



CITY OF GREATER
BENDIGO

Road Management Plan

Version 4.0

November 2022

Table of Contents

Glossary	4
1 Introduction	7
1.0 Background Information	7
1.1 Purpose of the Plan	7
1.2 Scope of this Plan	7
1.3 Key Stakeholders	8
1.4 Duty of Road Users	8
1.5 Incident Claims	9
1.6 Vision and Strategy	9
1.7 Suspension of RMP under Extreme Events (Force Majeure)	9
2 Public Roads	10
2.0 Register of Public Roads	10
2.1 Road Classification	10
2.2 Coordinating Road Authority & Responsible Road Authority	11
2.3 Others Responsibility	12
2.4 Vehicle Crossovers	13
2.5 Pathways Not in Road Reserves	14
2.6 Unused and Unformed Roads	14
2.7 Fire Access Tracks	14
2.8 Unsurfaced Roads (or Limited Access Roads)	15
2.9 Unsealed Roads	15
2.10 Capital Upgrades	16
3 Road and Path Hierarchy	17
3.0 Road and Path Hierarchy	17
4 Maintenance Management	18
4.0 Inspection Background	18
4.1 Types of Inspection	18
4.1.1 Re-active Inspections	18
4.1.2 Pro-active Inspections	18
4.1.3 Asset Condition Assessments	20
4.2 Defect Intervention Levels and Response Times	20
4.3 Other Maintenance Works	23
4.4 Management System	23
4.5 Works Within Road Reserves	23
4.6 Asset Protection - Local Law 11	24
4.7 Boundary Issues	24
5 Assessments and Amendments	25
5.0 Quarterly Performance Measures	25
5.1 Annual RMP Assessment	25
5.2 RMP Review and Amendment	26

Appendix 1 – RMP Inspection & Defect Workflow

27

Table of Figures

Table 2.1a : Road Classification	10
Table 2.4a : Typical Urban Vehicle Crossover	13
Table 3.0a: Sealed & Unsealed Road Asset Hierarchy	17
Table 3.0b: Footpath Asset Hierarchy	17
Table 4.1.2a: Road Pro-Active Inspection Frequency	19
Table 4.1.2b: Footpath Pro-Active Inspection Frequency	19
Figure 4.2a: Defect Response Times	21
Figure 4.2b: Defect Response Times ...continued	22
Figure 4.7 : Neighbouring Municipalities	24
Figure A1: RMP Inspection and Defect Workflow	27

Glossary

Ancillary Area	An area designated as an ancillary area by the coordinating road authority under section 18 of the Act
Arterial Roads	Freeways, Highways & Declared Main Roads which are managed by the State Government through the Department of Transport.
Code of Practice	Code of Practice for Road Management Plans (13 September 2004). Supporting document to the legislation, which provides practical guidance to Road Authorities in the making of RMPs.
Condition Inspections	Inspections conducted to assess the life of the road and footpath network and to prioritise major works.
Consent Applications	Applications made by other Road Authorities and Utilities companies to perform works on Council-managed roads.
Coordinating Road Authority	The road authority which has coordination functions as determined in accordance with section 36 of the Act
"Exceptional Circumstances" or "Force Majeure" Clause	A clause included in the RMP that describes the conditions under which a Council can suspend its maintenance and inspection responsibilities under the RMP due to the occurrence of events outside their control.
Fire Access Track	A track that primarily exists to allow access for fire fighting vehicles
Defect	A localised failure in an asset, for example, a pothole in a road surface or a joint displacement in a concrete footpath.
Infrastructure and works managers	Road Authority staff responsible for the management and maintenance of roads as determined by the classification system within the Act, and as contained in the roads register.
Intervention Level	The size or severity of a defect at which a mandatory response is required. The response could be to either repair the defect or make it safe.
Municipal Road	A public road within the municipality where Council is the designated Coordinating Road Authority.
Other Roads	Includes roads in State reserves, and roads on private property. Council is not responsible for the care and maintenance of these roads.

Pathway	A footpath, bicycle path or other area constructed or developed by a responsible road authority for use by members of the public other than with a motor vehicle. Does not include any path which has not been constructed by a responsible road authority; or which connects to other land.
Proactive Inspections	Inspections performed as part of a scheduled program, according to the hierarchy of roads, which is based on the road classification, volume of traffic etc.
Public Highway	Any area of land that is a highway for the purposes of the common law
Public Road	A road that is reasonably required for general public use.
Public Road Register	A list of public roads within the municipality where Council is the designated Coordinating Road Authority. Council is required to keep a register under section 19 of the Act.
Reactive Inspections	Inspections performed in response to a complaint about the condition of the road, or report of injury and/or property damage to a member of the public.
Response Time	The maximum time allowed before a response is required on a defect that is above intervention level. The response could be to either repair the defect or make it safe. Response time is measured from the time the defect is inspected by Council.
Responsible Road Authority	The road authority which has operational functions as determined in accordance with section 37 of the Act.
Road	Includes any public highway; any ancillary area; or any land declared to be a road under section 11 of the Act
Road Infrastructure	<p>The infrastructure which forms part of a roadway, pathway or shoulder, including -</p> <ul style="list-style-type: none"> • Structures forming part of the roadway, pathway or shoulder; and the road-related infrastructure. • Materials from which a roadway, pathway or shoulder is made; such as asphalt, bitumen, gravel, lane markers and lines.
Road Management Plan (RMP)	A document developed by Councils to assist in the management of their road related duties and responsibilities, as defined in the Act.

