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GREEN INFRASTRUCTURE POLICY CONTEXT

FINAL

October 2019

Version 8

NATIONAL POLICY CONTEXT

1.1. NPPF paragraph 20 requires strategic policies to "set out an overall strategy for the pattern, scale and quality of development and make sufficient provision for… conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure...".

1.2. Further provisions in the NPPF (paragraph 170) include the need to "recognise … the wider benefits from natural capital and ecosystem services" as well as ensuring new and existing development is not being put at risk from unacceptable levels of soil, air, water or noise pollution.

1.3. In addition, NPPF paragraph 174 states that plans should map ecological networks, wildlife corridors and stepping stones as well as promoting the conservation, restoration and enhancement of ecological networks and pursue opportunities to secure net gains for biodiversity.

1.4. The NPPG advises that:

> "To assist in planning positively for green infrastructure local planning authorities may wish to prepare an authority-wide green infrastructure framework or strategy. This should be evidence-based by, for example, including an assessment of current green infrastructure provision that identifies gaps in the network and the components and opportunities for improvement".

1.5. The NPPG also makes links between policy for Green Infrastructure and:

- Building a strong, competitive economy;
- Delivering a wide choice of quality homes;
- Requiring good design; and
- Meeting the challenge of climate change.

1.6. Recent developments in Government policy set out in the Governments 25 Year Environment Plan (A Green Future) are driving policy development in:

- Net Biodiversity Gain;
- Developing a Nature Recovery Network; and
- Green Infrastructure Standards.

1.7. The section on "Greening our towns and cities" sets out an aim to "draw up a national framework of green infrastructure standards," and a project to be led by Natural England to "review and update" standards. The actions include "supporting Local Authorities to assess green infrastructure provision against the new standards" and "working with MHCLG to see how commitments on GI can be incorporated into national planning guidance and policy".

PRINCIPLES AND STANDARDS FOR A GREENER GREATER MANCHESTER

1.8.   The use of defined standards can help to ensure that there is sufficient quantity and quality of green infrastructure, and that it is provided and maintained in the best locations, to meet the needs of residents and to deliver the overall green infrastructure network described in policy GM-G 2 of the January 2019 Draft GMSF. The Greater Manchester Combined Authority is working with Natural England to test the application of the draft National Framework of Green Infrastructure Standards in Greater Manchester.

The National Framework of Green Infrastructure Standards

1.9.   Natural England are leading the development of the National Framework of Green Infrastructure Standards – a commitment within the Government's 25 Year Environment Plan. The national framework defines green infrastructure standards as:

"an approach that applies the ten 'Principles of Good Green Infrastructure' to achieve quality and consistency in the provision, management and stewardship of green infrastructure as an essential part of place-making and place-keeping for the benefit of people and our environment".

