

SUMMARY OF RECOMMENDATIONS Code of Practice for Well-Managed Highway Infrastructure							
Recommendation			Adopt	Existing Practical demonstration	Improvement Plan	Who	When
1	USE OF THE CODE	This Code, in conjunction with the UK Roads Liaison Group (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.	Yes	1. Norfolk CC has used past Codes in similar way	A. Need review and paper taken to EDT	Asset & Capital Programme Manager	15/09/2017 EDT committee
					B. Update Transport Asset Management Plan (TAMP) to remove old Code of Practice (CoP) references as 2-year review progresses. Starting with 2018-19 TAMP	Asset & Capital Programme Manager	Jul-18
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. (Highway Infrastructure Asset Management Guidance (HIAMG) Recommendation 1)	Yes		A. Review TAMP content and update, members will sign-off in annual paper	Asset & Capital Programme Manager	15/09/2017 EDT 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. (HIAMG Recommendation 3)	Yes	1. Asset Management Policy & Strategy adopted EDT July 2014,  2. Strategy revisited EDT 14 Oct 2016	A. Reaffirm or review as part of Annual Highways Asset Performance Report	Asset & Capital Programme Manager	15/09/2017 EDT 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. (Taken from HIAMG Recommendation 2)	Yes	1. Consultee list for highway works  2. Consultation Hub 3. BS11000 Communication Strategy adopted EDT 14 Oct 2016 4. Annual Highway Asset Performance Report to members agreed EDT 14 Oct 2016. Common practice since 2008. 5. Inspection and maintenance practices and performance of highway assets are in the TAMP published every year.	A. Review Communication Plan as part of annual management cycle	Highway Services Manager	Annually in November of each year after publication of National Highways Transport (NHT) Customer Satisfaction Survey results

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.	Yes	<ol style="list-style-type: none"> <li>1. Adjoining authorities on Consultee list for highway works</li> <li>2. Similar for network policy, hierarchy, permit schemes etc.</li> <li>3. Maintenance boundary including bridges agreements with neighbouring authorities are in place</li> <li>4. Noting sometimes local communities want differing things near the boundaries i.e. HGV traffic movements</li> </ol>	A. When developing any Highway Network Management and Maintenance Policies, include review of practices in region. Using existing regional groups such as Eastern Area Consortium (Winter) and Eastern Highways Alliance	Highway Services Manager & Team Manager network Management (Analysis & Safety)	1. When any policy review undertaken
6	AN INTEGRATED NETWORK	The highway network should be considered as an integrated set of assets when developing highway infrastructure maintenance policies	Yes	<ol style="list-style-type: none"> <li>1. Policy development scopes impact on all modes and vulnerable groups. Equality Impact Assessment (EIA)</li> <li>2. Capital Programme managed via an integrated programme management system 'Scheme information management system' (SMIS). Programmes from various themes i.e. walking &amp; cycling, local safety and maintenance are overseen by one team who look for opportunities to combine works at one location.</li> <li>3. Safety Audit considers all modes</li> </ol>	A. Not required – Maintain current practice	Highway Services Manager together with Asset & Capital Programme Manager & Safety Audit & Major Projects	When any policy review undertaken

