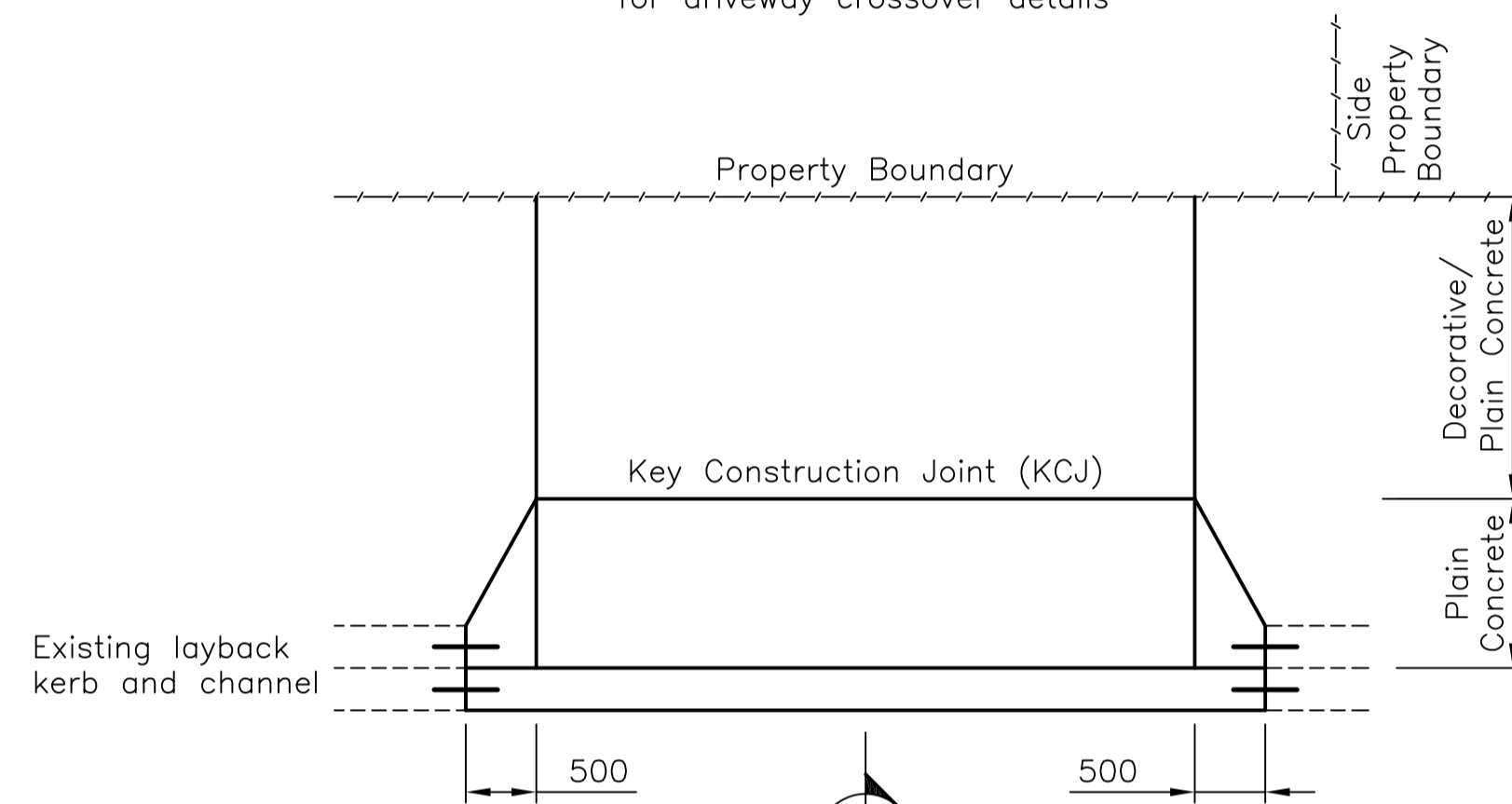
