Highway Safety Inspection Manual

Version 2.0, 30 October 2024

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Introduction

As the highway authority for Hampshire, our aim is to keep the highway network safe through a regime of highway safety inspections that are carried out by trained inspectors. Where possible highway safety inspectors shall be accredited within six months through the Institute of Highway Engineers (IHE) Highway Safety Training and Certification Scheme.

Inspectors shall register their qualification through the IHE (Highway Inspectors Register - IHE (theihe.org).

This Highway Inspection Manual is a procedural document which is intended as a guide for all involved in the inspection of Hampshire County Council's highway network. This document covers scheduled highway safety inspections and ad-hoc highway safety inspections. It should also be noted that detailed condition surveys of highway assets are not covered in this document.

This guide should be used in conjunction with Hampshire County Council's existing suite of highway documentation such as the Highway Maintenance Management Plan (HMMP) and the Hampshire Highways Service Contract (HHSC).

The Highway Safety Inspection Manual has been developed in accordance with the recommendations and guidance in the 'Well Managed Highway Infrastructure - A Code of Practice' (2016) and the Highways Maintenance Efficiency Programme (HMEP) best practice documents.

1. Context and Objectives

Hampshire County Council as the highway authority has a statutory duty under Section 41 of the Highways Act 1980 to maintain highways maintainable at public expense in a safe and serviceable manner for all types of road user. Neglecting this duty can lead to claims against the County Council for damages resulting from a failure to maintain the highway network.

Under Section 58 of the Highways Act 1980, highway authorities can use a special defence if it can prove that the authority had taken such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic.

To ensure Hampshire County Council fulfils its statutory obligations and meets the key objective of network safety, a robust regime of highway safety inspections is undertaken. These inspections are a critical element in managing the highway authority's liabilities and risks.

The main objectives are:

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

The risk is assessed on site and if the defect meets the defined investigatory level it will normally initiate reactive maintenance, see section 9 for details on defect identification and assessment.

2. Defined Terms

Safety Inspections – A scheduled or ad-hoc inspection designed to identify defects likely to create danger or serious inconvenience to users of the network or the wider community.

Scheduled Safety Inspections – A risk-based safety inspection regime determined by their position in the Network Hierarchy

Ad-hoc Safety Inspection – A site specific safety inspection undertaken in response to particular circumstances, such as reports of defects from the police, general public, other agencies, utilities and the like

Emergency Defects – Defects found during a Safety Inspection which require an immediate response to mitigate the hazard.

Safety Defects – Defects found during a Safety Inspection which trigger the Investigatory Level for a Safety Defect and require Risk Assessment and Response.

Service Issue – Issues within the highway infrastructure that do not require repair for safety reasons but may represent opportunities to protect the highway asset.

Investigatory Level – The level at which a Risk Assessment is triggered.

Risk Assessment – A structured assessment of the likely impact and probability of an incident occurring.

Response – Any action resulting from a Safety Inspection

3. Network Hierarchy

A well-defined network hierarchy, or series of related hierarchies, that reflect the needs, priorities and use of the asset is fundamental to implementing a risk-based approach across all aspects of highway maintenance policies and procedures.

The carriageway and footway hierarchies have been developed in accordance with the Well Managed Highway Infrastructure: A Code of Practice (COP). They help determine the relative importance of each network section related to their function and will be used as an essential tool in determining priorities for routine and planned maintenance activities, maintenance standards, performance, and budget allocation.

The hierarchies are also key to the highway safety inspection process as they set the required inspection frequency and are embedded in the defect risk assessment which determines defect repair response times.

The hierarchies are held and managed in Hampshire's integrated highways asset management system (Confirm) and are subject to periodic reviews to ensure they reflect changes to the network. The hierarchy categories and the criteria used to determine how a hierarchy category is assigned to a particular section of carriageway or footway are detailed in appendices A, B, C and D.

Tracks (Carriageway hierarchy category 7) are excluded from the Highways Safety Inspection Manual due to the defect types and their investigatory levels not being suitable for this type of road. Defects on tracks are locally risk assessed and repaired if deemed necessary to ensure the safe passage of highway users in keeping with this type of road. Considerations include type and level of use, potential damage to vehicles, disruption to local services and the like before deciding on an appropriate course of action.

4. Frequency of Inspections

The frequency of highway safety inspections have been aligned with the carriageway and footway hierarchies. The inspection frequencies have been developed using an evidenced risk-based approach in line with the COP and were approved by the Executive Member on 12th March 2019.

It is possible for carriageways and footways which are part of the same street section to have different inspection frequencies depending upon their function and usage. Details of the carriageway and footway frequencies are shown in figures 1 and 2.

Cycleways Shall be inspected at the same frequency as the relevant section of carriageway or footway.