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 .	Yes	<p>1. Risk section contained within committee template.</p> <p>2. Risks managed at levels with NCC i.e. Corporate, Departmental, Group within in common framework</p> <p>3. Risk section of our Transportation Asset Management Plan</p> <p>4. Highway defect risk register and response times built around risk principles</p> <p>5. Resilient network, risk areas identified and mitigation</p> <p>6. A risk based approach is currently adopted to set Principal Inspection frequencies for bridges using IAN 17/1/12 (Risk based Principal Inspection frequencies) We have been reviewing the inspection frequency for culverts over the last year.</p> <p>7. Moving away from a strict application of standards and codes, Street Lighting/Highway Inspections/Winter service? These will all require new documentation See example done for highway inspections in 2012 in order to incorporate PROW inspections that is now being rewritten for new regime starting 2017</p>	<p>A. Review and agree with Risk &amp; Insurance, methodology, analysis and record keeping for risk-based approach to be applied for template for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, responses, resilience, priorities and programmes</p> <p>B. Determine review programme for Highways Group</p> <p>C. Each responsible team needs to carry out a review of its services and incorporate a risk based approach. It needs to be able to demonstrate that it has identified the risks and have systems in place to mitigate that risk whilst still moving away from empirical rules.</p> <p>D. Review Highway Group / Service level risk register and Maintain</p> <p>E. Lessons learnt for 'risk' being considered by Corporate Finance (incentive fund action)</p> <p>F. Develop enhancement to Mayrise to allow cross network reporting Section Nos / USRN Mayrise routine records and rates/inspections/asset. Or suitable alternative Same as 11 &amp; 14</p> <p>H. Review attributes held in 'Figtree', considering analysis requirements for periodic for both insurance section and highway requirements. Same as 18</p>	<p>Highway Services Manager</p> <p>Highway Services Manager</p> <p>Relevant Team Managers to be identified</p> <p>Highway Services Manager &amp; Capital Programme Manager</p> <p>Risk management Officer</p> <p>Highways Support Systems Manager together with Area Manager West and Asset &amp; Capital Programme Manager</p> <p>Highway Services Manager</p>	<p>Jan-18</p> <p>Feb-18</p> <p>Sep-18</p> <p>Nov-17</p> <p>Feb-18</p> <p>Dec-17</p> <p>Nov-17</p>
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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.	Yes	<p>1. Various systems used to hold data</p> <p>a. Highway Management System</p> <p>b. Pavement Management System</p> <p>c. AMX bridge Management System</p> <p>d. Insurance System</p> <p>e. Key Accident</p> <p>f. Key Lab</p> <p>g. Traffic database</p> <p>h. Arc GIS and Norfolk Mapping Browser, mapping layers from external sources and internal data sources</p> <p>i. Scheme Management Information system (SMIS)</p> <p>j. Surface dressing layer since 2002 and forward</p> <p>k. Maintenance Surfacing Scheme Database – past resurfacing</p> <p>l. Intranet. Our processes and policies</p> <p>J. Figtree. Insurance data</p> <p>k. Customer Service Centre / NCC website - service requests, distribution, resolution</p> <p>l. Consultation Hub including analysis of returns</p> <p>m. Risk register</p> <p>n. Electronic folders</p> <p>O. Contractor returns gullies, grass cutting</p>	<p>A. Liaise with Risk &amp; Insurance to Update Insurance Claim attributes in '@Figtree' to enable improved reporting. Same as 7.h</p> <p>B. Issue guidance / procedure. As determined in Action 7.1</p> <p>C. Retain information that informs risk assessment, for future reference.</p>	<p>Highway Services Manager</p> <p>Highway Services Manager</p> <p>Relevant Team Managers to be identified</p>	<p>Oct-17</p> <p>Jan-18</p> <p>Apr-18</p>
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.	Yes	<p>1. We use various systems used to manage our data</p> <p>a. Highway Management System</p> <p>b. Pavement Management System</p> <p>c. Bridge Management System</p> <p>d. Insurance System</p> <p>e. Key Accident</p> <p>f. Key Lab</p> <p>g. Traffic database</p> <p>h. Arc GIS and Norfolk Mapping Browser mapping layers from external sources and internal data sources. GIS team is corporate resource.</p> <p>i. Intranet. Our processes and policies</p> <p>2. Asset Data Management Strategy approved by EDT Committee 14 Oct 2016</p>	<p>A. Gully Emptying IT development / Process review to enable contractor returns and new adoptions to be captured and issued</p> <p>B. Maintain current practice</p>	<p>Area Manager (West) together with Asset &amp; Capital Programme Manager</p> <p>Relevant Team Managers / Asset Data Owners</p>	<p>Apr-18</p> <p>N/A</p>