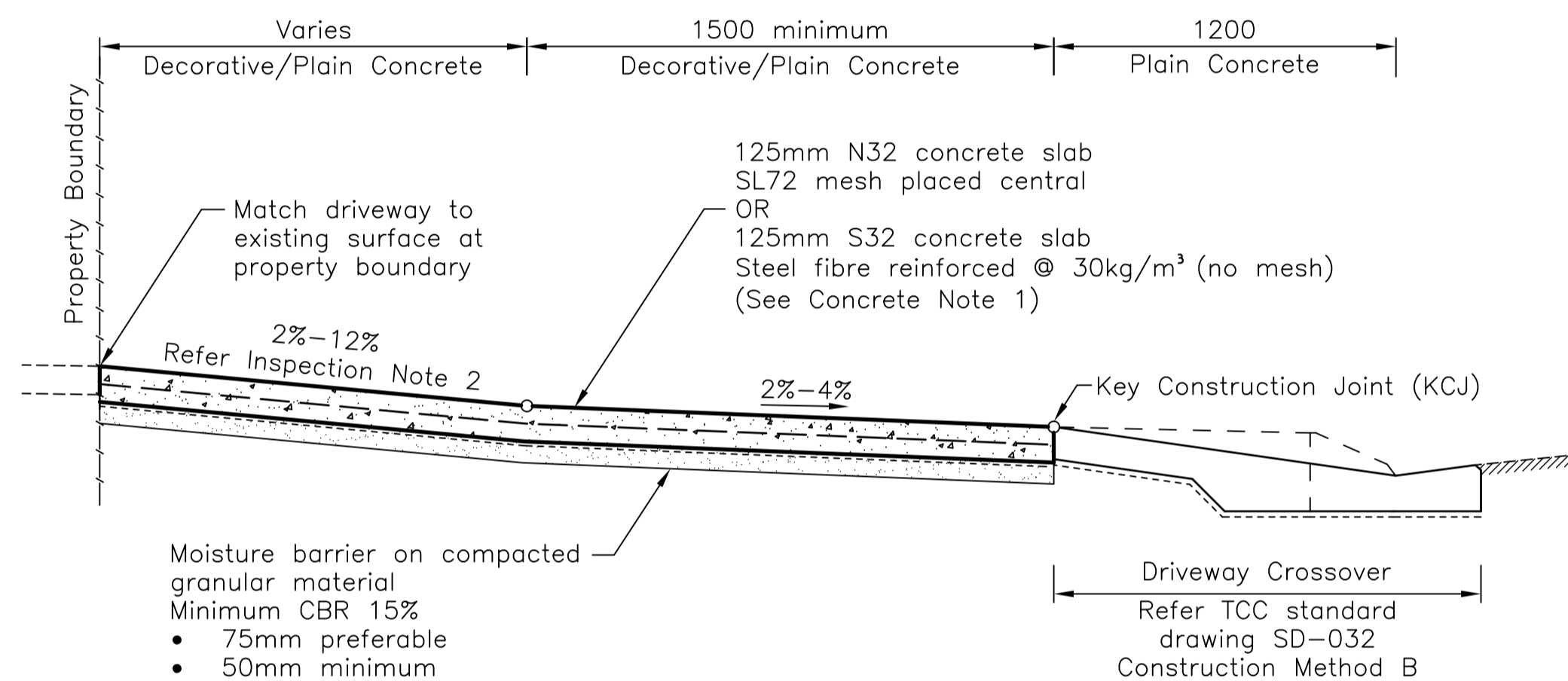
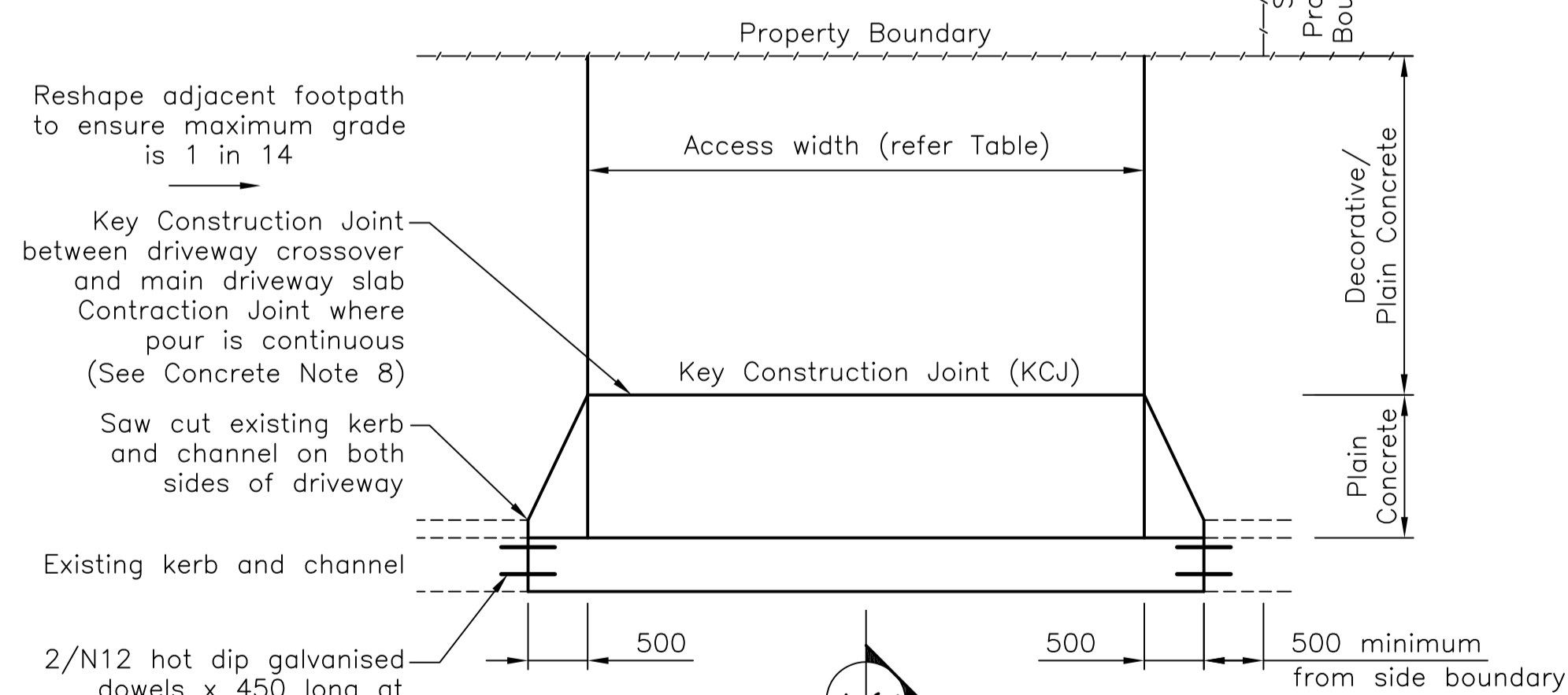
