

SECTION 5: A SUSTAINABLE MANOR ROYAL

Actions for a more sustainable Business District

In addition to site specific enhancement projects and a commitment to ongoing management and maintenance, this Projects Pack suggests potential further initiatives that can bring multiple benefits for Manor Royal and beyond.

Many of these district wide initiatives are founded on responding to the global climate emergency and biodiversity crisis. They suggest local actions / solutions specific to Manor Royal and its public realm.

The existing and future vegetation, soils and water throughout Manor Royal can play an important role in preventing biodiversity collapse and help climate change mitigation.

These initiatives, together with others, also present opportunities to directly educate people within Manor Royal about these global issues and make better connections between people and nature.

This section of the Projects Pack provides an overview of these potential initiatives and gives a steer on the next steps needed to implement them.

District Wide green initiatives include:

- Enhancing biodiversity, character and community awareness by creating an interlinking network of 'green corridors' along the major road network;
- Protecting the important areas of existing woodland and larger areas of vegetation and 'green space' and celebrating these as ecological havens for people to connect with nature;
- Increasing appropriate habitats and vegetation along cycleways and walkways creating 'green stepping stones';
- Managing surface water drainage in a sustainable and holistic way by use of 'green / blue infrastructure' and sustainable drainage systems;
- Seeking to use more sustainable sourced materials within the public realm projects; and
- Integrating biodiversity benefits into management and maintenance regimes throughout Manor Royal.

"For biodiversity to be protected, it has to be appreciated and valued. But our increasing detachment from nature stops many of us knowing and directly experiencing it".
Extracts from House of Commons Environmental Audit Committee 21-22



Example taken from Sheffield's 'Green to Grey' project. Grey to Green is a groundbreaking environmental and economic development strategy devised by Sheffield City Council. The outcomes include improved areas of public realm / streets; new rain gardens; paving; and new attractive vegetation and habitats.

Specific projects to help implement these initiatives include:

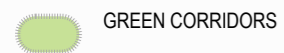
- DEVELOPING AND IMPLEMENTING AN ECOLOGICAL ENHANCEMENT PLAN
- REFRESHING THE MATERIALS / FURNITURE PALETTE

- IMPLEMENTING THE PARKING MANAGEMENT PLAN
- CONTINUING TO IMPLEMENT THE FOOTPATH IMPROVEMENT PLAN
- ENABLING A VOLUNTEERING CAMPAIGN
- DEVELOPING A PUBLIC REALM MONITORING / AUDIT INITIATIVE

- CREATING A CLIMATE CHANGE AWARENESS / COMMUNICATION PLAN
- ESTABLISHING AND DELIVERING A DISTRICT WIDE MANAGEMENT AND MAINTENANCE PLAN

Emerging district wide green initiative framework

Conceptual idea



GREEN CORRIDORS

LESS GREY - MORE GREEN: ECOLOGY / BIODIVERSITY CORRIDORS WITH OPPORTUNITIES FOR ALTERNATIVE GRASS CUTTING / WILDFLOWER MEADOW PLANTING / INCREASE IN SPECIES FOR BUGS AND BUTTERFLIES / MORE SPACE FOR CYCLING, WALKING AND PUBLIC TRANSPORT.



GREEN STEPPING STONES

INCREASE IN APPROPRIATE VEGETATION TO HELP PROVIDE ECOLOGY / BIODIVERSITY STEPPING STONES



GREEN / BLUE STREETS

POTENTIAL PRIORITY LOCATIONS TO SHOWCASE SUSTAINABLE DRAINAGE SYSTEMS (SUDS) APPROACH TO SURFACE WATER DRAINAGE MANAGEMENT



GREEN SPACES

IMPORTANT SPACES FOR THE PROTECTION OF ECOLOGY / BIODIVERSITY WITH POTENTIAL FOR PEOPLE TO CONNECT DIRECTLY WITH NATURE

NOTE: FURTHER ASSESSMENT AND EVIDENCE IS REQUIRED TO CONFIRM THE DELIVERABILITY OF THIS STRATEGY. THIS MAY INCLUDE A DISTRICTWIDE TREE CANOPY AUDIT AND ASSESSMENT, A PRELIMINARY ECOLOGICAL ASSESSMENT, AND A WATER CATCHMENT AND DRAINAGE ASSESSMENT. OPPORTUNITIES ALSO INCLUDE INNOVATIVE STREETScape DESIGN SOLUTIONS AND TAKING A LONG TERM VIEW ON SUSTAINABILITY

The idea:

Utilise the four main movement corridors to create a continuous interlinking loop of highly visible and multifunctional green infrastructure straddling both public and private land.

