



# CROSSOVERS

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## DOCUMENT CONTROL

Control Version	DATE	Officers	Distribution	Comment
A	02/05/14	Craig Pursey Therese Bell Chris Miller	Shire of Jerramungup	Draft for internal Comment
B	13/07/22	Noel Myers	Shire of Jerramungup	Update
C				
D				
E				
F				
G				
H				

## **AUTHORITY TO APPROVE CROSSOVER**

Section 12 of the *Local Government (Uniform Local Provisions) Regulations 1996* requires approval for a crossover.

## **PERMIT FOR CONSTRUCTION OF A VEHICLE CROSSOVER**

- An 'Application for a Vehicle Crossover Construction' form must be completed and lodged with the Shire of Jerramungup.
- The Permit is valid for a period of twelve months from date of issue.
- Main Roads WA approval is required for Crossovers on South Coast Highway, Borden – Bremer Bay Road and Jerramungup – Gnowangerup Road.
- Separate Department of Water and Environmental Regulation approval may be required where a crossover proposes the clearing of vegetation.

## **CROSSOVER SUBSIDY**

- The Shire of Jerramungup will provide a once only subsidy towards the construction of the first crossover at a property. The payment will be made to the property owner only.
- The Shire of Jerramungup will provide 50% of the total cost of the construction of a compliant crossover up to a maximum amount of \$500.
- To receive a subsidy the completed application form must be lodged at least ten (10) working days before work commences and the constructed crossover must meet the Shire of Jerramungup's minimum requirements as described in the specifications below.
- A receipt of payment for the crossover is required before a subsidy will be paid.

## **CROSSOVER GUIDELINES**

- The specifications (starting at page 4 of this document) set out the minimum standards for the construction of a vehicle Crossover from the edge of the road pavement to the property boundary.
- The Shire of Jerramungup has the power under the *Local Government (Uniform Local Provisions) Regulations 1996*, to make good any non-standard crossover at the property owner's expense.
- The property owner is to liaise with other Government authorities regarding the location of services, relocation of pits and trafficable lids. Any expense incurred will be the property owner's responsibility.
- Redundant Crossovers are to be removed and the kerb, footpaths and verge are to be reinstated to match existing infrastructure.
- No Crossover is to be detrimental to neighbouring properties. For example, the crossover is not to extend across property lines and storm water runoff is to flow away from adjoining properties.
- Damage that may occur to Council's facilities, or to private property, during the course of or arising from works associated with constructing the crossover shall be the responsibility of the property owner who shall be held responsible for the repair, replacement and legal claims.

- For rural roads, sight distances are to comply with Aust Road Standards 6.5.4 Rural Road Design.
- Crossovers with a finished height greater than that of the existing road verge shall be back filled with clean topsoil free from any rocks or vegetation. The grade of backfill shall not impede pedestrian traffic.
- Construction and future maintenance of crossovers is the responsibility of the property owner.

## **NATIVE VEGETATION**

- The Shire of Jerramungup does not support the removal of native vegetation from crossovers unless there are no uncleared areas along the property boundaries that could be used for this purpose.
- Where native vegetation must be removed to accommodate a crossover, disturbance of the vegetation should be kept to a minimum.
- Sight lines that involve the removal of native vegetation should be slashed and tree trimmed in preference to disturbance of soil and tree removal. This allows for retention of vegetation and prevents weed invasion. Clearing for sight lines needs to be kept to a safe minimum.
- Prior to submitting an application for a crossover, the applicant must check with the Department of Water and Environmental Regulation (DWER) that no significant flora is present at the site and provide written clearance from DWER. Declared Rare Flora is protected under the Biodiversity Conservation Act and penalties apply for its unlawful removal. Clearing of native vegetation is not permitted in Western Australia, unless a permit is granted or an exemption applies for purpose of clearing.

## **MAIN ROADS**

- Where a crossover connects the property boundary with a major road controlled by Main Roads WA (South Coast Highway, Borden-Bremer Bay Road, Gnowangerup-Jerramungup Road) then separate approval must be sought from Main Roads WA first.

# VEHICLE CROSSOVER STANDARD SPECIFICATIONS

## Existing Footpath Treatments

Where a footpath already exists on the verge the new crossover must not be to the detriment of the footpath. i.e. the footpath is to remain. However, existing concrete footpaths may require upgrading to the standards shown in drawing X-OVER STD3 with regards to concrete thickness and mesh. Slab footpaths are to be upgraded to concrete to the same standards.

## Existing Kerb Treatment

Where there is an existing mountable kerb the kerb is to remain. Semi mountable, semi barrier and barrier kerbing is to be cut with a diamond saw and removed at the applicants expense.

## Location

- a) Position as shown on drawing X-OVER STD1.
- b) Locate in such a position as not to cause interference to public facilities.
- c) On the verge abutting a corner lot at an intersection, the crossover is to be a minimum of 2m from the truncation.
- d) The crossover is to be a minimum of 1m from the side boundary.
- e) Crossovers are to be constructed at 90 degrees to the kerb line.