Table 1 - Carriageway Frequencies

Hierarchy Category	Name	Frequency
1	Primary Strategic Network	Monthly
2	Secondary Strategic Network	Monthly
3	Primary Distributor Network	Quarterly
4	Secondary Distributor Network	Quarterly
5	Local Network	Annually
6	Minor Network	Biennially
7	Tracks	Reactively

Table 2 - Footway Frequencies

Hierarchy Category	Name	Frequency
1	Primary Pedestrianised Zones	Monthly
2	Primary Walking Network	Monthly
3	Secondary Walking Network	Quarterly
4	Local Access Footways	Annually
5	Minor Footways	Biennial

5. Method of inspecting

Driven

Carriageway safety inspections should always be undertaken by two people in a suitable high-visibility marked vehicle with flashing beacons to accord with the Traffic Signs Manual Chapter 8 travelling at a suitable speed that will enable adequate recording of defects – (guidance speed is 25 mph), 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. For high-speed roads (above 40mph), a site specific risk assessment should be undertaken by the driver and inspector to determine the most appropriate method and speed to ensure the inspection is undertaken safely.

Driven inspections shall concentrate on safety defects that affect the carriageway only. This shall include sections of cycleways that are part of the carriageway.

Walked

Footways and footpaths shall be inspected on foot. Carriageways can be inspected by one person as part of the walked inspection if that person can safely inspect the footway, carriageway and verge at the same time. Where there is a second footway that cannot be inspected adequately from the first footway, due to distance or parked vehicles for example, the second footway shall also be walked.

As part of the walked inspections, the carriageway at a controlled pedestrian crossing shall be inspected in line with the footway investigatory levels over the full width of the crossing.

Combined

Combined inspections are undertaken as a driven inspection but have been identified as combined due to the presence of short section(s) of footway that require a walked inspection. If a carriageway section has been identified as requiring a combined inspection, this information will be held in the network data for that section in Confirm.

6. Health and Safety

Staff carrying out highway inspections shall comply with the ETE Department Safe System of Work for Working Safely on the Highway and Construction Sites, which incorporates the Vehicle Use Procedure for Highways, Traffic and Transport.

Inspections should wherever possible be carried out in periods of low risk, e.g. at off-peak times and in conditions of good visibility, e.g. not in darkness, at dusk or poor weather conditions.

Vehicles used for inspections from a moving vehicle should be conspicuous as defined in the Traffic Signs Manual Chapter 8. The roof-mounted flashing beacons should be used during the inspection.

When stopping to assess and/ or mark out defects the inspection vehicle should be parked at a safe location nearby and the assessment/marking-out carried out on foot and in accordance with the Safe System of Work for Working Safely on the Highway and Construction Sites. The inspection vehicle should not be used as temporary traffic management except in the circumstances defined in the Safe System of Work.

7. Recording Safety Inspection information

It is necessary to record details of every safety inspection, irrespective of whether it is a scheduled safety inspection or ad-hoc safety inspection.

The inspecting Officer shall record the severity and likelihood of a safety defect.

Where safe to do so, photographs shall be taken for each safety defect recorded. Photographs should include as a minimum; one photograph showing the defect in detail and another showing it in the context of its position within the highway. Where the highway environment or speed of the road prevents photographs from being taken safely, they may be omitted by the inspecting officer, but the reason shall be recorded.

Where safe to do so, photographs shall be taken as part of an Ad-hoc safety inspection whether there are any defects present or not. Where the highway environment or speed of the road prevents photographs from being taken safely, they may be omitted by the inspecting officer, but the reason shall be recorded.

If photographs cannot be taken in either case, due to the reported defect being located in a difficult location, such as a dual carriageway or other high-speed (40mph or greater) road with no safe place to stop/access the area of the defect on foot, or that the location of the possible defect is too vague and a longer length of highway has to be inspected, photographs may be omitted provided a comment is recorded stating the reason why photographs are not included.

Information relating to each inspection shall be captured in Confirm.

8. Out-of-Hours & Possible Emergencies generated by stakeholder / Police enquiries.

The details of every Out-of-Hours/Emergency response inspection shall be recorded in Confirm and this shall include details of the Stage 1 criteria or additional criteria to satisfy an emergency response. The information recorded shall also include a photographic record of the County Council's attendance irrespective of whether the reported defect exists or not. The photographs should clearly illustrate the street scene at the reported location of the defect(s) and any identifying features. For example, if there is a report of a footway pothole next to lamp column 17, the photograph must illustrate the condition of the footway around lamp column 17 along with another photograph showing the column in relation to its position on the highway.

