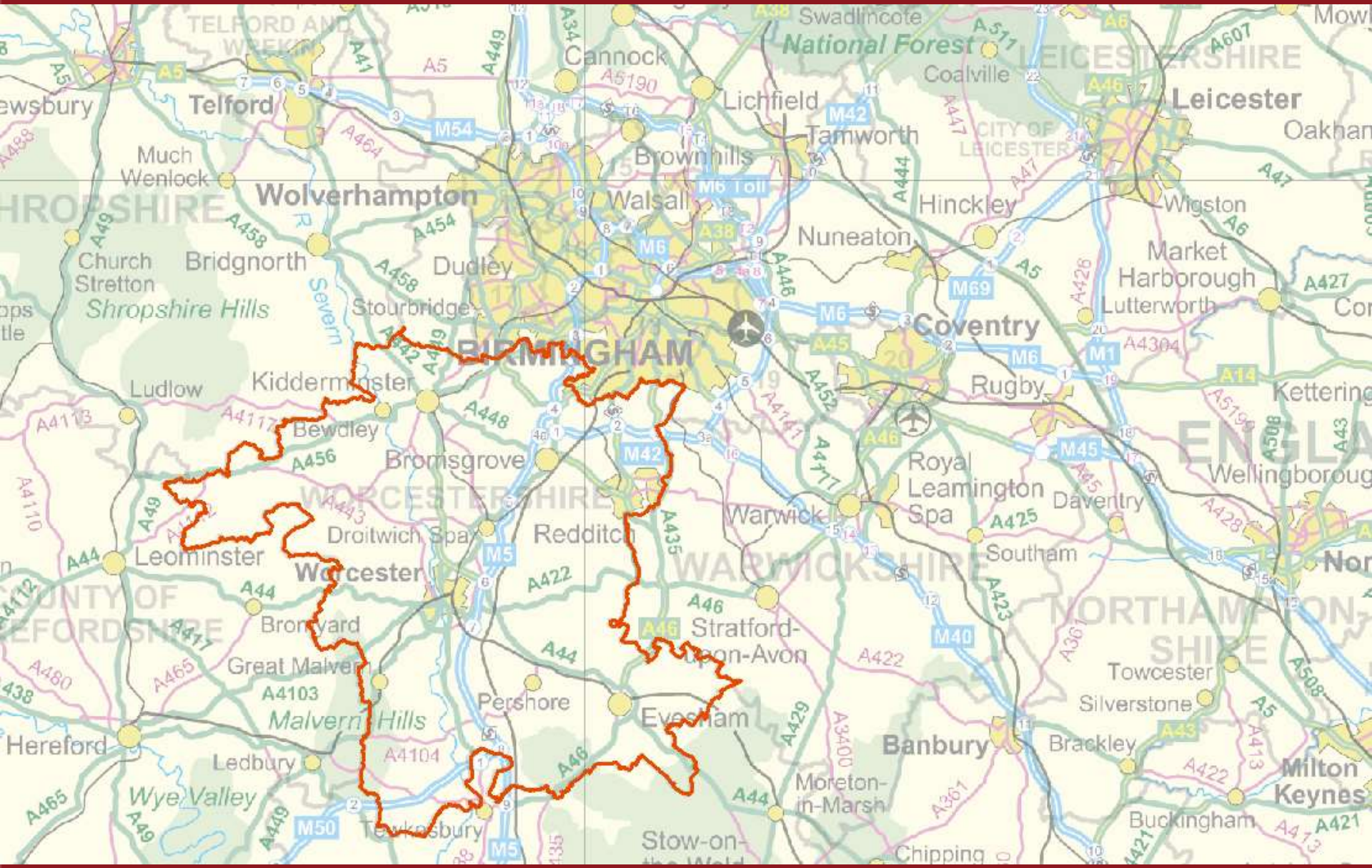
Using Strategic Initiatives to Lever Biodiversity Net Gain

Green Infrastructure as a delivery tool for Biodiversity Gain

image www.worcesternews.co.uk



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Bromsgrove District Council
www.bromsgrove.gov.uk

WOODLAND TRUST

Wyre Forest District Council

sustrans
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Green Infrastructure Worcestershire

NATURAL ENGLAND

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Forestry Commission

WYCHAVON DISTRICT COUNCIL
good services, good value

REDDITCH BOROUGH COUNCIL

Malvern Hills District Council

worcestershire county council


Planning for a Multifunctional Green Infrastructure Framework in Worcestershire
Green Infrastructure Framework
Context and Baseline
July 2018
Find out more online:
www.worcestershire.gov.uk/


Planning for a Multifunctional Green Infrastructure Framework in Worcestershire
GREEN INFRASTRUCTURE FRAMEWORK 2
Planning for a Multifunctional Green Infrastructure Framework in Worcestershire
Green Infrastructure Framework 3:
Access and Recreation
May 2013
Find out more online:
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Planning for a Multifunctional Green Infrastructure Framework in Worcestershire
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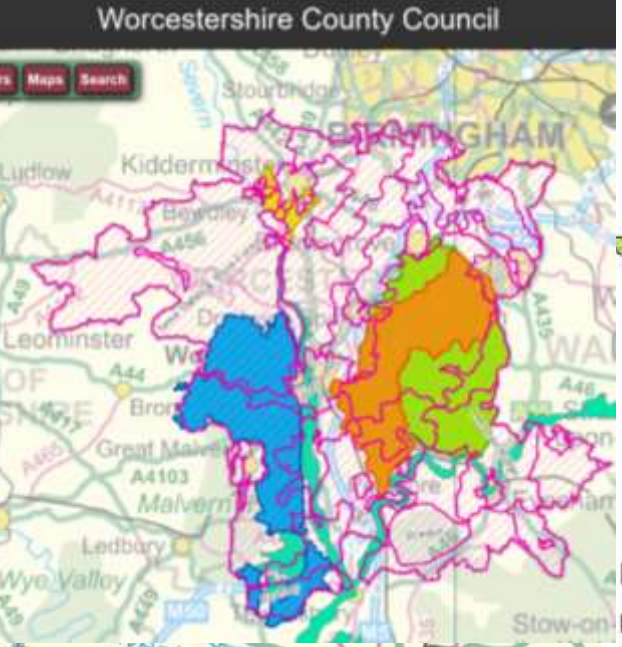
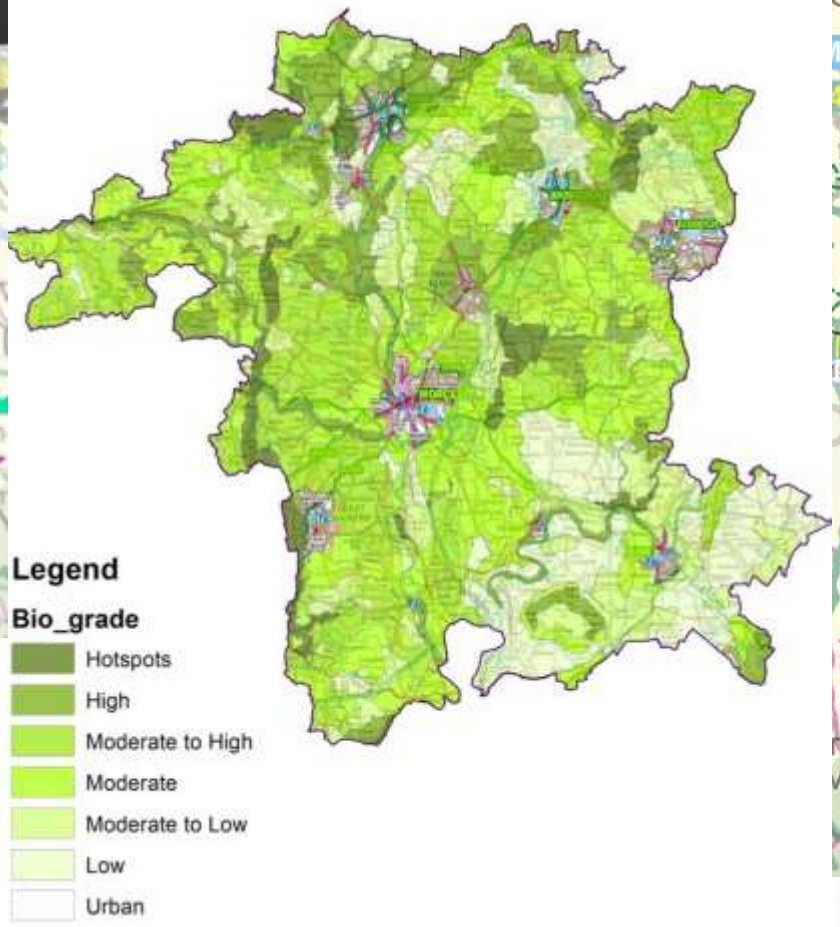
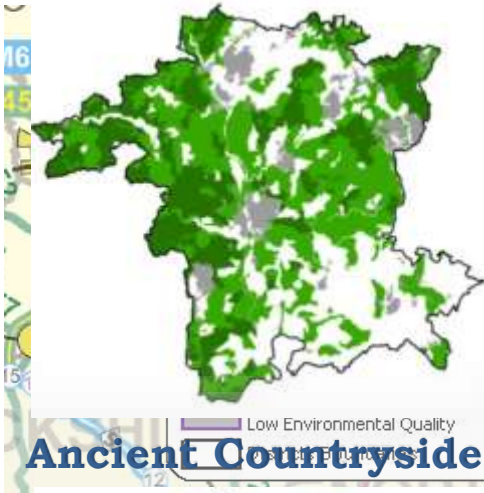
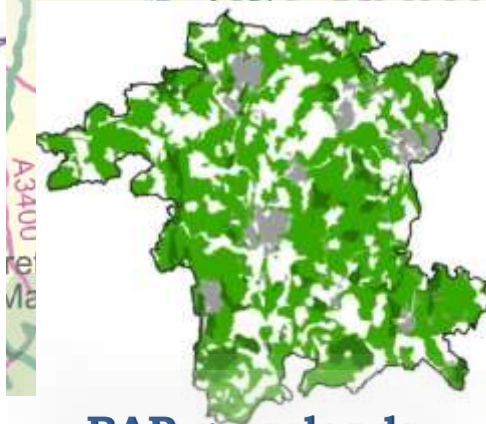


