

**DERBYSHIRE COUNTY COUNCIL**

**MEETING OF CABINET MEMBER – JOBS, ECONOMY AND  
TRANSPORT**

**9 July 2013**

Report of the Strategic Director – Environmental Services

**UPDATED TECHNICAL ANNEX TO THE HIGHWAY NETWORK  
MANAGEMENT PLAN – HIGHWAY SAFETY INSPECTIONS  
MANUAL**

(1) **Purpose of the Report** To seek the Cabinet Member's approval to a revised Technical Annex in the Highway Network Management Plan (HNMP).

(2) **Information and Analysis** The first edition of the HNMP was produced in June 2005 and approved by Cabinet on 19 July 2005 (Minute No. 331/05 refers).

Cabinet endorsed that a regular review of the HNMP and evaluation of Policies and Standards is undertaken that are consistent with the wider principles of integrated transport, sustainability and value for money.

The previous update was approved by the Cabinet Member – Environmental Services on 12 June 2012 (Minute No. 143/12 refers).

In early 2012 a working group was formed, which included a selection of technical staff and highway inspectors, to produce a new version of the manual. In addition, the creation of the Roadworks Centre has included refresher training for the Highway Inspectors and other associated staff. Feedback on the new manual from all attendees was incorporated alongside working group advice to help produce the final version.

It is now necessary to update the HNMP with a revised Technical Annex entitled: '*Highway Safety Inspections Manual*'. This document will supersede the previously approved version titled '*Highway Safety (Instructions to Inspectors)*' dated November 2003 (final revision October 2009).

It is necessary that the original document is replaced with this new version to take account of various modifications to bring the policy and standards up to date. The changes are primarily in sections relating to:

- Frequency of inspections
- Information to be recorded
- Defect risk assessments
- Investigatory levels
- Response times

One of the main objectives of the new manual is to reduce the number of defects that are temporarily repaired and increase the number of defects that are repaired 'right first time'; especially potholes as recommended in the recent *'Pothole Review – Prevention and a better Cure'* published by the Highways Maintenance Efficiency Programme.

(3) **Financial Considerations** In adopting new and revised policies, standards and procedures, the Authority will need to have regard to the resources available and ensure that the standards set are both deliverable and meet any statutory requirement which may be placed on the Authority.

(4) **Legal Considerations** Under Section 41 of the Highways Act 1980, a Highway Authority has a statutory duty to maintain a highway maintainable at public expense. Section 58 of the same Act allows a Highway Authority to use a 'special defence' for claims against it, if it can be shown that the Highway Authority has taken such care as in all the circumstances was required to secure that part of the highway to which the action relates was not dangerous to traffic. By keeping the HNMP up to date, it will be an additional argument available to the Highway Authority to enable it to demonstrate that it is taking all reasonable steps to deliver both a safe and sound highway network.

(5) **Equality and Diversity Considerations** The HNMP and its Technical Annexes seek to ensure that equitable benefits are available to all users of the Council's Highway Network.

(6) **Human Resources Considerations** Posts currently exist within the Environmental Services Department to implement the requirements as described in the new Technical Annex.

(7) **Environmental Considerations** In pursuing the objective of Network Sustainability in the latest version of the national 'Code of Practice – Well-Maintained Highways' dated 24 May 2013 it highlights the key issue of maximising the environmental contribution made by highway network management policies and practice and their subsequent revisions through the HNMP. The wide range of relevant issues considered, when updating policies,

standards and procedures, includes climate change, noise, materials utilisation, waste management, recycling, pollution control, conservation, biodiversity and environmental intrusion.

(8) **Health Considerations** The legal framework in the 'Code of Practice – Well-Maintained Highways' recommends, that a HNMP should consider a wide range of issues including duty of care, powers and duties, related powers and duties, health and safety and the management of risk.

This revised Technical Annex relates to health and safety and the management of risk.

In preparing this report the relevance of the following factors has been considered: prevention of crime and disorder, property and transport considerations.

(9) **Key Decision** No.

(10) **Call-In** Is it required that call-in be waived in respect of the decisions proposed in the report? No.

(11) **Background Papers** The Highway Network Management Plan and The Code of Practice – Well-Maintained Highways July 2005 (last updated 24 May 2013). Officer contact details – Paul Millership, extension 38151.

(12) **OFFICER'S RECOMMENDATION** That the Cabinet Member approves and adopts the new Highway Safety Inspections Manual as a Technical Annex for the Highway Network Management Plan with immediate effect.

**Mike Ashworth**  
**Acting Strategic Director – Environmental Services**

# **Derbyshire County Council Environmental Services**

## **HIGHWAY SAFETY INSPECTIONS MANUAL**

**(INSTRUCTIONS FOR SAFETY INSPECTIONS)**

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This document will be available in EDRM and this will be the key medium by which amendments will be released.

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## FOREWORD

### F1 SPECIAL NOTE

**F1.1 This document supersedes the previous document titled – ‘*Highway Safety Inspections (Instructions to Inspectors)*’ dated November 2003 (final revision October 2009)**

### F2 GENERAL

F2.1 The changes required to the previous version, as set out in this new edition, are essential to reflect the latest standards being adopted by members of the Midland Service Improvement Group (MSIG)<sup>1</sup> and national guidance.

F2.2 This manual is intended for employees involved in the safety inspections of Derbyshire’s highway network. It is not intended to cover inspections of Public Rights of Way (generally rural footpaths and bridleways as shown on the Definitive Map), detailed Street Lighting inspections and detailed Tree inspections and other asset inspections – see Section 10.

F2.3 This document reflects the recommendations of the latest version of Well-maintained Highways: Code of Practice for Highway Maintenance Management dated July 2005.

### F3 USE OF DOCUMENT

F3.1 This is a controlled document and it will be updated as details of legislation, updates to Well-maintained Highways: Code of Practice for Highway Maintenance Management, other national guidance and resources etc. change.

F3.2 This document includes information on various inter-related topics and aspects of particular issues that may be covered in different places, therefore individual sections should not be read in isolation.

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<sup>1</sup> This Service Improvement Group is a collective of Midlands and North West English Shire Counties, Shire Unitaries and City Unitaries sharing Best Practice within the disciplines of Highways and Transportation.

## SECTION 1 - THE NEED FOR HIGHWAY INSPECTIONS

### 1.1 GENERAL

- 1.1.1 Under Section 41 of the Highways Act 1980 Derbyshire County Council has a statutory duty to maintain highways maintainable at public expense.
- 1.1.2 Neglecting this duty can lead to claims against the County Council for damages resulting from a failure to maintain a highway.
- 1.1.3 Under **Section 58** of the **Highways Act 1980**, the highway authority can use a '**Special Defence**' in respect of action against it for damages for non-repair of a highway if it can prove that it has taken such care as was reasonable.
- 1.1.4 Part of the defence rests upon:
- 1.1.4.1 *'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'.*
- 1.1.4.2 This is where highway authorities have to show that they carry out highway safety inspections in accordance with their policies and national guidance. Highway Inspection Reports are part of the evidence used to show that the highway authority has acted reasonably.
- 1.1.5 **Section 58** of the Highways Act also states that:
- 1.1.5.1 *'The court shall, in particular, have regard to:*
- a. The character of the highway and the traffic which was reasonably to be expected to use it*
  - b. The standard of maintenance appropriate for a highway of that character and used by such traffic*
  - c. The state of repair in which a reasonable person would have expected to find the highway'*
- 1.1.6 Case history demonstrates that the highway authority must also be recording all customer reports of highway defects, however not all defects which the authority becomes aware of by inspection or customer report need to be



repaired. 'Confirm' records may also be used as evidence to show that the highway authority has acted reasonably.

- 1.1.7 This provides a system of prioritising repairs within the available budgets / resources that is consistent with the above criteria.

## **SECTION 2 - CUSTOMER CARE POLICY**

### **2.1 GENERAL**

- 2.1.1 All enquiries are logged into Confirm. The system forwards the details to the most appropriate officer(s) for consideration or action and response in accordance with the departmental customer care targets and procedures.

## **SECTION 3 - PURPOSE OF SAFETY INSPECTIONS**

### **3.1 GENERAL**

- 3.1.1 The aims of safety inspections are to identify and, where possible, remove those hazards causing danger to highway users. Additionally this process supports the development of various maintenance programmes, to preserve the assets and keep the highway in a serviceable condition. This is in line with our overall aims of network safety, serviceability and sustainability.
- 3.1.2 Highway Safety Inspections are undertaken to identify all defects that are starting to or likely to, in the future, create a danger or serious inconvenience to users of the network or the wider community.

## **SECTION 4 - RESPONSIBILITY OF PERSONS UNDERTAKING INSPECTIONS**

### **4.1 GENERAL**

- 4.1.1 The person undertaking an inspection is responsible for the accuracy of that inspection and the recorded information. In certain circumstances, that person may be called into Court to substantiate their inspection records. Any employee involved in the inspection process may be required to provide information relating to third party claims received and provide statements towards the defence of claims where the County Council's legal and insurance representatives are involved.

## SECTION 5 - NETWORK HIERARCHY AND SAFETY INSPECTIONS

### 5.1 GENERAL

- 5.1.1 Derbyshire County Council has set its own standards for the frequency of its highway safety inspections<sup>2</sup>. These have been approved by Elected Members and take into account national guidelines, issued in the Code of Practice for Maintenance Management '*Well Maintained Highways*'.

### 5.2 NETWORK HIERARCHY

- 5.2.1 A network hierarchy is crucial to asset management in establishing levels of service and to the network management role for developing co-ordination and regulating occupation.

