



TRAFFORD
COUNCIL

Highway Inspection Policy

Code of Practice for Highway Safety Inspections

Highway Management
ENVIRONMENT OPERATIONS

Policy Approved 29 October 2012

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1. Introduction:-

- 1.1 The main purpose of highway maintenance is to maintain the highway network for the safe and convenient movement of people, traffic and goods.
- 1.2 An effective transport network is crucial to the Borough's social, economical and environmental well-being. The policies set out in the Local Transport Plan (LTP) embrace the principles contained within a hierarchy of road users that gives priority to the more vulnerable, public transport and to those living in and using an area.
- 1.3 The LTP is therefore seen as a primary document with key policies influencing the way in which the Highway Inspection Policy is produced and implemented.
- 1.4 The objectives of highway maintenance within the network management context can be considered as the following:

a) Network Safety

- i) Complying with statutory obligations
- ii) Meeting users' needs

b) Network Serviceability

- i) Ensuring availability
- ii) Achieving integrity
- iii) Maintaining reliability
- iv) Enhancing quality

c) Network Sustainability

- i) Minimising cost over time
- ii) Maximising value to the community
- iii) Maximising environmental contribution

Ref: The Road Liaison Group's "Well-maintained Highways – Code of Practice for Highway Maintenance Management"

- 1.5 Section 41 of the Highways Act 1980 imparts a duty on the Council, as Highway Authority, to maintain the highway. The same Act however, in Section 58, grants a 'special defence in action against a highway authority for damages for non-repair of the highway'.
- 1.6 The defence in essence is 'to prove that the authority has taken such care as in all circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous to traffic' having regard for such matters as:
- i) the character of the highway and the traffic that was reasonably expected to use it.
 - ii) the standard of maintenance appropriate for a highway of that character and used by such traffic.
 - iii) the state of repair in which a reasonable person would have expected to find the highway.
 - iv) whether the highway authority knew, or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highway.
 - v) where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed.
- 1.7 This Code of Practice has been developed to meet the demands of both sections of the Act and addresses the specific matters above:
- i) by carrying out regular inspections to meet the character of the highway.
 - ii) by applying intervention criteria to the severity of a defect i.e. what constitutes 'dangerous'.
 - iii) by carrying out general repairs to the highway.
 - iv) by taking action to minimise the potential of a defect developing further.
 - v) by taking such action to make a dangerous defect safe, either by barriers or immediate repair to remove the danger.
- 1.8 The Road Liaison Groups "Well-maintained Highways – Code of Practice for Highway Maintenance Management" (the RLG Code), issued in 2005, is based on the assumption that available funding for highway maintenance will provide some flexibility for authorities to pursue a regime of inspection/assessment and rational planning of programmes and priorities. Where this is not the case, the statutory obligations for network safety will need to take preference.

- 1.9 The RLG Code is the fourth generation of a “Code of Good Practice” first published in 1989, revised to meet changing legislation and management trends. The current Code builds on the key themes of the original Code and gives greater prominence to asset management and risk management.
- 1.10 The recommendations in the RLG Code are explicitly not mandatory on authorities. In circumstances, however, where the Authority elects in the light of local circumstances to adopt policies, procedures or standards differing from those suggested, these will be identified together with the reasoning for such differences.
- 1.11 The RLG Code recommends three categories for inspection:
- Safety Inspections
 - These are designed to identify those defects likely to cause danger or serious inconvenience to the public and therefore require immediate or urgent action.
 - Service Inspections
 - Inspections designed primarily to establish the programme for routine minor maintenance tasks not requiring urgent execution. They are tailored to the needs of particular highway elements to ensure that they meet requirements for serviceability. These inspections will normally be carried out by the Highway Technician referred from either public/member complaints or from information passed to them by the Highway Safety Inspector.
 - Structural Condition Surveys
 - The structural condition of the highway is determined either by mechanical survey machines or by visual condition assessment in order to formulate a planned structural maintenance programme. The surveys are currently carried out by the Civil Engineering Division of The Built Environment Department.
- 1.12 This Code deals more specifically with Safety Inspections, although Service Inspections fall within the context of the overall routine inspection of the highway and are primarily carried out as a result of general rather than specific complaints.
- 1.13 Safety inspections are planned cyclic inspections that are specifically conducted to pro-actively identify potential dangers. They are carried out to specific frequencies, dependent upon the status (category) of each highway.
- 1.14 During the inspection defects that exceed or have the potential to exceed the minimum intervention level as outlined within this code are identified and processed for repair.

