

---

# Building and Managing Casey's Assets

---



4 June 2013  
**ITEM 2**  
**ATTACHMENT 3**

## Road Management Plan

This information is circulated separately.



C a s e y

**City of Casey**

**Road Management Plan**  
**Draft 2013**

Prepared by  
INFRASTRUCTURE SERVICES DIVISION  
June 2013

# Contents

<b>About this Plan</b>	2
<b>Background</b>	3
<b>City of Casey's Roads</b>	4
<b>Levels of Service</b>	<a href="#">98</a>
<b>Management System</b>	<a href="#">109</a>

Appendix A – System for Managing Service Requests

Appendix B –Design Standards

Appendix C – Routine Maintenance Activities

Appendix D – Inspections

Appendix E – Defect Intervention Levels

Date Issued	Key Changes	Status
<del>16 June 2009</del>		<del>Report to Council</del>
<del>15 September 2009</del>		<del>Adopted by Council</del>
<a href="#">4 June 2013</a>	<a href="#">Road Management Plan 2009 with proposed amendments for road Management Plan 2013</a>	<a href="#">Report to Council</a>

## **Preamble**

*In accordance with a resolution of Council on 21 June 2005 to include definitions of Council in all Council policy documents, the following definitions are provided:*

*Council – means Casey City Council, being a body corporate constituted as a municipal council under the Local Government Act*

*Councillors – means the individuals holding office of a member of the Casey City Council*

*Council Officers – means the Chief Executive Officer and staff of the Council appointed by the Chief Executive Officer*

# About this Plan

## Purpose of this Plan

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 systems used by the City of Casey to discharge its duty to manage, inspect, repair and maintain the roads for which it is responsible. The Road Management Plan is an Operational Plan within the City of Casey's hierarchy of Plans, as shown in the diagram below.

## Framework for Managing Casey's Assets

The City of Casey has adopted an integrated management approach for the management of its infrastructure assets. A three tier plan framework with asset management plans being central to this approach is used, as shown in the diagram below.

Council's Asset Management Plans are internal working documents that integrate the strategic objectives of Council with legislative requirements and an assessment of customer expectations to provide the long term context for the development of

annual budgets, work programs and this Road Management Plan. A summary key output of Asset Management Plans is available from the City of Casey Civic Centre, Narre Warren or [www.casey.vic.gov.au/policiesstrategies](http://www.casey.vic.gov.au/policiesstrategies).

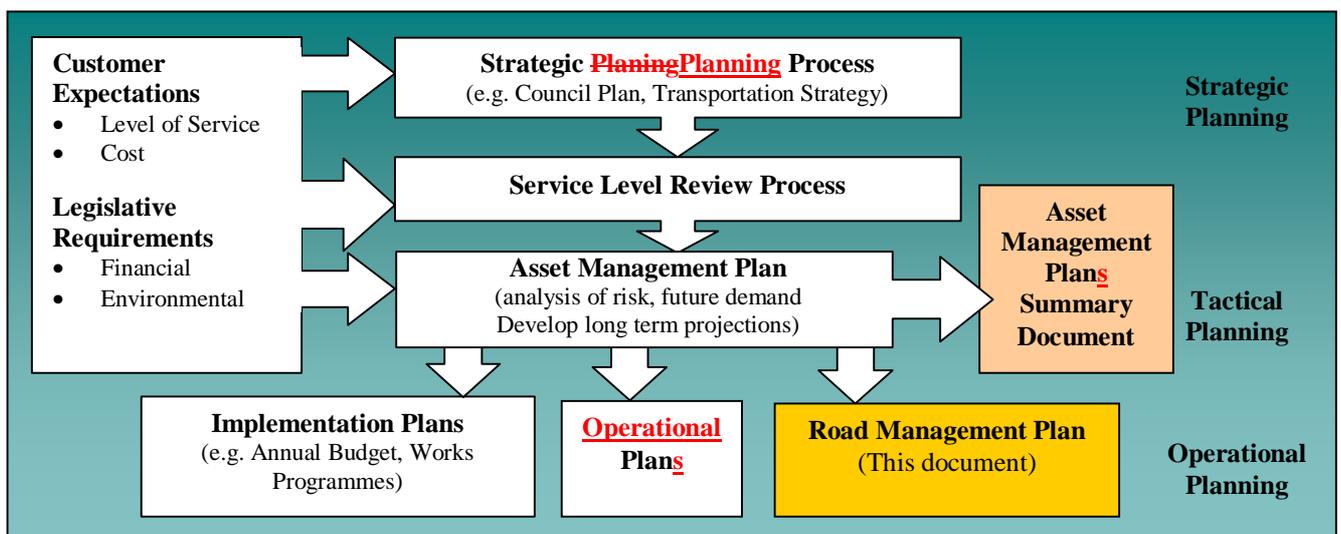
## Scope of this Document

The objective of this document is to clearly define:

- the road assets the 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. Evidence that the Council has taken account of social environmental and economic factors (as required by the Act) and is sustainable in the long term is provided through the Asset Management Plan summary document described above.

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 Casey.



# Background

## **Road Management Act 2004**

The purpose of the Road Management Act 2004 (RM 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 Casey is the “coordinating road authority” as defined by the RM Act for all roads within its boundaries with the exception of the VicRoads’ network. The RM Act requires Council to identify all roads for which it is the coordinating Road Authority that Council considers are reasonably required for general public use, on its Register of Public Roads. The City of Casey is the Responsible Road Authority for all Roads on the Register for which the Council is identified as having care and management responsibility.

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

In accordance with the “Code of Practice for Road Management Plans” made under the RM Act, Road Management Plans are to contain, for each type of road infrastructure:

- o asset description
- o a description of the inspections required
- o the standards or target condition to be achieved
- o details of the management system to inspect, maintain and repair road assets.

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.

## **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 RM Act. The Council is responsible for implementing processes and systems to ensure compliance with those standards.

## **Road User Responsibilities**

The road users’ obligations are set out in Section 17A of the Road Safety Act 1986 (as amended by the RM Act) and summarised below.

A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all relevant factors including (but not limited to) the:

- a) physical characteristics of the road
- b) prevailing weather conditions
- c) level of visibility
- d) condition of the motor vehicle
- e) prevailing traffic conditions
- f) relevant road laws and advisory signs
- g) physical and mental condition of the driver.

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.

