POLICY 4110

ROAD RESPONSE RISK MANAGEMENT POLICY AND PROCEDURES

1. Definition

Risk Management is the systematic application of management policies, procedures, and practice to the tasks of identifying, analysing, assessing, treating, and monitoring risks.

2. Objectives of Policy

The objectives of this policy are to:

- Apply the principles of Risk Management to treating hazards in the council's road pavement.
- Identify hazards in the road pavement through a formal system of inspection and recording of complaints/ service requests from the General Public and Council Staff.
- Establish a reasonably practicable time frame for the treatment of identified hazards having regard to the resources available.
- Establish a system to document the steps from identification to treatment to allow ongoing monitoring of the pavement maintenance system.

3. Scope of Policy

This policy covers programmed and routine maintenance works on road pavements, and any other physical item that has an impact on the safety and amenity of road users within the road reserve of Council maintained public roads.

4. Legislation, Council Policies and Documents relation to this policy

The Roads Act 1993, section 163

Civil Liability Act 2002, Sections, 42, 43 & 45 (Special non-feasance protection for roads authorities)

Oberon Council's Risk Management Policy

StateWide Mutual, Best Practice Manual, *Roads, Version 6, June 2019*

International Standard for Risk Management: AS/NZS ISO 31000:2009 Risk Management - Principles and Guidelines

5. Policy Statement and Procedures

Council has an obligation as well as a duty of care under common law to ensure that the road network is as safe for road users as it can be made within the resources of Council.

Oberon Council's road network has been constructed over many years in accordance with the acceptable standard work practices at the time of construction and thus the roads vary considerably in their construction. Roads deteriorate due to time, environment and traffic. Over the life of a road various defects and distresses can occur. Without maintenance intervention, defects and distresses can develop and shorten the life of the road and/or are a hazard to road users.

This policy sets out the system Council uses for managing its road maintenance responsibilities within the constraints of finite limited resources. In particular it defines the type and size of defects and distresses that are a hazard to road users, the inspections Council will undertake to identify the presence of any hazard in its road network and the actions that will be taken when hazards are found either by inspection or reports from road users. A flowchart describing the overall procedure is given in Appendix A.

Nothing in this policy prevents Council from undertaking maintenance on any defect or distress that is not considered a hazard to road users. Any such action cannot be construed as a change to the definition of any hazard.

Nothing in this policy prevents Council from undertaking maintenance on any hazard in a time shorter than the defined Maximum Response Time. Any such action cannot be construed as a change to the definition of any Maximum Response Time.

5.1. Road Network

This policy applies to roads listed on Oberon Council's road register prepared in accordance with Section 163 of the Roads Act 1993. At the time this policy was adopted the road network comprised various roads as set out in Table 1: Length of Various Road Classes.

This policy also applies to Council's responsibilities for maintenance in undertakes under contract to RMS for 52 km of State Roads for which RMS is the Roads Authority.

This policy does not apply to any private road, access road or unformed track that is not listed on Oberon Council's road register.

Table 1: Length of Various Road Classes

ROAD CLASS	LENGTH (Km)
Sealed Local Roads	396
Unsealed Local Roads	527
Sealed Regional Roads	103

5.2. Funding

Council allocates funds for road maintenance as part of its annual budget process through its Operational Plan. The budget allocated for road maintenance is determined considering the finite resources available to Council, the broad range of activities undertaken by Council on behalf of the community and the performance standards set out in this policy. The Operational Plan is available for public comment prior to adoption.

5.3. Inspection/Data collection

Three methods of information gathering/inspections are used in identifying any defects, distresses or hazards on the road network and prioritising any necessary repairs on roads.

a) Formal Inspections

Inspections are a formal means of gathering information and will be undertaken by competent personnel within the Technical Services Department of Council who understand road-related hazards, distresses, and defects. These personnel can be any of:

- Overseer
- Maintenance Foreman
- Engineers
- Anyone trained and deemed suitable to undertake inspections

The purpose of this formal inspection is to identify:

I. The type and chainage of a road that has a defect, distress, or hazard
II. The severity of the defect, distress, or hazard
III. The location of the defect, distress, or hazard

Inspections are undertaken at intervals not exceeding those set out in Table 2: Road Hierarchies and Inspection Intervals or may be triggered by a complaint from road users or other Council staff.

