

# Annex A

**Detailed definition of common defects** 

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# **1.0 Document Control**

# **1.1** Version Control

Version	Date	Author	Details	Purpose
1.2	01/07/2019	Michael White	Original document	Original Document
1.3	19/10/2023	Kirstie Williams	Addition of damaged / missing kerb defect – Page 22	To update the information on common defects

# 1.2 Distribution

Version	Date	Name	Title / Role
1.3	19/10/2023	Published to website	n/a

# **1.3** Review and Acceptance

Version	Accepted By	Title / Role	Date
1.3	John Davies	Head of Service - Highways	19/10/2023

# 1.4 Data Sensitivity

Classification	Description	Tick as Appropriate
Official	Treat all routine public sector business, operations and services as Official. Handle all information with care to prevent loss or inappropriate access and deter deliberate compromise or opportunist attack.	$\checkmark$
Sensitive	As per Official category but requires special handling by staff.	
Secret	Very sensitive information that justifies heightened protective measures to defend against determined and highly capable threats.	
Top Secret	The most sensitive information requiring the highest levels of protection from the most serious threats.	

# **1. Introduction**

This annex contains detailed information for the most common defects or hazards including a detailed definition, sample photographs, risk impact rating and associated investigation criteria, individual risk matrices and recommended actions.

Changes and additions to the definitions, risk matrix and recommended actions will be approved by the Head of Service – Highways.

Each defect will have the following information:

- Defect Code the code used in HAMS to assign the defect to the correct element of the highway asset and the type of defect.
- Detailed Definition provides a detailed description of the defect if required and any additional notes for consideration.
- Sample Photograph to illustrate typical occurrences of each defect
- Impact Rating and Investigatory Criteria Detailed investigatory criteria linked to impact rating.
- Risk Matrix a matrix comparing impact rating against network hierarchy and providing the associated response category
- Recommended Action provides guidance on action required to repair or make safe the defect.
- Low impact defects will be actioned at the discretion of the Highway Inspector and therefore will only be recorded as part of the inspection if action is going to be taken.

#### **Dynamic Risk Assessment and Inspector Discretion**

- The various types of defect that may be encountered on the highway are detailed in this annex. Defects with a High or Medium impact will be actioned in line with the details set out in this policy. Defects with a low priority will only be actioned at the discretion of the highway inspector. In addition highway inspectors have discretion to vary the response categories for high and medium defects due to reasons present at the time of inspection. This will be based on an on-site risk assessment taking account of factors such as but not limited to:-
  - Position of the defect in the street
  - Size and nature of the defect
  - Frequency of inspection
  - Volume and nature of traffic and pedestrians using that section of the street
  - Vulnerable road users
- A full explanation must be provided by the inspector as to the reasons for taking action and/or varying the response category. This must be noted in the "Description" field within the HAMS system.

#### **Investigatory Levels**

Where defects exceed specific investigatory measurements they will be actioned. However, highway inspectors will have discretion to vary the point at which action will be taken and the response category. This will be based on a dynamic risk assessment as described above.

Footway investigatory levels will be applied to carriageway defects at controlled crossing points such as zebra, toucan and pelican crossings.

#### **Recommended Treatments**

Typically the actions resulting from highway safety inspection would be to adopt an infill or excavate and reinstate repair method as described in this annex, the latter being the preferred method. Annex G also describes other repair techniques which may be used depending upon the prevailing circumstances as described in annex G.

#### **Network Hierarchy**

Lancashire County Council's network hierarchy is based on the recommendations set out in the Well Managed Highway Infrastructure Code of Practice. It is set out in section 11 and 12 of the Highway Inspection Policy and repeated here for ease of reference.