A Road user must have regard to the rights of other road users and the community, taking reasonable care to avoid conduct that may:

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

# City of Casey's Roads

## City of Casey's Roads

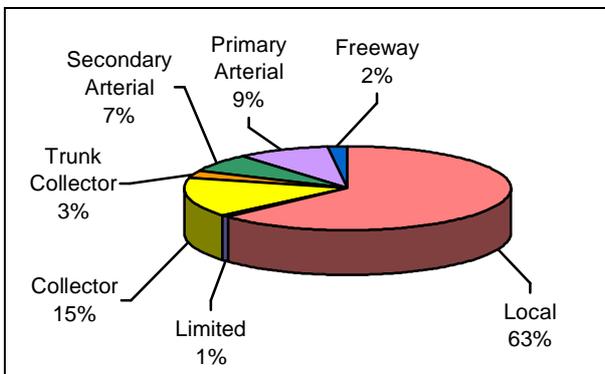
The City of Casey is the Coordinating Road Authority and the Responsible Road Authority for over ~~4,300~~ 1,400 kilometres of roads within its boundaries. VicRoads are the Coordinating Road Authority for the main road network and are responsible for over ~~90 kilometres~~ 173 kilometres of roads.

Approximately ~~70%~~ 80% of Casey's roads are in urban areas and usually include; footpaths, road furniture and kerb and channel that discharge into a drainage network. The remaining roads are classified as rural with stormwater usually controlled by open drains and culverts.

## Road Hierarchy

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

The chart below provides a percentage breakdown of the road network based on hierarchy.



<b>Freeway</b>	A primary arterial road which has fully controlled access and provides the principle route for movement of goods and people from one region to another
<b>Primary Arterial</b>	Roads whose main function is to form the principle routes for the movement of goods and people, predominantly from one region to another. Access to abutting properties and lower order roads is typically controlled or denied.
<b>Secondary Arterial (Major Roads)</b>	Roads that supplement the primary arterial roads, providing through traffic movement to an individually determined limit, that is sensitive to roadway characteristics and abutting land uses. These roads provide a direct traffic link from one part of a region to another. Access to abutting properties and lower order roads is typically limited in frequency.
<b>Trunk Collector</b>	Roads <del>that provide</del> <del>providing</del> —a specialised form of connection between the local streets and the arterial network where due to localised constraints traffic is required to be concentrated at a level higher than desirable for a collector road. Access to abutting properties is permitted, however the traffic function of the road is clearly recognised.
<b>Collector</b>	Collector roads are important local roads whose function is to distribute traffic between the arterial roads and the local road system and to provide access to <u>the</u> abutting property. 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.
<b>Local Access</b>	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.
<b>Limited Access</b>	Access is primarily for abutting properties and/or non-vehicular through traffic. Examples include: laneways; equestrian, bicycle or pedestrian trails; and some multiple-property access-ways.
<b>Car Parks</b>	All off-street car parks maintained by the Council and listed on its register of public roads.

## **Register of Public Roads**

The City of Casey's Register of Public Roads (Register) defines the public roads and their classifications, for all roads for which the Council is the responsible road authority. The Register is maintained by the City of Casey as a controlled document and is available for public inspection at Council offices in Narre Warren or on the City of Casey 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 Narre Warren Offices.

Council's Policy for registering or removing a road on or from the Register is available from Council's website or Narre Warren Offices.

For each road, the main details the register records are:

- o name of each public road
- o date on the which the road became a public road
- o identification of start and end points
- o locality
- o classification
- o details of changes to the status of the road as required by the Road Management Act.

### **Road Infrastructure Assets Covered by this Plan**

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

These assets are defined in Roads Management Acts as:

Roadway,  
Pathway,  
Shoulder, and  
Roads infrastructure.

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

- o Road Surface and supporting pavement
- o Constructed Footpaths Pathways ( pedestrian, bicycle and equestrian)
- o Car Parks within road reserves
- o Road Shoulders
- o Traffic Control Devices (traffic signals, line marking, signs speed control devices)
- o Bridges and large culverts as part of Roads infrastructure
- o Kerb & Channel
- o Signs (regulatory and advisory)

Although council is responsible for inspection and maintenance of roadside, stormwater and drainage assets, 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 the operational plans.

- o Drainage (pits & litter traps, road-related drainage, culverts and table drains)
- o Street Furniture (e.g. bus bays, bus stops, seats).

The Council's responsibilities with respect to Bridges bridges and culverts that are owned by other authorities (e.g. Railways, Melbourne Water) is are limited to carrying out inspections and ensuring appropriate -authorities maintenance is carry ied out the maintenance. appropriate to the requirements of the road network.

This plan covers the Council's drainage assets only where they are in the public road. It does not include

~~private drain connections between individual properties and the public stormwater main as these are deemed to belong to the property owner.~~

Council is not responsible for the assets of utilities (e.g. water and sewerage networks, telecommunications, electricity and gas) who use the road reserve. These assets are the responsibility of their respective utility provider.

Streetlights ~~and fire hydrants~~ in road reserves provide a service to the community and are funded by the 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). Inspections and maintenance of roadside vegetation are however included in this plan where they have the potential to affect road safety.~~

~~Nature strips in urban areas are the responsibility of the neighbouring landowner to maintain.~~

### ***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 private vehicle crossings on roads reserve that provide access to land](#)

[adjoining a road. This responsibility rests with the adjoining landowner.](#)

~~Vehicle crossovers are the landowner's responsibility.~~ The construction of a vehicle crossover must be carried out to the Council's standards, subject to a permit. Where modifications to the Council's 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, including the immediate surrounds that the crossover impacts on, are maintained in a safe condition. The Council's responsibility is limited to requiring the landowner to rectify any hazards that it becomes aware of.

In urban areas, the Council retains ownership for any footpaths and kerb and channel, while the landowner has ownership and responsibility for the remainder of the vehicle crossover on Council property. In rural areas where there is no footpath or kerb and channel, the landowner is responsible for the entire vehicle crossover, including any culverts that may be required.

### ***Consent to Perform Works on Roads Reserve***

[Any person who wants to undertake works in a roads reserve must obtain consent of the relevant road authority unless they are exempted under Roads Management Regulations 2005. For works on Council roads a permit has to be obtained from Council. Residents can get advice by contacting council customer service during the normal working hours by phone \(03 9705 5200\) or in person at any of the customer service branches.](#)