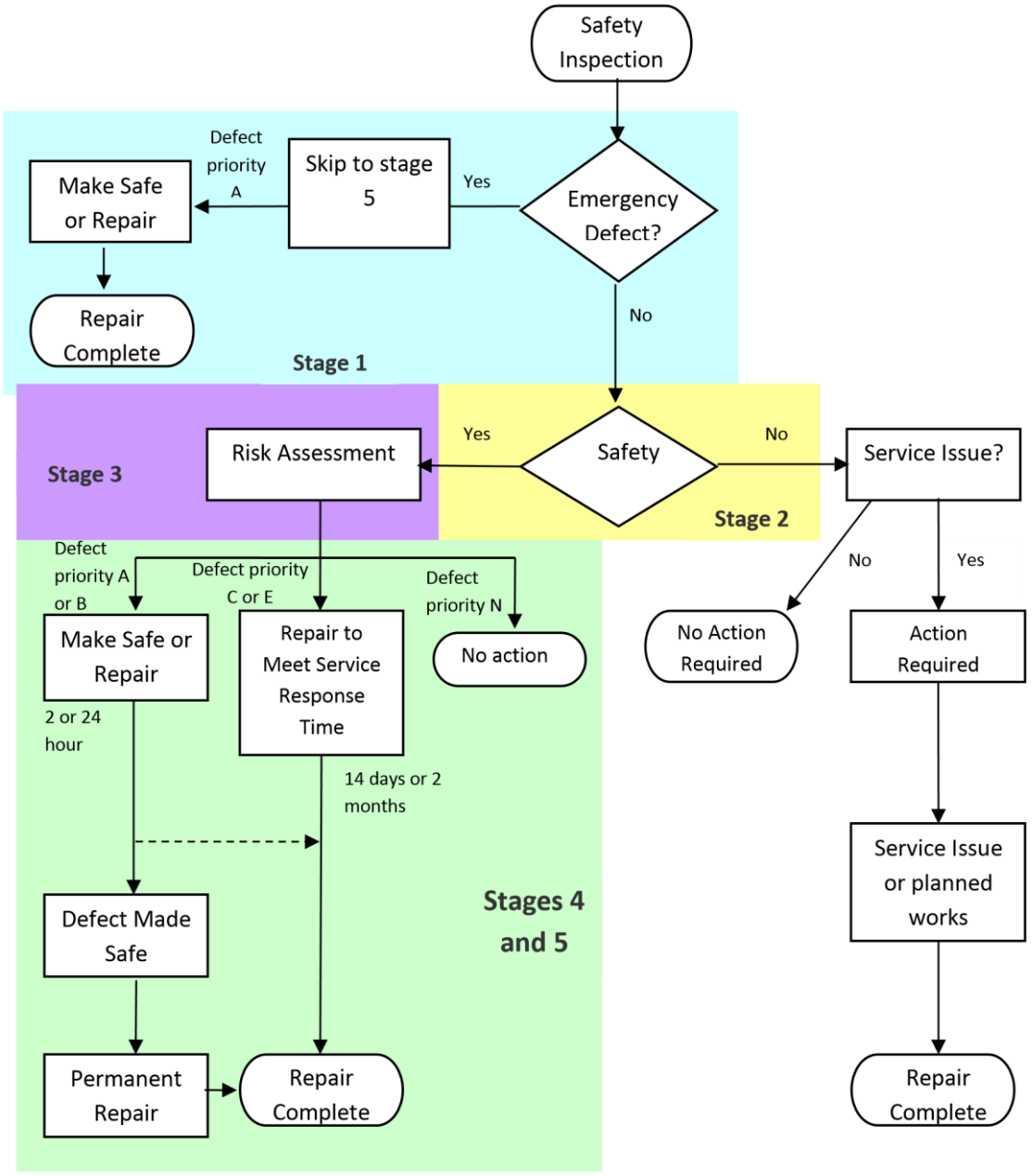
If photographs cannot be taken because the reported defect is located in a difficult location, such as a dual carriageway or other high-speed (40mph or greater) road with no safe place to stop/access the area of the defect on foot, or that the location of the possible defect is too vague and a longer length of highway has to be inspected, photographs may be omitted provided a comment is recorded stating the reason why photographs are not included. Where the inspection occurs during the hours of darkness vehicle headlights/torches/phone camera flashes should be used wherever possible to illuminate the area inspected and photographs obtained. If this is not possible to include photographs the reason why is to be recorded on the Confirm enquiry.

There will be occasions where it is not possible for an inspector/engineer to visit the site and an emergency response gang may be sent straight to site i.e. enquiries managed by HOC or during severe weather events. In these situations, the Confirm record should be updated to say no visit undertaken and gang sent straight to site.

9. Defect Identification and Ordering Process

9.1 The Outline Process

This process covers the identification, risk assessment, prioritisation, and categorisation of works, works ordering and repair of safety defects.



9.2 Defect Identification

Stage 1 – Is it an Emergency Defect?

The first decision regarding any Safety Inspection should determine whether the hazard is deemed an Emergency Defect.

The hazards below are all imminent and sufficient risk to cause severe or life threatening injuries to warrant immediate action to repair or make safe. These are defined as:

- Exposed or live electrical installation.
- Missing iron work (chamber covers, gully gratings etc.)
- Collapse or imminent structural failure of any highway asset (carriageway, footway, bridge, retaining wall or embankment).
- Substantial structures (tree, major branches, etc.) likely to fall on persons or property.
- Major obstructions blocking cycleways, footways or carriageways.
- General debris from road traffic incidents or similar on live carriageways.

