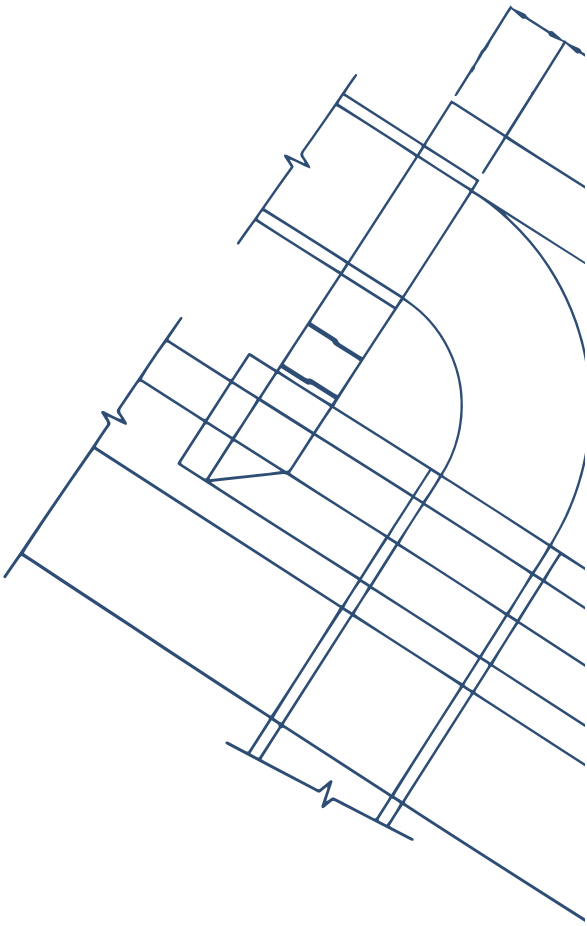
Banyule Standard Drawings



Banyule
CITY COUNCIL

This page was intentionally left blank

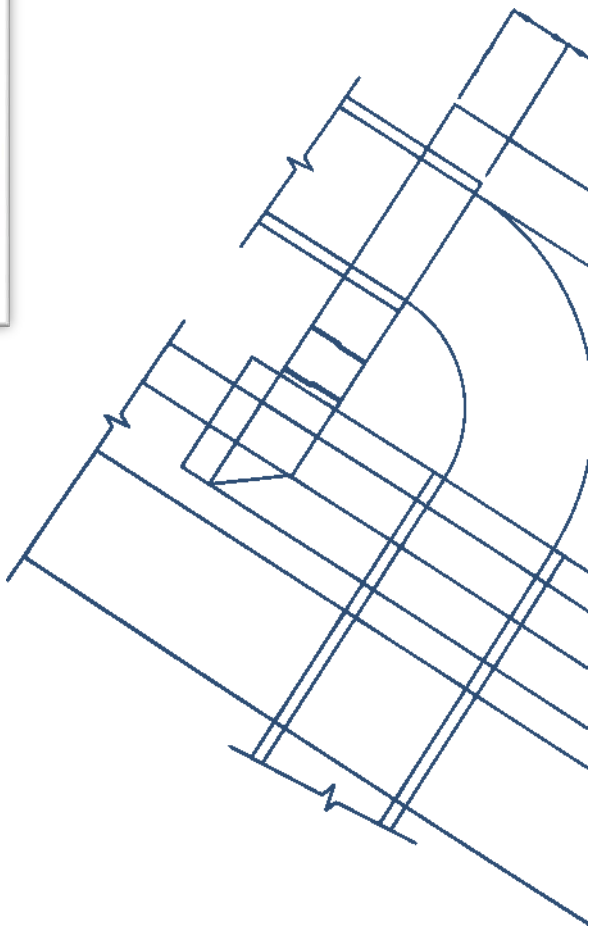
Banyule Standard Drawings	New Drawing No
ROADS	
Road Profiles	
Typical Road Profiles Residential	R 100A
Typical Road Profiles Residential	R 100B
Typical Road Profiles Access & Collector Level 1 & 2	R 105
Typical Road Profiles Low Density Residential Collector/Acceess/Rural Access	R 110
Typical Road Profiles Commercial street/ Industrial Street	R 115
Kerb Profiles	
Typical Kerb Profiles 'B', 'SM' & 'M' Type	R 150
Typical Industrial Kerb Profiles 'B' & 'M' Type	R 155
Open Invert Channel	R 160
Typical Kerb Bedding	R 165
Layback for 'B2' & 'B3' Kerbing	R 170
Kerb & Channel Installation Abutting Existing Pavement	R 175
Pitcher Kerb	R 180
Two Pitcher Tray Kerb & Channel at Crossing	R 185
Heavy Duty Kerb Adaptors for 'B2' and 'SM2' Kerbs	R 190
Vehicle Crossovers	
Retrofit Residential Vehicle Crossing Detail	R 200
New Residential Single Vehicle Crossing Detail	R 205
New Residential Shared/Double Vehicle Crossing Detail	R 210
New Industrial Vehicle Crossing Detail	R 215

Banyule Standard Drawings	New Drawing No
Typical Swale Drain Vehicle Crossing	R 220
Footpaths	
Pedestrian Crossing	R 250
Kerb Ramp	R 255
Typical Footpath Detail	R 260
Typical Hot Mix Asphalt Footpath	R 265
DRAINAGE	
Pipes and Connections	
Bedding & Backfilling for Concrete Pipe Drains	D 100
Anchor Blocks	D 105
Drainage Pipe Anchor Block	D 110
Subsurface Drain and Service Conduit Details	D 115
Catch Drain Details	D 120
House Drain to Kerb & Channel	D 125
House Drain Connection	D 130
Easement Drain Connection	D 135
Property Gully Inlet	D 140
Reinforced Concrete Wingwall (In – Situ)	D 145
Concrete Endwall for Pipes up to 300mm in Diameter (Walkways, Paths & Tracks)	D 150
27A Street Drain Connection	D 155
27A Street Drain Connection (Limited Cover)	D 160
Pit Details	
Step Irons	D 200
Glass Fibre Reinforced Pit Covers	D 205
Junction Pit	D 210

Banyule Standard Drawings	New Drawing No
Junction Pit – Heavy Duty/Light Duty/Fibre Glass	D 215
SEP Precast Lintel	D 220
Side Entry Pit B-Type Kerb	D 225
Side Entry Pit SM-Type Kerb	D 230
Side Entry Pit With Precast Lintel	D 235
Grated Side Entry Pit	D 240
Grated Side Entry Pit Inlet with Concrete Surround	D 245
Grating Pit for SM2 Modified Kerb & Channel	D 250
Side Entry Pit with Grating	D 255
Spoon Pit with Grating	D 260
Extended Throat Side Entry Pit	D 265
Footpath Grated Pit	D 270
Combination Grate & Side Entry Pit	D 275
Unhaunched Pits (Side Entry)	D 280
Haunched Pits (Side Entry)	D 285
Min. Wall Thickness for Reinforcement in Mass Concrete Pits (Cast In-Situ)	D 290
Depressed Grated Pit	D 295
Inlet Catch Pit	D 300
Double Side Entry Pits	D 305
ANCILLARY	
Retaining walls	
Low Side Stone Retaining Wall	A 100
High Side Stone Retaining Wall	A 105
Timber Sleeper Retaining Wall	A 110

Banyule Standard Drawings	New Drawing No
Reo Detail for Concrete	
Reinforced Concrete Pavement Sealant Detail	A 150
Reinforced Concrete Pavement Isolation Joint	A 155
Reinforced Concrete Pavement Joint Detail	A 160
Other	
Laneway Typical Section	A 200
Trenching Backfill (Trenches within 1 m of Council Assets)	A 205
Reinstatement of Road Openings	A 210

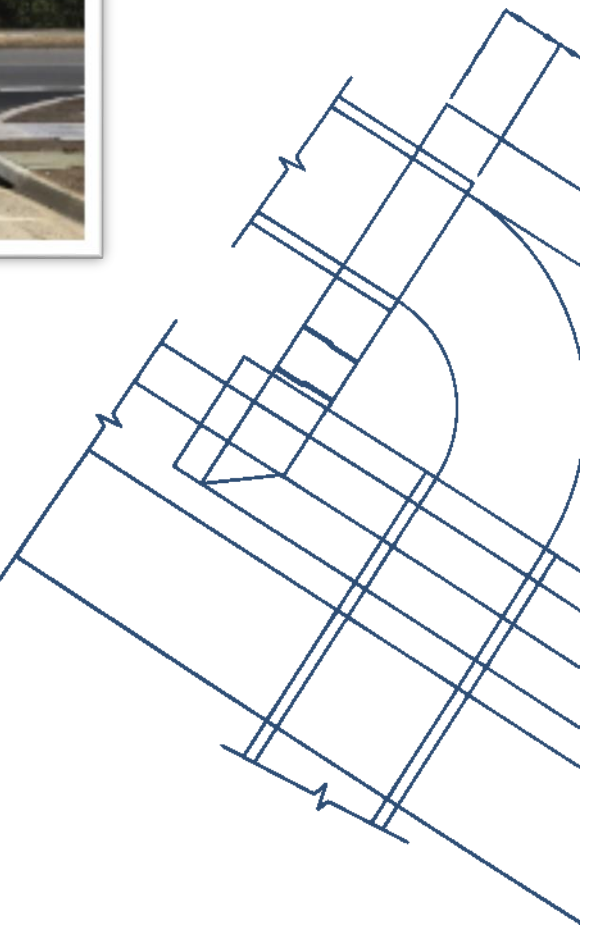
Roads



Banyule
CITY COUNCIL

This page was intentionally left blank

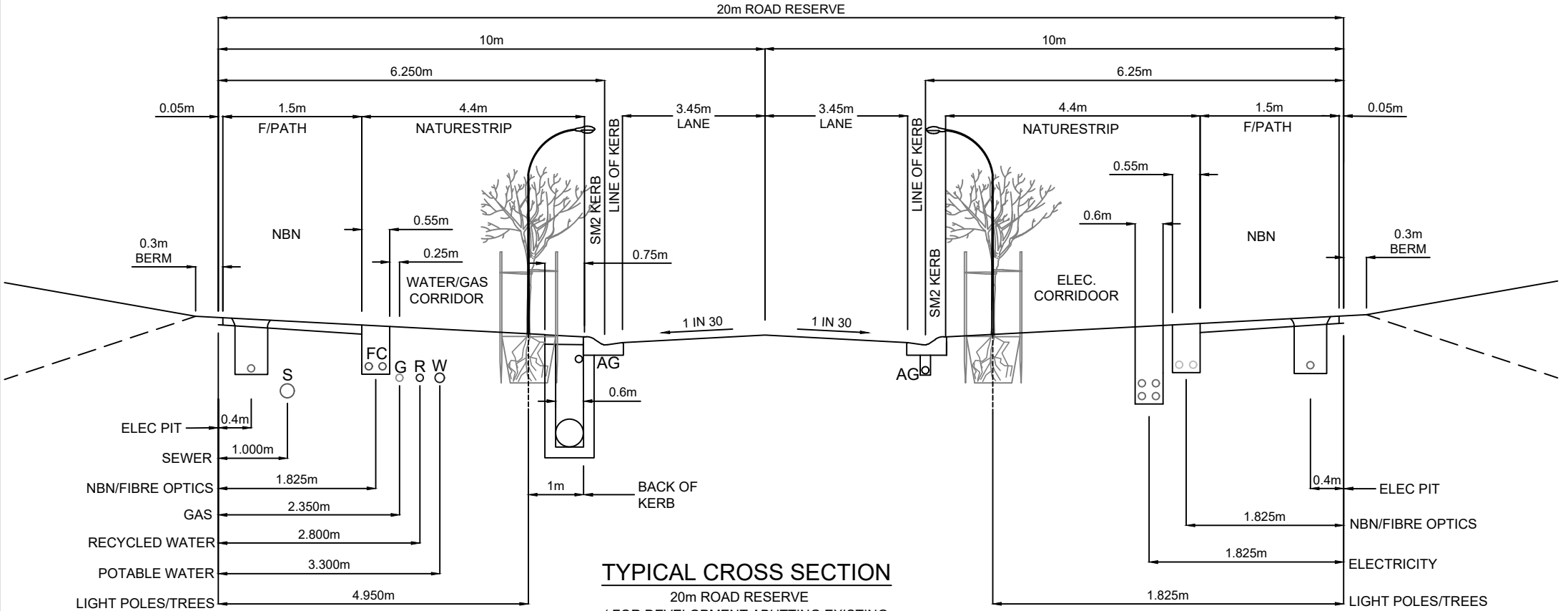
Road Profiles



Banyule
CITY COUNCIL

This page was intentionally left blank

This page was intentionally left blank



TYPICAL CROSS SECTION

20m ROAD RESERVE
(FOR DEVELOPMENT ABUTTING EXISTING
GOVERNMENT ROADS)

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

NOTES:

1. IF ROAD RESERVE WIDTH VARIES FROM TYPICAL SECTIONS THEN A MODIFIED SECTION IS TO BE SUBMITTED AND APPROVED BY COUNCIL.
2. WATER/GAS CORRIDOR: ASSUME WATER 100mm CONDUIT AND GAS 50mm CONDUIT.
3. ELECTRICAL CORRIDOR: ASSUME 2x HV POWER CABLES IN 100mm CONDUITS AND 2x HV POWER CABLES IN 150mm CONDUITS
4. ALL CLEARANCES TO COUNCIL ASSETS MUST BE CONFIRMED BY AN AUTHORIZED OFFICER.

TYPICAL ROAD PROFILES RESIDENTIAL

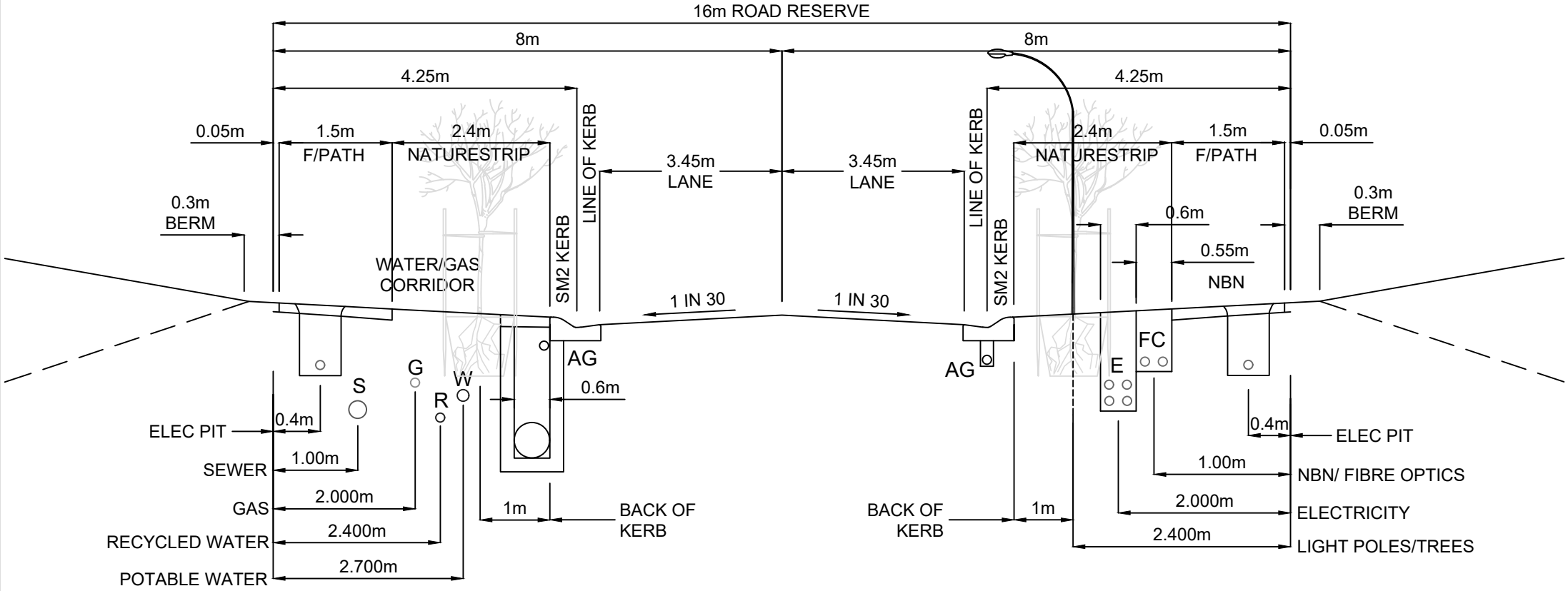
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

R 100A

NOT TO SCALE



TYPICAL CROSS SECTION

16m ROAD RESERVE

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NOTES:

REFER TO R 100A NOTES

TYPICAL ROAD PROFILES RESIDENTIAL

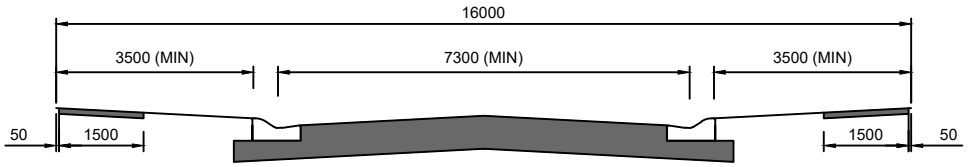
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

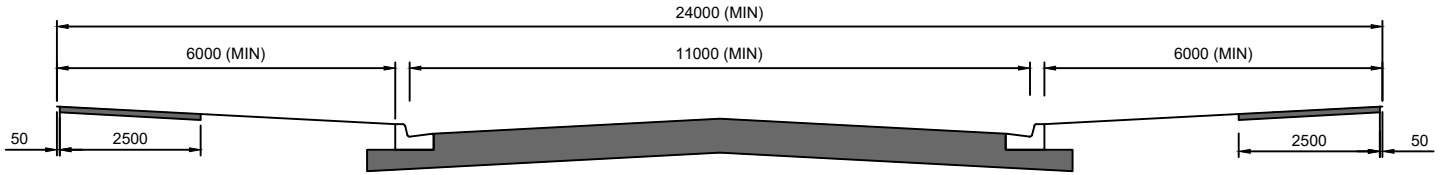
LAST UPDATED JULY 2019

R 100B

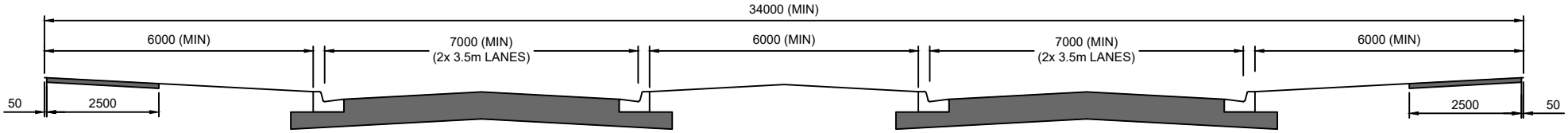
NOT TO SCALE



ACCESS STREET



COLLECTOR STREET - LEVEL 1



COLLECTOR STREET - LEVEL 2

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NOTES:

1. FOR KERB DETAIL REFER TO DRAWINGS R150, R155

TYPICAL ROAD PROFILES ACCESS & COLLECTOR LEVEL 1 & 2

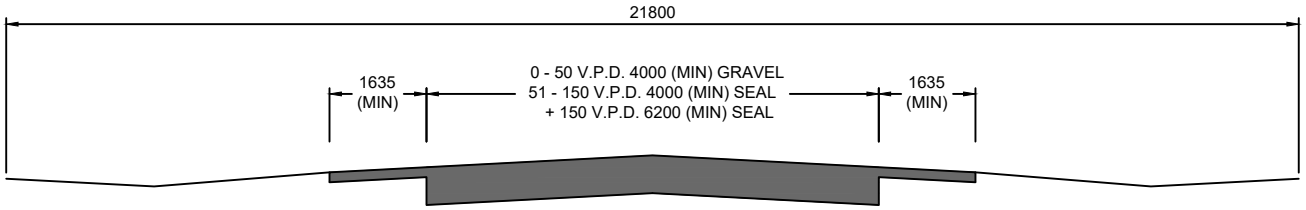
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

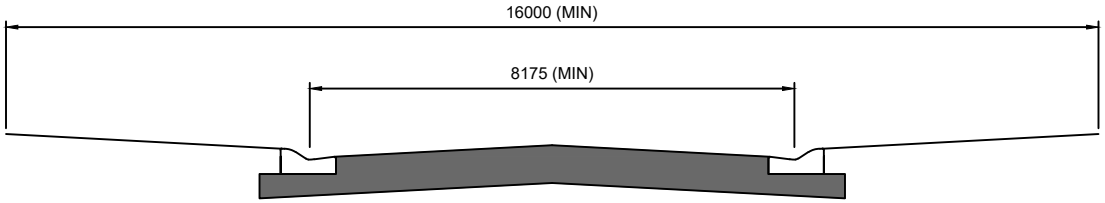
R 105

NOT TO SCALE

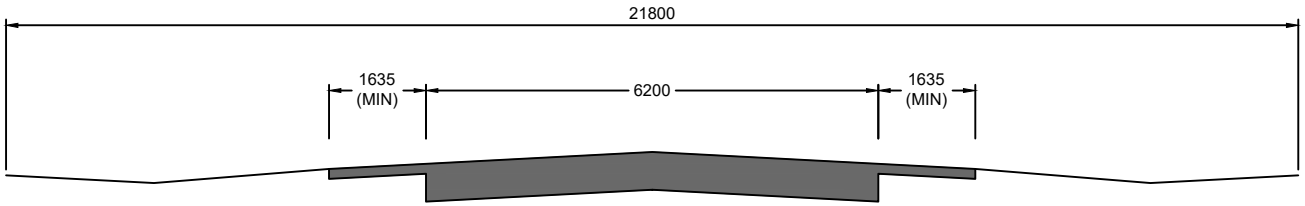


RURAL ACCESS

* V.P.D. = VEHICLES PER DAY



LOW DENSITY RESIDENTIAL COLLECTOR ROAD



LOW DENSITY RESIDENTIAL ACCESS ROAD

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NOTES:

1. FOR KERB DETAIL REFER TO DRAWINGS R150, R155

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

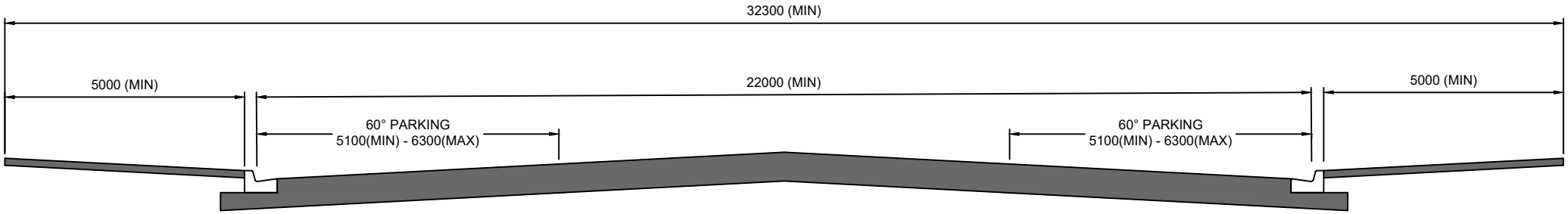
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

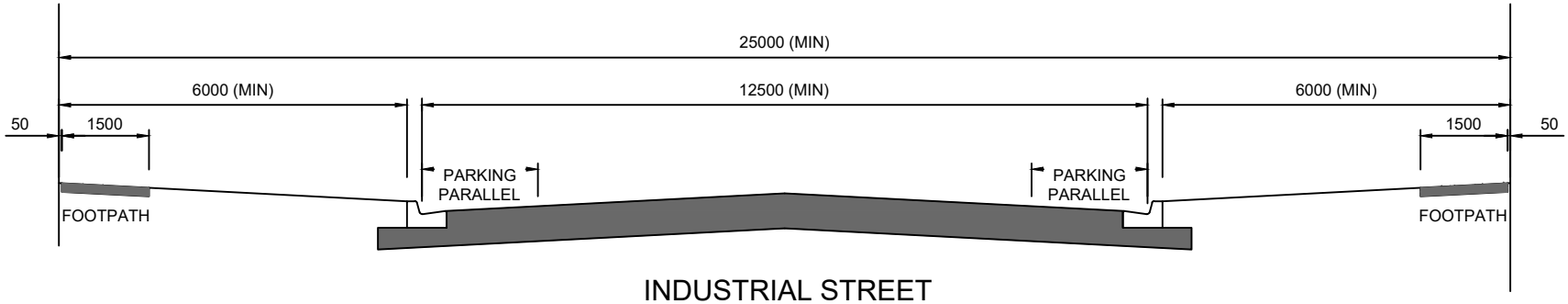
LAST UPDATED JULY 2019

R 110

NOT TO SCALE



COMMERCIAL STREET



INDUSTRIAL STREET

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

NOTES:

1. FOR KERB DETAIL REFER TO DRAWINGS R150, R155

TYPICAL ROAD PROFILES
COMMERCIAL STREET / INDUSTRIAL STREET

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

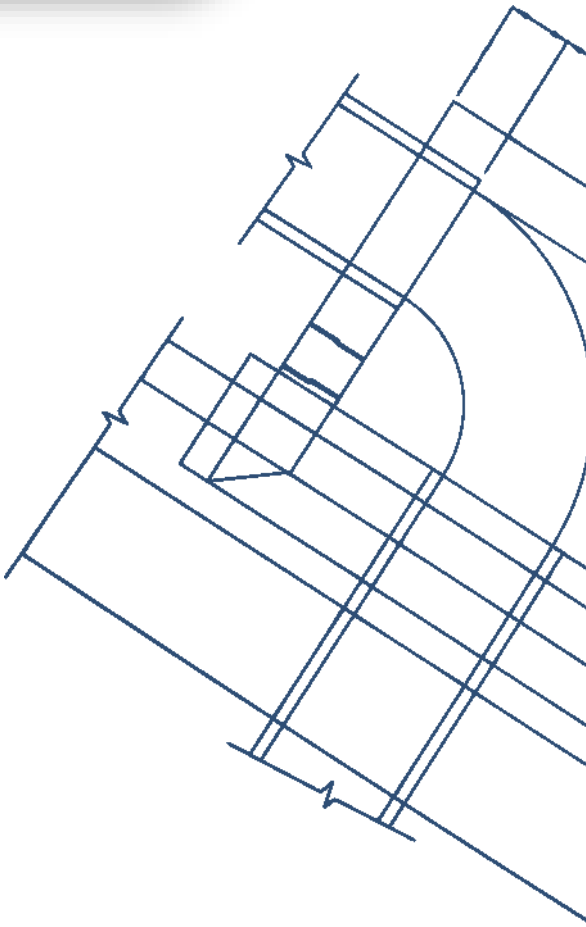
Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

R 115

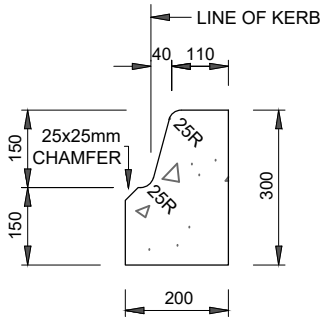
NOT TO SCALE

Kerb Profiles

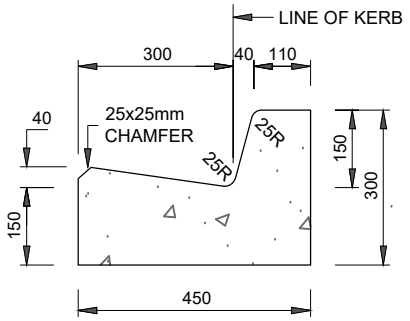


Banyule
CITY COUNCIL

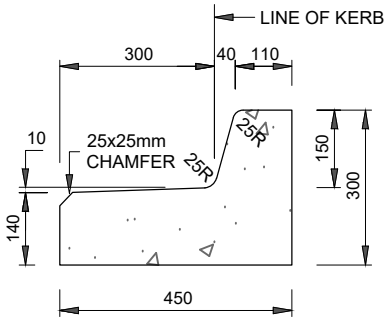
This page was intentionally left blank



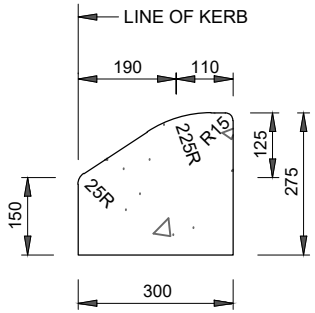
B1



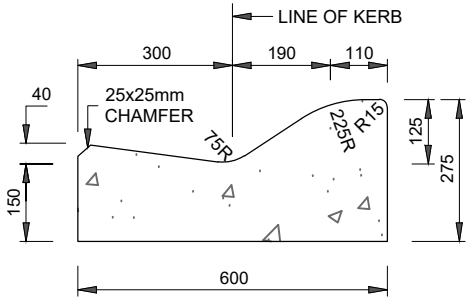
B2



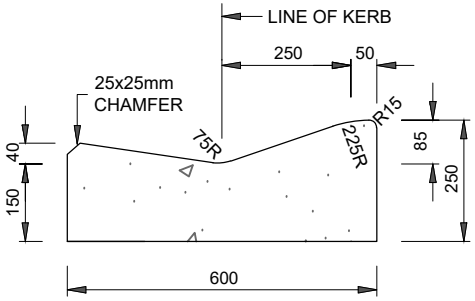
B3



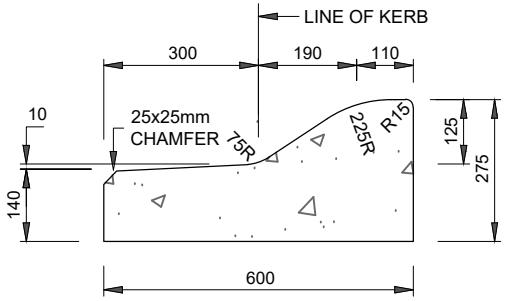
SM1



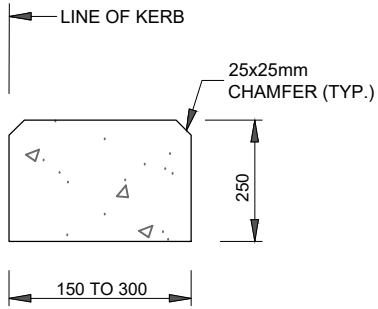
SM2



SM2-M (MODIFIED)



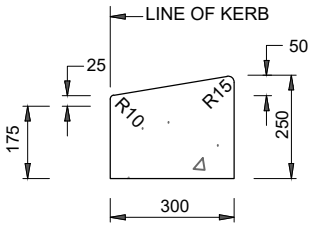
SM3



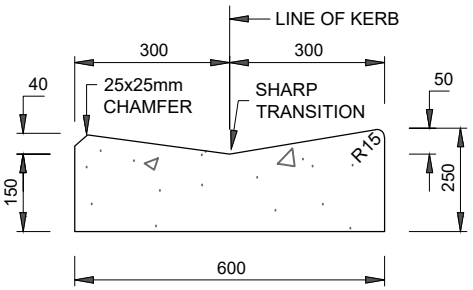
EDGE STRIP

NOTES:

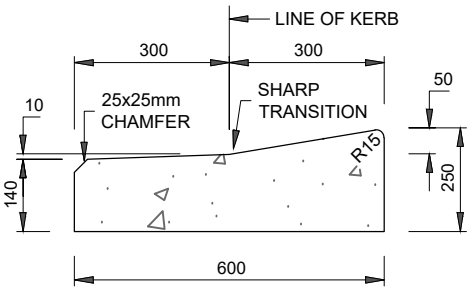
1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS FOR SPECIFIC REQUIREMENTS.
2. REFER TO AUSTROADS GUIDE TO ROAD DESIGN PART 3: GEOMETRIC DESIGN FOR THE RECOMMENDED USE OF KERBS AND CHANNELS.
3. CONCRETE SHALL BE NORMAL CLASS N25 STANDARD STRENGTH GRADE COMPLYING WITH THE REQUIREMENTS OF AS. 1379. 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 R 165)
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.



M1



M2



M3

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NOTES:

REFER TO THE NOTES ON THE DRAWING

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

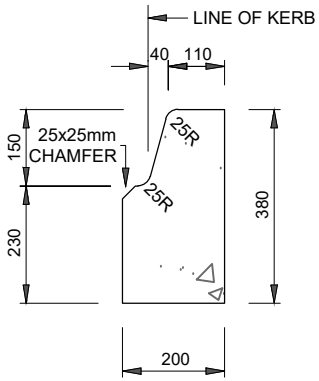
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

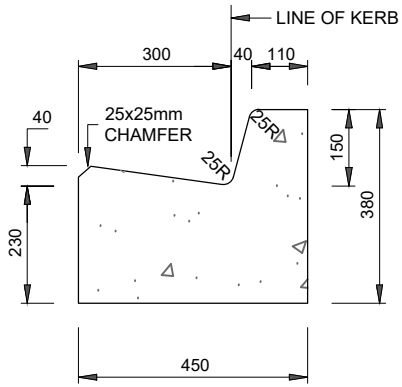
LAST UPDATED JULY 2019

R 150

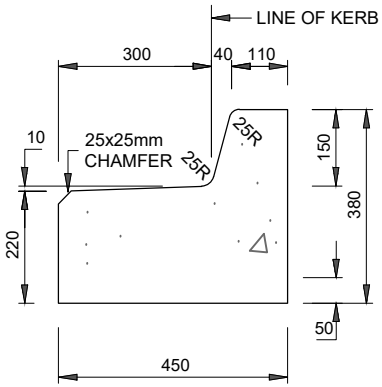
NOT TO SCALE



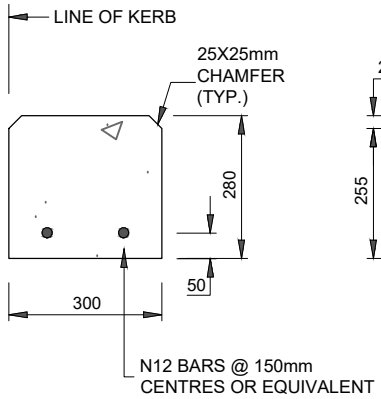
B1 (INDUSTRIAL)



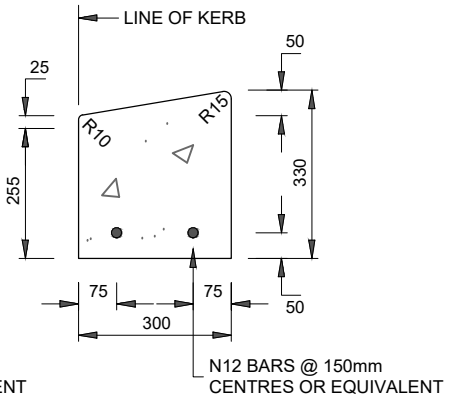
B2 (INDUSTRIAL)



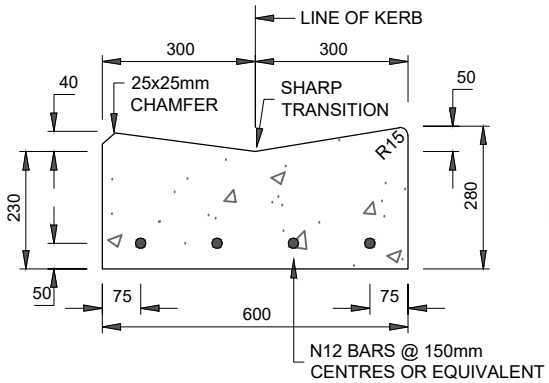
B3 (INDUSTRIAL)



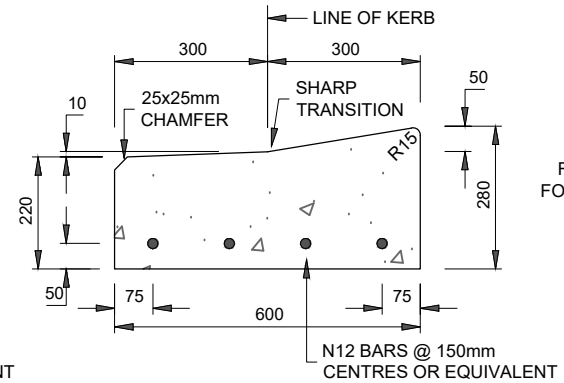
EDGE STRIP (INDUSTRIAL)



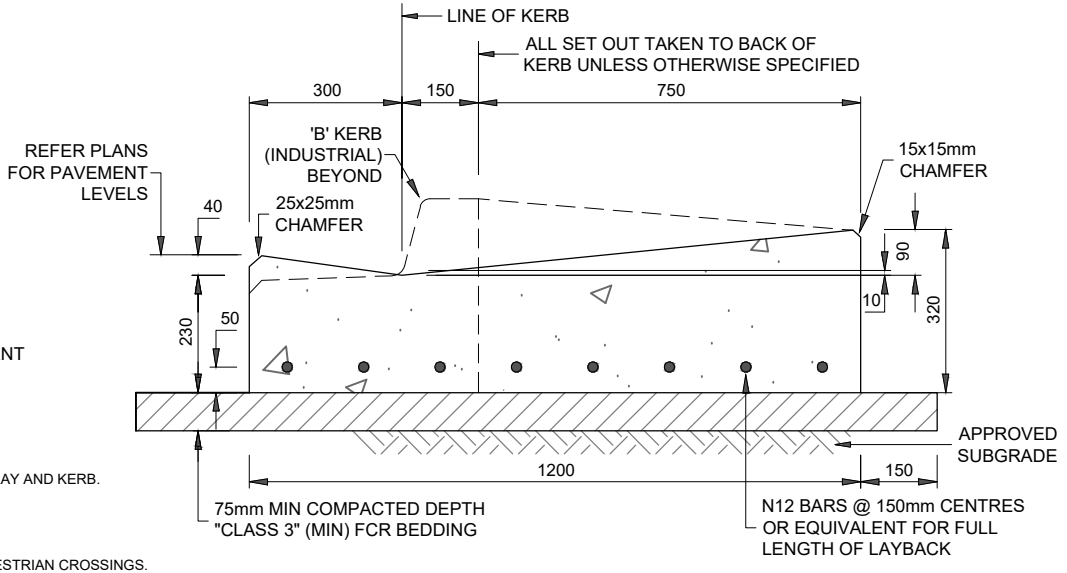
M1 (INDUSTRIAL)



M2 (INDUSTRIAL)



M3 (INDUSTRIAL)



TYPICAL INDUSTRIAL KERB LAYBACK

NOTES:

1. REFER TO AS. 2876-2000 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 R 165)
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)

NOTES (CONT.):

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

Banyule CITY COUNCIL

NOTE:

REFER TO THE NOTES ON THE DRAWING

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

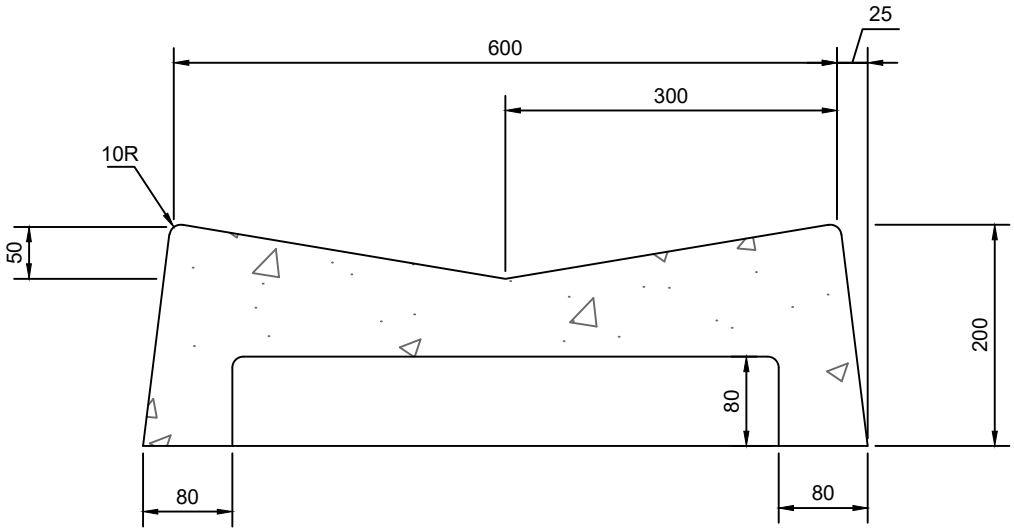
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

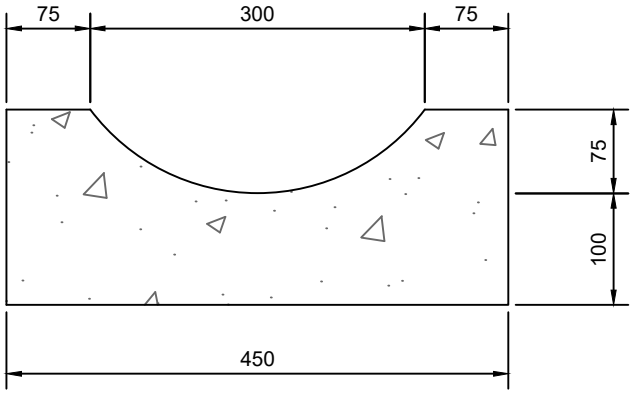
LAST UPDATED JULY 2019

R 155

NOT TO SCALE



600 OPEN INVERT CHANNEL



450 OPEN INVERT CHANNEL

NOTES:

1. CONCRETE STRENGTH TO BE 25 MPa
2. ALL DIMENSIONS ARE IN MILLIMETRES
3. AREA SHOWN HATCHED IS TO BE CUT BY TEMPLATE FOR ALL CONSTRUCTION JOINTS
4. CONSTRUCTION JOINTS TO BE NOT GREATER THAN 3m APART AND ARE TO BE AT REGULAR INTERVALS
5. ALL OPEN INVERT CHANNELS SHALL BE LAID ON A LAYER OF 50mm COMPACTED DEPTH OF 20mm CLASS 2 FINE CRUSHED ROCK