## Construction

### a) Levels

- i) The Crossover levels will be as per standard drawing X-OVER STD2
- ii) The crossing at the property line is to have the same longitudinal grade (slope) as the adjacent road.
- iii) Variations of levels must be approved by the nominated officer, must not impede the flow of water or be detrimental to adjoining properties.

### b) Dimensions

- i) The maximum crossover dimensions are:

Residential –	6.0m
More than 3 grouped dwellings -	7.5m
Rural Residential –	6.0m
Commercial -	7.5m
Light Industry -	7.5m
Industry -	10.0m
Rural -	12.0m
- ii) Where two residential crossings abut one another they may be combined into a dual Crossover providing the combined width does not exceed 8m and they meet the approval of the Shire's Engineering Officer. If exceeding 8m the two crossings shall be separated by a 2m pedestrian refuge.

c) Site Preparation

- i) Crossover site shall be cleared of all vegetation, roots, and trees to a depth equal to the depth of the base course. Sub grade formed to the levels and gradients required.
- ii) The sub grade shall be prepared and compacted to achieve uniform compaction and levels.
- iii) Where no kerb is in place, assume that a kerb is in place when establishing levels.

**Materials**

Crossovers in urban areas (ie Residential, Town Centre, industrial and commercial areas) are to be either concrete, bitumen, asphalt or paved.

Crossovers in Rural and Rural Residential areas may be gravel, concrete, bitumen, asphalt or paved.

All crossovers shall meet the requirements shown on drawings X\_OVER STD 1 -6 incl.

a) Bitumen & Asphalt

- i) Where there is existing mountable kerbing it is to remain. Where there is semi mountable, semi barrier or barrier kerbing it shall be cut with a diamond saw and replaced with a minimum 600mm wide x 150mm thick in-situ concrete apron with a 25mm lip at road edge.
- ii) Edging is to consist of 100mm x 25mm minimum F8 structural jarrah with jarrah legs spaced no more than 3m apart and at every end or joint. The legs to be spiked or bolted to edging. Where no internal driveway exists a backboard is to be put in place at the same specifications of the above.
- iii) Minimum bitumen standard is a two coat seal to Australian Standards with a coarse sand finish.
- iv) Minimum Asphalt standard is 25mm thick Hotmix (Domestic) to Australian Standards

b) Concrete

- i) All concrete used shall develop a minimum compressive strength of 25Mpa, slab thickness and mesh requirements as shown on standard drawing X\_OVER STD3.
- ii) Where there is existing mountable kerbing, it is to remain. Where there is semi mountable, semi barrier or barrier kerbing it shall be cut with a diamond saw and replaced with a minimum 600mm wide x 150mm thick in-situ concrete apron with a 25mm lip at road edge.
- iii) The finish shall be obtained by screeding to correct levels (no higher than the existing verge), wood floated or broom finish to provide a non slip surface. The surface shall be free of any depressions, float marks irregularities, honey comb sections or accumulation of fine dust accretions liable to cause excessive wear.
- iv) Joints shall be in the form of a plain dummy joint and finished with an approved joining tool at a maximum 3m centre along the length of the Crossover, at the intersecting line of any existing footpath and down the centre line of all Crossovers wider than 4m.
- v) Full depth expansion joints shall be 14mm wide and filled with a lock joint expansion joint or similar approved material. Joints shall be located at the property line and at junctions with existing kerbing or footpaths.