The observations made by the inspection officer are recorded in a written inspection report that includes the time and date of the inspection. A "nil report" is recorded if no hazards or defects are observed. All work actions identified by a formal inspection are separately entered into Council's works management system.

b) Complaints from Road Users

Council receives complaints from Road Users on road conditions and/or defects and hazards on roads through the CRM process that is used to receive all complaints and requests of Council.

At the time the complaint is received, the customer will be asked basic questions following the Complaint Handling Flowchart set out in Appendix B and their answers will be recorded in the system. Once entered into Council's CRM, the complaint will be forwarded to the Technical Services Department for action which may be either allocation to an inspector or a work crew to undertake a formal inspection.

c) Service requests from Council Staff

Council staff, when travelling the network on the way to and from work locations at various points through the Local Government Area are encouraged to inspect and report any defects or hazards encountered using the appropriate Fault Reporting Sheet. When a service request is received, it will be registered with the Customer Request System and handled as any other complaint from road users.

Table 2: Road Hierarchies and Inspection Intervals

Hierarchy Category	Road Description	Maximum Interval between inspections
4	Regional roads	1 month
3	Sealed Rural – Category Rural1 Town streets Category Town1	3 months
2	Sealed Rural – Categories Rural2 Town streets – Categories Town2	6 Months
	Sealed Rural – Categories Rural3 & Rural4 Town streets – Categories Town3 & Town4	12 months
1	Local road - unsealed	12 months

5.4. Hazard Response

The left-hand column of Table 3: Physical Description of Hazards and Response Codes sets the range and minimum magnitudes of distresses and defects that are deemed to be a hazard to road users. Any defect or distress that is smaller than the magnitude set out in Table 3 is deemed to be non-hazardous.

When Council becomes aware of a road hazard through any formal inspections, complaints from road users or service requests from staff, that hazard is assigned a Response Code from the right-hand columns of Table 3 based on the Hierarchy Category of the particular road. The Response Code then sets the maximum time for Council to undertake sufficient repairs to eliminate the hazard for road users. Where, because of the nature of the work required, the level of resources required or workload, these repairs may take the form of temporary works and/or the provision of appropriate warnings until a suitable repair or treatment can be completed.

The Response Codes in Table 3 have been determined based on the risk each hazard type presents to road users, the location of the hazard in the roadway and the function of the road in the road network. The methodology for determining the Response Codes is set out in Appendix 3.

The maximum time for Council's response is defined for each Response Code in Table 4: Responses and Maximum Response Times for each Response Code. Where the Maximum Response Time is defined in **Hours**, the response is measured in **whole hours** from the **time** the hazard is first recorded in Council's record systems until the work is recorded as complete by the person in charge of those works.

Where the Maximum Response Time is defined in **Days**, the response target is "close of business" on the applicable number of **full working days** from the **day** the hazard is first recorded in Council's record systems.

Where the Maximum Response Time is defined in **Months**, the response target is "close of business" on the **same day of the month** in the applicable number of **months** from the **day of the month** the hazard is first recorded in Council's record systems. Where the response target date falls on a non-working day, the target date will be the next working day. Where the response target date does not exist e.g. 31st June, the target date will be the next working day.

Table 3: Physical Description of Hazards and Response Codes

DESCRIPTION OF HAZARD	Hierarchy Category			
	4	3	2	1
OBSTRUCTIONS & SUBSTANCES IN ROAD TRAFFIC LANES				
Objects in Road Traffic Lanes				
Fallen trees, dead animals, and other objects where the height of the obstruction is greater than 100 mm	**A**	**A**	**B**	**B**
Spilled Materials on Sealed Roads				
Wet clay and other materials or substances with an area greater than 4 m^2 that are causing slippery or dangerous conditions	**A**	**A**	**B**	**B**
Water in Road Traffic Lanes				
Ponded or running water greater than 150 mm deep that is **NOT** located within a signed Floodway	**A**	**A**	**B**	**B**

