

Highways and Infrastructure Services Contract 2016-23

East Sussex Highways Highway Asset Inspection Guidance Document

Document History:

Further Information	Date of Approval	Document Version	Document Revision Date	Document Author / Reviser
Approved by Lead Member for Transport & Environment	18 April 2016	1.2	April 2017	Highways Funding & Development Project Manager

Register of Amendments

Reference	Amendment Date	Amendment	Updated By
Section 3. Inspection Frequencies	8 September 2016	Correction of typed error. Link Footway inspection frequency changed from 3 months to original 6 monthly frequency.	Rebecca Newby, Service Development Team, Highway Contracts Management Group

1. OBJECTIVES

As a highway authority we have a statutory duty under section 41 of the Highways Act 1980 to keep the network available and safer for our customers. We are also permitted under Section 58 of the Highways Act 1980 to use a “special defence” in respect of action against us, to show that we have kept the highway in reasonable repair.

The Highway Inspection regime has been developed in accordance with the recommendations contained in the Well-maintained Highways – A Code of Practice for Highway Maintenance Management (July 2005). Our regime is set out within a practical and reasonable framework of risk assessment and inspection frequency, which takes account of all road users, including those who are most vulnerable.

Our main objectives are:

- To locate and identify defects on the highway and where appropriate, adjacent to the highway and to prioritise its repair.
- To assess the potential risks of damage and / or injury to highway users that may result from these defects.
- To ensure that appropriate measures are put in place to manage, eliminate and minimise risk.
- To ensure that those measures are effective in eliminating, or at least minimizing the risk.

2. IDENTIFICATION OF DEFECTS

The table below sets out the various defects to be identified in a safety and service inspection. The defects are arranged in groups according to the element of the highway in which they occur. The list is not exhaustive and persons carrying out the safety inspections are requested to record any defect that might create a hazard to users of the highway

Element	Defect
Carriageway	Potholes Loose material (to include debris, spillages or contamination) Regulatory markings faded and worn Ironwork, missing, broken, tilted, sunken or projecting Displaced road studs Edge damage on unkerbed roads Unevenness due to rutting, humps, corrugations
Kerbing	Loose, tilted, projecting
Footways	Pre-formed unit paving rocking, trips or missing Potholes General surface defects – trips, bumps, depressions etc. Ironwork, broken, tilted, rocking, missing or projecting
Furniture **	Rails, barriers, safety fencing, fences, posts - excessive defects Road signs and signals - excessive defects Unlawful signs – safety hazard
Trees and Vegetation	On the highway – diseased, dead, dangerous all or part about to fall Off highway – safety hazard
Verges*	Surface defects Ironwork / covers, broken, missing or projecting
No defects	No relevant defects found
External defect	Third party, statutory undertaker defect

* Verges primarily consist of soft soil / material and will also contain natural undulations, depressions, ditches, shrubs, branches, tree stumps and the like.

They cannot be maintained to the same specifications and standards as the metalled carriageway.

** For a large number of street furniture elements some form of prefabrication would be required to achieve a permanent repair which may not be possible within 28 days. Under these circumstances the defect would be made safe until a permanent repair was possible.

