

## Leicestershire Highway Design Guide Principles

### Principle 1 – Working Collaboratively

- 1.1 An ethos of joint working with all key stakeholders is an essential part of the culture when preparing developments proposals. This will enable:
  - Setting shared objectives.
  - Understanding one another’s interests, aspirations and requirements.
  - The reconciling of any competing interests or site-specific challenges to increase the likelihood of approval processes being managed more efficiently.
- 1.2 It is recognised that it is often challenging to get all stakeholders around the table to discuss and agree matters of mutual interest. When this is the case, every attempt will be made to establish the relevant key contacts for all parties concerned, to ensure the appropriate input into proposed schemes.
- 1.3 Important design issues will be managed effectively, whilst reducing the need for bespoke site by site discussion on every point of a development. This will reduce resource pressures across all organisations involved.
- 1.4 LCC welcomes feedback on how its services might be improved. If you would like to comment about issues relating to the LHDG and its related processes, please contact [xxxxxxxxxx](#).
- 1.5 To facilitate developments that meet the needs of occupants and users, LHDG surveys and engagement work will be undertaken to help reduce the possibility of future issues, particularly in residential areas.

## Principle 2 – Facilitating Safe & Effective Highway

- 2.1 Increased congestion or road safety problems resulting from new development can have social, environmental and economic costs. This risk must be appropriately managed through the design of new highway and consideration of how it connects to the existing network.
- 2.2 In accordance with the National Planning Policy Framework (NPPF), LCC expects development promoters to provide robust evidence regarding the effects of their proposals on highway safety and the transport network, alongside the details of how negative impacts will be mitigated. LCC will advise refusal of any planning application that raises concerns about road safety.
- 2.3 As established in LHDG policy (**XXXX Our access to the road network policy**), LCC takes a risk-based approach to assessment of the appropriateness of new highway within development and how it connects to the existing network. This assessment includes consideration of traffic volumes, accident rates and the vulnerability of highway users. It is expected that the adverse effects on the existing highway network from new development proposals, both during construction and in the longer term, will be mitigated.
- 2.4 Assessment of the impact of a development should be undertaken via appropriate modelling tools, including as appropriate: Leicestershire County Council's Pan-Regional Transport Model which can also be utilised to identify the potential environmental impacts of schemes, and/or one of its suites of micro-simulation models.
- 2.5 Scheme access designs must be subject to Road Safety Audit requirements in accordance with the national standards defined in the Design Manual for Roads and Bridges. A more inclusive approach involving slower traffic speeds (where identified through assessment as being necessary) is advocated to create a safer environment.
- 2.6 As highlighted in Principles 5 and 6 of the LHDG, consideration must be given to those using the highway network for active travel and those with additional accessibility needs, in line with LHDG Street Type and Active Travel guidance.

### Principle 3 – Promoting Road Types for All Users (Also refer to xxxxx of the LHDG)

- 3.1 There is an important relationship between the built form and the spaces created by streets. This relationship can change depending on the local context - such as the character and heritage of an area - and the design aspirations for the development.
- 3.2 Nevertheless, to provide clarity around LCC's expectations from layout designs with respect to both proposed adopted highway and private roads, LHDG provides a hierarchy of street types.
- 3.3 This hierarchy allows some flexibility, subject to assessment, for designers to propose layouts that best fit the design aspirations. LHDG recognises both Manual for Streets and National Design Code guidance in developing this hierarchy, whilst respecting the Leicestershire context.
- 3.4 Highway must be safe and functional and help contribute towards high quality development. Highways should be adaptable to prevent them from becoming unused in the future; spaces should be designed to be able to change to meet new requirements.
- 3.5 It is critical that developers speak to the highway authority in addition to the local planning authority to discuss their proposals at the earliest opportunity (ideally pre-application) and that effective communication is maintained between all parties throughout the development process. This will facilitate the smooth progress of schemes through LCC's approval process.
- 3.6 Further guidance regarding street types can be found in **XXXXXXXXXX**.

