Road Management Plan 2021

Responsible Directorate: Places and Spaces

Authorised By: Council

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Introduction

Purpose

The purpose of this document is to meet the requirements of a Road Management Plan as defined by the *Road Management Act 2004*. This plan documents the standards, policies and management system used by the City of Boroondara to discharge its duty to manage, inspect, repair and maintain the roads for which it is responsible.

Scope

The objective of this document is to clearly define:

- The road assets that Council maintains
- The standards, policies and procedures used to maintain those assets
- The processes used to establish the appropriate standards.

The scope of this plan is restricted to the specific requirements identified in the Code of Practice for Road Management Plans.

This plan covers only the roads and road sections on Council's Register of Public Roads that are identified as being the responsibility of the City of Boroondara.

Corporate framework

This policy supports Council's Mission and Vision by addressing the following objective in the Council Plan 2017-2021:

"to ensure Council's assets are suitable for community use through proactive asset inspections, maintenance of asset data in the corporate asset system and development of Asset Management Plans."



Context

Road Management Act 2004

The purpose of the *Road Management Act 2004* (The Act) is to enable the coordinated management of public roads that will promote safe and efficient State and local public road networks, and the responsible use of road reserves for other legitimate purposes.

The City of Boroondara is the 'coordinating road authority' as defined by The Act for all roads within its boundaries, with the exception of roads identified on the VicRoads' Road Register. The Act requires Council to identify, on its Register of Public Roads, all roads for which it is the coordinating road authority that Council considers are reasonably required for general public use. A copy of the Register of Public Roads is available on Council's website. The City of Boroondara is the responsible road authority for all roads on the register, and also the specific road infrastructure within the VicRoads road reserve for which the Council is identified as having care and management responsibility (such as paths, access roads and some assets at intersections).

The Act sets out the powers and duties of the road authority to install, manage and maintain infrastructure for which it is the responsible authority. The Act also provides a policy defence for road authorities where they can demonstrate responsible management through an adopted Road Management Plan.

Council Responsibility

The Council has the power to determine the standard to which it will construct, inspect, maintain and repair roadways as set out in The Act. The Council is responsible for implementing processes and systems to ensure compliance with those standards.

Road User Responsibilities

Road user obligations are set out in Section 17A of the Road Safety Act 1986 and summarised below.

A person who drives on or otherwise uses a road must do so in a safe manner, taking reasonable care to avoid conduct that may:

- endanger the safety and welfare of other road users
- damage any infrastructure on the road reserve
- harm the environment of the road reserve.



Factors that must be taken into account when driving on or using the road include (but are not limited to) the:

- physical characteristics of the road
- prevailing weather conditions
- level of visibility
- condition of the motor vehicle
- prevailing traffic conditions
- relevant road laws and advisory signs
- physical and mental condition of the driver.



Policy

The Code of Practice for Road Management Plans¹ outlines the contents for a Road Management plan. Those contents are included in this document as follows:

Heading	Location in this Document	Contents of a RMP as defined by Code of Practice
City of Boroondara's road infrastructure	Appendix A	A description of the types of road infrastructure for each of the classes of public roads for which the road authority is the responsible road authority.
Management System	Appendix B	Details of the management system, which is established or is to be established and implemented by the road authority to discharge its duty to inspect, maintain and repair.
Inspections	Appendix C	A description of the inspections required for different types of road infrastructure.
Service Standards	Appendix D	The standard or target condition to be achieved in the maintenance and repair of different types of road infrastructure.

In setting these inspections, standards and systems the authority is required to take account of: community expectations; utilisation of assets; risk; environmental and cultural factors; and available resources. These factors are accounted for through Council's Asset Management Plans that take a long-term holistic view to managing Council's assets, and are considered in detail in the four-yearly review of this Road Management Plan.

¹ 1 Code of Practice for Road Management Plans: <u>Victoria Government Gazette No. S 201</u> <u>16 Sept 2004</u>.



Implementation and monitoring

Evaluation

The monitoring and auditing of the activities covered by this plan are carried out in accordance with Appendix B: Delivering and Auditing Maintenance Programs.

Road Management Plans are reviewed every four years in accordance with the *Road Management Act 2004*, following each Local Authority election. Details of this review are available on Council's website along with the current Road Management Plan.

Accountabilities

The current version of Council's Road Management Plan is made available to the public on Council's Website, under Policies Plans and Strategies.

For all queries or feedback regarding this policy, please use the contact details for the responsible department below.

Coordinator Strategic Asset Management

(03) 9278 4356

Strategic asset management@boroondara.vic.gov.au



References

Related Documents

Council adopted policies and strategies that support this Plan include (but are not limited to):

- Traffic Management Policy 2018
- Traffic Management Procedures 2018
- Boroondara Bicycle Strategy 2008
- Public Lighting Policy 2005
- Discontinuance of Roads and Reserves Policy
- Parking Management Policy
- Unmade Lanes Policy
- Vehicular Crossings Policy 2013.