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

OPEN INVERT CHANNEL

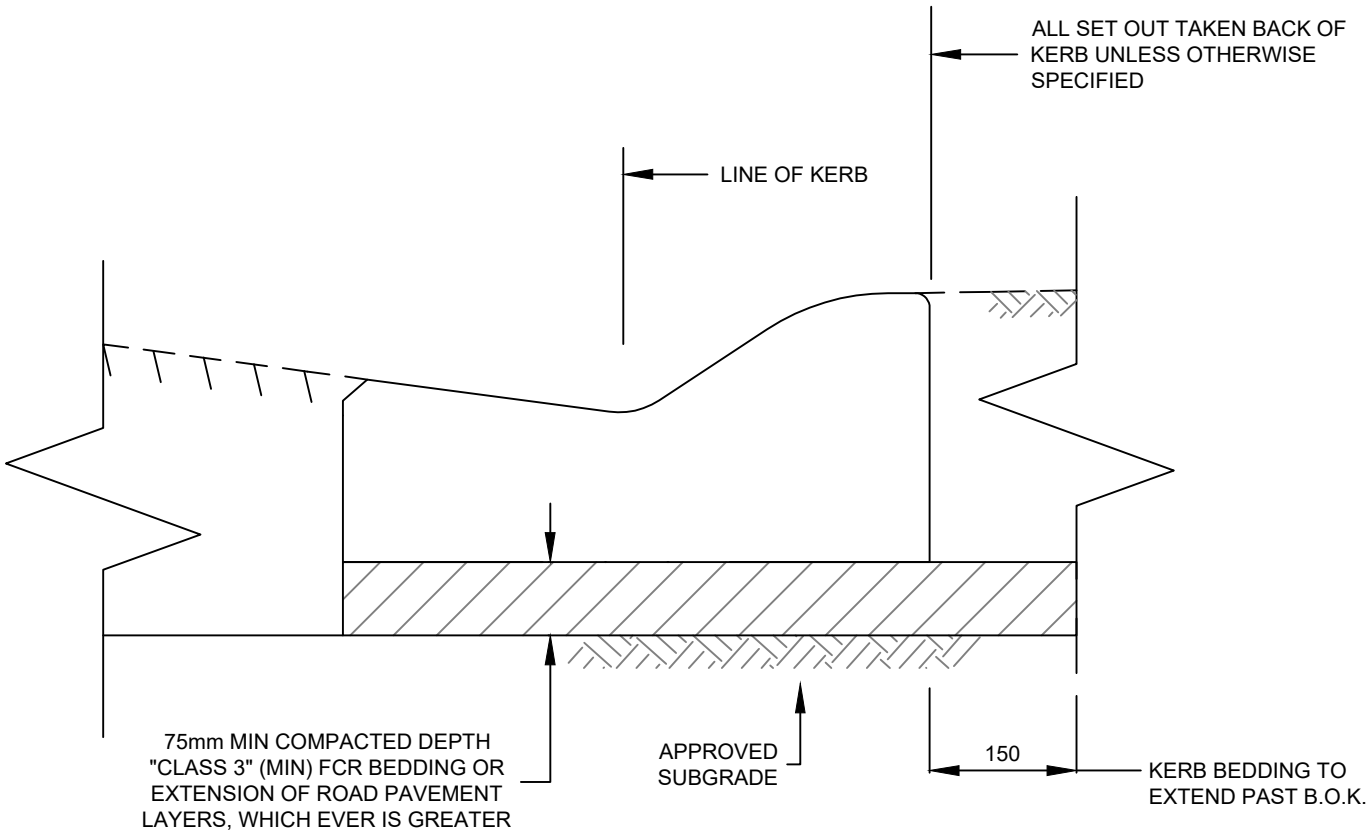
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

R 160

NOT TO SCALE



TYPICAL KERB BEDDING

NOTES:

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

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TYPICAL KERB BEDDING

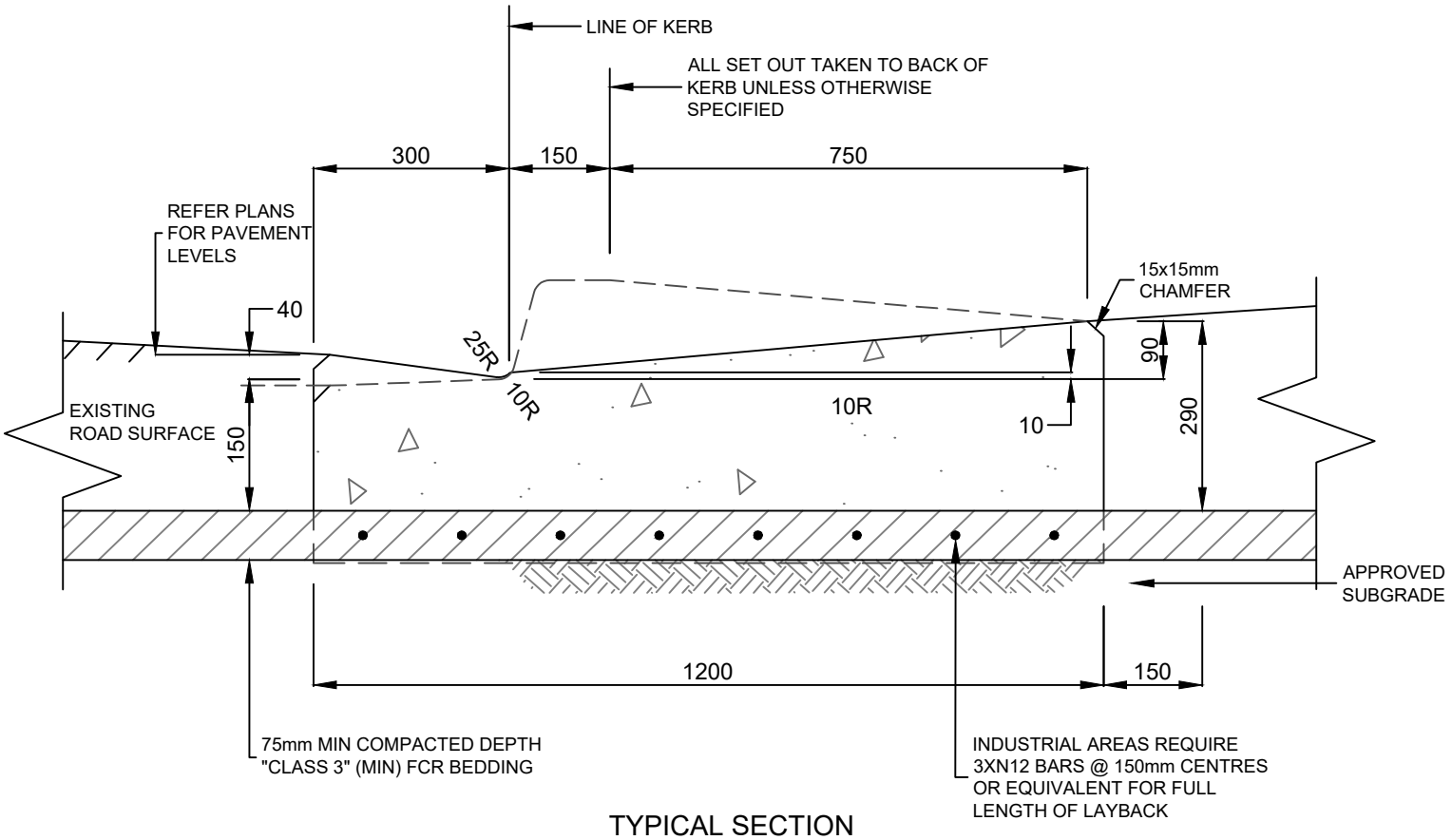
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

R 165

NOT TO SCALE



TYPICAL SECTION

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

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

LAYBACK FOR 'B2' & 'B3' KERBING

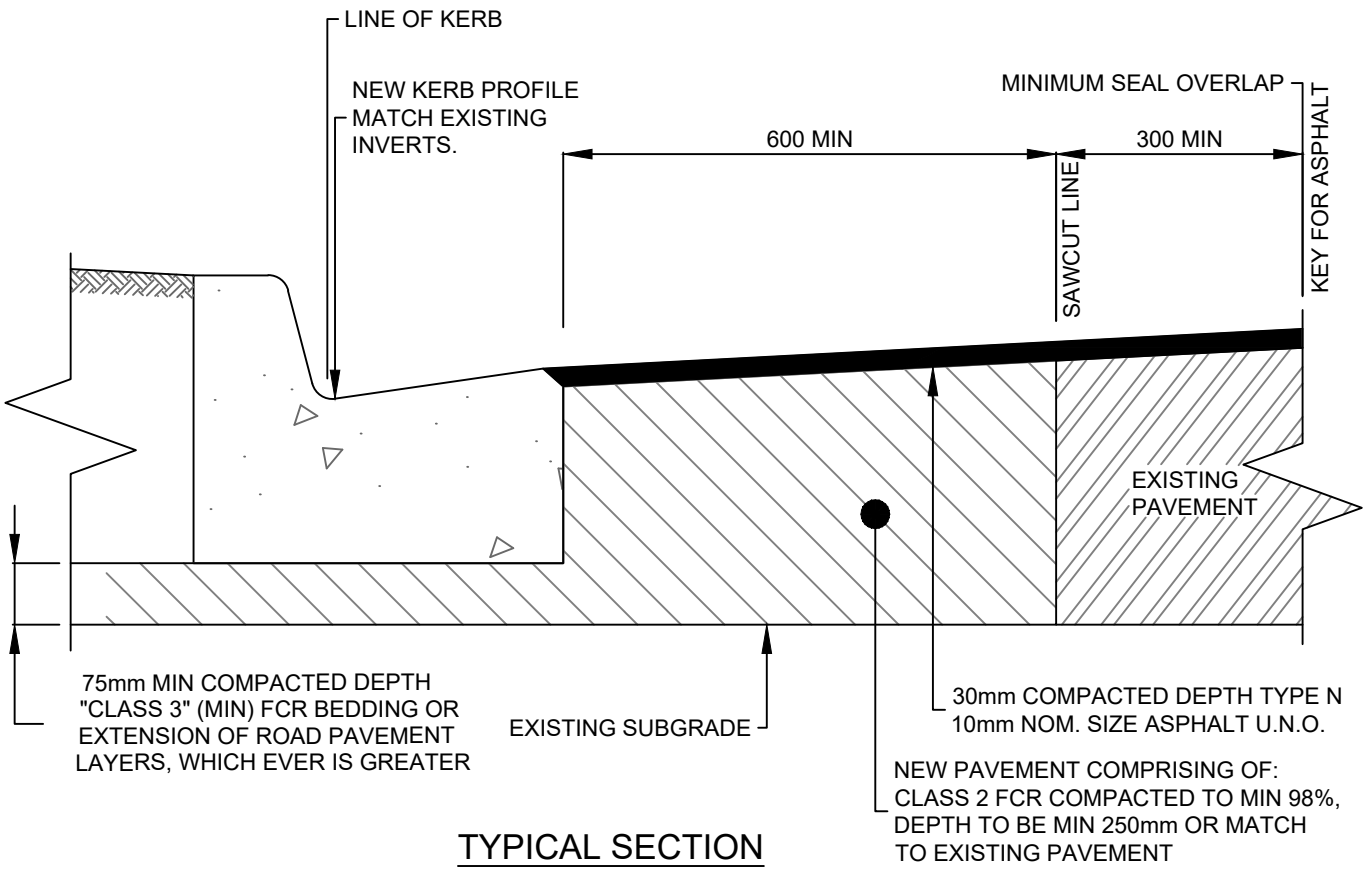
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

LAST UPDATED JULY 2019

R 170

NOT TO SCALE



TYPICAL SECTION

NOTES:

1. REFER TO AS. 2876-2000 CONCRETE KERBS AND CHANNELS
2. BEDDING TO BE COMPACTED CLASS 3 F.C.R. SUPPLIED BY THE CONTACTOR 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

Banyule CITY COUNCIL

KERB AND CHANNEL INSTALLATION ABUTTING EXISTING PAVEMENT

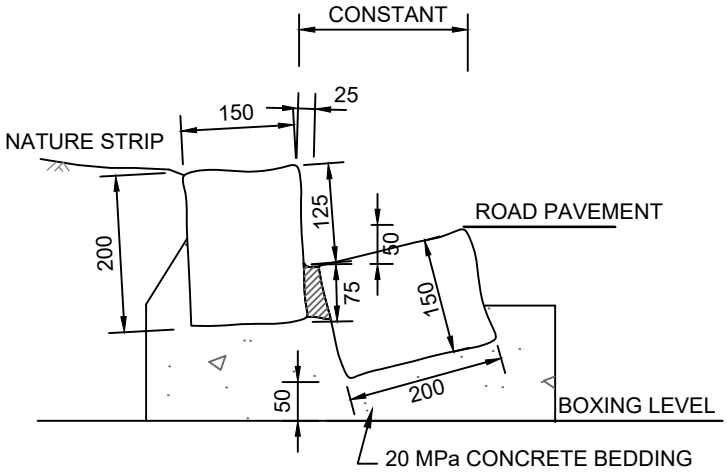
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

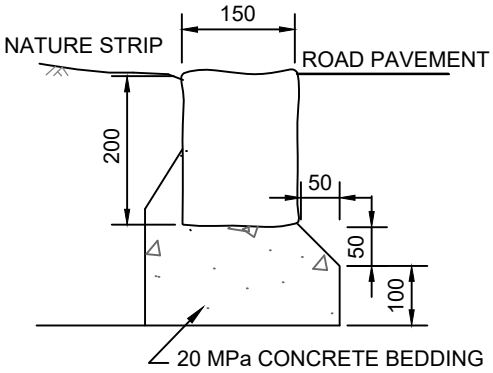
LAST UPDATED JULY 2019

R 175

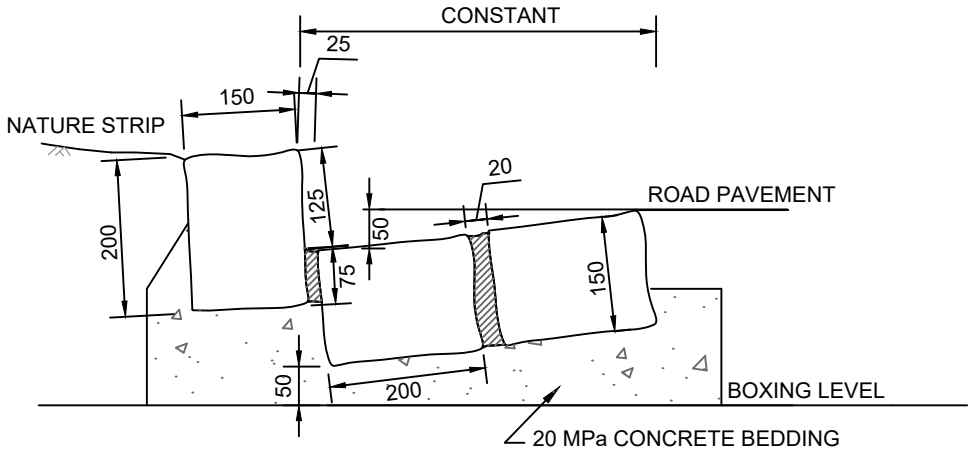
NOT TO SCALE



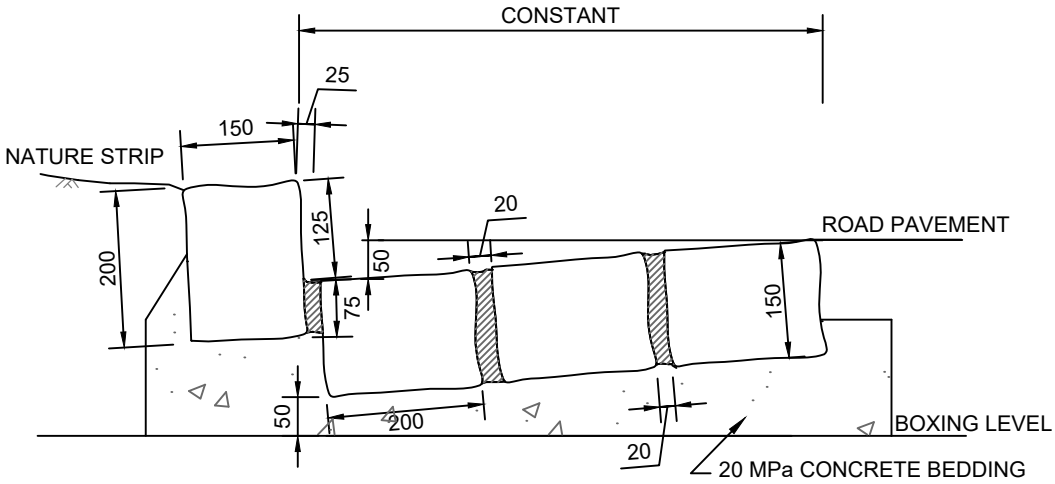
ONE PITCHER KERB



PITCHER EDGE STRIP



TWO PITCHER KERB



THREE PITCHER KERB

NOTES:

1. PITCHER SIZES QUOTED ARE AN AVERAGE SIZE ONLY.
2. ALL GROUTED JOINTS TO BE AVERAGE 20mm WIDE BY DEPTH OF PITCHER FLUSH FINISH ONLY. MORTAR TO BE CHARCOAL COLOURED.
3. PITCHERS TO BE BROOMED AFTER GROUTING HAS BEEN PLACED TO REMOVE EXCESS GROUTING.
4. WHEN RECONSTRUCTING EXISTING THE NUMBER OF PAVERS IS TO MATCH ORIGINAL DETAIL
5. WHEN INSTALLING NEW PAVERS THE PATTERN IS TO BE CONSISTENT WITH SURROUNDING AREA OR AS DIRECTED BY THE ENGINEER.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

PITCHER KERB

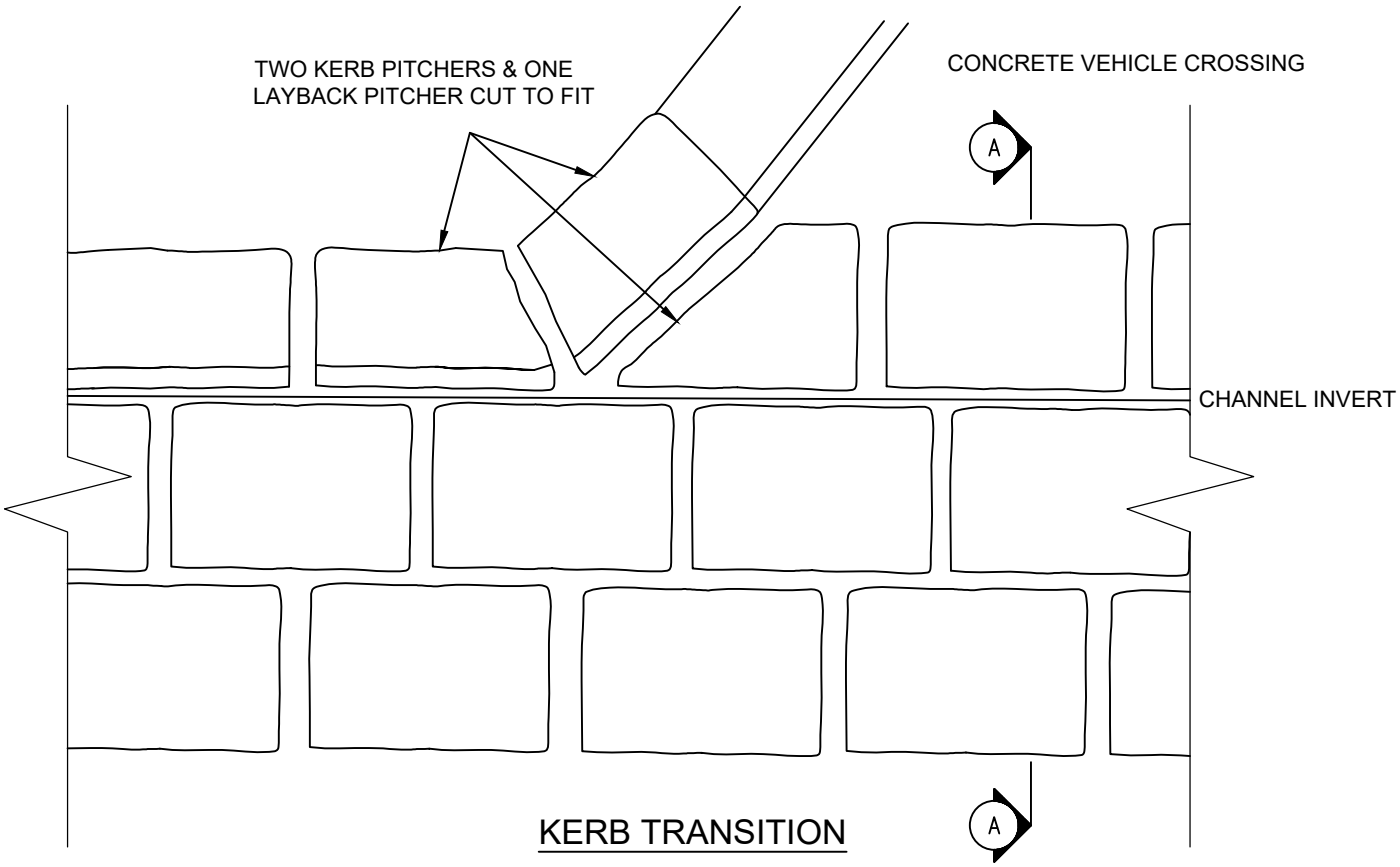
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

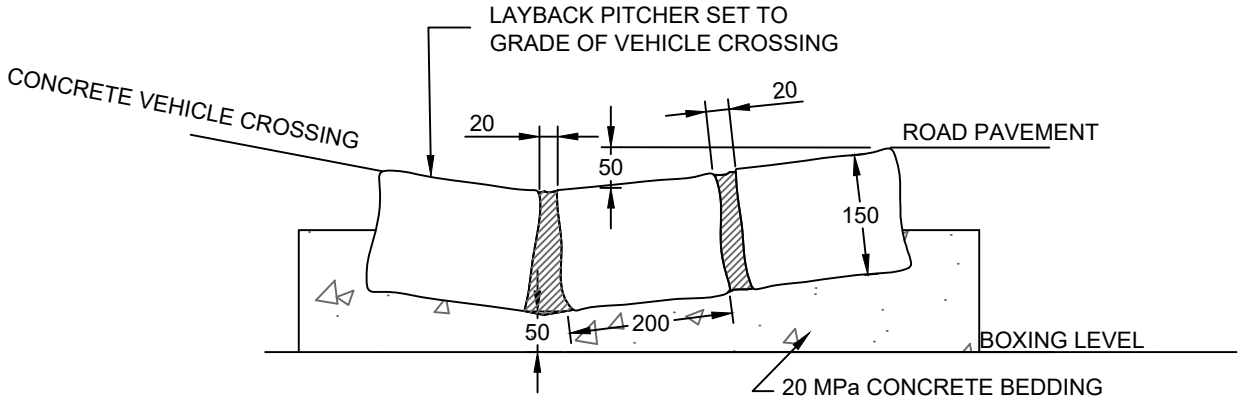
LAST UPDATED JULY 2019

R 180

NOT TO SCALE



KERB TRANSITION



SECTION A-A TWO PITCHER CHANNEL

NOTES:

1. PITCHER SIZES SHOWN ARE AVERAGE SIZES ONLY. USE PITCHERS OF BEST FIT
2. ALL GROUTED JOINTS TO BE AVERAGE 20mm WIDE BY DEPTH OF PITCHER, FLUSH FINISH ONLY. MORTAR TO BE CHARCOAL COLOURED.
3. PITCHERS TO BE BROOMED AFTER GROUTING HAS BEEN PLACED, TO REMOVE EXCESS GROUTING.
4. FOR REVERSE FALL CROSSINGS INVERT TO TOP OF LAY BACK DIMENSION 100mm.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TWO PITCHER TRAY KERB & CHANNEL AT CROSSING

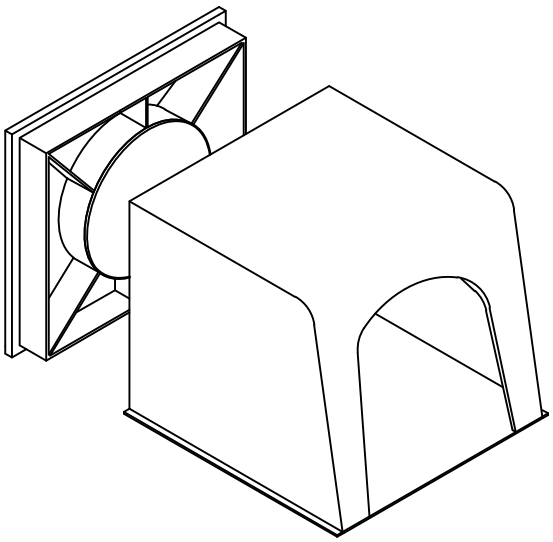
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

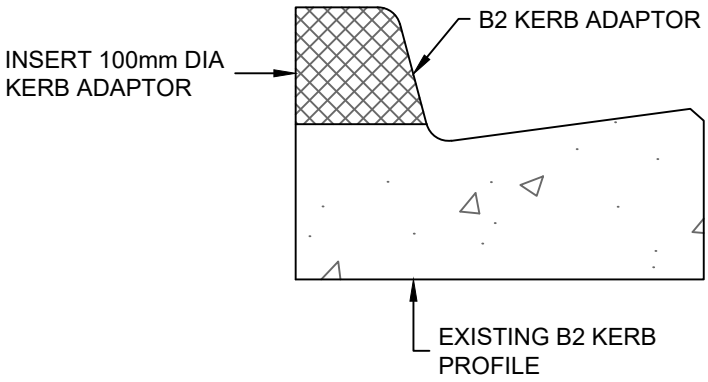
LAST UPDATED JULY 2019

R 185

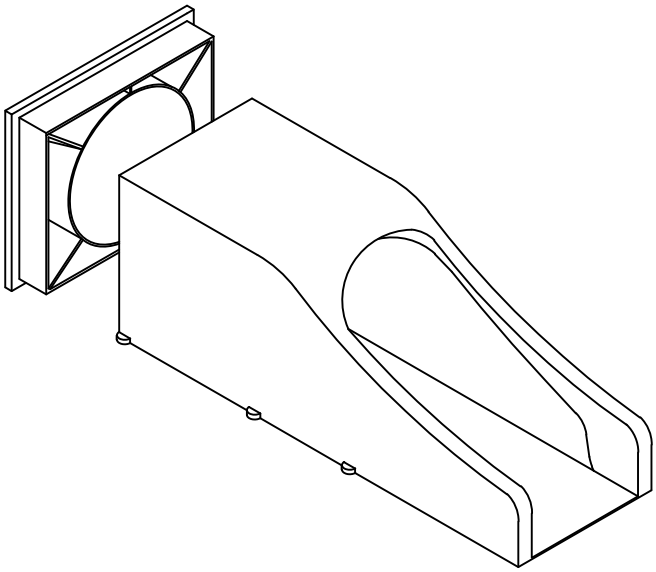
NOT TO SCALE



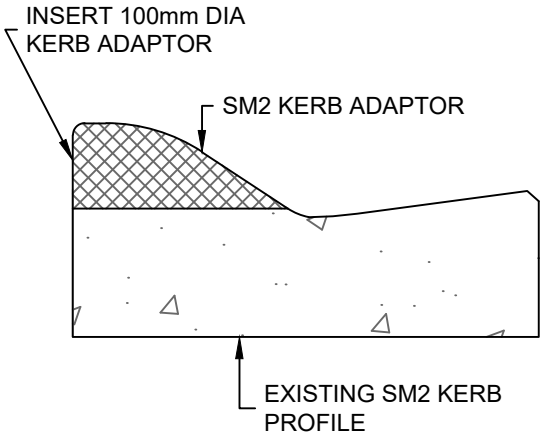
B2 KERB ADAPTOR



B2 KERB WITH HEAVY DUTY KERB ADAPTOR SECTIONAL VIEW



SM2 KERB ADAPTOR



SM2 KERB WITH HEAVY DUTY KERB ADAPTOR SECTIONAL VIEW

NOTES:

ALL KERB ADAPTORS ARE TO BE AN APPROVED PROPRIETARY PRODUCT CONSTRUCTED FROM HEAVY DUTY HOT DIPPED GALVANIZED MILD STEEL. KERB IS TO BE NEATLY SAW CUT & KERB ADAPTOR EPOXIED INTO POSITION. B2 KERB ADAPTOR NOW AVAILABLE IN GALVANIZED STEEL.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

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

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

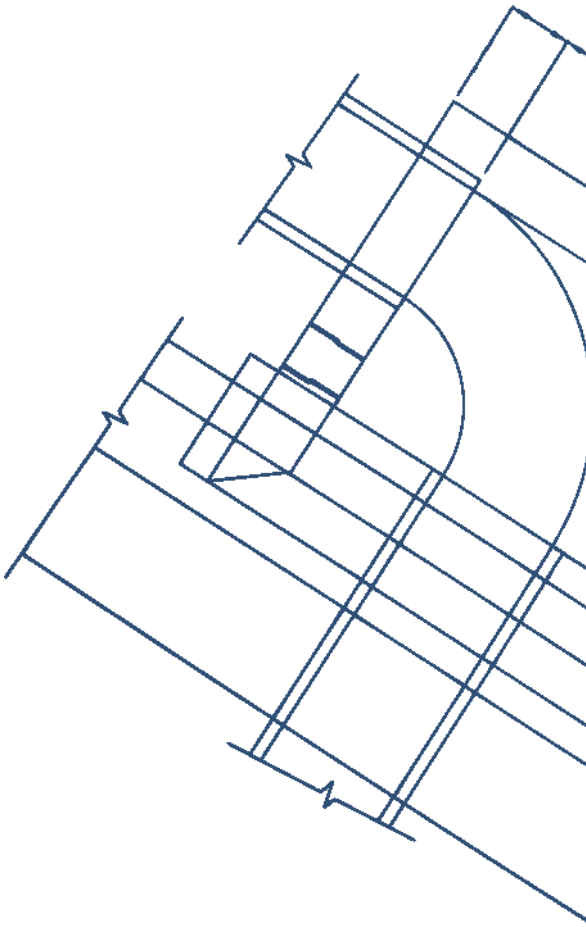
LAST UPDATED JULY 2019

R 190

NOT TO SCALE

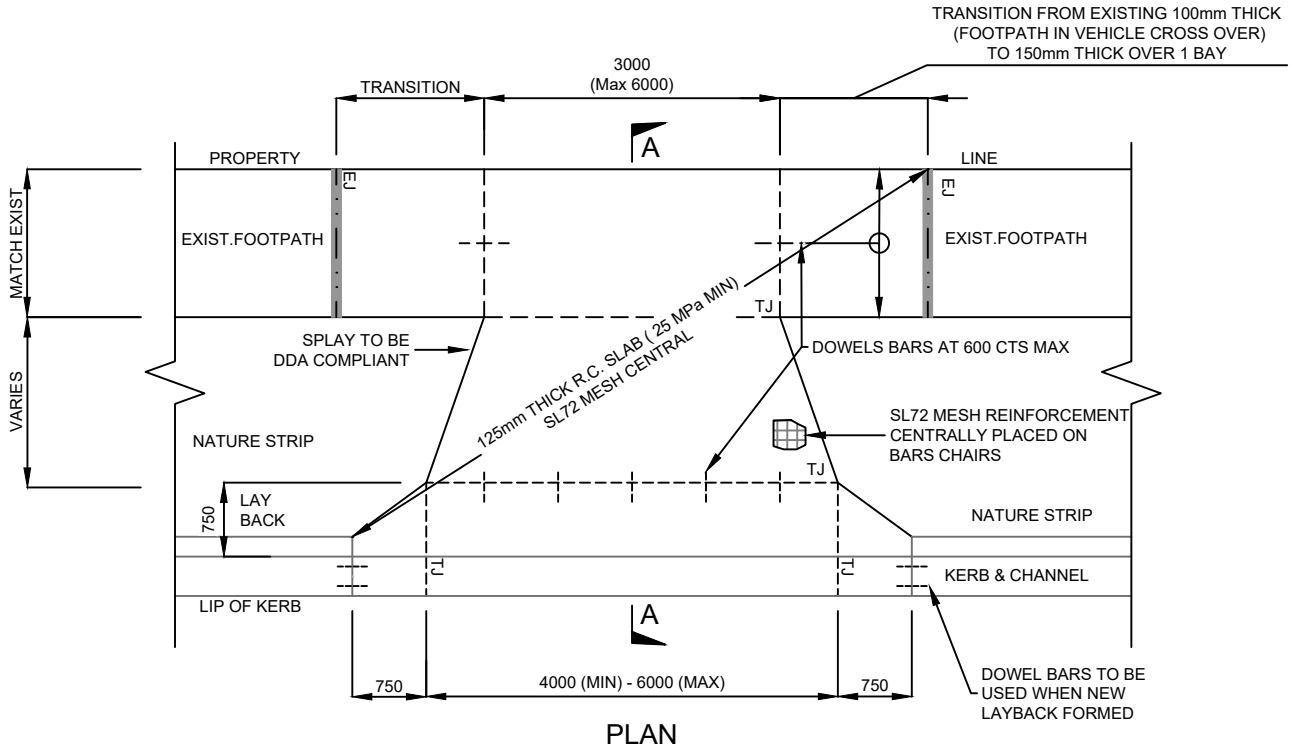
This page was intentionally left blank

Vehicle Crossovers

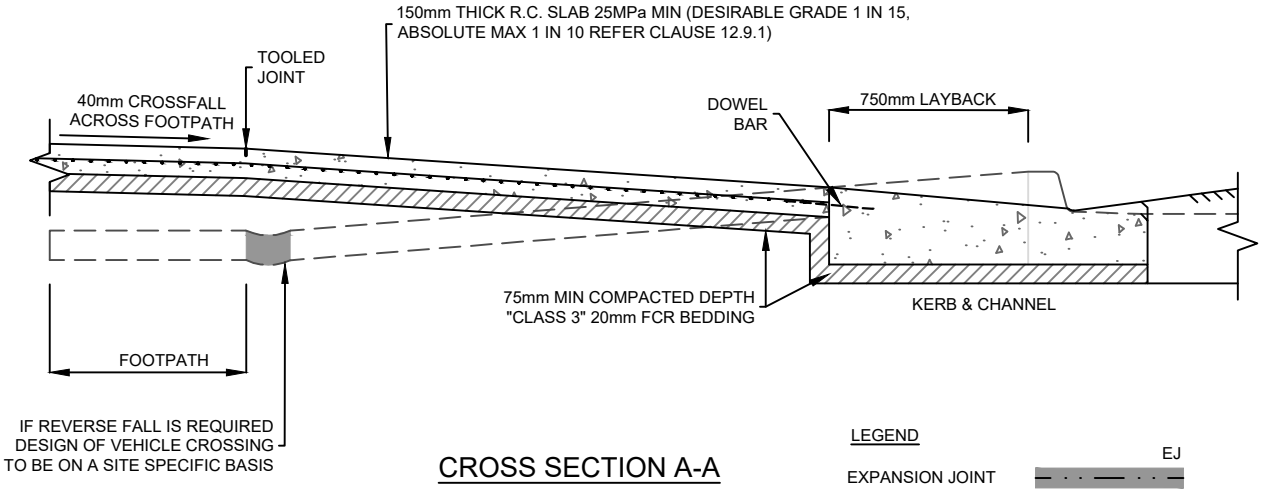


Banyule
CITY COUNCIL

This page was intentionally left blank



PLAN



CROSS SECTION A-A

LEGEND

EXPANSION JOINT — EJ

TOOLED JOINTS — TJ

NOTES:

1. THIS DRAWING DETAILS DIMENSIONS FOR STANDARD RESIDENTIAL CROSSINGS ONLY.
2. CROSSING WIDTHS EXCEEDING THE MAXIMUM ALLOWABLE WILL REQUIRE APPLICATION FOR SPECIAL CONSIDERATION.
3. 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 R12 X 300mm LONG DOWEL BARS.
4. 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 A 155.
5. ADDITIONAL TOOLED JOINT REQUIRED IF DISTANCE FROM BACK OF KERB TO FOOTPATH IS GREATER THAN 3000 AND SHALL BE PLACED AT THE MIDPOINT OF THE DISTANCE.
6. 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 OF 9 METRES.
7. 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

Banyule CITY COUNCIL

RETROFIT RESIDENTIAL VEHICLE CROSSING DETAIL

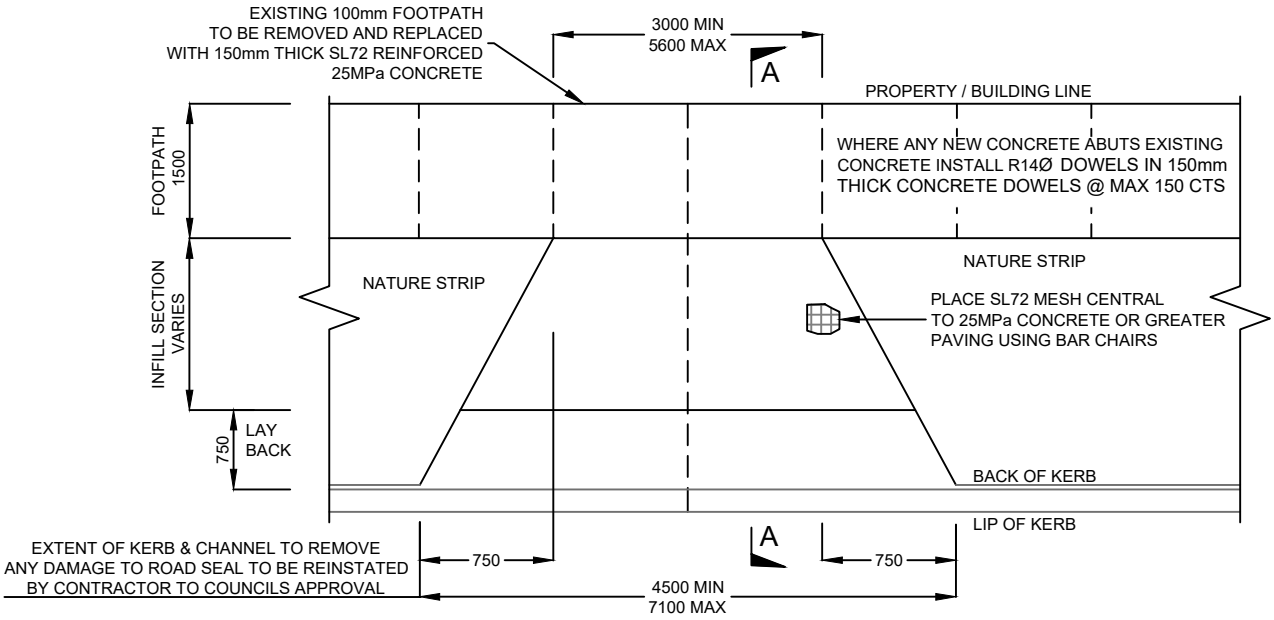
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

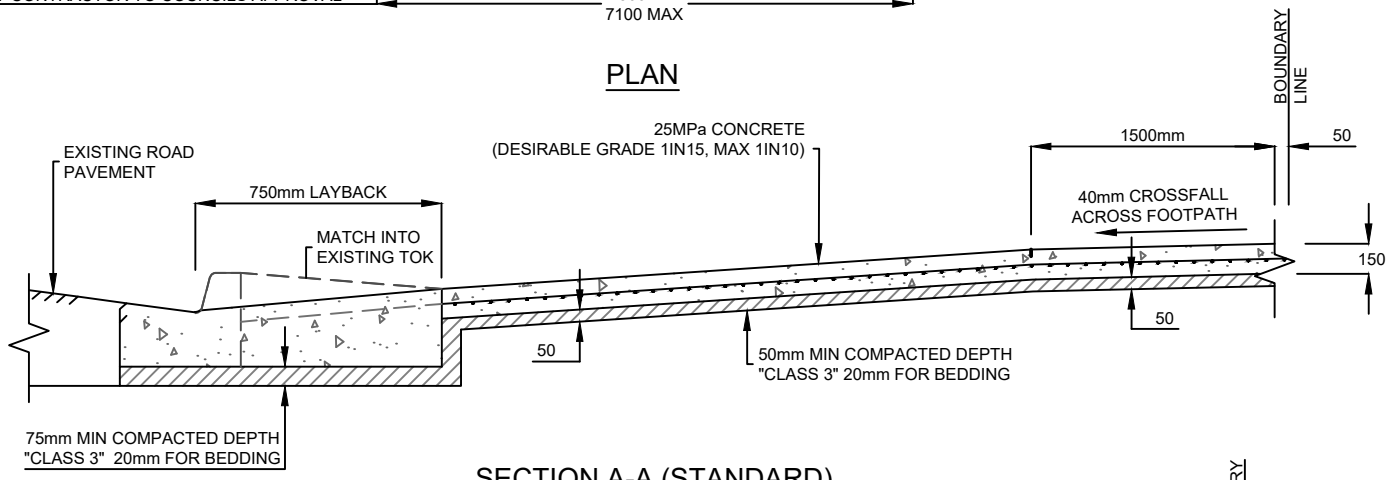
LAST UPDATED JULY 2019

R 200

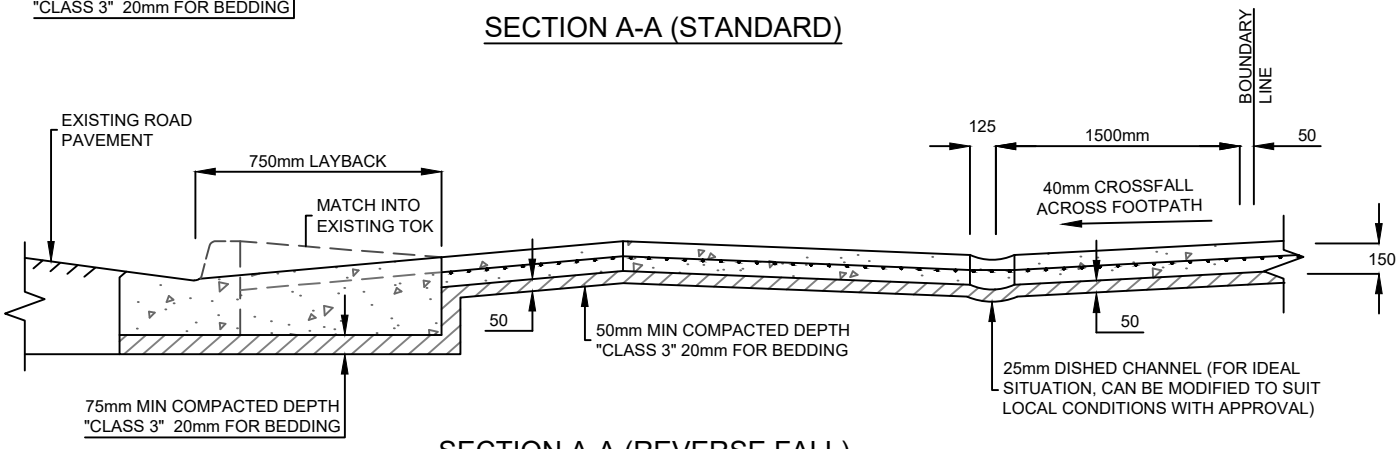
NOT TO SCALE



PLAN



SECTION A-A (STANDARD)



SECTION A-A (REVERSE FALL)

(ONLY TO BE USED WITH COUNCILS APPROVAL)

NOTES:

1. BULL NOSE MAY BE APPLICABLE FOR GRADES STEEPER THAN 1IN15
2. LAYBACK & CROSSOVER, TO BE CONSTRUCTED IN PLAIN CONCRETE ONLY (NO COLOURED CONCRETE BEYOND PROPERTY BOUNDARY) T.O.K. DENOTES TOP OF KERB.
3. STIPPLE FINISH REQUIRED

LEGEND:

CONSTRUCTION JOINTS — — — — — —

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NEW RESIDENTIAL SINGLE VEHICLE CROSSING DETAIL

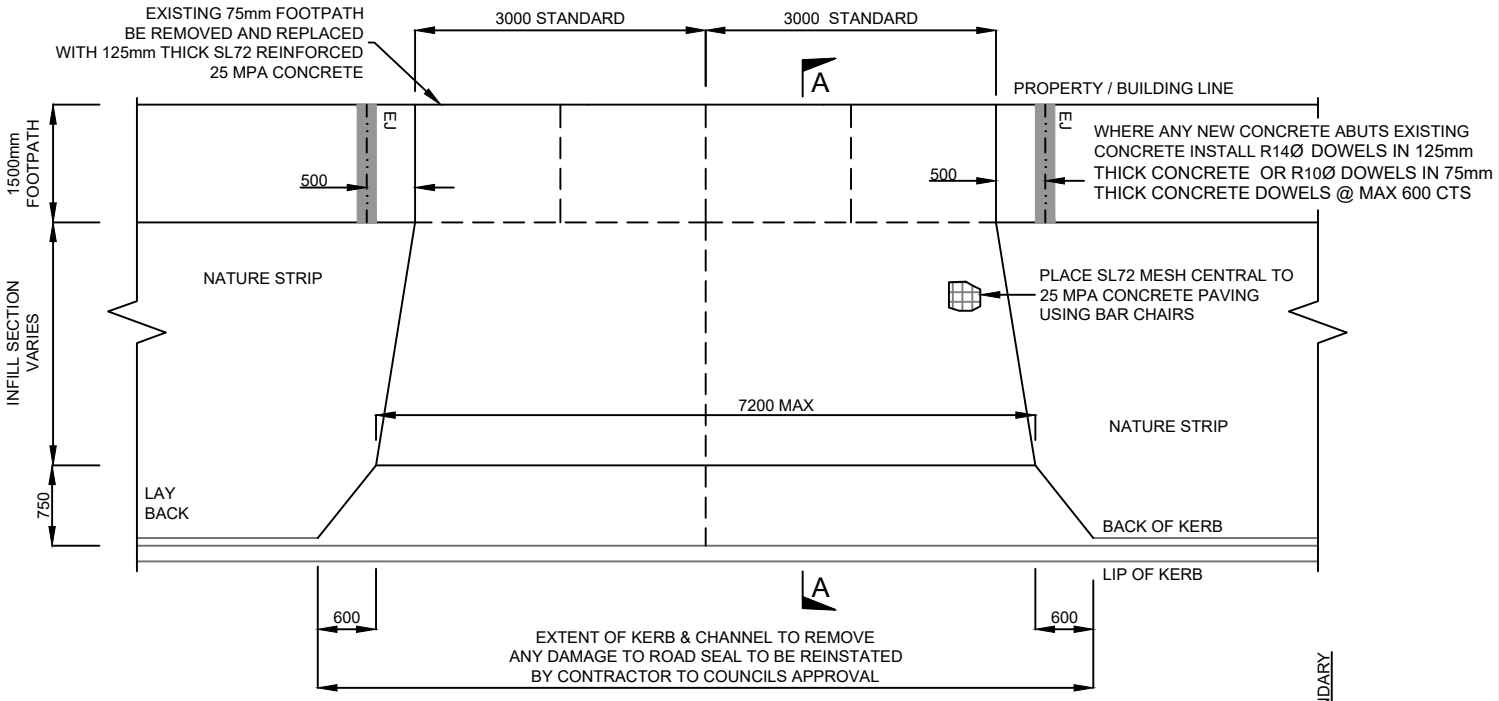
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

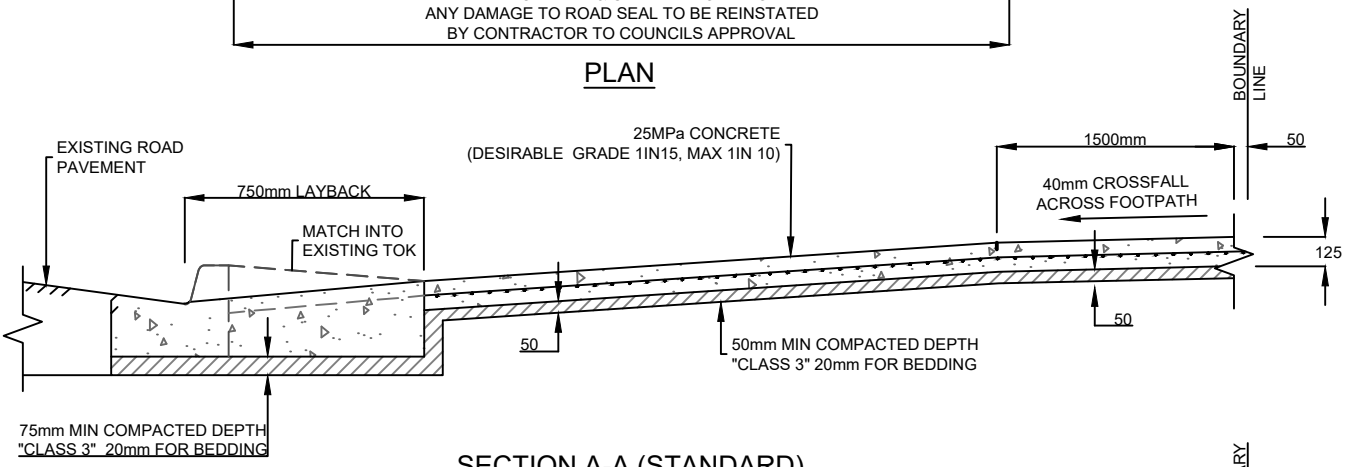
LAST UPDATED JULY 2019

R 205

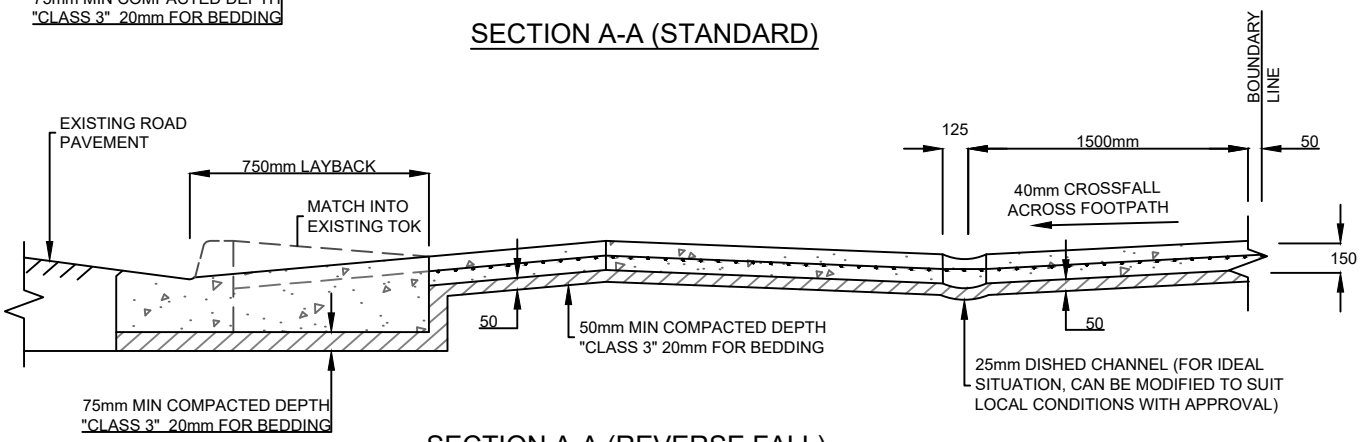
NOT TO SCALE



PLAN



SECTION A-A (STANDARD)



SECTION A-A (REVERSE FALL)

(ONLY TO BE USED WITH COUNCILS APPROVAL)

NOTES:

1. LAYBACK & CROSSOVER, TO BE CONSTRUCTED IN PLAIN CONCRETE ONLY (NO COLOURED CONCRETE BEYOND PROPERTY BOUNDARY) T.O.K DENOTES TOP OF KERB.
2. REINFORCEMENT MESH TO BE CENTRALLY PLACED.
3. 150mm CONCRETE DEPTH WITH BAR CHAIRS.

LEGEND:

CONSTRUCTION JOINTS

EXPANSION JOINT EJ

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NEW RESIDENTIAL SHARED / DOUBLE VEHICLE CROSSING DETAILS

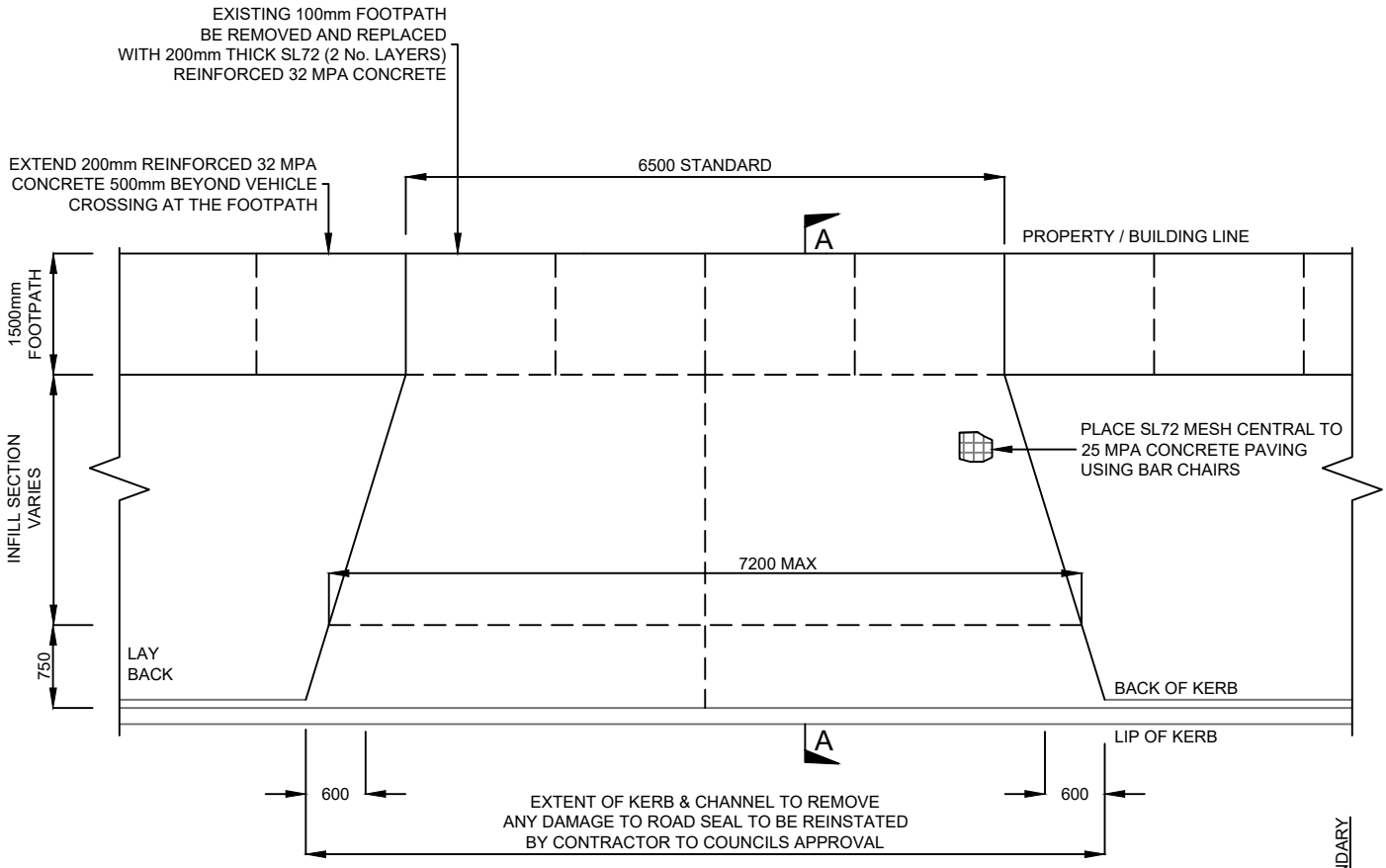
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

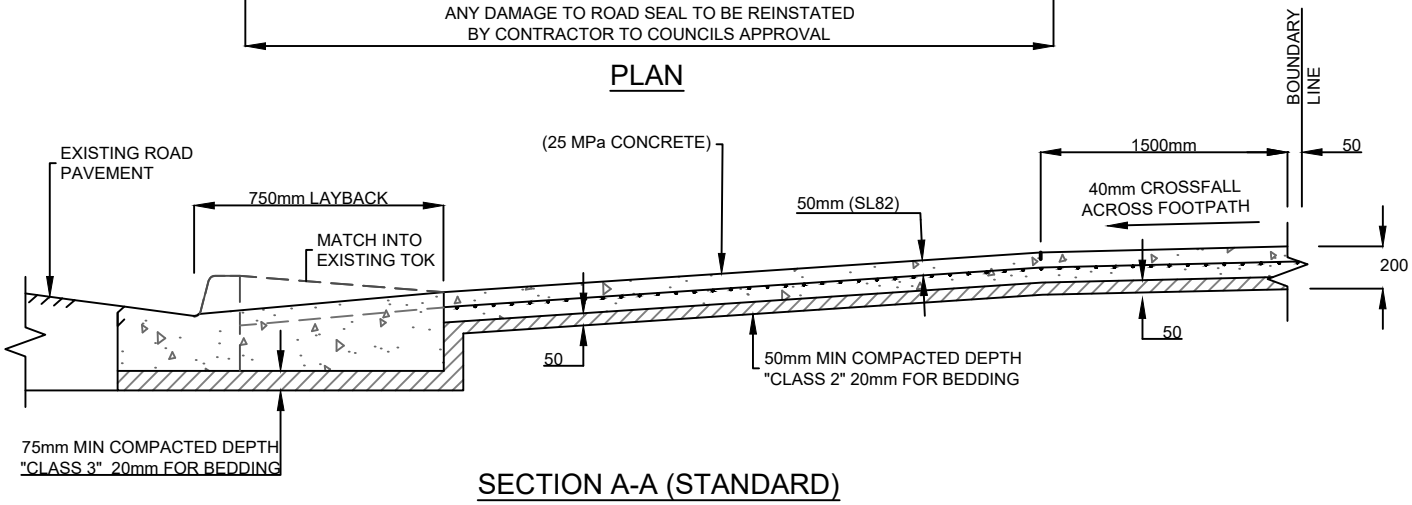
LAST UPDATED JULY 2019

R 210

NOT TO SCALE



PLAN



SECTION A-A (STANDARD)

NOTES:

1. T.O.K DENOTES TOP OF KERB
2. TOOL JOINT TO BE DETERMINED ON SITE
3. CONCRETE COVER FOR CROSSOVER 200MM WITH 2xSL72 REINFORCED WITH BAR CHAIRS
4. CROSSFALL GRADE AT 1 IN 10

LEGEND:

CONSTRUCTION JOINTS — — — — —

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

NEW INDUSTRIAL VEHICLE CROSSING DETAIL

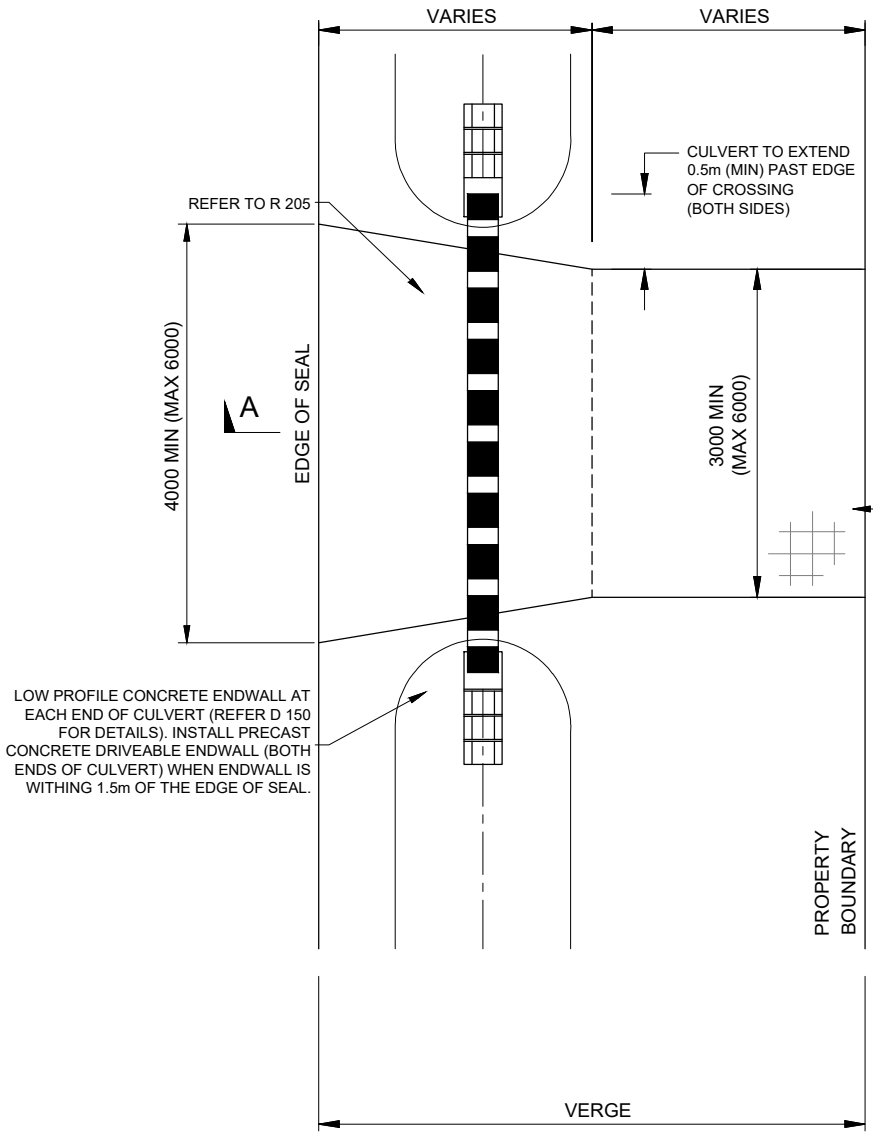
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

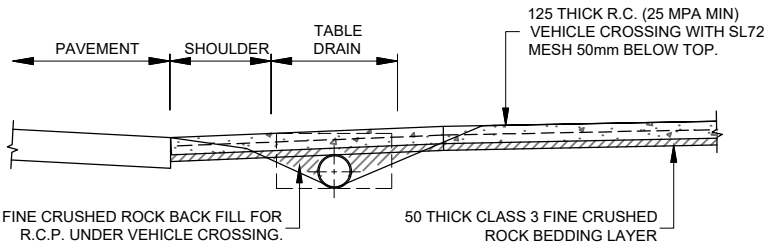
LAST UPDATED JULY 2019

R 215

NOT TO SCALE



PLAN



SECTION A-A

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 OF THE EDGE OF SEAL
8. FOR 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. CULVERT TO BE LOCATED AT LEAST 600mm FROM EDGE OF SEAL
11. PIPE DIAMETER MIN IS 225 OR GREATER PIPE SIZE TO BE DETERMINED BY AUTHORISED OFFICER
12. CROSSING PAVEMENT TO BE SEALED WHERE ABUTS A SEALED ROAD.
13. 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

Banyule CITY COUNCIL

TYPICAL SWALE DRAIN VEHICLE CROSSING

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

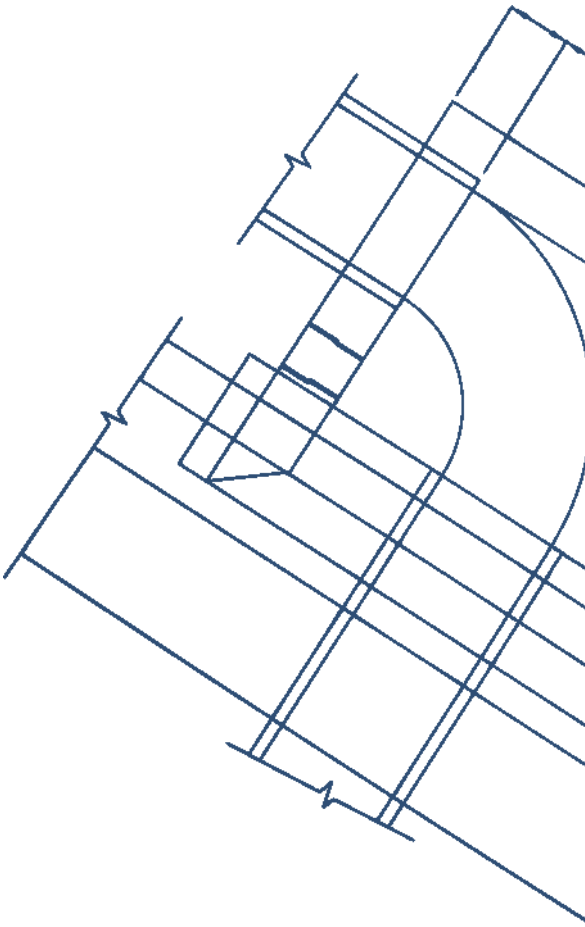
LAST UPDATED JULY 2019

R 220

NOT TO SCALE

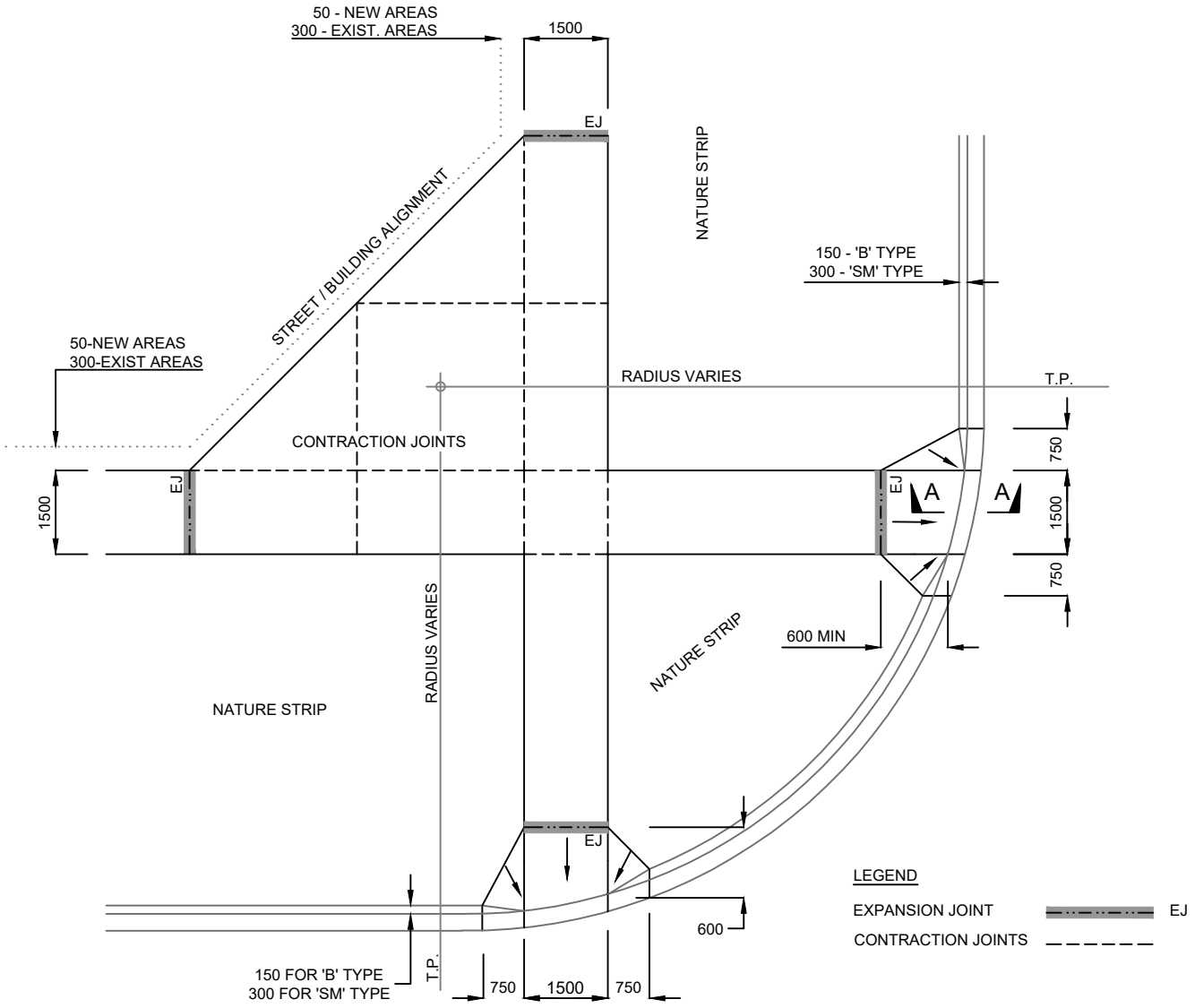
This page was intentionally left blank

Footpaths

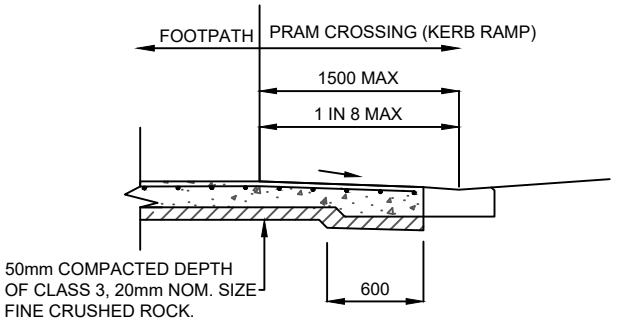


Banyule
CITY COUNCIL

This page was intentionally left blank



TYPICAL ARRANGEMENT PLAN



SECTION A-A

NOTES:

1. LOCATION OF CROSSING, GRADE AND DIMENSIONS 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 25MPA.
6. BEDDING TO BE COMPACTED CLASS 3 (OR BETTER) F.C.R. SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED.
7. IF SPRAY IS NOT REQUIRED FOOTPATH IS TO CONTINUE THROUGH TO LAYBACKS.
8. TGI'S (TILES), WHERE REQUIRED, ARE TO BE INSTALLED TO AS1428.4

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

PEDESTRIAN CROSSING

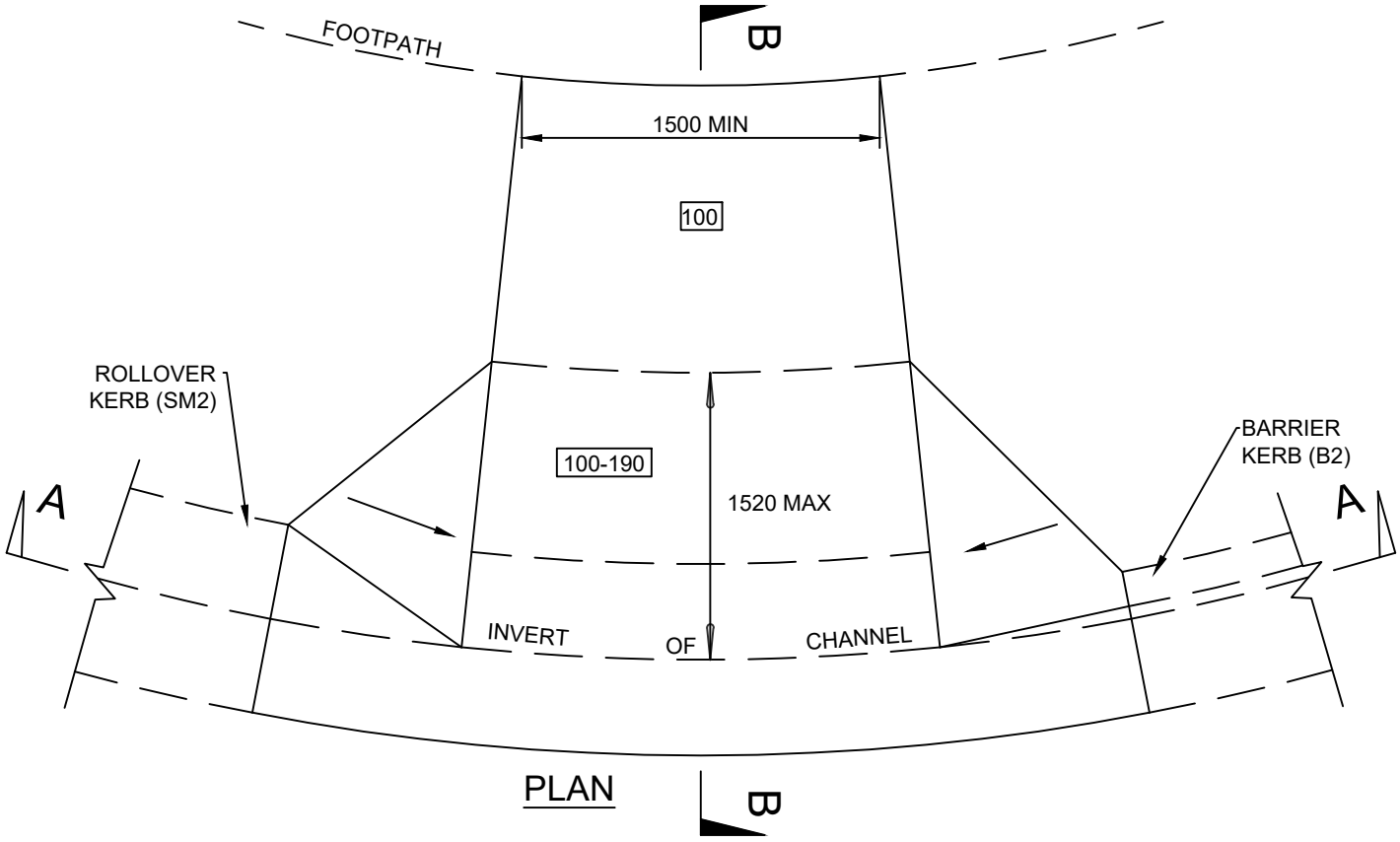
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

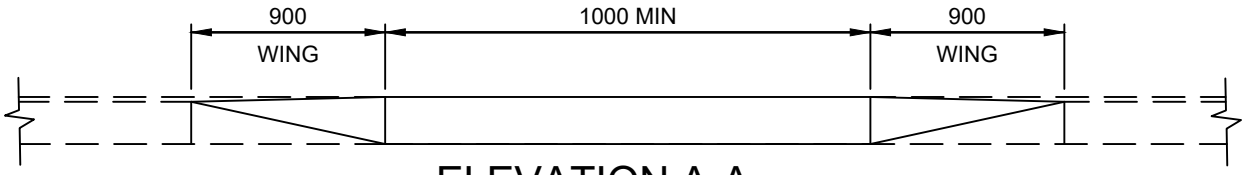
LAST UPDATED JULY 2019

R 250

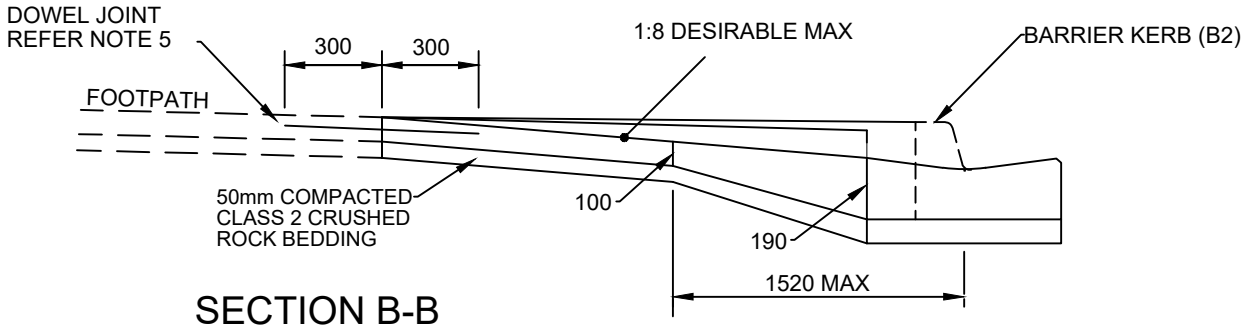
NOT TO SCALE



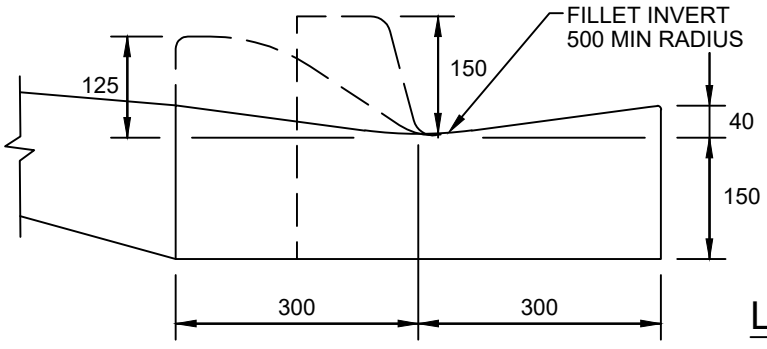
PLAN



ELEVATION A-A



SECTION B-B



LAYBACK DETAIL

NOTES:

1. CONCRETE THICKNESSES SHOWN THUS: 100
2. CONCRETE STRENGTH TO BE 25MPa.
3. CROSSINGS WITHIN INDUSTRIAL AREAS TO BE REINFORCED WITH SL72 MESH
4. ADJACENT NATURE STRIP AREAS TO BE TOPSOILED & SEEDED
5. 5. R12 DOWELS @ 500 CRS, TO BE PROVIDED WHERE FOOTPATH IS CONSTRUCTED BEFORE CROSSING INFILL

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

KERB RAMP

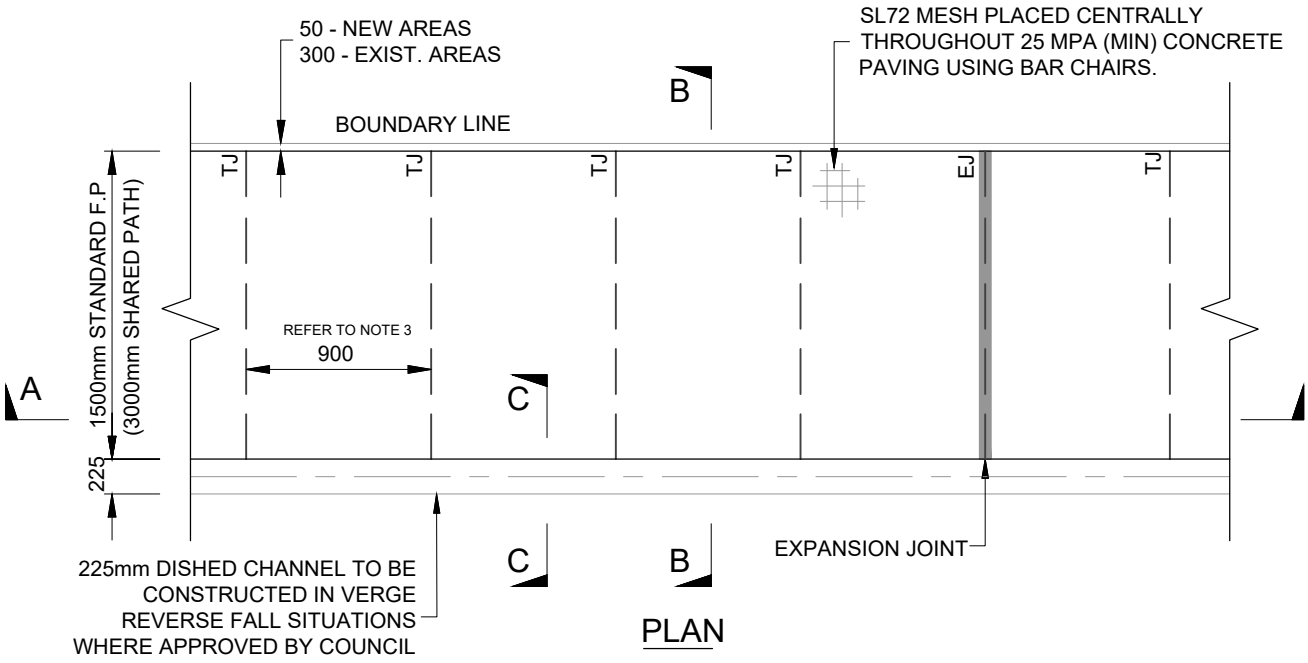
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

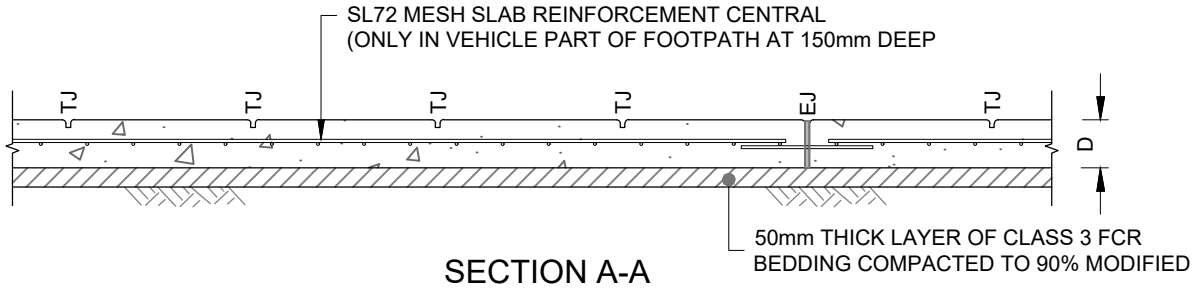
LAST UPDATED JULY 2019

R 255

NOT TO SCALE

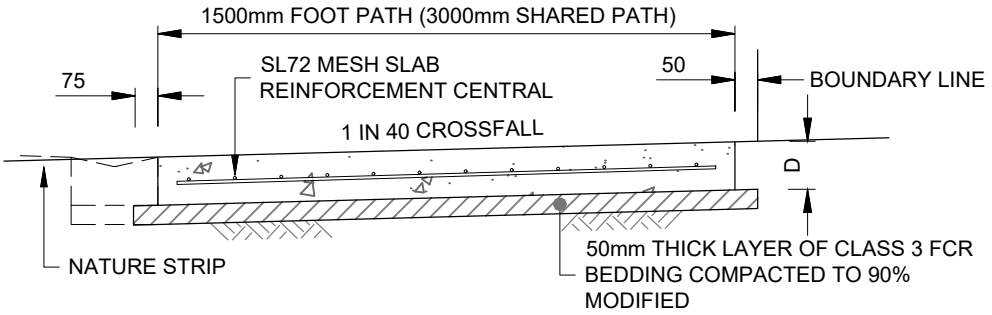


PLAN



SECTION A-A

TYPICAL 100mm & 150mm FOOTPATH SECTION



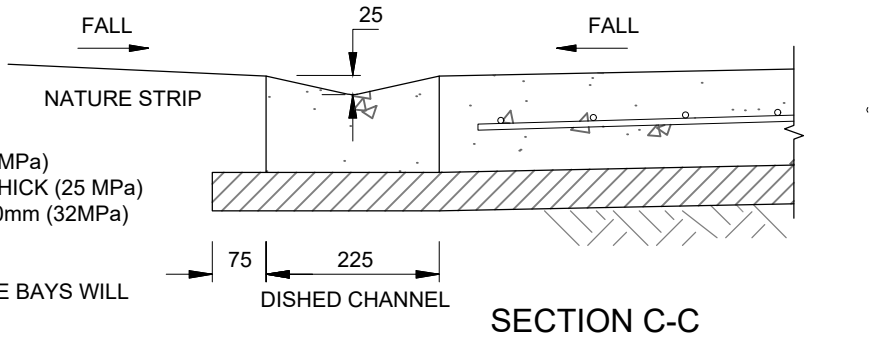
LEGEND:

EXPANSION JOINT — — — EJ

TOOLED JOINTS @ 900mm CRS. — — — TJ

SECTION B-B

TYPICAL 100mm & 150mm FOOTPATH SECTION



SECTION C-C

(ONLY TO BE USED WITH COUNCIL APPROVAL)

NOTES:

1. 'D' = DEPTH OF CONCRETE FOOTPATH
   TYPICAL RESIDENTIAL 'D'= 100mm THICK (25 MPa)
   TYPICAL VEHICLE CROSSOVER 'D'= 150mm THICK (25 MPa)
   TYPICAL INDUSTRIAL / COMMERCIAL 'D' = 150mm (32MPa)
2. TOOLED JOINTS TO BE MADE WITH T-IRON
3. 900mm SPACING FOR NEW SUBDIVISIONS.
4. FOR EXISTING FOOTPATH, SPACING FOR THE BAYS WILL BE DETERMINED BY AUTHORISED OFFICER

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TYPICAL FOOTPATH DETAIL

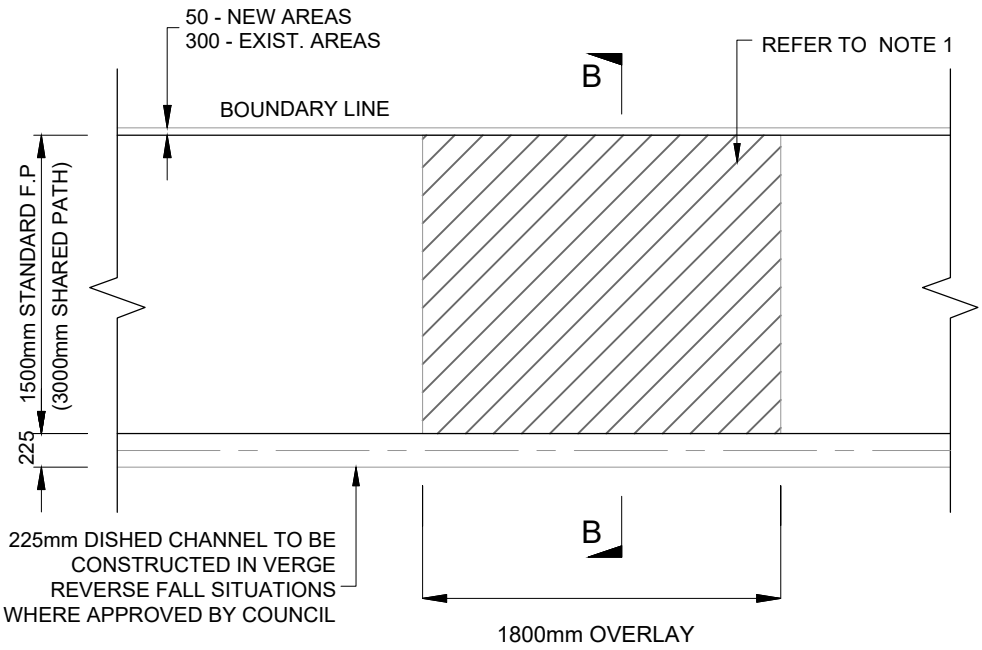
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