### ***Demarcation and Transfer or Responsibility***

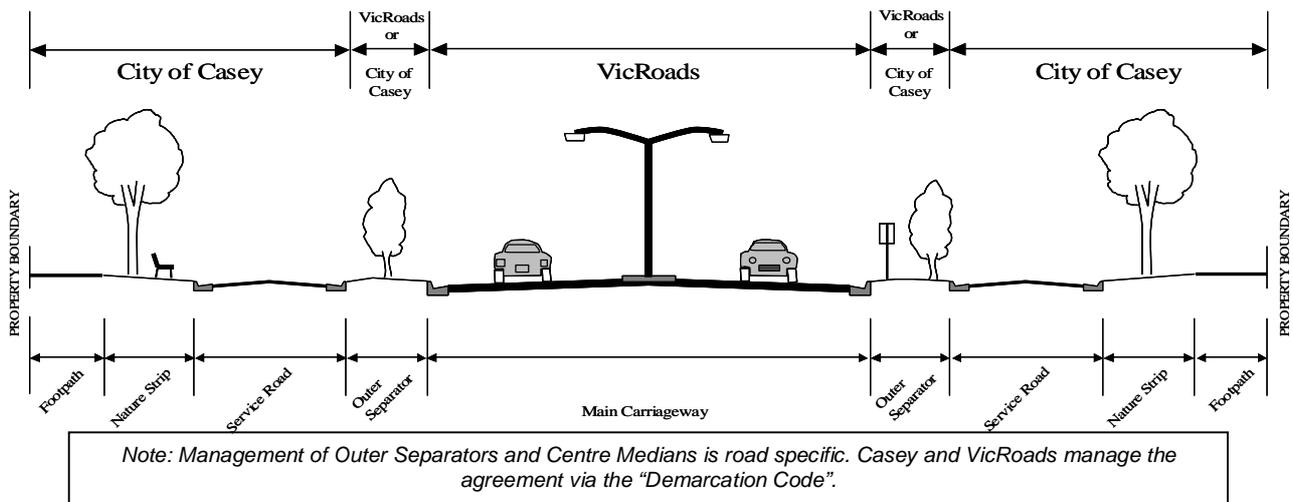
The City of Casey is bounded by 6 municipalities: the City of Greater Dandenong; Frankston City; Shire of Mornington Peninsula; Shire of Cardinia; Shire of Yarra Ranges; and the City of Knox.

The boundary is often the centreline of a road, or follows a watercourse over which bridges or culverts have been constructed. The Council has agreements with the neighbouring municipalities for boundary roads to clearly assign maintenance responsibilities for the whole road or bridge to one or other of the authorities. The agreement also identifies capital works responsibilities.

Melbourne Water manages the main drainage network and owns a number of bridges and culverts that support Council roads. The City of Casey ensures that, with respect to the ability of the bridge, to provide a safe crossing for traffic, these structures are inspected and maintained as for Council owned bridges.

VicRoads has an agreement with the City of Casey which defines the maintenance responsibilities on main roads owned by VicRoads. In general, VicRoads maintains the road pavement and kerb and channel, whilst the City of Casey maintains the road reserve and footpath in urban defined areas.

The following diagram illustrates a typical example of the relationship between assets managed by the City of Casey and the assets managed by VicRoads. In this example, the City of Casey is responsible for the management of: footpaths; outer separators (nature strips); trees; service roads; and the roadside furniture within the road reserve, while VicRoads is responsible for: the main carriageway (incl. kerb & channel); centre median strip; lighting; and any additional road related infrastructure defined in the Road Management Act 2004.



The following table details the relationships and agreements between the City of Casey and adjacent authorities.

Name	Authority	Relationship	Documented Agreement
City of Greater Dandenong	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary streets by City of Casey and City of Greater Dandenong.</li> <li>o Maintenance of footbridge by City of Casey.</li> </ul>	In place
Frankston City	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary streets by City of Casey and Frankston City.</li> </ul>	In place
Mornington Peninsula Shire	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary streets by City of Casey and Shire of Mornington Peninsular.</li> </ul>	In place
Shire of Cardinia	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary streets by City of Casey and Shire of Cardinia.</li> <li>o Maintenance of 1 traffic bridge by City of Casey.</li> <li>o Maintenance of 1 traffic bridge by City of Cardinia.</li> </ul>	In place
Shire of Yarra Ranges	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary roads by Shire of Yarra Ranges.</li> <li>o City of Casey pays an annual maintenance fee.</li> </ul>	In place
City of Knox	Local Government	<ul style="list-style-type: none"> <li>o Maintenance of boundary streets by City of Casey and City of Knox.</li> </ul>	In place
VicRoads	Main Roads Authority	<ul style="list-style-type: none"> <li>o VicRoads owns main roads.</li> <li>o Maintenance of pavement and kerb &amp; channel by VicRoads.</li> <li>o Maintenance of road reserves and footpaths by City of Casey.</li> </ul>	In place
South East Water	Water Authority	<ul style="list-style-type: none"> <li>o South East Water owns and maintains all water mains and sewerage system within City of Casey.</li> </ul>	Management of Road Utilities Infrastructure in Road Reserves
AGL	Gas and Electricity Utilities	<ul style="list-style-type: none"> <li>o AGL owns and maintains the gas and electricity assets.</li> </ul>	
TXU	Gas and Electricity Utilities	<ul style="list-style-type: none"> <li>o TXU owns and maintains the gas and electricity assets.</li> </ul>	
Telstra	Telecommunications (incl. Cable TV)	<ul style="list-style-type: none"> <li>o Telstra owns and maintains the telecommunications network in the City of Casey.</li> </ul>	
Optus	Cable TV	<ul style="list-style-type: none"> <li>o Optus owns and maintains a portion of the telecommunications network in the City of Casey.</li> </ul>	
Department of Transport		<ul style="list-style-type: none"> <li>o <del>Maintenance of bus hardstands</del></li> </ul>	Pending

Utility owners have rights of access to road openings and installation and maintenance of their assets, in accordance with the Code of Practice for the Management of Road and Utility Infrastructure in Road Reserves.

# Levels of Service

## *The ~~D~~development of Standards*

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

- o achieve the Council's goals and objectives
- o meet ~~minium~~minimum legislative requirements
- o reduce overall costs through timely ~~response~~response, and;
- o ~~and~~ reduce risk.

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.

## *Road Safety*

~~The number of road-related injuries requiring hospital treatment on roads within the City of Casey has been increasing over recent years. Although most accidents requiring hospital treatment are on VicRoads' Main road network, The number of reported accidents on Council roads has averaged around 200 accidents annually over the past five years. Accidents requiring hospital treatment have been reduced from 50% to 25%. road~~Road safety is an important focus for the Council's Traffic Management section.

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.

## *Construction Standards*

Road and path widths for various road classifications are summarised in Appendix B. The procedures, materials and pavement compositions to be used by developers and engineers when preparing design and documentation for residential street pavements within the municipality are specified in the ~~Council's Design Guide and Standard Drawings, which are available on the Council's website. Engineering Design and Construction Manual for subdivision in Growth Areas published by the Growth Areas Authority~~

~~The Design Guide consists of:~~

- o ~~Pavement Design Procedure~~
- o ~~Subgrade Strength~~
- o ~~Design Traffic Value~~
- o ~~Pavement Materials~~
- o ~~Pavement Thickness Design~~
- o ~~Pavement Composition.~~

## *Routine Maintenance*

The City of Casey carries out a number of activities on a routine basis independent of inspections. These include street-sweeping, dust suppression on unsealed roads, cleaning activities and control of vegetation. Routine maintenance activities are detailed in Appendix C. These activities also generate reactive maintenance if defects relating to any assets on the road reserve are identified, although they do not necessarily incorporate a formal inspection process.

