HTM/12/74
Cabinet
12 December 2012

Highway Safety Inspection Policy

Report of the Head of Highways and Traffic Management

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation:

(a) that the proposed changes outlined in Section 3 are approved and incorporated into the Highway Safety Inspection Policy;

(b) subject to the above changes that the updated Highway Safety Inspection Policy is approved and implemented from 1 April 2013.

1. Summary

The highway safety inspection policy is essential for road safety and is an important part of the Council's defence of third party claims by virtue of Section 41 of the Highways Act. It is under constant review with the last major amendments made during the Autumn of 2011. A review and benchmarking exercise has recently been undertaken and is the subject of this report.

2. Background/Introduction

Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community as detailed in the National Code of Practice 'Well Maintained Highways' (NCoP). Such defects include those that will require urgent attention as well as those where the locations and sizes are such that longer periods of response are acceptable.

The parameters which are specified for the safety inspection regime as recommended by the NCoP are:

- Frequency of inspection
- Items for inspection
- Degree of deficiency
- Nature of response

This regime has been developed in accordance with the principles of risk assessment and provides a practical and reasonable approach to the risks and potential consequences identified. The inspection regime attempts to take into account potential risks to all road users, and in particular those most vulnerable. Devon's safety inspection policy is based on giving the safety inspector distinct thresholds for safety defects whenever possible to avoid the need to risk assess every situation and to provide a consistent approach. This is not the case for some authority's safety inspection regimes where more responsibility for the assessment is placed with the safety inspector.

A comparison of the recommendations outlined in the NCoP and Devon's current safety inspection policy was undertaken and risk assessed (see Supplementary Information connected to this report on the web).

14 other highway authorities were asked to provide their safety inspection policy. The authorities are either representative of authorities of a similar size to Devon or neighbouring authorities. The Supplementary Information to this report shows their ranking on the item 'Highway Maintenance' in the National Highways and Transport Survey Devon County Council ranked 4th on this item in the survey.

A benchmarking exercise was completed against the recommendations of the NCoP, and the current policies of other highway authorities.

The findings from the comparison and benchmarking exercises have been used in the preparation of this report.

3. Proposal

It is proposed that the safety inspection regime be amended to accord with the following recommendations.

(i) Frequency of inspection

One change to the frequency of inspection is recommended. Maintenance Category 5 (*main access route to large settlements and recreational areas*) increase frequency of inspections to monthly from 6 monthly.

(ii) Items for inspection

These are grouped by location within the highway.

(a) The following additional defects have been identified and the descriptions can be found in Section 4.

Carriageway
Cracking/ Defective surfacing joints *(cracks in the road surface and where surfacing material meets)*
Defective traffic calming features *(e.g. road humps in need of repair)*

Footway
Standing/running water due to defective piped highway drainage systems *(persistent water and puddles due to broken or blocked drains)*
Vertical/horizontal displacement of kerb *(kerbs that need to be repositioned)*
Depression and humps *(a very uneven surface with severe dips and humps)*

Cycleway
Standing/running water due to defective piped highway drainage systems *(persistent water and puddles due to broken or blocked drains)*
Depression and humps *(a very uneven surface with severe dips and humps)*

(b) One defect has been identified for deletion:

Cycleway
Overriding *(where a vehicle has seriously damaged the verge)*

(iii) Description of defect/degree of deficiency

The following defect descriptions are to be amended:
Carriageway
Standing/running water due to defective piped highway drainage system *(persistent water and puddles due to broken or blocked drains)*
Overriding *(where a vehicle has seriously damaged the verge)*
Defective High Friction Surfacing *(an anti-skid surface treatment)*
Missing pre-formed modules *(surfaces made of bricks and blocks)*

Footway
Defective ironwork *(manhole and other metal covers)*
Missing pre-formed modules *(surfaces made of bricks and blocks)*

Cycleways
Defective ironwork *(manhole and other metal covers)*
Missing pre-formed modules *(surfaces made of bricks and blocks)*
Cracks and gaps *(crack or a gap in the cycleway surface)*
Abrupt level differences *(significant difference in surface level)*

Roadside
Defective boundary fences *(fence or wall along the highway to define boundary)*
Defective road traffic signs *(signs and posts)*

(iv) Nature of response

No changes recommended.

