

#### Background & Issues

Road hierarchies have been developed by Main Roads Western Australia and by the Western Australian Planning Commission (WAPC). The benefit of the road hierarchy is that it assists in the prioritisation of funds and determines standards for construction that balance budget with road efficiency and safety.

Most roads within the Shire are already defined by the existing hierarchies of Main Roads and the WAPC. However, these hierarchies omit some road types and do not provide enough scope to differentiate between similar roads of different importance or differing traffic volumes. In addition, lower classification roads within the Shire often take heavy vehicles, which is usually not the case for metropolitan urban roads of similar characteristics.

The Shire of Manjimup directly manages approximately 1400km of road, both sealed (~900km) and unsealed (~500km). Collectively known as Local Government Roads, they all have a similar role; to provide for the safe and efficient mobility of people and goods.

Applying evidence based and safe system principles to the Shire's Road Hierarchy Policy will guide the safety improvement of the local road network through the Shire's road planning, construction and maintenance and will aim to reduce the risks of the predominant crash types (Run-off-road, intersection and non-collision)<sup>1</sup> and protect road users when the system fails.

#### **Objectives**

The intent of the road hierarchy is to provide minimum standards for construction and maintenance of roads within the Shire and to prioritise the same. The standards of maintenance and construction will represent the adopted Levels of Service (LOS) for each road within the Shire.

Specifically, the road hierarchy policy will provide the following:

- a guidance to staff in preparing annual budgets and allocating resources to road maintenance, renewal and upgrade determined by Shire's Road Asset Maintenance Management (RAMM) System,
- sets and defines minimum standards for construction and maintenance and provides scope to systematically shift towards best practice road design,
- a balance between the cost of ownership and construction against community expectations, and
- identifies safe system principles and provides guidance on their application, where possible, to all planning, maintenance and construction on the Shire's Road Network.
- Aligns to the Shire's Road Traffic Safety Policy 9.1.21 and sets the scope for systematic delivering improvements to road safety performance.

#### Road Safety Objectives

The Shire recognises the safe system approach as international best practice road safety, which accepts that people make mistakes though these mistakes should not result in death or serious injury with the system working together to protect users. The Shire recognises that incorporating

<sup>1</sup> WALGA RoadWise, Road Safety Performance Local Government Roads, 2017-2021, South West Report. February 2024.



safe system principles to the design, construction and maintenance of roads protects users and reduces the risks of crashes resulting in death and serious injury.

Safety of the road network is a priority of the Shire, and within the Shire's role of managing the local road network, safety infrastructure and initiatives will be considered and prioritised within the design, maintenance and construction of the managed network. The application of road safety systems will consider the function and use of the road and will aim to align to safe system principles.

When prioritising works, safety is considered whereby the incorporation of infrastructure which improves road safety is identified and included within the planning, construction and maintenance of roads. Treatments which improve road safety outcomes are well known and these are incorporated into programs as budget, capacity and environmental factors allow.

#### Area of Application

All roads under the control or maintained by the Shire.

#### **Policy Measures**

#### 1. Road Hierarchy Classifications

Roads within the Shire shall be defined by one of the following classifications:

Classification	Classification	Classification Description	Best Practice Road
Name	Code		Safety Considerations
Primary Distributor (Sealed)	SPD	These roads are the primary road traffic links within the Shire. These roads provide town to town links within the Shire and beyond the Shire's boundary. The standard of construction and maintenance has the largest impact on overall road network efficiency, making up the largest part of town to town trips. These roads have a high movement based function, providing safe, reliable and efficient movement of people and goods.  These roads are currently all under the control of Main Roads Western Australia.	



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District Distributor Road (Sealed)	SDD1 & SDD2	District distributor roads are strategically important links within the Shire. Generally these roads connect large population or industry areas to primary distributor roads or other large population or industry areas. These roads might also provide a link between towns within or beyond the boundaries of the Shire, although with lower transport volumes, or as a secondary route to primary distributor roads. These roads have a high movement based function, providing safe, reliable and efficient movement of people and goods. Two levels of service (LOS) classifications exist for district distributor roads to recognise the requirement for a higher LOS where the road is the only connection to a major industry or population centre.	Better Practice - reduce KSIs  Improvements to clear zones or barriers where needed.  Lane width 2.75-3.25m  Centreline  Sealed shoulder  Audible edge lines  If no other road safety infrastructure installed then an operating speed of 80-100km/h on higher order roads.  Best Practice - Prevent KSIs  Roadside barrier for close hazards or sufficient clear zones  Lane width >3.25m  physically separate oncoming vehicles — wide centre line with audible line or centre barrier, if achievable  Wide paved shoulder
Rural Local Distributor (Sealed)	SRLD	Sealed rural local distributor roads are the higher volume local roads within the rural areas. Generally, these roads are contained wholly within a population or industry area and provide the main link within the area to a district distributor road or primary distributor road. These roads have a movement based function, providing safe, reliable and efficient movement of people and goods.	<ul> <li>with audible edge line</li> <li>Separated paths/bike facilities with barrier</li> <li>If no other road safety infrastructure installed, then an operating speed of 70-80km/h or less should apply.</li> </ul>
Main Street Roads (Sealed)	SMS1, SMS2, SMS3 & SMS4	Main Street roads are within the commercial centres of each town. These roads will normally have a high level of	Better Practice - reduce KSIs  Speed limit 30-40km/h



