



### **Information Sheet Residential Crossovers**

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#### Introduction

A crossover is the extension of a driveway from the edge of the property boundary to the edge of the road. Its primary function is to provide access for vehicles across the verge which forms part of the road reserve.

The purpose of these Guidelines is to provide information to residents in relation to the design and construction of a crossover. These guidelines have been developed by the Shire to ensure that each crossover:

- Is of a uniform standard;
- Ensures a safe entrance and exit to the property;
- Reduces the flow if storm-water entering private property;
- Provides a safe and even surface for pedestrians;
- Reduces any negative impact on other infrastructure in the road reserve or surrounding area;
- Maintains and/or improves the streetscape.

#### **Overview**

This document is designed to assist property owners and contractors in the construction a crossover that complies with Shire of Capel specifications.

All crossovers require competition and submission of an application from, by or on behalf of the current property owner.

No crossover is to be commenced until Shire approval (with or without conditions) is granted.

The location and size of the crossover must comply with the specifications provided in this document.

Subdivision and Commercial crossovers do not require an application form, these will be reviewed though the development/subdivision application process. They may require engineering drawing. An upgrade of an existing commercial crossover will require a written approval by the Technical Engineering Department.

#### **Procedure**

- 1. Read the following statement and specifications
- 2. Complete the application form including a sketch/drawing and submit to Council
- 3. Council will respond with their decision.
- 4. Construction of crossover may commence only after approval has been granted.
- 5. Inform Council upon completion of your approved crossover.
- 6. Council will register the completed crossover on the property record. Payment of contribution may be approved in eligible cases.

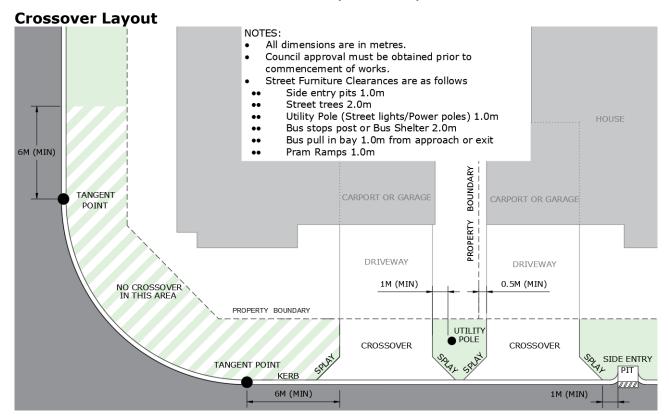
#### Design (Planning)

As driveways and crossovers are connected, both are subject to the requirements of the Residential Design Codes of Western Australia (R-Codes) and Residential Development Local Planning Policy.

Where a driveway and associated crossover does not comply with these requirements, a Development Application is required.

#### Width of Crossover

- minimum of 3.0m
- maximum width of 6.0m for residential lots (as per R-Codes)
- Multiple crossovers in total no greater than 9m for any one property.
  - See Multiple Crossover for further details
- Road fronting highways will have to comply with Main Roads Standards and approvals.
- Rural property may be permitted to have a wider crossover for commercial use.
  - See Non-standard Crossovers (Variations) for further details



#### **Visual Truncation (Sight Lines)**

Except with the approval of Council, no building, wall, fence or other form of visual obstruction greater than 0.75m in height, measured from the natural ground level at the boundary is permitted, within a 3m by 1.5m truncation of a vehicular access way, as per the Town Planning Scheme.

#### **Multiple Crossovers**

Except with the approval of Council, multiple crossovers for residential properties will only be approved where the R-coding is less than R30, and the crossovers would not cover more than 40% of the verge frontage of the property. The total aggregate width of multiple crossovers is to be no greater than 9m.

#### Storage of Caravans, Boats or Trailers

Ancillary vehicles such as caravans, boats & trailers shall be located entirely within private property.

#### **Non-standard Crossovers (Variations)**

Any non-standard crossover requires Shire approval and applications will assessed on site specific criteria such as the existence of paths, sightlines, topography, road activity, amount of adjoining verge already paved, and impact on public amenity.

Where a driveway and associated crossover does not comply with state planning requirements, a Development Application is required. Development Application fees may apply.

#### **Crossover Maintenance**

The ongoing maintenance and upkeep of crossovers is the financial and practical responsibility of the property owner. Council does not accept any costs associated with any repairs, unless the repairs are required as a direct result of action by Council or its contractors.

