

North Yorkshire County Council

Business and Environmental Services

Executive Members

24 February 2017

Review of Highway Safety Inspection Manual

Report of the Assistant Director – Highways and Transportation

1.0 Purpose of report

- 1.1 To enable the Corporate Director in consultation with the Executive Members to consider proposed changes to the Highway Safety Inspection Manual.

2.0 Background

- 2.1 The Highway Safety Inspection Manual (HSIM) was approved by the Corporate Director in consultation with the Executive Members at their meeting of 25 October 2013. It was produced with the primary aim of providing operational guidance to those officers involved in undertaking highway safety inspections. It details the intervention levels applicable to a variety of defects found on the highway and links this to the appropriate response time for repair. It therefore ensures that a consistent countywide approach is adopted for inspecting, assessing, recording and repairing the highway network.
- 2.2 The HSIM has been in operational use for over three years and it was always envisaged that a review would take place in November 2016. This would allow any issues which had arisen during its use to be formally considered. The contents of the existing document have been reviewed with input from the operational and strategy teams within H & T and from the NYCC Insurance & Risk Management team.
- 2.3 In October 2016 a new national guidance document was published entitled 'Well-Managed Highway Infrastructure'. This is the updated Code of Practice which local highway authorities are recommended to use in delivering the highway service. The need to digest content of this Code led to a slight delay in completing the review of the HSIM as it was necessary to ensure that there was nothing in the new Code which would impact on the changes being proposed to the HSIM.
- 2.4 It is clear that the new Code will influence the drafting of the new 'Highway Maintenance Plan' which, in turn, will, in all likelihood, require a further update to the HSIM. However, this may take several months to progress so it is still seen as worthwhile to introduce many of the revisions identified by the internal review now as they are not affected by the introduction of the new Code.

3.0 Proposed Action

- 3.1 The changes proposed to the HSIM are detailed in Appendix A. Many of the changes are relatively minor and are needed to give clarity and consistency to the standards which already exist within the HSIM.

3.2 The distinction between walked and driven inspections has been amended to ensure the wording in the HSIM ties in with the existing operational practices. The original document referred to all footway inspections being walked whereas, in practice, several of the lesser used footways were being inspected by a driven inspection. This is now reflected in the HSIM together with guidance to the Highways Officer on how to conduct such inspections to ensure that actionable defects are routinely identified.

3.3 The guidance on carriageway potholes has also been improved to recognise that such defects can be a particular hazard to cyclists.

4.0 **Equalities Implications**

4.1 Consideration has been given to the potential for any adverse equality impacts arising from the recommendation. It is the view of officers that the recommendation does not have an adverse impact on any of the protected characteristics identified in the Equalities Act 2010, see Appendix B.

5.0 **Financial Implications**

5.1 There are no financial implications with these proposals.

6.0 **Legal Implications**

6.1 There are no legal implications with these proposals.

<h4>7.0 Recommendation</h4>
<p>7.1 It is recommended that the Corporate Director in conjunction with the Executive Members approve the changes to the Highway Safety Inspection Manual.</p>

BARRIE MASON
Assistant Director – Highways & Transportation

Author of Report: Mike Roberts

Background Documents: Highway Safety Inspection Manual.

**Review of Highway Safety Inspection Manual
Version 3 – February 2017**

P2 – the review date for the Manual was originally set at November 2016. Following this review, a new review date and Reviewing Officer will need to be specified. The Highway Maintenance Plan now needs revision and both HSIM and HMP will need to take account of the recommendations of the new Code of Practice ‘Well-Managed Highway Infrastructure’.

P3 – Contents – this will be updated once all other changes have been made.

P5 – Introduction -add the following to the penultimate paragraph: ‘The Highway Officer is required to record any defects which are deemed to require repair when applying the criteria in this manual. Defects which do not meet the criteria given in this manual do not need to be recorded.’

P5 – Introduction –add the following to the final paragraph: ‘Highway Officers will be accredited to Highway Inspection – Technical (Lantra) level as part of on-going workforce development.’

P6 – Inspection Process – here is the first of many references to the ‘Inspector’. Change ‘Inspector’ to ‘Highways Officer’ throughout the document and include a definition in the Glossary.

P6 – Due date – For monthly inspections add ‘the monthly inspections can be undertaken up to 1 week after the due date as long as no more than 5 weeks have elapsed since the last inspection. This can only occur for legitimate operational reasons and is limited to no more than two occurrences in any given a year. Note: A late inspection will be reported on the system hence separate records need to be kept of any occurrences and the reason they occurred.’