This Plan is also supported by the following internal working documents:

- Roads and Paths Asset Management Plan This document sets out the levels of service for the road and path networks and develops strategies to sustain these over the next ten to twenty years.
- Proactive Asset Inspection guidelines These guidelines provide further details for asset inspectors to provide consistent assessments for the inspections and intervention levels specified in this plan

Versions of the Boroondara Road Management Plan and the date each becomes effective are listed below:

- Version 1 Adopted by Council on 2/7/2007
- Version 2 Adopted by Council on 7/12/2009
- Version 3.0 Adopted by Council on 13/5/2013
- Version 3.1 Adopted by Council on 22/7/2013
- Version 4 Adopted by Council on 21/7/2017
- Version 5.0 Adopted by Council on 20/12/2021



Definitions

Arterial Roads – Freeways, Highways and Declared Main Roads which are managed by the State Government through VicRoads.

Coordinating Road Authority – the road authority that has the overall control and management functions for the whole road reserve.

Council - Boroondara City Council.

Defect – a localised failure of an asset that may create a hazard for users, e.g. a pothole.

Intervention level – the size at which a defect will be repaired or remediated.

Lane – a narrow road typically less than 6 metres in width, usually providing rear or side access to properties.

Level of Service – the standard at which an asset will be maintained in equal or better condition.

Path – includes any footpath, shared path and bicycle path for which Council is the responsible road authority. Gravel paths are included in this definition, but trails of natural material without defined edges are not maintained by Council and are excluded.

Pavement – the materials the comprise the roadway: generally a surface material such as asphalt, spray seal, concrete, pavers or gravel, and underlying supporting materials such as gravel or crushed rock.

Register of Public Roads – a list of roads within the municipality for which Council accepts management responsibility. The Register includes for each road: the location; the hierarchy classification as defined in Appendix A; and the date it became a road.

Reactive inspections – unscheduled inspections performed in response to a customer request or complaint, and ad-hoc inspections undertaken by Council staff.

Response time – the time taken to repair or remediate a defect following its identification by Council officers or after the notification of the defect to Council by members of the public.

Responsible Road Authority – a road authority that has the management and maintenance responsibility for all or part of the road or of the assets that are in the road reserve.

Roadside – any part of the road reservation that is not the road surface or footpath.

Shared path – a path that is intended for use by both pedestrians and cyclists.



Appendix A: City of Boroondara's road infrastructure

Description

Boroondara is the coordinating road authority and the responsible road authority for approximately 567 kilometres of roads on its Road Register. VicRoads is the coordinating road authority for the main road network and is responsible for 94 kilometres of roads within Boroondara.

All of Boroondara's roads are in urban areas and usually include footpaths, road related infrastructure and kerb and channel that discharge into a drainage network.

Road Hierarchy

Roads within the City of Boroondara are given a road hierarchy classification based on factors including traffic volume, traffic type and accessibility, as shown in the table below. These classifications are recognised and adopted throughout Boroondara for classifying roads.

Link (Secondary) Road

These roads cater for significant traffic movements across suburbs and distribute traffic between the arterial roads and local street network. These roads are wider and longer than collector roads and tend to be signalised at intersections with arterial roads. The speed limit on these roads is typically 50-60km/h, and can be subject to time-based school and/or strip shopping centre speed zones. Footpaths are provided and bicycle movements can be accommodated on these roads. Access to abutting properties and lower order roads is typically limited.

Collector Road

These roads distribute traffic between the arterial/major roads and the local street network and provide access to abutting property. Collector roads are generally wider and longer than local access roads. They can provide access to local shops, local parks, schools and community facilities. A reasonable level of local amenity is maintained by restricting traffic volumes and vehicle speeds. The collector street may be used as a bus route, footpaths are provided and bicycle movements can be accommodated.



Local Access Road

Roads or streets not having a significant through traffic function. These roads provide access to abutting property. The local environment is dominant, traffic is subservient, speed and volume are low and pedestrian and cycling movements are facilitated.

Lane

Provides side or rear access to properties that have alternative access to a higher order road, with shared vehicular traffic and pedestrian use. They are narrow with no on-street parking and no formal bicycle infrastructure. Laneways carry very low volumes of traffic at low speeds.

Walkway

A narrow road reserve containing only a path for pedestrian traffic or pedestrian and bicycle traffic.

Roads in Boroondara and their classifications are shown in the map in Figure 2 below.

Path Hierarchy

Paths within the City of Boroondara are classified as High Activity and Low Activity. Paths around shopping/business districts, schools and other high visitation community facilities where displacements between path slabs could present a higher risk may be designated as High Activity and the remainder as Low Activity. Designated shared paths are maintained to the same standards as footpaths.