Safety Intervention Levels

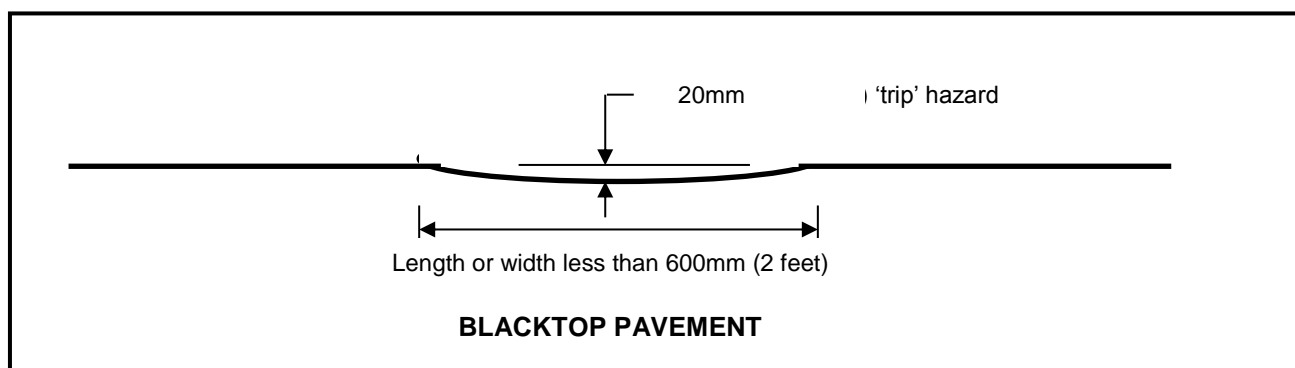
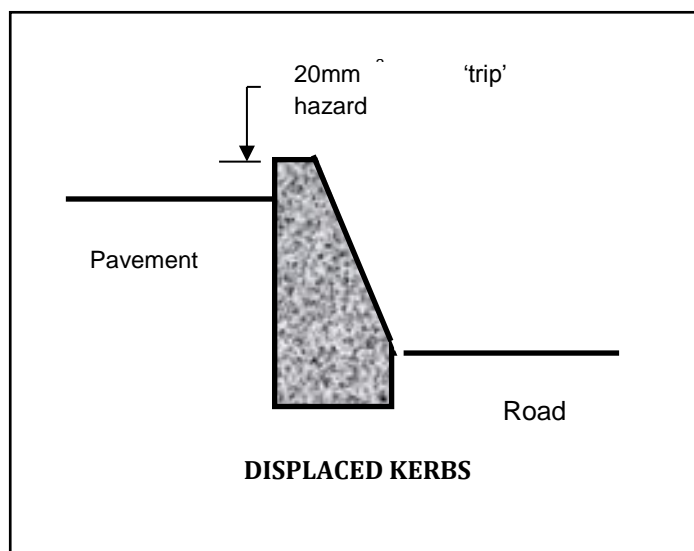
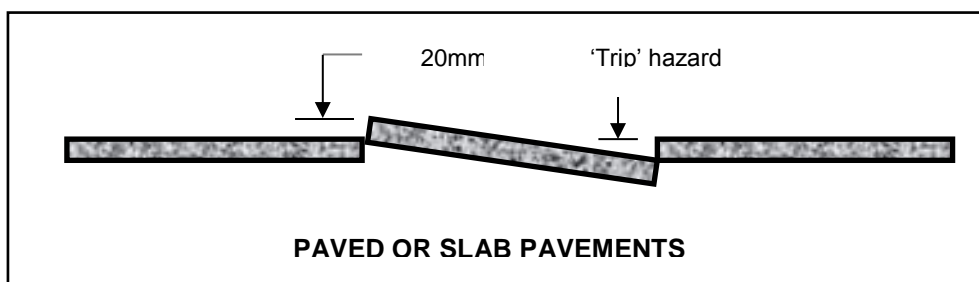
Carriageway:	(any defect in the carriageway, causing in a change in level, resulting from raised or sunken ironwork, pothole, failed surface)
High: Cat 1	Greater than 100mm and at least 300mm wide in all directions
Medium: Cat 2	Greater than 60mm and less than 99mm deep and at least 300mm in all directions
Low: Cat 3	Greater than 40mm and less than 59mm deep and at least 300mm in all directions

NOTE: At all formalised, pedestrian crossing points and 'on carriageway' cycleway, Footway intervention levels shall be used.

Footway:	(any defect in the footway or designated cycleway, causing in a change in level, resulting from raised or sunken ironwork, pothole, failed surface, displaced paving, kerb)
High: Cat 1	Greater than 40mm deep and at least 200mm wide in all directions
Medium: Cat 2	Greater than 30mm and less than 39mm deep and at least 200mm in all directions
Low: Cat 3	Greater than 20mm and less than 29mm deep and at least 200mm in all directions

