Local Government
Infrastructure Design Association

STANDARD DRAWINGS
APPENDIX 'G' - IDM VERSION 5.5

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P.O, Box 212

GOLDEN SQUARE VIC 3555

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STANDARD DRAWING COVER SHEET		LAST UPDATED 08/04/2025
Infrastructure Design Manual Standard Drawings	A copy of the Infrastructure Design Manual can be viewed on the Design Manual website www.designmanual.com.au	SD000
Local Government Infrastructure Design Association		

STANDARD DRAWING SHEET INDEX		
DRAWING NO.	DRAWING TITLE	LAST UPDATED
SD000	STANDARD DRAWING COVER SHEET	27/03/2025
SD001	STANDARD DRAWING SHEET INDEX	27/03/2025
SD100	TYPICAL KERB PROFILES ' B' TYPE, 'SM' TYPE & 'M' TYPE	27/03/2025
SD101	TYPICAL KERB PROFILES ' B' TYPE, 'SM' TYPE & 'M' TYPE 450 TRAY	27/03/2025
SD105	TYPICAL KERB PROFILES ' B' TYPE & 'M' TYPE	26/02/2020
SD106	TYPICAL KERB PROFILES ' B' TYPE & 'M' TYPE 450 TRAY	27/03/2025
SD110	TYPICAL KERB BEDDING DETAIL	27/03/2025
SD115	TYPICAL INDUSTRIAL KERB LAYBACK	27/03/2025
SD120	LAYBACK FOR 'B2' & 'B3' KERBING	27/03/2025
SD130	KERB & CHANNEL INSTALLATION ABUTTING EXISTING PAVEMENT	27/03/2025
SD140	HEAVY DUTY KERB ADAPTORS FOR 'B2' & 'SM2' KERBS	26/02/2020
SD145	SUBSOIL DRAIANGE	27/03/2025
SD200	PEDESTRIAN CROSSING	27/03/2025
SD205	TYPICAL FOOTPATH DETAIL	27/03/2025
SD206	TYPICAL HOT MIX ASPHALT FOOTPATH	26/02/2020
SD210	TYPICAL FOOTPATH JOINTS	27/03/2025
SD220	REINFORCED CONCRETE PAVEMENT ISOLATION JOINT	12/03/2020
SD225	REINFORCED CONCRETE PAVEMENT TYPICAL JOINT DETAILS	27/03/2025
SD235	RETROFIT RESIDENTIAL VEHICLE CROSSING DETAIL	27/03/2025
SD236	RETROFIT INDUSTRIAL VEHICLE CROSSING DETAIL	27/03/2025
SD240	NEW RESIDENTIAL SINGLE VEHICLE CROSSING DETAIL	27/03/2025
SD245	NEW RESIDENTIAL SHARED_DOUBLE VEHICLE CROSSING DETAILS	27/03/2025
SD250	NEW INDUSTRIAL VEHICLE CROSSING DETAIL	27/03/2025
SD255	TYPICAL SWALE DAIN VEHICLE CROSSING (RURAL ENTRANCE)	27/03/2025
SD260	TYPICAL SWALE DRAIN VEHICLE CROSSING (FRINGE URBAN OR RURAL)	27/03/2025
SD265	TYPICAL SEMI OR B DOUBLE VEHICLE CROSSING (RURAL ENTRANCE)	27/03/2025
SD270	FOOTPATH TO PEDESTRIAN CROSSINGS DDA COMPLIANCE DETAILS	24/03/2020
SD310	TRENCHING BACKFILL (TRENCHES WITHIN 1m OF COUNCIL ASSETS)	20/02/2019
SD400	TYPICAL PIT DIMENSIONING AND SETTING OUT DETAIL	27/03/2025
SD405	UNHAUNCHED PITS (450Ø MAX. PIPE)	27/03/2025
SD410	HAUNCHED PITS	27/03/2025
SD415	MIN. WALL THICKNESS FOR REINFORCEMENT IN MASS CONCRETE PITS	27/03/2025
SD420	JUNCTION PIT IN ROAD RESERVE	27/03/2025
SD425	JUNCTION PIT WITH CONCRETE COVER (NON TRAFFICABLE AREAS)	27/03/2025
SD426	JUNCTION PIT WITH NON-CONCRETE COVER (NON TRAFFICABLE AREAS)	

STANDARD DRAWING SHEET INDEX		
DRAWING NO.	DRAWING TITLE	LAST UPDATED
SD430	SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER 'B2'	27/03/2025
SD431	900 x 600mm SIDE ENTRY PIT PIPES UP TO 450mmØ	27/03/2025
SD435	SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER 'SM2'	27/03/2025
SD440	SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER 'SM2-M'	27/03/2025
SD441	GRATED SIDE ENTRY PIT WITH LIGHTWEIGHT COVER 'SM2-M'	27/03/2025
SD445	DOUBLE SIDED ENTRY PIT 1900mm INLET WITH APPROVED COVER 'B2'	27/03/2025
SD450	DOUBLE SIDED ENTRY PIT 1900mm INLET WITH APPROVED COVER 'SM2'	27/03/2025
SD455	DEPRESSED GRATED PIT	27/03/2025
SD460	INLET CATCH PIT	27/03/2025
SD475	GRATED SIDE ENTRY PIT INLET 900mm WITH CONCRETE SURROUND 'B2'	27/03/2025
SD480	GRATED PIT FOR SM2 MODIFIED KERB & CHANNEL	27/03/2025
SD481	ALTERNATE GRATED PIT FOR SM2 MODIFIED KERB & CHANNEL 'SM2-M'	27/03/2025
SD490	900 x 600mm SIDE ENTRY PIT WITH GRATING	27/03/2025
SD495	SPOON PIT WITH GRATING	27/03/2025
SD496	MODIFIED EXISTING PIT TO GRATED PIT IN VEHICLE CROSSING_LAYBACK	27/03/2025
SD497	REINFORCED CONCRETE WINGWALL (IN-SITU)	27/03/2025
SD498	CONCRETE ENDWALL FOR PIPES UP TO 375mmØ (WALKWAYS,PATHS,TRACKS)	26/02/2020
SD500	CATCH DRAIN DETAILS	20/03/2015
SD505	HOUSE DRAIN TO KERB & CHANNEL	26/02/2020
SD510	HOUSE DRAIN UNDER ROAD PAVEMENT	27/03/2025
SD515	STREET DRAIN CONNECTION	27/03/2025
SD516	STREET DRAIN CONNECTION (45° TO PIPE WHERE COVER LIMITED)	27/03/2025
SD520	EASEMENT DRAIN CONNECTION	27/03/2025
SD525	FLUSHOUT RISER DETAIL	20/03/2015
SD530	FLUSHOUT RISER COVER DETAIL	20/03/2015
SD535	DRAINAGE PIPE ANCHOR BLOCK	20/03/2015
SD600	TYPICAL ROAD PROFILES RURAL	20/03/2015
SD605	TYPICAL ROAD PROFILES ACCESS PLACE & STREET(LEVEL 1 & 2)	27/03/2025
SD610	TYPICAL ROAD PROFILES LOW DENSITY RESIDENTIAL (RURAL ACCESS)	26/02/2020
SD615	TYPICAL ROAD PROFILES RURAL LIVING (LOW DENSITY RESIDENTIAL)	26/02/2020
SD620	TYPICAL ROAD PROFILES COMMERCIAL STREET_INDUSTRIAL STREET	26/02/2020
SD625	PREFERRED SERVICE LOCATIONS FOR RURAL ACCESS STREETS	04/04/2016
SD630	PREFERRED SERVICE LOCATIONS FOR RESIDENTIAL ACCESS STREETS	04/04/2018
SD635	PREFERRED SERVICE LOCATIONS FOR COLLECTOR ROAD LEVEL 1	04/04/2016
SD640	PREFERRED SERVICE LOCATIONS FOR COLLECTOR ROAD LEVEL 2	04/04/2016

STANDARD DRAWING SHEET INDEX

LAST UPDATED 08/04/2025

Infrastructure Design Manual Standard Drawings

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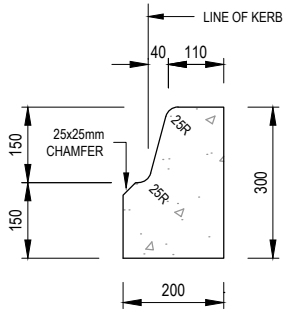
SD001



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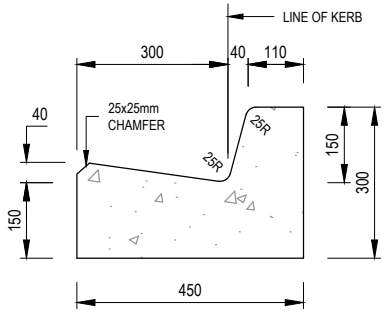

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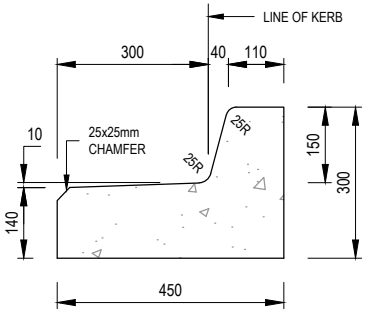

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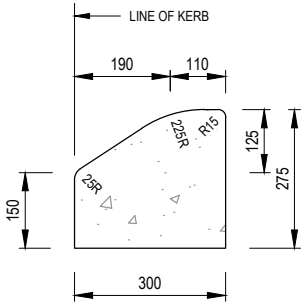
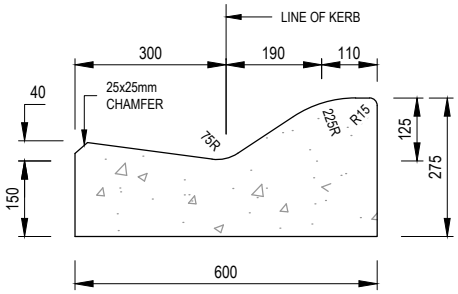
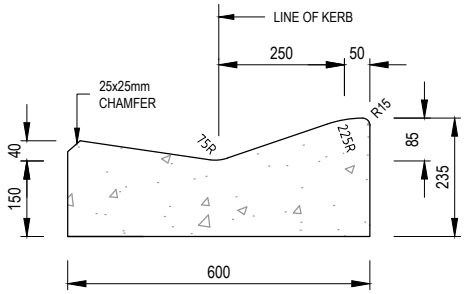


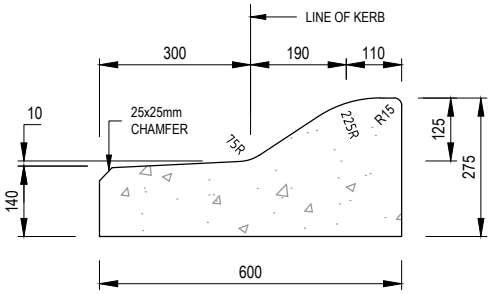
SM1



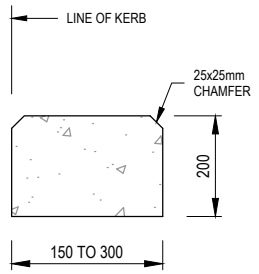
SM2



SM2-M (MODIFIED)



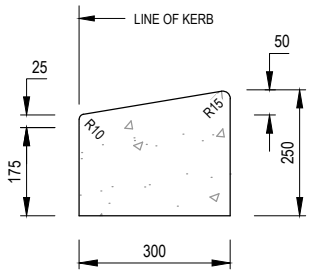
SM3



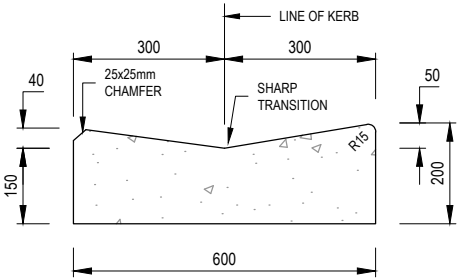
EDGE STRIP

NOTES:

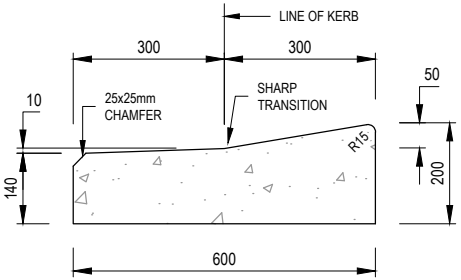
1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 2016 PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
4. BEDDING TO BE COMPACTED CLASS 3 F.C.R. UNLESS OTHERWISE DIRECTED. (REFER SD110)
5. INCREASE OVERALL KERB PROFILE (DEPTH OF CONCRETE):
   a) 80mm FOR COMMERCIAL PROPERTIES
   b) 80mm WITH L8TM TRENCH MESH FOR INDUSTRIAL PROPERTIES (MESH TO HAVE 40mm COVER)
6. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.
7. CONCRETE SPONGE FINISHED ON LAYBACK.
8. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
9. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS.
10. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB MINIMUM.
11. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.



M1



M2 (300 TRAY)



M3 (300 TRAY)

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL KERB PROFILES 'B' TYPE, 'SM' TYPE & 'M' TYPE (SEE ALSO SD101)

LAST UPDATED 27/03/2025

SD 100

NOT TO SCALE

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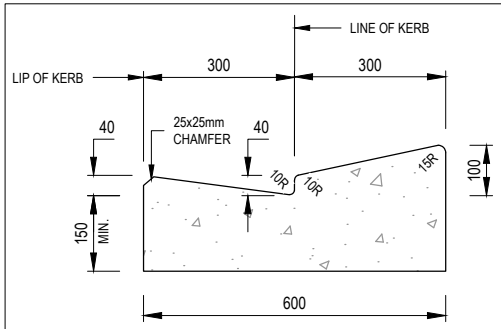
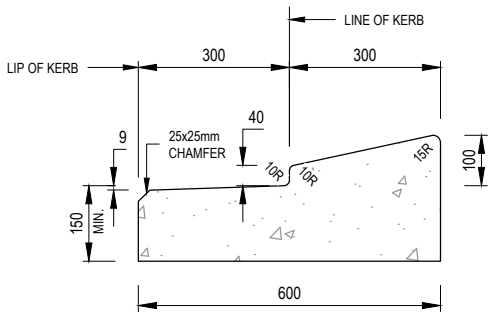
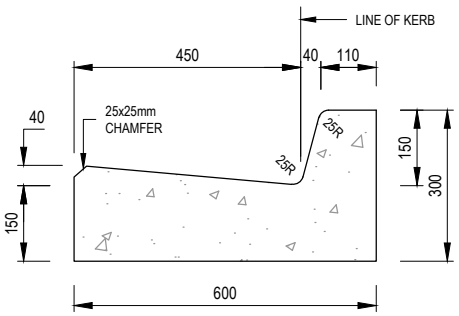


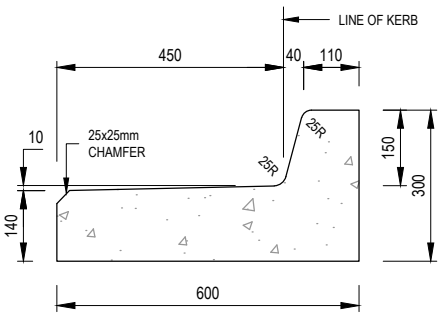
M5



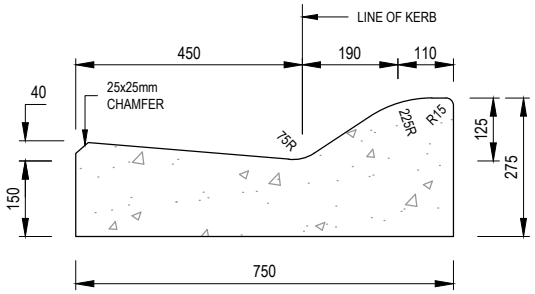
M6



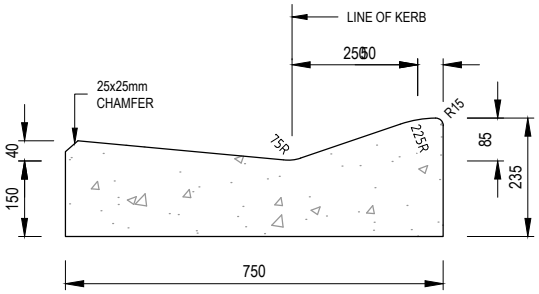
B2 (450 TRAY)



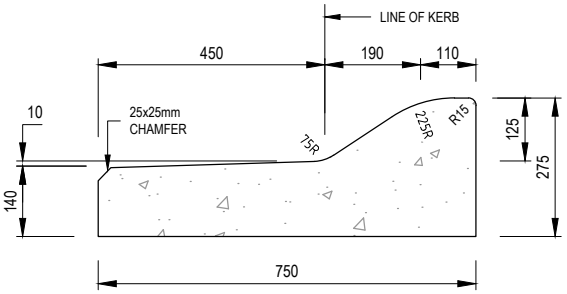
B3 (450 TRAY)



SM2 (450 TRAY)



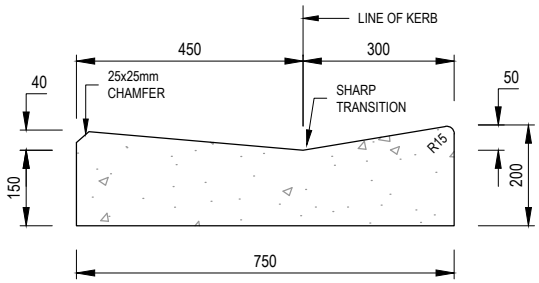
SM2-M (MODIFIED 450 TRAY)



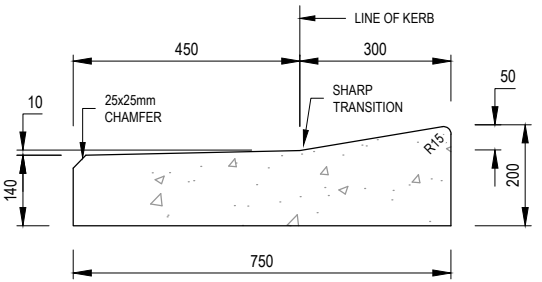
SM3 (450 TRAY)

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 2016 PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
4. BEDDING TO BE COMPACTED CLASS 3 F.C.R. UNLESS OTHERWISE DIRECTED. (REFER SD110)
5. INCREASE OVERALL KERB PROFILE (DEPTH OF CONCRETE):
   a) 80mm FOR COMMERCIAL PROPERTIES
   b) 80mm WITH L8TM TRENCH MESH FOR INDUSTRIAL PROPERTIES (MESH TO HAVE 40mm COVER)
6. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.
7. CONCRETE SPONGE FINISHED ON LAYBACK.
8. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
9. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS.
10. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB MINIMUM.
11. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.



M2 (450 TRAY)



M3 (450 TRAY)

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL KERB PROFILES VICROADS, 'B','SM','M' TYPE MODIFIED 450 TRAY (SEE ALSO SD100)

LAST UPDATED 27/03/2025

SD 101

Infrastructure Design Manual Standard Drawings

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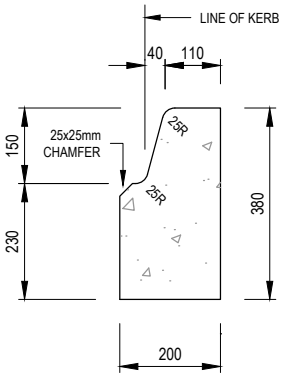
NOT TO SCALE



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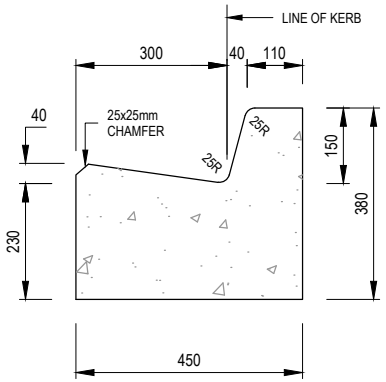

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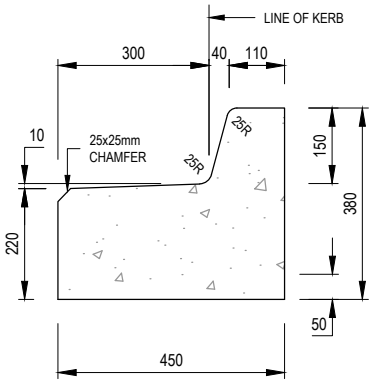
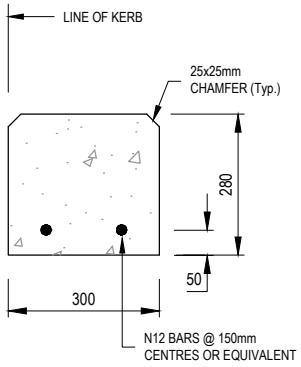
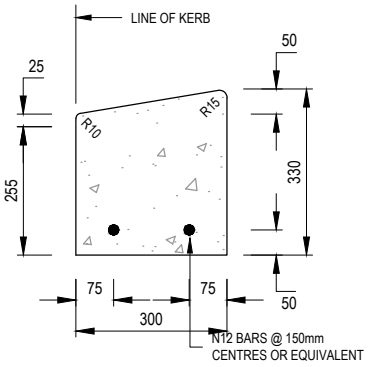


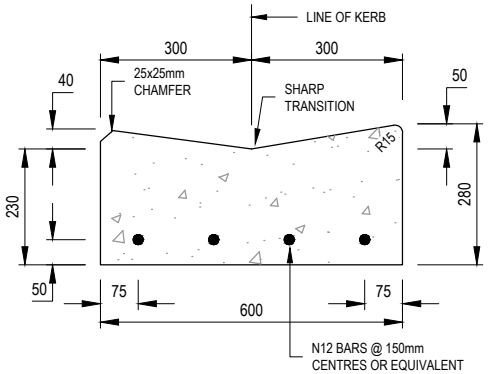
B3 (INDUSTRIAL)



EDGE STRIP (INDUSTRIAL)



M1 (INDUSTRIAL)



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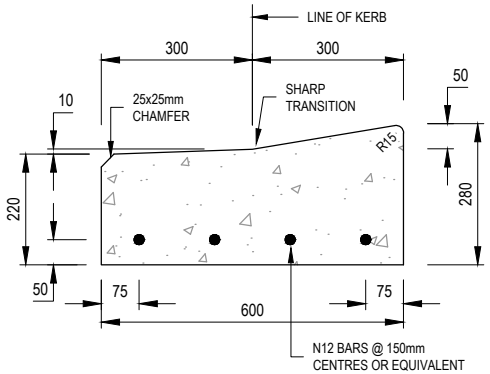

M3 (INDUSTRIAL)

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 2016 PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
4. BEDDING TO BE COMPACTED CLASS 3 F.C.R. UNLESS OTHERWISE DIRECTED. (REFER SD110)
5. INCREASE OVERALL KERB PROFILE (DEPTH OF CONCRETE):
   a) 80mm FOR COMMERCIAL PROPERTIES
   b) 80mm WITH L8TM TRENCH MESH FOR INDUSTRIAL PROPERTIES (MESH TO HAVE 40mm COVER)
6. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.
7. CONCRETE SPONGE FINISHED ON LAYBACK.
8. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
9. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS.
10. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB MINIMUM.
11. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL INDUSTRIAL KERB PROFILES 'B' TYPE & 'M' TYPE

LAST UPDATED 26/02/2020

Infrastructure Design Manual Standard Drawings

SD 105

Local Government Infrastructure Design Association

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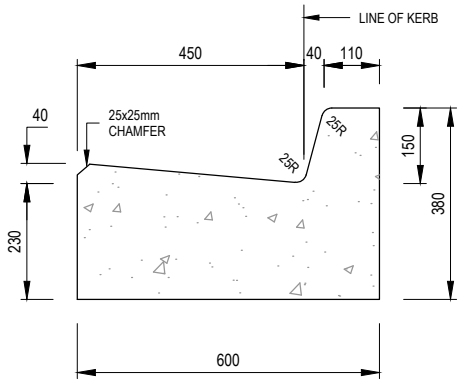
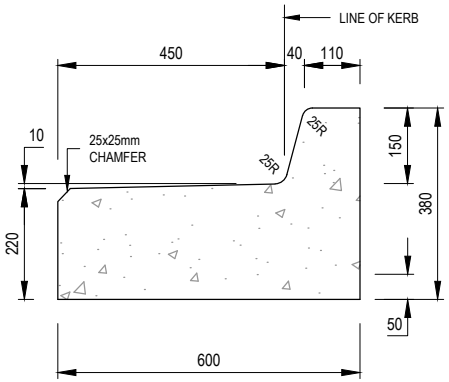


B2 450 TRAY (INDUSTRIAL)



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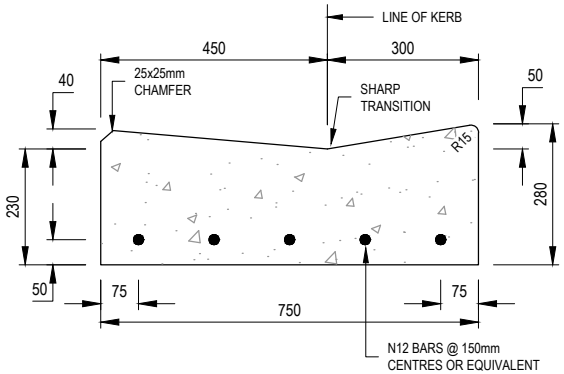

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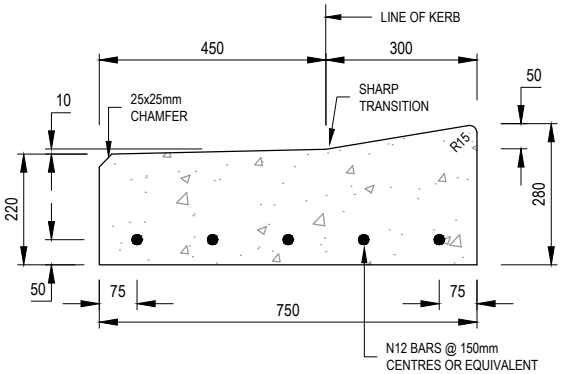

M3 450 TRAY (INDUSTRIAL)

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 2016 PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
4. BEDDING TO BE COMPACTED CLASS 3 F.C.R. UNLESS OTHERWISE DIRECTED. (REFER SD110)
5. INCREASE OVERALL KERB PROFILE (DEPTH OF CONCRETE):
   a) 80mm FOR COMMERCIAL PROPERTIES
   b) 80mm WITH L8TM TRENCH MESH FOR INDUSTRIAL PROPERTIES (MESH TO HAVE 40mm COVER)
6. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.
7. CONCRETE SPONGE FINISHED ON LAYBACK.
8. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
9. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS.
10. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB MINIMUM.
11. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL INDUSTRIAL KERB PROFILES 'B' TYPE & 'M' TYPE MODIFIED 450 TRAY

LAST UPDATED 27/03/2025

SD 106

NOT TO SCALE

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Local Government Infrastructure Design Association

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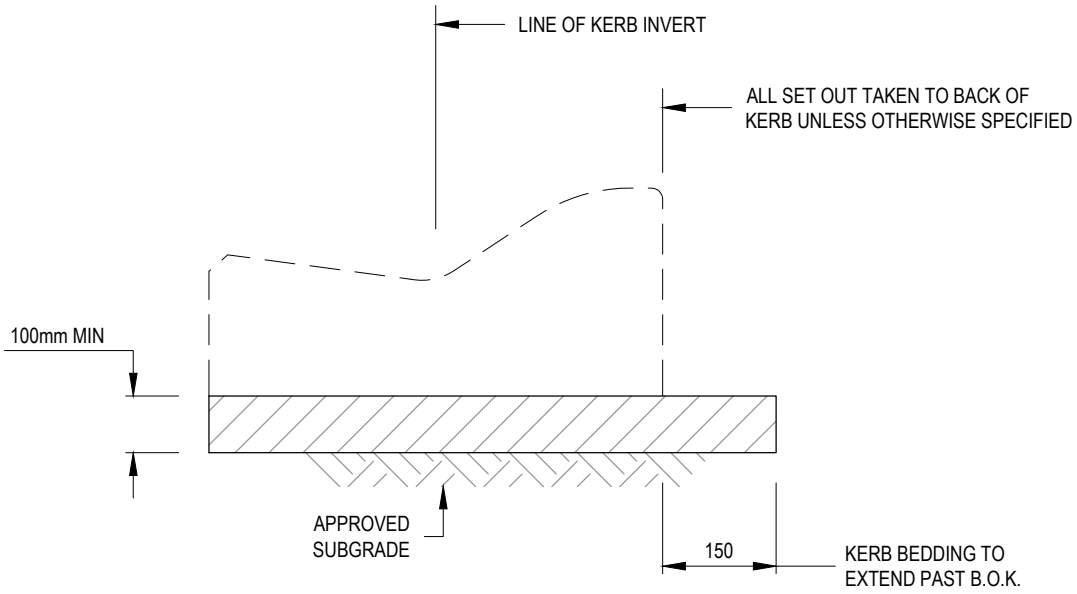

TYPICAL KERB BEDDING

NOTES:

1. BEDDING TO BE COMPACTED CLASS 3 F.C.R. 20mm BEDDING TO 97% MMD OR EXTENSION OF ROAD PAVEMENT LAYERS, WHICHEVER IS GREATER. UNLESS OTHERWISE DIRECTED.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL KERB BEDDING DETAIL

LAST UPDATED 27/03/2025

SD 110

SCALE 1:10

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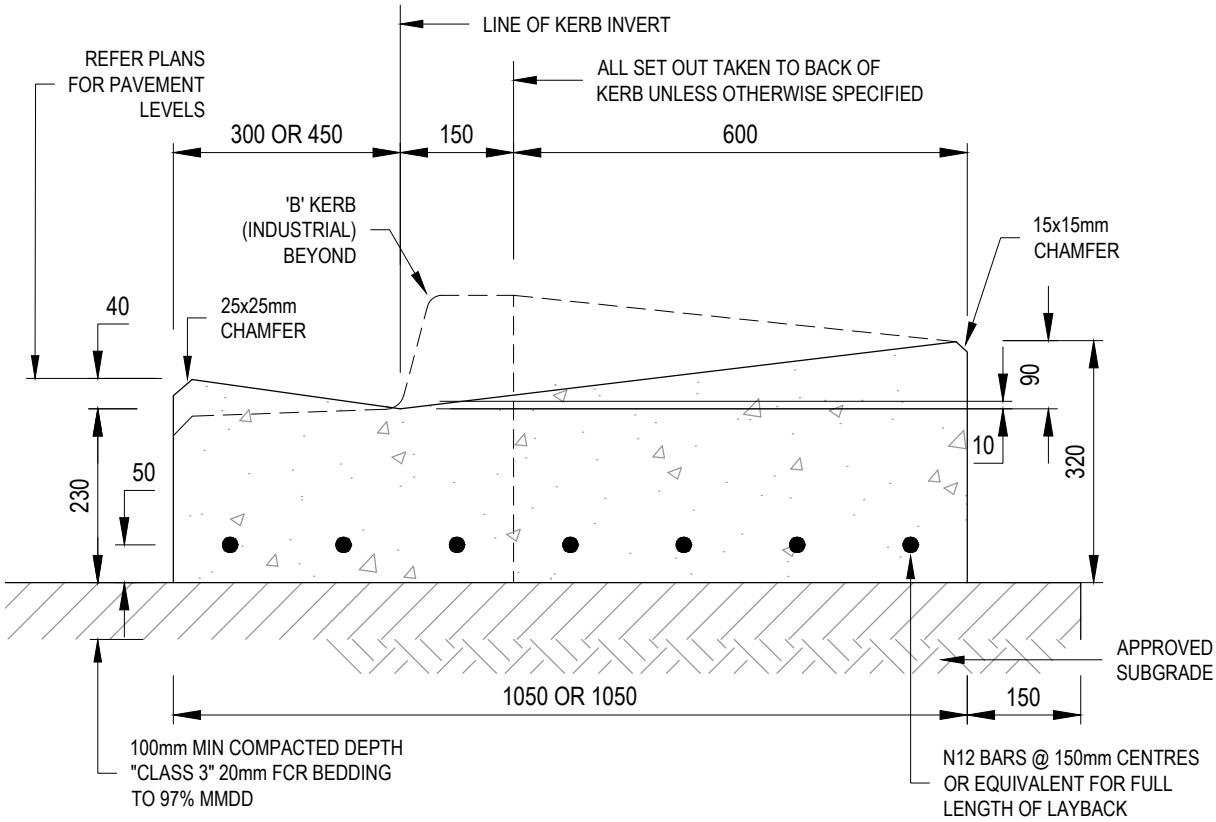

TYPICAL SECTION FOR INDUSTRIAL

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 2016 PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS 32MPa STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
4. BEDDING TO BE COMPACTED CLASS 3 F.C.R. UNLESS OTHERWISE DIRECTED. (REFER SD110)
5. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.
6. CONCRETE SPONGE FINISHED ON LAYBACK.
7. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
8. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS.
9. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB MINIMUM.
10. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL INDUSTRIAL KERB LAYBACK

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Infrastructure Design Manual Standard Drawings

SD 115

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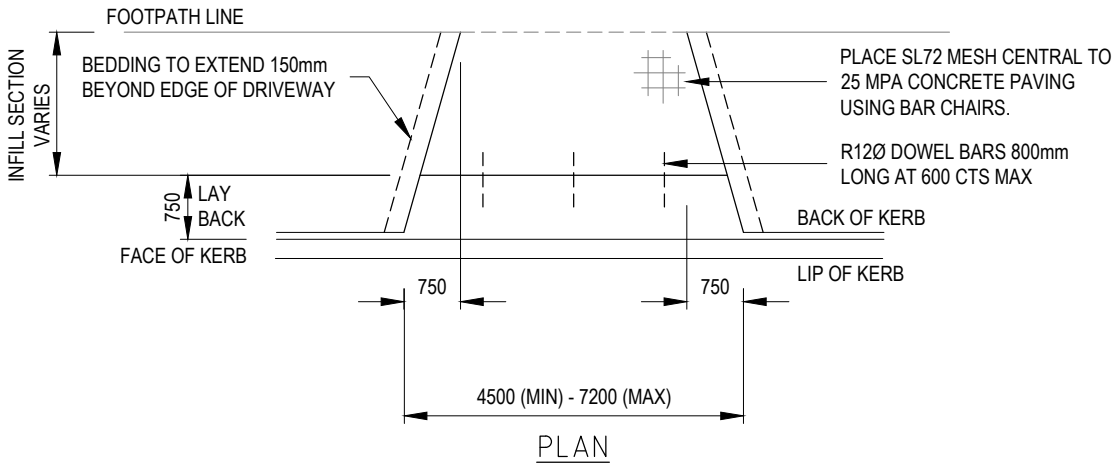
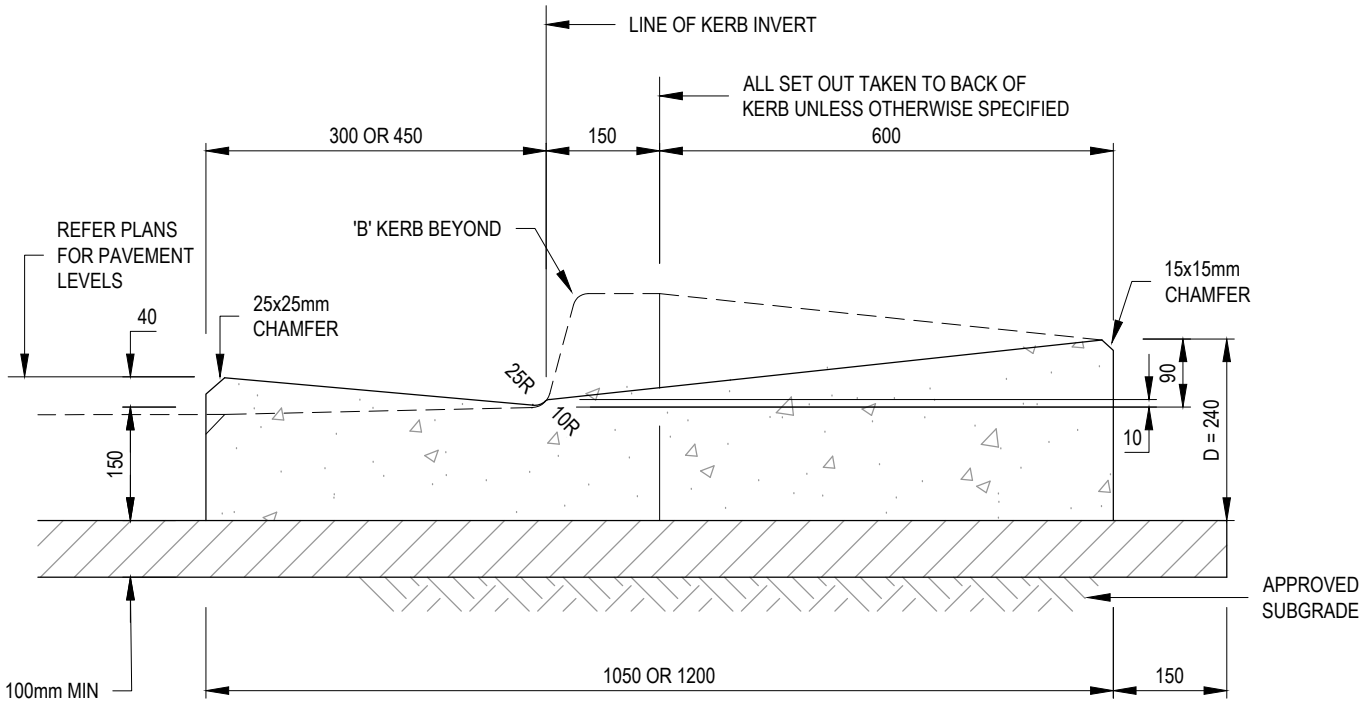
SCALE 1:10



PLAN



TYPICAL SECTION FOR RESIDENTIAL

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS
2. BEDDING TO BE COMPACTED CLASS 3 F.C.R. 20mm BEDDING TO 97% MMD OR EXTENSION OF ROAD PAVEMENT LAYERS, WHICH EVER IS GREATER. UNLESS OTHERWISE DIRECTED
3. INCREASE DEPTH OF CONCRETE 80mm FOR COMMERCIAL PROPERTIES ('D' + 80mm) CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB
4. CONCRETE SPONGE FINISHED ON LAYBACK
5. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
6. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS
7. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB.
8. FOR TYPICAL INDUSTRIAL KERB LAYBACK SEE DRAWING SD115.

ALL MEASUREMENTS IN MILLIMETRES

LAYBACK FOR 'B2' & 'B3' KERBING

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Infrastructure Design Manual Standard Drawings

SD 120

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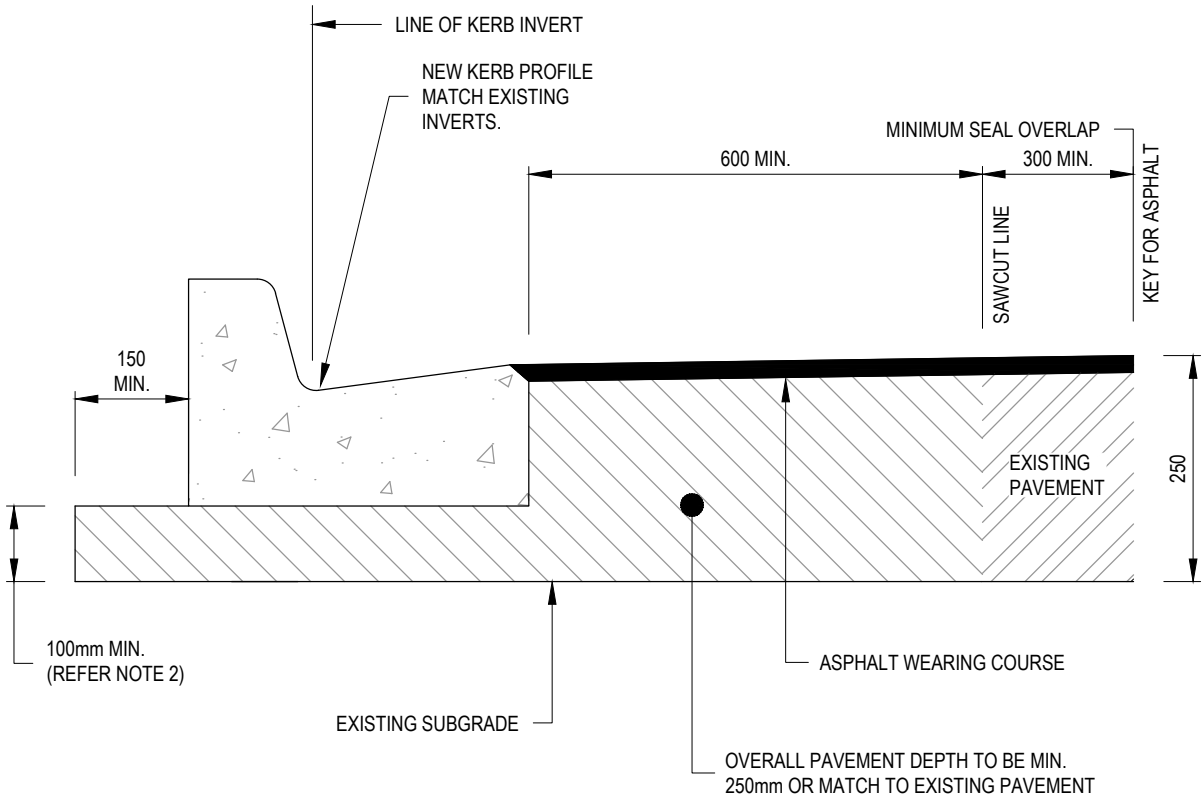
SCALE 1:10



TYPICAL SECTION

NOTES:

1. REFER TO CONCRETE AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. 100mm MINIMUM COMPACTED DEPTH OF CLASS 3, 20mm F.C.R. BEDDING TO 97% MMDD OR EXTENSION OF ROAD PAVEMENT LAYERS, WHICH EVER IS GREATER. UNLESS OTHERWISE DIRECTED.
3. WEARING COURSE ASPHALT TO BE MINIMUM 30mm COMPACTED DEPTH OF TYPE N, 10mm NOMINAL SIZE (U.N.O.)
4. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
5. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB.
6. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. REFER TO VICROADS STANDARD SPECIFICATION 703 FOR REQUIREMENTS OF CONCRETE TO BE USED IN EXTRUSION MACHINES.
7. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB.