(v) Training

The national approach to safety inspection training as proposed by the Institute of Highway Engineers is being introduced into the training programme. A pilot course has been delivered by an external training organisation which has resulted in a number of staff becoming nationally registered as safety inspectors. However, the accreditation process is being pursued locally so that a more relevant, integrated and cost effective course can be provided that will also lead to the national accreditation and registration.

Any changes in the policy or procedures will need to be introduced into the inspection system and covered by the training. It is therefore proposed to incorporate these amendments into the safety inspection process from 1 April 2013.

4. Consultations/Representations/Technical Data

(i) Frequency of inspection

The frequency of inspection is based upon consideration of the combination of network hierarchy and traffic use. The NCoP provides guidance that the frequency for safety inspections of individual network sections should be based upon consideration of:

- Category within the network hierarchy
- Traffic use, characteristics and trends
- Incident and inspection history
- Characteristics of adjoining network elements
- Wider policy or operational considerations

Other factors such as extensive development or promotion of the route by the authority for example as a 'Safer Route to School' may increase or decrease the frequency as outlined in the NCoP.

In considering the above, an analysis of traffic data, crash data and defect information has been undertaken as outlined in Appendix I. In addition, benchmarking has been carried out with other authorities and the NCoP.

It is recommended that the frequency of inspection is increased on carriageway maintenance category 5 roads. This is resulting from a comparison of traffic flow data standardising the relative flow between inspections. All other frequencies of inspections remain unchanged (see Appendix I).

(ii) Items for inspection

Safety defects are those which require prompt attention because they represent an immediate or imminent hazard.

Devon's items for inspection have been benchmarked with the NCoP and the other authorities' standards, and those being proposed to be added in the Devon safety inspection regime summarised in Appendix II.

The defect for overriding on cycleways has been deleted due to changes outlined later in the report. It is now included in carriageway defects.

(iii) Description of defect/degree of deficiency

The threshold on which a defect becomes a safety issue has been based on national guidance, practice, or local experience. Devon's defect descriptions have been benchmarked with the NCoP and the other authorities' standards and those with significant differences that are proposed to be amended are outlined in Appendix II.

(iv) Nature of response

Safety defects should be corrected or made safe at the time of inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning off or fencing off to protect the road user from the defect. If it is not possible to correct or make safe the defect at the time of inspection this should be carried out as soon as possible as recommended by the NCoP. The NCoP further recommends that this repair should be made within a period of 24 hours.

The 24 hour response time is not adopted in Devon. The current response times are generally by the end of the next working day on major roads and within seven working days on minor roads.

The response times have been benchmarked with the NCoP and the other authorities' standards (see Supplementary Information for further analysis).

The NCoP suggests a risk management approach to determine a balanced response (see Table 5 below).

		Probability			
		Very Low (1)	**Low (2)**	**Medium (3)**	**High (4)**
Impact	**Negligible (1)**	**1**	**2**	**3**	**4**
	Low (2)	**2**	**4**	**6**	**8**
	Noticeable (3)	**3**	**6**	**9**	**12**
	High (4)	**4**	**8**	**12**	**16**

Table 5. Risk matrix outlined in NCoP

In considering the risk matrix, the NCoP only considers those defects that have a risk factor of 16 as an urgent safety defect, irrespective of the maintenance category or traffic flow. All defects having a risk factor of less than 16, are deemed by the NCoP to not need urgent rectification and should be undertaken within a planned programme of works. By following this risk matrix and considering the usage of Devon's roads, it has been identified that the probability (per vehicle kilometres) of encountering a defect on lower categories of road is less as the traffic flows are lower. The possible impact remains high, giving a risk factor of 12. However it is not felt appropriate to leave the defect until works are planned in the area, and hence why a response time of generally 7 days is adopted for the maintenance categories 7 to 11 (the most minor part of the network), accounting for approximately 9600km (75%) of the network.