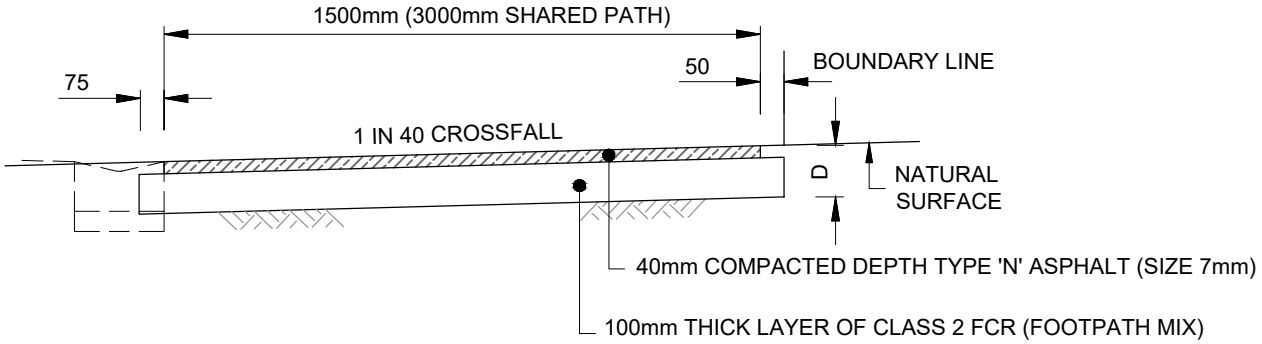
LAST UPDATED JULY 2019

R 260

NOT TO SCALE



PLAN



TYPICAL 140mm ASPHALT FOOTPATH SECTION

NOTES:

1. 'D' = DEPTH OF ASPHALT FOOTPATH TYPICAL ASPHALT FOOTPATH DEPTH 'D'= 140mm VARIED 'D' MAY OCCUR DEPENDANT ON CBE TYPE
2. ALL PLUMBER CUTS 90° FROM THE FRONT OF THE PROPERTY TO THE KERB & CHANNEL, MUST BE REINSTATED FROM THE FRONT OF THE PROPERTY TO THE BACK OF KERB WITH AN OVERLAY OF 1.8 METERS.
3. ALL PLUMBER CUTS RUNNING PARALLEL TO PROPERTY LINE MUST BE REINSTATED FROM PROPERTY BOUNDARY TO BACK OF KERB OR NATURESTRIP.
4. ALL WORKS TO BE COMPLETED TO THE SATISFACTION OF COUNCIL

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TYPICAL HOT MIX ASPHALT FOOTPATH

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

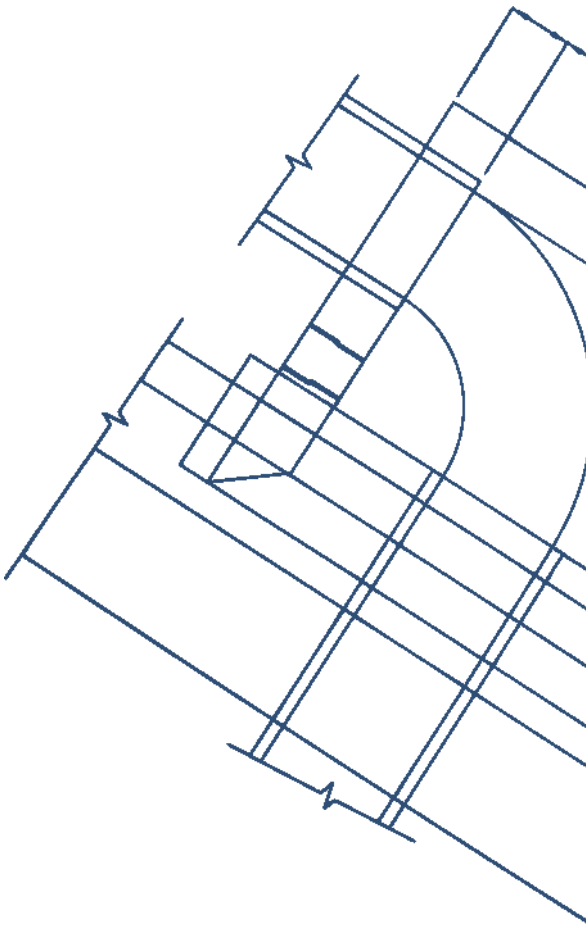
Approved by: James Kelly, Manager Delivery & Assets

LAST UPDATED JULY 2019

R 265

NOT TO SCALE

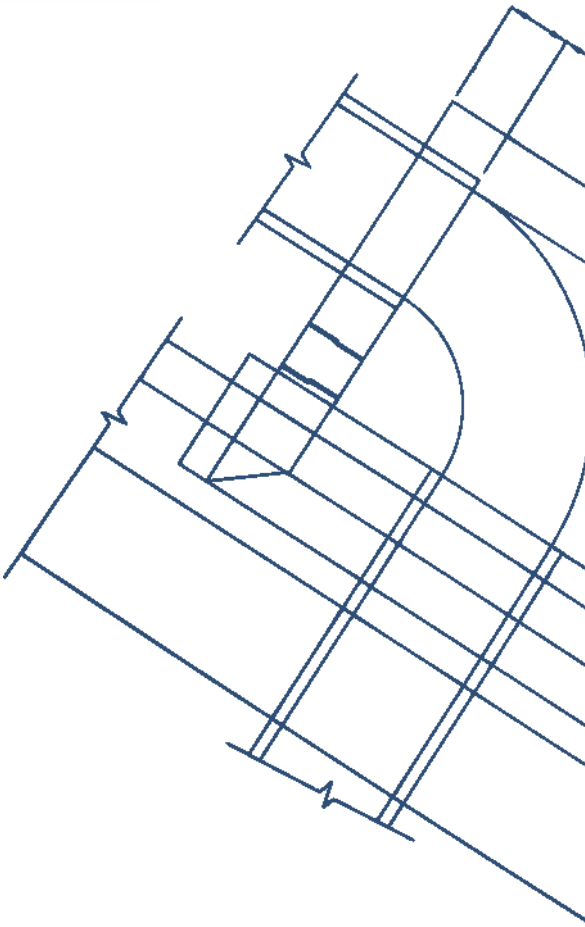
Drainage



Banyule
CITY COUNCIL

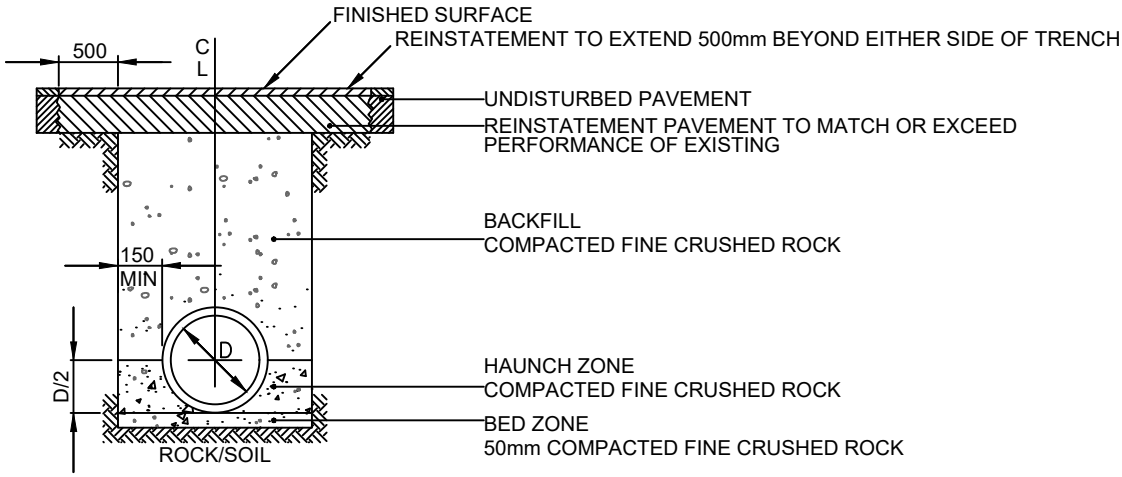
This page was intentionally left blank

Pipes and Connections



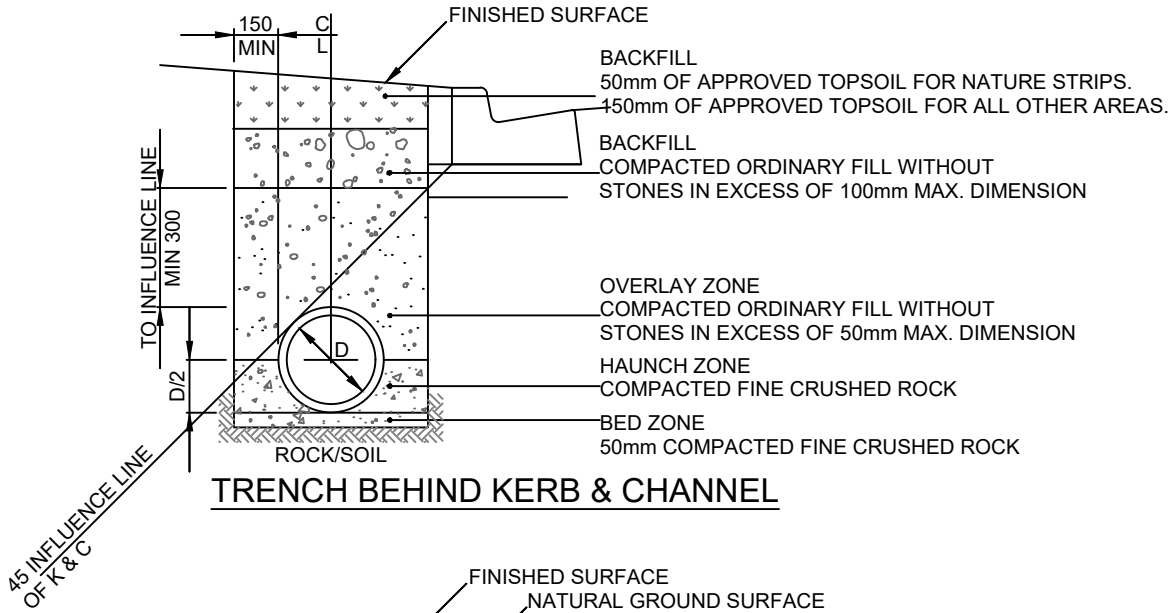
Banyule
CITY COUNCIL

This page was intentionally left blank

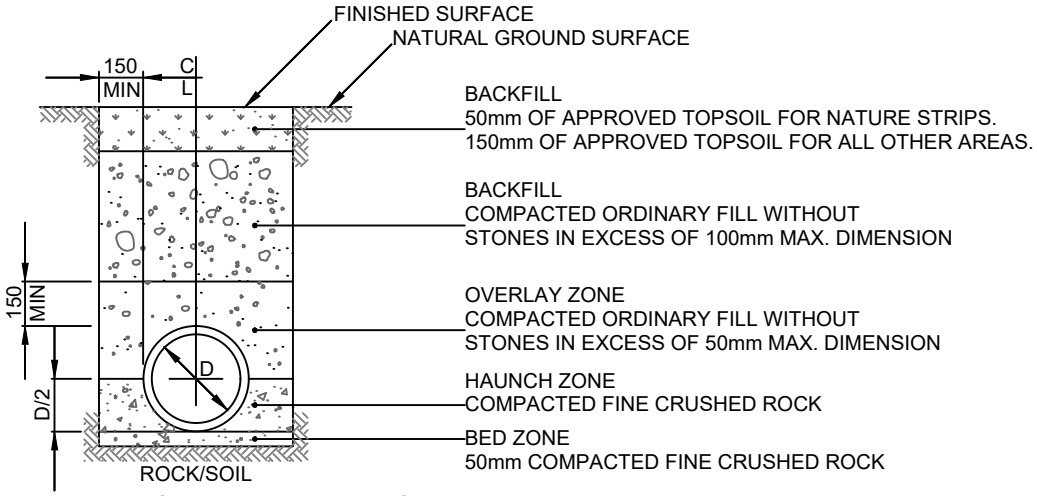


TRENCHES UNDER PAVEMENT AND/OR K&C

FOR ALL UTILITY TRENCHES UNDER ALL EXISTING PAVED AREAS, ALL PROPOSED PAVED AREAS SHOWN ON THE DRAWINGS AND ALL FUTURE ROAD PAVEMENTS



TRENCH BEHIND KERB & CHANNEL



TRENCH IN NATURE STRIP

NOTES:

1. TRENCH WIDTH TO BE NOMINAL DIAMETER OF PIPE PLUS 300mm UNDER ROADWAYS, 225mm LONGITUDINAL TO ROAD.
2. ALL F.C.R. TO BE 20mm MAX. SIZE 'A' GRADE MATERIAL UNLESS OTHERWISE SPECIFIED.
3. ALL BACKFILLING AND BEDDING TO BE COMPACTED AS SPECIFIED.
4. FOR BEDDING & BACKFILLING FOR PLASTIC PIPES REFER TO MANUFACTURER'S SPECIFICATION.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

BEDDING & BACKFILLING FOR CONCRETE PIPE DRAINS

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

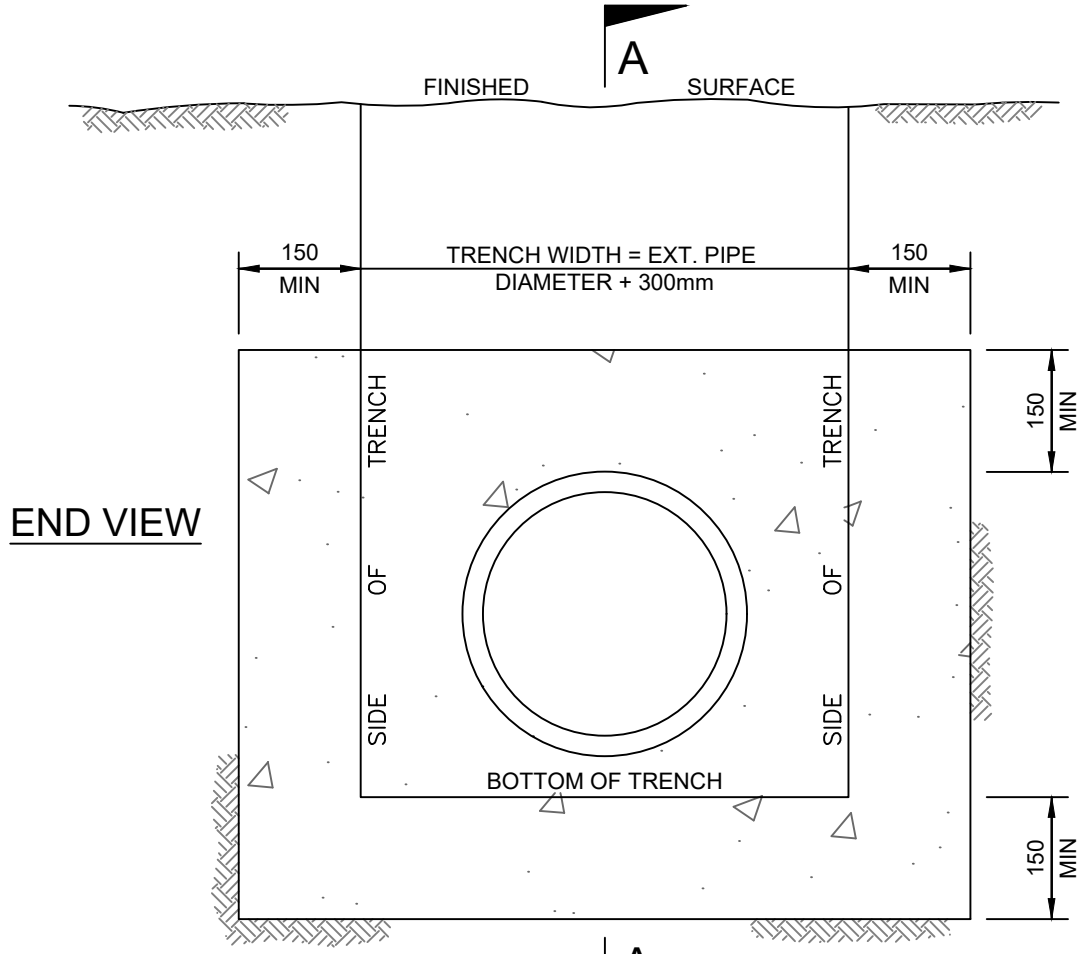
Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

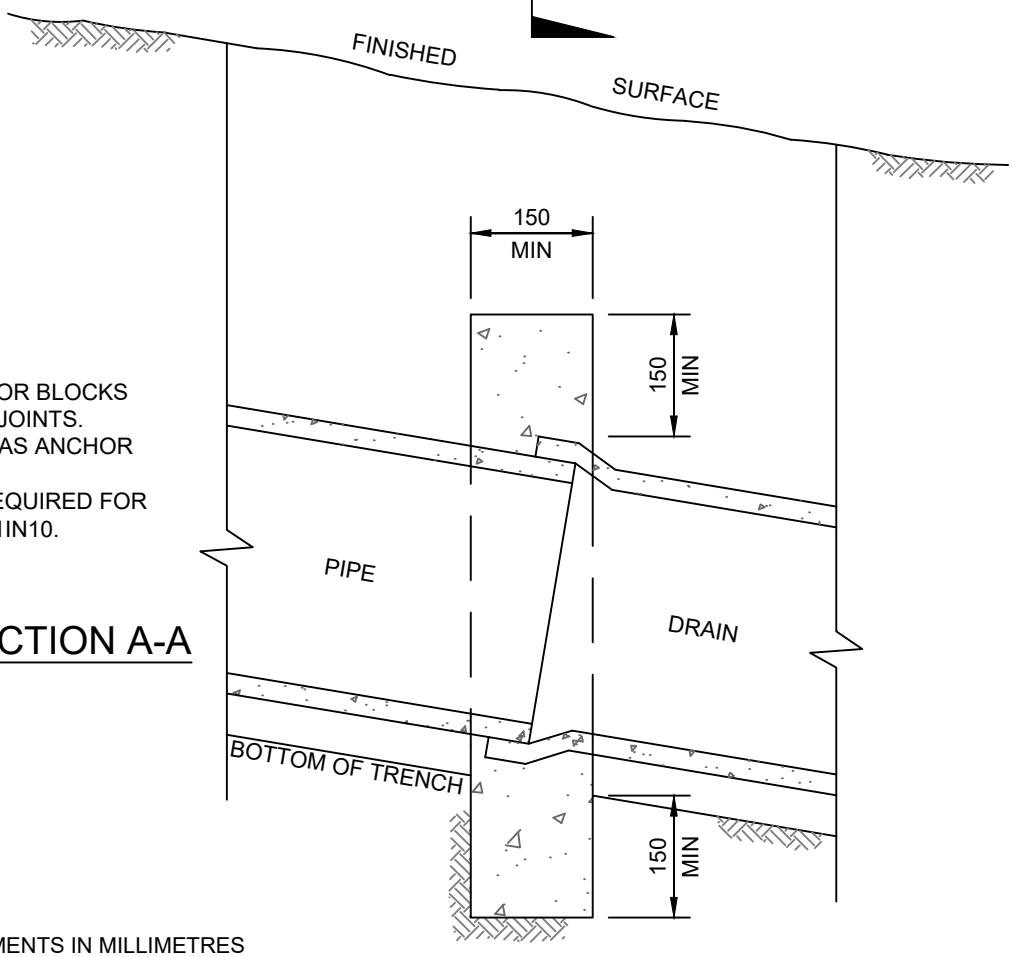
D 100

NOT TO SCALE

END VIEW



SECTION A-A



NOTES:

1. WHERE POSSIBLE, ANCHOR BLOCKS TO BE LOCATED AT PIPE JOINTS.
2. PITS MAY BE REGARDED AS ANCHOR BLOCKS.
3. ANCHOR BLOCKS NOT REQUIRED FOR GRADES FLATTER THAN 1IN10.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

ANCHOR BLOCKS

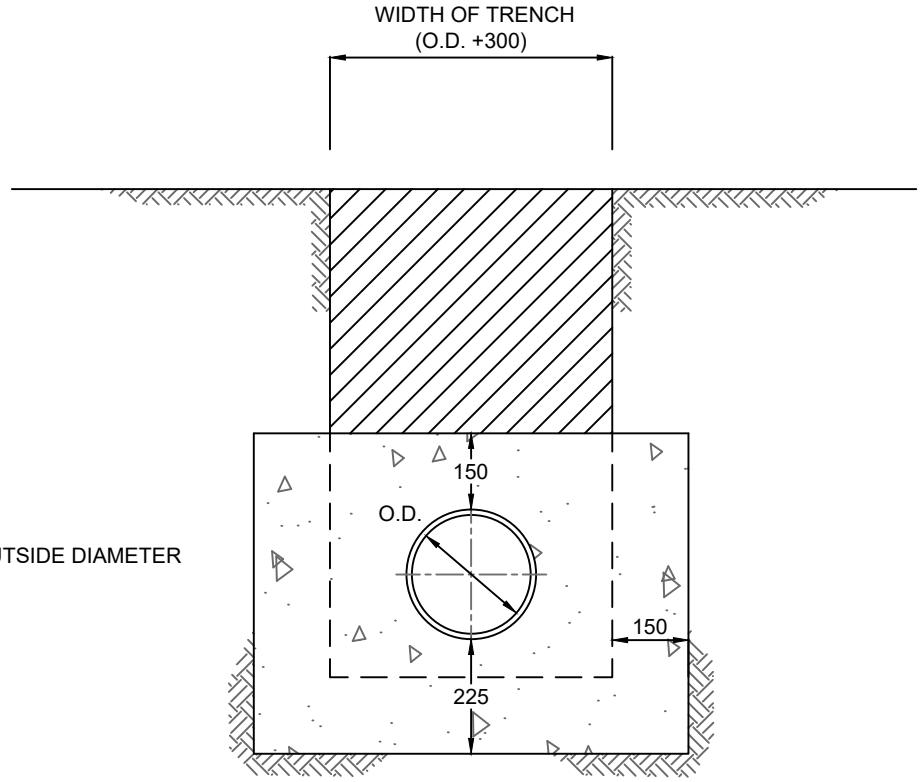
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

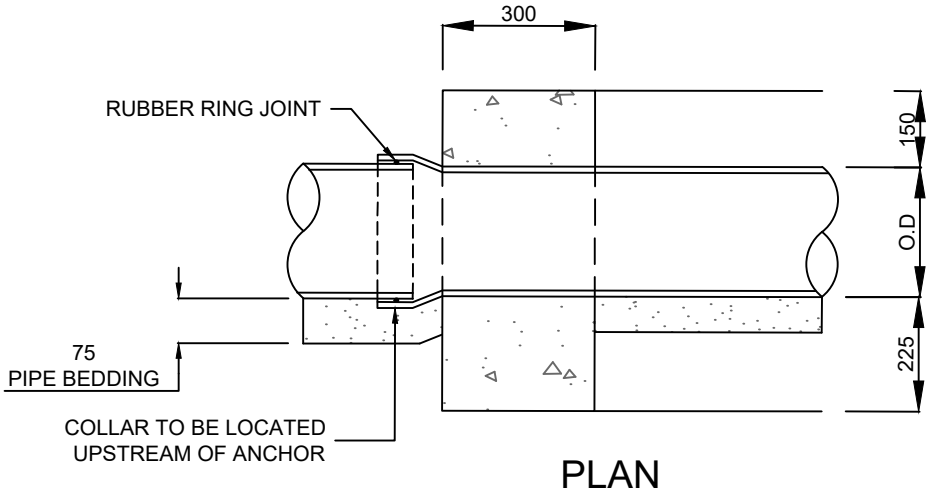
D 105

NOT TO SCALE



* 'O.D.' DENOTES OUTSIDE DIAMETER

ELEVATION



PLAN

NOTES:

1. FOR USE ON PIPE AT GRADES OF 1IN10 OR GREATER.
2. TO BE CONSTRUCTED AT A MAXIMUM OF 10m CTRS.
3. CONCRETE STRENGTH TO BE 25MPa.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

DRAINAGE PIPE ANCHOR BLOCK

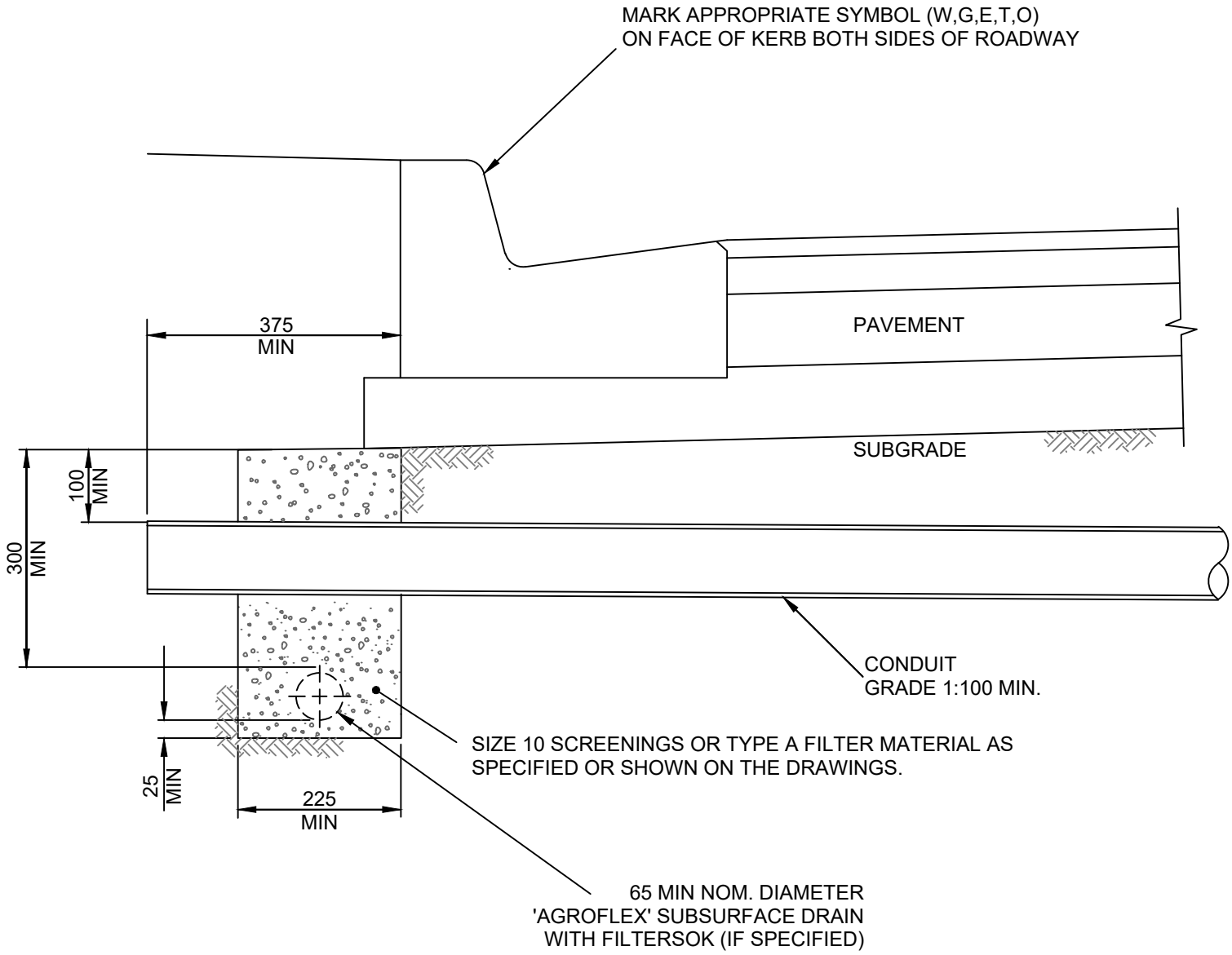
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 110

NOT TO SCALE



NOTES:

1. SUBSURFACE DRAINS ARE TO BE CONNECTED TO DRAINAGE PITS.
2. ALL CONDUIT DETAILS TO BE AS PER RELEVANT AUTHORITY'S REQUIREMENTS.
3. ALL ROADWAY CONDUIT POSITIONS ARE TO BE CLEARLY IDENTIFIED ON BOTH SIDES OF THE ROADWAY BY THE APPROPRIATE SYMBOL (EG. W (WATER), G (GAS) ETC.) IMPRESSED INTO THE FACE OF THE KERB VERTICALLY ABOVE THE CONDUITS.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

SUBSURFACE DRAIN AND SERVICE CONDUIT DETAILS

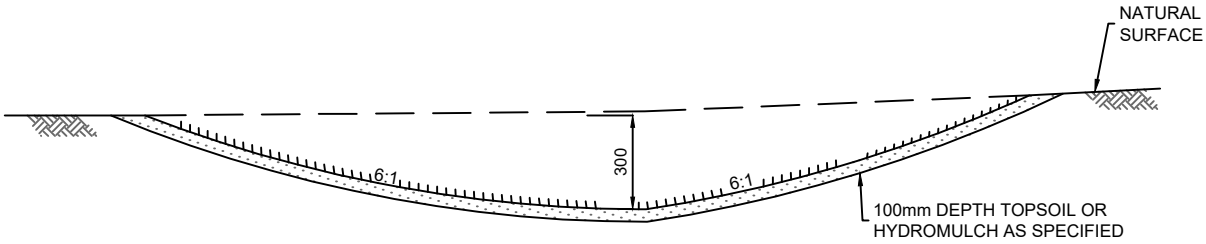
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

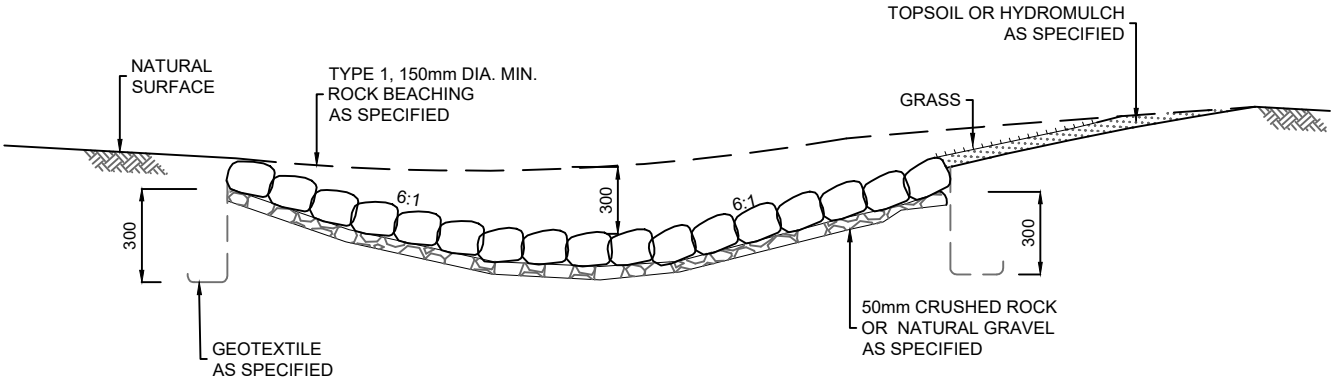
LAST UPDATED JULY 2019

D 115

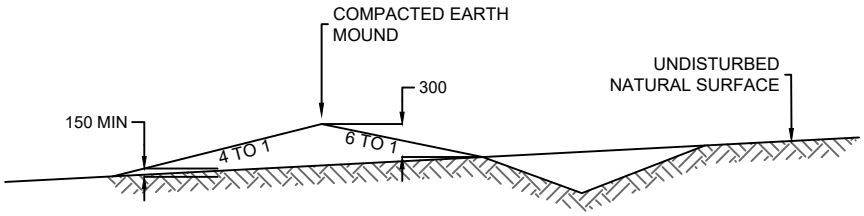
NOT TO SCALE



TYPICAL GRASS CATCH DRAIN SECTION



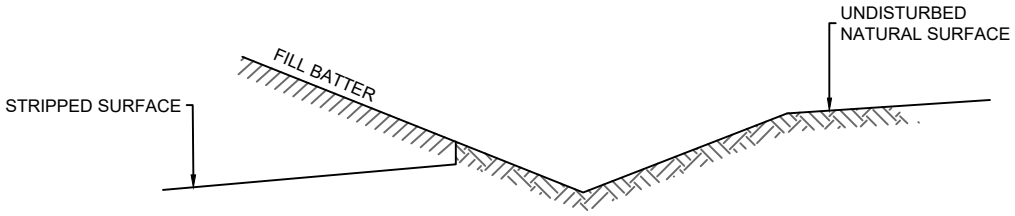
TYPICAL BEACHED CATCH DRAIN



NOTE:

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 TO D 300 FOR INLET CATCH PIT DETAILS.

TYPICAL MOUNDED CATCH DRAIN



TYPICAL CATCH DRAIN AT TOE OF BATTER

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

CATCH DRAIN DETAILS

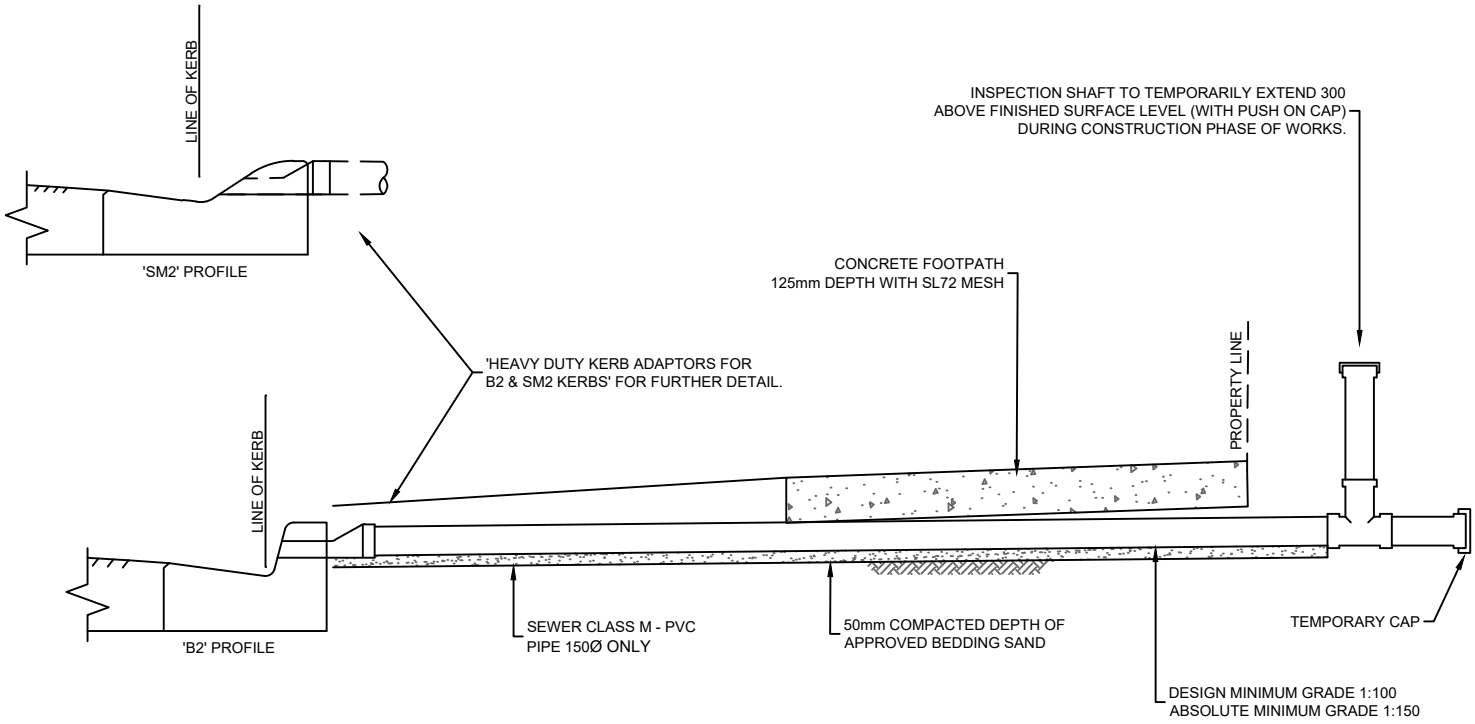
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 120

NOT TO SCALE



TYPICAL CROSS SECTION

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

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

HOUSE DRAIN TO KERB & CHANNEL

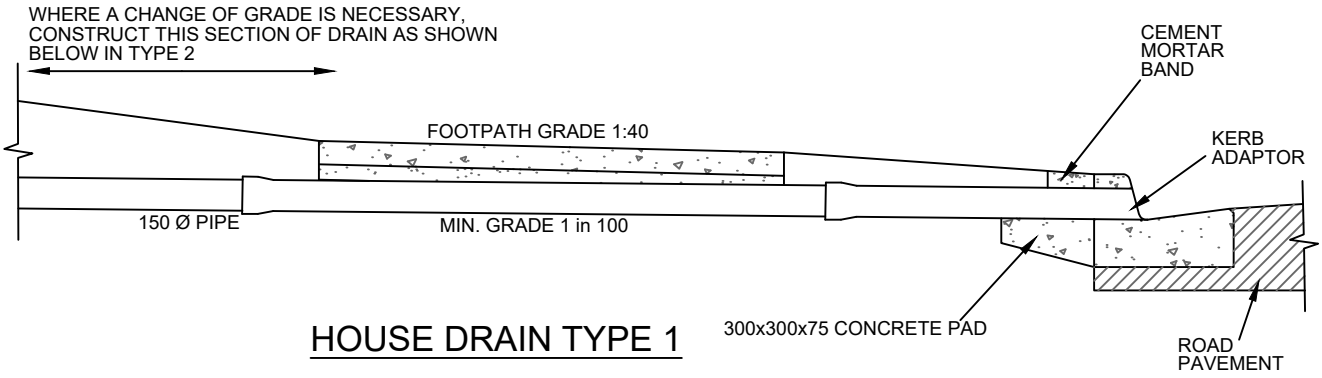
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

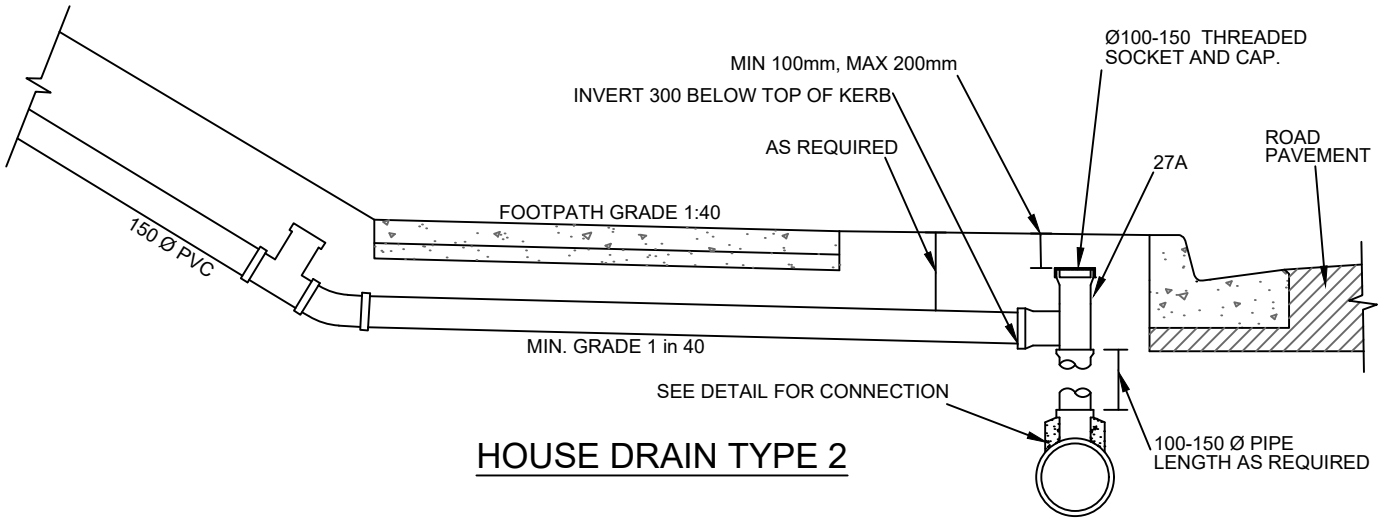
LAST UPDATED JULY 2019

D 125

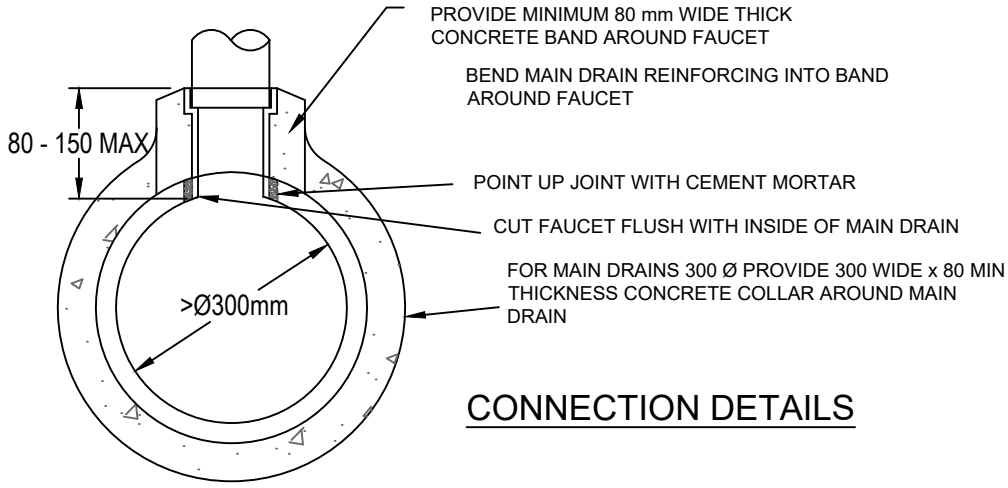
NOT TO SCALE



HOUSE DRAIN TYPE 1



HOUSE DRAIN TYPE 2



CONNECTION DETAILS

NOTES:

1. FOR PIPES SMALLER THAN Ø300mm A PIT MUST BE CONSTRUCTED OVER PIPE TO COUNCIL SPECIFICATIONS.
2. A27 CONNECTION TO BE CONSTRUCTED VERTICALLY TO TOP OF PIPE, UNLESS PIPE DIAMETER IS GREATER THAN 600mm WHERE CONNECTION IS TO BE MADE WITHIN TOP 1/3 OF PIPE.
3. WHERE CONNECTION CANNOT BE MADE IN ACCORDANCE WITH THIS STANDARD, A JUNCTION PIT MUST BE CONSTRUCTED
4. FOR KERB ADAPTOR DETAILS REFER DRAWING R 190

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

HOUSE DRAIN CONNECTIONS

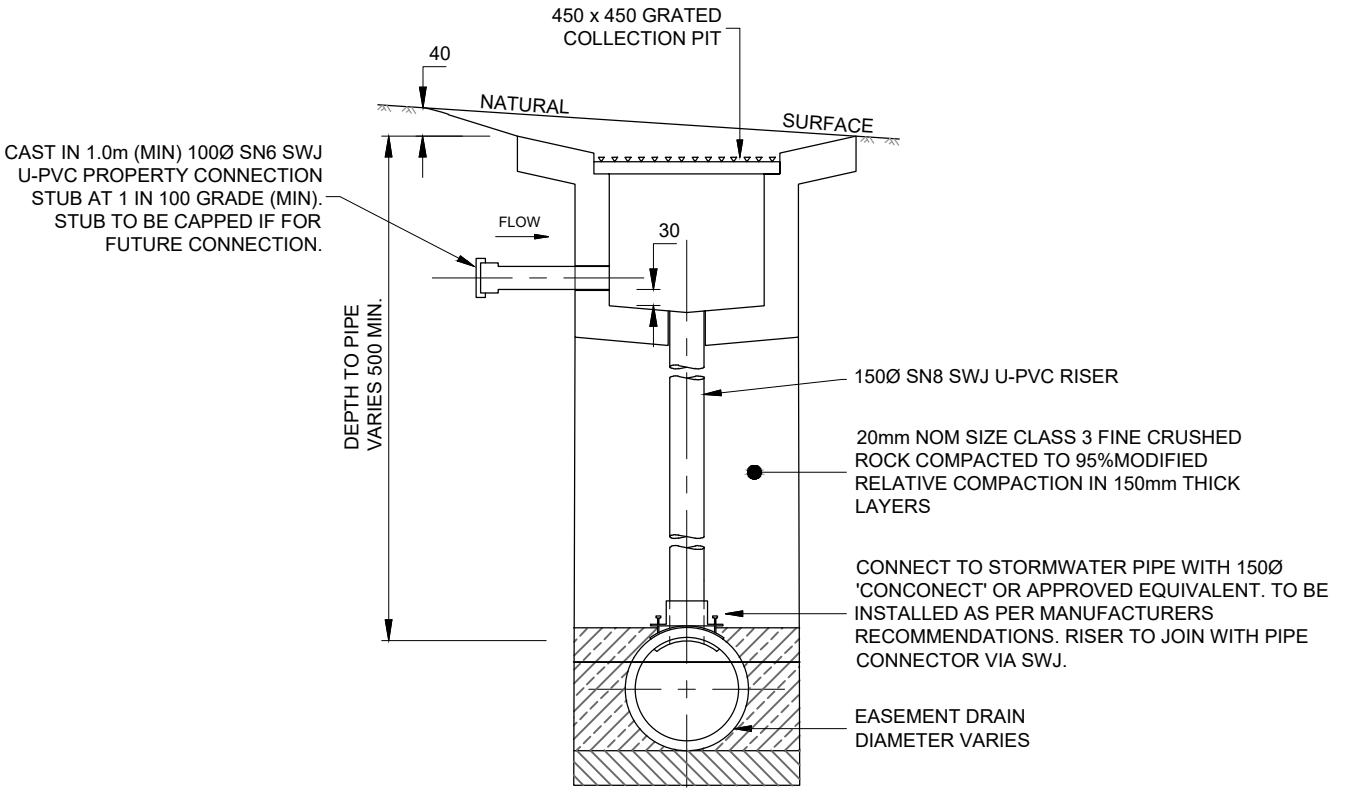
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

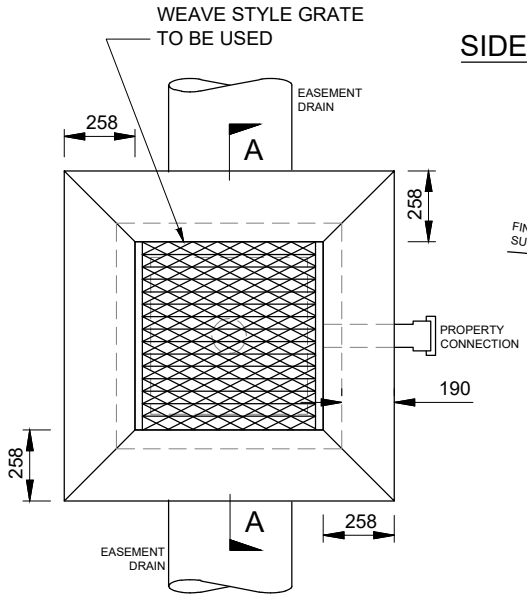
LAST UPDATED JULY 2019

D 130

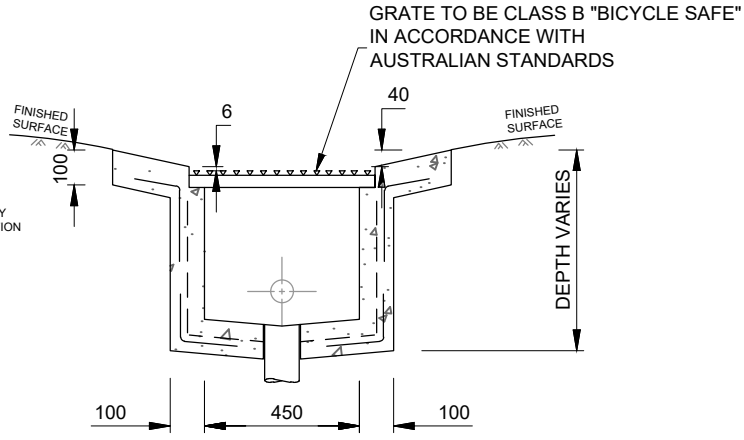
NOT TO SCALE



SIDE ELEVATION



COLLECTION PIT - PLAN



SECTION A-A

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 150Ø PIPE
9. AS THE DEPTH VARIES THE SIZE OF THE INLET PIT CHANGES CORRESPONDINGLY.

