TYPICAL KERB PROFILES 'B' TYPE, 'SM' TYPE & 'M' TYPE

NOTES:
1. REFER TO AS 2766:2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 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. SUPPLIED BY THE CONTRACTOR 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. MINIMUM CONCRETE STRENGTH TO BE 25 MPA.
12. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.

ALL MEASUREMENTS IN MILLIMETRES
NOTES:
1. REFER TO AS 2678-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN 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. SUPPLIED BY THE CONTRACTOR 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. MAXIMUM CONCRETE STRENGTH TO BE 55MPA.
12. LINE OF KERB IS USED TO DETERMINE CARRIAGEWAY WIDTHS.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL INDUSTRIAL KERB LAYBACK

Last Updated 29/03/2016

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

Infrastructure Design Manual Standard Drawings
Local Government Infrastructure Design Association

NOT TO SCALE
TYPICAL KERB BEDDING DETAIL

100mm MIN COMPACTED DEPTH
"CLASS 3" 20mm F.C.R. FOR BEDDING
TO 97% MMDD OR EXTENSION
OF ROAD PAVEMENT LAYERS,
WHICH EVER IS GREATER.

NOTES:
1. BEDDING TO BE COMPACTED CLASS 3 F.C.R. SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL KERB BEDDING

LINE OF KERB

ALL SET OUT TAKEN TO BACK OF KERB UNLESS OTHERWISE SPECIFIED

Approved Subgrade

150

KERB BEDDING TO EXTEND PAST B.O.K.
NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS
2. BEDDING TO BE COMPACTED CLASS 3 F.C.R. SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED
3. INCREASE DEPTH OF CONCRETE
   a) 80mm FOR COMMERCIAL PROPERTIES
   b) 80mm WITH SL72 MESH FOR INDUSTRIAL PROPERTIES (MESH TO HAVE 40mm COVER)
4. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB
5. CONCRETE SPONGE FINISHED ON LAYBACK
6. CONSTRUCTION JOINTS LOCATED
   - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
7. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS
8. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB.
9. FOR TYPICAL INDUSTRIAL KERB LAYBACK SEE DRAWING SD105.

ALL MEASUREMENTS IN MILLIMETRES
NOTES:

1. REFER TO CONCRETE AS. 2876-2000 CONCRETE KERBS AND CHANNELS
2. BEDDING TO BE COMPACTED CLASS 3 F.C.R. SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED
3. CONCRETE TO BE SMOOTH TROWELLED FINISHED ON TRAY AND KERB
4. CONSTRUCTION JOINTS LOCATED - 2500mm MAXIMUM SPACING
   - 75mm MINIMUM DEPTH
5. ELIMINATE 25mm BULLNOSE ON ALL POSITIVE FALL PEDESTRIAN CROSSINGS
6. WIDTHS SPECIFIED IN CROSS SECTIONS ARE FACE (LINE) OF KERB.

ALL MEASUREMENTS IN MILLIMETRES

KERB & CHANNEL INSTALLATION ABUTTING EXISTING PAVEMENT

Infrastructure Design Manual Standard Drawings

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Local Government Infrastructure Design Association

SD 130

LAST UPDATED 29/03/2016

SCALE 1:10
HEAVY DUTY KERB ADAPTORS FOR 'B2' AND 'SM2' KERBS

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. B2 KERB ADAPTOR NOW AVAILABLE IN GAL. STEEL

ALL MEASUREMENTS IN MILLIMETRES

LAST UPDATED 20/03/2015

SD 140
SCALE 1:10
NOTES:

1. THE DRAINS SHALL BE LAID ON A GRADE PARALLEL TO THE FINISHED SURFACE.
2. FOR FLUSHOUT RISER DETAILS REFER TO STANDARD DRAWINGS SD530 & SD535.
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.

ALL MEASUREMENTS IN MILLIMETRES

SUBSOIL DRAINAGE

Infrastructure Design Manual Standard Drawings


Local Government Infrastructure Design Association

SD 145

NOT TO SCALE

LAST UPDATED 20/03/2015
1. LOCATION OF CROSSINGS TO BE CASE BY CASE & TO BE APPROVED BY COUNCIL.
2. CROSSING GENERALLY TO BE LOCATED AT TANGENT POINTS.
3. CONCRETE TO BE SMOOTH TROWELLED FINISH ON TRAY.
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. SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED.
7. IF SPLAY IS NOT REQUIRED FOOTPATH IS TO CONTINUE THROUGH TO LAYBACKS.
8. TGI'S (TILES), WHERE REQUIRED, ARE 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.

NOTE:
1.5m IN THE DIRECTION OF TRAVEL AT 2% MAX GRADE.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL ARRANGEMENT PLAN

LEGEND:
- EXPANSION JOINT
- WEAKENED PLANE JOINTS

SECTION A-A
NOT TO SCALE
**NOT TO SCALE**

**SECTION A-A**

**TYPICAL 125mm & 150mm FOOTPATH SECTION**

- 100mm THICK LAYER OF CLASS 3 FCR BEDDING COMPACTED TO 97% MODIFIED

**SECTION B-B**

**TYPICAL 125mm & 150mm FOOTPATH SECTION**

- 225mm DISHED CHANNEL TO BE CONSTRUCTED IN VERGE REVERSE FALL SITUATIONS WHERE APPROVED BY COUNCIL.