ALL MEASUREMENTS IN MILLIMETRES

KERB & CHANNEL INSTALLATION ABUTTING EXISTING PAVEMENT

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SD 130

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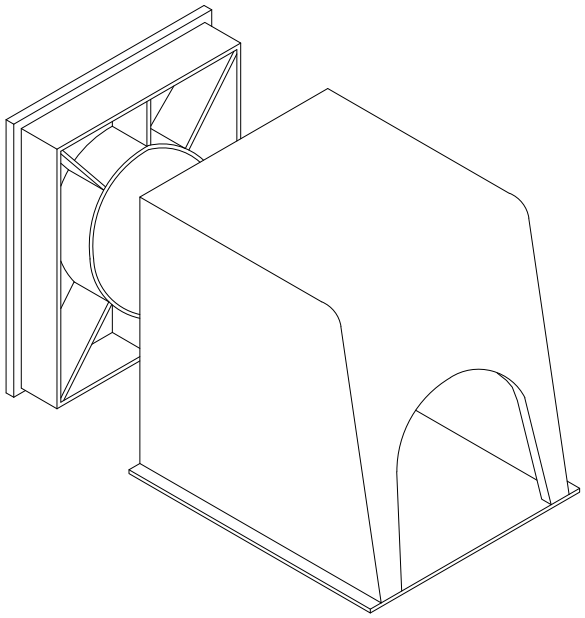
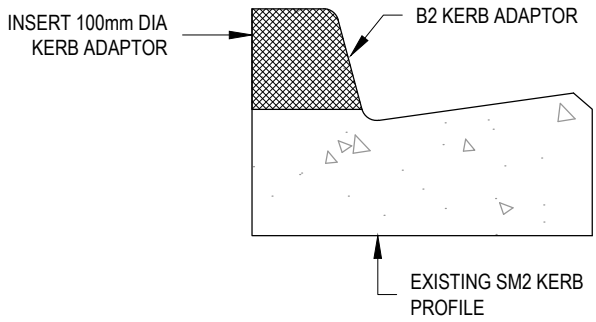
SCALE 1:10



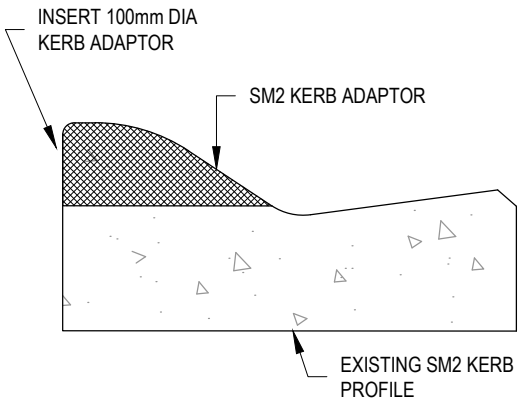
B2 KERB ADAPTOR



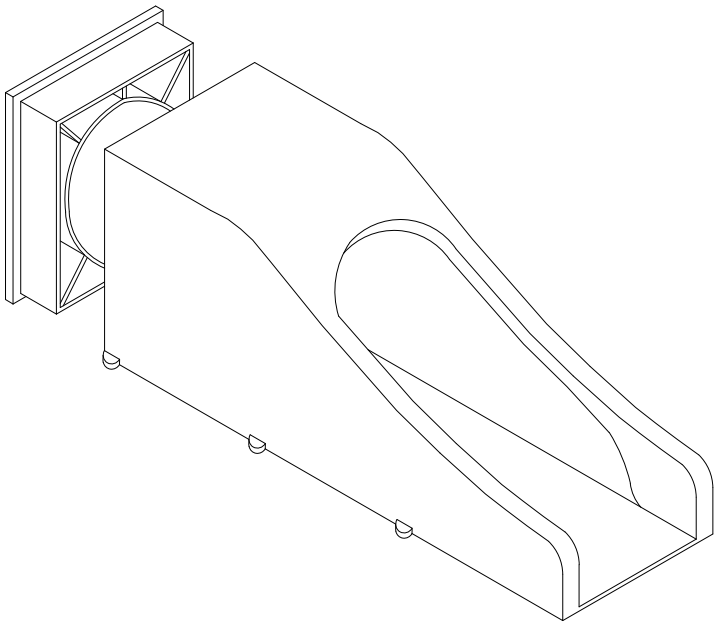
B2 KERB WITH HEAVY DUTY KERB ADAPTOR SECTIONAL VIEW

NOTES:

ALL KERB ADAPTORS ARE TO BE AN APPROVED PROPRIETARY PRODUCT CONSTRUCTED FROM EITHER HEAVY DUTY UPVC OR HOT DIPPED GALVANIZED MILD STEEL. KERB IS TO BE NEATLY SAW CUT & KERB ADAPTOR EPOXIED INTO POSITION.



SM2 KERB WITH HEAVY DUTY KERB ADAPTOR SECTIONAL VIEW



SM2 KERB ADAPTOR

ALL MEASUREMENTS IN MILLIMETRES

HEAVY DUTY KERB ADAPTORS FOR 'B2' AND 'SM2' KERBS

LAST UPDATED 26/02/2020

Infrastructure Design Manual Standard Drawings

SD 140

Local Government Infrastructure Design Association

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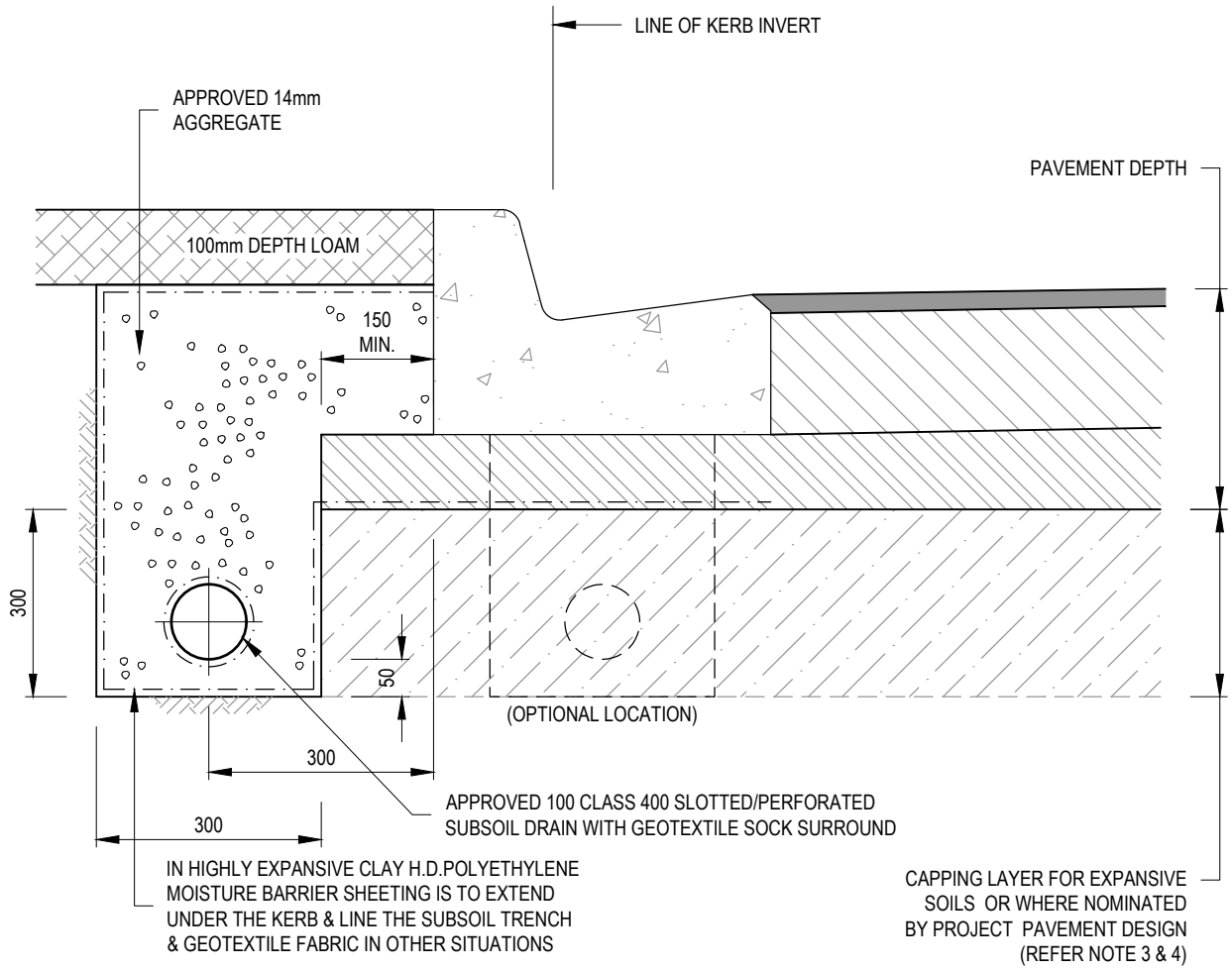
SCALE 1:10



TYPICAL SECTION

NOTES:

1. THE DRAINS SHALL BE LAID ON A GRADE PARALLEL TO THE FINISHED SURFACE.
2. FOR FLUSHOUT RISER DETAILS REFER TO STANDARD DRAWINGS SD525 & SD530.
3. WHERE THE SUBGRADE IS CLASSIFIED AS BEING EXPANSIVE, SUBSURFACE PAVEMENT DRAINS SHALL BE DESIGNED TO BE CONTAINED WHOLLY WITHIN THE CAPPING LAYER. IN ADDITION, NO PART OF THE SUBSURFACE DRAINAGE TRENCH SHALL BE LOCATED WITHIN 150 MM OF THE UNDERLYING SUBGRADE. IF NECESSARY, THE CAPPING LAYER MAY HAVE TO BE THICKENED TO SATISFY THIS REQUIREMENT.
4. WHERE REQUIRED BY PAVEMENT DESIGN, CAPPING LAYER OF LOW PERMEABILITY PLACED IMMEDIATELY BELOW THE PAVEMENT SUB-BASE TO MINIMISE CHANGES IN THE MOISTURE CONTENT IN THE MATERIAL BELOW THE CAPPING LAYER (REFER S204 VICROADS SPECIFICATION)

ALL MEASUREMENTS IN MILLIMETRES

SUBSOIL DRAINAGE

LAST UPDATED 27/03/2025

SD 145

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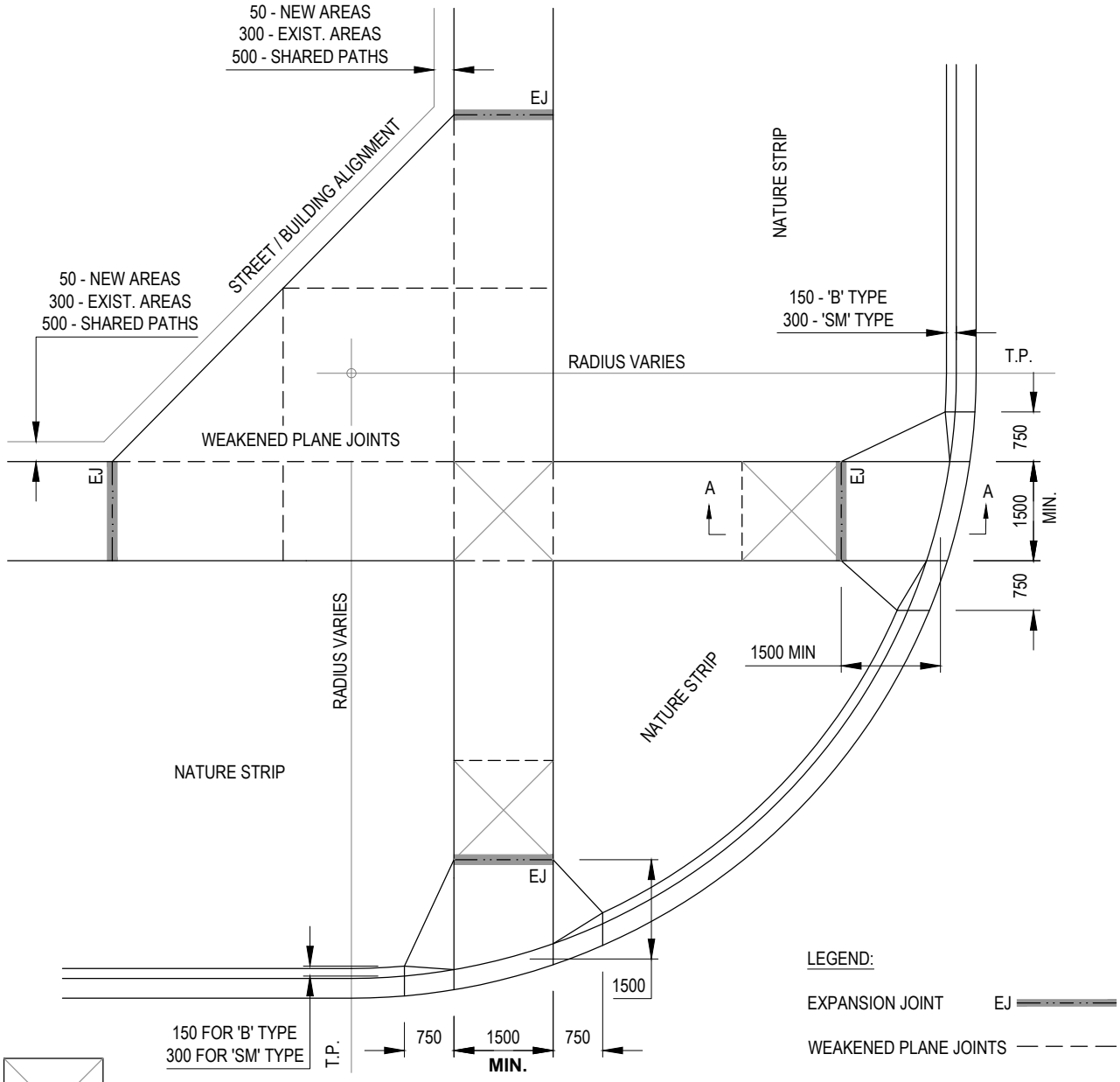
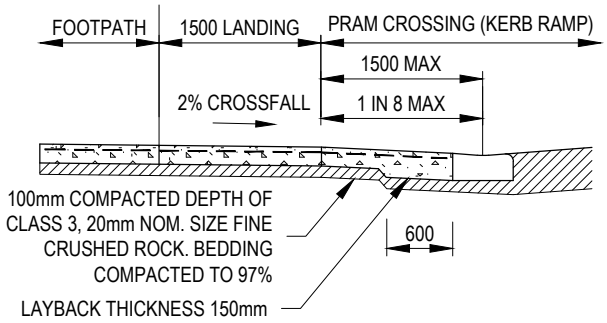
NOT TO SCALE



TYPICAL ARRANGEMENT PLAN

NOTE:
LANDING ZONE TO BE A MIN. 1.5m IN THE DIRECTION OF TRAVEL AT 2% MAX GRADE.



SECTION A-A
NOT TO SCALE

NOTES:

1. LOCATION OF CROSSINGS TO BE CASE BY CASE & TO BE APPROVED BY COUNCIL 2% CROSSFALL DESIRABLE.
2. CROSSING GENERALLY TO BE LOCATED AT TANGENT POINTS.
3. CONCRETE TO BE SMOOTH TROWELLED FINISH ON TRAY, NO BULLNOSE.
4. CONCRETE TO BE FINE SOFT HAIR BROOM FINISH ON LAYBACK.
5. MINIMUM CONCRETE STRENGTH TO BE 25 MPA.
6. BEDDING TO BE COMPACTED CLASS 3 (OR BETTER) F.C.R. UNLESS OTHERWISE DIRECTED
7. IF SPLAY IS NOT REQUIRED FOOTPATH IS TO CONTINUE THROUGH TO LAYBACKS.
8. TGSI'S (TILES), WHERE REQUIRED, ARE TO BE TO BE INSTALLED TO AS1428.4
9. WHERE ANY NEW CONCRETE ABUTS EXISTING CONCRETE INSTALL R16Ø DOWELS IN 125mm THICK CONCRETE OR R10Ø DOWELS IN 75mm THICK CONCRETE DOWELS @ MAX 600 CTS
10. REFER SD 205, SD270 FOR FURTHER FOOTPATH DETAILS

ALL MEASUREMENTS IN MILLIMETRES

PEDESTRIAN CROSSING

LAST UPDATED 27/03/2025

SD 200

SCALE 1:10

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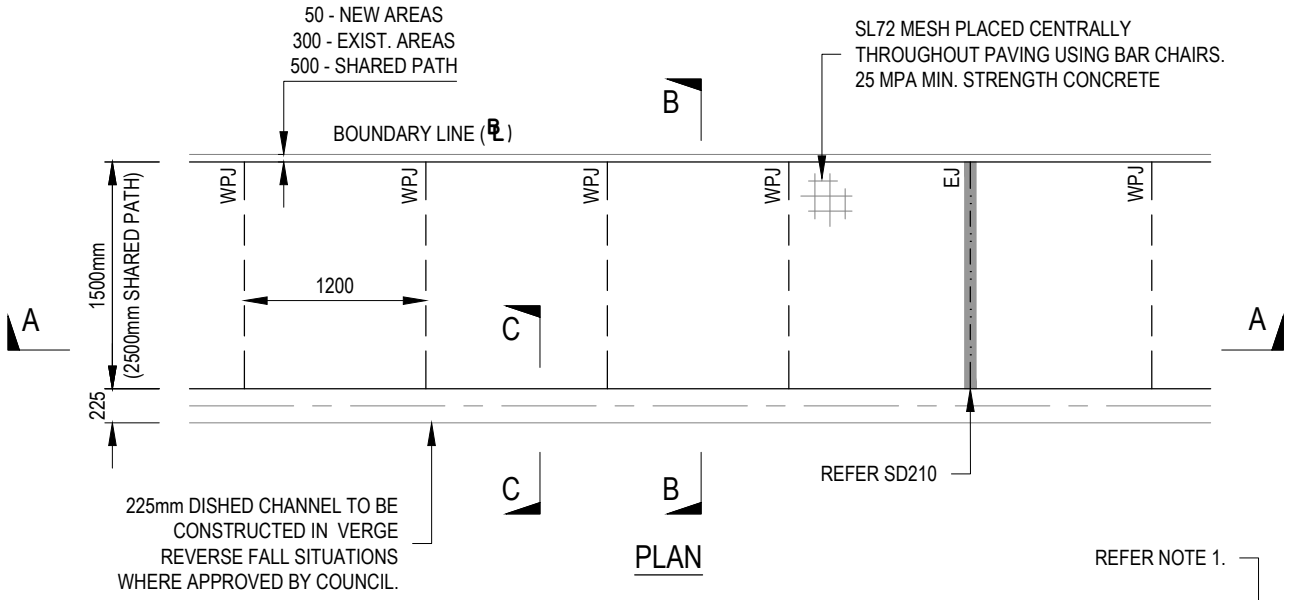
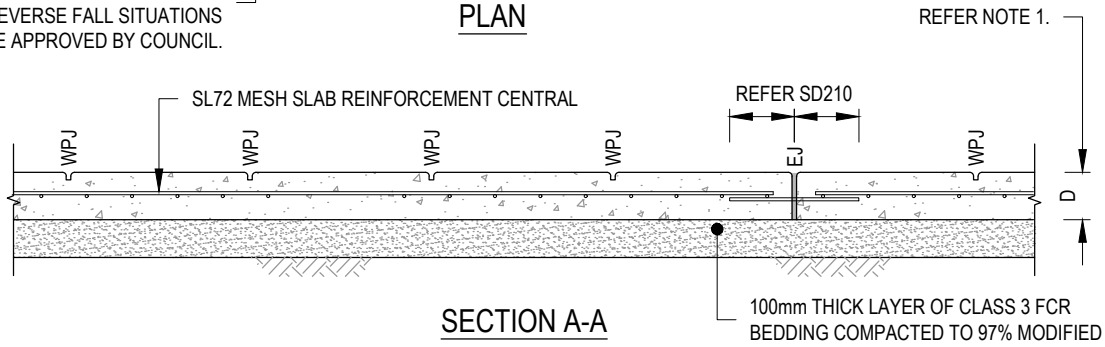
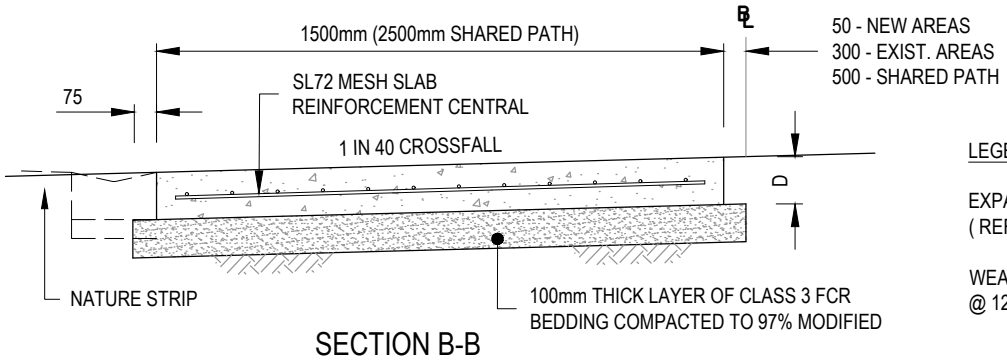


PLAN



SECTION A-A

TYPICAL 125mm & 150mm FOOTPATH SECTION



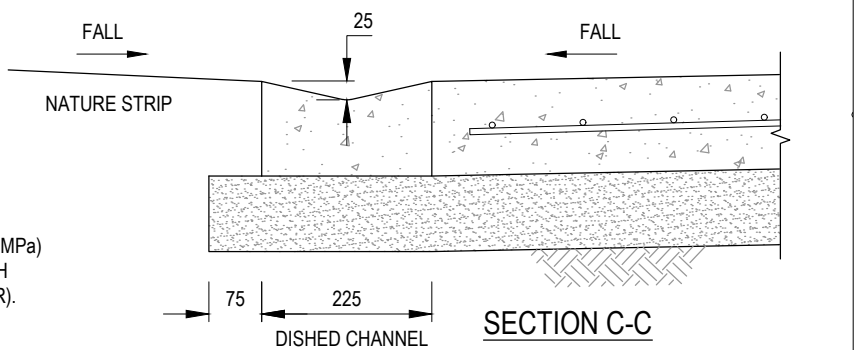
LEGEND:

EXPANSION JOINT (REFER SD210) — EJ

WEAKENED PLANE JOINTS @ 1200mm CRS. — WPJ

SECTION B-B

TYPICAL 125mm & 150mm FOOTPATH SECTION



SECTION C-C

(ONLY TO BE USED WITH COUNCIL APPROVAL)

NOTES:

1. 'D' = DEPTH OF CONCRETE FOOTPATH
   TYPICAL RESIDENTIAL 'D'= 125mm THICK (25 MPa)
   TYPICAL INDUSTRIAL / COMMERCIAL 'D' = 150mm (32MPa)
2. WEAKENED PLANE JOINTS (W.P.J) TO BE MADE WITH T-IRON (OR CONCRETE SAW WITHIN 24 Hrs OF POUR).
3. REFER TO IDM CLAUSE 13.3 FOR ADDITIONAL REQUIREMENTS.
4. BOXING MUST MATCH DEPTH OF CONCRETE

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL FOOTPATH DETAIL

LAST UPDATED 27/03/2025

SD 205

NOT TO SCALE

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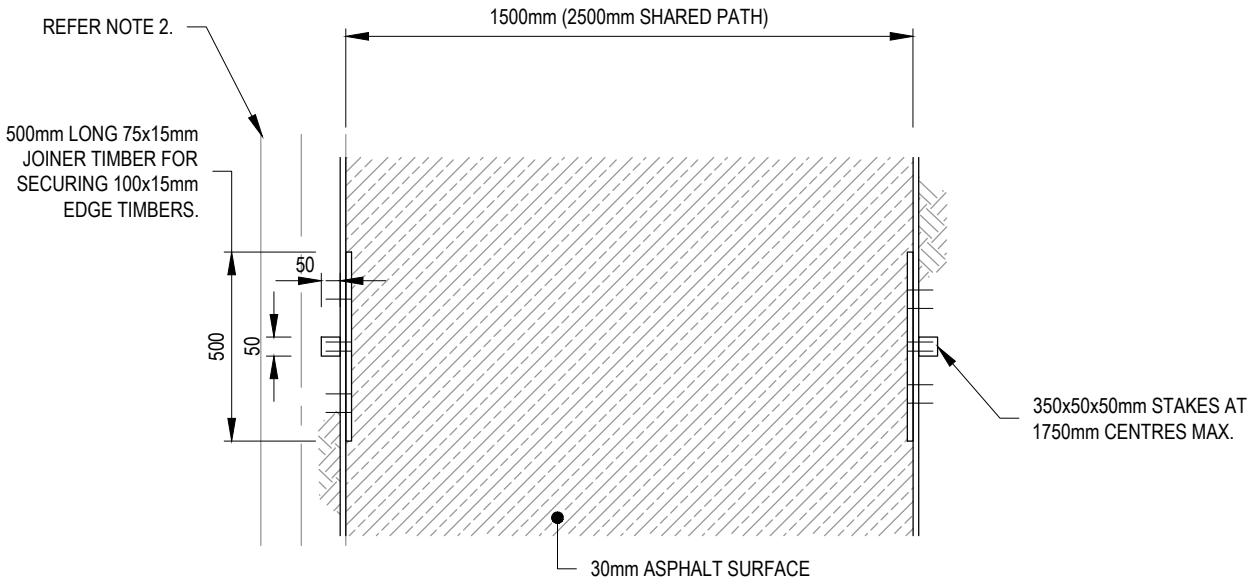
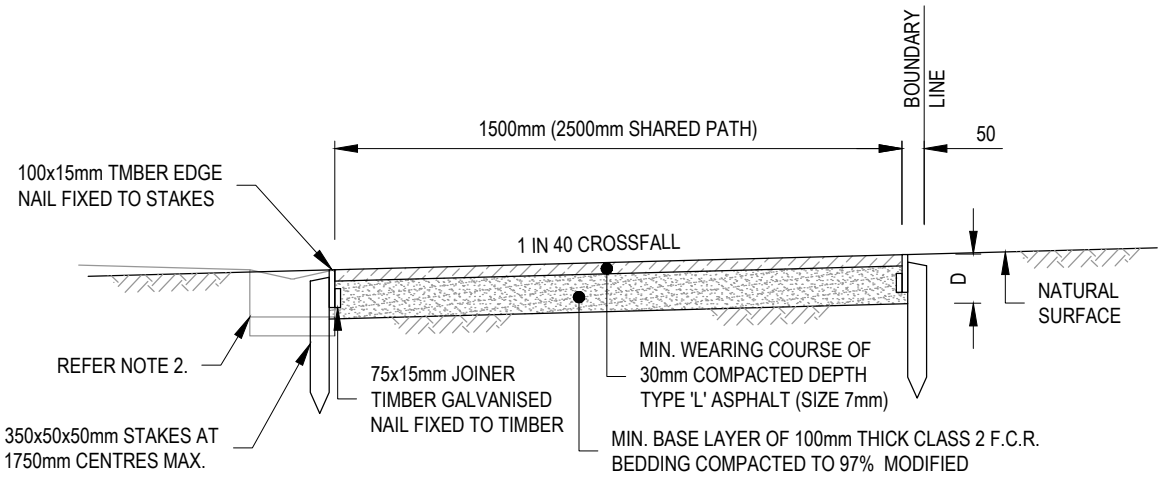


TYPICAL 130mm ASPHALT PATH WITH TIMBER EDGE PLAN



TYPICAL 130mm ASPHALT PATH WITH TIMBER EDGE SECTION

NOTES:

1. 'D' = DEPTH OF ASPHALT FOOTPATH
   TYPICAL ASPHALT FOOTPATH DEPTH 'D'= 130mm
   VARIED 'D' MAY OCCUR DEPENDANT ON APPROVED PAVEMENT MAKE UP
2. IF SURFACE DRAINAGE REDIRECTION IS NECESSARY DUE TO REVERSE FALL OF ADJACENT AREAS REPLACE TIMBER EDGE WITH CONCRETE DISHED CHANNEL AS PER SD205 'SECTION C-C' (COUNCIL APPROVAL REQUIRED)

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL HOT MIX ASPHALT FOOTPATH

LAST UPDATED 26/02/2020

SD 206

NOT TO SCALE

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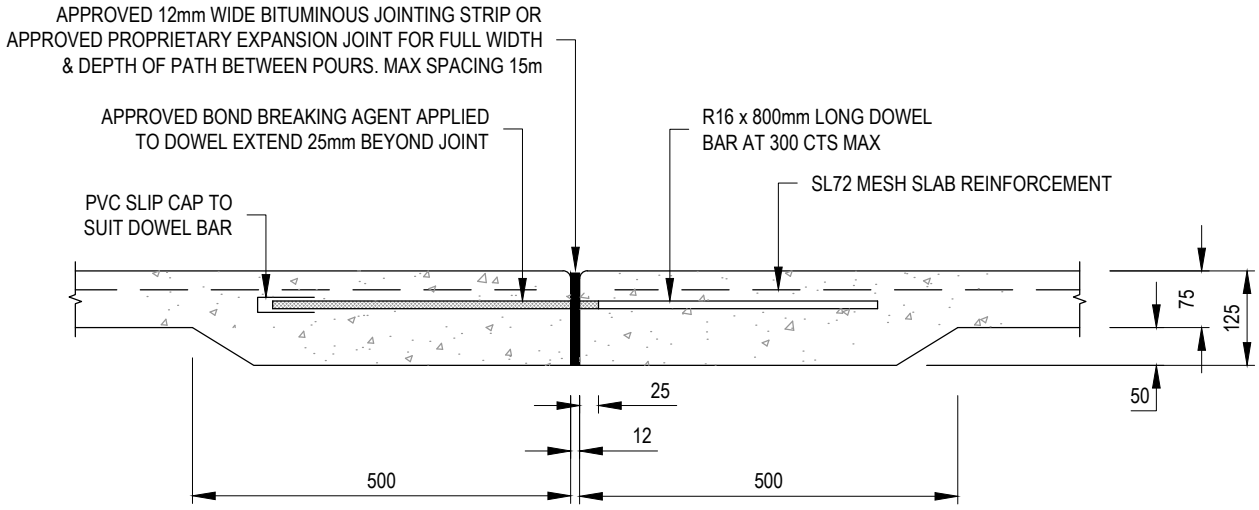
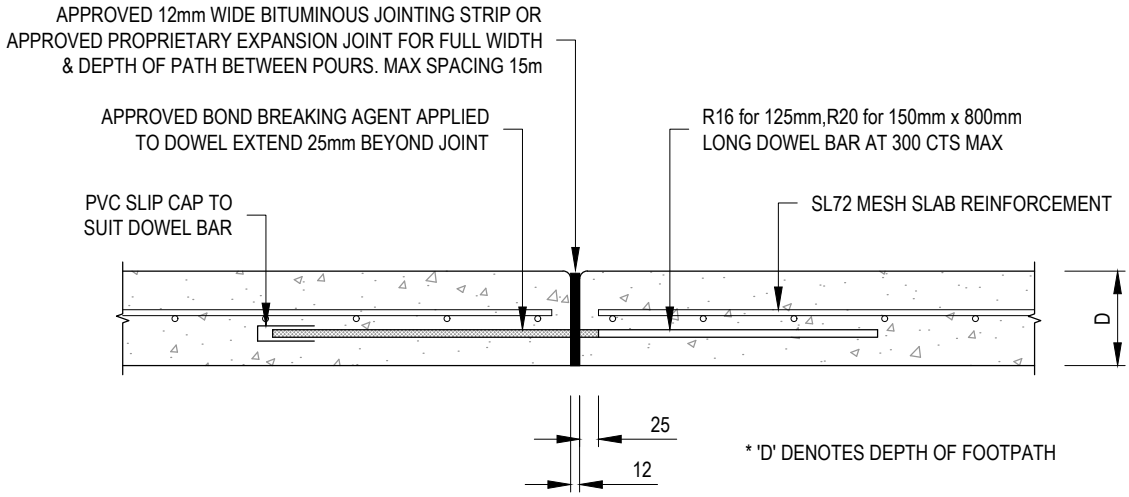


75mm FOOTPATH EXPANSION JOINT - SECTION

(EXISTING DEVELOPED AREAS ONLY)



125mm & 150mm FOOTPATH EXPANSION JOINT - SECTION

NOTES:

1. 'D' = DEPTH OF CONCRETE FOOTPATH
   TYPICAL RESIDENTIAL 'D'= 125mm THICK (25 MPa)
   TYPICAL INDUSTRIAL / COMMERCIAL 'D' = 150mm (32MPa)
2. APPROVED PROPRIETARY JOINTS CAN BE USED WITH COUNCIL APPROVAL.
3. DOWELL JOINTS SHALL BE GALVANISED OR HAVE APPROVED CORROSION PROTECTION.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL FOOTPATH JOINTS

LAST UPDATED 27/02/2025

SD 210

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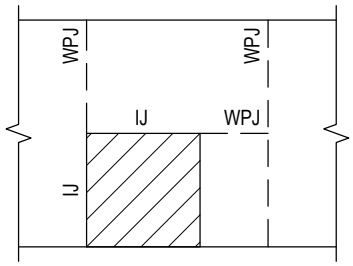
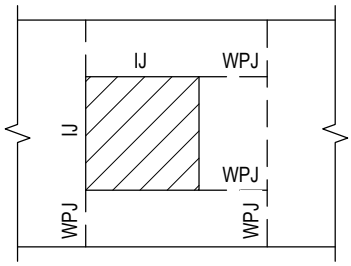
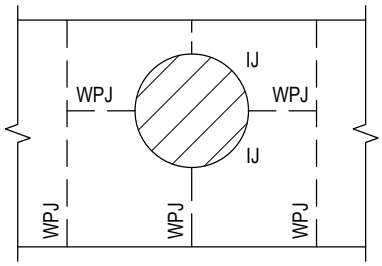
NOT TO SCALE



PIT / ACCESS HOLE AT EDGE (PLAN)



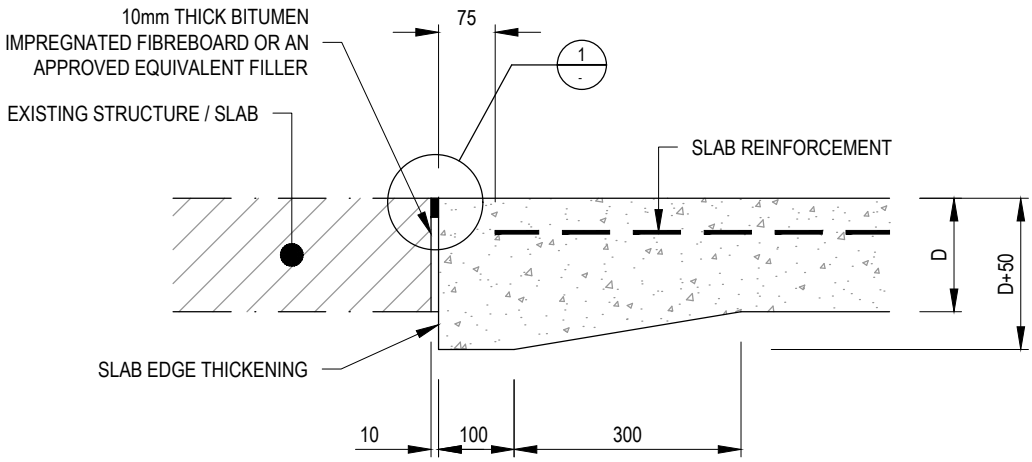


PIT / ACCESS HOLE NOT AT EDGE (PLAN)

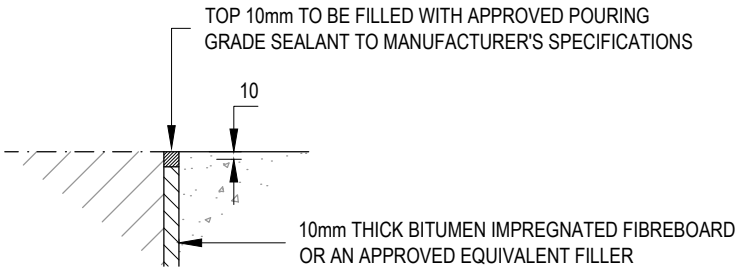
LEGEND:

ISOLATION JOINT — IJ

WEAKENED PLANE JOINT (TOOLED JOINTS) — WPJ



TYPICAL SECTION
SCALE 1:10



DETAIL 1 / -
SCALE 1:5

NOTES:

1. 'D' DENOTES DEPTH OF CONCRETE PAVEMENT

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE PAVEMENT ISOLATION JOINT

LAST UPDATED 12/03/2020

SD 220

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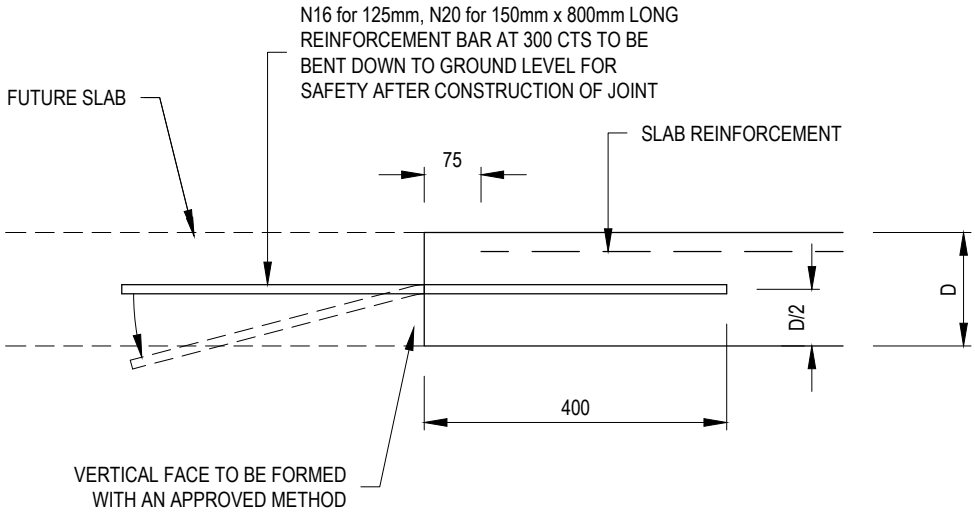
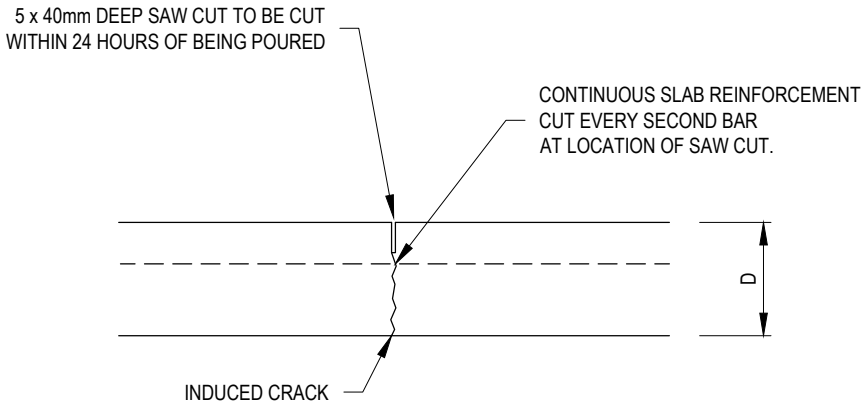
SCALE 1:10

Local Government Infrastructure Design Association



TYPICAL FUTURE CONSTRUCTION JOINT



TYPICAL SAWN WEAKENED PLANE JOINT

* 'D' DENOTES DEPTH OF FOOTPATH

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE PAVEMENT
TYPICAL JOINT DETAILS

LAST UPDATED 27/02/2025

SD 225

SCALE 1:10

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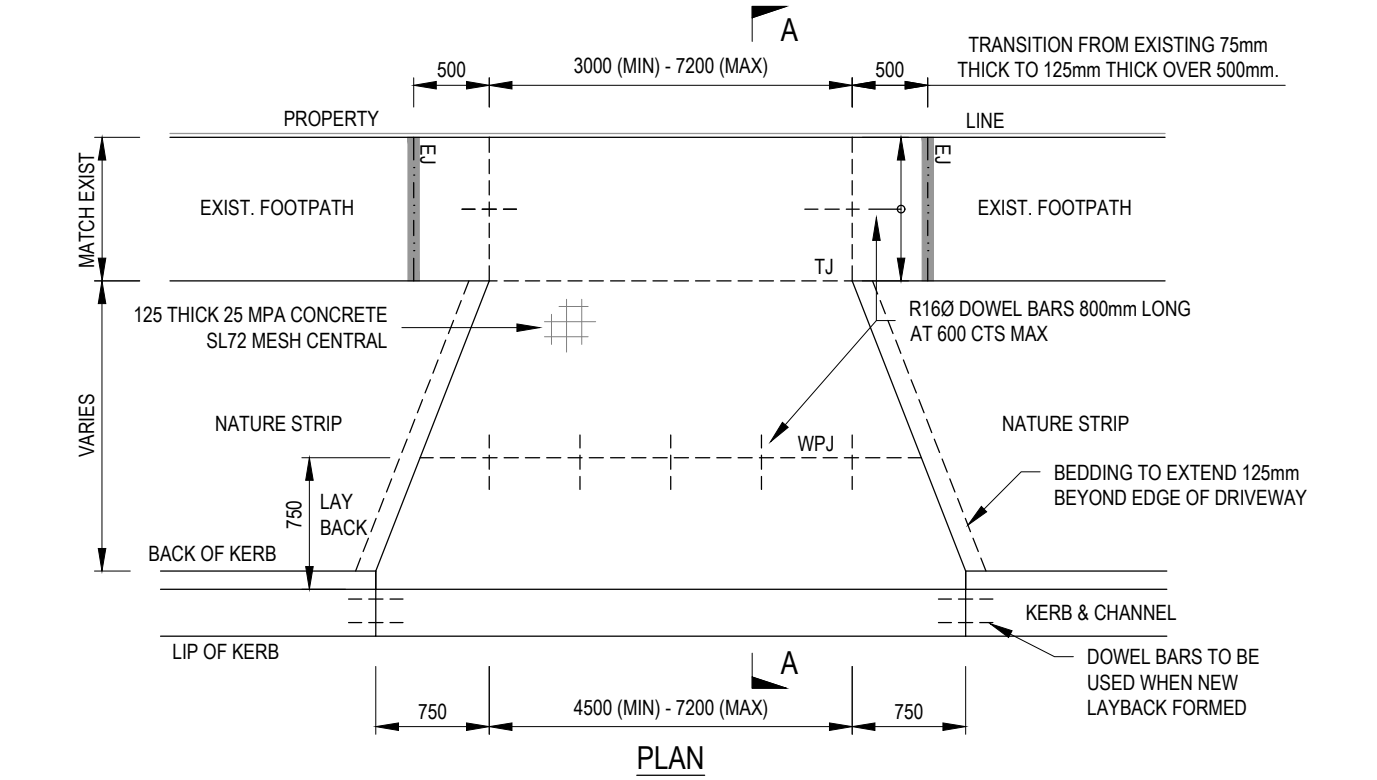
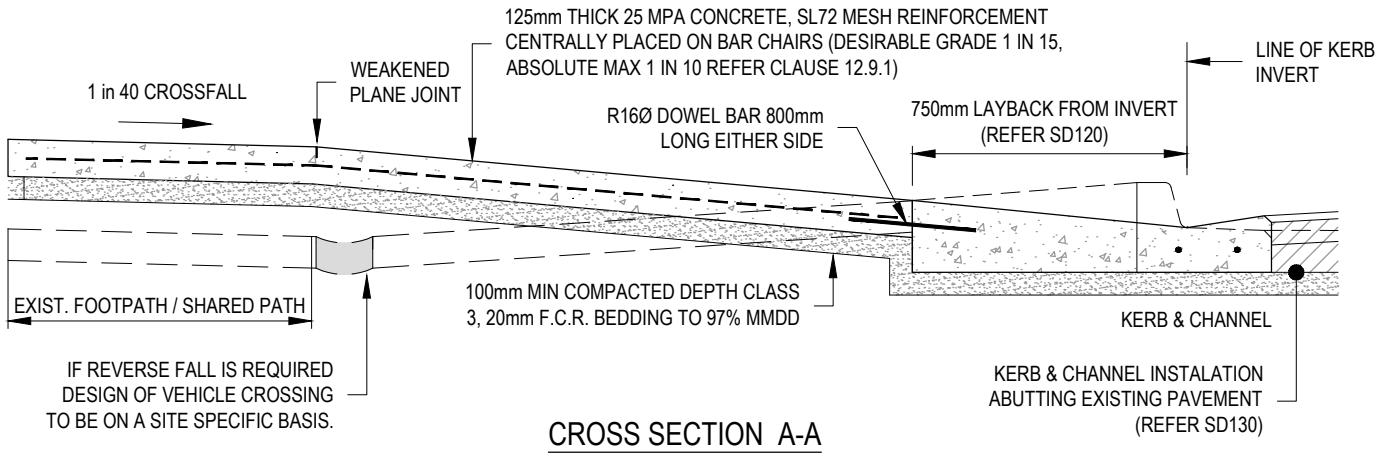


PLAN



CROSS SECTION A-A

LEGEND:

EXPANSION JOINT EJ

WEAKENED PLANE JOINTS WPJ

NOTES:

1. CROSS REFERENCES:
   INDUSTRIAL CROSSINGS - SD236 / SD250
   RURAL CROSSINGS - SD255 / SD260
   IDM - SECTION 12.9.1. AND 12.9.2.
2. THIS DRAWING DETAILS DIMENSIONS FOR STANDARD RESIDENTIAL CROSSINGS ONLY.
3. CROSSING WIDTHS EXCEEDING THE MAXIMUM ALLOWABLE WILL REQUIRE APPLICATION TO COUNCIL FOR SPECIAL CONSIDERATION.
4. JOINTS AND DOWEL BARS ARE REQUIRED ON EITHER SIDE OF THE CROSSING AT THE INTERFACE WITH THE FOOTPATH. PROVISION SHALL BE MADE IN EXISTING CONCRETE SECTIONS BY DRILLING HOLES TO A MINIMUM DEPTH OF 150mm AND INSERTING R16 DOWEL BARS.
5. AN APPROVED JOINT FILLER SHALL BE PLACED ON EITHER SIDE OF THE CROSSING AGAINST FOOTPATH SLABS. DOWEL BARS ARE TO HAVE AN APPROVED BOND BREAKER APPLIED TO THE END OF THE BAR INSERTED INTO THE EXISTING CONCRETE FOOTPATH SECTIONS REFER SD220.
6. ADDITIONAL WEAKENED PLANE JOINTS REQUIRED IF DISTANCE FROM BACK OF KERB TO FOOTPATH IS GREATER THAN 3000 AND SHALL BE PLACED AT THE MIDPOINT OF THE DISTANCE.
7. THE MAXIMUM NUMBER OF CROSSINGS, WHERE ANY CROSSING EXCEEDS 3.5 METRES WIDTH, SHALL BE ONE (1) CROSSING WITH THE MAXIMUM WIDTH OF THAT CROSSING TO BE 7.2 METRES. CROSSINGS TO ADJACENT PROPERTIES SHALL BE EITHER FULLY COMBINED, AND OF MAXIMUM WIDTH OF 7.2 METRES, OR ELSE HAVE A MINIMUM SEPARATION AS APPROVED BY COUNCIL.
8. FOOTPATHS OF 75mm THICKNESS ARE ACCEPTABLE ONLY WHERE THE LOTS ARE DEVELOPED ALREADY AND THE RISK OF SITE CONSTRUCTION DAMAGE IS NEGLIGIBLE. WHERE GREENFIELD SITES AND FUTURE HOUSING IS STILL TO BE DONE, THEN THE DEPTH OF THE FOOTPATH SHALL BE 125mm THROUGHOUT.