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

EASEMENT DRAIN CONNECTION

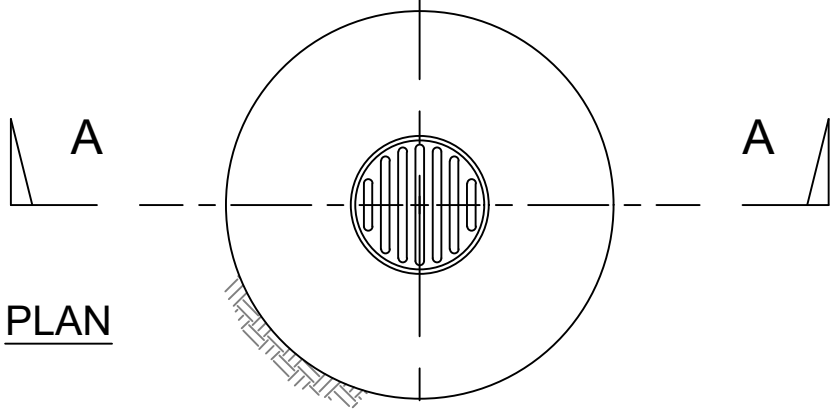
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

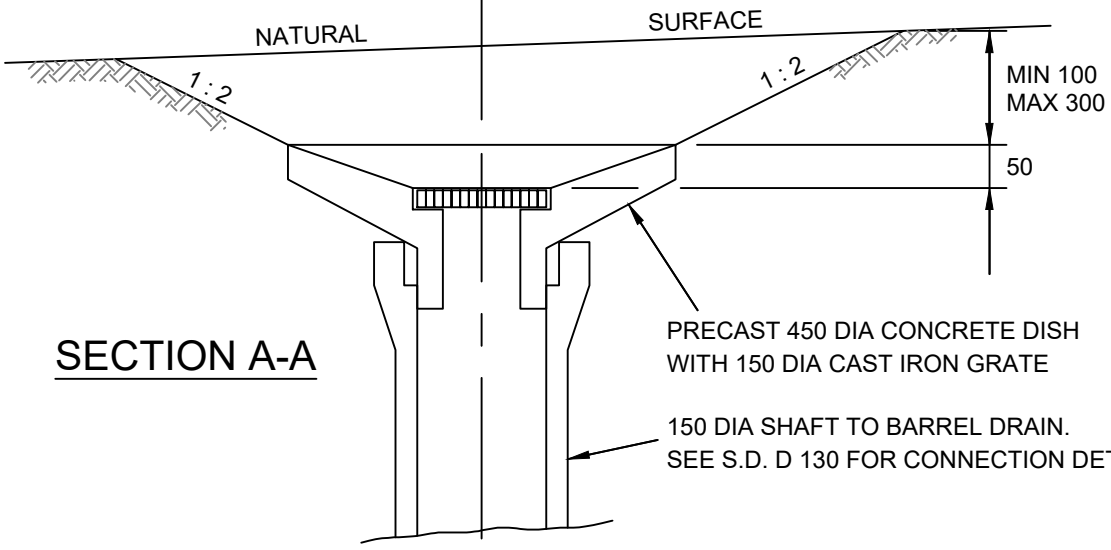
LAST UPDATED JULY 2019

D 135

NOT TO SCALE



PLAN



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

PROPERTY GULLY INLET

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 140

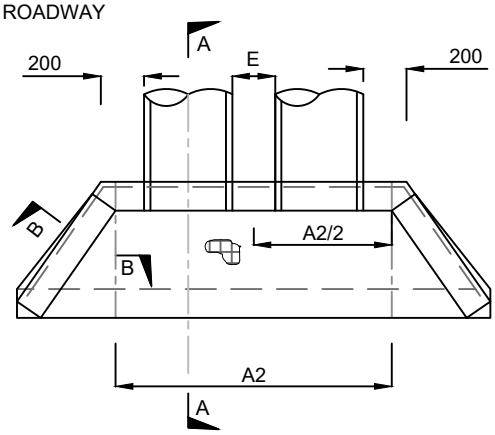
NOT TO SCALE

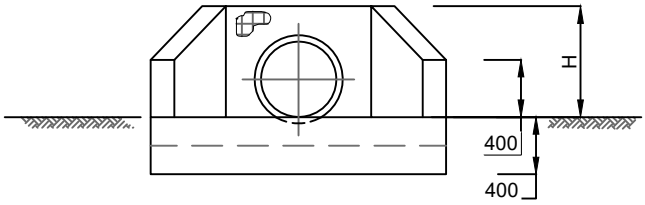
TYPE 1 *SLOPE AT 1.5:1				TYPE 2 *SLOPE AT 2:1				TYPE 3 *SLOPE AT 3:1			
B	C	D	F	B	C	D	F	B	C	D	F
138	1037	197	240	138	1129	262	320	275	1312	393	480
221	1286	315	385	294	1433	420	513	441	1727	630	769
307	1547	438	535	409	1752	584	713	613	2161	876	1069
394	1804	563	687	525	2066	750	916	788	2591	1125	1373

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

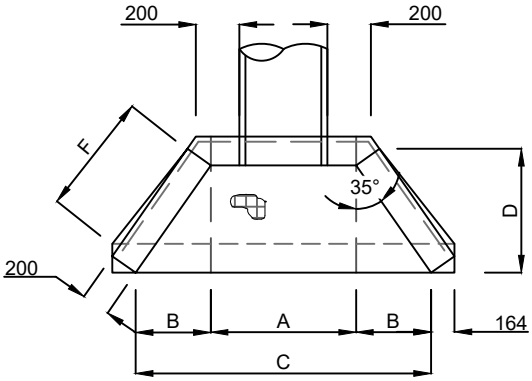
NOM PIPE DIA	EXTERNAL PIPE DIA*	A**	E	H
300	362	762	300	531
375	445	845	300	610
450	534	934	300	692
525	616	1016	300	775

FOR LARGER PIPE DIAMETERS REFER TO VICROADS SD1931 REV 8

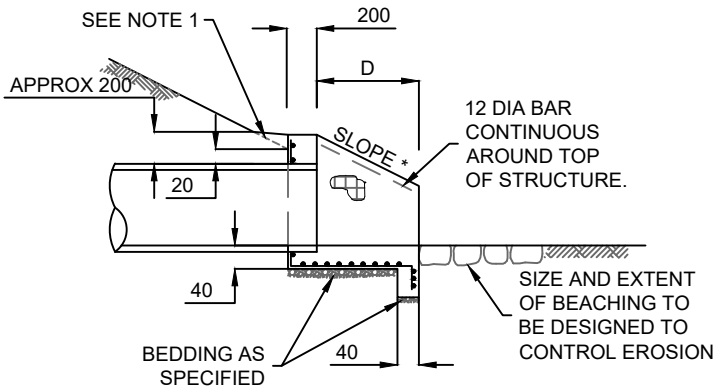




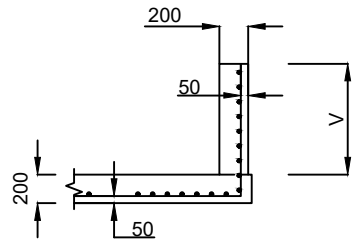
END ELEVATION



SECTION B-B



SECTION A-A



SECTION A-A
V = VARIABLE HEIGHT OF THE WINGWALL

NOTES:

1. PIT TO BE CONSTRUCTED IN 2 STAGES 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. FIBERGLASS 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)

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

REINFORCED CONCRETE WINGWALL (IN-SITU)

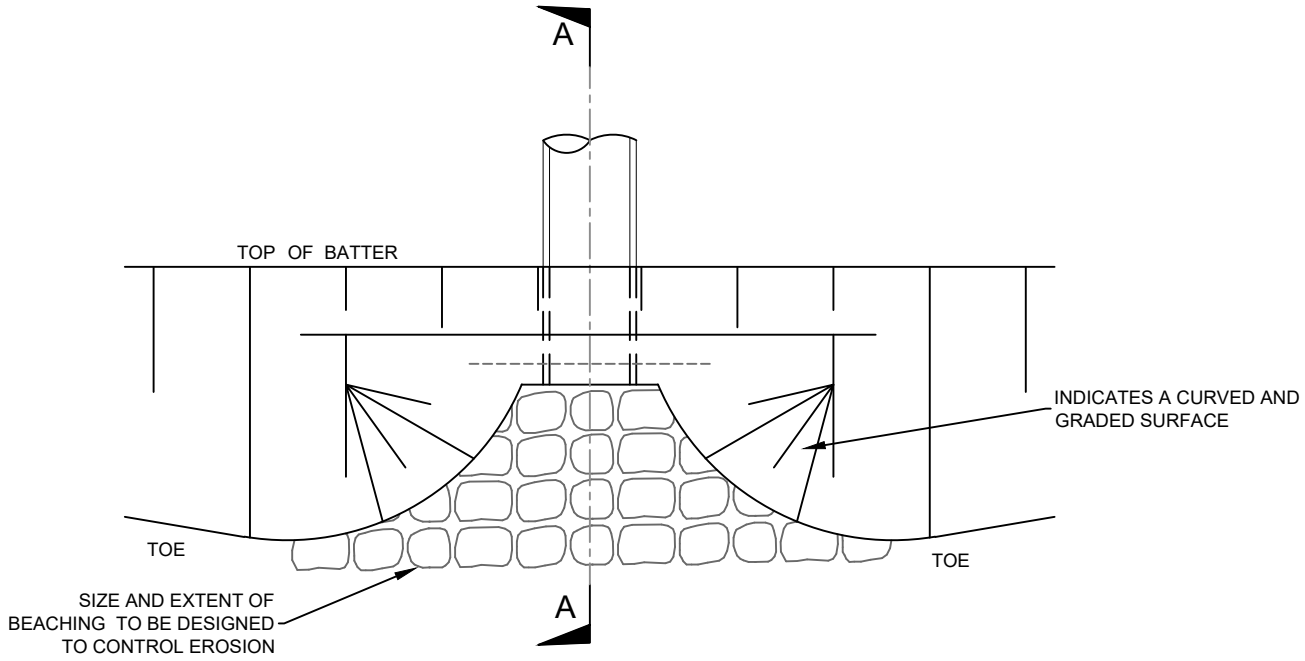
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

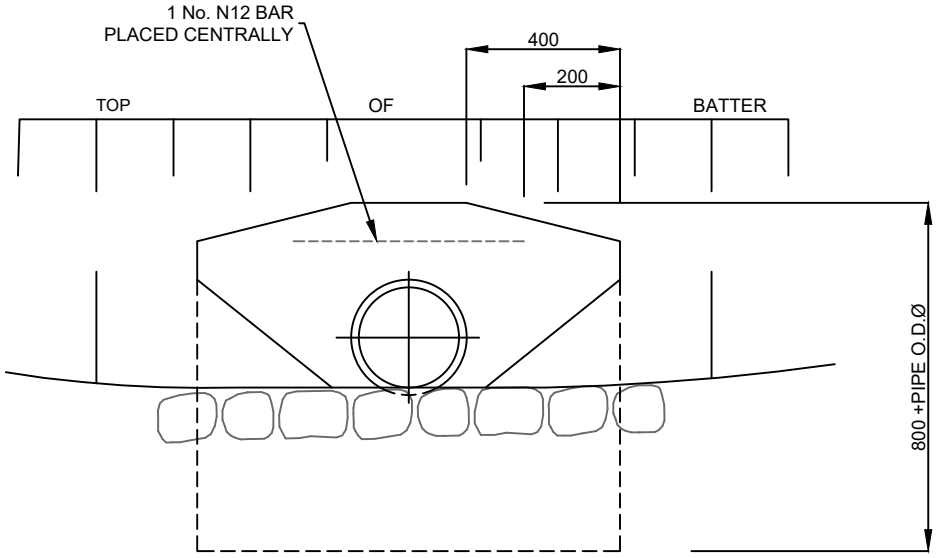
LAST UPDATED JULY 2019

D 145

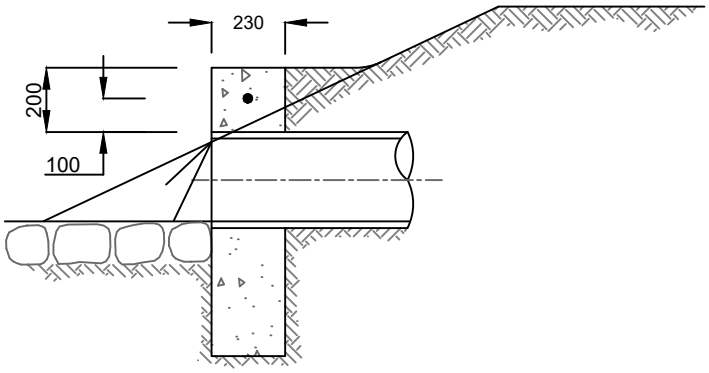
NOT TO SCALE



PLAN



END ELEVATION



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 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

Banyule CITY COUNCIL

CONCRETE ENDWALL FOR PIPES UP TO 300mm IN DIAMETER (WALKWAYS, PATHS & TRACKS)

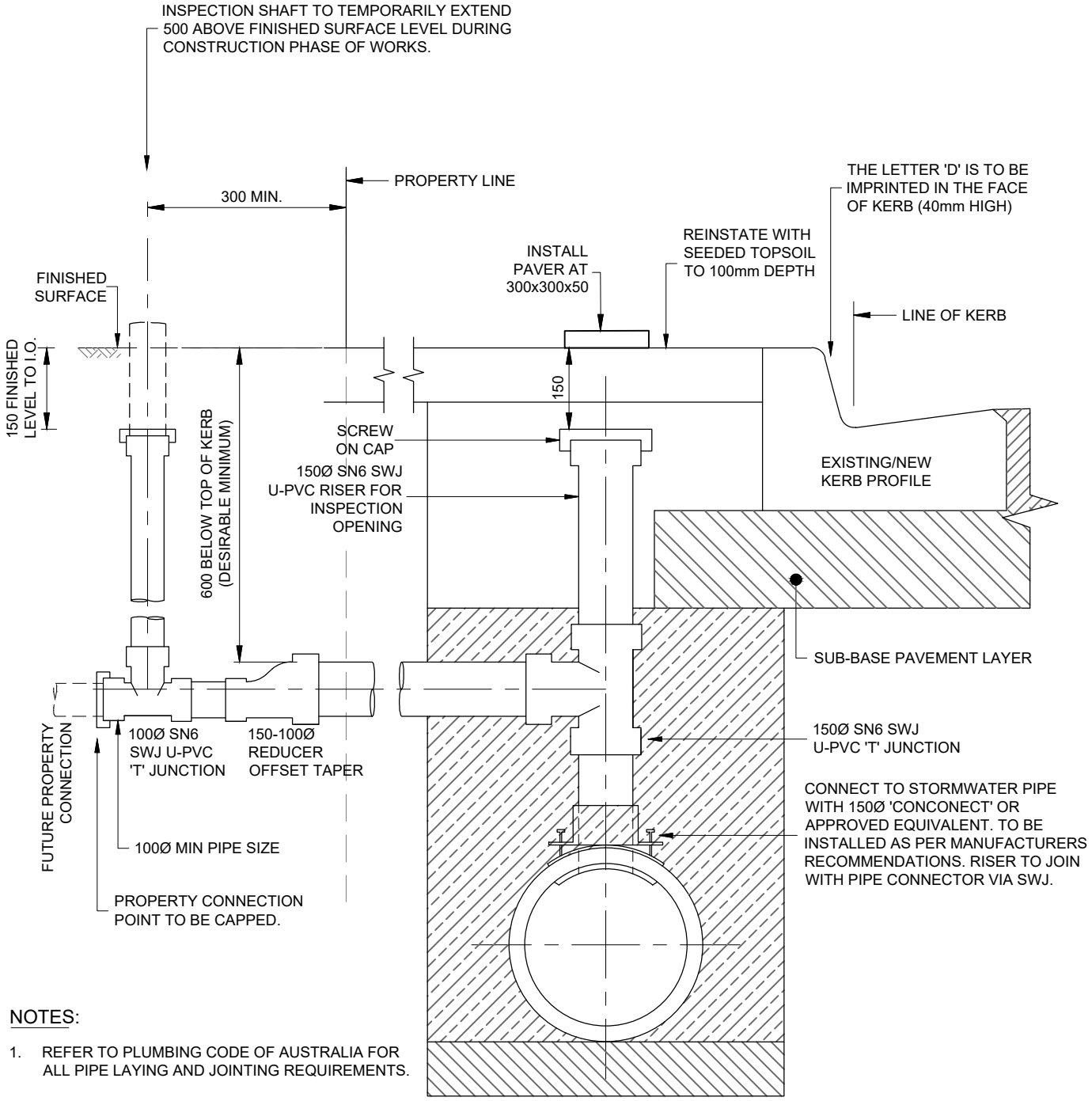
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 150

NOT TO SCALE



NOTES:

1. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

TYPICAL CROSS SECTION

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

27A STREET DRAIN CONNECTION

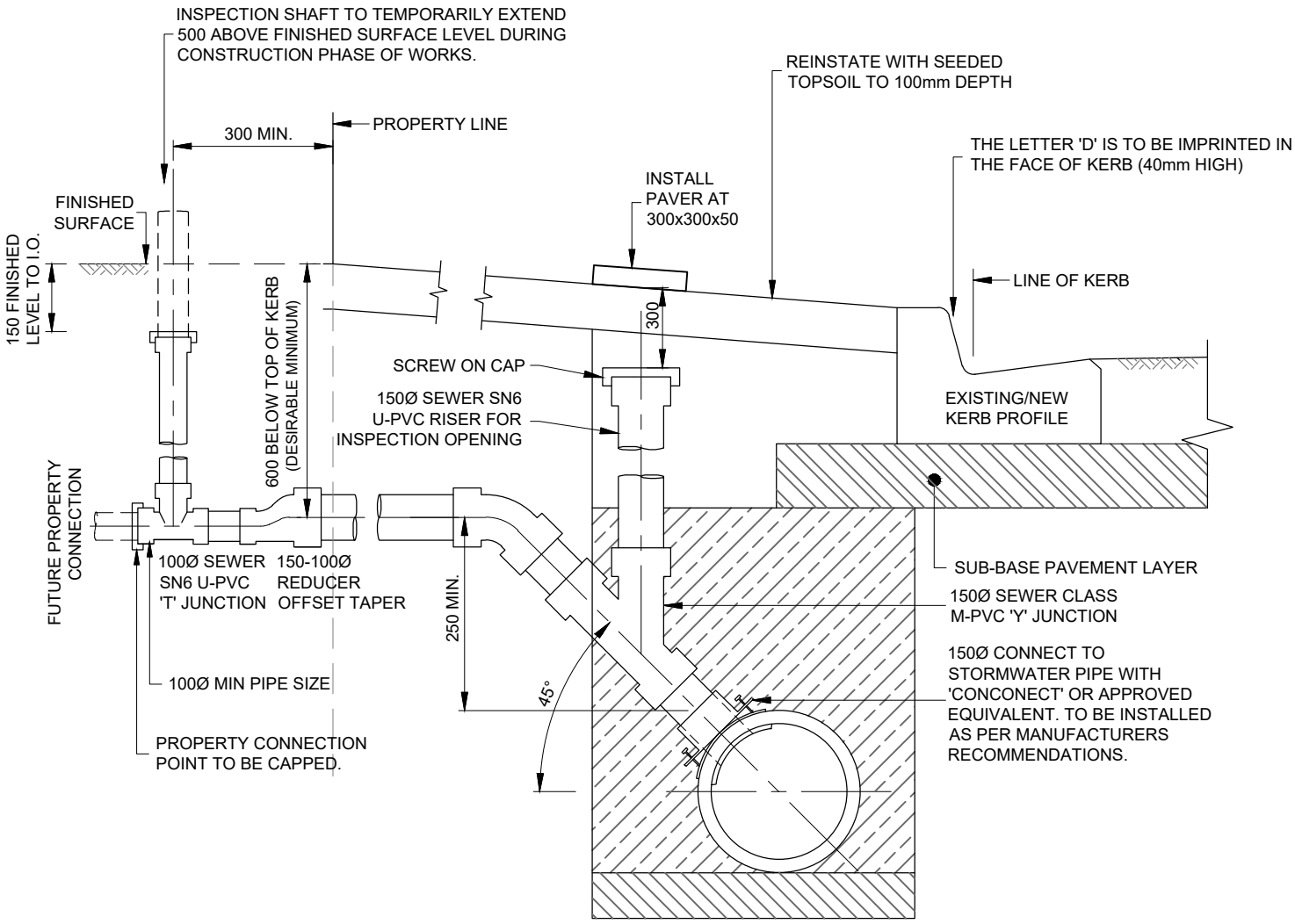
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 155

NOT TO SCALE



TYPICAL CROSS SECTION

NOTES:

1. 1. REFER TO PLUMBING CODE OF AUSTRALIA FOR ALL PIPE LAYING AND JOINTING REQUIREMENTS.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

27A STREET DRAIN CONNECTION (LIMITED COVER)

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

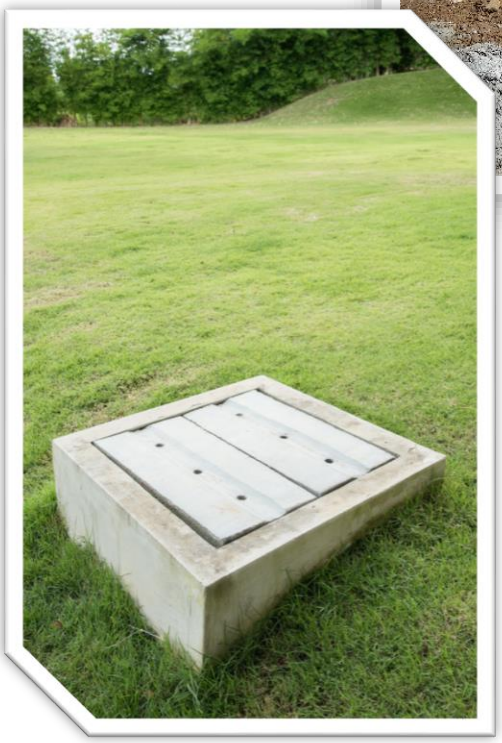
LAST UPDATED JULY 2019

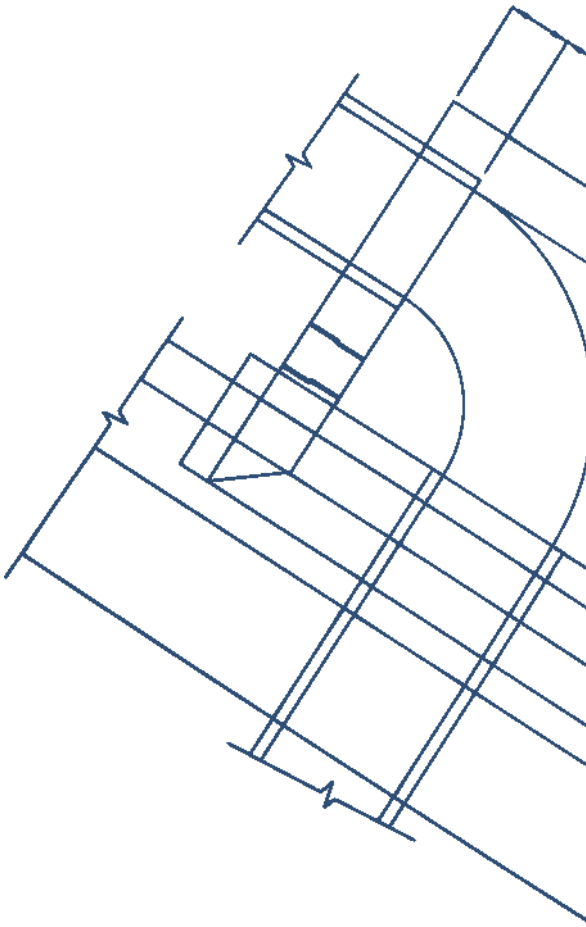
D 160

NOT TO SCALE

This page was intentionally left blank

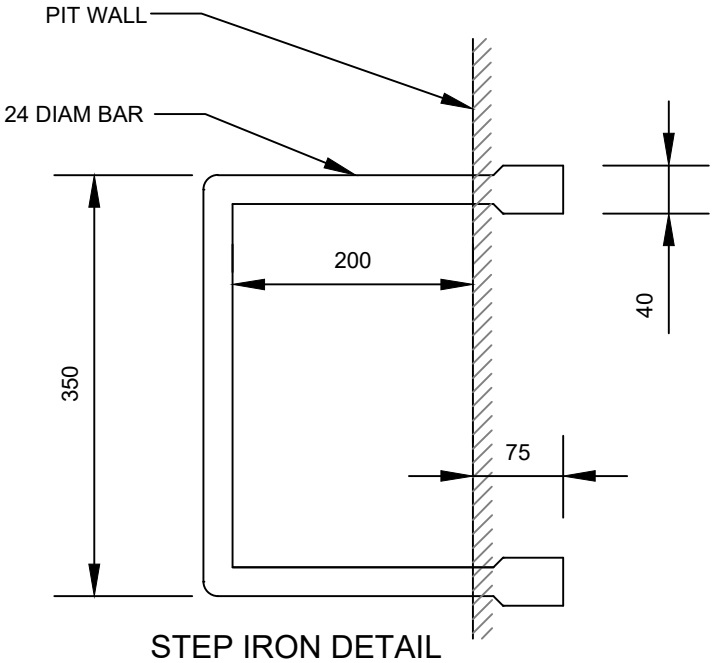
Pit Details



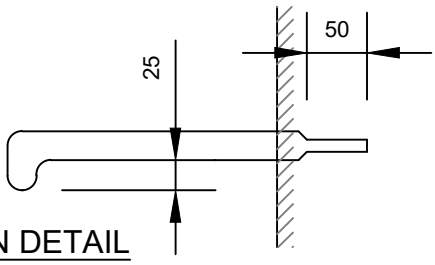


Banyule
CITY COUNCIL

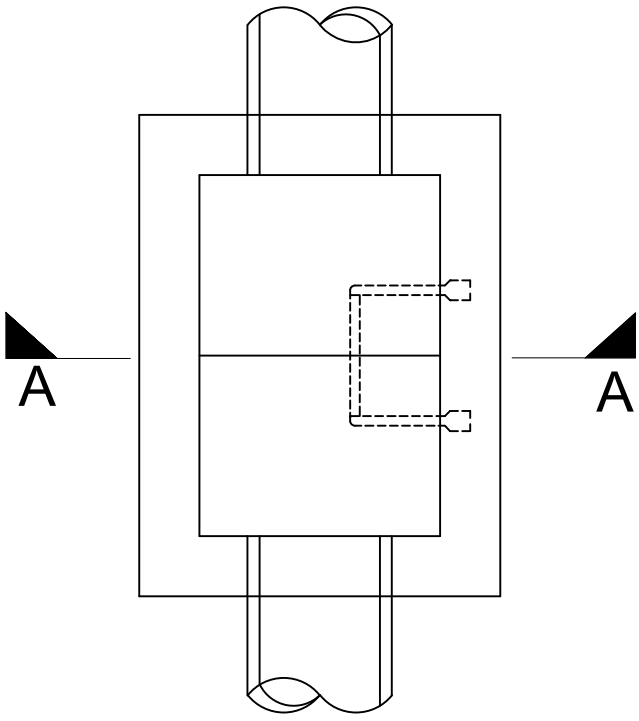
This page was intentionally left blank



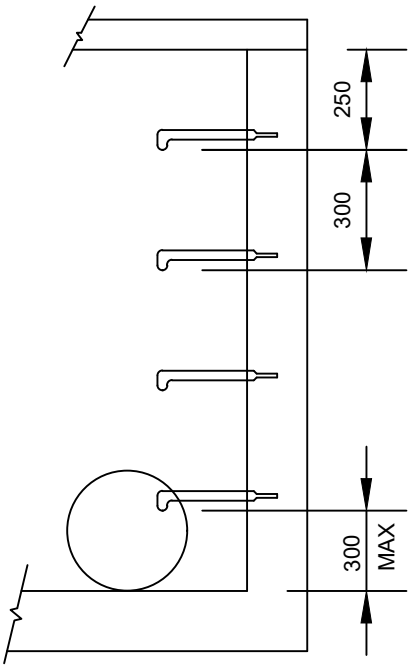
STEP IRON DETAIL
PLAN VIEW



STEP IRON DETAIL
SECTION VIEW



PLAN



SECTION A-A

NOTES:

1. PITS DEEPER THAN 900mm SHALL BE FITTED WITH STEP IRONS
2. STEP IRONS SHALL BE LOCATED:
   - -DIRECTLY BELOW THE OPENING IN THE COVER
   - -DESIRABLY ON A WALL WITHOUT PIPE OPENINGS
   - -DESIRABLY ON ONE OF THE LONG SIDES OF THE PIT
3. MATERIAL FOR STEP IRONS SHALL BE STRUCTURAL GRADE 250 TO AS1204
4. STEP IRONS SHALL HAVE SHARP EDGES ROUNDED AND BE HOT DIP GALVANISED AFTER FABRICATION
5. APPROVED PROPRIETORY STEP IRONS MAY BE USED AND SHALL BE INSTALLED ACCORDING TO THE MANAFACTURERS INSTRUCTIONS

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

STEP IRONS

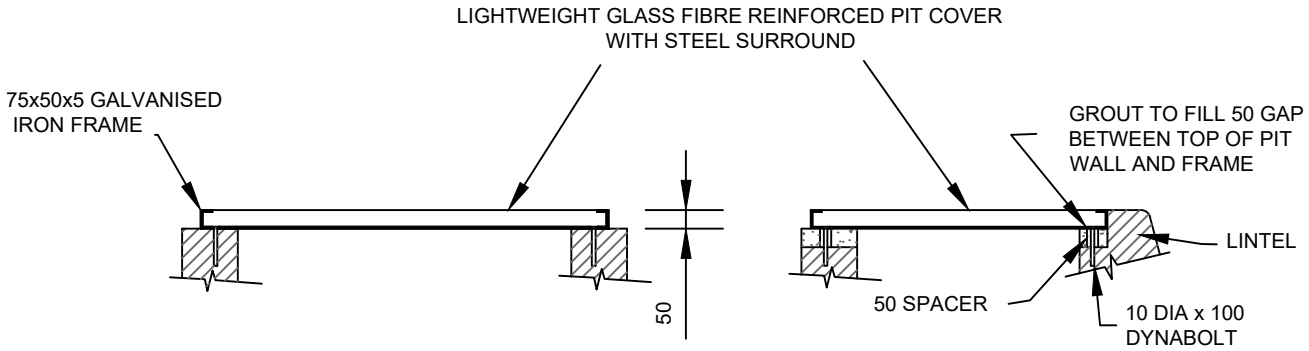
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

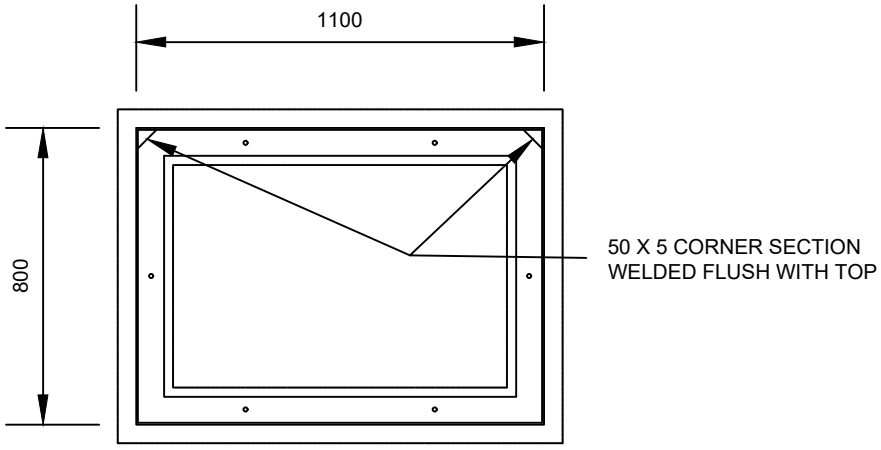
D 200

NOT TO SCALE

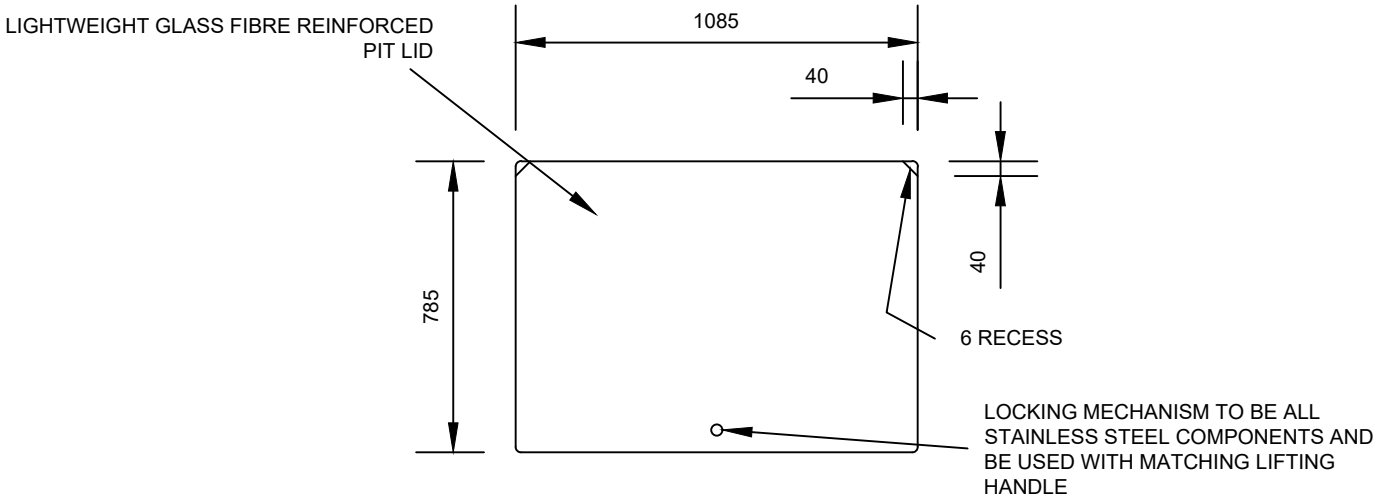


JUNCTION PIT SECTION

SIDE ENTRY PIT SECTION



FRAME DETAIL



LID DETAIL

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. THESE LIDS ARE TO BE USED ON ALL NEW PITS AND PIT RECONSTRUCTIONS WITHIN NATURE STRIPS, EASEMENTS AND RESERVES
3. FOR LIDS WITHIN THE ROAD CARRIAGEWAY USE RELEVANT RATED GATIC LID OR AN APPROVED EQUIVALENT
4. DETAILS GIVEN ARE BASED ON PIT LIDS SUPPLIED BY 'TERRA FIRMA ENGINEERING P/L'. OTHER APPROVED MANUFACTURERS MAY BE USED. LOCKING MECHANISMS MUST USE THE SAME KEY.
5. DIMENSIONS GIVEN ARE FOR 900x600 JP's AND 900x675 SEP'S.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

GLASS FIBRE REINFORCED PIT COVERS

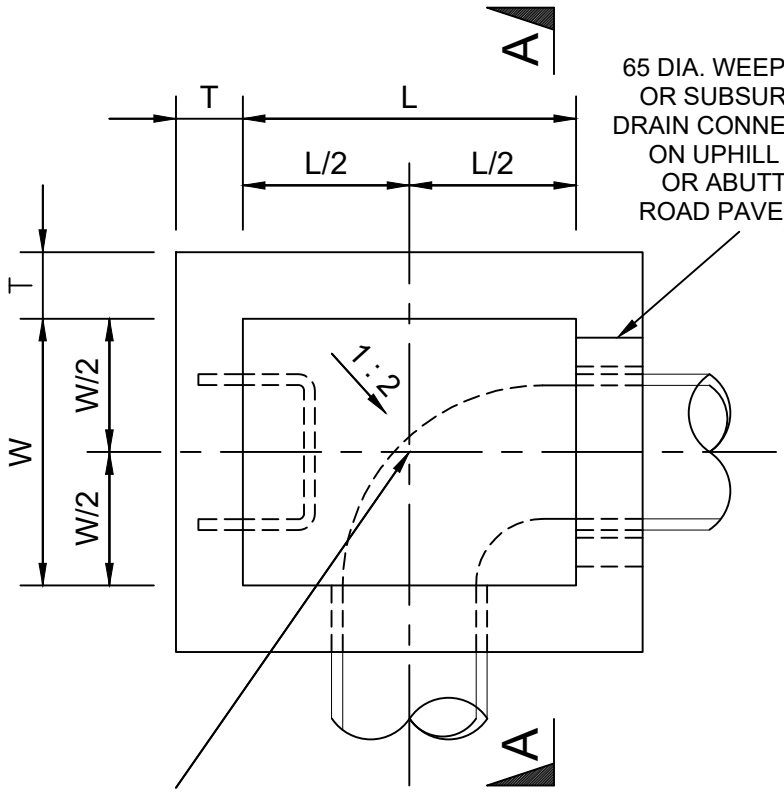
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

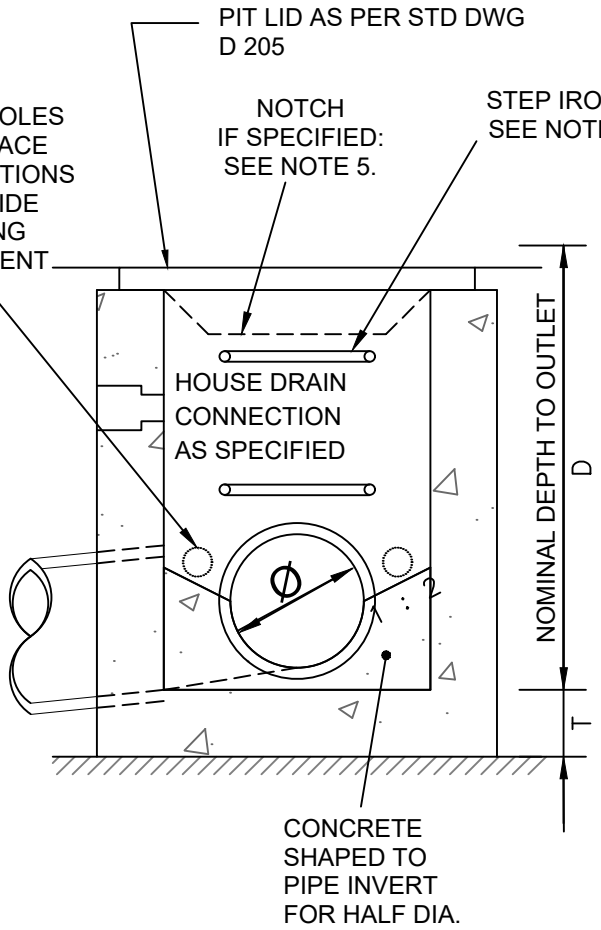
Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 205