Why?

The four roads (Manor Royal road, London Road, Fleming Way and Gatwick Road) already provide important green infrastructure such as trees, verges and boundary vegetation. However, these main corridors often appear dominated by grey infrastructure, vehicles, traffic noise and fumes. Private boundaries often appear uncoordinated and inconsistent.

The intent is to shift the balance so that these movement corridors create a more attractive and healthy environment for people and for nature.

They enable ease of movement (vehicles, public transport, cyclists, pedestrians, wildlife and data) whilst creating places to ‘pause’, visual interest and delight.

Green Corridors create ecosystems where people and biodiversity have equal importance and nature is fully integrated into the place.

How?

The Green Corridor concept could be delivered in variety of ways over short, medium and long timeframes.

Short to medium term measures could related to the way the existing vegetation is managed and maintained and / or delivering the Signature Projects along the Green Corridor with the wider aspirations in mind.

The important thing here is to take a holistic and longer term view on what these corridors could be and not solely focusing on one element at a time (eg - just adding a bus lane). Establishing some meaningful, over arching and holistic design principles for the Green Corridor is fundamental.

Longer term measures could include re-purposing and redesigning the roads with more emphasis and priority on the green infrastructure.

It may also be prudent to gather baseline data to help drive the principles, outcomes and to establish ways to measure success. Baseline information may include mapping the functionality, health and life expectancy of the existing tree canopy cover along the Green Corridors.



The Green Corridor concept establishes a inter-connecting circuit of improved green infrastructure.

Private boundaries and the properties that face onto each of the four roads can also play a part in delivering the Green Loop. Notwithstanding the Manor Royal Design Guide SPD, the principle of establishing a continuous Green Corridor should influence enhancements to properties and their contribution to climate change actions and addressing the biodiversity crisis.

Recommended next steps:

It is recommended that the idea / concept be explored further in association with the BID’s partners.

It is worth noting that some of the Green Corridor principles have been applied and integrated in the strategies, projects and initiatives elsewhere within this Projects Pack.

Precedent images of materials / potential outcomes:



Streets as green corridors for movement and place.