## *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 ~~to~~in which to address these defects once they are found, is determined from an analysis of risk, benefits and costs. Examples of these levels and the associated maintenance activities are described in Appendix E.

# Management System

## *Managing Asset Information*

The Council's asset information is stored on an electronic database known as the Asset Management System (AMS). This system is continually being developed and enhanced. The system is currently being upgraded to manage and record maintenance information, enabling work done on specific assets to be traced more readily. Projects are also underway to improve the integration of the AMS with the Council's other information systems.

The AMS is also increasingly being used to manage information on risk and to model deterioration and replacement scenarios.

## *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 programme as set out in appendix D or by a request for service. Requests for service (either generated internally or in response to a customer request) are responded to using the process identified in Appendix A.

Frequencies for routine inspections are developed for each asset group based on risk and rates of deterioration. For example, conditions on unsealed roads and unsealed shoulders of sealed roads can rapidly change resulting in increased maintenance cost and safety hazards if not dealt with promptly, which justifies frequent inspections. Footpaths adjacent to business districts, schools and facilities are identified for ~~6-12~~ monthly inspections and higher maintenance activity than other footpaths that have less use.

The inspection frequency for road pavements (other than unsealed roads) is carried out according to the road hierarchy. Secondary Arterial and Collector roads are considered to pose a greater risk because of their higher traffic loads, and therefore have more frequent inspections.

## *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 the City of Casey's Capital Works Program. The condition assessment processes also have provision for recording hazards and maintenance defects which are reported separately for action through the maintenance management system.

Roads and bridges are inspected and rated for condition at least every 5 years; however roads that have shown signs of deterioration are inspected more frequently so that intervention takes place at the most appropriate time. Footpaths are inspected and assessed every three years to determine their condition and develop work programs. ~~Other assets are not yet condition assessed on a routine basis.~~

## *Prioritising Work*

Requests for Service and Works Orders are initially screened, and "high" risk situations are dealt with immediately to manage the risk. If the 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 E.

## **Strategy for Footpath Maintenance**

~~Council's strategy to respond to reported trip hazards exceeding the intervention level is to remove the hazard within 7 days adjacent to business districts, schools and facilities for the elderly. If the repair is not permanent, the affected footpath is referred to a Three-Year Concrete Reinstatement Schedule and prioritised according to location and condition.~~

~~Routine condition inspections of the path network usually identify a high number of trip hazards that require a planned approach rather than a set response time. Paths containing such defects are prioritised based on risk, according location and the severity and number of defects.~~

## **Delivering and Auditing Maintenance Programmes**

Maintenance activities identified under "Levels of Service" and detailed in the ~~appendices,appendices~~ are carried out by a combination of in-house resources and external staff.

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

- The Contract Supervisor/Team Leader is responsible for auditing works activities and reporting results.
- Customer Service statistics (response times etc) are measured and reported monthly.
- Appropriate Team Leader/Manager carries out monthly spot checks to verify operation of data collection process.
- Processes from initial request or inspection result through to work done and recording are audited externally ~~each every second~~ year by the Council's insurer.

## **Replacement Programmes**

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

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

- the condition of the asset
- the road classification
- traffic volumes
- the proportion of commercial vehicles
- subgrade conditions
- rural and urban environment
- economic factors.

The City of Casey utilises a ~~pPavement mManagement sSystem (PMS)~~, in conjunction with inspection data and priority lists, 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.

Spray seal surfaces (comprising a sprayed bitumen layer with stone aggregate topping) are common in rural areas and are replaced on a seven year ~~(approximately)~~ cycle ~~approximately~~.

Asphalt (comprising a mix of graded aggregate and bituminous binder) is predominantly used for urban roads and is replaced when it deteriorates to a minimum condition level, usually after 25 to 30 years. This surface type is predominant in urban areas.

## **Tactics for New and Upgrade Assets**

The City of Casey's road network is still developing and continued investment is required to upgrade existing assets and provide new assets.

New residential streets are generally created as a condition of subdivision developments and the roads vested in the Council.

The Council has a prioritised Unsealed Road Program to construct and seal selected unsealed roads. Residents may apply to have other roads 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 City of Casey has a number of strategies that provide guidance in regard to the need and location of new roads. Principally these strategies relate to the future development of green field sites and the associated infrastructure required to service these areas.

The Strategies adopted include:

- ~~Casey C21 Strategy~~, which identifies the expected ultimate arterial road and public transport requirements as Casey progresses to a fully developed City.
- ~~Transport Strategy~~, which provides a policy framework to guide the detailed planning of transport infrastructure in the municipality.
- ~~Casey Strategic Infrastructure Planning Strategy~~, which identifies the expected arterial road upgrades required over the next 10 to 15 years
- ~~Local Road Network Improvement Plan~~, which establishes a protocol for assessing Local Roads that have a significant traffic function, using a common set of criteria and as a consequence the relative improvements for existing local roads.

## Disposal Tactics

As part of the delivery of cost-effective services, the Council may consider the disposal of assets and in doing so will take into account, risk, costs and benefits, and adverse effects. The 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 endeavour to meet all aspects of its Road Management Plan. However in the case of natural disasters and events (but not limited to, fires, and floods) as well as human factors, (but not limited to lack of Council staff or suitably qualified

contractors), because of Section 83 of the Victorian Wrongs Act (1958, as amended) Council reserves the right to suspend compliance with its Plan.

In the event that the Chief Executive Officer of Council, has to, pursuant to Section 83 of the said Act, consider the limited financial resources of Council and its other conflicting priorities, meaning Council's Plan cannot be met, the CEO will write to Council's Officer in charge of this Plan (Director of Infrastructure Services) and inform them that some, or all of the timeframes and responses in Council's Plan, are to be suspended.

Once the events beyond the control of Council have abated, or if the events have partly abated, Council's Chief Executive Officer will write to Council's Officer responsible for Council's Plan and inform them which parts of Council's Plan are to be reactivated and when.

## Improving the Plan

This Road Management Plan is required by the Road Management Regulations 2005 to be reviewed at four-year intervals from 30 June 2009, (subject to specific details outlined in the Regulations). Intermediate reviews or amendments may be made as a result of changes to operational or management practices, subject to the procedures outlined in the Regulations.

