



TABLE OF CONTENTS

1.0	VEHICULAR CROSSINGS	1
1.1	GENERAL REQUIREMENT	1
1.2	GRADES.....	1
1.3	DETACHED HOUSES	1
1.4	MULTI-UNIT DWELLINGS/ INDUSTRIAL AREAS/ CENTRES.....	1
1.5	SURFACE TREATMENTS.....	2
2.0	INTERNAL ACCESS	2
3.0	REAR LOT ACCESS	2
3.1	RESIDENTIAL AREAS.....	2
3.2	INDUSTRIAL AREAS	4
4.0	STEEP LOTS	5

Page left blank intentionally



1.0 VEHICULAR CROSSINGS

1.1 GENERAL REQUIREMENT

Access to all allotments/dwellings should be functional and safe and should be of such strength as to not impose a future liability to the owners. Engineering plans should indicate location and standard driveway type. **Water services (hydrants or valves) are not permitted on driveways.**

1.2 GRADES

Unless approved otherwise by Council, grades of vehicular crossings should comply with the desired grades shown in **Standard Drawings UMS 224 and UMS 225**. Where the crossfall of the driveway is severe and embankments are steeper than 1V:4H, consideration should be given to providing retaining walls.

1.3 DETACHED HOUSES

The vehicular crossings for detached single storey or double storey houses in low density residential and rural areas should comply with **Standard Drawing UMS 223**. The minimum driveway width (excluding apron tapers) should not be less than 2.5 m. However the maximum widths should be limited to 4 m for a single car accommodation facility and 5 m for a double car accommodation facility. In narrow residential streets (ie pavement width of 5.5 m or less), the driveway should be at least 5.5 m wide at the channel invert (by adjusting the apron tapers accordingly) to facilitate access when vehicles are parked across the road or from speed control devices.

1.4 MULTI-UNIT DWELLINGS/ INDUSTRIAL AREAS/ CENTRES

Vehicular crossings conforming to **Standard Drawing UMS 221** apply to the following locations:

- Low-medium, medium and high density residential areas.
- Industrial areas.
- Multi-purpose and special purpose centres.
- Group title access ways.

The location and type of driveway appropriate for a development should conform to the requirements of the Transport, Access, Parking and Servicing Planning Scheme Policy of the *City Plan*. Existing redundant vehicular crossings should be removed and the footpath reinstated.



1.5 SURFACE TREATMENTS

As pedestrians will also use the driveway across a verge, the surface should have an acceptable slip and skid resistance standard in accordance with *Reference Specification S150 Roadworks*. Broom finished concrete, segmental pavers and stencilled concrete provide good textured finish and are preferred. Exposed aggregate, stamped concrete, and the like are generally not permitted. Asphalt is not permitted except in non-urban areas.

Permits from Council and permanent levels will need to be obtained prior to constructing driveways. It should be noted that service authorities will not necessarily replace the driveway with any treatment other than normal concrete if alterations to services require the driveway to be excavated. The installation of spare conduits should be considered for services to be threaded through in the future.

2.0 INTERNAL ACCESS

The geometric requirements of internal access elements (such as circulation roads and aisles) are set out in the Transport, Access, Parking and Servicing Planning Scheme Policy of the *City Plan*. The actual width of the crossing into the site and internal layout should be approved by Council. The pavement should be designed for a nominal traffic loading of 1.5×10^4 ESA.

3.0 REAR LOT ACCESS

3.1 RESIDENTIAL AREAS

General requirement

Car tracks are not permitted. Rear allotment access ways (excluding the crossing across the verge) should comply with the requirements of Table B6.1. The specified pavement standard does not apply to poor subgrade where the soaked CBR value is less than 5. Where approved by Council, alternative asphalt pavement may be permitted in non-urban areas under one or more of the following circumstances:

- The concrete construction is visually intrusive.
- The cost of concrete construction is prohibitive for the length of driveway under consideration.