Category	Ref. No	Type of Road General Description	Description	Inspection Frequency
Motorway	1	Limited access - motorway regulations apply Routes for fast moving long distance traffic. Fully grade separated and restrictions on use		Monthly
Strategic Route	2	Trunk and some Principal 'A' class roads between primary destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited	Monthly
Main Distributor	3a	Major Urban Network and Inter-Primary Links. Short - medium distance traffic	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety	Monthly
Secondary Distributor	3b	B and C class roads and some unclassified urban routes carrying	In residential and other built up areas these roads have 20 or 30 mph speed limits	3 Monthly

#### Carriageway Hierarchy



		bus, HGV and local traffic with frontage access and frequent junctions	and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network	
Link Road	4a	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In urban areas these are residential or industrial interconnecting roads with 20 or 30 mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic	6 Monthly
Local Access Road	4b	Unclassified roads providing access to residential and business areas.	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop, access and estate roads or cul-de-sacs.	12 Monthly

# Footway Hierarchy

Category	Ref. No	Description	Inspection Frequency
Primary Walking Route	1	Busy urban town/city centre shopping areas and main pedestrian routes linking interchanges between different modes of transport e.g. railways, bus stations/interchanges.	Monthly
Secondary Walking Route	2	Medium usage routes through local areas feeding into primary routes, local shopping centres, large schools and industrial and commercial centres etc.	3 Monthly
Link Footway	3	Linking local access footways through urban areas and busy rural footways	6 Monthly
Local Access Footway	4	Footways associated with low usage, short estate roads to the main routes and cul-de-sac etc.	12 Monthly

# 1. CARRIAGEWAY POTHOLE

#### Definition

Loss of material from part or all of the surfacing layers creating a sharp edged hole or void.







# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Greater than 150mm diameter & 100mm or greater in depth	HIGH
Greater than 150mm diameter & 40mm or greater in depth	MEDIUM
Greater than 150mm diameter & less than 40mm in depth	LOW
Less than 150mm diameter	LOW

#### Risk matrix

		RISK PROBABILITY						
			Carriageway Network Hierarchy					
1 2 3a 3b 4					4a	4b		
L D	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	
ATIN	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days	
₹ Z	Low	Action w	ill be taken a	at the discret	tion of the i	nspector; se	e 17.7	

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	Road surface deterioration is such that no neat edge is available or can be saw cut	DI01 – CW Pothole
Excavate & Reinstate Repair Method – See Annex G	There is little or no road surface deterioration and a neat edge is available or can be saw cut.	DX01 – CW Pothole

# 2. CARRIAGEWAY EDGE DETERIORATION

#### Definition

Localised breaking away or erosion of the edge of an unrestrained carriageway to such an extent that it is encroaching into the running line of vehicles or cycles.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
100mm and greater in depth AND 300mm or greater long AND protruding into carriageway 250mm or more.	HIGH
40mm or greater up to 100mm AND 300mm or greater long AND protruding into carriageway 250mm or more.	MEDIUM
Less than 40mm depth	LOW

#### Risk matrix

			RISK PROBABILITY							
		Carriageway Network Hierarchy								
		1	2	За	3b	4a	4b			
ц Ц	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days			
PAC	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days			
₹ Z	Low	Action will	be taken at t	the discretio	n of the insp	ector; see 1	7.7			

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or road surface deterioration is such that no neat edge is available or can be saw cut	DI02 – CW Edge Deterioration

Excavate &	There is good edge support and little or no road	DX02 – CW Edge
Reinstate Repair	surface deterioration and a neat edge is available	Deterioration
Method – See Annex	or can be saw cut.	
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#### 3. CARRIAGEWAY DEPRESSION

#### Definition

A rapid change in the surface profile of the carriageway creating a depression with a difference in vertical level greater than 100mm.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
150mm to 300mm width AND 100mm or greater in depth	HIGH
Less than 600mm width AND 100mm or greater in depth	MEDIUM
600mm or over in width and less than 100mm in depth	LOW

#### Risk matrix

		RISK PROBABILITY					
		Carriageway Network Hierarchy					
	1 2 3a 3b 4a 4b					4b	
۲۵	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days
₹ 2	Low	Action will be taken at the discretion of the inspector; see 17.7					