Stage 2 – Is it a Safety Defect?

A defect can be categorised as a Safety Defect when the Inspector determines that the Investigatory Level for any defect type has been exceeded. This decision is achieved by visually assessing it against the pre-set list of defect types and their Investigatory Levels set out in Table 1 below. If, after this assessment, a Safety Defect is identified, then a further Risk Assessment must be carried out to determine the appropriate Response (see Stages 3 & 4).

The list not only provides information to determine when a Safety Defect should be considered; it also provides guidance where Safety Defects should not be considered. For clarification there may be a defect present, but it does not present a safety hazard and can be dealt with as a Service Issue.

This manual is intended as guidance. Whilst it is expected that inspectors will adhere to the principles set out in this document, this manual and the guidance it contains cannot cater for every situation which may be encountered within the highway network. If, upon inspection, a defect which may otherwise be dealt with as a Service Issue is considered to pose a risk to safety, that defect should be treated as a Safety Defect and a risk assessment carried out in accordance with Stages 3 and 4 of this manual.

Table 1 - Defect types and Investigatory Levels

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
OBST	**Obstruction**	Debris, deposits and spillages on the highway. Ingress or overhang, excluding vegetation	**Inclusions:** Any obstruction on or encroaching into the running surface of the carriageway, footway or cycleway that cannot be dealt with at the time of the inspection and is likely to be an imminent hazard to the road user. Any obstruction that is regarded as hazardous i.e. sharps, chemicals etc. should be considered as a safety hazard irrespective of their location within the Highway. **Exclusions**: Deposits on verges, in laybys or any land adjacent to the running surface is unlikely to be regarded as a safety hazard and should be dealt with as a Service Issue or other appropriate action Obstructions caused specifically by vegetation should be recorded as VEGO (see below for further details)
GUAR	**Guarding (temporary works)**	Works on the highway where guarding is either missing, damaged or inadequate	**Inclusions:** Any guarding defects that directly affect road users and are like to cause confusion, collision or injury **Exclusions**: Minor non-compliance to the relevant signing and guarding regulations should not be considered as a safety hazard and should be dealt with as a service issue or other appropriate action.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
CWPO	**Carriageway and dedicated on-carriageway cycleway pothole**	Loss of surface material within the carriageway surface	**Inclusions:** Any vertical or steep faced pothole greater than 40 to 50mm in depth and greater than 300mm in any dimension. The carriageway at controlled crossing points e.g., Zebra, pelican, Puffin, Toucan and Pegasus Crossings shall be inspected in accordance with the footway defect criteria.
CWNP	**Carriageway and dedicated on carriageway cycleway defect - not pothole**	All cracks, upstands / depressions, exposed unbound material and edge defects	**Inclusions:** Any longitudinal crack greater than 20mm in width, greater than 300mm in length that exceeds 40 to 50mm in depth. Any change of profile measured over a horizontal distance of 300mm that exceeds 40 to 50mm in depth Any edge defect greater than 150mm in depth and ingressing into the carriageway greater than 300mm. Any exposed unbound material likely to deteriorate into a defect meeting the dimensions of a pothole. The carriageway at controlled crossing points e.g., Zebra, pelican, Puffin, Toucan and Pegasus Crossings shall be inspected in accordance with the footway defect criteria.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
CWSK	**Carriageway and dedicated on-carriageway cycleway - slippery surface**	Presence of, hydrocarbon, grass or moss etc. or a visually assessed perceived loss of surface properties	**Inclusions:** Any defect that is likely to cause a temporary or permanent loss of skid resistance. **Exclusions**: Slippery surfaces due to ice will be dealt with through the winter maintenance service.
FWPO	**Footway and dedicated off carriageway cycleway - pothole**	Loss of surface material within the footway surface	**Inclusions:** Any vertical or steep faced pothole greater than 25 to 30mm in depth and greater than 150mm in any dimension.
FWNP	**Footway and dedicated off carriageway cycleway defect - not pothole**	All cracks, upstands/depressions, missing paving units, flags	**Inclusions:** Any severe change of profile measured over a horizontal distance of 500mm that exceeds 25 to 30mm in depth Any rocking flag, pavior or slab resulting in an upstand greater than 25 to 30mm. Any cracks wider than 15mm, greater than 150mm in length that exceeds 25 to 30mm in depth.
FWSL	**Footway and dedicated off carriageway cycleway - slippery surface**	Presence of, hydrocarbon, grass or moss etc. or a visually assessed, perceived loss of surface properties	**Inclusions:** Any defect that is likely to cause a temporary or permanent loss of skid resistance **Exclusions**: Slippery surfaces due to ice will be dealt with through the winter maintenance service.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
EDGE	**Edging misaligned/ damaged**	Dislodged and damaged or missing footway edgings	**Inclusions:** Any upstand or depression greater than 25 to 30mm. Any loose or dislodged edging that ingress into the cycleway or footway.
KERB	**Kerb/channel misaligned/** **damaged**	Dislodged and damaged or missing kerbs and channels	**Inclusions:** Where there is a footway behind the kerb, any upstand or depression greater than 25 to 30mm. For channel blocks, Any upstand or depression greater than 40 to 50mm is present. Any loose or dislodged kerbs that ingress into the carriageway, cycleway or footway.
COVM	**Ironwork missing/broken/ collapsed**	All ironwork missing or broken	**Inclusions:** Any missing or broken iron work, cracked through section or section missing.
COVS	**Ironwork sunken/ protruding/ uneven**	All ironwork that is either displaced or dislodged and needs reseating	**Inclusions:** Any defect, in a carriageway where an upstand or depression of greater than 40 to 50mm is present. For all footways, and off-carriageway cycleways with a upstand or depression greater than 25 to 30mm .
VERG	**Verge overrun/damage/ erosion**	All soft verges and soft landscaping adjacent to carriageways	**Inclusions:** Any Ruts and overriding on verges greater than 150mm in depth,