#### **References and Guidelines**

This document provides a standard for crossover design that references Statutory and best-practice Guidance documentation including the following:

- Austroads Guide to Road Design
- Australian Standards AS2890.1:Off-street parking (2004)
- IPWEA Guidelines for Driveway Crossovers
- Main Roads Standard Drawings for Driveways
- Planning WA Liveable Neighbourhoods
- State Planning Policy 7.3 Residential Design Codes (R-Codes)
- WALGA Crossover Guidelines

#### **Appendix 1 - Technical Specifications**

#### Important information for your contractor

During construction the contractor shall ensure no damage is caused to the Shire of Capel's roads, footpaths (footpath not to be removed unless replacing broken panels), drainage infrastructure, kerbs, pram ramps and verges. Damage may result in the repairs being carried out by the Shire of Capel at the property owner's expense.

#### **Footpaths**

During the construction of the crossover, if a footpath exists, it should be kept open to pedestrians in a safe manner and adequate signage or barricades placed to ensure pedestrian safety.

#### Levels

The crossover should be constructed to tie into existing verge levels, including existing footpaths. A cross-fall of 2% is desirable but up to 5% is acceptable. If unsure please contact Shire of Capel to obtain correct levels. No existing footpath shall be removed without written approval from Council.

#### **Splays**

Crossover splays are to be 1.5m wide  $\times$  1.5m long. Alternatively a radius of 1.5m for residential can be used. On request and approval splays can be reduced to an absolute minimum of 1.0m wide  $\times$  1.0m long.

#### Construction

Crossovers must be constructed by suitably qualified contractors to the specifications below.

The crossover must be constructed from new materials.

#### **Base Preparation**

The base material should be thoroughly moistened and compacted to 95% MMDD (Maximum Modified Dry Density), 7 blows / 300mm (per sand penetrometer).

Acceptable solutions for crossover materials in built-up areas:

#### Rural areas

In rural areas where the road is not kerbed it is recommended that asphalt seal crossovers be installed, but concrete may be approved. The concrete crossover must stop 1m away from the edge of seal and the gap between the crossover and the road must be filled with a 25mm thick asphalt strip.

#### **Gravel Driveways in Rural Areas**

Gravel driveways and crossovers are permitted in rural areas and are to be constructed to standard of the adjoining road surface and conditions as a minimum. Liaise with the Shire of Capel to ensure the correct formation is nominated for each particular site situation.

#### **Open drains**

All crossovers over an open drainage swale must have a 375mm Class 2 reinforced concrete pipe culvert and headwall installed. The property owner shall ensure the pipe culvert is maintained and kept clear of grass and debris where possible.

#### Kerbing

Mountable kerb need not be removed. Barrier and semi-mountable kerb can be removed at the owners cost. New kerbing is to be of equal width of the existing kerb with a 20mm water channel (lip) along the kerb line.

#### Stormwater

Stormwater falling on a driveway within private property shall be retained within that lot by means of soaking and/or storage with a capacity of 1m3 per 100m2 of impervious surface area. Residents within the townsites of Boyanup and Capel with poorly draining soils may allow the water to flow to the road.

#### **Street trees**

Crossover are to be located so as to avoid street trees, or, where this is unavoidable, the street trees replaced at the applicant's expense or re-planting arrangements to be approved by the decision-maker/Shire of Capel.

Driveways must be 2m from existing street trees.

#### **Appendix 2 – Schedule of requirements**

Important information for your contractor

Shire of Canal Crossovers Posidential			
Shire of Capel Crossovers Residential			
Minimum width	3.0m		
Maximum width	6.0m		
Second Driveway or Driveway Widening	9.0m width in total including the first crossover, or 40% of the width of the lot frontage; whichever is less		
Concrete			
Thickness	100mm		
Steel Reinforcement	SL62 mesh		
Concrete strength capacity at 28 days	25 Mpa / 80mm slump		
Brick paving – Kerbed Roads Only			
Paver Thickness	60mm		
Sand Bedding	25mm		
Limestone Sub-Base OR	150mm		
Rock/gravel	100mm		
Asphalt			
Asphalt Thickness	25mm		
Limestone Sub-Base OR	150mm		
Rock/gravel	100mm		
Gravel – Rural/Special Rural Zones only			
Limestone Sub-Base or	•		
compacted Rock/gravel	150mm		
Culvert - Open drain sites only			
Culvert Diameter	375mm with precast concrete headwall		
Depth of top of pipe	300mm (Min)		
Compacted fill	Limestone Sub-Base or compacted Rock/gravel to be compacted 150mm around the culvert		
Liaise with the Shire of Capel to ensure the correct alignment of culvert is achieved			