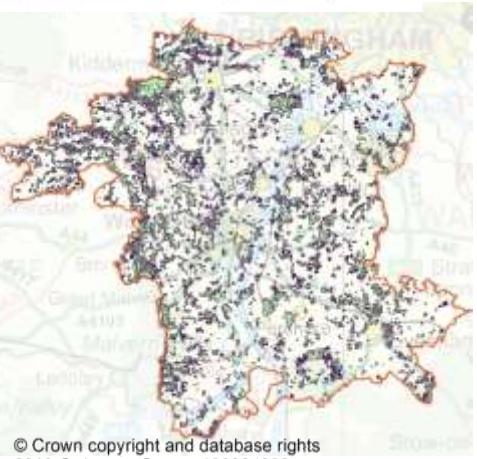




Ancient Countryside



BAP grasslands



A.S.N.W

>35% connectivity

Traditional Orchard

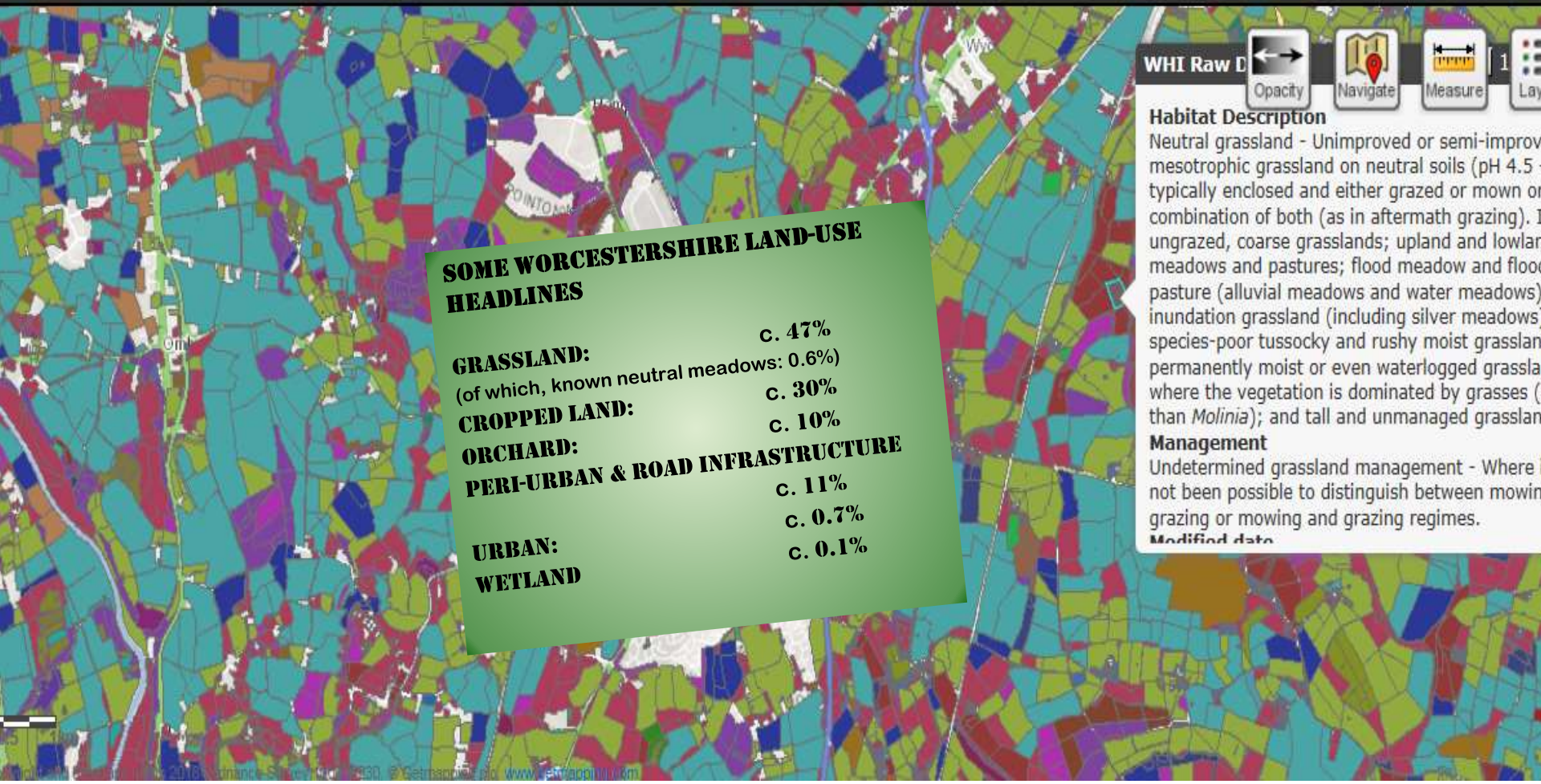
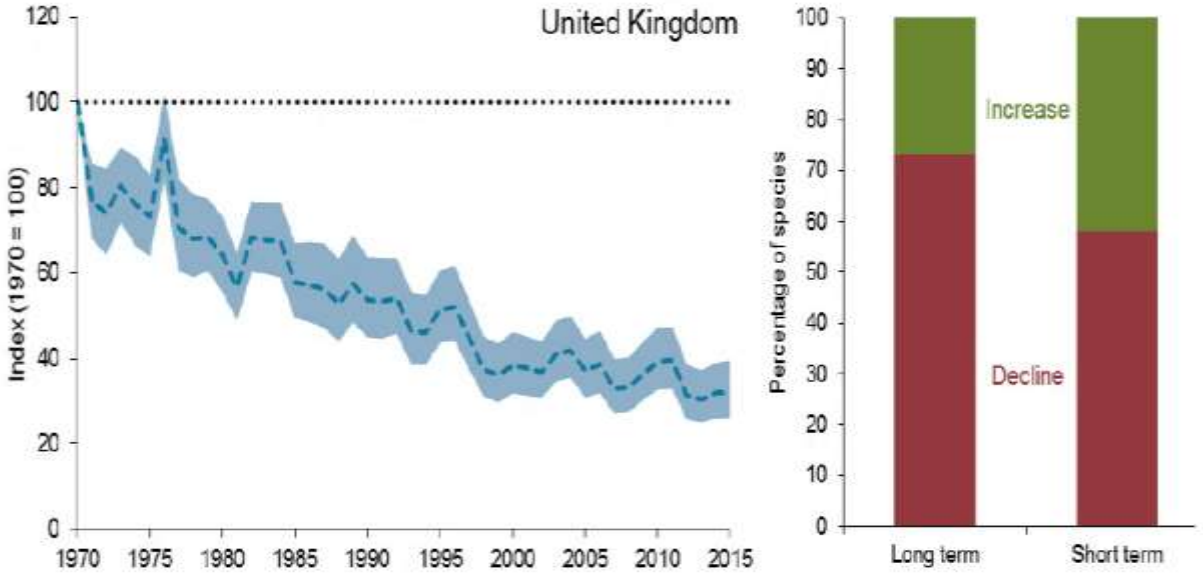