Following this analysis, it is recommended that no amendments are made to the current safety inspection regime in terms of nature of response.

5. Financial Considerations

Response to safety defects is a reactive operation and takes priority over all other works. Over the last few years adopting an enhanced preventative maintenance regime on the minor roads has resulted in a reduction in the number of defects found following the peak during the bad winter years of 2009 and 2010.

Any increase in standard of the safety inspection regime will have a potential to increase costs. The enhanced safety inspection frequency recommended in 4 (i) will result in an increased survey cost of approximately £43,000 per annum.

The heightened defect parameters in 4 (ii) and 4 (iii) above also have the potential to increase costs depending on the extent of the defects and is estimated to be approximately £170,000 and this will have to be met from the revenue highway maintenance budget. Overall these costs are not significant in the context of the overall highway budget and must therefore be accommodated.

6. Sustainability Considerations

The recommendations contained in this report have no direct sustainability implications.

7. Carbon Impact Considerations

The recommendations contained in this report have no direct carbon impact implications.

8. Equality Considerations

The recommendations of this report will enhance the County Council's highway safety inspection and defect repair regime and this will have a positive benefit for all road users.

9. Legal Considerations

The highway safety inspection regime forms a key aspect of the Council's strategy for managing liabilities and risks. The authority will need to demonstrate that its actions or decisions were reasonable. For example, inspection or repair policies were in accordance with national guidelines or were based on rational consideration of local circumstances.

By virtue of Section 58 of the Highways Act 1980 (England and Wales) if the authority can prove that it had in place adequate policies and procedures to maintain the highway, and the policies and procedures were being performed, and there was no prior knowledge of the defect before the incident date, a claim can be repudiated.

It is therefore vital that the recommendations of this report are considered and the implications are fully understood.

10. Risk Management Considerations

The safety inspection policy has been risk assessed in accordance with the 'Devon Way' guidelines. The inherent risk is very high but with a properly defined inspection and repair process that is satisfactorily delivered this can be mitigated to high and a regular review will be undertaken to seek better control.

11. Public Health Impact

The proposals in this report enhance the safety inspection regime and should improve the overall condition and continuing functionality of the network to the benefit of the most vulnerable road users.

12. Options/Alternatives

Three main options exist:

- Maintain current safety inspection regime
- Partial adoption of the NCoP recommendations based on risk assessment and benchmarking
- Adoption of all the NCoP recommendations.

13. Reason for Recommendation/Conclusion

This report recommends 'Partial adoption of the NCoP recommendations based on risk assessment and benchmarking' as outlined above. This option will improve safety on the highway network and improve the robustness of the safety inspection whilst balancing the risk for the highway user and authority.

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Head of Highways and Traffic Management

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Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Reference
1. *Devon County Council Guidance for managers – Risk Management*		
2. *Devon County Council Highways Safety Inspection Manual*		
3. *Benchmarking recommendations with Well Maintained Highways Code of Practice, Devon County Council policy and other authority policies*		
4. *Inspection frequency traffic flow data and incident data*		
5. *Devon way risk assessment of safety inspection process*		
6. *Estimated cost of changes to safety defects*		

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Appendix I
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Analysis of inspection frequencies