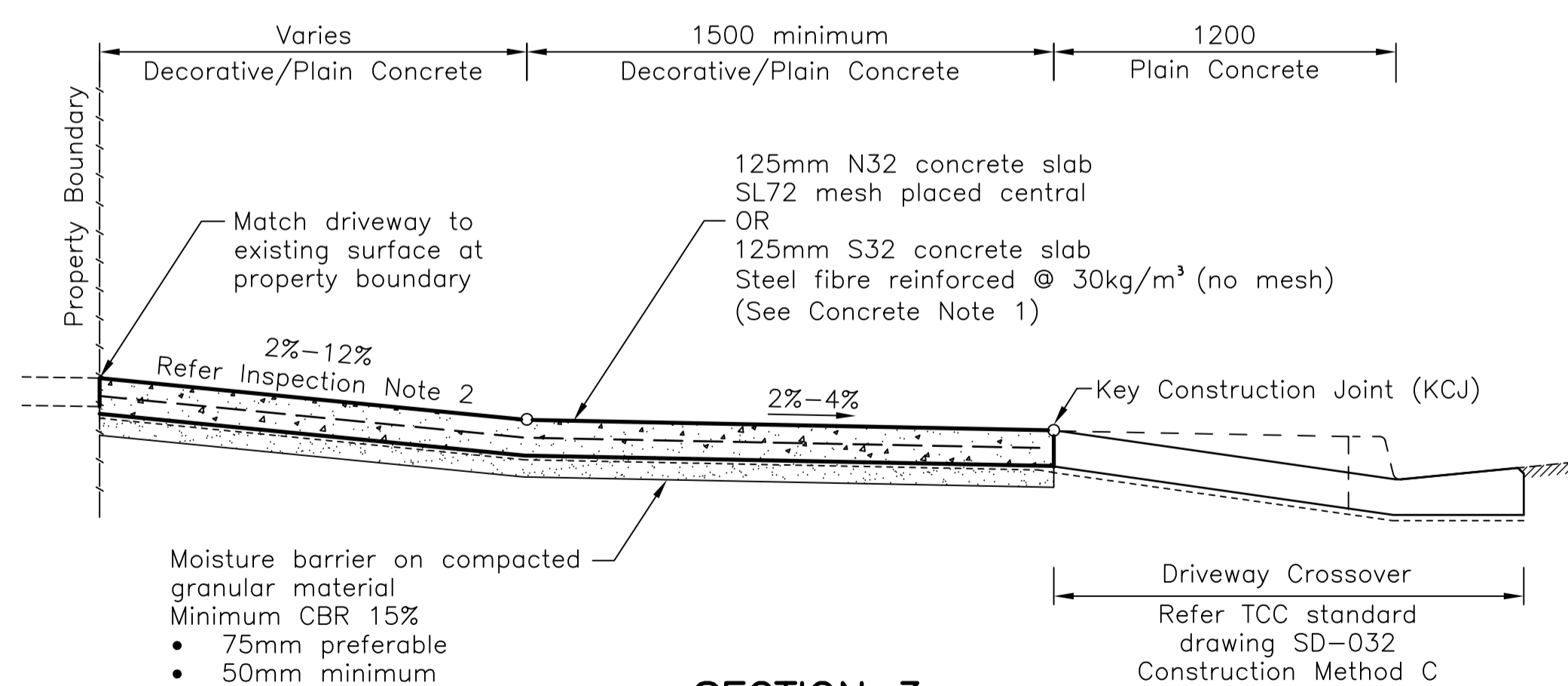