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		pedestrian and vehicular traffic, with many on-street parked vehicles.  The focus of main street roads is business access by the public and aesthetics.  These roads are recognised as vibrant streets, with a high demand for movement as well as place, therefore needs to balance different demands within available road space. Safety should be prioritised based on vulnerable road users	<ul> <li>Lane width 2.75-3.25m</li> <li>Provision of pedestrian crossing points</li> <li>Activation of roadsides to encourage pedestrians and signify change of environment</li> <li>Best Practice – prevent KSIs</li> <li>Speed limit 30km/h</li> <li>Lane width &gt;3.25m</li> <li>Median separation with pedestrian rest facilities</li> <li>Shared or pedestrian priority zones</li> <li>Separated/ protected footpath</li> <li>Raised pedestrian crossing points</li> </ul>
Urban Local Distributors (Sealed)	SUD	Urban distributor roads, similarly, to rural local distributors, are higher volume local roads providing a link within a local population area (e.g. within a single suburb). These roads provide the link from other local roads to district distributor roads or other higher classification roads. These roads may be vibrant streets, with a high demand for movement as well as place, therefore needs to balance different demands within available road space. Safety should prioritise vulnerable road users.	Better Practice - reduce KSIs  Improvements to clear zones or barriers where needed.  Lane width 2.75-3.25m  Centreline Sealed shoulder Audible edge lines If no other road safety infrastructure installed then an operating speed of 50-60km/h should apply.  Best Practice - Prevent KSIs Roadside barrier for close hazards or sufficient clear zones



			<ul> <li>Lane width &gt;3.25m</li> <li>physically separate oncoming vehicles – wide centre line with audible line, centre barrier or median painted or kerbed to allow pedestrian rest points</li> <li>Wide paved shoulder with audible edge line</li> <li>Separated and protected paths/bike facilities with barrier</li> <li>If no other road safety infrastructure installed then an operating speed of 30-40km/h or less should apply.</li> </ul>
Industrial Roads (Sealed)	SI1 & SI2	Industrial roads may be either a local distributor or local access type road. Industrial roads vary in need from other sealed roads due to the larger vehicle masses and vehicle lengths that need to be accommodated.	As above, though may need wider lanes to accommodate heavy vehicles.
Urban Local Roads (Sealed)	SUL	These roads are all other sealed urban roads. These roads may be vibrant neighbourhood streets, with a high demand for movement as well as high place value, therefore needs to balance different demands within available road space. Safety should be prioritised based on vulnerable road users	<ul> <li>Lane width 2.75- 3.25m</li> <li>Footpath or shared path provided</li> </ul>
Rural Local Roads (Sealed)	SRL	These roads are all other sealed rural roads. These roads may have a high demand for movement as well as place, therefore needs to balance different demands within available road space. Safety should	Best Practice – prevent KSIs  • Speed limit 30km/h.  • Lane width >3.25m  • Median separation with pedestrian rest facilities



		be prioritised based on vulnerable road users	<ul> <li>Separated/ protected footpath</li> <li>Speed management interventions</li> <li>Safe system intersection interventions</li> </ul>
Tourist Roads (Un-sealed)	GT1 & GT2	Un-sealed tourist roads have differing needs to other un-sealed roads. The peak traffic types are often not familiar with driving on gravel roads, and a poorly maintained un-sealed tourist road could discourage the use of the road by tourists. These roads are also likely to have a relatively high volume of caravans and similar vehicles, which require additional width for passing and parking.  The differing classifications within the un-sealed tourist roads allow different tourist types and the volumes of tourist traffic on the road. GT1 roads are high volume tourist roads generally traversed by 2wd vehicles and are likely to be frequented by inter-state or international tourists. GT2 roads are lower volume tourist roads or those that	on local access unsealed roads  Pavement width >6.5m (3.25m lane width)  Roadside hazards 10+m from roadside or barriers in place  Guide posts
Local Distributor Roads (Un- sealed)	GLD	are more likely to be used by 4wd vehicles.  Un-sealed local distributor roads are currently higher standard gravel roads. Some of these roads provide an alternative efficient connection between large population	Intersection warning signs



		areas or provide a 'short- cut' to a sealed road. These roads have a higher speed environment than other un- sealed roads within the Shire.	
School Bus Routes (Un- sealed)	GSB	School bus routes will change year by year. These roads could be any type of existing un-sealed road, so the LOS defined for these roads could be over-ridden where the road's LOS is otherwise higher.	
Rural Local Roads (Un- sealed)	GLR	All other un-sealed local roads.	
Laneways (Sealed & Unsealed)	LWY	Typically secondary access roads in urban areas.	
Right of Ways	ROW	A specific road or track through grounds or property belonging to another.	
Unallocated Crown Land & Vacant Crown Land	UCL & VCL	Section 3.53 of the Local Government (LG) Act 1995 "A local government is responsible for controlling and managing every otherwise unvested facility within its district". An 'otherwise unvested facility' means a thoroughfare, bridge, jetty, drain or watercourse belonging to the crown, the responsibility for controlling or managing which is not vested in any person other than under this section of the LG Act 1995.	
Un-named Tracks	UT	A specific track accessing one property	
Roads not under the care and control of the Shire but maintained by the Shire	Other	Private Roads	



An example of some roads included in each hierarchical classification are listed in Appendix 1.

#### 2. Road Hierarchy Priority for Construction and Maintenance

The capacity of the Shire to upgrade and maintain roads varies from year to year. Capital works are significantly funded through grants, which in some cases constrains where funds can be spent. In particular, Regional Road Group funding is restricted to certain roads within the District Distributor classification, so these funds are not available for any other roads.

Safety infrastructure is considered in all upgrades and maintenance of roads and as such the Shire is working to systematically upgrade roads to improve safety performance based on budget, capacity and environmental factors. To progress the delivery of safety improvements the Shire aims to deliver a minimum standard for construction of SDD1 and SDD2 roads including:

- · Minimum of 9m pavement
- Minimum of 7m seal
- Centrelines provided
- Audible edge lines provided

Due to the same plant and human resources being used to complete construction and maintenance works, the capacity to complete maintenance works is dependent on the size of the capital works program. In addition, poor weather can impact both the capital and maintenance programs. This is particularly the case where poor weather results in maintenance budgets being consumed in labour costs, with little on-ground benefit.