- 1.15 Service inspections are mostly re-active and are mainly carried out following complaints/service requests from members of the public, from local Councillors or from information provided by the Safety Inspectors. They may also be carried out on a totally ad-hoc basis after a Safety Inspection as part of our routine performance management checks on the Safety Inspectors and the safety inspection process in general.
- 1.16 Records of both cyclic safety inspections and service inspections are maintained on a purpose designed computer database.
- 1.17 This code sets out intervention levels and operational processes that are considered appropriate and reasonable taking into account the safety of the highway and the constraints placed upon the Council to manage public funds responsibly within defined budgets.
- 1.18 The code also sets out the processes required to meet the requirements of the Pre-Action Protocol for Personal Injury Claims under the Civil Procedure Rules in respect of claims under Section 58 of the Highways Act 1980.

2 Resources and Budgets:-

2.1 In delivering its 'duty of care' to users of the highway, the Council provides financial and operational resources. This allows operations to be carried out in both a planned and reactive manner in maintaining the highway in a safe condition.

2.2 Budgets:

Each year the Council determines the allocation of its financial resources with due consideration of its strategic aims and priorities. The Highway Maintenance Budget is one area of allocation that is split into a number of service delivery areas, each with dedicated budgets. A high regard to the safety of the users of the highway means that the Council sets aside an allocation specifically for undertaking repairs identified during safety and service inspections.

2.3 Safety Inspectors:

To undertake its cyclic safety inspections the Council has engaged a team of officers specifically trained in this activity. The inspectors are supported by an Area Highway Technician to monitor progress and to provide advice and supervision. Complaints are dealt with by the Area Highway Technicians.

2.4 Emergency repairs:

The Safety Inspectors and Area Technicians are supported operationally by supervisory staff who arrange for the works identified during the inspection to be undertaken to strict deadlines. Performance is closely monitored and the monitoring forms one of the services local performance indicators. Emergency repairs are undertaken by readily available teams, either through scheduling or breaking off from their normal routine maintenance activities.

3 Training:-

3.1 All Safety Inspectors and Highway Technicians are trained in a nationally recognised qualification relating to highway inspections. The essential competencies address:

1. Highway Maintenance Policies
2. Safety at Street Works
3. Highways Act Enforcement
4. Defect Recognition
5. Measurement and Estimation
6. Materials Recognition
7. Personal Safety

3.2 The IMTAC (Inspector Modular Training and Assessment Course) devised by Birmingham City Council will provide such a recognised qualification.

3.3 Tameside MBC provides this training on behalf of the Greater Manchester Authorities. However, some of the “Highway Maintenance Policies” element is Authority specific and therefore needs to be and has been, addressed separately.

3.4 In addition, each of the Highway Technicians and Safety Inspectors will be accredited as a ‘supervisor’ under the requirements of Section 126 New Roads and Street Works Act 1991

4 Frequencies of Inspection:-

4.1 All highways are categorised in line with the RLG Code and are inspected in accordance with the recommendations as follows:

Carriageway Hierarchy:

Category RLG Code - (TMBC)	Hierarchy Description	General Description	Detailed Description
1 – (No category)	Motorway		
2 - (1)	Primary Route	Principal roads between primary destinations	Designated Primary Route Network (PRN)
2 – (2)	Strategic Route	Remainder of principal road network	
3a – (3)	Main Distributor	Major urban network and inter-primary links	Routes between strategic routes and linking town centres
3b – (4)	Secondary Distributor	Remainder of classified network and major bus routes	Rural link roads between communities
4a – (5)	Link Road	Links between distributor roads with frontage access and frequent junctions	Residential and industrial inter-connecting roads
4b – (6)	Local access road	Roads serving limited number of properties and short lightly trafficked links between distributor roads	Residential loop roads and culs de sac

Footway Hierarchy:

Category	Hierarchy Description	General Description
1	Primary walking route	Busy urban shopping areas, transport interchanges
2	Secondary walking route	Medium usage routes feeding to primary routes, local shopping centres, large schools
3	Link footway	Linking local access footways through urban areas
4	Local access footway	Footways associated with low usage, short estate roads to main routes and culs de sac

Inspection Frequencies

Feature	Hierarchy	Category (TBC)	Frequency (TBC)	Frequency (The RLG Code)
Roads	Primary Route	1	monthly	monthly
	Strategic Route	2	monthly	monthly
	Main Distributor	3	monthly	monthly
	Secondary Distributor	4	monthly	monthly
	Link Road	5	3 monthly	3 monthly
	Local access road	6	annually	annually
Footways	Primary walking route	1	monthly	monthly
	Secondary walking route	2	3 monthly	3 monthly
	Link footway	3	6 monthly	6 monthly
	Local access footway	4	annually	annually

5 Methodology for Inspections:-

5.1 With the exception of certain rural link roads and the Carrington Spur, all safety inspections are undertaken on foot. Each road/street or section of a road/street will be walked in both directions on either side of the road/street.