5.2.2	TABLE 1	FREQUENCY OF INSPECTIONS	
Feature	Hierarchy	Category	Frequency of Safety Inspection
Carriageways	2	Strategic Routes	1 month
	2(a)	Strategic County Routes	1 month
	3(a)	Main Distributors	1 month
	3(b)	Secondary Distributors	1 month
	4(a)	Link Road (Locally Important Roads)	3 months
	4(b)	Local Access Roads (All other metalled Roads)	1 year
Footways	1(a)	Prestige Area	1 month
	1	Primary walking route (including shared use facilities)	1 month
	2	Secondary walking route (including shared use facilities)	3 months
	3	Link Footways (Non-interlinking footways)	As for c/way
	4	Local Access Footways	As for c/way
Cycleways	A	Carriageway – Contiguous or shared	As for c/way
	B	Footway – Contiguous or shared	As for f/way
Ancient Highway	Unmetalled	Established before 1835 and are assumed to be a publicly maintainable highway rather than an adopted one. (Generally only those in urban areas).	1 year

<sup>2</sup> Based on paragraph 9.4.9 in Well-maintained Highways.

- 5.2.3 Each part of the network is assigned a hierarchy which relates to its importance to transportation and usage. These hierarchies are stored in Confirm and records are kept of hierarchy changes.
- 5.2.4 Hierarchies need to be dynamic and regularly reviewed to reflect changes in network characteristics and functionality, so that maintenance policies, practices and standards reflect the current situation rather than the use expected when the hierarchy was originally defined and or last modified.
- 5.2.5 Highway Inspectors are able to evaluate their inspection routes when changes occur in characteristics and functionality and as a result they can make recommendations for a re-classification as they see appropriate. This process is undertaken on their hand-held devices.
- 5.2.6 Footway hierarchies can be different to carriageway hierarchies and therefore some roads have different hierarchy classifications and potentially inspection frequencies for carriageways and footways.
- 5.2.7 Where carriageway and footway hierarchies intersect, for example at pelican or zebra crossings, bollards or other defined crossing points at junctions, the footway hierarchy should always take precedence in determining of inspection frequencies, defect definition and responses. This principle should also apply to intersections between carriageways and cycle routes and between cycle routes and footways.
- 5.2.8 Due to the differences in categories between carriageways, footways and cycleways, it may be necessary in certain instances to inspect each element at different times. Conversely there will be instances where the frequencies for each are the same. These elements may thus be inspected at the same visit.
- 5.2.9 Link Footways are linking local footways through urban areas and busy rural footways. They are **not** interlinking footways, which are, for example, footways between 2 housing estate roads.
- 5.2.10 Ancient Highways will generally be inspected in urban areas on an annual basis depending on their usage; others will be dealt with on a reactive basis to assess the overall condition and safety. Defects identified by the inspecting officer as being hazardous will be recorded and appropriate remedial action taken. Defect definitions:
- Hazardous – Likely to result in serious injury to people – actionable defect
  - Obstruction – Blocks the use of an ancient highway – actionable defect
  - Inconvenience – Minor problem that does not prevent the use of the ancient highway

- 5.2.11 **All defined inspection frequencies should be maintained in accordance with Table 1.**
- 5.1.12 The Authority will ensure that the routes include the existing highway network and newly adopted highways, where appropriate. These will be added to the inspection routes as necessary.

## SECTION 6 - METHOD OF INSPECTION

### 6.1 DRIVEN

- 6.1.1 Carriageway Safety Inspections, when driven, **must** be undertaken by **two people** in a suitable vehicle travelling at an appropriate speed that will enable adequate recording of defects, with one driving and the other inspecting. The driver will not be expected to be actively involved in identifying and recording defects, but will concentrate on ensuring the safe passage of the vehicle.
- 6.1.2 The carriageway inspections of Derbyshire County Council's defined High Speed Roads (50mph and above) / High Volume of Traffic lengths may require an approved risk assessment, suitable traffic management and / or use of a specified vehicle.
- 6.1.3 See Appendix C – 'Inspecting High Speed and High Traffic Volume Roads'.
- 6.1.4 A highway with footways on either side must be driven in both directions.
- 6.1.5 The survey vehicle should be equipped with high intensity roof-mounted flashing beacons and high visibility reflective markings as a minimum, with other additional features being required subject to certain situations that may include, for example, high speed roads and highly trafficked roads etc.
- 6.1.6 The inspection of any Traffic-sensitive streets should be surveyed at off-peak times, where practical.

### 6.2 WALKED

- 6.2.1 Carriageways can be inspected by one person on foot if the person is walking on a footway and can inspect the footway and carriageway at the same time.
- 6.2.2 All Category 1 and 2 footways (if there is a footway on both sides of the road) are to be inspected in both directions.

## **SECTION 7 - HEALTH & SAFETY AND CONSTRUCTION DESIGN & MANAGEMENT**

### **7.1 GENERAL**

- 7.1.1 Inspections must be carried out in a safe manner so as not to endanger staff or the public. **All operations should have a current risk assessment** which must be followed by all staff. In addition general codes of practice are also available for additional guidance.
- 7.1.2 If in doubt, consult your manager and or refer to the risk assessments and general codes of practice on either Dnet or in EDRM as appropriate.

### **7.2 RISK ASSESSMENTS**

- 7.2.1 The following are risk assessments relating to highway inspections:
- a. Toolbox Talk 54 Rev.1 – Marking Out on the Highway – Dynamic Risk Assessment
  - b. 2012-11-19 Highways Inspections on Foot
  - c. 2012-11-19 Driven Highways Inspection

### **7.3 CONSTRUCTION DESIGN AND MANAGEMENT (CDM) – (GCP 15)**

- 7.3.1 When an inspector identifies defects on the highway, the opportunity is available to identify hazards that potentially could affect work teams or contractors undertaking the subsequent repair. This hazard identification is not only a duty of Designers under CDM but is an important part of risk evaluation in departmental procedures and also leads to improved efficiency when work teams or contractors are mobilised well prepared.
- 7.3.2 GCP 15 Appendix 2 is available on either Dnet or in EDRM

### **7.4 WORKING ON THE HIGHWAY (GCP09R3)**

- 7.4.1 This document advises employees of safety precautions that **must** be followed to reduce the risk of such collisions, not only to themselves, but to all road users.
- 7.4.2 Highway Inspectors shall wear an acceptable high visibility top when working or carrying out inspections on the footway or verge.

- 7.4.3 Highway Inspectors shall wear an acceptable high visibility top and high visibility trousers when working or carrying out inspections in the carriageway at all times (including short durations)
- 7.4.4 GCP09r3 is available on either Dnet or in EDRM

## **SECTION 8 - INFORMATION TO BE RECORDED**

### **8.1 GENERAL**

- 8.1.1 Each inspection must be recorded against the relevant Unique Street Reference Number (USRN) for the named street. All actionable defects found, must be recorded as part of the inspection.
- 8.1.2 If no defects are present this must be recorded as part of the inspection.
- 8.1.3 The inspection should show the inspector and driver (if applicable) who carried out the inspection. Inspections must not be carried out in another person's name.
- 8.1.4 All inspections will be retained by the Authority for future reference.
- 8.1.5 Inspections are required to be recorded on an approved hand-held device capable of transferring data from the field into Confirm
- 8.1.6 Photographs taken are to be at the inspector's discretion and must be attached to the enquiry or defect form.
- 8.1.7 When recording inspections on a hand-held device it will automatically time and date stamp the inspection.
- 8.1.8 High Risk defects which require immediate attention should be transferred from the device as soon as the inspection on a particular street has been completed. If it's not possible to transfer the defect(s) at the time of inspection, it must be transferred within **1 hour** of it being recorded. Low Risk defects can be transferred once an inspection has been completed.



## SECTION 9 - INSPECTION COVERAGE

### 9.1 SAFETY INSPECTIONS

9.1.1 A safety inspection should identify and record highway defects such as:

- a. Debris, spillage or contamination on footways, cycleways, carriageways or hard shoulders
- b. Displaced road studs lying in the carriageway
- c. Overhead wires in a dangerous condition
- d. Vandalism, the results of which are likely to endanger the public
- e. Abrupt level differences in footways, cycleways, carriageways or hard shoulders, the results of which are likely to endanger the public
- f. Potholes, cracks and gaps in footways, cycleways, carriageways or hard shoulders, the results of which are likely to endanger the public
- g. Damaged, broken or displaced kerbs representing a safety hazard
- h. Edge deterioration of the carriageway
- i. Apparent severe loss of skid resistance of the carriageway
- j. Missing or defective ironwork and other apparatus that is the responsibility of works promoter companies, which should be directed to the relevant works promoter company for action as soon as possible, under section 81 of the NRSWA 1991. This should be within a timescale decided by the Inspector to be reasonable and in line with relevant NRSWA Codes of Practice
- k. Standing water, water discharging onto or overflowing across the highway if present at the time of inspection
- l. Blocked drains and grips
- m. Damaged, defective, displaced, missing traffic signs, signals or lighting columns
- n. Worn road markings, missing road markings and road studs.
- o. Dirty or otherwise obscured traffic signals and signs
- p. Works Promoters' defects
- q. Bollards and street furniture defects
- r. Damaged safety fencing, parapet fencing, handrail and other barriers
- s. Sight-lines obscured by trees, other vegetation, unauthorised signs and other features
- t. Overhanging dead trees or trees with obvious die-back, which could fall on the highway
- u. Overhanging vegetation causing obstruction to pedestrian or vehicular traffic
- v. Unauthorised signs causing a danger to pedestrian and vehicular traffic

9.1.2 This list is not exhaustive and does not include every type of defect, if you are still unsure consult your manager. The important issue is to ensure the safety of the travelling public.