Refer to TCC standard drawing SD-032 for driveway crossover details



Refer to TCC standard drawing SD-032 for driveway crossover details and alternatives



Refer to TCC standard drawing SD-032 for driveway crossover details and alternatives

NOTES

GENERAL

- All driveways require a Road Work Permit, which must be obtained from Council prior to construction.
- Final location of access/es to be approved by Council's authorised person.
- Do not scale drawings, use figured dimensions. All dimensions are in millimetres unless noted otherwise.
- All workmanship and all materials shall be in accordance with Standards Australia specifications.
- Installation and maintenance of driveways are the responsibility of the property owner.

CONCRETE

- Concrete shall be Grade N32 (mesh reinforced) or S32 (fibre reinforced) minimum. Although not a mandatory requirement it is recommended to use 40MPa concrete grade in areas with exposure classification B2 and 50MPa concrete grade in areas with exposure classification C2.
- Where existing ground conditions appear to be highly plastic and have a high shrinkage, it is recommended to use a 150mm thick slab or seek advice from a Consulting Engineer.
- Reinforcement is to be in accordance with the latest Standards Australia specifications. Material is indicated by the following symbols:
R Plain Bars
N Structural Grade Deformed, Grade 500
SL Mesh Grade 500
- Cover to reinforcement is as shown on the drawing and is to be maintained during pouring of concrete by the use of plastic chairs, at maximum 800mm centres in each direction. For work in contact with the ground, chairs are to be supported on sheet plates.
- Lap Bars 40 diameter at splices unless noted otherwise.
- Mesh is to comply with Standards Australia specifications and to have minimum lap splices as follows:
Square Mesh – Wire spacing x2 times for wires in each direction.
- Welding reinforcement will not be permitted unless shown on the drawings.
- Provide contraction joints (CJ) at 6.0m maximum centres but not more than the width of the access, whichever is less.
- Compaction of concrete during placing shall be by mechanical vibrators.
- Curing of all concrete surfaces is to be carried out immediately after finishing as per AS3600 Section 4 for a minimum of 7 days.
- All driveways shall have a non-slip finish.
- Reinforcing fibres, if used, are to be a minimum length of 30mm and a maximum length of 55mm.

INSPECTIONS

- Council inspections are required for all driveways prior to construction, including concrete slab set-up and reinforcement.
- Driveway slopes greater than 4% may only be approved by the Council Asset Inspector in special circumstances prior to construction.
- A final Council inspection is required following completion of construction, including back filling to edges and ensuring the new driveway will not cause a tripping hazard.
- Approved construction plans are to be available on site during inspections.