5.2 A monthly list of inspections for each highway safety inspector will be generated from the inspection database within the Council's business IT system (SAP) and a notification created for each road within that list.

5.3 The items for inspection shall include:

- Debris, spillage or contamination on running surfaces
- Displaced road studs lying in the carriageway
- Overhead wires in a dangerous condition
- Vandalism, particularly if there are electrical consequences (e.g. Lighting columns)
- Abrupt level differences in the running surface
- Potholes, cracks and gaps in the running surface
- Edge deterioration of the running surface
- Loss of skidding resistance
- Missing or broken ironwork (gully lids, manholes etc.)
- Standing water, water discharging onto or overflowing across the highway
- Blocked drains or grips
- Damaged, defective, displaced, missing or misleading traffic signs, signals or lighting columns
- Missing or badly worn road markings
- Dirty or otherwise obscured traffic signals and signs
- Damaged safety fencing, parapet fencing, handrail and other barriers
- Sight-lines obscured by trees, unauthorised signs and other features

5.4 The defects to be recorded (Appendix 1) have been rationalised to make data entry consistent, related to the method of repair and enable ordering of materials. The defects are defined in two categories and the intervention criteria determined from case law.

5.5 Whether any of these deficiencies should be dealt with as Category 1 will depend upon:

- The depth, surface area, or other extent of the defect
- The location of the defect relative to highway features such as junctions and bends
- The location of the defect relative to access to schools, shops, hospitals etc.

- The location of the defect relative to the positioning of users - especially vulnerable users - such as in traffic lanes, wheel tracks or pedestrian desire lines
- The nature and extent of interaction with other defects
- Forecast weather conditions, especially potential for freezing of surface water

5.6 The weight given to each of these parameters in determining the priority which should be attached to a particular defect will be a matter of on site judgment. It remains necessary, therefore, for those undertaking inspections, or responding to reported incidents, complaints or requests for service, to decide whether any individual observed or reported defect should be recorded as Category 1 and the consequential urgent action put in hand.

5.7 In order to provide guidance and assistance in this respect, however, the following Risk Matrix has been adopted. This matrix is essentially identical to that at 9.5.9 in the RLG Code of Practice although some presentational changes have been made simply in order to provide better compatibility with the format of the intervention tables which appear at appendix 1 herewith:

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

Response Category	Category 1 response	Category 2 (High) response	Category 2 (Medium) response	Category 2 (low) response
Response Time	24 hours	7 days	28 days	Monitor/review at next inspection

- 5.8 Each and every decision which an Inspector takes in respect of priority could be critical to the safety of users and may also potentially be subject to legal scrutiny in the event of an accident occurring at or near to the site. It is therefore essential that these decisions are properly considered and are – so far as is possible – adequately justified.

Perhaps the overriding consideration which should always be borne in mind in this regard is the definition of a Category 1 defect provided by the Highways Agency -

“Those which require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short term structural deterioration”

Ref:” RLG Code 9.4.18”

- 5.9 All dangerous (Category 1) defects, as well as being recorded and transmitted, will automatically be individually notified by e-mail to the Highway or Street Lighting Supervisor. Where necessary they may also be reported to them immediately by telephone and the Inspector may decide to stay on-site to warn members of the public of a potential danger until it is made safe. Dangerous utility defects will be reported similarly to the Street Works Section.
- 5.10 Non highway maintenance defects e.g. street lighting, street furniture, utility and contraventions are similarly recorded and are each transmitted back to the relevant officers/sections. Furthermore, any defects or hazards noticed in passing which are not on the highway, but on other Council owned land, will be notified to the relevant service.
- 5.11 A subjective assessment of the overall condition of the footways and carriageway (except Principal Roads) will be recorded using the AEI parameters at the end of Appendix 1 (p19). This information will be passed on a regular basis to the Civil Engineering Section of The Built Environment (7.8)
- 5.12 Details of the inspections are recorded on dedicated M3Sky hand-held data capture devices using in-house developed software. The devices allow the Inspectors to electronically record details of any defects found (including GPS location and digital photographs) and of the work and materials necessary to carry out repair. The devices are remotely synchronised to the SAP Works Management Modules of the Integrated Business Information System (IBIS) so data is remotely transferred directly from site to create related service notifications which can be instantaneously accessed back at the depot.