Verges do more than just provide space for underground services



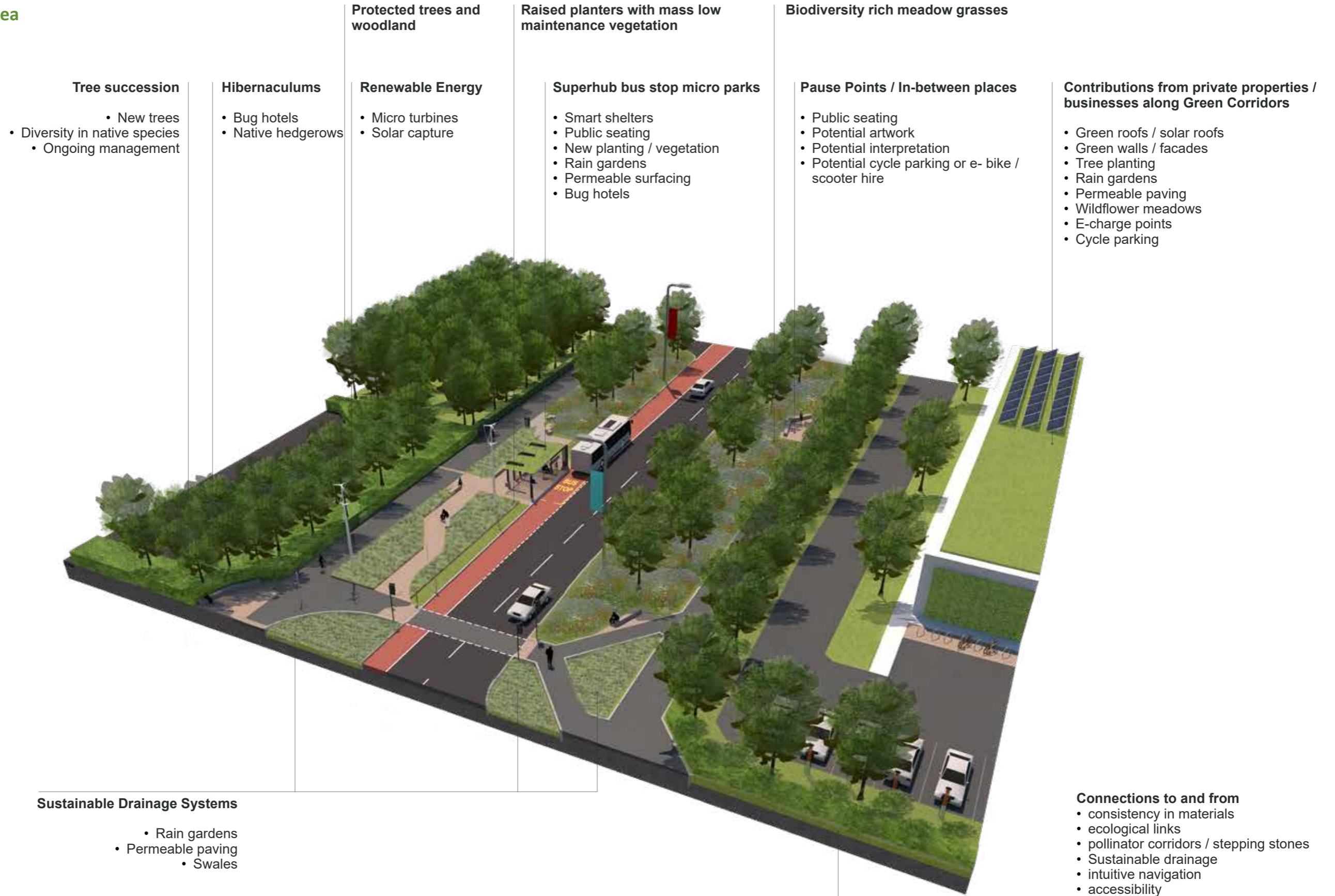
Private boundaries add value to the quality of the environment and the environmental benefits to Manor Royal



Streetscape design and layout makes it a pleasure to walk and cycle. Specification makes its better for the planet and sustainable for maintenance

The Green Corridor

Conceptual idea



NOTE: FURTHER ASSESSMENT AND EVIDENCE IS REQUIRED TO CONFIRM THE DELIVERABILITY OF THIS INITIATIVE.

The opportunities:



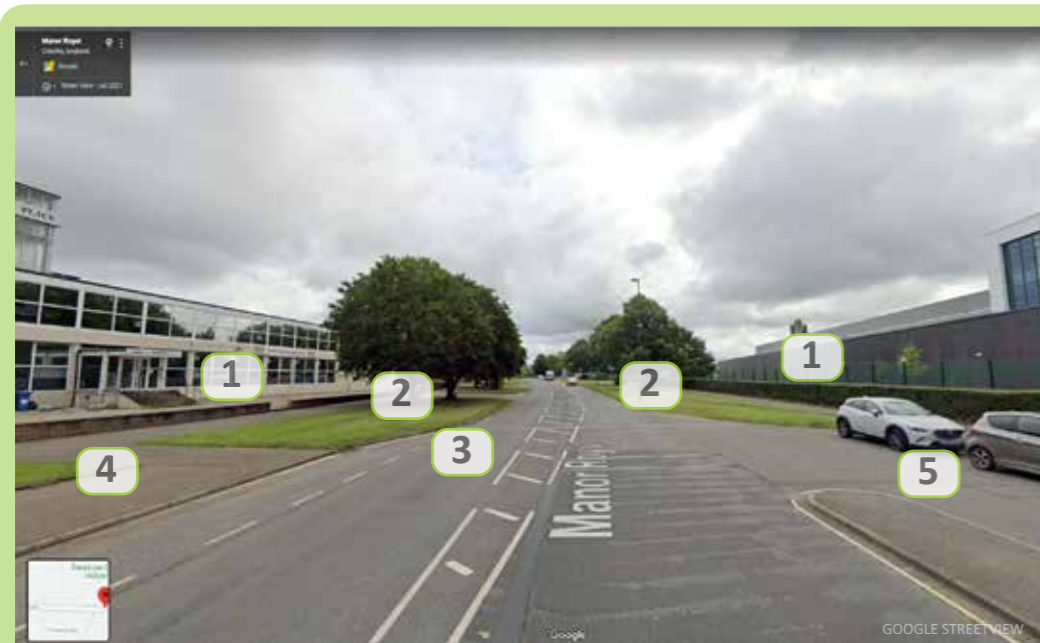
- 1 Trees and vegetation on private land
- 2 Vegetation on central reservation
- 3 Designated Bus and Cycle Lanes
- 4 Air quality filters / purifiers on lamp columns