Within the context of these constraints when allocating maintenance tasks (these priorities will also be used for prioritising emergency response) equivalent road needs or equivalent road risks, should be prioritised in accordance with the following table, where budget or other resource constraints (including those resulting from weather) prevent the Shire from achieving the LOS in policy point 3:

Priority Sealed	Road Classification
1	SDD1 & SDD2
2	SMS1, SMS2, SMS3
3	SRLD
4	SUD
5	SI1 & SI2
6	SUL
7	SRL
8	LWY/ROW
9	Other

Priority Un-sealed	Road Classification
1	GLD
2	GSB



3	GT1
4	GLR
5	GT2
6	LWY/ROW
7	UCL/VCL
8	Other

#### 3. Road Hierarchy Levels of Service (LOS)

#### Primary Distributor (Sealed) - SPD

SPD roads are all under the control of Main Roads. At this stage, standards for construction and maintenance are determined my Main Roads.

#### <u>District Distributor (Sealed) – SDD1 & SDD2</u>

New Construction (excluding new subdivision roads) LOS - SDD1 & SDD2

D (1)AP 101	T. 4
Pavement Width	Minimum 9m
Seal Width	Minimum 7m
Lane Width	Minimum 3.5m
Shoulder Type	shoulder minimum 1m, preferably
	sealed based on vehicle movements
	per day (VPD)
Seal Type	2 coat chip seal
Design Speed	90km/hr with desirable minimum
	curve speed 70km/hr depending on
	design characteristics.
Line Marking	As per Australian Standards with
	centre and audible edge markings on
	both lanes.
Intersection Treatments	Controlled with appropriate
	measures aligned to Road Traffic
	Safety Policy 9.1.21
Vegetation Clearance (within	Clear of bushy vegetation within 3m
constraints of clearing regulations)	of shoulder and removal of large
	trees within 1m of shoulder (within
	constraints). Barriers for hazards
	which can't be removed may be
	considered or warning signs.
Drainage Design	SDD1: 1 in 20-year storm
	SDD2: 1 in 10-year storm (in the case
	of new subdivisions, the
	requirements of Policy 9.1.4 shall
	prevail).
Guide Posts	To Australian Standards on curves
Speed Advisory Signs	To Australian Standards



Consideration of Interventions to Improve Safety	<ul> <li>Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:         <ul> <li>sealing shoulders to the pavement width or ≥1m,</li> <li>installation of centre lines and audible edge lines,</li> <li>installation of barriers or hazard warning signs,</li> <li>improved clear zones,</li> <li>reduction of speed limit if no other safety interventions can be applied.</li> </ul> </li> </ul>
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#### Road Maintenance LOS - SDD1 & SDD2

Dood Incorportions	Day Increation Minimum 4 times
Road Inspections	Day Inspection – Minimum 4 times
	per year
	Night Inspection – Minimum 1 time
	per year
Road Re-sealing	Every 15 to 20 years
Shoulder Grading	Prior to drop-off reaching 60mm
Pot Holes/Edge Break	Patching truck to travel each road at least 3 times per year, to fix edge break (exceeding 150mm) and potholes.
	Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 1 week (subject to weather) of notification.
	Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 1 week (subject to weather) of notification.
Vegetation Management (within constraints of Native Clearing Regulations)	Verge spraying – once per year Removal – as per priority listing Sight lines monitored and addressed as applies
Drainage	Clear known problem areas at least 1 time per year.



	<ul> <li>Inspect and clear all pipes and drains at least one time in each 3 years.</li> <li>Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response).</li> </ul>
Trees Over Road	Attend (remove tree or provide alternative access and make safe) trees over road within 3 hours of notification and remove tree within 2 working days of notification.
Other Infrastructure (e.g. advisory signs, guide posts etc)	As per policy point 4. below.
Other Maintenance	Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints.
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.

#### Rural Local Distributor (Sealed) - SRLD

New Construction (excluding new subdivision roads) LOS

Pavement Width	Minimum 8m
Seal Width	Minimum 6m
Lane Width	Minimum 3m
Shoulder Type	Gravel shoulder minimum 1m, preference for sealed shoulder aligned to vehicle movements per day (VPD)
Seal Type	2 coat chip seal
Design Speed	70 - 90km/hr with desirable minimum curve speed 50-70km/hr
Line Marking	centre line markings provided  A seal width minimum 6.8m would
	allow for edge line marking to be included. (considerations for VPD required)



Intersection Treatments	Controlled with appropriate measures aligned to Road Traffic Safety Policy 9.1.21
Pedestrian and Cycling Facilities	Considered as suitable and aligned to Shire's Bike Plan.
Vegetation Clearance (within constraints of clearing regulations)	Clear of bushy vegetation within 3m of shoulder and removal of large trees within 1m of shoulder (within constraints). Barriers for hazards which can't be removed may be considered or warning signs.
Drainage Design	1 in 10-year storm (in the case of new subdivisions, the requirements of Policy 9.1.4 shall prevail).
Guide Posts	To Australian Standards on curves
Speed Advisory Signs	To Australian Standards
Consideration of Interventions to Improve Safety	<ul> <li>Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:</li> <li>sealing shoulders to pavement width or ≥1m,</li> <li>installation of centre line,</li> <li>installation of audible edge line (seal width needs to be ≥6.8m)</li> <li>installation of barriers or hazard warning signs</li> <li>improvements to clear zones,</li> <li>reduction of speed limit if no other safety interventions can be applied.</li> </ul>

Road Inspections	Day Inspection – Minimum 2 times per year Night Inspection – Minimum 1 time per year
Road Re-sealing	Every 15 to 20 years
Shoulder Grading	Prior to drop-off reaching 60mm.
Pot Holes/Edge Break	Patching truck to travel each road at least 2 times per year, to fix edge break (exceeding 150mm) and potholes.



	Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 2 weeks (subject to weather) of notification.  Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 2 weeks (subject to weather) of notification.
Vegetation Management (within constraints of Native Clearing Regulations)	Verge spraying – once per year Removal – as per priority listing Sight lines monitored and addressed as applies
Drainage	<ul> <li>Clear known problem areas at least 1 time per year.</li> <li>Inspect and clear all pipes and drains at least one time in each 3 years.</li> <li>Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response).</li> </ul>
Trees Over Road	Attend (remove tree or provide alternative access and make safe) trees over road within 5 hours of notification and remove tree within 3 working days of notification.
Other Infrastructure (e.g. advisory signs, guide posts etc)	As per policy point 4. below.
Other Maintenance	Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints.
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.