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.  (HIAMG Recommendation 5)	Yes	1. We use various systems used to manage our data  a. Highway Management System b. Pavement Management System c. Bridge Management System d. Insurance System e. Key Accident f. Key Lab g. Traffic database h. Arc GIS and Norfolk Mapping Browser mapping layers from external sources and internal data sources. GIS team is corporate resource. i. Intranet. Our processes and policies 2. Asset Data Management Strategy approved by EDT Committee 14 Oct 2016 3. Data Management Plan	A. Data Management Plan seek to  a. widen scope of work areas b. ensure being followed through	Asset & Capital Programme Manager together with Highway Services Manager	Jan-18
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.  (HIAMG Recommendation 12)	Yes	1. We use various systems used to manage our data  a. Highway Management System  b. Pavement Management System c. Bridge Management System d. Insurance System 'Figtree' e. Key Accident f. Key Lab g. Traffic database h. Arc GIS and Norfolk Mapping Browser mapping layers from external sources and internal data sources. GIS team is corporate resource. i. Intranet. Our processes and policies 2. NCC website a. Outward facing	A. Develop enhancement to Mayrise to allow cross network reporting Section Nos / Unique Street Reference Numbers (URSN) Mayrise routine records and rates/inspections/asset. Or suitable alternative. Same as 7 and 14	Asset & Capital Programme Manager together with Area Manager West and Highways Support Systems Manager	Nov-17
					B. Not required – Maintain current practice	Relevant Asset Owners	N/A

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.	Yes	<p>1. The County Council Route Hierarchy was originally approved by Members in December 1980.</p> <p>2. A review was agreed by the Highways Sub-Committee, at its meeting on the 4 September 1991</p> <p>a. For the purpose of the review the County has been divided into cells, which are areas bounded by Trunk, Principal and Main Distributor Routes. Each cell is reviewed to identify the most appropriate routes for traffic from outside the cell to access each significant HGV Operating Centre, HGV Generator, local communities and tourist attractions within the cell via the existing Trunk, Principal and Main Distributor network. These routes are known respectively as HGV Access Routes, Local Access Routes and Tourist Access Routes. The designation of these routes will affect-</p> <ul style="list-style-type: none"> <li>• the priority given to road improvements and maintenance;</li> <li>• the consideration of planning applications;</li> <li>• Traffic Regulation Orders including weight restrictions;</li> <li>• Maps, if a route is removed from or added to the Route Hierarchy and its classification changes.</li> </ul> <p>In addition to the above, the main visible changes will be to direction signing</p> <p>b. The agreed signing policy approved by the Planning and Transportation Sub-Committee on 9 March 1997 is shown in Appendix B</p> <p>3. Bridges inspections based upon span, visibility and condition on risk-assed basis</p> <p>4. Street Lighting by Head of Highways</p>	<p>A. Manage and review hierarchy on needs basis:-</p> <p>a. Review against requirements of new Code of Practice, including table top review on existing hierarchies and traffic volume and new pedal ways / cycling facilities</p> <p>b. Review in future in the case of</p> <ul style="list-style-type: none"> <li>i. Significant development</li> <li>ii. Strategic new Highway Infrastructure Schemes such as NDR and proposed 3rd-river crossing Gt Yarmouth.</li> <li>iii. Significant changes to Traffic Movements</li> <li>iv. Council decision</li> </ul> <p>c. Inform Policy, Strategies and development</p> <p>d. Expert witness in any court proceeding on highway claims</p> <p>B. Winter, Resilient and Traffic sensitive street, P.R.O.W networks</p> <p>C. Street lighting, review need for hierarchy</p> <p>D. Bridges, review need for hierarchy</p>	<p>Team Manager network Management (Analysis &amp; Safety)</p> <p>Highway Services Manager</p> <p>Electrical Services Manager</p> <p>Bridges Manager</p>	<p>Apr-18</p> <p>In the event of</p> <p>In the event of</p> <p>As required</p> <p>Nov-17</p> <p>Sep-18</p> <p>Sep-18</p>
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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.	Yes	1. Coordination of works facilitated by programme management team. Bid process for available 'pots' sometimes causes revisits.	A. Needs to be reviewed and processes developed to effectively enact	Asset & Capital Programme Manager together with a Design Lead	Jan-18
				2. Guidance on 'palate' of materials to conservation officers 2013 re 'road hump' construction	a. Table 4 & 5 p33 & p34 need to be used within design process similar to environmental checklist. But referred to Head of Highways only in cases of exception.		Jan-18
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. (HIAMG Recommendation 11)	Yes	3. Whole life costs considered (often subjectively) when considering maintenance options,	B. Publicise approach a. IMS procedure b. 'Green room' lunchtime training sessions (in-house)	Asset & Capital Programme Manager together with a Design Lead	Jan-18
				1. Corporate guidance	A. Record management need to maintain evidence on development and management of risk. If we can't evidence our decision making we could be challenged successfully.		Highway Services Manager together with Team Managers
				2. Risk contained within template for committee reports	B. Policy development, how and why conclusion drawn together with information sources. Same as action 7.A	Highway Services Manager	Nov-18
				3. Risk Management embedded at Corporate / Department / Group / Project level	C. Risk Register, develop group level risk register further to capture performance against service levels, critical infrastructure etc. same as 7.D	Highway Services Manager & Capital Programme Manager	Oct-17
				4. Risk section within Norfolk's Transport Asset Management Plan	D. Project delivery, i.e. risk register as part of Programme Development Team feed into Highway Service Risk Register	Asset & Capital Programme Manager	Oct-17
				5. Information sources:-	E. Develop enhancement to Mayrise to allow cross network reporting Section Nos / USRN Mayrise routine records and rates/inspections/asset. Or suitable alternative. Same as 7 & 11	Asset & Capital Programme Manager together with Area Manager West and Highways Support Systems Manager	Nov-18
				a. Stats 19 (Police Road Traffic Accidents)			
				b. Highway Management System			
c. Pavement Management System							
d. Traffic Flow data							
6. Risk based Highway Defect Risk Register							
7. Resilient Network established with mitigation							
8. Capital Programme Significant risks added to risk register and discussed at Programme Delivery Team							