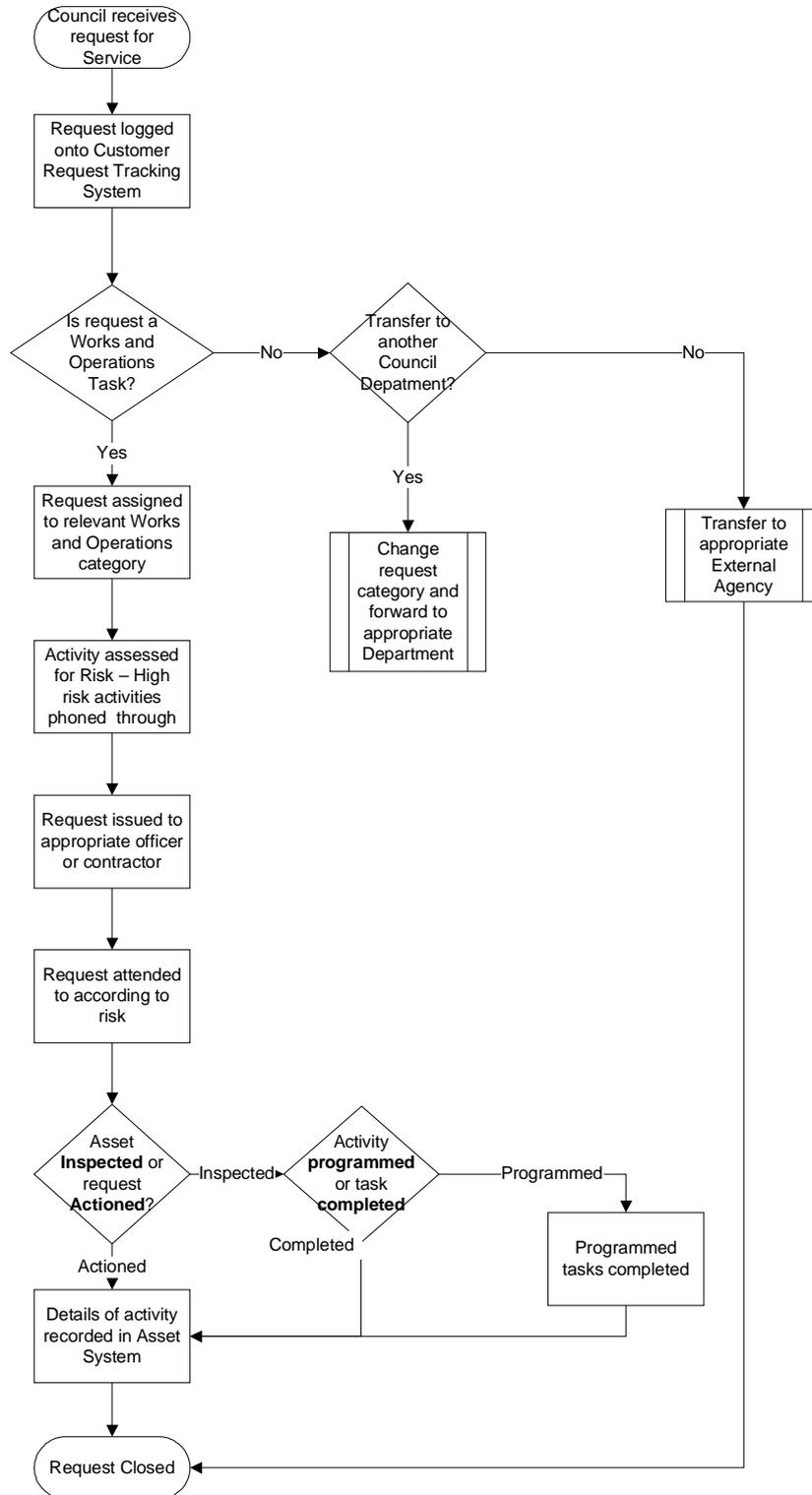
The Council is constantly developing its Asset Management Planning processes as part of its policy of continuous improvement. Improvements that may result in revisions to the Plan include:

- consultation with the community to review the levels of service and determine the community's willingness to pay for the continued levels of service outlined in this Plan
- the full implementation of the risk management process outlined in the Asset Management Plan
- further development and improvement of processes for managing asset information
- the refinement and improvement of financial projections

The development of the Council's long-term financial strategy may also affect levels of service as the Council makes trade-offs across all Council provided services to meet available long-term funding.

The Asset Management Plan will be maintained as a working document within council, and will be subject to continuous improvement without public consultation, although an up-to-date copy can be viewed at the City of Casey's offices in Narre Warren.

# Appendix A – System for Managing Service Requests



## Appendix B – Design Standards

This table shows the normal minimum layout requirements applied to new developments. Some existing situations may not meet these standards and requirements for new projects may vary to suit specific situations. Further details can be obtained from the [Councils Standard Drawings GAA Engineering Design and Construction Manual](#), which can be viewed at [Council Offices, Magid Drive, Narre Warren.](#)

[www.gaa.vic.gov.au/planning-publications/engineering-standards](http://www.gaa.vic.gov.au/planning-publications/engineering-standards)

Classification	Road Reserve Width (metres)	Roadway Width (incl. kerbs) (m)	Vehicle lanes each side, width (m)	Parking lanes each side, width (m)	Footpath 1.4 m wide	Shared Paths 2.5m wide	Typical Speed Limit (kph)
<b>Urban Streets</b>							
Driveway link	12	4.5	1@4.5m	Nil	Nil	Nil	
Local Access	16	7.3	1@ 3.0 m	Nil	Both Sides	Nil	50
Industrial /Commercial access	23	13.0	1@ 6.0 m	Nil	Both Sides	Nil	50
Collector	20	11.1	1@ 3.0 m	1 @ 2.3m	Both sides	Nil	50/60
Collector with shared path	22	11.1	1@ 3.0 m	1 @ 2.3m	One side	One side	50/60
Boulevard Trunk collector	34	18.5 including centre median	1@ 3.0 m	1 @ 2.3m	One side	One side	60
Secondary Arterial (6 lane)	40	28.0	2 @ 3.5 1@4.0	Nil	Nil	Both Sides	70/80
Secondary Arterial (4 lane)	34	22.6	2 @ 3.5 1@4.0	Nil	Nil	Both Sides	70/80
Service Road	13	5.5	1@ 3.0 m	1 @ 2.3m	One side	Nil	50

Rural Roads	Reserve Width (metres)	Pavement Width (m)	Lanes each way (m)	Sealed Shoulders (m)	Footpath	Shared paths	Typical Speed (kph)
Local Access		6.0	1@2.5	0.5	Nil	Nil	50
Collector		9.6	1@3.3	1.5	Nil	Nil	80/100
Secondary Arterial		11.0	1@3.5	2.0	Nil	Nil	80/100

