

## Highways Act 1980 Section 58 Highway Safety Inspections

# FOR HIGHWAY SAFETY INSPECTIONS

2013

Version 2.1

### **CODE OF PRACTICE**

#### **FOR**

#### **HIGHWAY SAFETY INSPECTIONS**

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# Highways Act 1980 Section 58 Highway Safety Inspections

# CODE OF PRACTICE FOR HIGHWAY SAFETY INSPECTIONS

2013

**PART 1 – STRATEGY** 

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#### **CODE OF PRACTICE**

#### **FOR**

#### **HIGHWAY SAFETY INSPECTIONS**

#### PART 1 - STRATEGY

#### 1 INTRODUCTION

#### 1.1. Cheshire East Council's Policy: Safety Inspections

The network of Borough highways is to be inspected to a regular frequency appropriate to each category of road. Defects are to be assessed against a Code of Practice which has been devised to take account of the provisions of Section 58 of the Highways Act 1980. Inspection is to result in action to repair defects found within a timescale that is reasonable in the opinion of the Highway Authority for the seriousness of the defect and the risk to the public.

#### 1.2. This Document

Safety inspections are an important means of keeping the highway safe for the travelling public. They are also vitally important in court cases for providing evidence that the Council takes a responsible attitude to it's duties as highway authority. If a member of the public has an accident which can be attributed to the condition of a section of highway, then the highway authority maybe liable to pay damages unless it can show that it has taken reasonable care to keep the highway safe; as is it's duty under S41 of the Highways Act 1980.

The strategy used by the Authority to assess the frequency of inspections follows the risk based approach for safety inspections of the 'Well-maintained Highways' code of practice for highway maintenance management. The hierarchy adopted for the network categorisation and frequency of inspection is however the national road classification ie A, B, C and U, with sub classifications of Urban and Rural.

This inspection manual sets the standard for highway safety inspections on the roads of Cheshire East Council. In most cases following the advice given will be adequate, but staff engaged on safety inspections will always be expected to apply a risk assessment approach as not every eventuality can be covered in this document. All details of inspections, defects and intended repairs must be recorded together with details of when subsequent repairs are carried out. In addition, sections with **no defects** must be positively recorded.

This document describes the Safety Inspections carried out by trained inspectors & investigators. It sets out the Standards to be followed on the Borough's roads. It is to be used by all members of staff who may be required to report defects or to visit sites to check on defect reports from members of the public, police etc.

The document will be updated from time to time by means of insertion pages, replacing or adding to those in the first edition. The recipient will be required to keep that copy up to date.

#### 1.3. Highway Inspections

Highway visual condition inspections used to record defects in highway condition are of three types:

| Safety     | to visit all adopted highways to a regular schedule, record hazards defects and initiate action to make safe by the end of the next working day or 5 working days depending on the nature of the defect |
|------------|---|
| Detailed   | Annually to record hazards plus non urgent repairs that are to be considered for inclusion in a programme of works.   |
| Structural | to assess the overall structural condition of Sections of the road network so that funds can be allocated where need is greatest.   |

This Code sets out the criteria for Safety Inspections. It does not include inspections for ice & snow. Winter maintenance policy & practice forms a separate document.

#### 2 LEGAL FRAMEWORK

#### 2.1. Highway Safety

The Highway Authority has a legal duty to maintain the highway. Under Section 41 of the Highways Act 1980; it may be exposed to the possibility of actions for breach of statutory duty if it fails to maintain a highway.

The policy of regular inspections and the subsequent actions to repair are designed to meet that duty. The records maintained in the 'Confirm' Business Management System assist in establishing the facts and provide evidence of the current maintenance standards.

The regular inspection / recording / retrieval system and the consequent action provide both a formal record of the condition of the highway and the defence for the Highway Authority under Section 58 of the Highways Act 1980. The recording of inspections & investigations made following notification of a possible hazard by members of the public, the Police etc. or on the receipt of a Third Party Claim is essential in establishing a comprehensive defence.

In order to provide a defence against a claim there must be written standards of maintenance, strictly followed, which are in accordance with nationally accepted criteria. The Highway Authority needs to show that it had effective policies and that they were adhered to. The 'Confirm' Business Management System is designed to be a key element in that task.

#### 2.2. Definition of Maintenance and Repair

The ordinary meaning of 'maintain' is to keep something in the state that enables it to serve the purpose for which it exists. (Case: Shaw L.J. [1978] Q.B. 343 et 364). It is broader than just matters of repair and keeping in repair. Maintenance is defined in the Highways Act 1980 Section 329(1) as <u>including</u> repair. A partial definition such as this suggests a wider meaning beyond mere repair.

Maintenance includes keeping road markings, street lights and signs in a condition to serve the purpose for which they exist. The provision of an adequate system of drainage is included in maintenance. (Burneside v. Emerson [1968] All E.R. 745A). These things also have to be kept in repair.

Maintenance does not mean improvement. There is no duty on a Highway Authority to improve highways. Thus there is no duty on the Highway Authority to widen an existing

highway, even if an accident may be said to be attributable to the amount of traffic using a road which is too narrow. (Highway Law, S.J.Sauvain 1989 p 104 Sect 5-21).

#### 2.3. The Highways Act 1980

"The Act expressly provided that the reasonableness of the Authority's actions in attempting to perform the duty of maintenance could form a defence to the action.

The burden of proof was to be on the highway authority to establish that it had taken such care as was in all the circumstances reasonably required to secure that the part of the highway to which the action related was not dangerous for traffic. This statutory defence is contained in the Highways Act 1980, Section 58. (Highway Law, S.J.Sauvain 1989 p95 Sect 5-03)

The Highways Service has the task of providing for the defence of the Highway Authority on the roads within the Borough, by taking action to make safe. Insurance against third party highways claims is carried by Cheshire East Council for all adopted highways in the Borough.

The Authority needs to establish that it has acted reasonably, which it would do by the production of adequate documentation and evidence in support of actions taken. In Cheshire East, these include a defined and monitored inspection regime, inspection records, the ordering of works of repair and the checking of compliance with instruction to repair.

#### 2.4. Ensuring a Defence

A claimant must show that the highway was not in a reasonably safe state as a result of failure to maintain. The test is whether the state of the highway was such as to cause a reasonably foreseeable danger.

For the purposes of a defence under subsection (1) of Section 58, the court shall in particular have regard to the following matters:

- the character of the highway, and the traffic which was reasonably expected to use it;
- the standard of maintenance appropriate for a highway of that character and used by such traffic:
- the state of repair in which a reasonable person would have expected to find the highway;
- 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;
- where the Highway Authority could not reasonably have been expected to repair that part of the highway before the cause of the action arose, what warning notices of its condition had been displayed;

Three points have to be established if a case is taken to law:

- The claimant must show that the highway had not been properly maintained and that it was thereby dangerous to traffic.
- Secondly the claimant has to establish that the dangerous condition was the cause of the accident.

• The Authority have to prove that they took all reasonable steps to ensure that the highway was safe (Section 58 H A 1980) and/or that the plaintiff was guilty of contributory negligence. (Burneside v. Emerson [1968] 1 L.W.R. 1490)

but for the purposes of such a defence it is not relevant to prove that the Highway Authority had arranged for a competent person to carry out or to supervise the maintenance of the part of the highway to which the action relates unless it is also proved that the authority had given proper instructions with regard to the maintenance of the highway and that those instructions had been carried out.

#### 2.5. Statutory Undertakers

Section 58 does not apply to damage resulting from statutory undertakers works or apparatus forming part of the highway surface.

The following sections of the New Road and Street Works Act apply to reinstatements:

<u>Sections 70 & 71</u>. The undertakers must ensure that their Reinstatements conform to the requirements of the "Specification for the Reinstatement of Openings in Highways" published in 1991.

<u>Section 72</u>. If a reinstatement is causing a danger, the highway authority may carry out appropriate work at the statutory undertakers expense.

The Highway Authority becomes responsible for a permanent reinstatement upon expiry of the guarantee period which is two years (three years in the case of openings deeper than 1.5 metres).

Statutory Undertakers are entitled to rely on the Highway Authority's inspections where they do no inspections themselves.

In Reid v British Telecommunications plc (1987) it was held that the Undertaker was not negligent in relying on a Highway Authority's six monthly inspections rather than itself conducting regular inspections of the condition of its manhole covers. However, if an undertaker did so rely, it was to be taken to have the same knowledge of their condition as it would or ought to have had if it had carried out its own inspection at the time of the Highway Authority's inspection. To achieve this the Highway Authority must promptly inform the utility of any dangerous defect.

Hazardous defects in undertakers apparatus, insofar as it forms part of the highway surface, or reinstatements discovered during an inspection must be recorded and a report sent immediately to the appropriate street works Inspector in order that the correct statutory undertaker may be informed.

Swift recorded action may be necessary by the street works inspector by telephone and FAX or Email. Any failure to report such defects could place responsibility for damages partly on the Highway Authority. (Nolan v. North West Water & Merseyside County Council 1982).

Action may need to be taken by the Highway Authority if the Undertaker does not respond within a reasonable time set by the highway authority.

"The Nolan Principal" is often cited by Statutory Undertakers and their insurers in the event of a third party claim being made against them. If the principal is upheld the Highway Authority and the Undertaker share the costs on a 50:50 basis. A Nolan agreement may be rejected by the highway authority when the highway authority has an effective inspection & repair

system and can demonstrate that it was in use and that the Undertakers were told of the defect but failed to repair.

