

WORKS

W 5.2 Crossovers

<i>Responsible Department</i>	Engineering Services
<i>Resolution Number</i>	C.2995
<i>Resolution Date</i>	19/04/2017
<i>Next Scheduled Review</i>	2019
<i>Related Shire Documents</i>	Street Tree Policy Verge Management Policy
<i>Related Legislation</i>	Local Government Act 1995

OBJECTIVE

- To provide design criteria that is uniform and practical;
- To provide safe access for vehicle and pedestrian traffic with minimal impact to road infrastructure assets and streetscape aesthetics;
- To ensure best practice for storm water management;
- To outline compliance requirements for subsidy eligibility.

SCOPE

This Policy applies to the construction of all new crossovers, and the modification to an existing crossover for the purpose of accessing a property within the Shire of Northam.

POLICY

Introduction

Approval must be sought and obtained from the Shire of Northam for crossovers prior to the commencement of any construction. The design and construction requirements outlined in this Policy have been developed in reference to the "WALGA Guidelines and Specifications for Residential Crossovers", with minor variations made to suit local conditions.

Crossover Subsidy

The property owner shall be eligible for a 50% subsidy (*to a maximum value of \$800 for a new crossover without culvert or to a maximum of \$1500 for a new crossover with new culvert & headwall*) for the construction cost of a **Standard Crossover (*)** provided the following compliance criteria has been met:

- The crossover has been constructed in accordance with Shire of Northam requirements and has received approval prior to construction.
- Where vehicle crossover prevents stormwater flow within the table drains, a culvert including headwalls must be provided.

This payment is subject to the construction of the crossover being completed within six (6) months of the approved application, also following inspection and confirmation of compliance.

() Shire defines a standard crossover as that detailed on Standard Drawing No. ES-SD-CR-003.*

Crossover subsidy will not be available for gravel crossovers without a culvert.

Number of Crossovers

One crossover per single title property is permitted with the following exceptions subject to Executive Manager Engineering Services approval;

- Properties located on street corners;
- Rural properties, such as farms,
- Group dwellings and non -residential areas where additional crossovers have been approved as part of a planning application.
- Properties which require a second access for off street parking on private property.

In these cases assessment of a second crossover request will give consideration to the following:

- A second crossover does not obstruct sight distance of the primary crossover.
- A second crossover does not have obstructed sight distance by verge vegetation, structures or road geometry;
- Footpath pedestrian users are not at any additional safety risk;
- The property is not group rated where single titles apply.

In the case where a second crossover is approved, no crossover subsidy will be provided.

Vehicle crossovers that are no longer required, or no longer connect with an internal driveway or parking area may be required to be removed at the discretion of the Executive Manager Engineering Services and at the cost of the property owner.

Footpaths

All crossovers proposed to be built on a verge which is identified to have a footpath constructed by Council must be constructed in a material that is approved by Shire of Northam.

When the Shire constructs new footpaths that intersect existing crossovers the footpath will not be constructed through the crossover unless:

- The crossover is not built to the Shire's specification;
- The crossover will inhibit the footpath being constructed to relevant standards and guidelines;
- In the opinion of the Shire the Crossover is unsafe or does not provide a fit for purpose use.

Street Trees

Crossovers should not be constructed closer than 1.5 metres from the base of the tree when fully mature.

Any damage caused to crossovers by street trees shall be rectified by the Shire of Northam at their own cost unless:

- The crossover has been built closer than 1.5 metres to the tree;
- The tree has been planted without permission from the Shire of Northam;
- The damage caused by the tree is not considered by The Shire of Northam to be a safety hazard, or affect the structural integrity of the crossover (where applicable).

In these cases the cost to rectify will be borne by the property owner.

Crossover Maintenance

The property owner is responsible for the maintenance of crossovers. Any footpath that intersects the crossover will be maintained by the Shire of Northam.

Conflict with Asset Infrastructure

Any relocation or amendment cost to Shire owned assets and underground services resulting from the construction of the proposed crossover will be borne by the property owner.

SPECIFICATIONS

Rural Access

Acceptable Material:

- Compacted Gravel - min150mm
Gravel material is expected to achieve a compaction to 98% of maximum dry density, making a total minimum consolidated thickness of not less than 150mm. Gravel must be free from stones retained on a 25mm sieve, clay lumps, building rubbish and other vegetative matter.