ALL MEASUREMENTS IN MILLIMETRES

RETROFIT RESIDENTIAL VEHICLE CROSSING DETAIL

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 235

Local Government Infrastructure Design Association

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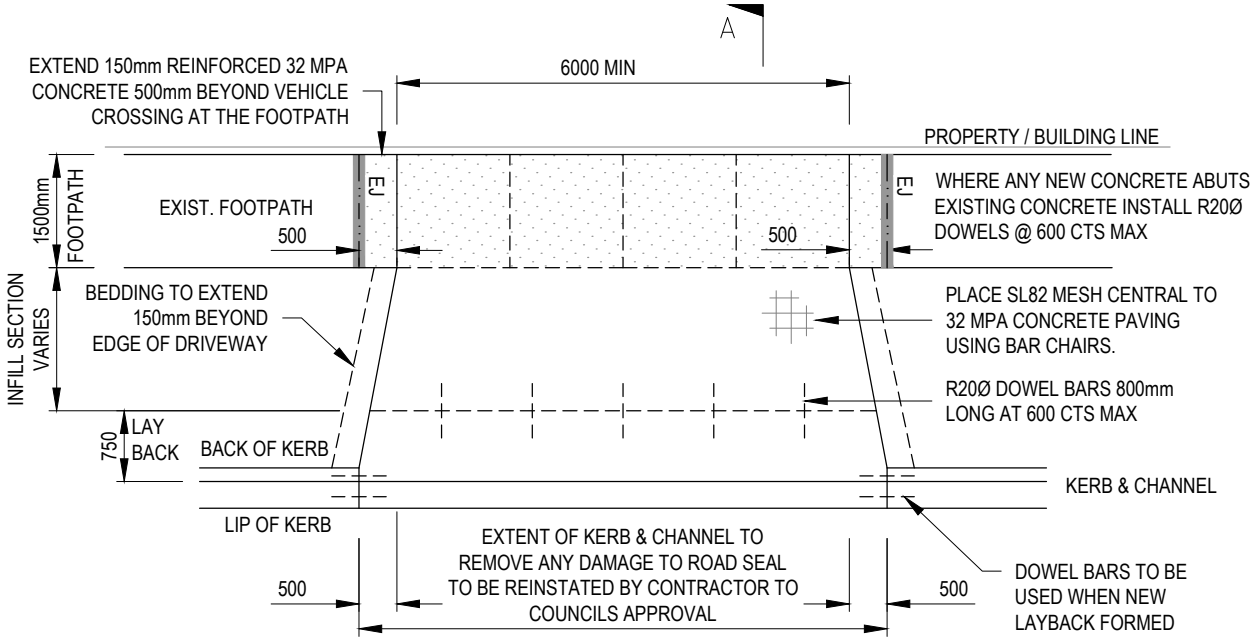
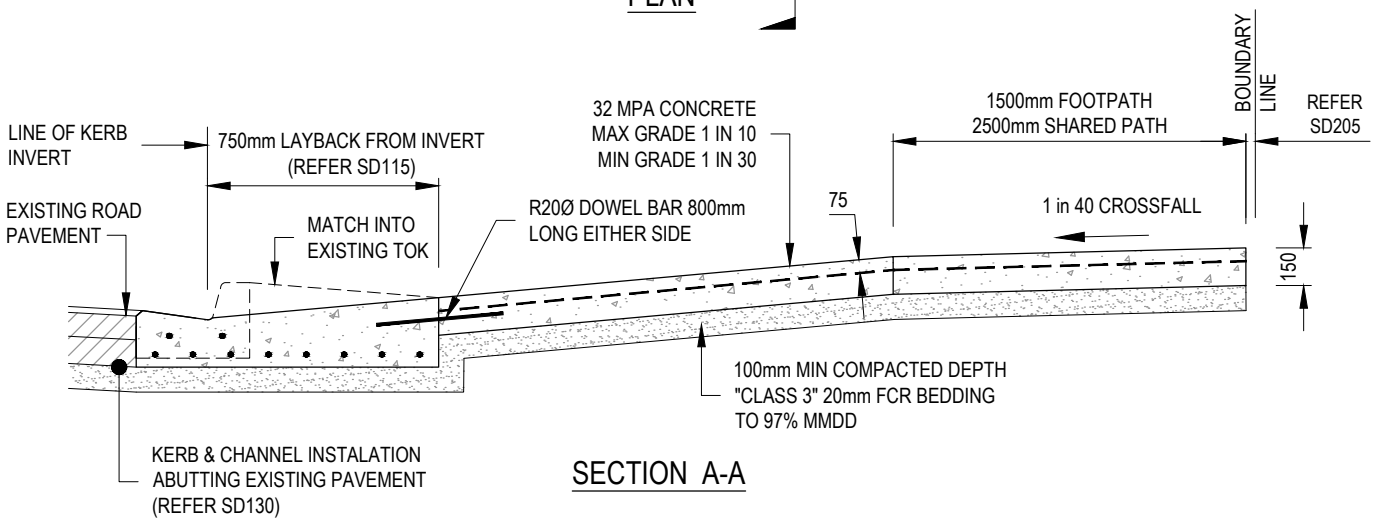
NOT TO SCALE



PLAN



SECTION A-A

LEGEND:

EXPANSION JOINT EJ

WEAKENED PLANE JOINTS

NOTES:

1. CROSS REFERENCES:
   INDUSTRIAL CROSSINGS - SD115 / SD250
   RURAL CROSSINGS - SD255 / SD260
   IDM - SECTION 12.9.1. AND 12.9.2.
2. THIS DRAWING DETAILS DIMENSIONS FOR STANDARD INDUSTRIAL CROSSINGS ONLY.
3. CROSSING WIDTHS EXCEEDING ANY COUNCIL DEFINED MAXIMUM ALLOWABLE WILL REQUIRE APPLICATION TO COUNCIL FOR SPECIAL CONSIDERATION.
4. JOINTS AND DOWEL BARS ARE REQUIRED ON EITHER SIDE OF THE CROSSING AT THE INTERFACE WITH THE FOOTPATH. PROVISION SHALL BE MADE IN EXISTING CONCRETE SECTIONS BY DRILLING HOLES TO A MINIMUM DEPTH OF 150mm AND INSERTING R16 DOWEL BARS.
5. AN APPROVED JOINT FILLER SHALL BE PLACED ON EITHER SIDE OF THE CROSSING AGAINST FOOTPATH SLABS. DOWEL BARS ARE TO HAVE AN APPROVED BOND BREAKER APPLIED TO THE END OF THE BAR INSERTED INTO THE EXISTING CONCRETE FOOTPATH SECTIONS REFER SD220.
6. ADDITIONAL WEAKENED PLANE JOINTS REQUIRED IF DISTANCE FROM BACK OF KERB TO FOOTPATH IS GREATER THAN 3000 AND SHALL BE PLACED AT THE MIDPOINT OF THE DISTANCE.
7. FOOTPATHS AFFECTED BY NEW CROSSING TO BE REPLACED WITH NEW 150mm THICK (MIN.) REINFORCED 32 MPA CONCRETE AS STATED ON DETAIL.
8. WHERE A REVERSE FALL IS REQUIRED DESIGN OF VEHICLE CROSSING SHALL BE ON A SITE SPECIFIC BASIS.

ALL MEASUREMENTS IN MILLIMETRES

RETROFIT INDUSTRIAL VEHICLE CROSSING DETAIL

LAST UPDATED 27/03/2025

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SD 236

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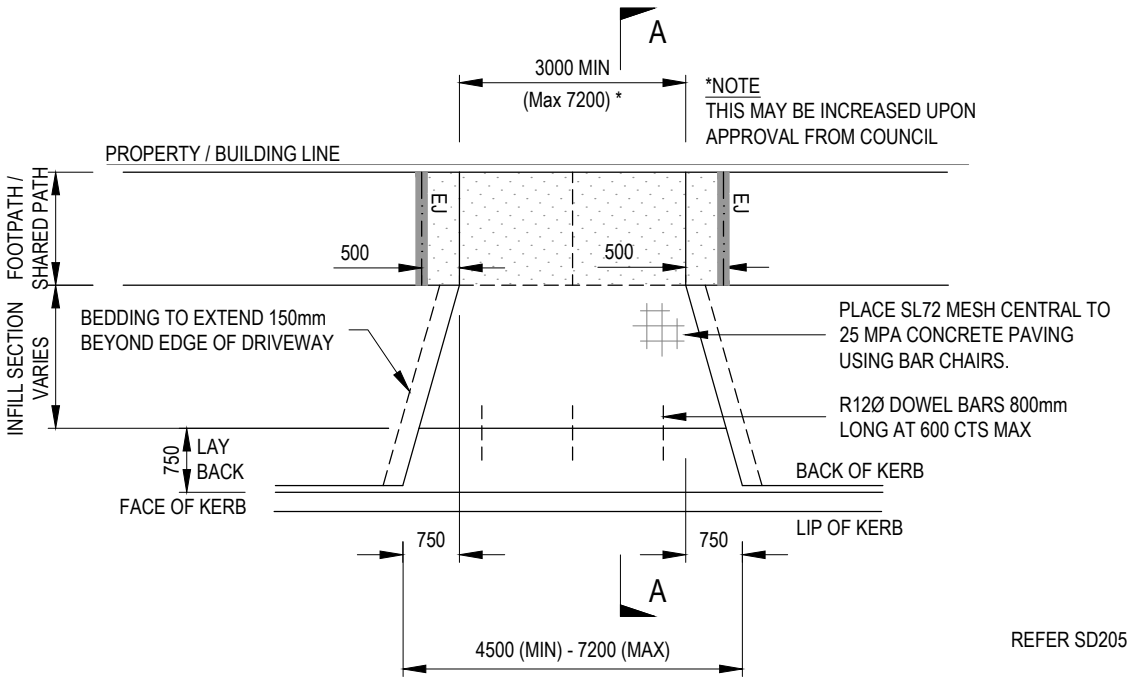

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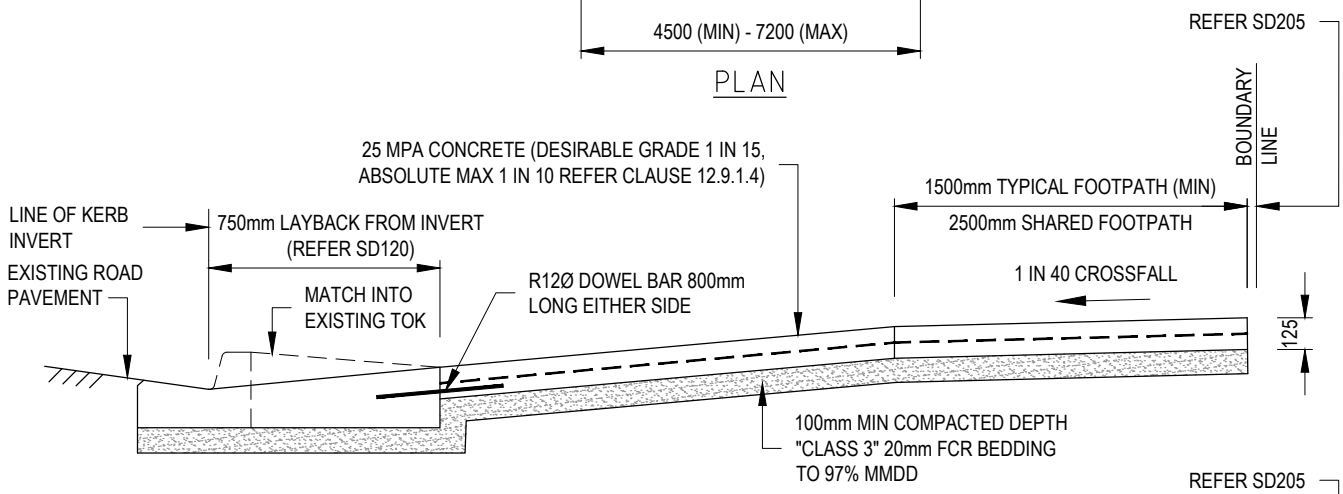
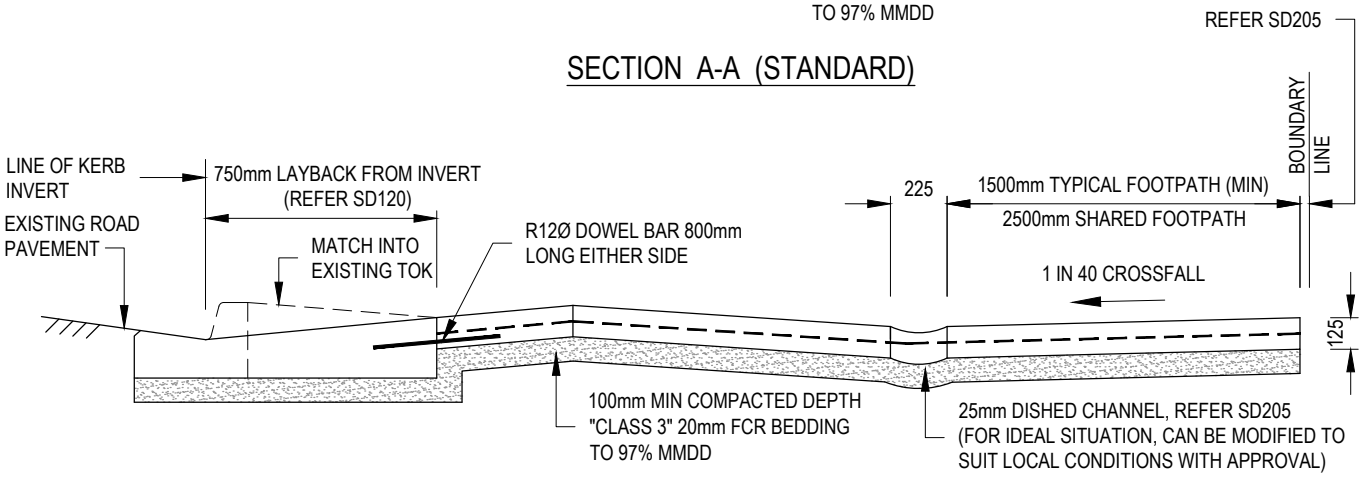


SECTION A-A (STANDARD)



SECTION A-A (REVERSE FALL)

(ONLY TO BE USED WITH COUNCIL APPROVAL)

NOTE:

1. FOR GRADES STEEPER THAN 1 IN 10 REFER CLAUSE 12.9.1.4.
   LAYBACK & CROSSOVER, TO BE CONSTRUCTED IN PLAIN CONCRETE ONLY
   (NO COLOURED CONCRETE BEYOND PROPERTY BOUNDARY)
2. T.O.K. DENOTES TOP OF KERB
3. FOR STEEP TERRAIN CONTACT THE COUNCIL FOR GUIDANCE.
4. REFER SD235 FOR DETAILS TO RETROFIT VEHICLE CROSSING INTO EXISTING.

LEGEND:

EXPANSION JOINT — EJ

WEAKENED PLANE JOINTS — — — —

ALL MEASUREMENTS IN MILLIMETRES

NEW RESIDENTIAL SINGLE VEHICLE CROSSING DETAIL

LAST UPDATED 27/03/2025

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SD 240

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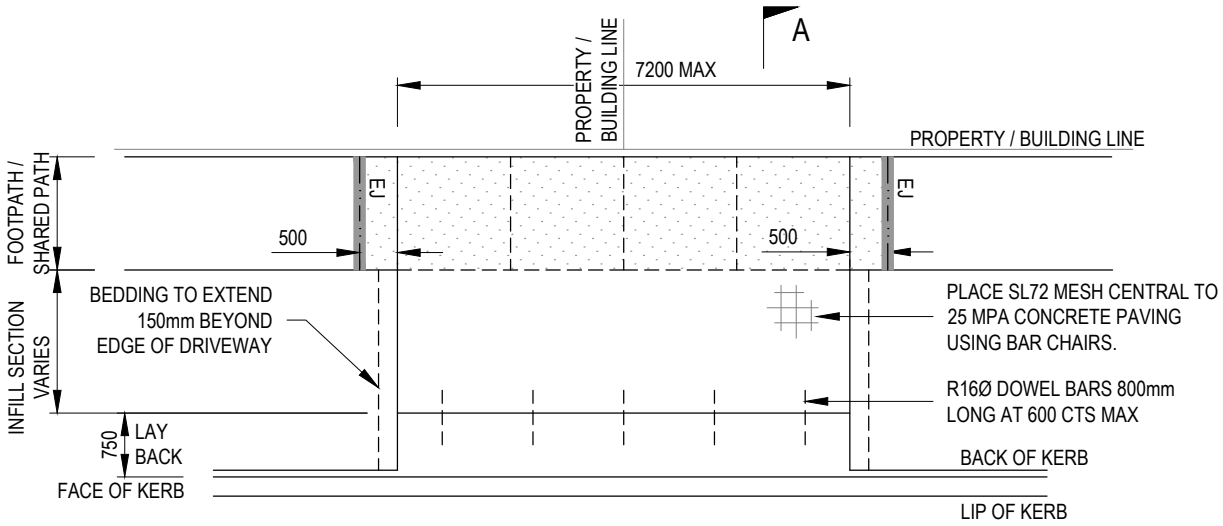
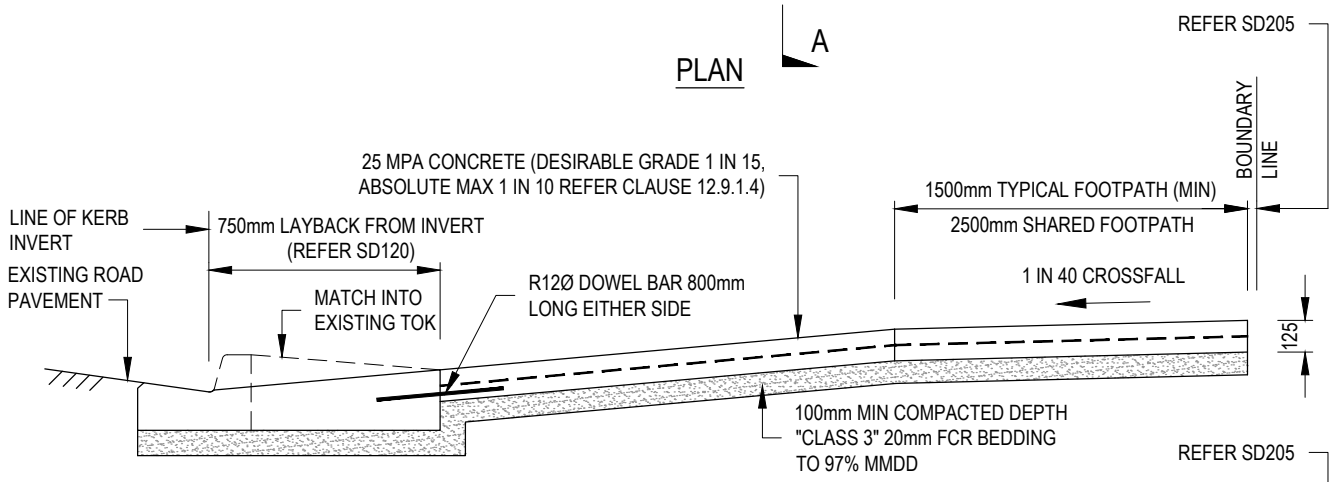
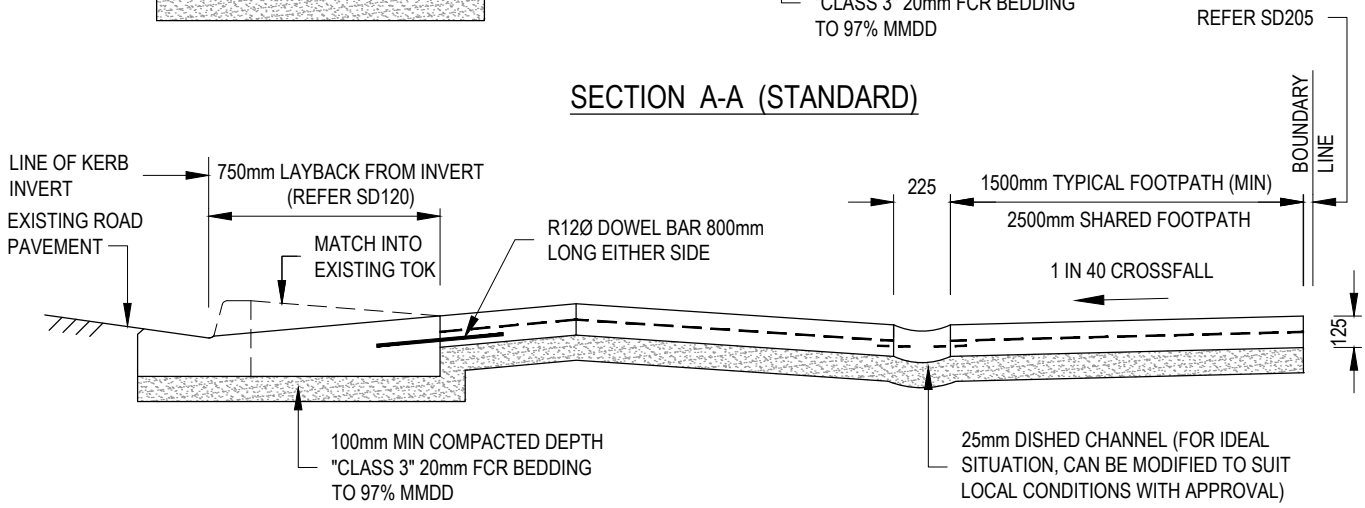




SECTION A-A (STANDARD)



SECTION A-A (REVERSE FALL)

(ONLY TO BE USED WITH COUNCIL APPROVAL)

NOTE:

1. FOR GRADES STEEPER THAN 1 IN 10 REFER CLAUSE 12.9.1.4 LAYBACK & CROSSOVER, TO BE CONSTRUCTED IN PLAIN CONCRETE ONLY (NO COLOURED CONCRETE BEYOND PROPERTY BOUNDARY)
2. T.O.K. DENOTES TOP OF KERB
3. FOR STEEP TERRAIN CONTACT THE COUNCIL FOR GUIDANCE.
4. REFER SD235 FOR DETAILS TO RETROFIT VEHICLE CROSSING INTO EXISTING.
5. WHERE CROSSOVER AT INVERT LINE LESS THAN 6.0m SPLAYS SHALL BE DESIGNED FOR EXPECTED USE AND SUBMITTED TO COUNCIL FOR CONSIDERATION AND APPROVAL.

LEGEND:

EXPANSION JOINT — EJ

WEAKENED PLANE JOINTS — — — —

ALL MEASUREMENTS IN MILLIMETRES

NEW RESIDENTIAL SHARED / DOUBLE VEHICLE CROSSING DETAILS FOR ADJACENT PROPERTIES

LAST UPDATED 27/03/2025

SD 245

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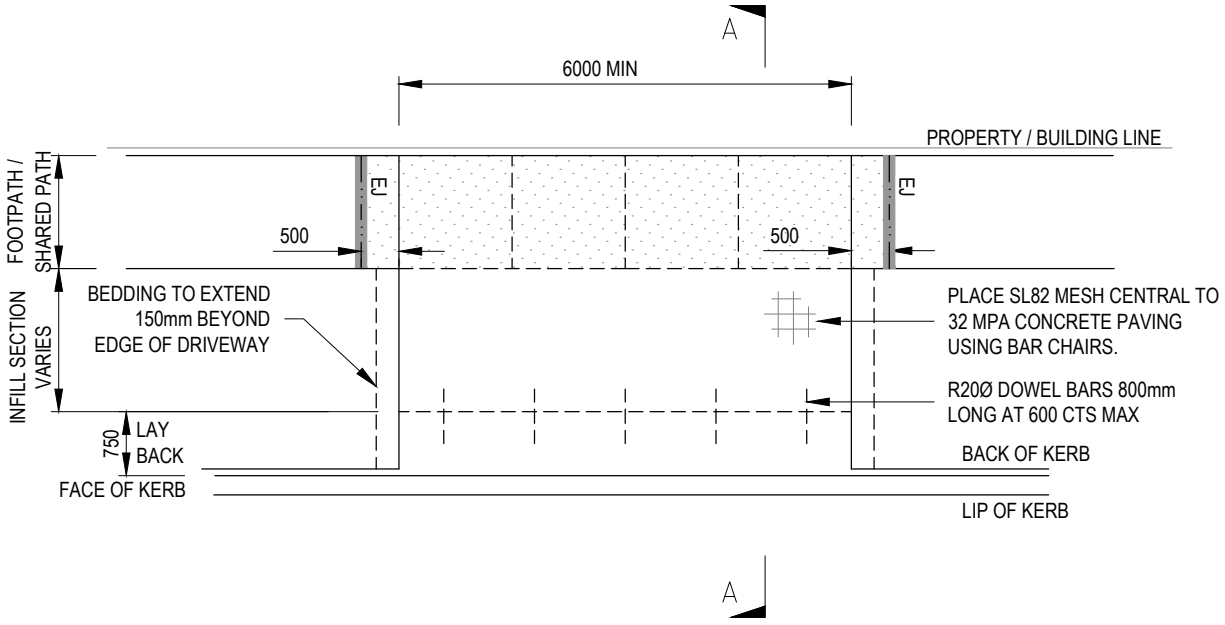
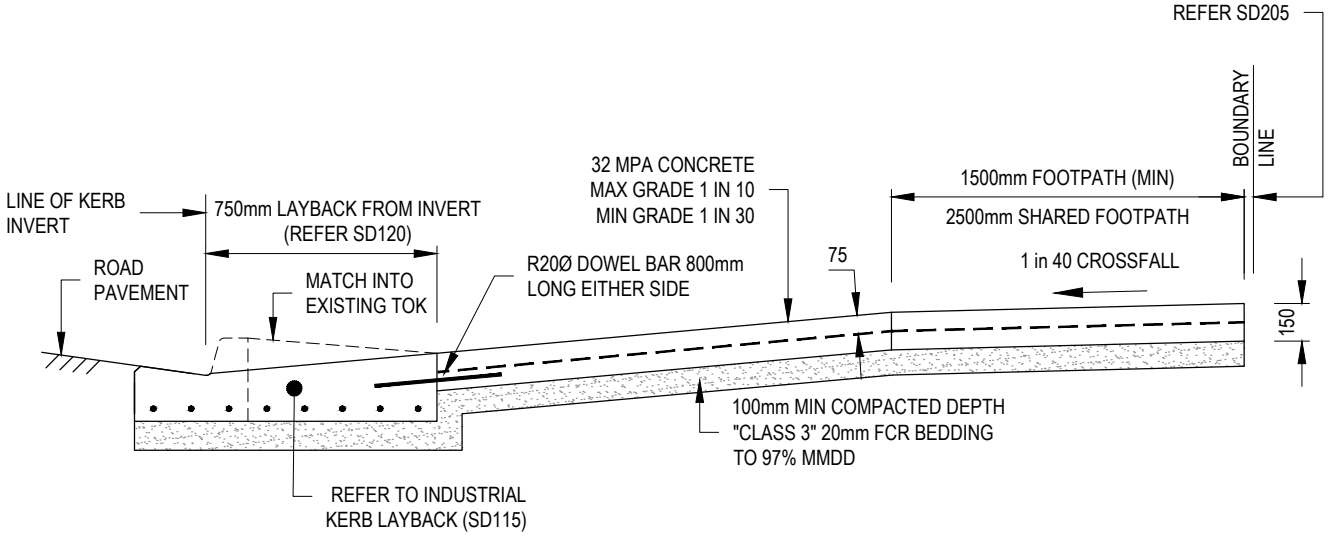


PLAN



SECTION A-A

LEGEND:

EXPANSION JOINT — EJ

WEAKENED PLANE JOINTS — — — —

NOTE:

1. T.O.K. DENOTES TOP OF KERB
2. WHERE THERE ARE EXPANSIVE SOILS AN ADDITIONAL LAYER OF REINFORCEMENT MAY BE REQUIRED AT 60mm COVER FROM THE BOTTOM OF THE SLAB.
3. FOR STEEP TERRAIN CONTACT THE COUNCIL FOR GUIDANCE.
4. FOR GRADES STEEPER THAN 1 IN 10 REFER TO CLAUSE 12.9.1.4.
5. REFER SD236 FOR DETAILS TO RETROFIT INDUSTRIAL VEHICLE CROSSING INTO EXISTING.
5. WHERE CROSSOVER AT INVERT LINE LESS THAN 6.0m SPLAYS SHALL BE DESIGNED FOR EXPECTED USE AND SUBMITTED TO COUNCIL FOR CONSIDERATION AND APPROVAL.

ALL MEASUREMENTS IN MILLIMETRES

NEW INDUSTRIAL VEHICLE CROSSING DETAIL

LAST UPDATED 27/03/2025

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SD 250

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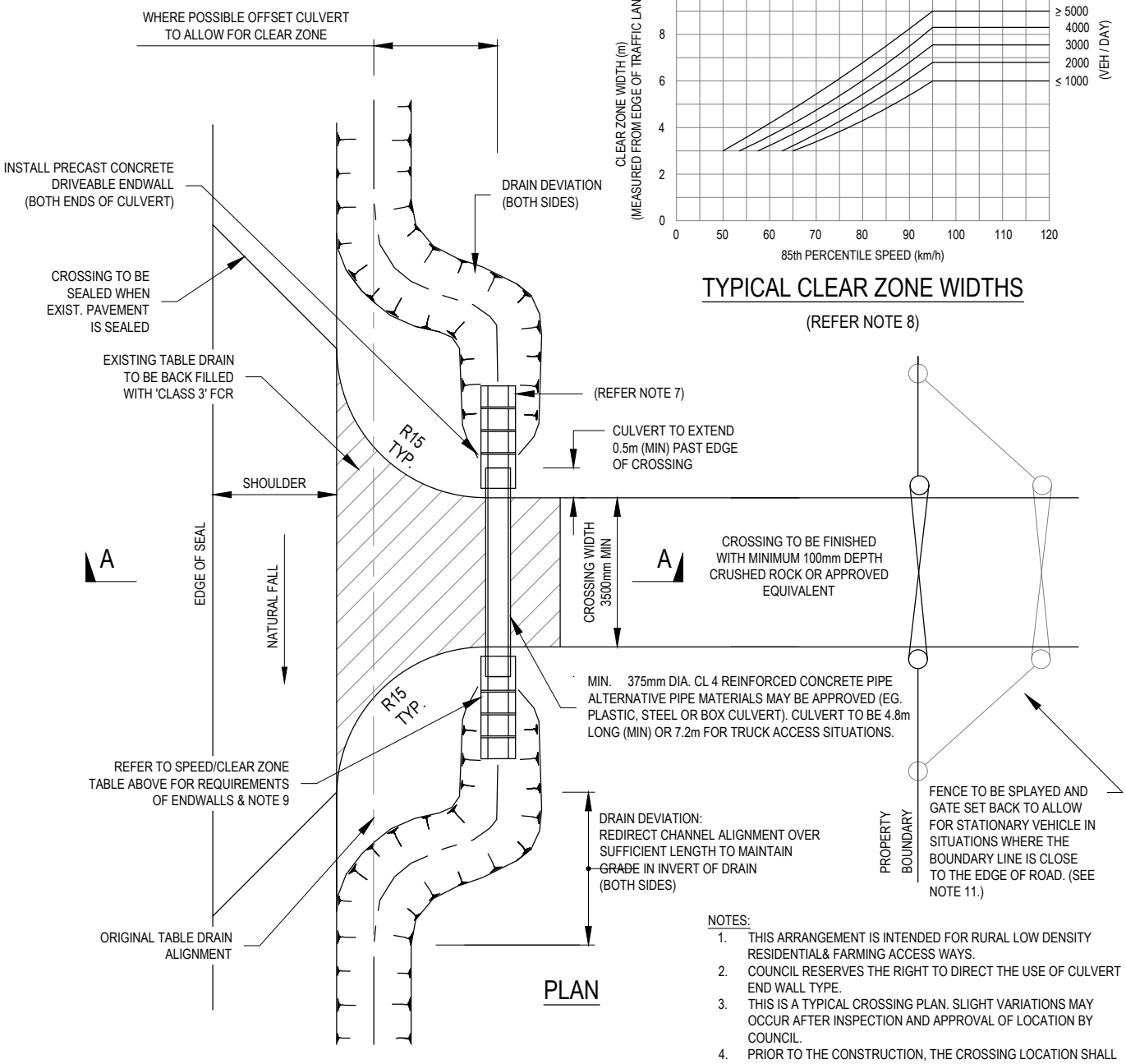

TYPICAL CLEAR ZONE WIDTHS

(REFER NOTE 8)

NOTES:

1. THIS ARRANGEMENT IS INTENDED FOR RURAL LOW DENSITY RESIDENTIAL& FARMING ACCESS WAYS.
2. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
3. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
4. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
5. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
6. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
7. INSTALL LOW PROFILE HEAD WALLS OUTSIDE CLEAR ZONE & DRIVEABLE END WALLS WITHIN CLEAR ZONE. NO CULVERT TO BE WITHIN 3m OF EDGE OF SEAL.
8. THE CLEAR ZONE TABLE SHOWN IS A GUIDE ONLY AND FOR FURTHER ACCURATE CLEAR ZONE GUIDELINES REFER TO AUSTROADS 'GUIDE TO ROAD DESIGN - PART 6: ROADSIDE DESIGN, SAFETY AND BARRIERS' TABLE 4.1: 'CLEAR ZONES DISTANCES FROM EDGE OF THROUGH TRAVELLED WAY'
9. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
10. CROSSING PAVEMENT TO BE SEALED WHERE ABUTS A SEALED ROAD.
11. GATE OFFSET DIMENSIONS:

STANDARD VEHICLE TYPE	MINIMUM GATE OFFSET FROM EDGE OF THROUGH LANE (m)
CAR (5.0m)	8.2
RIGID TRUCK (12.0m)	12.5
SEMI (19.0m)	22
B-DOUBLE (25.0m)	28

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SWALE DRAIN VEHICLE CROSSING (RURAL ENTRANCE)

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 255

Local Government Infrastructure Design Association

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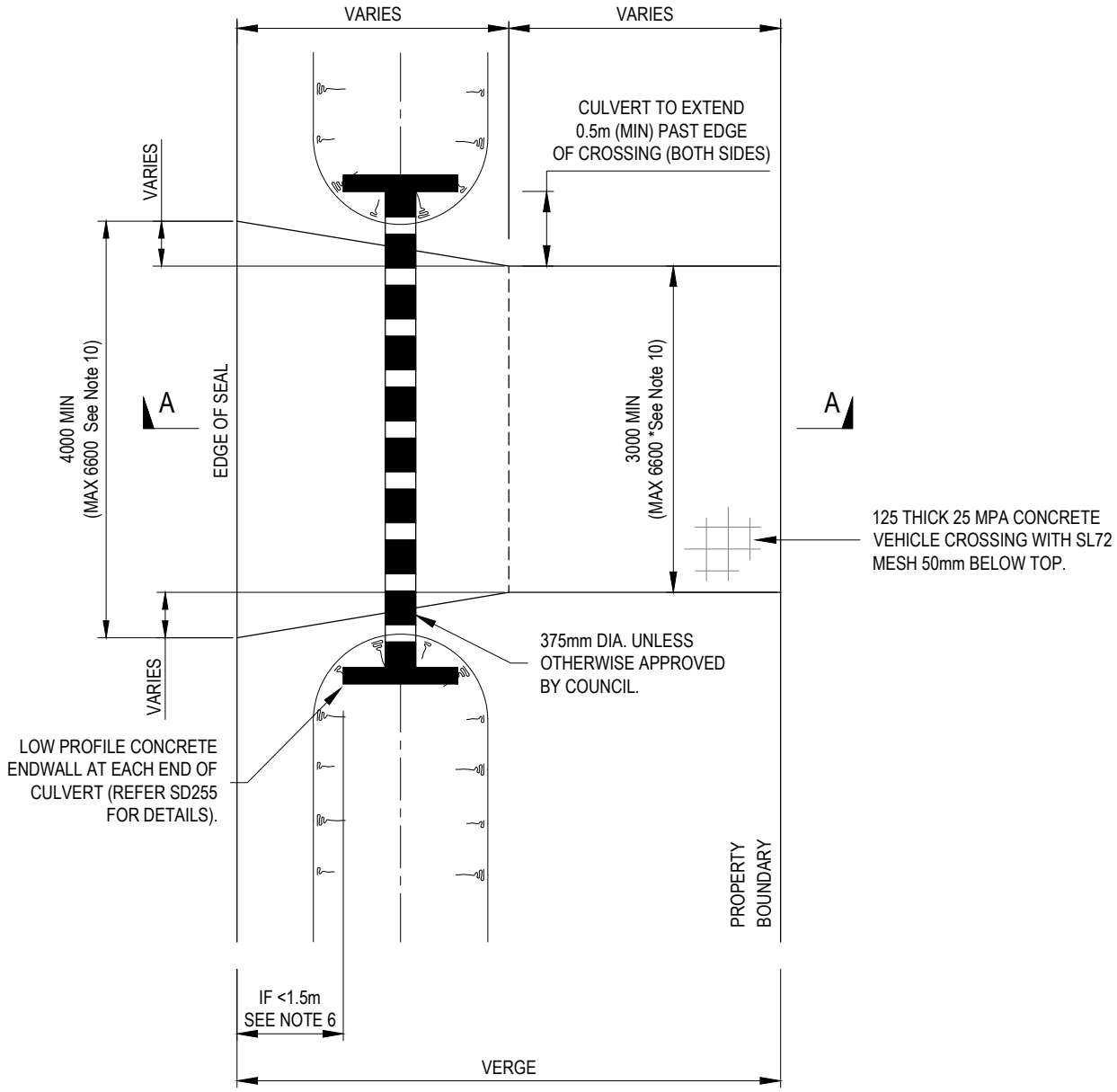
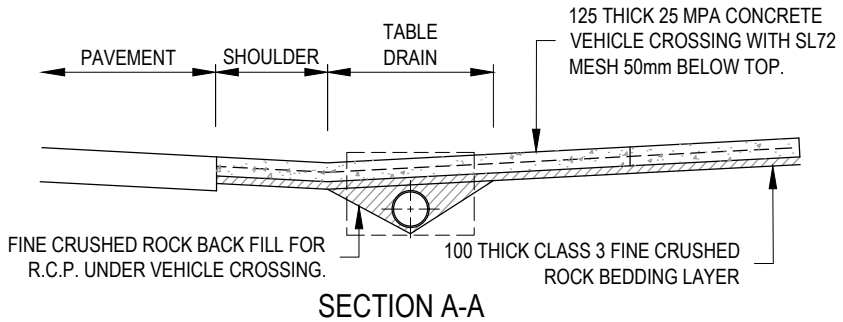


PLAN



SECTION A-A

NOTES:

1. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
2. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
3. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
4. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
5. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
6. DRIVEABLE ENDWALLS TO BE USED AS PER REQUIREMENTS OF SD255.
7. REFER SD255 FOR ADDITIONAL CLEAR ZONE DETAILS
8. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
9. CULVERT TO BE LOCATED AT LEAST 600mm FROM EDGE OF SEAL
10. MAXIMUM DRIVEWAY WIDTH MAYBE INCREASED UPON COUNCIL APPROVAL

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SWALE DRAIN VEHICLE CROSSING
(FRINGE URBAN OR RURAL RESIDENTIAL ENTRANCE)

LAST UPDATED 27/03/2025

SD 260

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

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Infrastructure Design Association

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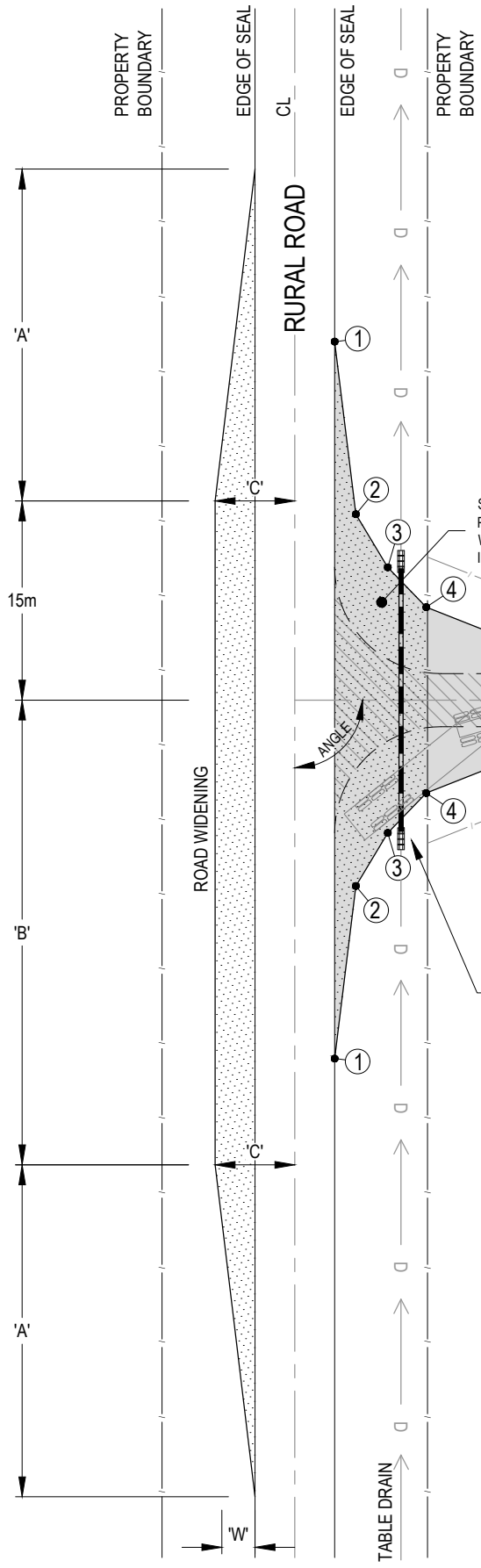

SETOUT TABLE:

POINT No.	OFFSET DISTANCE FROM EDGE OF SEAL (m)	OFFSET DISTANCE FROM ACCESS CENTRELINE (m)
1	0.0	27.0
2	1.6	14.0
3	4.0	10.0
4	6.9	7.0
5	18.3	2.5
6	22.0	2.0

ROAD WIDENING:

A = $\frac{0.5 \times \text{SPEED (km/h)} \times W \text{ (m)}}{3.6}$

B =

ANGLE:	70°	90°	110°
LENGTH (m):	40	35	30

C = ON STRAIGHT: 6.0m (MIN)
ON CURVE: 2 x (3.0m + CORRESPONDING WIDENING FOR CURVE RADIUS)

W = FORMATION WIDENING (IF REQUIRED BY COUNCIL)

LEGEND:

TYPICAL EXISTING ACCESS =
RECOMENDED ACCESS SPLAY =
AREA TO BE SEALED=

NOTES:

1. THIS ARRANGEMENT IS INTENDED FOR RURAL / FARMING ACCESS WAYS THAT REQUIRE SEMI / B DOUBLE ACCESS.
2. PAVED AREAS TO BE A MINIMUM OF 150mm DEPTH COMPACTED GRAVEL. PAVEMENT AREAS & TYPE TO BE APPROVED BY COUNCIL.
3. COUNCIL RESERVES THE RIGHT TO DIRECT THE USE OF CULVERT END WALL TYPE.
4. THIS IS A TYPICAL CROSSING PLAN. SLIGHT VARIATIONS MAY OCCUR AFTER INSPECTION AND APPROVAL OF LOCATION BY COUNCIL.
5. PRIOR TO THE CONSTRUCTION, THE CROSSING LOCATION SHALL BE APPROVED BY COUNCIL.
6. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL.
7. MAINTENANCE OF THE CROSSOVER REMAINS THE RESPONSIBILITY OF THE LAND OWNER.
8. REFER SD 255 FOR CLEAR ZONE OFFSET DETAILS.
9. DRIVEABLE ENDWALLS TO BE USED INSIDE CLEARZONE.
10. TABLE DRAINS ARE NOT TO BE CLOSER THAN 1.0m FROM FENCE LINES OR SERVICES.
11. COUNCIL MAY REQUIRE THAT CROSSING PAVEMENT BE SEALED DEPENDING ON SITE LOCATION AND SPECIFICS.
12. GATE OFFSET DIMENSIONS:

STANDARD VEHICLE TYPE	MINIMUM GATE OFFSET FROM EDGE OF THROUGH LANE (m)
SEMI (19.0m)	22
B-DOUBLE (25.0m)	28

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SEMI OR B DOUBLE VEHICLE CROSSING (RURAL ENTRANCE)

LAST UPDATED 27/03/2025

SD 265

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association

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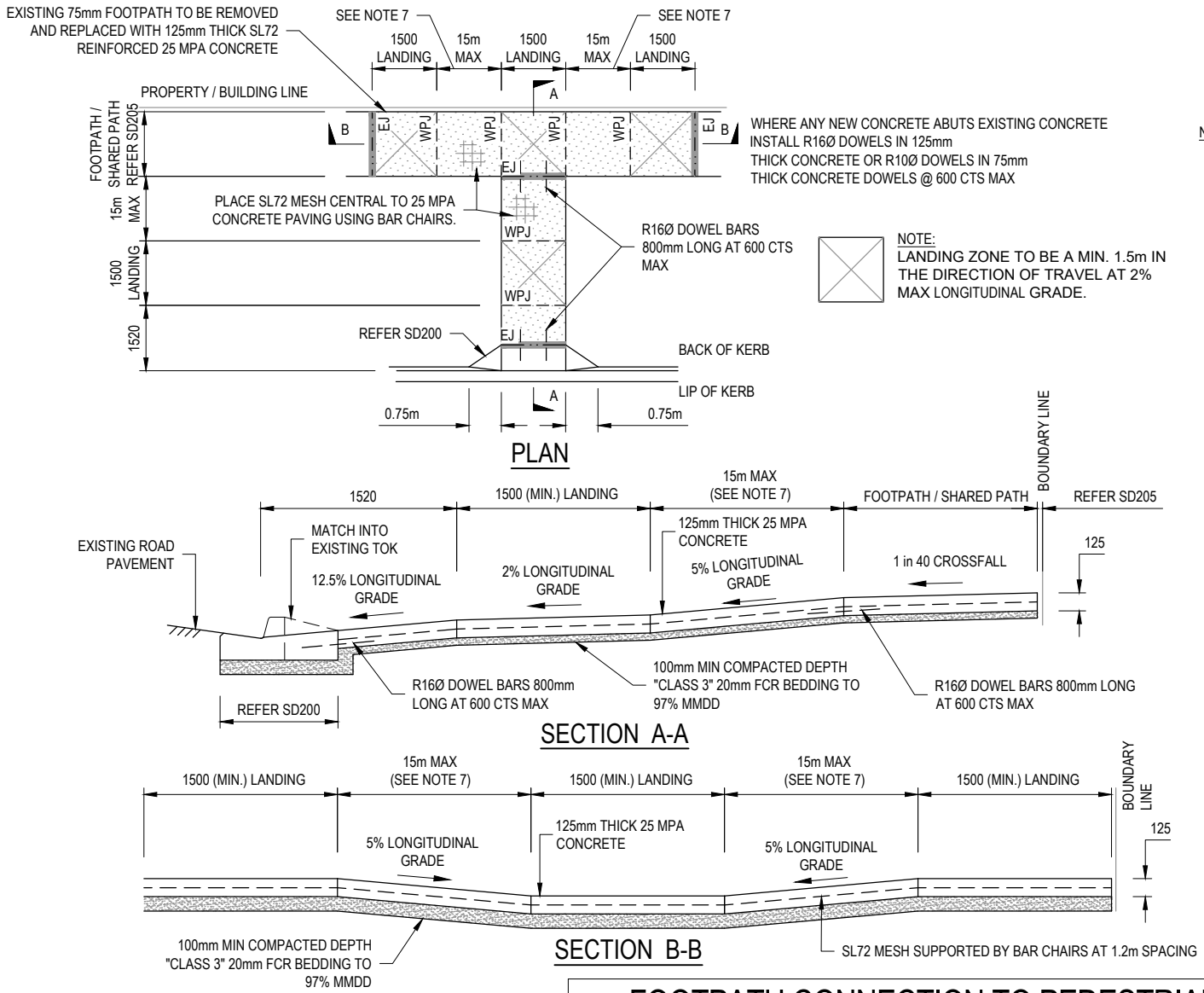

NOTES:

1. LANDING ZONE TO BE A MIN. 1.5m IN THE DIRECTION OF TRAVEL AT 2% MAX GRADE.
2. NEW FOOTPATH SHALL HAVE 2.5% CROSSFALL AWAY FROM THE PROPERTY LINE.
3. NEW FOOTPATH LEVEL SHALL MATCH INTO THE EXISTING LEVELS.
4. NEW FOOTPATH SHALL BE 125mm THICK 25 MPa CONCRETE ON A BASE OF MIN. 100mm THICK, MECHANICALLY COMPACTED CLASS 3 FCR.
5. FOOTPATH GRADES ARE APPROXIMATE AND REQUIRE CONFIRMATION ON SITE.
6. FOOTPATH CROSS OVERS SHALL BE CONSTRUCTED AS PER THE TYPICAL LAYBACK CONFIGURATION
7. USE OF LONGER TRANSITIONS AT FLATTER GRADES PRODUCES A MORE USER FRIENDLY VISUALLY APPEALING OUTCOME

LEGEND:

EXPANSION JOINT — EJ

WEAKENED PLANE JOINTS — WPJ

NOTE:
1. T.O.K. DENOTES TOP OF KERB

ALL MEASUREMENTS IN MILLIMETRES

FOOTPATH CONNECTION TO PEDESTRIAN CROSSINGS DDA COMPLIANCE DETAILS

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Local Government Infrastructure Design Association

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LAST UPDATED 24/03/2020

SD 270

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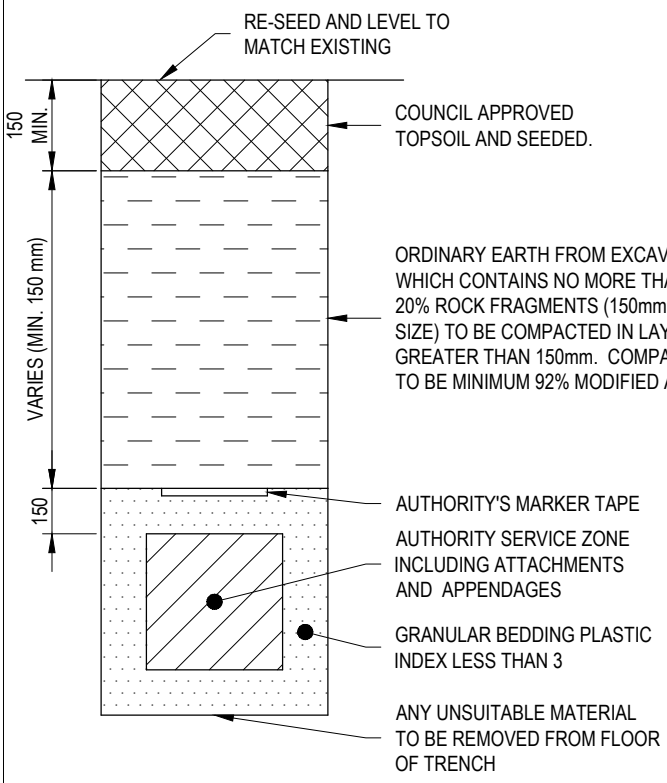
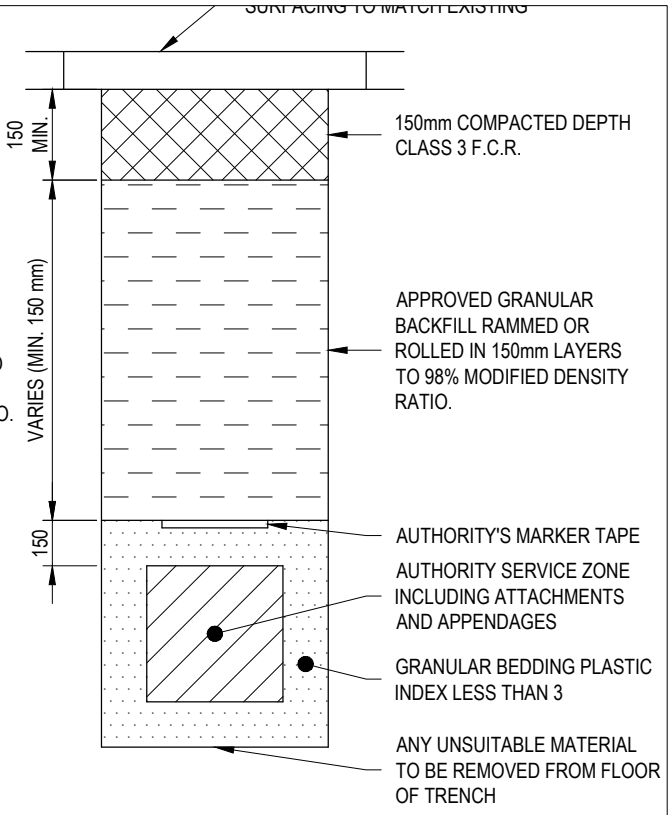
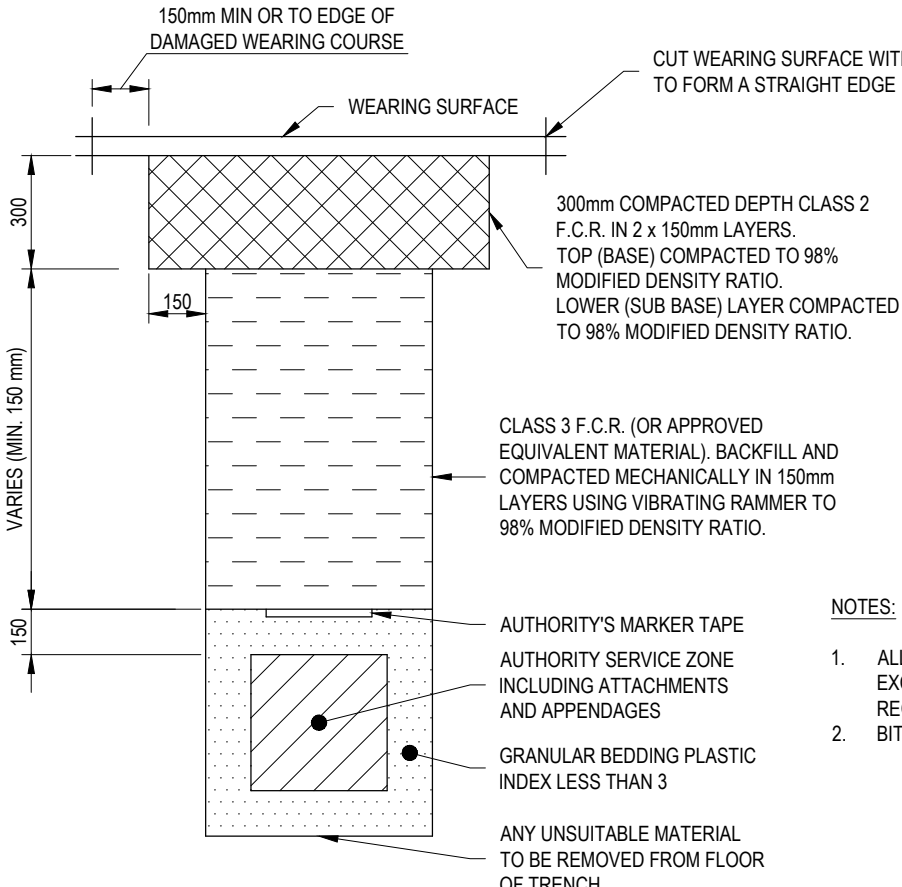


TRENCHES UNDER SWALES



TRENCHES UNDER FOOTPATHS



TRENCHES UNDER ROADS

NOTES:

1. ALL EXCAVATIONS ARE TO COMPLY WITH THE EXCAVATION CODE OF PRACTICE 2018-05, O.H.&S. REGULATIONS 2017 & O.H.&S. ACT 2004.
2. BITUMEN ROAD SURFACE SHALL BE CUT WITH A SAW.

LAST UPDATED 20/02/2019

ALL MEASUREMENTS IN MILLIMETRES

TRENCHING BACKFILL (TRENCHES WITHIN 1m OF COUNCIL ASSETS)

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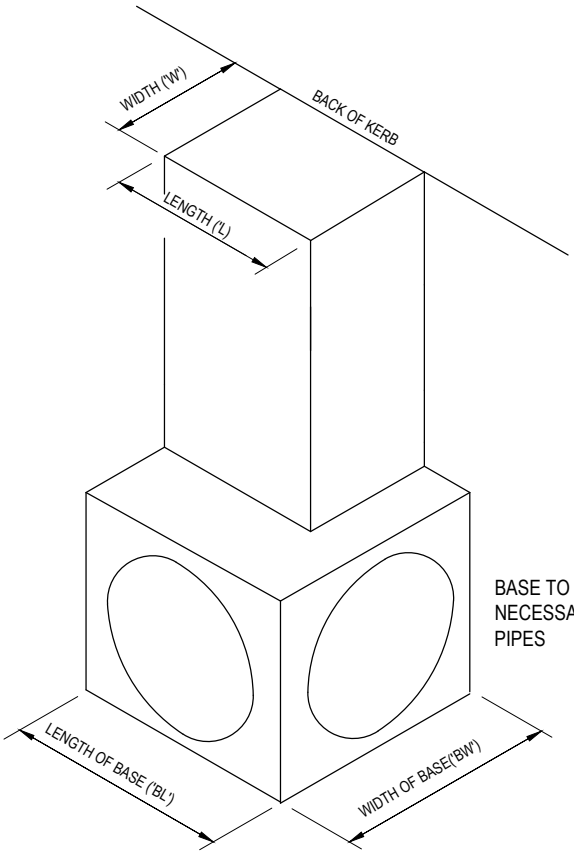
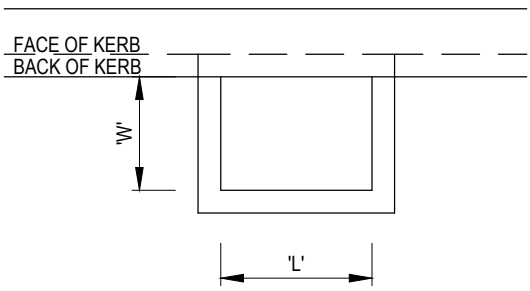
SD 310

NOT TO SCALE



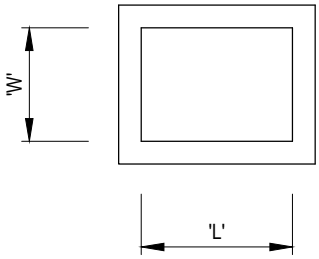
BASE TO BE HAUNCHED IF NECESSARY TO FIT LARGE PIPES

INTERNAL PIT DIMENSIONS



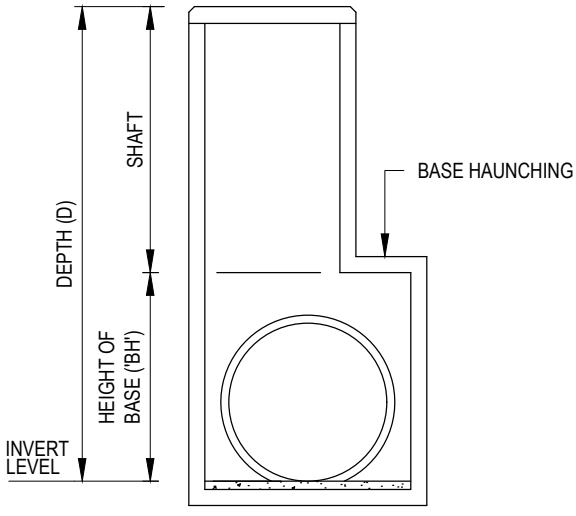
PLAN

SIDE ENTRY PIT



PLAN

JUNCTION PIT, GRATED PIT AND INLET CATCH PIT



SHAFT CONFIGURATIONS

PIT WITH HAUNCHED BASE

STANDARD PIT LISTING

PIT TYPE	COVER TYPE	SD DRG. NO.
UNHAUNCHED (450Ø MAX)	CAST IRON CONCRETE FIBREGLASS	SD405
HAUNCHED	CAST IRON CONCRETE FIBREGLASS	SD410
JUNCTION	CAST IRON CONCRETE FIBREGLASS	SD425, SD426
GRATED	MILD STEEL/CAST IRON	SD441
SIDE ENTRY	CAST IRON CONCRETE FIBREGLASS	SD430, SD431, SD435, SD440, SD445, SD450
DEPRESSED GRATE	MILD STEEL/CAST IRON	SD455
INLET CATCH	CONCRETE	SD460

NOTES:

1. REFER SPECIFIC STANDARD DRAWINGS FOR FULL DIMENSIONS.
2. REFER TO IDM CL.16.11 ABOUT PIT REQUIREMENTS
3. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL PIT DIMENSIONING AND SETTING OUT DETAIL

LAST UPDATED 27/03/2025

SD 400

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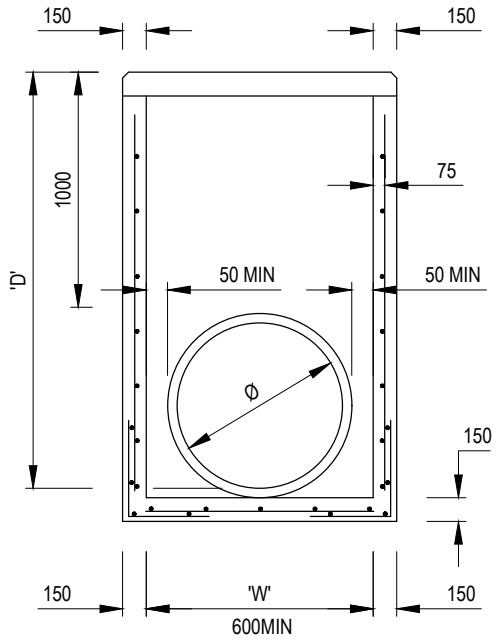
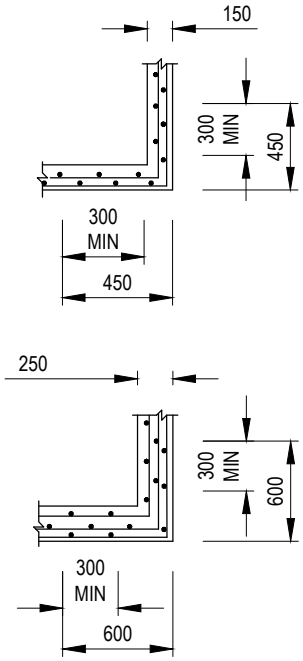


PITS UP TO 3600mm DEPTH

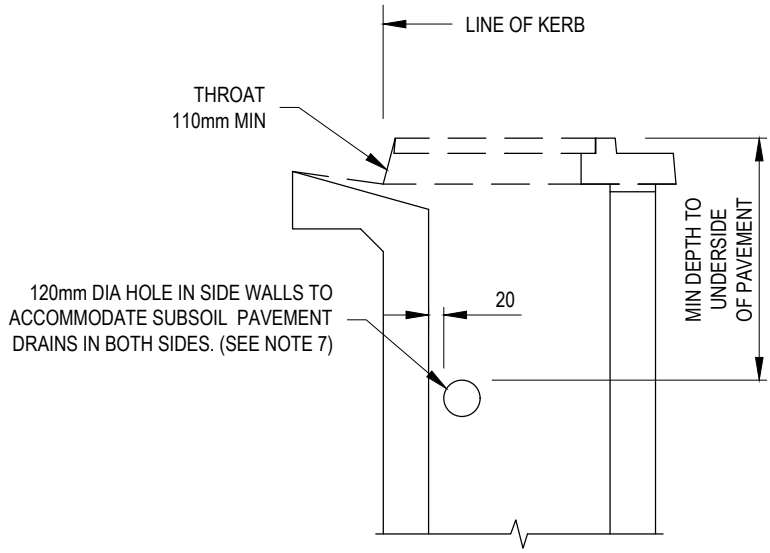


PLAN VIEW

CORNER DETAILS

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218



PRECAST PIT

NOTES:

1. MINIMUM PIT SIZES:

PIPE DIAMETER		BASE DIMENSIONS 'W'
JP	SEP	
UP TO 450Ø	UP TO 450Ø	600
450Ø & UPWARDS	450Ø & UPWARDS	900

2. PIPES GREATER THAN 450mm DIA. MAY REQUIRE HAUNCHING. REFER TO SD410.
3. FOR DETAILS OF SPECIFIC PITS, REFER TO PIT SCHEDULE.
4. PIT REINFORCEMENT SHALL HAVE 300mm MIN LAPS. CLEAR COVER TO BE 50mm MIN. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS.
5. FOR TOP OF PIT DETAILS, REFER TO SPECIFIC DESIGN PIT SCHEDULE AND RELEVANT STANDARD DRAWINGS.
6. PRECAST PITS WITH THINNER WALLS AND LESS STEEL MAY BE ACCEPTED WHERE THE MANUFACTURER CAN DEMONSTRATE THAT THE PITS HAVE ADEQUATE CAPACITY TO SUPPORT A COMBINATION OF THE FOLLOWING LOADS:
   LATERAL LOADS - EARTH PRESSURE WITH 210 kN SURCHARGE
   - HYDROSTATIC PRESSURE
   - COMPACTION PRESSURE (25 kPa MIN)
   - VERTICAL LOAD 210 kN
7. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
8. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
9. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
10. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED

ALL MEASUREMENTS IN MILLIMETRES

UNHAUNCHED PITS (450Ø MAX. PIPE)

LAST UPDATED 27/03/2025

SD 405

NOT TO SCALE

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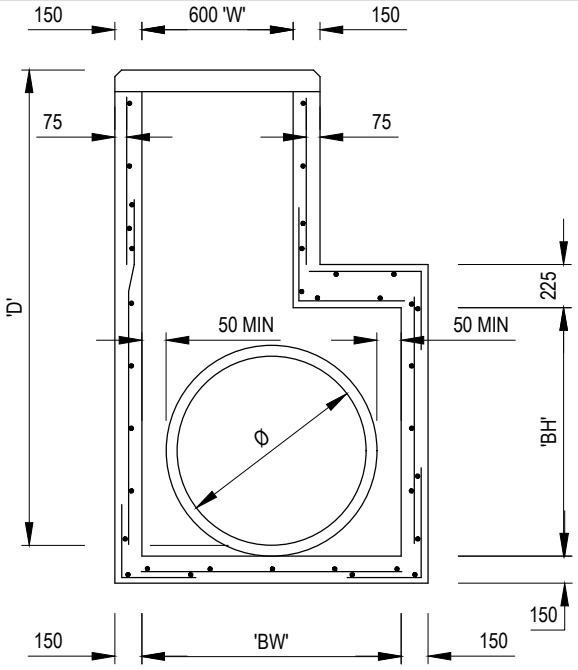
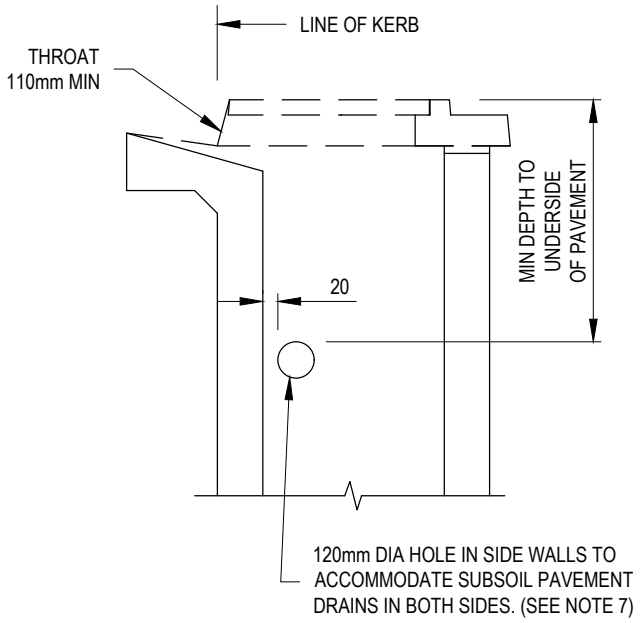
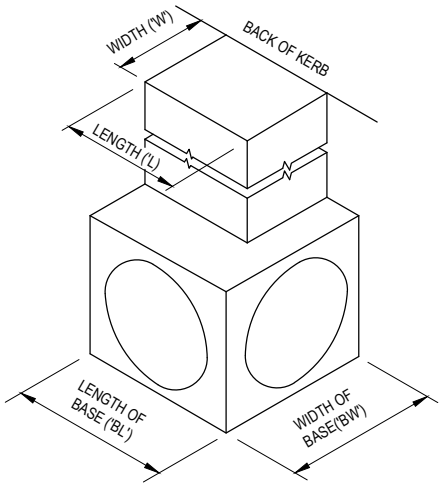


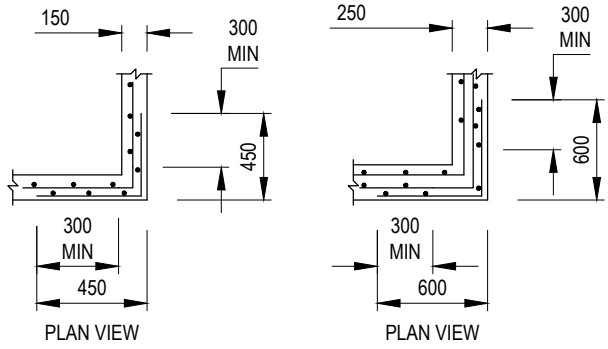
PITS UP TO 3600mm DEPTH



PRECAST PIT



INTERNAL PIT DIMENSIONS



CORNER DETAILS

NOTES:

1. PIPES LESS THAN 525mm DIA. MAY NOT REQUIRE HAUNCHING. REFER SD405.
2. PITS WITH HAUNCHING IN TWO DIRECTIONS REQUIRE SPECIAL STRUCTURAL DESIGN.
3. FOR DETAILS OF SPECIFIC PITS, REFER TO PIT SCHEDULE.
4. PIT REINFORCEMENT SHALL HAVE 300mm MIN LAPS. CLEAR COVER TO BE 50mm MIN. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS.
5. FOR TOP OF PIT DETAILS, REFER TO SPECIFIC DESIGN PIT SCHEDULE AND RELEVANT STANDARD DRAWINGS.
6. PRECAST PITS WITH THINNER WALLS AND LESS STEEL MAY BE ACCEPTED WHERE THE MANUFACTURER CAN DEMONSTRATE THAT THE PITS HAVE ADEQUATE CAPACITY TO SUPPORT A COMBINATION OF THE FOLLOWING LOADS:
   LATERAL LOADS - EARTH PRESSURE WITH 210kN SURCHARGE
   - HYDROSTATIC PRESSURE
   - COMPACTION PRESSURE (25 kPa MIN)
   - VERTICAL LOAD 210 kN
7. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
8. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
9. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
10. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED

REINFORCEMENT DETAILS

PIT BASE LENGTH 'BL' OR BASE WIDTH 'BW'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

PIT SIZING

'BW' & 'BH' (mm)	'Ø' (mm)
900	525
"	600
"	675
"	750
"	825
1200	900
"	975
"	1050
"	1125
1500	1200

ALL MEASUREMENTS IN MILLIMETRES

HAUNCHED PITS

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 410

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Infrastructure Design Association

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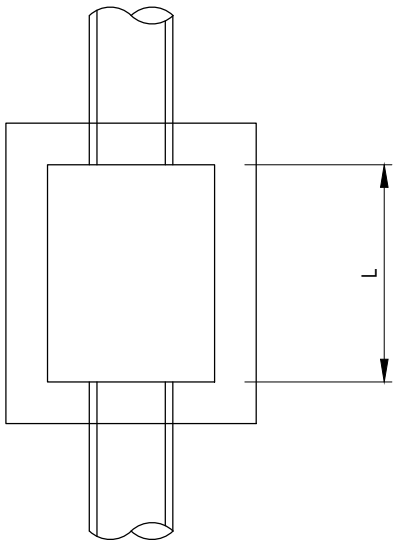
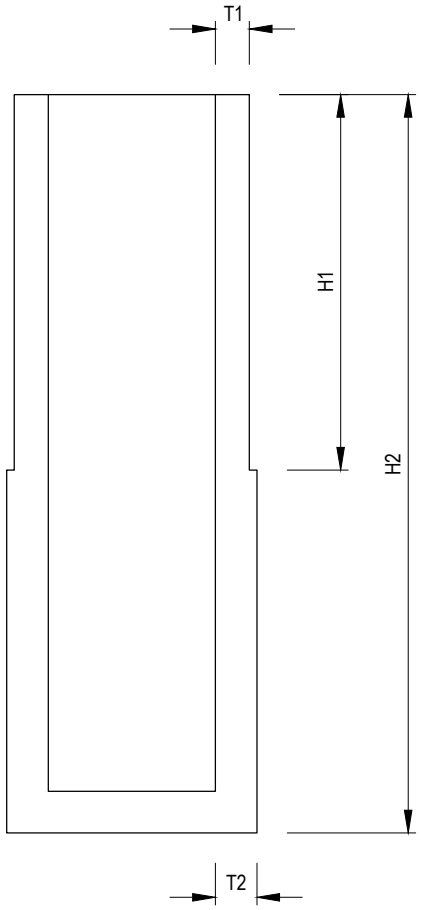
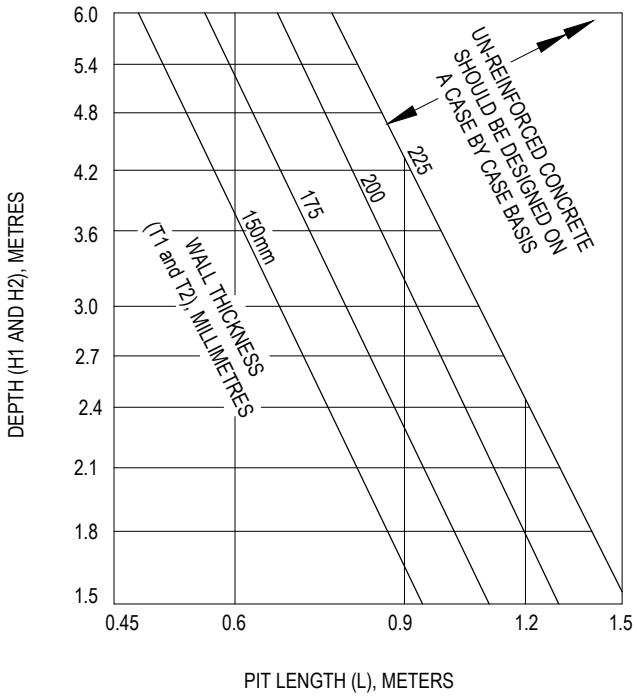


PLAN



SECTION



NOTES:

1. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

MIN. WALL THICKNESS FOR REINFORCEMENT IN MASS CONCRETE PITS (CAST IN-SITU)

LAST UPDATED 27/03/2025

SD 415

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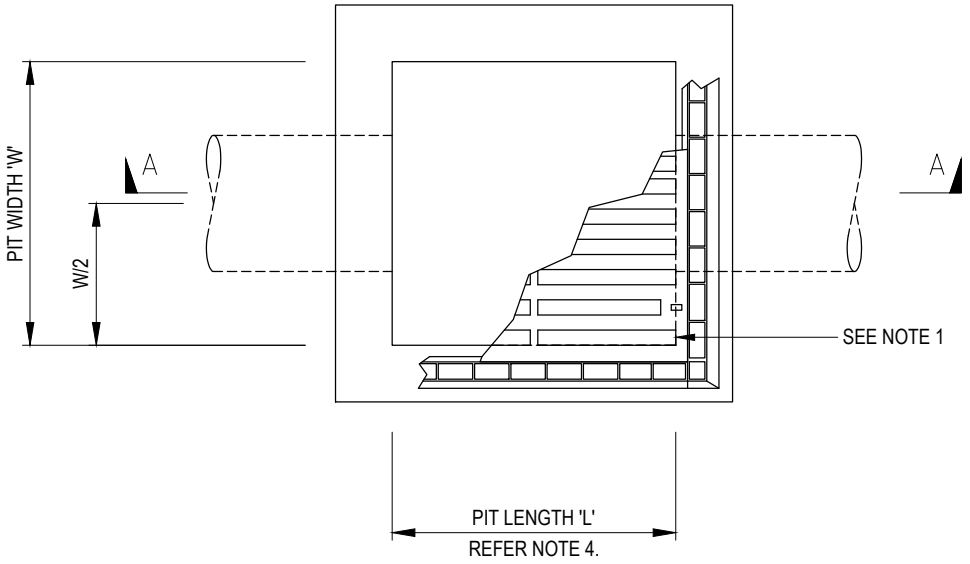

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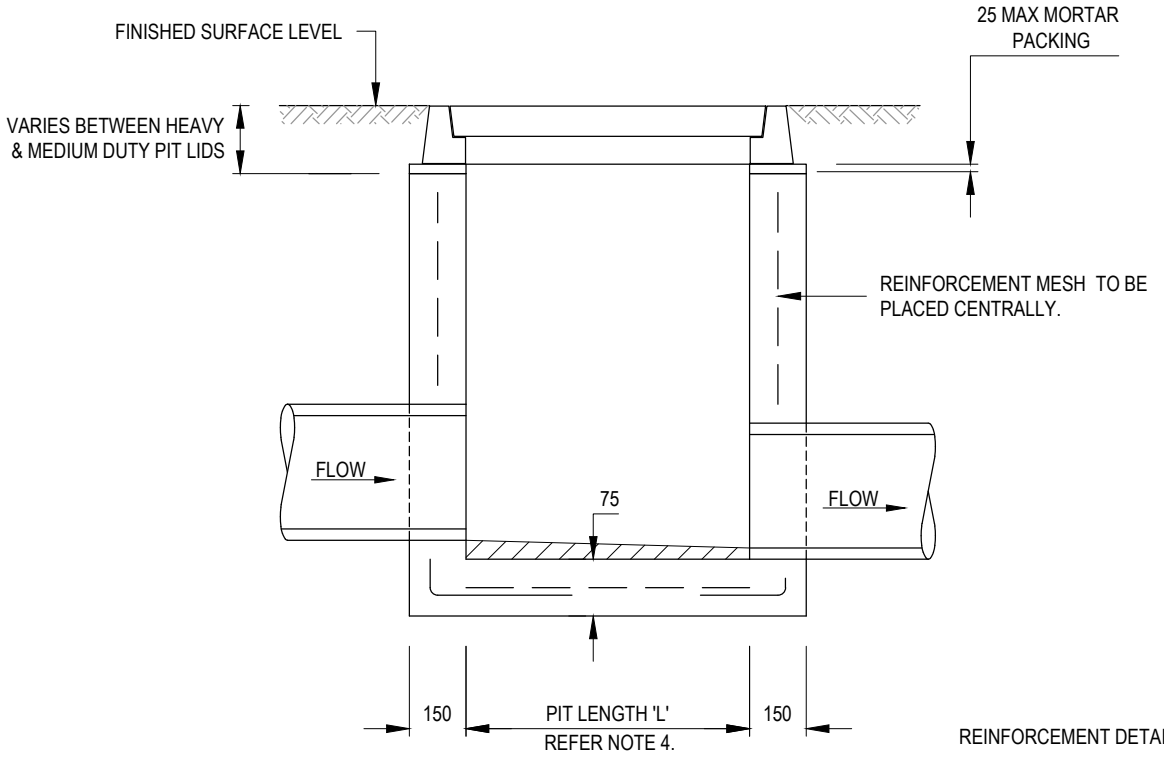

SECTION A-A

NOTES:

1. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 240kN) OR APPROVED EQUIVALENT. MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. JUNCTION PIT IN ROAD RESERVE TO HAVE MINIMUM INTERNAL PIT DIMENSIONS OF 600 X 900.
4. FOR TOP OF PIT DETAILS AND CHAMBER DIMENSIONS, REFER TO SPECIFIC DESIGN PIT SCHEDULE AND RELEVANT STANDARD DRAWINGS.
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

MINIMUM PIT SIZES (EASEMENTS)

PIT DEPTH	PIT SIZE
<1000	600 x 600
>1000	600 x 900

MINIMUM PIT SIZES (ROAD RESERVE)

PIT DEPTH	PIT SIZE
ALL PITS	600 x 900

ALL MEASUREMENTS IN MILLIMETRES

JUNCTION PIT IN ROAD RESERVE

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 420

Local Government Infrastructure Design Association

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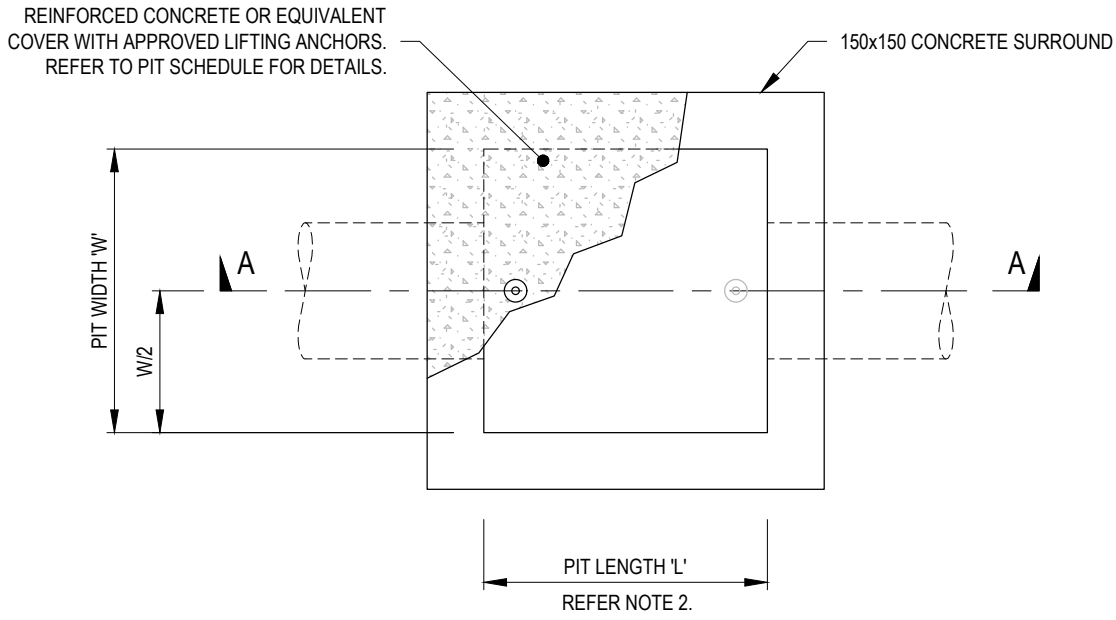

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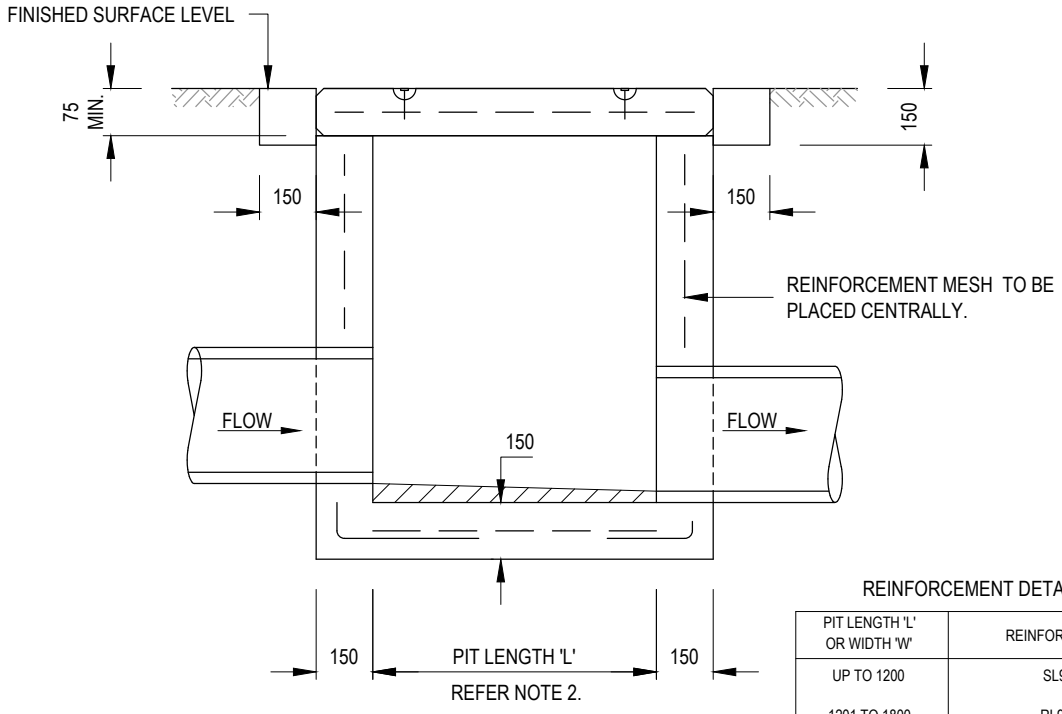

SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

MINIMUM PIT SIZES (EASEMENTS)

PIT DEPTH	PIT SIZE
<1000	600 x 600
>1000	600 x 900

MINIMUM PIT SIZES (ROAD RESERVE)

PIT DEPTH	PIT SIZE
ALL PITS	600 x 900

NOTES:

1. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
2. FOR TOP OF PIT DETAILS AND CHAMBER DIMENSIONS, REFER TO SPECIFIC DESIGN PIT SCHEDULE AND RELEVANT STANDARD DRAWINGS.
3. LIDS TO BE SPLIT FOR CHAMBERS GREATER THAN 1050 x 1050mm
4. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

JUNCTION PIT WITH CONCRETE COVER (NON TRAFFICABLE AREAS)

LAST UPDATED 27/03/2025

SD 425

NOT TO SCALE

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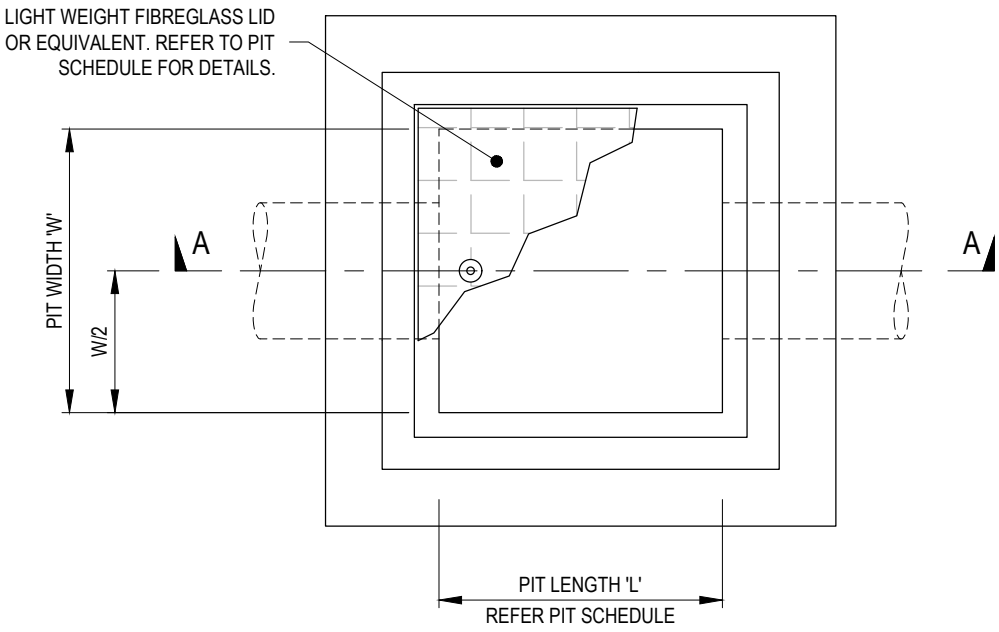