DESCRIPTION OF HAZARD	Hierarchy Category			
	4	3	2	1
SEALED ROADS - PAVEMENT				
Potholes				
Pothole of diameter greater than 300 mm and depth greater than 125 mm located in Road Traffic Lane	**C**	**C**	**D**	**E**
Pothole of diameter greater than 300 mm and depth greater than 125 mm located in sealed or unsealed road shoulder	**C**	**C**	**D**	**E**
Road Pavement or Surface Defects				
Depressions greater than 1 m^2 in area and depth greater than 125 mm measured under a 3-metre straight edge	**C**	**C**	**D**	**E**
Shoving greater than 1 m^2 in area and height greater than 125 mm above adjacent road surface	**C**	**C**	**D**	**E**
Rutting greater than 3 metres in length and depth greater than 125 mm measured under a 3-metre straight edge	**C**	**C**	**D**	**E**
Edge drops of length greater than 3 metres and depth greater than 125 mm	**C**	**C**	**D**	**E**
Longitudinal cracks greater than 10 mm in width and 1 metre in length	**C**	**C**	**D**	**E**
UNSEALED ROADS - PAVEMENT				
Potholes				
Pothole of diameter greater than 300 mm and depth greater than 125 mm	**C**	**D**	**E**	**E**
Road Surface Defects				
Depressions greater than 1 m^2 in area and depth greater than 125 mm measured under a 3-metre straight edge	**C**	**D**	**E**	**E**
Rutting greater than 125 mm deep measured under a 3-metre straight edge and greater than 3 metres in length	**C**	**D**	**E**	**E**
Corrugations greater than 25 mm deep and length of road affected greater than 10 metres	**C**	**D**	**E**	**E**
SIGNAGE AND ROADSIDE FURNITURE				
Safety signs that are missing or illegible making them substantially ineffective	**A**	**B**	**C**	**C**
Safety barriers and safety fencing at a Critical Location that is missing or damaged making it substantially ineffective	**A**	**B**	**C**	**C**
Guideposts at a Critical Location that are missing or damaged making them substantially ineffective	**A**	**B**	**C**	**C**
Pavement Markings at a Critical Location that are	**D**	**D**	**E**	**E**

DESCRIPTION OF HAZARD	Hierarchy Category			
	4	3	2	1
missing or illegible making them substantially ineffective				
Pit lids that are missing or are damaged with a crevice greater than 50 mm	**A**	**A**	**B**	**B**
VEGETATION				
Trees, shrubs, and grasses that have grown higher than 800 mm to restrict design sight distance to intersections or restrict viewing of safety signs	**C**	**C**	**D**	**D**
Unless signed otherwise, vegetation clearance of less than 4.5 metres over traffic lanes, the edge of the seal or trafficable portions of the shoulder	**C**	**C**	**D**	**D**

Table 4: Responses and Maximum Response Times for each Response Code

Response Code	Response	Maximum Response Time
A	**EITHER** Repair defects that exceed the stated intervention level within the relevant time shown in the adjacent column if feasible; **OR** Where because of the nature of the work required, the level of resources required or workload it is not feasible to rectify within the relevant time shown in the adjacent column, Appropriate Warning of the defect is to be provided until a suitable repair or treatment can be completed.	Within **12 hours** of Council having recorded a hazard that exceeds intervention level
B		Within **24 hours** of Council having recorded a hazard that exceeds intervention level
C		Within **5 working days** of Council having recorded a hazard that exceeds intervention level
D		Within **1 month** of Council having recorded a hazard that exceeds intervention level
E		Within **3 months** of Council having recorded a hazard that exceeds intervention level

6. Force Majeure

Council will make every endeavour to meet all aspects of this policy.