London Road opportunities



- 1 Consistency in trees and vegetation and their management on private land
- 2 Meadow rich grass verges
- 3 Designated Bus and Cycle Lanes
- 4 Air quality filters / purifiers / wind turbines
- 5 Microparks and superhub bus stops

Fleming Way opportunities



- 1 More trees and vegetation on private land
- 2 Meadow rich grass verges
- 3 Designated Bus and Cycle Lanes
- 4 Superhub bus stop with green energy
- 5 Microparks with vegetation / rain gardens

Manor Royal opportunities



- 1 More trees and vegetation on private land
- 2 Improved Bus Lane
- 3 Vegetated central reservation (aspirational)

Gatwick Road opportunities

The idea:

Ensure environmental and ecosystem solutions are integrated into improvement projects on the periphery of the potential Green Corridors.

These will provide 'stepping stones' for wildlife and help 'green the grey' between Green Corridors, the larger areas of Green Space and the green infrastructure outside of Manor Royal.

Why?

Manor Royal includes existing and valuable mature trees, hedgerows and water courses. It's also surrounded by green spaces, corridors, private gardens and larger areas of open space comprising of mature trees, native vegetation and water courses.

However, there are spaces and routes between these that currently lack vegetation, ecological habitats and are typically quite harsh / hard environments.

The intent is to increase appropriate vegetation in these areas to bring more wildlife and nature into and throughout Manor Royal, whilst improving the quality of environment for the people using them.

How?

Delivering the Signature Projects and making improvements to the identified Hotspots as shown in this Projects Pack will start to help delivery this concept.

Other spaces and interventions can be developed and implemented in the same way of the other projects in the Pack or led by community initiatives facilitated by BID partners such as the Sussex Wildlife Trust / The Gatwick Greenspace Partnership.

Recommended next steps:

It is recommended that the idea / concept be explored further in association with MRBID's partners.

It is worth noting that some of the Green Stepping Stone locations may fall within private land. Further engagement will be required with land owners and businesses.

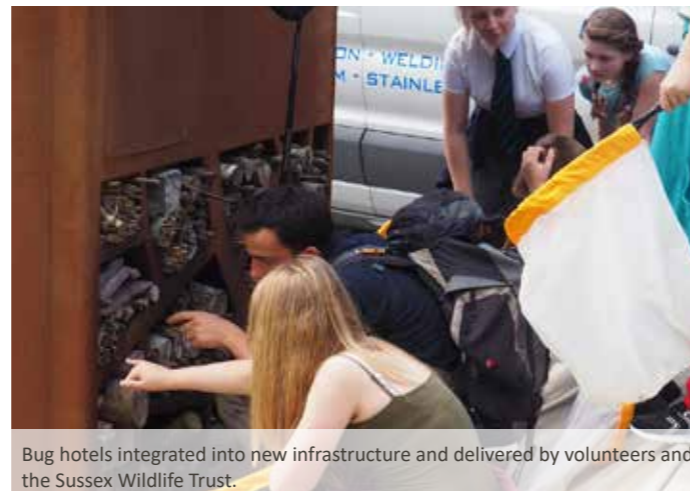


Areas of existing public realm that provide opportunity for an increase in biodiversity through greening initiatives and partnerships.

