Key tips for delivering successful green infrastructure

(Adapted from 'Demystifying Green Infrastructure' by UK Green Building Council, Feb 2015)

Below are a few key tips for ensuring successful implementation of green infrastructure (GI) in development proposals.

What already exists and what is valued locally?

Look for what is existing on and nearby to a proposed site. A good start is the MDC Green Infrastructure Study (2018) which highlights key assets identified within the district's strategic GI networks (www.mansfield.gov.uk/evidenceforthelocalplan).

Existing habitats and mature trees are likely to be highly valued by local people and expensive to replace. Linking these together or providing buffering through new wildlife areas can also add aesthetic appeal. Desire lines indicate how the site is currently being used to inform, for example, the placing of open space and green corridors. Nearby strategic trails, local routes and open space provide opportunities to plan for a more permeable and intuitive design. Understanding what people want, how they are likely to interact with new GI areas and how they might attribute value to these areas are key factors for helping inform site layout and design.

Early engagement – use the experts!

Considering GI early on in the design process will save time and money and is likely to make for a better planning application. Keep GI on the agenda in meetings and when engaging with stakeholders.

Designing places people will truly love requires working with others to get the recipe right. Involve diverse stakeholders: council officers, landscape architects, ecologists, heritage officers, local communities, wildlife trusts, statutory organisations, etc. This will help you think more holistically about the proposed development site. This will also help save time and money.

Involve and learn from others

It's also important to involve the public to help inform the *place-making* design process. Getting buy-in will help plan for places that people can take pride in. This can make a big difference to overall place shaping.

Also, it's important to learn from real-life examples of where GI on a scheme has worked well, rather than producing great drawings that might not work in practice. Including 'real-life' examples in pre-application discussions, consultations and design statements, etc. can help others more readily conceptualise plans. GI's success will rely on examples of it working in practice. Be prepared to look at examples of good quality GI locally, nationally and globally. By doing so, this may give ideas for more cost-effective solutions for designing in and managing GI.

Be nature, heritage and health led

Involve ecologists, heritage experts and landscape architects in the design process. Being nature, heritage and health-led will likely produce a higher quality outcome (and potentially more cost-effective), than trying to retrofit for these issues in at later planning or construction stages stages. This provides the opportunity to address cross-cutting issues in meaningful ways.

Be bold!

Don't shy away from experimenting with new ways of thinking or drawing upon innovative examples of schemes elsewhere. Being design-led will make for an overall better scheme.

Start at the end – how will it be managed and who will manage it?

This involves considering who is going to own/manage the land on completion – this is one of the most significant issues in the success or failure of a development. This should be considered at the at all stages, detailed within a management plan.

Consider all scales

Size simply doesn't matter when it comes to designing in GI. Green infrastructure can be implemented on any site, from green roofs and rain gardens to green corridors. Integrating GI at various levels can address cross-cutting issues such as flooding, cooling, health, providing net gains in biodiversity, etc.

Get connected

Connecting GI to existing features will help maximise benefits. A development site is rarely an island. Consider what opportunities exist for introducing new GI assets based on local need (i.e. poor health and deprivation) and opportunities to provide improved ecological benefits (e.g. flood resilience, urban cooling, wildlife corridors). Creating good quality green corridors is essential for encouraging a greater uptake of walking or cycling, especially when connected with open space, local centres, jobs or civic spaces; this can also increase the uptake/footfall on a site.

Think multiple benefits and place shaping

Green infrastructure works on multiple levels (i.e. scales, connections, cross cutting issues). Think about what social, economic and environmental services can be further enhanced and/or delivered through new GI assets. Think about who/what will benefit and how? How can the grey and green infrastructure coincide in a more balanced way to deliver key benefits? For example, houses facing open space/natural areas rather than garden-ended; green corridors along or linking to main routes; rain gardens, green roofs/walls and parking areas; street trees, interspersed urban pocket woodlands and community orchards.

Other useful gems

- Appoint a GI champion.
- Include GI on the agenda at all key decision meetings
- Communicate aspirations for GI to stakeholders and potential users

Resources to empower you

- Mansfield District Council Green Infrastructure Study (2018)
- Demystifying green infrastructure (UK Green Building Council, February 2015) www.ukgbc.org/ukgbc-work/demystifying-green-infrastructure/
- Cities Alive – Rethinking green infrastructure (ARUP, 2014) www.arup.com/perspectives/cities-alive-rethinking-green-infrastructure
- UK Green Infrastructure Partnership (TCPA) – free membership and resources - www.tcpa.org.uk/pages/category/green-infrastructure-partnership
- Ecosystems Knowledge Network has lots of great case studies, (e.g. GI Audits) and background studies - https://ecosystemsknowledge.net/resources/tools-guidelines/green-infrastructure