Appendix B

	ACCESS LANE	ACCESS PLACE	ACCESS STREET 1	ACCESS STREET 2	CONNECTOR STREET	TRUNK CONNECTOR (2 LANE)	ARTERIAL
Traffic Volume (vpd)	300	300-1000	1000-2000	2000-3000	3000-7000	7000-12000	12000-60000
Target Operating Speed (kph)	10	15	30	40	50	60	60-80
Carriageway Width (m) <sup>1</sup>	6.0	5.5 <sup>2</sup>	7.3	6.0	7.0	3.5 lane each way	2*10.5 <sup>7</sup>
Parking Within Street	None	Unmarked	Unmarked	2.3 marked lanes both sides	2.3 marked lanes both sides	2.3 marked lanes	None
Verge Width (m) <sup>3</sup>	Only if required for servicing	4.50 / 4.20 <sup>9</sup>	4.50 / 4.20 <sup>9</sup>	4.7 min each side	5.0 min each side	5.25 min each side	5.0 min
Kerbing <sup>5</sup>	Subject to pavement cross fall	B2, SM2 <sup>10</sup>	B2, SM2 <sup>10</sup>	B2, SM2 <sup>10</sup>	B2, SM2 <sup>10</sup>	B2, SM2 <sup>10</sup>	B2, SM2 <sup>10</sup>
Footpath Provision <sup>8</sup>	None	2 * 1.5 <sup>4</sup>	2*1.5	2*1.5	2*1.5	2*1.5	2*1.5 min, opportunity for shared paths
Cycle Path/Lane Provision <sup>8</sup>	None	None	None <sup>6</sup>	Optional	2*1.7	2*1.7	2.0 both sides, opportunity for shared paths

## Appendix C – Routine Maintenance Activities

The activities listed in this Appendix are carried out routinely.

Asset	Activity	Cycle
	<del>Power line clearance to ensure trees and other vegetation are clear of overhead power lines performed in designated urban areas</del>	<del>1 year</del>
	<del>Urban Nature Strips</del>	<del>N/A (property owner to maintain)</del>
<u>Unsealed Roads</u>	<u>Dust Suppressant Program on designated unsealed roads during the period November to March, each year</u>	<u>1 year (during summer)</u>
Sealed Roads	Repainting of <del>linemarking</del> <u>line marking</u> on all relevant roads (including controlled intersections) and car parks	<u>2-3</u> years
Road Signage	Maintenance of Signage (where required) on all roads	1 year
Pedestrian and School Crossings	Repainting school <u>and Pedestrian</u> crossings (all roads)	1 year
Side Entry Pits ( <del>Road Reserves,</del> <del>Parks and Car Parks</del> )	Clear Pits of litter, silt and other debris. Visual hazard and defects inspection of structure and components	1 year
<del>Kerb and Channel</del>	<del>Road/Street Sweeping of designated Industrial Areas</del>	<del>2 weeks</del>
<del>Open Drains in Road Reserve</del>	<del>Vegetation management and grass cutting</del>	<del>1 year</del>
<del>Pits and Structures identified as high risk</del>	<del>Clear specific pits of litter, silt and other debris Visual hazard and defects inspection of structure and components</del>	<del>3 months</del>
<del>Litter Traps</del>	<del>Empty &amp; Visual hazard and defects inspection of structure and components</del>	<del>1 month</del>
<del>Gross Pollutant Traps</del>	<del>Empty &amp; Visual hazard and defects inspection of structure and components</del>	<del>3 months</del>
<del>Stormwater Pump Station Maintenance</del>	<del>Pits cleared of silt and other debris Efficient and safe pump operation Visual hazard and defects inspection of structure and components</del>	<del>3 months</del>
<del>Kerb and Channel</del>	<del>Road/Street Sweeping of designated Industrial Areas</del>	<del>2 weeks</del>

Appendix C

Asset	Activity	Cycle
	<del>Road/Street Sweeping of Residential streets and designated Car Parks</del>	6 weeks
Footpath	<del>Sweeping in designated commercial areas</del>	2 per week
Litter Bin Maintenance	<del>Bins, fittings and fixtures repaired or replace as required</del>	Cyclic – Once a year

## Appendix D – Inspections

The Table below describes the types of inspections carried out on road assets within the City of Casey.

	Type	Inspection Details	Person	Reporting Details
Reactive Inspections	Emergency/Safety	Defects identified as likely to create a danger or serious inconvenience. <a href="#">Risk reduced by repair, barricades or warnings as appropriate, within -6 hours.</a>	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 inspections carried out within <del>7 days</del> <a href="#">10 working days</a> . 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
	Incident	Carried out as part of Claims Procedure as outlined in s116 of RM Act	Qualified engineer or experienced technical officer with extensive knowledge and experience in road construction and maintenance practices	Used in preparation of incident condition report for legal purposes, accident analysis and safety improvement.
Routine Inspections	Risk/maintenance	Routine inspections specifically to determine priorities for maintenance works programme	Technical officer or asset inspector with knowledge and experience of road maintenance techniques.	Record of each street /road detailing person completing, date time and description of defects.
	Condition	Routine inspections to identify capital works requirements to feed into AM 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 recorded electronically against asset or component level (as appropriate) and loaded into asset management system

## ***Routine Inspections – Condition***

Routine condition inspections are used to estimate remaining life for establishing capital works programmes and calculating depreciation.

<b>Asset</b>	<b>Classification</b>	<b>Inspection Description</b>	<b>Frequency</b>
Pavement	Flexible and rigid sealed pavement	Surface inspection for defects, cracking, roughness, rutting	5 years maximum (depending on condition of last inspection)
		Structural pavement testing	Selected roads where construction planned
Paths	Concrete	Visual condition survey	<del>3 years maximum</del> <u>Incorporated into routine inspections</u>
Kerb and Channel	All	Visual condition survey	5 years, in conjunction with pavement condition inspection
Bridges	All	Condition Survey (Level 2)	5Years maximum (depending on condition of last inspection)
	All	Structural Safety and Load capacity (Level 3 and 4)	As determined from Level 1 and 2 inspections

Other assets and classifications are currently not condition rated.