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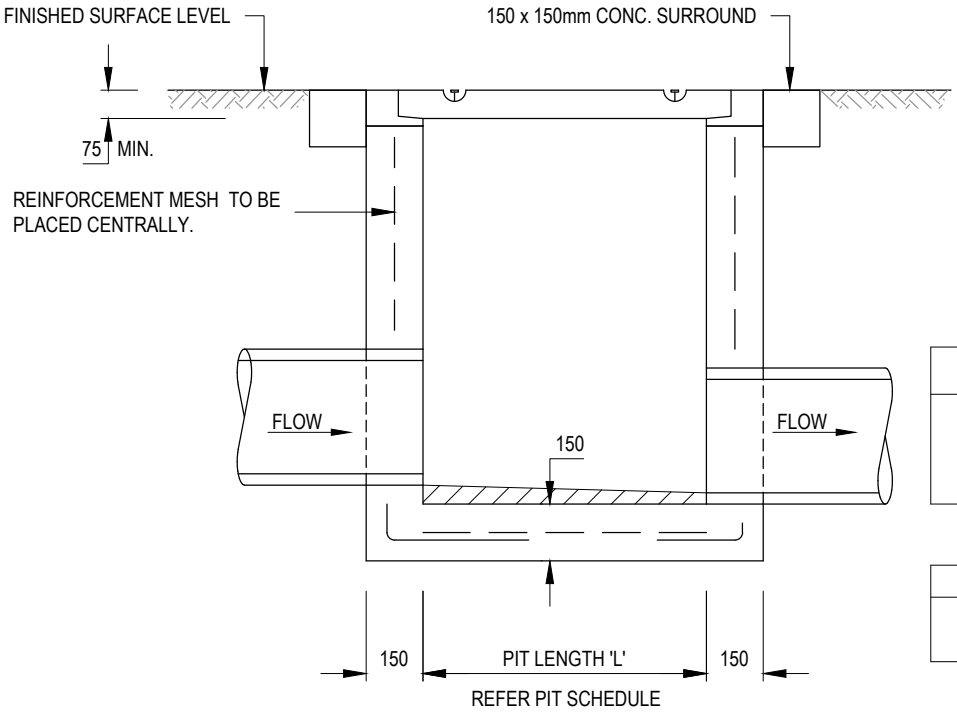

SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

MINIMUM PIT SIZES (EASEMENTS)

PIT DEPTH	PIT SIZE
<1000	600 x 600
>1000	600 x 900

MINIMUM PIT SIZES (ROAD RESERVE)

PIT DEPTH	PIT SIZE
ALL PITS	600 x 900

NOTES:

1. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
2. FOR DEPTHS OF INVERT GREATER THAN 1.5m WALL THICKNESS TO BE 200mm AND BASE TO BE 900 x 900mm.
3. SL82 REINFORCING MESH FOR PITS GREATER THAN 1.2m IN DEPTH
4. PIT LID TO BE LIGHT WEIGHT FIBREGLASS TYPE, OR APPROVED EQUIVALENT. PROVIDE REBATE IN PIT WALL FOR LID LOCKING.
5. IF PIT IS TO BE CONSTRUCTED INSIDE AN EASEMENT THE WORDS "NOT TO BE COVERED OR BUILT OVER" ARE TO BE STAMPED IN LID WITH A MIN TEXT HEIGHT OF 50mm.
6. FOR TOP OF PIT DETAILS AND CHAMBER DIMENSIONS, REFER TO SPECIFIC DESIGN PIT SCHEDULE AND RELEVANT STANDARD DRAWINGS
7. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
8. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

JUNCTION PIT WITH NON-CONCRETE COVER (NON TRAFFICABLE AREAS)

LAST UPDATED 27/03/2025

SD 426

Infrastructure Design Manual Standard Drawings

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Infrastructure Design Association

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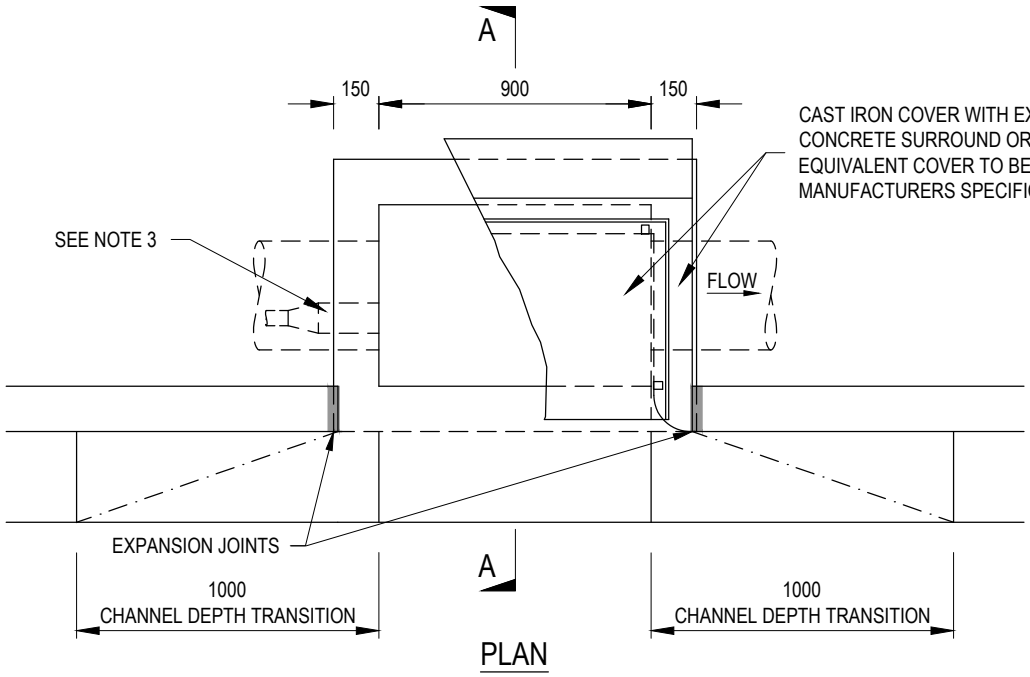

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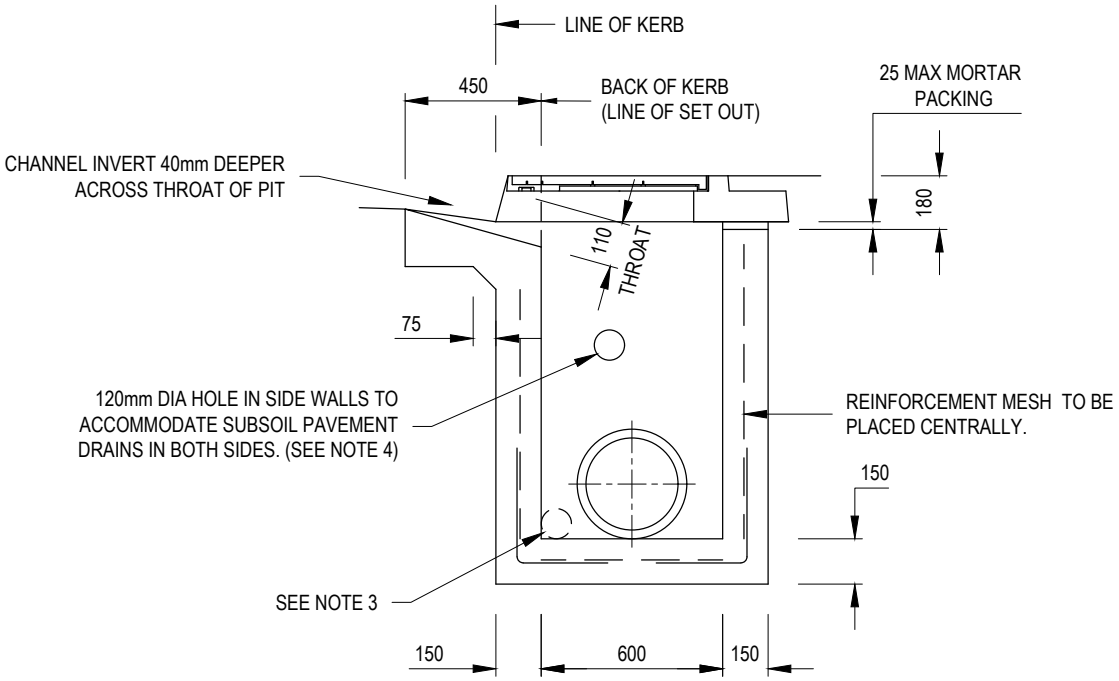

SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

NOTES:

1. REFER TO SD100 FOR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
4. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER & CONCRETE SURROUND FOR 'B2'

LAST UPDATED 27/03/2025

SD 430

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association

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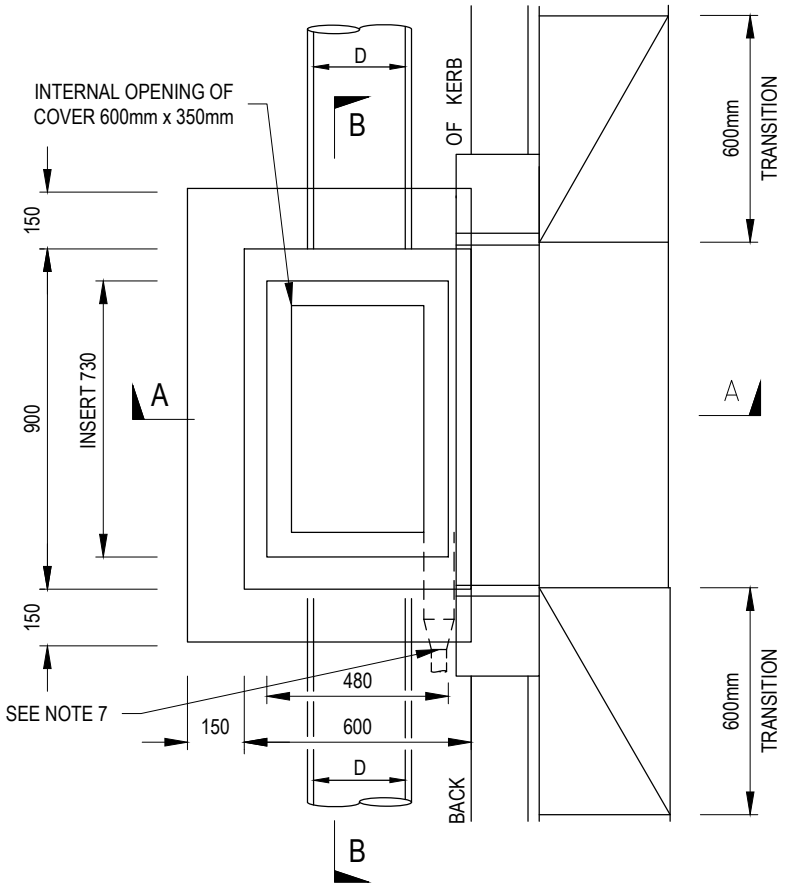
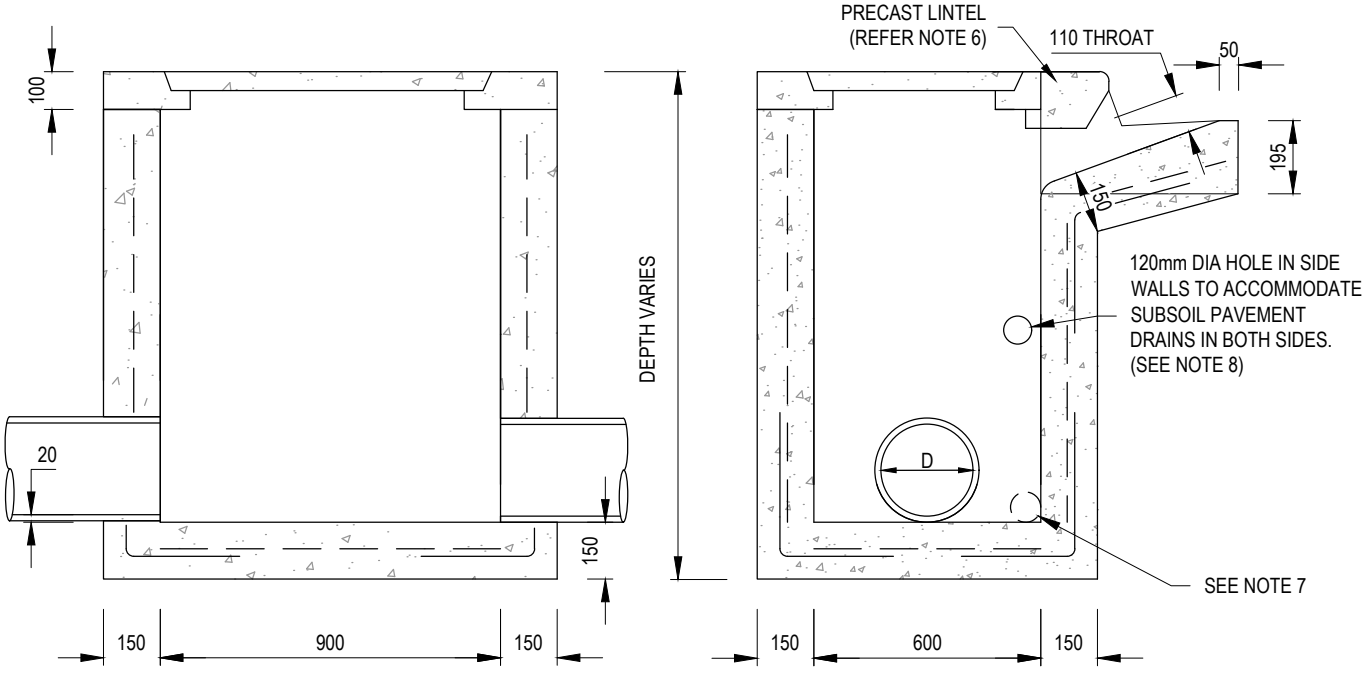
NOTES:

1. PIT TO BE CONSTRUCTED IN 2 STAGES. STAGE 2-TOP 500mm OF PIT IN CONJUNCTION WITH KERB AND CHANNEL.
2. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
3. AT LOW POINT TRANSITION 600mm BOTH SIDES.
4. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
5. FIBREGLASS PIT LIDS WITH EA FRAME AND LIGHTWEIGHT LOCKING LID OR APPROVED EQUIVALENT CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH AS3996 MAY BE USED INSTEAD OF CONCRETE.
6. PRECAST LINTEL TO MATCH REQUIRED KERB TYPE (SM2, B2)
7. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
8. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
9. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.



PLAN



SECTION B-B

SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

900 x 600mm SIDE ENTRY PIT PIPES UP TO 450mmØ (PRECAST CONCRETE LINTEL)

LAST UPDATED 27/03/2025

SD 431

Infrastructure Design Manual Standard Drawings

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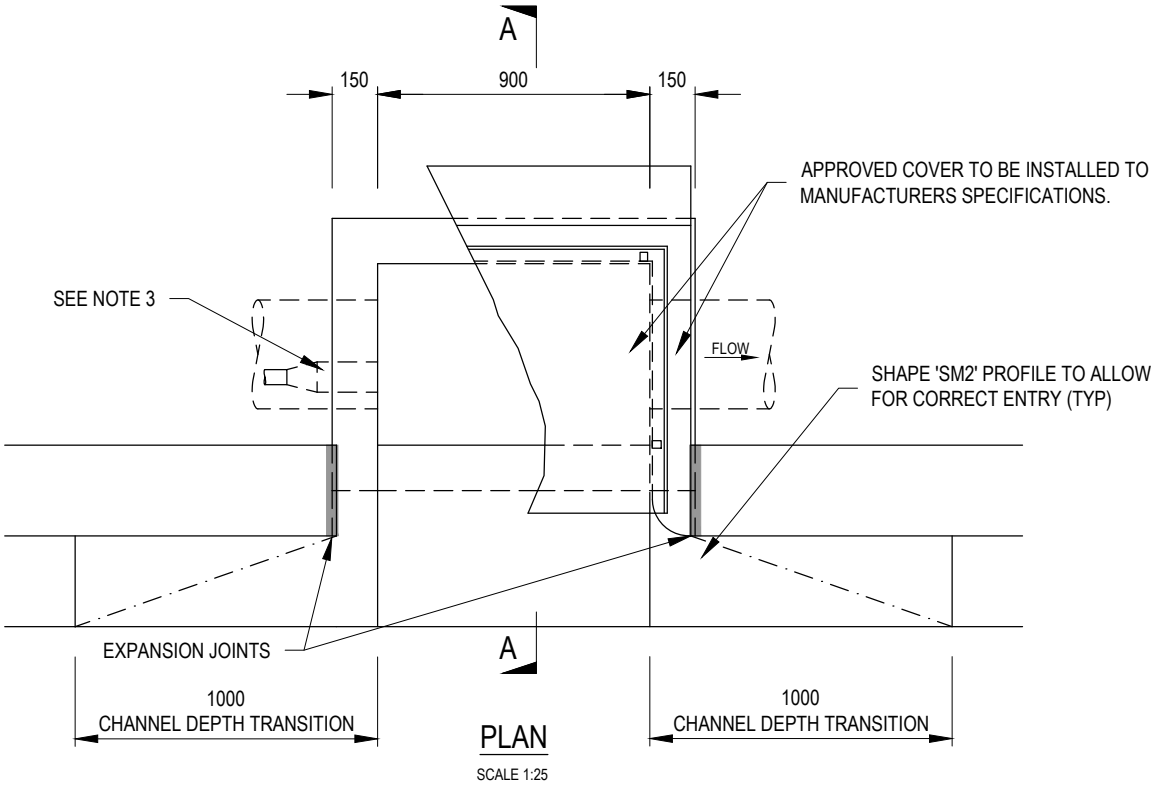
NOT TO SCALE



PLAN

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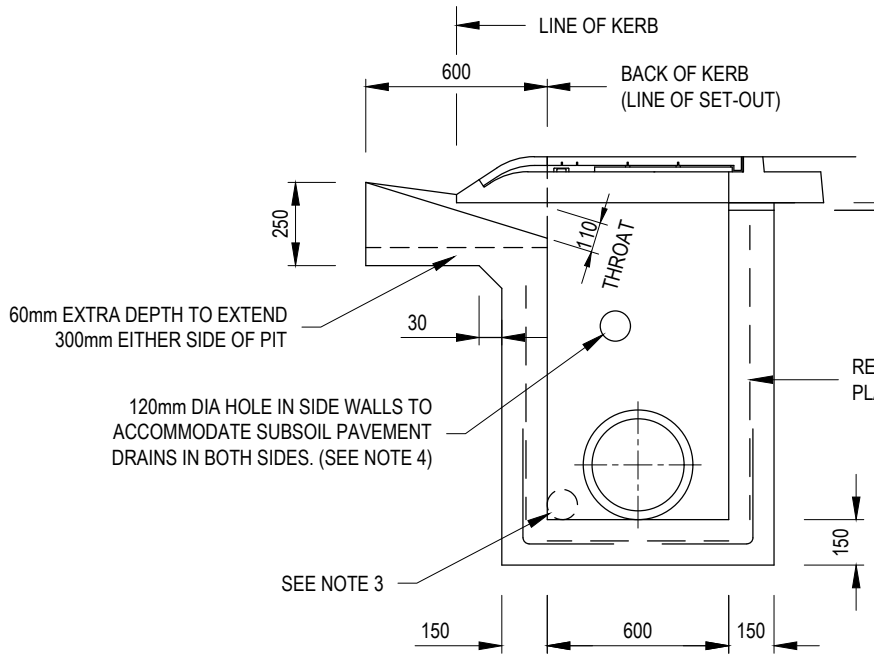

SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

NOTES:

1. REFER TO SD100 FOR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
4. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

SIDE ENTRY PIT900mm INLET WITH CAST IRON COVER & CONCRETE SURROUND FOR 'SM2'

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 435

Local Government Infrastructure Design Association

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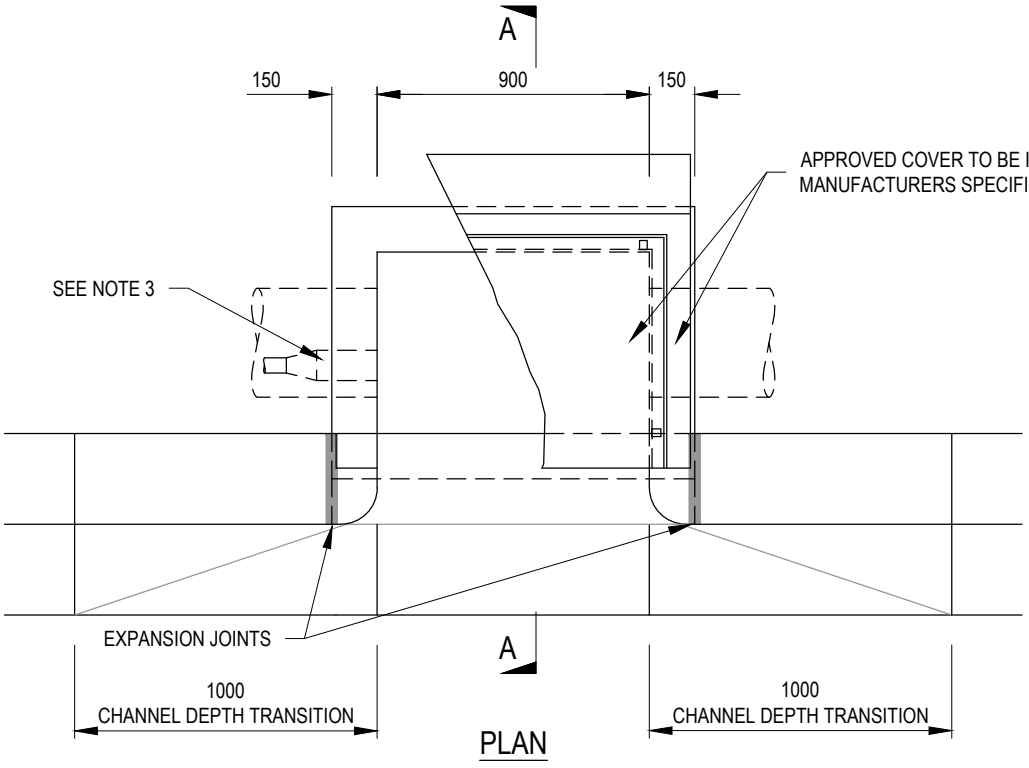
NOT TO SCALE



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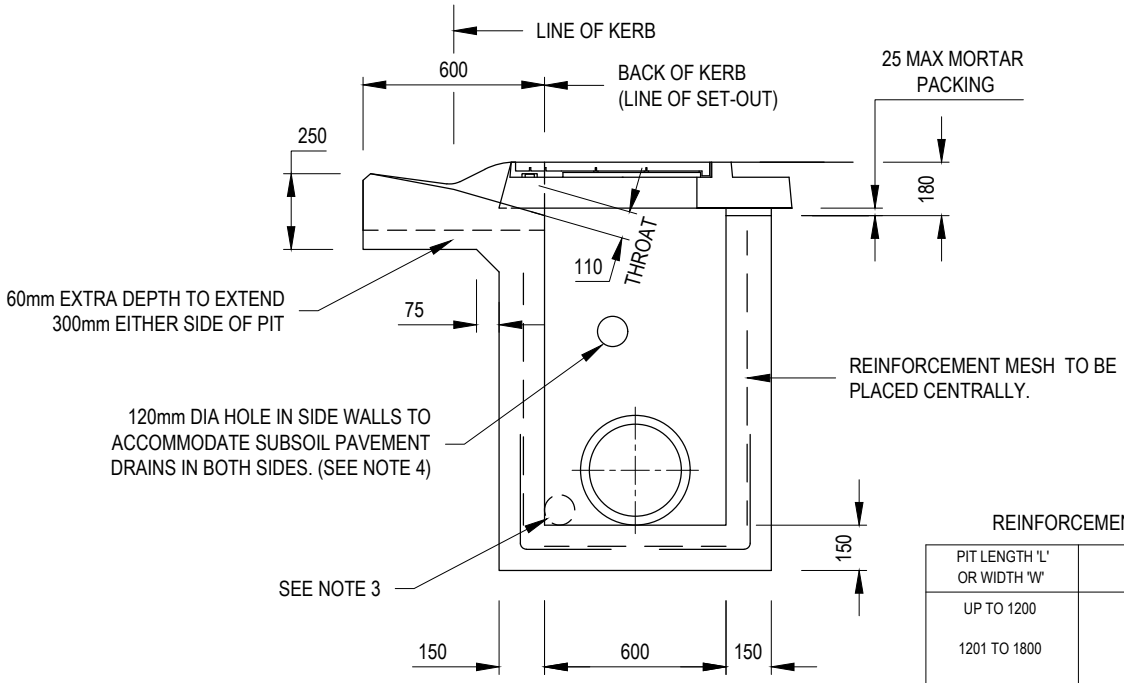

SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

NOTES:

1. REFER TO SD100 FOR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
4. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER & CONCRETE SURROUND FOR 'SM2-M'

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 440

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Infrastructure Design Association

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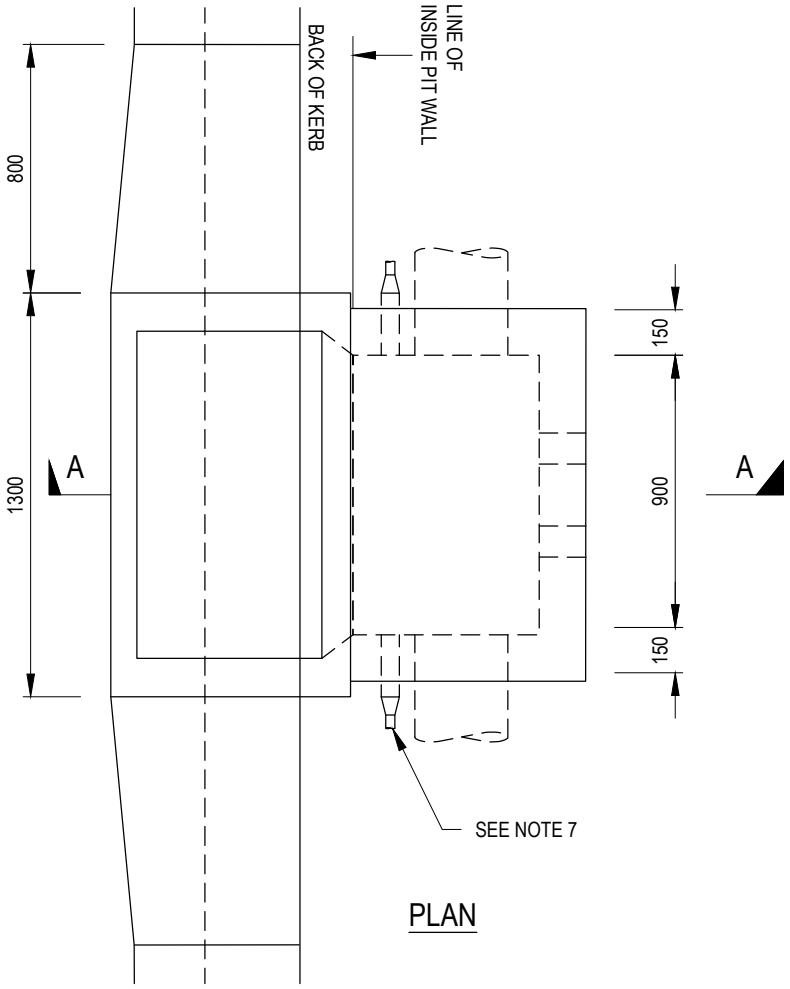
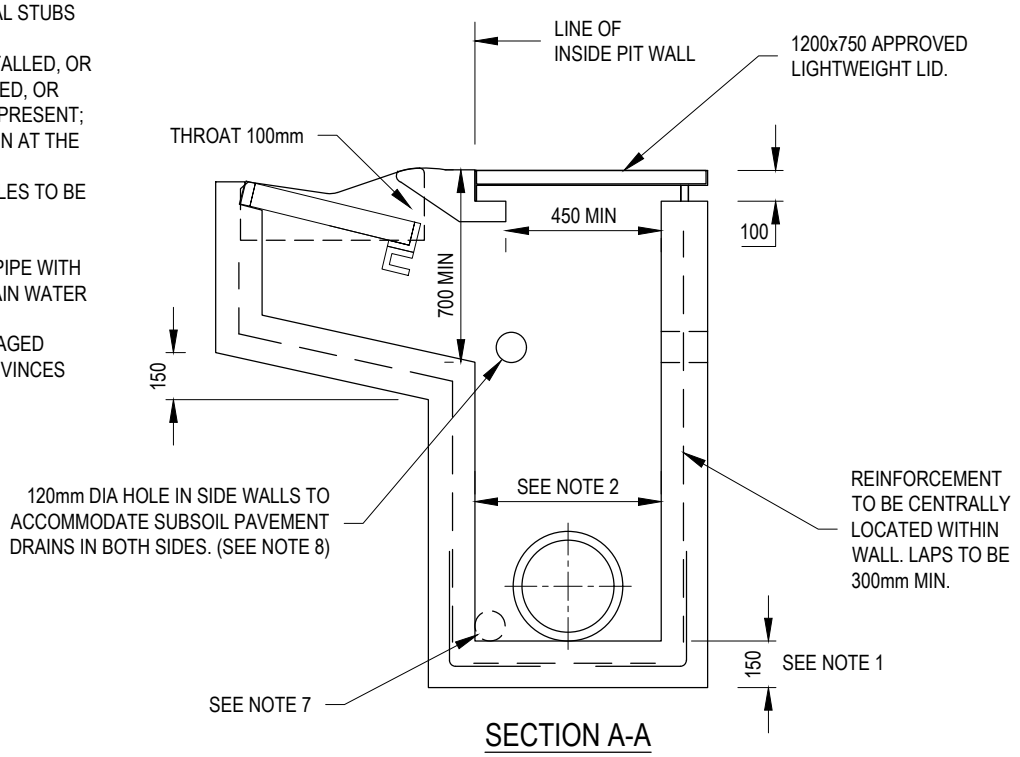


PLAN

NOTES:

1. FOR DEPTH OF INVERT GREATER THAN 1.5m, MIN. WALL & BASE THICKNESS TO BE 200mm AND BASE TO BE CORBELLED OUT TO 900x900mm.
2. MIN. INTERNAL PIT DIMENSION = EXTERNAL PIPE Ø + 150mm. FOR PIPE Ø GREATER THAN 450mm CORBEL PIT TOP TO A MIN. OF 600mm.
3. SL82 REINFORCING IS REQUIRED FOR PITS GREATER THAN 1200 DEEP.
4. PIT LID TO BE LIGHTWEIGHT FIBREGLASS TYPE, OR APPROVED EQUIVALENT. GRATE & FRAME TO BE HINGED.
5. CONCRETE STRENGTH SHALL BE 25MPa AT 28 DAYS.
6. WHERE NO AG PIPES EXIST, SEAL STUBS WITH GEOFABRIC.
7. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
8. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
9. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
10. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

GRATED SIDE ENTRY PIT WITH LIGHTWEIGHT COVER & CONCRETE SURROUND FOR 'SM2-M'

LAST UPDATED 27/03/2025

Infrastructure Design Manual Standard Drawings

SD 441

Local Government
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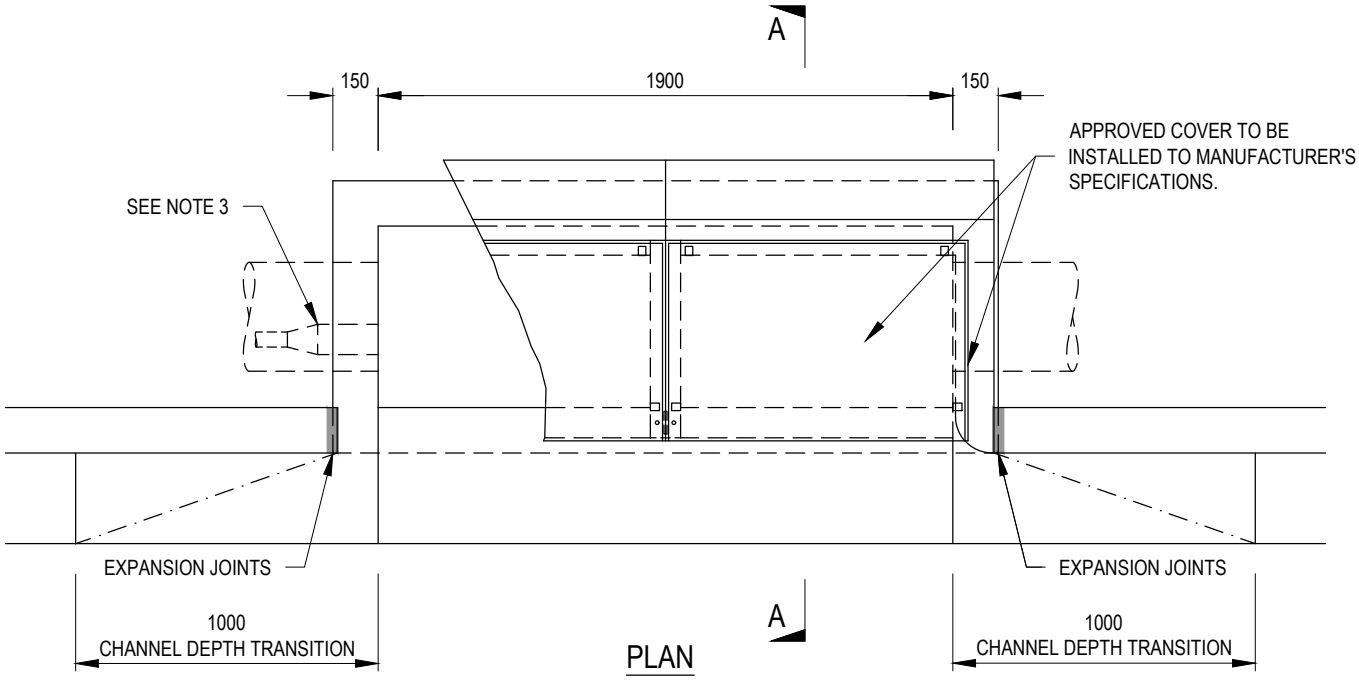
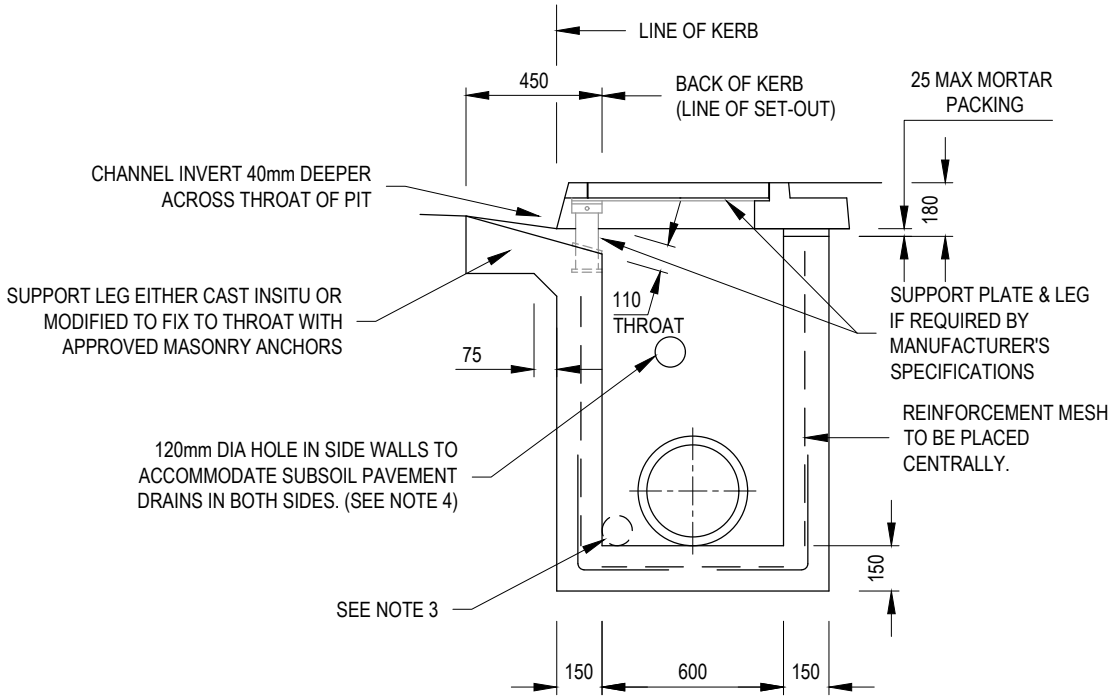


PLAN

SCALE 1:25



SECTION A-A

NOTES:

1. REFER TO SD100 FR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
4. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

ALL MEASUREMENTS IN MILLIMETRES

DOUBLE SIDE ENTRY PIT 1900mm INLET WITH APPROVED COVER & CONCRETE SURROUND FOR 'B2'

LAST UPDATED 27/03/2025

SD 445

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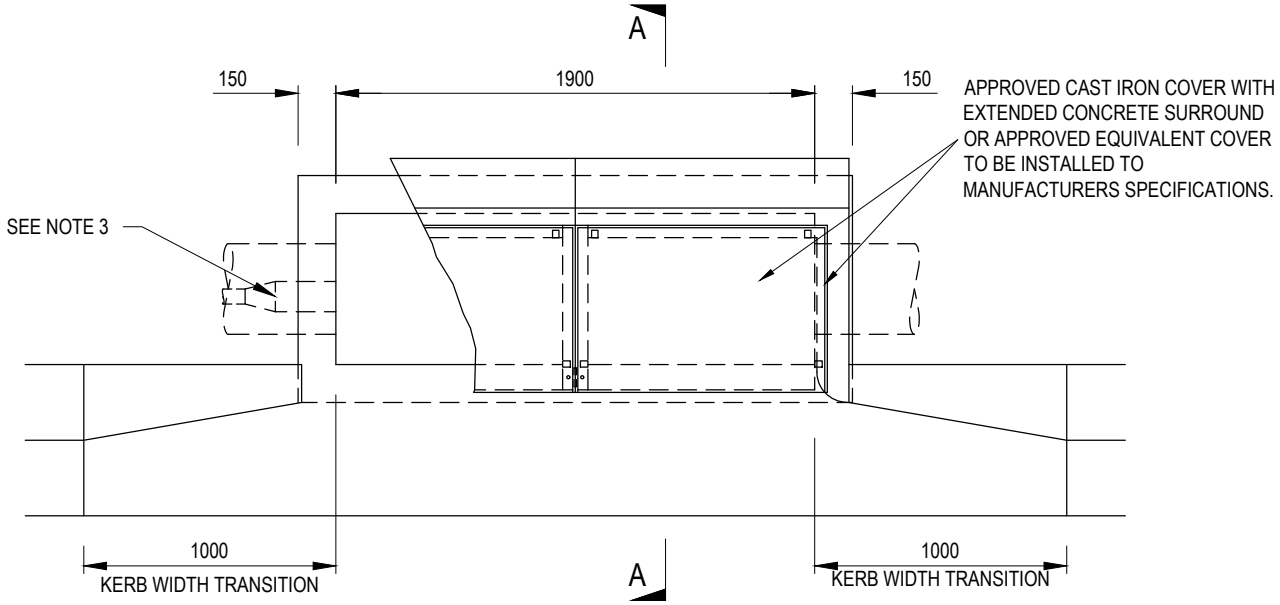
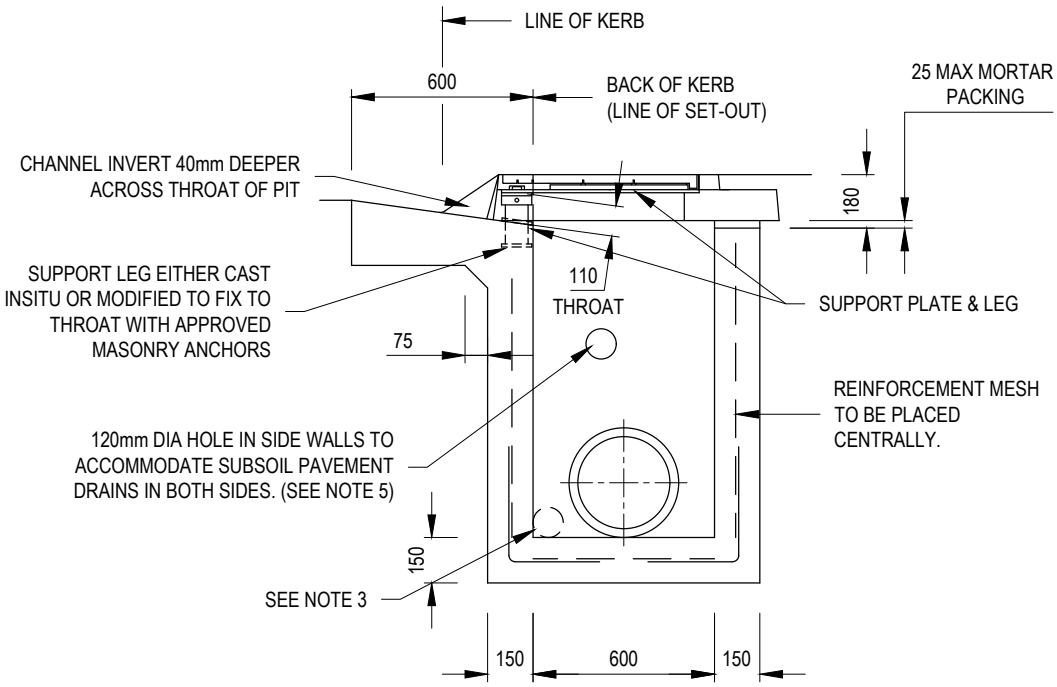


PLAN



SECTION A-A

NOTES:

1. REFER TO SD100 FR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
4. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
5. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

ALL MEASUREMENTS IN MILLIMETRES

DOUBLE SIDE ENTRY PIT 1900mm INLET WITH CAST IRON COVER & CONCRETE SURROUND FOR 'SM2'

LAST UPDATED 27/03/2025

SD 450

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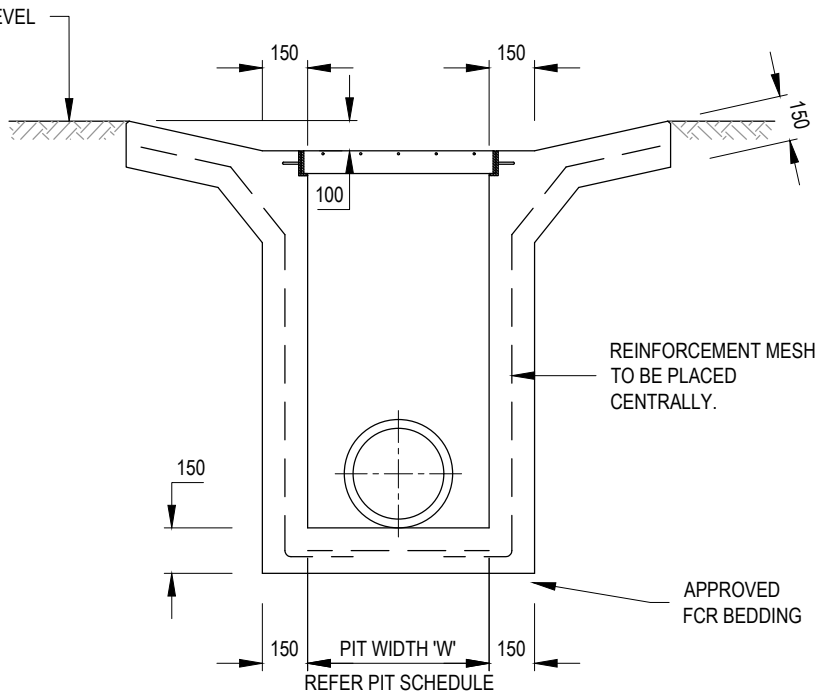
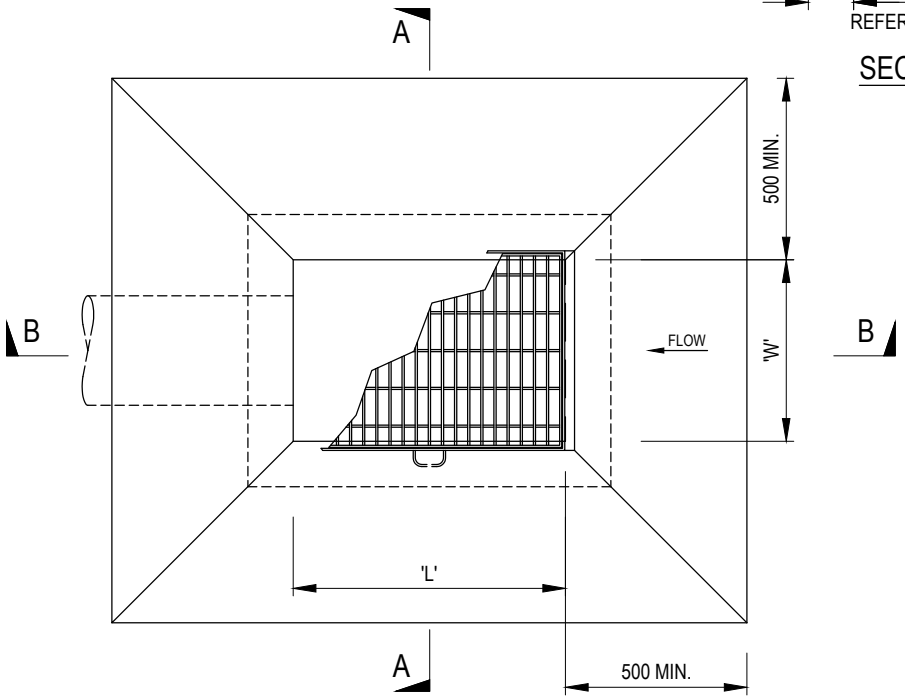


SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

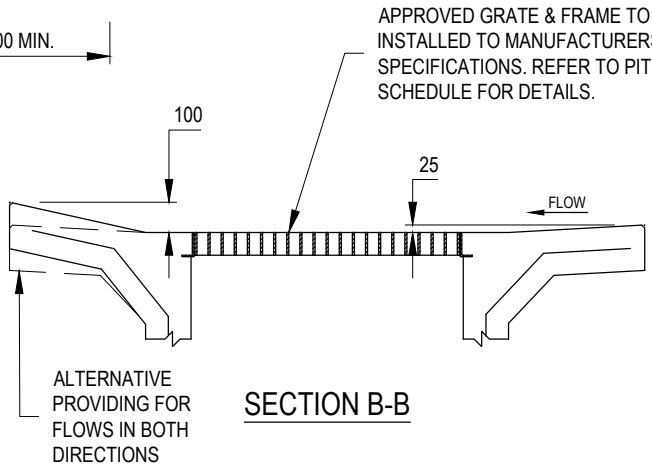


PLAN

SCALE 1:25

NOTES:

1. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.