1.10.   In this context, 'standards' are not just a set of numeric targets. Instead, they are based on qualitative 'principles' which seek to guide policy makers and developers towards achieving the best possible social and environmental outcomes for their areas and sites – by whichever means is most appropriate in the local context. Figure 1 shows principles and outcomes at the core of the national framework.
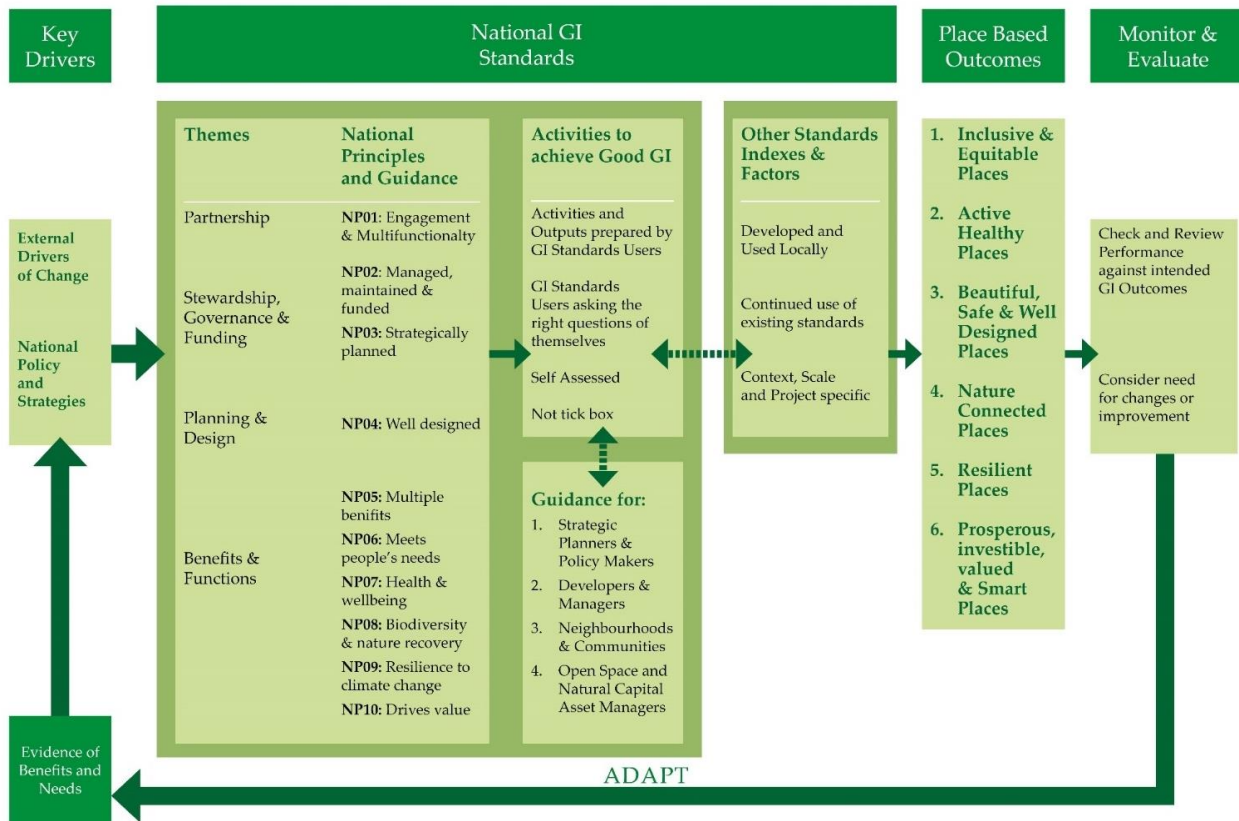
Figure 1: Draft structure for the National Framework of Green Infrastructure Standards

Developing a Framework of Green Infrastructure Standards for Greater Manchester

1.11. Work has been undertaken by Greater Manchester's local authorities and other stakeholders (collaboratively and individually) that has improved green infrastructure across Greater Manchester over many years. For example, Red Rose Forest has a 25 year history working towards greening the city region, with this work now continued by City of Trees.

1.12. Whilst green infrastructure policy, planning and management across Greater Manchester seeks to be in general conformity with the National Framework, the application of the ten Principles in Greater Manchester must complement and fit with the existing green infrastructure approaches across the region, as well as with other GMSF policies.

1.13. Recommendations for green infrastructure provision in Greater Manchester – especially where the intention is that the provision will be achieved through development – are described by Principle as follows. Other policies set out in the January 2019 Draft GMSF to which the Principles relate are shown in parentheses.

NP01: Engagement and multifunctionality (GM-G 6)

- Greater Manchester's authorities should continue to engage with local communities and other stakeholders regarding local strategy/plan development and develop green infrastructure

policies and partnerships in consultation with a wide variety of stakeholders and community groups.

- Greater Manchester's authorities are encouraged to adopt the use of a consistent approach (underpinned by the Principles and place-based outcomes of the National Framework) to improve multifunctionality of the region's green infrastructure and consistency across Local Authority boundaries.