Main Street Roads (Sealed) - SMS1, SMS2, SMS3 & SMS4



Pavement and Seal Width	In accordance with applicable main
	street design. Otherwise, seal width
	to comprise a minimum 6m vehicle
	carriageway.
Lane Width	Minimum 3m
Seal Type	SMS1, SMS2, SMS3, SMS4: Asphalt
	including tack coat, kerb both sides
	(SMS1, SMS2, SMS3).
Design Speed	In accordance with applicable main
	street plan. Otherwise, generally low
	speed (30km/h) environment due to
	high place value with high pedestrian movements and parking
	manoeuvres.
Speed Limit	Maximum of 40km/h, preferably
	30km/h aligned to vulnerable road
	user survivable limits.
Median Type	Separation between oncoming traffic
	incorporated. Dependent on
	carriageway, speed limits and
	pedestrian activity if median rest
	point is suitable.
Line Marking	Centre line provided at minimum if no
Intersection Treatments	median present.  Controlled with appropriate
Intersection freatments	measures aligned to Road Traffic
	Safety Policy 9.1.21
Vegetation	In accordance best practice
Drainage Design	1 in 10-year storm for CBD
	underground drainage. 1 in 10-year
	storm for residential underground
	network.
Speed Advisory Signs	To Australian Standards
Pedestrian and Cycling Facilities	Separated facilities provided
	in accordance with Shire of Manjimup
	Bicycle and Footpath Plan.
	Inclusion of infrastructure which
	supports high pedestrian movements ie: pedestrian crossings and median
	rest points
Streetside furniture	Compliant with speed limits and clear
	zones
Street Lighting	In accordance with applicable main
	street design and to Australian
	Standards).
Sight distances	Aligned to Austroads Guidelines,
	applied for on street parking,



	intersection and pedestrian crossings or facilities sight distance requirements.
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:  • Application or widening of median  • Implementation of shared zones  • Lowering speed limits to 30km/h  • Raised pedestrian crossing facilities  • Median pedestrian rest points  • Improved sight distances  • Kerb extension to on street parking  • Raised plateaus

Road Inspections (including footpaths)	SMS1: Day Inspection – Minimum 4 times per year SMS2, SMS3 & SMS4: Day Inspection – Minimum 2 times per year SMS1, SMS2, SMS3 & SMS4: Night Inspection (excluding footpaths) –
	Minimum 1 time per year
Road Re-sealing	Asphalt – every 25 to 30 years
Pot Holes	Where pot hole exceeding 300mm in diameter appears, the pot hole is to be repaired within 1 week (subject to weather) of notification.
Vegetation Management	In accordance with Parks & Gardens
Drainage	Street sweeping: SMS1: 1 time per week SMS2: 1 time per quarter SMS3: 1 time per quarter SMS4: Nil Educt drainage gullies 1 time per year. Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response).



Kerb Maintenance	Repair damaged kerb within 3
	months of notification or
	identification.
Footpath Sweeping	Removal of reported hazards within 1 week of notification.
Footpath Repairs	Repair identified hazards, within
	budget constraints within 3 months of
	identification. Allocation of budget to
	be in accordance with policy point 2
Street Bins	Clear 3 times per week
Consideration of Interventions to	Identified and suitable safety
Improve Safety	interventions will be considered if
	significant works are being
	completed to incorporate safety
	upgrades as part of maintenance
	based on priority and considerations
	identified in point 2 of the policy.

#### Urban Local Distributor Roads (Sealed) SUD

New Construction (excluding new subdivision roads) LOS

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Pavement and Seal Width	Seal width to comprise a minimum
	6m vehicle carriageway.
Lane Width	Minimum 3m
Shoulder Type	If not kerbed, provision of gravel
	shoulder minimum 1m, preference
	for sealed shoulder aligned to
	vehicle movements per day (VPD)
Seal Type	Desirably asphalt and kerb both sides
Design Speed	60km/hr with desirable minimum
	curve speed 40km/hr within
	constraints of existing road reserves
	and services.
Line Marking	As per Australian Standards.
_	Centre line included if vehicle
	warrants met.
Intersection Treatments	Controlled with appropriate
	measures aligned to Road Traffic
	Safety Policy 9.1.21
Pedestrian and cycling facilities.	Preference for separated facilities
	provided as suitable in accordance
	with Shire of Manjimup Bicycle and
	Footpath Plan
Vegetation	In accordance with best practice
Drainage Design	1 in 10-year storm for underground
	network
Speed Advisory Signs	To Australian Standards



Street Lighting	In accordance with Policy 9.1.3
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:  • Separation of oncoming vehicles ie centrelines, wide centrelines, medians (painted or kerbed),  • Widening seal to include sealed shoulders if not kerbed,  • Installation of centrelines,  • Provision of separated pedestrian facilities  • Safe system intersection treatments  • Reduction in speed limit if no other safety interventions can be applied.

Road Inspections (including footpaths)	Day Inspection – Minimum 1 time per year. Night Inspection (excluding footpath) - Minimum 1 time every 2 years
Road Re-sealing	2 coat seal - every 15 to 20 years Asphalt – every 25 to 30 years
Pot Holes	Patching truck to travel each road at least 1 time per year to fix potholes.
	Where pot hole exceeding 300mm in diameter appears, the pot hole is to be repaired within 3 weeks (subject to weather and repairs to higher priority roads) of notification.
Vegetation Management	In accordance with Parks & Gardens
Drainage	Educt drainage gullies 1 time every 3 years. Removal of reported hazards within 2 weeks of notification. Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response).
Kerb Maintenance	Repair damaged kerb if risk to vehicle or pedestrian or likely to affect



	drainage, within 3 months of
	notification or identification.
Footpath Sweeping	Street sweeping: 4 times per year.
Footpath Repairs	Repair identified hazards, within
	budget constraints within 3 months of
	identification. Allocation of budget to
	be in accordance with policy point 2.
Consideration of Interventions to	Identified suitable safety
Improve Safety	interventions will be considered if
	significant works are being
	completed to incorporate safety
	upgrades as part of maintenance
	based on priority and considerations
	identified in point 2 of the policy.