Register of Public Roads

The City of Boroondara's Council's <u>Register of Public Roads</u> (Register) defines the public roads and their classifications for all roads for which Council is the coordinating road authority. The Register is maintained by Council as a controlled document and is available for public inspection on Council's website. Descriptions on the Register are supported by map information on Council's geographic information system.

Maps for specific roads showing the extent of the area maintained, can be provided on request from Council's Camberwell office.



For each road, the main details the Register records (as required by the *Road Management Act 2004*) are:

- · Name of each public road
- Date on the which the road became a public road
- Identification of start and end points
- Locality
- Classification
- Details of changes to the status of the road.

Assets Covered by this Plan

The assets covered by this plan are confined to those for which Council has statutory responsibility under the *Road Management Act 2004* (the Act).

These assets are defined in the Act as:

- Roadway
- Pathway
- Shoulder
- Road-related infrastructure.

In keeping with these definitions, the following assets on roads identified in Council's Asset Register are covered by this plan:

- Road surface and supporting pavement
- Constructed pathways (pedestrian, shared and bike paths)
- Car parks within road reserves
- Traffic control devices (traffic signals, line marking, speed control devices)
- Bridges and large culverts as part of roads infrastructure
- Kerb and channel
- Roadside pits and connections to the urban stormwater system
- Signs (regulatory, warning and advisory).

Although Council also carries out inspection and maintenance of; roadsides, fire hydrants, street trees, and information signs; the maintenance and inspection of these assets is outside the scope of this plan. The operation and maintenance of these assets are covered by separate operational procedures.



Council has responsibility for specific assets in the road reserves on VicRoads road register, as set out in the Code of Practice for Operational responsibility for public roads². In general, Council is responsible for access roads and paths, while VicRoads is responsible for the Carriageway, including the kerbs and street lighting.

Council's responsibilities regarding bridges and culverts owned by other authorities (e.g. railways, Melbourne Water), are limited to carrying out inspections and ensuring the appropriate authorities carry out maintenance.

Council is not responsible for utility assets (e.g. water and sewerage networks, telecommunications, electricity and gas) within the road reserve. These assets are the responsibility of their respective utility provider. Managers of these assets are required under the Act: to maintain them to a satisfactory state of repair; to avoid damaging the roadway or road infrastructure; and to ensure assets such as pit lids and access hole covers are flush with the surrounding surface and do not cause a hazard or adversely affect the smooth passage of traffic.

Streetlights in road reserves provide a service to the community and are funded by Council but are owned and maintained by the respective network provider. They are therefore not covered by this plan. The levels of service relating to these assets are considered through the Asset Management Plan and arrangements made directly with the appropriate utility.

Roadside Vegetation

A road authority does not have a statutory duty or a common law duty to maintain, inspect or repair land of any public highway that is not a constructed path or roadway (RM Act s.107). Council relies on the goodwill of property owners to maintain the nature-strip outside their property in an appropriate condition.

To ensure the safety of road and path users, Council will remove or trim vegetation within the following spaces where it interferes with the safe passage of path or road users, whether or not the vegetation is planted on private property.

- Encroaching 4.5 meters over road surfaces, and 2.5 meters over footpath surfaces
- Blocking line of sight to signage and at intersections.

² Code of Practice for Operational responsibility for public roads: http://www.gazette.vic.gov.au/gazette/Gazettes2017/GG2017S174.pdf



Access to Private Property

Access to private property is provided by a 'vehicle crossover', which is defined as infrastructure to allow the passage of vehicles between the road formation (or kerb and channel, where it exists) and the property boundary. Vehicle crossovers may serve several properties.

Section 107 of the Roads Management Act 2004 provides that Council is under no statutory duty to inspect, maintain or repair vehicle crossovers on road reserves that provide access to land adjoining a road. This responsibility rests with the adjoining landowner. The construction of a vehicle crossover requires a permit and must be carried out to Council standards. Where modifications to Council assets (e.g. paths and kerb and channel) are required, these shall be at the landowner's expense. The landowner is responsible for ensuring the vehicle crossover and the immediate surrounds that the crossover impacts on, are maintained in a safe condition. Council's responsibility is limited to requiring the landowner to rectify any hazards of which it becomes aware.

Council has ownership for any footpaths and kerbs and channels on Council's public roads. The landowner has ownership and responsibility for the remainder of the vehicle crossover on Council property.

Roadside maintenance responsibilities in urban areas are shown diagrammatically in Figure 1 below.

