

# OPENING OF UNCONSTRUCTED ROADS PROCEDURE

## 1. Scope

The Opening of Unconstructed Roads Procedure (this 'Procedure') applies to all unconstructed roads under the jurisdiction of Livingstone Shire Council.

## 2. Purpose

This Procedure addresses the provision and standard of construction of capital improvements to unconstructed road reserves that provide access to properties with a dwelling and details the responsibilities for funding the capital improvements. The steps set out in this Procedure will be applied when exercising a discretionary power in making an administrative decision in relation to the provision of access to properties on unconstructed road reserves.

## 3. Related Documents

### Primary

Opening of Unconstructed Roads Policy

### Legislative reference

*Local Government Act 2009* ss 59-60

*Planning Act 2016* ch 3

*Transport Operations (Road Use Management) Act 1995* s 72

*Work Health and Safety Regulation 2011* s 293

### Related documents

ARRB Group

Unsealed Roads Manual – Guidelines to Good Practice (3<sup>rd</sup> ed March 2009)

## 4. Definitions

To assist in interpretation, the following definitions shall apply:

Application for Operational Works	DA Form 1 – Development application details
As Constructed Plans	Plans which show the dimensions and location of the constructed asset.
Council	Livingstone Shire Council.
Dwelling	A building or structure which has been approved for use as a habitable building or structure
Environmental Management Plan	A document which addresses the environmental impacts of a project and determines appropriate strategies to control or avoid environmental harm.
Road	Has the same meaning as road in the <i>Local Government Act 2009</i> .
Traffic Management Plan	A document which addresses:

	<ul style="list-style-type: none"> <li>a) Safe movement of vehicular and pedestrian traffic;</li> <li>b) Protection of workers from passing traffic;</li> <li>c) Provision of access to properties;</li> <li>d) Provision of traffic controllers;</li> <li>e) Installation of temporary signs, road markings, lighting and safety barriers; and</li> <li>f) Maintenance of the existing road corridor (including the road and road shoulder) that may be used for the temporary diversion of traffic.</li> </ul>
Unconstructed Road	Is either a completely unformed road or a formed road that does not have gravel paving, but which is formed using a grader or similar machinery so that stormwater will drain off laterally.

## 5. Procedure

All applications to construct a road are to be submitted to Council in writing. The submission must detail the reasons for the request, the extent of the road to be constructed and address the Heads of Consideration detailed in the Opening of Unconstructed Roads Policy.

### 5.1 Pre-Approval

If pre-approval is granted for the applicant to open the road (at their own cost), they will be informed in writing. This advice will not constitute approval to construct. It will inform the applicant that they must lodge an Application for Operational Works. It will also specify the standard to which the road must be designed and constructed and set out conditions that must be met prior to an approval being issued.

### 5.2 Application

The Application for Operational Works is to be lodged with the following:

- a) Plans showing the proposed road construction which contain a longitudinal section, plan view and typical cross section of the proposed road, including vertical and horizontal curve radius details, any required drainage structures and all appropriate road signage (the standard of construction must comply with Appendix 1 'Main Geometric Design Standards for Unsealed Roads');
- b) A Traffic Management Plan;
- c) An Environmental Management Plan which addresses the following issues, if applicable: noise, traffic, dust, weed and pest management, vibration, water quality, erosion and sedimentation, acid sulfate soils, flora and fauna, cultural heritage, land contamination, waste and site clean-up, rehabilitation, emergency situation management and fire management;
- d) An estimate of the cost of construction; and
- e) Copies of relevant State Government approvals, for example permits relating to vegetation clearing.

### 5.3 Approval

#### 5.3.1 Approved Plans

A set of the plans outlined in cl 5.2 approved by Council will be returned to the applicant who is to supply a copy to the contractor. These plans are to be retained on site at all times during construction.

### 5.3.2 Conditions of Approval

An approval may be issued subject to the following conditions:

- a) If, after the approval is issued, errors, omissions or insufficient details are noted on the construction plans, such deficiencies are to be made good during construction;
- b) A pre-start meeting is to be held between the applicant, the principal contractor and Council prior to commencement of construction. At this meeting the following information is to be presented to Council:
  - i) A copy of the contractor's public liability insurance policy for the minimum amount required as per Council's current policies indemnifying Council against all claims resulting from the construction works; and
  - ii) Notification of the principal contractor for the works pursuant to s 293 of the *Work Health and Safety Regulation 2011* and evidence that the Portable Long Service Levy has been paid.
- c) Pursuant to s 72 of the *Transport Operations (Road Use Management) Act 1995*, the principal contractor and its employees must be prescribed persons for the purposes of installation of official traffic signs;
- d) All timber on road reserves is the property of the Crown. The Department of Agriculture and Fisheries (DAF) must be contacted prior to commencement of work to ascertain the existence or otherwise of millable timber in the area proposed to be cleared. Remaining vegetation that cannot be mulched on site for use on the works or an approved place of use is to be disposed of at a suitable place. Burning will not be permitted in a residential area.  
DAF contact – Forest Ranger in Charge (Forest Products) at Duaringa  
Ph: (07) 4935 7140;
- e) All works must be supervised by a competent person who is experienced in roadwork construction and be conducted in accordance with environmental best practices;
- f) Work is to comply with the requirements of the ARRB Group – Unsealed Roads Manual - Guidelines to Good Practice (3<sup>rd</sup> ed March 2009); and
- g) A licensed surveyor may be required to certify that the road, as designed, is constructed wholly within the road reserve.

### 5.4 Inspection Requirements

Joint inspections with the applicant/superintendent, contractor and Council are required at the hold points identified in the site-specific inspection/testing plan.