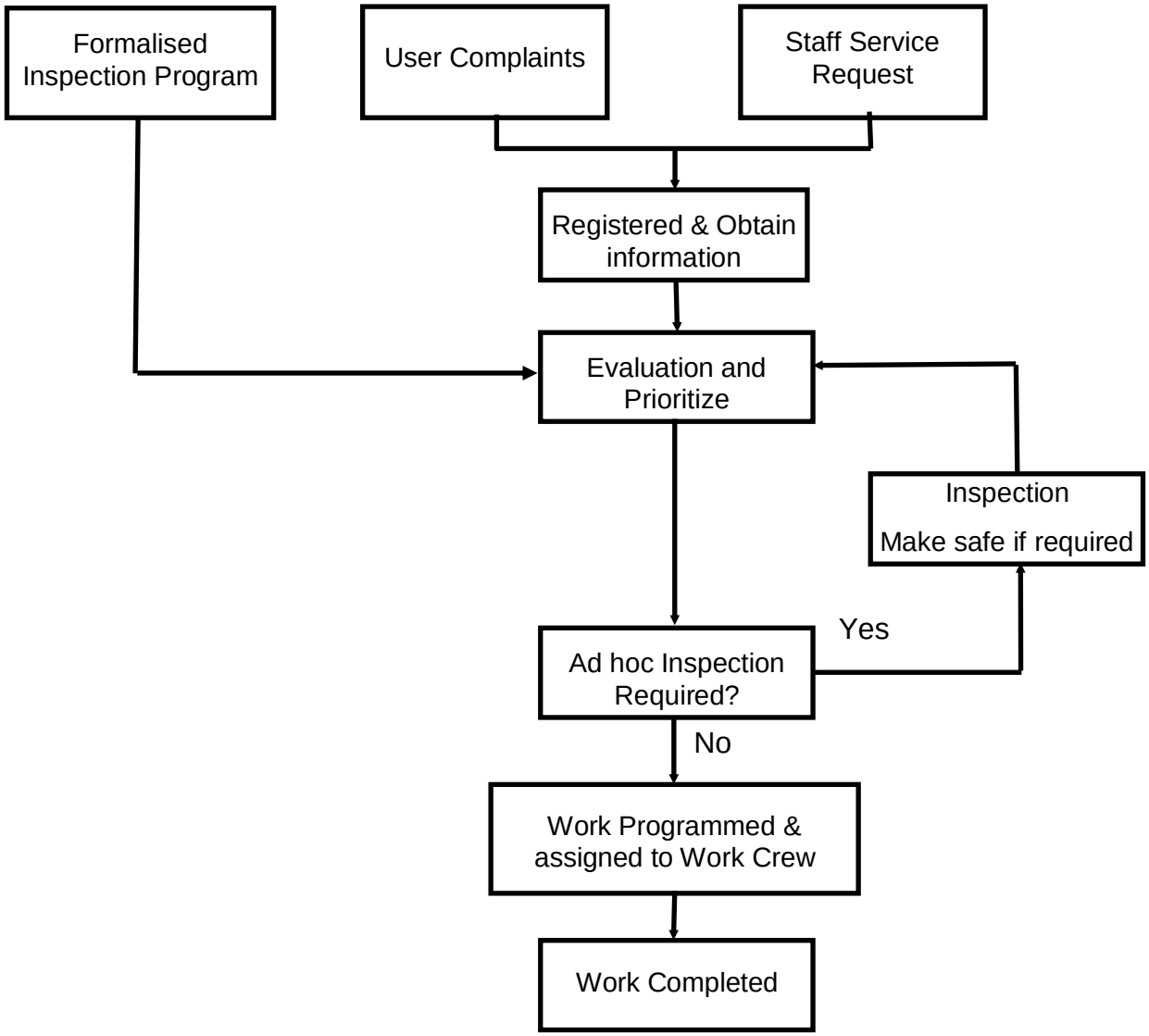
However, in the event of natural disasters and other events including, but not limited to, fires, floods, droughts etc., together with human factors, such as unavailability of Council staff or suitably qualified contractors, Council reserves the right to suspend compliance with this policy.

On considering the impact of such an event on the limited financial and other resources of the Council, the General Manager of the Council may determine that any standards or requirements in this policy cannot be adequately met. In this case the General Manager will write to Council's officer in charge of delivering this policy and inform them that some, or all, of the timeframes and response times are to be suspended.