- Two coat bituminous seal – 14/7mm or 10/5mm

Width: 3.0 meters (minimum)
11 meters (maximum)

Drainage: A culvert including headwalls must be provided if the vehicle crossover prevents stormwater flow within the table drains. Reinforced concrete drainage pipes shall be Class “2” unless otherwise required by Council with a minimum diameter of 375mm. Residential culverts are the only culverts that will be considered by the Shire for HDPE pipes. Minimum cover over the pipes must be 300mm.

Taper: 2m at 45 degrees both sides from road edge (optional)

Urban Access

Acceptable Material:

- Concrete - 150mm (Residential) 25Mpa Min Concrete Strength, Steel reinforcing may be used to reduce cracking or increase strength for crossovers that will have heavy vehicles on them.
- Concrete - 150mm reinforced (Industrial & Commercial) 25Mpa Min Concrete Strength.
- Brick Paved - Trafficable 50mm (Residential)
- Asphalt – 30mm
- Two coat bituminous seal – 14/7mm or 10/5mm

Width: 3 meters minimum, 6 meters maximum (residential)
3 meters minimum, 10 meters maximum – (Industrial & Commercial)

Drainage: 375dia (min) Concrete reinforced pipe with (if applicable) Precast concrete headwalls.

Kerbing: Mountable kerb type (if applicable)

Taper: 2m at 45 degrees both sides from road edge (optional)

General Conditions

- All variations to be approved by Executive Manager Engineering Services and paid in full by owner/applicant.
- Maximum dimensions of access apply.
- Crossovers are to be constructed perpendicular to the property boundary with a minimum clearance of 0.75 metres from a side boundary.
- Any alteration to the verge, path or crossover that encroaches onto the land of a neighbouring property will be carried out at the proponents cost. The

applicant must notify the neighbour of the proposed works prior to applying to Council for approval. Council must be provided with a copy of the written agreement from the neighbour with the application for the crossover;

- Approved multiple access to be separated by a minimum of 10 metres at the roadside.
- On corner locations, no crossover, or any portion of the crossover including splays is to be constructed closer than 6.0m from the line of the intersection of the road reserve boundary alignments.
- Crossovers shall be located at a minimum distance to obstructions as follows:
 - Side-entry pits: 1.0m
 - Street trees: 1.5m
 - Utility boxes: 1.0m
 - Street Lights: 1.0m (as required by Western Power's Guidelines for Placement of Power Poles within Road Reserves in Built-Up Areas, 2006)
- If crossovers must be constructed within this distance, the obstruction shall be relocated wherever possible. Where an existing tree is within 1.5 metres of a proposed crossover, advice shall be obtained from Parks and Gardens Administration on the future size of the tree and the advisability of it being retained. The written approval of the Shire is required for all street tree removals;
- Sufficient storage length must be provided (crossover length) for a vehicle to stand clear of the carriageway. Where the entrance has a gate, the set back from the edge of the carriageway to the gate shall be a minimum of 6m to allow for this.
- Path construction guidelines dictate a maximum crossfall of 2.5% to cater for people who have a disability (Austroads Guide to Road Design 6A, Clause 7.6). To allow the path to shed water and to avoid ponding, a crossfall of 2.0-2.5% is recommended.
- To provide smooth transition from the road edge to the crossover and particularly to the pedestrian path in the most highly constrained situation, the kerb profile must provide 160mm vertical rise from the invert of the kerb, over a 500mm distance. Alternatively a standard mountable kerb profile shall be used.
- Cross fall of the crossover to be such that any storm water falling onto surface will drain off sides into crossover margin which is to be directed to road table drains. No storm water is to flow from crossover directly onto the road surface.
- Narrow lots shall be constructed with paired crossovers to minimise conflict and retain verge space for street trees, lighting, overhead power and on-street parking.
- Where the combined width of residential crossover exceeds 6.0 metres, the two (2) crossovers shall be separated by a minimum 2.0 metres in width, unless specifically approved by the Executive Manager Engineering Services.

- Applicant is responsible for the cost of any traffic management that may be required to ensure the safety of road users, contractors and pedestrians during the construction of the crossover. Only qualified traffic management personnel shall be used and all traffic management shall be in accordance with Main Roads Western Australia's code of Practice "Traffic Management for Roadworks" and Australian Standard AS 1742.3 – 2002.

Specifications & Guidelines

For further information, the Shire of Northam have developed information packages and guidance criteria which outline allowable design and construction standards for crossovers, as well as information on how to apply for the crossover subsidy.