Road Related Infrastructure	<p>Infrastructure which is installed by the relevant road authority for road related purposes to –</p> <ul style="list-style-type: none"> • Facilitate the operation or use of the roadway or pathway • Support or protect the roadway or pathway. <p>Examples: Traffic islands, traffic management, signage, traffic control sign, traffic light, kerb and channel, a bridge, culvert or ford, road drain or embankment, a noise wall, gate, post or board installed on the road reserve.</p>
Roadside	<p>Roadside means any land that is within the boundaries of a road (other than the shoulders of the road) which is not a roadway or a pathway and includes the land on which any vehicle crossing or pathway which connects from a roadway or pathway on a road to other land has been constructed.</p>
Sealed Road	<p>A road within a road reserve that has been sealed with bitumen or asphalt.</p>
Shared Path	<p>A pathway that caters for <u>both</u> pedestrians and bicycles that has been constructed on a road reserve where Council is the responsible road authority or on land managed by Council that has unrestricted public access. Excludes the following –</p> <ul style="list-style-type: none"> • ‘on-road’ bike lanes • paths or tracks on land that Council doesn’t manage • unconstructed paths or tracks
The Act	<p>Road Management Act (2004). The Act provides a statutory framework for the management of the road network in Victoria.</p>
Traffic Lane	<p>The part of a sealed or unsealed road designed to carry through traffic, excludes parking lanes, shoulders and table drains</p>
Unformed Road	<p>A track within a road reserve that has not been formed or surfaced.</p>
Unsealed Road	<p>A road within a road reserve that has been formed and surfaced with crushed rock or gravel, but not sealed with bitumen or asphalt.</p>
Unsurfaced Road or Limited Access Road	<p>A road or track within a road reserve that has been formed (shaped) but not surfaced. These roads have limited access and are suitable for dry weather only.</p>
Unused Road Reserve or Paper Road	<p>A road reserve that exists on paper but does not contain a physical road.</p>

1 Introduction

1.0 Background Information

The *Road Management Act (2004)* ("the Act") was introduced to improve the management and coordination of road infrastructure. The purpose of the Act is to establish a coordinated management system that will promote safe and efficient road networks at state and local levels, and the responsible use of road reserves for other legitimate purposes. This Plan is prepared in accordance with Part 4, Division 5 of the Act and *Code of Practice No. S 201*.

1.1 Purpose of the Plan

In accordance with section 50 of the Act, the purposes of a road management plan are:

- To establish a management system for the road management functions of the Council (as the relevant road authority) which is based on policy and operational objectives and available resources.
- To set the relevant standards or policy decisions in relation to the discharge of duties in the performance of those road management functions.

Council's Road Management Plan ("**RMP**") aims to:

- Set relevant standards or policies in relation to the discharge of its duties in relation to the performance of its road management functions.
- Detail the management systems that Council uses to discharge its duty to inspect, maintain and repair public roads for which Council is responsible.

1.2 Scope of this Plan

The provisions of this Plan apply to road infrastructure and road related infrastructure for which Council is the Responsible Road Authority. This infrastructure may be in roads where Council is the designated Coordinating Road Authority or in roads where another authority is the designated Coordinating Road Authority e.g. Department of Transport (DoT). The demarcation between Council and DoT responsibilities is detailed in the "Road Management Act 2004 Code of Practice – Operational Responsibility for Public Roads". Council road infrastructure and road related infrastructure includes:

- Sealed roads
- Unsealed roads
- Footpaths and shared paths
- Kerb and channel
- Bridges and major culverts
- Traffic control devices

1.3 Key Stakeholders

The RMP is intended to demonstrate to stakeholders that Council is managing its roads and the road related assets responsibly. The key stakeholders include -

- Community - as users of services that rely on sound asset management
- Councillors - as stewards of Council's infrastructure assets
- State & Federal Governments as fund providers for road infrastructure development
- Utilities / Developers - as infrastructure providers
- Employees – responsible for managing Council's infrastructure assets
- Contractors / Suppliers - as service providers
- Emergency agencies (Police, Fire, Ambulance, VIC SES)

1.4 Duty of Road Users

Road users have a duty in respect of the use of a road or road related area (as defined by the *Road Safety Act 1986*). This duty is set out in Clause 17A of the *Road Safety Act 1986* and imposes an obligation on all road users to operate in a safe manner having regard to the road conditions, namely:

- (1) *A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all the relevant factors.*
- (2) *A road user other than a person driving a motor vehicle must use a highway in a safe manner having regard to all the relevant factors.*
- (3) *For the purposes of subsections (1) and (2) and without limiting their generality, the relevant factors include the following -*
 - (a) the physical characteristics of the road;*
 - (b) the prevailing weather conditions;*
 - (c) the level of visibility;*
 - (d) the condition of any vehicle the person is driving or riding on the highway;*
 - (e) the prevailing traffic conditions;*
 - (f) the relevant road laws and advisory signs;*
 - (g) the physical and mental condition of the driver or road user.*

Note: The above factors are relevant to section 106 of the Road Management Act 2004 (Matters which may be considered to constitute contributory negligence).

- (3) *A road user must -*
 - (a) take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users;*
 - (b) take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve;*

(c) take reasonable care to avoid conduct that may harm the environment of the road reserve.

(4) In subsection (3), non-road infrastructure, road infrastructure and road reserve have the same meanings as in section 3(1) of the Road Management Act 2004

1.5 Incident Claims

In accordance with Section 115 of the Act, a person who intends to take court proceedings in relation to a claim for damages arising out of the condition of a public road or infrastructure must first lodge a written notice with the Council. This notice must be lodged with the Council within 30 days of the incident occurring.