TABLE B6.1
ACCESS REQUIREMENTS TO REAR RESIDENTIAL LOTS
AND RESIDENTIAL GROUP TITLE LOTS

No of dwelling units	Distance from dedicated road	Easement width	Minimum requirements
1-3	≤40m	3.5 m	Grade N25 concrete driveway: 2.5 m wide, 125 mm thick, F72 reinforcing mesh
4-5	≤40m	4.0 m	Grade N25 concrete driveway: 3.1 m wide, 125 mm thick, F72 reinforcing mesh
≥6	≤40m	6.5 m	Grade N25 concrete driveway: 5.5 m wide, 160 mm thick, F82 reinforcing mesh
1-5	>40m	6.0 m	Grade N25 concrete driveway: 3.1 m wide, 125 mm thick, F72 reinforcing mesh Grade N25 concrete passing lane: 2.0 m wide x 6.0 m length, 1 in 2 taper at 60 m centres Alternative* asphalt driveway: 3.1 m wide, nominal traffic loading 1.5 x 10 ⁴ ESA Alternative* asphalt passing lane: 2.0 m wide x 6.0 m length, 1 in 2 taper at 60 m centres
≥6	>40m	6.5 m	Grade N25 concrete driveway: 5.5 m wide, 160 mm thick, F82 reinforcing mesh Alternative* asphalt driveway: 5.5 m wide, nominal traffic loading 1.5 x 10 ⁴ ESA

* Where approved by Council, alternative asphalt pavement may be permitted in non-urban areas.

Vehicular crossing

The crossing from the back of the kerb and channel to the property alignment should comply with Section 1.3 for single detached houses, and Section 1.4 for multi-unit dwellings and group title access ways.

Refuse collection

If the access driveway is trafficked by refuse vehicles, the driveway width should not be less than 5.5 m and constructed to carry a nominal traffic loading 1.5 x 10⁴ ESA. Refer to [Chapter 1 of Part B of this document](#) for details on asphalt and concrete pavements.

Easement

Before constructing the driveway, provision should be made for the services of future house/s. This can be provided by an easement, wide enough (minimum width of 3.5m) for the services to be placed alongside the driveway or by laying conduits under the concrete for the services to be threaded through in the future.



Drainage

Environmental concerns would require that where scour of table drains or embankments can occur, longitudinal kerb/channel should be constructed and surface water directed to a suitable pipe system.

Additional works such as culverts, concrete causeways, stone pitching, etc, may be required if the driveway crosses gullies or watercourses, permanent or otherwise. If rear lot access concentrates runoff onto adjoining properties, then a lawful point of discharge will be required.

The size of the culvert across the access way should provide adequate flood immunity and is determined by several factors including size of catchments, immunity provided by the road reserve fronting the lot and if there is a possible emergency exit route.

3.2 INDUSTRIAL AREAS

General requirement

A minimum 8 m wide pavement should provide access to rear industrial lots. The footpath crossing should comply with **Standard Drawing UMS 221**. Council will determine specific requirements on easement width and pavement standard.

Maximum grades

The maximum grade of the rear lot access strip should comply with the Transport, Access, Parking and Servicing Planning Scheme Policy and the layout should incorporate areas for the safe manoeuvring of vehicles.

Drainage

The design of rear allotment access driveways should consider the natural overland flow and the effect of the driveway on such flows. In order to control surface water, consideration needs to be given to:

- Collection of the surface water via kerbs and piping under the driveway.
- Scour and erosion protection of the driveway embankment.
- Maintenance of table drains and embankments.



4.0 STEEP LOTS

Minimum requirement

For each new allotment, satisfactory vehicular access should be provided. Council's absolute minimum requirement is for a grade 1V in 4H (desirable minimum requirement is 1V in 6H) from the property alignment to reach the building platform by two-third of block depth. Refer to Figure B6.1.

Where it is impractical to undertake earthworks and an embankment higher than 1.5 m remains at the road property alignment, Council would require the construction of a small cut-off wall along the full frontage and driveway returns.