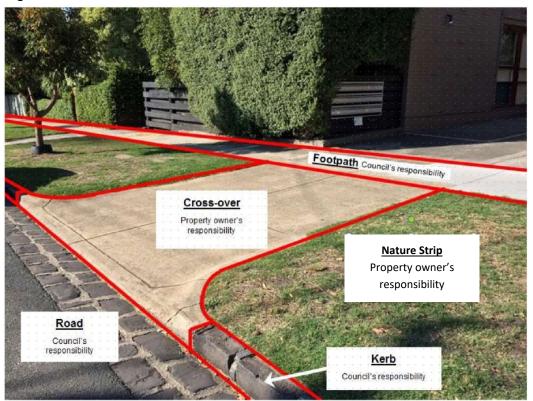


Figure 1: Maintenance Responsibilities for Urban Roadside



Utility Assets

Should Council be made aware via a customer complaint or proactive inspection of a damaged utility asset, Council will advise the relevant asset owner within seven days. If the defect creates a vertical displacement in a footpath in excess of 30mm, Council will carry out a temporary repair within seven days to rectify the trip hazard.

Consent to Perform Works on Road Reserves

Any person who wishes to undertake works in a road reserve must obtain consent from the relevant road authority, unless they are exempted under Roads Management Regulations 2005. To carry out any works on Council roads, a permit must be obtained from Council. Residents may obtain advice on road works by contacting council customer service during normal working hours by phone (03 9278 4444) or in person at Council Offices (8 Inglesby Road, Camberwell).

Transfer of Responsibility between Neighbouring Authorities

The City of Boroondara has agreements in place with neighbouring Councils where roads run along the boundary or where bridges cross a boundary. These agreements assign maintenance responsibilities for the whole road or bridge to one or other of the authorities and the responsible authority is recorded in Council's asset register. The agreement also identifies how capital works responsibilities are shared.



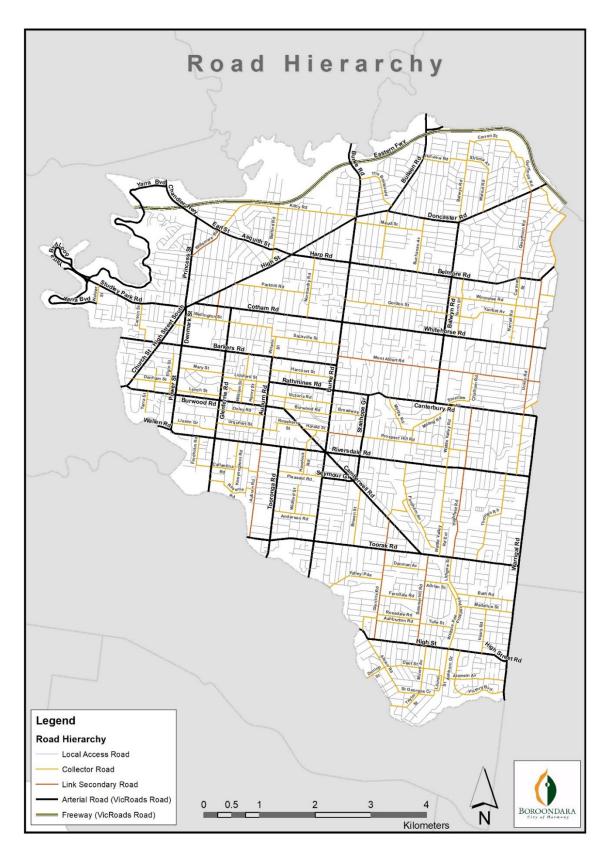


Figure 2: Map of Boroondara showing Road Hierarchy Classifications



Appendix B: Management System

Managing Asset Information

Council's overall system for managing assets comprises an Asset Register to store asset information and a Works Management System to manage and record the tasks inherent in managing assets asset and is integrated with other key Council systems. These systems are continually being developed and enhanced. The systems and processes and the relationships between them that comprise the management system for Public Roads is shown in Figure 3.

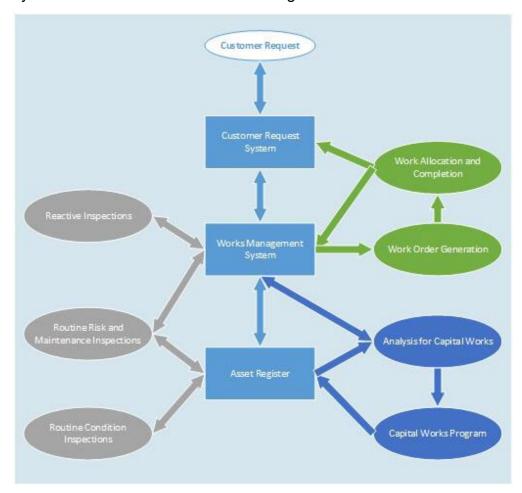


Figure 3: Relationship between Council systems and processes.



Identifying Hazards

Hazards or defects in road infrastructure are identified through inspections and recorded in the Council's database. Inspections can be initiated either as part of a scheduled program as set out in Appendix C or by a request for service. Requests for service can either be generated internally or in response to a customer request. Inspections are generally conducted on foot rather than from within a vehicle. It is standard practice is to assess road defects from behind the kerb unless other staff are available to ensure traffic safety.