NOT TO SCALE





PLAN

SECTION A-A

INTERNAL SIZE (L X W)	MAX DEPTH (D)	MAX PIPE DIA (ø)	WALL THICKNESS (T)
600 X 600	900	300	150
900 X 600	2400	600	150
1000 X 750	2400	750	150
LARGER SIZES TO BE SPECIFIED BY ENGINEER			

NOTES:

1. PIT WALLS ARE TO BE REINFORCED WITH SL72 MESH UNLESS SPECIFIED OTHERWISE
2. PIT WALLS ARE TO BE PLASTERED AS REQUIRED TO PRODUCE A SMOOTH CHAMBER WITHOUT VOIDS
3. USE STEP IRONS AS PER VICROADS STD DWG 1041 OR AN APPROVED EQUIVALENT FOR ALL PITS DEEPER THAN 900.
4. LIDS AND FRAMES AS SPECIFIED IN STD DWG D 205.
5. PROVIDE LIGHTWEIGHT COMPOSITE PIT LID AS PER BCC STD DWG D 205.
6. PROVIDE 100mm DEEP NOTCH IN WALL WHERE SPECIFIED FOR TABLE DRAIN INLET.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

JUNCTION PIT

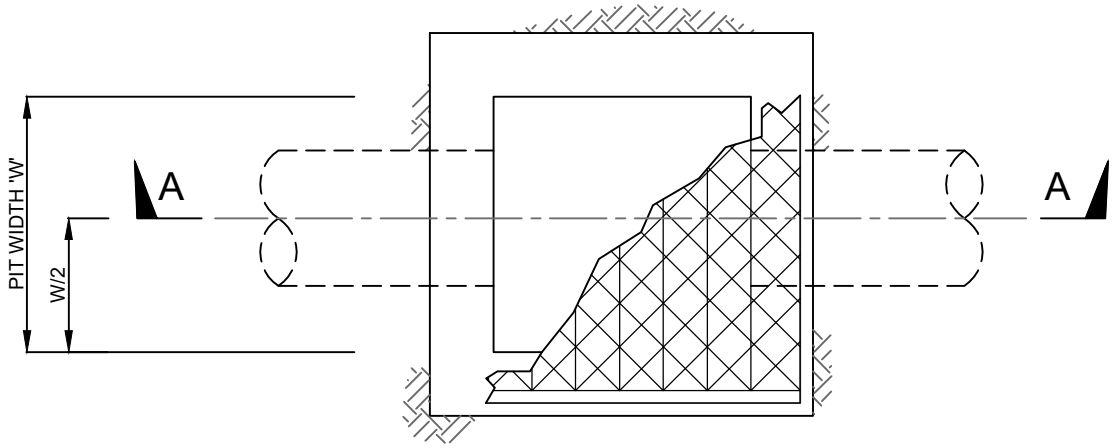
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

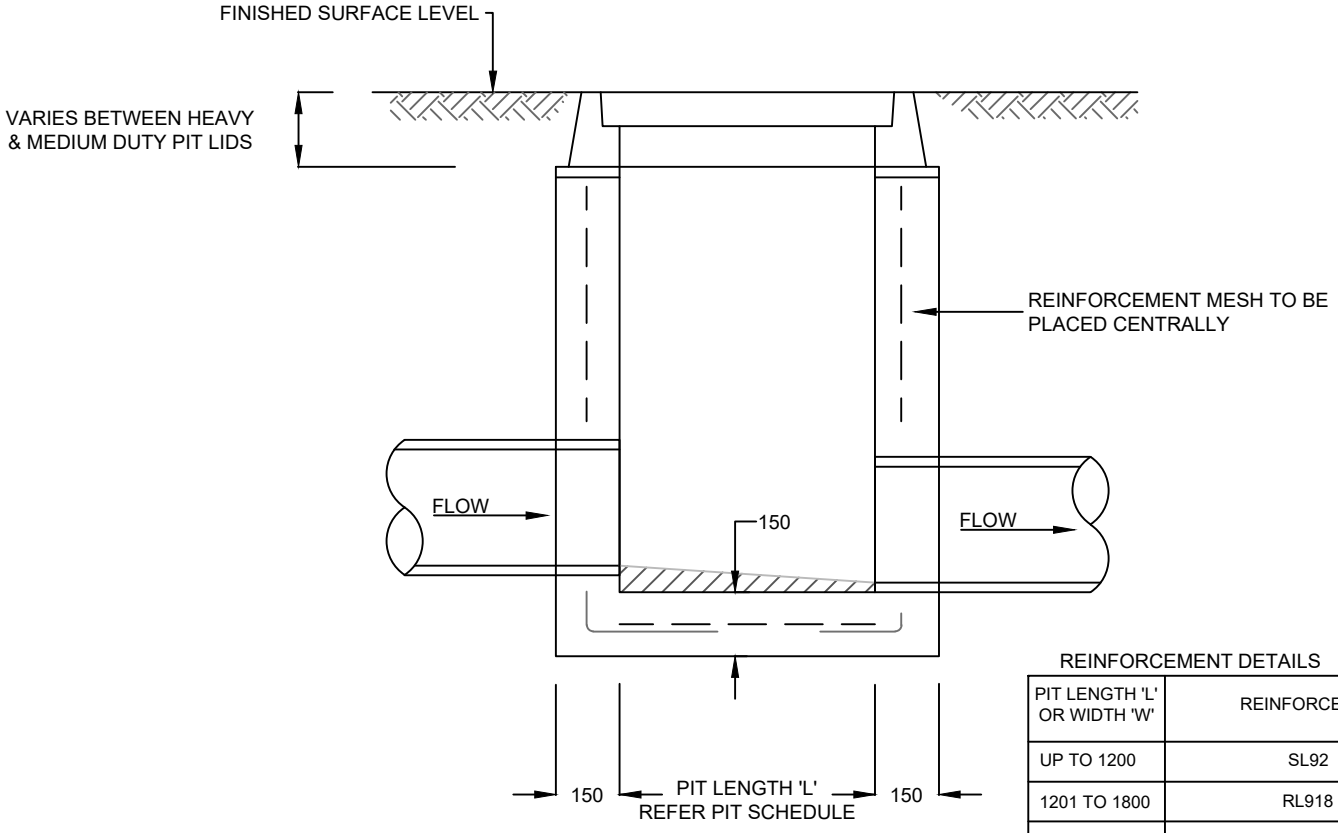
LAST UPDATED JULY 2019

D 210

NOT TO SCALE



PLAN



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 to 1200	600 x 900
> 1200	900 x 900

MINIMUM PIT SIZES (ROAD RESERVE)

PIT DEPTH	PIT SIZE
< 1200	600 x 900
> 1200	900 x 900

NOTES:

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

Banyule CITY COUNCIL

JUNCTION PIT - HEAVY DUTY/LIGHT DUTY/ FIBRE GLASS

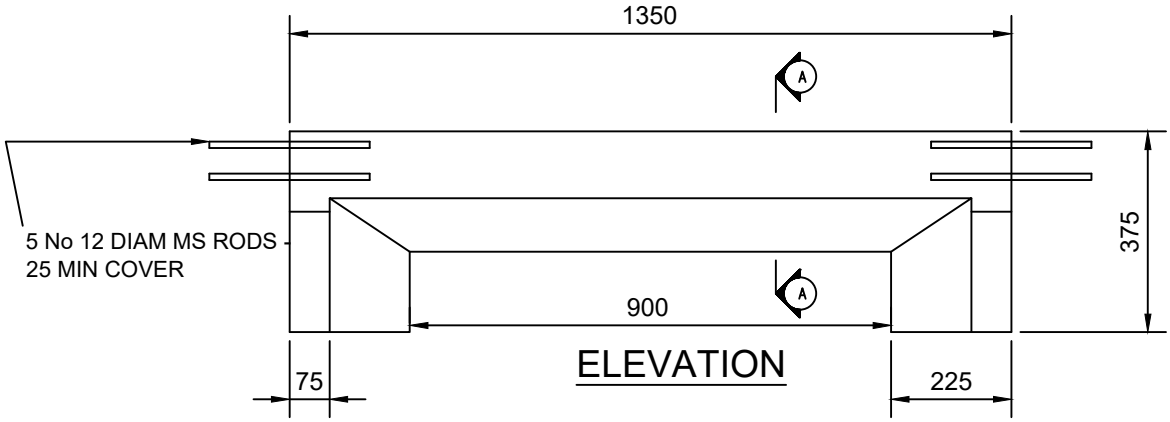
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

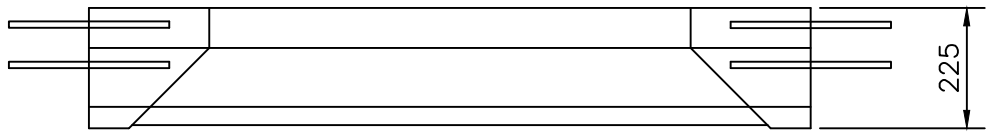
D 215

NOT TO SCALE

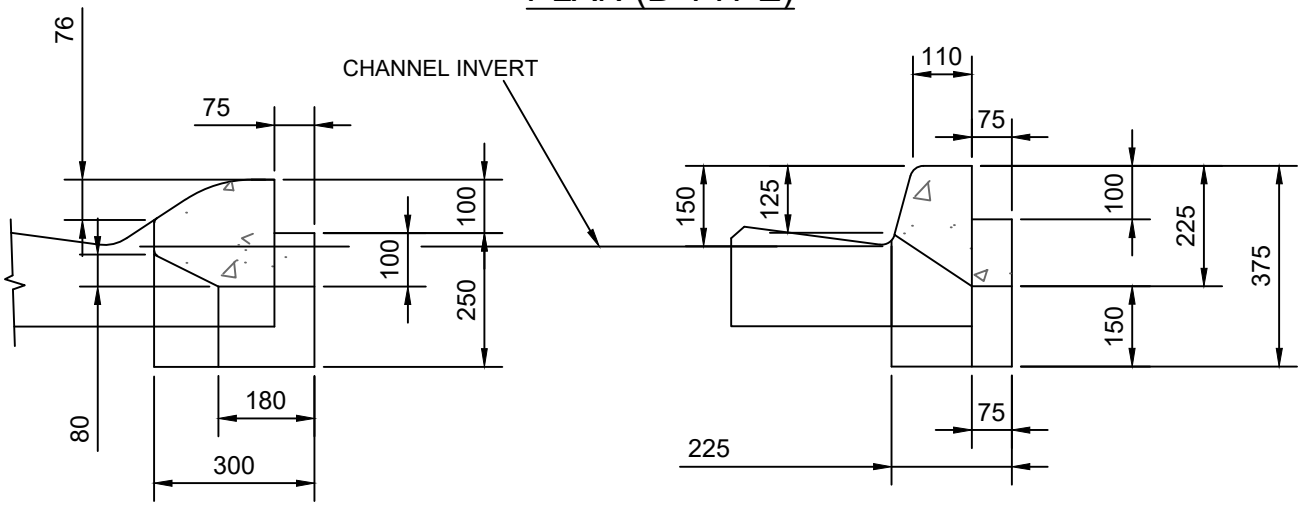


ELEVATION

LINTEL TO BE CONSTRUCTED
USING 25 Mpa CONCRETE
VIBRATED IN MOULD

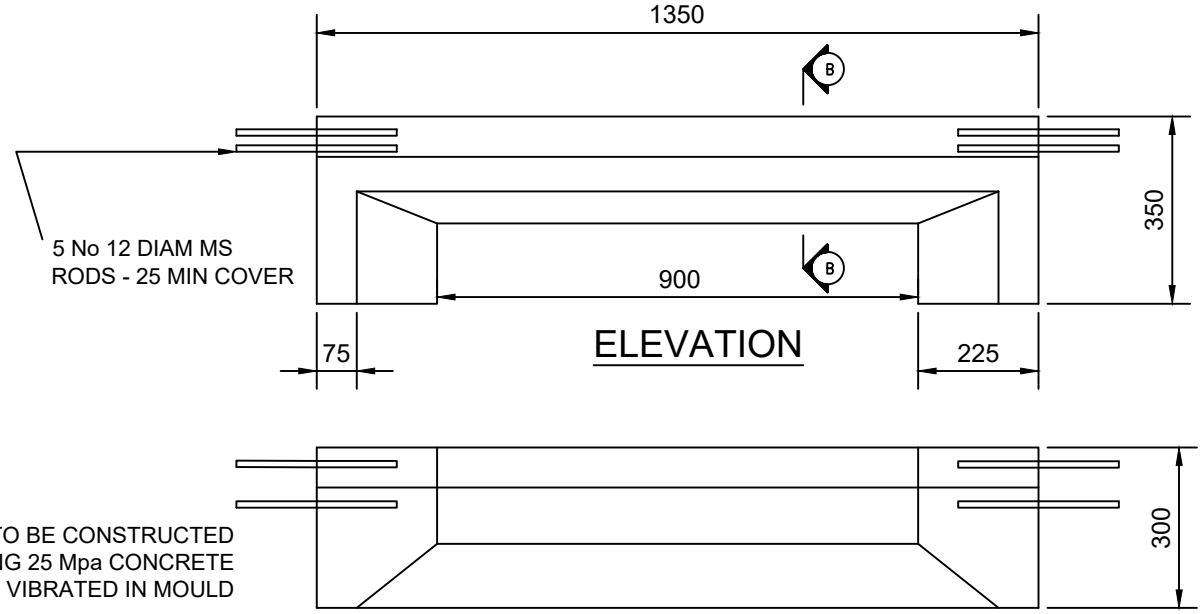


PLAN (B-TYPE)



SECTION B-B

SECTION A-A



ELEVATION

PLAN (SM-TYPE)

ALL MEASUREMENTS IN MILLIMETRES

Banyule
CITY COUNCIL

SEP PRECAST LINTEL

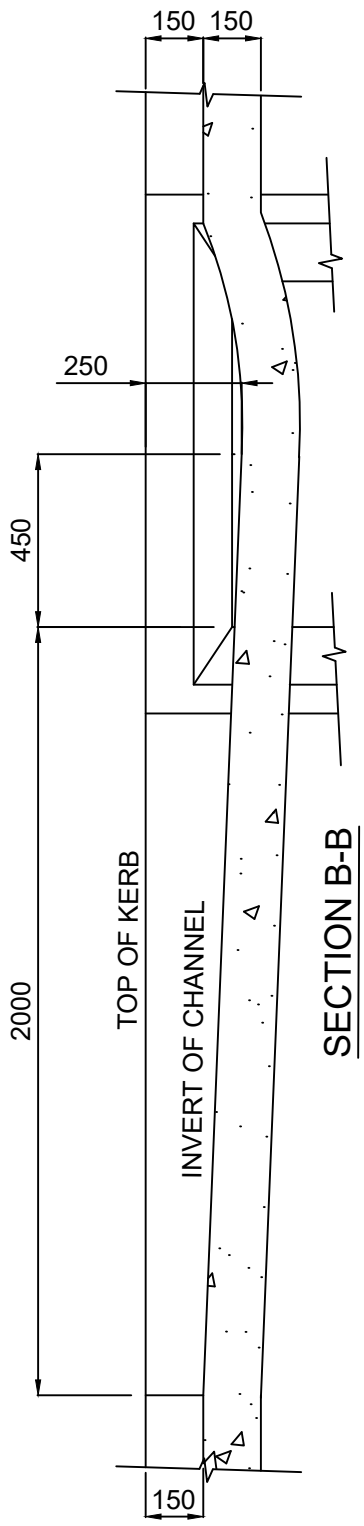
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

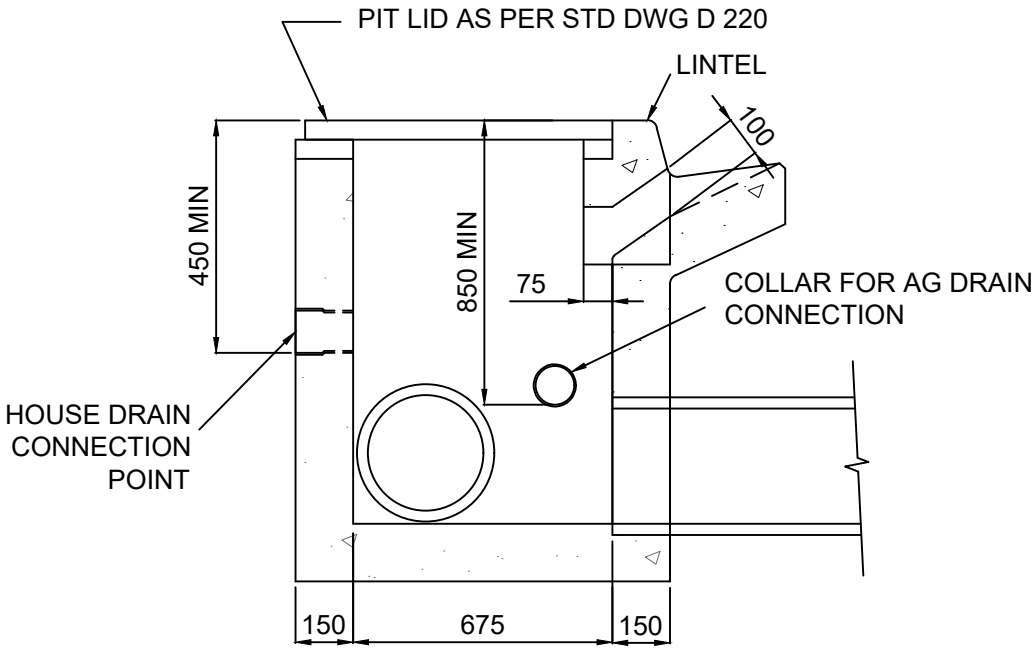
LAST UPDATED JULY 2019

D 220

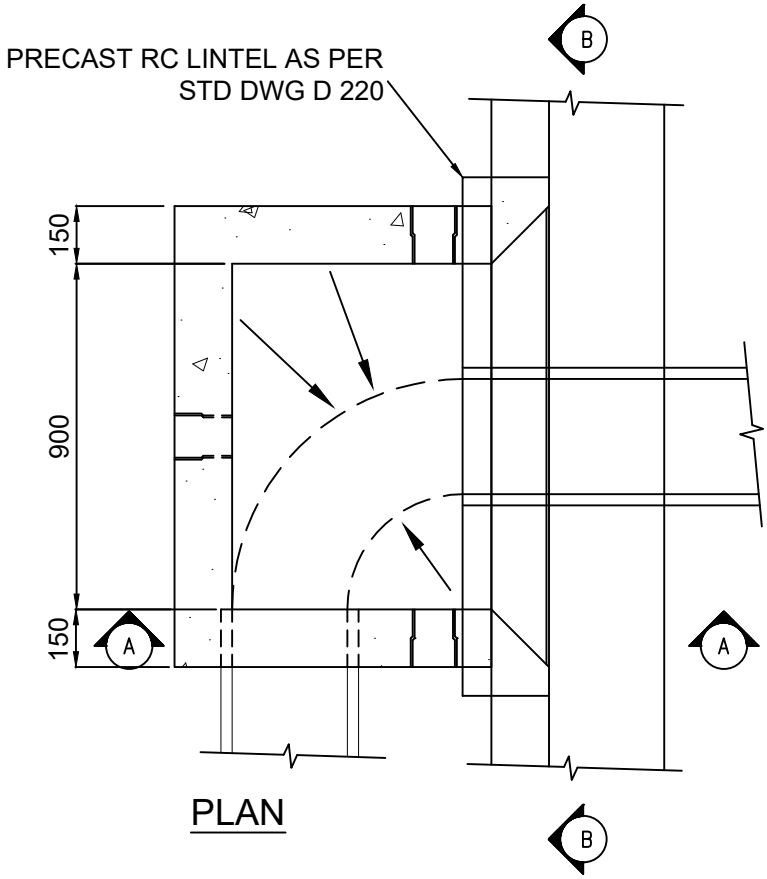
NOT TO SCALE



SECTION B-B



SECTION A-A



PLAN

NOTES:

1. PIT LID AS PER D 205
2. STEP IRONS TO USED FOR PITS WITH DEPTHS GREATER THAN 900mm.
3. WHENEVER DOUBLE SEP's ARE NEEDED CONSTRUCT TWO SEPARATE PITS 300 APART.
4. HOUSE DRAIN CONNECTION COLLARS ARE TO BE LOCATED TO GIVE ADEQUATE FALL FROM LOWEST POINT OF ALLOTMENT.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

SIDE ENTRY PIT B-TYPE KERB

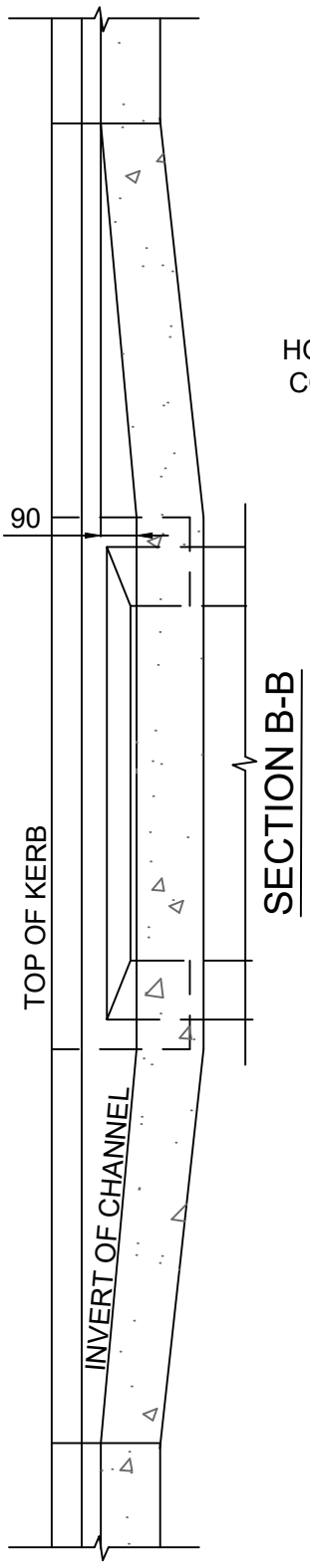
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

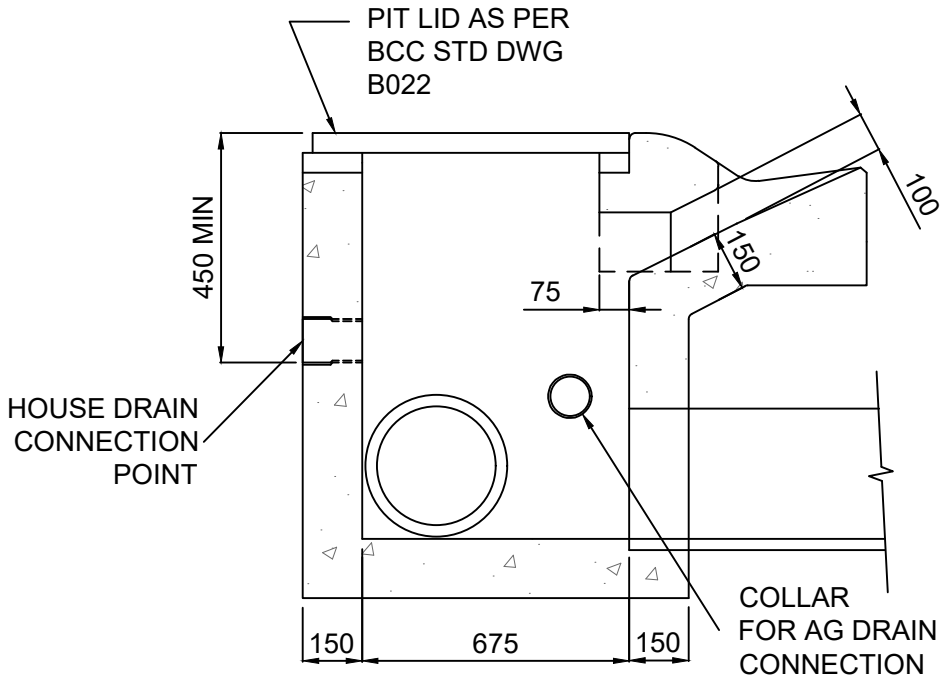
Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

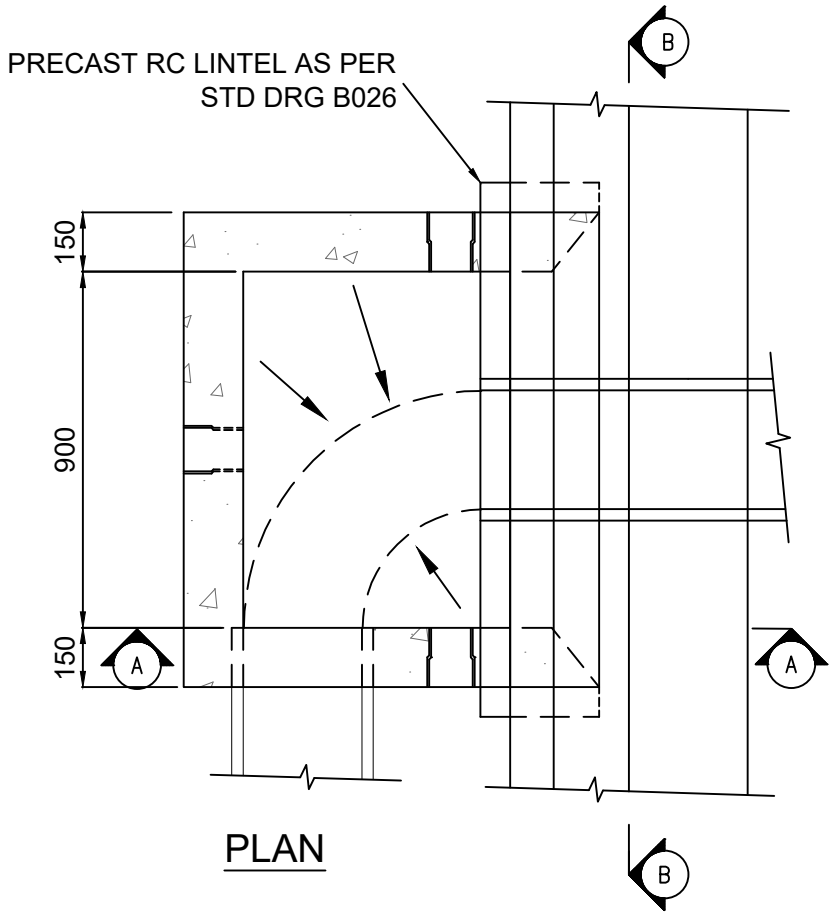
D 225

NOT TO SCALE





SECTION A-A



PLAN

NOTES
1. PIT LID AS PER BCC STD DWG D205.
2. STEP IRONS TO USED FOR PITS WITH DEPTHS GREATER THAN 900mm.
3. WHENEVER DOUBLE SEP's ARE NEEDED CONSTRUCT TWO SEPARATE PITS 300 APART.
4. HOUSE DRAIN CONNECTION COLLARS ARE TO BE LOCATED TO GIVE ADEQUATE FALL FROM LOWEST POINT OF ALLOTMENT.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

SIDE ENTRY PIT SM-TYPE KERB

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

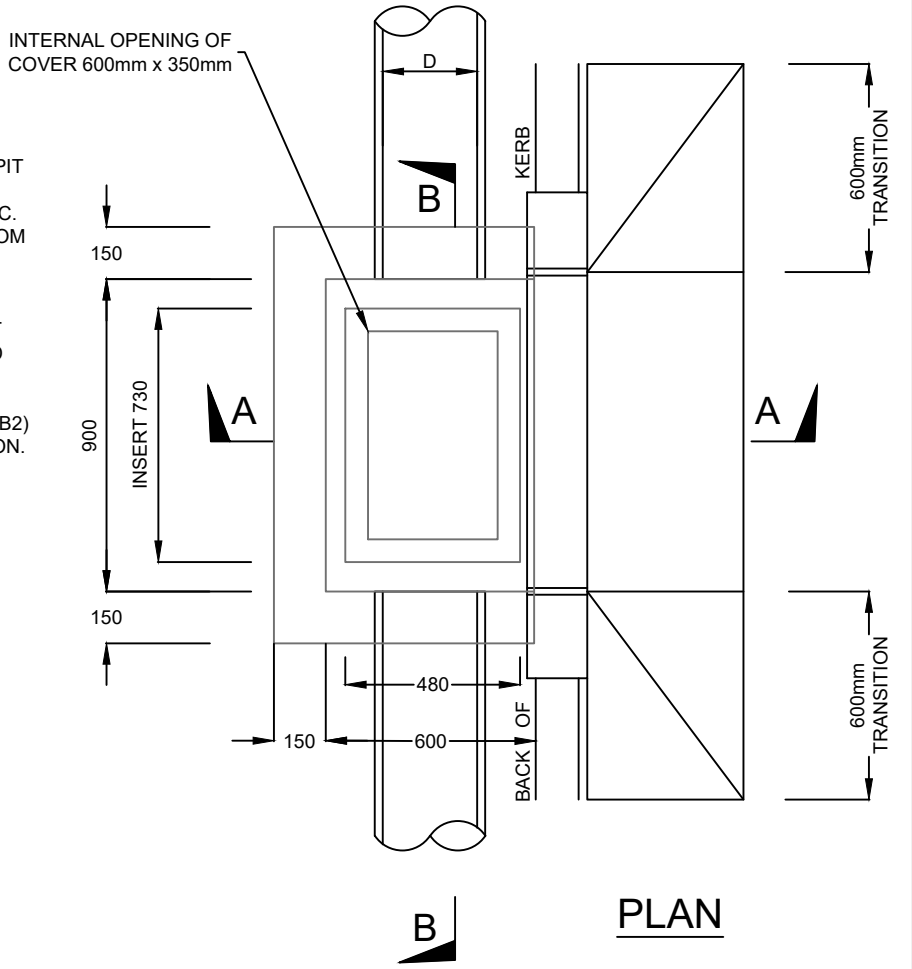
LAST UPDATED JULY 2019

D 230

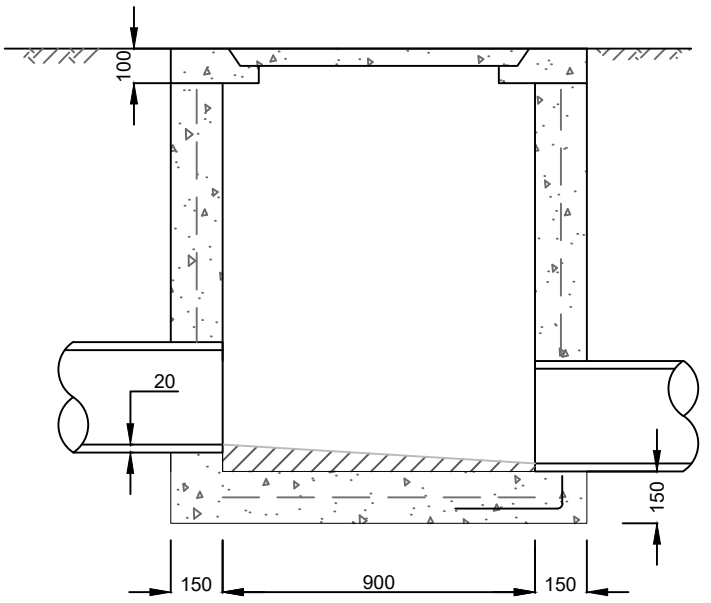
NOT TO SCALE

NOTES:

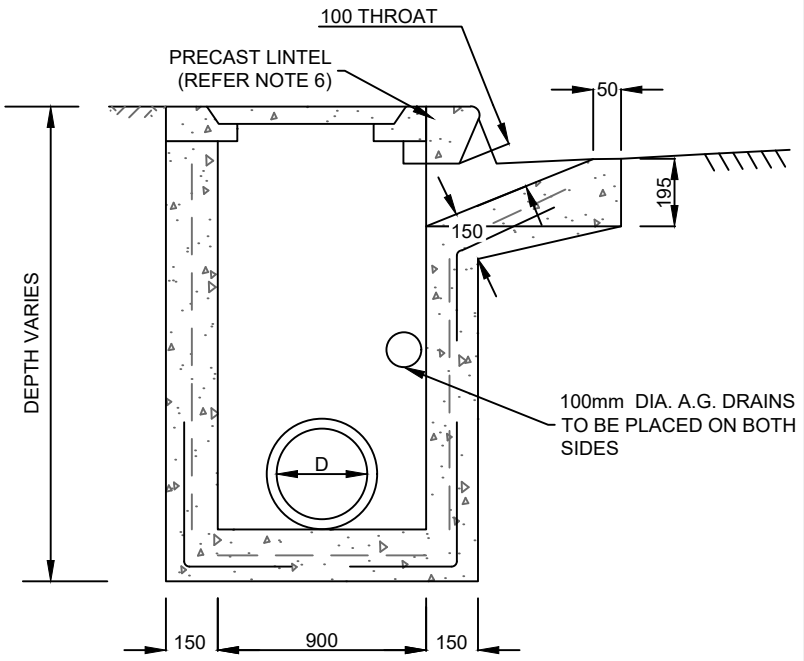
1. PIT TO BE CONSTRUCTED IN 2 STAGES 2-TOP 500mm OF PIT IN CONJUNCTION WITH KERB AND CHANNEL.
2. WHERE PIT AT LOW POINT CONSTRUCT - 100mm DIA, P.V.C. PIPE WITH CONSTRUCTION WORKS TO DRAIN WATER FROM PAVEMENT.
3. AT LOW POINT TRANSITION 600mm BOTH SIDES.
4. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
5. FIBERGLASS 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. REFER TO D 225 FOR MINIMUM HOUSE DRAIN CONNECTION.



PLAN



SECTION B-B



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

SIDE ENTRY PIT WITH PRECAST LINTEL

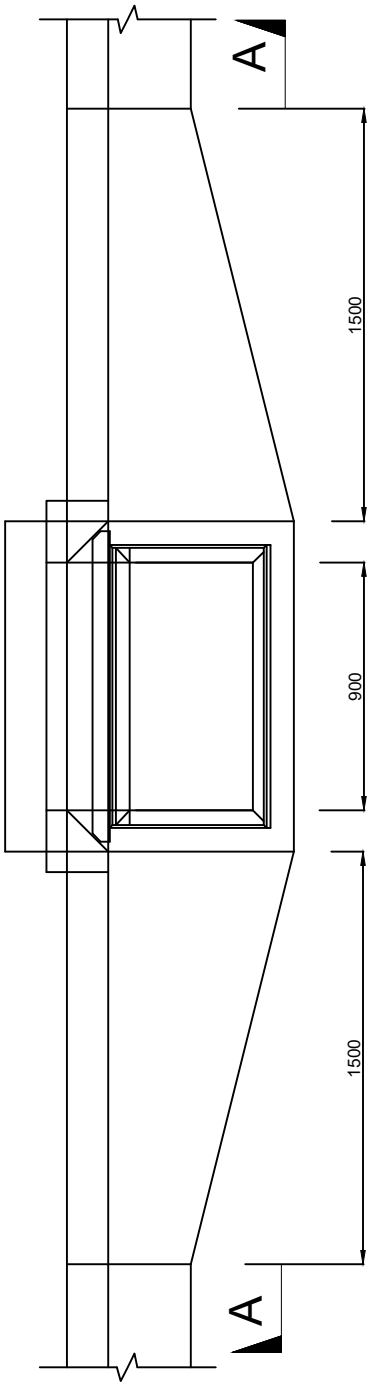
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

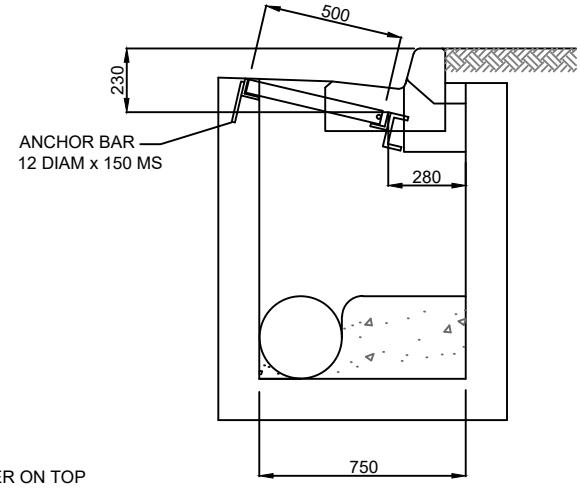
D 235

NOT TO SCALE

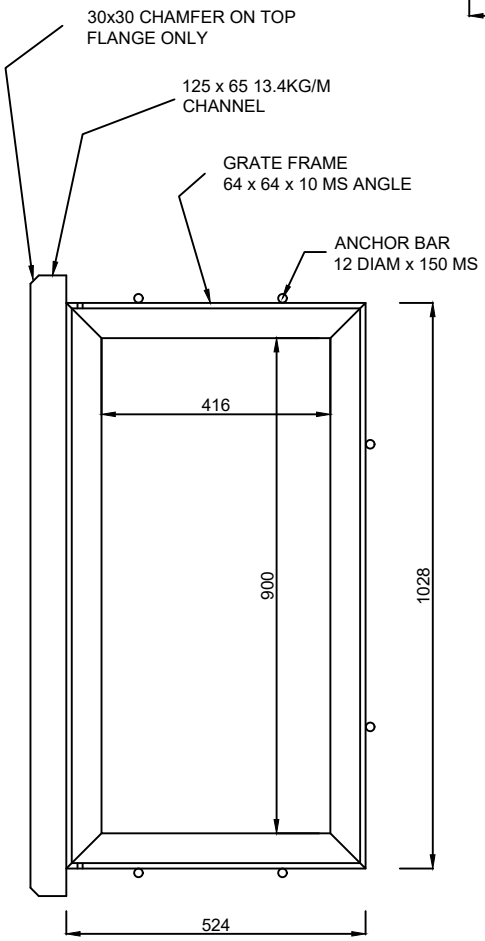


PLAN

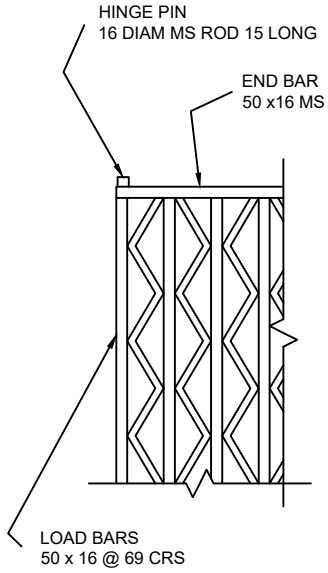
GRATE REMOVED



SECTION A-A



GRATE FRAME



GRATE DETAIL

(O/A SIZE 500 x 1000)

NOTES:

1. DETAILS FOR THE ABOVE GRATE HAVE BEEN DERIVED FROM THAT MANUFACTURED BY 'R & S GRATING'. SIMILAR BICYCLE SAFE GRATINGS FROM OTHER MANUFACTURERS MAY BE USED.
2. GRATE FRAME SHALL BE CONSTRUCTED FROM 64x64x10 MS ANGLE AND BE WELDED TO 25x65 13.4kg/m TF CHANNEL
3. GRATE UNITS SHALL BE MADE FROM 50x16 MS WITH 40x12 WEAVE BARS AND CONTINUOUSLY WELDED ALL ROUND
4. GRATE AND FRAME SHALL BE HOT DIP GALVANISED TO AS 1650/1989 UNLESS SPECIFIED OTHERWISE.
5. PITS DEEPER THAN 1000 SHALL BE FITTED WITH STEP IRONS

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

GRATED SIDE ENTRY PIT

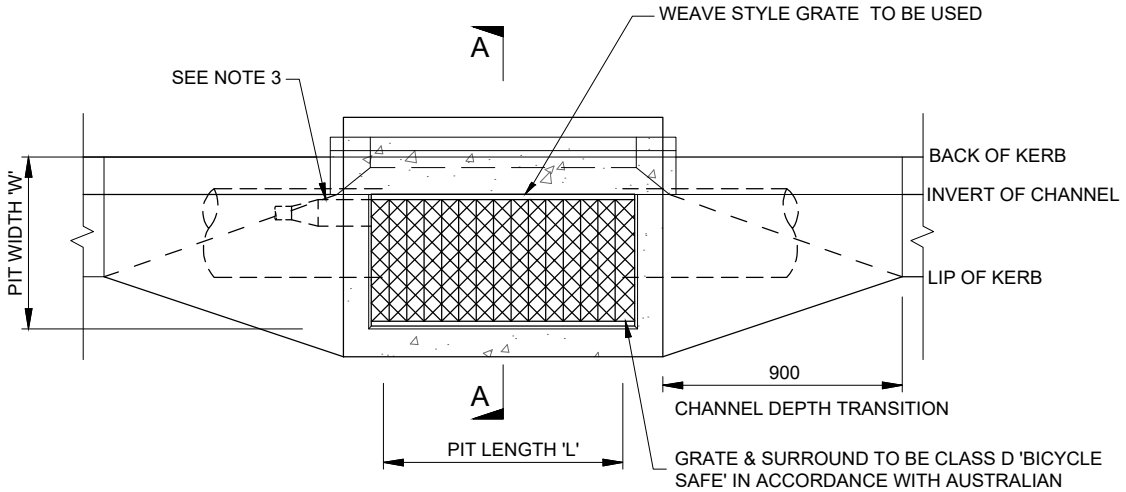
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

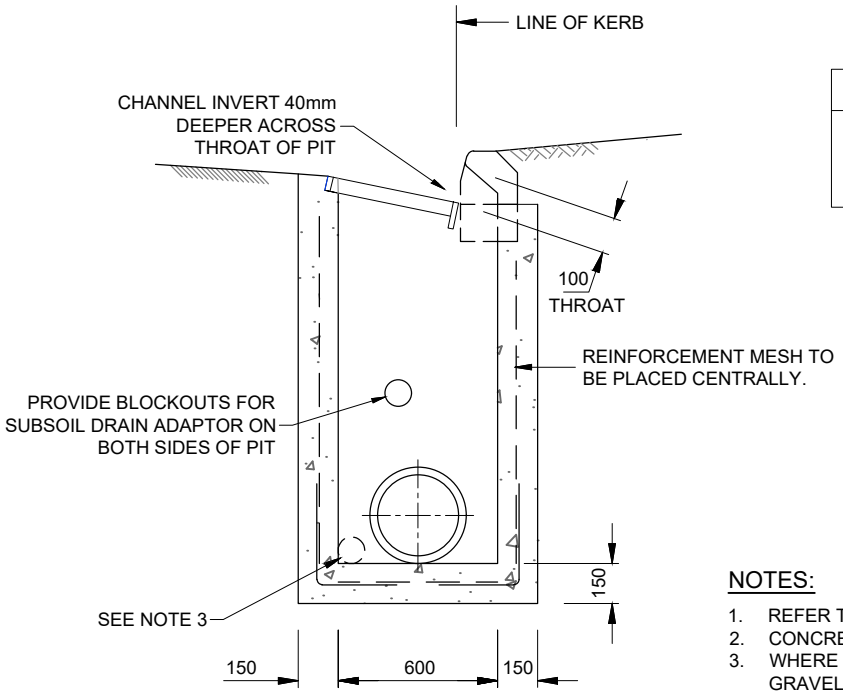
LAST UPDATED JULY 2019

D 240

NOT TO SCALE



PLAN



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 R 150 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. STEP IRONS REQUIRED FOR DEPTHS GREATER THAN 900mm. REFER D 200 FOR THE DETAIL DRAWING.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

GRATED SIDE ENTRY PIT INLET WITH CONCRETE SURROUND

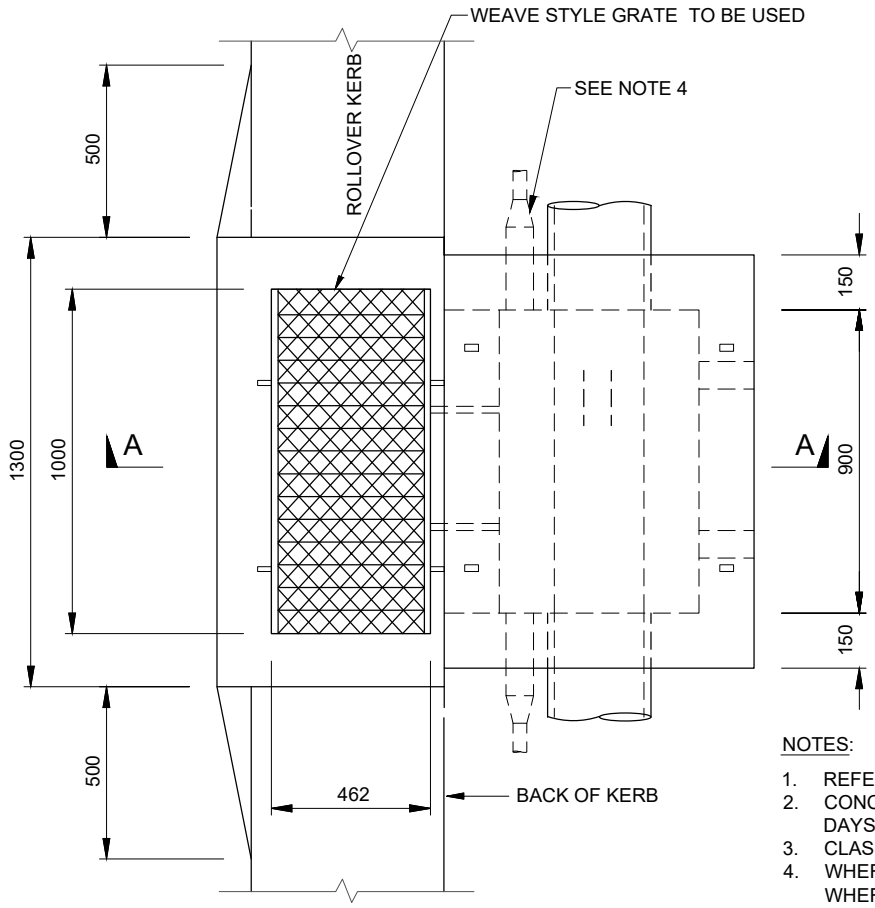
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 245

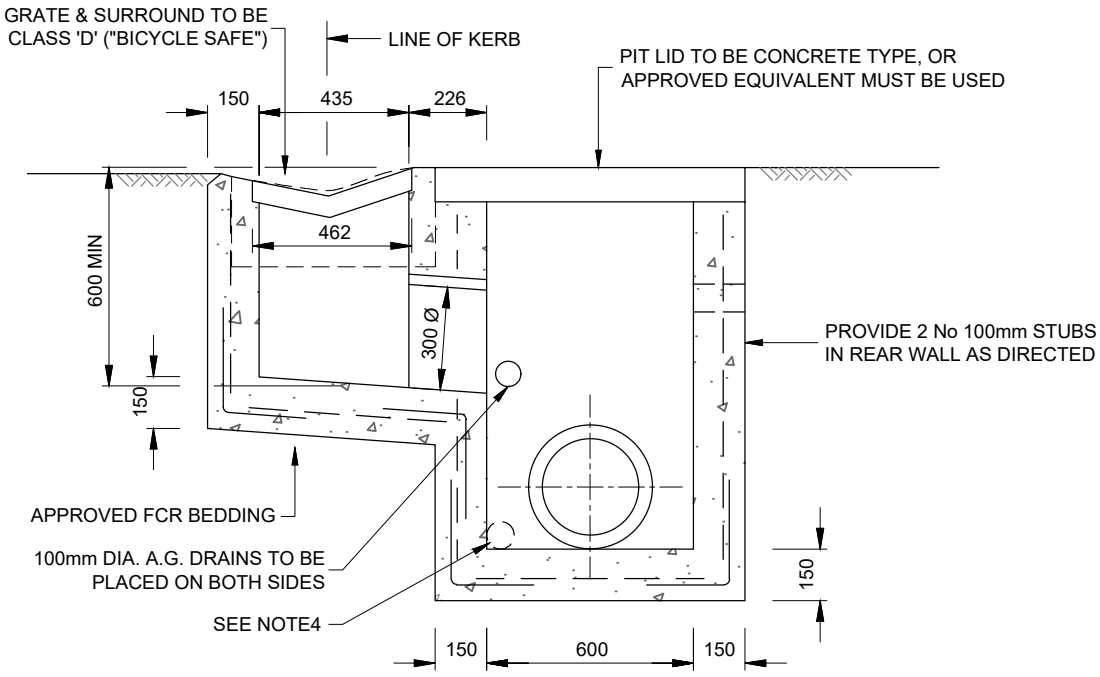
NOT TO SCALE



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. STEP IRONS REQUIRED FOR DEPTHS GREATER THAN 900mm. REFER D 200 FOR THE DETAIL DRAWING.