NP02: Managed, maintained and funded (GM-G 2, GM-Strat 13)

- Proposals for how green infrastructure is best resourced, managed, monitored and maintained across the city region and locally will be examined as proposals relating both to Biodiversity Net Gain and the implementation of the Greater Manchester Natural Capital Investment Plan are rolled out.

- Greater Manchester's local authorities should ensure that proposals for resourcing, managing, monitoring and maintaining green infrastructure (which may be developed according to local circumstances) are embedded within local plans and/or green infrastructure strategies.

- The community environmental issues map (see Figure 8.6) should be used to identify those places and communities that need the benefits of green infrastructure most, to assist with targeting and prioritisation of resources and interventions.

- Green infrastructure proposals emerging from development (both on- and off-site) should include clear provision of long term management and stewardship (including the funding for this), and be in line with Greater Manchester requirements for Biodiversity Net Gain.

NP03: Strategically planned (GM-G 2, GM-G 8, GM-Strat 13)

- The Priority Green Infrastructure Network as set out in GM-G 2 should be used to inform the creation and enhancement of areas of strategic green infrastructure.

- Strategic green infrastructure should also integrate with ecological networks (including any future Nature Recovery Network), as well as the wider landscape.

- Local level green infrastructure should continue to be targeted at meeting local needs.

NP04: Well designed (GM-G 1, GM-G 2)

- The Greater Manchester landscape character map (see Figure 8.1) should be used as the starting point for identifying local landscape character (taking into account geodiversity), which can inform design of developments and associated green infrastructure.

NP05: Multiple benefits (GM-G 2, GM-S 4, GM-E 1)

- The planning of green infrastructure should be informed through use of the Greater Manchester green infrastructure evidence base; in particular the community environmental issues map (see Figure 8.6) and the ecosystem service opportunity map (see Figure 8.7). This should be supplemented with the use of local data, if available.

- Green infrastructure design should seek to deliver Biodiversity Net Gain alongside local-appropriate gains in other ecosystem service provision.

- Tools such as measures of access to greenspace (e.g. ANGSt, as available for Greater Manchester), the Biodiversity Net Gain Metric, and the Green Space Factor can be used to

measure change and ensure delivery of multiple benefits. (See below for details on recommended tools).

NP06: Meets people's needs (GM-G 6)

- Gaps in green infrastructure provision and the potential to improve the functionality of green infrastructure can be identified using local data if available, or the community environmental issues map (see Figure 8.6), which takes into account places with high levels of deprivation, and people who need the benefits of green infrastructure the most.

- Consideration should be given to how improving the quality and functionality of existing and new green infrastructure can best meet the needs of the local population, working with local communities.

- Local policy and delivery should take account of the need to address inequalities and inequity of both provision and quality of green infrastructure, and seek to ensure that targeting of investment can identify those places and people who most need the benefits of green infrastructure.

NP07: Health and wellbeing (GM-G 2, GM-C 3, GM-E 6, GM-S 6)

- Green infrastructure planning and design should ensure green infrastructure delivery maximises its potential contribution to local health and wellbeing, including measures to encourage more active lifestyles, environments that help people maintain and improve good mental health and designs capable of helping to manage environmental hazards such as air quality or even local issues such as road safety.

- The community environmental issues map (see Figure 8.6) should be used alongside information on Index of Multiple Health Deprivation to inform the targeting of interventions to help deliver the best health outcomes.

- Tools like HEAT may assist with design and targeting of green infrastructure investments aimed at delivering health related outcomes. (See below for details on recommended tools).

NP08: Biodiversity and nature recovery (GM-G 2, GM-G 10)

- Strategic green infrastructure provision should be targeted to the green infrastructure priority or local equivalent priority areas.

- The Greater Manchester Biodiversity Net Gain Guidance provides a framework which can assist the delivery of net gain for biodiversity as well as delivery of other benefits.