Council's minimum inspection program is as follows:

- a) Roadworks – All roads are subject to the following minimum inspections:
  - Subgrade;
  - Pavement;
  - On defects liability; and
  - Off defects liability.
- b) Drainage Works
  - Prior to backfill.

## 5.5 As Constructed Requirements

As Constructed Plans are to be submitted to Council for review a minimum of 48 hours prior to the inspection for placing the construction 'On Defects Liability Period' and must satisfy the Manager Construction & Maintenance. A Defects Liability Period of 90 days will apply to the works.

## 6. Changes to this Procedure

This Procedure is to remain in force until otherwise amended/replaced by the Director Infrastructure Services.

## 7. Repeals/Amendments

This Procedure repeals Livingstone Shire Council Procedure titled 'Opening of Unconstructed Roads Procedure (v1.1).'

Version	Date	Action
1	08/03/2016	Approved
1.1	30/11/2018	Administrative Amendments – reflect organisational restructure
2	21/05/2019	Amended Procedure Approved - minor updates to definitions and some wording

**DAN TOON**  
**EXECUTIVE DIRECTOR INFRASTRUCTURE**

APPENDIX 1

Main geometric design standards for unsealed roads																				
Road Classification (Operational Class)	150			125			100			75			30			10			Comments	
Typical Traffic Counts	125-150			100-125			75-100			30-75			10-30			<10				
Terrain type <sup>1</sup>	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain	Flat	Rolling	M'tain		
<b>Main geometric characteristic</b>																				
based on safety, cost and environmental considerations																				
Operating speed value km/h	80	70	50	70	50	30	70	50	30	60	40	20	60	40	20	n/a	n/a	n/a	based on 85th percentile speed	
<b>Cross-section elements</b>																				
number of traffic lanes	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	unsealed lanes
minimum cross fall unsealed road	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	min of 4% to drain rainfall off tracks	
Maximum superelevation % <sup>2</sup>	6	8	10	6	8	10	6	8	10	6	8	10	6	8	10	n/a	n/a	n/a		
minimum traffic lane width m <sup>3</sup>	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
minimum shoulder width m	0.25	0	0	0	0	1	1.25	1	0.75	1	0.75	0.5	0.5	0.25	0	0	0	0		
minimum carriageway width (lanes + shoulder) m	6.5	6	6	6	6	5	5.5	5	4.5	5	4.5	4	4	3.5	3	3	3	3		
<b>Horizontal geometry</b>																				
minimum radius curve m <sup>5</sup>	320	250	140	250	100	35	250	100	35	170	60	15	170	60	15	n/a	n/a	n/a		
minimum stopping sight distance m <sup>6</sup>	150	120	70	120	70	30	120	70	30	90	50	30	90	50	30	n/a	n/a	n/a		
minimum meeting sights distance m <sup>7</sup>	290	230	130	230	130	60	230	130	60	180	100	60	180	100	60	n/a	n/a	n/a		
<b>Vertical geometry</b>																				
maximum vertical grade % <sup>8</sup>	6	8	12	6	8	12	6	8	12	6	8	12	6	8	12	n/a	n/a	n/a	for tracks avoid steep grades to reduce soil erosion	
minimum crest vertical curve K values <sup>9</sup>	50	30	10	30	10	5	30	10	5	19	8	2	19	8	2	n/a	n/a	n/a		
Minimum sag vertical curve K values <sup>10</sup>	11	8	4	8	4	3	8	4	3	6	3	2	6	3	2	n/a	n/a	n/a		
<b>Drainage</b>																				
Cross Road Drainage Immunity -11	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Longitudinal Drainage Immunity - 12	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
RCP & RCBC desirable length	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	4.8	4.8	4.8	4.8	4.8	4.8	4.8	can be longer at curve widenings, intersections, etc
Floodway desirable width	6.5	6.5	6.5	6.5	6.5	6.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	can be wider at curve widenings, intersections, etc
<b>Gravel Pavement</b>																				
% of road length covered with imported gravel meeting unsealed road guidelines	75%	75%	75%	70%	70%	70%	60%	60%	60%	55%	55%	55%	25%	25%	25%	10%	10%	10%		

- 1 Flat, rolling or mountainous terrain
- 2 The maximum superelevation values will need to take into account the use of the road by high loaded heavy vehicles, speed and curve radii
- 3 In cases where there are a high percentage of heavy vehicles (>20%) minimum lane widths can be increased by 0.5m
- 5 Values rounded up. For minimum radius curves widening on the inside of a curve may be necessary to accommodate longer vehicles.
- 6 Based on a reaction time of 2 seconds and surface coefficients relating to unsealed surfaces and values rounded up. Values based on flat grades and allowances will need to be made for up and down grades.
- 7 This is mainly a requirement of single lane two-way roads. Values rounded up.
- 8 In some cases higher grades of up to 20% can be allowed for short sections (about 150m). Keep grades on unsealed roads lower due to ravelling and scouring of surface.
- 9 Calculation of these values is to be based on information contained in Austroads (2003). The lengths of the vertical curve (L) is based on the production of K multiplied by the algebraic difference in grades percentage A (i.e. L = K x A).
- 10 Sag values are based on comfort on control criteria.
11. Class 10, 30 & 75 roads will require suitable gravel or hard surface treatments at gullies and creek crossing
12. Class 10, 30 & 75 roads shall have formation 300mm above natural surface or 300mm deep table drains

Opening of Unconstructed Roads Procedure

Adopted/Approved: Approved, 21 May 2019  
Version: 2

Portfolio: Infrastructure  
Business Unit: Construction and Maintenance