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or road surface deterioration is such that no neat edge is available or can be saw cut	DI03 – CW Edge Deterioration
Excavate & Reinstate Repair Method – See Annex G	There is good edge support and little or no road surface deterioration and a neat edge is available or can be saw cut.	DX03 – CW Edge Deterioration

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# 4. CARRIAGEWAY HUMP or HEAVE

# Definition

A rapid change in the surface profile of the carriageway creating a hump or heave in the surface of the carriageway with a difference in vertical level of 100mm or greater.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Difference in vertical level of 100mm or greater over a width of 150mm or Less	HIGH
Difference in vertical level of 40mm up to 99mm over a width of 150mm or Less.	MEDIUM
Difference in vertical level of 40mm up to 99mm over a width of more than 150mm	LOW

#### Risk matrix

		RISK PROBABILITY					
		Carriageway Network Hierarchy					
_		1 2 3a 3b 4a 4b					
۲o	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
PAC	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days
l ≣ %	Low	Action will be taken at the discretion of the inspector; see 17.7					

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or road surface deterioration is such that no neat edge is available or can be saw cut	DI04 – CW Edge Deterioration
Excavate & Reinstate Repair Method – See Annex G	There is good edge support and little or no road surface deterioration and a neat edge is available or can be saw cut.	DX04 – CW Edge Deterioration

# 5. CARRIAGEWAY – LOSS OF MATERIAL AROUND IRONWORK

# Definition

Loss of carriageway surfacing layers adjoining ironwork, such as inspection cover or gully grate, leaving a pothole like defect. The ironwork is sound and does not need re-setting.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
100mm or greater in width AND 100mm or greater in depth	HIGH
100mm or greater in width AND 40mm or greater in depth up to 99mm	MEDIUM
Less than 40mm in depth	LOW

#### Risk matrix

		RISK PROBABILITY					
			Carriageway Network Hierarchy				
		1	2	3a	3b	4a	4b
μo	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
PAC	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days
₹ <u>₹</u>	Low	Action	will be taker	n at the discr	etion of the	inspector;	see 17.7

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or road surface deterioration is such that no neat edge is available or can be saw cut	DI05 – CW Edge Deterioration
Excavate & Reinstate Repair Method – See Annex G	There is good edge support and little or no road surface deterioration and a neat edge is available or can be saw cut.	DX05 – CW Edge Deterioration

# 6. CARRIAGEWAY SUNKEN TRENCH

#### Definition

Where the surface height of a trench reinstatement creates a vertical difference in level with the adjoining carriageway surface. If it appears to be a utility trench within its guarantee period (typically 2 years) then this must be reported via utility CW defect.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Up to 300mm wide & 100mm or greater in depth	HIGH
Up to 300mm wide & Greater than 40mm up to 99mm depth	MEDIUM
Greater than 300mm wide & greater than 40mm in depth	MEDIUM
Greater that 300mm wide & and less than 40mm in depth	LOW

#### Risk matrix

		RISK PROBABILITY								
		Carriageway Network Hierarchy								
		1 2 3a 3b 4a 4b								
50	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days			
PAC	Medium	10 Days	10 Days	10 Days	10 Days	20 Days	20 Days			
$\mathbf{E} \mathbf{\vec{x}}$ Low Action will be taken at the discretion of the inspector							e 17.7			

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or road surface deterioration is such that no neat edge is available or can be saw cut	DI06 – CW Edge Deterioration
Excavate & Reinstate Repair Method – See Annex G	There is good edge support and little or no road surface deterioration and a neat edge is available or can be saw cut.	DX06 – CW Edge Deterioration

# 7. CARRIAGEWAY GULLY MISSING/BROKEN GRATE

# Definition

A missing or broken gully grating.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Missing or broken	HIGH

#### Risk matrix

		RISK PROBABILITY						
		Carriageway Network Hierarchy						
		1	2	3a	3b	4a	4b	
IMPACT RATING	High	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	