15	COMPETENCIES AND TRAINING	The appropriate competencies for all staff should be identified. Training should be provided where necessary for directly employed staff, and contractors should be required to provide evidence of the appropriate competencies of their staff	Yes	<p>1. All posts have job specifications containing</p> <p>1. Principal accountabilities</p> <p>2. Person spec</p> <p>    i. Qualifications</p> <p>    ii. Experience</p> <p>    iii. Skills/Knowledge</p> <p>3. Ways of working - Behaviours</p> <p>2. How to Manage Risk ~ eLearning</p> <p>3. Risk Management contained with project management training such as PRINCE2</p>	<p>A. Review training matrix within old Highway Maintenances teams, widened to include 'Highways' and maintain.</p> <p>B. Consider whether to send bridge inspectors to do the LANTRA bridge inspection training</p> <p>C. Some form of formal training for asset management team – await IHE course or Institute of asset management. Seek opportunities within EHA funding</p> <p>D. Some form of training in case of challenge on risk Competency. Suggest publicising "How to Manage Risk ~ eLearning" and incorporating into competency matrix</p> <p>E. Check in contracts if contractors are required to submit / refresh info on staff within current contracts</p>	<p>Highway Services Manager with Fast Lane Training Services</p> <p>Bridges Manager</p> <p>Asset &amp; Capital Programme Manager</p> <p>Highway Services Manager together with Team Managers</p> <p>Highway Services Manager together with Team Managers</p>	<p>Dec-17</p> <p>May-18</p> <p>Jun-18</p> <p>Dec-17</p> <p>Dec-17</p>
16	INSPECTIONS	A risk-based inspection regime, including regular safety inspections, should be developed and implemented for all highway assets.	Yes	<p>1. Already in place see TAMP 17-18 App D (i), (v), (vi), (vii), (viii), (ix). Including a risk based approach based on national traffic flow. Should this be itemised i.e. roads, trees PRoW</p> <p>2. Consider exceptional inspections i.e. damage after prolonged period frosts/ severe winter period</p> <p>3. All metalled urban PROW inspected as footway.</p> <p>4. Risk based approach in place for Bridge principal inspections</p>	<p>A. Update TAMP to remove old CoP references as 2-year review progresses.</p> <p>B. Monitor repudiation rate following inspection frequency changes implemented 1<sup>st</sup> April 2017 and review in one and two years' time</p> <p>C. Guidance required for new street scene inspectors for Culverts (as transferred from Bridges to new team 18-19)</p>	<p>Asset &amp; Capital Programme Manager</p> <p>Highway Services Manager</p> <p>Highway Services Manager</p>	<p>Jun-18</p> <p>Jun-18</p> <p>Mar-18</p>