### ***Routine Inspections – Risk / Hazards / maintenance***

<b>Asset</b>	<b>Classification</b>	<b>Inspection Description</b>	<b>Frequency</b>
Pavement <u>&amp; Kerb</u>	Secondary Arterial	Maintenance & Hazard inspection of road surface	3 Months
	Trunk Collector	Maintenance & Hazard inspection of road surface	6 months
	Unsealed	Maintenance & Hazard inspection of road surface	Monthly
	<u>Limited Access</u>	<u>Maintenance &amp; Hazard inspection of road surface</u>	<u>yearly</u>
	Other pavements	Maintenance & Hazard inspection of road surface	yearly
	Unsealed road shoulders of sealed roads	Maintenance & Hazard inspection	monthly
Footpath and Shared Paths	<del>Concrete and Paved</del> — Priority areas <sup>***</sup> — <u>Concrete/asphalt</u>	Defect & Hazard inspection of footpath	<u>6-12 months</u>
	<u>Priority areas – Pavers</u>	<u>Defect &amp; Hazard inspection of footpath</u>	<u>6 months</u>
	<del>Concrete and Paved</del> — <u>outside Priority areas</u> <u>Non Priority areas – Concrete</u>	Defect & Hazard inspection of footpath	<u>3-4 yearly</u> <u>maximum in conjunction with condition survey</u> <u>cyclic</u>
	<u>Non Priority areas</u> – Unsealed / gravel	Maintenance & Hazard inspection of footpath	3 months
	<u>Non Priority areas</u> – Asphalt	Maintenance & Hazard inspection of footpath	yearly
<u>Bus Shelters</u>	<u>All</u>	<u>Maintenance &amp; Hazard inspection</u>	<u>6 months</u>
Street Furniture/Signage ( <u>Regulatory and advisory</u> )	All	Maintenance & Hazard inspection	yearly
	Signage on local roads	Night-time inspection of reflectivity	<u>Random sample</u> <u>yearly</u> <u>Secondary Arterial and intersecting Roads</u>
	Signage <del>on major roundabouts</del> <u>at roundabouts of Collector and Arterial roads</u>	Maintenance & Hazard inspection	weekly
<u>Drainage</u>	<u>Side Entry Pits on roads</u>	<u>Maintenance Inspection &amp; Cleanout</u>	<u>yearly</u>
Bridges	All	Level 1 Hazard and Maintenance Inspection	3 months
Horse Trails	Constructed (gravel) horse-trails	Maintenance & Hazard inspection	Yearly
<u>Other</u>	<del>Limited access roads</del> <u>without infrastructure identified above</u>	<u>Hazard inspection</u>	<u>Yearly</u>

## Appendix D

### Notes:

\*\*\* Priority Areas - Streets around business districts, schools and facilities used by the elderly, where displacements between footpath slabs are likely to have more serious consequences. Footpaths on this list of approximately 90 precincts are therefore monitored at a higher frequency.

## Appendix E – Defect Intervention Levels

The following table lists typical defects and associated intervention levels used at the City of Casey. Where the response times are given in-in working days, ~~a day is defined as being a business day as compared to a calendar day.~~

### ROADS & STREET FURNITURE

Key Task	Intervention Levels	Response times	Performance standard
Response to emergency call outs	<ul style="list-style-type: none"> <li>Spill creating slippery or other hazardous situation</li> <li><del>• Roadwork site unsafe (e.g. signage, plant or materials)</del></li> <li>• <u>Obstacles on roadway or shoulder</u></li> <li><del>• Potholes, s</del>Severe pavement subsidence or surface damage</li> <li>• <del>Obstacles on roadway or shoulder</del></li> <li>Flooding in road reserve</li> <li><del>• Bridge Unserviceable</del> guard rail <del>broken or missing</del></li> <li><del>•</del></li> <li>Structural bridge damage reducing capacity or significant bridge surface defect</li> <li>Missing or illegible traffic control signs</li> <li>Other situations assessed by Council officers as being of high risk</li> </ul>	3-6 hours	Site inspected and risk reduced appropriately as required,
		48 hours	<del>Safe trafficable roadway (from the time of notification or floodwaters receding as applicable) notwithstanding speed or load restrictions that may apply until permanent repairs can be programmed</del> <u>Assess situation and determine remedial treatment</u>
Sealed Roads Pot Hole Patching	Repair all pot holes 100mm dia to 400mm dia or when the depth exceeds 50mm, or if smaller/shallower pot holes are likely to deteriorate rapidly	<del>1-week</del> <u>10 working Days</u>	Hole is to be repaired to provide a smooth, safe surface consistent to line and level of surrounding pavement
Sealed Roads Isolated Pavement Failures (up to 5sq.m of pavement surface area &/or potholes 400mm- 600mm Dia)	Repairs are to be carried out if a 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	<del>2-weeks</del> <u>10 working days</u>	Smooth, safe pavement surface consistent with line and level of surrounding pavement
<del>Sealed Roads minor surface treatment</del>	<del>Areas of pavements exceeding 5sq.m at any location that have ravelled,</del>	<del>3-month</del>	<del>Surface repaired to prevent further deterioration</del>

## ROADS &amp; STREET FURNITURE

Key Task	Intervention Levels	Response times	Performance standard
	<del>stripped, delaminated, cracked, flushed or polished, but have no significant shape loss</del>		
Sealed Roads Regulation of wheel ruts and depressions	When a depression holds water, or exceeds 50mm in depth under a 1.2m straight edge transversely or under a 3m straight edge longitudinally	3 month	Return to line, level, safe and trafficable surface, with no ponding of water evident
<del>Sealed Roads Crack Sealing</del>	<del>When cracking exceeds 10 mm in width and 3m in length</del>	<del>Annual Crack Sealing Program</del>	<del>All appropriate cracks sealed to prevent premature deterioration of pavement</del>
<del>Sealed Roads Edge Repairs</del>	<del>Repairs to be carried out when break exceeds 75mm laterally over 1 m length</del>	<del>1 month</del>	<del>Repairs to finish to line and level of surrounding pavement, to provide a safe full width trafficable lane</del>
Sealed Roads <u>Repair Grading</u> of Shoulders	<u>Grading Maintenance</u> is required when the drop from the traffic lane to the shoulder exceeds 75mm over any length, or when there are more than 20 pot holes per km, of single shoulder of depth greater than 50mm, or where corrugations exceed 30% of the area of a single road shoulder per km	<u>2 weeks 10 working Days</u>	Provision of a safe trafficable surface which is free draining and which prolongs the pavement life
Sealed Roads Placement of Shoulder Materials	Reinstate to correct cross fall when the gradient of the shoulder is outside the limits of 1 in 20 to 1 in 25	<u>2 weeks 10 working Days</u>	Provision of a safe trafficable shoulder, which is free draining and adequately supports the sealed pavement edge
Unsealed Roads <u>Grading maintenance</u>	When pavement defects (as specified) and/or loose material (greater than 40mm deep) exceed 20% pavement surface area per km <u>Resheet when the area of exposed clay or subgrade, exceeds 100sq.m per km of road length</u>	<u>2 weeks 10 working days</u>	Safe and trafficable pavement free of potholes, corrugations and other surface defects
<del>Unsealed Roads— Isolated Pavement</del>	<del>Resheet when the area of exposed clay or subgrade, exceeds 100sq.m per km</del>	<del>2 weeks</del>	<del>Provide a safe, all-weather trafficable pavement</del>

