



# Construction of Gutter Crossings and Footpath Crossings Information and Specification

## A. GENERAL INFORMATION

1. Under the *Roads Act 1993*, property owners are liable for all costs associated with the construction, maintenance and repair of a vehicular access between the road pavement and property boundary line.
2. Council will permit owners or their contractors to construct standard concrete layback crossings in the existing kerb and gutter in accordance with Council's Plan 2004-004. Refer **Attachment A**.
3. All gutter bridge crossings and all 300mm pipe gutter crossings must be constructed by Council at full cost to the owner of the property served.

Where there is no kerb and gutter existing, all layback gutter crossings must also be constructed by Council at full cost to the owner of the property served.

4. Driveway crossings are not to be constructed unless an approved gutter crossing already exists.
5. Where an approved gutter crossing exists or has been constructed as above in Condition 2 and/or Condition 3, Council will permit the construction of vehicular crossings across the footway and/or verge between the gutter crossing and the property served in accordance with the specification contained herein:
6. Conduct a 'Before You Dig' search on the location of services in the nature strip and road reserve. Refer to the Before You Dig Australia website [www.byda.com.au](http://www.byda.com.au)
7. Separate approval from NSW Roads and Maritime Services is required for any work on a classified road, including driveways. Contact the RMS Land use Planning and Assessment Manger to ascertain their requirements.

### **CROSSINGS NOT CONFORMING TO THIS SPECIFICATION ARE NOT APPROVED AND COUNCIL:**

- a) **Will not accept** any liability for the death or injury to any person or damage caused to any thing due to the existence of the non-approved crossing.
- b) **May require modification, removal or replacement** of the crossing at full cost to the owner at any time.
- c) **Will not reinstate** any damage caused to the crossing by any public utility, authority or other person.
- d) **Will record that a non-standard crossing has been provided**, and this information will be shown in any future *Section 603 Certificate* issued in connection with the property.

## 6. Standard Requirements

- a) The **MINIMUM WIDTH OF ANY ACCESS CROSSING AT THE KERB LINE SHALL BE 3.7 METRES** in residential areas and 5-metres in commercial areas.  
Refer Plan 2004-004 – **Attachment A**
- b) The maximum width of any access crossing at the kerb line shall be 6-metres in residential areas and 7-metres in commercial areas.  
Refer Plan 2004-004 – **Attachment A**
- c) **The road surface shall be removed for a minimum width of 300 millimetres from the proposed gutter lip with a sawcut edge for the full length of the works.**
- d) The number of crossings permitted shall be one to each property with frontages up to 18-metres and two (2) where these frontages exceed 18-metres, with a minimum of 7-metres between crossing wings, pipe headwalls or bridge gutter crossings. However, the location of existing trees, utility services, etc, may preclude the installation of two (2) crossings. Any request for reconsideration of this condition must be made in writing and include reasons as to why Council's minimum standard should be varied.
- e) Driveway crossings shall be constructed at right-angles to the kerb and gutter or centre-line of the road wherever practicable. In special circumstances, including the need to avoid trees and other obstructions on the footway, and subject to the prior written approval of Council, this angle may be reduced to not less than 60° to the kerb and gutter or the centre-line of the road.
- f) Where a concrete footpath exists at the driveway, it shall conform to the Specifications B 2a) and B 2b) as listed in the following page.

## 7. Levels

- a) i) Construction levels will be supplied by the Driveways Engineer in writing following lodgement of a request and **payment of the fee** at Council Chambers. Levels must be strictly adhered to otherwise Council cannot guarantee reasonable access to the property. **NO CONSTRUCTION SHOULD BE UNDERTAKEN PRIOR TO OBTAINING LEVELS AND FORMWORK INSPECTIONS WILL NOT BE CARRIED OUT UNLESS LEVELS HAVE BEEN ISSUED AND THE CURRENT FEE PAID.**
- ii) **FOR ANY ADDITIONAL FORMWORK INSPECTIONS AFTER THE INITIAL INSPECTION THERE WILL BE A FURTHER CHARGE PER INSPECTION. THIS PAYMENT IS TO BE RECEIVED BY COUNCIL PRIOR TO THE REINSPECTION.**
- b) Any change of slope of the vehicular access at the property boundary and/or within the property should be designed to provide access without vehicles scraping. This, and the slope of the driveway within the property, are matters for determination by the owner and for which Council cannot accept any liability.
- c) The driveway at the road alignment (property boundary line) **IS NOT TO BE CONSTRUCTED HORIZONTAL. IT IS TO FOLLOW THE GRADE OF THE ROAD.**

## 8. Inspection

**INSPECTIONS WILL ONLY BE CARRIED OUT BETWEEN 8.30 AM AND 3.00 PM, MONDAY TO FRIDAY.**

**24 hours confirmed notice** must be given to Council prior to any inspection.

Pouring of any material is not to proceed until the inspection is complete and approval has been given.