#### Industrial Roads (Sealed) SI1 & SI2

New Construction (excluding new subdivision roads) LOS

	Ta
Pavement and Seal Width	Seal width to comprise a minimum
	8m vehicle carriageway.
Lane Width	Minimum 3.5
Shoulder type	If not kerbed, provision of shoulder
,,	minimum 1m, preferably sealed
	aligned to vehicle movements per
	day (VPD)
Seal Type	SI1: Desirably 40mm industrial
Joan Type	asphalt
	aophait
	SI2: 2 coat seal
Design Speed	60km/hr with desirable minimum
Besign opecu	curve speed 40km/hr within
	constraints of existing road reserves.
	constraints of existing road reserves.
	Corners and road sweeps to
	accommodate vehicle combinations
	to 27.5 m in length (within constraints
	of existing road reserves and
Line Meyking	services)
Line Marking	As per Australian Standards. Centre
	line included and if not kerbed
	provision of edge lines if meet vehicle
	warrants.
Intersection Treatments	Controlled with appropriate
	measures aligned to Road Traffic
	Safety Policy 9.1.21



Pedestrian and Cycling	Preference for separated facilities considered as suitable and determined based on Shire's Bike Plan
Vegetation	In accordance with best practice
Drainage Design	1 in 10-year storm
Speed Advisory Signs	To Australian Standards
Street Lighting	In accordance with Policy 9.1.3
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:  • Separation of oncoming vehicles ie centrelines, medians (painted or kerbed)  • Provision of separated pedestrian facilities  • Safe system intersection treatments  • Reduction of speed limit if no other interventions can be applied

Road Inspections  Road Re-sealing	Day Inspection – Minimum 1 time per year Night Inspection – Minimum 1 time every 2 years 2 coat seal - every 15 to 20 years
	Asphalt – every 25 to 30 years
Shoulder Grading	Prior to drop-off reaching 60mm.
Pot Holes/Edge Break	Patching truck to travel each road at least 1 time per year, to fix edge break (exceeding 150mm) and potholes.
	Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 4 weeks (subject to weather) of notification.
	Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 4 weeks (subject to weather) of notification.



Vegetation Management (within constraints of Native Clearing Regulations)	Verge spraying –once per year Removal – as per priority listing
Drainage	<ul> <li>Clear known problem areas at least 1 time per year.</li> <li>Inspect and clear all pipes and drains at least one time in each 5 years.</li> <li>Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response).</li> </ul>
Trees Over Road	Attend (remove tree or provide alternative access and make safe) trees over road within 10 hours of notification and remove tree within 3 working days of notification.
Other Infrastructure (e.g. advisory signs, guide posts etc)	As per policy point 4. below.
Other Maintenance	Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints.
Consideration of Interventions to Improve Safety	Identified and suitable safety interventions specific for heavy vehicles or as the mix of heavy/light/pedestrian applies and is suitable. These will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.

### Urban Local Sealed Roads SUL

New Construction (excluding new subdivision roads) LOS

Pavement and Seal Width	Seal width to comprise a minimum 6m vehicle carriageway.
Lane Width	Minimum 3m
Shoulder type	If not kerbed, provision of shoulder minimum 1m, preferably sealed aligned to vehicle movements per day (VPD)



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Seal Type	2 coat seal (desirably asphalt and
	kerb both sides). Asphalt to be used
	in cul-de-sac heads
Design Speed	40km/hr with desirable minimum
	curve speed 20km/hr within
	constraints of existing road reserves
	and services.
Line Marking	As per Australian Standards. Centre
	line applied if vehicle warrants met
Intersection Treatments	Controlled with appropriate
	measures aligned to Road Traffic
	Safety Policy 9.1.21
Pedestrian and Cycling Facilities	Separated facilities provided in
	accordance with Shire of Manjimup
	Bicycle and Footpath Plan.
Vegetation	In accordance with best practice
Drainage Design	1 in 10-year storm for underground
	network.
Speed Advisory Signs	To Australian Standards
Street Lighting	In accordance with Policy 9.1.3
Consideration of Interventions to	Identified suitable safety
Improve Safety	interventions will be considered for
	inclusion if significant works are
	HICUSION II SIGNIICAN WORKS ARE
	•
	being completed, such as:
	being completed, such as:  Slower speeds to support high
	<ul><li>being completed, such as:</li><li>Slower speeds to support high place value,</li></ul>
	<ul> <li>being completed, such as:</li> <li>Slower speeds to support high place value,</li> <li>Installation of centre lines,</li> </ul>
	<ul> <li>being completed, such as:</li> <li>Slower speeds to support high place value,</li> <li>Installation of centre lines,</li> <li>Separated pedestrian facilities,</li> </ul>
	<ul> <li>being completed, such as:</li> <li>Slower speeds to support high place value,</li> <li>Installation of centre lines,</li> </ul>

Road Inspections (including footpaths)	Day Inspection – Minimum 1 time every 3 years. Night Inspection - Nil
Road Re-sealing	2 coat seal - every 15 to 20 years Asphalt – every 25 to 30 years
Pot Holes	Pot holes exceeding 200mm in diameter, is to be repaired within 3 weeks (subject to weather and repairs to higher priority roads) of notification.
Vegetation Management	In accordance with Parks & Gardens
Drainage	Street sweeping: 4 times per year.



	Educt drainage gullies 1 time every 3 years.
	Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response).
Kerb Maintenance	Repair damaged kerb if risk to vehicle or pedestrian or likely to affect drainage, within 3 months of notification or identification.
Footpath Sweeping	Removal of reported hazards within 2 weeks of notification.
Footpath Repairs	Repair identified hazards, within budget constraints within 3 months of identification. Allocation of budget to be in accordance with policy point 2.
Consideration of Interventions to Improve Safety	Identified suitable safety interventions will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.