- 5.13 The service notifications are then duly assessed and allied onto Works Orders to be allocated to repair gangs – if necessary within just minutes of the defect first being found.
- 5.14 If no defects are found on an inspection then a notification which simply records this fact is created.
- 5.15 In the event of any temporary absence of electronic input capability, this data can be recorded onto blank preprinted proforma and transferred via manual input to the SAP database on return to the office.
- 5.16 SAP will also provide the environment for performance management for such indicators as:
1. Inspections to target
 2. Repairs to target
 3. Defects per km
 4. Defects per month

6 Locating a defect:-

- 6.1 The hand-held devices plot the location of recorded defects via GPS. However, in recording the details of a defect, the Inspector is also required to include a written description and it is vital that the information provided is simple and easily understood as this assists the repair team(s) to rapidly identify the precise defect. Simple and accurate description also helps greatly in the interpretation of inspection records by non-technical legal/insurance staff who depend greatly on this detail when dealing with the defence of claims against the Authority, particularly after the repair has been carried out.
- 6.2 Locations shall, where possible, relate to house numbers/names and lighting column numbers. In rural situations, distance from certain fixed objects (telegraph poles, road junctions etc) will have to suffice. Simple abbreviations should be used:
- os – outside
 - adj – adjacent
 - opp – opposite
 - so – side of
 - jn – junction

7 Processing the Inspection Data:-

- 7.1 On completion of a street inspection the Highway Safety Inspector remotely synchronises the hand-held device with the Council's mainframe SAP Works Management system and downloads the collected inspection data. SAP then creates a new "service request notification" for each entry that the Inspector has recorded.
- 7.2 Notifications for 24 hour emergency work are passed directly to the Highway Maintenance Supervisors in Operations, who in turn will raise a works order for each and ensure that the works are carried out promptly.
- 7.3 The remaining notifications, i.e. those for urgent or normal status works, are sorted by street and repair category and – where possible - are grouped together to generate Works Orders by the same street or general area and repair category. The works order and associated notification paperwork is then passed to the Highway Maintenance Supervisors in Operations for planning and onward issue to the operatives.
- 7.4 All notifications for hot rolled asphalt and sand carpet works are passed to the Technical Assistant (Highways) for completion under an external contract.
- 7.5 Running parallel to the above is the process for data generated by the Highway Technicians who also create Works Orders - generally against a notification logged from a complaint.
- 7.6 Each month a list of AEI category 1 footways or carriageways will be generated and passed to the Civil Engineering Section of The Built Environment for the roads to be assessed for possible inclusion in forthcoming planned structural maintenance programmes.

8 Recording of Works carried out:-

- 8.1 Each Works Order and individual notification sheet (if attached to the Works Order) will be signed and dated (the date of the completion of the work) by the operative when the relevant works have been completed and passed back to the Highway Maintenance Supervisor.
- 8.2 The completed Notification sheets will be passed to the highways administration team for the works order and notification records within the Works Management System to be updated – date of completion entered against 'technically complete'.

9 Random Sample of Works:-

- 9.1 On a monthly basis a manual random sample of those works certified as complete by operatives will be generated and passed to the Highways Supervisor so that they can be inspected and audited.
- 9.2 Those works that have either not been carried out or are not to specification will be identified to the Highways Supervisor and the work reissued against a new notification/works order.
- 9.3 The completed random inspection records will be held and analysed by the Highway Maintenance Manager for appropriate action to be taken under performance management/disciplinary procedures.

10 Defective Apparatus Reporting Procedure:-

- 10.1 When defective utility apparatus is found by the safety inspector, the reinstatement inspector, other highway staff or reported by the public the following procedure will be implemented:

The relevant inspector will make a risk assessment as to whether the defect should be categorised as an immediate (ie 2 hour) defect, an emergency (24 hour) defect, a hurry (7 day) defect or a non-dangerous (28 day) defect.

Immediate or Emergency defect

Inspector contacts the Technical Assistant (Street Works) who in turn contacts the responsible utility by telephone (confirmed by fax) detailing the hazard and requesting that immediate or emergency remedial works are carried out

Utility faxes back confirming that the defect has been made safe

Failure to comply or unable to make contact, works made safe and reasonable costs charged

Hurry or Non-dangerous defect

Details will be faxed to the responsible utility

Utility faxes back confirming job number and/or that the work has been carried out

Failure to comply or unable to make contact, works made safe and reasonable costs charged

11 Public Liability Claims:-

- 11.1 The function of the Highway Management Section is to provide an inspection regime to meet the RLG Code's recommendations and for the Highways Section to repair highway defects within the timescales laid down, in order to provide the Council with a Highways Act Section 58 defence against such claims.
- 11.2 All public liability claims are dealt with by the Council's Insurance Section.
- 11.3 The Highway Technicians will investigate and provide the necessary inspection, repair information, photographic evidence etc. as required by the Insurance Section.
- 11.4 Investigations will be carried out as expeditiously as possible so as not to compromise the Pre-Action Protocol for Personal Injury Claims under the Civil Procedure Rules.