P6 – Walked Inspections – the manual currently specifies that footway and cycleway inspections in urban areas shall be walked. This is revised to the following:

- Inspection of category 1a, 1, 2 and any ‘remote’ footways will normally be walked. When there are footways on both sides of the carriageway, both footways shall be walked. When carrying out walked footway inspections, the adjoining carriageway will also be inspected by observation from the adjacent footway.
- Inspection of category 3, 4 and 5 footways will normally be carried out as part of the driven inspection along the adjacent carriageway. The Highways Officer must walk any sections where parked vehicles restrict the view of the full highway extent or where the footway is elevated so that it cannot be viewed from the inspection vehicle. When a driven inspection is being carried out and there is a footway present on both sides of the carriageway, the road will be driven in both directions.
- Inspection of cycleways will either be walked or carried out using a bicycle.

P7 – Driven Inspections – the first paragraph remains unaltered as this is the foundation of our statutory defence. However, add a second paragraph as follows:

- As an exception to the above, driven inspections can be carried out from a slow moving vehicle without a dedicated driver being present in low risk situations on category 4b roads. This would be in situations where any actionable defects can still

be identified and there are no additional public safety risks from not having a dedicated driver. In such circumstances the normal safety inspection vehicle may be replaced with an appropriately liveried Highways Officer's van. In urban areas the inspection will be carried out at no more than 10 mph and in both directions and the Highways Officer must walk any sections where parked vehicles restrict the view of the full highway extent. A record must be kept of the inspection method used.

P7 – Driven Inspections - replace 'directly' with 'on site' and replace 'Bes' with 'BES'.

P7 – Driven Inspections – add 'The paragraph on parked cars in 'Walked Inspections' equally applies to driven inspections.'

P7 – change the size on cones in the Inspection Vehicle from 900mm to 750mm. Also road signs should be 'fold-up' or 'cone-mounted' to reduce storage space.

P8 – remove 'Any safety inspection carried out beyond the due date for reasons beyond the control of the Inspector will be recorded as an ad-hoc inspection.' Add 'Any safety inspection carried out beyond the due date must have the reasons for the delay recorded.' In the first and second paragraphs, remove 'recorded as a site specific inspection' and replace with 'recorded through the issuing of a works order'. At the end of the first paragraph add 'Regardless of whether a defect reported in this way is actionable or not, it should be photographed and measurements taken.'

P9 – Observation Assessments - rename 'Asset Management Team' as 'Programme and Asset Management Team.'

P9 – Observation Assessments - add 'Observational assessments shall be based on the average condition of the full section length.'

P13 – General Duty to Maintain – add the following to the second paragraph 'however, if the defect requires immediate or urgent action then the Highways Officer should deal with the hazard and advise the line manager retrospectively. Any defect being considered by reason of the above should be photographed and measurements recorded.'

P14 – NRSWA - replace 'utility company' with 'statutory undertaker' and then change the Glossary in Appendix A to reflect this. Also add in the Glossary that this also applies to Section 50 licence holders.

P14 – NRSWA - add the following between the two sentences in the second paragraph 'Notice will normally be served on the undertaker to respond to a category 1 defect within 2 hours, however, if such a response is not forthcoming then the highway authority will respond and recover its costs.'

P14 – NRSWA – delete 'please see appendix B for further details.' Remove Appendix B.

P16 – Methodology - after the 'local knowledge/expertise' bullet point in section 3.1 add 'where this results in an inspection frequency being changed, the reasons must be documented and agreed by the Maintenance Manager.'

P17 – Carriageway Hierarchy - change notes on monthly inspection to reflect changes to P6.

P18 – Footway Hierarchy – Link Footway should have a tolerance of +0/-3 weeks.

P20 – Priority Response Times - reference to 'make safe' should be clarified so that the actions of the Highways Officer (Inspector) are classed as 'temporary make safe' and the actions of the contractor are 'securely make safe'. This is to avoid the contractor putting a single cone out as this would not be an appropriate contractor response.

P20 – Priority Response Times –in the paragraph which starts 'all priority 1 defects' insert 'within the response times specified in the Highway Maintenance Contract (ie 1hr in working hours, 1.5hrs outside working hours) in order to achieve compliance with action being taken' between 'repaired' and 'within'. Also in the paragraph which starts 'all priority 1 defects' replace 'before being reported at the base office' with 'and reported to the base office'.
In the paragraph which starts 'all priority 2 defects' remove the second sentence.

P22 – Risk Assessments – replace 'Bes' with 'BES'.

P22 – Risk Assessments - add 'This Manual is a guide to assist the Highways Officer in undertaking a risk assessment of the defect. It provides a framework which links intervention levels to response times and covers a number of examples which act as a starting point in the decision making process. Highways Officers are expected to use their judgement to assess the risks that apply to the particular on-site circumstances and use their expertise to select the most suitable priority for repair. As a result there will be circumstances where the priority assigned is different to that given in the worked examples in the Manual. The reasons for this decision should be recorded at the time of the inspection'.