9.1.3 Also see Appendix A, which lists the Confirm codes, investigatory levels and default response times.

## SECTION 10 - ANCILLARY INSPECTION REGIMES

### 10.1 GENERAL

10.1.1 Street lamps and columns, internally illuminated road signs and external lighting units, together with traffic signals, pedestrian signals and other control and monitoring installations, safety barriers, trees and public rights of way etc. are included for inspection purposes in other maintenance regimes. Nevertheless, the highway inspector is expected to note and report any potential hazard found during a safety inspection.

10.1.2 Examples may include damage to a safety barrier post or missing access doors to columns or posts leaning to the extent that they are an obstruction to passing vehicular or pedestrian traffic.

### 10.2 SERVICE INSPECTIONS OF TREES BY ARBORICULTURALISTS

10.2.1 Highway inspectors will only undertake safety inspections of highway trees; including those trees outside, but within falling distance of the highway, for ill health or obvious damage etc.

10.2.2 Separate programmes of more specialist technical tree inspections (Service Inspections) are undertaken by arboricultural advisors at the appropriate frequency to ascertain if any works are required based on assessment of respective risks for example extensive root growth, which could cause significant damage to the surface of a footway, particularly in an urban area.

10.2.3 Most trees should ideally have an arboricultural inspection every five years but this period may be reduced on the advice of an arboriculturalist. Default intervals for arboricultural service inspections are listed in Appendix D.



## **SECTION 11 – Defect Risk Assessments**

### **11.1 GENERAL**

- 11.1.1 Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the highway network. Such defects include those that require urgent attention as well as those where the locations and sizes are such that longer periods of response are acceptable.
- 11.1.2 This manual sets out revised classifications of highway defects that are designed to reduce the amount of reactive work undertaken, moving this work into longer term co-ordinated and planned works programmes. This approach is designed to reduce the costs of reactive maintenance, reduce the number of temporary repairs on the network and allow a higher proportion of first time permanent repairs to be completed.

### **11.2 RISK IDENTIFICATION**

- 11.2.1 An inspection item for which the defect investigatory level is reached or exceeded is to be identified as a risk. See Table 2 below.

### **11.3 RISK EVALUATION**

- 11.3.1 All risks identified through this process have to be evaluated in terms of their significance, which means assessing the likely impact should the risk occur and the probability of it actually happening.

### **11.4 RISK IMPACT AND RISK PROBABILITY**

- 11.4.1 The **impact** is quantified by assessing the extent of the damage likely to be caused should the risk become an incident. As the **impact** is likely to increase with increasing speed, the amount of traffic and type of road are clearly important considerations in the assessment.
- 11.4.2 The **probability** is quantified by assessing the likelihood of users, passing by or over the defect, encountering the risk. As the **probability** is likely to increase with increasing vehicular or pedestrian flow, the network hierarchy and defect location are, constantly, important considerations in the assessment.

## **11.5 DEFICIENCY AND RISK**

- 11.5.1 In addition to the above the overall risk assessment (Risk Impact versus the Probability of the Risk occurring plus the Response Time) will depend upon the inspector's assessment at the point of inspection, which should be based on the:
- a. Overall probability and impact of damage or accident occurrence
  - b. Hierarchy and frequency of inspection from Table 1 above
  - c. Depth, surface area or other degree of deficiency of the defect or obstruction (extent of the defect)
  - d. Location of the defect relative to other highway features such as junctions and bends
  - e. Location of the defect and its likely effect on the road user
  - f. Consideration that should be given to pedestrians and vulnerable road users and whether it affects walking routes outside, elderly people's homes, doctors' surgeries etc.
  - g. Consideration given to the position of the defect in traffic lanes and in particular the wheel tracks.
  - h. The volume, characteristics and speed of all types of traffic
  - i. Nature and extent of the interaction with other defects
  - j. Seasonal weather conditions and time of year, especially considering the potential for the freezing of standing water
- 11.5.2 Where investigatory levels in Appendix A are not met, the nature and response time of any action is determined by using Table 2 below:

**11.5.2.1**

**TABLE 2**

**DEFECT RISK ASSESSMENT**

THE RISK RATING IS SCORED BY APPLYING SCORES TO THE MATRIX WERE:  
LOW = 1, MEDIUM = 2 AND HIGH = 3

RISK IMPACT ↓	PROBABILITY OF ACCIDENT AND / OR STRUCTURAL FAILURE →		
	Low	Medium	High
Low	1 + 1 = 2	2 + 1 = 3	3 + 1 = 4
Medium	1 + 2 = 3	2 + 2 = 4	3 + 2 = 5
High	1 + 3 = 4	2 + 3 = 5	3 + 3 = 6

Note: This section of the table is not to be used by the Inspectors

AGGREGATE SCORE ASSESSED FOR THE FOLLOWING, USING:  
1-2 = LOW, 3-4 = MEDIUM AND 5-6 = HIGH

RISK IMPACT ↓	PROBABILITY OF ACCIDENT AND / OR STRUCTURAL FAILURE →		
	Low	Medium	High
Low	Low	Medium	Medium
Medium	Medium	Medium	High
High	Medium	High	High

Notes:

1. This Section is for use by the Inspectors
2. All default response times are appropriate to **Medium** level risk
3. For **Low** risk downgrade the response by one level
4. For **High** risk escalate the response by one level

11.5.3 The classification for High Risk defects, are those that require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration. It is considered that, in general, potholes of less than 40mm in depth in the carriageway and 20mm in the footway do not pose an excessive risk to either network users or the structural integrity of the highway.

11.5.4 See Appendix A for additional details.

11.5.5 **It is essential that defects are categorised correctly so that all defects requiring urgent attention are clearly identified.**

## **11.6 HIGH RISK DEFECTS**

- 11.6.1 These are **all** defects that require appropriate action to repair or make safe at the time of inspection, **if reasonably practicable**. Generally, in this context, making safe may constitute displaying warning notices, coning off and or fencing off to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of inspection, repairs or other actions of a permanent or temporary nature should be carried out as soon as possible with a target of 90% completed by the next working day.
- 11.6.2 High Risk pothole defects, wherever possible, should be repaired permanently as described in the Reactive Maintenance Teams Operational Manual.
- 11.6.3 High Risk pothole defects that require a temporary 'plugged' repair to make them safe because a permanent repair is not possible, for example, due to the location requiring further traffic control or weather conditions may prevent a successful permanent repair need to be downgraded to a Medium or Low Risk defect once they have been made safe.
- 11.6.4 Temporary High Risk pothole repairs can also be considered if the road has been designated for more extensive patching or resurfacing works.
- 11.6.5 High Risk defects must take first priority of the available resources and budgets.

## **11.7 MEDIUM RISK DEFECTS**

- 11.7.1 These defects present a moderate level of hazard where traffic levels are low.

## **11.8 LOW RISK DEFECTS**

- 11.8.1 Low Risk defects present a moderate to minor level of hazard and are generally categorised to correspond to their inspection frequency and their position in their respective hierarchy as shown in Appendix A.
- 11.8.2 These defects are those which, following their risk assessment, are deemed not to represent an urgent or imminent hazard or risk of short term structural deterioration. It is accepted that these defects may have safety implications, although of a far lesser significance than High and Medium Risk defects. These defects are not required to be urgently rectified, however for those which do require repair shall be undertaken within a planned programme of works with the priority determined by the inspector.

- 11.8.3 Low Risk defects should be completed within timescales and priorities stated on the works order.

## **11.9 ANCILLARY DEFECTS**

- 11.9.1 These defects are categorised as Enforcement, External Agency and Internal Other Section for action by others. These defects will be directed, via the hand-held device, to the Control Centre for distribution to other sections or agencies, as appropriate.
- 11.9.2 Ancillary defects may range from those that need prompt attention to those that are deemed not to present an immediate or imminent hazard.

## **11.10 EXAMPLES OF DEFECTS**

- 11.10.1 The classifications, guidance and remarks are contained in Appendix A.

# **SECTION 12 - CLAIMS BY THIRD PARTIES**

## **12.1 GENERAL**

- 12.1.1 The Council receives claims for damages for alleged failure of its statutory duty that is Section 41 - Duty to maintain highways maintainable at public expense. The inspection records constitute an important part of the Council's defence documents. In the event of such a claim the person(s) undertaking the inspection may be required to comment on a Third Party Accident Report Form. It is important that the information given is accurate and honest. When commenting upon a claim, please study the information provided by the claimant, including the direction of travel.
- 12.1.2 If the claimant's version of events does not seem likely please remark upon it.

# **SECTION 13 - FURTHER HELP AND ADVICE**

## **13.1 GENERAL**

- 13.1.1 If you are unsure, or need further guidance on any matter related to highway safety inspections and condition assessments, please talk to your manager.
- 13.1.2 Also see Appendix B – 'References' in this document.

## **SECTION 14 - APPENDIX A – EXAMPLES OF HIGHWAY DEFECTS**

### **14.1 GENERAL**

- 14.1.1 A risk priority is assigned to each defect at the discretion of the Inspector by taking into account the severity of the defect and the risk that it poses to road users. The Inspector should consider the following guidance in exercising this discretion. The defects listed are **not** exhaustive and the Inspector will need to use risk assessments to decide what is likely to be hazardous, as local circumstances will apply.
- 14.1.2 How these defects should be treated will depend on the particular circumstances and the nature and speed of response required.