Precedent images of materials / potential outcomes:



Log piles and bug hotels provide opportunities for biodiversity



Bug hotels integrated into new infrastructure and delivered by volunteers and the Sussex Wildlife Trust.



Private and public boundaries improved by green walls providing year round interest, carbon capture and biodiversity increase.



Opportunities to 'green the grey' should not be missed, such as the medium strip at Gateway 1 / Gatwick Road.

The idea:

Use the streetscape and open spaces to mimic nature and manage surface water before it enters watercourses (taking a SuDS approach). Showcase these and use them to meaningfully enhance the existing grey infrastructure.

Why?

Sustainable Drainage Systems (SuDS) mimic nature and typically manage rainfall close to where it falls. SuDS can be designed to transport (convey) surface water, slow runoff down (attenuate) before it enters watercourses, they provide areas to store water in natural contours and can be used to allow water to soak (infiltrate) into the ground or evaporated from surface water and lost or transpired from vegetation (known as evapotranspiration).

SuDS are drainage systems that are considered to be environmentally beneficial, causing minimal or no long-term detrimental damage. They are often regarded as a sequence of management practices, control structures and strategies designed to efficiently and sustainably drain surface water, while minimising pollution and managing the impact on water quality of local water bodies.

Some areas across Manor Royal Business District provide opportunities for SuDS including permeable paving, rain gardens and swales. These areas include streets and areas of the public realm that typically consist of more traditional piped drainage systems. Surface water is typically only transported ‘conveyed’ rather than utilised for things like evapotranspiration (transpiration + evaporation). With further investigation there is a good chance to change current infrastructure to act more like ‘sponges’ that improve amenity, biodiversity, water quality and better control water quantity.

How?

SuDS solutions require careful investigation and design work to ensure the approach, layout and the specification is fit for purpose and can be maintained / managed in the long term. That said, the application of SuDS solution could be quite simple like reducing the amount of non-permeable surfacing or replacing grass verges with grass swales.

Delivering the Signature Projects and Hotspots within this Projects Pack will start to help delivery this concept. SuDS should also be integrated in another further improvement and development projects across the business district.



Potential streets and spaces for the Green / Blue initiatives (there may be many more across Manor Royal)

Recommended next steps:

It is recommended that the idea / concept be explored further in association with the BID’s partners, particularly the local Highways Authority, West Sussex County Council .

It is worth noting that the SuDS principles have been applied and integrated in the strategies, projects and initiatives within this report.

Precedent images of materials / potential outcomes:



Rain gardens take the surface water run off, add character and provide opportunities for biodiversity. They can also change throughout the year.



A combination of materials and vegetation can help transform a road / street into a place of form and function.



Hit and miss kerbs enable surface water from hard surfacing to fall into swales and rain gardens.



Rain water conveys into rain gardens close to where it falls. The rain gardens act like sponges whilst providing amenity and biodiversity to the public realm.

The idea:

Protect and enhance the large areas of woodland within Manor Royal as ecological havens / eco-halos.

Utilise these areas for people to escape and better connect to nature.

Why?

The existing woodlands already provide space for wildlife and biodiversity. It's important that these are protected, enhanced and well looked after.

The creation of Crawter's Brook People's Park is a fine example of enabling the community to access and appreciate the nature on the doorstep.

Not only is the People's Park used for walking and cycling between Manor Royal and Fleming Way, it's also used by community groups, school groups and other volunteers learning about ecology and the environment. The Gatwick Greenspace Partnership facilitate workshops and team building days that focus on keeping the park maintained and well looked after.

This should continue and could be expanded to the other areas of woodland within the Manor Royal Business District boundary such as Magpie Wood and Rowley Wood.

How?

Commitment should be given to continue protecting, enhancing and maintaining Crawter's Brook People's Park.

Both Magpie Wood and Rowley Wood are in private ownership and currently do not have public access.

It is recommended that the idea / concept be explored further in association with MRBID's partners and owners of the land.

Recommended next steps:

It is recommended that the idea / concept be explored further in association with the BID's partners.

It is worth noting that some of the ideas have already been integrated into the Strategies, Projects and Initiatives within the Project Pack.