## B. SPECIFICATION

**THESE ARE THE ONLY APPROVED CONSTRUCTED GUTTER AND FOOTWAY CROSSINGS ALLOWED IN KU-RING-GAI COUNCIL AREA.**

1. All works shall be completed to the satisfaction of the Director Operations.

**A SEALED FOOTPATH CROSSING WILL NOT BE APPROVED WHERE NO APPROVED GUTTER CROSSING EXISTS**

2. Alternative specifications which may be used for the footpath crossing are as listed in a) to d) below. No other material will be approved.

**ONLY BITUMINOUS TYPE FLEXIBLE SURFACING** is authorised on the road carriageway side of the gutter crossing, i.e. concrete or paving is **not** approved on the road shoulder.

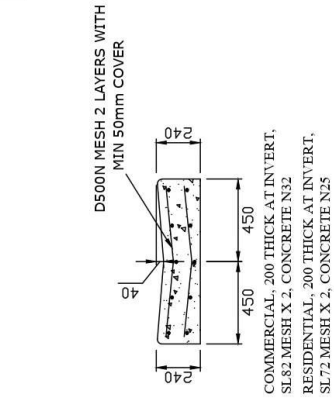
The alternatives are:

- a) Crossings in **NATURAL CONCRETE** shall be 130mm THICK ready mixed concrete reinforced centrally with a minimum of one layer of F72 REINFORCING FABRIC. Concrete strength shall be 25 MPa at 28 days and the surface finish shall be a broomed or wood float finish. Expansion jointing shall be placed to the full depth of the slab against existing dish crossings and at the boundary line and dummy joints are to be provided either side of the footpath where a concrete footpath exists. Expansion jointing material shall be approved bituminous material not less than 10mm thick.
- b) Crossings in **COLOURED CONCRETE** shall be as in a) above and ***shall be subject to conditional approval***. Colouring admixtures shall be incorporated in the structural mix and shall not be applied as a surface topping. **No colour sealant to be applied on the driveway crossing.** Owners should note that in the event of the coloured crossing being damaged, or disturbed by an authorised person or utility authority, reinstatement of the disturbed section of crossing will be limited to natural (white) concrete. **Reinstatement of the crossing in coloured concrete shall be the responsibility of the property owner and this is a condition of approval for the installation of coloured concrete.**
- c) Crossings surfaced with **HOT BITUMINOUS ASPHALT** shall comprise a 10mm grade asphaltic concrete surface course with a minimum compacted thickness of 30 mm placed over a 100 mm minimum compacted thickness of 20 mm fine crushed rock placed on a thoroughly compacted subgrade without loose material or soft spots. Fine crushed rock shall be watered during compaction and finished to a dense even surface prior to the application of the surface course.

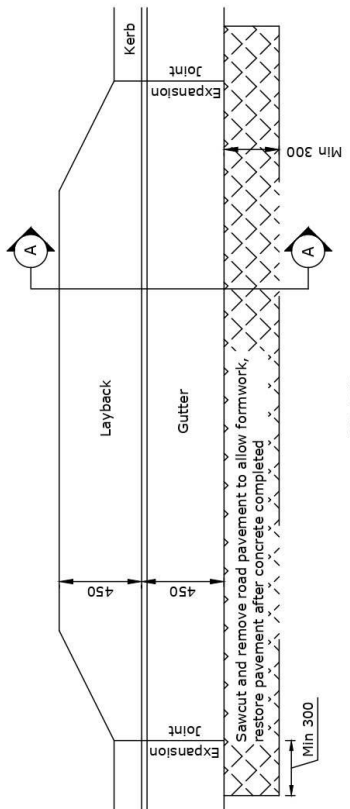
- d) Crossings in **PAVING BLOCKS shall be subject to conditional approval.** Only interlocking blocks (ie:Herring-bone etc. pattern) having a textured surface equivalent to a wood float finish and which comply with Council's requirements for abrasion will be approved. Blocks shall be not less than 50 mm thick and shall be laid flush jointed on a REINFORCED CONCRETE BED OF 100 mm MINIMUM thickness. Reinforcing shall be a minimum of F42 MESH placed centrally and concrete shall be as specified in a) above. **THE SLAB SHALL BE EXTENDED 100 mm EITHER SIDE OF THE BLOCKWORK TO ALLOW EDGES OF BLOCKS TO BE RETAINED WITH 3:1 SAND CEMENT MORTAR OF MINIMUM THICKNESS 50 mm. Refer Attachment B**