Figure C4ai. Change in the relative abundance of priority species in the UK, 1970 to 2015.



Source: UK Biodiversity Indicators 2018, DEFRA (available at www.jncc.defra.gov.uk/ukbi)

Biodiversity 2020:
A strategy for England's wildlife and ecosystem services

defra

"England's collection of wildlife areas (both legally protected areas and others) does not currently represent a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures"

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https://metro.co.uk/2016/03/11/watch-just-how-useful-is-a-chocolate-teapot-5746932/

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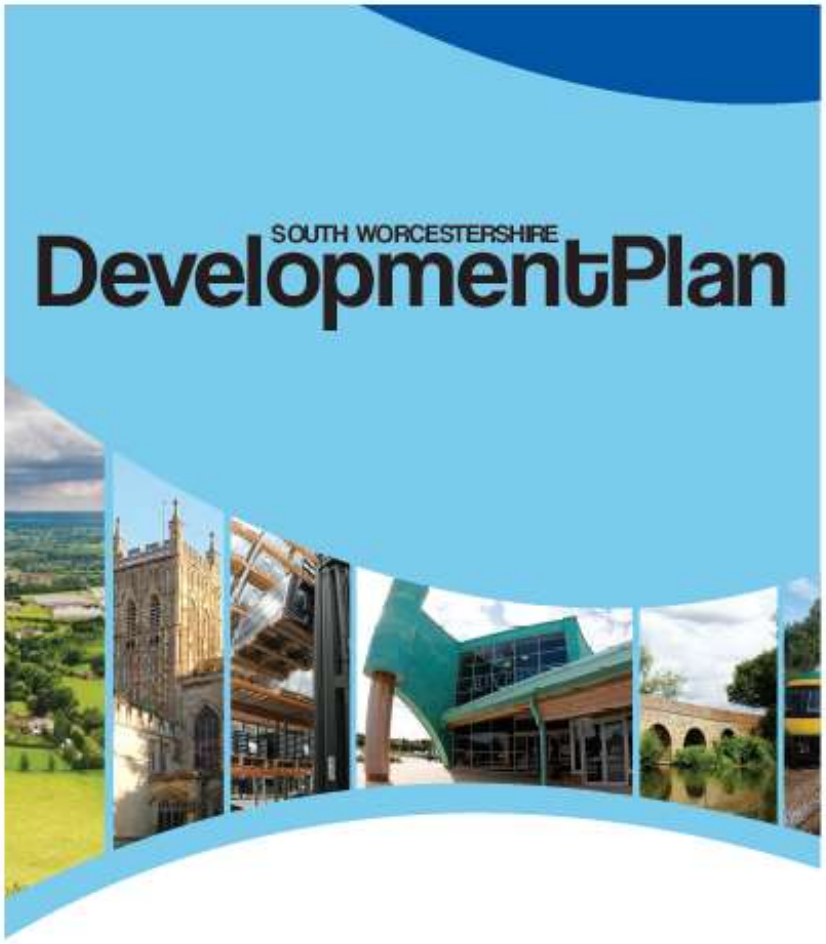

www.swdevelopmentplan.org

SWDP 5: Green Infrastructure

A. Housing development proposals (including mixed-use schemes) are required to contribute towards the provision, maintenance, improvement and connectivity of Green Infrastructure (GI) as follows (subject to financial viability[20]:)

i. **For greenfield sites exceeding 1ha (gross) - 40% Green Infrastructure (GI)[21].**

ii. **For greenfield sites of less than 1ha but more than 0.2ha (gross) – 20% Green Infrastructure (GI)[22].**

iii. **For brownfield sites – no specific Green Infrastructure (GI) figure[23].**

20 Provision of Green Infrastructure at a lower level than that required by this policy will need to be justified by a robust viability assessment.
21 Excluding private gardens.
22 Excluding private gardens.
23 Proposals will need to satisfy other SWDP policies, e.g. SWDP 21: Design, SWDP 22: Biodiversity & Geodiversity, SWDP 28: Sustainable Drainage Systems, SWDP 39: Provision for Green Space and Outdoor Community Uses in New Development and in most cases this will necessarily mean parts of the site performing a Green Infrastructure (GI) function.

A-Z of Services A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Our Local Plan 2016-2036

Pre-submission consultation

Local Plan Review (2016 - 2036)

Local Plan Pre-submission publication

Consultations runs 1 November 2018 to 5pm on 17 December 2018.

We are now onto the next stage of the Local Plan Review with a Pre-Submission consultation period, in accordance with Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012.

All representations received will be submitted with the Local Plan to the Planning Inspectorate for examination in public.

The new Local Plan will replace the current Adopted Core Strategy, Site Allocations and Policies Local Plan and Kidderminster Central Area Action Plan in order to produce a single Local Plan for the district. Please see the current project plan for the most up to date timetable.

Once adopted, the new Local Plan will shape the future of Wyre Forest District up to 2036. It will identify where housing, retail and employment land should be located and the infrastructure required to support this growth, such as new roads, schools and health services. The policies in the plan will be used to help make decisions on planning applications in the district.

If we don't review and adopt an up-to-date Local Plan, development will still happen in our district, but decisions will be taken in regard to the National Planning Policy Framework (NPPF) without local people having a say on setting local policies.

Consultation response forms must be received by no later than 5pm on Monday 17 December 2018. The consultation response

Comment

View and comment on the online portal

Consultation runs until 5pm Monday 17 December 2018

View

- Local Plan Pre-Submission Publication document (pdf)
- Local Plan Policies Maps
  - Pre-Submission policies map

Biodiversity and Geodiversity

Policy 11D - Protecting and Enhancing Biodiversity

1. The Council will expect proposed developments to deliver measurable net gains in biodiversity through the promotion and re-creation of priority habitats, ecological networks and the protection and recovery of legally protected and priority species populations. Delivery of measurable net biodiversity gains should be designed to support the delivery of the identified biodiversity network. The level of biodiversity net gain required will be proportionate to the type, scale and impact of development. Enhancements for wildlife within the built environment will be sought where appropriate from all scales of development.

2. Where required proposals for development must be supported by an appropriate level of up to date technical ecological assessment, demonstrating how ecological features identified have influenced the design and layout.

3. In these circumstances development should support the conservation, enhancement and restoration of biodiversity across the Plan Area. Specific provisions are identified below.

