



QUEENSLAND NORTHERN TERRITORY

IPWEA

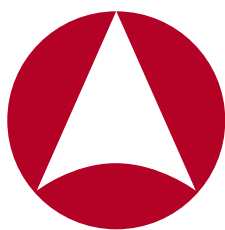
INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

STANDARD DRAWINGS HOME OWNER SUITE



**DECEMBER
2023**





QUEENSLAND NORTHERN TERRITORY

IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

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DISCLAIMER

Please note that these Standards have been developed by councils in the south of the state and may not be applicable in other regions of Queensland. The Standards Working Group is committed to collaborating with regional councils to incorporate other current standards in the suite of Standard Drawings.

If you would like to participate in this project, please contact:

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INTRODUCTION

In 1995, the Institute of Public Works Engineering Australasia, Queensland (IPWEAQ) compiled a set of 96 drawings applicable to development and local authority works in Queensland. The drawings have been reviewed and updated multiple times since by a Working Group comprising representatives from various councils. The Standard Drawings – Drainage suite was most recently reviewed in 2023.

Each drawing reflects the latest technology and most up-to-date specifications and standards for modern land developments. The drawings are referenced in a significant number of council planning schemes and are an important technical reference for those working on public works projects in Queensland. Drawings offer councils, planners, developers and engineers efficiencies with time and costs.

For the latest release of the Standard Drawings – Drainage, IPWEA-QNT wishes to thank the Technical Review Committee including representatives from:

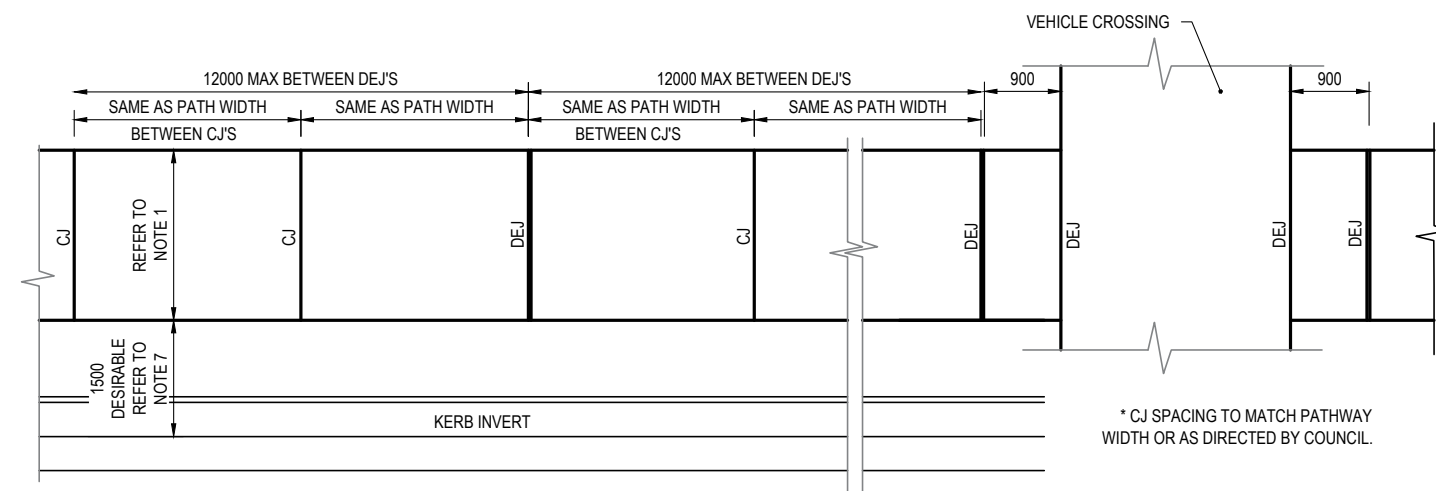
- Arup Australia
- Baker Ryan Stewart
- Brett’s Traffic Engineering
- Concrete Pipe Association of Australia
- GBA Consulting Engineers
- Gladstone Regional Council
- JCE Engineers
- Mackay Regional Council
- MCM Engineers
- McMurtrie Consulting Engineers
- Ocean Protect
- Proterra Group
- Reinforced Concrete Pipe Australia
- SLR Consulting Australia
- Sunshine Coast Council

And we are indebted to the ongoing efforts of our dedicated Working Group chaired by Dean Ostrofski of the City of Gold Coast:

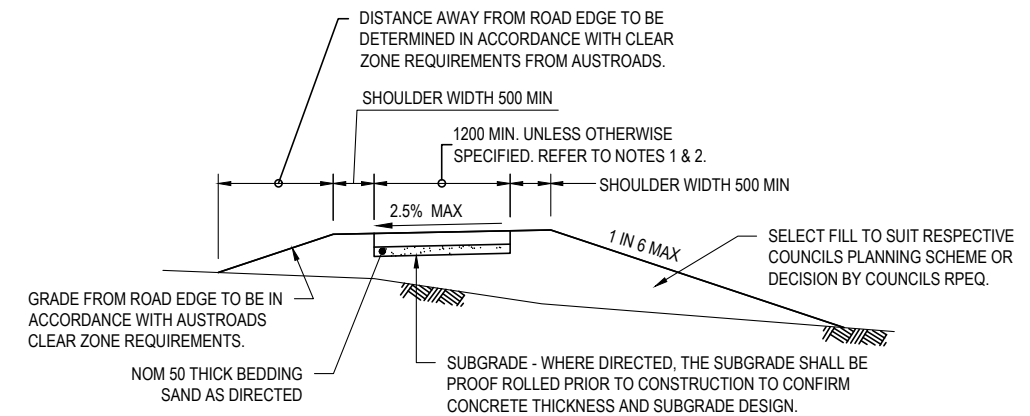
- Brisbane City Council - Dallas Lee
- Department of Transport and Main Roads - Kevin Mahoney
- Gladstone Regional Council - Scott McDonald
- City of Gold Coast - Dean Ostrofski (Chair) & Kelvin Matthews
- City of Ipswich - Benjamin Bruce & Chris Osley
- City of Moreton Bay - Tim Cash
- Noosa Council - Danny Kang
- Redland City Council - Amanda Doyle
- Sunshine Coast Regional Council - Darren Meredith



Brett Wright
CEO, IPWEA-QNT



CONCRETE PATHWAYS

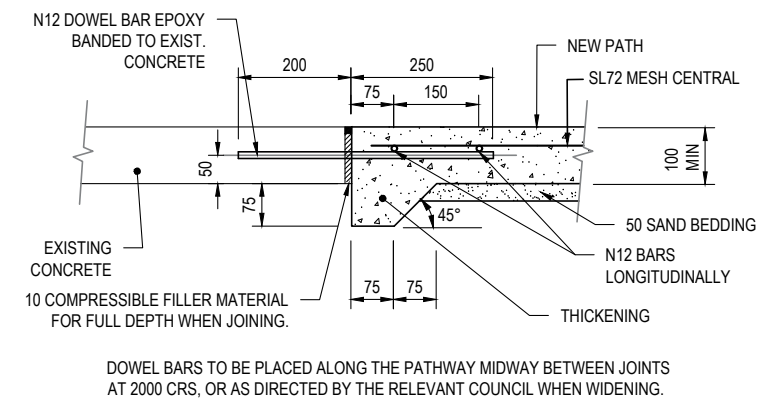


TYPICAL SECTION

(WHERE NO KERB & CHANNEL EXIST)

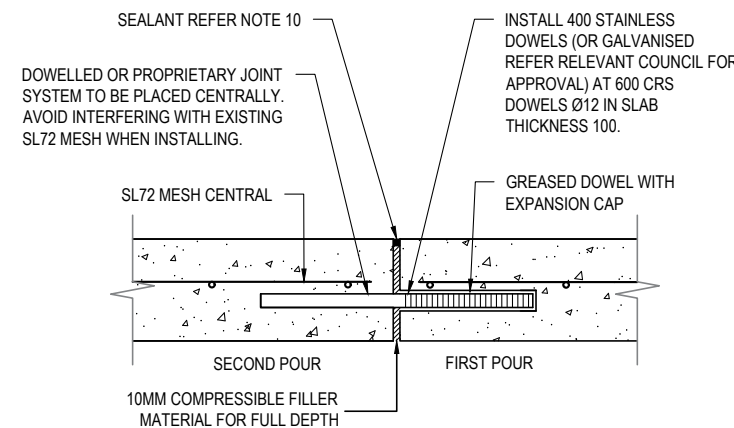
NOTES:

1. REFER TO RELEVANT COUNCIL REQUIREMENTS FOR PATHWAY WIDTH, DIMENSIONS AND CONCRETE COLOUR.
2. CONCRETE TO BE GRADE N32 AS 1379 AND AS 3600 WITH AN 80 SLUMP UNLESS APPROVED OTHERWISE.
3. REINFORCING REQUIREMENTS MAY BE AMENDED ON WRITTEN INSTRUCTIONS FROM COUNCIL.
4. FIBRE REINFORCEMENT - WHEN APPROVED FOR USE BY THE RELEVANT COUNCIL, THE CONCRETE SHALL BE REINFORCED WITH CLASS 2 MACRO STRUCTURAL SYNTHETIC POLYMER FIBRES IN ACCORDANCE WITH AS3600 AND MANUFACTURERS SPECIFICATION FOR THE SPECIFIED DESIGN LOAD.
5. FOR STEEL MESH REINFORCED PATHS AT DOWELLED EXPANSION JOINTS: MESH IS TO BE STOPPED 75 FROM THE JOINT, BE PLACED UNDER THE DOWELS AND CHAIRED AT MIN 50 COVER FROM BOTTOM FACE TO DETER THE MESH DEFLECTION INTERFERING WITH THE DOWELS.
6. PATHWAY SURFACE FINISH TO BE BROOM FINISHED PERPENDICULAR TO LENGTH TO COMPLY WITH THE REQUIREMENTS OF AS/NZ 4586 'SLIP RESISTANCE CLASSIFICATION OF NEW SURFACE MATERIALS'.
7. THE DIMENSION BETWEEN KERB INVERT AND EDGE OF PATHWAY MAY BE VARIED SUBJECT TO RELEVANT COUNCIL APPROVAL. FOR APPROPRIATE TREATMENT OF GRADES GREATER THAN 1 IN 8 (12.5%), REFER TO AS 1428, DESIGN FOR ACCESS & MOBILITY.
8. WHERE A VEHICLE CROSSING POINT, OR PATH IS SUBJECT TO LONGITUDINAL TRAFFIC THE PATHWAY DETAILS SHALL BE PER RELEVANT RESIDENTIAL DRIVEWAY STANDARD DETAILS RSD-100 & RSD-101.
9. ADDITIONAL PATH DETAILS SHALL BE AS PER AUSTROADS GUIDELINES.
10. EXPANSION JOINTS TO BE SEALED WITH A LOW MODULUS SELF PRIMING SEALANT TO THE MANUFACTURERS SPECIFICATIONS. THE COLOUR OF THE SEALANT IS TO MATCH THE ADJOINING SURFACE FINISH.
11. SAW CUT JOINTS ARE TO BE UNDERTAKEN BETWEEN 4 TO 12 HOURS AFTER LAYING DEPENDING ON CONDITIONS. JOINT SEALANT IS REQUIRED IN SANDY AREAS.
12. CONCRETE FOOTPATHS JOINING TO EXISTING DRIVEWAYS TO TRANSITION OVER A MINIMUM 5.0M. LENGTH.
13. WHEN A CONCRETE FOOTPATH IS TO BE AFFECTED WHEREBY PARTIAL REMOVAL IS PROPOSED (eg UNDERGROUND UTILITY INSTALLATION) THE SECTION AFFECTED BY WORKS IS TO BE REPLACED FROM AN EXISTING JOINT TO EXISTING JOINT UTILISING DOWELED EXPANSION JOINTS.
14. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

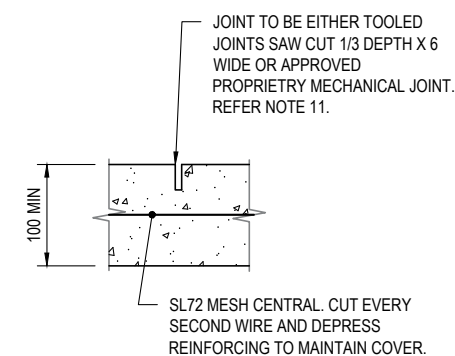


PATHWAY WIDENING/JOINING

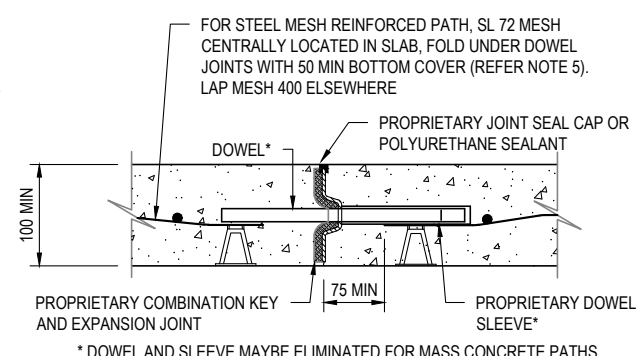
(MINIMUM WIDENING 800)



