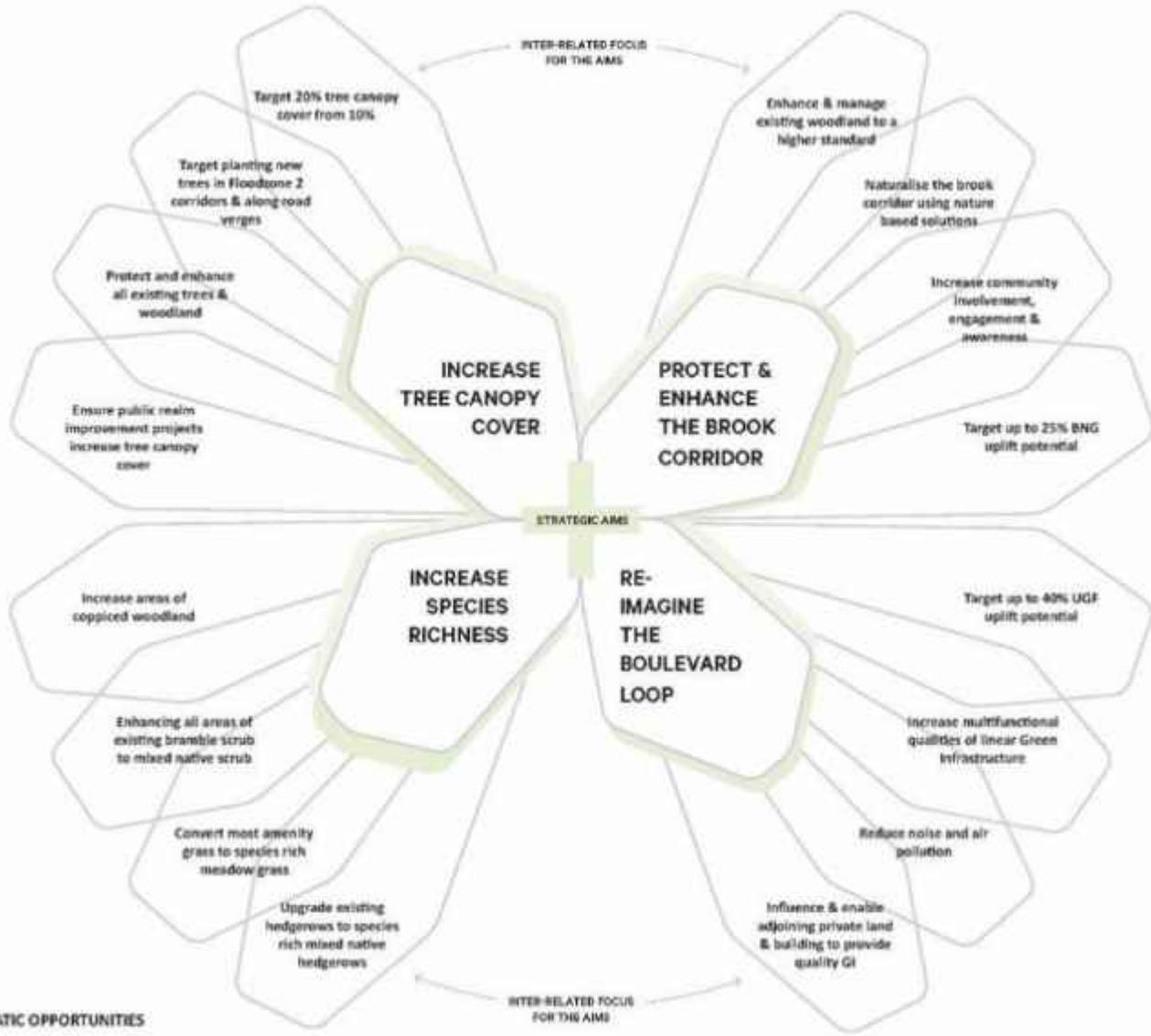
just about right!



"We envisage this as a fine boulevard, brilliantly lighted at night, enriched with sculpture and fountains, and the habitual resort of young and old." That was Sir Thomas Bennett's description of the civic centre of new Crawley. Mr. Minopri's drawing is only an impression — no detailed plan has yet been passed by the Corporation. But he envisages the boulevard with a central green strip 100 feet wide, possessing the fine chestnut, oak, maple and ash trees of the Rectory garden. The boulevard would be bordered on the south side by shops and on the north side by the town hall, college and theatre.

This booklet is based on the report in the "Courier" for December 9, 1948, of the Master Plan Meeting on December 4, but original material is also included.