**SECTION C-C**

**TYPICAL FOOTPATH DETAIL**

1. 'D' = DEPTH OF CONCRETE FOOTPATH
   - TYPICAL RESIDENTIAL 'D' = 125mm THICK (25 MPa)
   - TYPICAL INDUSTRIAL / COMMERCIAL 'D' = 150mm (32MPa)

2. WEAKENED PLANE JOINTS TO BE MADE WITH T-IRON (OR CONCRETE SAW WITHIN 24 HRS OF POUR).
3. REFER TO IDM CLAUSE 13.3 FOR ADDITIONAL REQUIREMENTS

**NOTES:**

- ALL MEASUREMENTS IN MILLIMETRES

Last Updated 06/02/2019

SD 205


Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association
TYPICAL 130mm ASPHALT PATH WITH TIMBER EDGE PLAN

NOTES:

1. 'D' = DEPTH OF ASPHALT FOOTPATH
   TYPICAL ASPHALT FOOTPATH DEPTH 'D' = 130mm
   VARIED 'D' MAY OCCUR DEPENDANT ON CBE TYPE

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 CBE TYPE
NOTES:

1. 'D' = DEPTH OF CONCRETE FOOTPATH
   TYPICAL RESIDENTIAL 'D' = 125mm THICK (25 MPa)
   TYPICAL INDUSTRIAL / COMMERCIAL 'D' = 150mm (32 MPa)

2. APPROVED PROPRIETARY JOINTS CAN BE USED WITH COUNCIL APPROVAL.

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL FOOTPATH JOINTS

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www.designmanual.com.au

SD 210
LAST UPDATED 06/02/2019
NOT TO SCALE
REINFORCED CONCRETE PAVEMENT ISOLATION JOINT

PIT / ACCESS HOLE AT EDGE (PLAN)

PIT / ACCESS HOLE NOT AT EDGE (PLAN)

LEGEND:

- ISOLATION JOINT
- TOOLED JOINTS

10mm THICK BITUMEN IMPREGNATED FIBREBOARD OR AN APPROVED EQUIVALENT FILLER

EXISTING STRUCTURE / SLAB

SLAB EDGE THICKENING

SLAB REINFORCEMENT

TOP 10mm TO BE FILLED WITH APPROVED POURING GRADE SEALANT TO MANUFACTURER'S SPECIFICATIONS

10mm THICK BITUMEN IMPREGNATED FIBREBOARD OR AN APPROVED EQUIVALENT FILLER

* 'D' DENOTES DEPTH OF PAVEMENT

ALL MEASUREMENTS IN MILLIMETRES

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SD 220

SCALE 1:10

LAST UPDATED 06/02/2019
TYPICAL FUTURE CONSTRUCTION JOINT

75
D/2

D

VERTICAL FACE TO BE FORMED WITH AN APPROVED METHOD

FUTURE SLAB

SLAB REINFORCEMENT

D

N16 for 125mm, N20 for 150mm x 800mm LONG REINFORCEMENT BAR AT 300 CTS TO BE BENT DOWN TO GROUND LEVEL FOR SAFETY AFTER CONSTRUCTION OF JOINT

TYPICAL SAWN WEAKENED PLANE JOINT

5 x 40mm DEEP SAW CUT TO BE CUT WITHIN 24 HOURS OF BEING POURED

CONTINUOUS SLAB REINFORCEMENT

INDUCED CRACK

* D' DENOTES DEPTH OF FOOTPATH

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE PAVEMENT TYPICAL JOINT DETAILS

SD 225

SCALE 1:10
RETROFIT RESIDENTIAL VEHICLE CROSSING DETAIL

PLAN

MATCH EXIST.

PROPERTY

EXIST. FOOTPATH

EXIST. FOOTPATH

500

3000

(Max 6600)

500

TRANSLATION FROM EXISTING 75mm THICK TO 125mm THICK OVER 500mm.

125 THICK 25 MPA CONCRETE
SL72 MESH CENTRAL

NATURE STRIP

LIP OF KERB

750

4000 (MIN) - 6600 (MAX)

750

KERB & CHANNEL

750

LAY

BACK

40mm CROSSFALL

ACROSS FOOTPATH

125mm THICK 25 MPA CONCRETE, SL72 MESH REINFORCEMENT
CENTRALLY PLACED ON BAR CHAIRS (DESIRABLE GRADE 1 IN 15,
ABSOLUTE MAX 1 IN 10 REFER CLAUSE 12.9.1)

WEAKENED

PLANE JOINT

IF REVERSE FALL IS REQUIRED

DESIGN OF VEHICLE CROSSING
TO BE ON A SITE SPECIFIC BASIS.

125mm THICK 25 MPA CONCRETE, SL72 MESH REINFORCEMENT
CENTRALLY PLACED ON BAR CHAIRS (DESIRABLE GRADE 1 IN 15,
ABSOLUTE MAX 1 IN 10 REFER CLAUSE 12.9.1)

WEAKENED

PLANE JOINT

R16Ø DOWEL BAR 800mm LONG

EJ

R16Ø DOWEL BAR 800mm LONG EACH SIDE

TO 97% MMDD

"CLASS 3" 20mm FCR BEDDING

TO EXTEND 125mm BEYOND EDGE OF DRIVEWAY

NATURE STRIP

BEDDING TO 100mm MIN COMPACTED DEPTH

TRANSITION FROM EXISTING 75mm THICK TO 125mm THICK OVER 500mm.