- Nature Recovery Networks can inform the application of net gain for biodiversity. The Greater Manchester Combined Authority will consider the possible implementation of future policy for nature recovery and any future Nature Recovery Network.

- The National Framework of Green Infrastructure Standards and any future policy guidance on Nature Recovery Networks will be used as the basis of ensuring the planning, development, delivery and management of an integrated network that delivers benefits for the people and biodiversity of Greater Manchester.

NP09: Resilience to climate change (GM-G 2, GM-S 4, GM-E 1)

- All green infrastructure provision and management should aim to maximise the contribution of green infrastructure assets to Greater Manchester's climate change aspirations, as set out in the 5 Year Environment Plan.

- This should include contributions to both climate change mitigation (for example carbon storage/sequestration and lowering fossil fuel usage through building energy use and transport choices), *and* adaptation measures to cope with heat stress and flood risks (especially surface water flood risk).

NP10: Drives value (GM-G 2, GM-Strat 2, GM-Strat 5)

- Good design is a key aspect of sustainable development, creating better places in which to live and work, and helping to make development (more) acceptable to communities.

- Green infrastructure design should seek to make specific contributions to local place making, targeting those areas where green infrastructure might contribute to the regeneration of existing communities or make less attractive places more investable.

- Green infrastructure delivery and enhancement should seek to make identified net gains in provision of ecosystem services to build the local natural capital value of Greater Manchester (thus helping to increase the overall value set out in Greater Manchester's Natural Capital Accounts).

Delivering Multiple Benefits through Issues and Opportunities Mapping

1.14. Green infrastructure should deliver multiple benefits for those living and working in Greater Manchester, as well as for those visiting the area. The benefits of green infrastructure that are considered a priority for delivery across Greater Manchester are:

- Cooling / heat reduction
- Decreasing flood risk from surface water run-off
- Decreasing fluvial flood risk
- Air quality improvements
- Aesthetic experience
- Recreation
- Health and wellbeing (including nature connections)
- Carbon sequestration
- Biodiversity and nature recovery
- Water quality

1.15. Mapping of community environmental issues has been undertaken to identify Output Areas where provision of these benefits to communities is lacking. For example, densely populated areas that suffer from excessively high temperatures, a high risk of surface water flooding, poor air quality, or