#### 2.6. Other Authorities & Owners

An inspection or a visit to a site may reveal hazardous defects in street furniture, overhanging trees etc. which do not fall within the remit of the Highway Authority. Any hazards found must be recorded in the 'Confirm' Business Management System and a report sent immediately to the appropriate engineering supervisor in order that the correct street authority or owner may be informed. Swift action may be necessary by telephone and FAX or email. Any failure to report such defects could place responsibility for damages partly on the highway authority by an extension of the Nolan Principal.

#### 3. SAFETY INSPECTIONS

#### 3.1 General

Regular Inspections of the whole network are made by trained personnel operating either from a slow moving vehicle or on foot, using hand-held computers to record the dated location and nature of defects hazardous to the public.

The data from safety inspections is transferred to a central database which produces printed and Electronic defect reports at each Local Highways Office. These reports are used as instructions to carry out the repairs or make safe the hazard.

#### 3.2 Information from the Public or the Police

Inspections, other than the specialist safety inspectors, to investigate a reported defect (reported by: Police, Public or highways staff) should be made before that defect is entered in the 'Confirm' Business Management System or work ordered. This Code sets the standards to be used.

Hazards found, action taken and the completion of the action are then entered into the Council's 'Confirm' Business Management System at a computer terminal to ensure that repair instructions and work completion dates are all recorded into the same database from which data for Third Party Claims reports and performance statistics will be drawn up.

#### 3.3 Time to Make Safe

Clearly some defects need to be treated more urgently than others. In order to record how quickly action needs to be taken after an inspection, a "category" is applied to each individual defect.

| Cheshire East<br>Category | Description   |
|---------------------------|---|
| E                         | Repair or make safe within 1.5 hours                |
| 1                         | Make safe/repair by the end of the next working day |
| 2                         | Make safe/repair within 5 working days              |

The time scale for each category commences when the highways service provider/contractor accepts that a qualifying defect exists.

In Cheshire East a risk management philosophy has been applied and the end of the next working day action will generally be applied on the busiest locations, i.e. 'greatest risk' of an accident and resulting claim.

Some defects on rural C and all unclassified roads must still be recorded as Category 1 where failure to act would mean that the first person to pass by would be likely to have an accident. This would apply to fallen trees, major bank slips, or particularly potholes (more than 100mm deep).

#### 3.4 Locational Referencing

The transverse location of a defect is recorded by using the UKPMS cross-section position referencing.

The Main Carriageway Lanes are numbered CL1 to 9 or CR1 to 9 from the edge toward the centre of the carriageway for the left and right respectively. The off carriageway features are numbered sequentially upward from L1 or R1 for the left or right respectively, away from the Carriageway. Kerbs and Kerb defects are referenced to LE ("Left Edge") or RE ("Right Edge").

The full code descriptions can be found in "the UKPMS user manual, Vol 2 Visual Data Collection for UKPMS, chapter 4: cross-Section Position Referencing.

#### 3.5 How the Information is recorded

A defect found on the highway has to be identified by its location on the road network. Without this information it would be impossible to direct a contractor to the right place to effect a repair.

It would also be difficult to confirm or deny the presence of a defect alleged to have been the cause of injury or damage. The time of inspections and of when defects are found must be recorded.

Defects found within the highway are grouped according to an "activity" such as work to the carriageway or to signs. Each type of defect is given a description such as "pothole" or "safety barrier too low".

Depending on the defect, its location and the materials of construction, a "treatment" is chosen from a range of permitted ones such as "adjust level" or "provide new".

The size of the defect is needed in order for the right quantity of materials to be provided to the repair gang.

In order to make the business of recording all the information required as simple and quick as practicable, a coding system has been devised.

Each road has a unique number. Each part of the highway has a position from the left or the right across the whole width between boundaries. Distance to a defect is measured, always in the same direction from a fixed origin.

The coding system turns the English descriptions for defects and treatments into letter groups that are easy to remember because they are partly "mnemonic" and resemble the full words e.g. Ironwork difference in level = "IDLV" (the defect); Adjust level = "AJL" (the treatment).

#### 3.6 Archiving

The details recorded into the 'Confirm' Business Management System of the inspections and actions are to be retained in archive form for six years following the date of inspection.

#### 3.7 Defect Categories

Having identified a defect, it is necessary for the Inspector to use his judgement in deciding when remedial action will be necessary and to make recommendations on what work is required.

For safety inspections the response time is dependent on the severity and location of the defect and the usage of the highway. A response may be called for under emergency provisions, or it may require a 'by the end of the next working day or 5 working day response'.

Once the defect & response time are determined, the defect is recorded and given one of three categories:

#### **Emergency Response:**

The defect is such that it presents an immediate and critical hazard to highway users. The response time during office hours is 1 hour for electrical defects and 1.5 hours for other defects, and a representative of the Highway Authority will remain at the site until make safe measures has been taken.

IMMEDIATE ACTION is action taken by the inspector at the time of the inspection, e.g. informing the Local Highways Office by mobile telephone of a need to initiate an emergency response, by placing signs & cones or by filling a pothole.

#### End of next working day Response:

Defects which are an immediate hazard and require prompt attention and to which make-safe actions or repairs should be made by the end of the next working day - Category 1

RECOMMENDED MAKE SAFE NEXT WORKING DAY ACTION is used to initiate action by the Local Highways Office staff, to complete make safe works by the end of the next working day this may be by signing / coning or by repair work.

#### 5 Working Day Response:

Defects which are a potential hazard where the risk of injury is reduced due to their location or severity. Make safe actions or repairs to be carried out within 5 working days - Category 2.

RECOMMENDED 5 WORKING DAY RESPONSE is used to initiate action by the Local Highways Office staff to fully repair a defect or to affect a repair that will last at least until the next inspection.

Local Highways Office staff are responsible for ensuring that any make safe measures are kept in an effective condition until a repair can be carried out.

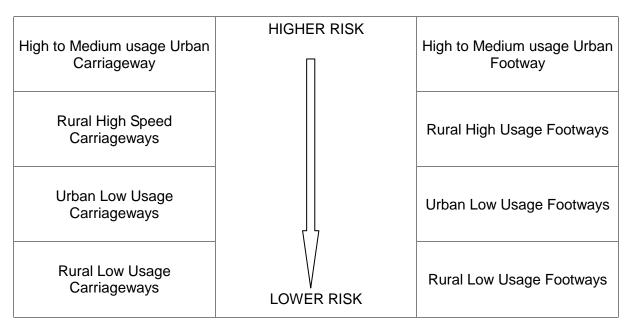
| Road Category | C/way Target Response Time |                            |                      |
|---------------|----------------------------|----------------------------|----------------------|
|               | C/way<br>Defect(>100mm)    | C/way Defect<br>(50-100mm) | C/way Edge<br>>100mm |
| Urban A Road  | Cat E                      | Cat 1                      | Cat 1                |
| Rural A Road  | Cat E                      | Cat 1                      | Cat 1                |
| Urban B Road  | Cat 1                      | Cat 1                      | Cat 1                |
| Rural B Road  | Cat 1                      | Cat 1                      | Cat 1                |
| Urban C Road  | Cat 1                      | Cat 1                      | Cat 1                |
| Rural C Road  | Cat 1                      | Cat 2                      | Cat 2                |
| Urban U Road  | Cat 1                      | Cat 2                      | Cat 2                |
| Rural U Road  | Cat 1                      | Cat 2                      | Cat 2                |

| Road Category | F/way Target Response Time |               |  |
|---------------|----------------------------|---------------|--|
|               | F/way (>25mm)              | F/way (>40mm) |  |
| Urban A Road  | Cat 1                      | -             |  |
| Rural A Road  | -                          | Cat 1         |  |
| Urban B Road  | Cat 1                      | -             |  |
| Rural B Road  | -                          | Cat 1         |  |
| Urban C Road  | Cat 1                      | -             |  |
| Rural C Road  | -                          | Cat 1         |  |
| Urban U Road  | Cat 1                      | -             |  |
| Rural U Road  | -                          | Cat 1         |  |
| Link          | Cat 1                      | -             |  |

#### Notes:

• During periods of severe weather conditions it may not always be possible to meet the target response times for which the highway authority should not be penalised upon evidencing best use of resources in difficult conditions.  Full details of categorised highway defects and response times are contained within the Cheshire East highway inspections detailed guidance code.

#### 3.8 Usage Categories



Intervention levels & inspection frequencies have been set to reflect the wear & tear on the highway plus the level of risk associated with the defect and its location.

#### 3.9 Inspection Frequencies

**TABLE 3.2** Frequencies of inspection for each road class per year

| Road Class                   | Urban        | Urban          | Rural        | Rural        |
|------------------------------|--------------|----------------|--------------|--------------|
|                              | C/w          | F/w & C/t      | C/w          | F/w & C/t    |
| А                            | <b>6</b> (3) | <b>6</b> (3)   | <b>6</b> (1) | 6 (1)        |
| B & C                        | <b>3</b> (3) | <b>3</b> (3)   | 3 (1)        | <b>3</b> (1) |
| Unclassified                 | <b>3</b> (3) | <b>3</b> (3)   | 2 (0)        | 2 (0)        |
| Higher Risk<br>Special Areas |              | <b>12</b> (12) |              |              |

#### Notes:

- Total number of inspections in a year is shown in bold.
- Inspections will ideally be scheduled evenly across the year however in times of adverse weather the time between inspections may vary.

- Walked inspections are shown in brackets, at all other times inspections may be walked or driven at a slow speed, stopping and getting out as necessary.
- Additional to the regular inspections, any member of the Highway Service staff is required to be vigilant during daily business and to report the existence of hazards.
- Higher risk special areas are busy urban shopping/business areas.

Hazards found, action taken and the completion of the action are required to be entered by Local Highways staff into the 'Confirm' Business Management System.