#### **Application to Construct a Crossover**

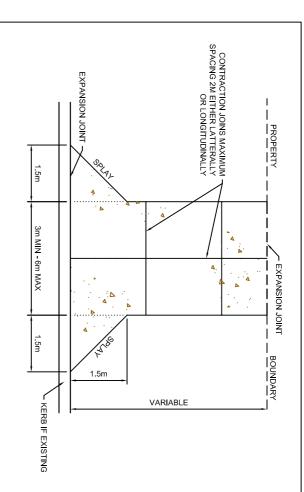
Crossover Property	Details		
Lot Number		House Number	
Street			_
Applicant Details			
Applicant Name			
Postal Address			
Phone	Em	nail	
<b>Crossover Details</b>			
Material Type	□ Concrete □ Brick P	aving $\square$ Asphalt	□ Gravel (rural only)
Is there an open drai	n on the verge?	□ Yes	□ No
Is this the first crosso this lot?	over to be constructed on	□ Yes	□ No
Is this property subjection building/development	•	□ Yes	□ No
If yes, please provide	e relevant numbers		
Proposed Crossover \	Vidth		(m)
Constructed by Estimated Construction Date			
Crossover Site Diag	gram		
Please provide a plan showing the site, noting existing street trees, footpath, public utilities, signage, location and dimensions of the crossover.			
Crossover Requirements			
<ul> <li>It is a legal requirement that approval for all crossover is obtained from the Shire of Capel before they are constructed.</li> <li>Crossover are to be constructed in accordance with the Shires Information Sheet Residential Crossovers (available on the Shire website <a href="www.capel.wa.gov.au">www.capel.wa.gov.au</a>).</li> <li>No works are to commence prior to issue of approval</li> <li>Building &amp; planning approvals do not cover crossover construction</li> <li>It is the responsibility of the owner to engage the services of a competent contractor</li> <li>Crossover works carried out without approval will be deemed unauthorised</li> <li>Subsidies only apply to the first ever crossover installed to access the property or an upgrade from bitumen to concrete.</li> </ul>			
Declaration			
	ccompanying documentation knowledge failure to compl		esult in legal actions

#### **Application for Crossover Subsidy**

#### **Conditions of Subsidy**

- Crossover subsidies only apply to the first crossing installed to access the land and/or an upgrade from a bituminous to concrete or brick paved crossover.
- Crossover subsidies can only be applied for after construction of crossover.
- The crossover contribution form shall be made within 12 months of the crossover being built, with evidence of date provided
- Tax invoices will not be accepted as supporting documentation.
- · Crossover subsidies are a fixed sum of
  - o \$375.00 for the first approved crossover to a property without a culvert; or
  - o \$575.00 for the first approved crossover to a property with a culvert.
- Crossover construction must be approved. Crossover must conform to Shire of Capel Information Sheet Residential Crossovers (available on the Shire website <a href="www.capel.wa.gov.au">www.capel.wa.gov.au</a>).. Nonconforming and/or unapproved crossovers are not eligible for a subsidy.
- Building & planning approvals do not cover crossover construction.
- Only the property owner may apply for Crossover Subsidies. Crossover Subsidies are only payable to the property owner.

Crossover Property Details				
Lot Number	H-	louse Number		
Street				
Applicant Details				
Applicant Name				
Postal Address				
Phone	Email			
Declaration				
I acknowledge the accompanying documentation and understand the Shire's requirement for this application.				
I acknowledge that clot.	I acknowledge that council contribution is only eligible for the first crossover constructed this			
I accept the amount of money contributed by Council is based on Shire of Capel Policy 7.2.  Signature Date/ /				
Payment Details		Office use only		
I would like to be pai	d by	Inspected by		
☐ EFT ☐ Chequ	е	Inspection / /		
Account Name		Inspection Comments		
BSB	Acct No	Records		
Payment Approved (0				
\$	Date /			