#### Rural Local Road (Sealed) - SRL

New Construction (excluding new subdivision roads) LOS

Pavement Width	Minimum 8m
Seal Width	Minimum 6m
Lane Width	Minimum 3m
Shoulder Type	Shoulder minimum 1m, preferably
	sealed aligned to vehicle movements
	per day (VPD)
Seal Type	2 coat chip seal
Design Speed	50km/hr with desirable minimum
	curve speed 30km/hr
Line Marking	Centre line markings provided if
	vehicle warrants met.
	Seal width of minimum 6.8m will
	allow edge line marking (dependent
	on number vehicles per day)



Intersection Treatments	Controlled with appropriate measures aligned to Road Traffic Safety Policy 9.1.21
Pedestrian and Cycling Facilities	Facilities provided as suitable and determined based on Shire's Bike Plan.
Vegetation Clearance (within constraints of clearing regulations)	Clear bushy vegetation within 3m of shoulder (within constraints). Barriers for hazards which can't be removed may be considered or warning signs.
Drainage Design	1 in 10 (in the case of new subdivisions, the requirements of Policy 9.4.1 shall prevail).
Guide Posts	To Australian Standards on curves
Speed Advisory Signs	To Australian Standards
Consideration of Interventions to Improve Safety	<ul> <li>Identified suitable safety interventions will be considered for inclusion if significant works are being completed, such as:</li> <li>Slower speeds to support high place value</li> <li>Installation of centre lines</li> <li>Separated pedestrian facilities</li> <li>Sealing of shoulders</li> <li>Widen seal to include audible edge lines</li> <li>Safe system intersection treatments</li> </ul>

Road Inspections	Day Inspection – Minimum 1 time every 2 years Night Inspection – Minimum 1 time every 2 years
Road Re-sealing	Every 15 to 20 years
Shoulder Grading	Prior to drop-off reaching 60mm
Pot Holes/Edge Break	Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 3 weeks (subject to weather) of notification.
	Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 3 weeks (subject to weather) of notification.



Vegetation Management (within constraints of Native Clearing Regulations)	Verge spraying –once per year Removal – as per priority listing
Drainage	<ul> <li>Clear known problem areas at least 1 time per year.</li> <li>Inspect and clear all pipes and drains at least one time in each 3 years.</li> <li>Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response).</li> </ul>
Trees Over Road	Attend (remove tree or provide alternative access and make safe) trees over road within 5 hours of notification and remove tree within 3 working days of notification.
Other Infrastructure (e.g. advisory signs, guide posts etc)	As per policy point 4 below.
Other Maintenance	Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints.
Consideration of Interventions to Improve Safety	Identified and suitable safety interventions will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.



#### <u>Un - Sealed Road Design</u>

As per "Australian Road Research Board Unsealed Roads Manual – Guide to Best Practice"

#### Tourist Roads (Un-sealed) - GT1 (Priority 3) & GT2

Road Inspections	GT1: Day Inspection – Minimum 1 time every year GT1: Night Inspection – Minimum 1 time every 2 years GT2: Nil	
Road Grading	GT1: Prior to School Holiday periods (providing the road contains corrugations or potholes). Otherwise when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm.  GT2: 1 time per year.	
Vegetation Management (within constraints of Native Clearing Regulations)	GT1: Verge spraying – once per year GT2: maintained with grader.	
Drainage	GT1: Clear known problem areas a least 1 time per year. GT1: Inspect and clear all pipes an drains at least one time in each years. GT1: Attend (make safe and clear possible) pipe blockages causin road flooding within 2 days of notification (subject to weather conditions and emergence response). GT2: Attend (make safe and clear possible) pipe blockages causin road flooding within 5 days of notification (subject to weather conditions and emergence response).	



Trees Over Road	GT1: Attend (remove tree or provide alternative access and make safe) trees over road within 24 hours of notification and remove tree within 5 working days of notification.  GT2: Attend and remove tree over	
Other Infrastructure (e.g. guide posts	road within 5 days of notification.  As per policy point 4. below,	
etc)	excluding speed advisory signs.	
Re-sheeting	To be determined by staff based on a minimum whole of life cost approach, within budget constraints.  To be determined by Shire's Road Asset Maintenance Management System RAMM based on a minimum whole of life coast approach, within budget constraints.	
Consideration of Interventions to Improve Safety	Identified and suitable safety interventions specific for unsealed roads will be considered if significant works are being completed to incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.  Treatments which improve safety on unsealed roads include:  • Widen pavement  • Roadside hazards consider Austroad guidance. If not possible, consider installation of barriers or warning signs.  • Guide posts installed  • Adequate hazard warning signage  • Advocate for lower default or ability to set survivable maximum speed limit for unsealed roads based on local context.	



#### Local Distributor Roads (Un-sealed) GLD

Road Inspections	Day Inspection: Minimum 1 time every year Night Inspection – Minimum 1 time every 3 years
Road Grading	4 times per year and when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm.
Vegetation Management (within constraints of Native Clearing Regulations)	Maintained with grader.
Drainage	Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response).
Trees Over Road	Attend (remove tree or provide alternative access and make safe) trees over road within 24 hours of notification and remove tree within 5 working days of notification.
Other Infrastructure (e.g. guide posts etc)	As per policy point 4 below, excluding speed advisory signs.
Re-sheeting	To be determined by staff based on a minimum whole of life cost approach, within budget constraints.  To be determined by Shire's Road Asset Maintenance Management System RAMM based on a minimum whole of life coast approach, within budget constraints.
Consideration of Interventions to Improve Safety	Identified and suitable safety interventions specific for unsealed roads will be considered if significant works are being completed to



incorporate safety upgrades as part of maintenance based on priority and considerations identified in point 2 of the policy.  Treatments which improve safety on unsealed roads include:  • Widen pavement  • Roadside hazards consider Austroad guidance. If not possible, consider installation of barriers or warning signs.  • Guide posts installed  • Adequate hazard warning signage  • Advocate for lower default unsealed roads speed limit or the ability to set survivable speed limits based on local context.
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### School Bus Routes (Un-sealed) GSB Road Maintenance LOS