### **14.2 INVESTIGATORY LEVELS, CONFIRM CODES AND REACTION TIMES TABLES**

- 14.2.1 The following tables are to be used in conjunction with Table 2 above.
- 14.2.2 The complete list of Confirm Defect Codes and Default Response Times are in Table 18 below.

14.2.1	TABLE 3	SURFACE IRREGULARITY - CARRIAGEWAYS AND CATEGORY ‘A’ CYCLEWAYS (CONTIGUOUS / SHARED)					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Spalling / depression / bump / rutting ≤ 20m <sup>2</sup>		CD1	Cycleway and designated pedestrian crossing area on carriageway:				Permanent repairs should be programmed whenever possible.
Spalling / depression / bump / rutting >20m <sup>2</sup>		CD15					
Pothole		CD2					
Hazard – Pedestrian crossing area		CD4					
Other hazard – elsewhere		CD4	1. Greater than 20mm depth or greater than 20mm trip.	Obstruction e.g. building materials.	Defects that are the responsibility of a works promoter, company or other council etc.	Street lighting road opening.	Modular paving may be in either DCC or other Council ownership, but is generally other.
Carriageway - subsidence		CD6					
Gully lid - missing		DR3					
Gully - lid broken		DR3B					
Gully - parallel grating		DR4	2. Gap / crack greater than 20mm width and depth and greater than 200mm length.	Skip without a permit.		Traffic signal boxes.	Works promoter should be dealt with under the NRSWA - Section 81, but the defect may need making safe.
Gully – damaged road surface		GU5					
Drainage -Ironwork raised		DR5					
Drainage – Ironwork sunken		DR51					
Manhole cover - missing / damaged		DR6	Elsewhere on carriageway:	Illegal vehicular crossings.			High Risk defects should be made safe if a permanent repair is not possible.
Manhole – noisy / rocking		DR61 or SC22					
Service cover - missing / damaged		SC1					
Service cover - raised		SC2					
Service cover - sunken		SC21	1. Greater than 40mm depth.				Consideration should be given for powered two wheeled vehicles, cyclists, equestrians and pedestrians as appropriate.
Service cover - polished		SC3					
Loss of skid resistance – limestone, evidence of polishing and fatting up		CD5					
District council highway defect		DCHD					
Modular paving - missing / rocking / depression (DCC maintained)		CD1	2. Longitudinal Gap / crack greater than 20mm width and depth and greater than 200mm length.				



14.2.2	TABLE 4	EDGE DETERIORATION – CARRIAGEWAYS (UNKERBED)				
Defect Description	Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Carriageway edge – damaged / deterioration	CD3	Greater than 100mm 'drop-off' at the edge of an unimpeded road.  If a cycle route 50mm should be used.	Illegal access over rural verge.	N/A	N/A	Where constituting a hazard to the travelling public especially cyclists, powered 2 wheelers and equestrians.  Edge deterioration that has broken away should be reinstated as like for like.



14.2.3	TABLE 5	DRAINAGE, SURFACE WATER AND FLOODING – CARRIAGEWAYS AND FOOTWAYS							
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:		
Gully - blocked		DR1	Where excess water requires signing and guarding.	Prohibited discharge from private property, business or farmer's field etc.	Depression, holding water, in works promoter's trench, which is still in guarantee period.	Properties being flooded.	Flooding of properties to be reported to the Flood Risk Team.		
Grip - blocked		DR11							
Ditch - needs clearing		DR12							
Bolthole / hole in parapet wall / kerb outlet / escape for surface water - blocked		DR13							
Linear / beany block type - blocked		DR15	Properties at risk of severe flooding.					Standing water.	Ponding or discharging onto the highway, which constitutes a hazard of aquaplaning, vehicle avoidance measures or skidding, especially during winter.
Flooding		DR2							
Culvert – blocked / silted / collapsed		DR14							
Gully - dig out required		GU2							
Gully – damaged surface surrounding the frame		GU5							
Surface Water - ponding / standing		DR7							
Water discharging onto the highway		DR8							
Manhole – noisy / rocking		DR61 or SC22							

14.2.4	TABLE 6	LEVEL CROSSINGS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Carriageway - pothole		CD2	Item causing immediate danger to highway users.	N/A	Report via Control Centre.	N/A	Missing and displaced pad or pothole within the crossing must be reported to Network Rail as soon as possible.

14.2.5	TABLE 7	STREET WORKS AND ROADWORKS BY OTHERS – CARRIAGEWAYS AND FOOTWAYS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Carriageway - pothole in road opening		CD2	Item causing immediate danger to highway users.	Must be reported to the third party as soon as possible	Must be reported to the works promoter as soon as possible	S278 works.	Defects dealt with under NRSWA Sections 72 & 81, but defect must be made safe.  Repairs should be undertaken if works promoter or third party does not respond to notice / letter.
Footway - pothole in road opening		FD2					
Road opening - depression / bump		SWD					
Damage due to illegal access		FD4					
Lack of signage to street works		SWD					
Hazardous defect at street works		SWD					
Service cover – polished / worn		SC3					
Non-highway manhole – noisy / rocking		SC22					

14.2.6	TABLE 8	SURFACE IRREGULARITY - FOOTWAYS AND CATEGORY 'B' CYCLEWAYS (CONTIGUOUS / SHARED)					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Deterioration - spalling / depression / bump / rutting ≤ 20m <sup>2</sup>		FD1	Footway and dedicated cycleway:  1. Greater than 20mm depth or greater than 20mm trip.  2. Gap / crack greater than 20mm width and depth and greater than 200mm length.	Projections at low level.	Defects that are the responsibility of a works promoter, company or other council etc.	Tree root (Countryside Services).  S278 works.  Street lighting road opening.  Traffic signal pillars / boxes.	Permanent repairs should be programmed whenever possible.
Gap / longitudinal crack		FD1					
Deterioration - spalling / depression / bump / rutting >20m <sup>2</sup>		FD15		Tree root damage from private tree.			
Pothole		FD2					
Edging kerbs – moved / damaged		FD3		Cellar covers and grills.			
Tactile slabs – damaged / trip hazard		FD5					
Trip hazard		FD6		Roof drainage.			
Modular paving - missing / rocking / module / depression (DCC maintained)		FD8					
District council highway defect		DCHD		Obstruction e.g. building materials.			
Gully - missing lid		DR3					
Gully - lid broken		DR3B		Skip on F/W without a permit.			
Drainage – ironwork raised		DR5					
Drainage – ironwork sunken		DR51		Illegal or incomplete vehicular crossings.			
Manhole cover - missing / damaged		DR6					
Manhole – noisy / rocking		DR61or SC22					
Pedestrian crossing – missing / rocking module		FD6					
Service cover - missing / damaged		SC1					
Service cover - raised		SC2					
Service cover - sunken		SC21					
Service cover - polished		SC3					

14.2.7	TABLE 9	DEBRIS, SPILLAGE AND CONTAMINATION – CARRIAGEWAYS AND FOOTWAYS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Debris / glass / builders waste / other / spillage / contamination		DEB2	Item causing immediate danger to highway users.	Discharge onto the footway.	General detritus / rubbish clearance is a District responsibility.	N/A	Non-emergency debris / rubbish clearance is a district council responsibility.
Mud on highway		MUD		Persistent mud deposited on the highway.	Persistent spillages.		A notice may require serving under Highways Act or NRSWA.
Dead animal on highway		DEB1					High Risk making safe can include signing / treatment / removal of hazard.

14.2.8	TABLE 10	KERBING AND CHANNEL BLOCKS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Kerb – Missing / damaged / rocking		KERB	Greater than 20mm vertically in high volume pedestrian crossing areas (Category 1 & 2 footways).	Illegal vehicular crossing.	Works promoter defect on other council's asset e.g. kerb associated with modular paving in a town centre regeneration scheme	Contained in a pedestrian dropped crossing.	Additional consideration to be given to damaged, rocking, missing or dislodged kerbs contained in a pedestrian dropped crossing.
Channel block – missing / damaged / rocking		K1					Pedestrian dropped crossing kerb height no more than 6mm and works to be programmed.
Pedestrian crossing kerb - missing / damaged / rocking		KERB					

14.2.9	TABLE 11	VERGES AND VEGETATION					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Verge sightline - overgrown		VER3	Visibility at junctions & roundabouts severely restricted.  Footway impassable (Category 1 & 2 footways).  Items causing an immediate danger.	Sponsored roundabouts and verges.	District, parish & town council.	Roadside verges.  SSSI's etc.  DCC property.  Roadside verges.	Overgrown verge / vegetation or obstruction to footway.
Verge overgrown		VER4		Third party property.			Nuisance Items in the verge.
Verge - damaged / nuisance item		VER		Sponsored verges.			Externally, 3rd parties and Districts should be contacted and a notice served if appropriate or reported internally i.e. Technical Services.
				Unauthorised items on the verge of the highway.			Consideration should be given to equestrians and maintenance teams for mowing.
							Wildlife, especially in the respective growing season, should be considered with care <sup>3</sup>

<sup>3</sup> As described in the Wildlife and Countryside Act 1981 (as amended).

14.2.10	TABLE 12	SIGNS (NON-ILLUMINATED)					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Road sign – faded / misleading		RMS2	Replace Stop / Give Way sign or other regulatory sign.	Illegal signs.	N/A	N/A	Badly damaged or obscured or missing or worn ‘Stop’ or ‘Give Way’ sign etc.
Road sign - damaged		RMS3					Loose sign / post in danger of falling on pedestrian, or falling into carriageway.
Road sign – obscured / dirty		RMS4					All hazards must be reported immediately via the control centre.
							Temporary signs must be placed / erected for High Risk defects as necessary.