DOWELLED EXPANSION JOINT DETAIL (DEJ)

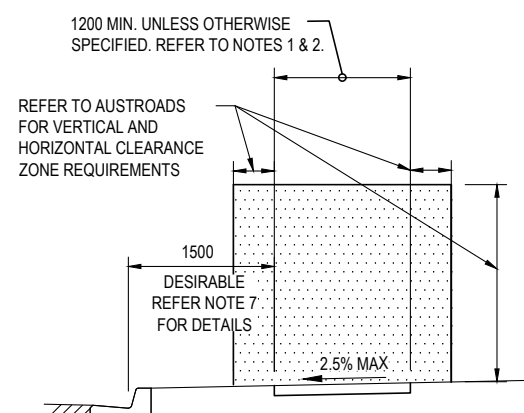


CONTROL JOINT (CJ)




PREFORMED KEY JOINT WITH DOWEL

The fitness for purpose of these drawings for a specific project shall be determined and certified by a Registered Professional Engineer of Queensland (RPEQ).
The user is responsible for ensuring the relevant council has adopted the drawing prior to its use.



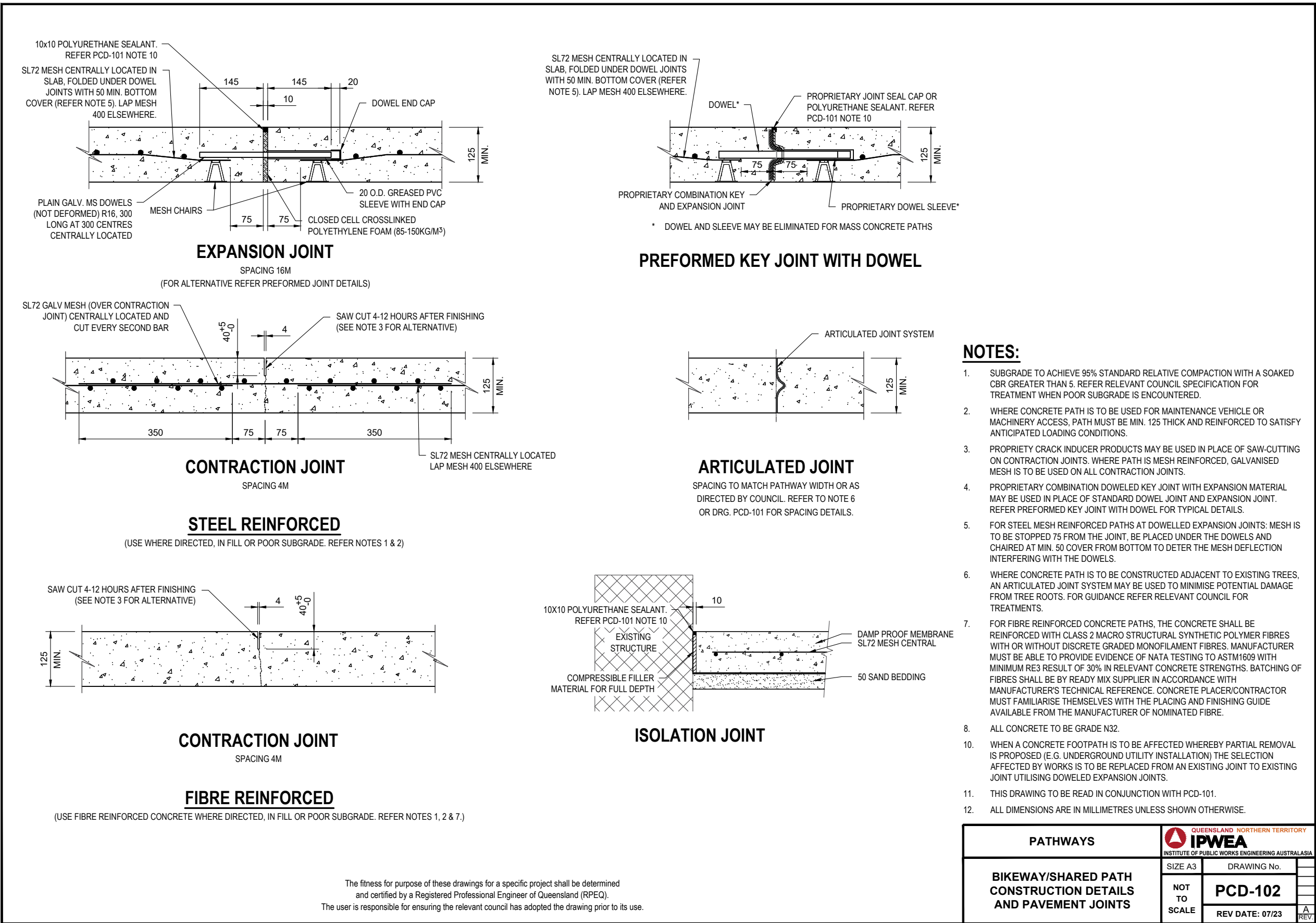
TYPICAL SECTION

(WHERE KERB & CHANNEL EXISTS)

<h1>PATHWAYS</h1>		 QUEENSLAND, NORTHERN TERRITORY IPWEA <small>INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA</small>	
		SIZE A3	DRAWING No.
<h2>CONCRETE PATHWAYS CONSTRUCTION DETAILS</h2>		NOT TO SCALE	PCD-101
		REV DATE: 07/23	A REV

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PCD-102 | Bikeway/Shared Path | Construction Details & Pavement Joints