DEFECT INTERVENTION CRITERIA - SAFETY INSPECTIONS

KEY

Emergency (24 hours unless otherwise stated)

Hurry – 7 days

Normal – 28 days

No immediate action – review at next inspection

Defect Intervention Tables:

The following tables outline the levels at which different defects are considered to become “actionable” (ie the point at which they will be considered for repair by the Safety Inspector), and applies those levels within the risk-matrix formula outlined at paragraph 5.7 above.

The levels stated herein are very largely advised by established case-law and are fully in line with current national guidelines.

The tables are preceded by an extract taken from a 1994 directive issued by The Audit Commission which defines the point at which some of the most common general highway defects should be considered to be actionable. It is included here because it serves as a simple yet helpful pictorial guide.

The tables are shaded in a “traffic light” system in accordance with the following key –

Category 1 defect - 24 hour response (unless otherwise stated)

Category 2 (high) defect - 7 day response

Category 2 (medium) defect - 28 day response

Category 2 (low) defect – no immediate action

The tables are not exhaustive. In particular, they do not include every emergency situation with which the Safety Inspectors may find themselves to be faced. Defects such as collapses, major water bursts, broken manhole covers and missing highway gully covers all present an immediate and significant risk and will be dealt with immediately by telephone contact to the Highway Supervisors (or to the utility company concerned if the problem is with an item of their equipment) to arrange a 2-hour response to make-safe.

If necessary, the Inspector may also remain on-site to warn the public away from such a hazard until such time as a repair gang arrives to make the area safe.

Special Notes on Tables:

Under the Council's Risk-Management procedures relating to the highway it has been determined reasonable **not** to undertake repair of certain defects which might fall within the criteria set out in this code. In particular -

Chipped or sunken kerbs on a footway at either an obvious crossing point or located outside a point of interest such as, for example, shops, post boxes, bus-stops, schools, hospitals etc will be subject to the normal criteria set within the relevant stated footway intervention level. However, chipped or sunken kerbs located on a straight section of road and **not** at an expected pedestrian crossing point or outside of any particular point of interest will **not** normally be recorded as a defect requiring specific attention as the potential risk is felt to be low.

Displaced or loose kerbs which are liable to become detached from the footway, **will** however generally be identified for repair.

Carriageway depressions will be recorded if they exceed the appropriate intervention level but do not exceed 600mm in length.

Potholes in the carriageway will be recorded as actionable if they exceed the appropriate intervention level and extend in any one direction by more than 300mm.

(Ref The Kindred Association Report – Report on Highway Liability Claims 1998)

Carriageway channel deterioration at the kerb edge will only be recorded if it is wider than 100mm with a depth exceeding 40mm.

Carriageway edge damage, (on lanes where there are no footways and no kerbs providing edge retention).

Problems often arise in these roads due to vehicles overriding the edge of the “made” road surface - usually to pass oncoming traffic in narrow areas of road – thereby causing damage both to the unretained road edge and to the adjacent soil/grassed verge. This action can very easily result in the appearance of potentially hazardous “drop-offs” beyond the edge of the metalled surface as well as causing damage to the edge of the road surface itself.

In wet conditions, when ground in adjacent verge areas may be particularly soft, such damage can occur very quickly and can even be the result of the action of a single vehicle being driven off the made highway surface.

Edge damage of this sort will therefore only be noted for attention where there is considered to be a medium to high risk of further vehicle interaction and will be prioritised for emergency repair only in limited circumstances and only when the problem extends into the normal wheel path of passing vehicles where the risk of impact is particularly high.

If the defect is located outside any edge of carriageway line marking then it will only be recorded at all if there is a particular and significant risk of interaction and damage.

PCC Edgings (aka “pin kerbs”) at tree pits are provided both to physically delineate the tree pit area from the area of the footway where one would expect pedestrians to be walking and to retain the adjacent footway surface. They often contain an intentional up-stand above the level of the footway surface but are also often pushed upwards (or outwards from the tree) further than would be desirable by the effects of the roots from the tree itself.

Pedestrians should have neither cause nor need to actually walk into a tree pit area, and – on that basis - the general height of any edgings that surround such a feature is not a major concern in itself. Rather, claims experience has shown that it is when individual such kerbs become horizontally displaced around the tree that they present the greater risk. The intervention criteria therefore require that attention be given where edgings have been pushed outwards by tree roots so as to present a tripping hazard and not where they have been simply pushed upwards.

Inspector’s Discretion:

These tables provide the guidelines by which the Safety Inspectors are directed to work. The intervention levels advised are in accordance with the nationally accepted “norm” and should be affordable within the budget provision that is made available for this form of highway repair. However, they are not, (and are not intended to be), absolute values which must be unthinkingly applied irrespective of any other consideration.