NOTES:

1. CROSS REFERENCES:
INDUSTRIAL CROSSINGS - SD250
RURAL CROSSINGS - SD255 / SD260
IDM - SECTION 12.9.1.

2. THIS DRAWING DETAILS DIMENSIONS FOR STANDARD RESIDENTIAL CROSSINGS ONLY.

3. CROSSING WIDTHS EXCEEDING THE MAXIMUM ALLOWABLE WILL REQUIRE APPLICATION 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 R10 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 6.0 METRES. CROSSINGS TO ADJACENT PROPERTIES SHALL BE EITHER FULLY COMBINED, AND OF MAXIMUM WIDTH OF 6.0 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

NOT TO SCALE

LAST UPDATED 06/02/2019

SD 235

Infrastructure Design Manual Standard Drawings


Local Government Infrastructure Design Association
NEW RESIDENTIAL SINGLE VEHICLE CROSSING DETAIL

EXTENDING 75mm FOOTPATH TO BE REMOVED AND REPLACED WITH 125mm THICK SL72 REINFORCED 25 MPA CONCRETE

PROPERTY / BUILDING LINE

EXISTING 75mm FOOTPATH TO BE REMOVED AND REPLACED WITH 125mm THICK SL72 REINFORCED 25 MPA CONCRETE

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

PLACE SL72 MESH CENTRAL TO 25 MPA CONCRETE PAVING USING BAR CHAIRS.

R16Ø DOWEL BARS 800mm LONG AT 600 CTS MAX

BACK OF KERB

LIP OF KERB

EXTENT OF KERB & CHANNEL TO REMOVE ANY DAMAGE TO ROAD SEAL TO BE REINSTATED BY CONTRACTOR TO COUNCIL'S APPROVAL

NOTE:

1. FOR GRADES STEEPER THAN 1 IN 15 REFER CLAUSE 12.9.1.
   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.

ALL MEASUREMENTS IN MILLIMETRES

25 MPA CONCRETE (DESIRABLE GRADE 1 IN 15, ABSOLUTE MAX 1 IN 10 REFER CLAUSE 12.9.1)

SECTION A-A (STANDARD)

SECTION A-A (REVERSE FALL)

ONLY TO BE USED WITH COUNCIL APPROVAL

LEGEND:

EXPANSION JOINT

WEAKENED PLANE JOINTS


Infrastructure Design Manual Standard Drawings

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LAST UPDATED 29/03/2016

SD 240

NOT TO SCALE
EXISTING 75mm FOOTPATH TO BE REMOVED AND REPLACED WITH 125mm THICK SL72 REINFORCED 25 MPA CONCRETE

PLACE SL72 MESH CENTRAL TO 25 MPA CONCRETE PAVING USING BAR CHAIRS.

R16Ø DOWEL BARS 800mm LONG AT 600 CTS MAX

BACK OF KERB

EXTENT OF KERB & CHANNEL TO REMOVE. ANY DAMAGE TO ROAD SEAL TO BE REINSTATED BY CONTRACTOR TO COUNCIL'S APPROVAL.

LIP OF KERB

SECTION A-A (STANDARD)

EXISTING ROAD PAVEMENT

750mm LAYBACK MATCH INTO EXISTING TOK

R16Ø DOWEL BAR 800mm LONG EITHER SIDE

75mm MIN COMPACTED DEPTH "CLASS 3" 20mm FCR BEDDING TO 97% MMDD

SECTION A-A (REVERSE FALL)

EXISTING ROAD PAVEMENT

750mm LAYBACK MATCH INTO EXISTING TOK

R16Ø DOWEL BAR 800mm LONG EITHER SIDE

225 1500mm 40mm CROSSFALL ACROSS FOOTPATH

25mm DISHED CHANNEL (FOR IDEAL SITUATION, CAN BE MODIFIED TO SUIT LOCAL CONDITIONS WITH APPROVAL)

NOTE:

1. FOR GRADES STEEPER THAN 1 IN 15 REFER CLAUSE 12.9.1. 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.

ALL MEASUREMENTS IN MILLIMETRES

NEW RESIDENTIAL SHARED / DOUBLE VEHICLE CROSSING DETAILS FOR ADJACENT PROPERTIES

Infrastructure Design Manual Standard Drawings


Local Government Infrastructure Design Association

SD 245

NOT TO SCALE

LAST UPDATED 06/02/2019
NEW INDUSTRIAL VEHICLE CROSSING DETAIL

LEGEND:

- EXPANSION JOINT
- 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.

ALL MEASUREMENTS IN MILLIMETRES

SD 250
NOT TO SCALE

LAST UPDATED 06/02/2019
WHERE POSSIBLE OFFSET CULVERT TO ALLOW FOR CLEAR ZONE

INSTALL PRECAST CONCRETE DRIVEABLE ENDWALL (BOTH ENDS OF CULVERT)

EXISTING TABLE DRAIN TO BE BACK FILLED WITH CLASS 3 FCR

REFER TO SPEED/CLEAR ZONE TABLE ABOVE FOR REQUIREMENTS OF ENDWALLS & NOTE 9

ORIGNAL TABLE DRAIN ALIGNMENT

PAVEMENT

SHOULDER

TABLE DRAIN

DRAIN DEVIATION

MINIMUM COVER OVER PIPE TO BE 150MM

FINE CRUSHED ROCK BACK FILL INCLUDING EXISTING TABLE DRAIN.

PIPE TO BE MIN. 375mm RCP UNLESS OTHERWISE DIRECTED. BACKFILL AND 75mm DEPTH PIPE BEDDING TO BE 20mm 'CLASS 3' FCR.

SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL CLEAR ZONE WIDTHS

(REFER NOTE 8)

CROSSINGS TO BE FINISHED WITH MINIMUM 100mm DEPTH CRUSHED ROCK OR APPROVED EQUIVALENT

CRUSHED ROCK OR APPROVED EQUIVALENT

FENCE TO BE SPLAYED AND GATE SET BACK TO ALLOW FOR STATIONARY VEHICLE IN SITUATIONS WHERE THE BOUNDARY LINE IS CLOSE TO THE EDGE OF ROAD. (SEE NOTE 11.)

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:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MINIMUM GATE OFFSET FROM EDGE OF LANE [m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR  (5.0m)</td>
<td>8.2</td>
</tr>
<tr>
<td>RIGID TRUCK (12.0m)</td>
<td>12.5</td>
</tr>
<tr>
<td>SEMI (19.0m)</td>
<td>22</td>
</tr>
<tr>
<td>B-DOUBLE (25.0m)</td>
<td>28</td>
</tr>
</tbody>
</table>

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SWALE DRAIN VEHICLE CROSSING
( RURAL ENTRANCE )

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association


LAST UPDATED 29/03/2016

SD 255

NOT TO SCALE
NOTES:

1. THIS ARRANGEMENT IS INTENDED FOR RURAL LOW DENSITY RESIDENTIAL 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. DRIVEABLE ENDWALLS TO BE USED WITHIN 1.5m FROM THE EDGE OF SEAL.
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 THE EDGE OF SEAL.

125 THICK 25 MPA CONCRETE VEHICLE CROSSING WITH SL72 MESH 50mm BELOW TOP.

SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

TYPICAL SWALE DRAIN VEHICLE CROSSING (FRINGE URBAN RESIDENTIAL ENTRANCE)
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.
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 OFFSETS.
9. DRIVEABLE ENDWALLS TO BE USED INSIDE CLEAR ZONE.
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:

SETOUT TABLE:

<table>
<thead>
<tr>
<th>POINT</th>
<th>OFFSET DISTANCE FROM EDGE OF SEAL (m)</th>
<th>OFFSET DISTANCE FROM ACCESS CENTRELINE (m)</th>
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<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>6</td>
<td>22.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

ROAD WIDENING:

A = 0.5 x SPEED (km/h) x W (m) x 3.6
B = ANGLE x 70° x 90° x 110°
C = ON STRAIGHT: 6.0m (MIN)
ON CURVE: 2 x (3.0m + CORRESPONDING WIDENING FOR CURVE RADIUS)
W = FORMATION WIDENING (IF REQUIRED BY COUNCIL)

FENCE TO BE SPLAYED AND GATE SET BACK TO ALLOW FOR STATIONARY VEHICLE IN SITUATIONS WHERE THE BOUNDARY LINE IS CLOSE TO THE EDGE OF ROAD. (SEE NOTE 11.)

16m (MIN) LENGTH OF 375Ø (MIN) CLASS 2 RCP WITH A MINIMUM COVER OF 200mm AND DRIVEABLE END WALLS (BOTH ENDS) WHERE REQUIRED WITHIN CLEAR ZONE

LEGEND:

- TYPICAL EXISTING ACCESS
- RECOMMENDED ACCESS SPLAY
- AREA TO BE SEALED

ALL MEASUREMENTS IN MILLimetres

TYPICAL B DOUBLE VEHICLE CROSSING
(RURAL ENTRANCE)
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.

LEGEND:
- EXPANSION JOINT
- WEAKENED PLANE JOINTS

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

ALL MEASUREMENTS IN MILLIMETRES
TRENCHING BACKFILL
(TRENCHES WITHIN 1m OF COUNCIL ASSETS)

RE-SEED AND LEVEL TO MATCH EXISTING

COUNCIL APPROVED TOPSOIL AND SEEDED.

ORDINARY EARTH FROM EXCAVATION WHICH CONTAINS NO MORE THAN 20% ROCK FRAGMENTS (150mm MAX SIZE) TO BE COMPACTED IN LAYERS NO GREATER THAN 150mm. COMPACTION TO BE MINIMUM 92% MODIFIED A.A.S.H.O.

AUTHORITY'S MARKER TAPE
AUTHORITY SERVICE ZONE INCLUDING ATTACHMENTS AND APPENDAGES
GRANULAR BEDDING PLASTIC INDEX LESS THAN 3
ANY UNSUITABLE MATERIAL TO BE REMOVED FROM FLOOR OF TRENCH

TRENCHES UNDER SWALES

150mm MIN OR TO EDGE OF DAMAGED WEARING COURSE

Wearing Surface

300mm COMPACTED DEPTH CLASS 2 F.C.R. IN 2 x 150mm LAYERS. TOP (BASE) COMPACTED TO 98% MODIFIED DENSITY RATIO. LOWER (SUB BASE) LAYER COMPACTED TO 98% MODIFIED DENSITY RATIO.

CLASS 3 F.C.R. (OR APPROVED EQUIVALENT MATERIAL). BACKFILL AND COMPACTED MECHANICALLY IN 150mm LAYERS USING VIBRATING RAMMER TO 98% MODIFIED DENSITY RATIO.

AUTHORITY'S MARKER TAPE
AUTHORITY SERVICE ZONE INCLUDING ATTACHMENTS AND APPENDAGES
GRANULAR BEDDING PLASTIC INDEX LESS THAN 3
ANY UNSUITABLE MATERIAL TO BE REMOVED FROM FLOOR OF TRENCH

TRENCHES UNDER FOOTPATHS

CUT WEARING SURFACE WITH SAW TO FORM A STRAIGHT EDGE

Wearing Surface

150mm MIN OR TO EDGE OF DAMAGED WEARING COURSE

300mm COMPACTED DEPTH CLASS 3 F.C.R.