#### 3.10 Emergency Procedures

If a defect is sufficiently dangerous to require an emergency response, provision has been made for rapid action.

Response times should always be as short as practicable but the maximum time to respond to an emergency on the Authority network shall be within 1½ hours of notification (2 hours outside normal working hours of 0800 hours -1700 hours Mon - Fri). In the case of electrical defects the time to respond is 1 hour.

An appropriate communication system has been put in place which enables the required response times to be achieved.

Outside of office hours, third party reports of dangerous defects will be reported to CEC staff and forwarded. A suitably qualified member of the highways staff is on 'out of hours call out' and available to attend on site without delay when called upon.

#### **LOCAL HIGHWAYS OFFICE CONTACT DETAILS**

| LOCAL<br>HIGHWAYS<br>OFFICE | ADDRESS   | TELEPHONE NUMBER OUT OF HOURS   |
|-----------------------------|---|---|
| Wardle<br>Depot             | Cheshire East<br>Highways<br>Wardle Deport<br>Green Lane<br>Wardle<br>CW56BJ  | Phone: 0300 123 5020  Email: ENGCN@cheshireeast.gov.uk  Out-of Hours Emergencies: 0300 123 5025     |
| Brunswick<br>Depot          | Cheshire East Highways Brunswick Wharf Deport Brook Street Congleton CW12 1RG | Phone: 0300 123 5020  Email: ENGJMMACC@cheshireeast.gov.uk  Out-of-Hours Emergencies: 0300 123 5025 |

#### **ANNEX 1**

PHOTOGRAPHIC GUIDE TO ILLUSTRATE EXAMPLES OF DEFECTS

SHOWING THE TYPE, THE RESPONSE TIME AND THE INTERVENTION LEVEL

ACTION TO BE TAKEN WHEN A DEFECT EXCEEDS THE INTERVENTION LEVEL



#### **Defect:** Pothole (POTH)

Location: In the body of the carriageway

Category: E,1,2

Intervention level: 50–100mm or ≥100mm



#### **Defect: Pothole (POTH)**

Location: On the edge of, and extending into the

carriageway

Category: E,1,2

Intervention level: 50–100mm or ≥100mm



#### **Defect.** Localised Edge Deterioration (LODT)

Location: Cracking and breaking away on the edge of the carriageway not encroaching into the carriageway more than 250mm, and not requiring vehicles to alter their course.

Category: 1, 2

Intervention level: ≥100mm



#### **Defect:** Condition of Fittings (COFT)

Location: Signs over carriageways or footways.

Category: 1

Intervention level:

If in danger of falling on pedestrian or vehicle.



#### **Defect: Slurry or Mud on Road (SLOP)**

Location: A roads and other busy roads

Category: 1 (dependent on severity)

Intervention level: Slippery surface

*Notes*: Contact person responsible, if known, and request signing/clean up. If no response, Local office to do work and recharge.



### <u>Defect: Unauthorised Obstruction/Enclosure</u> of Verge (UNOB)

Location: All roads.

Intervention level:

Stones, cultivation, fencing, etc, on verge.

*Notes*: Local office to issue notice to person responsible, and ensure removal.



#### Defect. Slab Profile Uneven (SLPF)

Location: Urban footways and pedestrian areas.

Category: 1, 2

Intervention level: ≥ 25mm

Notes: Use 'Notes' on DCD to record type and number of slabs/flags to be re-laid. If other slabs/flags are broken, number of new slabs/flags to be recorded also.



#### **Defect: Concrete Blocks/Sets Missing (CBMS)**

Location: Footways, pedestrian areas and cycle paths.

Category: 1

Intervention level: Missing blocks/sets

*Notes*: Use 'Notes' on DCD to record number of blocks to be replaced.



#### **Defect: Difference in level (IDLV)**

Location: Footway, pedestrian area or cycleway

Category: 1

Intervention levels: ≥ 25mm (urban areas ≥ 40mm in rural areas

*Notes*: Use 'Notes' to inform Area Office of the type and owner (if apparent) of cover. If Utility owned, Area Office to contact Utility, and set time for response.



#### **Defect: Cracked or Broken cover (IBCK)**

Location: All areas of highway

Category: 1

Intervention level: Cat E if in danger of collapse

*Notes*: Use 'Notes' to inform Area Office of the type and owner (if apparent) of cover. If Utility owned, Area Office to contact Utility, and set time for response.



#### **Defect. Missing (MISS)**

Location: All areas of highway

Category: E,1

Intervention level: Cover not present

*Notes*: Use 'Notes' to inform Area Office of the type and owner (if apparent) of cover. If Utility owned, Area Office to contact Utility, and set time for response.



#### Defect: Obscured Sign (OBSG)

Location: All Roads

Category: 1, if at a junction with a busy or high speed road.

*Notes*: Applies to Stop, Give Way, Slippery Road, junctions, bends and roadworks signs. Does not apply to direction signs.



#### **Defect. Flooding (FLOD)**

Location: All Roads

Category: E (make safe/signing)

Intervention Level: Road obstructed by water.

Notes: Partial obstruction to be considered dependent on extent and location on the road. Area Office to establish cause and remedy.



#### **Defect. Missing Door (MISP)**

Location: All Roads

Category: E (1 hour make safe)

Intervention Level:
Missing door (open, off or missing)

Notes: Telephone message to Street Lighting Superintendent to arrange attendance within ONE hour. Technician to stand by column until help arrives if in high risk location (play area, school, shops, busy footway, and the like). Technician is NOT to touch column or replace door.



#### **Defect.** Blacktop Profile (BKTP)

Location: Footway, pedestrian area or cycleway with bituminous surface.

Category: 1

Intervention levels: ≥ 25mm in urban areas ≥ 40mm in rural areas



#### Defect: Rocking Element (ROCK)

Location: Any element including ironwork Urban footways, pedestrian areas or cycleways.

Category: 1

*Intervention levels:* ≥ 20mm when depressed at one end.

*Notes*: Use 'Notes' to record number of blocks to be relaid.



## Highways Act 1980 Section 58 Highway Safety Inspections

# CODE OF PRACTICE FOR HIGHWAY SAFETY INSPECTIONS

2013

**PART 2 – INSPECTORS MANUAL** 

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#### **CODE OF PRACTICE**

#### **FOR**

#### **HIGHWAY SAFETY INSPECTIONS**

#### **PART 2 - INSPECTIONS MANUAL**

#### 1. INTRODUCTION

Parts 2 & 3 of the manual are to be used by any member of staff (hereafter referred to as an "inspector") from the Highways Service Provider to define a defect and record it in a form that may be entered into the 'Confirm' database.

This may be achieved by using a PC Workstation in the office or a Data Capture Device (DCD) / or in the event of technical failure paper form (see Appendix 1) on site and downloading or entering the information onto 'Confirm' later.

Part 2 of the manual is set out firstly to describe a system based on a DCD such as the Panasonic 'Toughbook' currently carried by the highway safety inspector who perform the Scheduled Safety Inspections of the Borough Highway Network.

All defects found by highway staff are to be inspected and recorded in accordance with this manual. The dedicated Highway Safety inspectors are trained in the collection and recording of defects as detailed in this manual.

Having identified a defect which meets or exceeds the intervention level in this Code, it is necessary for the Inspector to use his judgement, based on the guidance given in this code, in deciding when remedial action will be necessary and to make recommendations on what work is required.

For safety inspections the response time is dependent on the severity of the defect and the usage of the highway.

A response may be called for under emergency provisions, or it may require a 'by the end of the next working day or 5 working day response'. Once the defect & response time are determined, the defect is recorded and given one of three categories

#### 1.1 Defect Categories

#### **Emergency Response:**

The defect is such that it presents an immediate and critical hazard to highway users. The response time during office hours is 1 hour for electrical defects and 1.5 hours for other defects, and a representative of the Highway Authority will remain at the site until make safe measures has been taken.

IMMEDIATE ACTION is action taken by the inspector at the time of the inspection, e.g. informing the Local Highways Office by mobile telephone of a need to initiate an emergency response, by placing signs & cones or by filling a pothole.

#### End of next working day Response:

Defects which are an immediate hazard and require prompt attention and to which make-safe actions or repairs should be made by the end of the next working day - Category 1

RECOMMENDED MAKE SAFE NEXT WORKING DAY ACTION is used to initiate action by the Local Highways Office staff, to complete make safe works by the end of the next working day this may be by signing / coning or by repair work.

#### 5 Working Day Response:

Defects which are a potential hazard where the risk of injury is reduced due to their location or severity. Make safe actions or repairs to be carried out within 5 working days - Category 2.

RECOMMENDED 5 WORKING DAY RESPONSE is used to initiate action by the Local Highways Office staff to fully repair a defect or to affect a repair that will last at least until the next inspection.

The DCD will prompt for further action to be recorded to complete a temporary action so that, say, cones & signs may be replaced by a more durable repair.

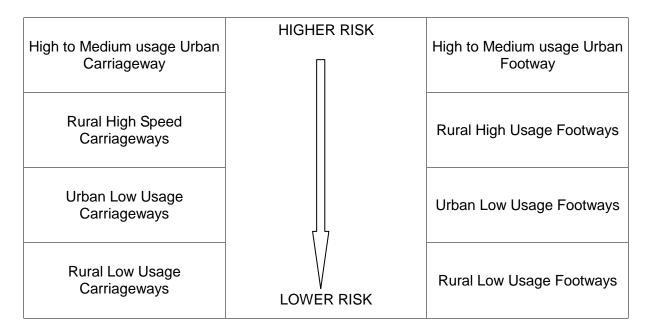
This "FOLLOW-UP" action, organised by the Highway Office, is to take place as soon as reasonably practicable. Cones and signs are vulnerable and may only be regarded as a short-term expedient. They do not fully satisfy the requirement to "make safe" unless they remain undisturbed.