Frequencies for routine inspections are developed for each asset group based on risk and rates of deterioration, leading to different frequencies depending on the road or path hierarchy. For example, if not dealt with promptly, conditions on collector roads can rapidly change resulting in increased maintenance cost and safety hazards, justifying more frequent inspections. Footpaths adjacent to business districts, schools and facilities are designated as "High Activity" and are identified for 6 monthly inspections and faster maintenance response than other footpaths that have less use.

Assessing Condition

The purpose of condition inspections is: to assess the remaining life of an asset; for financial purposes (calculation of depreciation); and for planning and prioritising prioritisation of the capital works program. Roads paths and bridges are inspected and rated for condition at least every five years, however roads that have shown signs of deterioration are inspected more frequently so that intervention takes place at the most appropriate time. Roads and paths are audited by an external contractors who usually utilise high-resolution digital imagery with off-site assessment.

Prioritising Work

Requests for service and works orders are initially screened and 'high' risk situations are dealt with immediately to manage the risk. If immediate repairs are not practicable, steps are taken to reduce the risk and the appropriate intervention is then scheduled. Activities are programmed to meet the response times identified in Appendix D.

Delivering and Auditing Maintenance Programs

Maintenance tasks are generated from routine inspections or reactively from reported incidents that are generated either internally or through customer requests. Maintenance activities identified in Appendix D are carried out by a combination of in-house resources and external staff.



The City of Boroondara has the following processes in place to ensure that planned processes and activities are actioned:

- The Contract Supervisor/Team Leader is responsible for monitoring works activities and recording results on a daily basis.
- Customer Service statistics (response times etc.) are measured and reported quarterly.
- Appropriate Team Leader/Manager carries out monthly spot checks to verify operation of data collection process.
- KPIs for the percentage of tasks carried out to required timeframes risk inspections and repairs are reported.

The monitoring of work activities is carried out through the Work Management System through on-line queries and standard and customised reports. Non-compliance with standards will be reported to the Manager Asset and Capital Planning.

Compliance Auditing

Council will complete an internal audit of the activities defined in this plan by 30 September each year. The review will include the following:

- Recording of requests relating to activities in this plan in the Customer Request System and transfer into the Asset Management System
- That requests have been investigated and assessed against the RMP intervention levels
- That programmed inspections are carried out as scheduled
- Relevant inspection reporting & recording mechanisms are in place
- Record of identified defects and maintenance activities is made in the database against the asset, including actual date of completion
- Procedures for collecting and storing information regarding road asset condition are in place and being followed
- Review of supporting documentation (internal and external) for changes and inconsistencies.

The internal review will be completed by Council's Asset and Capital Planning Department and reported to the Executive Leadership Team. Any non-compliance found during the audit or incidentally since the previous audit and steps to rectify the non-compliance will be included in the report.



Replacement Programs

Pavement resurfacing, rehabilitation and footpath renewals are the main replacement activities undertaken on City of Boroondara road assets.

The type and nature of replacement activity undertaken for road pavements depends on:

- Condition of the asset
- Road classification
- Traffic volumes
- · Proportion of commercial vehicles
- Subgrade conditions
- Whether reshaping is required
- Existing pavement type and kerb and channel type
- Economic factors.

In conjunction with inspection data and priority lists, the City of Boroondara utilises a pavement management system to model the timing and type of renewal and replacement activities that are undertaken to remove defects and manage the overall condition of roads within the municipality.

Tactics for New and Upgraded Assets

The Boroondara Community Plan 2017-27 is Council's key strategic document that outlines the community's vision and priorities, and incorporates the Municipal Public Health and Wellbeing Plan 2017-21.

As Council's key strategic document, it guides future planning, and directly informs the Council Plan, budget processes, Council strategies and plans, policies and operational actions. These strategies, plans, policies and actions provide guidance in regards to the upgrading of the existing roads network and associated assets. These adopted strategies include: Traffic Management Policy and Procedures; Parking Management Policy and Procedures; Integrated Transport Strategy; and the Bicycle Strategy. Other plans, policies and strategies may also result in improvements to the road reserve, such as strip shopping centre improvement plans.

The City of Boroondara's road network is effectively fully developed, however investment is required at times to effect safety improvements and address increase in traffic flows in some areas. New residential streets are occasionally created as a condition of subdivision or development and the roads vested in the Council.

Some Secondary Access Lanes (approximately 16 km total length) and a few local access roads (less than one kilometre total) have a gravel or natural surface. It is not Council's practice to construct and seal the roads unless Council determines it is of broader community benefit. Residents may apply to have unconstructed



laneways constructed and sealed on the basis that such upgrades would be subject to full cost recovery from owners of land fronting the road through a special charge scheme established for that purpose.

The cost-effectiveness of maintaining assets in a safe and functional condition is a key driver in decisions to upgrade Council's road infrastructure. An example is gravel paths that are subject to frequent scouring which may result in a decision to construct the path with asphalt or concrete.