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
SLOP	**Slope unstable/collapsed**	Cuttings and embankments adjacent to running surfaces	**Inclusions:** Any evidence of collapse or instability of an embankment likely to result in a structural failure, which directly affects, or obstructs a carriageway, footway or cycleway **Exclusions**: Collapse or instability of an embankment in verges, lay-bys or any land adjacent to running surfaces are less likely to be regarded as a safety hazards.
STRD	**Structure damage**	Bridges, footbridges, retaining walls and culverts	**Inclusions:** Any damage to structures resulting in debris falling from the structure. Damage to parapets which results in ingress onto the carriageway, cycleway or footway or reduces protection.
WEED	**Injurious and Invasive weeds**	Ragwort, Japanese Knotweed, etc.	Presence of injurious or invasive weeds shall not be considered a Safety Defect and should be dealt with as a Service Issue or other appropriate action taken.
VEGO	**Vegetation Obstruction**	Grass, shrubs, trees and weeds	**Inclusions:** Any obstruction caused by vegetation which is seriously affecting safety by obstructing footways, off carriageway cycleways or obscuring visibility **Exclusions**: Vegetation ingressing the highway and likely to inconvenience the highway user, which should be dealt with as a Service Issue or other appropriate action taken.
VEGD	**Vegetation damaged/dying/ diseased**	Trees and large shrubs	**Inclusions:** Any Fallen or badly damaged trees or branches obstructing or affecting carriageways, footways or cycleways.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
DRAB	**Drainage blocked**	All surface drainage features	**Inclusions:** Any Blocked gullys, ditches, grips and other surface features on carriageways where traffic speed could be a significant issue (i.e. above 30mph) or where properties are in danger of flooding **Exclusions**: All similar defects where speed limits are low, usually 30mph or below or property is not in danger of flooding should be dealt with as a Service Issue or other appropriate action taken.
FLOO	**Standing Water cause unknown**	Standing water on carriageways	**Inclusions:** Any standing water on carriageways where traffic speed could be a significant issue (i.e. above 30mph) and or where properties are in danger of flooding **Exclusions**: All similar defects where speed limits are low, usually 30mph or below should be dealt with as a Service Issue or other appropriate action taken.
MARK	**Road mark and studs**		**Inclusions:** Any Give-Way, Stop or No Entry markings that are no longer visible **Exclusions**: All other badly worn markings and missing studs should be dealt with as a Service Issue or other appropriate action taken.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
SIGN	**Non-illuminated Sign or bollard (such as Flecta, Night Owl or similar type bollard)**	All nonilluminated signs	**Inclusions:** Any Missing, illegible or obscured Stop, Give-Way sign or other signs (e.g., height restriction signs on bridges) or bollards likely to be critical to safety. Any badly damaged sign, signpost or bollard fallen or likely to fall onto a footway, cycleway or carriageway **Exclusions**: All other illegible or obscured signs, damaged bollards etc. and non-safety critical signs should be dealt with as a Service Issue or other appropriate action taken.
STRL	**Street Light, Illuminated sign or Bollard (such as Flecta, Haldo, or similar type bollard)**	All illuminated signs including street lighting.	**Inclusions:** Any Missing, illegible or obscured Stop, Give-Way sign or other sign (e.g., height restriction signs on bridges) or bollard likely to be critical to safety. Safety critical failed illumination. Any badly damaged sign, signpost, bollard or street lighting unit fallen or likely to fall onto a footway cycleway or carriageway. Any damage likely to expose highway users to live electrics **Exclusions**: All other illegible or obscured signs, damaged bollards etc and non-safety critical signs including failed illumination should be dealt with as a Service Issue or other appropriate action taken.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
TRSI	**Traffic Signal**		**Inclusions:** Any badly damaged, fallen or likely to fall traffic signal head or post (unit). Any damage likely to expose highway users to live electrics. Any electrical failure of the signal equipment.
SAFE	**Vehicle Restraint System, Pedestrian Restraint System**	Barriers, Terminals, parapet connections, Pedestrian Guard rail	**Inclusions:** Any damage or deterioration leaving either the integrity of the restraint system or the highway environment to which they apply in a safety critical situation. Any broken or damaged Vehicle Restraint System. Any missing pedestrian restraint system likely to be critical to safety. Any visually assessed minor damage resulting in sharp edges or protrusions likely to injure
FURN	**Street Furniture**	bollards, cycle stands, litter bins, seating, planters, letter boxes, bus shelters, traffic signalling equipment etc.	**Inclusions:** Any damage or deterioration leaving either the integrity of the street furniture or the highway environment to which they apply in a safety critical situation. This includes structural defects to the furniture itself, damage to the highway surface and minor damage resulting in sharp edges or protrusions likely to injure.