APPROVED GRANULAR BACKFILL RAMMED OR ROLLED IN 150mm LAYERS TO 98% MODIFIED DENSITY RATIO.

AUTHORITY'S MARKER TAPE
AUTHORITY SERVICE ZONE INCLUDING ATTACHMENTS AND APPENDAGES
GRANULAR BEDDING PLASTIC INDEX LESS THAN 3
ANY UNSUITABLE MATERIAL TO BE REMOVED FROM FLOOR OF TRENCH

TRENCHES UNDER ROADS

150mm MIN OR TO EDGE OF DAMAGED WEARING COURSE

ALL MEASUREMENTS IN MILLIMETRES

NOTES:

2. BITUMEN ROAD SURFACE SHALL BE CUT WITH A SAW.

Infrastructure Design Manual Standard Drawings


Local Government Infrastructure Design Association

SD 310

LAST UPDATED 20/02/2019

NOT TO SCALE
**Standard Pit Listing**

<table>
<thead>
<tr>
<th>Pit Type</th>
<th>Cover Type</th>
<th>SD DRG. No.</th>
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</thead>
<tbody>
<tr>
<td>Unhaunched</td>
<td></td>
<td>SD405</td>
</tr>
<tr>
<td>Haunched</td>
<td></td>
<td>SD410</td>
</tr>
<tr>
<td>Junction</td>
<td>Cast Iron</td>
<td>SD425</td>
</tr>
<tr>
<td>Grated</td>
<td>Mild Steel/Cast Iron</td>
<td>SD425</td>
</tr>
<tr>
<td>Side Entry</td>
<td>Cast Iron</td>
<td>SD430, SD435, SD440, SD445, SD450</td>
</tr>
<tr>
<td>Depressed Grate</td>
<td>Mild Steel/Cast Iron</td>
<td>SD405</td>
</tr>
<tr>
<td>Inlet Catch</td>
<td>Concrete</td>
<td>SD460</td>
</tr>
</tbody>
</table>

**Notes:**

Refer specific standard drawings for full dimensions.

All measurements in millimetres.

**Typical Pit Dimensioning and Setting Out Detail**

Infrastructure Design Manual Standard Drawings

A copy of the Infrastructure Design Manual can be viewed on the Design Manual website

www.designmanual.com.au

Local Government Infrastructure Design Association

Last Updated 20/03/2015

SD 400

NOT TO SCALE
1. MINIMUM PIT SIZES:

<table>
<thead>
<tr>
<th>PIPE DIAMETER</th>
<th>BASE DIMENSIONS W'</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 450Ø</td>
<td>600</td>
</tr>
<tr>
<td>450Ø &amp; UPWARDS</td>
<td>900</td>
</tr>
</tbody>
</table>

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 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. SUBSURFACE DRAIN HOLES TO BE SEALED IF NOT USED.
8. PIT LENGTH 'L' REFER TO SD400.
9. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.

ALL MEASUREMENTS IN MILLIMETRES

SD 405

NOT TO SCALE
**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 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. SUBSURFACE DRAIN HOLES TO BE SEALED IF NOT USED.
8. CONCRETE STRENGTH F'c = 25MPa. (MIN) AT 28 DAYS.

---

**HAUNCHED PITS**

**SD 410**

**NOT TO SCALE**
MIN. WALL THICKNESS FOR REINFORCEMENT IN MASS CONCRETE PITS (CAST IN-SITU)

ALL MEASUREMENTS IN MILLIMETRES

PLAN

SECTION

PIT LENGTH (L), METERS

T1

T2

H1 AND H2, METRES

1.5

0.45

1.8

2.4

2.1

2.7

3.6

3.0

4.2

4.8

5.4

6.0

0.45

0.6

0.9

1.2

1.5

DEPTH (H1 AND H2), METRES

WALL THICKNESS

UN-REINFORCED CONCRETE SHOULD BE DESIGNED ON A CASE BY CASE BASIS

PIT LENGTH (L), METERS

WALL THICKNESS

T1 AND T2, MILLIMETRES

150mm

175

200

225

NOT TO SCALE

LAST UPDATED 20/03/2015

SD 415

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association

A copy of the Infrastructure Design Manual can be viewed on the Design Manual website

www.designmanual.com.au
NOTES:

1. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 210kN) 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.

ALL MEASUREMENTS IN MILLIMETRES
CONCRETE OR EQUIVALENT COVER
WITH APPROVED LIFTING ANCHORS.
REFER TO PIT SCHEDULE FOR DETAILS.

PIT LENGTH 'L'
REFER PIT SCHEDULE

FINISHED SURFACE LEVEL

REINFORCEMENT MESH TO BE
PLACED CENTRALLY.

NOTES:
1. CONCRETE STRENGTH F’C = 25MPa. (MIN) AT 28 DAYS.

ALL MEASUREMENTS IN MILLIMETRES

JUNCTION PIT WITH CONCRETE COVER
(NON TRAFFICABLE AREAS)

REFERENCES:
1. CONCRETE STRENGTH F’C = 25MPa. (MIN) AT 28 DAYS.

MINIMUM PIT SIZES (EASEMENTS)

<table>
<thead>
<tr>
<th>PIT DEPTH</th>
<th>PIT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1000</td>
<td>600 x 600</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>600 x 900</td>
</tr>
</tbody>
</table>

MINIMUM PIT SIZES (ROAD RESERVE)

<table>
<thead>
<tr>
<th>PIT DEPTH</th>
<th>PIT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL PITS</td>
<td>600 x 900</td>
</tr>
</tbody>
</table>

A copy of the Infrastructure Design Manual can be viewed on the Design Manual website
www.designmanual.com.au

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association

NOT TO SCALE

SD 425

LAST UPDATED 20/03/2015
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.