Parts 2 & 3 of this Manual provide guidance on how such defects should be assessed and recorded.

#### 1.2 Usage Categories

Intervention levels & inspection frequencies have been set to reflect the wear & tear on the highway plus the level of risk associated with the defect and its location.

**TABLE 1** - Usage Categories considered in order of risk to users



#### 1.3 Inspection Frequencies

Frequencies of inspection include at least one walked survey in a year <u>where safe to do so</u>. Where a road is too dangerous to inspect on foot the Inspector is authorised to carry out a driven inspection.

**TABLE 2** Frequencies of inspection for each road class per year.

| Road Class                   | Urban        | Urban          | Rural        | Rural        |
|------------------------------|--------------|----------------|--------------|--------------|
|                              | C/w          | F/w & C/t      | C/w          | F/w & C/t    |
| А                            | <b>6</b> (3) | <b>6</b> (3)   | <b>6</b> (1) | <b>6</b> (1) |
| B & C                        | <b>3</b> (3) | <b>3</b> (3)   | 3 (1)        | 3 (1)        |
| Unclassified                 | <b>3</b> (3) | <b>3</b> (3)   | 2 (0)        | 2 (0)        |
| Higher Risk<br>Special Areas |              | <b>12</b> (12) |              |              |

#### Notes to Table 2:

- Total number of inspections in a year is shown in bold.
- Inspections will ideally be scheduled evenly across the year however in times of adverse weather the time between inspections may vary.
- Walked inspections are shown in brackets, at all other times inspections may be walked or driven at a slow speed, stopping and getting out as necessary.
- Additional to the regular inspections, any member of the Highway Service staff is required to be vigilant during daily business and to report the existence of hazards.
- Higher risk special areas are busy urban shopping/business areas.

#### 1.4 Emergency Procedures

If a defect is sufficiently dangerous to require an emergency response, provision has been made for rapid action. This may be called up by mobile telephone from site to the Highway Office as shown in Part 3 of the Manual.

Response times should always be as short as practicable but the maximum time to respond to an emergency on the Authority network shall be within  $1\frac{1}{2}$  hours of notification (2 hours outside normal working hours of 0800 hours -1700 hours Mon - Fri). In the case of electrical defects the time to respond is 1 hour.

An appropriate communication system has been put in place which enables the required response times to be achieved.

Outside of office hours, third party reports of dangerous defects will be reported to CEC staff and forwarded. A suitably qualified member of the highways staff is on 'out of hours call out' and available to attend on site without delay when called upon.

#### 2. ACTION

#### 2.1 General

A decision made by an inspector requires an action to be recorded in the DCD using the Safety Inspection Software provided by Cheshire East Council.

Safety Inspection actions: make safe high priority hazard

Immediate Action Used to record a make safe repair or emergency call by the

Inspector

safe works or repairs.

Recommended "Follow-up" Used to describe treatment advised to follow up Immediate &

Temporary actions above.

**IMMEDIATE ACTION** is action taken at the time of the inspection, e.g. informing the Highway office by telephone, placing signs & cones or filling a pothole. Any repairs made, either temporary or permanent, are recorded under their correct action boxes. It is the responsibility of the inspector to take appropriate action, record it in the 'Confirm' Business Management System and to pass the information to the Local Highways Office staff.

RECOMMENDED MAKE SAFE ACTION is action to be taken 'by the end of the next working day or 5 working day response'. This may be "make-safe" or full repair work. The treatment of the defect is a recommended one. It is the responsibility of the Local Highways Office staff to ensure that the recommended action is considered, that the work is instructed and that the defect is made safe within period specified. The result is to be recorded into the 'Confirm' Business Management System to show the date & time of the repair.

**RECOMMENDED "FOLLOW-UP" ACTION** is action to be taken or recommended to fully repair a defect or to effect a repair that will last at least until the next inspection. It is the responsibility of the Local Highways Office staff to ensure that the recommended action is considered, that the work is instructed and that the result is recorded into the 'Confirm' Business Management System.

Local Highways Office staff are responsible for ensuring that make safe measures are kept in an effective condition until a repair can be carried out.

#### 2.2 Marking Out Defects For Attention

The defect is to be marked. Marking is to be kept to a minimum. The aim is that the repair work should remove the marking leaving no misleading or unsightly marks on the surface. White spray paint is NOT a Make Safe Immediate Action though its presence may be helpful.

#### 3 SPECIFIC ACTIVITIES

Some activities require particular actions

| (a) Flooding<br>FL                     | This Code requires that action is dependant upon the nature & extent of flooding and in addition to recommending remedial action, a note of the cause of the flooding is required if this is obvious at the time of the inspection. Engineer attendance may be appropriate to establish the cause and to consider possible remedial options.                        |
|--|---|
| (b) Hedges and<br>Trees<br>HT          | Action that can be carried out or recommended by the inspector will be dealt with in the normal way. Hedge & Tree Notices may need to be issued & followed up.  Most of the other defects (dead & dying) associated with trees should be referred to a suitably qualified person ie. Borough Tree Officer who will advise the Highway Office on appropriate action. |
| (c)<br>Embankments /<br>Cuttings<br>EC | Failure indicators include water weeping from the slope, longitudinal cracking at the top & slumping of the slope. Action is to be taken as soon as possible if hazardous but specialist advice may be needed. The Highways Office is to be informed and an engineer's inspection recommended /Engineers visual inspection  |

#### 4. APPENDICES

#### TABLE A SURFACE TYPES

| 1 | HRA  | Hot Rolled<br>Asphalt | 10 | OTHR | Other               |
|---|------|-----------------------|----|------|---------------------|
| 2 | BITM | Bit Macadam           | 11 | SETT | Stone Setts         |
| 3 | CONC | Concrete              | 12 | HFSD | High Frict S. Dress |
| 4 | SDRE | Surfaced<br>Dressed   | 13 | MFLG | Mini-Flags          |
| 5 | GRSS | Grass                 | 14 | YKST | York Stone          |
| 6 | GRAV | Gravel                | 15 | COBB | Cobbles             |
| 7 | FLAG | Concrete Flags        | 16 | BLBR | Block Pave (Brick)  |
| 8 | BLCK | Block Pave<br>(Conc)  | 17 | ANPD | Anti-pedestrian     |
| 9 | UNMD | Unmade                | 18 | TACF | Tactile flags       |

#### TABLE B KERB TYPES

| 101 | CONC | Conc Half Batter    | 108 | СВСК                     | Concrete Block   |  |
|-----|------|---------------------|-----|--------------------------|------------------|--|
| 102 | STON | Natural Stone       | 109 | 9 CONF Conc. Full Batter |                  |  |
| 103 | EXTA | Extruded<br>Asphalt | 110 | CONB                     | Conc. Bull Nose  |  |
| 104 | OTHR | Other               | 111 | CONL                     | Conc. Drop Left  |  |
| 105 | ввск | Beaney Block        | 112 | CONR                     | Conc. Drop Right |  |
| 106 | SFTY | Safety Kerb         | 113 | CONQ                     | Conc. Quadrant   |  |
| 107 | BRIK | Brick               | 114 | SETT                     | Setts            |  |

#### TABLE C COVER, GULLY, GRATING, FRAME OR BOX TYPES

| 201 | PARL | Parallel Gully | 208 | WATR | Water Authority  |
|-----|------|----------------|-----|------|------------------|
| 202 | CHAN | Channel Gully  | 209 | STAP | Stop Tap         |
| 203 | SIDE | Side Entry     | 210 | HYDT | Hydrant          |
| 204 | OSID | Off-set        | 211 | ELEC | Electricity      |
| 205 | SEWR | Sewer          | 212 | GASS | Gas              |
| 206 | TCOM | Telecom        | 213 | HIGH | Highway Drainage |
| 207 | CABL | Cable TV       | 214 | UNKN | Unknown          |

#### TABLE D TRAFFIC SIGNAL LAMP DEFECT TYPES

| 301 | ALLO | All lamps out | 303 | AMBO | Amber lamp out |
|-----|------|---------------|-----|------|----------------|
| 302 | REDO | Red lamp out  | 304 | GRNO | Green lamp out |

#### TABLE E ROAD STUD CLASSES

| 401 | CLA1 | Class 1,<br>Prohibitory           |  |  |
|-----|------|-----------------------------------|--|--|
| 402 | CLA2 | Class 2, Warning<br>& Informatory |  |  |



## Highways Act 1980 Section 58 Highway Safety Inspections

### **CODE OF PRACTICE**

**FOR** 

**HIGHWAY SAFETY INSPECTIONS** 

2013

PART 3 – DETAILED GUIDANCE: CODES

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#### **CODE OF PRACTICE**

#### **FOR**

#### **HIGHWAY SAFETY INSPECTIONS**

#### **PART 3 - DETAILED GUIDANCE: CODES**

#### Intervention levels:

Dimensions given with a ">" symbol: action is to be taken when the dimension is at or above the value stated.

Dimensions given with a "<" symbol: action is to be taken when the dimension is below the value stated.