1.6 Vision and Strategy

The RMP forms an integral part of the Council's Asset Management Strategy and recognises the linkage between the effective management of road assets and the standard of maintenance. The overall objective of Asset Management (AM) is to ensure that Council's road infrastructure continues to provide sustainable, safe and economic service. Council has adopted an Asset Management Policy which sets the broad framework for undertaking AM in a structured and coordinated way.

1.7 Suspension of RMP under Extreme Events (Force Majeure)

Although Council will make every endeavour to meet all aspects of its RMP, Council reserves the right to suspend compliance during extreme events. Pursuant to Section 83 of the *Victorian Wrongs Act (1958)*, Council's obligations may be suspended in the event of:

- Natural disasters - including, floods, fires, droughts, etc
- Human factors - such as unavailability of Council staff or qualified Contractors
- Any other major event beyond the control of Council.

In such circumstances, the Manager Engineering, may deem that the requirements of Council's RMP cannot be satisfied and will seek Chief Executive Officer (CEO) approval to suspend all or part of the plan. The Manager will advise the CEO which activities and response times in the RMP cannot be achieved. Once these circumstances have abated, or partly abated, the Manager Engineering will advise the CEO which parts of the Plan can be reactivated.

2 Public Roads

2.0 Register of Public Roads

A 'public road' is a road reasonably required for general public use as defined in Section 17 of the Act. In accordance with Section 19 of the Act, a road authority must keep a Register of Public Roads specifying the public roads in respect of which it is the Coordinating Road Authority. Council's Register of Public Roads is available for inspection at Council's primary Office in Bendigo. The Register of Public Roads is also available on Council's web page at:

<http://www.bendigo.vic.gov.au/>

The Register of Public Roads includes the following details –

- Road and suburb name
- Road section description
- Road classification
- Asset hierarchy
- The date on which the road became a public road.

2.1 Road Classification

The method used to classify the road network is based on the classifications used in the Vicmap Transport data set, namely:

Class Description
Freeway
Highway
Arterial Road
Sub-Arterial Road
Collector Road
Local Road
Track



Table 2.1a: Road Classification

The relevant classifications have been applied to all roads listed in Council's Register of Public Roads.

2.2 Coordinating Road Authority & Responsible Road Authority

The Coordinating Road Authority for a public road is determined using Section 36 of the Act. Council is generally the Coordinating Road Authority for public roads within the municipality that are not State Roads; these roads are designated as Municipal Roads. Municipal Roads are further classified (as per Section 2.1) as Sub-Arterial, Collector or Local Roads. Council has a statutory duty to inspect, maintain and repair Municipal Roads as listed in Council's Register of Public Roads. In accordance with Section 107 of the Act, the City of Greater Bendigo (the City) does not have a statutory duty or a common law duty to perform road management functions in respect of a public highway which is not a public road.

Council is also the Responsible Road Authority for Council owned road related infrastructure within road reserves where another authority (e.g. DoT) is the Coordinating Road Authority. There are several other authorities responsible for parts of the road network and/or infrastructure within the road reserves within the municipality, including:

DoT:

DoT is the coordinating road authority for all State Roads, classified in Section 2.1 as Freeways, Highways or Arterial Roads. These roads are not listed in Council's Register of Public Roads. Council is responsible for Council owned road related infrastructure within road reserves where DoT is the Coordinating Road Authority, for example Council footpaths on a DoT arterial road. Likewise, DoT responsibility can extend into adjoining roads where Council is the coordinating road authority. The demarcation between Council and DoT responsibilities is detailed in "Road Management Act 2004 Code of Practice – Operational Responsibility for Public Roads".

Dept of Environment, Land, Water and Planning (DELWP) / Parks Victoria:

A number of roads and tracks exist on Crown land (other than road reserves) where Council isn't the Committee of Management e.g. national and regional parks. DELWP and/or Parks Victoria has management responsibility of these roads. These roads are not listed in Council's Register of Public Roads.

VicTrack:

VicTrack is responsible for maintaining railway level crossings which include the area in the immediate vicinity of the railway line. Council is responsible for maintaining the approaches to the rail line and approach signage on the municipal road network. VicTrack is also responsible for road and pedestrian bridges over rail and rail over road bridges within the municipality, unless there is an individual agreement stating otherwise.

Coliban Water and Goulburn-Murray Water:

Goulburn-Murray Water is responsible for the tourist / access roads within the vicinity of Lake Eppalock. These roads are not listed in Council's Register of Public Roads. Coliban Water and Goulburn-Murray Water is also responsible for the road bridges over channels that they own, and for water supply and sewer infrastructure assets in road reserves where Council is the designated Coordinating Road Authority.

2.3 Others Responsibility

Some roads open to the public are privately owned and maintained, Council is not responsible for these roads. There are also a number of non-road related infrastructure in road reserves where Council is the designated Coordinating Road Authority but the responsibility for those assets belongs to others. Council is not responsible for the following:

Private Roads and Laneways:

Council has a role in supervising the construction of private subdivisional works that occur within the City. This ensures that assets are constructed to an appropriate standard. Roads which are constructed as part of a subdivision are generally private roads until such time as the Statement of Compliance is finalised at which point they become public roads. There are some roads which remain privately owned and maintained. Private Roads and other roads which are not available to the general public are excluded from this plan. Council has no maintenance obligations in regard to these roads. These roads are not listed in Council's Register of Public Roads.