ALL MEASUREMENTS IN MILLIMETRES
PLAN

CHANNEL DEPTH TRANSITION

BACK OF KERB (LINE OF SET OUT)

FLOW

EXPANSION JOINTS

LINE OF KERB

CHANNEL INVERT 40mm DEEPER ACROSS THROAT OF PIT

REINFORCEMENT MESH TO BE PLACED CENTRALLY.

CAST IRON COVER WITH EXTENDED CONCRETE SURROUND OR APPROVED EQUIVALENT COVER TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.

SEE NOTE 3

SECTION A-A

REINFORCEMENT DETAILS

<table>
<thead>
<tr>
<th>PIT LENGTH L' OR WIDTH W'</th>
<th>REINFORCEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 1200</td>
<td>SL92</td>
</tr>
<tr>
<td>1201 TO 1600</td>
<td>RL918</td>
</tr>
<tr>
<td>1801 TO 2400</td>
<td>RL1218</td>
</tr>
</tbody>
</table>

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.

ALL MEASUREMENTS IN MILLIMETRES

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

SD 430

NOT TO SCALE

Infrastructure Design Manual Standard Drawings

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.

ALL MEASUREMENTS IN MILLIMETRES

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

1. REFER TO SD100 FOR KERB DETAILS.
2. CONCRETE STRENGTH FC = 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.

ALL MEASUREMENTS IN MILLIMETRES

SD 435
LAST UPDATED 08/08/2016
NOT TO SCALE
SIDE ENTRY PIT 900mm INLET WITH CAST IRON COVER & CONCRETE SURROUND FOR 'SM2-M'

REINFORCEMENT DETAILS

<table>
<thead>
<tr>
<th>PIT LENGTH 'L' OR WIDTH 'W'</th>
<th>REINFORCEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 1200</td>
<td>SL92</td>
</tr>
<tr>
<td>1201 TO 1800</td>
<td>RL918</td>
</tr>
<tr>
<td>1801 TO 2400</td>
<td>RL1218</td>
</tr>
</tbody>
</table>

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 CLAY IS PRESENT; INSTALL 1m LONG SUBSOIL DRAIN AT THE BOTTOM OF THE PIT.

ALL MEASUREMENTS IN MILLIMETRES

SD 440
NOT TO SCALE

LAST UPDATED 08/08/2016

Infrastructure Design Manual Standard Drawings


Local Government Infrastructure Design Association
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.

ALL MEASUREMENTS IN MILLIMETRES
DOUBLE SIDE ENTRY PIT 1900mm INLET WITH APPROVED COVER & CONCRETE SURROUND FOR ‘B2’

NOTES:
1. REFER TO SD100 FR KERB DETAILS.
2. CONCRETE STRENGTH FC = 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.

ALL MEASUREMENTS IN MILLIMETRES

REINFORCEMENT DETAILS

<table>
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<tr>
<th>PIT LENGTH ‘L’ OR WIDTH ‘W’</th>
<th>REINFORCEMENT</th>
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<tbody>
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<td>SL92</td>
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<td>1201 TO 1800</td>
<td>RL918</td>
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<tr>
<td>1801 TO 2400</td>
<td>RL1218</td>
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</table>


Local Government Infrastructure Design Association

Infrastructure Design Manual Standard Drawings

SD 445

NOT TO SCALE

LAST UPDATED 08/08/2016
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.

ALL MEASUREMENTS IN MILLIMETRES

REINFORCEMENT DETAILS

<table>
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<tr>
<th>PIT LENGTH L’ OR WIDTH W’</th>
<th>REINFORCEMENT</th>
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</thead>
<tbody>
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<td>UP TO 1200</td>
<td>SL92</td>
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<tr>
<td>1201 TO 1800</td>
<td>RL918</td>
</tr>
<tr>
<td>1801 TO 2400</td>
<td>RL1218</td>
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</tbody>
</table>

LOCAL GOVERNMENT INFRASTRUCTURE DESIGN ASSOCIATION

INFRASTRUCTURE DESIGN MANUAL STANDARD DRAWINGS


SD 450

LAST UPDATED 08/08/2016

NOT TO SCALE
1. CONCRETE STRENGTH $F'_C = 25\text{MPa. (MIN) AT 28 DAYS.}$

2. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 210kN) OR APPROVED EQUIVALENT.
MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.

ALTERNATIVE PROVIDING FOR FLOWS IN BOTH DIRECTIONS

APPROVED GRATE & FRAME TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS. REFER TO PIT SCHEDULE FOR DETAILS.

FINISHED SURFACE LEVEL

REINFORCEMENT MESH TO BE PLACED CENTRALLY.

SECTION A-A

SECTION B-B

NOTES:

1. CONCRETE STRENGTH $F'_C = 25\text{MPa. (MIN) AT 28 DAYS.}$

2. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 210kN) OR APPROVED EQUIVALENT.
MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.

CONCRETE STRENGTH $F'_C = 25\text{MPa. (MIN) AT 28 DAYS.}$

PLAN

SCALE 1:25

NOTES:

1. CONCRETE STRENGTH $F'_C = 25\text{MPa. (MIN) AT 28 DAYS.}$

2. HEAVY DUTY COVERS TO BE USED WHEN SUBJECT TO TRAFFICABLE LOADS (AS3996 CLASS D - 210kN) OR APPROVED EQUIVALENT.
MEDIUM DUTY COVERS TO BE USED IN OFF ROAD USE (AS3996 CLASS B - 80kN) OR APPROVED EQUIVALENT.