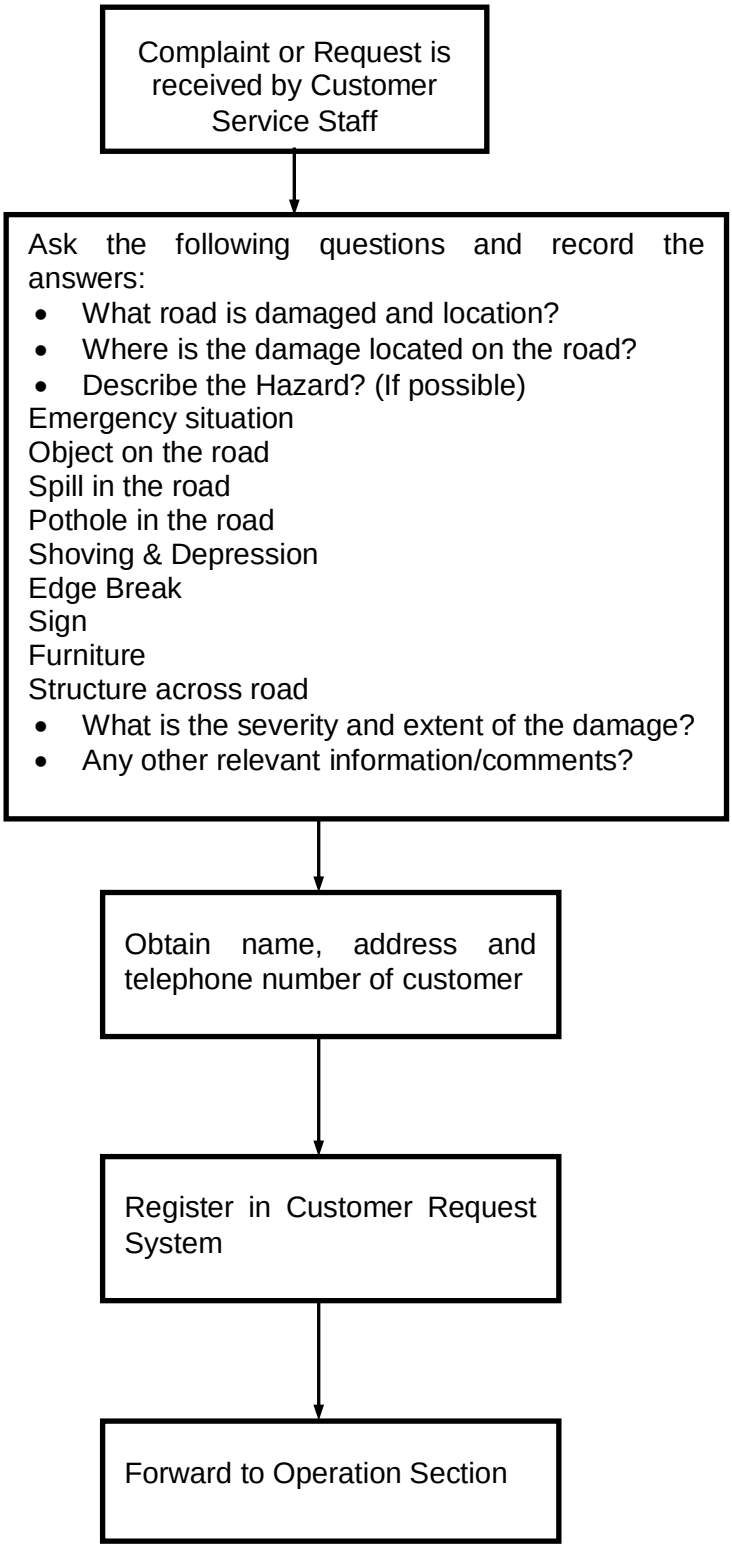
Once the events beyond the control of Council have abated, or if the events have partly abated, Council's General Manager will write to Council's Officer responsible for delivering this policy and inform them which parts of the policy are to be reactivated and the timeframes for doing so.

Approving Authority	Oberon Council
Contact	Technical Services Director
Approval	20 September 2016, Item 13.06, Resolution 21 200916 16 March 2021, Item 13.06, Resolution 17 160321
Due for Revision Date	March 2023
Revised	March 2021
Issue Date to Staff	March 2021

Appendix A – Flowchart of Overall Procedure



Appendix B – Complaint Handling Flowchart



Appendix C – Response Code Risk Calculations

To determine the Response Codes to be used for any particular hazard, first the *Overall Risk Score* for that hazard is calculated using the formula:

Overall Risk Score = (Hazard Risk Score) x (Location Multiplier) x (Hierarchy Multiplier)

The *Hazard Risk Score* is assigned by selecting the applicable score for the particular hazard from Table 5: Applicable Hazard Risk Scores for each type of Hazard.