#### **PERMITTED ACTIVITY CODES**

| Carriageways Footways & Cycle Tracks          |    |
|---|----|
| Flexible carriageway                          | MC |
| Concrete carriageway                          | CM |
| Footway and cycle tracks                      | FC |
| Kerbs Edging & Channels                       |    |
| Kerbs, edging & preformed channel             | KC |
| Highway Drainage                              |    |
| Highway drain: Covers Gratings Frames & Boxes | CG |
| Highway drain: gully/ Catchpit/ Interceptor   | GC |
| Highway drain: piped drain                    | PD |
| Highway drain: piped grips                    | PG |
| Highway drain: Grips                          | GP |
| Highway drain: ditches                        | DI |
| Highway drain: filter drains                  | FD |
| Highway drain: culverts                       | CV |
| Highway drain: flooding                       | FL |
| Fences & Barriers                             |    |
| Safety fences: metal/concrete/timber          | FB |
| Safety fences: Steel - tensioned              | FN |
| Boundary fences: metal/concrete               | BF |
| Boundary fences: Timber                       | ВТ |
| Verges Hedges & Trees                         |    |
| Hedges and trees                              | HT |

#### PERMITTED BOROUGH ACTIVITY CODES Cont...

| Road Studs & Markings                 |    |
|---------------------------------------|----|
| Road studs: general                   | RS |
| Road markings                         | RM |
| Traffic Signs                         |    |
| Non-Illd. Signs (face/struct/fixings) | SG |
| Illuminated Signs                     | SE |
| Road Lighting                         |    |
| Road lighting columns                 | LP |
| Traffic Signals                       |    |
| Traffic signals hardware              | TS |
| Sweeping & Cleansing                  |    |
| Carriageway & Footway                 | SC |

In brackets on each page by the Activity Description are given the Features Inventory Codes to which that Activity applies.

Treatment Codes are shown for each Activity and are described in the Appendix: Treatment Codes.

#### NOTES:

Corrections of defects arising from the activities of public undertakers should not be charged to the CEC. If the undertaker does not carry out repair work to a dangerous defect in the time given then work is to be carried out by CEC and a charge raised on the undertaker. Notification is to be given to the undertaker at all stages and documentation is to accompany any charge, which should be agreed where possible with the undertaker

Particular consideration should be given to defects, such as trips & potholes, which may constitute an immediate danger to pedestrians and/ or cyclists, especially on cycle lanes carriageways or carriageways used by pedestrians.

## For cycle lanes & pedestrian use the standards in FC apply, not MC INCLUDE DEPTH OF POTHOLE IN TEXT

**Treatment Codes:** /AJL/CPL/EVI/ESI/PRB/PRD/PRE/PRG/PRI/RPL/SOB/NON

CAT 1 - End of next working day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--|----------------|---|
| Localised Edge<br>Deterioration<br>Surface + L x w +<br>text | LODT           | If difference in level is equal to or greater than 100mm, for A, B and Urban C Roads.  Cracking & breaking away confined to a discrete area of the carriageway and not associated with structural maintenance activities. (NOT edge potholes)       |
| Missing carriageway<br>element<br>Surf+no.+depth+text        | MISS           | If carriageway elements are missing forming a pothole.  Intervention level as for POTHOLE   |
| Patch Difference in<br>Level<br>Surface + L x w + text       | PDLV           | If difference in level is equal to or greater than 50mm for A, B and Urban C Roads.  If difference in level is equal to or greater than 100mm for Rural C and Unclassified Roads.  Difference in level of a patch with the surrounding carriageway. |
| Pothole<br>Surface + L x w +<br>text                         | POTH           | If difference in level is equal to or greater than 50mm for A, B and Urban C Roads.  If difference in level is equal to or greater than 100mm for C Rural and Unclassified Roads.  May be on the edge or in the main part of the carriageway        |
| Single Crack or gap<br>Surface + L x w +<br>text             | SCRK           | If width of crack is equal to or greater than 20mm and equal to or greater than 40mm deep on carriageways subject to high to medium <b>pedestrian</b> usage.  |

| Surfacing Joint -<br>Open or Excessive<br>Surface + L x w +<br>text | SRJT | If width of joint is equal to or greater than 20mm and equal to or greater than 40mm deep on carriageways subject to high to medium <b>pedestrian</b> usage. |
|---|------|--|
| Isolated small<br>depression or hump<br>Surface + L x w +<br>text   | SDPR | equal to or greater than 50mm in urban areas or on high speed rural roads  |

#### CAT 2 - 5 Working Day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--|----------------|---|
| Localised Edge<br>Deterioration<br>Surface + L x w +<br>text | LODT           | If difference in level is equal to or greater than 100mm, for Rural C and Unclassified Roads.  Cracking & breaking away confined to a discrete area of the carriageway and not associated with structural maintenance activities. (NOT edge potholes) |
| Patch Difference in<br>Level<br>Surface + L x w + text       | PDLV           | If difference in level is between 50mm and 100mm for C Rural and Unclassified Roads.  Difference in level of a patch with the surrounding carriageway.  |
| Pothole<br>Surface + L x w +<br>text                         | POTH           | If difference in level is between 50mm and 100mm for C Rural and Unclassified Roads.  May be on the edge or in the main part of the carriageway   |

#### FLEXIBLE CARRIAGEWAY Cont....

#### **SURFACE CODES & DESCRIPTIONS**

| 1 | HRA  | Hot Rolled Asphalt | 10 | OTHR | Other               |
|---|------|--------------------|----|------|---------------------|
| 2 | BITM | Bit Macadam        | 11 | SETT | Stone Setts         |
| 3 | CONC | Concrete           | 12 | HFSD | High Frict S. Dress |
| 4 | SDRE | S. Dressed         | 13 | MFLG | Mini-Flags          |
| 5 | GRSS | Grass              | 14 | YKST | York Stone          |
| 6 | GRAV | Gravel             | 15 | COBB | Cobbles             |
| 7 | FLAG | Concrete Flags     | 16 | BLBR | Block Pave (Brick)  |
| 8 | BLCK | Block Pave (Conc)  | 17 | ANPD | Anti-pedestrian     |
| 9 | UNMD | Unmade             | 18 | TACF | Tactile flags       |

Treatment Codes: / EVI / ESC / RCS / SOB / STR / NON

**Safety Inspection** 

CAT 1 - End of next working day Make Safe

| DESCRIPTION   | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|---|----------------|--|
| Joint seals<br>L x w + text                             | JTSL           | If width of joint is at or >20 mm and >40 mm deep on carriageways subject to high to medium <b>pedestrian</b> usage or is longitudinal and a danger to cyclists.   |
| Deep spalling at<br>joints<br>L x w x depth + text      | DSPL           | At or >25mm in urban high to medium usage carriageways subject to high to medium <b>pedestrian</b> usage.  At or >50mm elsewhere   |
| Opening of<br>longitudinal joint Lx<br>w x depth + text | OLJT           | If width of joint is at or >20 mm and >40 mm deep on carriageways subject to high to medium <b>pedestrian</b> usage or is a danger to cyclists.  |
| Pothole<br>L x w + text                                 | POTH           | If difference in level is equal to or greater than 50mm for A, B and Urban C Roads.  If difference in level is equal to or greater than 100mm for Rural C and Unclassified Roads.  May be on the edge or in the main part of the carriageway |
| Single Crack or joint<br>gap<br>L x w + text            | SCRK           | If width of crack is >20 mm and >40 mm deep on carriageways subject to high to medium <b>pedestrian</b> usage.   |
| Stepping (trip) at<br>joint/crack<br>L x height + text  | STEP           | At or >25mm in urban high to medium usage carriageways subject to high to medium <b>pedestrian</b> usage.  At or >50mm elsewhere   |
| Vert movement under<br>traffic<br>Height + text         | VMVT           | At or > 25mm Urban & Rural carriageways subject to high to medium usage or high speed >50mm elsewhere  |

CAT 2 - 5 Working Day Make Safe

| DESCRIPTION             | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-------------------------|----------------|---|
| Pothole<br>L x w + text | РОТН           | If difference in level is between 50mm and 100mm for C Rural and Unclassified Roads.  May be on the edge or in the main part of the carriageway |

DEFINITION: An area for pedestrians/cyclist within the Borough road boundary, including subways, underbridges, overbridges and other footways which are the responsibility of Cheshire East Council. Intervention levels apply to the complete width of all cycle lanes and combined bus/cycle/taxi lanes, whether segregated from or within the carriageway. Intervention levels also apply to footway crossing areas on the carriageway, and pedestrianised areas of carriageway.

Treatment Codes: /AJL /FLT /EVI /ESI /MFJ /PRB /PRD /PRG /RFX /RPL /NON

**Safety Inspection** 

CAT 1 - End of next working day Make Safe

| DESCRIPTION   | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|---|----------------|---|
| Blacktop Pothole  Surface + L x W + text  | ВРОТ           | Includes potholes and patches equal to or greater than 25mm in all areas, and equal to or greater than 40mm on rural footways.  |
| <i>Missing</i><br>Surf + no. + ht + text  | MISS           | Missing paving units (as pothole)   |
| Trench Reinstatement - loss of material inc. paving units  Surface + L x W + text | RLMT           | On busy urban footways. Loss of material (Fretting) from a reinstated trench <u>if</u> it constitutes a trip or pothole equal to or greater than 25 mm on urban footways (40mm rural) or cracks and gaps equal to or greater than 20 mm wide x 40mm deep (urban). <b>Notify Undertaker concerned.</b> |
| Trench Reinstatement - subsidence or overfill Surface + L x W + text              | RDLV           | Ridges equal to or greater than 25mm on urban footways, and equal to or greater than 40mm on rural footway.  Notify Undertaker concerned.   |
| Isolated small<br>depression or hump<br>Surface + L x W +<br>text                 | SDPR           | Depressions or humps equal to or greater than 25mm deep/high and less than 250mm wide. Applies in all areas, except equal to or greater than 40mm depth/height in rural areas.  |
| Surface Joint or Gap<br>Surface + L x W +<br>text                                 | SIFJ           | Cracks and gaps equal to or greater than 20mm or 40mm deep on urban footways  |
| Surface Profile<br>Uneven<br>Surface + L x W +<br>text                            | SRPF           | Ridges equal to or greater than 25 mm on urban footways. Includes ridges, projections and sharp edges (trips),  |

| Rocking            |      |  |
|--------------------|------|--|
|                    | ROCK | If rocking creates a ridge of at or equal to or greater than |
| Surface + Number + | NOCK | 20 mm  |
| Height + text      |      |  |