14.2.11	TABLE 13	ROAD MARKINGS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Road markings – faded / missing		RMS1	Faded or missing regulatory lines at major junctions.	Illegal markings.	Works promoter defect.	Markings not put back correctly after surfacing.  Street lighting defect.	Non regulatory lining & missing stud defects to be identified for lining and stud programmes.
Road studs - displaced		RMS5					Major junction lining faults to be passed to Manager.
Road studs - missing		RMS6					Temporary signs must be put out for High Risk defects as necessary.

14.2.12	TABLE 14	ROAD LIGHTING, TRAFFIC SIGNALS, CONTROLLED CROSSINGS, ILLUMINATED SIGNS AND BOLLARDS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Column – damaged		LI1	Lighting column, traffic signal or illuminated sign knocked down.	N/A	N/A	Report via the Control Centre.	ALL ELECTRICAL HAZARDS AND SERIOUS DAMAGE MUST BE REPORTED IMMEDIATELY VIA THE CONTROL CENTRE.
Column – door missing / loose		LI2					
Column – knocked down		LI3					
Illuminated bollard – damaged / out		LI4					
Illuminated sign - damaged / out		LI5	Exposed live electrical wiring.				
Light bowl – damaged / missing		LI6					
Light – dim / flickering		LI7					
Light – on during the day		LI8					
Light - out		LI9					
Lighting other		LI91					

14.2.13	TABLE 15	HIGHWAY STRUCTURES, THIRD PARTY PROPERTY AND STREET SCENE ITEMS					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Fencing – missing / damaged		FE1	Damaged causing immediate danger to highway users.	Private fencing and unlawful signs.  Item causing some obstruction to passage or vision or loose with risk to network users.	Damaged or missing temporary barriers or signs at road works.	Damaged or missing temporary barriers or signs at road works.  Salt bins to be reported to the Control Centre.  Street lighting cabinets.  Item causing obstruction to passage or vision or loose with risk to network users.  School property.	Dangerous defect to building, wall, fence etc. abutting the highway to be made safe as necessary.  Street furniture includes other external agency items as well as DCC’s.  Damage or missing pedestrian barriers to be made safe as necessary.  Salt bin could be DCC or Parish Council.  Only culverts ≥ 900mm in this category.  Report via the Control Centre.
Parapet – missing / damaged		FE2	Obstruction of carriageway, footway or cycleway that is deemed a hazard.		Other council street nameplates, litter bins & seats etc.		
Pedestrian guard rail – missing / damaged		FE3			Works promoter cabinets.		
Safety fencing – missing / damaged		FE4	Damaged or missing temporary barriers or signs at road works.	Unauthorised objects and structures.	Bus stop flag and pole.		
Street furniture - damage		SFU1		Dangerous fence.  Gate / door opening over highway.	Item causing obstruction to passage or vision or loose with risk to network users.		
Culvert (Structure) – blocked / damaged		DR14	Damage or missing pedestrian barriers.		Salt / Grit bin.		
Bollard (non-illuminated) – missing / damaged		BOL	Item causing some obstruction to passage or vision or loose with risk to network users.		Other council Building Control.		
Street nameplate – missing / damaged		SNP					
Advertising board – obstructing highway		ADB					



14.2.14	TABLE 16	TREES AND HEDGES					
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:
Highway tree - problem		TRE1	Items causing significant obstruction to passage or vision.	Third party tree or hedge.	District council under agency agreement.	Countryside Services.	High volume pedestrian trafficked area (Category 1 & 2 footways).  Wildlife, especially birds in the nesting season should be considered with care <sup>4</sup> .
Tree - emergency works		TRE2					
Private tree - problem		TRE3					
DCC hedge – obstruction / obscuring visibility		HEDG1					
Private hedge – obstruction / obscuring visibility		HEDG2					

14.2.15	TABLE 17	MISCELLANEOUS ITEMS						
Defect Description		Code	Investigatory Level	Enforcement	External Agency	Internal Other Section	Comments:	
Fly posting – obscuring visibility		ENV7	Item causing significant obstruction to passage or vision.	Visibility severely restricted.	Visibility severely restricted.	N/A	Abusive and racist graffiti must be reported to Corporate Resources	
Fly tipping – causing an obstruction		ENV8						
Overhead device / wires - defective		OWD						
Highway - obstruction / enclosure		OEH	Defective device / wire hanging with clear risk to network users.	Defective device / wire hanging with clear risk to network users.	High Risk defective items must be made safe.			
Graffiti – racist / abusive		VAN2						
Graffiti		VAN3						
Abandoned vehicle		ABV	Item racist or abusive.	Illegal planter.	Other council planter.		Enforcement may be required	
Other defect		OD						

<sup>3</sup> As described in the Wildlife and Countryside Act 1981 (as amended).

14.2.17	TABLE 18	CONFIRM DEFECT TYPE NAMES, DEFECT CODES AND DEFAULT RESPONSE TIMES				
Defect Type Name		Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Abandoned vehicle		ABV	Refer to District Council	Refer to District Council	Refer to District Council	Refer to District Council
Advertising board - obstructing highway		ADB	28 Day	Letter to occupier	Letter to occupier	Letter to occupier
Bollard non-illuminated – missing / damaged		BOL	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Carriageway - deterioration – spalling / depression / bump / rutting ≤ 20m <sup>2</sup>		CD1	28 day	28 day	28 day	28 day
Carriageway - deterioration – spalling / depression / bump / rutting > 20m <sup>2</sup>		CD15	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Carriageway - pothole		CD2	5 day	32 hour	5 day	28 day
Carriageway - edge deterioration		CD3	28 day	28 day	28 day	28 day
Carriageway - trip hazard		CD4	5 day	32 hour	5 day	28 day
Carriageway - loss of skid resistance – limestone / evidence of polishing / fatting up		CD5	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Carriageway - subsidence		CD6	32 hour	32 hour	32 hour	32 hour
Culvert – blocked / silted / collapsed		DR14	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
District council highway defect		DCHD	5 Day	Refer to District Council	Refer to District Council	Refer to District Council
Dead animal on highway		DEB1	32 hour	Remove to verge and refer to District Council	Remove to verge and refer to District Council	Remove to verge and refer to District Council
Debris – glass / builders waste / other / spillage / contamination		DEB2	32 hour	32 hour	32 hour	32 hour

Defect Type Name	Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Gully - blocked	DR1	28 day	28 day	28 day	28 day
Grip - blocked	DR11	28 day	28 day	28 day	28 day
Linear / beany drainage- blocked	DR15	28 day	28 day	28 day	28 day
Ditch needs clearing	DR12	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Bolthole / hole in parapet wall / kerb outlet or similar escape for surface water - blocked	DR13	28 day	28 day	28 day	28 day
Flooding	DR2	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Gully - missing lid	DR3	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Gully - lid broken	DR3B	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Gully - parallel grating	DR4	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Ironwork - raised	DR5	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Ironwork - sunken	DR51	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Highway manhole - noisy / rocking	DR61	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Manhole - cover missing / damaged	DR6	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Surface water - ponding / standing	DR7	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Water discharging on highway	DR8	5 Day	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier
Fly posting - obscuring visibility	ENV7	Refer to District Council	Refer to District Council	Refer to District Council	Refer to District Council

Defect Type Name	Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Fly tipping - causing an obstruction	ENV8	Refer to District Council	Refer to District Council	Refer to District Council	Refer to District Council
Footway deterioration – spalling / depression / bump / rutting $\leq 20\text{m}^2$	FD1	28 day	28 day	28 day	28 day
Footway deterioration – spalling / depression / bump / rutting $> 20\text{m}^2$	FD15	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Footway - pothole	FD2	5 day	32 hour	5 day	28 day
Footway - edging stones moved / damaged	FD3	5 day	32 hour	5 day	28 day
Footway - damage due to illegal access	FD4	5 Day	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier
Footway - tactile slabs - trip hazard	FD5	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Footway - trip hazard	FD6	5 day	32 hour	5 day	5 day
Footway – modular – missing / rocking / depression (DCC maintained)	FD8	5 day	32 hour	5 day	5 day
Fencing - missing / damaged	FE1	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Parapet - missing / damaged	FE2	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Pedestrian guard rail - missing / damaged	FE3	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Safety fencing - missing / damaged	FE4	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Gully - dig out required	GU2	28 day	28 day	28 day	28 day
Gully - surrounding surface damaged	GU5	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
DCC hedge problem - obstruction / obscuring visibility	HEG1	28 days	28 day	28 day	28 day

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Defect Type Name	Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Private hedge problem - obstruction / obscuring visibility	HEG2	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier
Channel blocks - missing / damaged	K1	5 day	32 hour	5 day	28 day
kerb – missing / damaged / upstand	KERB	5 day	32 hour	5 day	28 day
Column - damaged	LI1	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Column - door missing / loose	LI2	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Column - knocked down	LI3	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Illuminated bollard - damaged / out	LI4	32 hour	32 hour	32 hour	32 hour
Illuminated sign - damaged / out	LI5	32 hour	32 hour	32 hour	32 hour
Light bowl - damaged /missing	LI6	21day	21day	21 day	21 day
Light dim / flickering	LI7	21day	21day	21 day	21 day
Light - on during day	LI8	21day	21day	21 day	21 day
Light out	LI9	21day	21day	21 day	21 day
Lighting other	LI91	21day	21day	21 day	21 day
Mud on highway	MUD	32 hours	32 hours	32 hours	32 hours
Other defect	OD	28 day	28 day	28 day	28 day
Obstruction / enclosure of highway	OEH	5 Day	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier
Overhead wires - dangerous	OWD	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention