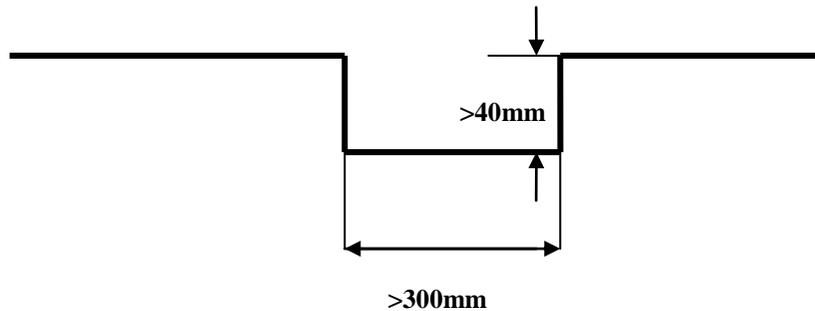
Safety Inspectors may, therefore, use their discretion and experience to arrange repair of a defect which does not strictly meet the specified intervention level but where they are convinced that such repair will remove a specific or potential future hazard.

Definition of Damage to Highways

Ref - Audit Commission – The Publication of Information (Standards of Performance) Directive 1994:

Damage to Carriageways:

Damage is defined as a defect in the highway, which impairs the value or usefulness of the carriageway and provides a safety hazard for road users. A sharp edged depression (pot hole) of 40mm or greater in depth and extending in any one direction greater than 300mm constitutes a safety hazard and should be repaired in accordance with individual highway authority response times

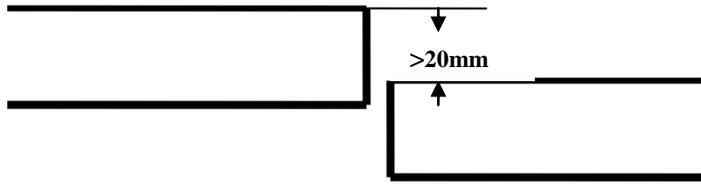


Damage to Footways:

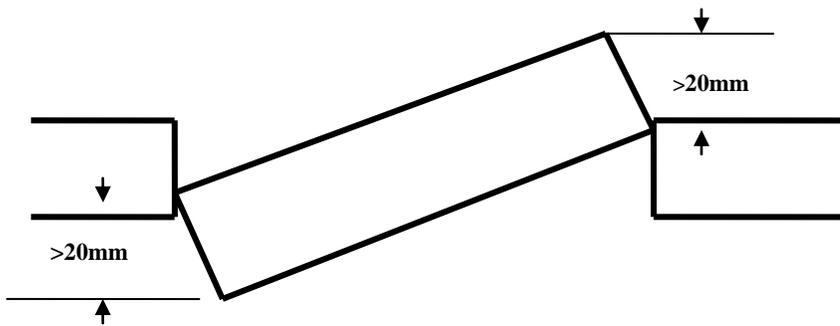
Damage is defined as a defect in the footway which impairs the value or usefulness of the footway and provides a safety hazard for pedestrians:

- Trips more than 20mm
- Rocking flags greater than 20mm
- Rapid change of footway profile greater than 25mm and extending in plan dimension less than 600mm

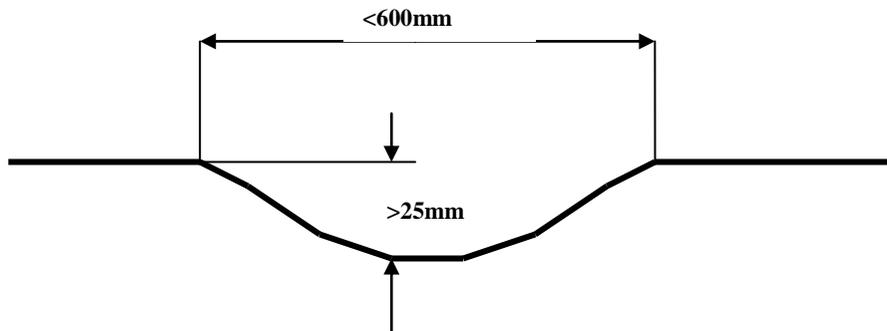
should be repaired in accordance with the individual authority response times.



Trips greater than 20mm



Rocking flags greater than 20mm



Rapid change of footway profile greater than 25mm and extending in plan direction less than 600mm.