Day Inspection: Minimum 1 time		
every year		
Night Inspection: nil		
4 times per year and when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm.		
Maintained with grader.		
Attend (make safe and clear if possible) pipe blockages causing road flooding within 1 day of notification (subject to weather conditions and emergency response).		
Attend (remove tree or provide alternative access and make safe) trees over road within 12 hours of		



	notification and remove tree within 5	
	working days of notification.	
Other Infrastructure (e.g. guide posts etc)	As per policy point 4. below, excluding speed advisory signs.	
Re-sheeting	To be determined by staff based on a minimum whole of life cost approach, within budget constraints.  To be determined by Shire's Road Asset Maintenance Management System RAMM based on a minimum whole of life coast approach, within budget constraints.	
Consideration of Interventions to Improve Safety	coast approach, within budget	



#### Rural Local Roads (Un-sealed) GLR

Road Inspections	Nil
Road Grading	For the extent that the road provides a direct frontage to a property and the logical connection to the next road: minimum 2 times per year with additional grades up to a total of 4 times a year where corrugations or pot holes are considered excessive for the speed environment, or where adjacent roads are being graded and the road users would benefit if the road is graded.
	Where the road is a secondary access, provides no (or is a secondary) link to a property access or provides a link to a 4wd only area: only where resources allow (i.e. time and budget in that financial year) otherwise nil.
Vegetation Management (within constraints of Native Clearing Regulations)	Maintained with grader.
Drainage	Attend (make safe and clear if possible) pipe blockages causing road flooding within 5 days of notification (subject to weather conditions and emergency response).
Trees Over Road	For the extent that the road provides a direct frontage to a property and the logical connection to the next road: attend (remove tree or provide alternative access and make safe) trees over road within 12 hours of notification and remove tree within 5 working days of notification.
	Where the road is a secondary access, provides no (or is a secondary) link to a property access, or provides a link to a 4wd only area:



Other Infrastructure (e.g. guide posts etc) Re-sheeting	within 4 weeks attend (remove tree or provide alternative access).  As per policy point 4 below, excluding speed advisory signs.  To be determined by staff based on a minimum whole of life cost approach, within budget constraints.  To be determined by Shire's Road Asset Maintenance Management System RAMM based on a minimum whole of life coast approach, within budget constraints.	
Consideration of Interventions to Improve Safety	· · · · · · · · · · · · · · · · · · ·	



#### 4. Other Infrastructure

The following infrastructure shall be installed at the time of construction or re-construction of a road.

- Vegetation removal.
- Speed Zoning.
- Speed advisory signage (not to be installed on un-sealed roads).
- crash barrier (unless funded through Blackspot program).
- guide posts.

This infrastructure may also be considered to improve safety.

- Sealed shoulders.
- Audible edge lines.
- Separation of oncoming traffic ie centre line, wide centre line with rumble strips, median or centre barrier,
- Intersection improvements ie reduce complexity, slow through speeds, change collision angles to survivable impacts
- Warning signage, and
- Separated pedestrian and cycling facilities

Where the above infrastructure is required on roads where construction or re-construction is not taking place, installation shall be prioritised in accordance with policy point 2 above.

#### <u>Administration</u>

Responsibility for implementing this policy is delegated to the Manager Technical Services for new construction works. Responsibility for implementing this policy is delegated to the Manager of Works for maintenance works.

Adoption and Date Due for Revision

ADOPTED 24 APRIL 2014 REVIEWED 13 FEBRUARY 2020 REVIEWED MARCH 2024

**NEXT DUE FOR REVIEW MARCH 2029** 

The Administration of this Policy is by the Work and Services directorate.



#### Appendix 1

### Primary Distributor (Sealed) - SPD

Level of Service	Road Name	From	То
SPD	South West Highway	Shire Boundary	South Coast Highway
SPD	Vasse Highway	Shire Boundary	South West Highway
SPD	Pemberton Northcliffe Road	Vasse Highway	Wheatley Coast Road
SPD	Muir Highway	South West Highway	Shire Boundary
SPD	South Coast Highway	South West Highway	Shire Boundary

#### District Distributor (Sealed) - SDD1 & SDD2

Level of Service	Road Name	From	То
SDD1	Windy Harbour Road	Zamia Street	Windy Harbour
SDD2	Middleton Road	Wheatley Coast Road	South West Highway
SDD2	Wheatly Coast Road	Zamia Street	South West Highway
SDD2	Channybearup Road	South West Highway	Vasse Highway
SDD2	Perup Road	South West Highway	Mordalup Road
SDD2	Mordalup Road	Perup Road	Shire Boundary
SDD2	Graphite Road	Finch Street	Shire Boundary

### Rural Local Distributor (Sealed) - SRLD

Level of Service	Road Name	From	То
SRLD	Ralston Road	Graphite Road	Ringbark Road
SRLD	Yanmah Road	Ralston Road	Donnelly Road
SRLD	Donnelly Road	Yanmah Road	Sears Road
SRLD	Sears Road	Donnelly Road	Shire Boundary



SRLD	Palgarup Road West	Ralston Road	South West Highway
SRLD	Balbarup Road	South West Highway	Perup Road
SRLD	Seven Day Road	South West Highway	Palings Road
SRLD	Middlesex Road	South West Highway	South West Highway
SRLD	Stirling Road	Channybearup Road	Pump Hill Road
SRLD	Pump Hill Road	Stirling Road	Vasse Highway
SRLD	Ipsen Street	Lintott Street	Wildwood Road
SRLD	Pemberton North Road	Vasse Highway	Diamond Tree Road
SRLD	Diamond Tree Road	Pemberton North Road	Eastbrook Road
SRLD	Eastbourne Road	Diamond Tree Road	Vasse Highway
SRLD	North Walpole Road	South Coast Highway	End of Bitumen
SRLD	Richardson Road	Northcliffe- Pemberton Road	Holliwell Road
SRLD	Allen Road	North Walpole Road	End of Bitumen
SRLD	Bridge Road	North Walpole Road	Shire Boundary
SRLD	Karri Lane	Wheatly Coast Road	Cul-de-sac
SRLD	Wheatly Coast Road	South West Highway	Karri Lane
SRLD	Mullineaux Road	Golf Links Road	Big Brook Dam
SRLD	Golf Links Road	Vasse Highway	Mullineaux Road