## ROADS &amp; STREET FURNITURE

Key Task	Intervention Levels	Response times	Performance standard
<del>Improvements (Minor Resheeting) and Road Pavement Rehabilitation</del>	<del>of road length, or when isolated areas of exposed clay or subgrade exceed 10sq.m or when road conditions warrant interim resheeting for other reasons Excavate and replace with Class 4 20mm F.C.R. when isolated areas of "soft" sand exceeds 2sq.m</del>		<del>Roads to be free of any visible soft sand, clay or subgrade material</del>
Pedestrian and School Crossing Maintenance	Timber posts to be replaced when damaged or greater than 50% wood rot is evident	<del>1 week</del> 5 working days	All crossings and related furniture to be in good <del>repair conditions</del> and highly visible at all times
<del>Sundry Furniture and Fencing</del>	<del>Fence components missing or when 25% of fencing is not true to line and level.</del>	<del>2 weeks</del>	<del>Furniture and fencing restored to a safe, sound and functional condition.</del>
<del>Road &amp; Street Name, regulatory and advisory Signage Maintenance</del>	<del>Road/street name_ signs missing or illegible</del>	<del>2 months</del> 20 working days	Clean or replace damaged signs
Guard Rail Maintenance	Guardrails in damaged condition (other than immediate safety hazards)	<del>3</del> 1 month	Guardrails restored to provide safety to road Users and protection of pedestrians and assets.
Guide Post Maintenance	Damaged posts/delineators.  50% of the white face of the post is noticeably degraded or faded.	1 month	Posts/delineators <del>painted,</del> <del>cleaned or</del> replaced, to provide clear delineation of the road shoulder edge and culvert/bridge locations
<del>Bus Shelter Maintenance</del>	<del>When vandal damage is a hazard</del>	<del>6 weeks</del>	<del>Shelter made safe and minor repairs completed such that Bus shelter restored to a clean, neat and safe condition</del>
<del>Pruning Roadside</del>	<del>Roadside Trees inhibit reasonable</del>	<del>1 week</del>	<del>Roadside Tree Maintenance</del>

**ROADS & STREET FURNITURE**

Key Task	Intervention Levels	Response times	Performance standard
<del>Trees—Rural</del>	<del>vehicular access</del>		<del>Code of Practice</del>

## PATHS

Key Task	Intervention Levels	Response times	Performance Standard
Response to emergency call outs	Surface collapse or obstacle Other situations on paths assessed by Council Officers as being of immediate priority	<del>3-6</del> hours	Site inspected and risk reduced appropriately as required.
Footpath/Shared Path - Concrete	<del>Hazard identified by the general public in Priority Areas with displacement &gt; 10mm 20 mm or crack width more the 20mm over length of 0.5 m</del> <del>Hazard identified by Routine Concrete Footpath Inspection Program and displacement &gt; 10mm</del>	<del>Priority Areas</del> <del>*1 week 10 working days</del> <del>Non Priority Areas – 20 working Days</del> <del>*3-years</del>	<del>Grinding or filling with asphalt as a temporary repair. In the case of temporary repairs the works will be referred to a 3-year concrete reinstatement schedule or replacing the slabs. If these repairs are not practicable, the defect will be highlighted with paint until the defect can be rectified.</del>
Footpath/Shared Path - Asphalt	Whenever the number of pot holes exceed two (2) per 100m of footpath or pot holes are greater than 100mm diameter or 25mm in depth  Whenever cracking exceeds 2m in length and 10mm in width  Wherever pavement shows significant concentrated levels of distress	<del>4-20 working days week</del>	Footpaths to be free of potholes and surface defects including depressions that hold water and cracking in sealed pavements greater than 10mm in width and 2m in length.
Footpath/Shared Path - Unsealed	Whenever pavement shows significant concentrated levels of distress  Whenever scours of depth greater than 50mm occur at any location	<del>4-weeks 20 working days</del>	Footpaths to be free of potholes and surface defects including depressions that hold water
<del>Undefined tracks</del>	<del>Intervention level not applicable as undefined tracks are not Casey registered assets</del>		<del>Not applicable</del>
Horse trails	Whenever trail is impassable by horse	<del>4-20 working days month</del>	Trails to be accessible and free of obstruction or temporarily closed.

**DRAINAGE**

Key Task	Intervention Levels	Response times	Performance Standard
Emergency call outs	<del>Obstructions in waterway causing flooding of roadway more than 300mm deep</del>	<del>3-6 hours 1-week</del>	<del>Site inspected and risk reduced risk reduced or provides appropriate warnings appropriately as required. Remove obstruction (response time subject to accessibility)</del>
<del>Open Drain remedial activities</del>	<del>Stormwater retained or batters unstable</del>	<del>3-month</del>	<del>Rural drains free of silt, weed and debris, uniformly graded with stable batters</del>
<del>Replacement/Repairs of pipes/pits etc  (Road Reserves, Parks/Reserves, Car Parks Private Properties &amp; Easements)</del>	<del>Missing or damaged pit lids or grates that jeopardise public safety Missing or damaged lids or grates in other locations Displaced or damaged pipes Asset damage construed to be hazardous to the public representing a possible flooding risk</del>	<del>3-hours 1-week 24 hours 1-week 3-month 1-week</del>	<del>Site inspected and risk reduced appropriately as required Pit lids &amp; grates, replaced/restored to a secure, functional condition (subject to grate/grill availability) Site inspected and risk reduced appropriately as required Pit lids &amp; grates, replaced/restored to a secure, functional condition (subject to grate/grill availability) Replaced/restored to a secure, functional condition Repaired to a secure, functional condition</del>
<del>Culvert Cleaning</del>	<del>Effective pipe area reduced by more than 40%</del>	<del>1-week 5 working days †</del>	<del>Culverts under roads and driveways clear of weed, silt &amp; debris</del>
<del>Erosion Control (structures)</del>	<del>Assets undermined or potentially at risk</del>	<del>3-month†</del>	<del>Integrity of the drainage channel and associated assets (roads) and structures (culverts) maintained</del>

**DRAINAGE**

Key Task	Intervention Levels	Response times	Performance Standard
Side Entry Pit Cleaning (Road Reserves, Parks and Car Parks)	Pit blocked or capacity significantly reduced	1 week <sup>‡</sup>	Pits free of litter, silt and other debris
Drainage Pipe & Pit Cleaning (Road Reserves, Parks and Car Parks)	Major blockage of drain Other obstructions	24 hours 1-month	Pipe drains free of root matter, silt and other debris
Drainage Pipe & Pit Cleaning (Private Properties - Easements)	Major blockage of drain Other obstructions	24 hours 3 months (permission required)	Easement drains through private properties and the associated property inlet are free of root matter, silt and other debris

**Note:**

<sup>‡</sup> Response times for drainage activities: these activities are subject to a risk assessment. Defects where risk of injury or property damage is rated as high, the sites are attended to within 24 hours

**CLEANSING**

Key Task	Intervention Levels	Response times	Performance Standard
Removal of Dead animals from road reserve	Dead animal in road reserve a risk to public safety ( $\leq 20\text{kg}$ )	24 hours	Animal removal and disposed of at approved tipping site
	Dead animal in road reserve a risk to public safety ( $>20\text{kg}$ )	24 hours	Animal shifted off roadway and made safe from public
		3 days	Animal removed from site
Removal of sediment & residue from flooding	Residue from flooding hazardous to road traffic	1 week	Road returned to a serviceable condition