Roadsides:

Roadside means any land that is within the boundaries of a road (other than the shoulders of the road) which is not a roadway or a pathway. For example, any nature strip, forest, bushland, grassland or landscaped area within the road reserve would be roadside. In accordance with Section 107 of the Act, the City does not have a statutory duty or a common law duty to inspect or repair the roadside of any public highway (whether or not a public road).

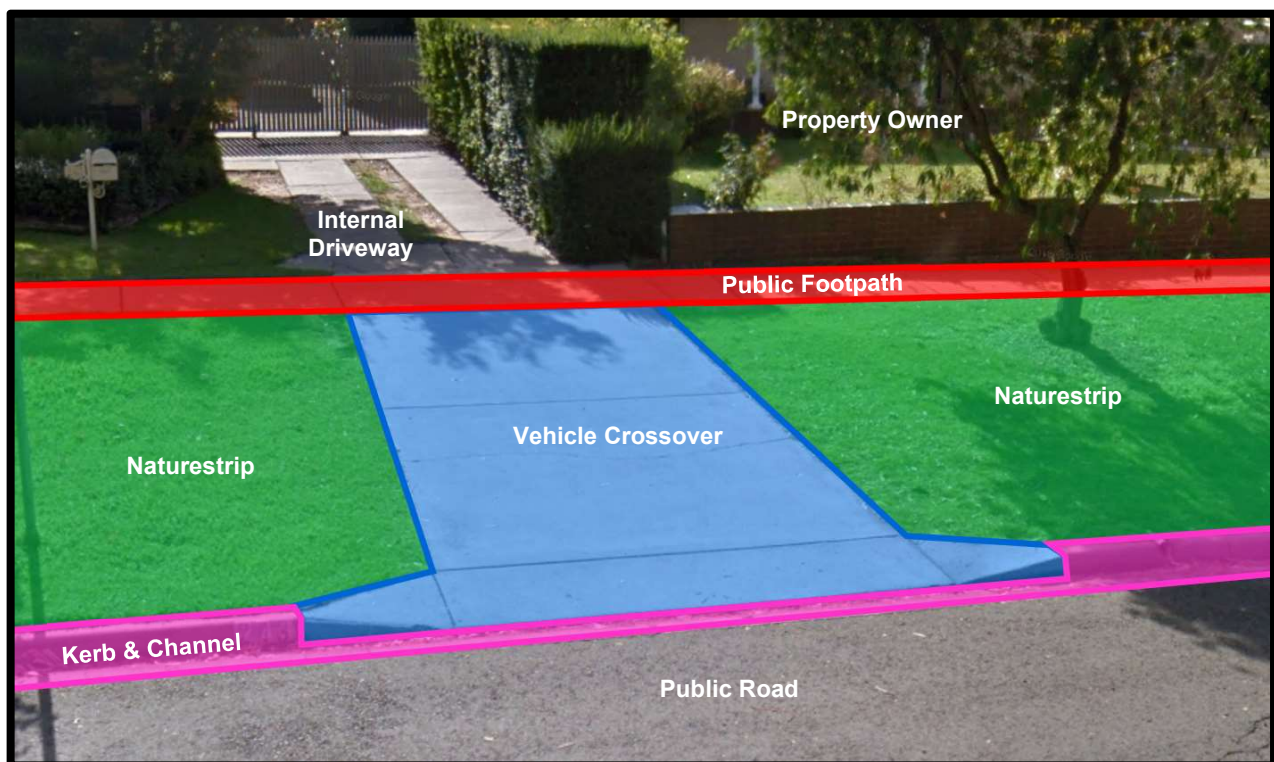
Service Authority Infrastructure:

Council is not responsible for service authority assets contained within road reserves where Council is the designated Coordinating Road Authority. These assets include infrastructure for water supply, sewer, telecommunications, gas, electricity, tramways and railway functions, which are the responsibility of the relevant authority.

2.4 Vehicle Crossovers

A vehicle crossover provides vehicular access to private property from the traffic lane to the property boundary. In the urban area the crossover may consist of a concrete driveway and layback in the kerb and channel. In the rural area the crossover may consist of a crushed rock pavement over a reinforced concrete pipe with concrete end walls. Vehicle crossovers (including pipes & end walls or kerb laybacks) are the responsibility of the abutting landowner and are constructed at the landowner's expense. Landowners are responsible for ensuring the cross overs are maintained in a safe condition. Landowners must obtain a Works Within Road Reserves permit (WWRR) and comply with Council specifications and WWRR permit conditions when constructing vehicle crossovers.

If a footpath is constructed in front of the property, Council is responsible for the section of footpath through the crossover, the landowner retains responsible for the remainder of the crossover. If there is no constructed footpath, then the landowner is responsible for the entire crossover from the road edge to the property boundary.



The diagram illustrates a typical urban vehicle crossover. It shows a public road at the bottom, with a pink-shaded 'Kerb & Channel' area. Above the road is a blue-shaded 'Vehicle Crossover' area. To the left of the crossover is a green-shaded 'Naturestrip'. To the right of the crossover is another green-shaded 'Naturestrip'. Above the right naturestrip is a red-shaded 'Public Footpath'. At the top of the diagram is a grey-shaded 'Internal Driveway' leading to a 'Property Owner' area. The diagram is overlaid with colored rectangles corresponding to the responsible parties for different areas, as detailed in the table below.