Defect Type Code	Defect Type Description	Scope	Investigatory level or detail description of a Safety Defect
CATT	**Cattle Grid**		**Inclusions:** Any damage likely to affect the integrity of the structure or damage which results in ingress onto the carriageway, cycleway or footway.
VXOX	**Illegal vehicle crossing**		An illegal vehicle crossing is highly unlikely to present a safety hazard and should be dealt with as a regulatory issue.
GRAF	**Offensive graffiti**		Offensive Graffiti is not a Safety Defect and should be dealt with as a Service Issue
EXTE	**Third party defect**		**Inclusions:** This defect covers any defect or issue described above that is deemed to be the responsibility of a third party, either operating on the highway, or affecting the highway as a result of adjacent work. Safety Defect action may be required to make safe in line with the assessed level of risk
NDEF	**No defect found**		This code is only to be used when no evidence of a reported defect has been found as a result of an enquiry. It is **not to be used** as part of any scheduled Safety Inspection.

If the identified hazard is not considered an Emergency Defect but meets the Investigatory Level for a Safety Defect as set out in Table 1, then a Risk Assessment should be carried out (Stage 3) to determine the appropriate timescale for a Response (Stage 4).

Any hazard not considered an Emergency or Safety Defect should be reviewed in the context of the wider highway service and appropriate action taken, as set out in the section relating to Highway Service Issues below.

If the Highway Safety Inspector is in any doubt regarding the assessment of a defect, the inspector should seek guidance from their line-manager or Highway Manager.

Stage 3 – Assessing the Risk

The Risk Assessment of highway Safety Defects needs to consider two important factors in order to identify the most appropriate Response timescale. These factors are:

Severity – The assessed extent of damage likely to be caused if an incident involving the defect occurred (i.e. the potential severity of personal injury or property damage), and:

Likelihood – The assessed probability of an incident involving the defect occurring, based upon relative level of use of the identified section of the highway network and the physical location of the defect in the street scene.

Severity is to be assessed against one of four possible categories, as set out below:

Negligible – This level of severity should be considered when a defect is evident, however, an incident is unlikely to cause injury or damage for the following reasons.

- Where a defect is easily visible, can be easily avoided or is not normally trafficked by pedestrians, drivers, cyclists or other highway users.
- Where a defect has triggered a risk assessment and a repair is required but there is no imminent risk of injury.

Moderate – This level of severity should be considered when an incident caused by impact or direct contact with the defect is likely to result in minor injuries, or possible damage to property:

- Involving a vehicle sustaining damage only
- Between a pedestrian or cyclist and an obstruction or encroachment
- A drainage related defect that may cause flooding within the grounds of a property

Noticeable– This level of severity should be considered when an incident caused by impact or direct contact with the defect is likely to result in Significant injuries, or severe structural damage to property:

- Involving a vehicle that suffers temporary loss of control on roads with a 30mph speed limit or below
- Involving two or more vehicles colliding on roads with a speed limit or 30mph or below
- Involving a vehicle and a pedestrian or cyclist on roads with a speed limit of 30mph or below.
- Between a vehicle and any unprotected, failed or fallen structure such as a tree, fence, bridge or private property etc. on roads with a speed limit of 30mph or below

- Where failed or blocked drainage items resulting in localised ponding/flooding on roads with a speed limit below 50mph
- Where pedestrians or cyclists will slip or trip
- Between a pedestrian or cyclist and any unprotected, failed, damaged or fallen street furniture, highway structure such as a tree, fence or bridge with any speed limit
- A drainage defect affecting the structural integrity of a private property

Serious – This level of severity should be considered when an incident caused by impact or direct contact with the defect is likely to result in Severe or life-threatening injuries:

- Involving a vehicle that suffers serious loss of control on roads with a 40mph speed limit or above
- Involving two or more vehicles colliding on roads with a 40mph speed limit or above
- Between a vehicle and any unprotected, failed or fallen structure such as a tree, fence, bridge or private property etc., on roads with a 40mph speed limit or above
- Where failed or blocked drainage items resulting in localised ponding/flooding on a road with a speed limit of 50mph or above
- Involving a vehicle and pedestrians or cyclist on roads with a 30mph speed limit or above

Likelihood is to be assessed also against one of four possible categories, as set out below:

Very Low – Based upon the following network hierarchy categories:

- On carriageway hierarchy category 6, or;
- on a rural cycleway not covered by Medium likelihood

Low – Based upon the following network hierarchy categories:

- Carriageway hierarchy category 5.