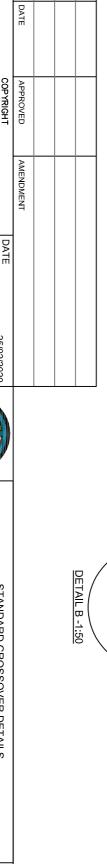


## NOTES

- ON REQUEST AND APPROVAL SPLAYS MAY BE REDUCED (TO AN ABSOLUTE MINIMUM OF 1M X 1M)
- CROSSOVERS SHALL PROVIDE A NON-SLIP BROOMED SURFACE FINISH
- NO EXCAVATED MATERIAL SHALL BE STOCKPILED ON SITE
- EXISTING CONCRETE PATHS IN GOOD CONDITION SHALL NOT BE REMOVED.
- CONCRETE PLACEMENT SHALL CONFORM TO AS1379 (1991) AND AS3600 (1988)
- :: EXPANSION JOINT SHALL BE USED IN THE FOLLOWING
- BOTH SIDE OF AN ABUTTING FOOTPATH AT THE LOT BOUNDARY LINE
- ABUTTING ANY EXISTING KERBING

:::

- **EVERY 6M MAXIMUM SPACING ON LONG SECTIONS** ABUTTING ANY EXISTING PUBLIC UTILITY SERVICE
- **EXPANSION JOINTS TO BE 12mm CANITE STRIP**
- CONTRACTION JOINTS SHALL INSTALLED A MAXIMUM OF 2M SPACING EITHER LATERALLY OR LONGITUDINALLY
- DRAWING TO BE READ IN CONJUNCTION WITH SHIRE OF CAPEL CROSSOVER INFORMATION PACK



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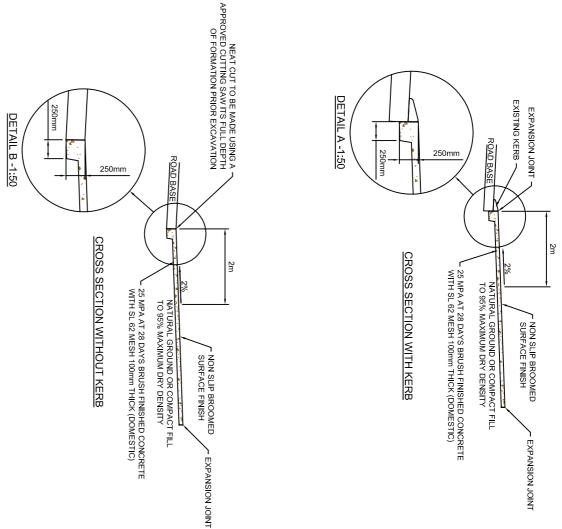
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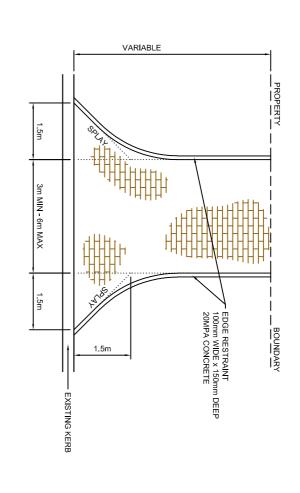
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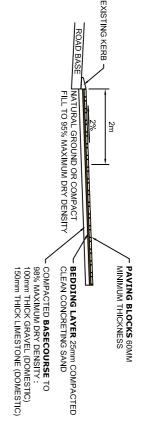
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## CROSS SECTION WITH KERB

- PAVING ONLY ACCEPTABLE FOR KERBED ROADS
- ON REQUEST AND APPROVAL SPLAYS MAY BE REDUCED (TO AN ABSOLUTE MINIMUM OF  $1M \times 1M$ )
- NO EXCAVATED MATERIAL SHALL BE STOCKPILED ON SITE EXISTING CONCRETE PATHS IN GOOD CONDITION SHALL NOT BE REMOVED.
- CONCRETE MASONRY ASSOCIATION PA02 CONCRETE SEGMENTAL PAVEMENTS. BEDDING LAYER SHALL BE WELL-GRADED CONCRETING SAND, FREE FROM DELETERIOUS SOLUBLE SALTS AND OTHER CONTAMINATES, COMPLYING WITH
- PAVING BLOCKS TO COMPLY WITH AS4455 AND AS4456
- CONCRETE SEGMENTAL PAVEMENTS. JOINT FILLING SAND TO BE USED AS PER CONCRETE MASONRY ASSOCIATION PA02
- INFORMATION PACK DRAWING TO BE READ IN CONJUNCTION WITH SHIRE OF CAPEL CROSSOVER