RESPONSIBLE PARTY	CONSTRUCTION AND MAINTENANCE RESPONSIBILITY			
	Vehicle Crossover	Public Footpath	Kerb & Channel	Naturestrip
City of Greater Bendigo	✗	✓	✓	✗
Land Owner (adjacent)	✓	✗	✗	✓

Table 2.4a: Typical Urban Vehicle Crossover

2.5 Pathways Not in Road Reserves

In addition to the footpaths and shared paths constructed within the road reserves, Council also maintains pathways constructed on land where it is the designated responsible authority. Given the common law definition of a 'Public Highway' and the Local Government Act 1989 definition of a 'Road', it is council's intention, where appropriate, to apply the standards developed for the RMP to council pathways not in road reserves. The RMP standards will only be applied to constructed pathways that are on Council managed land and provide un-restricted public access. These pathways are not listed in the Register of Public Roads. The RMP standards do not apply to the following pathways:

- Pathways or tracks on land that Council doesn't manage
- Pathways or tracks that have restricted public access
- Pathways that have not been constructed or formally adopted by Council
- Unconstructed paths or tracks.

2.6 Unused and Unformed Roads

All unused road reserves and unformed roads within the municipality are excluded from the inspection and defect response requirements of the RMP. The City is not obliged to undertake any of the following on unused or unformed roads:

- pro-active inspections
- maintenance works
- capital renewals
- capital improvements.

Unused road reserves and unformed roads are not included in the Register of Public Roads.

2.7 Fire Access Tracks

In addition to Municipal Roads, the City also undertakes periodic maintenance on nominated tracks to allow access for fire fighting vehicles. These fire access tracks are not maintained to a standard suitable for public access and are excluded from the inspection and defect response requirements of the RMP. The City is not obliged to undertake any of the following on fire access tracks:

- pro-active inspections
- maintenance works
- capital renewals
- capital improvements.

These roads are not required for general public use and as such are not included in the Register of Public Roads.

2.8 Unsurfaced Roads (or Limited Access Roads)

Roads that have been formed (shaped) but not surfaced provide limited access and are usually only suitable for dry weather use. A number of roads in the municipality have been formed over the years but not surfaced; these roads are excluded from the inspection and defect response requirements of the RMP. The City is not obliged to undertake any of the following activities on unsurfaced roads:

- pro-active inspections
- maintenance works
- capital renewals
- capital improvements.

However, the City may inspect these roads on occasion and program limited maintenance work (such as grading) as resources permit. These roads generally provide limited access to specific properties rather than general public use and as such are not included in the Register of Public Roads.

2.9 Unsealed Roads

Unsealed roads are roads that have been formed and surfaced with crushed rock or gravel, but not sealed with bitumen or asphalt. These roads provide access in all weather conditions and are included in the inspection and defect response requirements of the RMP. The City will undertake the following activities on unsealed roads:

- pro-active inspections
- maintenance works
- capital renewal works

Capital renewal works are only designed to renew the unsealed road to its original condition. The City is not obliged to improve the road further, e.g. seal an unsealed road.

These roads are included in the City's Register of Public Roads.

2.10 Capital Upgrades

In accordance with Section 40 (2) of the Act, the City does not have a duty to upgrade a road or to maintain a road to a higher standard than the standard to which the road is constructed. The City is not obliged to:

- provide a road in an unused road reserve
- construct or improve an unformed road
- provide an all-weather surface on an unsurfaced road
- seal an unsealed road.

Upgrade works requested by landowners that only benefit a limited number of properties will not be funded by the City. Residents may elect to fully fund the cost for these upgrade works; however they will be required to undertake the works in accordance with the relevant standards and with the appropriate permissions and permits. The City will only take over responsibility for the ongoing maintenance of the road when satisfied that the road has been constructed to an appropriate standard.

If the upgrade works can be demonstrated as providing a clear benefit to the general public and not just the adjacent landowners, the City will rank the project against other similar projects using cost/benefit criteria. High ranked projects will be considered as part of the preparation of Council's budget.

3 Road and Path Hierarchy

3.0 Road and Path Hierarchy

The hierarchies used to determine the inspection routines & maintenance levels have been established using a risk-based approach considering traffic volume and vehicle speed (for roads), and pedestrian volumes (for footpaths).

Sealed and Unsealed Roads, Traffic Control Devices and Bridges:

Hierarchy No	Hierarchy Description	VPD Range	
		Speed ≤ 70 km/h	Speed > 70 km/h
1	High Traffic volume	> 5,000	> 1,000
2	Medium Traffic Volume	1000 - 4,999	500 – 999
3	Low Traffic Volume	500 - 999	100 – 499
4	Very Low Traffic Volume	0 - 499	0 – 99

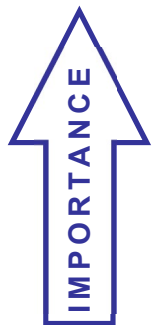


Table 3.0a: Sealed & Unsealed Road Asset Hierarchy

Sealed parking lanes are designated Hierarchy 4 regardless of the traffic volume or speed limit on the adjacent traffic lane.

Footpaths and Shared Paths:

Hierarchy No	Hierarchy Description	Hierarchy Criteria
1	Heavily Pedestrianised Areas	CBD and Hospital Precinct.
2	Moderately Pedestrianised Areas	Major Shopping Precincts and Major Parks
3	Standard Pedestrianised Areas	All Other Constructed Paths

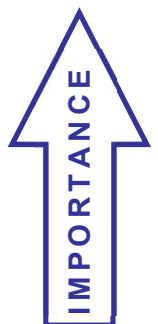


Table 3.0b: Footpath Asset Hierarchy

4 Maintenance Management

4.0 Inspection Background

Inspections are the cornerstone of maintenance programs for road and footpath assets. To ensure that all road infrastructure and road related infrastructure is inspected at appropriate frequencies a formal inspection system has been adopted. The system differentiates between road and footpath inspections, which differ in frequency and extent.