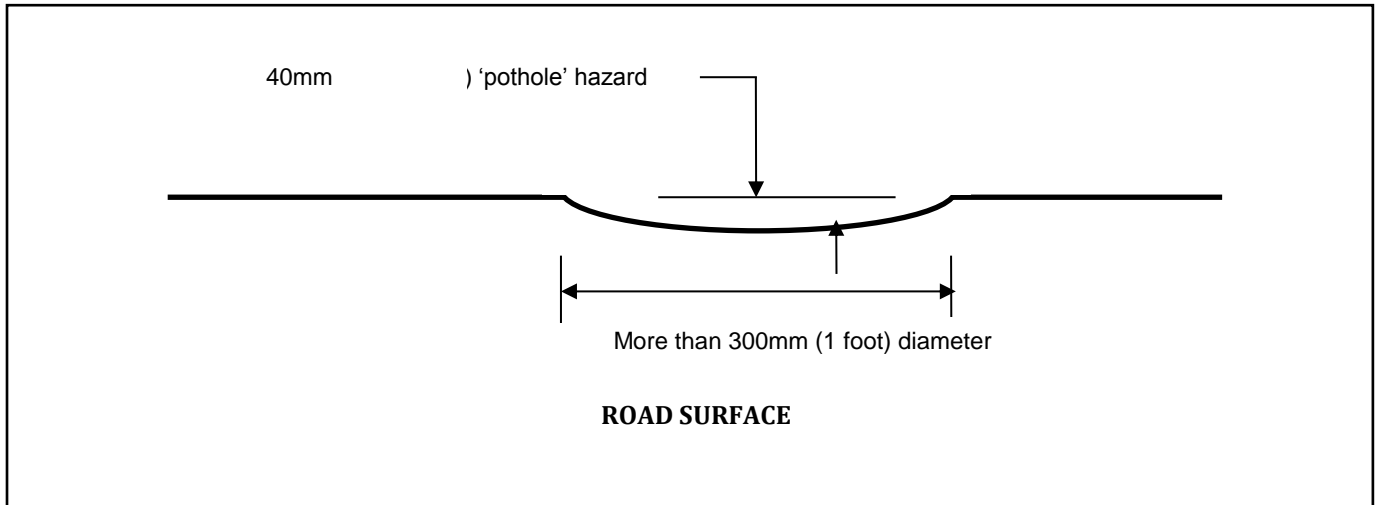
Pavements, Kerbs & Blacktop / Tarmac Pavements

In defined Primary and Secondary Walking routes where the adopted inspection frequency is the same, repairs will be carried out when a 'trip' hazard of 20mm is either found through our regular safety inspections or where the fault is reported to us by members of the public. For blacktop or tarmac pavements the 'trip' hazard is defined as 20mm or more in depth and less than 600mm (2 feet) in width or length.



Road or Carriageway

On Strategic Routes, Main and Secondary Distributors where the adopted inspection frequency is the same. Repairs will be carried out where a 'pothole' hazard of 40mm (1 ½ inches) or more in depth and with an equivalent diameter of 300mm or over, is either found through our regular safety inspections or where the fault is reported to us by members of the public.



The following is a schedule of defects to be identified during safety inspections:-

- Missing warning and regulatory signs.
- Missing ironwork covers or gratings.
- Damaged safety fences/barriers impeding the highway or footway.
- Damaged signs / street furniture which overhang the highway or footway and which are likely to collapse.
- Loose road studs
- Cracks in footways / cycleways wider than 25mm (1 inch) and longer than 300mm (1 foot).

3. INSPECTION FREQUENCIES

Categories of Inspection

Inspections can be considered under the following two categories:

Safety Inspection – Inspections to identify all defects likely to create danger to users or the wider community, and therefore requiring immediate or urgent action.

Service Inspection - Inspections to identify all defects likely to compromise serviceability and sustainability.

Safety Inspection Frequency

Inspection frequencies have been determined according to the network hierarchy for both roads (carriageway) and footways based on the Well-maintained Highways – A code of Practice for Highway Maintenance, and are set out in the tables below.

Feature	Description	Network Hierarchy	Frequency
Roads	Motorway	1	N/A
	Strategic Route	2	Once a month
	Main Distributor	3(a)	Once a month
	Secondary Distributor	3(b)	Once a month
	Local Roads	4a	Once every 6 months
	Local Access Roads – Urban	4b	Once every 6 months
	Local Access Roads - Rural	4b	Once a year
Footways	Prestige Walking Routes	1(a)	Once a month
	Primary Walking Routes	1	Once a month
	Secondary Walking Routes	2	Once every 3 months
	Link Footways	3	Once every 6 months
	Local Access Footways	4	Once a year
Cycle Route	Cycle Lane	A	As contiguous road
	Cycle Gap	A	As contiguous road
	Cycle Track	B	Once every 6 months
	Shared Cycle / Pedestrian	B	As contiguous

Service Inspection Frequency

Other inspection regimes

Service Inspections to identify all defects likely to compromise serviceability and sustainability shall be carried out on the features listed in the table below; such inspections may be carried out as part of respective general maintenance regimes for each feature, if applicable. Nevertheless, the highway inspector is expected to note and report a potential hazard found during a service inspection.

