

Highways Code of practice - Appendix 4

WELL-MANAGED HIGHWAY INFRASTRUCTURE - SUMMARY OF RECOMMENDATIONS

1	USE OF THE CODE	This Code, in conjunction with the UKRLG Highway Infrastructure Asset Management Guidance, should be used as the starting point against which to develop, review and formally approve highway infrastructure maintenance policy and to identify and formally approve the nature and extent of any variations	Recommendation to adopt use of the Code
2	ASSET MANAGEMENT FRAMEWORK	An Asset Management Framework should be developed and endorsed by senior decision makers. All activities outlined in the Framework should be documented	The Council has a draft Asset Management Framework generated in 2016, this is currently under review and shall be submitted to a future meeting of E&CS PDS Committee
3	ASSET MANAGEMENT POLICY AND STRATEGY	An asset management policy and a strategy should be developed and published. These should align with the corporate vision and demonstrate the contribution asset management makes towards achieving this vision	Asset Management Policy and Strategy drafted and approval being sought from E&CS PDS Committee.
4	ENGAGING AND COMMUNICATING WITH STAKEHOLDERS	Relevant information should be actively communicated through engagement with relevant stakeholders in setting requirements, making decisions and reporting performance	Processes are in place to submit reports to Committee, there are regular routine meetings with the Portfolio Holder for E&CS
5	CONSISTENCY WITH OTHER AUTHORITIES	To ensure that users' reasonable expectations for consistency are taken into account, the approach of other local and strategic highway and transport authorities, especially those with integrated or adjoining networks, should be considered when developing highway infrastructure maintenance policies	Exchanges of relevant information and dedicated meetings have taken place with neighbouring boroughs. Bromley is active within London wide technical groups in respect of highways, winter service, drainage and bridges.
6	AN INTEGRATED NETWORK	The highway network should be considered as an integrated set of assets when developing highway infrastructure maintenance policies	The recent tender of Highway Services has brought within the same contract Major Planned Works and Street Lighting, Minor Highway Maintenance and, in the future (potentially) further services including Professional Services and Highway Drainage

7	RISK BASED APPROACH	A risk based approach should be adopted for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, responses, resilience, priorities and programmes	Programmes of routine inspection are undertaken across all highway assets and the outcome of the inspection programme drives the responses and priorities of highway infrastructure maintenance work.
8	INFORMATION MANAGEMENT	Information to support a risk based approach to highway maintenance should be collected, managed and made available in ways that are sustainable, secure, meet any statutory obligations, and, where appropriate, facilitate transparency for network users	Outcomes from inspections and defects and repairs are recorded on the Council's asset databases and works order systems. Major/Minor works and street lighting on Confirm, Highway Structures on BridgeStation.
9	NETWORK INVENTORY	A detailed inventory or register of highway assets, together with information on their scale, nature and use, should be maintained. The nature and extent of inventory collected should be fit for purpose and meet business needs. Where data or information held is considered sensitive, this should be managed in a security minded way	The inventories of highway assets is recorded either in Confirm or BridgeStation. A proportion of this data is represented electronically on maps via the Council's Earthlight system
10	ASSET DATA MANAGEMENT	The quality, currency, appropriateness and completeness of all data supporting asset management should be regularly reviewed. An asset register should be maintained that stores, manages and reports all relevant asset data	Routine and safety inspections plus condition data are utilised to do this.
11	ASSET MANAGEMENT SYSTEMS	Asset management systems should be sustainable and able to support the information required to enable asset management. Systems should be accessible to relevant staff and, where appropriate, support the provision of information for stakeholders	The Council's Confirm asset information system is used for most of highways asset data. BridgeStation, developed & managed by the London Bridges Engineering Group for all London's highway authorities is used to record all highway structures information.
12	NETWORK HIERARCHY	A network hierarchy, or a series of related hierarchies, should be defined which include all elements of the highway network, including carriageways, footways, cycle routes, structures, lighting and rights of way. The hierarchy should take into account current and expected use, resilience, and local economic and social factors such as industry, schools, hospitals and similar, as well as the desirability of continuity and of a consistent approach for walking and cycling	The Council has a developed network hierarchy taking cognisance of use, taking account schools, local economic and social factors, transport etc.