17	CONDITION SURVEYS	An asset condition survey regime, based on asset management needs and any statutory reporting requirements, should be developed and implemented.	Yes	<ol style="list-style-type: none"> <li>1. Already in place see</li> <li>2. Road / Footway / Cycle ways condition surveys TAMP 16-17 App D (ii). Established practice for 5 years since FNS added</li> <li>3. Inspection of Structures TAMP 16-17 App D (v).</li> </ol>	A. Review Bridges practice	Bridge Manager	Mar-18
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.	Yes	<ol style="list-style-type: none"> <li>1. Proven processes               <ol style="list-style-type: none"> <li>a. Highways within Yotta HMS</li> <li>b. Structures within AMX</li> <li>c. Capital Programme in SMIS</li> <li>d. Condition Surveys in Yotta MARCHpms</li> </ol> </li> <li>2. Repudiation in line with peer authorities in region</li> </ol>	A. Review attributes held in 'Figtree', considering analysis requirements for periodic for both insurance section and highway requirements	Highway Services Manager	Nov-17
19	DEFECT REPAIR	A risk-based defect repair regime should be developed and implemented for all highway assets.	Yes	<ol style="list-style-type: none"> <li>1. Significant areas already in place see TAMP 16-17, Inspection frequency by hierarchy, Inspections of Structures Highway Defect Risk Register App D (i), (v), (vi), (vii), (viii), (ix). VRS TAMP section 2.7</li> <li>2. Structures defects are categorised as Low, Medium or High priority. Current funding levels only allow High priority defects to be addressed and Medium priority on safety critical elements</li> </ol>	A. Add current bridge guidance to TAMP and review as necessary	Bridge Manager	Mar-18
					B. Guidance required for new street scene inspectors for Culverts (as transferred from Bridges to new team 18-19), then add to TAMP	Highways Service Manager with Bridges Manager	Mar-18
					C. Create performance reports for response and order for each priority, monitor results and review with Figtree data, to consider if Highway Defect Risk Register or order/response timescale need review	Highway Service Manager	Mar-18

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.	Yes	<p>1. Resilient Network approved by EDT committee 20 Nov 2015</p> <p>2. Documentation of Risks identified</p> <p>3. Documentation of mitigation</p> <p>4. Eastern Highway Alliance has bought access to Highways Infrastructure Resilience Assessment Modelling (HIRAM) training 30 Nov 2016.</p> <p>5. 1. Haven Bridge is situated on the resilient highway network. It has been identified as a risk because it is a moving bridge with ageing mechanical and electrical equipment. Funds identified to carry out feasibility study.</p> <p>6. Part of Multi-criteria analysis from 2018-19 programme year</p>	<p>A. Review every two years going to EDT committee Oct/Nov 17 (in line with DfT incentive questionnaire)</p> <p>B. Review use of HIRAM</p>	<p>Highway Service Manager</p> <p>Asset &amp; Capital Programme Manager with Highway Service Manager and Eastern Highways Alliance</p>	<p>Oct-18</p> <p>Mar-18</p>
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.	Yes	<p>1. Climate Change Section 10 of Transport Asset Management Plan gives overview</p> <p>2. App D (x) TAMP outlines Weather and Other Emergencies -Objectives, Standards &amp; Response</p> <p>3. Resilience network risks identified</p> <p>4. Surface Water Management Plans produced by Flood &amp; Water management Team with Highways input as flood risk authority</p> <p>5. 1. Scour assessments completed on relevant structures</p>	<p>A. Review UK Climate Projections (UKCP09)LCP 09 data layer and Surface Water Management Plans (SWAMP's_ outputs for anticipate future rainfall levels in review of resilience network report Oct/Nov 17</p> <p>B. Review any incidents for review of resilience network report Oct/Nov 17</p> <p>C. Review possibility of scour on bridges as part of inspection process to detailed</p>	<p>Highway Service Manager with support of Flood &amp; Water Management Team</p> <p>Highway Service Manager</p> <p>Bridge Manager</p>	<p>Jul-18</p> <p>Jul-18</p> <p>Mar-18</p>