Details of the inspection workflows are indicated in **Appendix 1**.

4.1 Types of Inspection

The two main types of inspections undertaken on the City's road and footpath network are re-active inspections and pro-active inspections. These safety related inspections may also include asset condition assessments.

4.1.1 Re-active Inspections

Re-active inspections are initiated by requests from the public (the customer).

Customer requests regarding road infrastructure and road related infrastructure will be inspected within 15 working days of the request being lodged.

Any defects above intervention level identified in the re-active inspection will have a response time frame as detailed in Section 4.2 and will be treated the same as those identified in the pro-active inspections. The defect response time is measured from the time the defect is inspected by Council.

4.1.2 Pro-active Inspections

Pro-active inspections are regular programmed safety inspections designed to identify those defects that exceed the stated intervention level.

Pro-active inspection frequencies are based on risk and are aligned to the asset hierarchies detailed in Section 3.

Roads:

Pro-active inspections for roads are undertaken at frequencies determined by the hierarchy of the road. All inspections are recorded against the asset, as well as any defects detected that exceed the stated intervention level. The frequencies of these inspections are detailed in the following table

Hierarchy	Inspections
1	1 month
2	3 months
3	6 months
4	12 months



Table 4.1.2a: Road Pro-Active Inspection Frequency

Footpaths:

Pro-active inspections for footpaths are undertaken at frequencies determined by the hierarchy of the footpath. All inspections are recorded against the asset, as well as any defects detected that exceed the stated intervention level. The frequencies of these inspections are detailed in the following table -

Hierarchy	Frequency
1	3 months
2	12 months
3	24 months



Table 4.1.2b: Footpath Pro-Active Inspection Frequency

Bridges:

Pro-active inspections for bridges (Level 1 inspections) are undertaken in accordance with DoT guidelines on a 12 monthly basis.

Any defects likely to affect road user or public safety identified in the pro-active inspections will have a response timeframe as detailed in Section 4.2

4.1.3 Asset Condition Assessments

Asset condition assessments are used to determine the overall structural condition and remaining life of the assets. They are used to program periodic rehabilitation and replacement, as well as for determining depreciation costs when valuing the assets. Asset condition assessments are not undertaken to identify individual defects; however they may be conducted in conjunction with pro-active safety inspections.

The frequency of the asset condition assessments is not governed by the RMP.

4.2 Defect Intervention Levels and Response Times

A defect is a localised failure in an asset, for example, a pothole in a road surface or a joint displacement in a concrete footpath. The defect intervention level is the size or severity of a defect at which a mandatory response is required. An appropriate response could be to undertake maintenance works to ensure the defect no longer exceeds intervention level. The response time is the maximum time allowed before a response is required on a defect that is above intervention level. Response time is measured from the time the defect is inspected by Council and is determined from the defect intervention level and the hierarchy of the asset.

Within the relevant response time Council may also at its discretion and where appropriate employ temporary measures to defects that exceed a stated intervention level utilising one of the following:

- provision of warning signs
- provision of safety barriers
- traffic control action:
 - diverting traffic around the site
 - install temporary speed limit
 - lane closure or road closure
 - closure of the road to certain vehicles (e.g. Load limit).
- spray painting footpath lips.

Response times for repair work exclude major capital works (i.e. maintenance work only).

The response times for various road/path hierarchies are given in the following tables:

Description	Hierarchy			
	1	2	3	4
Sealed Road Defects				
Potholes in the traffic lane of a sealed pavement, greater than 300mm in diameter and greater than 50mm in depth.	2 weeks	1 month	2 months	3 months
Edge break in the traffic lane of a sealed pavement, greater than 10m in length and greater than 150mm across lane	2 weeks	1 month	2 months	3 months
Deformations in the traffic lane of a sealed pavement greater than 100mm under a 3m straight edge	2 weeks	1 month	2 months	3 months
Edge drops onto an unsealed shoulder greater than 10m in length and greater than 100mm in depth.	2 weeks	1 month	2 months	3 months
Loose material in the traffic lane of a sealed pavement, greater than 2m in diameter and greater than 20mm in depth	2 weeks	1 month	2 months	3 months
Missing or structurally unsound drainage pit lids or grates in the traffic lane of a sealed pavement	3 days	3 days	3 days	3 days
Unsealed Road Defects				
Wheel ruts, shoves and potholes in the traffic lane of an unsealed road, greater than 500mm in diameter and greater than 100mm in depth.			2 months	3 months
Continuous corrugations in the traffic lane of an unsealed road, greater than 50m in length and greater than 50mm in depth.			2 months	3 months
Loose material in the traffic lane of an unsealed road greater than 50m in length and greater than 50mm in depth			2 months	3 months
Traffic Control Defects				
Regulatory and traffic advisory signs missing or illegible.	2 weeks	1 month	2 months	2 months
Statcon line marking missing or faded so as to render them ineffective	2 weeks	1 month	2 months	3 months
Greater than 25% of guideposts missing along a curved section of road or at culvert locations	1 month	3 months	6 months	12 months
Roadside safety barriers missing or structurally unsound	1 month	3 months	6 months	12 months