Disposal Tactics

As part of the delivery of cost-effective services, Council may consider the disposal of assets and, in doing so, will take into account risk, costs and benefits, and adverse effects. Council will dispose of assets only after appropriate notification and full consultation with affected parties.

Events Beyond the Control of Council

Council will make every effort to meet its commitments under its RMP. However, there may be situations or circumstances that affect Council's business activities to the extent that it cannot deliver on the service levels of the RMP. These include but are not limited to:

- natural disasters, such as fires, floods or storms
- pandemics
- government intervention, or
- a prolonged labour or resource shortage due to a need to commit or redeploy Council staff and/or equipment elsewhere.

In the event that the Chief Executive Officer (CEO) of Council has considered the impact of such an event on the limited financial resources of Council and its other conflicting priorities, and determined that the RMP cannot be met, then pursuant to Section 83 of the Wrongs Act, the CEO will write to Council's Officer in charge of its Plan and inform them that some, or all, of the timeframes and responses in Council's RMP are to be suspended.

Once the scope of the event/s have been determined, and the resources committed to the event response have been identified, then there will be an ongoing consultation between Council's CEO and Council's Officer responsible for the RMP, to determine which parts of Council's Plan are to be reactivated and when.

Council statements to residents about the suspension or reduction of the services under the RMP will include reference to how the work that will be done has been prioritised, and the period for which it is likely to be affected.



Asset Protection

Road works and road closures to ensure the protection of Council's road assets and the safety of road users during work related to utilities or other activities in the road reserve are managed through a permit system controlled by Council's Asset Protection Team. The processes include restoration standards and the requirement for traffic management plans that are consistent with, but managed separately from the requirements of this RMP.



Appendix C: Inspections

Reactive Inspections

The table below describes reactive inspections carried out on road assets within the City of Boroondara in response to a request for service, whether generated externally through a customer request or internally form incidental observations by Council Staff.

Туре	Inspection details	Person	Method
Emergency /safety	A defect that presents a significant and imminent threat of personal injury or property damage. Risk reduced by repair, barricades or warnings as appropriate, within 6 hours from the time it's initiated through the 24 hours, 7 days a week Council call out service.	Council representative with knowledge of road maintenance techniques. Additional expertise brought in as required.	Identify specific defect, time first reported, time inspected, by whom, subsequent action and time of completion. Recorded in database.
Reactive maintenance	Non-urgent (potential risk but no immediate danger; e.g. street name plate missing) inspections carried out within 10 working days. Any work requirements are recorded and prioritised in conjunction with results of programmed inspections.	Technical officer or asset inspector with knowledge and experience of road maintenance techniques.	As above.



Routine Inspection Description

The following table describes how routine inspections are carried out.

Туре	Inspection details	Person	Method
Condition	Routine inspections that determine overall asset condition and is used to populate capital works program through Asset Management prioritisation processes	Carried out under direction of qualified engineer or experienced technical officer with extensive knowledge and experience in road construction and maintenance practices	Details including digital imagery recorded electronically against asset or component level (as appropriate) and loaded into asset management system
Risk /maintenance	Routine inspections according to Council Asset Inspection Guidelines, specifically to determine priorities for maintenance works program	Technical officer or asset inspector with knowledge and experience of road maintenance techniques. Training provided in application of Council Asset Inspection Guidelines	Details recorded electronically including photos of each street /road detailing person completing, date time and description of defects. Inspections of paths and kerb defects are carried out from the roadside and not the carriageway



Routine Inspections – Condition

The table below sets out the routine condition inspection regime used to estimate remaining life for establishing capital works programs and calculating depreciation.

Asset	Classification	Inspection description	Frequency
Pavement	Flexible and rigid sealed pavement	Surface inspection for defects, cracking, roughness, rutting	5 years maximum (depending on condition of last inspection)
Path	All	Visual condition survey	5 years - in conjunction with pavement condition inspection
Kerb and channel	All	Visual condition survey	5 years - in conjunction with pavement condition inspection
Bridges	All	Condition survey (Level 2)	5 years maximum (depending on condition of last inspection)
Bridges	All	Structural safety and load capacity (Level 3 and 4)	As determined from Level 1 and 2 inspections



Routine Inspections – Risk / Maintenance

The following tables identify the inspections and frequencies for each asset type.

Roads and car parks

This includes road-related infrastructure, such as:

- kerbs
- signs
- traffic control devices
- line-marking
- roadside pits.

Link (Secondary) roads and car parks are inspected every 6 months.

Collector roads and car parks are inspected every 6 months.

Local Access roads and car parks are inspected every 12 months.

Lanes

Primary Access lanes are inspected every 12 months.

Secondary Access lanes are inspected every 12 months.

Paths and Walkways in road reserves

High Activity paths and walkways in road reserves are inspected every 6 months.