Medium – Based upon the following network hierarchy categories:

- Carriageway hierarchy categories 3 and 4, or;
- Footway hierarchy categories 4 and 5, or;
- on a cycleway that is either shared with a footway or remote from the carriageway/footway.

High – Based upon the following network hierarchy categories:

Carriageway hierarchy categories 1 and 2, or; • Footway hierarchy categories 1, 2 and 3.

In order to take into account the more localised situation of a particular defect, the assessed likelihood level may be reduced by ONE step if:

- ***the defect is located in an area not normally trafficked by highway users, or it is clearly visible and can be easily avoided***

AND

- ***there is no reason to believe that there are an unusually high proportion of people who are unsteady on their feet or visually-impaired using the area***

Stage 4 – Determining the Response to Safety Defects

Once an Inspector has undertaken their assessment of the potential Severity and Likelihood of an incident occurring for a particular Safety Defect, they shall locate the two factors into the following assessment matrix to identify the minimum response timescale:

Severity → / Likelihood ↓	Negligible (1)	Moderate (3)	Noticeable (4)	Serious (5)
Very Low (1)	N (1)	E (3)	E (4)	See Note 1
Low (2)	N (2)	E (6)	E (8)	C (10)
Medium (3)	E (3)	E (9)	C (12)	A or B (15)
High (4)	E (4)	C (12)	A or B (16)	A or B (20)

A or B — **Priority A or B defect** – complete rectification (make-safe, if not rectify) within 2 hours or 24 hours respectively of defect raised. Defect Priority B is the minimum response; defect priority A can be used if at least four of the Emergency Response criteria, outlined below, are satisfied. Defect priority A should be used if the defect is an emergency as defined in Stage 1.

C — **Priority C defect** – complete rectification within 14 calendar days from defect being raised.

E — **Priority E defect** – complete rectification within 2 months from defect being raised.

N — **Priority N defect** – To be dealt with as a service issue

Note 1: *There is a general presumption that Safety Defects on the minor carriageway network (hierarchy category 6) will not involve high speeds. Consequently, no 'serious' severity events can be associated with hierarchy category 6 roads, other than those identified as Emergency Defects and dealt with at Stage 1 of this process.*

Additional Criteria for selecting Defect Priority A

If the defect is assessed as Priority A or B in Stage 4, the general presumption should be that the defect is a Priority B defect unless four out of five of the following criteria are satisfied, in which case it can be classed as a Priority A defect. If a defect does not fully satisfy these criteria but a high priority response is still considered appropriate, approval from an F Grade Manager or higher will be required. This will apply during office hours only and will not apply to out-of-hours operations.

Emergency Response criteria for non-Stage 1 hazards (**at least four criteria must be satisfied**)

1. Is the road on a Priority 1 salting route? These account for 30% of the Hampshire network, take around 75% of all traffic and service critical infrastructure including schools, hospitals and major town centres.
2. Could harm or damage occur if the defect/issue is left unattended for more than 1 hour?
3. Has the defect happened within the last 48 hours, or has there been a reported incident in the last 48hrs?
4. Is the defect in an area of high footfall, in a wheel-track or in an area/location where there is a high probability of personal injury or damage?
5. Is the route significantly restricted or blocked by the defect?

For defect Priority A, record in the defect description which of the Emergency Response criteria have been satisfied, i.e. either Stage 1 emergency or which four of the five non-stage 1 criteria apply.

Highway Service Issues

There will always be issues with a highway network that will not meet the Investigatory Levels for Safety Defects set out in Table 1 above, but that are appropriate to record as part of an overarching asset management strategy.

As such, they do not require a formal response time for repair but may prompt action by the authority as part of a proactive approach. These Service Issues specifically exclude Safety Defects, as defined above, and will be dealt with by means of a task-order with a priority not governed by a defect priority.

Service Issues should be recorded as a **SERV ISSUE.**

Stage 5 – Ordering Work to rectify Safety Defects

The ***defect*** priority and the ***job*** priority are not necessarily the same.

The ***defect*** priority timescale from stage 4 governs the time available to complete the work.

Select the ***job*** priority that has the longest timescale that will accommodate the defect priority timescale, accounting for the time already elapsed since the defect was found.