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

GRATING PIT FOR SM2 MODIFIED KERB & CHANNEL

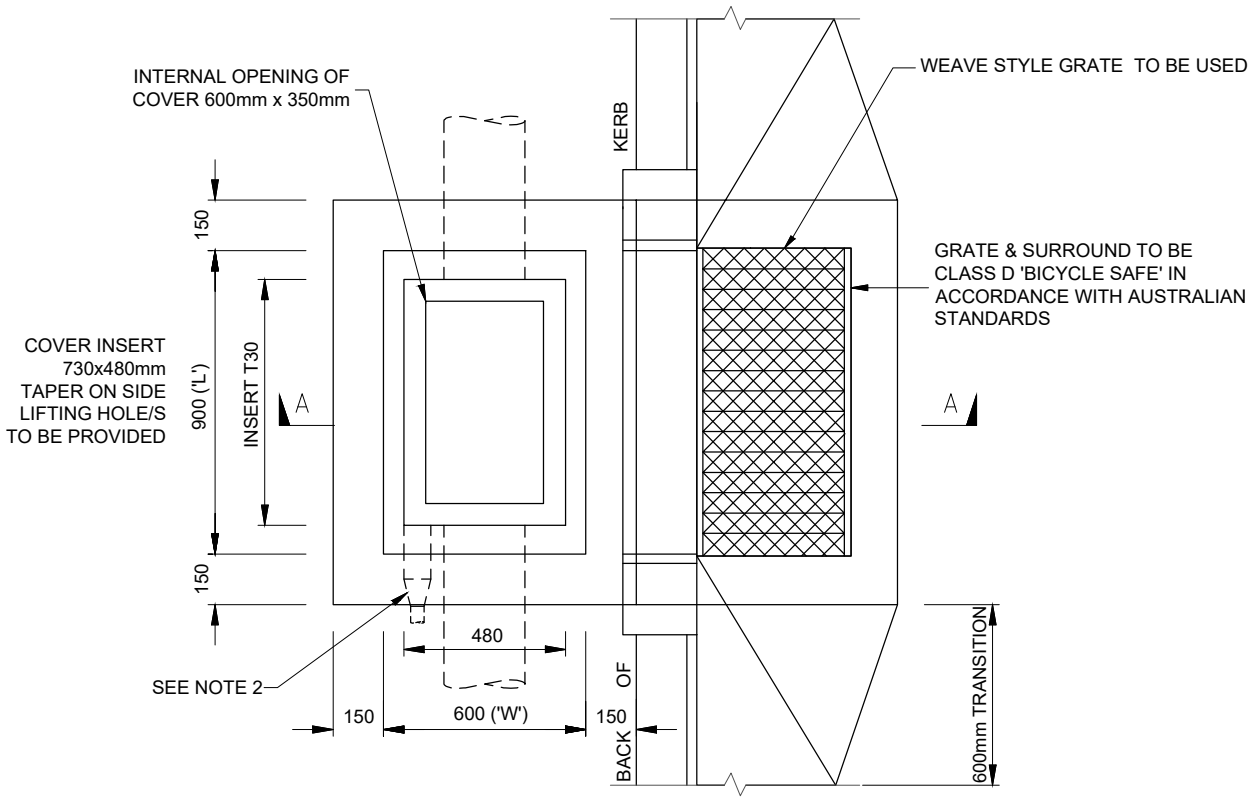
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

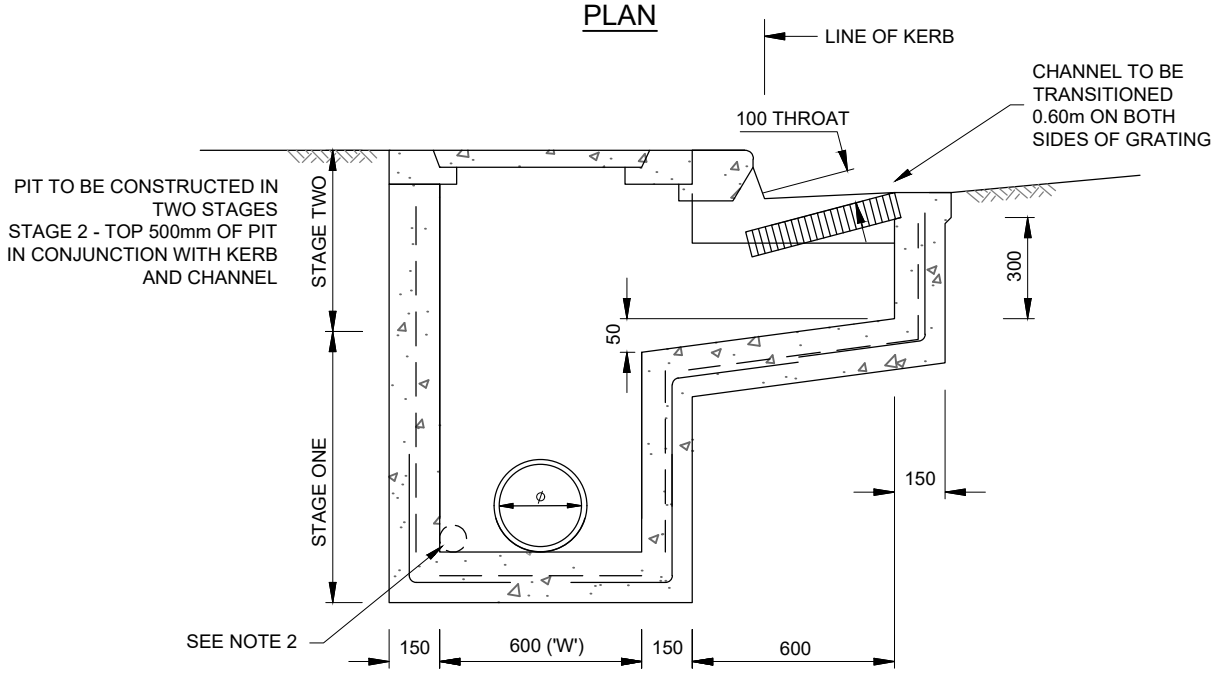
LAST UPDATED JULY 2019

D 250

NOT TO SCALE



PLAN



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. STEP IRONS ARE REQUIRED FOR DEPTHS GREATER THAN 900mm. REFER D 200 FOR THE DETAIL DRAWING.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

SIDE ENTRY PIT WITH GRATING

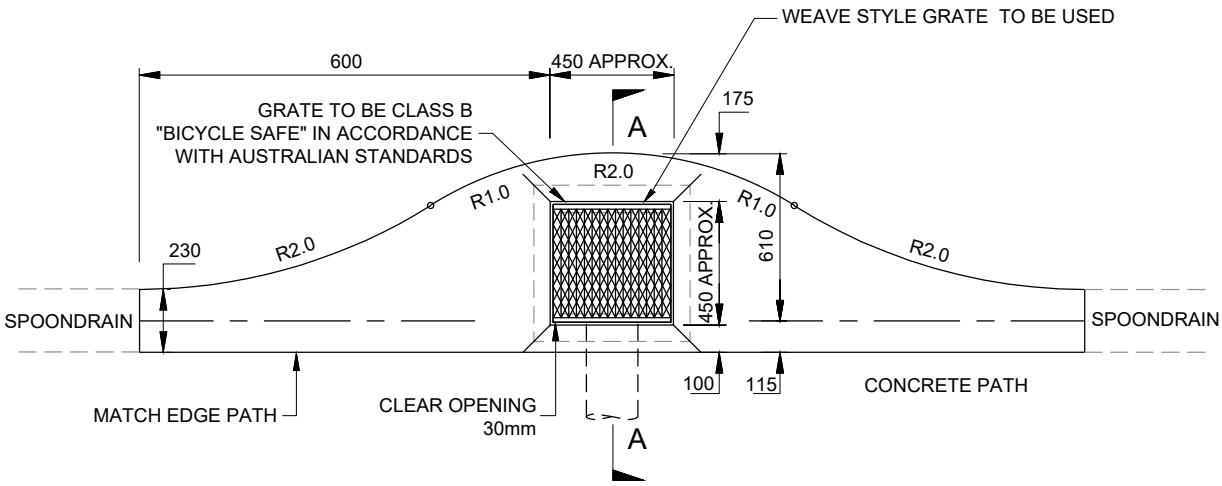
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

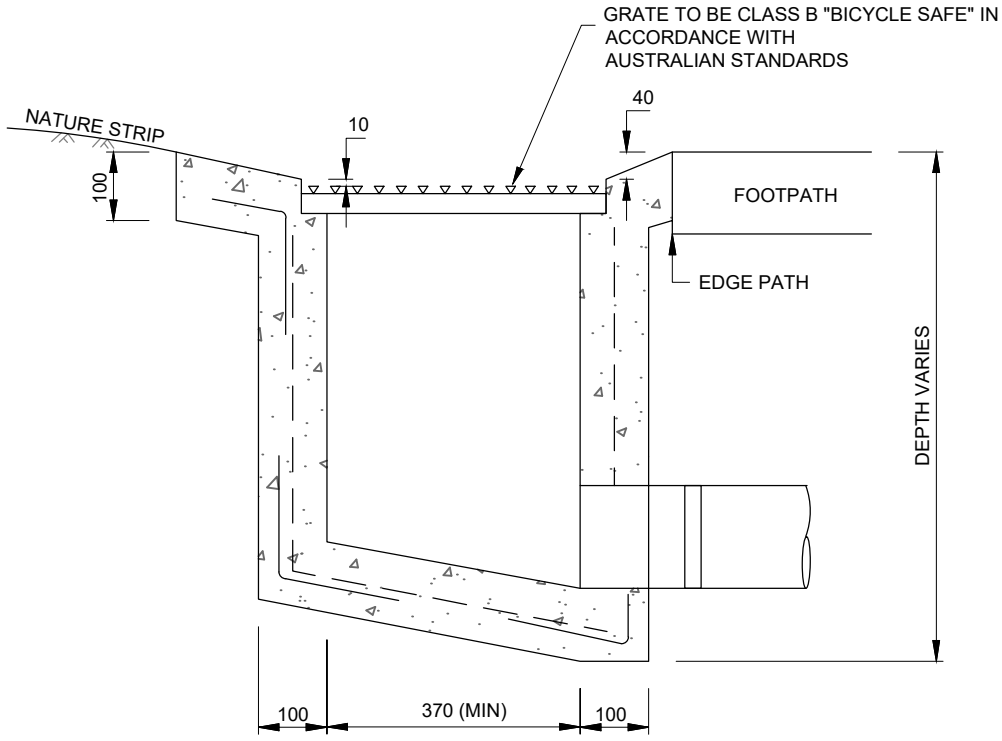
LAST UPDATED JULY 2019

D 255

NOT TO SCALE



PLAN



SECTION A-A

NOTES:

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

Banyule CITY COUNCIL

SPOON PIT WITH GRATING

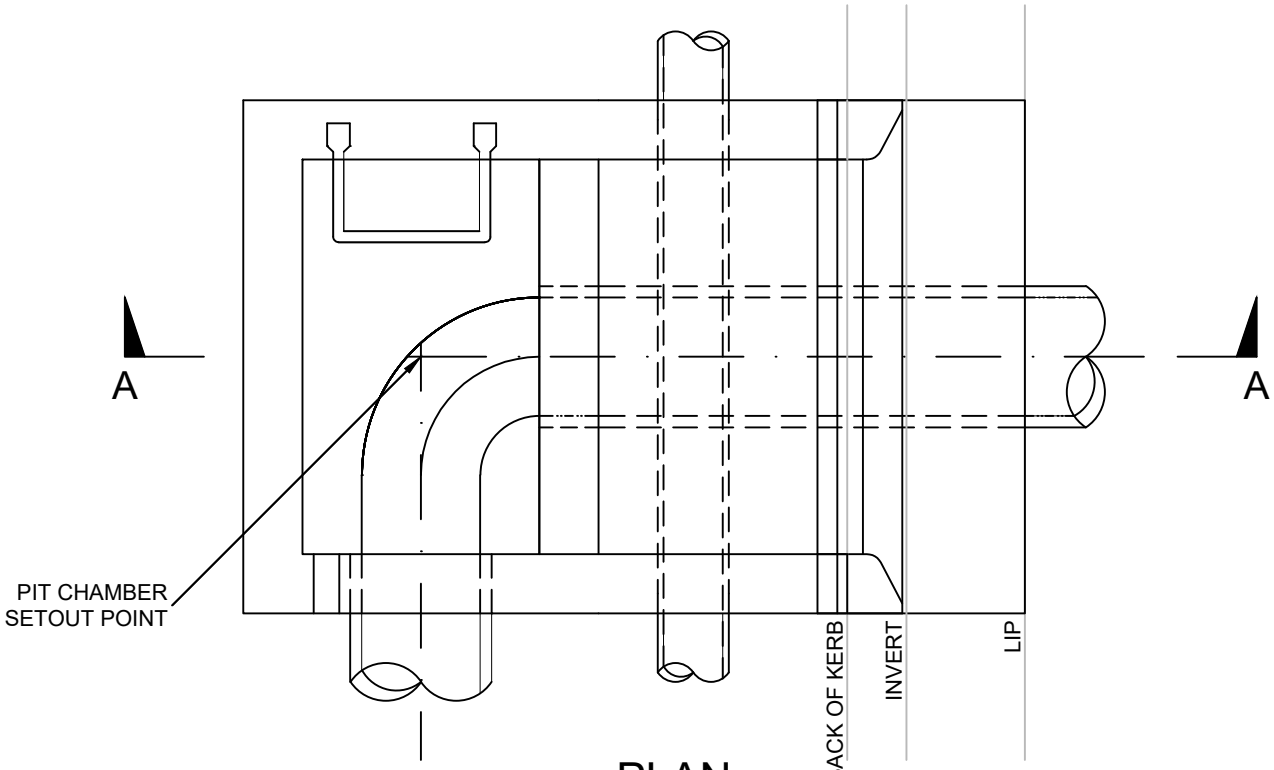
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

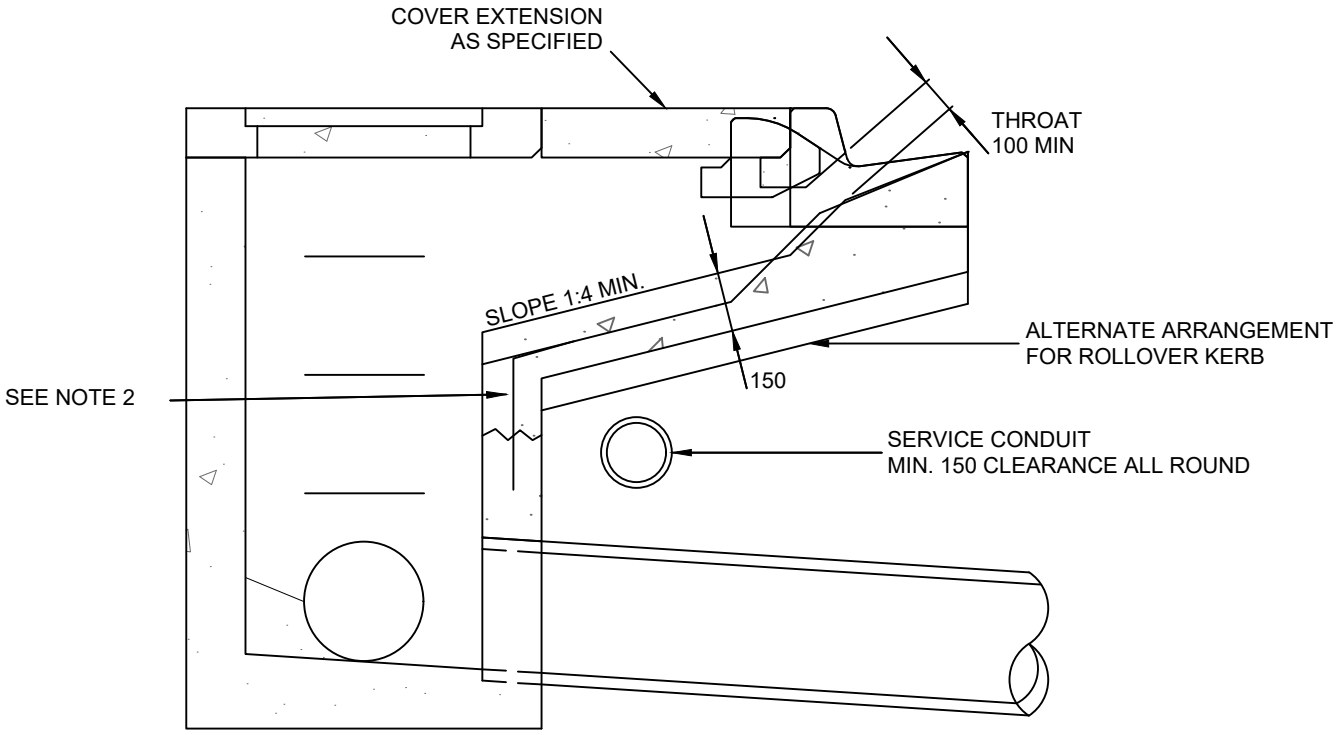
D 260

NOT TO SCALE



PLAN

(COVERS REMOVED)



SECTION A-A

NOTES:

1. FOR STANDARD COVER EXTENSIONS REFER VICROADS STANDARD DRAWING SD1051 ISSUE C
2. Y12 DEFORMED STARTER BARS TO BE PROVIDED WHERE EXTENDED THROAT IS TO BE CONSTRUCTED TO AN EXISTING PIT.

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

EXTENDED THROAT SIDE ENTRY PIT

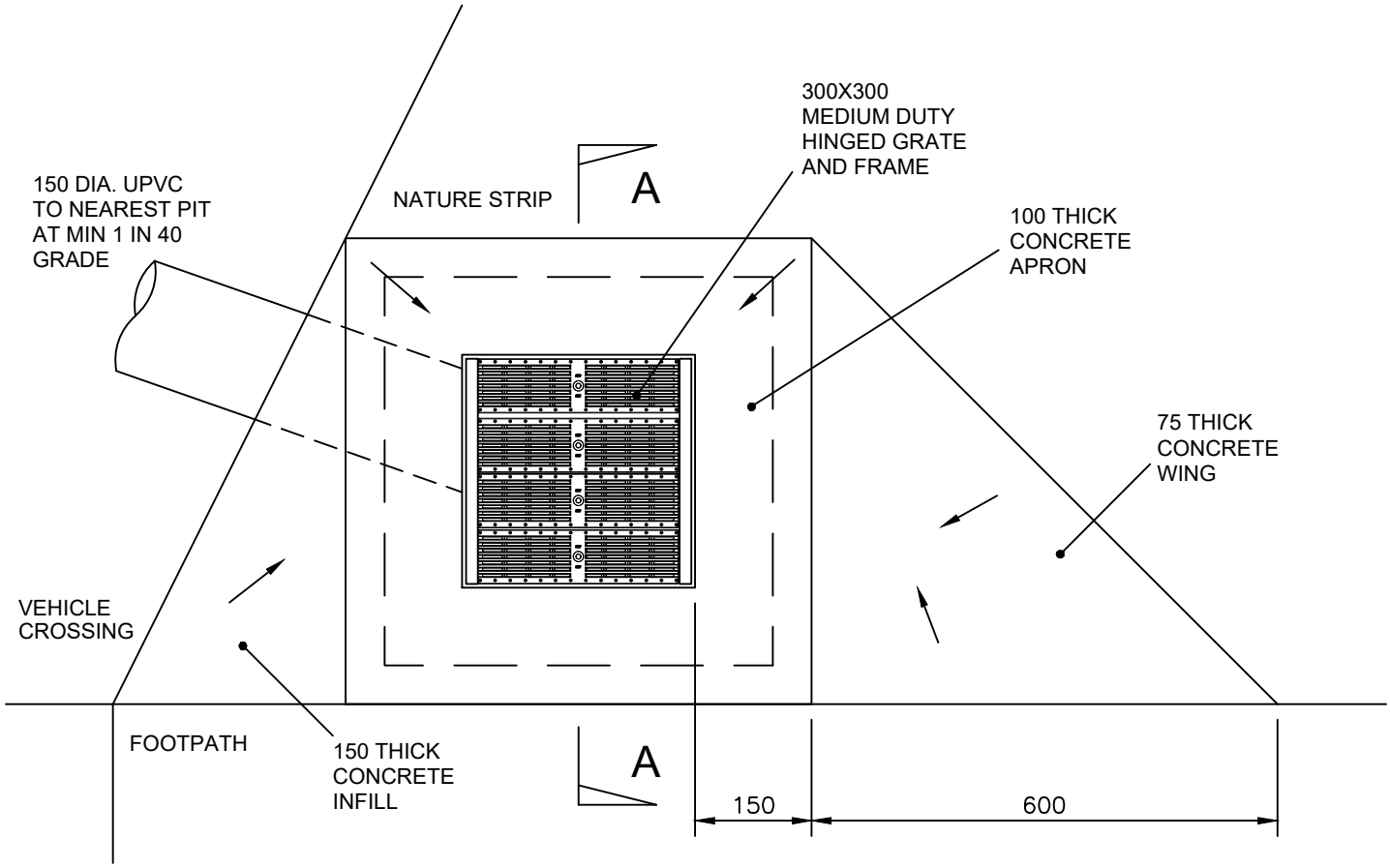
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

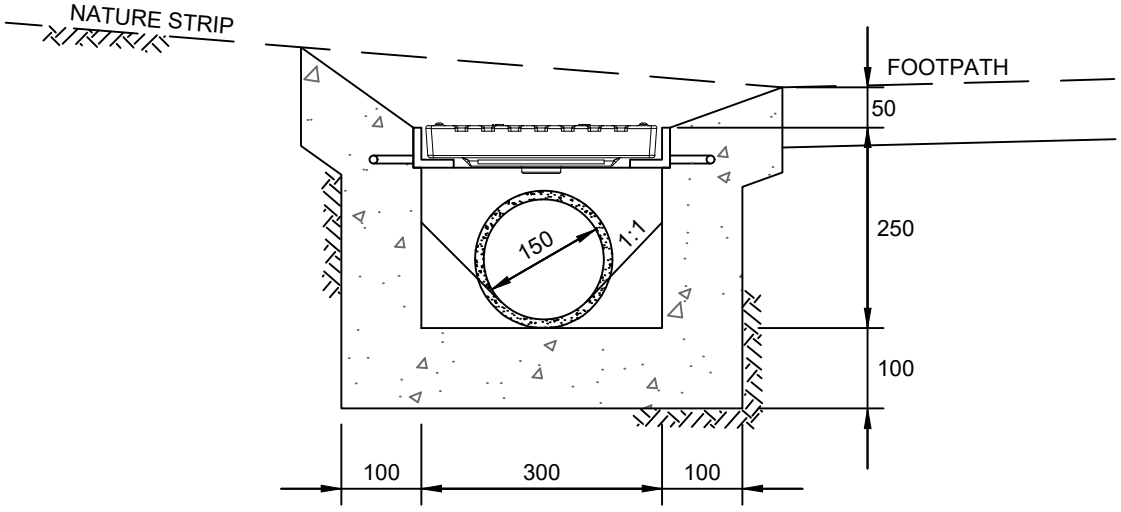
LAST UPDATED JULY 2019

D 265

NOT TO SCALE



PLAN



SECTION A-A

NOTES:

1. GRATE & FRAME TO BE HOT DIPPED GALVANISED AFTER WELDING.
2. GRATED PIT IS NOT TO BE LOCATED IN PEDESTRIAN/CYCLE TRAFFIC AREAS
3. HEAL PROOF GRATE TO BE USED FOR PEDESTRIAN TRAFFIC, OTHERWISE WEAVE GRATE IS REQUIRED

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

FOOTPATH GRATED PIT

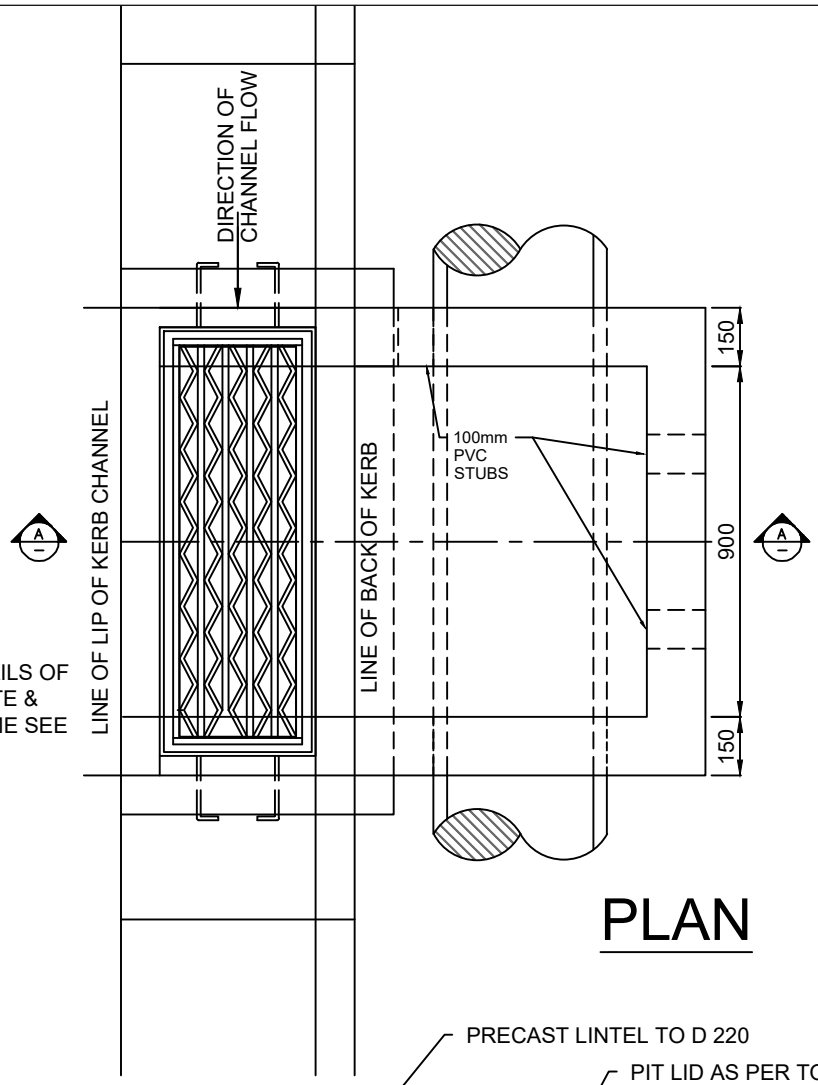
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 270

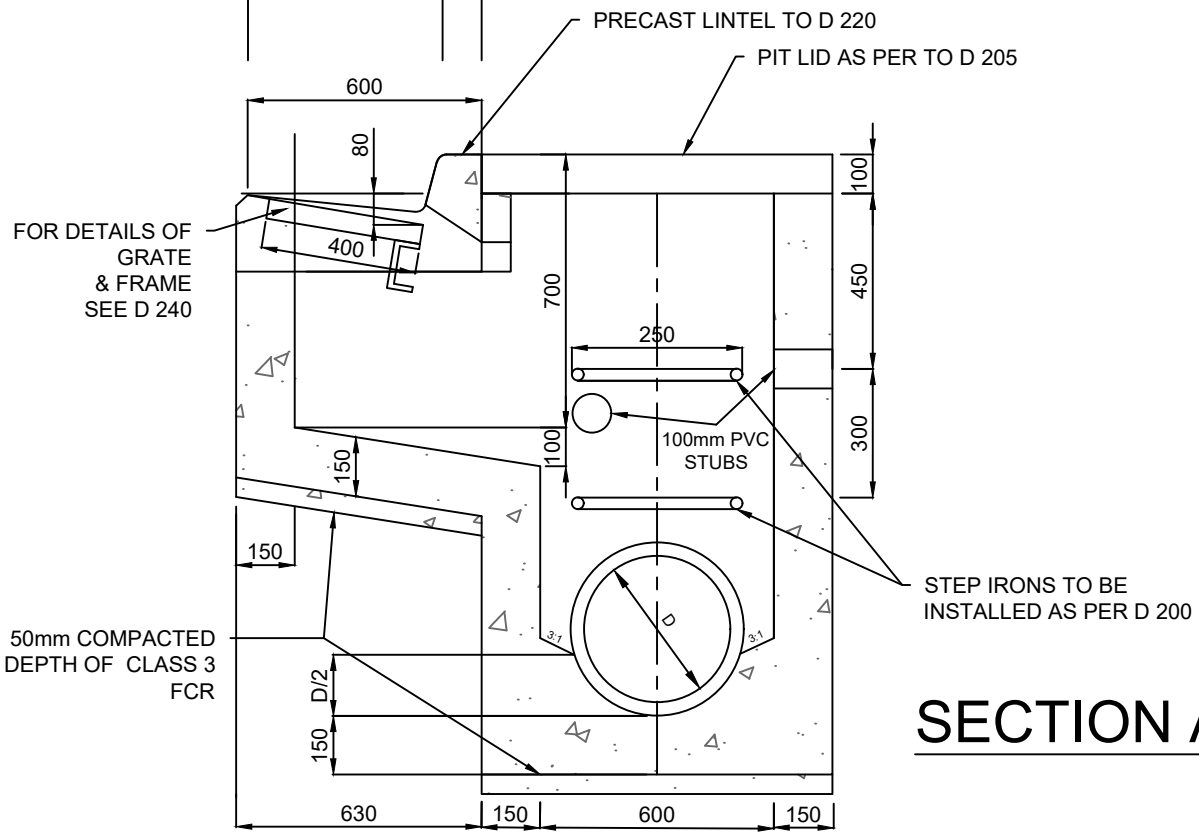
NOT TO SCALE



NOTES:

1. GRATE & SIDE ENTRY PIT FOR PIPE DIA. UP TO 450mm
2. STEP IRONS TO BE PROVIDED IN ALL PITS GREATER THAN 1000mm IN DEPTH
3. PROVIDE 100mm PVC STUB IN BOTH PIT WALLS 700mm BELOW SURFACE FOR AG DRAIN (ON BOTH ENDS OF PIT AT LOW POINT).
4. PROVIDE 2 x 100mm PVC STUBS IN REAR WALL OF PIT 500mm BELOW SURFACE FOR HOUSE DRAIN CONNECTIONS AS DIRECTED.
5. CONCRETE STRENGTH F'C = 25MPa.

PLAN



SECTION A-A

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

COMBINATION GRATE & SIDE ENTRY PIT

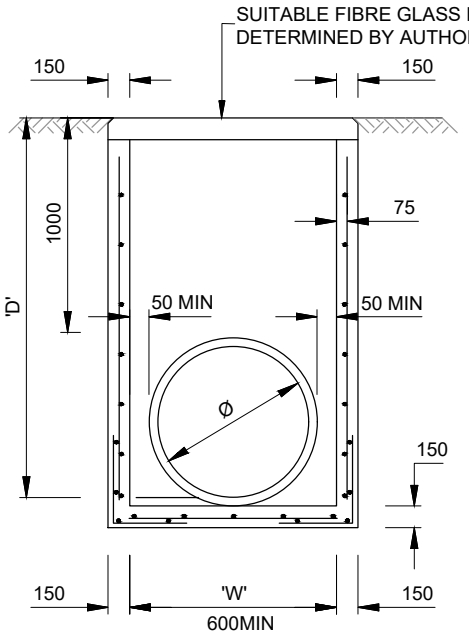
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

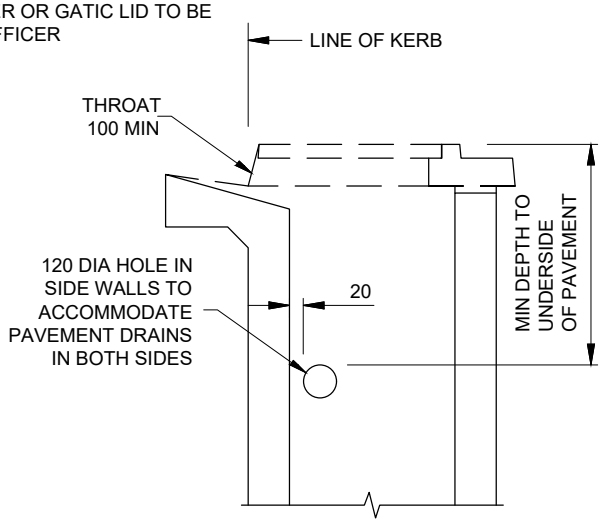
LAST UPDATED JULY 2019

D 275

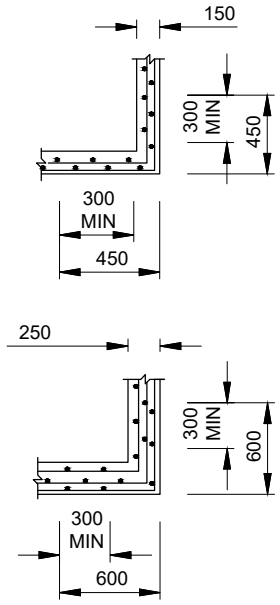
NOT TO SCALE



PITS UP TO 3600mm DEPTH



PRECAST PIT



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

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 D 285.
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:
   - 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. CONCRETE STRENGTH F'C = 25MPa. (MIN) AT 28 DAYS.
9. EXCAVATED MATERIAL SHOULD NOT BE USED AROUND PIT SURROUND. 3% CEMENT STABLISER MUST BE USED.
10. STEP IRONS ARE REQUIRED FOR ALL PITS WHICH ARE ≥ 1M IN DEPTH

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

UNHAUNCHED PITS (SIDE ENTRY)

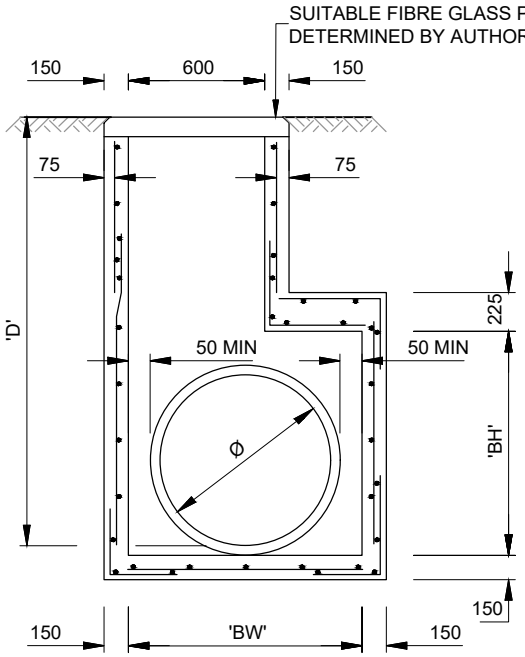
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

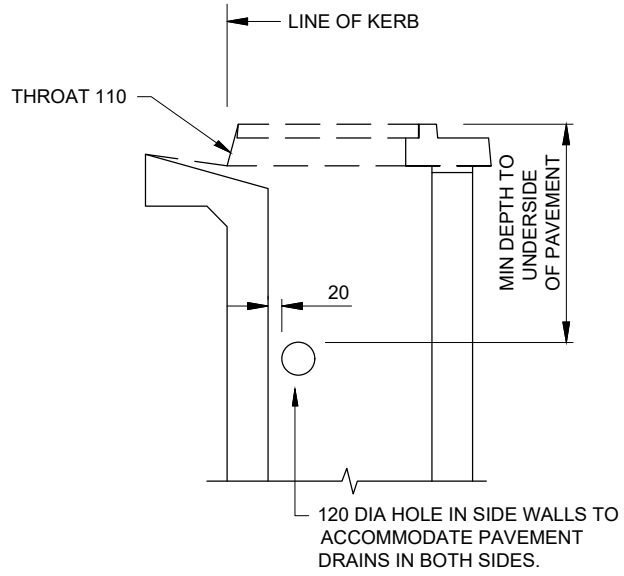
LAST UPDATED JULY 2019

D 280

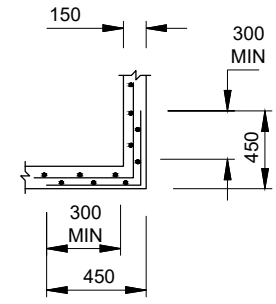
NOT TO SCALE

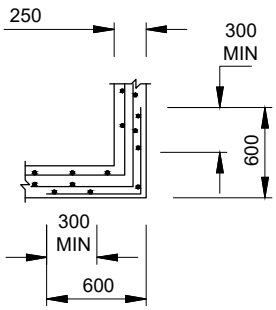


PITS UP TO 3600mm DEPTH



PRECAST PIT





PLAN VIEW

CORNER DETAILS

NOTES:

1. PIPES LESS THAN 525mm DIA. MAY NOT REQUIRE HAUNCHING. REFER D 280.
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:
   - 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.
9. STEP IRONS REQUIRED FOR DEPTHS GREATER THAN 900mm. REFER D 200 FOR THE DETAIL DRAWING.