CARRIAGEWAY DEFECTS	Potholes (ie sharp-sided defects) The depth of a pothole is covered below. As a general rule the diameter at the surface level should be >300mm				Initial signs of openness. Crazing with limited loss of aggregate	Edge damage		Unevenness	
	Marked Cycle lanes & recognised pedestrian crossing points		All other locations			Road edge breaking, falling away so as to be potentially hazardous	Road edge extensive cracking, some deformation likely to worsen in short term	Sunken reinstatements, depressions in wheeltrack on high speed roads >50mm <u>and</u> <600mm in width	Less severe defects or defects located in low risk locations
	>25mm	>20-25mm with likelihood of worsening in short term. Advanced local crazing likely to pothole	>50mm	>40-50mm with likelihood of worsening in short term. Advanced local crazing likely to pothole					
Impact									
High risk of vehicle interaction (ie in line with vehicle path)						*	*	#	#
Medium risk of vehicle interaction (ie adjacent to path of vehicle)						*	*	#	#
Low risk of vehicle interaction (ie other carriageway areas)						* Edge damage should be classified as Cat 1 in limited circumstances and only when extended into actual wheel path and the risk of impact is high		# Extensive areas of uneven running surface – especially when directly in the wheeltrack of vehicles - should be reported to The Asset Management team for consideration.	
Negligible risk of vehicle interaction						If defect is located outside the edge of carriageway marking it should only be recorded if significant risk of interaction or damage is anticipated		Defective utility repairs should be referred to The Streetworks Team for possible referral back to the utility responsible for it.	

FOOTWAY & KERBING DEFECTS	Potholes (ie sharp-sided defects)			General Surface Defects (inc flagging)				Kerbing defects		
	>25mm deep	>20mm deep	<20mm deep	>25mm trip	>20mm trip	<20mm trip	Bumps, depressions, surface heave, undulations >25mm deep/high & <600mm wide	Dislodged or loose	Uneven or chipped (exposed trip edge >50mm in height <u>and</u> >100mm in width)	Horizontal displacement (inc. edging kerbs around highway tree pits) >75mm
Impact										
High risk of interaction (town centre shopping areas, pedestrianised roads, main footfall areas on footways)			Inspectors discretion may be used to include repair where there is evidence of short term deterioration or where there is a foreseeable injury risk			Inspectors discretion may be used to include repair where there is evidence of short term deterioration or where there is a foreseeable injury risk		NB: At expected pedestrian crossing points or in areas where a foreseeable injury risk to pedestrians exists (eg main shopping streets in town centres) intervention should be as adjacent footway levels.		
Medium risk of interaction (adjacent to main areas of footfall in vulnerable areas)										
Low risk of interaction (most other footway areas)										
Negligible risk of interaction (particularly obscure or unused footway locations)										

IRONWORK DEFECTS	MANHOLES (ie 600x600 inspection covers or similar) & including road gullies & hydrants			SMALL BOXES (eg stop taps, valve & water meters etc) & including footway drainage gullies					
	Any highway location			Footway, Marked Cycle Lanes & Pedestrian Crossing Points in Carriageways			Carriageway		
	Cover missing	Uneven, broken or loose cover (footway trip hazard >25mm, carriageway >50mm)	Loose, cracked or noisy covers not an immediate danger	Cover missing	Uneven, broken or loose cover (trip hazard >25mm)	Loose, cracked or noisy covers not an immediate danger	Cover missing	Uneven, broken or loose cover (hazard >50mm deep/high)	Loose, cracked or noisy covers not an immediate danger
Impact									
High risk of interaction	2 Hour								
Medium risk of interaction	2 Hour								
Low risk of interaction)	2 Hour								
Negligible risk of interaction	2 Hour								

NB. The response times employed internally by individual utility companies may vary from those indicated above, (United Utilities, for example, recognise only 2 categories of defect – “dangerous” and “non-dangerous” – to which they attach a 2 hour or a 20 day expectancy of repair). Whatever their own systems demand, however, they will be expected to respond to defects at least within the timescales required here.

DEFECTS TO BE REFERRED FOR ATTENTION OF OTHER DEDICATED SECTIONS	STREET LIGHTING/FURNITURE							
	Street Lighting Columns				Illuminated signs & bollards		Non-illuminated equipment & street furniture (inc signs, street name plates, guardrails, non-illuminated bollards, public seats & litter bins)	
	Door missing, wires exposed	Damaged or leaning column	Broken or damaged lantern	Day burning lantern	Missing	Damaged	Missing	Damaged
REPORT (ie. contact relevant Technician or Street Lighting supervisor from site to instigate immediate response)		If immediate hazard	If immediate hazard	N/A		If immediate hazard	If immediate hazard	If immediate hazard
RECORD (record on hand-held device for follow-up by Street Lighting Technician)	N/A				N/A			
IGNORE (will be noted and repaired under separate programme when necessary)	N/A	N/A	N/A	N/A	N/A	N/A	Missing street name plates should be ignored as they will be noted and re-ordered under area based scheme	N/A

AEI Codes (Carriageway and Footway considered separately)

- 1** – very poor condition - consider for planned maintenance
- 2** – poor condition – certain lengths could be treated as small schemes
- 3** – Suitable for surface dressing – patching up to 10% - but surface generally OK (e.g. minor crazing, loss of chippings)
- 4** – Minor non-actionable defects
- 5** – New surface – no defects

Notes on Contravention:

APPENDIX 2

Safety Inspectors must also always be aware of – and record – any contraventions of The Highways Act 1980 which they encounter and which might have adverse effect upon the overall safety of the highway for users.