Treatment	Criteria	HAMS Defect Code
Replace carriageway gully grate and excavate & reinstate surface as Annex G	Not applicable	DX16 – CW Gully grate missing/broken grate

# 8. CARRIAGEWAY GULLY GRATE SUNK/RAISED/ROCKING

#### Definition

Gully frames and gratings and which are sunk, raised, rocking or broken and causing a step in level to the surrounding carriageway surface. This may be causing a problem with the surrounding surfacing which will need reinstating.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
100mm or greater in difference in level	HIGH
40mm or greater and up to 99mm difference in level	MEDIUM
Less than 40mm difference in level	LOW

## Risk matrix

		RISK PROBABILITY								
		Carriageway Network Hierarchy								
_		1 2 3a 3b 4a 4b								
59	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days			
PAC	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days			
ΞŽ	Low	Action will be taken at the discretion of the inspector; see 17.7								

Treatment	Criteria	HAMS Defect Code
Reset carriageway gully grate and excavate & reinstate surface as Annex G	Not applicable	DX15 – CW gully sunk/raised/rocking

# 9. CARRIAGEWAY – LOOSE OR ROCKING PAVING

# Definition

Where a paving unit (e.g. flag or block paviour) is moving or rocking or sunken and creating a vertical difference in level with the adjoining surface.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
100mm or greater in height or depth	HIGH
40mm or greater and up to 99mm in height or depth	MEDIUM
Less than 40mm in height or depth	LOW

## Risk matrix

			RISK PROBABILITY								
		Carriageway Network Hierarchy					Footv	vay Netw	ork Hier	archy	
_		1	2	3a	3b	4a	4b	1	2	3	4
НЭ	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
IMPAC RATIN	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days
	Low	Action will be taken at the discretion of the inspector see 17.7									

Treatment	Criteria	HAMS Defect Code
Reset paving unit.	Where a paving unit (e.g. flag or block paviour) is moving or rocking and creating a vertical difference in level with the adjoining surface. Paving units are <b>not</b> broken – This is generally USED ON HIGH AMENITY/PRIMARY WALKING/CONSERVATION.	DX10 – CW Loose/rocking paving

# Annex A

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Infill with bituminous material	Where a paving unit (e.g. flag or block paviour) is moving or rocking and creating a vertical difference in level with the adjoining surface. Paving units are <b>not</b> broken – Generally USED WHEN NOT ON HIGH AMENITY/PRIMARY	DI10 – CW Loose/rocking paving
	WALKING/CONSERVATION	

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# **10.FOOTWAY POTHOLE**

#### Definition

Loss of material from part or all of the surfacing layers creating a sharp edged hole or void.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
100mm and greater in diameter AND 75mm or greater in depth	HIGH
100mm and greater in diameter AND 25mm or greater in depth up to 74mm.	MEDIUM
Less than 25mm in depth	LOW

#### Risk matrix

			RISK PROBABILITY									
		Carriageway Network Hierarchy							Footway Network Hierarchy			
		1	2	3a	3b	4a	4b	1	2	3	4	
IG T	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	
IMPA( RATIN	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days	
	Low	Action	will be	taken a	t the dis	scretion	of the	inspect	or; see '	17.7		

Treatment	Criteria	HAMS Defect Code			
Infill Repair Method – See Annex G	Footway surface deterioration is such that no neat edge is available or can be saw cut	DI31 – FW Pothole			
Excavate & Reinstate Repair Method – See Annex G	There is little or no footway surface deterioration and a neat edge is available or can be saw cut.	DX31 – FW Pothole			

# 11.FOOTWAY - LOOSE OR ROCKING PAVING

## Definition

Where a paving unit (e.g. flag stone or block paviour) is moving or rocking and creating a vertical difference in level with the adjoining footway surface.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
75mm or greater in height or depth	HIGH
25mm/20mm or greater and up to 74mm in height or depth	MEDIUM
Less than 25mm/20mm in height or depth	LOW

