

Specifications

Construction of Standard Residential Concrete Crossovers

1) SCHEDULE OF REQUIREMENTS:

- a) Depth of concrete - 100mm minimum
- b) Minimum width of crossover at the property line - 3.0 metres
- c) Maximum width of crossover at property line - 6.0 metres
- d) Canite strips 12mm wide by 100mm deep of bituminous impregnated canite material shall be used. Details of material can be found in Section 4.
- e) Splay dimensions guidelines – Typically for a maximum of 6.0m wide crossover, a 1.0m wide by 1.5m deep splay at 90 degrees to the kerb line is required. For narrower crossovers typically less than 6.0m wide, the following table is to apply for splay dimensions:

Width of Crossover	3.0m	3.0m - 4.0m	4.0m - 5.0m	5.0m - 6.0m
Splay Dimensions	3.0m by 2.0m	2.5m by 2.0m	2.0m by 1.5m	1.5m by 1.0m

- f) Verge Gradient - A positive 2.0% grade over at least a distance of 2.5m from the back of the kerb must be maintained. **NOTE:** This may not be achievable in some locations, that being the case the maximum grade can be determined specific to the site requirements and at the approval of the City.
- g) Mountable kerbing or apron kerbing is required to separate the crossover from the carriageway. **(The existing kerb must not be removed or modified without the City's Approval).**
- h) Crossovers must be constructed to meet the kerb line at an angle of 90 degrees.
- i) The minimum compressive strength of the concrete is to be 25Mpa at 28 days.
- j) Surface finish is to be broomed non-slip. The use of exposed aggregate or coloured concrete surface treatments are acceptable.
- k) The crossover must be constructed at least a minimum of 0.5 metre off the side property line. **NOTE:** Splays of crossovers may not overlap adjoining properties' verge area.
- l) Other than major intersections, crossovers must be located at least 6m to a street corner or the point at which a carriageway begins to deviate. (Refer to Figure 1 of the Crossover Guidelines)
- m) Crossovers shall be located at a minimum distance to obstructions as follows:
 - i) Drainage pits, Utility Boxes, Street trees and Street Lights: 1.0m
 - ii) Bus stops and Bus stands: 1.5m

2) CONSTRUCTION:

- a) **Concrete** - Premix concrete shall comply with the requirements of Australian Standard 1379-2007 (or as amended). All concrete used in the works shall develop a minimum compressive strength of 25 Mpa at 28 days and shall be composed of a mixture of screenings, sand and cement to give the strength specified with a maximum slump of 90mm.

All concrete shall have an approved high early strength additive to give rapid hardening.

b) Excavation

- i) The excavation for the crossover bed shall be taken out to the levels, lines and grades as per the standard design shown on standard drawing ES-07-2-4. Excavation shall be cleanly executed, watered and vibrated to give a solid compaction to provide for a sound base free from any deleterious materials giving a minimum depth of 100mm of concrete pavement for residential crossovers.
- ii) All surplus material resulting from site preparation and construction of the crossover shall become the property of the property owner and shall be removed at the owner's expense.
- iii) Where an existing concrete footpath has thickness of 100mm or more, in good condition, and adjacent the lot boundary or kerb line, the crossover shall be constructed either side of the concrete path.

- c) **Placing Concrete** - The base shall be thoroughly and evenly moistened, but not saturated, prior to placing concrete.

Concrete shall be evenly placed to a depth specified and shovelled into position continuously and spaded especially at all edges to give maximum density. No break in operations shall be permitted from time of placing to finishing.

- d) **Finishing** - The finish shall be obtained by screening to correct levels and broom finished to provide a non-slip, dense surface free of any depressions, marks, jointing marks, honeycomb sections or accumulation of fine dusty accretions liable to cause excessive surface wear.

Where required and or where directed, any portion of the surface may be required to be treated with a multi-grooved grooving tool with grooving to be at 200m centres worked parallel to the kerb line to minimise the slipping effect.

A steel trowel finish is not permitted on a vehicle crossing

- e) **Surface Patterns** - The final surface shall be broom finished and non-slip. It should provide a safe route for pedestrians. All expansion joints must comply with concrete vehicle crossing specifications (Refer to standard drawing ES07-2-4).
- f) **Jointing** – Expansion joints shall be full depth joints and filled with bitumen-impregnated canite or similar approved material.

3) GENERAL:

- a) The existing kerbing is not to be removed without the City's prior approval. Kerbing must be reinstated as mountable kerbing or crossover apron kerbing to the City's Specifications (Refer to standard drawing ES-05-1-3).
- b) If a footpath is present within the verge area, the path will continue through the body of the crossover and shall not be removed.
- c) All materials used in the construction of vehicle crossings shall be in accordance with the standard specifications of the Council and any materials used which are inferior to those specified shall be liable to rejection and replacement without payment or compensation being made to the owner.
- d) Any damages that may occur to any City infrastructure or private property during the course of the works or which may subsequently become evident from the operations thereof shall be the sole responsibility of the owner who shall be held responsible for the repair replacement or legal liability.

4) CANITE MATERIAL:

Approved Canite-type material shall be such that when it is subject to compression in hot weather, no concrete is extruded. The following materials are approved and the use of any other material requires the approval of the City.

- a) NON PORITE -Bitumen Impregnated Canite by the cold solvent process
- b) FOSROC EXPANDITE
- c) MELJOINT

5) CONTRIBUTION:

If it is a first crossing constructed on the property or is the replacement of a bitumen crossover to concrete or brick paving material, the City may contribute towards the cost. The Subsidy Payment form for First/Replacement of Vehicle Crossings can be found on the City's webpage and is required to be completed once the works have been carried out. Application for a subsidy payment must be made on the prescribed form within 6 months of the date it was constructed and is to be accompanied by proof of pavement (invoice or delivery docket). **NOTE:** The rebate payment will be provided once the application form has been approved and the crossover is deemed to be compliant.