SECTION B-B

NOTES:

1. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 240kN) OR APPROVED EQUIVALENT.
   MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

DEPRESSED GRATED PIT

LAST UPDATED 27/03/2025

SD 455

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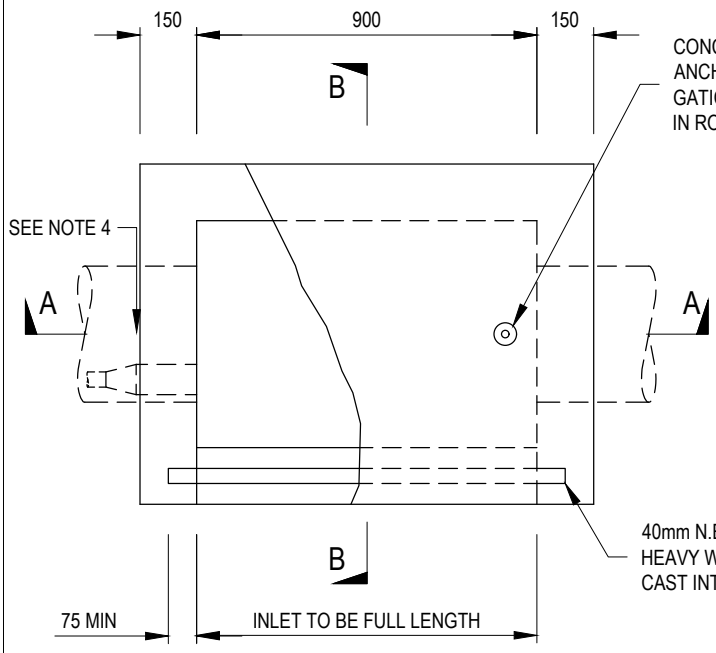


PLAN

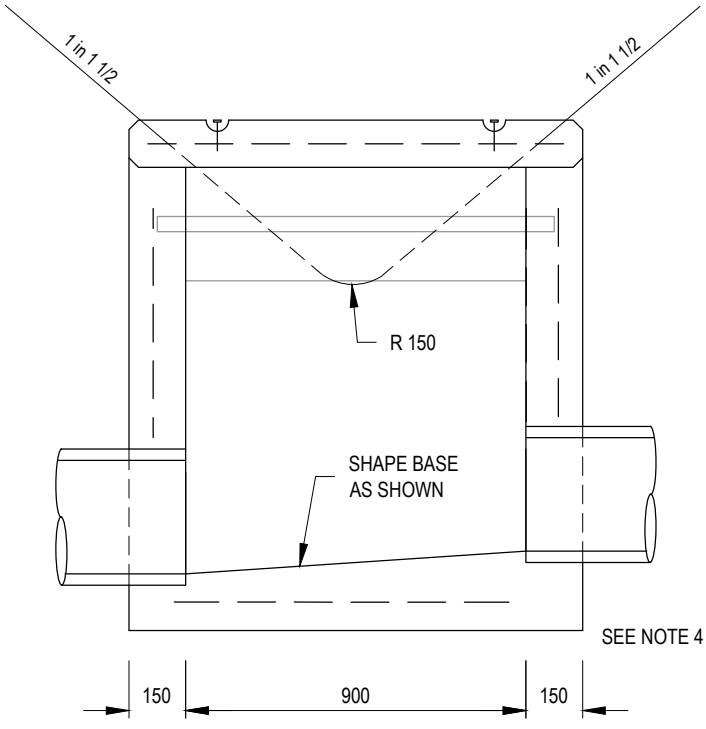
SCALE 1:25

REINFORCEMENT DETAILS

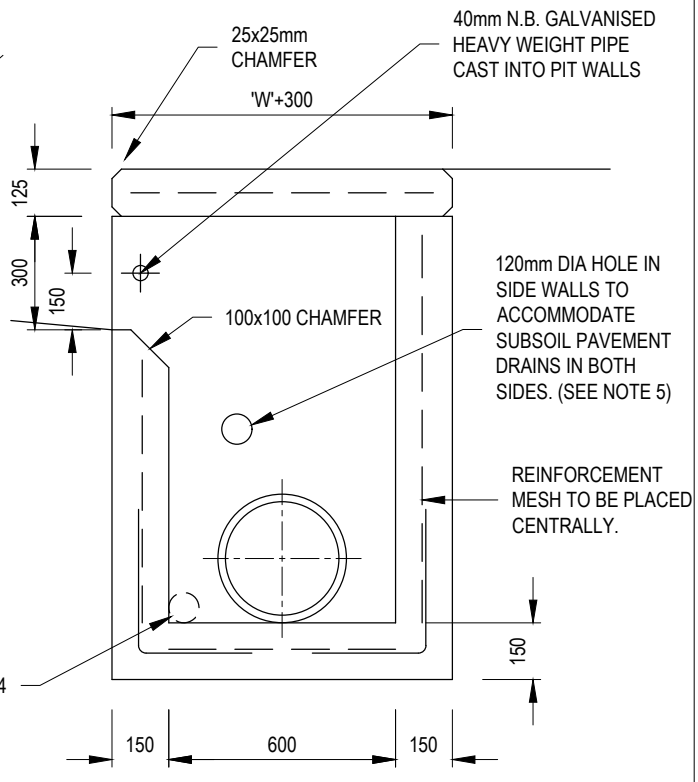
PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

NOTES:

1. PLACEMENT OF PIT WITHIN ROAD RESERVE / MUNICIPAL RESERVE SUBJECT TO COUNCIL APPROVAL.
2. REFER TO PIT SCHEDULE FOR CORRECT PIT ORIENTATION.
3. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
4. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
5. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.



SECTION A-A



SECTION B-B

ALL MEASUREMENTS IN MILLIMETRES

INLET CATCH PIT

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SD 460

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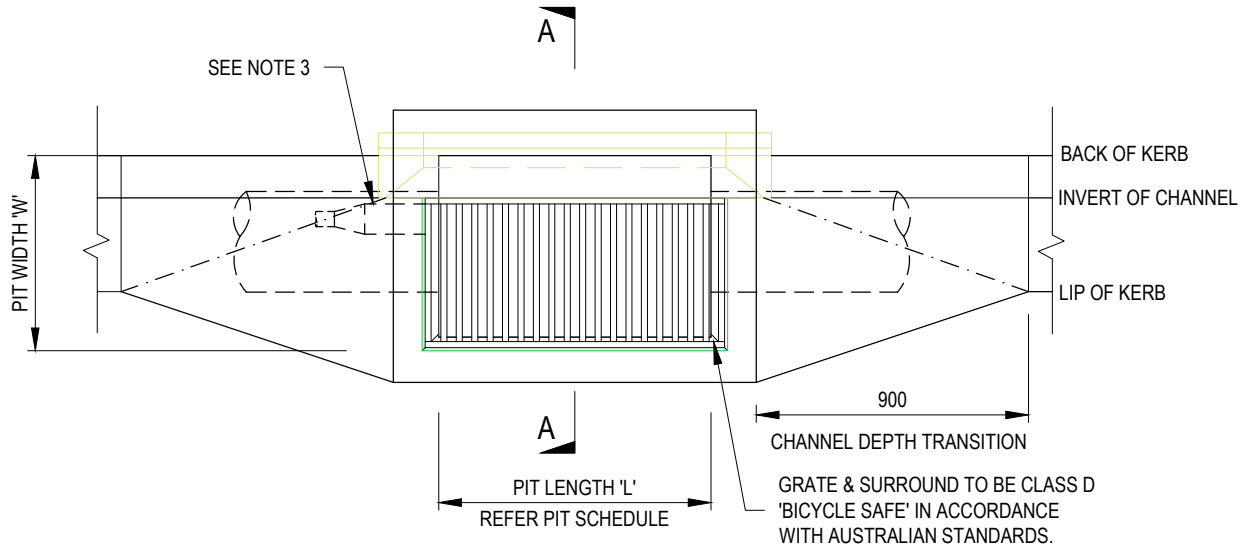
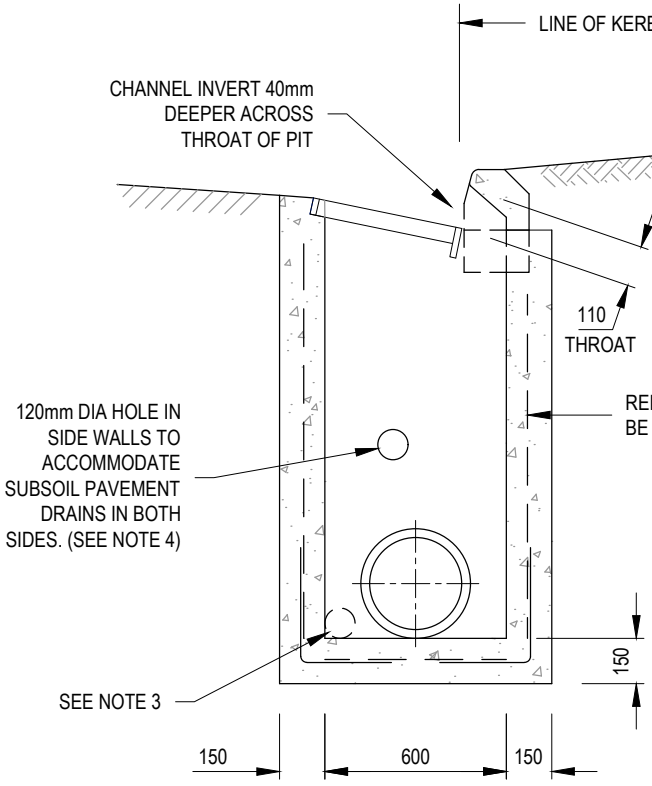


PLAN

SCALE 1:25



SECTION A-A

REINFORCEMENT DETAILS

PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

NOTES:

1. REFER TO SD100 FOR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
4. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED
5. WHERE PIT AT LOW POINT CONSTRUCT-100mm DIA. P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

GRATED SIDE ENTRY PIT INLET 900mm WITH CONCRETE SURROUND FOR 'B2'

LAST UPDATED 27/03/2025

SD 475

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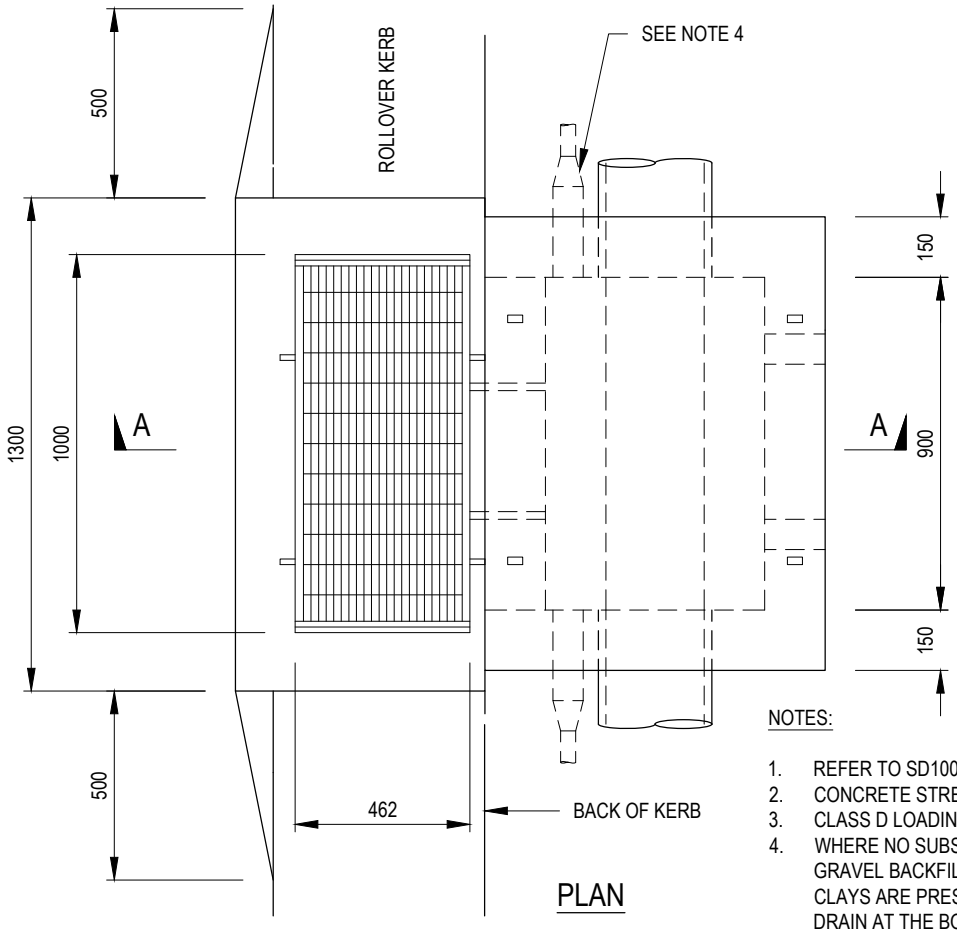
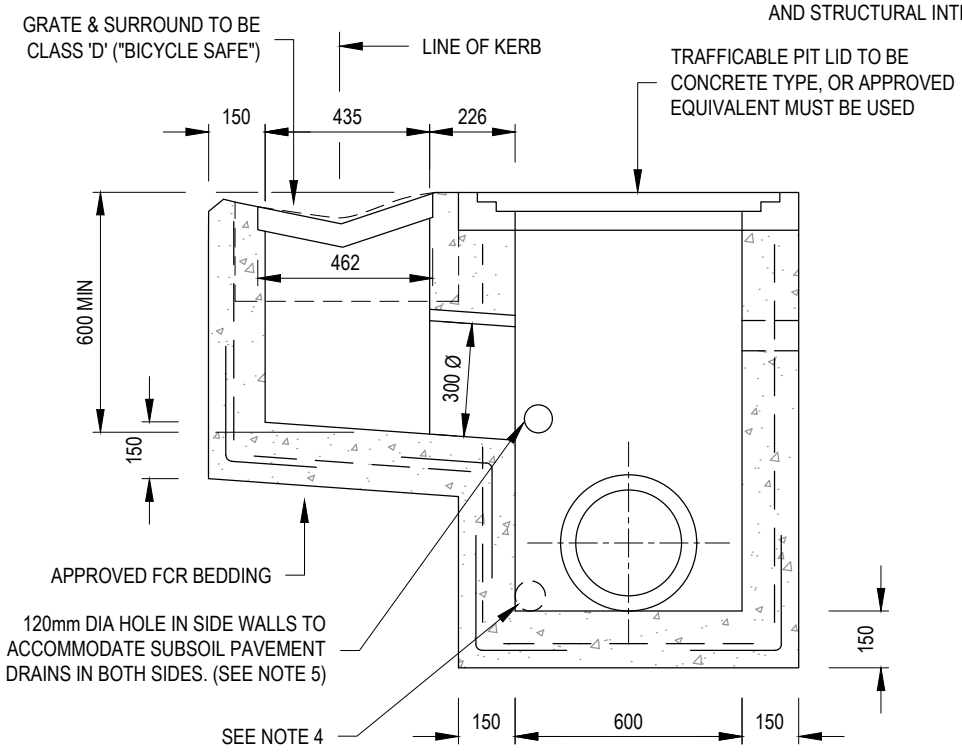


PLAN

NOTES:

1. REFER TO SD100 FR KERB DETAILS.
2. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
3. CLASS D LOADING IS REQUIRED FOR LID.
4. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
5. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED
6. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

GRATED PIT FOR SM2 MODIFIED KERB & CHANNEL

LAST UPDATED 27/03/2025

SD 480

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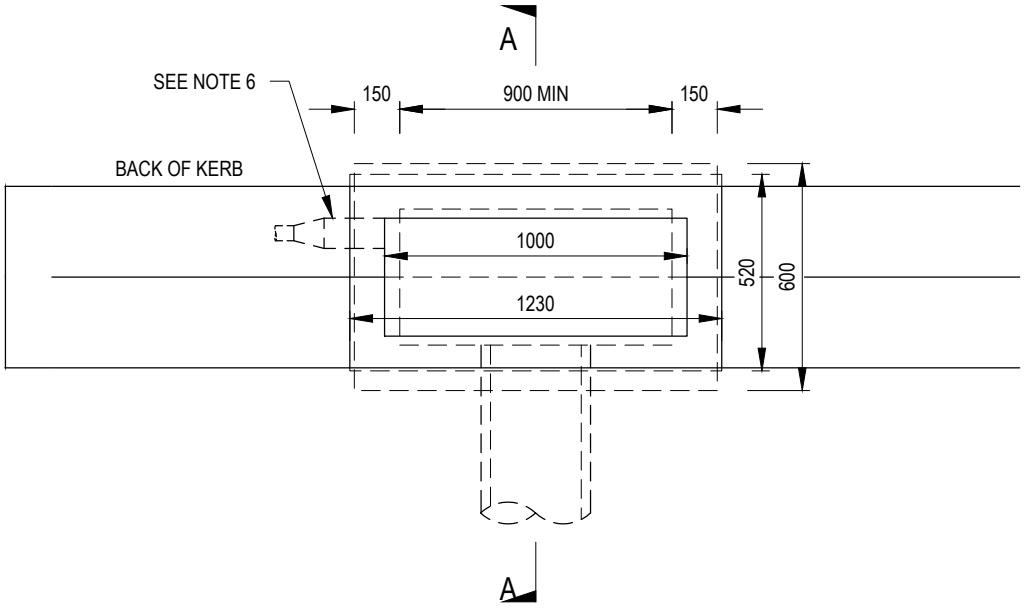
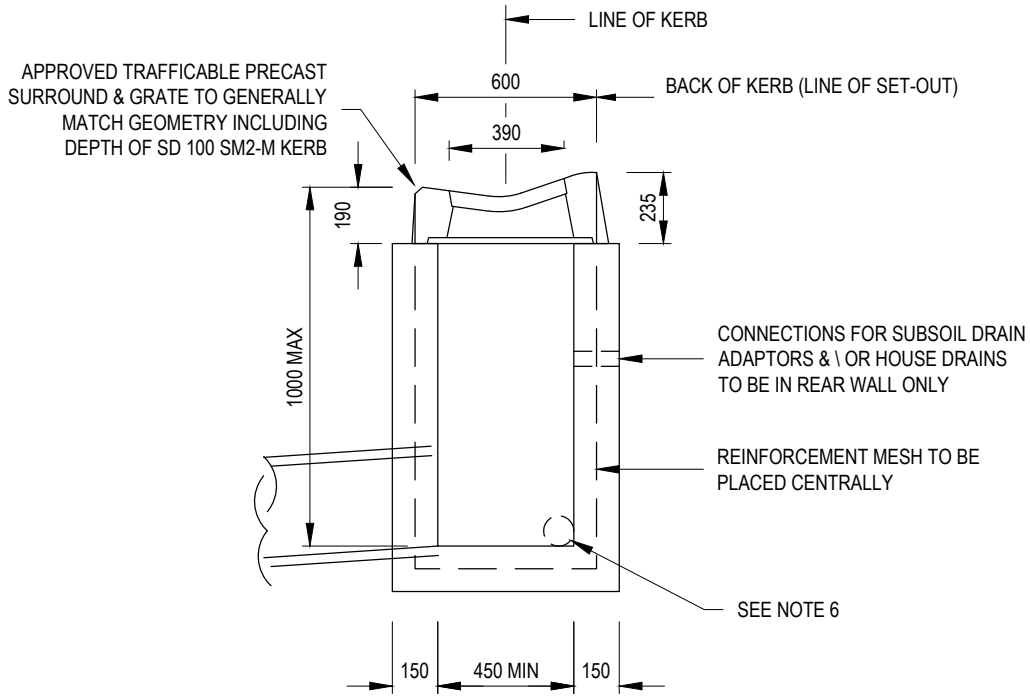


SECTION A-A



SECTION A-A

NOTES:

1. FOR USE AS UPSTREAM PIT ONLY
2. MAXIMUM PIT DEPTH 1000mm
3. APPROVED GRATE & SURROUND TYPE TO MATCH KERB
4. GRATE & SURROUND TO BE CLASS 'D' ("BICYCLE SAFE")
5. CONCRETE STRENGTH SHALL BE 25MPa AT 28 DAYS.
6. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
7. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

ALTERNATE GRATED PIT FOR SM2 MODIFIED KERB & CHANNEL 'SM2-M' - UPSTREAM PIT ONLY

LAST UPDATED 27/03/2025

SD 481

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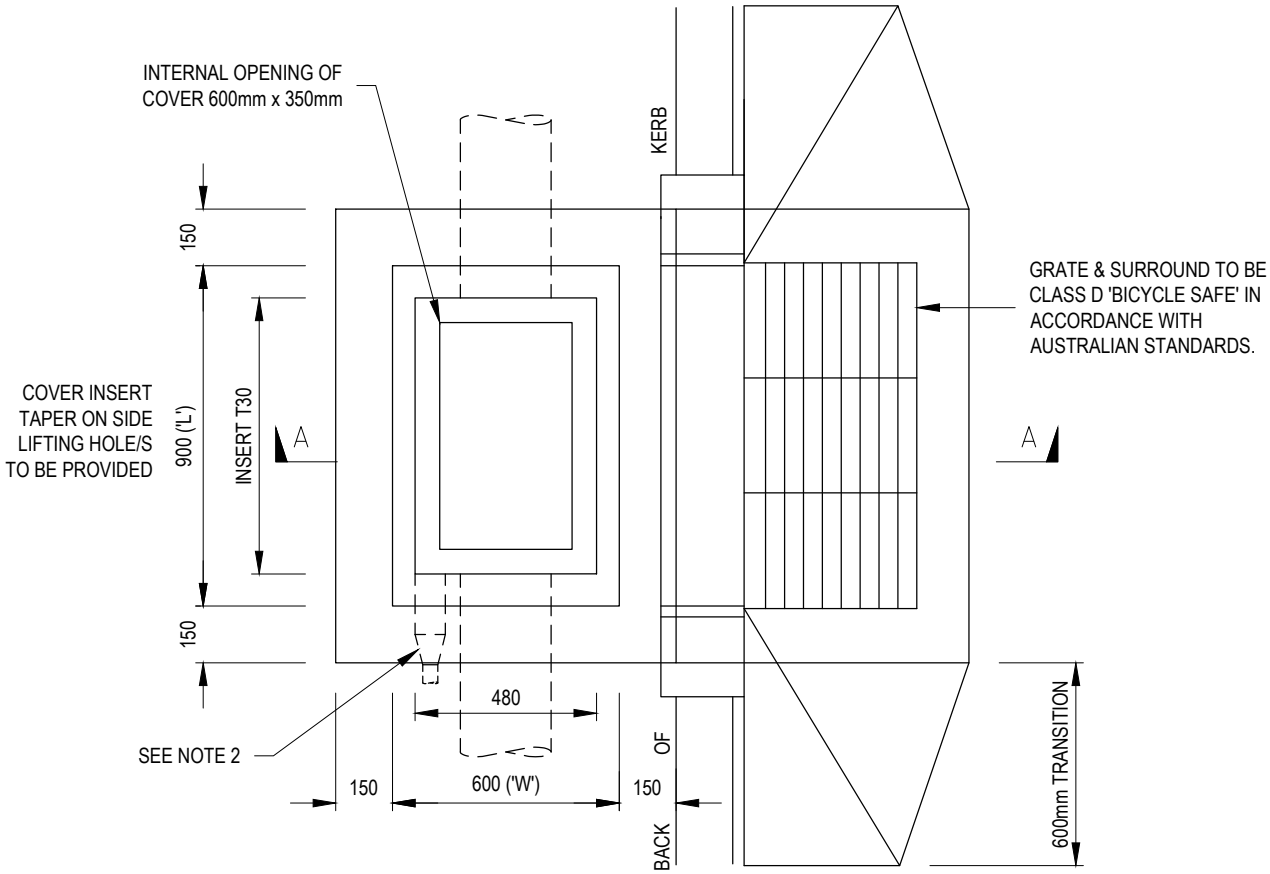

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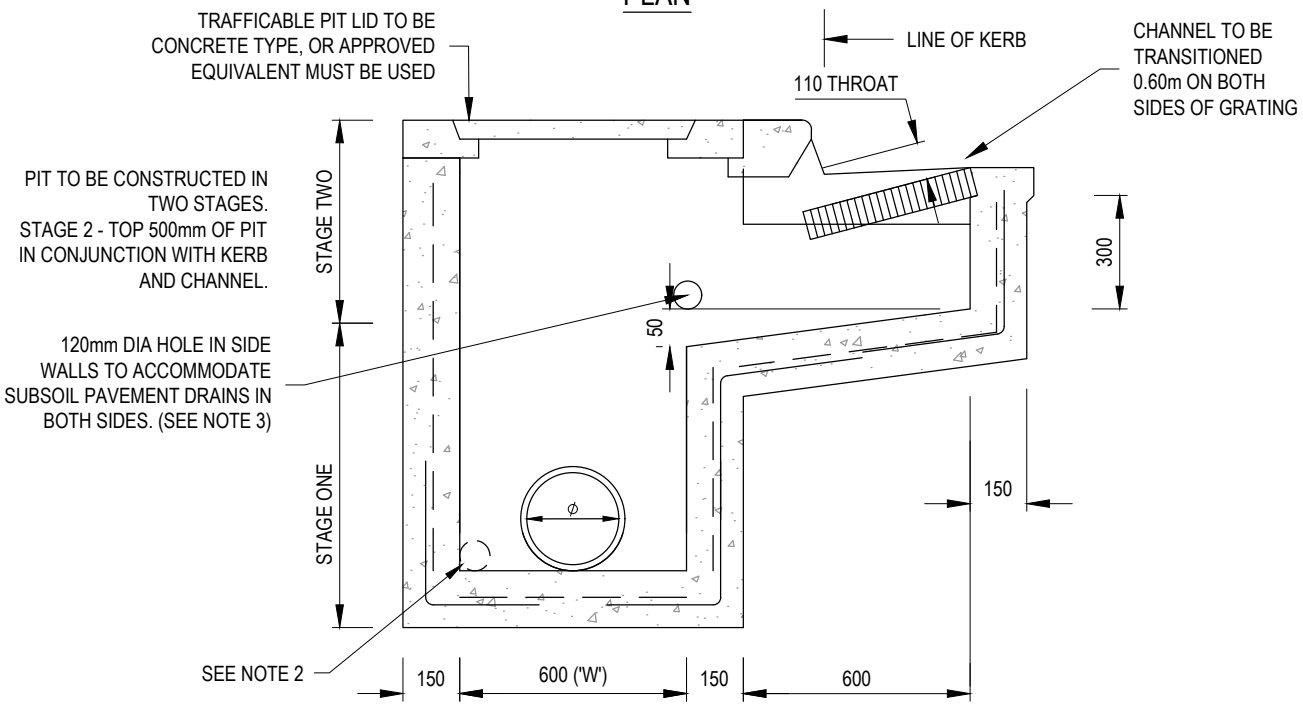

SECTION A-A

NOTES:

1. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS
2. WHERE NO SUBSOIL DRAIN INSTALLED, OR WHERE GRAVEL BACKFILL IS USED, OR WHERE EXPANSIVE CLAYS ARE PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.
3. SUBSOIL / PAVEMENT DRAIN HOLES TO BE SEALED IF NOT USED
4. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

900 x 600mm SIDE ENTRY PIT WITH GRATING

LAST UPDATED 27/03/2025

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SD 490

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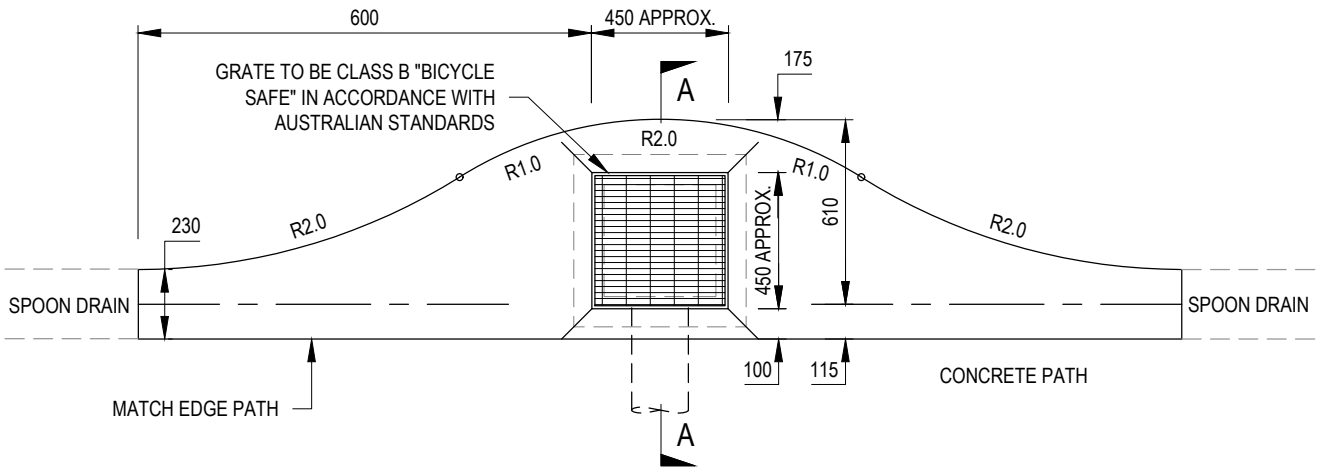

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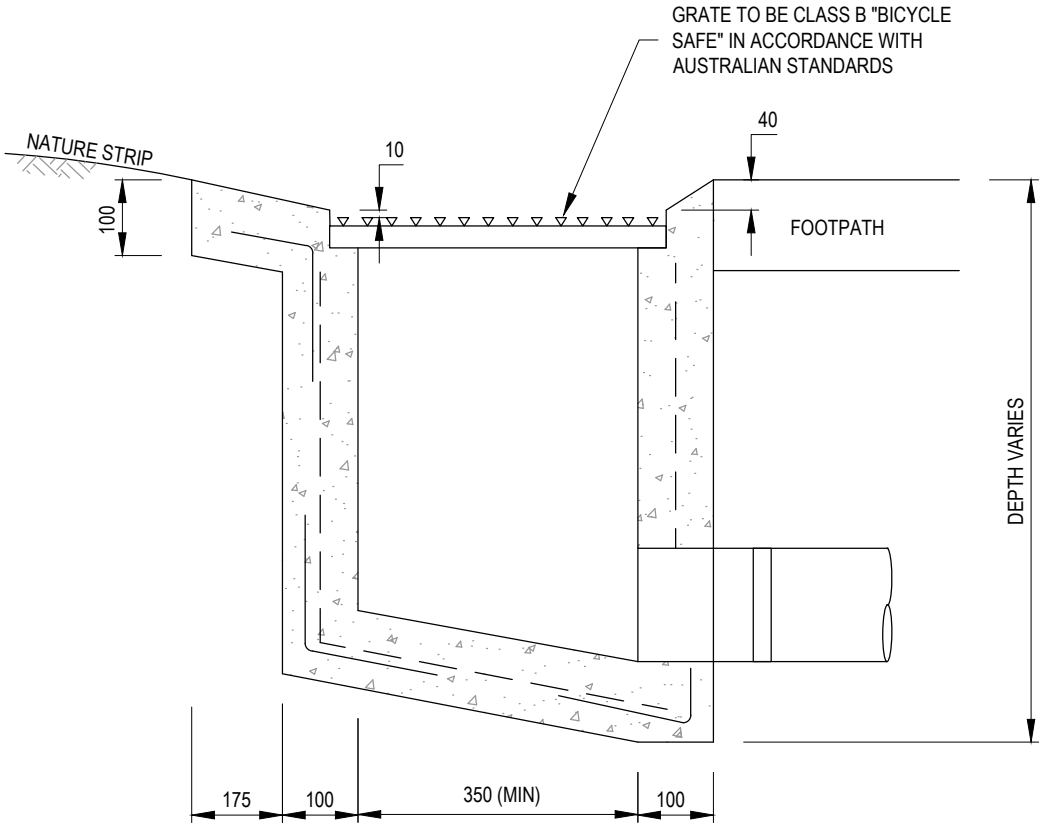

SECTION A-A

NOTES:

1. EDGE CONCRETE AROUND PERIMETER OF GRATE.
2. TOP OF GRATE 50mm BELOW EDGE OF PATH.
3. DO NOT CAST IN OR BOND GRATE TO CONCRETE PIT TO ALLOW EASY ACCESS TO PIT.
4. CONCRETE TO BE SMOOTH TROWELLED FINISH.
5. GRATE FRAME TO BE OILED IF INSTALLED IN WET CONCRETE.
6. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS
7. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

SPOON PIT WITH GRATING

LAST UPDATED 27/03/2025

SD 495

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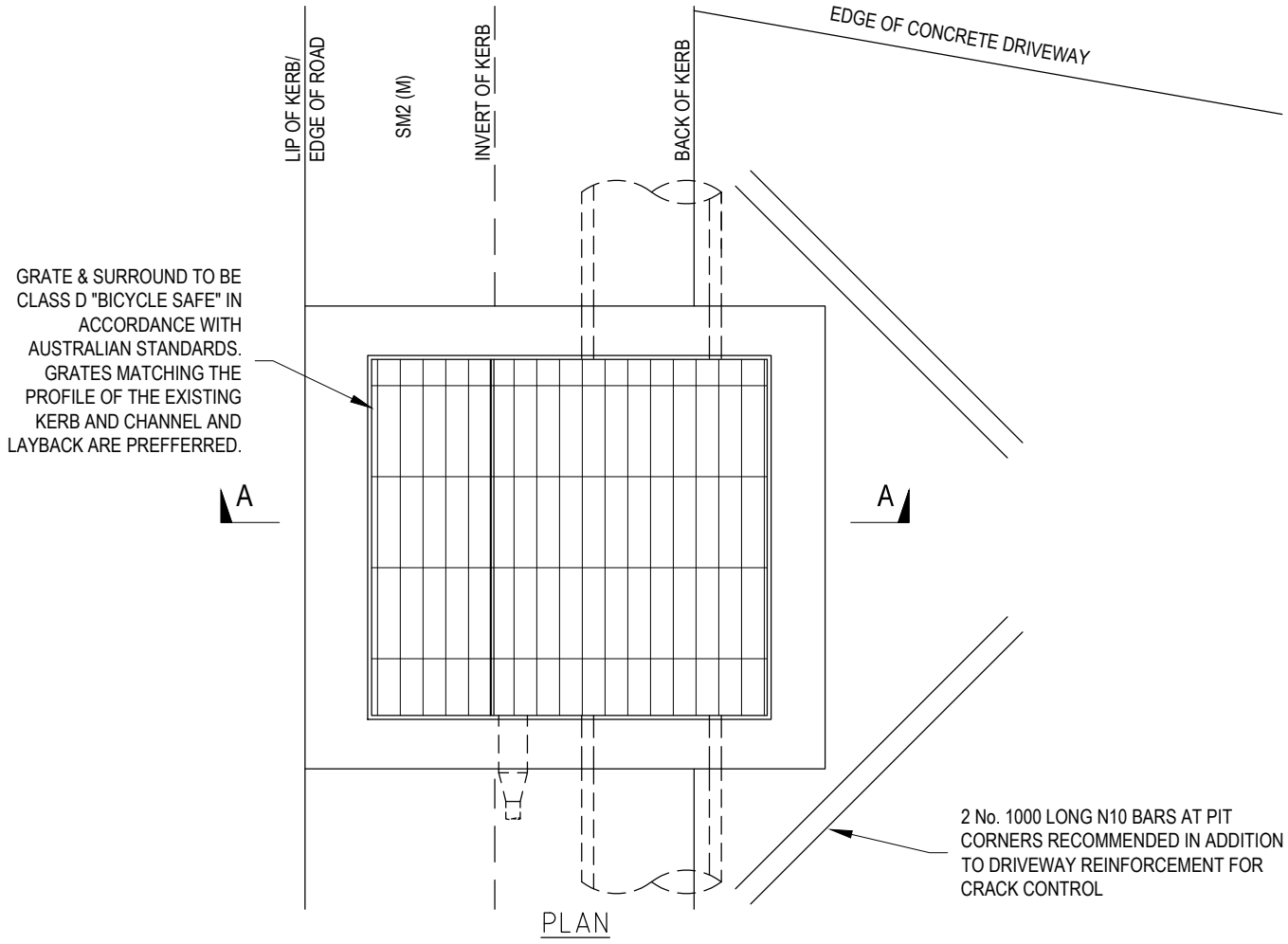

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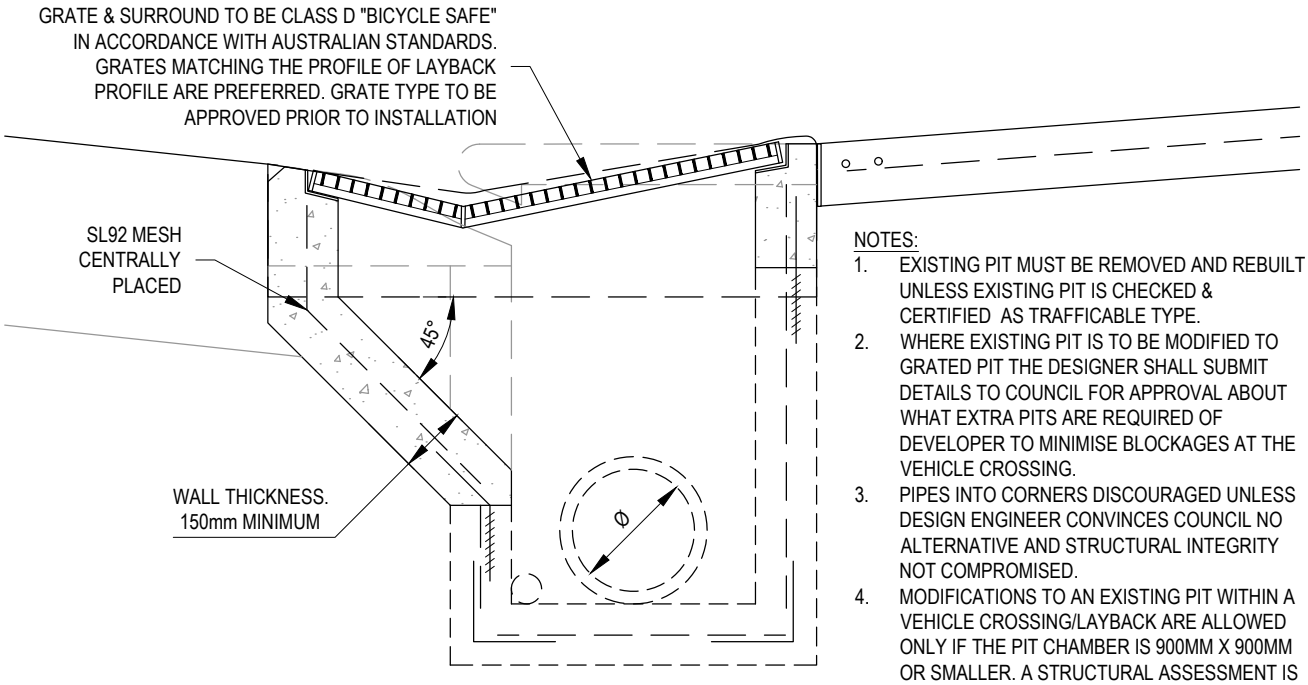

SECTION A-A

NOTES:

1. EXISTING PIT MUST BE REMOVED AND REBUILT UNLESS EXISTING PIT IS CHECKED & CERTIFIED AS TRAFFICABLE TYPE.
2. WHERE EXISTING PIT IS TO BE MODIFIED TO GRATED PIT THE DESIGNER SHALL SUBMIT DETAILS TO COUNCIL FOR APPROVAL ABOUT WHAT EXTRA PITS ARE REQUIRED OF DEVELOPER TO MINIMISE BLOCKAGES AT THE VEHICLE CROSSING.
3. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.
4. MODIFICATIONS TO AN EXISTING PIT WITHIN A VEHICLE CROSSING/LAYBACK ARE ALLOWED ONLY IF THE PIT CHAMBER IS 900MM X 900MM OR SMALLER. A STRUCTURAL ASSESSMENT IS REQUIRED FOR LARGER PITS.
5. MODIFICATIONS TO AN EXISTING PIT WITHIN A VEHICLE CROSSING/LAYBACK ARE ALLOWED ONLY IF THE PIT CHAMBER IS 900MM X 900MM OR SMALLER. A STRUCTURAL ASSESSMENT IS REQUIRED FOR LARGER PITS.