# Investigatory level is 20mm on Primary Walking Routes

## Risk matrix

			RISK PROBABILITY								
			Carriag	eway Net	Footway Network Hierarchy						
		1	2	3a	3b	4a	4b	1	2	3	4
L D	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
IMPAC RATIN	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days
	Low		Action	will be ta	aken at th	ne discre	etion of t	he inspe	ctor see	17.7	

Treatment	Criteria	HAMS Defect Code
Reset paving unit.	Paving units are <b>not</b> broken. This is generally used when on high amenity/primary walking/conservation streets. Surrounding paving units are sound and not moving or rocking.	DX40 – FW Loose/rocking paving

# Annex A

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Infill with	Paving units are <b>not</b> broken. This is generally used	DI40 – FW
bituminous material	when <b>not</b> on high amenity/primary	Loose/rocking paving
	walking/conservation streets. Surrounding paving	
	units are not sound and are moving or rocking.	

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# 12.FOOTWAY BROKEN, MISSING PAVING

#### Definition

Where a paving unit (e.g. flag or block paviour) is broken or missing and creating a vertical difference in level with the adjoining surface.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
75mm or greater in height or depth	HIGH
25mm/20mm or greater and up to 74mm in height or depth	MEDIUM
Less than 25mm/20mm in height or depth	LOW

#### Investigatory level is 20mm on Primary Walking Routes

#### Risk matrix

			RISK PROBABILITY										
		С	Carriageway Network Hierarchy							Footway Network Hierarchy			
		1 2 3a 3b 4a 4b 1 2 3 4									4		
с С	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days		
IMPAC RATIN	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days		
	Low	A	ction wil	ll be tak	en at th	e discre	etion of	the insp	pector s	ee 17.7			

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Treatment	Criteria	HAMS Defect Code
Replace and reset paving unit.	This is generally used when on high amenity/primary walking/conservation streets.	DX41 – FW Broken/missing paving
Infill with bituminous material	This is generally used when <b>not</b> on high amenity/primary walking/conservation streets.	DI41 – FW Broken/missing paving

# 13.KERB – SUNKEN/RAISED

#### Definition

Where a kerb or kerbs are sunk, raised, moving and rocking creating a vertical difference in level with the adjoining **footway** surface.





# Investigatory level and impact Rating

Investigatory Level	Impact Rating
75mm or greater in height of depth	HIGH
25mm or greater and up to 74mm in height or depth	MEDIUM
Less than 25mm in height or depth	LOW

#### Risk matrix

			RISK PROBABILITY									
			Carriag	jeway Ne	twork Hie	Footway Network Hierarchy						
1 2 3a 3b 4a 4b 1 2 3								4				
ц С	High	2 Days	2 Days	2 Days	5 Days	5 Days	5 Days	2 Days	5 Days	5 Days	5 Days	
IMPAC RATIN	Medium	20 Days	20 Days	20 Days	Action w discretio	ill be take n of the ir	en at the spector	20 Days	Action at discretion of inspector			
	Low		Actior	ו will be t	aken at ti	ne discre	tion of th	e inspec	tor; see	17.7		

Treatment	Criteria	HAMS Defect Code
Reset kerb or channel	Not applicable	DX60 – KC Kerb sunk or raised

# 14.KERB – DAMAGED/MISSING

#### Definition

A damaged, spalled or missing kerb which poses a risk to highway users.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Damage greater than 25mm at a controlled pedestrian crossing point where the kerbs are flush	HIGH
Damage greater than 40mm at other designated crossing points where the kerbs are flush	MEDIUM
Damage greater than 75mm in depth on a linear kerb run	MEDIUM
Damage greater than 40mm on radius kerbs at junctions	LOW
Less than 75mm in depth on a linear kerb run	LOW