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.	Yes	<p>1. Maintenance</p> <p>a. Proactive maintenance is carried on gullies, grips and ditches.</p> <p>b. Reactive maintenance is carried out when required to pipelines, outfalls, soakaways and catch pits.</p> <p>c. Pollution control points have been identified and are part of routine maintenance activities.</p> <p>2. Documentation of Risks identified</p> <p>3. Documentation of mitigation</p> <p>4. Gully emptying contractor capturing gullies fill level i.e. Full / Half-Full</p> <p>5. Surface Water Management Plans produced by Flood &amp; Water management Team with Highways input as flood risk authority</p>	<p>A. Proactive and reactive highway drainage maintenance is carried out. A new risk assessed model needs to be developed in order to demonstrate that the necessary systems are in place to maintain the highway drainage systems so that they operate efficiently.</p> <p>B. Analysis of gully emptying operations and processes fill to consider appropriate cleansing regime</p> <p>C. Non-resilient network, documentation of drainage risks identified from coastal , fluvial pluvial sources Documentation of mitigation</p> <p>D. Pollution control points, i.e. petrol interceptors. Identify and add as asset layer to inform a cleansing regime based upon risk assessment</p>	<p>Area Manager West with BS11000 working group</p> <p>Area Manager West with BS11000 working group</p> <p>Highway Service Manager with support of Area Managers and Flood &amp; Water Management Team</p> <p>Area Manager West with BS11000 working group</p>	<p>Nov-17</p> <p>Nov-17</p> <p>Oct-18</p> <p>Nov-17</p>
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.	Yes	<p>1. Norfolk Resilience Forum's (NRF) plans</p> <p>1. Norfolk Emergency Response Guidance (NERG)</p> <p>2. Strategic Flood Plan and Tactical Flood Plan</p> <p>3. Chemical Biological Radiological Nuclear Explosive (CBRNe)</p> <p>4. Exotic Notifiable Animal Disease Contingency Plan</p> <p>5. Fires in Waste Sites</p> <p>6. Flu Pandemic</p> <p>7. Fuel Emergency Plan</p> <p>8. Centres of Major Accident Hazard (COMAH) Plans</p> <p>9. Recovery Guidance</p>	<p>A. Reference to the "authority's Civil Emergency Plan" is now outdated. The current approach is to develop generic plans that can be applied to the consequences of an emergency. Hence, we have the Norfolk Emergency Response Guidance which underpins our emergency planning for a wide range of incidents, including severe weather. Flood Risk is one of our High Risks and therefore we have both a Strategic Flood Plan and Tactical Flood Plans for each of the districts in Norfolk which covers both tidal and surface water flooding. - review</p>	Resilience manager	Nov-17