Full consideration will be given in making planning decisions to the importance of any affected habitats and features, taking account of the hierarchy of protected sites:

i. Development which is likely to have an adverse impact on the integrity of a Special Area of Conservation (SAC) (including candidate SACs), Special Protection Area (SPA) (including candidate SPAs), or other international designations or the favourable conservation status of European or nationally protected species or habitat will not be permitted.

ii. Development likely to have an adverse effect on nationally important sites including a Site of Special Scientific Interest (SSSI) and irreplaceable features including (but not limited to) ancient woodland, and ancient or veteran trees will not be permitted, except where the public benefits of the development at that site clearly outweigh the loss or deterioration of habitat and a suitable compensation strategy exists.

iii. Development which would compromise the favourable condition, (or make it less likely that favourable condition can be reached) of a Local Wildlife Site (LWS), a Grassland Inventory Site (GIS), an important individual tree or woodland and species or habitats of principal importance recognised in the Worcestershire Biodiversity Action Plan, or listed under Section 41 of the Natural Environment and Rural Communities Act 2006, will only be permitted if the need for and the public benefits of the proposed development outweigh the loss.

iv. The ecological network of wildlife corridors that link the biodiversity areas detailed above, including areas identified for habitat restoration and creation will be protected.

v. Where the policy requirements of ii and iii and iv have been met, full compensatory provision, to include establishment (secured through a legal agreement where appropriate) commensurate with the ecological value of the site will be required. In the first instance this should be through on-site mitigation, the details of which should be agreed with the Local Planning Authority. Off-site mitigation will only be acceptable where on-site mitigation is shown not to be possible.

4. The development will secure the management and monitoring of biodiversity of features retained and enhanced within the site or for those features created off-site to compensate for development impacts for a period reasonably related to the lifetime of the development.

5. Where, having followed the mitigation hierarchy, there is an unavoidable requirement for offsite biodiversity compensation to offset harm, applicants will be expected to demonstrate that this will be brought forward at a scale and proximity to the proposed development in keeping with the harm caused. Where pooled off-setting is required for multiple sites compensation will need to be proportionally supported in scale and kind by the project proposer(s).

6. Proposals for new housing development should ensure that garden boundaries are permeable to native wildlife (such as small mammals, reptiles and amphibians).

Specific requirements relating to the protection and enhancement of biodiversity and green infrastructure within the District will be set out in a Green Infrastructure Supplementary Planning Document (SPD). Development proposals will be expected to comply with this SDP.

Reasoned Justification

11.30 The importance of protecting and enhancing biodiversity occurring outside these designated sites is recognised in European and national law and in the NPPF. In particular, guidance reflects the need to maintain functioning ecological networks at the landscape scale together with irreplaceable habitats and biodiversity features which may not necessarily be covered by a formal designation but which may be highly susceptible to in-combination and cumulative effects such as lighting, noise and disturbance. The Council will therefore expect developments to be informed by an understanding of the site within its local ecological context. This comprises the mappable network of designated and undesignated features and interlinking features within the landscape, including non-designated and non-priority habitats such as road verges, hedgerows and trees outside woodland. The relevant ecological network will draw from readily accessible evidence sources including, but not limited to, the Worcestershire Green Infrastructure Framework, Worcestershire's Biodiversity Delivery Areas, the Worcestershire Habitat Inventory and Worcestershire Biodiversity Action Plan.

11.31 As well as sites which are protected by designations, there is also the potential through development to create and enhance other sites. These additional areas may be smaller 'stepping stones' forming part of 'wildlife corridors' (both blue and green (see Glossary)) which help to link sites into a more comprehensive and resilient ecological network. This approach is embedded within NPPF paragraphs 170, 171 and 174 which require Local Authorities to create biodiversity or ecological networks.

11.32 Ancient woodland and veteran trees are an irreplaceable and intrinsic feature of Wyre Forest's ecological network, their importance is recognised within NPPF paragraph 175(c) and a strong commitment for their protection is expressed within DEFRA's 25 year plan. Due to their historical significance, veteran trees are to be considered heritage assets (NPPF Section 16). Natural England guidance on ancient woodland and veteran trees [14] states that mitigation measures could include leaving an appropriate buffer zone of semi-natural habitat between the development and the ancient woodland or veteran tree. The actual size of the buffer depends on the type of the development, the type of woodland and what the likely impact would be, but as a minimum it should be at least 15 metres.

11.33 Where development proposals may affect biodiversity assets, including ancient woodlands, veteran trees and their immediate surroundings, the following principles shall be used to guide the design of development:

- Avoid harm
- Provide unequivocal guidance of need and benefits of proposed development
- Provide biodiversity net gain
- Establish likelihood and type of any impacts
- Implement appropriate and adequate mitigation and compensation
- Provide adequate buffers
- Provide adequate evidence to support proposals

11.34 Source: The Planners' Manual for Ancient Woodland and Veteran Trees (Woodland Trust, 2017)

11.35 Impact assessments and evidence of biodiversity net gain must use the DEFRA biodiversity metric or similar metric subject to the prior written approval of the Local Planning Authority. Mitigation strategies must be informed by an appropriate level of technical study reasonably related to the scale of unmitigated impact anticipated and risks posed. The effectiveness of mitigation and compensation measures is critical in ensuring protection and enhancement of the integrity of biodiversity networks. The Council will expect that wherever possible biodiversity measures in relation to habitats and species will be subject to reasonable monitoring effort related to their scale and complexity.

11.36 The garden boundaries of new housing developments should be appropriately designed to ensure there is ecological permeability for wildlife species such as hedgehogs, nesting birds, roosting bats, invertebrates etc. This is to ensure the protection and enhancement of existing wildlife corridors and the provision of new connections across the site. This can be achieved in new housing developments by ensuring garden boundaries include at least a 125mm2 (5 inch2) holes/gap in garden fences and walls to allow access for wildlife, such as hedgehogs, frogs and toads. The use of hedgehog shelters, nesting boxes and bug hotels (e.g. installed on buildings and fence posts), to provide food and nesting opportunities is encouraged. Developers will be required to provide an information/welcome pack to new residents regarding the importance of maintaining wildlife corridors.

11.37 The District Council will seek to progress a Green Infrastructure Supplementary Planning Document (SPD) in order to provide a holistic approach to the provision of green infrastructure and to maximise the many benefits that green infrastructure brings. The SPD will set out specific requirements for the protection and enhancement of biodiversity and green infrastructure within the District up to 2036.

11.38 Wyre Forest District has a range of nationally and locally important sites. The NPPF provides the context for conserving biodiversity and this Local Plan protects the relevant designated sites through identifying them on the Policies Map. The designated sites are also set out in the table below. It should be noted that there are no sites within the District which are designated as being of international importance. Additional sites may be designated during the lifetime of the Local Plan.

Table .1 Important sites for Biodiversity

Designation	Sites
Areas of National Importance:	• Chaddesley Woods NNR and Feckenham Forest SSSI - A large semi-natural ancient woodland and species-rich unimproved grassland.

14 Natural England guidance - Ancient woodland and veteran trees: protecting them from development https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

Policy 14 - Strategic Green Infrastructure

A. The existing green infrastructure network will be safeguarded from inappropriate development.

B. New development will be expected to retain, protect and enhance Green Infrastructure (GI) assets by integrating GI into developments and contributing positively to the District's green infrastructure network. Housing and employment development proposals (including mixed use schemes) will be required to contribute towards the provision, maintenance, improvement and connectivity of GI, directly delivering GI as follows, subject to viability requirements designated by the NPPF:

i. For Greenfield sites exceeding 1ha (gross): 40% GI.
ii. For Greenfield sites of less than 1ha but more than 0.2ha (gross): 20% GI.
iii. For Brownfield sites: no specific GI figure.

3. Development which is unable to retain, protect and enhance the integrity of the GI network and its connectivity or 'stepping-stone' features will be considered inappropriate. Within brownfield developments it is expected that key GI features such as SuDs, green roofs, green walls, and biodiversity measures will be delivered wherever possible and integrated into the wider GI network.

4. Within the identified key strategic development corridors it is expected that masterplanning for all major developments will be informed by the Green Infrastructure Concept Plans.

5. The precise form and function(s) of the GI provided will depend on local circumstances and the Worcestershire Green Infrastructure Strategy's priorities. Developers should seek to agree these matters with the Council in advance of submitting a planning application. Effective management arrangements should also be clearly set out and secured. Once planning permission has been given by the Council, the associated GI will be protected as semi-natural green open space (see also Policy 20B in respect of the provision of semi-natural green "open space").