## Principle 4 – Creating Durable and Easily Maintained Places (Also refer to xxxxx of the LHDG)

- 4.1 Safety, functionality (in terms of movement of people around the network in their chosen mode of transport) and deliverability are key considerations when designing new highway/making changes to existing highway. Additionally, an appropriate balance of risk should be struck between LCC, the planning authority if appropriate and developer in terms of continued maintenance and costs.
- 4.2 The design principles applied, and materials used - whether that is the types of kerbs used or through provision of green infrastructure - can also help to reinforce the character and historic context of a place. Development should respect and reflect the diversity of settlement character and landscape across Leicestershire. In accordance with the National Planning Policy Framework (NPPF) and the National Design Code, new highway should contribute to creating attractive, sustainable places to live where all residents and highway users can enjoy the benefits it provides.
- 4.3 Design decisions should also help to facilitate broader objectives including place making, health and wellbeing, net zero and biodiversity net gain (see Principle 7 Climate Change and the Environment).
- 4.4 LCC will seek to work with district/borough councils, development promoters and the wider highway industry to ensure that LCC continues to evaluate its approach to design safety, quality and sustainability within the context of the LHDG.
- 4.5 To ensure that attractive, well-functioning places are not just created but are built to last, it is critical that they are designed to be simple and cost effective to maintain. To safeguard the interests of communities and residents, highway and transportation infrastructure will only be adopted where it is designed to publicly maintainable standards, in accordance with LCC Highway Asset Management Policy and the standards set out in this Guide. Design solutions should also allow for appropriate futureproofing in terms of connectivity to surrounding areas to enable future growth to take place in a sustainable manner.
- 4.6 Developer proposals should follow asset management best practice to minimising the future maintenance burden within the extents of the highway proposed for adoption; scheme promoters should ensure that new development aligns with LCC's Asset Management [Policy](#) and [Strategy](#)
- 4.7 Designers and engineers must refer to LCC's Materials Palettes in the development of their scheme.

## Principle 5 Encouraging Active and Sustainable Travel (Also refer to xxxxx of the LHDG)

- 5.1 Achieving a greater uptake of active travel, such as cycling, walking and wheeling, leads to a wide range of benefits that improve the health and wellbeing of communities. It can also help reduce vehicles within the road network, potentially leading to improved highway capacity resulting in better air quality and reduction in greenhouse gas emissions. These benefits will only be achieved if design solutions place these modes at the heart of the movement strategy to give precedence to cycling, walking and wheeling over motor vehicles wherever practicable to maximise their uptake, together with incentives for their use.
- 5.2 Alongside LCC's Cycling and Walking Strategy (CaWS) and Action Plan, the design of active travel aspects of highway schemes will follow the policies and objectives set out in national guidance including the Government's Gear Change vision document and Local Transport Note 1/20 "Cycling Infrastructure Design". These documents define the ambition to create "a national default position where high quality cycle infrastructure is provided as a matter of course in local highway schemes".
- 5.3 Whilst adhering to these ambitions, active travel elements of schemes must reflect the context of Leicestershire as a county with significant rural areas. Additionally, in designing new development, consideration must be given to how new active travel infrastructure can link into the existing network of facilities and how this network can be improved.
- 5.4 As set out in the CaWS Action Plan the council is developing Local Cycling and Walking Infrastructure Plans (LCWIPs) for the more urban areas in Leicestershire, in line with Government guidance. These LCWIPs set out the vision and priorities for active travel improvements in an area, to create convenient, accessible and practical cycling, walking and wheeling networks to help and encourage people to travel more sustainably. New or improvements to existing active travel infrastructure in, or near to, an area where there is an LCWIP must give due consideration to these plans.
- 5.5 LCC will continue to support provision of socially-necessary local bus services, including publishing bus and bus information strategies and promoting high-quality rural and urban services that encourage greater use of public transport;
- 5.6 This overall approach aligns with wider LCC policy and strategies that have ambitions to create better places, including the Network Management Policy and Strategy, Net Zero Leicestershire Strategy and Leicestershire Joint Health and Wellbeing Strategy.

## Principle 6 – Supporting Inclusive Highway (Also refer to xxxxx of the LHDG)

- 6.1 Streets should aim to become national beacons for inclusive design, actively taking account of the needs of all users. This can be achieved by embedding a design principle that creates places where people feel safe, enjoy spending time, and that function in a way that meets the needs of communities.
- 6.2 Although LHDG offers guidance in relation to accessibility for those with mobility issues, it is the responsibility of the developer through the planning process to ensure that schemes have accounted for the requirements of those with protected characteristics under the Equality Act 2010.
- 6.3 The design of new highway should consider national guidance relating to inclusive mobility, such as the Department for Transport’s [“Inclusive Mobility - a Guide to Best Practice on Access to Pedestrian and Transport Infrastructure”](#).
- 6.4 Consideration must be given to methods of designing out crime as part scheme design including issues relating to natural surveillance, access control (physical and symbolic barriers to opportunities for crime), territorial reinforcement (defensible space) and space management. Designers may wish to refer to the current guidance documents [“Designing out Crime”](#) and [“Safer Parks - Improving access for women and girls”](#)
- 6.5 Whilst placing people at the centre of design solutions is critical, specialist services are also vital for communities to function. The street layout design must accommodate the needs of emergency and waste collection services.
- 6.6 In addition to active travel options, the design of new development should consider the provision of the necessary infrastructure and layouts to ensure residents have opportunities to access the passenger transport network. Additionally, regard should be given to the suitability of layouts to accommodate home deliveries and other key services