13	WHOLE LIFE / DESIGNING FOR MAINTENANCE	Authorities should take whole life costs into consideration when assessing options for maintenance, new and improved highway schemes. The future maintenance costs of such new infrastructure are therefore a prime consideration	Each situation is reviewed on it's merit and appropriate solutions implemented that take into account whole of life costs.
14	RISK MANAGEMENT	The management of current and future risks associated with assets should be embedded within the approach to asset management. Strategic, tactical and operational risks should be included as should appropriate mitigation measures	The Council's Network Hierarchy shall be reviewed on a regular basis as acknowledgement of the change in risk this represents.
15	COMPETENCIES AND TRAINING	The appropriate competency required for asset management should be identified, and training should be provided where necessary	Competencies for the roles in highway maintenance are determined and appropriate development is provided to highway staff including highway inspectors, the winter service team, street lighting team NRSWA etc. Regular updating of skills forms a key element of development training.
16	INSPECTIONS	A risk-based inspection regime, including regular safety inspections, should be developed and implemented for all highway assets	The majority of highway asset inspections are risk based. Regular inspection programmes for highway structures and street lighting are in place. The highway inspection regime has been included as part of the report to E&CS PDS Committee on 20/11/18.
17	CONDITION SURVEYS	An asset condition survey regime, based on asset management needs and any statutory reporting requirements, should be developed and implemented	Condition indicators for the Council's principal road network are undertaken through London Technical Advisory Group carriageways. Condition surveys for the Council's remaining roads are undertaken approximately every 3 years. Highway structures have regular condition inspections from which a Bridge Condition Indicator is generated through BridgeStation. Street Lighting columns have visual inspections undertaken at each visit and these are categorised a condition level 1 to 4.
18	MANAGEMENT SYSTEMS AND CLAIMS	Records should be kept of all activities, particularly safety and other inspections, including the time and nature of any response, and procedures established to ensure efficient management of claims whilst protecting the authority from unjustified or fraudulent claims	The Council's Confirm asset database and BridgeStation record inspections and work undertaken on the Council's highways assets.

19	DEFECT REPAIR	A risk-based defect repair regime should be developed and implemented for all highway assets	The Council's footways and carriageways have set intervention levels and response times which are appropriate for all categories of highway. Street lighting has a similar regime of response times. Highway Structures have regular routine inspection and repairs undertaken on a risk based approach.
20	RESILIENT NETWORK	Within the highway network hierarchy a 'Resilient Network' should be identified to which priority is given through maintenance and other measures to maintain economic activity and access to key services during extreme weather	The Council's Winter Service has prioritised routes for gritting in adverse conditions. These are regularly reviewed.
21	CLIMATE CHANGE ADAPTATION	The effects of extreme weather events on highway infrastructure assets should be risk assessed and ways to mitigate the impacts of the highest risks identified	The Council's Winter service routes represent a well established resilient network.
22	DRAINAGE MAINTENANCE	Drainage assets should be maintained in good working order to reduce the threat and scale of flooding. Particular attention should be paid to locations known to be prone to problems, so that drainage systems operate close to their designed efficiency.	Drainage assets are routinely maintained and levels of maintenance reflect their location and function on the network. Known areas causing flooding are prioritised for treatment.
23	CIVIL EMERGENCIES AND SEVERE WEATHER EMERGENCIES PLANS	The role and responsibilities of the Highway Authority in responding to civil emergencies should be defined in the authority's Civil Emergency Plan. A Severe Weather Emergencies Plan should also be established in consultation with others, including emergency services, relevant authorities and agencies. It should include operational, resource and contingency plans and procedures to enable timely and effective action by the Highway Authority to mitigate the effects of severe weather on the network and provide the best practicable service in the circumstances	The Council has corporate plans for emergencies. Highways is documented in the plans and in particular the capability of access to contractors resources and the resources of Highway Engineering Consultant Engineers.
24	COMMUNICATIONS	Severe Weather and Civil Emergencies Plans should incorporate a communications plan to ensure that information including weather and flood forecasts are received through agreed channels and that information is disseminated to highway users through a range of media	The Council's communications team have plans in place to communicate information to highway users, including published media, radio, social media. Forecast from weather agencies providing advance warning of weather events are received and distributed.