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Defect Type Name	Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Road markings - faded / missing	RMS1	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Road sign - faded / misleading	RMS2	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Road sign - missing / damaged	RMS3	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Road sign - obscured / dirty	RMS4	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Road studs - displaced	RMS5	32 hour	32 hour	32 hour	32 hour
Road studs - missing	RMS6	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Service cover - missing /damaged	SC1	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Service cover - raised	SC2	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81
Service cover - sunken	SC21	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81
Non-highway manhole - noisy / rocking	SC22	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81
Service cover - polished / worn	SC3	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81	Refer to responsible authority - Section 81
Street furniture - damage	SFU1	Refer to District Council	Refer to District Council	Refer to District Council	Refer to District Council
Street nameplate - missing / damaged	SNP	Refer to District Council	Refer to District Council	Refer to District Council	Refer to District Council
Street works - defective	SWD	5 Day	Refer to Street Works Section	Refer to Street Works Section	Refer to Street Works Section
Highway tree problem	TRE1	Refer to Tree Inspectors	Refer to Tree Inspectors	Refer to Tree Inspectors	Refer to Tree Inspectors
Tree - emergency works	TRE2	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention

Defect Type Name	Code	Response to Public Enquiry	Monthly Inspected Highways	Quarterly Inspected Highways	Annually Inspected Highways
Private tree problem	TRE3	5 Day	Initiate letter to occupier	Initiate letter to occupier	Initiate letter to occupier
Graffiti - on highway (abusive/racist) - refer to Corporate Resources	VAN2	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention	Urgent – requiring immediate action or attention
Graffiti on highway	VAN3	28 day	28 day	28 day	28 day
Verge - damaged	VER	5 Day	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme
Verge overgrown - sightline	VER3	28 day	28 day	28 day	28 day
Verge overgrown	VER4	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme	Nominated for planned programme

**Notes**

**Response Times:**

- 32 hour means 32 consecutive hours
- 5 day means 5 working days
- 28 day means 28 consecutive days



## **SECTION 15 - APPENDIX B – REFERENCES**

### **15.1 ASSOCIATED DOCUMENTS**

- 15.1.1 Any of the following publications may possibly be continuously being updated; consequently care should be taken to refer to the latest version.

### **15.2 WELL-MAINTAINED HIGHWAYS – CODE OF PRACTICE FOR HIGHWAY MAINTENANCE AND ITS COMPLEMENTARY GUIDANCE**

- 15.2.1 This national guidance on highway maintenance provides inspection related information in the following sections:

#### **15.2.2 Section 8 – Strategy and Hierarchy**

- 15.2.2.1 The general principles and objectives of highway maintenance management, including issues relating to inventory and hierarchy, are dealt with in this section and any associated complementary guidance.

#### **15.2.3 Section 9 – Inspection Assessment and Recording**

- 15.2.3.1 The establishment of an effective regime of inspection, assessment and recording is the most crucial component of highway maintenance.
- 15.2.3.2 Appendix B – Parameters for Defect Definitions is linked to Section 9 plus any associated complementary guidance.

#### **15.2.4 Appendix C – Highway Risk and Liability Claims Summary of Task Group Report**

- 15.2.4.1 This appendix is a short summary of a more comprehensive report titled 'Highway Risk and Liability Claims', which is a practical guide to Appendix C

#### **15.2.5 Supplement to Appendix C - Highway Risk and Liability Claims (2009)**

- 15.2.5.1 This report provides an overview of highways liability arising from highway maintenance including the latest philosophy and views on best practice and legislation.



### **15.3 APPLICATION GUIDE AG26 (V2) – FOOTWAY AND CYCLE ROUTE DESIGN, CONSTRUCTION AND MAINTENANCE GUIDE**

- 15.3.1 This manual provides practical field guidance for the construction and maintenance of footways. The advice given is compatible with Well-maintained Highways. Parts 3 and 4 refer to footways and cycleways respectively and Appendix B, in Part 5, deals with inspection methods.

### **15.4 STATUS OF NATIONAL CODES**

- 15.4.1 The suggested recommendations of the above Codes are explicitly not mandatory on the Authority.
- 15.4.2 The Authority also has certain legal obligations with which it needs to comply and which will, on occasion, be subject of claims or legal action by those seeking to establish non-compliance by the authority. It has been recognised that in such cases, the content of the above Codes may be considered to be a relevant consideration.
- 15.4.3 In the circumstances, where this Authority elects, in the light of local circumstances to adopt policies, procedures or standards differing from those suggested by National Codes, it is essential that these have been identified, together with the reasoning for such differences.
- 15.4.4 On this basis it is very important to note that where this Authority has chosen to make an approved departure from national guidance as a new policy, procedure or standard that the approved different approach is followed and not the national guidance, consequently it is vital, when referring to any national guidance, to check this Authority's current approved policies, procedures and standards before making a judgement.
- 15.4.5 **Essentially any departures in this manual from the national guidance could make those stated in the national guidance ineffective.**
- 15.4.6 The codes above are based on the assumption that available funding for highway maintenance will provide some flexibility for authorities to pursue a regime of assessment and rational planning of programmes and priorities. Where this is not the case, statutory obligations for network safety will need to take precedence.

## **15.5 REACTIVE MAINTENANCE TEAMS OPERATIONAL MANUAL (FORMERLY THE CARE TEAM MANUAL)**

- 15.5.1 This document is a companion for this manual. It is designed to set down the operational methods, processes and repair work types for dealing with matters like customer enquiries, items identified during safety inspections, items regarding safety and minor problems.

## **15.6 3C CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT AT ROAD WORKS**

- 15.6.1 This approved Code of Practice is a Technical Annex to the Council's Highway Network Management Plan. It was produced by the 3 Counties Alliance Partnership.
- 15.6.1.2 Its purpose is to promote uniform standards for installing temporary traffic management across the 3 Counties.

## **15.7 GUIDANCE FOR SAFER TEMPORARY TRAFFIC MANAGEMENT**

- 15.7.1 In 1994 the 3<sup>rd</sup> edition of 'Notes for Guidance on Safety at Road Works' was published by the Department of Transport and the County Surveyors Society (now ADEPT).
- 15.7.2 Since 1994 due to technical and operational developments and increased traffic levels the Highways Agency and the County Surveyors Society (at that time) decided to review the document.
- 15.7.3 A Review Group comprising representatives from all elements of the highway industry was assembled to produce a revised edition of the 1994 publication, which is now known as 'Guidance for Safer Temporary Traffic Management. This new version is now promoted by TRL, ADEPT, HA and HSE.

## **15.8 NEW ROADS AND STREET WORKS ACT 1991 (NRSWA)**

- 15.8.1 For the purpose of Safety Inspections Sections 64, 72 and 81 in the NRSWA are used for guidance purposes.

## **15.8.2 New Roads & Street Works Act 1991 – Section 64 – Traffic-sensitive Streets**

15.8.2.1 Under section 64 of the New Roads and Street Works Act 1991 streets may be designated by the Street Authority as traffic sensitive. A traffic sensitive street is defined as one on which any work will create unacceptable delays and disruption to highway users at specified times.

## **15.8.3 New Roads & Street Works Act 1991 – Section 72 – Powers of street authority in relation to reinstatement:**

15.8.3.1 *‘(4) If it appears to the street authority that a failure by an undertaker to comply with his duties under this Part as to reinstatement is causing danger to users of the street, the authority may carry out the necessary works without first giving notice and may recover from him the costs reasonably incurred by them in doing so.*

15.8.3.2 *They shall, however, give notice to him as soon as reasonably practicable stating their reasons for taking immediate action.’*

## **15.8.4 New Roads & Street Works Act 1991 – Section 81 – Duty to maintain apparatus:**

15.8.4.1 *‘(1) An undertaker having apparatus in the street shall secure that the apparatus is maintained to the reasonable satisfaction of-*

*(a) the street authority, as regards the safety and convenience of persons using the street (having regard, in particular, to the needs of people with a disability), the structure of the street and the integrity of apparatus of the authority in the street and*

*(b) any other relevant authority, as regards any land, structure or apparatus of theirs;*

*and he shall afford reasonable facilities to each such authority for ascertaining whether it is so maintained.’*

## **15.9 TRAFFIC SIGNS MANUAL**

15.9.1 The Traffic Signs Manual provides guidance for traffic authorities on the use of traffic signs and road markings.

## **SECTION 16 - APPENDIX C – INSPECTING HIGH SPEED & HIGH TRAFFIC VOLUME ROADS**

### **16.1 GENERAL**

- 16.1.1 **Every possible precaution MUST be taken to ensure that highway safety inspections are carried out in the safest possible way. If highway inspectors consider that circumstances make it unsafe to carry out a routine safety inspection then they should consult with their line manager.**
- 16.1.2 For safety and certain operational issues High Speed and High Traffic Volume Roads, as listed, are considered as being the same for the purpose of this appendix due to their potential to have higher risk locations and or situations, whilst executing highway safety inspections.
- 16.1.3 Additional specific site assessments may need to be undertaken at locations where safety standards are required to be higher than normal, which may require alternative methods for safety inspections.
- 16.1.4 When safety inspections, that require a higher risk assessment approach, are undertaken 'other' road types that do not meet this criterion, may also be inspected at the time for other operational purposes.
- 16.1.5 Inspection routes, especially on longer lengths, may require dividing into smaller sections of appropriate length to suit alternative inspection techniques and or traffic management options.