### Main Street Roads (Sealed) – SMS1, SMS2, SMS3 & SMS4

Level of Service	Road Name	From	То
SMS1	Giblett Street (M)	Pritchard Street	Rose Street
SMS1	Brockman Street (M)	Bath Street	Giblett Street
SMS1	Rose Street (M)	Ipsen Street	Mount Street
SMS1	Ipsen Street (M)	Bath Street	Giblett Street
SMS1	Mount Street (M)	Giblett Street	Bath Street



SMS1	Ralston Road (M)	Giblett Street	Highway
SMS2	Brockman Street (P)	Dean Street	Robinson
			Road
SMS3	Bath Street (M)	Ipsen Street	Mount Street
SMS3	Ellis Street (P)	Brockman Road	Kennedy
			Street
SMS3	Guppy Street (P)	Dean Street	Robinson
			Street
SMS3	Dean Street (P)	Brockman	Guppy Road
		Street	
SMS3	Robinson Street (P)	Brockman	Guppy Road
		Street	
SMS3	Nockolds Street (W)	Inlet Street	Swan Street
SMS3	Wheatly Coast Road (N)	Richards Street	Boorara Road
SMS3	North Street (N)	Zamia Street	Rear of Pub
SMS3	Zamia Street (N)	Richardson	Wheatley
		Road	Coast Road
SMS3	Vista Street (W)	Nockolds Street	Pier Street
SMS3	Nockolds Street (W)	Inlet Street	Swan Street
SMS4	Wheatley Coast Road (Q)	Karri Lane to 300	m south

### **Urban Local Distributor (Sealed) – SUD**

Level of Service	Road Name	From	То
SUD	Ipsen Street	Bath Street	Linton Street
SUD	Hospital Avenue	Mottram Street	Blackbutt Drive
SUD	Blechynden Street	South West Highway	Stokes Street
SUD	Somerville Street	Pritchard Street	Ipsen Street
SUD	Pritchard Street	Somerville Street	Mottram Street
SUD	Graphite Road	South West Highway	Finch Street

### Industrial Roads (Sealed) - SI1 & SI2

SI1	Wetherell Street	South West Highway	Cul-de-sac
SI1	Franklin Street	South West Highway	Wetherell Street
SI1	Franklin Street	Wetherell Street	Muir Highway
SI1	Margerson Street	Franklin Street	Wetherell Street
SI1	Gandy Street	Franklin Street	Crouch Street
SI1	Crouch Street	Franklin Street	Gandy Street



SI2	Miguel Place	Chugg Street	Cul-de-sac
SI2	Boorara Road	Windy Harbour	End of Seal
		Road	
SI2	Vista Street	South Coast	Walpole Street
		Highway	
SI2	Chugg Street	South Coast	Miguel Place
		Highway	

#### Urban Local Roads (Sealed) - SUL

SUL - All other urban roads

#### Rural Local Roads (Sealed) - SRL

SRL - All other sealed rural roads

### Tourist Roads (Un-sealed) - GT1 & GT2

Level of Service	Road Name	From	То
GT1	Old Vasse Highway	Vasse Highway	Pemberton- Northcliffe Road
GT1	Kemp Road	Golf Links Road	Cul-de-sac
GT2	Broke Inlet Road	South West Highway	Broke Inlet
GT2	Seven Day Road	Waist Coat Road	Vasse Highway

#### Local Distributor (Un-sealed) - GLD

Level of Service	Road Name	From	То
GLD	Fernhill Road	Balbarrup Road	Perup Road
GLD	Grays Road	South Western Highway	Vasse Highway
GLD	Springdale Road	Muir Highway	Balbarrup Road
GLD	Balbarrup Road	Muir Highway	Perup Road
GLD	Boorara Road	End of Seal	Preston Road
GLD	Muirillup Road	End of Seal	Rudd Road
GLD	Datchet Road	Wheatley Coast Road	Pemberton Northcliffe Road
GLD	Ralston Road	End of Seal	Mitchelldean Road
GLD	Mitchelldean Road	Ralston Road	Sears Road



GLD	Gardiner Road	North Walpole Road	End
GLD	Smiths Road	Channybearup Road	Pemberton North Road
GLD	Double Bridges Road	Windy Harbour Road	Gabbedy Road
GLD	Tattenham Road	Richardson Road	Guernsey Gully Road
GLD	Southfield Road	Mordalup Road	Wingebellup Road
GLD	Smithbrook Road	Middlesex Road	Peppermint Grove Road
GLD	Dixvale Road	Yanmah Road	Graphite Road
GLD	Gibillenis Road	Linfarne Road	Tower Road
GLD	Springall Road	West Boundary Road	Dean Mill
GLD	Hillbrook Road	Wheatley Coast Road	Wheatley Coast Road
GLD	Deeside Coast Road	Middleton Road	Preston Road (Great Tree Drive)

#### School Bus Route (Un-sealed) - GSB

GSB - Extent of School Bus Routes

#### Rural Local Roads (Un-sealed) - GLR

GLR – All other un-sealed rural roads

#### Laneways & Right of Ways - LWY/ROW

Level of Service	Road Name	From	То
LWY/ROW	Guadagnino Lane	Mount St	Ipsen St
LWY/ROW	LOT 66	Lintott St	Limmer St

#### Unallocated/Vacant Crown Land - UCL & VCL

Level of Service	Road Name	From	То	
UCL/VCL	Loverock Road	Windy Harbour	Beebe/Preston	
UCL/VCL	Waistcoat Road		Road   Road   Road   Section outside state forest	



Level of Service	Road Name	From	То
OTHER	Wetherell Road	South Western Highway	Lot 10878
OTHER	Langley Road	South Western Highway	Wheatley Coast Road