Low Activity paths and walkways in road reserves are inspected every 12 months.

Bridges – Level 1 inspection

All bridges are inspected every 6 months.



Appendix D: Service Standards

The Development of Standards

Through the Council's Asset Management Plan, the expectations of the key stakeholders are identified in terms of accessibility, safety, responsiveness, quality, cost effectiveness and environmental considerations. Customer expectations have initially been inferred by Council staff involved in service delivery for road activities and are modified as information from ongoing research (customer requests and feedback analysis, focus groups and surveys) becomes available. Where appropriate, these expectations are translated into standards which are modified through the Council's asset management planning process to:

- Achieve Council's goals and objectives
- Meet minimum legislative requirements
- Reduce overall costs through timely response.

Inspection standards (nature and frequency) identified in this appendix are determined to meet the above requirements and are confirmed through a risk assessment in accordance with Council's risk management framework.

The technical standards are assessed prior to each review of this plan and the standards modified to minimise risk and take account of any legislative changes.

Key Stakeholders

The key stakeholder groups of the community who are both users of the road network and/or are affected by it include:

- Pedestrians, including the very young, those with disabilities, and the elderly with restricted mobility;
- Users of a range of miscellaneous smaller, lightweight vehicles such as cyclists, motorised buggies, wheel chairs, prams, etc;
- Vehicle users using motorised vehicles such as trucks, buses, commercial vehicles, cars and motor cycles;
- Emergency agencies (Police, Fire, Ambulance, VICSES);
- Business and commercial operators;
- Traffic & Transportation managers;
- Construction & maintenance personnel who build and maintain asset components;
- Construction & maintenance personnel who build and maintain asset components;
- Utility agencies that utilise the road reserve for their infrastructure (water, sewerage, gas, electricity, telecommunications);
- Council as the responsible Road Authority;
- State & Federal Government departments that periodically provide support funding to assist with management of the road network.



Road Safety

A total of 279 reported crashes resulting in injury on Council's Council roads were reported in the 5 years to December 2018 with a decrease of around 5% each year during that period. Road safety is an important focus for Council's Traffic and Transport Department.

Specific sites identified with a recurring accident trend are assessed for suitability for remedial treatment under a range of Federal, State and Local Government safety programs. Traffic management devices to improve road safety throughout the municipality are considered using reported crash data to prioritise treatments for locations with higher risk.

Construction Standards

The standards for the construction of road infrastructure are set out in the <u>VicRoads</u> standard specifications for roadworks and bridgeworks. While new infrastructure is designed and constructed in accordance with these standards, there is no obligation on Council to upgrade any existing infrastructure which may not be built according to this standard.

Reactive Maintenance and Intervention Levels

Intervention levels define the circumstances under which a defect is no longer tolerable for a stated level of service. The timeframe in which to address these defects once they are found is determined from an analysis of risk, benefits and costs. Intervention levels and the associated maintenance activities used by the City of Boroondara are described in the tables below. The nominated response times are inclusive of non-working days.



Response to emergency callouts

Intervention levels	Performance standard	Response times
Spill that could potentially create a slippery or other hazardous situation.	Site inspected and risk reduced appropriately as required	6 hours
Roadwork controls and signage does not meet requirements.		
Obstacles on roadway, shoulder or path.		
Severe pavement subsidence or surface damage (on road or path).	Assess situation and determine remedial treatment	48 hours
Flooding in road reserve.	ti catilicit	
Unserviceable guard rail.		
Structural bridge damage reducing capacity or significant bridge surface defect.		

Road pavement (excluding lane pavements)

Sealed roads - pot-hole patching

Intervention levels	Performance standard	Secondary & Collector response times	Local Access response times
Potholes greater than 300mm diameter and 50mm depth	Initial repair with cold mix to remove hazard	7 days	14 days
Potholes greater than 300mm diameter and 50mm depth	Hole is to be repaired (by contractor) to provide a smooth, safe surface consistent to line and level of surrounding pavement	42 days	42 days



Sealed roads – isolated pavement failures (up to 5sq.m of pavement surface area)

Intervention levels	Performance standard	Secondary & Collector response times	Local Access response times
Pavement shows distress in the form of shoving, rutting or depressions of the surface exceeding 50mm at any location under a 1.2m straight edge	Smooth, safe pavement surface consistent with line and level of surrounding pavement	42 days	42 days

Sealed roads - regulation of wheel ruts and depressions

Intervention levels	Performance standard	Secondary & Collector response times	Local Access response times
When a depression holds water, or exceeds 50mm in depth under a 1.2m straight edge transversely or under a 3m straight edge longitudinally	Return to line, level, safe and trafficable surface, with no ponding of water evident.	42 days	42 days

Crack sealing

Intervention levels	Performance standard	Secondary & Collector response times	Local Access response times
Cracking on over 10% to 20% of road length provided otherwise sound	No visible cracks remaining.	12 months	12 months