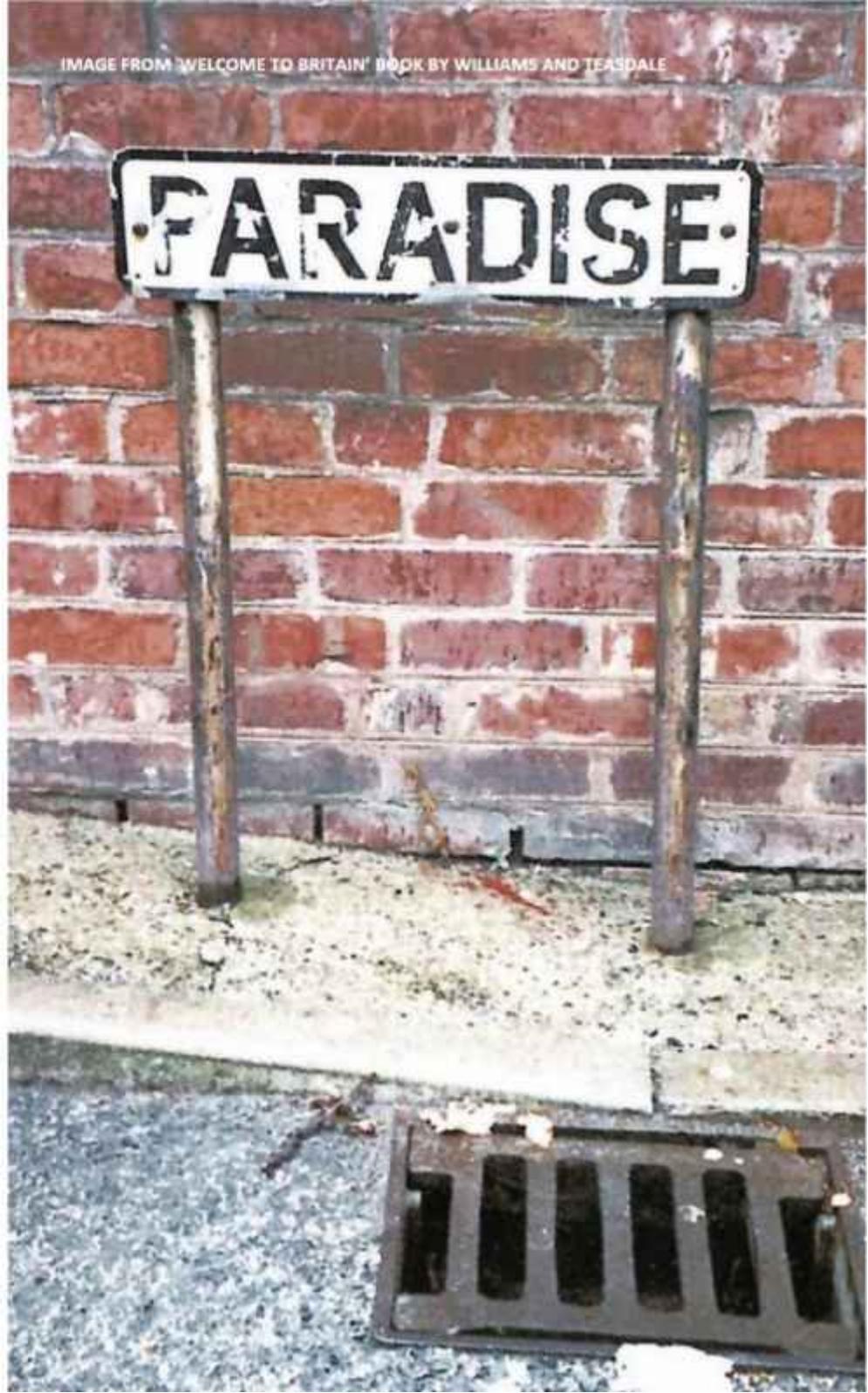
PRICE: THREEPENCE



STRATEGIC AIMS & THEMATIC OPPORTUNITIES

THIS GI FRAMEWORK IS NOT A STICKY LABEL

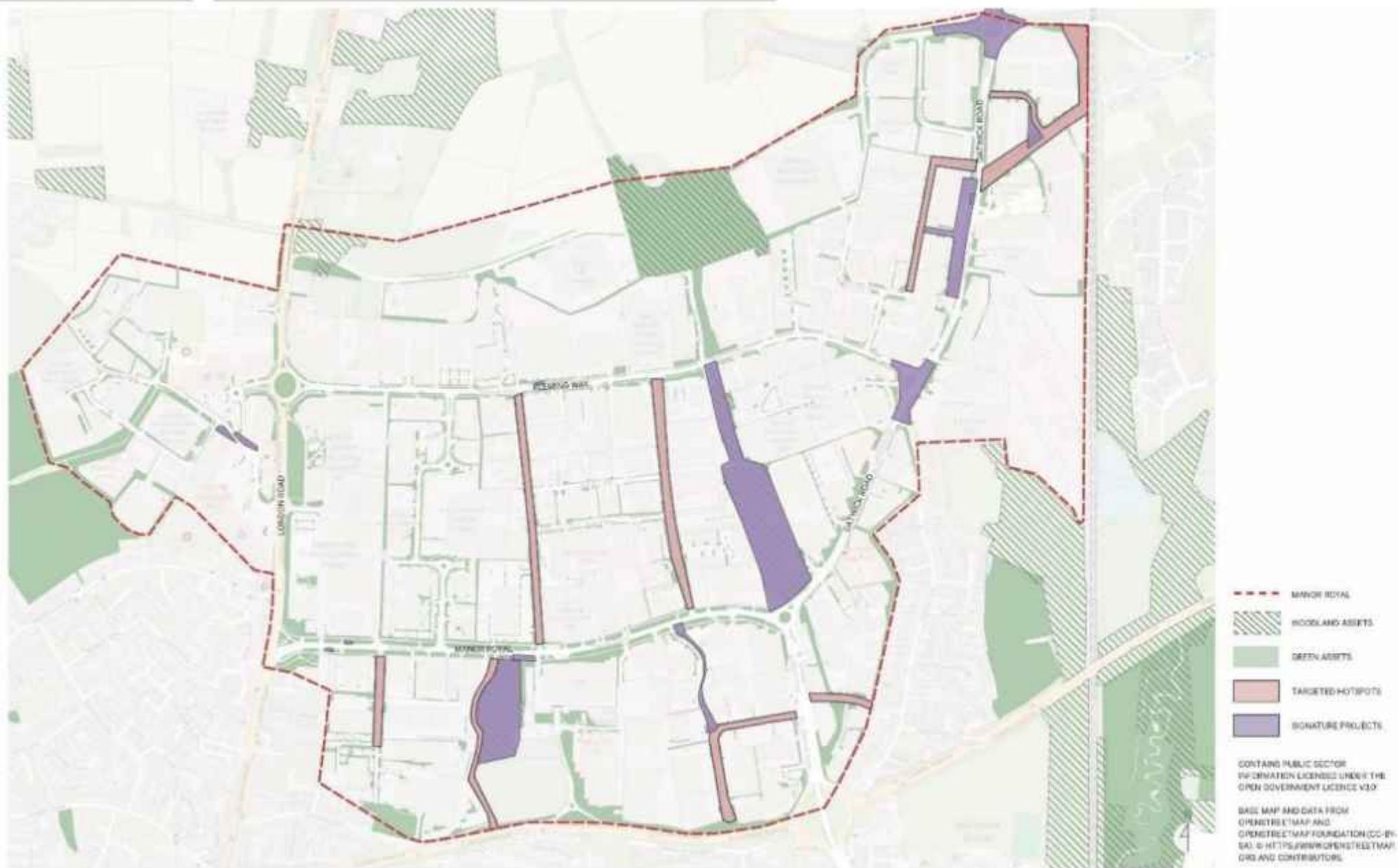
IMAGE FROM 'WELCOME TO BRITAIN' BOOK BY WILLIAMS AND TEASDALE



This is an action focussed strategic framework with purpose and meaning.

“By strengthening natural assets & bringing more nature into the business district, we will increase biodiversity & ecosystem services for the benefit of current & future generations.”





PROJECTS PACK SIGNATURE PROJECTS AND HOT SPOTS

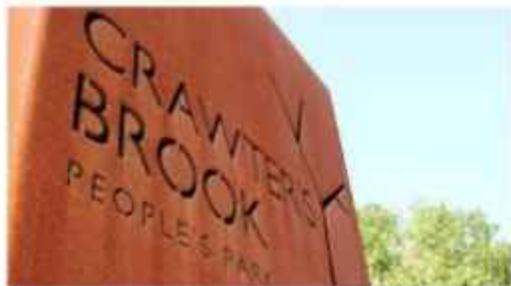
Why this is important for Manor Royal



Before the BID



With the BID







Final words

“It is about making it ‘greener’ but it’s not just about that.

Evidence supports that protecting and enhancing the green infrastructure also has economic, social and health benefits alongside the all important environmental ones.

By investing in this GI Framework and delivering the actions, we can expect to realise multiple returns that benefit Manor Royal and everyone that uses it, including the insects, bees and birds.”

www.manorroyal.org/GIF



Thank you

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Chartered Landscape Architect

Director / Co-owner Allen Scott

Working with Manor Royal since 2015