## Principle 7 Tackling Climate Change and Protecting the Environment

### **Carbon**

- 7.1 Climate change is one of the planet's greatest challenges, with communities already experiencing the severe impacts of flooding, extreme heat and drought. The transport sector is the UK's largest contributor to carbon emissions, responsible for about a third of the total greenhouse gas emissions and needs to change to meet this challenge.
- 7.2 In accordance with LCC's commitment to become a net zero carbon authority by 2030 and for Leicestershire as a county to become net zero by 2045, the impact of materials chosen for highway construction activities will be considered from the point of view of carbon generated through its entire lifecycle.
- 7.3 LCC's materials palettes consider the carbon and wider environmental impacts of materials. However, understanding the lifecycle carbon consequences of a material, from the manufacturing stage and required construction methods through to durability from usage, is incredibly challenging and will be an ongoing piece of work undertaken with support from the wider industry.
- 7.4 In designing new highway, consideration should be given to the resilience of future assets to the negative impacts of climate change (such as flooding and heat damage), whilst ensuring the core principles of safety and durability are met; this might be through thinking about how drainage systems can better cope with extreme rainfall events or using surfacing materials that can withstand higher temperatures. The National Highways' document "[Preparing for climate change on the strategic road network](#)" examines key areas of risk in relation to climate change and considers how we might adapt in the future.
- 7.5 Additionally, the design of highway in terms of layout and provision of infrastructure can have an impact on the carbon footprint of a scheme. For example, a well-planned development should look to reduce the number of construction vehicle movements, whilst well-designed layouts can encourage residents to adopt active travel modes rather than relying on the car and reduce congestion by enabling the free flow of traffic.
- 7.6 To help decarbonise transport and contribute to net zero ambitions for the county, LCC is keen to support residents in switching to electric vehicles. LCC is currently developing an electric vehicle strategy for Leicestershire to define local design standards, principles and processes. Developers will need to liaise closely with LCC and the local planning authorities regarding EV provision in new developments.

### **Green Infrastructure**

- 7.7 The Government has updated the National Planning Policy Framework (NPPF) to include the requirement that "new streets are tree-lined" and sets out the ambition for the creation of beautiful and sustainable places. Additionally, the Natural Environment and Rural Communities Act 2006 (NERC Act) states that public authorities should go beyond the mere maintenance of biodiversity in its current

condition and provide for the enhancement and improvement of biodiversity as part of the extended biodiversity duty.

- 7.8 Leicestershire County Council is developing a Local Nature Recovery Strategy (LNRS), which is system of spatial strategies for nature and environmental improvement required by law under the Environment Act (2021). The purpose of an LNRS is to address the serious decline in nature throughout the UK. Highways can provide important opportunities to improve connectivity of sites of value for wildlife through provision of green infrastructure that has biodiversity benefits.
- 7.9 The Government's National Design Guide also recognises the contribution nature can make to the quality of place and states that natural features should be "integrated into well-designed places".
- 7.10 When appropriately designed and planted, green infrastructure such as trees and landscaping can offer multiple benefits for communities, creating attractive places that encourage people to leave their cars behind, participate in active travel and spend time. In the context of climate change, it can provide shade, reduce flooding, act as a carbon sink and provide valuable corridors for wildlife.
- 7.11 LCC will facilitate green infrastructure within the highway that meets the principles of design quality in relation to appropriateness to the local context (see below and LHDG Sections....) and asset management best practice. Commuted sums may be required to provide for the future maintenance of adopted green assets. To align with national and local guidance and planning policy it is expected that such provision should help facilitate broader objectives including place making, health and wellbeing, carbon net zero and biodiversity net gain.
- 7.12 For additional guidance on green infrastructure provision within the highway please refer to XXXXXXXXX.