ALLOWABLE NUMBER AND WIDTH OF RESIDENTIAL VEHICLE CROSSINGS						
	TYPE	DESCRIPTION	ALLOWABLE No. OF CROSSINGS	MAX W1 (INCLUDES 500MM TAPER, BOTH SIDES)	W2 (VARIES)	W3 (MAX WIDTH AT PROPERTY BOUNDARY)
SINGLE HOUSE	1	SINGLE GARAGE	1	4.0M	3.0M	3.0M
	2	DOUBLE GARAGE OR MORE	1	4.0M	3.0M	5.0M
	3	DOUBLE GARAGE OR MORE	2	4.0M	3.0M	5.0M
	4	DOUBLE GARAGE OR CARPORT ON PROPERTY BOUNDARY	1	5.0M	4.0M	6.0M
DUPLEX	5	DUPLEX WITH FRONTAGE 20.0M OR LESS	1	5.0M	4.0M	6.0M
	6	DUPLEX WITH FRONTAGE GREATER THAN 20.0M	2	5.0M	4.0M	5.0M

SPECIAL CONDITIONS APPLICABLE ALL VEHICLE CROSSINGS ARE SUBJECT TO RELEVANT COUNCIL APPROVAL

1. MIN 40.0M FRONTAGE;
2. MIN 12.0M BETWEEN TWO CROSSINGS.

SUBJECT TO CARPORT/GARAGE APPROVAL.

MIN 7.0M BETWEEN TWO CROSSINGS.

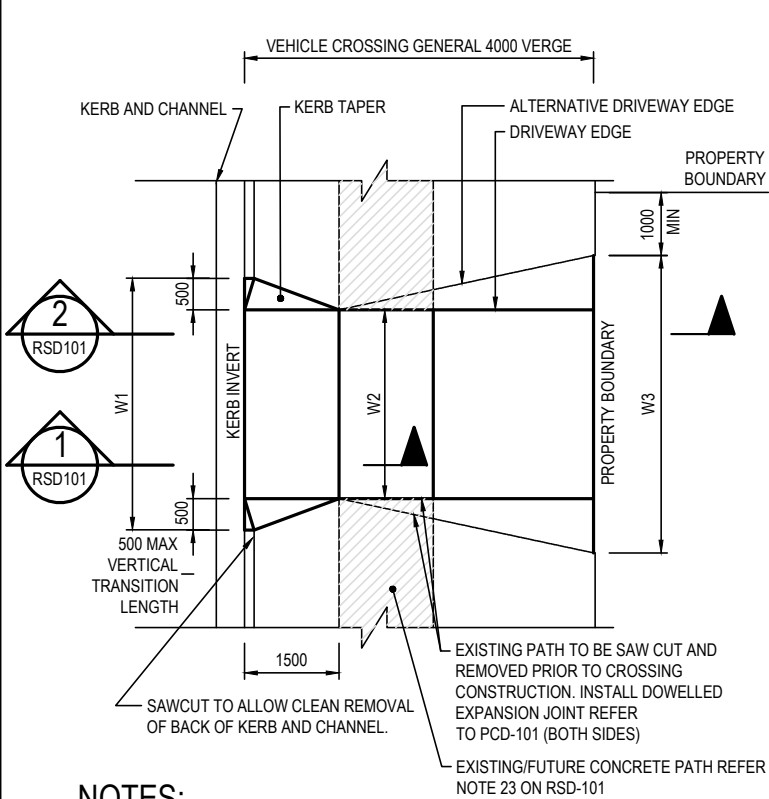
LEGEND
(VEHICLE CROSSING PROHIBITED LOCATIONS)