## **SURFACE TYPES AND DESCRIPTIONS**

| 1 | HRA  | Hot Rolled Asphalt | 10 | OTHR | Other               |
|---|------|--------------------|----|------|---------------------|
| 2 | ВІТМ | Bit Macadam        | 11 | SETT | Stone Setts         |
| 3 | CONC | Concrete           | 12 | HFSD | High Frict S. Dress |
| 4 | SDRE | S. Dressed         | 13 | MFLG | Mini-Flags          |
| 5 | GRSS | Grass              | 14 | YKST | York Stone          |
| 6 | GRAV | Gravel             | 15 | COBB | Cobbles             |
| 7 | FLAG | Concrete Flags     | 16 | BLBR | Block Pave (Brick)  |
| 8 | BLCK | Block Pave (Conc)  | 17 | ANPD | Anti-pedestrian     |
| 9 | UNMD | Unmade             | 18 | TACF | Tactile flags       |

DEFINITION: This section relates to minor repairs to kerbs, edgings and preformed

channels of all types.

**Treatment Codes:** /AJL/EVI/ESI/RFX/RPL/NON

**Safety Inspection** 

## CAT 1 - End of next working day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | GUIDANCE  |
|--|----------------|---|
| Vertical projection or<br>sunken<br>Type + L + Ht + text | EVPJ           | CAT 1 only if adjoining a footway and creates a longitudinal trip equal to or greater than 25mm in all areas, except equal to or greater than 40 mm on rural footways.              |
| Horizontal projection<br>Type + L + Ht + text            | EHPJ           | If equal to or greater than 50 mm where a kerb has been pushed out into the carriageway, facing traffic. CAT 1 only if on the inside of a curve where tyres could override & burst. |
| Loose/rocking<br>Type + L + Ht + text                    | ELRK           | Loose or rocking items equal to or greater than 20mm which are creating a hazard underfoot in busy urban areas and are adjoining a footway.   |
| Missing Type + L + No + text                             | MISS           | CAT 1 only if adjoining a footway and creates a longitudinal trip equal to or greater than 25mm in all areas, except equal to or greater than 40 mm on rural footways.              |

#### **KERB MATERIAL TYPES**

| 101 | CONC | Conc Half Batter | 108 | CBCK | Concrete Block    |
|-----|------|------------------|-----|------|-------------------|
| 102 | STON | Natural Stone    | 109 | CONF | Conc. Full Batter |
| 103 | EXTA | Extruded Asphalt | 110 | CONB | Conc. Bull Nose   |
| 104 | OTHR | Other            | 111 | CONL | Conc. Drop Left   |
| 105 | BBCK | Beaney Block     | 112 | CONR | Conc. Drop Right  |
| 106 | SFTY | Safety Kerb      | 113 | CONQ | Conc. Quadrant    |
| 107 | BRIK | Brick            | 114 | SETT | Setts             |

DEFINITION: This section relates to the repairs to and replacement of (where necessary) all types of covers, gratings, frames and boxes, which are the responsibility of the Borough Council or for which the Borough Council have a responsibility to report to the owners.

#### NOTES:

- (i) The majority of covers in carriageways, footways and cycle tracks are the responsibility of the Statutory Undertakers and other parties. Hazardous defects should be signed & coned and the owners notified by Highway Office staff by phone/FAX. If repairs are not then carried out in the appropriate time by the owners, the authority should carry them out and seek to recover the costs from the owners.
- (ii) Where defects arise in carriageways subject to medium or high pedestrian use, the standards given for footways & cycle tracks should be employed.

Treatment Codes: /AJL /EVI /ESI /FLT /LET /REP /RPL /NON Safety Inspection

CAT 1 - End of next working day Make Safe

| DESCRIPTION   | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|---|----------------|--|
| Difference in level<br>with road<br>Type + Ht + text  | IDLV           | If equal to or greater than 50 mm in c/way or equal to or greater than 25mm in urban footway or cycle track (40mm rural). Differential levels between items and the abutting surface.  |
| Difference in<br>components level<br>Type + Ht + text | ICLV           | If equal to or greater than 25 mm on an urban footway or a cycle track. (40mm rural). Differential levels between different components i.e. cover & frame.   |
| Cracked or broken<br>Type + L + W + text              | IBCK           | A cracked or broken item which is in danger of collapse or if an inspector is in doubt should be classed as a Category 1 defect.   |
| Missing<br>Type + L + W + text                        | MISS           | Missing items should be replaced as soon as possible.  |
| Parallel gratings<br>Type + L + W + text              | PARL           | Gully and other gratings in carriageways and cycle tracks which have gaps more than 20 mm wide parallel to and within the normal line of movement of pedal and motor cycles should be corrected as soon as possible.  Offset gratings unlikely to be Cat 1.  |
| Smooth surface  Type + L + W + text                   | SMTH           | Worn covers which constitute a skidding hazard to pedal and motor cycle users in wet conditions should be classed as Category 1 where they are located on a bend, at a junction or in an area of braking ahead of signals etc.  Notify Undertaker concerned. |

DEFINITION: This section relates to the gully pot itself and any raising pieces below the cover.

Treatment Codes: /CLU /RPL /ESI /EVI /NON

**Safety Inspection** 

### CAT 1 - End of next working day Make Safe

| DESCRIPTION                      | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|----------------------------------|----------------|--|
| Flooding<br>L x w x depth + text | FLOD           | Record as FLOOD (FL). Treatment as /ESI to get Flood signs in place. |

### COVER, GULLY, GRATING, FRAME OR BOX TYPE

| 201 | PARL | Parallel Gully | 208 | WATR | Water Authority  |
|-----|------|----------------|-----|------|------------------|
| 202 | CHAN | Channel Gully  | 209 | STAP | Stop Tap         |
| 203 | SIDE | Side Entry     | 210 | HYDT | Hydrant          |
| 204 | OSID | Off-set        | 211 | ELEC | Electricity      |
| 205 | SEWR | Sewer          | 212 | GASS | Gas              |
| 206 | TCOM | Telecom        | 213 | HIGH | Highway Drainage |
| 207 | CABL | Cable TV       | 214 | UNKN | Unknown          |

# HIGHWAY DRAINAGE: PIPED DRAINAGE SYSTEMS (FD, GY, CD, PG)

PD

DEFINITION: All types of Piped Drainage Systems including slot drains.

NOTES:

- (i) Maximum use should be made of emptying & cleansing operations to check that piped drainage systems are operating satisfactorily.
- (ii) Symptoms of blockage or fault which should normally prompt a detailed inspection are, backing up and flooding at the entry points to the system, dry outfalls, wet areas and the presence of lush vegetation.
- (iii) Before any work is carried out, the ownership of the drainage system should be determined.

Treatment Codes: /CLU /EVI /ESI /PVN /NON

#### **Safety Inspection**

| DESCRIPTION                       | DEFECT<br>CODE | GUIDANCE  |
|-----------------------------------|----------------|---|
| Flooding<br>L x W x Depth + text  | FLOD           | If creating a dangerous flood on the highway Treatment as /ESI to get Flood signs in place. And inform highway office staff immediately |
| Flood nuisance to properties text | NPRP           | flooding properties.  |

DEFINITION:Short lengths of pipe carrying water from a channel across the verge direct to a ditch, filter drain or soakaway, without a gully-pot but sometimes with a grating.

Tretament Codes: /CLU /EVI /ESI /RPL /NON

**Safety Inspection** 

| DESCRIPTION                   | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-------------------------------|----------------|---|
| Flooding L x w x depth + text | FLOD           | A dangerous flood on the highway. Record as FLOOD (FL). Treatment as /ESI to get Flood signs in place.  And inform highway office staff immediately |

DEFINITION:An open channel cut across rural verges leading to ditches or filter drains and ending at an appropriate distance from the carriageway or hard shoulder.

Treatment Codes: /CLU /ESI /EVI /NON

**Safety Inspection** 

| DESCRIPTION                   | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-------------------------------|----------------|---|
| Flooding L x w x Depth + text |                | If causing a dangerous flood on the highway. Treatment as /ESI to get Flood signs in place. And inform highway office staff immediately |

DEFINITION:A channel adjacent to the highway for drainage. The ditch is not generally a part of the highway unless owned by the highway authority. Check with Area Office.

NOTES: Ditches are not generally the responsibility of the Borough Council. The

riparian owner of the ditch is to be informed of the defect.

Treatment Codes: /CLU /EVI /ESI /LET /NON

**Safety Inspection** 

CAT 1 - End of next working day Make Safe

| DESCRIPTION           | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-----------------------|----------------|---|
| Collapsed bank        | CLBK           | If undermining the carriageway or footway record as   |
| L x W x Height + text | OLDIK          | CAT 1 with a request for an Engineer to inspect.  |
| Flooding              | EI 0 D         | If dangerous flooding of the highway itself or adjacent   |
| L x W x Height + text | FLOD           | property is also occurring. Also record as FLOOD (FL).  And inform highway office staff immediately |

DEFINITION:A field drain, usually adjacent to a carriageway that may or may not incorporate a properly formed invert or collection pipe.