MODIFIED EXISTING PIT TO GRATED PIT IN VEHICLE CROSSING / LAYBACK

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SD 496

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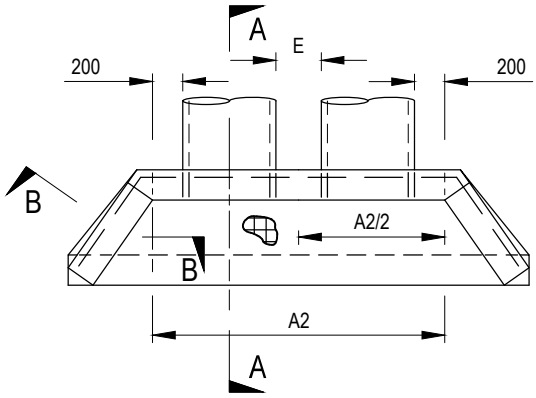
DIMENSIONS

TYPE 1 *SLOPE AT 1.5:1				TYPE 2 *SLOPE AT 2:1				TYPE 3 *SLOPE AT 3:1			
B	C	D	F	B	C	D	F	B	C	D	F
138	1037	197	240	138	1129	262	320	275	1312	393	480
221	1286	315	385	294	1433	420	513	441	1727	630	769
307	1547	438	535	409	1752	584	713	613	2161	876	1069
394	1804	563	687	525	2066	750	916	788	2591	1125	1373

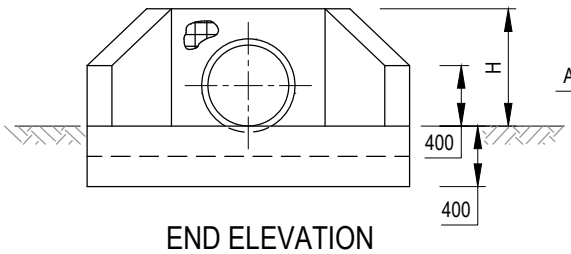
* THEORETICAL SLOPE OF WINGWALL MEASURED AT RIGHT ANGLES TO THE ROADWAY.
** A2=A+E+EXTERNAL DIAMETER OF PIPE
# APPROXIMATE ONLY

NOM PIPE DIA	EXTERNAL PIPE DIA#	A**	E	H
300	362	762	300	531
375	445	845	300	610
450	534	934	300	692
525	616	1016	300	775

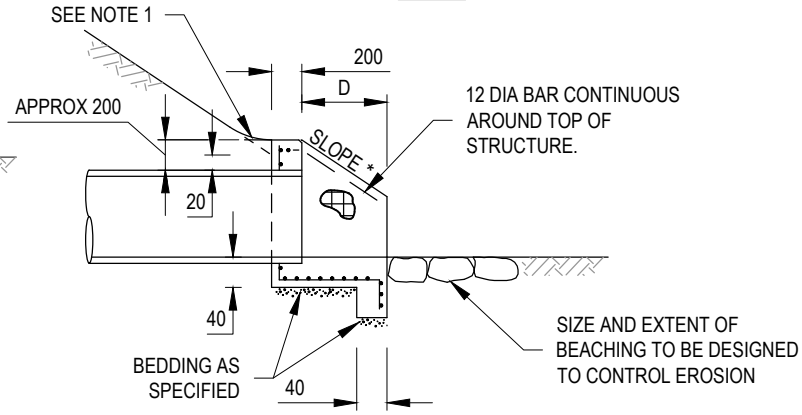
FOR LARGER PIPE DIAMETERS REFER TO VICROADS SD1931 REV B



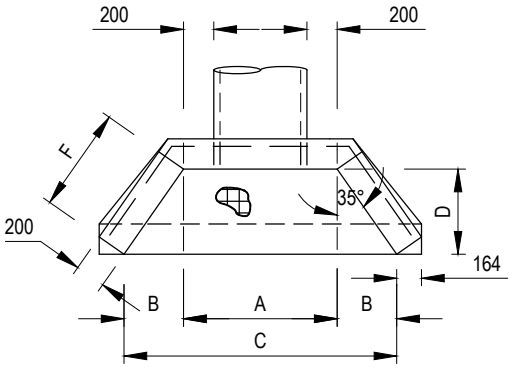
PLAN



END ELEVATION



SECTION A-A



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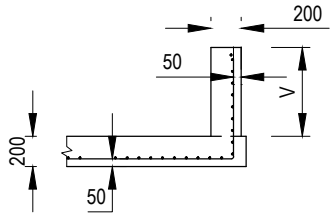

SECTION B-B

V = VARIABLE HEIGHT OF THE WINGWALL

NOTES:

1. BECAUSE THE RELATION OF THE BATTER TO THE TOP OF THE ENDWALL IS ESSENTIAL FOR THE SAFETY OF THE MOTORIST THE DETAILS AS SHOWN IN SECTION A-A MUST BE ADHERED TO DURING CONSTRUCTION.
2. REINFORCEMENT, F82 UNLESS OTHERWISE SPECIFIED, SHALL BE CONTINUOUS AROUND CORNERS AND LOCATED AS SHOWN ON SECTIONS A-A AND B-B. CLEAR COVER 50 MIN. LAPS: FABRICS 300 MIN, BARS 25 X BAR DIAMETER MIN.
3. DISTRIBUTION BARS 12 DIA AT 200 CENTRES.
4. CONCRETE STRENGTH SHALL BE 32MPa. (MIN) AT 28 DAYS.STANDARD STRENGTH GRADE OR HIGHER COMPLYING WITH THE REQUIREMENTS OF AS 1379. EXPOSURE CLASSIFICATION UP TO AND INCLUDING B1.
5. EXPOSED EDGES SHALL HAVE 20 x 20 CHAMFERS.
6. COMPACTION PRESSURE BEHIND WALLS NOT TO EXCEED 15 kPa. (1.5 TONNE VIBRATORY ROLLER OR 300 kg VIBRATING PLATE WITHIN 0.5m OF WALL).
7. ENDWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF AS 3600.
8. PIPES INTO CORNERS DISCOURAGED UNLESS DESIGN ENGINEER CONVINCES COUNCIL NO ALTERNATIVE AND STRUCTURAL INTEGRITY NOT COMPROMISED.

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE WINGWALL (IN-SITU)

LAST UPDATED 27/03/2025

SD 497

NOT TO SCALE

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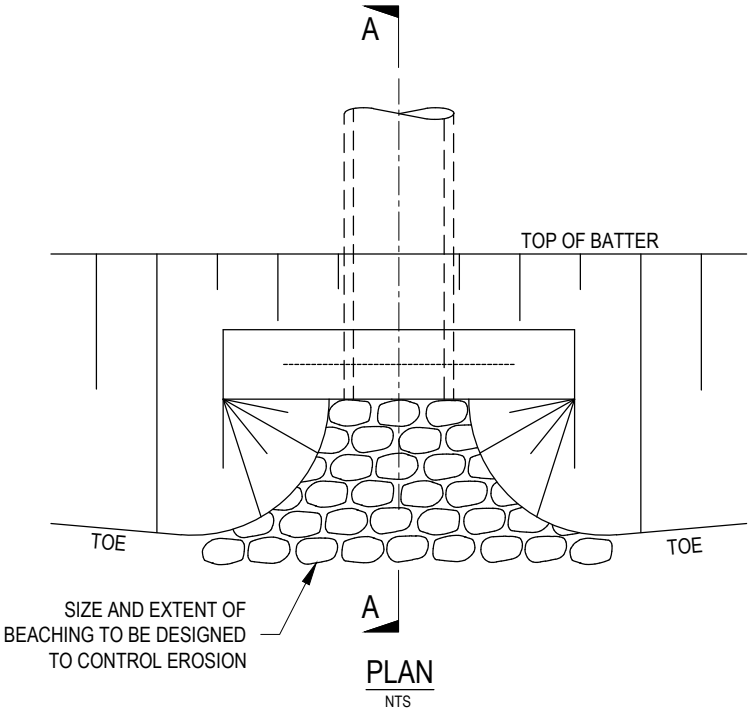
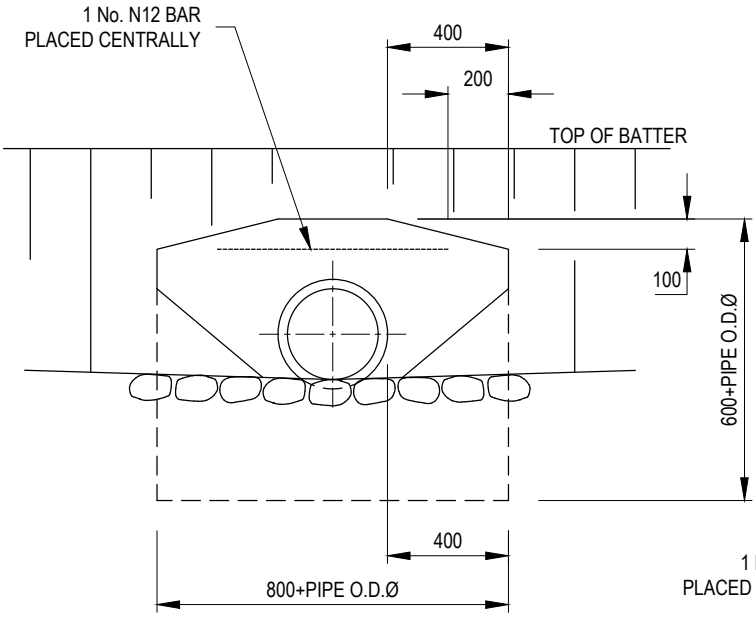
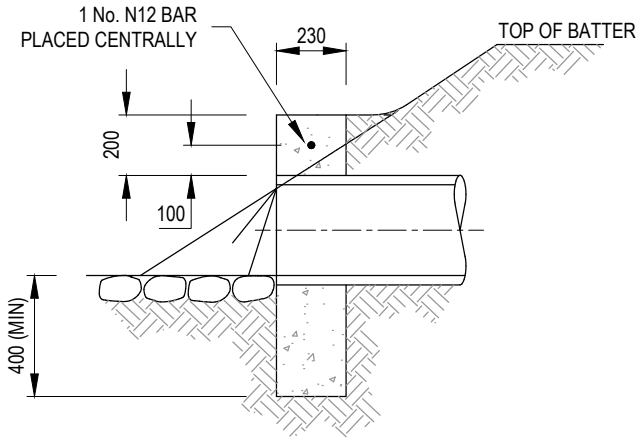


PLAN
NTS



END ELEVATION
NTS



SECTION A-A

NOTES:

1. COMPACTION PRESSURE BEHIND ENDWALLS IS NOT TO EXCEED 12.5kPa.REFER (1.5 TONNE VIBRATORY ROLLER).
2. A MAXIMUM PIPE SIZE OF 375Ø FOR THIS ENDWALL ARRANGEMENT.
3. NOT TO BE USED WHERE GENERAL VEHICULAR TRAFFIC IS PRESENT, (MAINTENANCE OR EMERGENCY VEHICLES EXCEPTED AS ALLOWED BY SD 260).
4. ALTERNATIVELY PRECAST ENDWALL MAY BE USED WHERE APPROVED BY COUNCIL.
5. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.

ALL MEASUREMENTS IN MILLIMETRES

CONCRETE ENDWALL FOR PIPES UP TO 375mmØ (WALKWAYS, PATHS & TRACKS)

LAST UPDATED 26/02/2020

SD 498

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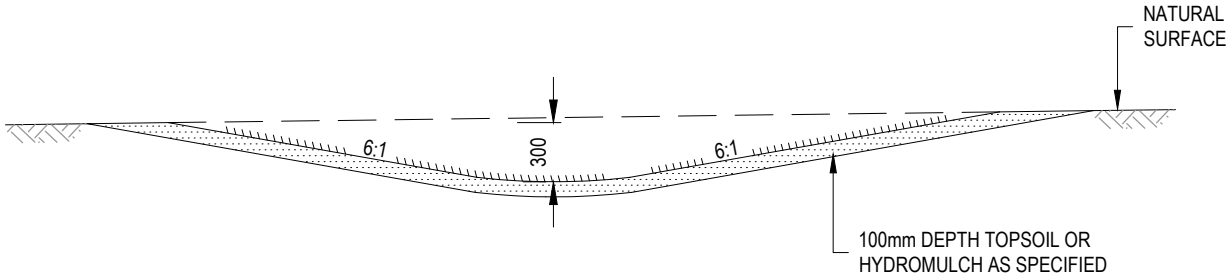
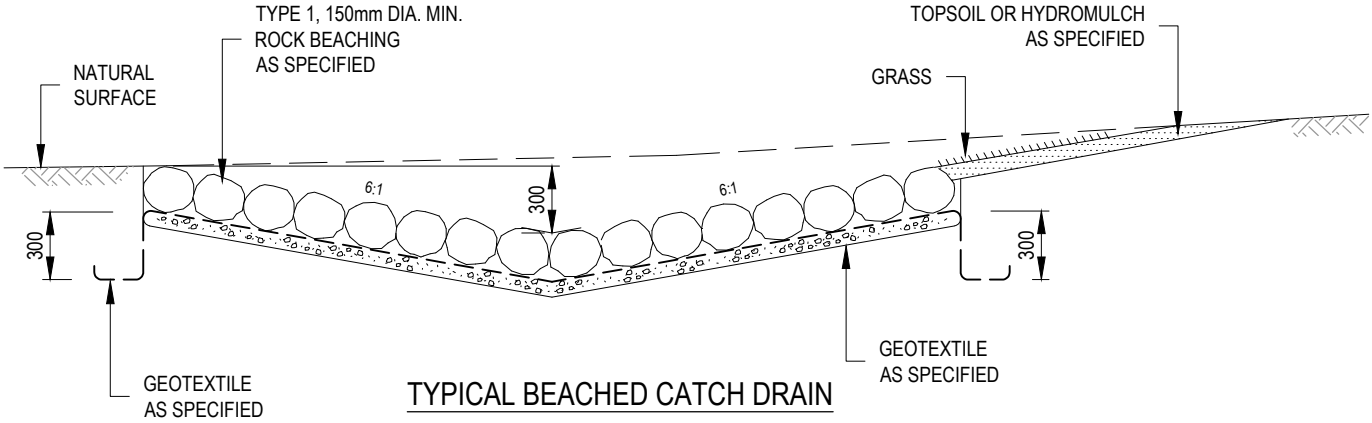
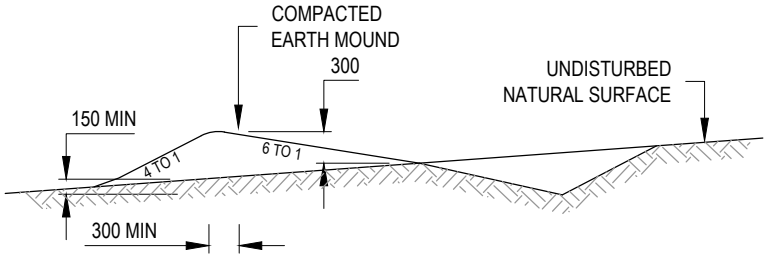


TYPICAL GRASS CATCH DRAIN SECTIONS



TYPICAL BEACHED CATCH DRAIN

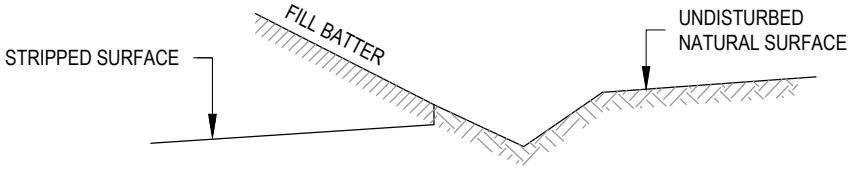


TYPICAL MOUNDED CATCH DRAIN

(ERODABLE TERRAIN)

NOTES:

1. CATCH DRAINS SHALL BE CONSTRUCTED WHERE INDICATED ON ALIGNMENT PLANS.
2. CATCH DRAINS LOCATION RELATIVE TO THE BATTER SHALL BE DETERMINED BY THE COUNCIL REPRESENTATIVE.
3. CATCH DRAINS SHALL BE GRADED TO CULVERTS OR EXISTING LOW POINTS.
4. CATCH DRAINS SHALL BE LINED WITH TOPSOIL OR HYDROMULCH AS SHOWN.
5. REFER SD460 FOR INLET CATCH PIT DETAILS.



TYPICAL CATCH DRAIN AT TOE OF BATTER

ALL MEASUREMENTS IN MILLIMETRES

CATCH DRAIN DETAILS

LAST UPDATED 20/03/2015

SD 500

NOT TO SCALE

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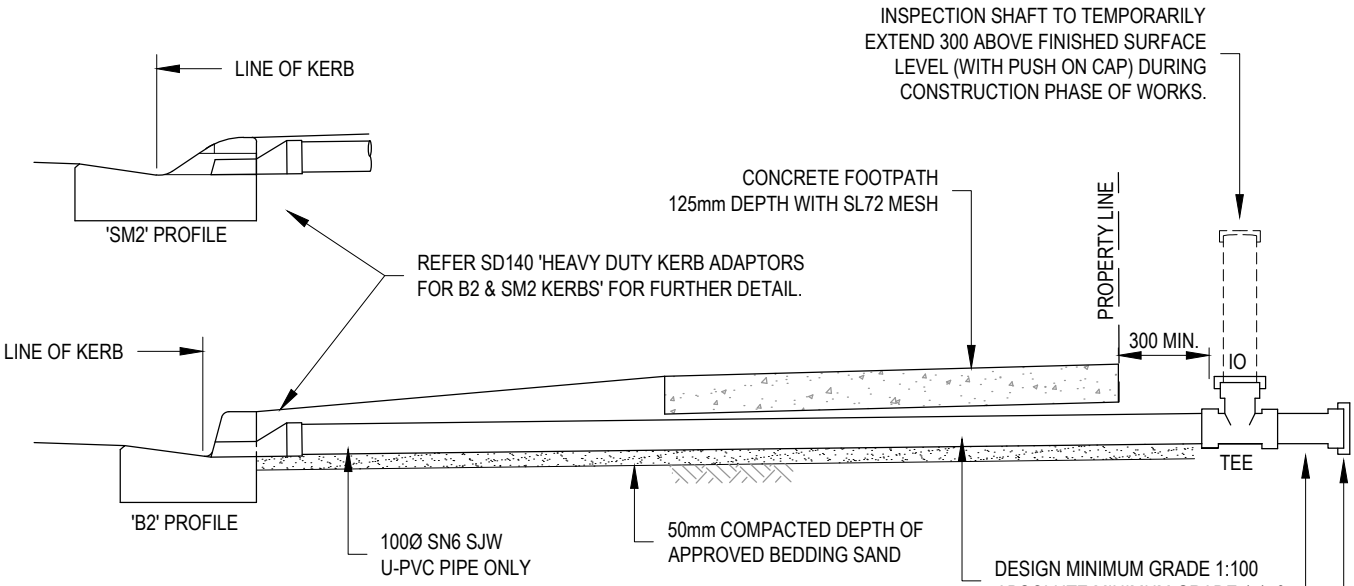

TYPICAL CROSS SECTION

SCALE 1:25

NOTES:

1. LOCATION OF HOUSE DRAINS WITHIN PROPERTY BOUNDARY TO BE MARKED WITH AN APPROVED TAPE TIED TO EXTEND THROUGH FINISHED SURFACE FOR EASY LOCATION BY BUILDERS.
2. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

HOUSE DRAIN TO KERB & CHANNEL

LAST UPDATED 26/02/2020

Infrastructure Design Manual Standard Drawings

SD 505

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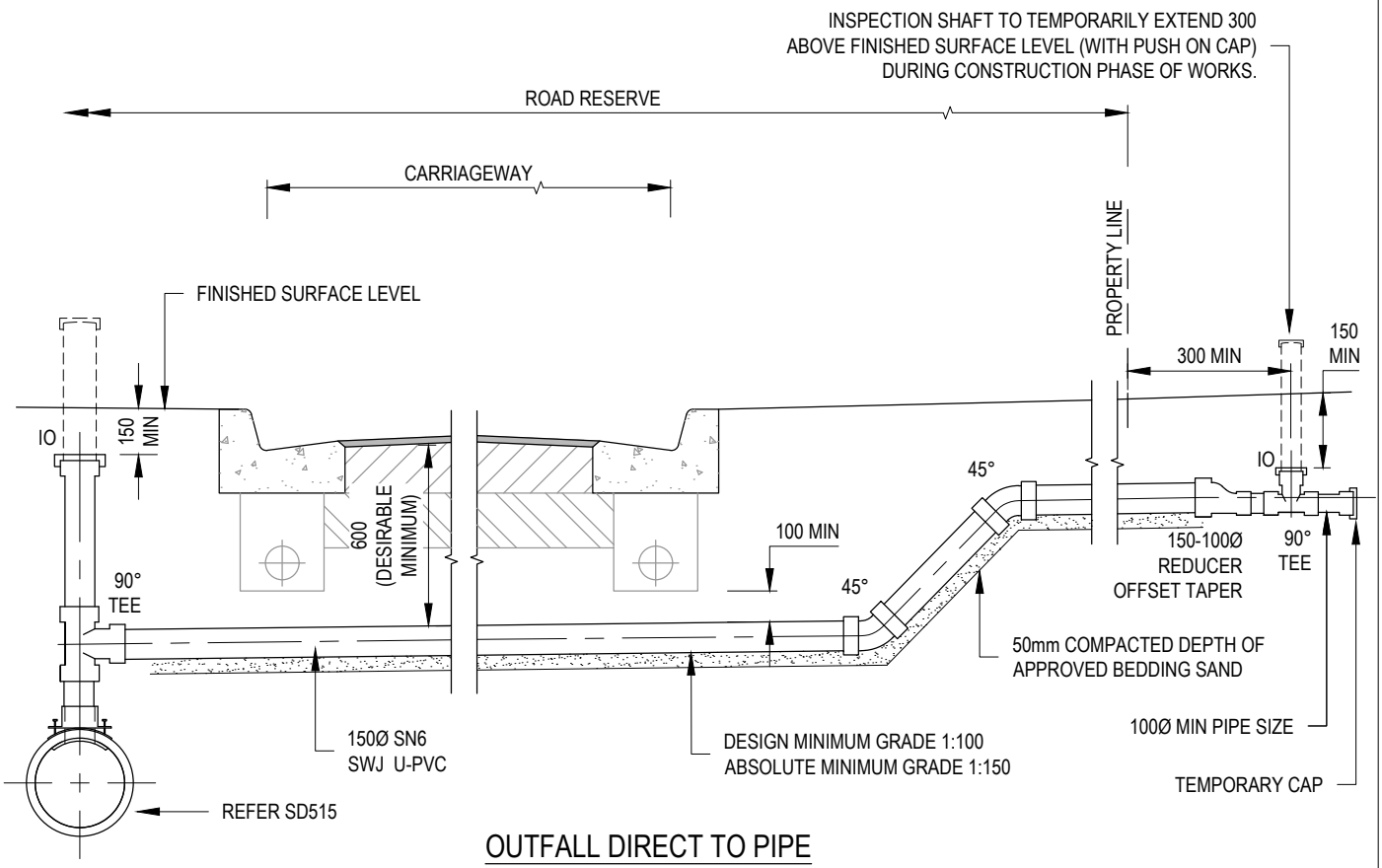
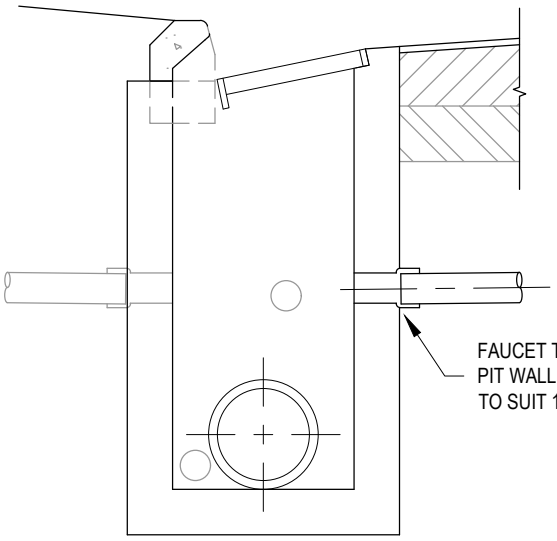
NOT TO SCALE



OUTFALL DIRECT TO PIPE

(UNDER ROAD PAVEMENT)



OUTFALL DIRECT TO DRAINAGE PIT

(STREET DRAINAGE)

NOTES:

1. LOCATION OF HOUSE DRAINS WITHIN PROPERTY BOUNDARY TO BE MARKED WITH AN APPROVED TAPE TIED TO EXTEND THROUGH FINISHED SURFACE FOR EASY LOCATION BY BUILDERS.
2. 20mm CLASS 3 F.C.R. BACKFILL COMPACTED TO 98% MODIFIED DENSITY RATIO TO BE USED UNDER ROAD PAVEMENT.
3. CONCRETE KERB TO BE STAMPED WHEN CURING WITH THE LETTER 'D' ADJACENT THE HOUSE DRAIN CONNECTION POINT.
4. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

HOUSE DRAIN UNDER ROAD PAVEMENT

LAST UPDATED 27/03/2025

SD 510

NOT TO SCALE

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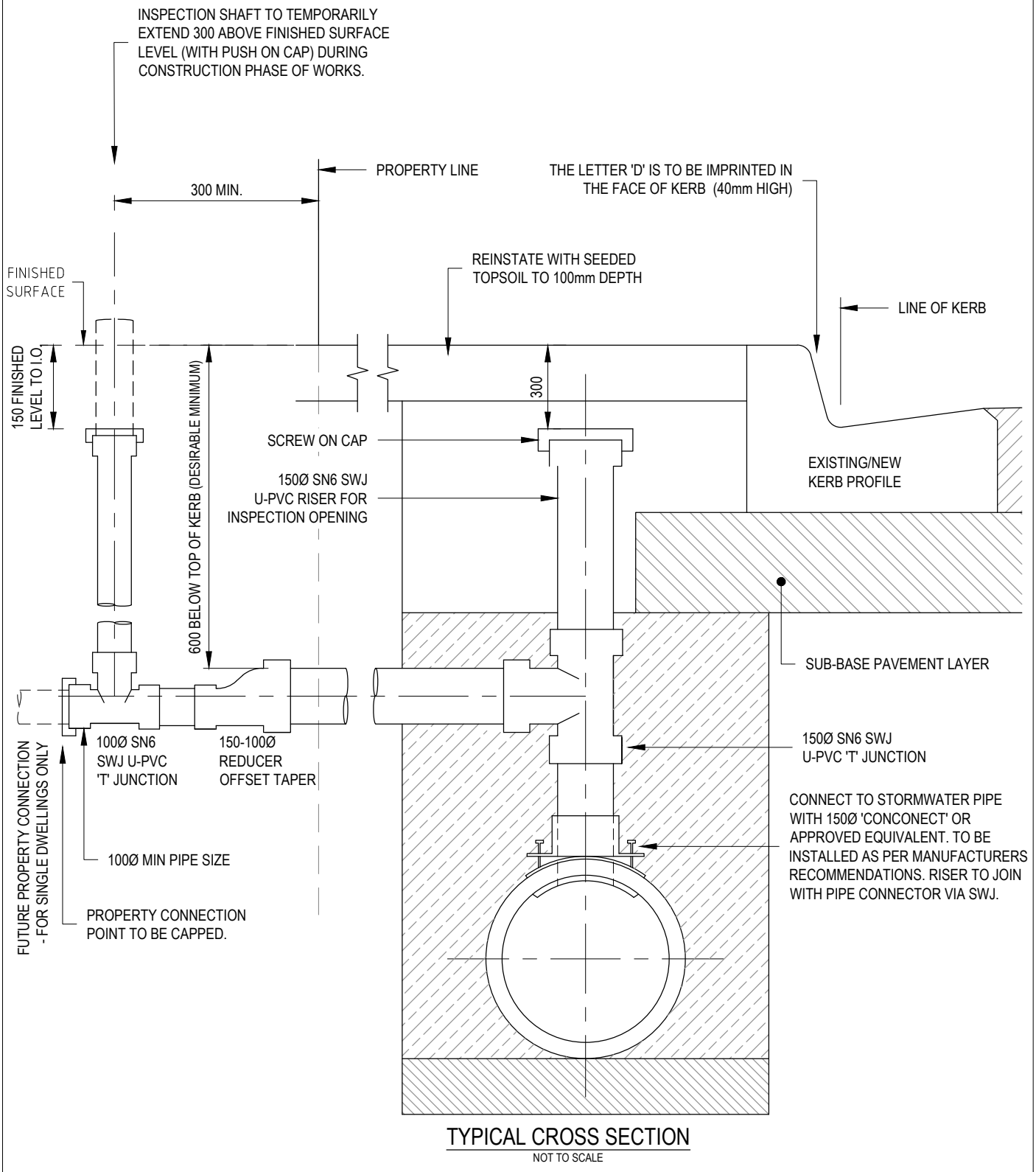

TYPICAL CROSS SECTION

NOT TO SCALE

NOTES:

1. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.
2. LOCATION OF HOUSE DRAINS WITHIN PROPERTY BOUNDARY TO BE MARKED WITH AN APPROVED TAPE TIED TO EXTEND THROUGH FINISHED SURFACE FOR EASY LOCATION BY BUILDERS.

ALL MEASUREMENTS IN MILLIMETRES

STREET DRAIN CONNECTION

LAST UPDATED 27/03/2025

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SD 515

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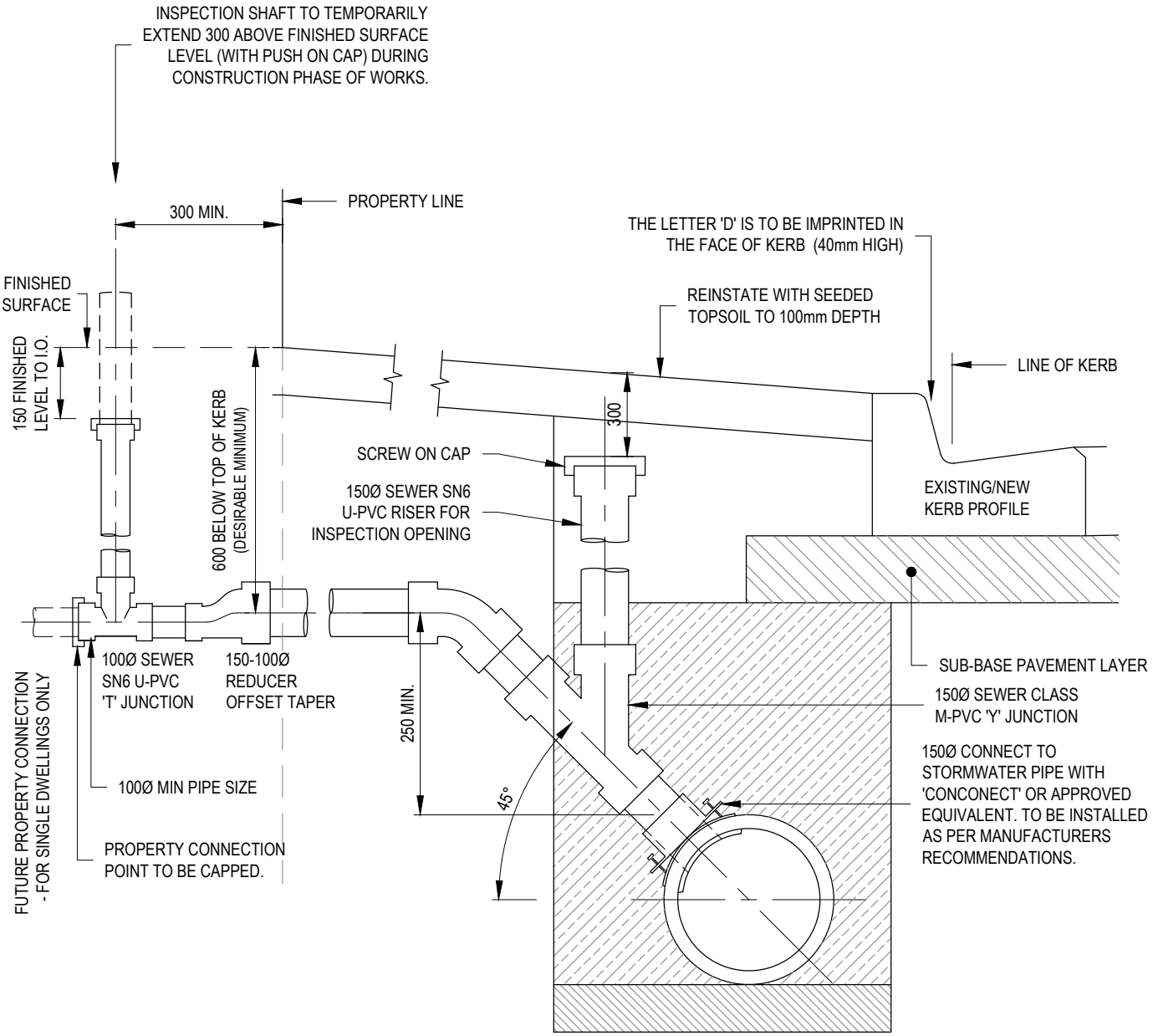

TYPICAL CROSS SECTION

NOT TO SCALE

NOTES:

1. LOCATION OF HOUSE DRAINS WITHIN PROPERTY BOUNDARY TO BE MARKED WITH AN APPROVED TAPE TIED TO EXTEND THROUGH FINISHED SURFACE FOR EASY LOCATION BY BUILDERS.
2. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

STREET DRAIN CONNECTION (45° TO PIPE WHERE COVER LIMITED)

LAST UPDATED 27/03/2025

SD 516

NOT TO SCALE

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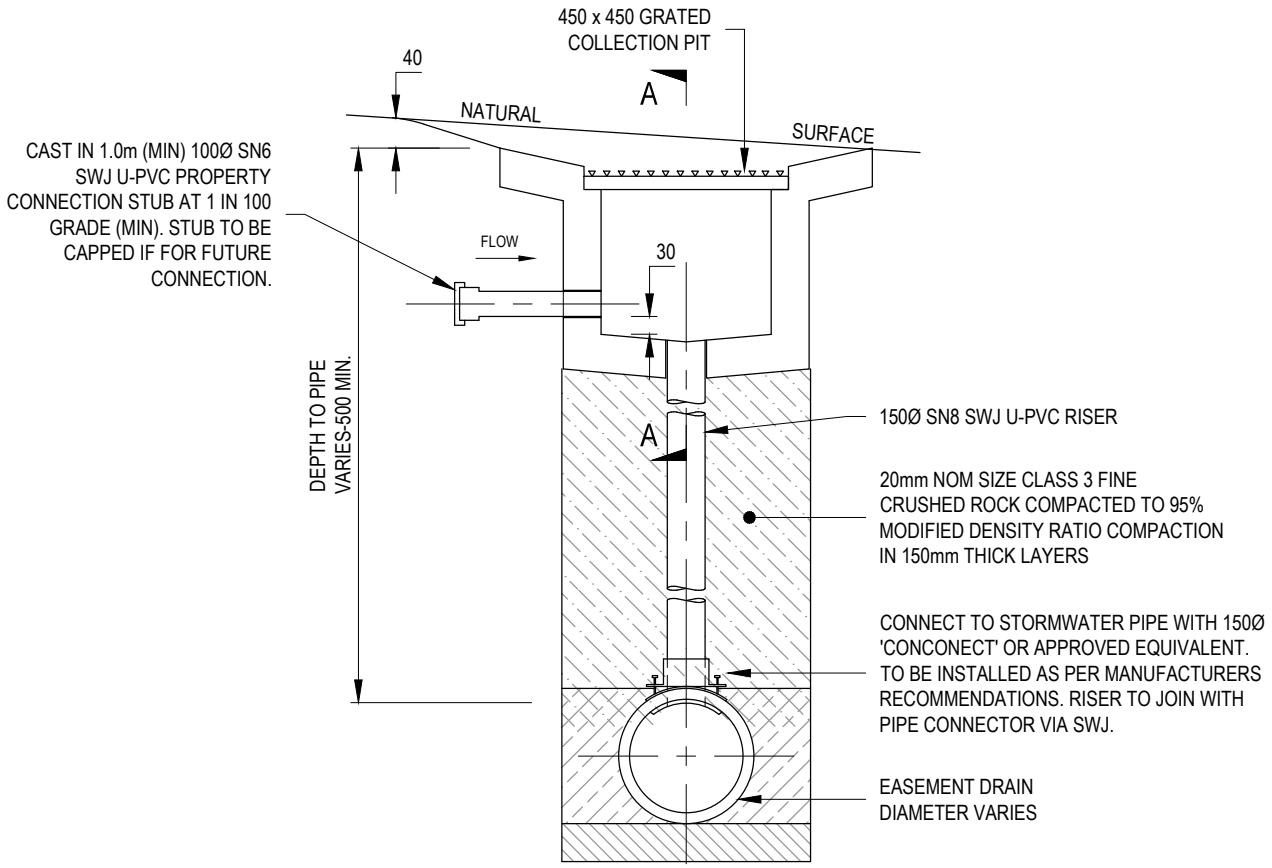
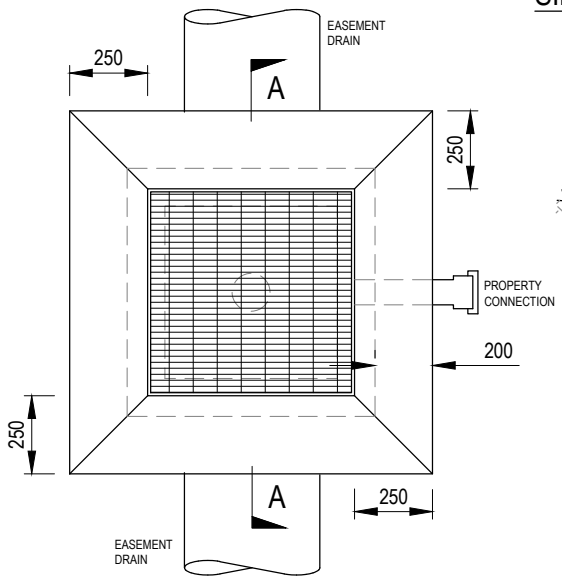


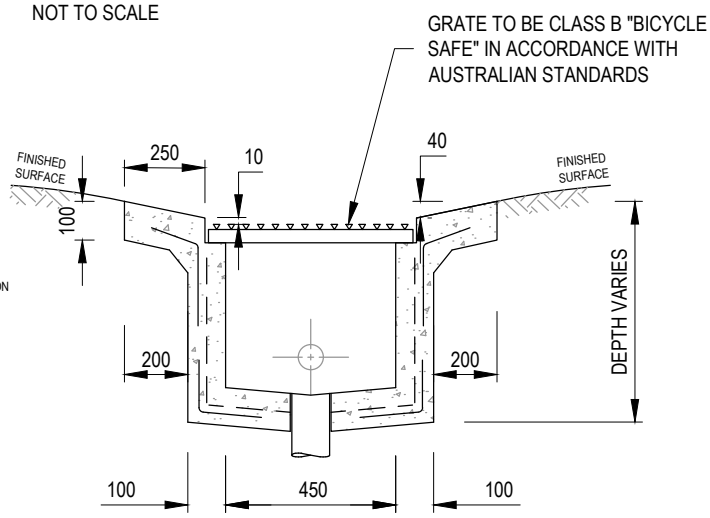
SIDE ELEVATION

NOT TO SCALE



COLLECTION PIT - PLAN

NOT TO SCALE



SECTION A-A

NOT TO SCALE

NOTES:

1. TOP OF GRATE 40mm (min) BELOW FINISHED SURFACE.
2. DO NOT BOND GRATE TO CONCRETE TO ALLOW EASY ACCESS TO PIT.
3. CONCRETE TO BE SMOOTH TROWELLED FINISH.
4. GRATE FRAME TO BE OILED IF INSTALLED IN WET CONCRETE.
5. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS
6. SEAL UP AND MAKE GOOD PIPE CONNECTION / INSERTION TO PIT.
7. PROPERTY CONNECTION MIN 100Ø PIPE AS PER IDM CLAUSE 16.10.2 (PIPE DIAMETERS).
8. ALTERNATIVE PIT TYPES NOMINATED ARE REQUIRED TO BE SUBMITTED TO COUNCIL FOR CONSIDERATION AND PRIOR APPROVAL.