c) Brick Paving

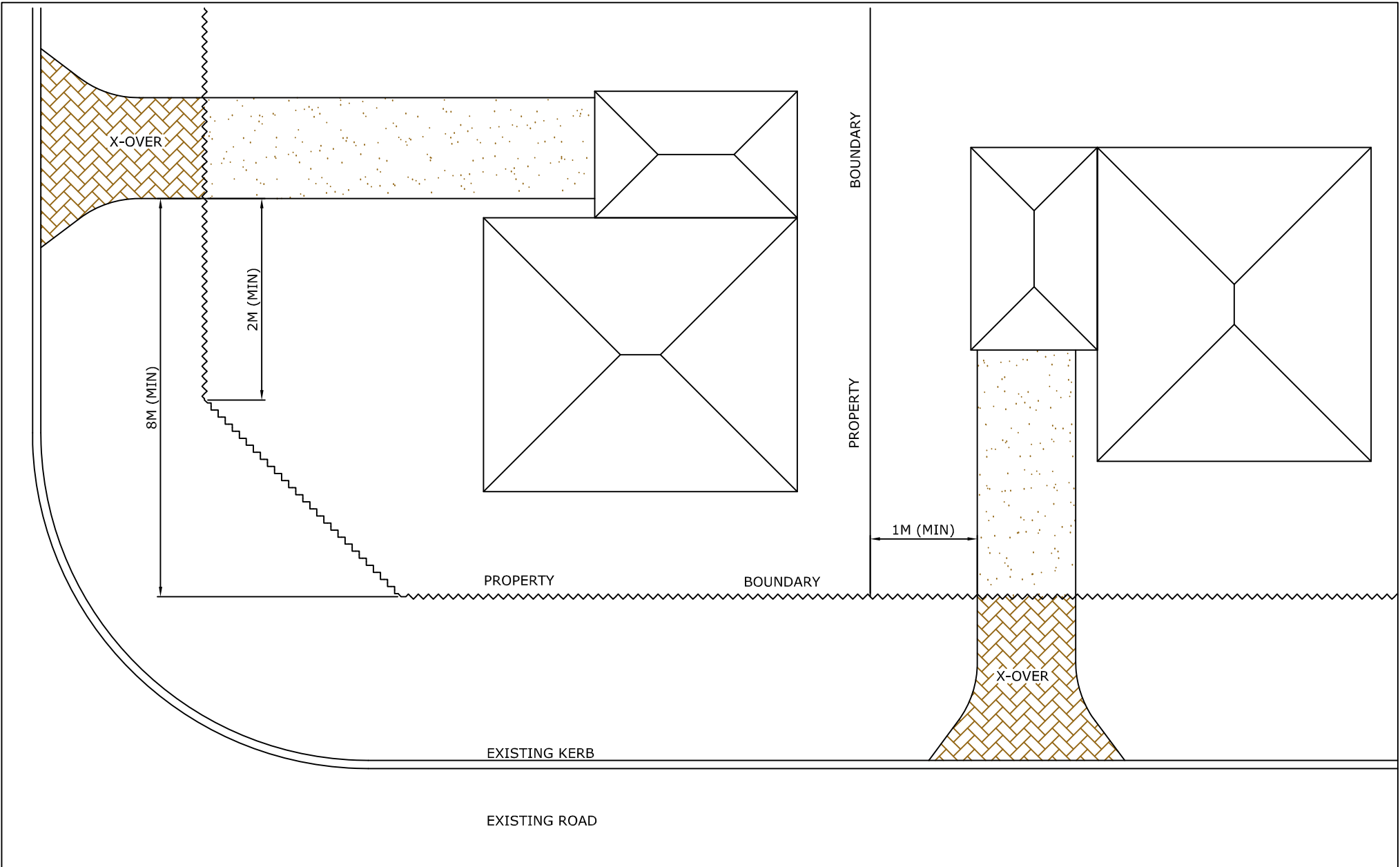
- i) Where there is existing mountable kerbing, it is to remain. Where there is semi mountable, semi barrier or barrier kerbing it shall be cut with a diamond saw and replaced with a minimum 600mm wide x 150mm thick in-situ concrete apron with a 25mm lip at road edge.
- ii) The outer edge of all paving to have a retaining barrier as shown on drawing X\_OVER STD4.

d) Unsealed/Gravel

- i) Unsealed crossovers are to be constructed from 150mm thick (minimum) compacted gravel, limestone or blue metal scalps. All widths shall comply with table b(i) in the construction section of this standard and as per standard drawing X\_OVER STD6.
- ii) If a culvert is required it shall be a minimum diameter of 300mm (unless approved otherwise on site visit due to drain and level requirements) and be installed as per drawing X\_OVER STD6
- iii) If a culvert is installed appropriate headwalls shall be installed at the inlet and outlet of the pipe as per drawing X\_OVER STD6

e) Culverts

- i) Crossovers over an open drain will require pipes and headwalls to be installed at owner's expense. Pipes will be correctly sized by the Shire of Jerramungup.
- ii) Pipe lengths are to be laid with watertight joints in accordance with manufacturer's recommendations and have a minimum cover of 300mm.
- iii) Headwalls of grouted stone or concrete are to be installed at each end and are to be of sufficient standard to prevent any erosion problems.