6. Other than specific site allocations in the development plan, development proposals that would have a detrimental impact on important GI attributes within areas will not be permitted unless:

Reasoned Justification

14.2 The District has a distinctive environment comprising diverse landscape character areas including urban areas. There are many green corridors within the District which are currently fragmented but have the potential to provide a comprehensive network of green infrastructure (GI). The District's waterways in particular offer the opportunity to link the urban areas with the open countryside beyond. There are also some of the County's most important and distinctive acid/lowland heath communities and the continued protection and enhancement of these important areas needs to be considered in future development.

14.3 The green infrastructure network for the District is set out within the Green Infrastructure Strategy for Wyre Forest District. This Strategy shows how the District's existing green infrastructure assets can be better linked in order to provide greater connectivity for both people and nature.

14.4 Worcestershire's GI Strategy and supporting evidence base seeks to enhance opportunities to link biodiversity with drainage, historic landscape character and improved accessibility. The Worcestershire GI Strategy promotes the GI Concept Plan approach for strategic sites and seeks to promote collaborative working with developers.

14.5 The key objective of Green Infrastructure Concept Plans is to establish principles for development which will identify key GI assets and opportunities for their protection and enhancement in line with their surrounding Environmental Character Area priorities, local policies and the broader Worcestershire GI Framework. Green Infrastructure Concept Plans have been developed for each of the identified key strategic development corridors within Wyre Forest and should inform masterplanning exercises of all major developments coming forward within these corridors. Green Infrastructure Concept Plans have been produced for the following indentified key strategic development corridors:

- Kidderminster North GI Concept Plan
- Kidderminster East GI Concept Plan
- Kidderminster and Stourport Urban and Waterfront GI Concept Plan

14.6 The Council requires developers to have regard to and contribute towards these Green Infrastructure Concept Plans for these identified key strategic development corridors. The Council has an aspiration for developers to prepare a GI Concept Plan for all large scale developments, which would then serve to inform all developments in that area as they come forward.

14.7 GI will need to be carefully planned into new developments from the outset. When determining planning applications the way in which the proposals contribute to delivering the GI network will be of paramount importance.

14.8 The delivery of the Stour Valley Country Park is a long-standing aspiration for the District. The completion of the Kidderminster Flood Alleviation Scheme presents the opportunity to create a new country park to the North of Kidderminster. The creation of a new country park

Worcestershire Sub-Regional Green Infrastructure Framework

Foxlydiate Site Concept Plan

Draft Version 0.7

The Foxlydiate Site Concept Plan has been prepared by a working group of the Worcestershire Sub-Regional Green Infrastructure Steering Group including Worcestershire County Council, Natural England, The Environment Agency, Worcestershire Wildlife Trust and The Forestry Commission.

While the Concept Plan has benefited from scrutiny and input from stakeholders, it is not a statutory document and holds the status of a guidance paper to provide framework for the master planning of a comprehensive multifunctional green infrastructure.

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Worcestershire Sub-Regional Green Infrastructure Framework

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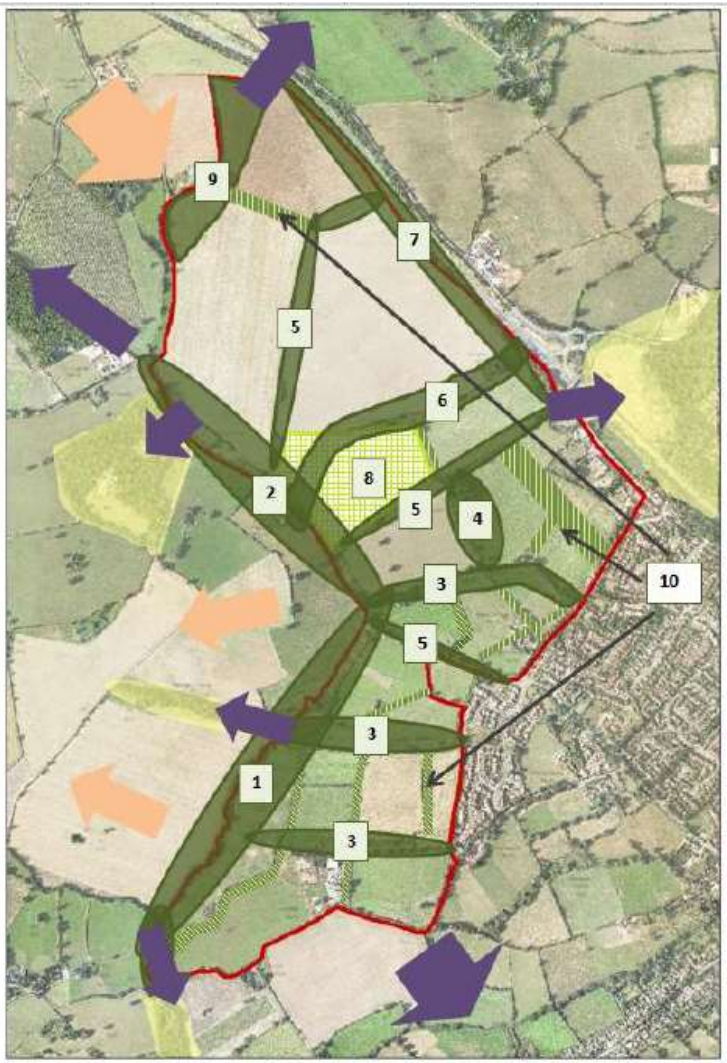


Measures towards landscape-connectivity

An important component of Green Infrastructure is creating a development which is 'in place' with its surroundings and which maintains ecological permeability for wildlife to disperse and for populations to survive.

This approach is demonstrated by the residential extensions of Warndon found within Worcester City. Careful masterplanning in partnership with the local Wildlife Trust created and manages new woodland buffers which link the ancient Warndon and Tolladine Woods together. Remnants of the ancient Warndon wood can be found on site today.

Woodland corridor planting, Warndon

Where woodlands have become fragmented and woodland extensions are unfeasible, using hedgerow networks with a strategic network of densely planted 'hop-over' points replicates much the same function for wildlife.

Planting to create 'hop-overs' (adapted from Limpens et al, 2005)

These opportunities need to be careful managed to avoid scrub encroachment, to ensure succession for taller trees whose canopy provide the key 'hop-over' opportunities, and to protect these nodes and the surrounding network from unwanted light spill.

Limpens H.J.G.A., Twisk P. and Veenbaas G., 2005 Bats and road construction. DWW-2005-033, ISBN 90-369-5588-2

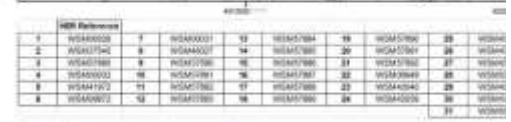
4. Maintain existing trees and particularly through the rete management of veteran hed trees, alongside those adjac watercourses and ponds. A creation should conform to the broader landscape – of shape and composition, inte organic and non-geometric enclosure-system.

5. New development should setting, condition, or char assets within proximity of t

6. Avoid erosion of the distinct pattern and morphologies o historic landscape beyond t

7. Seek to conserve the chara communications formed of hedgerow-lined lanes and p

8. Explore opportunities to inte management features and p Ensure historic landscape-a beyond the development sit and Swans Brooks are not through increased surface w includes numerous water-m and buildings pertaining to and settlement.



Historic Buildings Archaeological Monuments Developme

Historic Environment Features: Foxlydiate GI Concept Plan

Landscape Character Assessment: Foxlydiate, Redditch

Legend

- Main green infrastructure corridors
- Secondary green infrastructure linkages
- Area of potential historic environment interest
- Important features off-site
- Linkages with wider setting
- Views in and out

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SI grassland	- 7.85ha
Arable	- 91.85ha
Hedgerow	+ 5,139.5m
playground	+ 2.14ha
woodland	+ 1.92ha
orchard	+ 1.86ha
Wildflower grassland	+ 16.61ha
ponds	+ 3.22ha
Public open space	+ 19.13ha

With the habitat creation and enhancement measures as outlined in Section 8.5, it is expected that the Scheme would achieve a 'net gain' in biodiversity, as outlined in Table 8.9 below.