P24 – Risk Register - the intervention level for un-metalled footways given in 2.2 should be viewed in a similar way to the intervention level for un-metalled cycleways given in 5.2. Change section 5.2 to 50mm on both P24 and P43.

P27 – 1.1 carriageways – add: 'category 5 carriageways are subject to carriageway intervention levels unless they are formally designated as a pedestrian through route, in which case footway intervention levels will apply. Back streets constructed using setts will only be subject to carriageway intervention levels on account of small levels differences already being part of their original construction.'

P27 – 1.1 carriageways - reference is made to a pothole needing to be 150mm wide in all directions. However, defects of a narrower width but of longer length in the direction of travel can be a problem for cyclists. Therefore add 'on defined cyclist routes, narrower defects meeting the depth requirements should be considered for repair if the defect is more than 75mm wide and 300mm long in the direction of travel'. Having done site trials with IRM, the conclusion is that a hazard to cyclists can be created by a pothole with an abrupt face in the direction of travel. Similarly potholes with gradually sloping edges in the direction of travel are less likely to be a hazard. Hence it is proposed to firstly clarify what is to be measured by adding the note 'The defect dimensions specified above refer to those parts of the defect which exceed the intervention depth'. Secondly add the following to the sentence on defined cycle routes, 'with a sloping exit face or 150mm long for an abrupt exit face'.

P27 – 1.1 carriageways - remove the reference to 'exposed unbound formation' in the first paragraph in the 'comments' section.

P27 – 1.1 carriageways - the second paragraph in the 'comments' section should be changed to 'Potholes are a potential hazard to all road users, not just motorists, and any assessment must also consider cyclists or motorcyclists.'

P29 – 2.1 footways - remove the reference to 'exposed unbound formation' in the first paragraph of the 'comments' section. Add 'and over 100mm wide in all directions' to the dimension boxes.

P30 – 2.2 footways – add 'and over 100mm in all directions' to the dimensions boxes. Add a note to 2.1 to 2.6 footways to confirm that 'designated pedestrian crossing points include locations where there is a clear intention that pedestrians should cross the road'.

P35 – 3.1/3.2/3.3 kerbs – where there is no footway area immediately adjacent to the kerb then the intervention level can be relaxed. Missing granite setts in rural areas where no adjacent footway is present should only need a 3-month response time. Change the criteria for 3.1 to 'greater than 100mm into carriageway' – 1 week; 'between 40mm and 100mm into carriageway' – 1 month (cat2/3a/3bU), 3 months (cat3bR/4/5); 'greater than 100mm away from carriageway' – 1 month; 'between 40mm and 100mm away from carriageway' – 3 months. Change criteria for 3.2 to 'greater than 100mm displaced face' – 1 week; 'between 40mm and 100mm displaced face' – 1 month (cat2/3a/3bU), 3 months (cat 3bR/4/5). Change criteria for 3.3 to 1 month (cat2/3a/3bU) and 3 months (cat3bR/4/5).

P41 – 4.4 kerbs – add 'The measurement of the gap would also include any spalling or other damage to either kerb'.

P46 – 7.1/7.2 verges – change second paragraph to 'A purposely excavated channel in the verge (including ditches and grips) for the purpose of highway drainage is not considered to be part of this defect. Such situations will be assessed at the Highway Officer's discretion and, if necessary, the advice of the Maintenance Manager sought. It should also be noted that many roadside ditches/watercourses are the maintenance responsibility of adjacent landowners'.

P51 – 8.4 ironwork – in the 'extent' box add 'covers with dimensions exceeding 200mm x 200mm'.

P57 – 11.1 drainage – after the second sentence in the 'comments' box add 'the response times for the street cleansing teams shall be as defined in the Highway Maintenance Contract'.

P59 – 11.3 drainage – include 'depth in wheel-path of over 100mm' in the extent box.

P60 – 11.4 drainage – add 'reference should also be made to any action required by sections 11.1 to 11.3'.

P61 – 12.1 road markings – add the comment 'if defective areas cannot be repaired within the specified timescales then appropriate warning signs should be erected until the

permanent repairs have been completed'. The current percentages should continue to apply except that the IL for high friction coating should be set at 30%.

P62 – 13.1 road studs – change comment to: 'this particular defect relates to the loss of reflectivity of the road studs as assessed by visual inspection. If necessary, further assessment can be made via a specialist inspection. Additionally an inspection during the hours of darkness may be needed to confirm reflectivity'

P64 – 14.1 road restraint systems – add a sentence confirming that 'defective road restraint systems should also be reported to the Programme and Asset Management Team'.