The following is by no means an extensive list but amongst the most common contraventions are:-

Overhanging or obstructive vegetation (ref: section 154, The Highways Act 1980) –

This includes vegetation of any description which infringes upon (or over) the highway such as to cause obstruction or potential hazard. Common examples are overgrown boundary hedges at adjacent properties that obstruct pedestrian access along the footway, low hanging tree branches that obstruct the passage of high sided vehicles along a road (or adequate and proper illumination from street lights), vegetation that obstructs sight-lines at bends or corners or views of road signs or traffic signals anywhere or that obstructs access for maintenance purposes to highway equipment (eg access to lighting columns etc).

Requirements are that vegetation should intrude no lower than 2.5m over a footway and 4.5m over a carriageway and that private hedges etc should be kept cut-back to the rear of the property boundary so as not to infringe upon or obstruct free pedestrian passage along the footway. Inspectors should record any examples that they encounter but should be aware that there is a Notice procedure to go through and that vegetation may not be removed quickly if those responsible for it do not act in accordance with our request.

Water discharging onto the highway (ref: section 163, The Highways Act 1980) –

It is an offence for an occupier of premises adjacent to the highway to permit surface water from their premises to discharge onto the highway.

This is a very widely disregarded subject however and over the years very many property owners have laid non-permeable driveways or hard-standings in their premises that drain outwards onto the highway.

Unfortunately, we simply do not have the staff resource to enforce this section to the extent of becoming routinely involved in such cases. However, more recently introduced Planning legislation which is more specifically designed to try to combat the problem will hopefully begin to have greater effect in due course.

There are occasions, however, when use of section 163 is still necessary and inspectors should, therefore, be aware of it and of its potential use where a specific problem exists. Common examples include car-washing areas where insufficient internal surface water drainage is provided and individual properties where downspouts and/or internal surface drainage provisions are intentionally diverted to drain out onto the footway.

Obstruction of the Highway –

Obstruction covers a wide range of issues – but we only have limited legal powers in this area and are therefore only able to act in similarly limited circumstances. Perhaps the single most common example of obstruction nowadays is caused by drivers who park vehicles up on footways such as to prevent free passage to pedestrians. This however, is a transitory problem over which only the Police (or the Traffic Wardens in some limited circumstances) have legal powers to act. Instances where we can intervene though, include, where shops store goods outside on the highway, “A-Board” advertisements placed on the highway and where building materials are left on the highway. Inspectors should record any such examples for later follow up by the Area Technicians as necessary

Access to premises by where no vehicular crossing is provided (ref: section 184, The Highways Act 1980) –

The Highways Act 1980 makes it a specific requirement for an occupier of adjacent premises who wishes to habitually access their property by driving over a footway or verge area, to have that area adapted for the purpose by provision of a vehicle crossing, (ie “dropped kerbs” and strengthened surfaces necessary to protect underground services). However, this again is a massively abused requirement in this day and age and much damage is caused to highway surfaces as a result.

Section 184 of the Act empowers local Highway Authorities to serve Notice and to compulsorily construct such a vehicle crossing, (and to recharge the full reasonable cost of so doing) where an occupier of adjacent premises flouts this requirement. However, the procedure involved is very staff-intensive, can involve appeals going as far as The Secretary of State’s office and is only now routinely pursued to completion in cases where actual damage to the highway is in evidence.

Nevertheless, inspectors should still record details of all properties that appear to have driveways and/or internal parking provision but which lack a properly constructed vehicle crossing.

Skip Permits (ref: sections 139 & 140, The Highways Act 1980) –

Builders skips can be deposited on the highway only by permission and issue of a permit to do so – and issue of such permit is subject to various restrictions that are outlined in section 139 of the Act, to the production of adequate insurance cover and to a charge. Skips that are deposited either in contravention of the permit, or without issue of a permit at all, can be removed and ultimately disposed of. Skip permits are issued by the Street Works section and inspectors should note and record any that they discover so that their validity can be verified.

INSPECTION PROCESS FLOW CHART

KEY TO FUNCTIONS:

HIGHWAY TECHNICIANS

SAFETY INSPECTORS

ADMINISTRATION TEAM

HIGHWAY SUPERVISORS

HIGHWAY OPERATIVES