### **16.2 DEFINITIONS**

- 16.2.1 **High-speed Road** means a single or dual carriageway road which is subject to a permanent speed limit of 50mph or more.
- 16.2.2 **High Traffic Volume Road** means a road, which has traffic flows equal to or greater than 12,000 vehicles per day.
- 16.2.3 **Traffic Sensitive Street** means a street where traffic control measures may cause unacceptable congestion at certain times of the day (usually associated with commuter traffic) and therefore work causing an obstruction of the carriageway should not be undertaken between specified times (e.g. 07:00hrs – 09:30hrs & 16:00hrs – 19:00hrs).

16.2.4 Details are contained within the 'Traffic Sensitive Street Register'.

### **16.3 RISK ASSESSMENT APPROACH**

#### **16.3.1 Inspection Routes and Sections of Routes**

16.3.1.1 These can be graded from 1 – 4 in terms of their risk.

16.3.1.2 **Category 1** – This is a route or section of route that is considered low risk and is dealt with as described in Section 6 above.

16.3.1.3 **Category 2** - This is a route or section of route that is considered a higher risk, which will require some form of temporary traffic management based on a risk assessment.

16.3.1.4 **Category 3** - This is a route or section of route that is a 'traffic sensitive street' or time restricted that during certain times the traffic is far higher than the rest of the day. Outside of the time restriction the route or section of route can be treated as Category 1 or Category 2 as above.

16.3.1.5 **Category 4** - This is a route or section of route that is very high / special risk that will need a more detailed risk assessment and a permit to be completed before an inspection can take place.

### **16.4 TEMPORARY TRAFFIC MANAGEMENT OPTIONS**

16.4.1 The following guidance and options are for consideration when undertaking risk assessments for various safety inspection route conditions.

#### **16.4.2 GCP09: Working on the Highway**

16.4.2.1 This recommends that a Site Specific Risk Assessment is undertaken to determine the appropriate temporary traffic management, irrespective of the permanent speed limit, which should consider additional factors such as:

- a. Expected vehicle speed
- b. Volumes of PSV / HGV traffic
- c. Tidal flows
- d. Accident history
- e. Driver expectation

### **16.4.3 3C Code of Practice for Temporary Management at Road Works (Technical Annex to the Highway Network Management Plan)**

16.4.3.1 The available space at road works sites is often limited. To ensure that temporary traffic management does not compromise safety and to minimise disruption the following should be considered:

- a. Number and width of traffic lanes
- b. Adequacy of working space
- c. Use of static or mobile temporary traffic management
- d. Lane restrictions and temporary speed limits
- e. Positioning of signs
- f. Appropriate selection of equipment

16.4.3.2 In some instances applying the recommended safety clearance in Chapter 8 Part 1 Section D3.2 and Part 2 Section 03.2 will cause unwarranted disruption to traffic flows on some county high-speed roads especially during certain operations. However, while it is accepted that Chapter 8 makes recommendations based on good practice, the guidance cannot cover all situations. Therefore, temporary traffic management will be determined by a documented Site Specific Risk Assessment to suit the actual conditions that justify any departure from the lateral clearances.

16.4.3.3 For all roads with a permanent speed limit of 50mph or more, the lateral clearance between the edge of the working space and that part of the carriageway being used by traffic should be not less than 1.2m.

16.4.3.4 Chapter 8 gives guidance on how temporary traffic management should be installed. Part 1 Section D3.20 provides guidance for 'works off the carriageway not requiring guarding and / or signs'. Part 2 Section 08 gives guidance on 'single vehicle works' where a vehicle either stands for a short duration, or operates at low speed in the carriageway on an urban or low speed road where the use of mobile lane closure is inappropriate. The use of lorry-mounted crash cushions will be determined by the Site Specific Risk Assessment.

16.4.3.5 Applying the 'high-speed road' definition irrespective of the type or class of road, could involve a disproportionate amount of resources and unwarranted disruption on the road network. The 3C have considered this definition carefully and will adopt a safe, reasonable and practical approach. A Site Specific Risk Assessment to determine the appropriate temporary traffic management, irrespective of the permanent speed limit, should consider additional factors such as:



- a. Expected vehicle speed
- b. Volumes of PSV / HGV traffic
- c. Tidal flows
- d. Accident history
- e. Driver expectation

#### 16.4.4 **Mobile Lane Closure (MLC)**

16.4.4.1 This technique is not suitable for use on single carriageway roads with the exception of one-way slip roads. It is best suited to work on dual carriageway roads with hard shoulders. In these circumstances, the method can be used day or night.

16.4.4.2 MLC's can be carried out on dual carriageway roads without hard shoulders however these operations are more complicated and greater care and preparation is required.

16.4.4.3 This method should be carried out in good visibility, during periods of low risk when traffic flows are low and congestion is unlikely to occur.

16.4.4.4 The maximum allowable traffic flows, when this system may be operated is given in Traffic Signs Manual – Part 8.

#### 16.4.5 **Single Vehicle Operation**

16.4.5.1 Single vehicle works involve the use of a works vehicle displaying a 'keep left / right' sign at the rear or end facing oncoming traffic.

16.4.5.2 Single vehicle works must not be carried out on dual carriageway roads where the national speed limit applies.

16.4.5.3 The maximum length that the works can be is 1600m.

16.4.5.4 When a **single vehicle operation** is being considered for works which move steadily but at a slower speed than normal road operating speeds, there is a need to interpret the underlying principles contained within Traffic Signs Manual Chapter 8 in relation to the specific circumstances prevailing at the particular location.

16.4.5.5 There are basic requirements for using a single mobile vehicle or minor works with one or more vehicles.

16.4.5.6 The vehicle must have one or more roof mounted beacons operating.

16.4.5.7 A 'Keep Right / Left' sign must be displayed for drivers approaching on the same side of the carriageway, showing which side to pass. Vehicle mounted 'Keep Right / Left' signs must be covered when the vehicle is travelling to and from site. The sign must not simply be turned to point up or down.

#### 16.4.6 **Permit System**

16.4.6.1 This option requires that a 'Permit to Work' on a high speed and a high traffic volume road is produced for safety inspection routes or sections of routes. As part of the process a specific risk assessment detailing the description and locations will be required.

16.4.6.2 Restrictions on each of the roads in the route or sections of route e.g. available road widths and the number of vehicles per day are used to help determine the level of risk.

16.4.6.3 If the risk assessment recommends that a permit is required then no safety inspections should commence without the approved permits being issued.

#### 16.4.7 **Video Surveyor Systems**

16.4.7.1 A 'Video Surveyor' system combines a vehicle-mounted video camera and Global Navigation Satellite System (GNSS) for the rapid capture of the street scene combined with appropriate software to provide a complete end to end solution for the GIS data capture and digitisation of highway defects. This would allow the rapid 'capture' of any defects from the video, in the safety of a safe parking area, on the hand-held device or in a council office on the device or computer.

16.4.7.2 **Vehicle system configuration** - A GNSS receiver is connected to a tablet computer and a HD video camera mounted in or on a vehicle to automatically record synchronized data. The inspector is able start the system whenever required and then he / she can be safely driven along the inspection route at any legal speed.

16.4.7.3 The high resolution video camera is able to record directly to the internal hard disk of the camera or directly to a tablet, allowing sufficient hours of survey to be captured. Multiple cameras can be used to capture a wide angle of view, including front and rear facing cameras.

16.4.7.4 Videos can be replayed with a real-time positional display, video streams can be fast forwarded, or single frame stepped. When defects are identified a number of frames can be used to locate the defect.



#### **16.4.7.5 Video Surveys by Third Parties**

16.4.7.6 Specialist contractors can be appointed to undertake video surveys that capture high-resolution street-level images of highways assets and defects using bespoke inventory capture vehicles. The vehicles are specially adapted and equipped with high-grade tracking and GPS software.

16.4.7.7 The contractor is then able to extract detailed defect data from the images and supply them geo-referenced for loading into the Council's own software packages.

#### **16.4.7.8 Data Protection**

16.4.7.9 The images from the above surveys would need to be closely controlled and would be subject to the council's data protection policies.

### **16.5 VEHICLES AND THEIR SPECIFIC REQUIREMENTS**

16.5.1 Chapter 8 of the traffic signs manual provides guidelines for those operating on public highways on a range of issues including high visibility markings. Section five outlines what conspicuous markings are required on vehicles that stop for work purposes or inspection purposes on all public highways. In addition to the specifications regarding the colour of the vehicle, chapter 8 also sets out the requirements for rear reflective markings on all vehicles stopping on high speed roads.

16.5.2 It affects any operator of large or small vehicles from HGV's to road maintenance trucks, small vans and cars that intentionally stop for work or inspection purposes on high speed roads.

16.5.3 Generally speaking all vehicles must be marked up. Four marking options exist, but it is normally accepted that high visibility film markings maximise the benefits associated with being seen.