Figure 4.2a: Defect Response Times

Description	Hierarchy			
	1	2	3	4
Roadside Vegetation Defects				
Roadside vegetation intruding within a 4.5m envelope above the traffic lane of a road	1 month	3 months	6 months	n.a.
Roadside vegetation intruding within a 2.5m envelope above a constructed footpath	1 month	3 months	6 months	
Vegetation that has grown to obstruct visibility at intersections or of regulatory and traffic advisory signs	2 weeks	1 month	2 months	3 months
Bridges and Major Culverts Defects				
Visible damage likely to affect road user or public safety	2 weeks	1 month	2 months	3 months
Footpath and Shared Path Defects				
Sealed or concrete paths with a lip / step greater than 25mm in height	1 month	3 months	6 months	
Sealed paths with potholes greater than 300mm in diameter and greater than 25mm in depth	1 month	3 months	6 months	
Sealed or concrete paths with mounding or depressions which are greater than 100mm under a 1 metre straight edge	1 month	3 months	6 months	
Missing or structurally unsound drainage pit lids or grates in constructed footpaths and shared paths	3 days	3 days	3 days	

Note: Response times measured in days refer to working days

Figure 4.2b: Defect Response Times...continued

4.3 Other Maintenance Works

In addition to identifying and repairing defects above intervention level, Council may also repair other minor defects that are below intervention level. Defects below intervention level are not considered hazardous and will only be repaired as resources permit. To maximise efficiencies, Council may also repair defects below intervention level when repairing defects above intervention level in the same area. Defects above intervention level will always have the highest priority.

4.4 Management System

A comprehensive audit trail of inspection dates, defects recorded, works programmed and completion dates is an essential part of a maintenance management system. This information is recorded in Council's Asset Management System (AMS) with location information recorded in Council's Geographic Information System (GIS). Council use a mobile computing solution to accurately record the inspection date/time of each asset, and the spatial location of any defects.

Council's AMS also stores asset condition, asset hierarchy & classification, and valuation information. Council's Public Road Register is derived directly from the information stored in the AMS.

4.5 Works Within Road Reserves

Unless an exemption applies under the Act, a person must not conduct any works in, on, under or over a road without the written consent of the coordinating road authority. This includes works on footpaths and nature strips, including the installation or modifications of driveways outside of private property.

In the case of Municipal Roads, Council is the coordinating road authority. People seeking consent for works within road reserves are required to apply for a Works Within Road Reserve Permit. Application forms can be obtained from Council offices or the Council website <http://www.bendigo.vic.gov.au/>

Unless exempt under the Act, failure to seek consent for works within a road reserve is an offence under the Act for which penalties apply. Fees and penalties are indexed annually by the State Government.

The on-going maintenance of vehicle crossings is the responsibility of the landowner.

4.6 Asset Protection - Local Law 11

For the protection of public assets vested in Council and for the safety of persons on, adjacent to, opposite, or passing a building site, Council require the owner, builder or appointed agent to obtain an Asset Protection Permit where major building work is to be carried out. The Asset Protection Permit requirements are detailed in “Local Law No 11 - Protection of Public Assets & Control of Building Sites”. Local Law 11 provides for an inspection by Council officers at the completion of projects of the road reserve assets. Repair of damage over and above pre-existing conditions is the responsibility of the owner/builder. The objective of this procedure is to limit Council's liability for the repair of damage caused by others to Council assets and to ensure that a safe environment is provided for road users. The applicant is responsible for detailing any existing damage to Council assets when taking out the permit.

Failure to comply with any provisions of Local Law 11 is an offence which incurs penalties.

4.7 Boundary Issues

The City's road network connects to those of five other authorities. These are -

- Campaspe Shire
- Loddon Shire
- Mitchell Shire
- Mt Alexander Shire
- Strathbogie Shire

Agreements are in place with these neighbouring municipalities for the management of boundary roads and infrastructure.

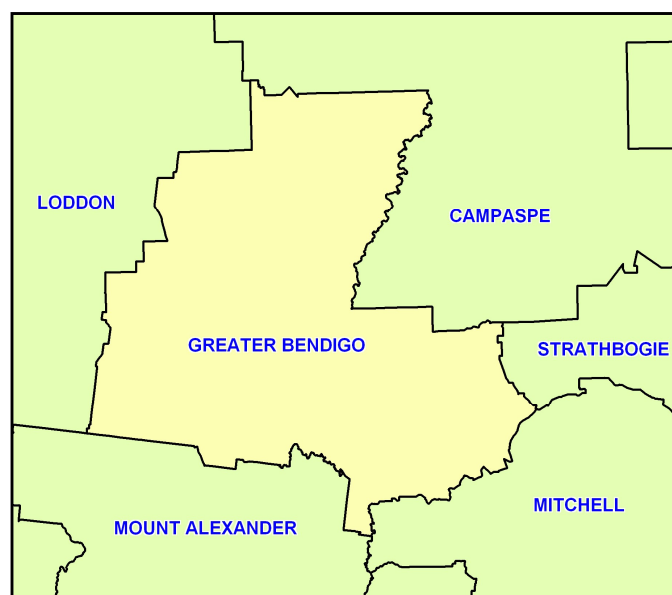


Figure 4.7: Neighbouring Municipalities

5 Assessments and Amendments

5.0 Quarterly Performance Measures

The following criteria will be used to measure Council's performance against the plan on a quarterly basis:

- Pro-active inspection frequencies are within the prescribed schedule.
- Re-active inspections are undertaken within the prescribed time.
- Inspected defects above intervention level are responded to within the prescribed time.