#### Risk matrix

		RISK PROBABILITY									
		Carriageway Network Hierarchy							tway Net	work Hier	archy
		1	2	3a	3b	4a 4b 1 2 3 4					
IMPACT RATING	High	5 Days	5 Days	5 Days	5 Days	5 Days	5 Days	5 Days	5 Days	5 Days	5 Days
	Medium	20 Days	20 Days	20 Days	Action will be taken at the discretion of the inspector20 DaysAction will be taken a discretion of the insp			en at the nspector			
	Low		Action will be taken at the discretion of the inspector; see 17.7								

Treatment	Criteria	HAMS Defect Code				
Repair or Replace kerb	Not applicable	DX61 – KC Kerb damaged or missing				

#### **15.DAMAGED BOLLARD**

## Definition

A non-illuminated concrete, metal, plastic or self-righting bollard which is damaged and or unstable which poses a risk to highway users.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
knocked over and dangerous	HIGH
Damaged, unstable, leaning	MEDIUM

#### Risk matrix

			RISK PROBABILITY									
			Carriageway Network Hierarchy						Footway Network Hierarchy			
		1	2	3a	3b	4a	4b	1	2	3	4	
	High	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	4hrs	
RATING	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days	

Treatment	Criteria	HAMS Defect Code
Repair or Replace Non-illuminated bollard	Not applicable	DZ11 – Damaged Bollard (Non- Illuminated)

# 16.CARRIAGEWAY – BROKEN OR MISSING PAVING

#### Definition

Where a paving unit (e.g. flag or block paviour) is broken or missing and creating a vertical difference in level with the adjoining surface.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
Greater than 100mm in height or depth	HIGH
Greater than 40mm and up to 100mm in height or depth	MEDIUM
Less than 40mm in height or depth	LOW

#### Risk matrix

			RISK PROBABILITY										
			Carriageway Network Hierarchy							Footway Network Hierarchy			
		1 2 3a 3b 4a 4b 1 2 3							3	4			
с G	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days		
IMPAC RATIN	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days		
	Low		Action will be taken at the discretion of the inspector see 17.7										

Treatment	Criteria	HAMS Defect Code
Reset paving unit.	Where a paving unit (e.g. flag or block paviour) is broken or missing and creating a vertical difference in level with the adjoining surface. – This is generally USED ON HIGH AMENITY/PRIMARY WALKING/CONSERVATION AREAS	DX11 – CW Broken/missing paving
Infill with bituminous material	Where a paving unit (e.g. flag or block paviour) is broken or missing and creating a vertical difference in level with the adjoining surface. – Generally USED WHEN NOT ON HIGH	DI11 – CW Broken/missing paving



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AMENITY/PRIMARY	
WALKING/CONSERVATION AREAS	

# **17.FOOTWAY DEPRESSION**

#### Definition

A rapid change in the surface profile of the footway creating a depression with a difference in vertical level greater than 75mm.



# Investigatory level and impact Rating

Investigatory Level	Impact Rating
150mm to 300mm width AND 75mm or greater in depth	HIGH
Less than 600mm width AND 75mm or greater in depth	MEDIUM
600mm or over in width and less than 75mm in depth	LOW

#### Risk matrix

		RISK PROBABILITY									
			Carriaç	Jeway Ne	twork Hie	Footway Network Hierarchy					
		1	2	3a	3b	4a	4b	1	2	3	4
	High	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days	2 Days
	Medium	5 Days	5 Days	5 Days	10 Days	20 Days	20 Days	5 Days	10 Days	20 Days	20 Days
RAT	Low	Action will be taken at the discretion of the inspector see 17.7									

Treatment	Criteria	HAMS Defect Code
Infill Repair Method – See Annex G	No suitable edge support or footway surface deterioration is such that no neat edge is available or can be saw cut	DI033 – CW Edge Deterioration

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Excavate & Reinstate Repair Method – See Annex G	There is good edge support and little or no footway surface deterioration and a neat edge is available or can be saw	DX033 – CW Edge Deterioration
	cut.	