poor physical or mental health of inhabitants. Figure 2 shows a heatmap of the Output Areas with lowest (blue) to highest (red) community environmental issues. The red, orange and yellow Output Areas are those that would benefit most from new or enhanced green infrastructure.
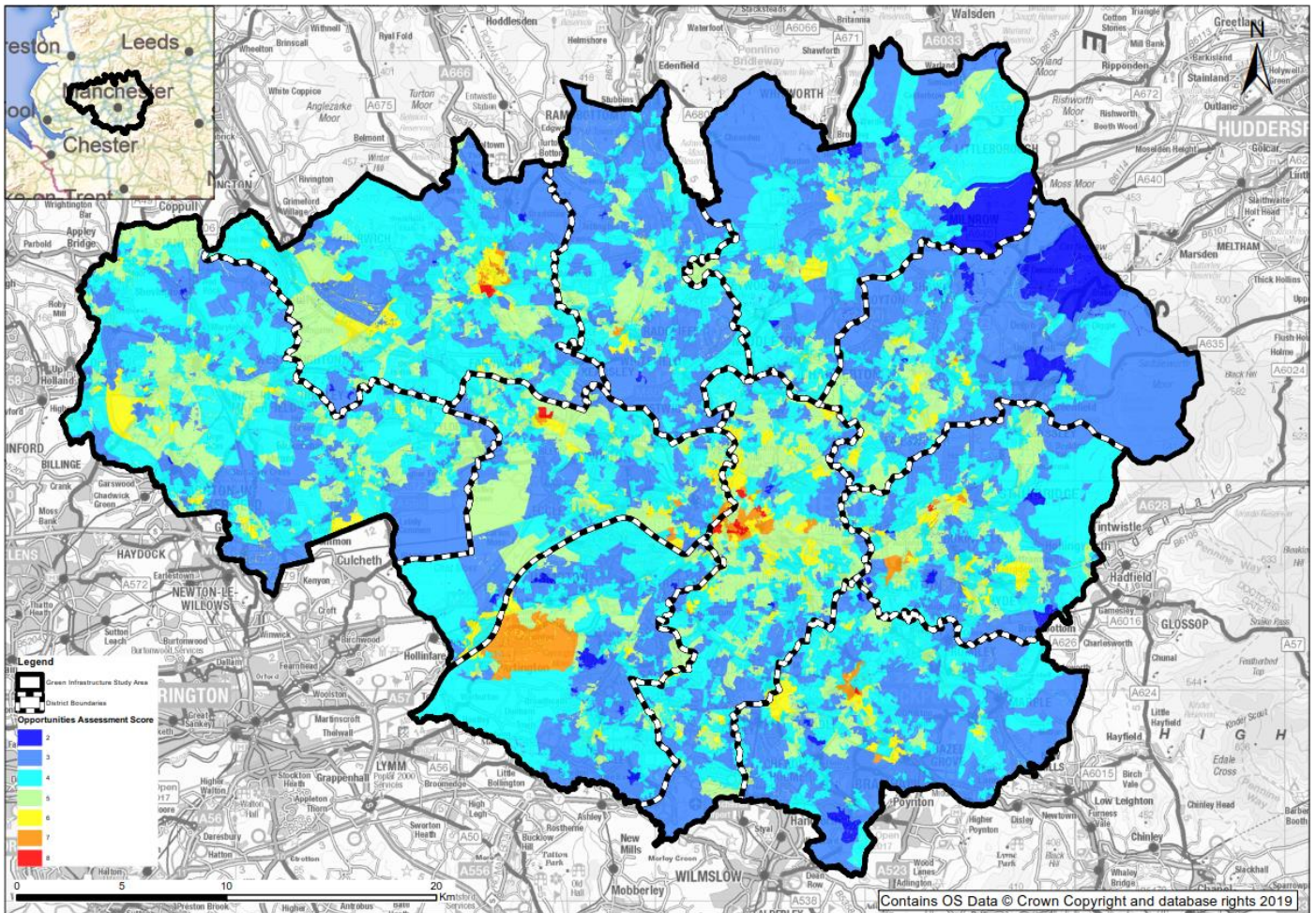

Figure 2: Areas of low and high community environmental issues

1.16. In the absence of appropriate local data, the community environmental issues map should be used to identify areas that would benefit most from new or enhanced green infrastructure provision. The issues are focused on the needs of the local population and relate only to those which have the potential to be addressed through provision of high quality green infrastructure. Note that even where community environmental issues are absent, the creation, and particularly enhancement, of green infrastructure is encouraged.