Performance will be measured, and the outcome reported to the Director Presentation & Assets and the Manager Works. Responsibility for preparing the performance measurement reports belongs to the Manager Engineering.

5.1 Annual RMP Assessment

Considering the Quarterly Performance Measures, the RMP will be assessed annually to determine whether:

- asset hierarchies remain appropriate and effective
- specified inspection frequencies remain appropriate and reasonable
- specified defect intervention levels remain appropriate and reasonable
- specified defect response time remain appropriate and reasonable
- risk management objectives are being achieved
- the RMP content is still compliant with any legislative changes
- maintenance budget levels are adequate to allow compliance with the RMP.

The outcome of the RMP Assessment is to be reported to the Director Presentation & Assets and the Manager Works. Responsibility for preparing the annual RMP assessment report belongs to the Manager Engineering.

5.2 RMP Review and Amendment

Irrespective of the outcome of the Annual RMP Assessment, the RMP will be reviewed a minimum of every 4 years, in line with Council elections. The plan will be reviewed in accordance with the *Road Management (General) Regulations 2016*.

The procedures for amending the RMP are detailed in Sections 303 and 304 of the *Road Management (General) Regulations 2016*. Under the provisions of Section 304, the CEO may amend the RMP without giving notice if the changes result in a higher standard, or the changes deal with administrative procedures.

Appendix 1 – RMP Inspection & Defect Workflow

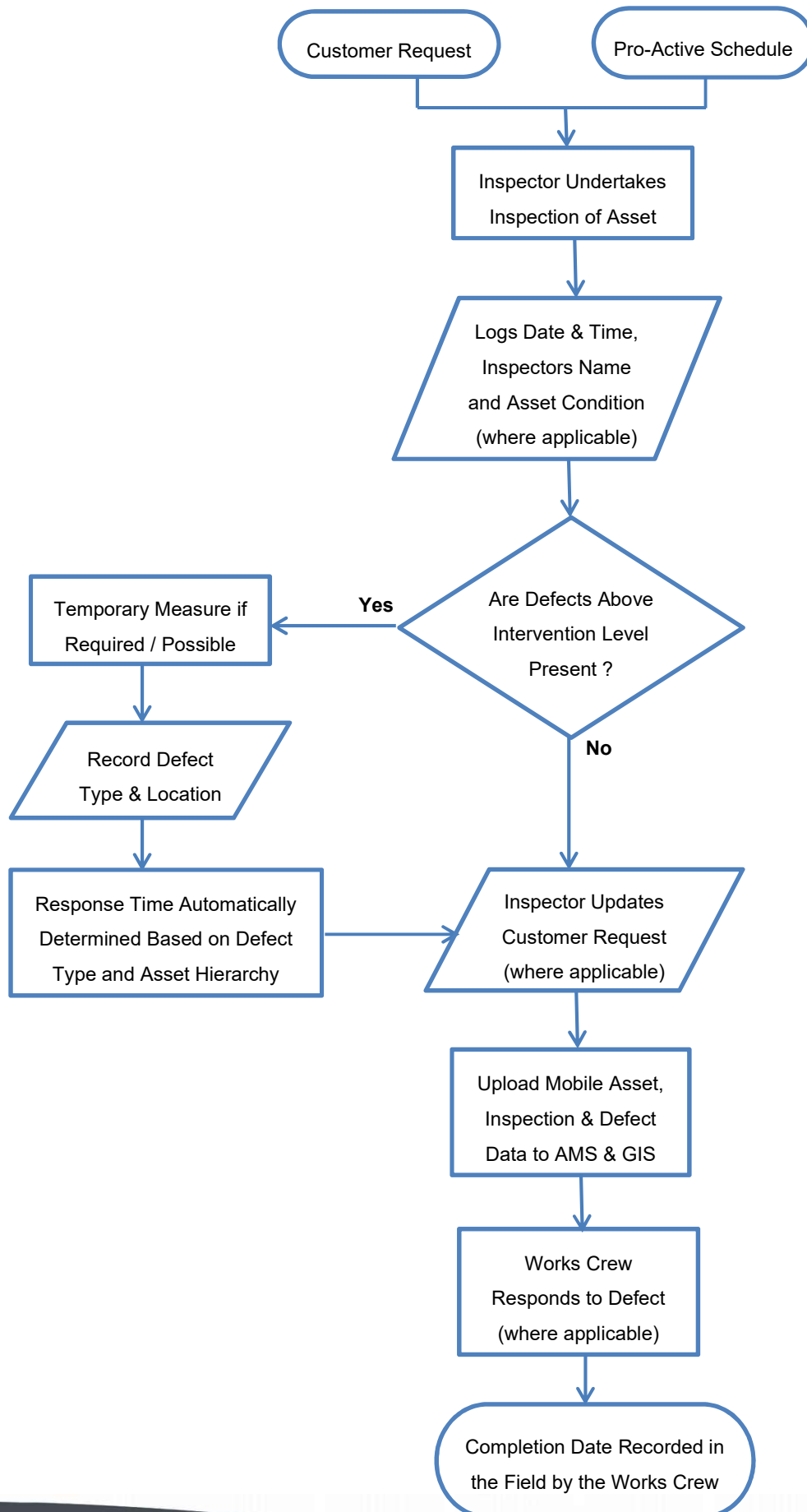


Figure A1: RMP Inspection and Defect Workflow