DCC Maintenance Category No.	DCC Maintenance Category Name	DCC Frequency of Inspections	NCoP recommended frequency	Recommendation	Proposed DCC Frequency of inspections	Financial implication
3	National Primary Route	1 month	1 month	No change agrees with code.	1 month	None
4	County Primary Route	1 month	1 month	No change agrees with code.	1 month	None
5	Secondary Primary Route	6 month	1 month	increase to monthly on the basis of a) NCoP b) benchmarking with other authorities c) Traffic flow data	1 month	£43,000 for the cost of the additional inspections.
6	Local Distributor	6 month	1 month	No change. Benchmarking to the code shows that 7 authorities carry out monthly inspections, however a comparison of traffic flow on cat 6 roads, along side the number of defects found, would indicate that 6 monthly is the correct frequency when compared to maintenance categories 3 to 5.	6 month	None
7	Collector Road	6 month	3 months	No change	6 month	None
8	Minor Collector Road	Annual	3 months	No change. Benchmarking to the code shows that 5 authorities carry out 3 monthly inspections, however a comparison of traffic flow on cat 8 roads, along side the number of defects found, would indicate that annual is the correct frequency when compared to maintenance categories 3 to 7.	Annual	None
9	Service Road	Annual	Annual	No change agrees with code.	Annual	None
10	Minor Service Road	Annual	Annual	No change agrees with code.	Annual	None
11	Minor Lane	Every 2 years	Annual	No change. Benchmarking to the code shows that all authorities carry out annual inspections, however a comparison of the very low traffic flow on cat 11 roads, along side the number of defects found, would indicate that bi-annual is the correct frequency when compared to maintenance categories 3 to 10.	Every 2 years	None

Appendix II
To HTM/12/74

Summary of items and descriptions for inspection

Carriageway Defects		
Defect Type	**Recommendation**	**Evidence**
Pothole	Continue to use the defined defect.	DCC follow a nationally recognised dimension defined in the Kindred Report on Highway Liability Claims - The Issues 1998.
Defective surfacing joints	Create new defect type named 'Cracking/Defective surfacing joints' and include surfacing joints. Minimum dimensions 20mm wide, 300mm in any horizontal direction and 40mm deep.	Cracking and defective surfacing joints can occur at any point across the carriageway width and may present a danger to cyclists.
Major surface deterioration	Do not include.	Any major surface deterioration that is not deemed a safety defect by any other description is a serviceability defect.
Standing water due to defective/damaged highway drainage systems	Remove reference to m/c 3-6 and change defect name to 'Standing/running water due to defective piped highway drainage systems' 24 hours.	None of the 10 authorities benchmarked against preclude any maintenance categories from this defect type. Aquaplaning can occur at 40mph and presents the biggest risk.
Embankment or bank slips	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Spillages	Continue to use the defined defect.	Other authorities who include this defect either have no defined parameters making interpretation subjective or define a larger area. Existing dimension of 0.5m² considered large enough to cause skidding.
Obstructions - debris	Continue to use the defined defect.	Where mud/silt is described as a defect by several authorities but is covered in spillages.
Overriding	Remove note referring to rural 7-11 maintenance categories.	Evidence from other authorities include all maintenance categories.
Slippery surface/HFS	Rename defect type to 'Defective HFS' and description to 'A minimum loss of 0.5m² of aggregate or fatting up within high friction surface or slippery covers within high friction surface.	Defect type only specifically used by 2 other authorities. Slippery surfaces are included in spillages and the removal from the description will give greater clarity.
Dangerous or obstructing trees	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.

Carriageway Defects		
Defect Type	**Recommendation**	**Evidence**
Obscured visibility and overgrown hedges & bushes	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Defective road markings or road studs	Continue to use the defined defect.	DCC do not consider loose stick on studs as a safety issue as the risk to the road user is low. The annual serviceability inspection on white lines determine what percentage of missing white line requires action.
Defective ironwork	Continue to use the defined defect.	As carriageway pothole depth, there is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective cattle grids	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective overhead cables	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective roadworks signing	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Missing pre-formed modules	Amend description as follows - The void from missing or sunken preformed flags, slabs, kerbs, channels or paviours is a safety defect when the void is greater than 40mm deep and 300mm in a horizontal direction. Rocking modules greater than 40mm are a safety defect.	Other authorities who include this defect have few defined parameters making interpretation subjective.
Obstructions - materials, goods, equipment & signs	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Abrupt level differences	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Subsidence/Depression	Do not include at this time.	Benchmarking evidence suggest inclusion. However, further investigation is required for determining suitable perameters.
Cracking	Create new defect type named 'Cracking/Defective surfacing joints' and include surfacing joints. Minimum dimensions 20mm wide, 300mm in any horizontal	Cracking and defective surfacing joints can occur at any point across the carriageway width and may present a danger to cyclists.