Service Inspection Frequency and Requirements

Feature	Description	Network Hierarchy	Frequency
Highway Trees	All highway trees within and adjoining the highways should be inspected for dangerous conditions once every two years. The inspection shall be planned that it will alternate between when the trees are dormant and in full growth.		Once every 2 years
Safety Barriers, Pedestrian Guardrails and Small Retaining Walls			
Safety Barriers	Safety barriers and pedestrian guardrails and small retaining walls visually inspected when required.	N/A	No less than 2 year intervals
Road Markings and Road Studs			
Road markings	Cycle Lane	A	No less than 2 year intervals
	Cycle Gap	A	
	Cycle Track	B	
	Shared Cycle / Pedestrian	B	
	Paths	C	
Road studs	Road studs scouted for reflectivity	In accordance with road hierarchy & safety sites	Once a year prior to Autumn / Winter at night

4. RESPONSE CATEGORIES

Category Defects Timescales

Any safety defect identified on the Highway that exceeds the Safety Intervention Level(s) identified in section 2 of this guidance document shall be responded to under one of the following three categories:

Category 1 Defects (High) - Attend, make safe or repair within 2 hours

- Those that require prompt attention because they represent an immediate and imminent hazard or because there is a risk of short term structural deterioration. Category 1 defects should be permanently corrected (if reasonably practicable), temporarily corrected or made safe at the time of inspection.
- Permanent repairs should be carried out within 28 days of defect identification.

Category 2 Defects (Medium) - Attend, make safe or repair within 5 days

- Those which, following an inspection, are deemed not to represent an immediate hazard or risk of short term structural deterioration. Such defects may have safety implications, although of a far lesser significance than Category 1 defects, but are more likely to have serviceability or sustainability implications.
- These defects are not required to be urgently rectified, yet should be permanently / temporary corrected or made safe within 5 days, or at the time of inspection, if reasonably practicable.
- Permanent repairs should be carried out within 28 days of defect identification.

Category 3 Defects (Low) - Attend, make safe or repair within 28 days

- Those which, following a risk assessment, are deemed not to represent an immediate hazard or risk of short term structural deterioration. Such defects may have safety implications, although of a far lesser significance than Category 1 defects, but are more likely to have serviceability or sustainability implications. These defects are not required to be urgently rectified, yet should be permanently / temporary corrected or made safe at the time of inspection, if reasonably practicable.
- Permanent repairs should be carried out within 28 days.

Table 1: Risk Intervention Table

		Inspection Frequency (Monthly, 3 Monthly, 6 Monthly or Yearly)
Defect Classification	HIGH Cat 1	Response (Cat 1) Attend, make safe or repair within <u>2 hours</u>
	MEDIUM Cat 2	Response (Cat 2) Attend, make safe or repair within <u>5 days</u>
	LOW Cat 3	Response (Cat 3) Attend, make safe or repair within <u>28 days</u>

Note: All intervention level defects are to be actioned and rectified within a maximum of 28 days.

Observations – Those that are non-intervention defects and will be collected by an inspector to help inform asset inventory and condition data and be used to plan longer term prioritisation of future maintenance works.

Response Times for General Maintenance

Street Lighting & Traffic Signals		
Street Lighting & Traffic Signals	Repairs for Cat 1 defects and Emergency Reposes.	2 Hours
	Faults involving the replacements of components of apparatus.	10 Days
	Faults requiring the replacement of a complete unit of apparatus, including those made safe as emergency faults.	10 Days
	Faults requiring the replacement of illuminated mandatory traffic signs and illuminated traffic bollards, including those made safe as emergency faults.	1 Day
	Faults requiring the removal of graffiti and / or any unauthorised attachments from apparatus	5 Days
	Faults involving rectification of non-operating Belisha beacons and school crossing flashing signs (wig wags)	1 Days
	Replacement of a complete unit of apparatus	20 Days
Intelligent Transport (ITS) Systems		
ITS Systems	Priority 1 – Emergency / Serious Faults	2 Hours
	Priority 2- Urgent Faults	4 Hours
	Priority 3 – Non-Urgent Faults	16 Hours
	If permanent repair cannot be made at the first visit, full repair of Priority 1, 2 and 3 faults must be completed within 7 days.	7 Days
Structures Response Times		
Structures	Newhaven Swing Bridge Additional	30 Mins
	Cuifail Tunnel Additional	2 Hours

5. ADDITIONAL INFORMATION ON INSPECTION AND RESPONSE ARRANGEMENTS

Other inspection information

The inspector is expected to carry out the highway safety inspection in reference to the intervention matrix contained within Appendix 1, but is also expected to note and report any potential highway hazard found during any other routine service inspection. The response time, if different from categories 1, 2 & 3 are set out within the Works Information.

Days are based on calendar days and weekends are included within calendar days.

Defects reported by the public

Enquiries by the public will be reviewed within 10 working days and actioned where necessary, in accordance with the above response categories.

Inspection Records

All repairs shall be recorded and details retained for a minimum of 6 years.