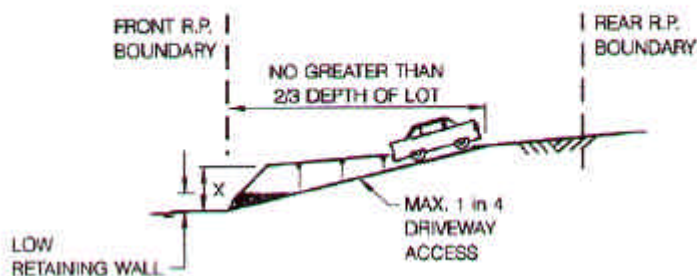


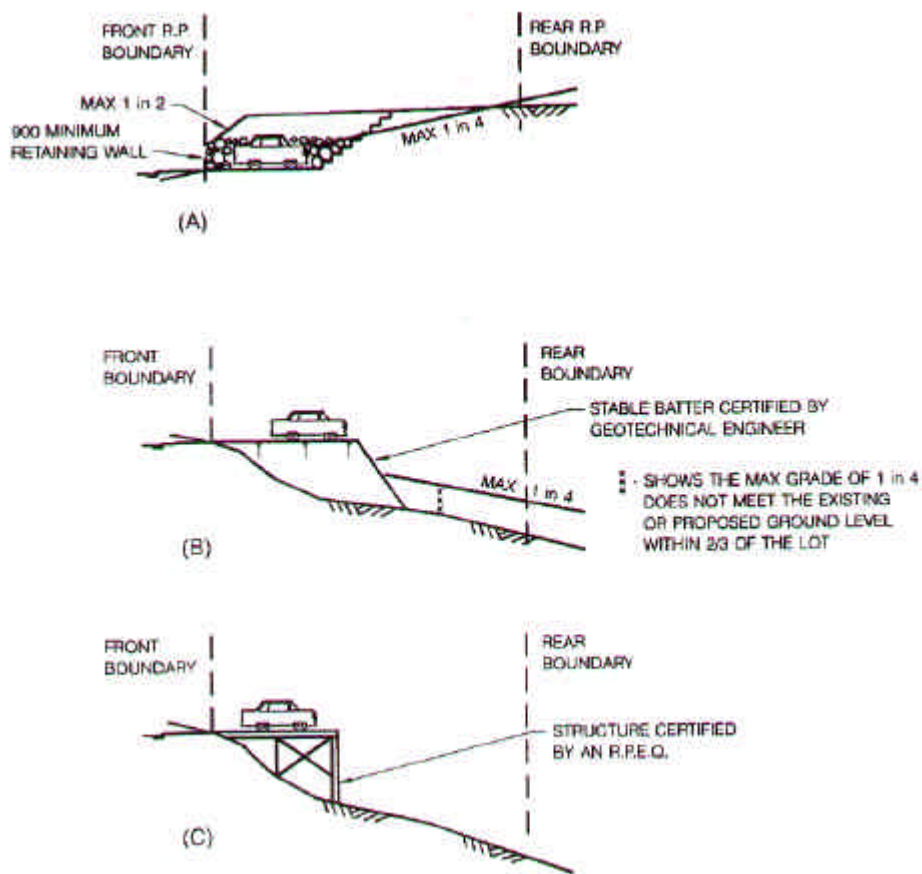
FIGURE B6.1
DRIVEWAY ACCESS FOR STEEP LOTS (NEW SUBDIVISIONS)

Alternative off street parking

On occasion, Council may consider an alternative treatment as per Figure B6.2 when conventional access cannot be obtained. These include:

- Area for a vehicle cut into the lot at road level and retaining walls constructed.
- Area for a vehicle filled on the lot with structurally stable batters.
- Structural elevated platform provided for a vehicle.

Any alternative designs should be approved by Council.



**FIGURE B6.2
ALTERNATIVE STRUCTURED OFF STREET PARKING**