Carriageway Defects		
Defect Type	**Recommendation**	**Evidence**
	direction and 40mm deep.	
Kerb/Edgings	Do not include.	Included in the missing preformed module defect.
Edge deterioration	Do not include.	Included within pothole definition.
Unsuitable surfaces	Do not include.	Covered by various safety defect criteria.
Rutting	Do not include at this time.	Benchmarking evidence suggest inclusion. However, further investigation is required for determining suitable perameters.
Severe damage	Do not include.	Covered by various safety defect criteria.
Trench, reinstatement high/low	Do not include.	Covered in abrupt level differences.
Traffic calming features	Create new defect 'Defective traffic calming features' with the following criteria ' missing or loose sections, missing or proud bolts. Includes modular and constructed.	Included by other authorities plus numerous complaints.

Footway Defects		
Defect Type	**Recommendation**	**Evidence**
Pothole	Continue to use the defined defect.	Any smaller sized defect would be collected by the cracks and gaps defect definition.
Standing water due to defective/damaged highway drainage systems	Create new defect type 'Standing/running water due to defective piped highway drainage systems' forcing pedestrians off the footway.	Majority of highway authorities included in review include this as a specific defect.
Embankment or bank slips	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Spillages	Continue to use the defined defect.	Other authorities who include this defect either have no defined parameters making interpretation subjective or define a larger area. Existing dimension of 0.5m² considered large enough to cause slipping.
Obstructions - debris	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Slippery surface	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Dangerous or obstructing trees	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Obscured visibility and overgrown hedges & bushes	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Defective ironwork	Continue to use the defined defect but add gully gratings and cellars if over 20mm and not designed for purpose. Where this is a cellar grate, a letter will be sent to homeowner suggesting they seek advice to ensure the grating is designed for the purpose.	As footway pothole depth, there is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective overhead cables	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective roadworks signing	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.

Footway Defects		
Defect Type	**Recommendation**	**Evidence**
Missing pre-formed modules	Amend description as follows - The void from missing or sunken preformed flags, slabs, kerbs, channels or paviours is a safety defect when the void is greater than 20mm deep and 50mm in a horizontal direction. Rocking modules greater than 20mm are a safety defect.	Other authorities who include this defect have few defined parameters making interpretation subjective.
Obstructions - materials, goods, equipment & signs	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective. Links to unauthorised signs.
Cracks and gaps	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Trip	Continue to use the defined defect.	DCC follow a nationally recognised dimension defined in the Kindred Report on Highway Liability Claims - The Issues 1998.
Rocking flag	Continue to use the defined defect.	DCC follow a nationally recognised dimension defined in the Kindred Report on Highway Liability Claims - The Issues 1998.
Damaged steps	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Damaged handrails	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Kerbs	Create new defect type 'Vertical/horizontal displacement of kerb' defect description 'a vertical displacement of 20mm and or horizontal displacement of 50mm is a safety defect'.	The vast majority of authorities include this defect within their manuals.