LREV	LDATE	REV_DESCR	AMENDMENT
No.	DATE	APPROVED	

PROJECT:  
STANDARD CROSSOVER DETAILS

TITLE:  
LOCATION OF CROSSOVER

DATE:  
22/4/2014

SCALE:  
1:150

DRAWN:  
C. MILLER

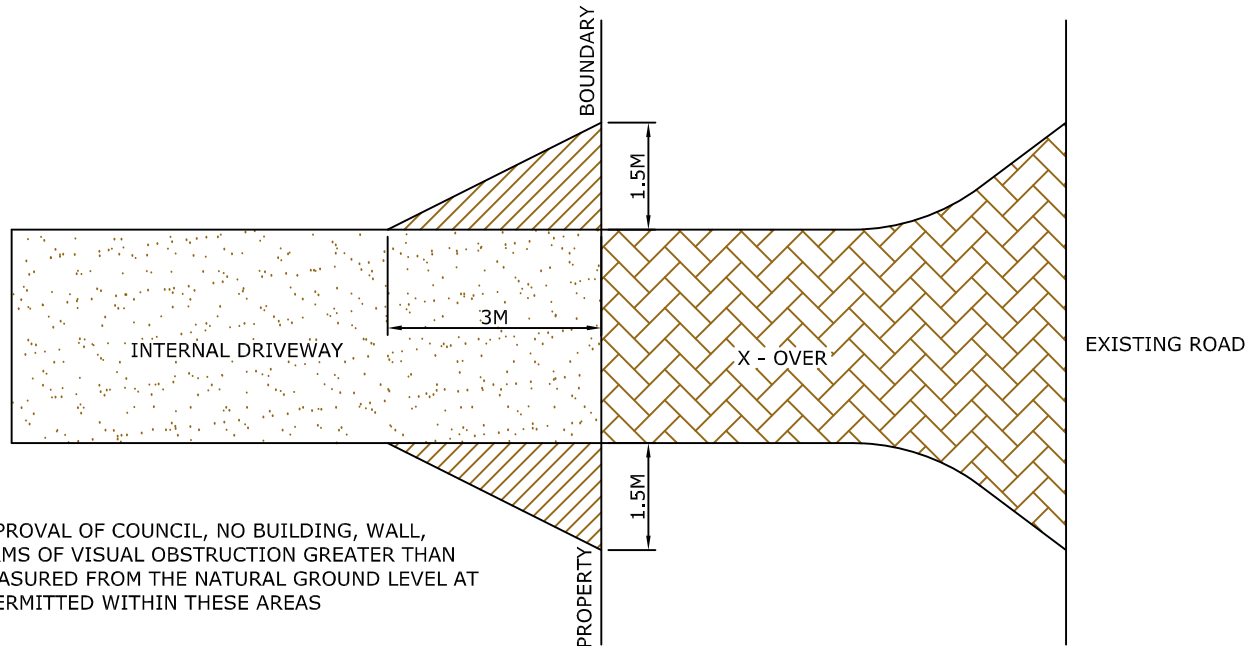
DRAWING NO.  
X-OVER STD1

FILE LOCATION:

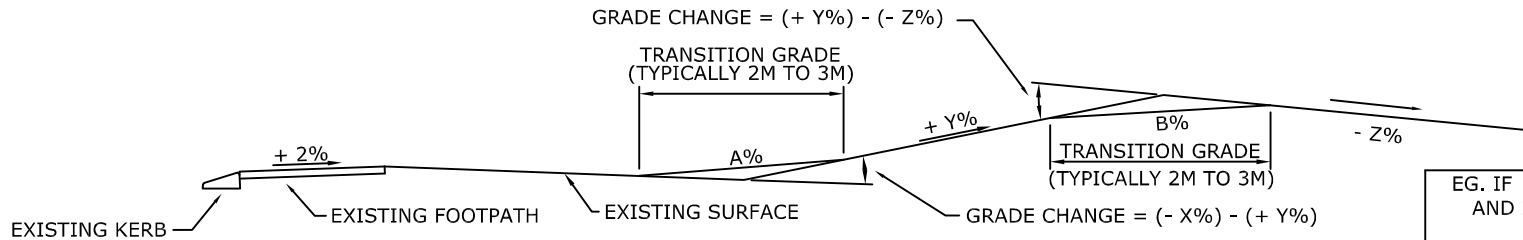
SHEET  
1 OF 6

ISSUE  
REV. 0





EXCEPT WITH THE APPROVAL OF COUNCIL, NO BUILDING, WALL, FENCE OR OTHER FORMS OF VISUAL OBSTRUCTION GREATER THAN 0.75M IN HEIGHT, MEASURED FROM THE NATURAL GROUND LEVEL AT THE BOUNDARY, IS PERMITTED WITHIN THESE AREAS