I.e. the job priority timescale

- **must**, when the job is committed, be no longer than the defect priority timescale minus the time already elapsed from when the defect was found;
- **And**, for the most effective works programming, **should** be the longest possible that will achieve a resolution within the defect priority timescale.

Example – a Priority E defect (complete within 2 months) was recorded on 1 August. The defect must be rectified by 30 September. It's now 15 August and you are ready to commit the job. The Defect priority is fixed as E. Job priority E (complete within 2 months) cannot be used because two months from 15 August is after 30 September so the next available job priority would be D. Do not use job priority C, B or A because these would restrict works programming unnecessarily. Keep the defect priority as E and select job priority D.

APPENDIX A - Carriageway Hierarchy Scoring Matrix

Hierarchy Category	Hierarchy Name	Primary Criteria							Secondary Criteria						
		Highway Critical Infrastructure	Road Classification and Primary Route Network (PRN)						Local Essential Services	NRSWA Traffic Sensitive Streets	Road Speed (70 mph)	Connecting / Link (U Road)	With through road (U Road)	No Through Road <250M (U Road)	Site Specific Information (all)
			PRN	A	B	C	U	T							
1	Primary Strategic	x	x												
2	Secondary Strategic			x					x	x	x				x
3	Primary Distributor			x	x	x			x	x					x
4	Secondary Distributor				x	x	x		x	x		x			x
5	Local Network						x						x		x
6	Minor Network						x							x	x
7	Tracks							x							

The primary criteria are used in conjunction with the secondary criteria (where applicable) to decide the hierarchy category.

Example: For a road section to be a hierarchy category 2 it must be an A road that's not included in the Primary Route Network with at least one of the secondary criteria present. If no secondary criteria are present, it's automatically a category 3.

Site specific information can be used to override the hierarchy category initially assigned. However, robust evidence will be required to justify the change.

APPENDIX B – Carriageway Hierarchy Categories

Hierarchy Category	Name	Description	Criteria
1	Primary Strategic Network	Sections of carriageway that have a high strategic importance to the resilience of the highway network	Generally sections that include critical highway infrastructure and are on the Primary Route Network
2	Secondary Strategic Network	Sections of carriageway that have a strategic importance to the resilience of the highway network	Generally sections that are A roads that are also either high speed, traffic sensitive or are used for a local essential service
3	Primary Distributor Network	Sections of carriageway that have a high social and economic importance	Generally sections that are all other A roads or are classified roads that are also either traffic sensitive or are used for a local essential service
4	Secondary Distributor Network	Sections of carriageway that have a social and economic importance	Generally sections that are all other classified road or are unclassified roads that are also either major urban and rural connections, traffic sensitive or are used for a local essential service
5	Local Network	Sections of carriageway that are of local importance only	Generally sections that are part of the unclassified network but have access through to another road
6	Minor Network	Sections of carriageway that are minor in their importance to the highway network	Generally sections that are a no through road of less than 250m and serve a small number of properties
7	Tracks	Sections of unmetalled carriageway that might be unsuitable for some types of vehicular traffic	Generally unmetalled highway (tracks)

APPENDIX C - Footway Hierarchy Scoring Matrix

Hierarchy Category	Hierarchy Name	**Primary Criteria**		**Secondary Criteria**					
		Pedestrianised Zone	Pavement Construction (flagged footways)	Local Essential Services	Transportation links of importance	Shopping Area (5+ shops in postcode area)	With through way	No Through way (<250m)	Site Specific Information
1	Pedestrianised Zones	x							
2	Primary Walking Network		x	x	x	x			x
3	Secondary Walking Network		x	x	x	x			x
4	Local access footways						x		x
5	Minor footways							x	x

Examples:

For a footway to be a hierarchy category 2 it must be a flagged footway with at least one of the secondary criteria For

a footway to be a category 3 it only needs to have one of the factors highlighted red present.

Site specific information can be used to override the hierarchy category initially assigned. However, robust evidence will be required to justify the change.

APPENDIX D - Footway Hierarchy Categories

Hierarchy Level	Name	Description	Criteria
1	Primary Pedestrianised Zones	Sections of footway that are of high pedestrian volume reserved for pedestrian use where most vehicular traffic is prohibited	Generally pedestrianised zones
2	Primary Walking Network	Sections of footway that have multiple important factors including a high pedestrian use, locally important social factors and low structural resilience	Generally sections that are flagged footways and have either local essential services, transportation link of importance or 5 plus number of retail establishments
3	Secondary Walking Network	Sections of footway that have singular important factors including a high pedestrian use, locally important social factors and low structural resilience	Generally sections that are all other flagged areas or are local essential services, transportation link of importance or 5 plus number of retail establishments
4	Local access footways	Sections of footway that have local usage only	Generally sections that may be used as a through way
5	Minor footways	Sections of footway of asphalt construction that are of low usage within the highway network	Generally sections that serve a small number of properties and no through way