Kerb and channel maintenance

Intervention levels	Performance standard	Secondary & Collector response times	Local Access response times
Vertical or horizontal displacement > 75mm	Return to line and level	42 days	42 days
Missing kerb sections	Replace section	42 days	42 days

Paths Footpath /shared path – concrete, pavers or bluestone

Intervention levels	Performance standard	High Activity response times	Low Activity response times
Displacements ≥30mm	Temporary repair to remove hazard using asphalt	7 days	14 days
Displacements ≥30mm	Replace slab(s)	28 days	42 days
Displacement <30mm and ≥20mm	Grinding or replacing slab(s)	28 days	42 days
Crack >20mm wide over 0.5m length or multiple cracking over most of slab	Fill crack or replace slab ensuring surface is even and doesn't hold water	28 days	42 days



All Paths

Intervention levels	Performance standard	High Activity response times	Low Activity response times
Edge drop-off >75 mm	Reshape adjacent surface to remove drop-off	28 days	42 days

Footpath /shared Path - Asphalt

Intervention levels	Performance standard	High Activity response times	Low Activity response times
Potholes greater than 200mm diameter and 25mm in depth	Fill depressions and level.	28 days	42 days
Cracking exceeds 2m in length and 10mm in width	Fill crack and level, or replace section	28 days	42 days
Significant concentrated levels of distress	Repair damage and fill to match surrounds	28 days	42 days

Tactile repairs

Intervention levels	Performance standard	High Activity response times	Low Activity response times
Missing tactile or damage so that it causes a trip hazard or doesn't fulfil function	Replace tactile and/or repair surrounding material to be flush and level	42 days	42 days



Gravel path maintenance

Intervention levels	Performance standard	High Activity response times	Low Activity response times
When pavement shows significant concentrated levels of distress.	Prepare surface and reinstate with compacted gravel to match	N/A	42 days
When scours of depth greater than 50mm occur at any location.			

Clearance envelope to shared paths

Intervention levels	Performance standard	High Activity response times	Low Activity response times
Whenever vertical clearance (e.g. tree branches, etc.) is less than 2.5m above the ground or horizontal clearance from the edge of the path is less than 1.0m to a potential hazard.	Branches pruned, obstruction cleared and Cyclist envelope maintained (where practicable) and hazard mitigated.	N/A	70 days

Lane pavement (primary and secondary)

Concrete, Bluestone or asphalt

Intervention levels	Performance standard	Response times
Potholes greater than 300mm diameter and 50mm depth	Fill depressions and level.	42 days
Vertical Displacement ≥ 75mm	Fill depressions and level.	42 days



Bluestone or Pavers

Intervention levels	Performance standard	Response times
Horizontal Displacement ≥ 75mm	Fill depressions and level.	42 days
Deformation ≥ 75mm over 1 m	Fill depressions and level.	42 days

Gravel

Intervention levels	Performance standard	Response times
≥ 750mm diameter & ≥ 200mm deep	Fill depressions and level.	42 days
≥ 300mm over 1m	Fill depressions and level.	42 days
Loss of gravel material and extensive depressions exceeding 75mm or drop-offs exceeding 50mm	Gravel re-sheet to provided smooth surface	42 days

Natural surface

Intervention levels	Performance standard	Response times
Potholes > 750mm diameter and 200mm deep, or vertical deformation of > 300mm over 1 metre	Fill depressions and level.	42 days



Road-related infrastructure

Pedestrian and school crossing maintenance

Intervention levels	Performance standard	Response times
Timber posts to be replaced when damaged or greater than 50% wood rot is evident	All crossings and related furniture to be in good conditions and highly visible at all times	7 days

Road regulatory and advisory signage maintenance

Intervention levels	Performance standard	Response times
50% sign legend illegible at 150 m under low beam or in daylight	Clean or replace damaged signs	7 days

Guard rail maintenance

Intervention levels	Performance standard	Response times
Guard rails in damaged condition (other than immediate safety hazards)	Guard rails restored to provide safety to road users and protection of pedestrians and assets.	28 days

Sealed Roads line marking

Intervention levels	Performance standard	Response times
When line marking is faded, eroded, worn or non-reflective.	Works programmed for repainting in the next financial year	Program



Drainage maintenance

Intervention levels	Performance standard	Response times
Broken or missing Pit lid or lintel that renders the item structurally unsound or presents a safety issue to road users.	Replace Pit Lid	14 days
Ponding greater than 200mm deep and 3 metres across in any direction) caused by blocked pits or drains or culverts.	Remove debris and/or blockage	14 days

Bridge maintenance

Intervention levels	Performance standard	Response times
Visible damage on components likely to affect users or public safety	Temporary repair and/or permanent repair/ replacement of the unsafe/ damaged components.	28 days
	If repair is not applicable, hazard is mitigated and repair is programmed for the next financial year.	