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.	Yes	<p>1. The NCC Resilience Team have a 24/7 Duty Officer. The Resilience Team Duty Officer (RTDO) receives severe weather and flood warnings which are disseminated to relevant services, including Highways &amp; Comms, partners and the public.</p> <p>2. <a href="#">Norfolk Resilience Forum's (NRF) Emergency Response Guidance. See website, 'Norfolk Prepared', for information disseminated to the public. E.g. Severe Weather guidance: <a href="http://www.norfolkprepared.gov.uk/preparing-your-home/severe-weather/">http://www.norfolkprepared.gov.uk/preparing-your-home/severe-weather/</a></a></p> <p>3. Winter part of BS11000 Communication plan</p>	A. Review process	Resilience Manager	Nov-17
					B. Review website	Resilience Manager	Nov-17
					C. Annual Review of Communications Plan includes weather and civil emergencies	Highways Service Manager	May-18
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.	Yes	<p>1. Norfolk Resilience Forum's (NRF) plans, training &amp; exercising programme.</p> <p>2. Debriefs of significant emergencies. Examples include surface water flooding event on 23 June 2016; North Sea Tidal Surge of 13 January 2017.</p> <p>3. Winter Service wash-ups</p>	A. Recent significant incidents have identified areas for improvement through a multi-agency debrief process. Resilience Manager to review A dedicated Training & Exercising Officer has been recruited to develop a more comprehensive training & exercising programme.	Resilience Manager	Nov-17
					B. Continue with current practice annual winter service 'wash-up' and similar for significant incidents	Highways Service Manager	01/05/2018 annual thereafter
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. (HIAMG Recommendation 4)	Yes	<p>1. <a href="#">Performance Framework adopted EDT 14 Oct 2016. D App available on website</a></p>	A. No improvement plan required established 14 Oct -16 EDT committee	AD(Highways)	NA

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. (HIAMG Recommendation 13)	Yes	1. EDT 14 Oct 2016 agreed that an annual Highway Performance report be presented to members in order to for them to be informed on whether the strategy is delivering the performance targets, and to take corrective action or manage changing circumstances such as annual budgets or the regulatory framework. Has been commonly taken approach since 2008.	A. Report and review annually with Members	AD(Highways)	15/09/2017 EDT committee and annually thereafter
28	FINANCIAL PLANS	Financial plans should be prepared for all highway maintenance activities covering short, medium and long term time horizons.	Yes	1. Short-term. Revenue based a. Highway Maintenance Fund annually reviewed b. Emergencies i.e. winter 2. Medium & Long-term plans. Capital based a. Highway Capital Programme presented annually to EDT committee who approve two-year financial plan b. 5-year plan exists for both improvement and structural maintenance. c.	A. No improvement plan required – Maintain current practice.	Asset & Capital Programme Manager together with Highway Service Manager	N/A

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. (HIAMG Recommendation 6)	Yes	<p>1. Lifecycle plans</p> <p>a. contained within the TAMP additional information not published in detail i.e. HMEP toolkit  b. Used to inform budgetary need, service levels, performance framework discussion with members</p> <p>2. Asset Owners Continue to explore best practice tools provided by HMEP or similar and HMS/PMS/Bridge asset systems as they develop.</p>	A. Generally no improvement action required - teams reviewing new tools as and when published	Asset & Capital Programme Manager with asset owners	NA
					B. Bridge Management System is being further developed to do lifecycle planning	Bridge Manager	May-18
30	CROSS ASSET PRIORITIES	In developing priorities and programmes, consideration should be given to prioritising across asset groups as well as within them.	Yes	<p>1. Fully integrated in terms of asset management as Asset Manager determines budget allocations for each type of work based upon Asset Management Strategy and then leads on developing detailed programme of works for roads using condition data and lifecycle planning.</p> <p>2. Capital Programme Manager proactively manages highways programme delivery and 5 year programme enables schemes to be brought forward if funding allows or if originally programmed schemes slip / get delayed.</p> <p>3. Capital Programme team liaises heavily with wide stakeholder groups for differing integrated transport work types</p> <p>4. Area based team liaise heavily with District, Borough and Parish Councils for maintenance schemes</p> <p>5. All programme delivery managed by Capital programme team who seek out opportunities to co-ordinate works where possible</p>	A. No improvement action required - Two teams being merged, maintain current practices	Asset & Capital Programme Manager	N/A