***Council will accept no liability for the restoration of any damage caused to this type of crossing by any public utility, authority or other person, and this is a condition of approval for the installation of paving blocks.***

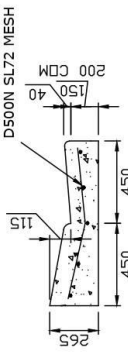
3. It is the owner's responsibility to ensure that work is carried out in a safe manner without inconvenience to users of the road or footpath. The owner shall ensure that works are properly barricaded and lit and that he/she and his/her **contractor carry adequate public liability insurance**, as Council will accept no liability for injury or damage to any person or thing during the course of the work.
4. The owner of the property shall negotiate with any public authority whose services may be affected by the proposed driveway and shall bear **the full cost** of any alterations which may be required to such services.
5. Works undertaken shall be complete, inclusive of all restoration, adjustment of adjoining surfaces, relocation of services, footpath and/or footway/verge adjustment or any other works deemed by the Crossings Inspector to be necessary as a result of crossing construction and **the full cost** of all such works shall be borne by the owner.
6. Where existing gutter and/or footpath crossings are made redundant by the construction of a new gutter and/or footpath crossing at alternative locations, they are to be removed and:
  - a. The kerb and gutter restored to the standard profile;
  - b. The old bitumen or concrete driveway surface is to be removed, and the area re-grassed to the satisfaction of Council's Crossings Inspector.
7. Crossings on corner allotments are not to be constructed within (six) 6 metres of the intersection of street alignments. {At Roads & Maritime Services (RMS) Traffic Lights 25 Metres}.
8. Crossings shall not encroach over the frontage of an adjoining allotment without the approval of Council. Applicants should seek the written concurrence of the adjoining property owner and submit this to Council for consideration.
9. Where layback crossings adjoin and their construction would leave a length of kerb 300mm or less between them, Council may require that the wing sections be deleted and be replaced with a continuous layback section.



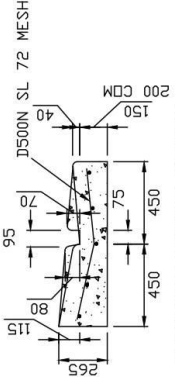
Type SA integral kerb and gutter



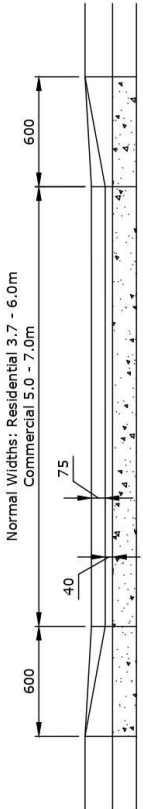
PLAN  
Not To Scale



DISH GUTTER CROSSING



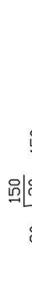
LAYBACK GUTTER CROSSING  
Scale 1:125



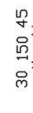
ELEVATION  
Not To Scale

NOTE:

1. CONCRETE TO BE A MINIMUM THICKNESS OF 150mm. LAYBACK AND SLAB TO BE REINFORCED WITH MINIMUM D500N SL 72 MESH.
2. LAYBACK REINFORCEMENT MAY BE OMITTED WHEN KERB MACHINE IS USED.
3. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED.
4. ALL FILLET CURVES TO BE RADIUS OF 25mm UNLESS OTHERWISE INDICATED.
5. LEVELS AT THE ROAD PROPERTY BOUNDARY ALIGNMENT TO BE OBTAINED BEFORE CONSTRUCTION.
6. THIS PLAN TO BE READ IN CONJUNCTION WITH K.C. SPECIFICATION FOR THE CONSTRUCTION OF GUTTER AND FOOTWAY CROSSINGS.
7. CONCRETE STRENGTH CLASS TO BE M25 MPa AT 28 DAYS, UNLESS NOTED OTHERWISE.
8. PAD GUTTER CROSSINGS ARE ONLY TO BE USED IN NON STANDARD DRIVEWAYS, AT THE DIRECTION OF THE COUNCILS DRIVEWAY ENGINEER.