1.17. Once areas with community environmental issues have been identified (i.e. relating to a particular benefit, in a particular location), this should be viewed alongside a baseline map of existing green infrastructure. If green infrastructure is already present within or close to the area(s) with community environmental issues, then enhancement, expansion, or linking of existing green infrastructure may be required. When enhancing areas of green infrastructure, the ecosystem services that can be provided should be identified using the ecosystem service opportunity map (available at https://mappinggm.org.uk/gmodin/; see Figure 3).
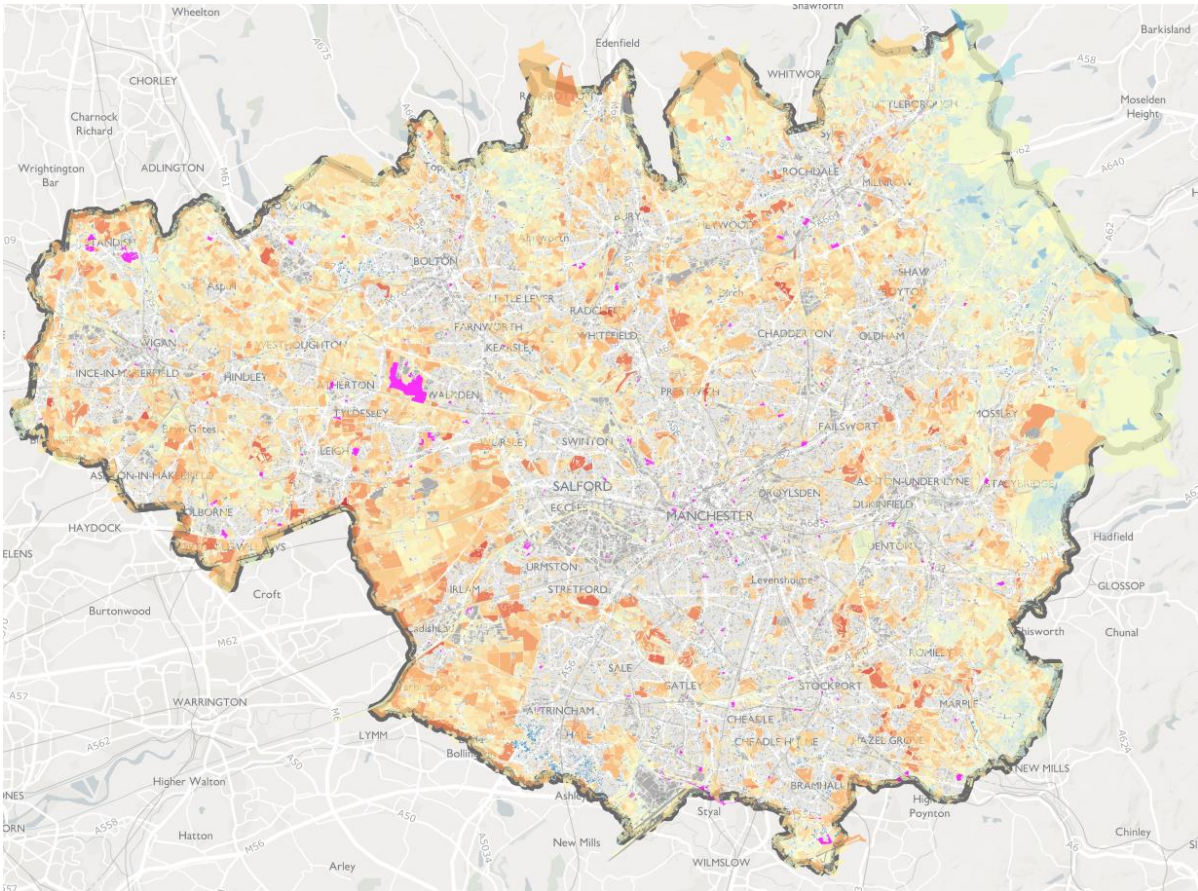
![WSP logo]

Figure 3: Ecosystem service opportunity map

1.18.   Alternatively, if there is a lack of green infrastructure in the area, then creation of new site(s) – if feasible – should be considered. When creating areas of green infrastructure, these should ideally be located in areas experiencing community environmental issues. The use of the green infrastructure priority map (see Figure 8.2 of the GMSF) is also recommended to facilitate the integration of new areas of green infrastructure into the wider network, and to support wider service provision (e.g. cycle ways or access to greenspace). If created on a development site, the new green infrastructure should take account of the needs of the new occupants of the site as well as the existing local community.

Application of local level Standards and Tools

1.19.   Development has a major role in helping to achieve high quality green infrastructure and delivery of ecosystem services, both through on-site provision of green infrastructure and the creation or improvement of off-site green infrastructure.