NKL NOMINAL KERB LINE (FACE OF KERB)

TP TANGENT POINT ON NKL

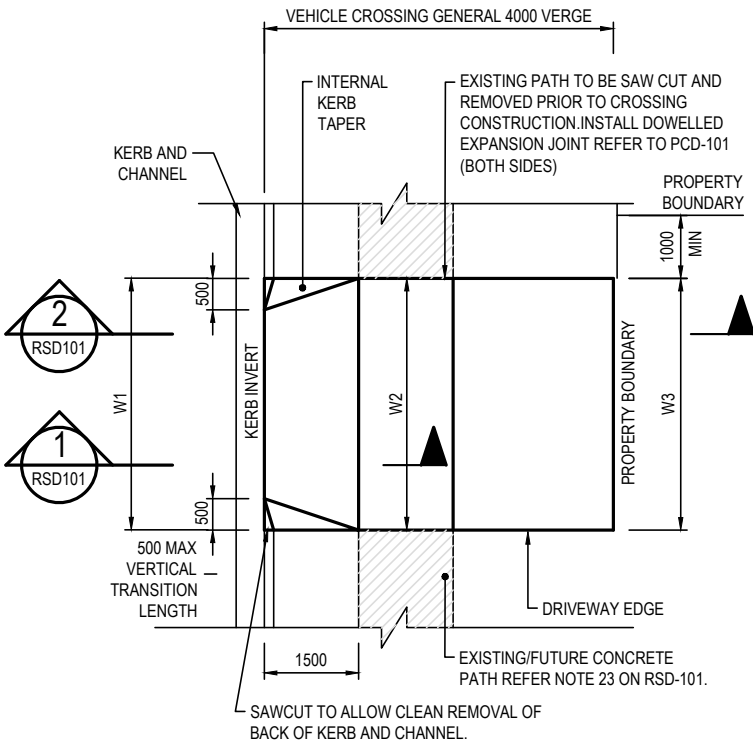
PROHIBITED LOCATIONS SHOWN IN A HEAVY LINE, BASED ON AS 2890.1

X THE POINTS MARKED 'X' ARE EITHER AT THE MEDIAN ON A DIVIDED ROAD, OR AT THE INTERSECTION OF THE MAIN ROAD CENTRELINE AND THE PROLONGATION OF THE SIDE ROAD NKL LINE ON AN UNDIVIDED ROAD.



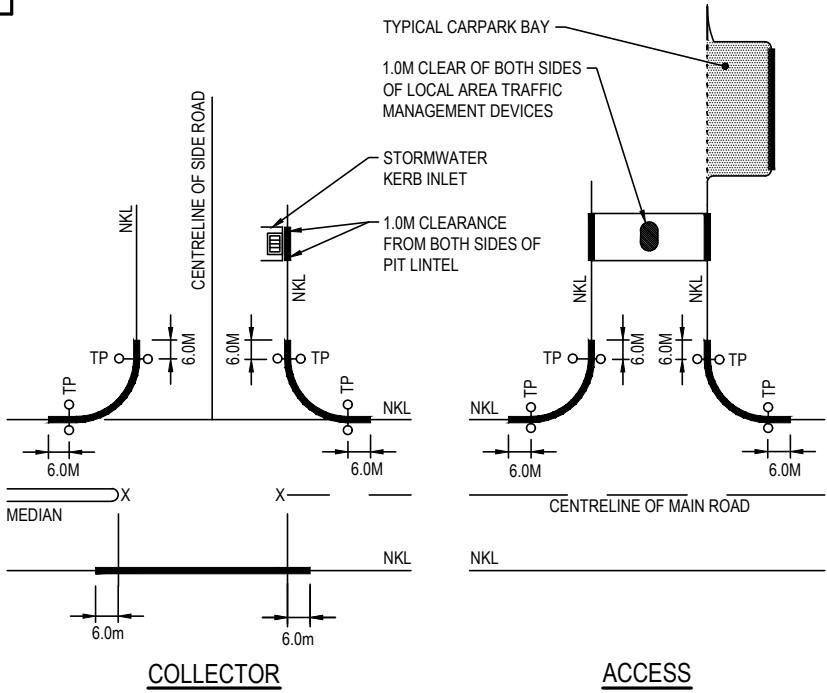
- NOTES:**
- SERVICES & ROAD FURNITURE WILL NOT BE MOVED FOR VEHICLE CROSSINGS IN PROHIBITED LOCATIONS.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH RSD-101.
 - W1 MAY NOT BE LESS THAN 4.0M AT ANY POINT, INCLUSIVE OF 500MM TAPERS.
 - W3 MAY NOT BE LESS THAN W2.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

SETOUT REQUIREMENTS
NOT TO SCALE.