P66 – 15.2 signs etc – the second paragraph in the 'comments' section should be replaced with ' where missing illuminated bollards are identified, the situation should be reported to the Road Lighting team.' Also add the comment 'The adjacent landowner must be notified of the need to take action in respect of any safety defect'.

P66 – 15.2 signs etc - add 'the absence of an information sign is not in itself a safety defect, however, the absence of a warning sign should be treated as a safety defect. In such circumstances temporary warning signs may be needed to comply with the above response times.'

P69 – 15.5 lighting – change comment to 'priority 1 and 2 defects must be reported to the Road Lighting Team immediately for action. All other instances must be passed to the Road Lighting Team at the earliest opportunity'.

P71 – 15.7 signs etc – add 'an additional inspection may be required during the hours of darkness to confirm reflectivity.'

P72 – 16.1 trees – add comment: 'damage caused by tree roots should be assessed and dealt with in accordance with the footway criteria in examples 2.1 to 2.6'.

P77 – 18.1 highways general – change the defect to 'oil/debris/mud on the carriageway or footway'. Also add the comment 'the Highways Officer will use his judgement to determine whether a particular situation is a safety defect'.

P82 – Glossary of Terms – add the definition of 'Highways Officer'.

P83 – Appendix B needs to be deleted.

Initial equality impact assessment screening form (As of October 2015 this form replaces 'Record of decision not to carry out an EIA')			
This form records an equality screening process to determine the relevance of equality to a proposal, and a decision whether or not a full EIA would be appropriate or proportionate.			
Directorate	Business and Environmental Services		
Service area	Highways and Transportation		
Proposal being screened	Changes to the Highways Inspection Manual		
Officer(s) carrying out screening	Mike Roberts, Head of Highways Operations.		
What are you proposing to do?	Make changes to the published highway inspection manual following a review of practice and in light of new guidelines published by the Department for Transport.		
Why are you proposing this? What are the desired outcomes?	To ensure the highway inspection manual provides clarity to all stakeholders – but including the following to groups in particular - over how and to what standard highway inspections will be carried out: <ul style="list-style-type: none"> • All NYCC Highways staff including Highway Officers who carry out inspections. • Members of the public. 		
Does the proposal involve a significant commitment or removal of resources? Please give details.	No		
Is there likely to be an adverse impact on people with any of the following protected characteristics as defined by the Equality Act 2010, or NYCC's additional agreed characteristics? As part of this assessment, please consider the following questions: <ul style="list-style-type: none"> • To what extent is this service used by particular groups of people with protected characteristics? • Does the proposal relate to functions that previous consultation has identified as important? • Do different groups have different needs or experiences in the area the proposal relates to? <p>If for any characteristic it is considered that there is likely to be a significant adverse impact or you have ticked 'Don't know/no info available', then a full EIA should be carried out where this is proportionate. You are advised to speak to your Equality rep for advice if you are in any doubt.</p>			
Protected characteristic	Yes	No	Don't know/No info available
Age		X	
Disability		X	
Sex (Gender)		X	
Race		X	
Sexual orientation		X	
Gender reassignment		X	
Religion or belief		X	
Pregnancy or maternity		X	
Marriage or civil partnership		X	
NYCC additional characteristic			
People in rural areas		X	

People on a low income		X	
Carer (unpaid family or friend)		X	
Does the proposal relate to an area where there are known inequalities/probable impacts (e.g. disabled people's access to public transport)? Please give details.	No		
Will the proposal have a significant effect on how other organisations operate? (e.g. partners, funding criteria, etc.). Do any of these organisations support people with protected characteristics? Please explain why you have reached this conclusion.	No impact		
Decision (Please tick one option)	EIA not relevant or proportionate:	X	Continue to full EIA:
Reason for decision	<p>The highway inspection manual was first published in 2013. The changes being proposed now will ensure the manual accurately reflects current inspection practice. The majority of changes are administrative.</p> <p>Two material changes relate to (a) the operational approach taken to undertaking footway inspections and (b) the intervention standards for carriageway potholes being lowered to ensure greater safety for cyclists.</p> <p>The first material change will not reduce the quality of inspections and therefore will not impact negatively on any customers.</p> <p>The second material change is likely to increase the amount of repair work done on the highway and will therefore have a positive impact on all road users.</p> <p>Therefore the recommendations to update the inspection will not have any specific negative impact on any of the protected characteristic groups.</p>		
Signed (Assistant Director or equivalent)	Barrie Mason		
Date	15 February 2017		