ALL MEASUREMENTS IN MILLIMETRES

EASEMENT DRAIN CONNECTION

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SD 520

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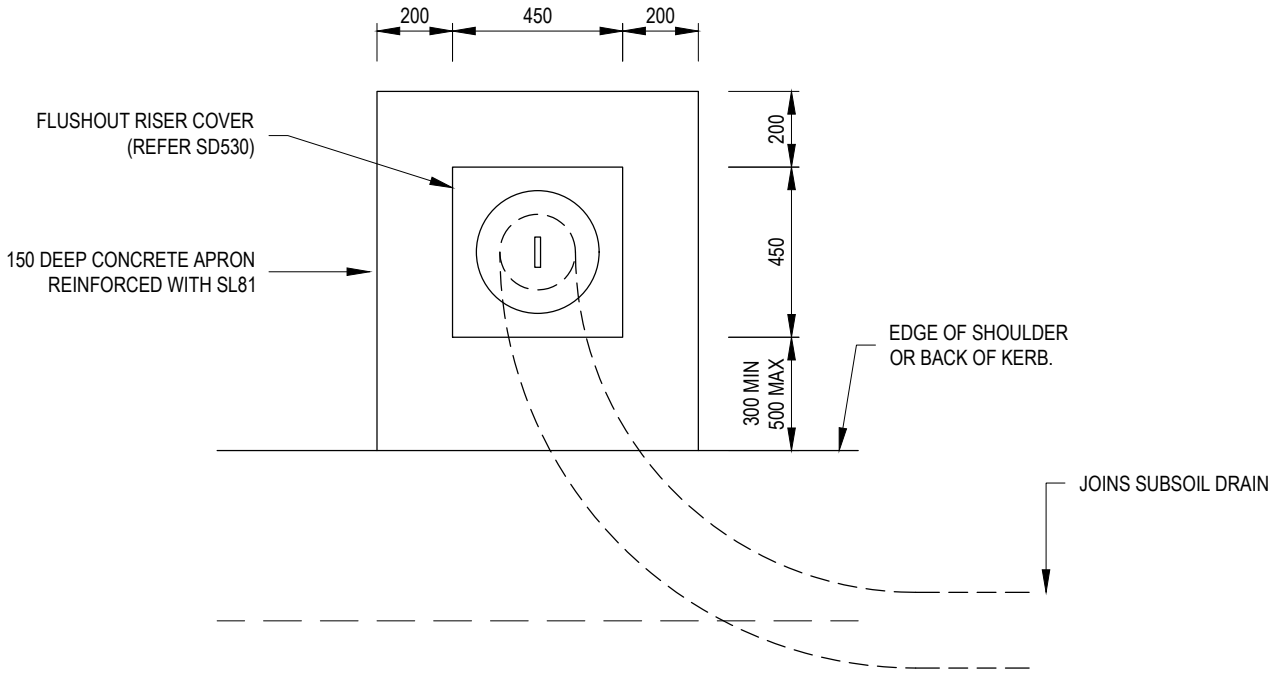
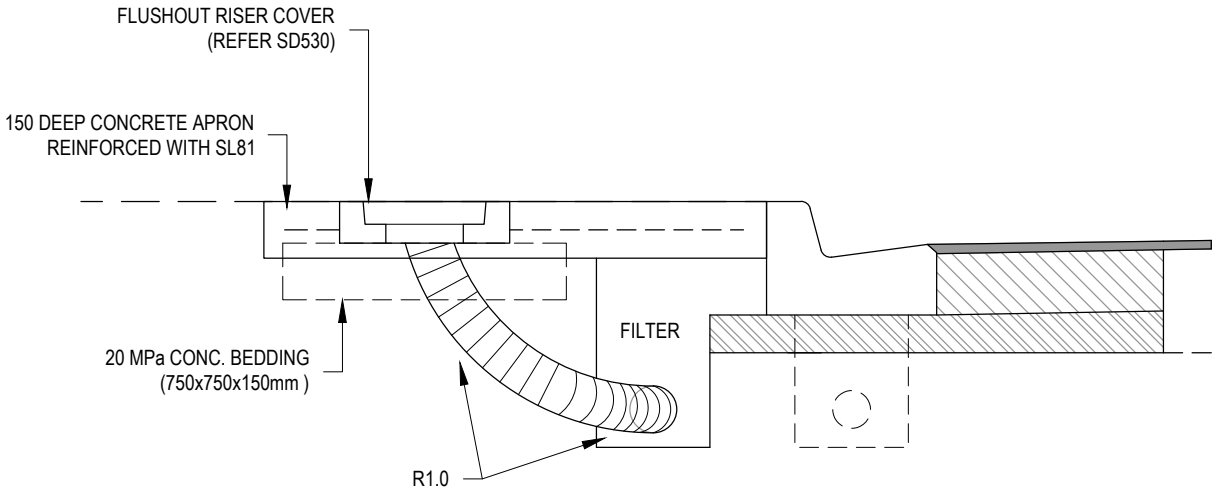


TYPICAL FLUSHOUT RISER PLAN



TYPICAL FLUSHOUT RISER SECTION

ALL MEASUREMENTS IN MILLIMETRES

FLUSHOUT RISER DETAIL

LAST UPDATED 20/03/2015

SD 525

NOT TO SCALE

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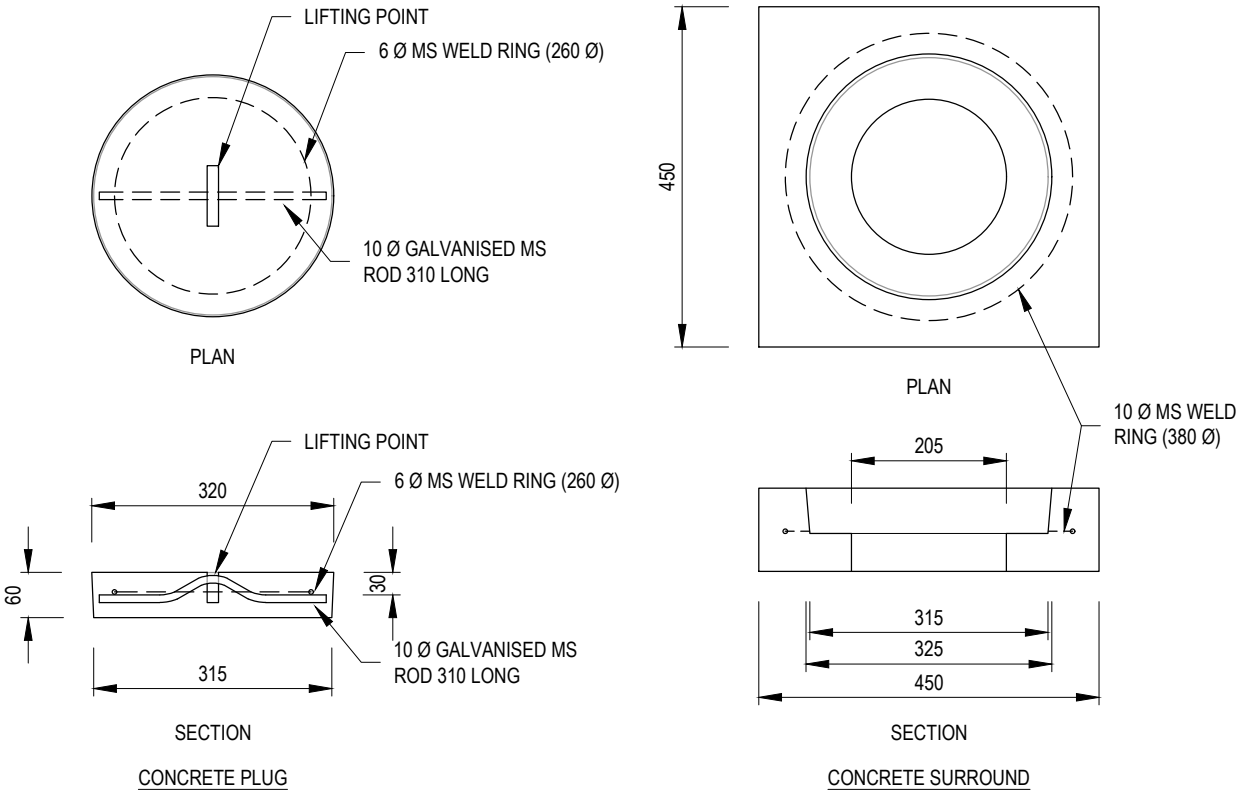

FLUSHOUT RISER COVER DETAIL

ALL MEASUREMENTS IN MILLIMETRES

FLUSHOUT RISER COVER DETAIL

LAST UPDATED 20/03/2015

SD 530

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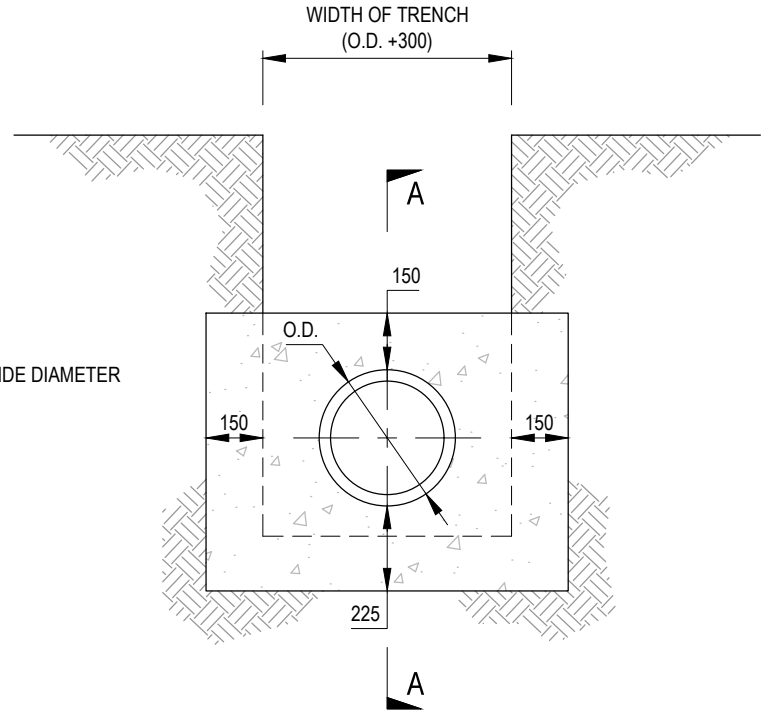
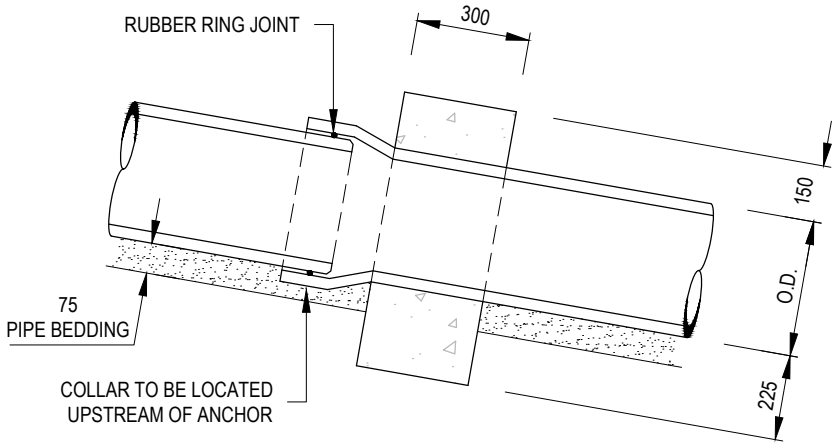


* 'O.D.' DENOTES OUTSIDE DIAMETER

ELEVATION



SECTION A-A

NOTES:

1. FOR USE ON PIPE AT GRADES OF 1 IN 10 OR GREATER.
2. TO BE CONSTRUCTED AT A MAXIMUM OF 10m CTRS.
3. CONCRETE STRENGTH TO BE 25MPa.

ALL MEASUREMENTS IN MILLIMETRES

DRAINAGE PIPE ANCHOR BLOCK

LAST UPDATED 20/03/2015

SD 535

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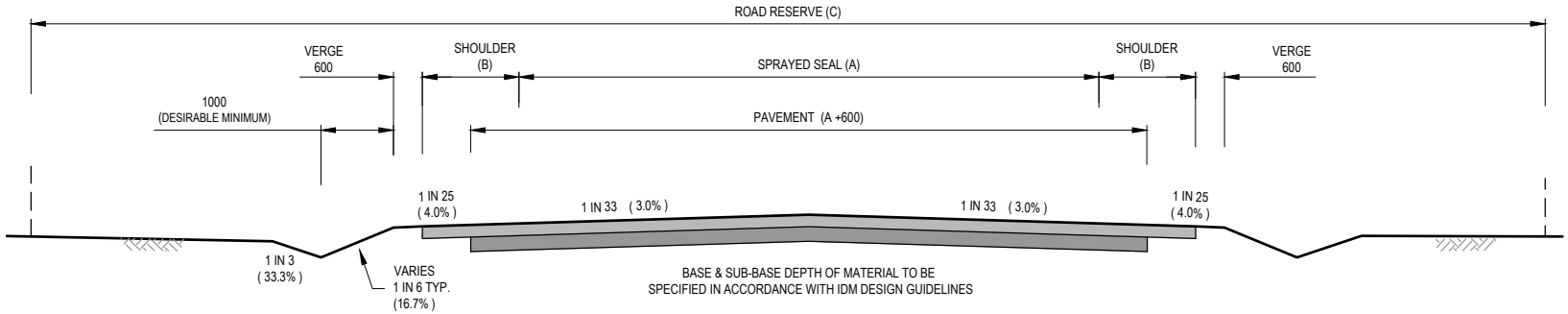
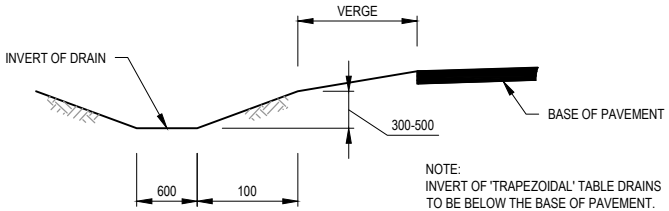
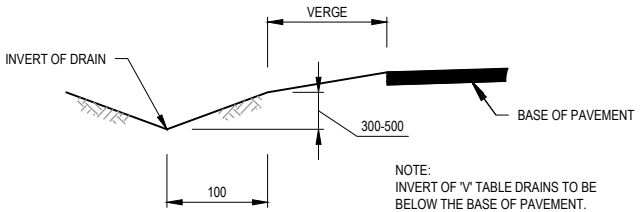
FOR DIMENSIONS (A) (B) & (C) REFER TO IDM DESIGN GUIDELINES:
CLAUSE 12.4 TABLE 6 - 'RURAL ROAD CHARACTERISTICS'.



TYPICAL CROSS SECTION
SEALED ROAD

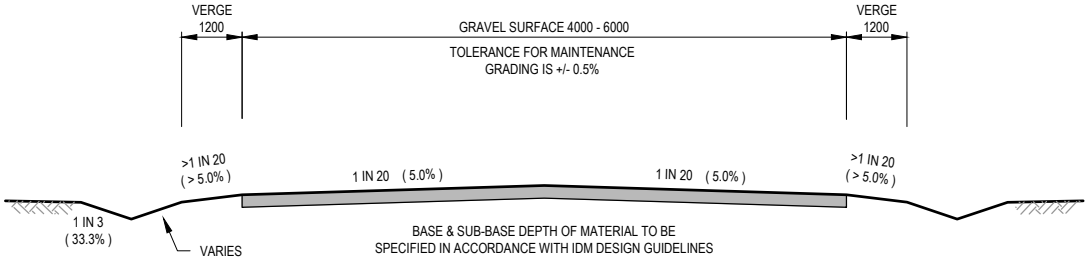


'TRAPEZOIDAL' CUT TYPE



'V' CUT TYPE

TYPICAL OPEN TABLE DRAINS



TYPICAL CROSS SECTION
GRAVEL ROAD

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL ROAD PROFILES RURAL

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SD 600

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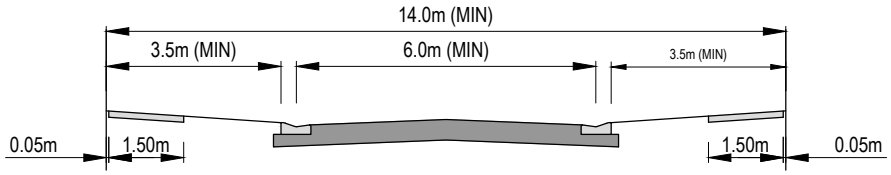
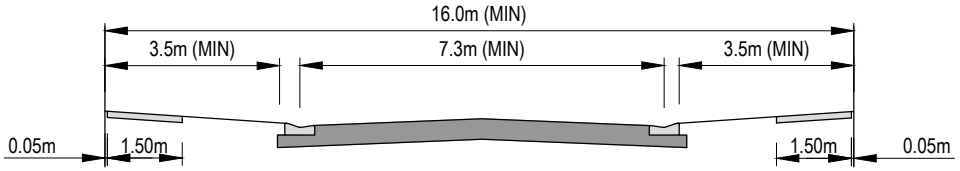
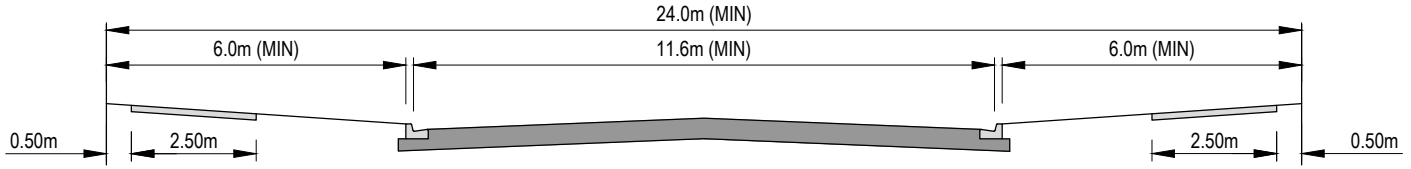


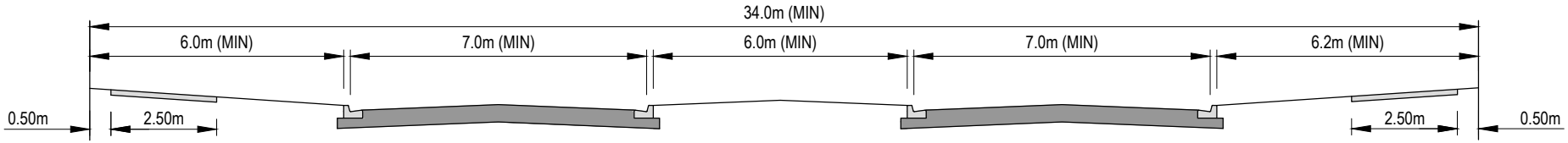
ACCESS PLACE



ACCESS STREET



COLLECTOR STREET - LEVEL 1



COLLECTOR STREET - LEVEL 2

NOTES:

1. REFER TO IDM DESIGN GUIDELINES: SECTION 12.3, TABLE 2 - 'URBAN ROAD / STREET CHARACTERISTICS'.
2. PROFILES TO BE USED FOR LOW DENSITY RESIDENTIAL ZONES - RURAL ONLY. FOR LOW DENSITY RESIDENTIAL ZONES - URBAN SEE PROFILES FOR URBAN ROADS.

TYPICAL ROAD PROFILES ACCESS PLACE & STREET / COLLECTOR LEVEL 1 & 2

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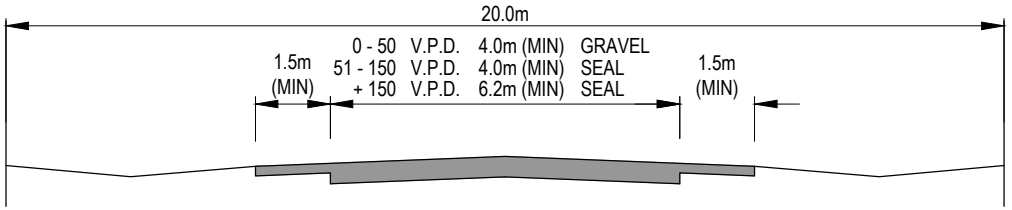
LAST UPDATED 27/03/2025

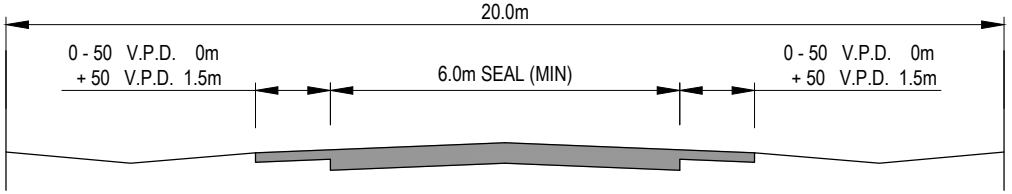
SD 605

NOT TO SCALE



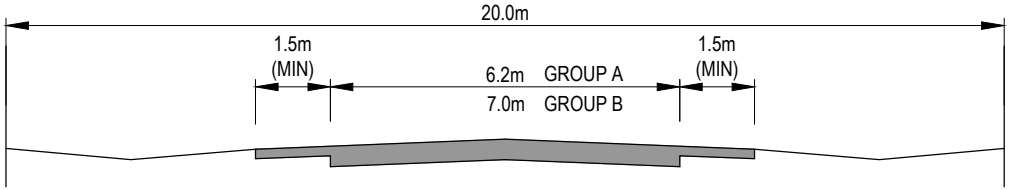
RURAL ACCESS - GROUP A COUNCILS

* V.P.D. = VEHICLES PER DAY

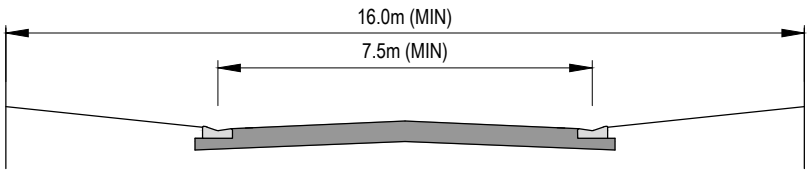


RURAL ACCESS - GROUP B COUNCILS

* V.P.D. = VEHICLES PER DAY



LOW DENSITY RESIDENTIAL COLLECTOR ROAD - GROUP A COUNCILS



LOW DENSITY RESIDENTIAL COLLECTOR ROAD - SOUTH GIPPSLAND

NOTES:

1. REFER TO IDM DESIGN GUIDELINES: SECTION 12.4, TABLE 6 - 'RURAL ROAD CHARACTERISTICS'.
2. PROFILES TO BE USED FOR LOW DENSITY RESIDENTIAL ZONES - RURAL ONLY. FOR LOW DENSITY RESIDENTIAL ZONES - URBAN SEE PROFILES FOR URBAN ROADS.

TYPICAL ROAD PROFILES LOW DENSITY RESIDENTIAL COLLECTOR / RURAL ACCESS

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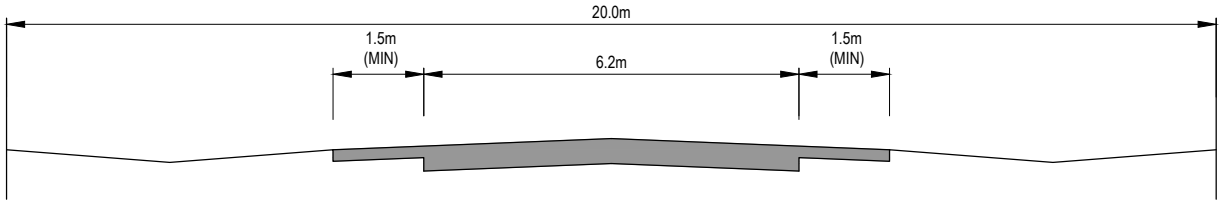
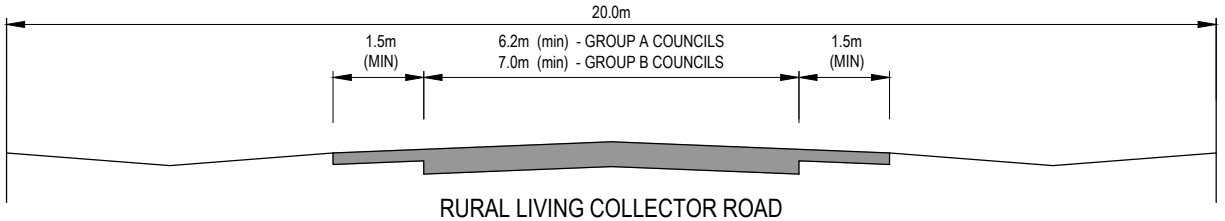
LAST UPDATED 26/02/2020

SD 610

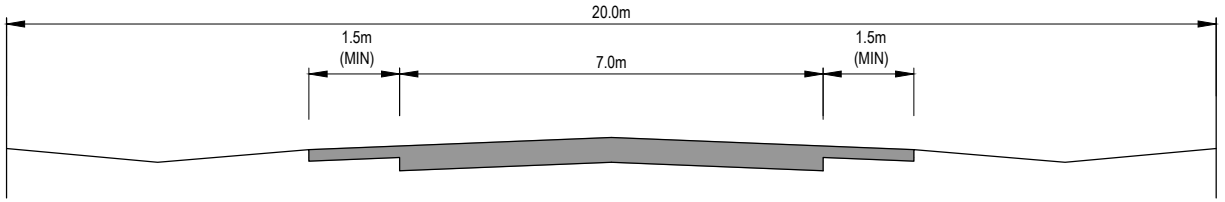
NOT TO SCALE



RURAL LIVING ACCESS ROAD



RURAL LIVING COLLECTOR ROAD



LOW DENSITY RESIDENTIAL ACCESS ROAD

NOTES:

1. REFER TO IDM DESIGN GUIDELINES: SECTION 12.4, TABLE 6 - 'RURAL ROAD CHARACTERISTICS'.
2. PROFILES TO BE USED FOR LOW DENSITY RESIDENTIAL ZONES - RURAL ONLY. FOR LOW DENSITY RESIDENTIAL ZONES - URBAN SEE PROFILES FOR URBAN ROADS.

TYPICAL ROAD PROFILES RURAL LIVING ACCESS & COLLECTOR / LOW DENSITY RESIDENTIAL ACCESS

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LAST UPDATED 26/02/2020

SD 615

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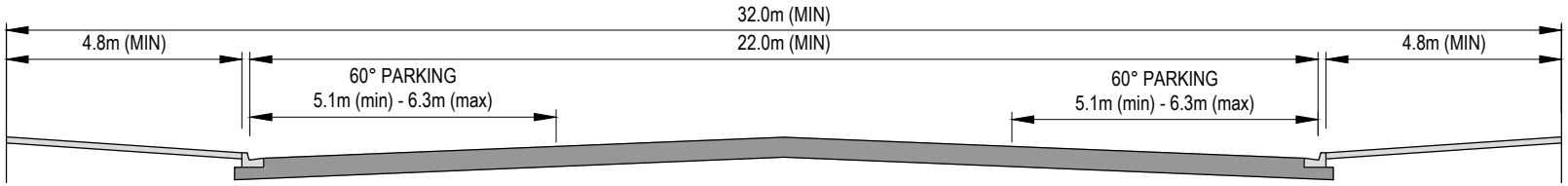
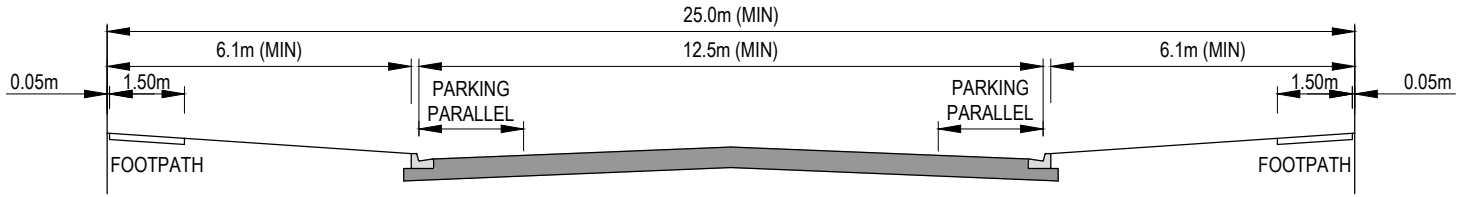


COMMERCIAL STREET



INDUSTRIAL STREET

NOTE:
REFER TO IDM DESIGN GUIDELINES: SECTION 12.3, TABLE 2
- 'URBAN ROAD / STREET CHARACTERISTICS'.

TYPICAL ROAD PROFILES
COMMERCIAL STREET/ INDUSTRIAL STREET

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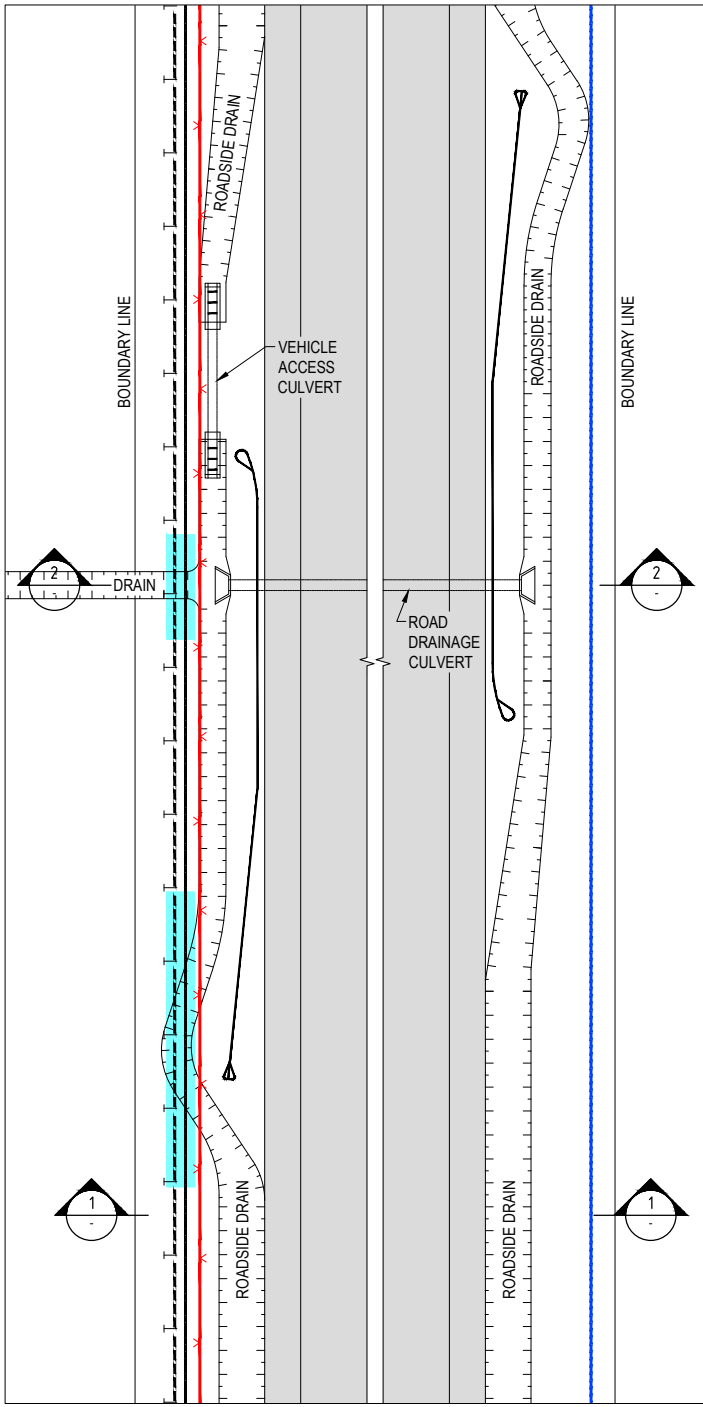

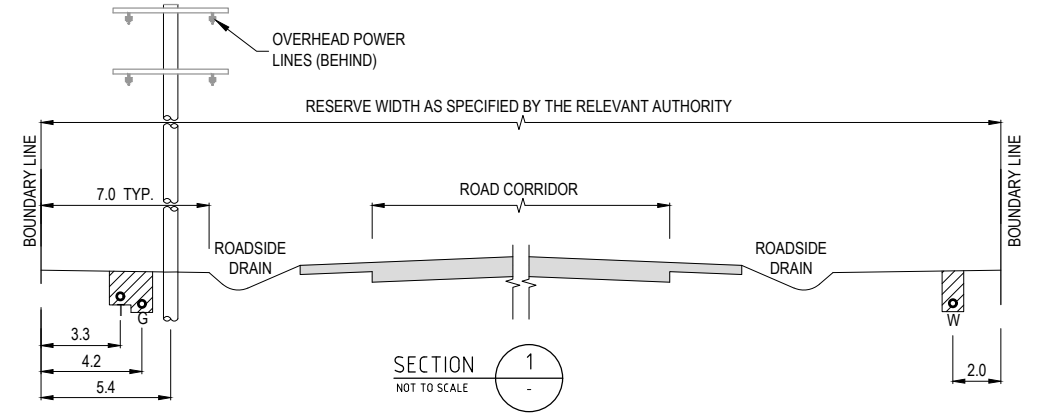

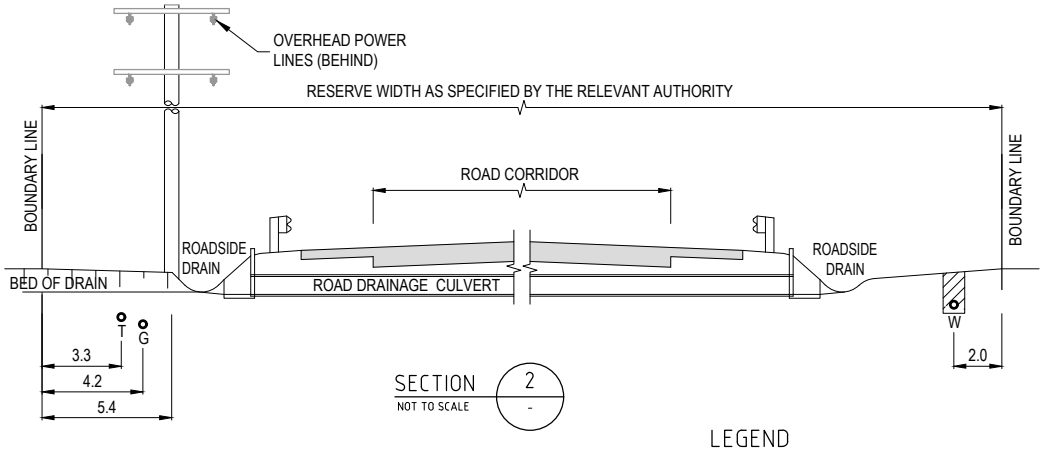

NOTES

1. MINIMUM DEPTH OF COVER TO ALL UTILITY SERVICES WITH THE EXCEPTION OF
2. TELECOMMUNICATIONS SERVICES TO BE 600mm.
   TELECOMMUNICATIONS SERVICES ARE TO HAVE A MINIMUM DEPTH OF COVER OF 450mm. REFER TABLE A5 FOR FURTHER DETAILS.
3. MINIMUM DEPTH OF COVER SHALL BE BELOW THE NATURAL SURFACE LEVEL, WITH THE EXCEPTION OF WHERE UNDERGROUND SERVICES PASS UNDER OR IN CLOSE VICINITY TO OPEN DRAINS.
4. WHEN PASSING UNDER OR IN CLOSE PROXIMITY TO OPEN DRAINS, MINIMUM DEPTH OF COVER FOR UNDERGROUND
5. SERVICES SHALL BE BELOW BED OF DRAIN LEVEL.
6. FOR LOW DENSITY RESIDENTIAL INCORPORATING KERB AND CHANNEL, REFER TO FIGURE 1 FOR DETAILS.

LEGEND

- OVERHEAD POWER LINES
- G — GAS
- W — WATER
- T — TELECOMMUNICATIONS
- DENOTES LOCATIONS WHERE UNDERGROUND PASS UNDER OR IN CLOSE VICINITY OF OPEN DRAIN.

PREFERRED SERVICE LOCATIONS FOR RURAL ACCESS STREETS

LAST UPDATED 04/04/2016

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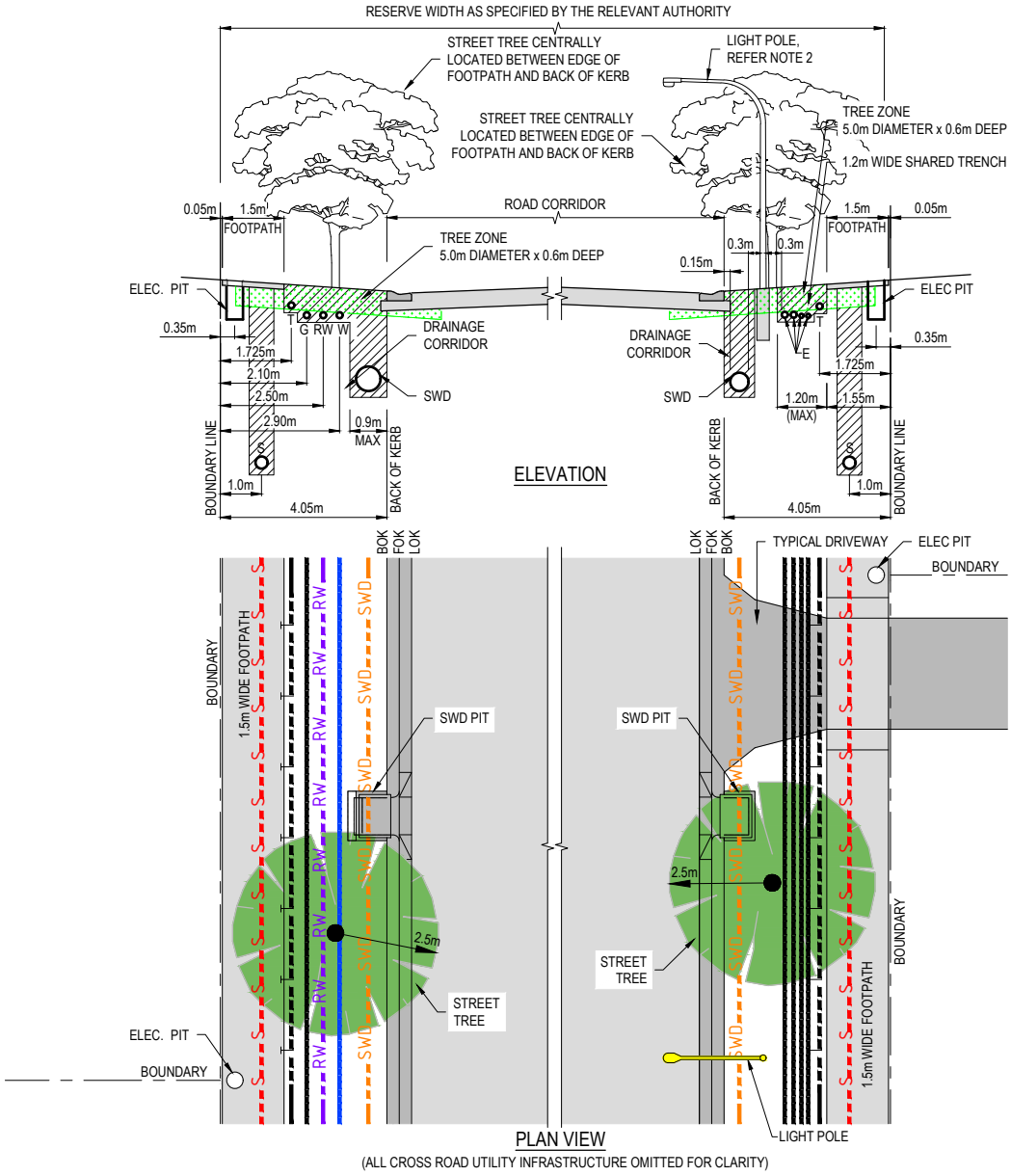

NOTES

1. MINIMUM DEPTH OF COVER TO ALL UTILITY SERVICES WITH THE EXCEPTION OF TELECOMMUNICATIONS SERVICES TO BE 600mm. TELECOMMUNICATIONS SERVICES ARE TO HAVE A MINIMUM DEPTH OF COVER OF 450mm. REFER TABLE A5 FOR FURTHER DETAILS.
2. LIGHT POLE STANDARD OFFSET TO BE 800mm FROM BACK OF KERB TO FACE OF POLE UNLESS THERE IS A CONFLICT WITH UNDERGROUND SERVICES.
3. THE PREFERRED SEWER LOCATION IS OUTSIDE OF THE ROAD RESERVE. WHERE IT IS NECESSARY FOR THE SEWER TO BE WITHIN THE ROAD RESERVE, IT SHALL BE LOCATED AS INDICATED ON THE CROSS SECTIONS.
4. WHERE STORM WATER ASSETS BELONG TO MELBOURNE WATER AND ARE GREATER THAN 750mm IN DIAMETER, CONTACT SHOULD BE MADE WITH MELBOURNE WATER TO DETERMINE ITS REQUIRED LOCATION IN RELATION TO STREET TREES.
5. LOCATIONS OF STREET TREES, STREET LIGHTS, DRIVEWAYS AND PROPERTY BOUNDARIES ARE SHOWN INDICATIVELY ONLY.

LEGEND

E	ELECTRICTY
G	GAS
S S	SEWER
W	WATER
RW	RAW WATER
T	TELECOMMUNICATIONS
SWD	STORM WATER
LOK	LIP OF KERB
FOK	FRONT OF KERB
BOK	BACK OF KERB
SWD	STORM WATER DRAIN

PREFERRED SERVICE LOCATIONS FOR RESIDENTIAL ACCESS STREETS

LAST UPDATED 04/04/2016

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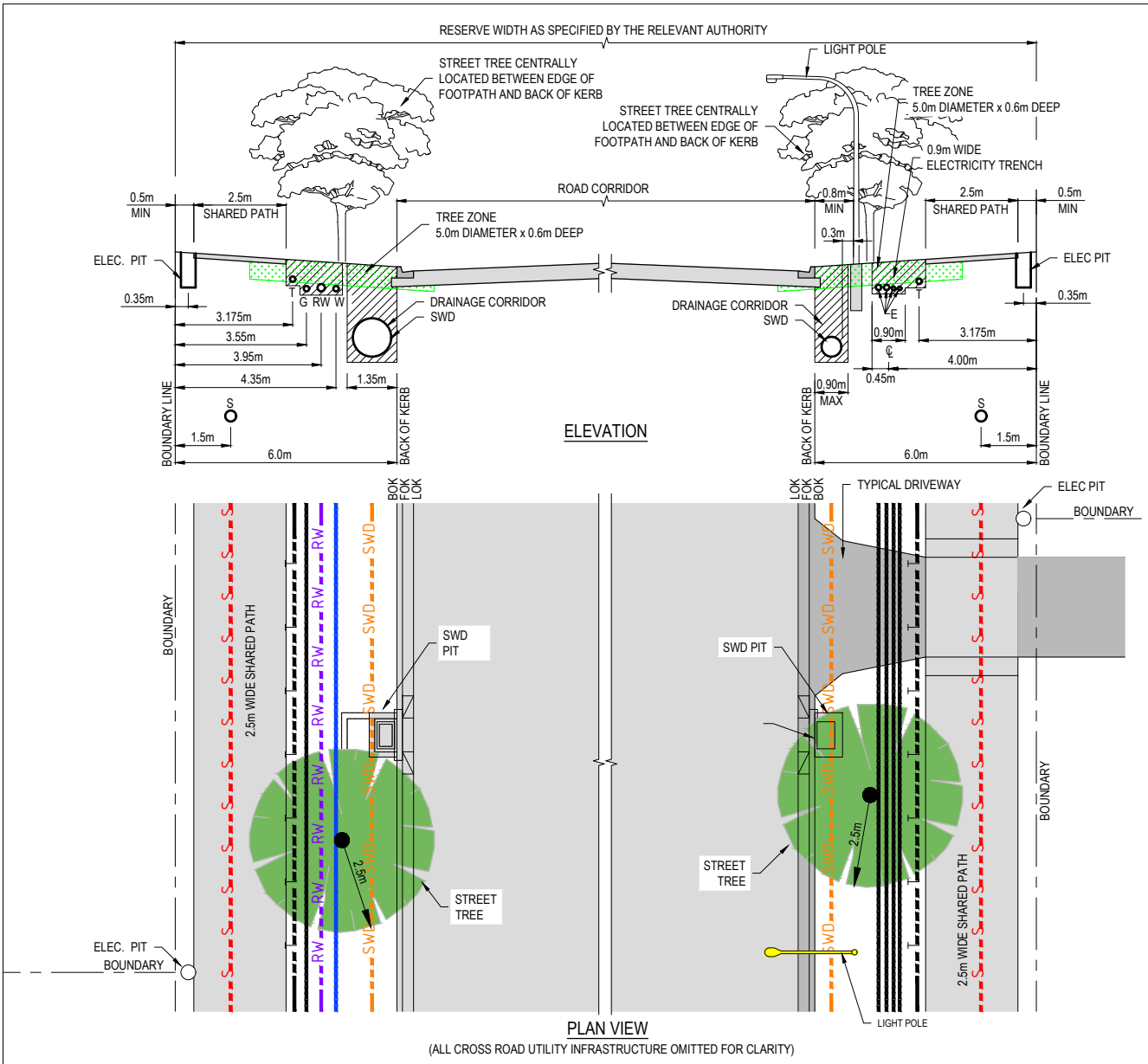

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LEGEND

E	ELECTRICTY
G	GAS
S	SEWER
W	WATER
RW	RAW WATER
T	TELECOMMUNICATIONS
SWD	STORM WATER
LOK	LIP OF KERB
FOK	FRONT OF KERB
BOK	BACK OF KERB
SWD	STORM WATER DRAIN

PREFERRED SERVICE LOCATIONS FOR COLLECTOR ROAD LEVEL 1

LAST UPDATED 04/04/2016

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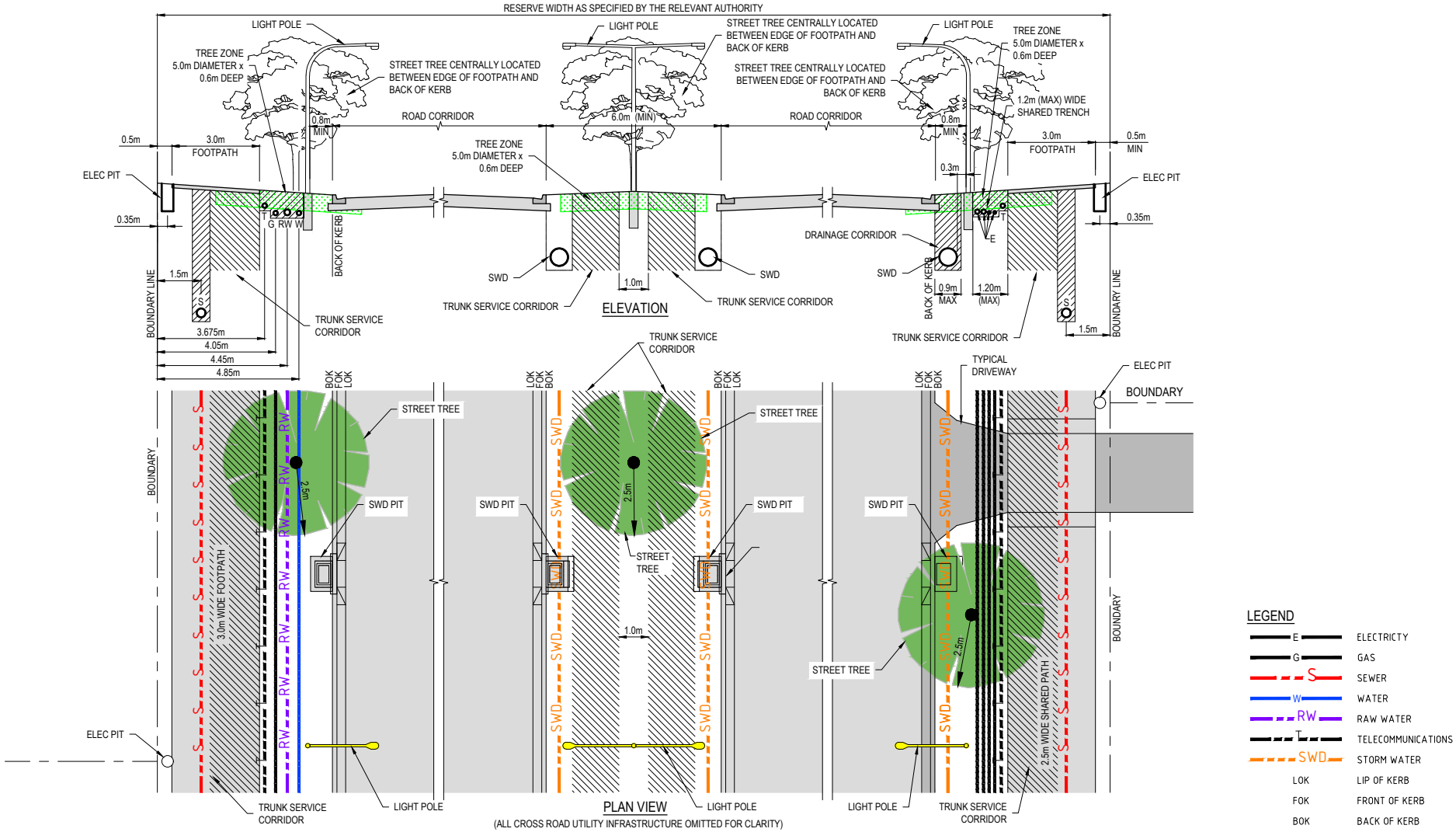

PREFERRED SERVICE LOCATIONS FOR COLLECTOR ROAD LEVEL 2

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LAST UPDATED 04/04/2016

SD 640

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