- NOTES:**
- W3 MAY NOT BE LESS THAN W2.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

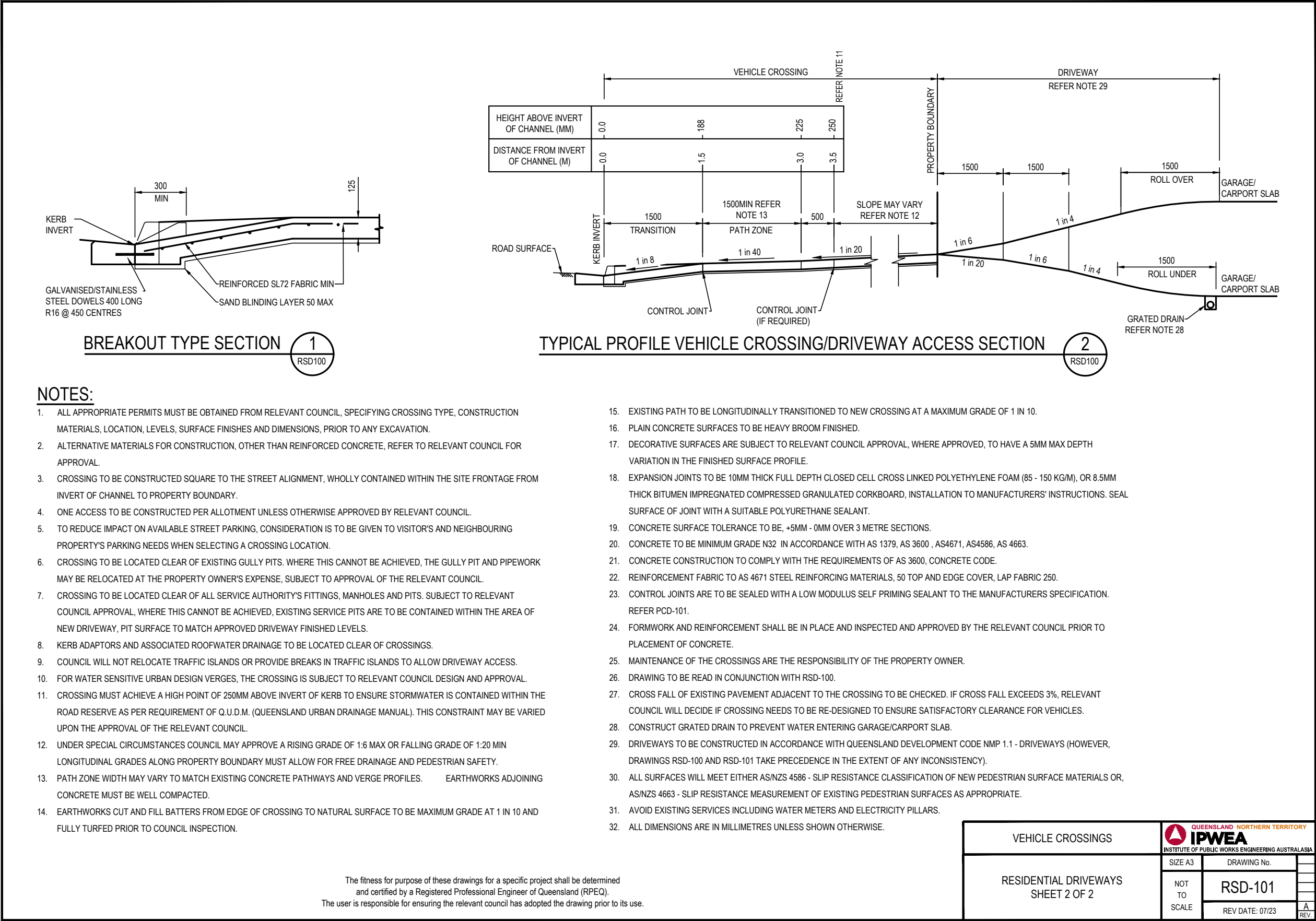
ALTERNATIVE SETOUT (INTERNAL TAPERS)
NOT TO SCALE.