Large areas of existing woodland and open space within the Manor Royal Business District boundary

Precedent images of materials / potential outcomes:



Commitment to ongoing management and maintenance, volunteering opportunities and education.



Informal and formal gathering set within natural environments. Better connection to wildlife and nature.



Seasonal change and diversity in species.



Community input into enhancements that benefit wildlife and the climate.

SUMMARY AND NEXT STEPS

Delivering this Projects Pack

“Over the past 10 years the Projects Pack has been instrumental in delivering wide-ranging changes all across Manor Royal for the businesses that trade here and the people that work and visit here. This latest version is the most far reaching yet providing a route map for a better, greener and more attractive place.”

Steve Sawyer : Executive Director of Manor Royal Business District

This is the most ambitious Projects Pack yet produced for the Manor Royal BID. It describes a wide-ranging series of projects and interventions that could be delivered during the next five year term of the Manor Royal BID (2023-28), although in all likelihood it will be challenging to deliver every project and intervention.

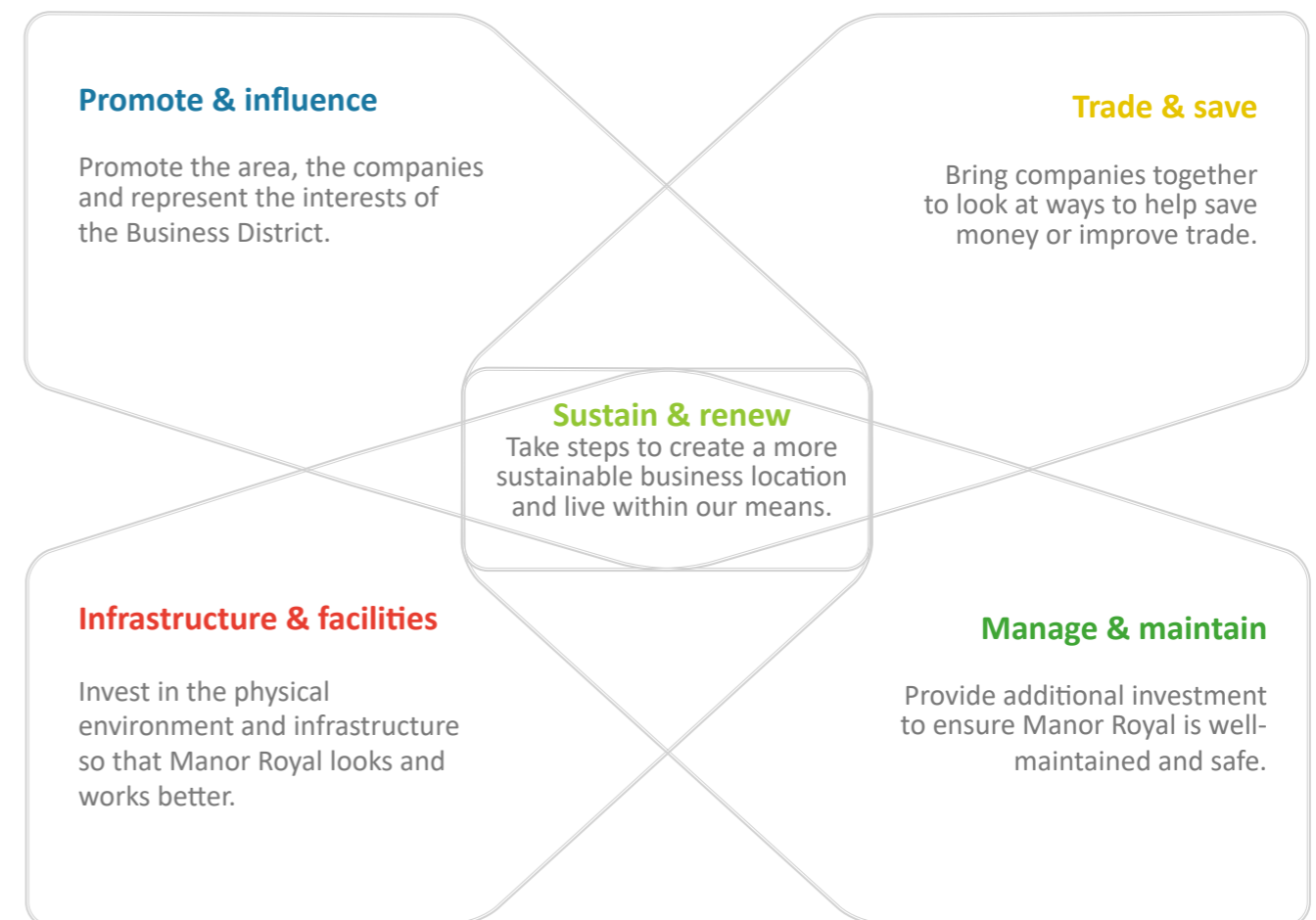
The Project Pack, like previous iterations, is deliberately devised in this way to provide challenge to the BID but also to provide scope for development and attracting and responding to investment opportunities as they arise.