Type SM barrier



Type SF median  
and island kerb

PAD GUTTER CROSSING  
SEC-NOTE 8

COMMERCIAL, 200 THICK AT INVERT,  
SL82 MESH X 2, CONCRETE N32  
RESIDENTIAL, 150 THICK AT INVERT,  
SL72 MESH X 1, CONCRETE N25

REVISED: Layback raised to 115...12/79 D.L.N.  
REVISED: Roll K & G...10/86 N.J.T.  
REVISED: Layback opening...5/86 I.P.  
REVISED: Original kerb thickness...15/03/04 R.B.  
REVISED: Original kerb thickness...80-191...22 Feb 2004 JT  
NEW NUMBER: 2004-004  
REVISED: RTA Type SA, SF & SM kerbs added...22 Feb 2004 JT  
REVISED: Concrete and steel classes updated...22 Feb 2004 JT  
REVISED: Dish crossing details updated...15 May 2006 JT  
REVISED: Roll kerb and gutter updated...02 June 2006 JT  
REVISED: Broom finish on layback...02 June 2006 JT  
REVISED: Bridge crossing removed to 94-030...21 Feb 2019 JT

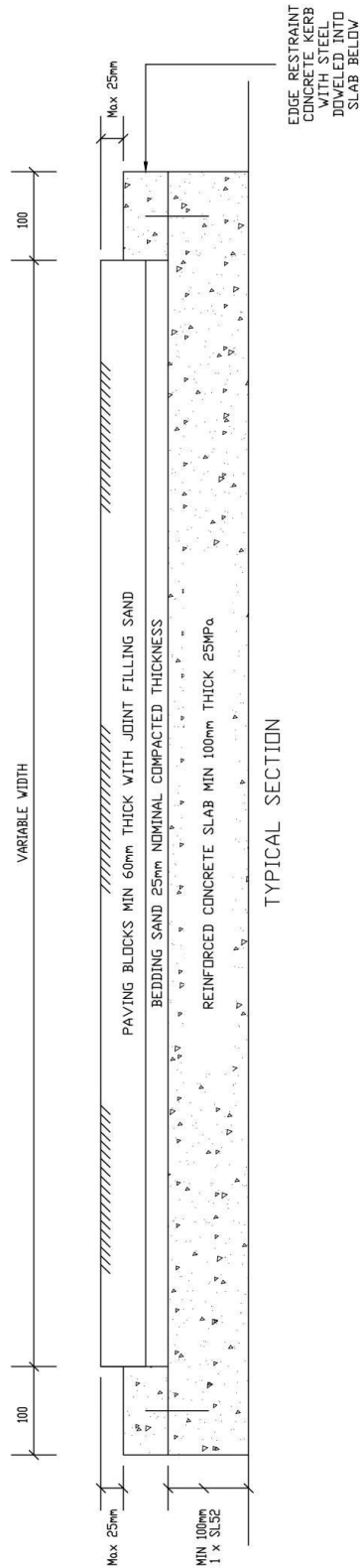
| REVISION | DATE   | AMENDMENTS                                 | INITIALS | Scale:        | APPROVED BY:               |
|----------|--------|--|----------|---------------|----------------------------|
| A        | Feb 04 | Updated to RTA kerb types                  | JT       | 1:25 & N.T.S. |                            |
| B        | Aug 10 | New title block                            | JT       | Designed:     | Mark Shaw                  |
| C        | Oct 17 | Residential and Commercial Thickness Added | A.L.     | Drawn:        | Manager Technical Services |
| D        | Feb 19 | Reinforcing Detailed                       | J.T.     | Datum:        |                            |

CONCRETE KERB AND GUTTER CROSSING AND LAYBACK



PLAN N°: 2004-004 REVISION: D



A3



FOR FURTHER DETAILS, REFER TO CMAA PUBLICATION PA02 - CONCRETE SEGMENTAL PAVEMENTS - DESIGN GUIDE FOR RESIDENTIAL ACCESS WAYS AND ROADS

|   |             |  |                 |                        |  |
|---|-------------|--|-----------------|------------------------|--|
|  |             | <b>TYPICAL SECTION FOR<br/>PAVED DRIVEWAYS</b> |                 | PLAN N°: <b>96-042</b> | REVISION: <b>C</b>   |
| <b>REVISION</b>   | <b>DATE</b> | <b>AMENDMENTS</b>                              | <b>INITIALS</b> | <b>Scale:</b>          | <b>APPROVED BY:</b>  |
| B   | Aug 10      | Reinforcing updated & new title block          | J.T.            | N.T.S.                 |  |
| C   | July 2021   | Description updated                            | W.T.            | Designed: I.K.         |  |
|   |             |  |                 | Drawn: T.C.            |  |
|   |             |  |                 | Datum:                 | POSITION: <b>Manager Technical Services</b>  |
|   |             |  |                 |                        | NAME: <b>Mark Shaw</b>   |
|   |             |  |                 |                        | DATE: <b>19/7/21</b>   |

**ATTACHMENT B**