SERVICES

- Locations of existing underground services are to be confirmed by the owner/applicant/contractor who shall contact 'Dial Before You Dig' for information prior to any construction.
- Ensure 450mm minimum cover to all underground services.
- Re-establish any service markers damaged during construction.

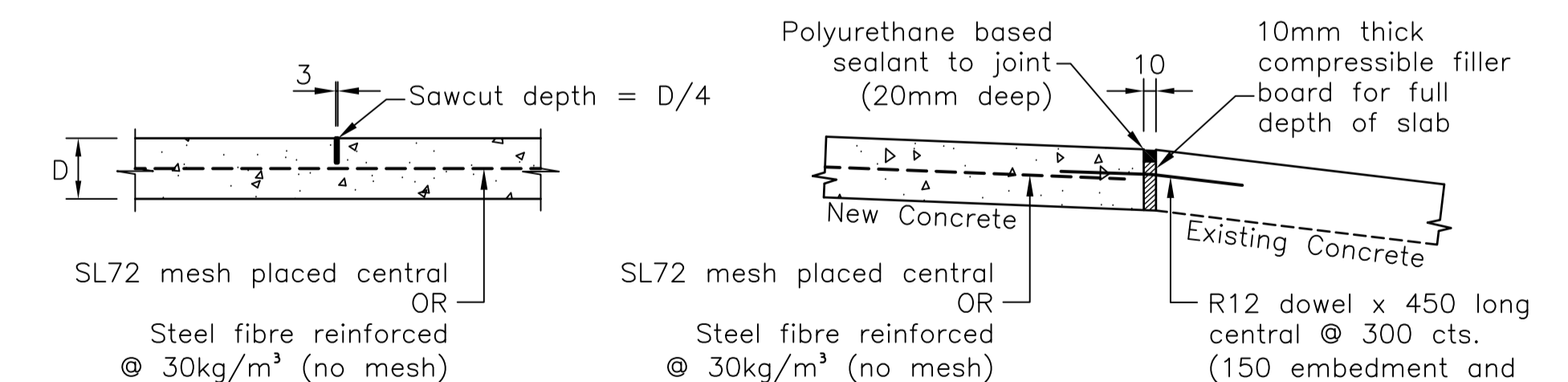
DRIVEWAY CLEARANCES

- 1.0m minimum from all poles (eg. power, signs).
- 0.5m minimum from service pits (eg. Ergon, Telstra). Service pits shall not be incorporated into the driveway. All pit relocations shall be done with the approval of the relevant service authority and at the expense of the property owner.
- 0.6m minimum from stormwater inlet pits/manholes.
- 0.5m minimum from sewer manholes.
- 1.2m minimum from sewer house drain connections.
- 3.5m minimum from trees unless assessed and approved by Council's Horticulture/Arboriculture Officer.
- Water Fittings (e.g. SV, FH) are not to be located within concrete driveway unless assessed and approved by Townsville Water.

ACCESS WIDTH AT PROPERTY BOUNDARY

- Dimensions shown are minimum requirements however usability should be considered when designing the driveway layout.

	One way access	Two way access
Dwellings and Dual Occupancy	3000 to 6000	N/A
Multiple Dwellings	3500 to 4500	5000 to 6000



CONTRACTION JOINT - CJ

6.0m maximum centres but not more than the width of the access, whichever is less

KEY CONSTRUCTION JOINT - KCJ

Key Construction Joints to be provided between all abutting new and existing concrete works

No.	DATE	DESCRIPTION	AP'D
I	07/04/2015	CONCRETE, DOWEL AND GRANULAR MATERIAL DETAILS	
H	17/06/2014	DRAWING REVIEWED	
G	27/02/2014	CONCRETE NOTE AMENDED	
F	15/05/2012	DOWELS CHANGED TO GALVANISED	
E	12/02/2010	REVISED TO 1200 WIDE CROSSOVER	
D	4/9/2009	MINOR AMENDMENTS	
REVISIONS			

NOTES :

Full Size A1

Not to Scale

DRAWN: DESIGN OFFICE	CHECKED: WP
Design Engineer Approved: Original signed by JORGE EL-KHOURI	
Date: 07/04/2015	
Manager Approved: Original signed by MARK WILKINSON	
Date: 09/04/2015	



DRIVEWAY ACCESS
URBAN RESIDENTIAL PROPERTIES

STANDARD DRAWING
ROADWORKS

SD-030 | 1