16.5.4 The high visibility film markings have to be on the rear of the vehicle. They should comprise of either of the following:

- a. Chevron markings comprising alternate strips of fluorescent red retro-reflective materials and fluorescent yellow non retro reflective material of not less than 150mm width each, inclined at 45-60°
- b. A solid block of fluorescent orange-red retro-reflective material

- 15.5.5 The markings should cover as much of the rear facing portion of the vehicle as possible without obscuring the windows, the vehicle's lighting or it's registration plate.
- 16.5.6 A 'fully specified hi-viz vehicle' means:
- Equipped with high visibility rear markings comprising chevron markings comprising alternate strips of fluorescent orange-red retro reflective material and fluorescent yellow non-retro reflective material, of not less than 150mm width each, inclined at 45° to the horizontal and pointing upwards, or a solid block of fluorescent orange-red retro reflective material
  - Red retro reflective tape shall also be applied to all rear facing edges of open doors, guardrails and equipment lockers
  - Roof-mounted amber light bar (visible 360 degrees) with a minimum of two independent light sources
  - A permitted sign e.g. 'Highway Maintenance' or 'Surveying' must also be appropriately displayed
  - Where the main body of the vehicle being used is not a recognised conspicuous colour (yellow or white) then the above markings should be supplemented by a high visibility fluorescent yellow retro reflective strip, of not less than 50mm wide, along the side of vehicle as a minimum
- 16.5.7 On certain roads an inspection vehicle that is fitted with a 'Crash Cushion' and high visibility signage etc. which is specifically designed for that purpose, may be required as a result of the 'Risk Assessment' and a 'Permit to Work'

## 16.6 Derbyshire's High-speed Network (as at 2009)

16.6.1	TABLE 20	HIGH SPEED ROADS WITH TRAFFIC VOLUMES EXCEEDING 15000 VEHICLES PER DAY		
Road	Description		AADT	Speed Limit (mph)
A61 – Derby Rd	North of Tupton		16565	60
A6 – Burley Hill	Derby		16904	50
A616 - Barlborough	East of M1 JCT 30		20829	60
A617	East of Temple Normanton		29340	60
A61	Chesterfield Inner Relief Rd		34774	60

16.6.2	TABLE 21	HIGH SPEED ROADS WITH TRAFFIC VOLUMES EXCEEDING 12000 VEHICLES PER DAY	
Road	Description	AADT	Speed Limit (mph)
A6	Chapel-en-le-Frith bypass	12182	60
A516	Etwall Bypass	13013	60
A6 – Buxton Rd	North of Dove Holes	13339	50
A61 – Chesterfield Rd	North of Alfreton	14145	50
A6 – Buxton Rd	North of Furness Vale	14798	50
A61 – Derby Rd	North of Tupton	16565	60
A6 – Burley Hill	Derby	16904	50
A616 - Barlborough	East of M1 JCT 30	20829	60
A617	East of Temple Normanton	29340	60
A61	Chesterfield Inner Relief Road	34774	60

16.6.3	TABLE 22	ROADS WITH TRAFFIC VOLUMES EXCEEDING 12000 VEHICLES PER DAY	
Road	Description	AADT	Speed Limit (mph)
A632	Long Duckmanton, West of M1	12220	40
Unclassified	Station Road, Ilkeston	12335	30
A6007	Heanor Road, Ilkeston	12356	40
A632	Long Duckmanton, East of M1	12387	40
A514	Stanton-By-Bridge	13148	30
B6052	High Street, Old Whittington	13215	30
A610	Ripley Road, Sawmills	13682	30
A619	Chesterfield Road, Middlecroft	13982	30
Unclassified	Rutland Street, Ilkeston	14319	30
A6007	High Street, Loscoe	14550	30
A511	East of Woodville	14804	40
A6	Gas Cottages Corner, Matlock	15792	40
A619	Duke Street, Staveley	16610	30
A6096	Lower Stanton Road, Ilkeston	19235	30
A61	Derby Road, Wingerworth	20602	40
A619	Brimington, Near Crematorium	21203	30
A6007	Chalons Way North, Ilkeston	23076	40
A6007	Chalons Way South, Ilkeston	28969	40

## **SECTION 17 - APPENDIX D – TREE SERVICE INSPECTIONS BY ARBORICULTURALISTS**

### **17.1 GENERAL**

- 17.1.1 The Council, as the Highway Authority, has a duty under the Highways Act 1980 to ensure that all trees in the highway and those outside but within falling distance of the highway, do not pose a threat to users of the highway, consequently the Council's Arboricultural Advisors will inspect all trees that meet this criteria.
- 17.1.2 The Council will not be held responsible for privately owned trees that have the potential to fall across the highway, as it is the responsibility of the landowner who has a duty of care under the Occupiers Liability Act 1984 to take reasonable precautions to prevent or minimise risk to personal injury from trees.
- 17.1.3 Many causes of tree failure are difficult to detect and often require a thorough inspection of the entire tree which is not always possible from a road side inspection, although where an arboricultural advisor suspects a tree to be showing signs of deterioration or structurally compromised, a report will be forwarded to the respective landowner.
- 17.1.4 It is assumed that trees believed to be within the boundary of an adopted highway are the responsibility of the Authority and that trees outside of this are considered privately owned. Where doubt occurs and asset management data proves inconclusive, a land registry search will be undertaken to ascertain ownership.

### **17.2 CARRIAGEWAY HIERARCHY – CATEGORIES 2, 2A & 3A**

- 17.2.1 The trees on these roads are generally inspected annually.
- 17.2.2 Where it is considered a route has been inspected thoroughly the route will be re-inspected in alternate years of walked or driven surveys.

### **17.3 CARRIAGEWAY HIERARCHY – CATEGORIES 3B, 4A & 4B**

- 17.3.1 The trees on these roads are generally inspected on a three year cycle.
- 17.3.2 Where concentrations of trees and volume of traffic are considered high, these roads may be inspected on a more frequent basis.

## **17.4 METHOD OF INSPECTION**

- 17.4.1 Inspections will be carried out using the principles of Visual Tree Assessment (VTA) and risk assessed using the Quantified Tree Risk Assessment (QTRA) technique. These are used as an additional tool to aid the decision making process in conjunction with a broad knowledge and practical experience of working with trees by an arboricultural advisor.
- 17.4.2 A Driven Inspection **must** be undertaken by **two people** in a suitable vehicle travelling at an appropriate speed (20mph or less) that will enable adequate recording of obvious defects, with one driving and the other inspecting. The driver will not be expected to be actively involved in identifying and recording defects, but will concentrate on ensuring the safe passage of the vehicle.
- 17.4.3 If obvious defects are observed then, if appropriate and safe to do so, the vehicle can be parked in a safe manner to allow the arboricultural advisor to undertake a more thorough inspection from outside of the vehicle.
- 17.4.4 The survey vehicle should be equipped with high intensity roof-mounted flashing beacons and high visibility reflective markings as a minimum, with other additional features being required subject to certain situations that may include, for example, high speed roads and highly trafficked roads etc.
- 17.4.5 The inspection of any trees on Traffic-sensitive streets should be surveyed at off-peak times, where practical.
- 17.4.6 Walked inspections will be undertaken particularly where there is a high concentration of trees along a route.
- 17.4.7 Tree Inspectors will generally work independently, but where it is considered to be a high risk to inspect individually on foot then a joint inspection will be undertaken. This will allow, where appropriate, for suitable parking of the vehicle with the ability for the vehicle to be moved at short notice and to give advance warning to users of the highway when further investigation to defects is deemed necessary.
- 17.4.8 Inspections are required to be recorded on an approved hand-held device capable of transferring data from the field into Confirm.

## **17.5 PRIVATELY OWNED TREES**

- 17.5.1 If privately owned trees are identified as being in a dangerous condition and they have the potential to put the safety of highway users at risk then the

Council will issue a report to the tree owner alerting them of the authorities' concerns.

- 17.5.2 Where necessary appropriate recommendations for remedial works to make the tree safe, which must be completed within 28 days, will be given to the tree owner.
- 17.5.3 The works required maintaining highway safety would need to be agreed between the owner and their approved contractor who must be qualified to LANTRA Awards Level 3 or equivalent. The Council's report is often based on a partial inspection, and a thorough inspection by the tree owner may be advised. These reports are linked to the Confirm system for access; providing a history for each enquiry.
- 17.5.4 If the tree is protected by virtue of being in a Conservation Area or Tree Preservation Order the tree report will highlight this. Network management will advise the tree owner that they may need to seek the permission of the relevant Planning Authority. Depending on the urgency of the work, they may either need to submit a formal application or give the planning authority five days' notice of their intention to carry out the recommended works.
- 17.5.5 Where the tree owner is instructed to complete works within 28 days and this falls between 1<sup>st</sup> February and 1<sup>st</sup> August (bird nesting season), this may conflict with wildlife legislation. If the work is not urgent and can be delayed until later in the year, Network Management should extend the 28 day timeframe accordingly. If the tree is in such a condition that it requires immediate / urgent action Network Management should advise the tree owner to seek advice from Natural England with regard to obtaining an exemption licence for disturbing nesting birds under the Wildlife and Countryside Act 1981.
- 17.5.6 If the defective tree exhibits features that have potential as bat roosts the tree inspection report will highlight this. Network Management should then advise the landowner of this in their outgoing letter and again advise the owner to seek guidance from an ecologist and / or Natural England with a view to a mitigation plan and obtaining the relevant licence.
- 17.5.7 If the defective tree exhibits features that have potential as bat roosts the tree inspection report will highlight this. Network Management should then advise the landowner of this in their outgoing letter and again advise the owner to seek guidance from an ecologist and / or Natural England with a view to a mitigation plan and obtaining the relevant licence.



- 17.5.8 In the event of non-co-operation, a statutory notice may be served under Section 154(1) of the Highways Act 1980, stating that if the work is not undertaken within 14 days; the Highway Authority will carry out the work required and seek to recover the costs.
- 17.5.9 If the owner of the property will not allow entry for such works, compulsory powers of entry can be obtained from the Magistrates Court under Section 294 of the Highways Act 1980 Act. In the event of non-co-operation by the landowner, it may be necessary to close the highway until the statutory procedures have been undertaken.
- 17.5.10 As soon as the notification of the completion of the works has been received, a further inspection will be made to check that the works have been undertaken satisfactory.