Table 8.9. Habitat Loss/Gain for the Scheme

Habitat Type	Original (m^2)	Retained (m^2)	New (m^2)	Total (m^2)	Net Gain/Loss (m^2)
Total woodland/scrub	31549	17569	13878	31447	-102
SI Grassland/tall ruderal	27251	16498	3943	20441	-6810
Wetland creation within Flood Compensation Area	0	0	44910	44910	44910
Net Gain					37998

In addition to the habitat net gain as described above, further biodiversity enhancement measures such as installation of bird and bat boxes and enhancement of existing habitat for reptiles, would contribute to this 'net gain' for biodiversity.

https://youtu.be/wBgqwAWbMO8

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4.3 Change in Biodiversity Value

Under the current proposals set out in the Landscape and Ecological Masterplan (June 2018; *Figure 2*) there will be a positive gain of + 3.47 biodiversity area units and + 0.59 linear biodiversity units as a result of the proposed development. This is shown in *Table* 15. below.

Table 5. Change in Biodiversity Units Calculation

Post-development Biodiversity Area Units		Baseline Biodiversity Area Units		Change in Biodiversity Area Units
25.08	-	21.61	=	+ 3.47
Post-development Biodiversity Linear Units		**Baseline Biodiversity Linear Units**		**Change in Biodiversity Linear Units**
21.47	-	20.88	=	+ 0.59

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11 October 2014 Last updated at 15:19

Worcester technology p announced

Plans have been put together for a 70-acre site near junct

Plans for a £120m technology park in Worcester unveiled.

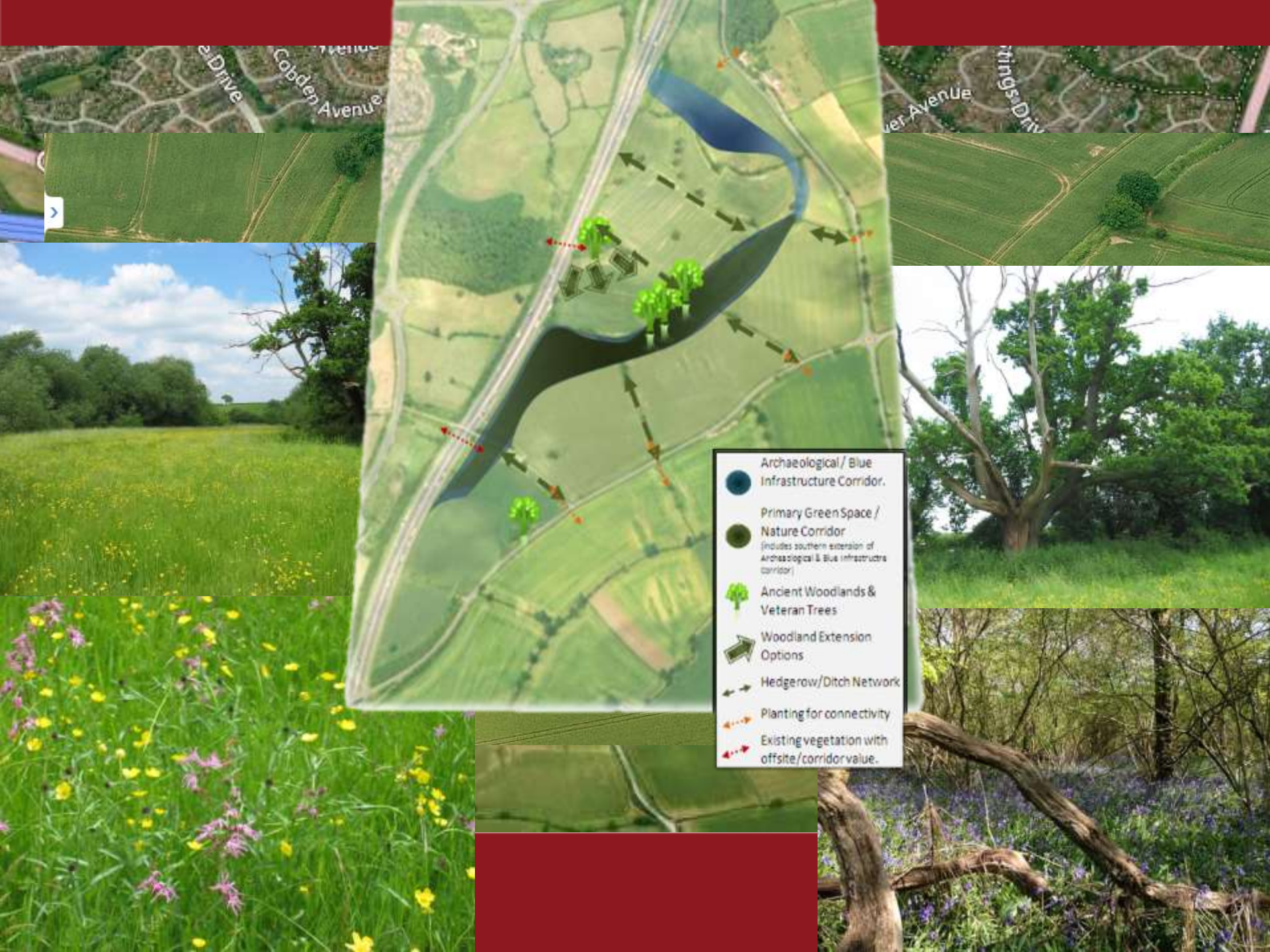
A 70-acre site near junction six of the M5, for Worces business units under the proposals.

A planning application is due to be submitted to Wyc early next month and work on highway improvement start this year, developer Stoford said.

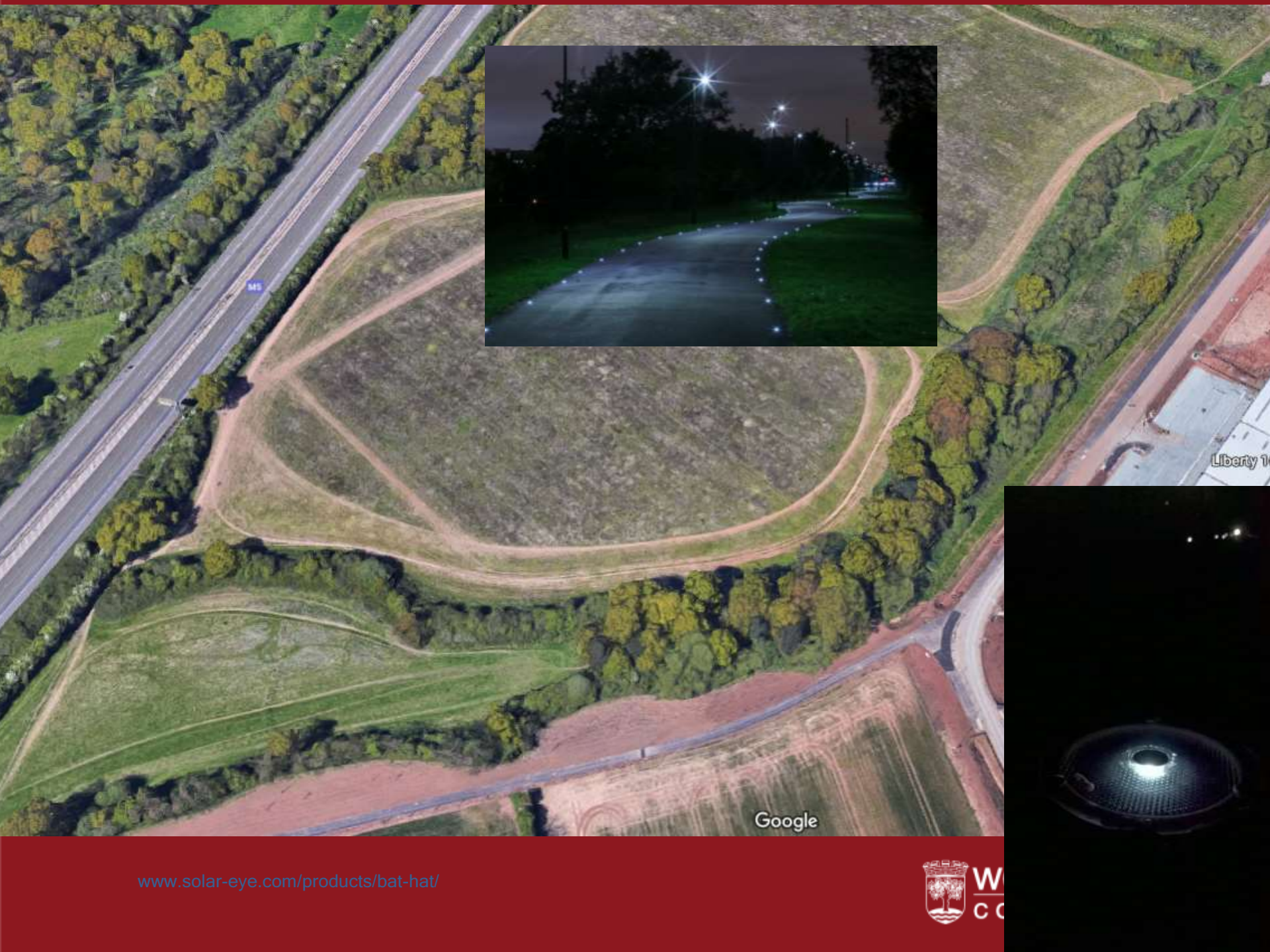
A public consultation event for people to talk to the d Tibberton Village Hall at 14:00 BST.