The scope and scale of this version of the Project Pack also recognises the fact that the Manor Royal BID has now demonstrated its ability to deliver ambitious projects, which this pack encourages and seeks to extend.

Ultimately, while the Manor Royal BID has demonstrated its ability to deliver sometime complex projects, the contribution of public partners - in particular West Sussex County and Crawley Borough Councils - will be necessary to realise the full potential to improve Manor Royal in a timely, efficient and cost-effective way.

The next steps for each project and intervention outlined in this Projects Pack are unique to each project and summarised on the corresponding pages. In all cases further detailed design work will be required to develop the concepts outlined necessary to deliver the project described.

For these projects to be delivered it will also be necessary for the Manor Royal BID to be renewed at it's ballot in 2023 and, subsequently, the BID will need to use it's influence to raise additional funds as the value of these projects is more than the BID Levy income alone would be able to reasonably generate.



The Projects 2023-2028

Signature projects:

- SP01 GATEWAY 4
- SP02 GATEWAY 5 (GREENING)
- SP03 FLEMING WAY MICRO PARK
- SP04 COUNTY OAK POCKET PARK
- SP05 COBHAM WAY POCKET PARK
- SP06 MAGPIE WOOD (TBC)
- SP07 GATWICK ROAD PARADE
- SP08 WOOLBOROUGH LANE - LINEAR PARK
- SP09 SUPERHUB BUS STOPS / MICRO PARKS
- SP10 IN-BETWEEN SPACES AND DESIRE LINES
- SP11 CRAWTER'S BROOK (EXTRAS)

Targeted hotspots:

- TH01 NAPIER WAY
- TH02 MAGPIE WOOD - CYCLE / WALK WAY
- TH03 MAXWELL WAY
- TH04 RUTHERFORD WAY
- TH05 CROMPTON WAY
- TH06 FARADAY ROAD
- TH07 NEWTON ROADS
- TH08 TINSLEY LANE NORTH / COBHAM WAY

Green initiatives:

- | | |
|----------------------------|-------------------------|
| GI01 GREEN CORRIDORS | GI03 GREEN BLUE STREETS |
| GI02 GREEN STEPPING STONES | GI04 GREEN ECO SPACES |

Areas of focus:

- AF01 TARGETED BLITZ / INTENSIVE CLEANS
- AF02 GRASS CUTTING REGIME
- AF03 EDGING UP PROGRAMME
- AF04 PRIVATE BOUNDARIES
- AF05 AFTERCARE OF SIGNATURE PROJECTS

District Wide

- DW01 ECOLOGICAL ENHANCEMENT PLAN
- DW02 REFRESH MATERIALS PALETTE
- DW03 PARKING MANAGEMENT PLAN
- DW04 FOOTPATH IMPROVEMENT PLAN
- DW05 VOLUNTEERING CAMPAIGN
- DW06 MONITORING / AUDIT INITIATIVE
- DW07 AWARENESS / COMMUNICATION PLAN
- DW08 MANAGEMENT AND MAINTENANCE PLAN
- DW09 RECOGNISE, REWARD AND ENCOURAGE GOOD PRACTICE
- DW10 EXTERNAL RECOGNITION

The story
of Manor
Royal is
one of
growth,
change and
progress



ALLEN SCOTT
LANDSCAPE
ARCHITECTURE