RESIDENTIAL DRIVEWAY STANDARD

Scope
This standard applies to all residential properties with up to six (6) dwelling units, from the travel lane of the road to the property boundary at the road frontage.

Driveway Constraints
1. Driveways must be less than six (6) metres wide across the footpath with the exception of the flares at the kerb to prevent rutting.
2. Driveways must be wholly located within the frontage of the allotment. To avoid service access points, driveways should where practical be located with a minimum side boundary clearance of two metres.
3. Where the allotment has a frontage of less than 30 metres, only one driveway is permitted per street frontage.
4. Corner blocks may have one driveway on each frontage.
5. Driveways must not be located within 12 metres of an intersection or roundabout.
6. Constraints such as power poles guard rail etc should also be examined before siting the house and driveway.
7. Access restriction strips (encroachment), easements or “limited access” roads may prevent the placement of the driveway in the intended location.
8. Driveways should have sufficient sight distance for entering and leaving the driveway. In some special circumstances such as busy roads, works may need to be undertaken within the property to allow a vehicle to turn within the property and leave the property in a forward direction.

Driveway Design
Driveways for single dwelling unit or duplex developments must be constructed in accordance with Calliope Shire Council standard drawing RT-0055 (attached). Car tracks across the footpath tend to rut between the tracks over time and present an unacceptable pedestrian risk and therefore are not allowed on the footpath.
1. The minimum width “W” (refer plan RT-0055) for a straight driveway for a car is 2.7m with 3m being preferred. Driveways for more than 2 Residential units must be at least 3.5 metres wide at the boundary (ie “W”).
2. Given the minimum width stated above, driveways must be wide enough to accommodate the swept path of the vehicle so as to prevent rutting over the sides of the driveway. (Check this by driving the largest vehicle expected over the area where the driveway is intended). Allow at least 0.3m to 0.6m either side of the wheel path for misjudgement. Ie flares at the kerb and channel may be required to be widened.
3. Isolation joints must be provided where a pavement adjoins a building or other rigid structure such as a drainage pit. Isolation joints should allow freedom of movement between the slab and the structure and resist the entrance of foreign matter.
Some guidance for the construction of driveways for surface types other than concrete can be found in Australian Standard AS 3727.

**Surface Treatments (Roads and Transport Standard 2005 Section 8.1)**

As the driveway must also accommodate the needs of pedestrians walking along the verge of the road, it will be required to meet the relevant AUSTROADS’ Guidelines in terms of skid resistance. Accordingly broom finished concrete or segmental pavers provide a good textured finish and are preferred. Loose surfaces will not be permitted in urban areas, as loose material can be washed into gutters or stormwater drains and tracked onto the road causing a hazard and polluting water ways. Uneven surfaces such as stamped concrete should be avoided as they may create a tripping hazard, particularly for elderly persons.

Slick coatings or finishes with low skid resistance in wet weather must be avoided. This may include rounded pebbles in exposed aggregate driveways, silicone sealant paint (used to lift the colours of oxides), glossy ceramic tiles or any other surface that is slippery when wet.

**Protection of Services and Markers**

Council and other utility providers are likely to have pipes and wires under the footpath where the driveway will be placed. Accordingly, the driveway constructor should locate the existing services in the road reserve well before the digging starts.

It is recommended that they:-

- Contact Council who will be able to provide most of the information you require on what services are located in the footpath (refer Guide), and
- Make use of the “Dial before you dig” service by phoning “1100”

Services located under footpaths are _usually_ covered by at least 300mm of soil. This is designed to spread the surface loads (or impacts) on the underground services. Accordingly, any excavation works should be undertaken _very carefully_ to ensure that these services are not damaged.

Utility providers may have constructed access points such as surface or subsurface pits valves or connections, which if covered by concrete or other material during construction of a driveway may prevent future access for maintenance work. Accordingly, the driveway should be located to avoid construction over these points if at all possible. However, should this not be the case the driveway construction must provide for suitable isolation joints adjacent to the access point and ensure that the service access is capable of taking the wheel loadings expected. If necessary, the applicant should contact the service provider to alter the level of the point to match the driveway.