EG. IF X = -3%  
AND Y = -20%

GRADE CHANGE = (-3%) - (+20%)  
= -3 + 20  
= 17%

THEREFORE TRADITIONAL GRADE  
REQUIRED  
A% = HALF OF 17% = 8.5%

EG. IF Y = +20%  
AND Z = -5%

GRADE CHANGE = (+20) - (-5%)  
= 20 + 5  
= 25%

THEREFORE TRADITIONAL GRADE  
REQUIRED  
A% = HALF OF 25% = 12.5%



LREV	LDATE	REV_DESCR	
No.	DATE	APPROVED	AMENDMENT

PROJECT:  
STANDARD CROSSOVER DETAILS

TITLE:  
VISUAL TRUNCATION AND CHANGES OF GRADE

DATE:  
22/4/2014

SCALE:  
1:100

DRAWN:  
C. MILLER

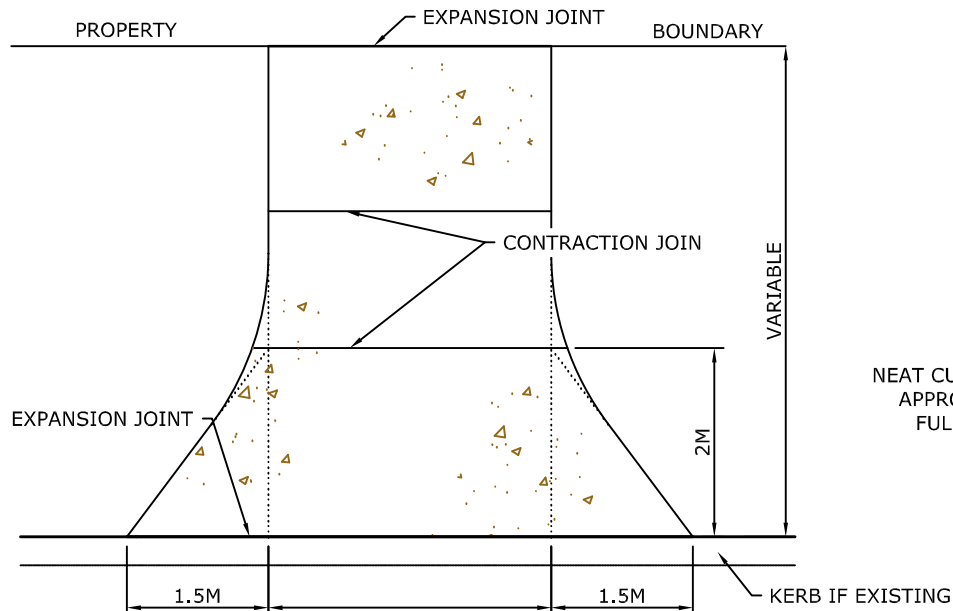
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X-OVER STD2

FILE LOCATION:

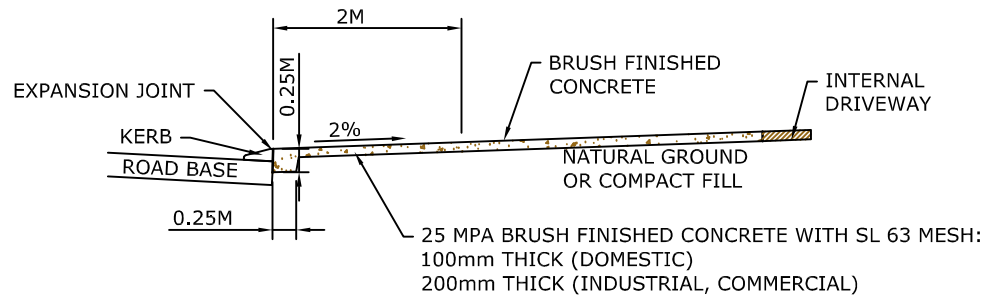
SHEET  
2 OF 6

ISSUE  
REV. 0

**NOTE:  
CONTRACTION JOINTS TO  
BE AT 3M CENTERS (MAX)**

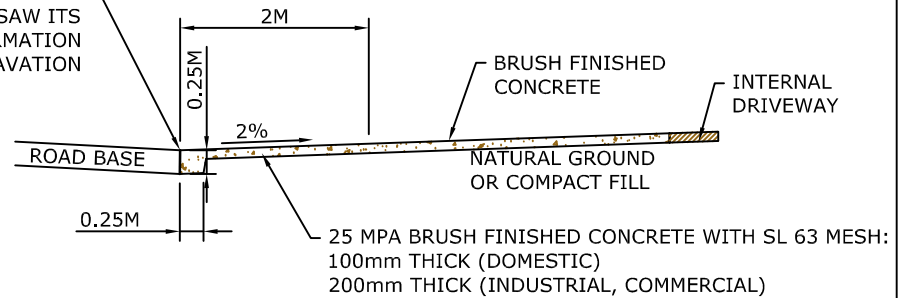


\* FOR WIDTHS REFER TO  
TABLE B(i) IN THE SHIRE  
OF JERRAMUNGUP  
CROSSOVER POLICY



**CROSS SECTION WITHOUT KERB**

NEAT CUT TO BE MADE USING A  
APPROVED CUTTING SAW ITS  
FULL DEPTH OF FORMATION  
PRIOR EXCAVATION



**CROSS SECTION WITH KERB**

**NOTE: IF CULVERT IS REQUIRED  
REFER TO SHEET 6**



L/REV	LD/DATE	REV_DESCR	
No.	DATE	APPROVED	AMENDMENT

PROJECT:  
STANDARD CROSSOVER DETAILS  
TITLE:  
CONCRETE CROSSOVER

DATE:  
22/4/2014

SCALE:  
N.T.S

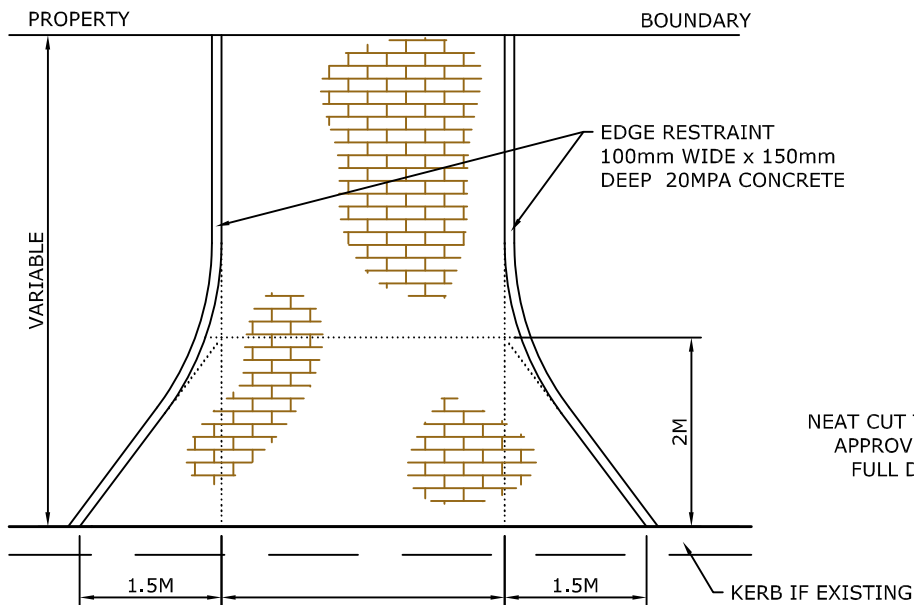
DRAWN:  
C. MILLER

DRAWING NO.  
X-OVER STD3

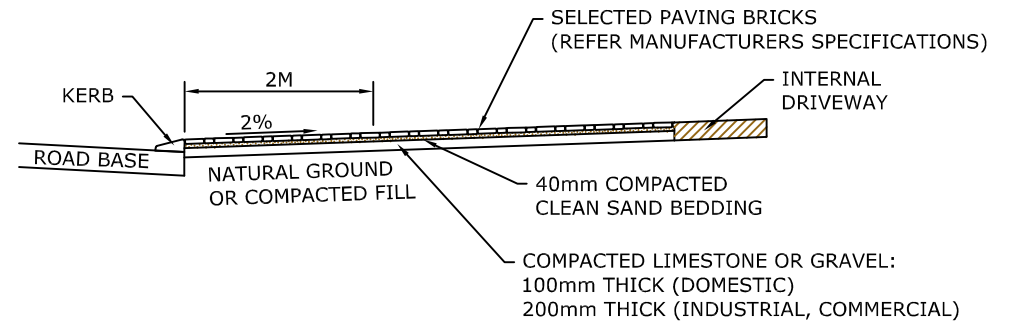
FILE LOCATION:

SHEET  
3 OF 6

ISSUE  
REV. 0

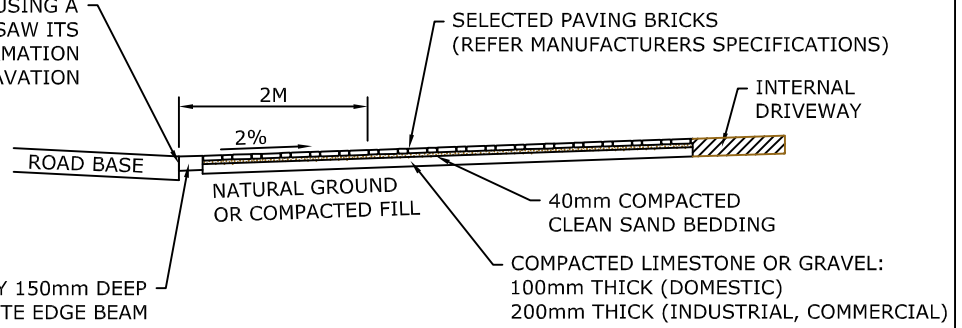


\* FOR WIDTHS REFER TO TABLE B(i) IN THE SHIRE OF JERRAMUNGUP CROSSOVER POLICY



CROSS SECTION WITHOUT KERB

NEAT CUT TO BE MADE USING A APPROVED CUTTING SAW ITS FULL DEPTH OF FORMATION PRIOR EXCAVATION



CROSS SECTION WITH KERB

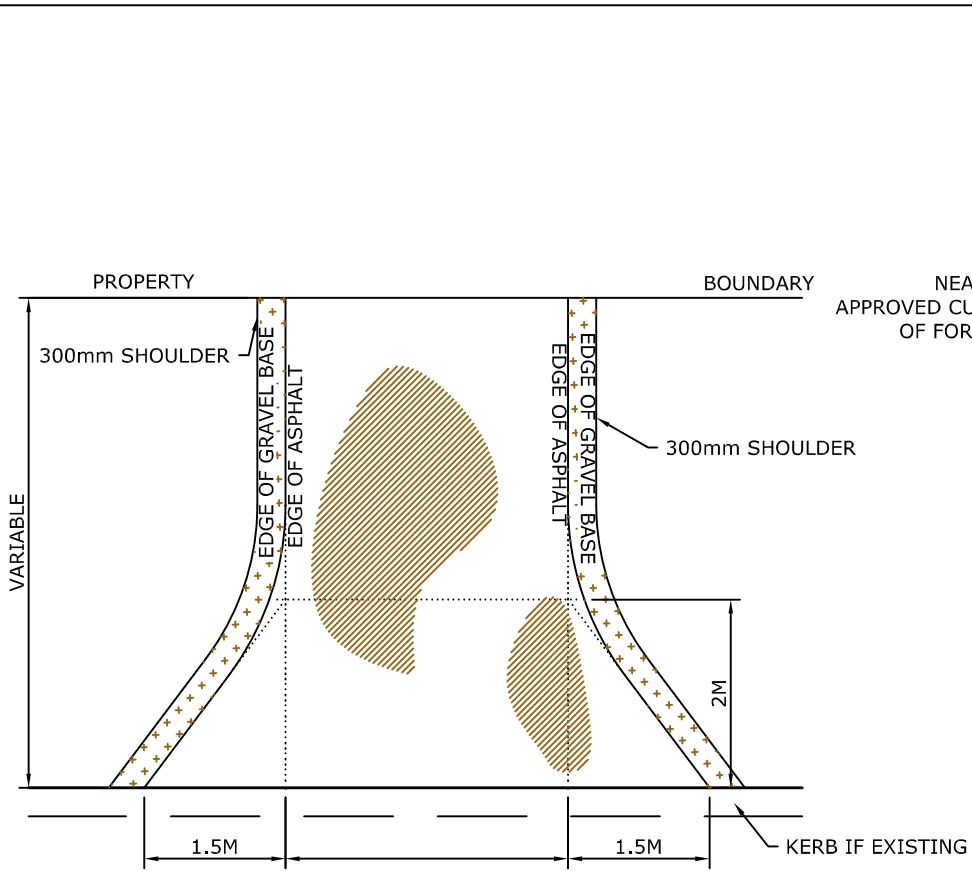
NOTE: IF CULVERT IS REQUIRED REFER TO SHEET 6



LREV	LDATE	REV_DESCR	
No.	DATE	APPROVED	AMENDMENT

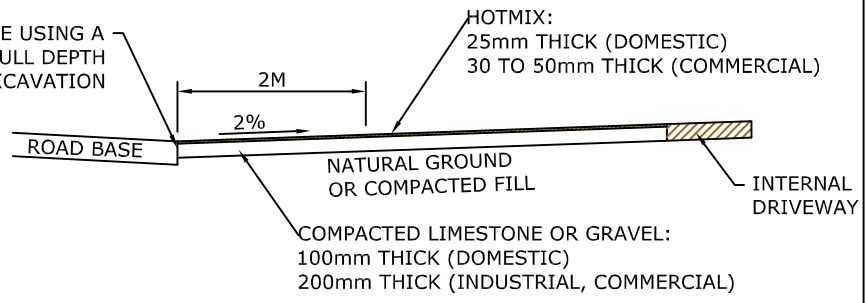
PROJECT: STANDARD CROSSOVER DETAILS  
 TITLE: PAVED CROSSOVER