APPROVED E	HERRINGBONE
APPROVED BRICK PATTERNS	TRAFFIC FLOW

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AMENDMENT	APPROVED	DATE	REV

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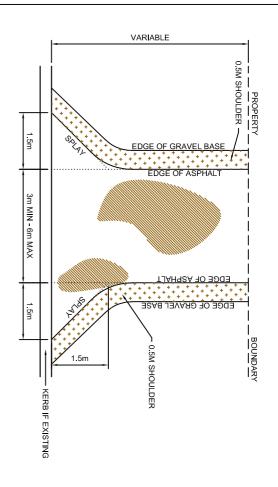
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## NEAT CUT TO BE MADE USING A PAN APPROVED CUTTING SAW ITS FULL DEPTH OF FORMATION PRIOR EXCAVATION ROAD BASE 2m 98% MAXIMUM DRY DENSITY: 100mm THICK GRAVEL (DOMESTIC) 150mm THICK LIMESTONE (DOMESTIC) COMPACTED BASECOURSE TO NATURAL GROUND OR COMPACT FILL TO 95% MAXIMUM DRY DENSITY BLACK **ASPHALT** TO RAC10: 25mm THICK (DOMESTIC)

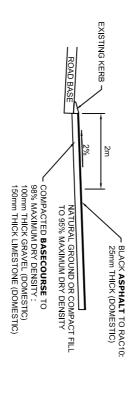
# CROSS SECTION WITHOUT KERB

### NOTES

- ON REQUEST AND APPROVAL SPLAYS MAY BE REDUCED (TO AN ABSOLUTE MINIMUM OF 1M X 1M)
- NO EXCAVATED MATERIAL SHALL BE STOCKPILED ON SITE
- EXISTING CONCRETE PATHS IN GOOD CONDITION SHALL NOT BE REMOVED.
- ASPHALT IN ACCORDANCE WITH IPWEA/AAPA SPECIFICATIONS FOR SUPPLY FINISHING WORKS SHALL BE UNDERTAKEN WHILE THE MATERIAL IS HOT ASPHALT WORK SHOULD NOT BE DONE IN COLD, WINDY OR WET CONDITIONS AS THIN LAYERS OF ASPHALT WILL NOT BE COMPACTED ADEQUATELY. THE
- A GRAVEL SHOULDER OF 500mm WIDE AND 100mm THICK SHOULD BE AND INSTALLATION OF ASPHALT ROAD SURFACING
- DRAWING TO BE READ IN CONJUNCTION WITH SHIRE OF CAPEL CROSSOVER TOP OF THE ASPHALT SURFACE.

PROVIDED AT THE EDGES OF THE CROSSOVER TO FINISH FLUSH WITH THE

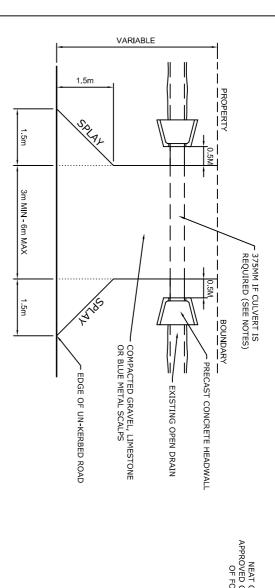
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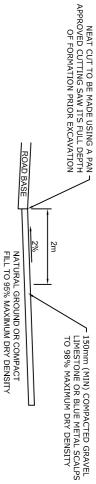


## CROSS SECTION WITH KERB

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# CROSS SECTION WITHOUT CULVERT

## 375mm CULVERT -150mm NATURAL GROUND OR COMPACT FILL TO 95% MAXIMUM DRY DENSITY 120mm 150mm (MIN) COMPACTED GRAVEL LIMESTONE OR BLUE METAL SCALPS TO 98% MAXIMUM DRY DENSITY 300mm (MINIMUM)

# CROSS SECTION WITH CULVERT

## NOTES

- NO EXCAVATED MATERIAL SHALL BE STOCKPILED ON SITE CULVERTS ARE REQUIRED IF THE VERGE HAS AN EXISTING OPEN DRAIN
- CULVERTS ARE TO BE IN ALIGNMENT WITH EXISTING OPEN DRAIN
- DRAWING TO BE READ IN CONJUNCTION WITH SHIRE OF CAPEL CROSSOVER INFORMATION PACK

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