25	LEARNING FROM EVENTS	Severe Weather and Civil Emergencies Plans should be regularly rehearsed and refined as necessary. The effectiveness of the Plans should be reviewed after actual events and the learning used to develop them as necessary	The Council's Emergency Planning Team is part of a pan London approach and members of the authority team take part in regular training exercises that take into account relevant emergency scenarios.
26	PERFORMANCE MANAGEMENT FRAMEWORK	A performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy	The contracts with the main service providers have performance management throughout.
27	PERFORMANCE MONITORING	The performance of the Asset Management Framework should be monitored and reported. It should be reviewed regularly by senior decision makers and when appropriate, improvement actions should be taken	KPI's and routine and regular review service board meetings are held to review performance
28	FINANCIAL PLANS	Financial plans should be prepared for all highway maintenance activities covering short, medium and long term time horizons	The Council contribute to the LoTAG 'State of the City Report' which include financial data to support backlog and hence highway maintenance financial need.
29	LIFECYCLE PLANS	Lifecycle planning principles should be used to review the level of funding, support investment decisions and substantiate the need for appropriate and sustainable long term investment	Lifecycle planning has been undertaken for the Council's roads and footways and street lighting asset. The recent Street lighting 'Invest to Save' and current highway investment programme of work demonstrate this Council's commitment to Lifecycle Planning.
30	CROSS ASSET PRIORITIES	In developing priorities and programmes, consideration should be given to prioritising across asset groups as well as within them.	Maintenance budgets are allocated by asset but the recent highway investment programme has been re-prioritised to tackle planned maintenance of the Council's carriageways.
31	WORKS PROGRAMMING	A prioritised forward works programme for a rolling period of three to five years should be developed and updated regularly	The current highway investment programme has re-profiled budgets to make them available up-front for investment, effectively covering a three year period of investment.
32	CARBON	The impact of highway infrastructure maintenance activities in terms of whole life carbon costs should be taken into account when determining appropriate interventions, materials and treatments	The Council has recently awarded Highway Maintenance contracts to JB Riney who are part of the Tarmac group of companies and innovative surface treatments such as warm asphalt are under review. In addition the Council is undertaking LED lantern conversions to reduce energy use.

33	CONSISTENCY WITH CHARACTER	Determination of materials, products and treatments for the highway network should take into account the character of the area as well as factoring in whole life costing and sustainability. The materials, products and treatments used for highway maintenance should meet requirements for effectiveness and durability	A like for like policy of replacement is generally practised and appropriate equivalent materials chosen.
34	HERITAGE ASSETS	Authorities should identify a schedule of listed structures, ancient monuments and other relevant assets and work with relevant organisations to ensure that maintenance reflects planning requirements	All heritage assets are mapped on the Council's asset information systems.
35	ENVIRONMENTAL IMPACT, NATURE CONSERVATION AND BIODIVERSITY	Materials, products and treatments for highway infrastructure maintenance should be appraised for environmental impact and for wider issues of sustainability. Highway verges, trees and landscaped areas should be managed with regard to their nature conservation value and biodiversity principles as well as whole-life costing, highway safety and serviceability	Sustainability of materials and their impact is implicit in the choice of materials used on Bromley's network. The Council works with our service providers to ensure sustainable methods and materials are used.
36	MINIMISING CLUTTER	Opportunities to simplify signs and other street furniture and to remove redundant items should be taken into account when planning highway infrastructure maintenance activities	De-cluttering exercises have been undertaken and the street lighting service is removing lit signs when possible to reduce energy use and help improve health and safety aspects of highway maintenance.