Footway Defects		
Defect Type	**Recommendation**	**Evidence**
Depression	Create new defect 'Depression and humps' defect description 'a rapid change of footway profile greater than 50mm and extending in a horizontal direction of less than 300mm is a safety defect'.	Although the nationally recognised dimension defined in the Kindred Report on Highway Liability Claims - The Issues 1998 is +/- 25mm and 600mm horizontal only one authority adopts this level of defect.
Unsuitable surfaces	Do not include.	Covered by various safety defect criteria.
Overridding	Do not include.	Little evidence demonstrating inclusion by other HA's, not included in code.
Cellars	Added to defective ironwork.	Included by two other authorities but defined within other defects.
Trench, reinstatement high/low	Do not include.	Covered by trip defect.
Tree Roots	Do not include.	Covered by various defects.

Cycleway Defects		
Defect Type	**Recommendation**	**Evidence**
Pothole	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Embankment or bank slips	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Spillages	Continue to use the defined defect.	Other authorities who include this defect either have no defined parameters making interpretation subjective or define a larger area. Existing dimension of 0.5m² considered large enough to cause skidding.
Obstructions - debris	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Overriding	Delete from manual.	Parameters on carriageway have been extended to include this defect when the cycleway is on road. No other authority include this defect for cycleways.
Slippery surface	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Dangerous or obstructing trees	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Obscured visibility and overgrown hedges & bushes	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Defective road markings and road studs	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective ironwork	Change defect description dimension to +/-20mm from +/-40mm.	Benchmarking of other authorities and consistent dimension use for cycleways.
Defective overhead cables	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective roadworks signing	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Missing pre-formed modules	Amend description as follows - The void from missing or sunken preformed flags, slabs, kerbs, channels or paviours is a safety defect when the void is greater than 20mm deep and 50mm in a horizontal direction. Rocking modules greater than 20mm are a safety defect.	Other authorities who include this defect have few defined parameters making interpretation subjective.

Cycleway Defects		
Defect Type	**Recommendation**	**Evidence**
Obstructions - materials, goods, equipment & signs	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Cracks and gaps	Change defect description dimension to 20mm deep from 40mm.	Benchmarking of other authorities and consistent dimension use for cycleways.
Abrupt level differences	Change defect description dimension to 20mm from 40mm.	Benchmarking of other authorities and consistent dimension use for cycleways.
Standing water due to defective/damaged highway drainage systems	Create new defect type 'Standing/running water due to defective piped highway drainage systems' forcing user off cycleway.	To bring a consistent approach to this defect type and is included in the NCoP.
Depression/Humps	Create new defect 'Depression and humps' defect description 'a rapid change of cycleway profile greater than 50mm and extending in a horizontal direction of less than 300mm is a safety defect'.	Although the nationally recognised dimension defined in the Kindred Report on Highway Liability Claims - The Issues 1998 for a footway is +/- 25mm and 600mm horizontal only one authority adopts this level of defect.
Trench, reinstatement high/low	Do not include.	Covered in abrupt level differences.
Unsuitable surfaces	Do not include.	Covered by various safety defect criteria.

Roadside Defects		
Defect Type	**Recommendation**	**Evidence**
Dangerous or obstructing trees	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective and sometime unrealistic.
Defective ironwork	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective overhead cables	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective roadworks signing	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Obstructions - materials, goods, equipment & signs	Continue to use the defined defect.	Other authorities who include this defect have no defined parameters making interpretation subjective.
Damaged road restraint systems	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect. Correct height will be picked up un serviceability inspection.
Defective boundary fences	Add boundary walls to defect.	Boundary walls not included in current defect although included by others.
Defective streetlights, illuminated or variable message traffic signs	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective road traffic signs	Include 'verge markers using No.561 reflectors that are; missing, damaged or is not upright is a safety defect' and include signpost/fixing/non-illuminated bollard in the description.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect. Amendment due to feedback from officers. Missing information signs are not a safety issue.
Defective traffic signals	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Defective escape lanes/arrester beds	Continue to use the defined defect.	There is nothing to suggest from the evidence gathered that indicates the defect description is incorrect.
Sign post/fixing/marking post/non-illuminated bollard	Include in road traffic signs.	Included by several other authorities.