31	WORKS PROGRAMMING	A prioritised forward works programme for a rolling period of three to five years should be developed and updated regularly. (HIAMG Recommendation 7)	Yes	1. Five-year programme exists in detail for a. A & B road b. Bridges c. Traffic Signals 1. Five-year programme exists but in less detail for a. Improvement Programme b. Other structural maintenance c.	A. Develop a 3-year programme for improvement works currently 2-years	Asset & Capital Programme Manager	Feb-18
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.	Yes	1. We use 'warm-mix' asphalt if the site and timing of the works is appropriate, i.e. distance and if the plant is open. Is not possible for some remote or time restricted sites i.e. Some night or weekend sites  2. Street Lighting - LED programme and options for savings developed	A. No action required - maintain current practice. This will be undertaken only in broad terms upon the review of new material options and life-cycle implications. It is not our intention to measure all of our activities on a continuing basis.	Asset & Capital Programme Manager / Highway Service Manager / Bridge Manager when undertaking significant reviews of materials or treatment options in lifecycle or service planning	When any appropriate review undertaken
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.	Yes	1. Agreed palate of materials with district conservation officers, limitation on certain usage such as 'road humps' where certain locations and environments	A. Green Infrastructure officer is to conduct review of 'highway' corridor. Update with latest palate of materials and estate planning guide	Green Infrastructure Officer together with Design Manager and Asset & Capital Programme Manager	Jun-18

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.	Yes	<ol style="list-style-type: none"> <li>1. Heritage             <ol style="list-style-type: none"> <li>a. English Heritage                 <ol style="list-style-type: none"> <li>i. Listed buildings</li> <li>ii. Schedule Ancient Monuments</li> <li>iii. Historic Parks &amp; Gardens</li> </ol> </li> <li>b. Milestones,</li> <li>c. Conservation Areas</li> </ol> </li> <li>2. Planning Services             <ol style="list-style-type: none"> <li>a. Airfields</li> <li>b. Defence infrastructure</li> <li>c. Core River Valleys</li> </ol> </li> <li>3. Listed structures and ancient monuments etc. are identified on Bridge Management System. Relevant authorities are consulted as part of scheme preparation</li> </ol>	A. No action required - maintain current practice	Countryside Manager	NA
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.	Yes	<ol style="list-style-type: none"> <li>1. Highway Corridor document Environment Best Practice Guide</li> <li>2. Environmental checklist</li> </ol>	<ol style="list-style-type: none"> <li>A. Green infrastructure team have agreed to review highway Corridor document Highway corridor             <ol style="list-style-type: none"> <li>a. Confirm owner of this document</li> <li>b. Has been updated to include latest agreement 2013 on use of materials and anything else? ?</li> </ol> </li> <li>2. Check Environmental checklist             <ol style="list-style-type: none"> <li>a. Confirm owner of this document</li> <li>b. and how it compares with Table 6 &amp; 7 – What is</li> <li>c. Scheme level appropriate</li> </ol> </li> <li>3. General management level</li> </ol>	Green Infrastructure Officer together with Highway Service Manager and Asset & Capital Programme Manager	Jun-18
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.	Yes	<ol style="list-style-type: none"> <li>1. Current member approved practice is to undertake a risk based assessment of signs in need of replacement to ascertain whether the sign is still needed. This assessment can be applied to all roads, but it is more likely to question sign provision on Norfolk's minor road network. The risk assessment form can be seen in the TAMP 'Appendix D (xiv)'. Replacement signs should be within the framework of the traffic sign regulations</li> </ol>	A. Not improvement action required – Maintain current practice	Highway Service Manager together with Area Managers	N/A

From Shaun  
 This recommendation should be highlighted for discussion at a senior level. We need to test the appetite of members and senior staff for this risk based approach.  
 From Shaun  
 This recommendation should be highlighted for discussion at a senior level. We need to test the appetite of members and senior staff for this risk based approach.  
 Who owns this document?? It is out of date and possible irrelevant  
 Again this need to be reviewed and simplified  
 Yes but the philosophy of risk taking is not embedded in the Highway Inspectors psyche.