DATE: 22/4/2014	DRAWING NO. X-OVER STD4	
SCALE: N.T.S	FILE LOCATION:	
DRAWN: C. MILLER	SHEET 4 OF 6	ISSUE REV. 0

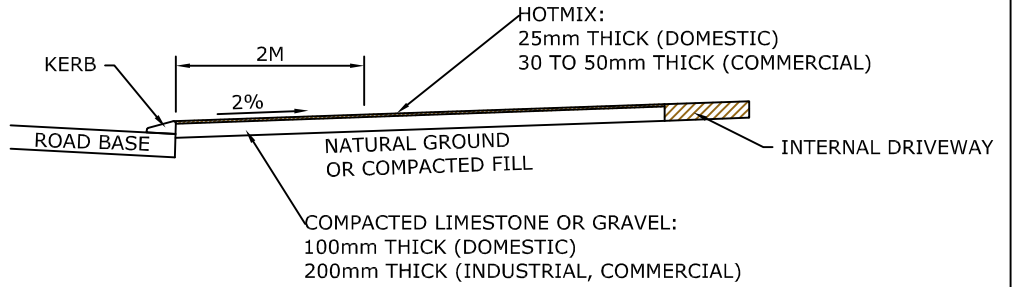


\* FOR WIDTHS REFER TO TABLE B(i) IN THE SHIRE OF JERRAMUNGUP CROSSOVER POLICY

NEAT CUT TO BE MADE USING A APPROVED CUTTING SAW ITS FULL DEPTH OF FORMATION PRIOR EXCAVATION



CROSS SECTION WITHOUT KERB



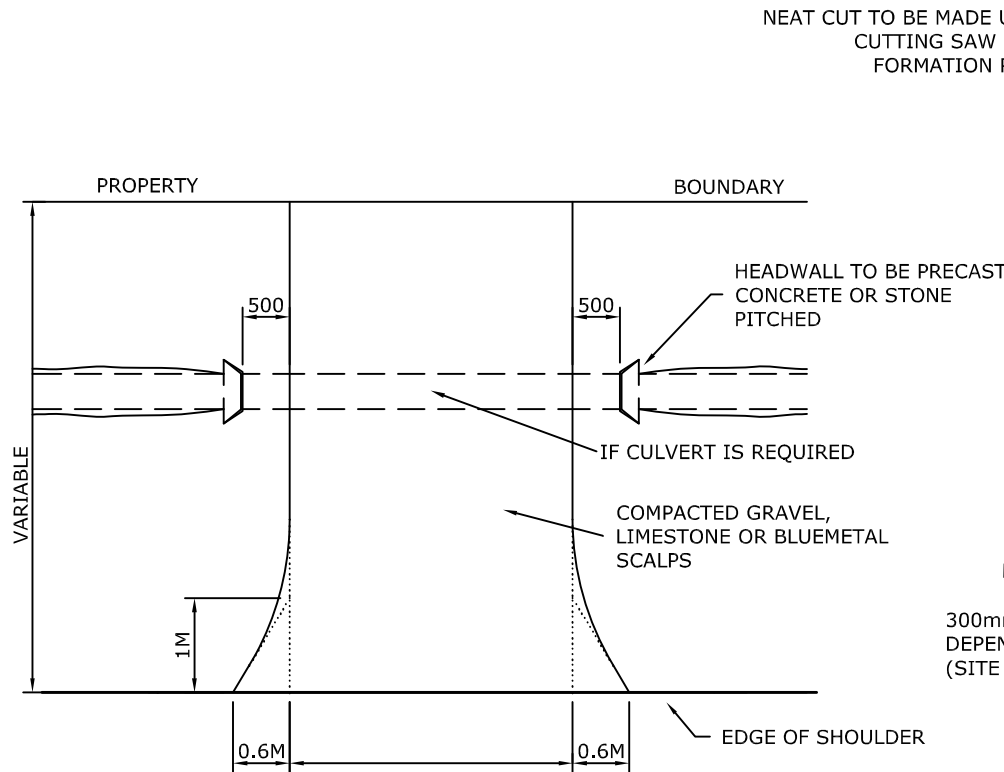
CROSS SECTION WITH KERB

NOTE: IF CULVERT IS REQUIRED REFER TO SHEET 6



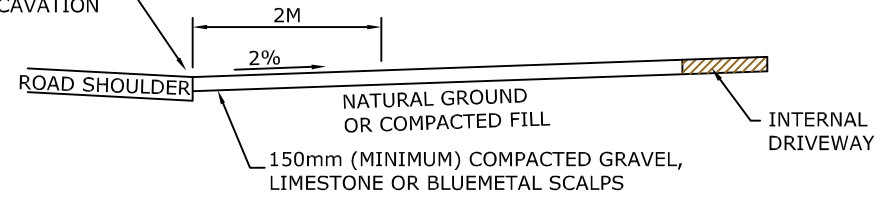
L/REV	LDATE	REV_DESCR	
No.	DATE	APPROVED	AMENDMENT

PROJECT: STANDARD CROSSOVER DETAILS	DATE: 22/4/2014	DRAWING NO. X-OVER STD5
TITLE: ASPHALT CROSSOVER	SCALE: N.T.S	FILE LOCATION:
	DRAWN: C. MILLER	SHEET 5 OF 6
		ISSUE REV. 0

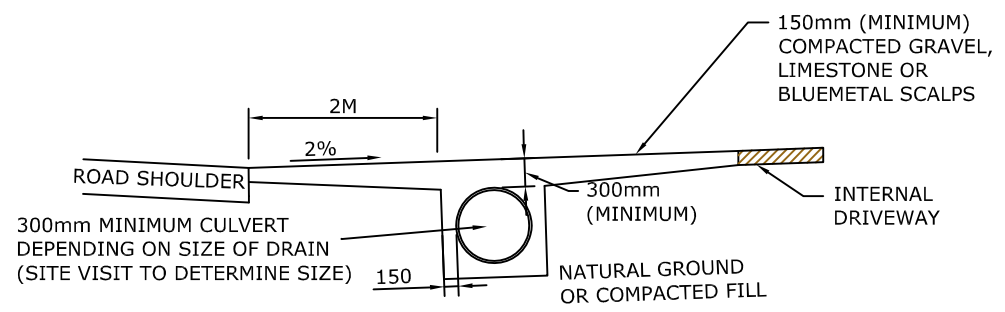


\* FOR WIDTHS REFER TO TABLE B(i) IN THE SHIRE OF JERRAMUNGUP CROSSOVER POLICY

NEAT CUT TO BE MADE USING A APPROVED CUTTING SAW ITS FULL DEPTH OF FORMATION PRIOR EXCAVATION



CROSS SECTION WITHOUT CULVERT



CROSS SECTION WITH CULVERT



L/REV	LD/DATE	REV_DESCR	AMENDMENT
No.	DATE	APPROVED	

PROJECT:  
STANDARD CROSSOVER DETAILS

TITLE:  
UNSEALED CROSSOVER AND CULVERT DETAILS

DATE:  
22/4/2014

SCALE:  
N.T.S

DRAWN:  
C. MILLER

DRAWING NO.  
X-OVER STD6

FILE LOCATION:

SHEET  
6 OF 6

ISSUE  
REV. 0