ALTERNATIVE PROVIDING FOR FLOWS IN BOTH DIRECTIONS

SECTION B-B

NOT TO SCALE

LAST UPDATED 20/03/2015

SD 455

DEPRESSED GRATED PIT

Infrastructure Design Manual Standard Drawings

Local Government Infrastructure Design Association

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www.designmanual.com.au
CONCRETE COVER WITH APPROVED LIFTING ANCHORS & F81 MESH PLACED CENTRALLY. GATIC COVER OR APPROVED EQUIVALENT TO BE USED IN ROAD RESERVES OR OPENING ON BOTH SIDES.

**REINFORCEMENT DETAILS**

<table>
<thead>
<tr>
<th>PIT LENGTH L OR WIDTH W</th>
<th>REINFORCEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 1200</td>
<td>SU92</td>
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<td>1201 TO 1800</td>
<td>RL918</td>
</tr>
<tr>
<td>1801 TO 2400</td>
<td>RL1218</td>
</tr>
</tbody>
</table>

**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 FC = 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.

ALL MEASUREMENTS IN MILLIMETRES

**SECTION A-A**

**SECTION B-B**

**PLAN**

SCALE 1:25

**SECTION B-B**

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 FC = 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.
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.


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

FOR LARGER PIPE DIAMETERS REFER TO VICROADS SD1931 REV B

ALL MEASUREMENTS IN MILLIMETRES

REINFORCED CONCRETE WINGWALL (IN-SITU)

LAST UPDATED 20/03/2015

SD 465

NOT TO SCALE
NOTES:
1. COMPACTION PRESSURE BEHIND ENDWALLS IS NOT TO EXCEED 12.5 kPa. REFER (1.5 TONNE VIBRATORY ROLLER).
2. A MAXIMUM PIPE SIZE OF 300Ø FOR THIS ENDWALL ARRANGEMENT.
3. NOT TO BE USED WHERE GENERAL VEHICULAR TRAFFIC IS PRESENT, (MAINTENANCE OR EMERGENCY VEHICLES EXCEPTED).
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 ENDFWALL FOR PIPES UP TO 375mmØ (WALKWAYS, PATHS & TRACKS)

SD 470

LAST UPDATED 20/03/2015

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.

ALL MEASUREMENTS IN MILLIMETRES

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

SD 475
NOT TO SCALE
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.

PROVIDE 2 No 100mm STUBS IN REAR WALL AS DIRECTED.

APPROVED FCR BEDDING
100mm DIA. A.G. DRAINS TO BE PLACED ON BOTH SIDES

SEE NOTE 3

SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

GRATING PIT FOR SM2 MODIFIED KERB & CHANNEL

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SD 480

NOT TO SCALE

LAST UPDATED 08/08/2016
NOTES:
1. FOR USE AS UPSTREAM PIT ONLY
2. MAXIMUM PIT DEPTH 1000mm
3. GRATE & SURROUND AS PER ASQ PRODUCT OR SIMILAR APPROVED
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.

ALL MEASUREMENTS IN MILLIMETRES
STAGE ONE

900 x 600mm SIDE ENTRY PIT WITH GRATING

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.

ALL MEASUREMENTS IN MILLIMETRES

LAST UPDATED 08/08/2016

SD 490

NOT TO SCALE
NOTES:
1. EDGE CONCRETE AROUND PERIMETER OF GRATE.
2. TOP OF GRATE 50mm BELOW EDGE OF PATH.
3. DO NOT BOND GRATE TO CONCRETE 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

ALL MEASUREMENTS IN MILLIMETRES

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SD 495
NOT TO SCALE

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LAST UPDATED 08/08/2016

SPOON PIT WITH GRATING
1. FOR PIT DIMENSIONING REFER TO IDM STANDARD DRAWING SD400.

2. EXISTING PIT MUST BE REMOVED AND REBUILT UNLESS EXISTING PIT IS CHECKED \& CERTIFIED AS TRAFFICABLE TYPE.

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.
TYPICAL GRASS CATCH DRAIN SECTIONS

TYPICAL BEACHED CATCH DRAIN

TYPICAL MOUNDED CATCH DRAIN
(ERODABLE TERRAIN)

TYPICAL CATCH DRAIN AT TOE OF BATTER

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.

ALL MEASUREMENTS IN MILLIMETRES

CATCH DRAIN DETAILS

LAST UPDATED 20/03/2015

SD 500

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. F.C.R. BACKFILL TO BE USED UNDER ROAD PAVEMENT.
3. AS PER AS 2032:2006 TABLE 5.1: WHERE SUBJECT TO VEHICLE LOADING, THE MINIMUM COVER FOR PVC PIPES IS 0.45m. WHERE NOT SUBJECT TO VEHICLE LOADING THE MINIMUM COVER FOR PVC PIPES 0.3m.
4. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

SD 505

HOUSE DRAIN TO KERB & CHANNEL

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LAST UPDATED 29/03/2016

NOT TO SCALE
NOTES:
1. 20mm CLASS 3 F.C.R. BACKFILL TO BE USED UNDER ROAD PAVEMENT.
2. CONCRETE KERB TO BE STAMPED WHEN CURING WITH THE LETTER 'D' ADJACENT THE HOUSE DRAIN CONNECTION POINT.
3. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES
NOTES:
1. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

STREET DRAIN CONNECTION

SD 515

LAST UPDATED 29/03/2016

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REINSTATE WITH SEEDED TOPSOIL TO 100mm DEPTH

150 Ø SN6 SWJ U-PVC 'T' JUNCTION

SUB-BASE PAVEMENT LAYER

150 Ø SN6 SWJ U-PVC RISER FOR INSPECTION OPENING

SCREW ON CAP

PROPERTY CONNECTION POINT TO BE CAPPED.