worcestershire county council

www.stoford.com/2016/05/plans-lodged-for-first-units-at-worcester-six/
www.worcesternews.co.uk/news/business_daily/10952451.worcester-technology-park-plans-move-forward


Cobden Avenue
Archaeological / Blue Infrastructure Corridor.
Primary Green Space / Nature Corridor
(includes southern extension of Archaeological & Blue Infrastructure corridor)
Ancient Woodlands & Veteran Trees
Woodland Extension Options
Hedgerow/Ditch Network
Planting for connectivity
Existing vegetation with offsite/corridor value.

- 40% GI apportionment (16.57 hectares)
- + 38m new watercourse
- 100% retention: woodland, wet grassland, rough grassland and species rich hedgerows
- 527m species poor hedgerow needed to be removed, to be replaced with new (species rich) hedgerow planting
- + 3000m of new hedgerow planting
- + 250 new standard trees
- + 3 hectares of new woodland and shrub planting
- + 1.4 hectare marshy grassland created alongside stream and flood alleviation pond
- 5000m^2 of wildflower seeding and native bulb planting



www.solar-eye.com/products/bat-hat/

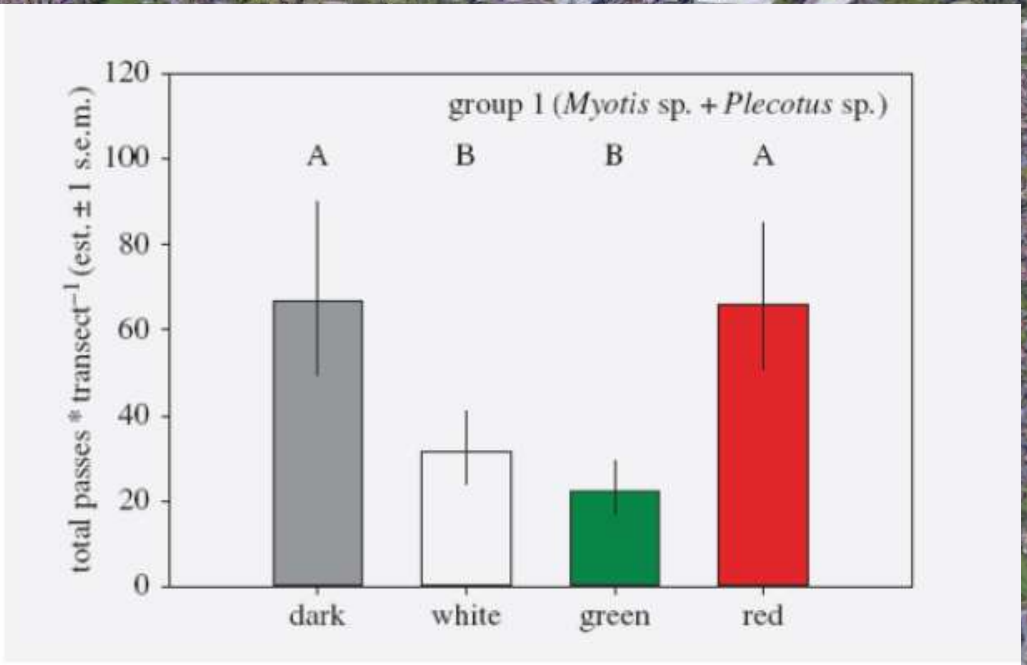
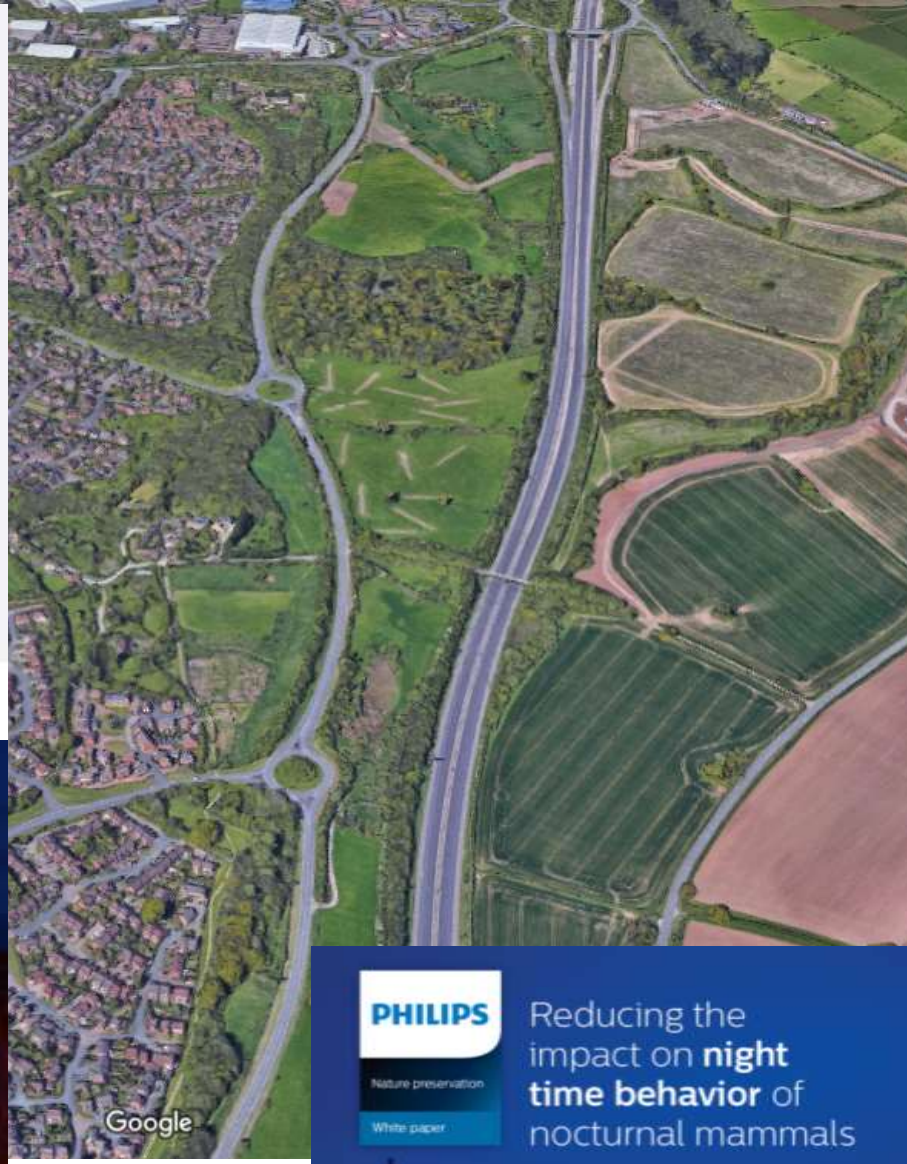