1.20.   The larger site allocations in the GMSF provide opportunities to incorporate major areas of new accessible green infrastructure, delivering overall net gains in green infrastructure value to the benefit of local communities. Even if the quantity of green infrastructure in that particular location

may reduce as a result of development, this is often not accessible; the quantity of good quality, accessible green infrastructure is therefore expected to increase.

1.21. The way in which existing built areas have developed over time means that it will not be realistically possible to have the same quantity of green space provision in all parts of Greater Manchester, though adoption of Green Factor approaches (see below) offers the opportunity to integrate other forms of green infrastructure, such as street trees and sustainable drainage systems (SuDS), into the existing urban fabric.

1.22. It is therefore recommended that Greater Manchester's authorities set locally applicable standards (either qualitative or quantitative) that support the delivery of the national principles, building on standards and policies they may already have in place.

1.23. The national framework provides the necessary structure for the development, adoption and use of local standards and tools within Greater Manchester. These will enable changes in the delivery of benefits resulting from development and other land use change to be identified, assessed, and considered in decision making. A wide range of tools are available for assessing the value of green infrastructure, and more are being developed. Whilst not precluding the use of other tools and standards, Greater Manchester's authorities are encouraged to consider use of the following – either individually or in combination:

- Accessible Natural Greenspace Standards (ANGSt) – this seeks to maximise the overall proportion of people across Greater Manchester who have access to natural green space. Published by Natural England, ANGSt is a helpful starting point for informing green infrastructure policy and site allocations, as its focus on ensuring good accessibility to different sizes of green space for all residents make it an appropriate approach at a sub-regional level. ANGSt analysis has been carried out across Greater Manchester for individual Districts and Lower Super Output Areas – this data should be used in the first instance (once made available on MappingGM). More detailed standards regarding specific habitats, designations, quality or functions of green space may be set out in district local plans, taking account of local circumstances and opportunities. (For more information on this tool see http://www.ukmaburbanforum.co.uk/docunents/other/nature_nearby.pdf).

- A Greater Manchester 'Green Factor' – once developed by the Combined Authority, this will set out a minimum level of on-site green infrastructure that new developments should seek to provide, so as to meet their occupants' needs, increase ecosystem service delivery, and contribute to the extent and interconnectedness of the wider network. The Green Factor will provide a baseline expectation based on the proportion of the site that is covered by different types of green infrastructure features (each with their own 'factor' or 'score'). Similar to the 'Urban Greening Factor' adopted in the London Local Plan, the Green Factor will be based on a set of regional factors, but tailored to local circumstances. (For more information on this tool see https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/draft-new-london-plan/chapter-8-green-infrastructure-and-natural-environment/policy-g5).

- Biodiversity Net Gain (BNG) – this is an approach that aims to leave biodiversity in a better state at the end of the development than at the beginning by avoiding, minimising and compensating for impacts. The approach uses a metric, developed by Defra, to value biodiversity before and after the development. The BNG metric requires data collected from a site visit for a habitat classification survey and an additional condition assessment survey to determine the habitat's

type and condition. An updated version of the tool is currently in development. Within Greater Manchester, specific guidance has been produced to support developments to deliver BNG, whilst UK-wide guidance is also available from CIEEM/IEMA/CIRIA. The Government has also recently issued a response to the Defra net gain consultation. (For more information on this tool see http://nepubprod.appspot.com/publication/5850908674228224).

- Health Economic Assessment Tools (HEAT) for walking and cycling – this tool is designed to enable users to conduct economic assessments of the health impacts of walking or cycling. Developed by the World Health Organisation, HEAT estimates the value of reduced mortality that results from specified amounts of walking or cycling, and can provide evaluation of new or existing projects, including benefit-cost ratio calculations. The user is required to input data relating to the volumes of travel (i.e. duration, distance, frequency, trips), purpose of travel (i.e. transport or recreation) and population size. Alternative tools which encourage health and wellbeing outcomes may also be used. (For more information on this tool see https://www.heatwalkingcycling.org/#homepage).