PROPERTY LEVEL TO I.O.

INSPECTION SHAFT TO TEMPORARILY EXTEND 500 ABOVE FINISHED SURFACE LEVEL DURING CONSTRUCTION PHASE OF WORKS.

THE LETTER 'D' IS TO BE IMPRINTED IN THE FACE OF KERB (40mm HIGH)

100 Ø SN6 SWJ U-PVC 'T' JUNCTION

OFFSET TAPER

1000 MIN PIPE SIZE

CONNECTION TO STORMWATER PIPE WITH 1500 'CONCONECT' OR APPROVED EQUIVALENT. TO BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS. RISER TO JOIN WITH PIPE CONNECTOR VIA SWJ.

1500 SN6 SWJ U-PVC 'T' JUNCTION

OFFSET TAPER

150-1000 REDUCER

100 Ø MIN PIPE SIZE

PROPERTY CONNECTION POINT TO BE CAPPED.

600 BELOW TOP OF KERB DESIRABLE MINIMUM

INSPECTION OPENING

SCREW ON CAP

150 FINISHED LEVEL TO O.C.

PROPERTY LINE

FINISHED SURFACE

FUTURE PROPERTY

EXISTING/NEW KERB PROFILE

LINE OF KERB

NOT TO SCALE
NOTES:

1. 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 29/03/2016

SD 516

NOT TO SCALE
NOTES:
1. EDGE CONCRETE AROUND PERIMETER OF GRATE.
2. TOP OF GRATE 40mm (min) BELOW FINISHED SURFACE.
3. DO NOT BOND GRATE TO CONCRETE 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. SEAL UP AND MAKE GOOD PIPE CONNECTION / INSERTION TO PIT.
8. PROPERTY CONNECTION MIN 100Ø PIPE AS PER CLAUSE 16.10.2 (PIPE DIAMETERS).

ALL MEASUREMENTS IN MILLIMETRES

LOCAL GOVERNMENT INFRASTRUCTURE DESIGN ASSOCIATION

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FLUSHOUT RISER DETAIL

TYPICAL FLUSHOUT RISER PLAN

TYPICAL FLUSHOUT RISER SECTION

ALL MEASUREMENTS IN MILLIMETRES

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Local Government Infrastructure Design Association

SD 525

NOT TO SCALE

LAST UPDATED 20/03/2015
FLUSHOUT RISER COVER DETAIL

ALL MEASUREMENTS IN MILLIMETRES

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SD 530

NOT TO SCALE

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LAST UPDATED 20/03/2015
**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
NOTES:
1. REFER TO IDM DESIGN GUIDELINES: SECTION 12, 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.
LOW DENSITY RESIDENTIAL COLLECTOR ROAD - GROUP A COUNCILS

LOW DENSITY RESIDENTIAL COLLECTOR ROAD - SOUTH GIPPSLAND

NOTES:
1. REFER TO IDM DESIGN GUIDELINES: SECTION 12, 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.

* V.P.D. = VEHICLES PER DAY

TYPICAL ROAD PROFILES LOW DENSITY RESIDENTIAL COLLECTOR / RURAL ACCESS

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LAST UPDATED 08/08/2016

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, 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.
NOTE:
REFER TO IDM DESIGN GUIDELINES: SECTION 12, TABLE 2 - 'URBAN ROAD / STREET CHARACTERISTICS'.

TYPICAL ROAD PROFILES
COMMERCIAL STREET/ INDUSTRIAL STREET

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LAST UPDATED 04/04/2016
SD 620
NOT TO SCALE
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 AS 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
- GAS
- WATER
- TELECOMMUNICATIONS
- DENOTES LOCATIONS WHERE UNDERGROUND PASS UNDER OR IN CLOSE VICINITY OF OPEN DRAIN

PREFERRED SERVICE LOCATIONS FOR RURAL ACCESS STREETS

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Local Government
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LAST UPDATED 04/04/2016
SD 625
NOT TO SCALE
NOTES

1. MINIMUM DEPTH OF COVER TO ALL UTILITY SERVICES WITH THE EXCEPTION OF TELECOMMUNICATIONS SERVICES TO BE 800mm. TELECOMMUNICATIONS SERVICES ARE TO HAVE A MINIMUM DEPTH OF COVER OF 450mm. REFER TABLE AS 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 INDICATORIALLY ONLY.

LEGEND

- Electricity
- Gas
- Sewer
- Water
- Raw Water
- Telecommunications
- Storm Water

LAST UPDATED 04/04/2016

PREFERRED SERVICE LOCATIONS FOR RESIDENTIAL ACCESS STREETS


SD 630

NOT TO SCALE
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 400mm. REFER TABLE AS FOR FURTHER DETAILS.

2. 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.

3. LOCATIONS OF STREET TREES, STREET LIGHTS, DRIVEWAYS AND PROPERTY BOUNDARIES ARE SHOWN INDICATIVELY ONLY.

LEGEND

- ELECTRICITY
- GAS
- SEWER
- WATER
- RAW WATER
- TELECOMMUNICATIONS
- 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

SD 635

NOT TO SCALE