Treatment Codes: /EVI /ESI /NON

**Safety Inspection** 

| DESCRIPTION                   | DEFECT<br>CODE | GUIDANCE   |
|-------------------------------|----------------|--|
| Flooding L x W x Depth + text | FLOD           | Dangerous flooding of the carriageway itself is occurring, record as FLOOD (FL). Treatment as /ESI to get Flood signs in place And inform highway office staff immediately |

CULVERTS (CV)

DEFINITION: This section relates to culverts with diameters at or less than 1.5m, culverts with diameters over 1.5m are to be reported to the Bridge Maintenance Section.

Treatment Codes: /CLU /EVI /NON

**Safety Inspection** 

| DESCRIPTION                   | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-------------------------------|----------------|---|
| Free flow impeded             | FRFL           | If flooding of the highway is likely over full width or road  |
| percentage + text             | FRFL           | width would be significantly reduced with poor visibility.  |
| Flooding L x w x depth + text | FLOD           | If creating a dangerous flood on the highway. Also record as FLOOD (FL). Treatment as /ESI to get Flood signs in place. And inform highway office staff immediately |

#### (DI, CV, CH, PG, GY, MH, CP, FD, CD, BP, IN, CW, LB, CI, CR, HS, XO, FW, CT)

DEFINITION:Flooding of the highway caused by the inadequate provision or operation of highway drainage facilities. If the cause can be established as an item of drainage inventory e.g. GY, that is the cause, then record that. If the flooding is general to the carriageway, then record CW with the cause to be found on later investigation.

If the general area is flooded, record as CW or FW etc. so that warning signs may be provided.

NOTES: The cause of flooding shall be ascertained and if necessary proposals for action recommended

Treatment Codes: /CLU /EVI /ESI /NON

#### **Safety Inspection**

| DESCRIPTION          | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|----------------------|----------------|--|
| Flooding             | FLOD           | If road flooded over full width or width significantly reduced with poor visibility.       |
| L x w x depth + text |                | Treatment as /ESI to get Flood signs in place. And inform highway office staff immediately |

(SF, PR, RW, FB, OI)

DEFINITION:All types of boundary fences (including open iron b & w Cheshire fencing) and walls, antiglare screen fences, noise barriers, pedestrian guardrails and fences, and tensioned / untensioned vehicle safety fences/barriers.

Does <u>not</u> include parapets and guardrails on bridges and other structures or the structural elements of noise barriers.

**Treatment Codes:** /AJL/EVI /ESI /REP /RPL /NON (FB, FN, BF, BT)

#### **Safety Inspection**

| DESCRIPTION                         | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|-------------------------------------|----------------|---|
| Missing<br>L x w x ht + text        | MISS           | Only if part of a safety barrier or pedestrian guard-rail.  Treat = /EVI                                  |
| <i>Damaged</i><br>L x w x ht + text | DAMM           | Only if safety barrier bent / displaced. Inform the owner of stock as if stock in the field. Treat = /EVI |

DEFINITION: This section relates to the maintenance of hedges and trees which are the responsibility of the Borough Council or which, although the responsibility of others are causing a nuisance or obstruction to the highway. contact: Borough Tree Officer.

Treatment Codes: /CUT /EVI /ESI /LET /TEL /NON

CAT 1 - End of next working day Make Safe

| DESCRIPTION                                     | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|---|----------------|---|
| Unstable/overgrown L + number + text            | UNST           | A branch or tree is clearly broken & swaying about above the road it is to be treated as an emergency.  |
| Dead tree<br>height + text                      | DTRE           | A dead highway tree is clearly broken & leaning over above the road it is to be treated as an emergency.  |
| Dying/dead branch length x ht + text            | DBRA           | If a dead branch is clearly broken & swaying about above the road it is to be treated as an emergency.  |
| Obscured sign or<br>Traffic Signal Head<br>text | OBSN           | 24 hour response only for Signal Heads, mandatory signs.  |
| Overgrown & obstructing the way Length + text   | OVER           | If the growth is forcing pedestrians off the footway into the path of traffic or if branches are projecting into carriageway  Length = length of highway affected |

ROADSTUDS (RS)

DEFINITION:Reflective and non-reflective road studs of all types and colours including 'Catseyes'.

Treatment Codes: /EVI /ESI /PRG /RFC /RFX /RPL /STK /NON

CAT 1 - End of next working day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|--|----------------|--|
| Loose catseye<br>casing<br>Type + Number +<br>text | LCAS           | Remove immediately then record another defect at this EXACT location as RS - MISC. |

Type 401 = Class 1, prohibitory Type 402 = Class 2, warning & informatory

DEFINITION: This section relates only to mandatory road markings in paint or thermoplastic materials, these markings may be longitudinal, transverse, hatched & special road markings, but not to edge markings.

Treatment Codes: /EVI /REM /NON

**Safety Inspection** 

| DESCRIPTION                    | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--------------------------------|----------------|---|
| Completely Missing<br>Markings | MISS           | Only if a mandatory marking;<br>Stop or Give-way line.<br>Give way triangle |
| Number + text                  |                | STOP wording  |

DEFINITION:This section relates to all non-illuminated road traffic signs & permanent bollards. A special Section, SE, is provided for electrical faults in illuminated signs.

Treatment Codes: / CLO / ESI / EVI / LET / PVN / TEL / REP / RPL / RSL / NON

ID No. & Diag No. are prompted for just before "Defect Code".

#### **Safety Inspection**

| DESCRIPTION                            | DEFECT<br>CODE | <u>GUIDANCE</u>  |
|--|----------------|--|
| Physical condition of fittings.        | COFT           | If in danger of falling into the road or onto pedestrians.   |
| Physical condition of<br>frame<br>text | COFR           | If in danger of falling into the road or onto pedestrians.   |
| Physical condition of post text        | COPT           | If in danger of falling into the road or onto pedestrians.   |
| Damaged.<br>text                       | DAMG           | If in danger of falling into the road or if non-functional for Stop 601.1 & Give Way 602 at junctions with busy or high speed roads & Slippery Road 557 signs. |
| Post Leaning<br>text                   | LEAN           | If clearly dangerous i.e. could fall. In emergency, then phone message to Area highways office foe street lighting attendance and action.                      |
| <i>Missing</i><br>text                 | MISS           | For Stop 601.1 & Give Way 602 signs at junctions with busy or high speed roads.  |
| Pointing wrong way text                | RWAY           | For Stop 601.1 & Give Way 602 signs at junctions with busy or high speed roads.  Do not record direction or other information signs.                           |

DEFINITION: This section relates to all **illuminated** road traffic signs including permanent bollards.

**NOTES** 

During recent years some illuminated traffic signs have been replaced with non-illuminated ones. In many cases the old wide-based posts have been left, sometimes still containing an electrical supply. Instances of such sign posts are to be recorded & reported to the Street Lighting Section, during office hours or the highway duty officer outside normal office hours in case of difficulty.

Treatment Codes: /ESI /EVI /LET /PVN /TEL /REP /RPL /RSL /NON

**Safety Inspection** 

CAT 1 - Time as shown or End of next working day Make Safe

| DESCRIPTION                         | DEFECT<br>CODE            | <u>GUIDANCE</u>   |
|-------------------------------------|---------------------------|---|
| Defects as for SG                   | COFT to<br>DIRT &<br>MISS | Guidance as for SG  |
| Accident damage                     |                           | If the post is in an obviously dangerous state, immediate phone message to relevant Street Lighting Officer for |
| Response time + text                | DAMG                      | contractor to respond within ONE hour. Enter  Response Time as 1½hrs.   |
| Exposed wiring Response time + text | EXPW                      | Phone as above. Enter Response time as 1½ hrs   |
| Electrical Arcing                   | EARC                      | Phone as above. Enter Response time as 1½ hrs.  |

## **ILLUMINATED ROAD TRAFFIC SIGNS Cont**

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--|----------------|---|
| Lantern Bowl<br>hanging<br>text  | LBHG           | If bowl is hanging.   |
| Post Leaning or<br>Bracket Arm hanging<br>by cable<br>Response time + text | LEAN           | If clearly leaning at a dangerous angle or bracket is hanging by its cable, then phone message to relevant Street Lighting Client Officer to respond within 1½ hours. |
| Missing Door (Open,<br>off or missing )<br>Response time + text            | MISP           | Phone message to relevant Street Lighting Officer to respond within 1½ hours. If children near, stay by post.  Do NOT attempt to touch post.                          |
| Pointing wrong way or twisted text   | RWAY           | For Stop 601.1 & Give Way 602 signs at junctions with busy or high speed roads.  Do not record direction or other information signs.                                  |
| Underground Cables<br>Exposed Response<br>time + text                      | UXPW           | If insulation damaged then phone message to relevant Street Lighting Officer to respond within 1½ hours.  |

DEFINITION: This section relates to the routine maintenance of road lighting installations

Treatment Codes: /ESI /EVI /LET /PVN /REP /TEL /RSL /NON

Identity No. prompted for just before "Defect Code"

### **Safety Inspection**

## CAT 1 - Time as shown or End of next working day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--|----------------|---|
| Electrical Arcing/<br>buzzing<br>text  | EARC           | The sound of electrical buzzing from within the column.   |
| Exposed wiring  Response time + text   | EXPW           | Telephone message to relevant Street Lighting Officer response time 1½ hours  |
| Accident damage  Response time + text  | DAMG           | If the column is in an obviously dangerous state, phone message to relevant Street Lighting Officer, response time 1½ hours.  |
| Lantern Bowl<br>hanging or Bracket<br>Arm twisted<br>text                        | LBHG           | If bowl is hanging or bracket arm is twisted  |
| Column Leaning unreasonably or Bracket Arm hanging by cable Response time + text | LEAN           | If clearly leaning at a dangerous angle or the bracket is hanging by its cable i.e. could fall, then phone message to relevant Street Lighting Officer, response time 1½ hours. |
| Missing Door (Open, off or missing)  Response time + text                        | MISP           | Phone message to relevant Street Lighting Officer, response time 1½ hours Do not touch post. If children near stay by post.   |
| Underground Cables Exposed Response time + text                                  | UXPW           | If insulation damaged then phone message to relevant Street Lighting Officer, response time 1½ hours  |

DEFINITION: This section relates to the routine maintenance of road signal installations. telephone message to Traffic Signals Section, Immediate action taken = TEL to show that a phone message passed to the Traffic Signals Section.