If the kerb is to be cut during the driveway construction, the constructor should be on the look out for service markers on the kerb. These markers may designate a conduit (brass disk) or location of a fire hydrant (painted). If these markers are to be removed, then contact Council to re-locate the markers before they are removed.
Service providers may need to cut through your driveway in the future to either maintain existing services or place new services in the footpath. Most service providers will only replace an existing driveway surface with a broomed plain concrete finish. For this reason Council recommends landowners avoid placing other “fancy” finishes on that section of the driveway that covers the footpath.

**Driveway Levels and Slopes**

The following gives a general guide to the levels for the construction of a driveway.

1. Generally the level of the driveway should match the level of the footpath for the first three metres from the kerb and channel.
2. The slopes and levels along the driveway should be designed to allow a standard vehicle with a full passenger load to enter the property without scraping the middle or ends of the vehicle.
3. Council suggests that the kerb and channel be cut down to avoid damaging the vehicles crossing it. The kerb can be cut down between 50 and 100mm to accommodate this. The outline of the driveway should be cut by a professional concrete cutter with a diamond saw, along with some transverse cuts to assist in the break out of small pieces of the kerb. Council will reject an uncut kerb broken out solely with a sledge hammer, and may replace the damaged kerb and channel at the expense of the property owner.
4. Roads also double as stormwater drains. Accordingly, to avoid potential flooding of the property Council requires that the level of the top of the kerb before its removal be achieved within the first metre of the driveway.
5. The desirable maximum driveway grade is 16% (approx. 1 Vertical in 6 Horizontal). Driveways with grades steeper than 16% should be constructed with a sealed pavement suitable for the traction of the appropriate two wheel drive to traverse the driveway in wet weather (preferably concrete). The maximum grade for residential/rural driveways is 20% (1 Vertical in 5 Horizontal). A grade of 25% may be approved by Council in exceptional circumstances.
6. Transitions should be provided between changes in vertical grades to ensure that the loaded vehicles clear the driveway. Templates contained in the Main Roads’ “Urban Road Design Manual” Volume 1 (Figure 3-1170) are attached to the standard. (the scale of the templates should be checked before using them) Other publications such as “AS 2890 Parking Facilities – Off Street” also may be used to check the clearances of vehicles using the driveway.

Council will not approve items being placed in the kerb and channel to help the vehicle enter or leave the driveway as these devices present slicing puncture or impact hazards to road users (pedestrians cyclists motorcyclists) as well as restrict the flow of stormwater in the kerb and channel. The following as examples are prohibited and should be removed: steel plate ramps, steel grates, pieces of timber etc.
**PUBLIC SAFETY**
The main concern of Council is the safety of persons using the road reserve be it pedestrians, cyclist, motorcyclists motorists etc. Being on the footpath, the predominant group of concern is pedestrians which are vulnerable to tripping on uneven surfaces. A tripping hazard for sealed surfaces consists of a sudden change in level of 10 to 25 mm while for a natural surface is a sudden change of level of 25 to 50mm. Tripping hazards must be minimised on the footpath at any time. The sides of the driveway must be backfilled or joint to other surfaces to minimise tripping hazards. The maximum step allowable onto or across the driveway for new installations is as follows:

i. From a paved or gravel surface: 10mm  
ii. From a grassed surface: 25mm

**Approval Process**

**(A) Applications which strictly comply with this standard**

Applications must be submitted to Council on the appropriate form with the prescribed fee.

Council will however formally acknowledge and approve the application within five business days of receipt of the application.

The applicant is required to advise Council when a pre-pour inspection is required and when the project is complete to allow a final inspection to be made. Council has the authority to issue a compliance notice requiring the applicant to rectify any faults in the driveway, or Council may carry out the rectification work at the expense of the landowner if they fail to comply with the notice within a reasonable time.

**(B) Applications which do not comply with this standard**

Applications must be submitted to Council on the appropriate form along with:-

- the prescribed fee
- a dimensioned drawing of the driveway showing the location of the driveway with respect to the boundary
- the proposed surface type
- if the standard drawing RT-0055 is not being used then an alternate plan including a long section showing distances and heights with respect to the top of the kerb should be provided.

A Council officer may contact the applicant to confirm the details and possibly provide amended sketches of the driveway to ensure compliance with this policy. A permit for construction of the driveway should take 5 to 10 business days.