The *Location Multiplier* is assigned by selecting the applicable multiplier for the location of the hazard from Table 6: Location Multiplier for different Hazard locations.

The *Hierarchy Multiplier* is assigned by selecting the applicable multiplier for the Hierarchy of the road in which the hazard is located from Table 7: Hierarchy Multiplier for each classification of Road Hierarchy.

The calculated *Overall Risk Score* is converted into the applicable *Response Code* using Table 8: Response Code look-up table.

Table 5: Applicable Hazard Risk Scores for each type of Hazard

DESCRIPTION OF HAZARD	Hazard Risk Score
OBSTRUCTIONS & SUBSTANCES IN ROAD TRAFFIC LANES	
Objects in Road Traffic Lanes	
Fallen trees, dead animals, and other objects where the height of the obstruction is greater than 100 mm	9
Spilled Materials on Sealed Roads	
Wet clay and other materials or substances with an area greater than 4 m^2 that are causing slippery or dangerous conditions	9
Water in Road Traffic Lanes	
Ponded or running water greater than 150 mm deep that is NOT located within a signed Floodway	9
SEALED ROADS - PAVEMENT	
Potholes	
Pothole of diameter greater than 300 mm and depth greater than 125 mm	2
Road Pavement or Surface Defects	
Depressions greater than 1 m^2 in area and depth greater than 125 mm measured under a 3-metre straight edge	2
Shoving greater than 1 m^2 in area and height greater than 125 mm above adjacent road surface	2
Rutting greater than 3 m in length and depth greater than 125 mm measured under a 3-metre straight edge	2
Edge drops of length greater than 3 metres and depth greater than 125 mm	2
Longitudinal cracks greater than 10 mm in width and 1 metre in length	2

UNSEALED ROADS - PAVEMENT	
Potholes	
Pothole of diameter greater than 300 mm and depth greater than 125 mm	1
Road Surface Defects	
Depressions greater than 1 m^2 in area and depth greater than 125 mm measured under a 3-metre straight edge	1
Rutting greater than 125 mm deep measured under a 3-metre straight edge and greater than 3 metres in length	1
Corrugations greater than 25 mm deep and length of road affected greater than 10 metres	1
SIGNAGE AND ROADSIDE FURNITURE	
Safety signs that are missing or illegible making them substantially ineffective	5
Safety barriers and safety fencing at a Critical Location that is missing or damaged making it substantially ineffective	5
Guideposts at a Critical Location that are missing or damaged making them substantially ineffective	5
Pavement Markings at a Critical Location that are missing or illegible making them substantially ineffective	2
Pit lids that are missing or are damaged with a crevice greater than 50 mm	9
VEGETATION	
Trees, shrubs, and grasses that have grown higher than 800 mm to restrict design sight distance to intersections or restrict viewing of safety signs	2
Unless signed otherwise, vegetation clearance of less than 4.5 metres over traffic lanes, the edge of the seal or trafficable portions of the shoulder	2

Table 6: Location Multiplier for different Hazard locations

LOCATION DESCRIPTION	LOCATION MULTIPLIER
Pavement Markings	1
Road Shoulder, Parking Lane or Median	1
Critical Signage & Roadside Furniture	2
Traffic Lane	2

Table 7: Hierarchy Multiplier for each classification of Road Hierarchy

Hierarchy	Description	Hierarchy Multiplier
4	Regional roads	4
3	Sealed Rural – Category Rural1	3
	Town streets Category Town1	

2	Sealed Rural – Categories Rural2, Rural3 & Rural4	2
	Town streets – Categories Town2, Town3 & Town4	
1	Local road - unsealed	1

Table 8: Response Code look-up table

Overall Risk Score	Response Code
37 - 72	A
17 - 36	B
9 - 16	C
5 - 8	D
1 - 4	E