Treatment Codes: /CUT /ESI /EVI /LET /RFX /REP /RPL /TEL /NON

#### **Safety Inspection**

### CAT 1 - End of next working day Make Safe or Response Time stated

| DESCRIPTION   | DEFECT CODE | <u>COMMENTS</u>  |
|---|-------------|--|
| Alignment or<br>Obscuration<br>Response time + text             | ALOB        | If drivers cannot see heads or Alignment, cleanliness and visibility of signal heads Immediate phone message to Traffic Signals Section.  Enter reported to Traffic Signals Section.                         |
| Corrosion holes in post or box  Response Time + text            | CORR        | Severe corrosion holes allowing access to electrical equipment, particularly on doors or near ground level.  Immediate phone message to Traffic Signals Section.  Enter reported to Traffic Signals Section. |
| Damaged Response time + text                                    | DAMG        | If non-functional. All lights out immediate phone message to Traffic Signals Section Enter reported to Traffic Signals Section.  |
| Lamp Out  Type + Response  Time + text                          | LAMP        | Any lamps out immediate phone message to Traffic Signals Section. Enter reported to Traffic Signals Section.   |
| Post Leaning or<br>Loose Signal Head<br>Response Time +<br>text | LEAN        | If clearly dangerous ie could fall immediate phone message to Traffic Signals Section Enter reported to Traffic Signals Section.   |
| Missing Door<br>Response time + text                            | MISP        | Immediate phone message to Traffic Signals Section. Enter reported to Traffic Signals Section.   |
| Underground Cables<br>Exposed<br>Response time + text           | UXPW        | If insulation damaged then immediate phone message to Traffic Signals Section  |
|   |             | Enter reported to Traffic Signals Section.   |

DEFINITION: This section is included to deal with mud & debris on the highway

Treatment Codes: /CLO /ESI /LET /SWP /NON

CAT 1 - End of next working day Make Safe

| DESCRIPTION  | DEFECT<br>CODE | <u>GUIDANCE</u>   |
|--|----------------|---|
| Mud on Road<br>L x w + text                                  | SLOP           | Slurry or mud on the road. 24 hour response if on a strategic route (2) or Main Distributor (3(a)) `or other busy road. Notify those causing the problem.  Immediate notification of Highways Office if road surface likely to be dangerous to get warning signs set up as soon as possible.  Council will inform Police and take action to have slippery surface cleaned at cost to those causing it if they do not take immediate action. |
| Material deposited on<br>the highway surface<br>L x w x text | MUCK           | Immediate action may be necessary to identify the source & cause of the danger and to notify those causing the problem that they face prosecution.  Immediate notification of Highways Office.  "Material" includes Diesel oil spillage - make clear in text.   |
| Excess Surface<br>Dressing Chippings L<br>x w x text         | CHIP           | The defect is most likely to be present following surface dressing of the road  Note as Contractor Works in text.  If "loose chippings" signs not present notify Highways  Office immediately.  |

| ACTIVITY<br>CODE | ACTIVITY CODE DESCRIPTION                | TREATMENT CODE                                       |
|------------------|--|--|
| BF               | Boundary fences:<br>Metal/concrete       | /EVI /LET /REP /RPL /NON                             |
| ВТ               | Boundary fences: Timber                  | /EVI /LET /REP /RPL /NON                             |
| CG               | Covers, gratings, frames and boxes       | /AJL/CLU/EVI/ESI/FLT/LET/REP/RPL/NON                 |
| СМ               | Concrete carriageway repairs             | /EVI /ESI /RCS /SOB /STR /NON                        |
| CV               | Highway drainage: Culverts               | /CLU /EVI /NON                                       |
| DI               | Highway drainage: Ditches                | /CLU /EVI /ESI /LET /NON                             |
| EC               | Embankments and cuttings                 | /EVI /NON  |
| FB               | Fences and barriers                      | /AJL/EVI/ESI/REP/RPL/NON                             |
| FC               | Footways and cycle tracks                | /AJL/FLT/EVI/ESI/MFJ/PRB/PRD/PRG<br>/RFX/RPL/SOB/NON |
| FD               | Filter Drain                             | /EVI /ESI /NON                                       |
| FL               | Highway drainage: Flooding               | /CLU /EVI /ESI /NON                                  |
| FN               | Safety fences: Steel - tension           | /AJL/EVI/ESI/REP/RPL/NON                             |
| GA               | Grassed areas                            | /CUT /EVI /ESI /LET /SBV /NON                        |
| PD               | Highway drainage: Piped drainage systems | /CLU /EVI /ESI /PVN /NON                             |

| ACTIVITY<br>CODE | ACTIVITY CODE DESCRIPTION                            | TREATMENT CODE                                       |
|------------------|--|--|
| GC               | Highway drainage: Gullies,<br>Catchpits,Interceptors | /CLU /RPL /ESI /EVI /NON                             |
| GP               | Highway drainage: Grips                              | /CLU /ESI /EVI /NON                                  |
| HT               | Hedges and trees: General                            | /CUT /EVI /ESI /LET /TEL /NON                        |
| KC               | Kerbs, edgings and preformed channels                | /AJL/EVI/RFX/RPL/NON                                 |
| LP               | Road lighting  | /ESI /EVI /LET /PVN /REP /TEL /RSL /NON              |
| MC               | Flexible carriageway repairs                         | /AJL/CPL/EVI/ESI/PRA/PRB/PRD/PRE/PRG/PRI/RPL/SOB/NON |
| PD               | Highway drainage: Piped drainage systems             | /CLU /EVI /ESI /LET /PVN /NON                        |
| PG               | Highway drainage: Piped grips                        | /CLU /EVI /ESI /RPL /NON                             |
| RM               | Road markings  | /EVI /ESI /REM /NON                                  |
| RS               | Road studs: General                                  | /EVI /ESI /PRG /RFC /RFX /RPL /STK /NON              |
| SE               | Illuminated Signs                                    | /CLO /ESI /EVI /LET /PVN /TEL /REP /RPL /RSL /NON    |
| SG               | Road traffic signs                                   | /CLO /ESI /EVI /LET /PVN /TEL /REP /RPL /RSL /NON    |
| SC               | Emergency Sweeping & Cleansing                       | /CLO /ESI /LET /SWP /NON                             |
| TS               | Traffic signals                                      | /CUT /ESI /EVI /LET /RFX /REP /RPL /TEL<br>/NON      |

| TREATMENT CODE | TREATMENT CODE DESCRIPTION              | DEFECT ATTRIBUTE DESCRIPTION All may not be present for any defect |
|----------------|---|--|
| AJL            | Adjust level, refix/relay               | Height, text   |
| CLO            | Clean only                              | Length, width, text  |
| CLU            | Clear/unblock                           | Percentage, text   |
| CPL            | Cold Planings                           | (Surface) Type, length, width, text                                |
| CUT            | Cut/trim                                | Length, width, height, text  |
| ESI            | Emergency Sign/cone & maintain          | Length, width, height, text  |
| EVI            | Engineer to Visit Site                  | Text   |
| FLT            | Fillet, mortar/asphalt                  | Length, height, text   |
| LET            | Notify owner: FAX/ Phone/ Letter        | Length, height, text   |
| MFJ            | Mortar Fill to Joint                    | (Surface) Type, length, width, text                                |
| PRA            | Patch - edge key & asphalt only         | (Surface) Type, length, width, text                                |
| PRB            | Patch - edge key & bitmac only          | (Surface) Type, length, width, text                                |
| PRD            | Patch-complete excavation & bitmac only | (Surface) Type, length, width, text                                |
| PRE            | Patch-complete excav.& bitmac & asphalt | (Surface) Type, length, width, text                                |
| PRG            | Patch - no excavation & bitmac only     | (Surface) Type, length, width, text                                |

| TREATMENT CODE | TREATMENT CODE DESCRIPTION           | DEFECT ATTRIBUTE DESCRIPTION All may not be present for any defect |
|----------------|--------------------------------------|--|
| PRI            | Patch using hot rolled asphalt       | (Surface) Type, length, width, text                                |
| PVN            | Provide new                          | Emergency response, height, text                                   |
| TEL            | Telephone Emergency Call Out         | Length, height, text   |
| RCS            | Reconstruct                          | Length, width, height, text  |
| REM            | Re-mark                              | Length, percentage remaining, text                                 |
| REP            | Repair                               | Length, text   |
| RFC            | Remove Stud Fill Cavity              | Number, text   |
| RFX            | Refix                                | (Surface) Type, length, width, text                                |
| RPL            | Replace                              | Length, width, height, text  |
| RSL            | Inform Street Lighting               | Emergency Response, text   |
| RTS            | Inform Traffic Signal Control Centre | Emergency Response, text   |
| SBV            | Sideback verge                       | Length, width, height, text  |
| SOB            | Seal/overband                        | Length, width, height, text  |
| STK            | Renew Dual Coloured Stick on Studs   | Number, text   |
| SWP            | Sweep (Surface)                      | Length, width, text  |