Figure 3. Aggregated activity of *Myotis/Plecotus* species



www.lighting.philips.com/main/products/urban-lighting-inspiration/lighting-for-both-nature-and-people

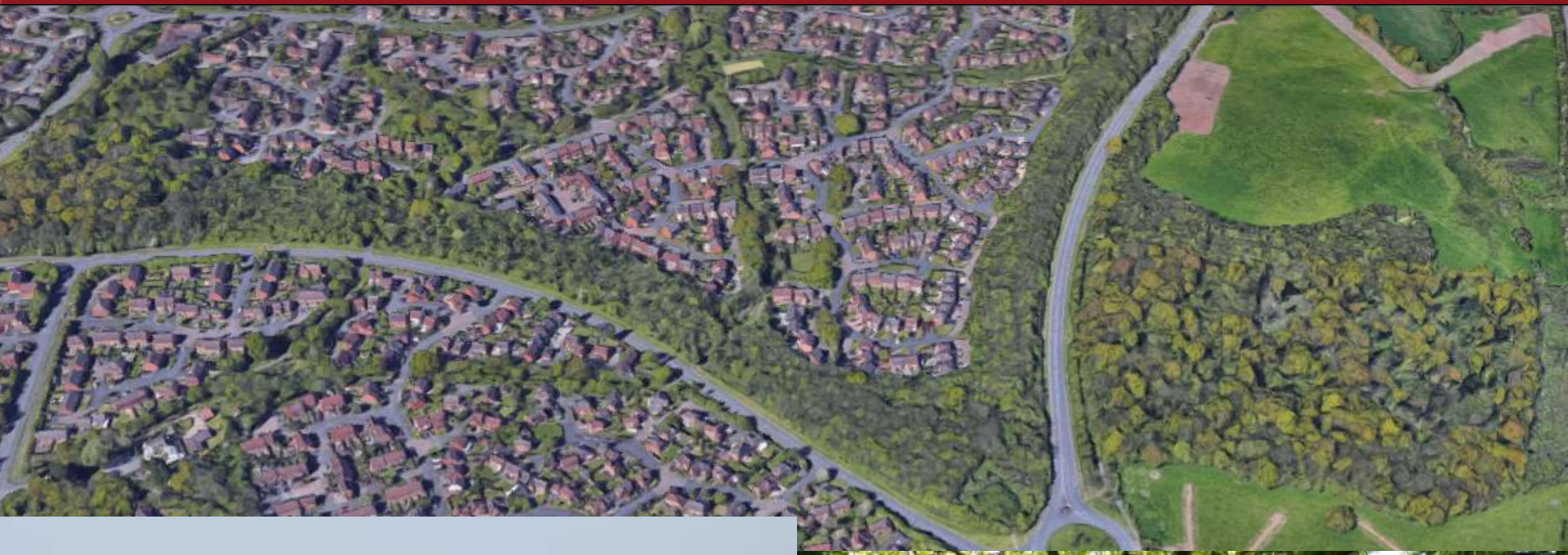


Figure 3 – Kidderminster East corridor with indicative delivery approaches for some of the key Green Infrastructure principles outlined within this concept plan

Biodiversity 'micro-islands'

The concept of a biodiversity 'micro-island' is simple: to create a stepping-stone opportunity for wildlife to find shelter and disperse through an otherwise more hostile built environment. In practice an array of small and inexpensive features can achieve this aim, depending on both the target species and the opportunities presented by the development site.

Artificial otter holt – internal construction (L) and external view during installation (R). Note: how the holt can be installed above or underground and integrated into soft-landscaping if adequately protected from disturbance.

In the case of waterfront developments within the Strategic Development Corridor, there is a unique opportunity available to enhance permeability through the urban environment for riverine species such as otters, water vole and bats to shelter during the daytime and disperse to and from nearby nature reserves and wider countryside. Simply put, without these features urban development and the built environment would pose a substantial barrier between populations for much of our rare wildlife. With careful design, each waterfront development can contribute in a small but meaningful way to the overall strategic aim of increasing permeability for wildlife of the urban environment, drawing the countryside in to towns for all to enjoy.

There is therefore an expectation that all waterfront developments within the Strategic Development Corridor will contribute towards enhancements for riverine species such as otter. Similarly there is an expectation that all urban developments within the Strategic Development Corridor will be capable of delivering at least modest opportunities for shelter and foraging wildlife, such as bird and bat boxes and wildlife-friendly landscaping schemes.

Wildflower verges at Hoo Brook Link Road. Nearby kingfisher nest chambers have been integrated into the watercourse margins and provide one of a number of 'stepping-stone' features for flora and fauna.

To be functional, places of rest or shelter should be appropriately specified, this means more than the right size and shape and includes controlling indirect disturbance such as lighting, noise, pollution events and designing-out risk of vandalism. Appropriate soft-landscaping and aftercare management are critical components in the success of these biodiversity features and require careful consideration and embedding into designs from the outset. The nature of each 'island' is therefore to be agreed with the Local Planning Authority at the outset.

Existing assets should be protected and enhanced and new opportunities realised which offer opportunity of greater permeability for wildlife throughout urban Kidderminster and Stourport. Efforts should focus on the north-south ecological corridor which forms a functional link from the River Severn to Puxton Marsh and the wider countryside beyond the northern fringes of Kidderminster. Developmental proposals in proximity to designated nature reserves should be mindful of the indirect and cumulative impacts posed to both the local sites and associated ecological corridor including, but not limited to increased visitor pressure, impacts of cats on breeding birds and so forth.

Key opportunities also exist around the confluence of the Stour and Severn and as the watercourses traverse urban Stourport and Kidderminster.

Opportunities for betterment of permeability for biodiversity will, by nature, be framed by both the location and scale of each development within the Strategic Development Corridor. However, it should be noted that even small measures which promote permeability for wildlife inside the Strategic Development Corridor will, cumulatively, provide dividends for wildlife.

There is a presumption that at least one 'biodiversity micro-island' will be integrated within each riverside development in order to create a series of 'stepping stones' for wildlife to move safely through Stourport and Kidderminster from and to the wider countryside.

A biodiversity micro-island is simply a point of focus for biodiversity enhancement which addresses connectivity for species whilst also buffering the effects of surrounding development, for instance providing sheltered temporary refuges for otter to move through the river corridor.

Micro-islands do not necessarily require significant land-take from a development in order to be effective, for example, in circumstances where

WFDC Plan - Urban and waterfront allocation sites

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Not everything that
counts can be counted;
AND
Not everything that can
be counted, counts.

-Albert Einstein

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The River Rea now exposed as it is about to pass under the Bristol Road South A38. Copyright Roy Hughes and licensed for reuse under Creative Commons Licence.

River Rea, Austin Rover Longbridge. The River Rea is, at last, exposed as it passes through the old Austin Rover Works. Copyright Roy Hughes and licensed for reuse under Creative Commons Licence.

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Final thoughts

1. Early engagement: fundamental to success

2. Benefits for biodiversity: needed at every scale

3. Our landscapes need to be permeable: wildlife for all

   'Biodiversity Net Gain' encompasses more than biodiversity benefits alone

4. Policies come with resource implications

Effective interventions require evaluation, negotiation, management and monitoring

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Image Credit: wattleandash.com/2016/11/09/the-worcestershire-way

ASSOCIATION OF
Local Government Ecologists

Department for Environment Food & Rural Affairs

Net gain
Consultation proposals
December 2018

CONFIDENCE IN THE SYSTEM

- Net Gain does not mean non-adherence to the Mitigation Hierarchy
- Expert ecological advice is needed at the local level
- Robust accredited system
- A Good Guidance Document is critical

EQUALITY OF STANDARDS

- National Infrastructure Projects should be exemplars
- NERC Act should be strengthened to reflect net gain

MONITORING AND REPORTING

- Local loss, Local delivery
- Integrated National and Local Biodiversity Maps so that local net gains can aggregate to national objectives
- Monitoring of implementation and outcomes (net gain) is essential

Thanks for your ear

clevine@worcestershire.gov.uk

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Photo credit: Ann Froschauer/USFWS