The applicant is required to advise Council when a pre-pour inspection is required and also when the project is complete to allow a final inspection to be made. Council has the authority to issue a compliance notice to rectify any faults in the driveway and carry out the rectification work at the expense of the landowner if they fail to comply with the notice within a reasonable time.
Standard Conditions for Residential Driveways that “Strictly Comply” with the Standard

1. The owner is responsible for the maintenance of all improvements/alterations undertaken.

2. The driveway must be constructed in accordance with the Residential Driveway Standard and the joint Calliope / Gladstone standard drawing number RT-0055.

3. The applicant is responsible for the Workplace Health & Safety aspects during the construction of the driveway and must protect the public by complying with the following:
   i. The driveway must be completed and safe within 10 days of commencing excavation, including back fill to the sides of the driveway.
   ii. Tripping hazards to the public in the vicinity of the work must be minimised.
   iii. All steel rods or other potential hazards protruding above the ground must be suitably capped when the driveway construction is unattended.
   iv. Provision must be made for pedestrian safety including safety mesh around the site whilst tripping hazards exist and alternative pedestrian passage on busy roads. (where the home owner is constructing the driveway, safety mesh may be borrowed from Council upon payment of a bond)
   v. External house lights should be left on overnight where practical to flag the hazard on busy footpaths.

4. Driveways and surrounding ground shall be maintained such that there is no tripping hazard. The driveway must be built and maintained to the following tolerances:

<table>
<thead>
<tr>
<th>Type of adjacent ground</th>
<th>Maximum height difference between driveway and adjacent ground</th>
<th>Maximum Grade adjacent to driveway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard surfaces (concrete, pavers, gravels)</td>
<td>10mm for new installation or up to 30mm depending on risk associated with step for older work</td>
<td>1V in 8H (12.5%)</td>
</tr>
<tr>
<td>Soft natural surfaces (grass, loose soil)</td>
<td>25mm for new installation or up to 50mm depending on risk associated with step for older work.</td>
<td>1V in 8H (12.5%)</td>
</tr>
</tbody>
</table>

Kerbs, ropes, edging etc must not be placed on side of driveway or footpath as they present a tripping hazard.
5. Where the driveway is being constructed by a commercial entity, the holder of the permit must ensure that the constructor is covered by liability insurance in an amount of not less than $20 million and which indemnifies Council in respect of any liability arising from the construction of the vehicular access works.

6. The owner or contractor is required to advise Council when a pre-pour inspection is required and also when the project is complete to allow a final inspection to be made and approval to be issued.

7. Surface treatments shall be non-skid. Surface treatments other than broomed plain concrete may not be replaced by Council or any other service provider in the future.

(For interpretation of Fig 3-1170 following, Jounce = a bouncing movement).
### Residential Driveway Standard

#### URBAN ARTERIAL ROADS

**Fig. 3-1170**

<table>
<thead>
<tr>
<th></th>
<th>Front Clearance</th>
<th>Centre Clearance</th>
<th>Rear Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal load</td>
<td>280</td>
<td>100</td>
<td>270</td>
</tr>
<tr>
<td>Front dive (braking)</td>
<td>180</td>
<td>65</td>
<td>300</td>
</tr>
<tr>
<td>Rear jounce</td>
<td>300</td>
<td>65</td>
<td>160</td>
</tr>
<tr>
<td>Full jounce</td>
<td>200</td>
<td>25</td>
<td>190</td>
</tr>
</tbody>
</table>

*Clearance dimensions under various conditions for composite longest vehicle.*

<table>
<thead>
<tr>
<th></th>
<th>Front Clearance</th>
<th>Centre Clearance</th>
<th>Rear Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal load</td>
<td>150</td>
<td>125</td>
<td>115</td>
</tr>
<tr>
<td>Front dive (braking)</td>
<td>85</td>
<td>100</td>
<td>135</td>
</tr>
<tr>
<td>Rear jounce</td>
<td>160</td>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>Full jounce</td>
<td>100</td>
<td>75</td>
<td>65</td>
</tr>
</tbody>
</table>

*Clearance dimensions under various conditions for composite shortest vehicle.*

**Scale 1 : 50**

*Use normal load as a basis for design of entrances, but the effects of greater spring deflections should be checked.*

*The dimensions shown relate to those of a composite design vehicle and do not necessarily apply to the particular models shown.*

**Source:** Ref. 14

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