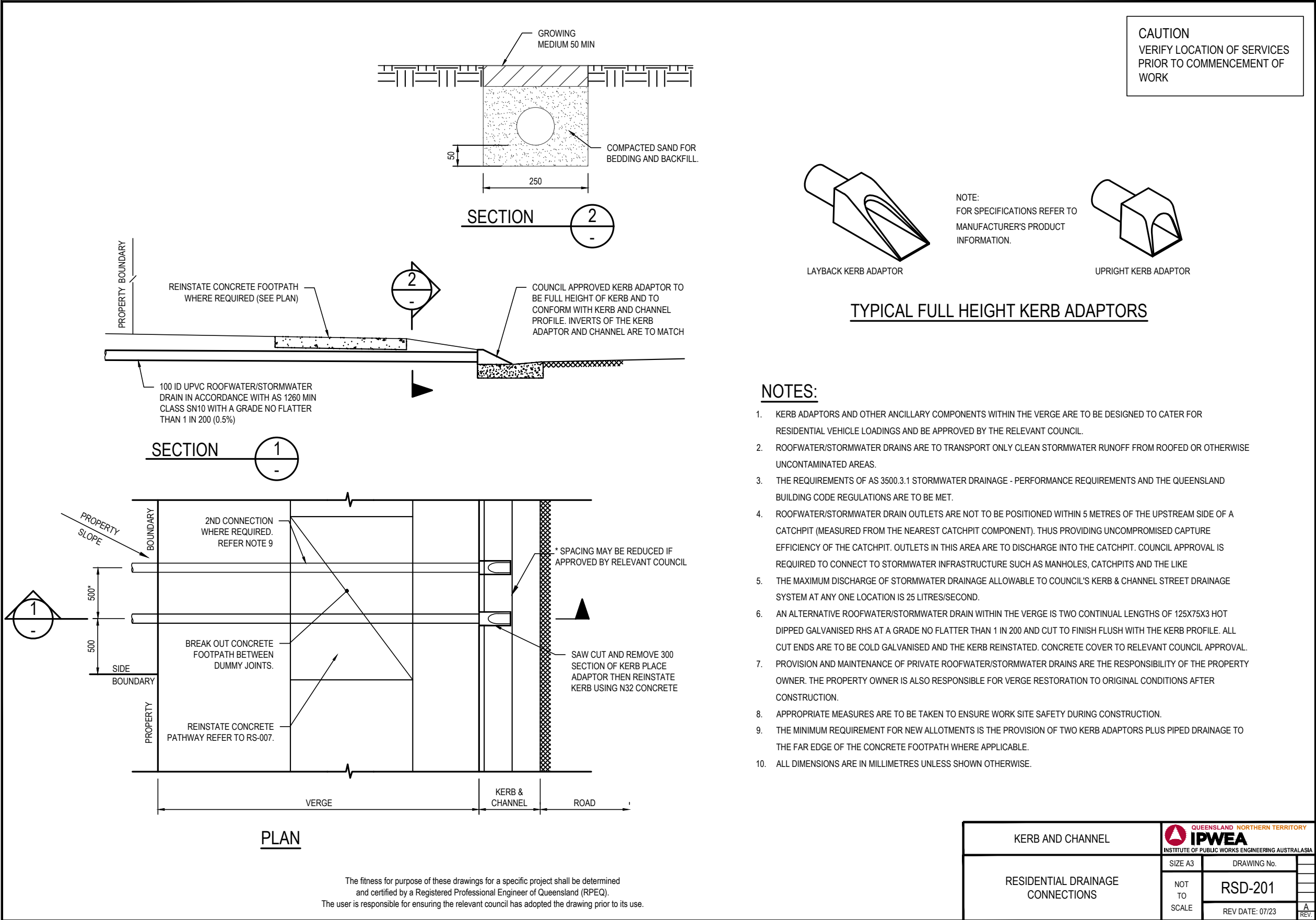
VEHICLE CROSSING PROHIBITED LOCATIONS
NOT TO SCALE.

VEHICLE CROSSINGS		QUEENSLAND NORTHERN TERRITORY IPWEA INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA	
RESIDENTIAL DRIVEWAYS SHEET 1 OF 2	SIZE A3	DRAWING No.	
	NOT TO SCALE	RSD-100	
		REV DATE: 07/23	A REV.

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