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

Banyule CITY COUNCIL

HAUNCHED PITS (SIDE ENTRY)

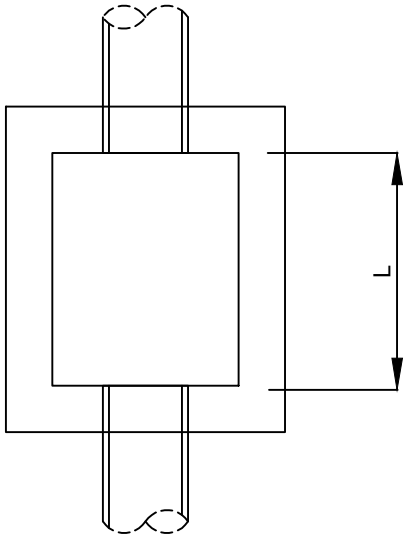
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

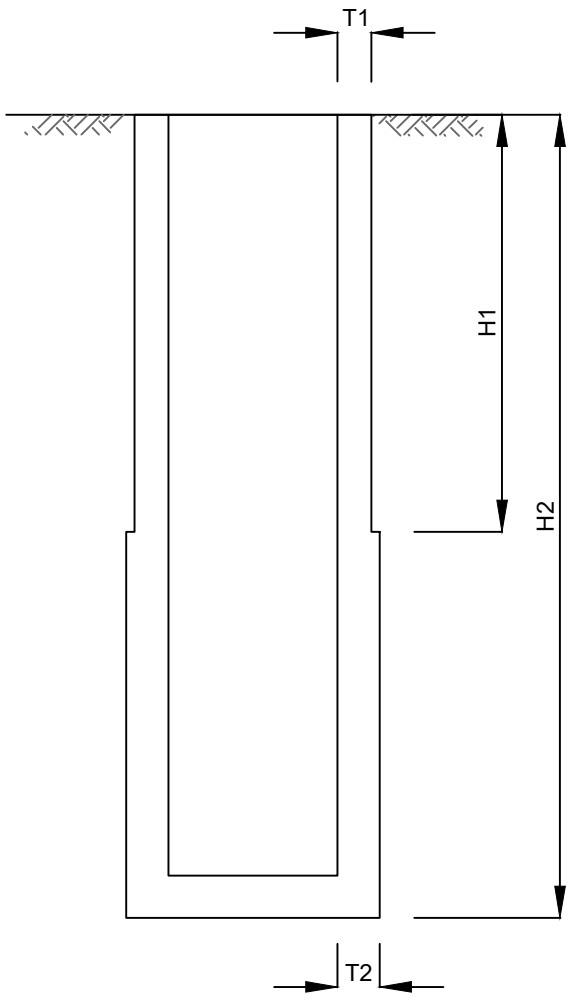
LAST UPDATED JULY 2019

D 285

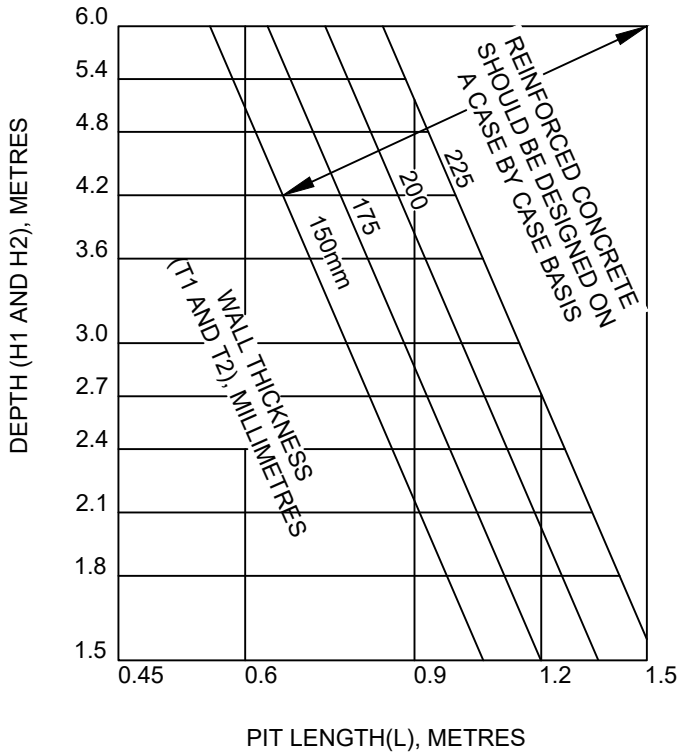
NOT TO SCALE



PLAN



SECTION



ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

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

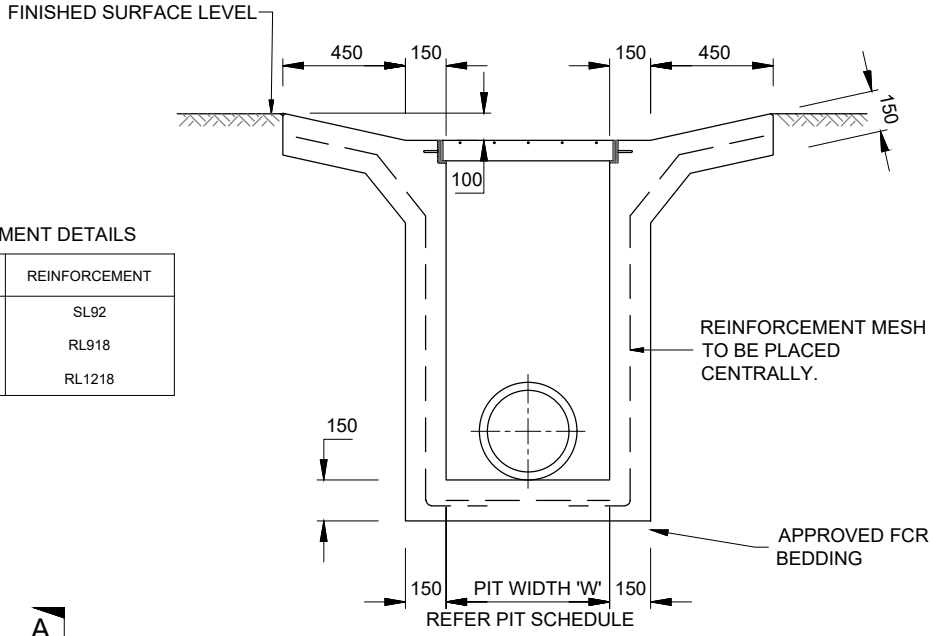
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 290

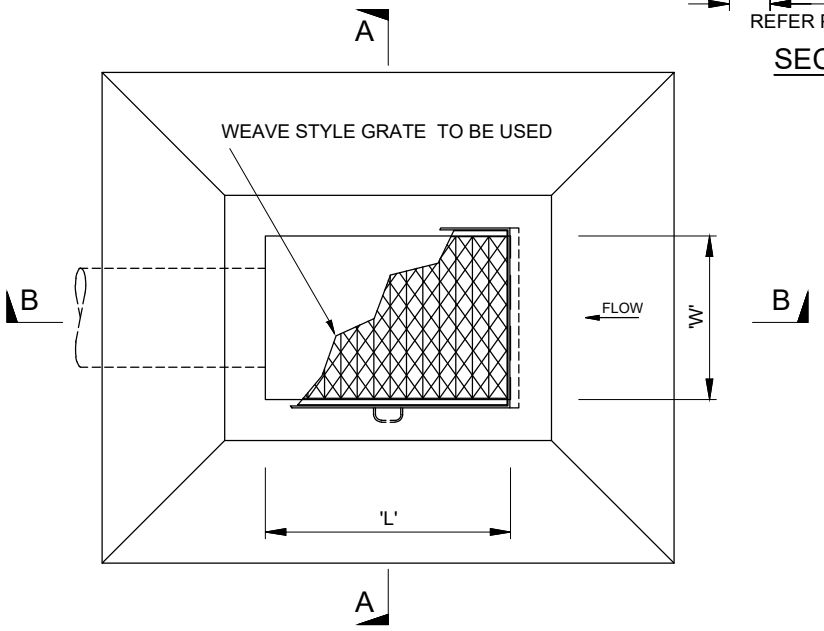
NOT TO SCALE



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

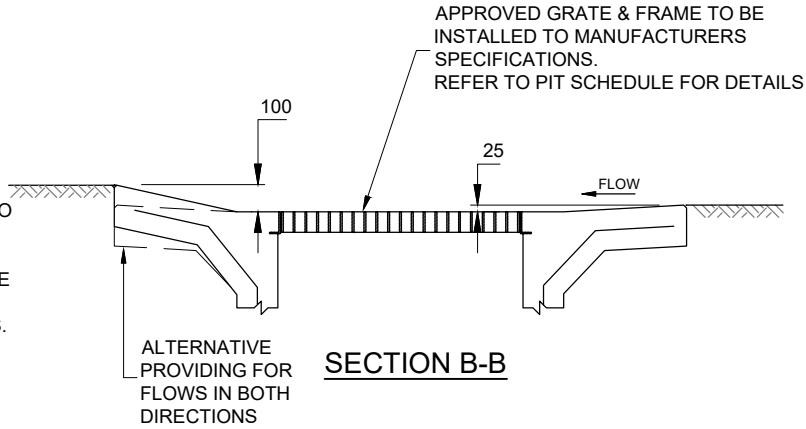
NOT TO SCALE

NOTES:

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

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.



SECTION B-B

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

DEPRESSED GRATED PIT

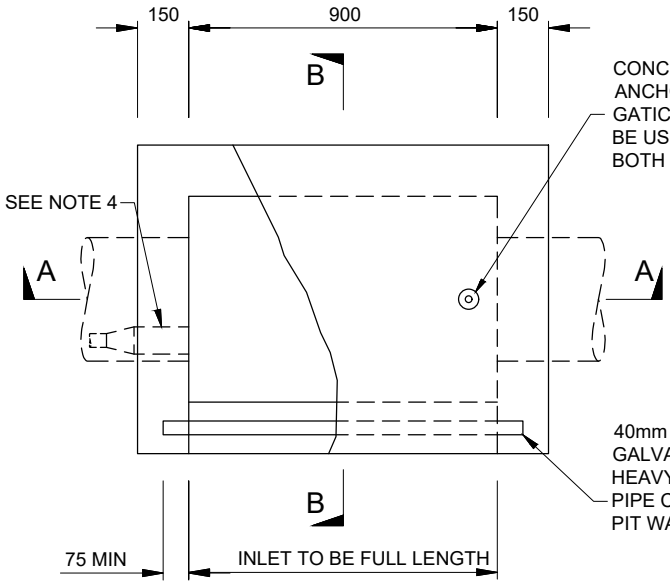
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 295

NOT TO SCALE



PLAN

NOT TO SCALE

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.

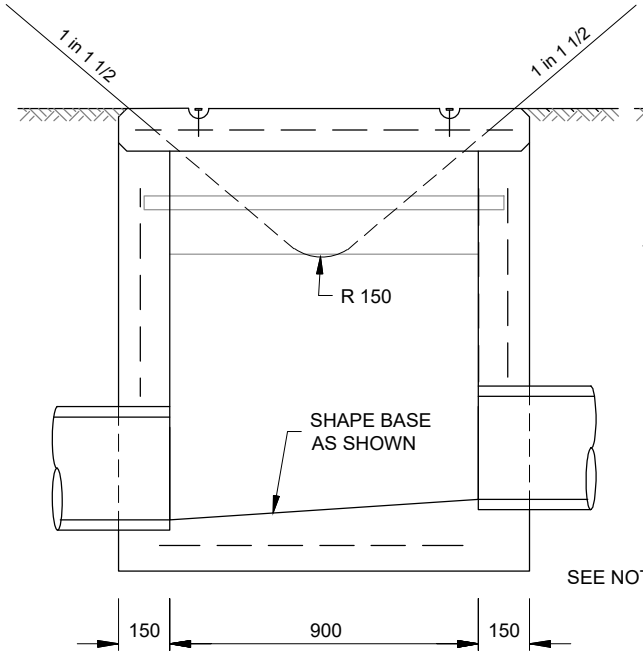
40mm N.B. GALVANISED HEAVY WEIGHT PIPE CAST INTO PIT WALLS

REINFORCEMENT DETAILS

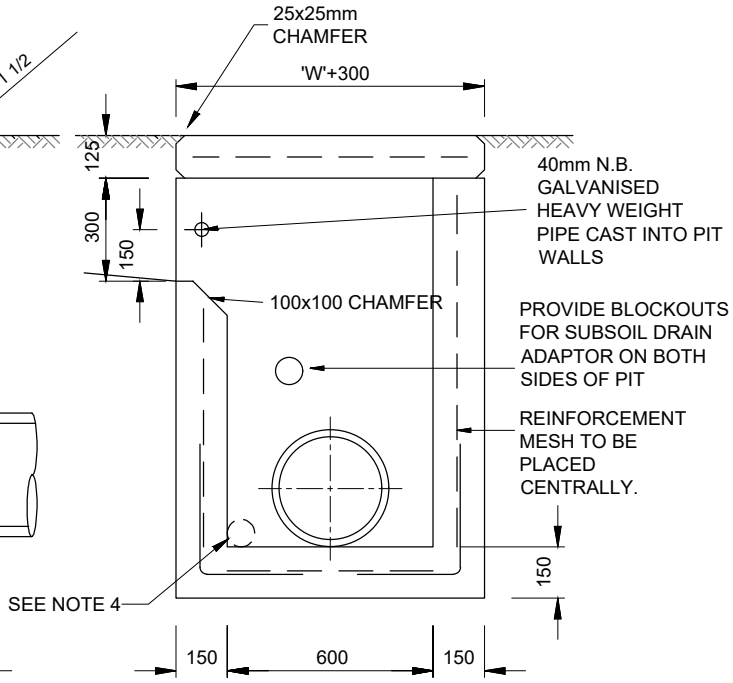
PIT LENGTH 'L' OR WIDTH 'W'	REINFORCEMENT
UP TO 1200	SL92
1201 TO 1800	RL918
1801 TO 2400	RL1218

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.



SECTION A-A



SECTION B-B

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

INLET CATCH PIT

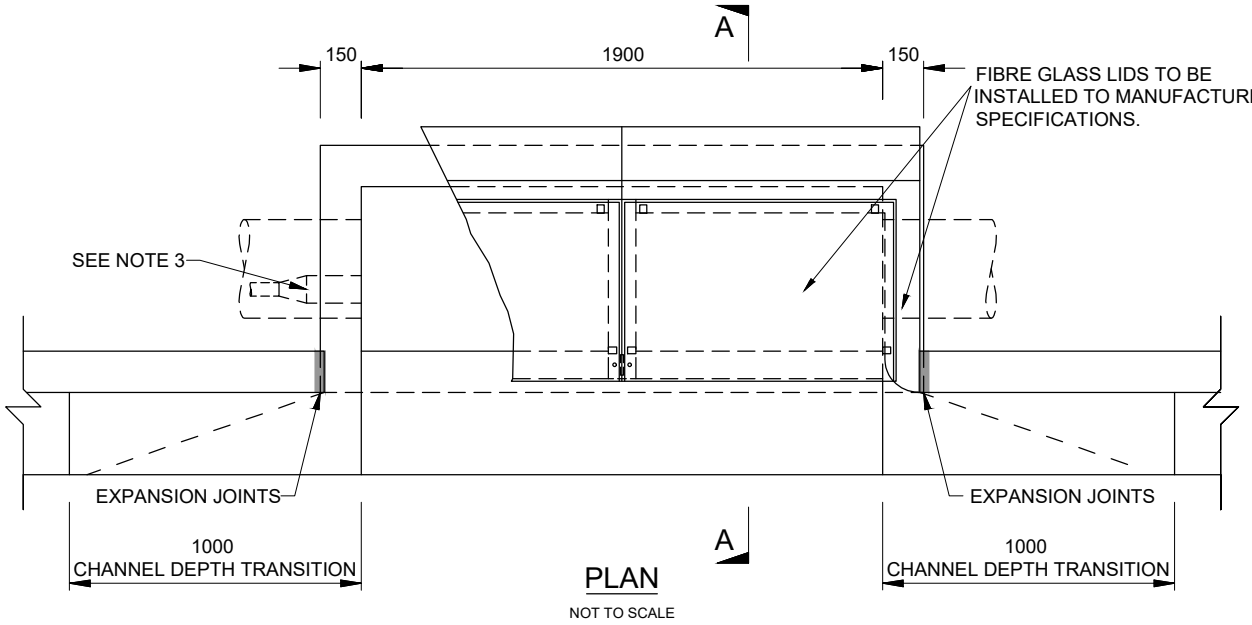
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

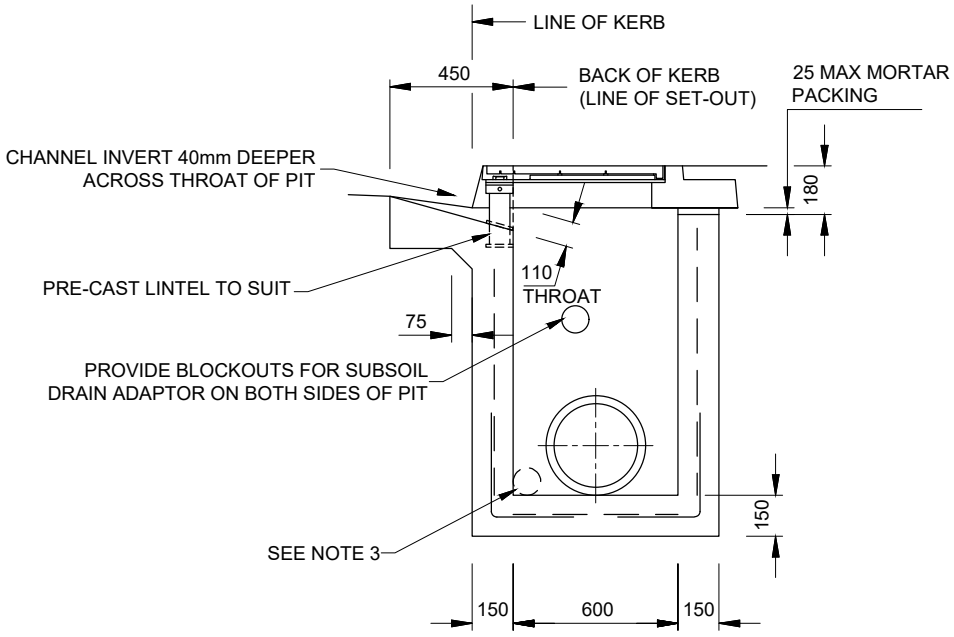
D 300

NOT TO SCALE



PLAN

NOT TO SCALE



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 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

Banyule CITY COUNCIL

DOUBLE SIDE ENTRY PITS

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

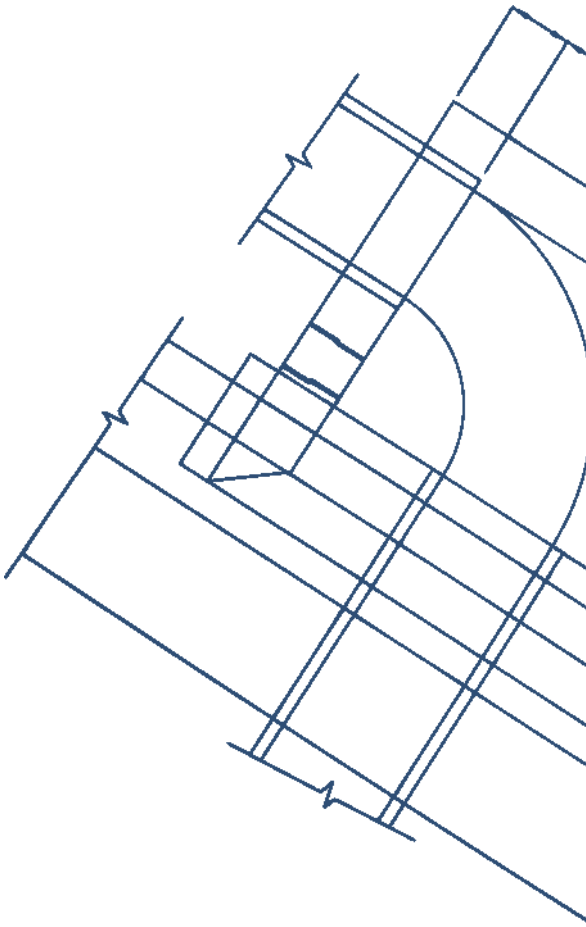
Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

D 305

NOT TO SCALE

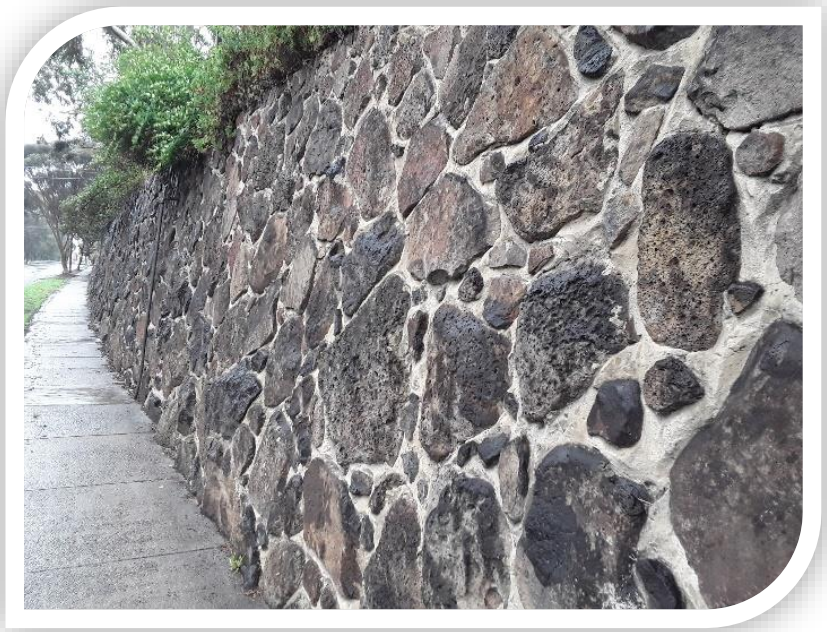
ANCILLARY



Banyule
CITY COUNCIL

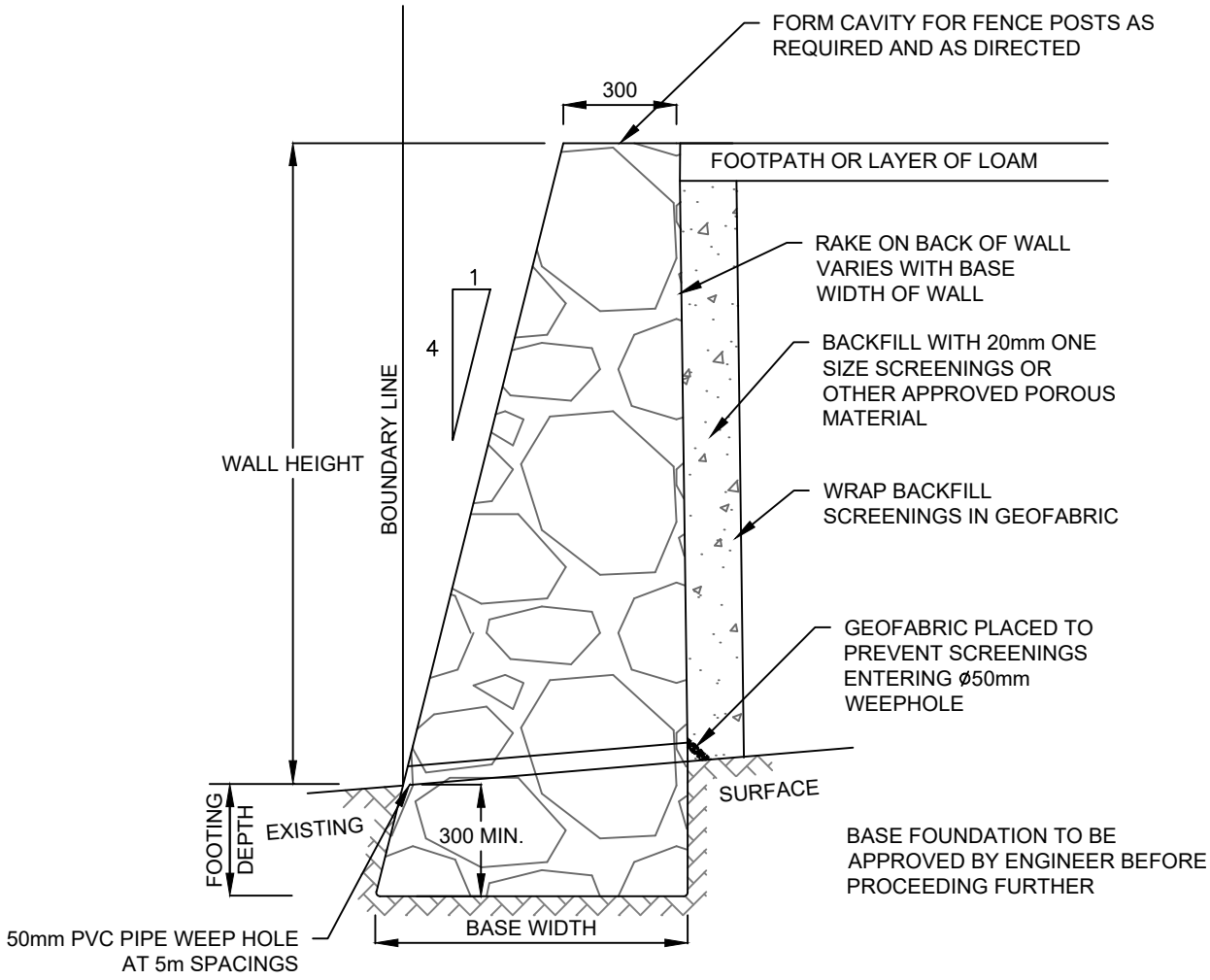
This page was intentionally left blank

Retaining walls



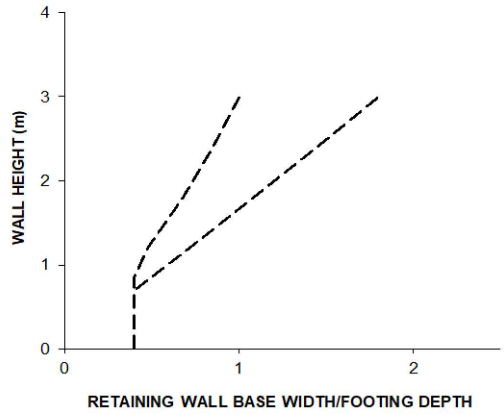
Banyule
CITY COUNCIL

This page was intentionally left blank



NOTE: FOR WALL HEIGHTS, FOOTING DEPTH AND BASE WIDTHS NOT SHOWN ON TABLE SEE FIG 1.		
WALL HEIGHT (m)	FOOTING DEPTH (m)	BASE WIDTH (m)
1.2	0.48	0.72
1.8	0.68	1.08
2.4	0.85	1.45
3.0	1.00	1.80

Fig. 1



ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

LOW SIDE STONE RETAINING WALL

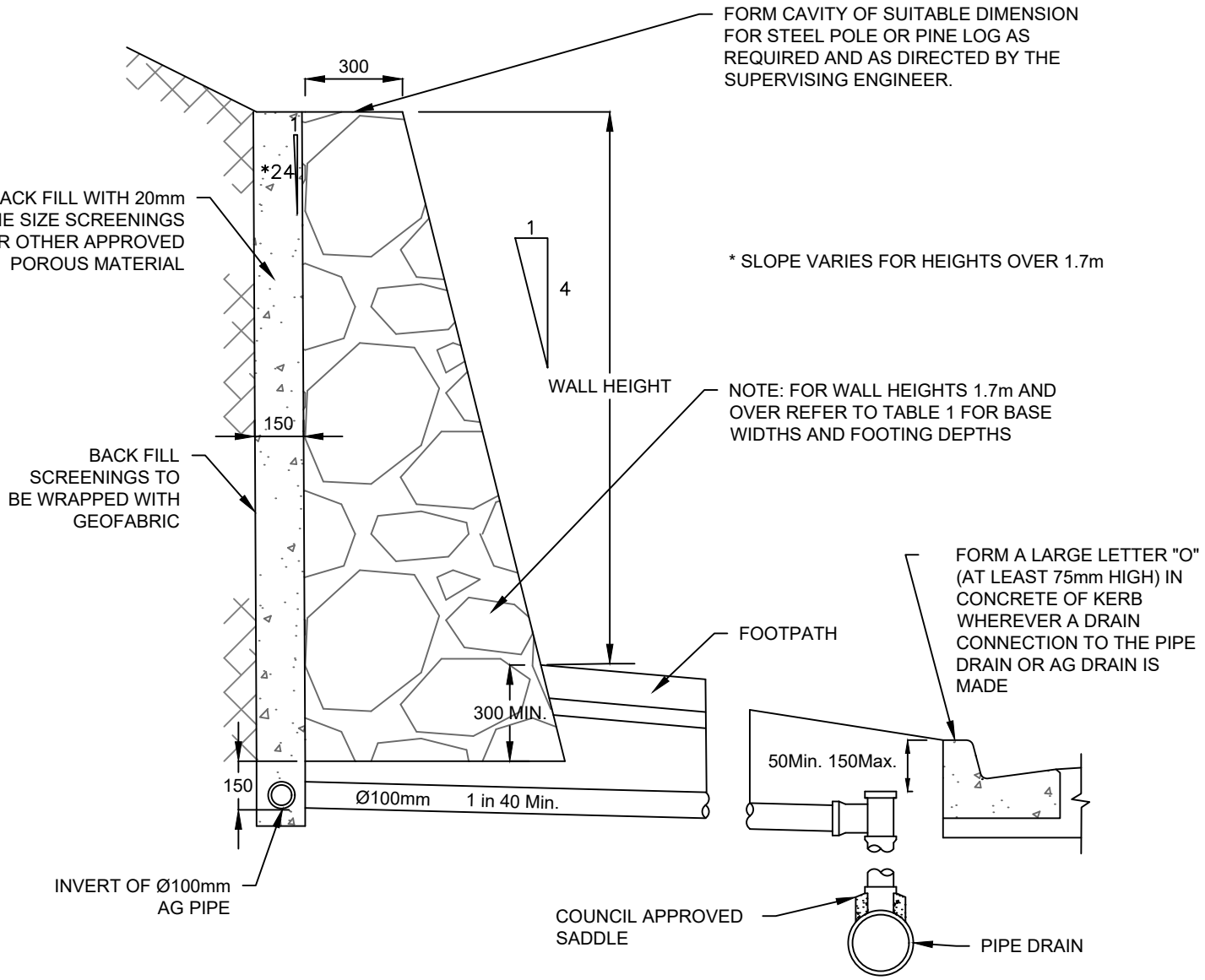
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

A 100

NOT TO SCALE



NOTE:

STONE SHALL BE CLEAN SOUND HARD BLUESTONE OR OTHER APPROVED HARD STONE IN SELECTED COLOUR TONINGS AND SHALL BE BUILT IN CONCRETE AS SPECIFIED. ALL SPACES BETWEEN STONES BEING COMPLETELY FILLED JOINTS ON THE EXPOSED FACE SHALL BE POINTED UP WITH MORTAR CONSISTING OF 1 PART CEMENT AND 5 PARTS APPR. SAND AND SHALL BE LEFT GENERALLY RECESSED BELOW THE FACE OF THE WALL AS DIRECTED

TABLE 1

FOR WALL HEIGHTS 1.7m AND OVER

WALL HEIGHT (m)	FOOTING DEPTH (m)	BASE WIDTH (m)
1.7	0.30	0.79
1.8	0.45	0.86
1.9	0.45	0.91
2.0	0.45	0.96
2.1	0.45	1.01
2.2	0.45	1.06
2.3	0.45	1.10

WALL HEIGHT (m)	FOOTING DEPTH (m)	BASE WIDTH (m)
2.4	0.45	1.17
2.5	0.45	1.23
2.6	0.45	1.27
2.7	0.45	1.31
2.8	0.60	1.36
2.9	0.60	1.41
3.0	0.60	1.45

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

HIGH SIDE STONE RETAINING WALL

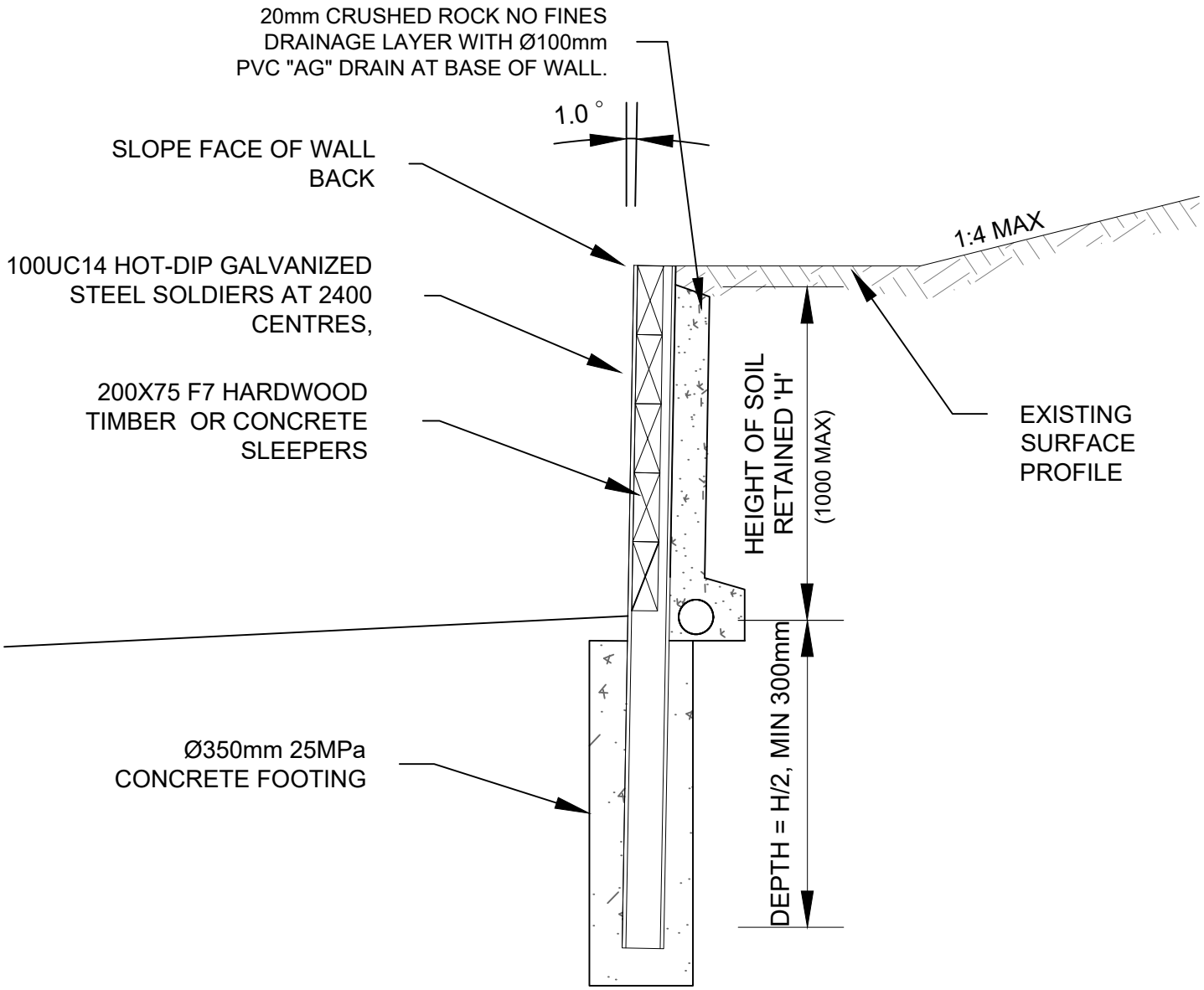
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

A 105

NOT TO SCALE



TYPICAL SECTION

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TIMBER SLEEPER RETAINING WALL

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JULY 2019

A 110

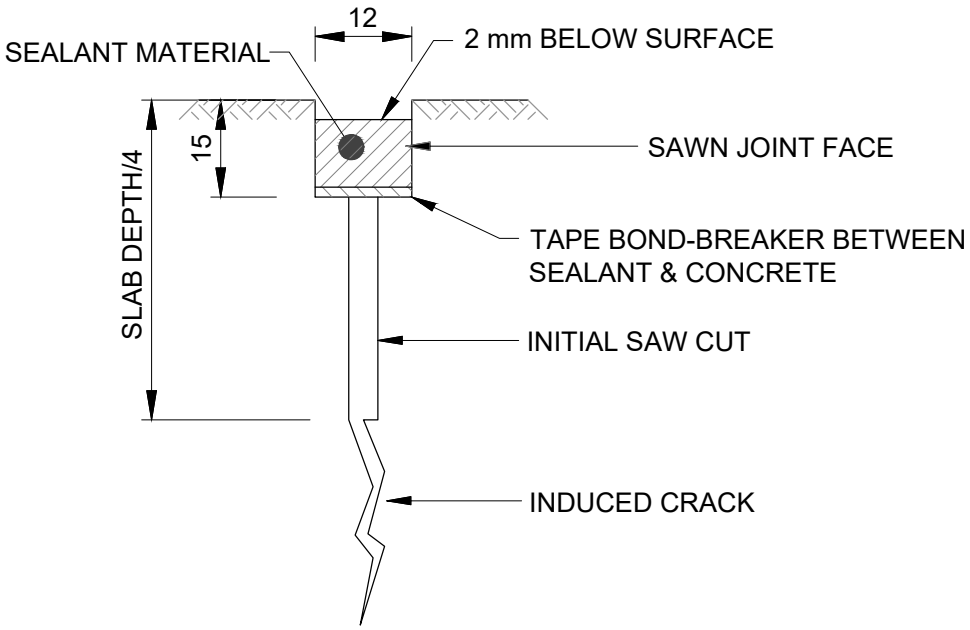
NOT TO SCALE

This page was intentionally left blank

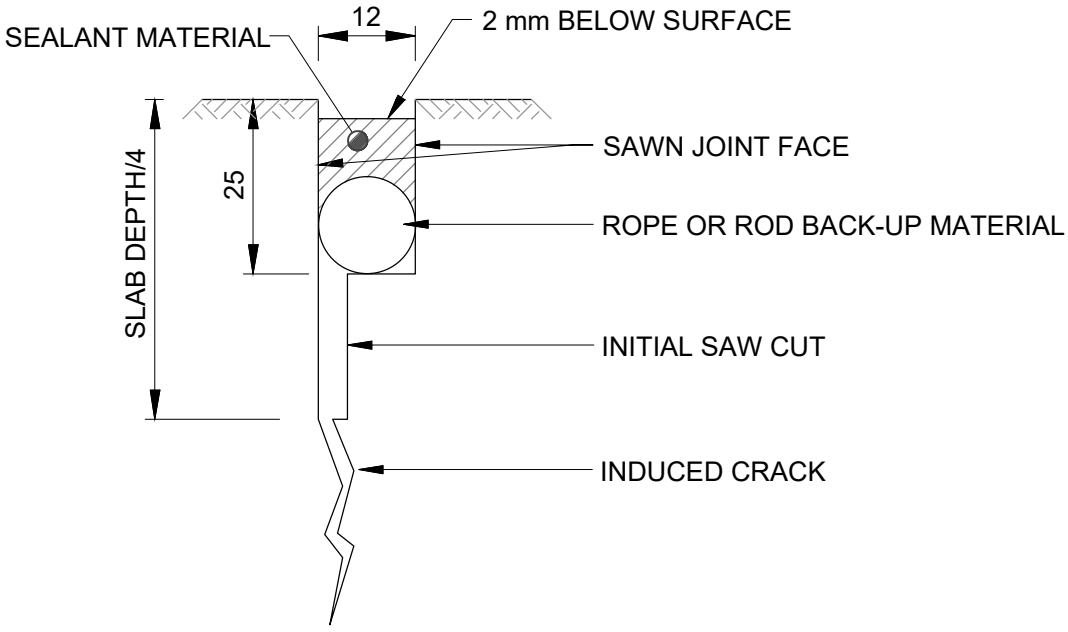
Reo Detail for Concrete

Banyule
CITY COUNCIL

This page was intentionally left blank



SEALANT DETAIL TYPE 1



SEALANT DETAIL TYPE 2

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

REINFORCED CONCRETE PAVEMENT SEALANT DETAILS

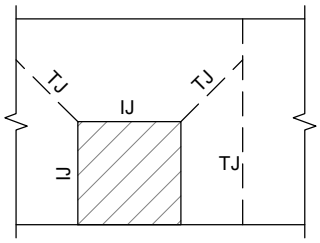
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

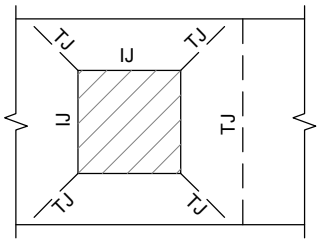
LAST UPDATED JULY 2019

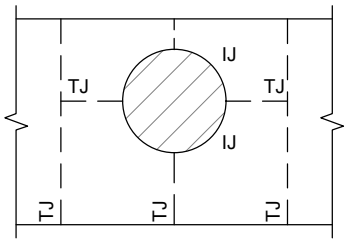
A 150

NOT TO SCALE



PIT / ACCESS HOLE AT EDGE (PLAN)



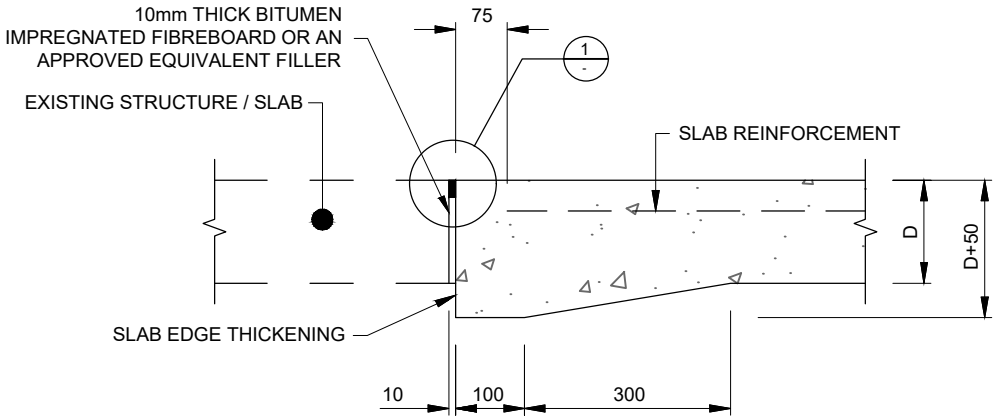


PIT / ACCESS HOLE NOT AT EDGE (PLAN)

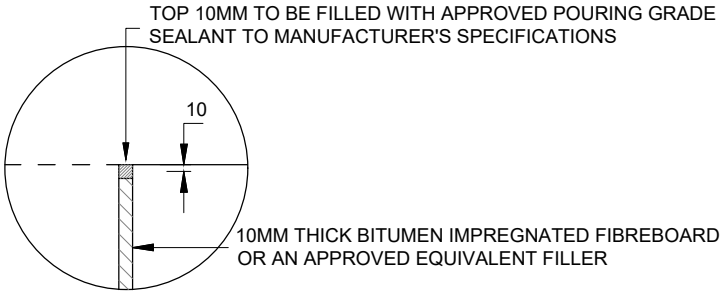
LEGEND:

ISOLATION JOINT ——— IJ

TOOLED JOINTS — — — TJ



TYPICAL SECTION



DETAIL 1/- NOT TO SCALE

NOTES:

1. EXPANSION FOAM TO BE USED AT PERIMETER OF ANY PIT
2. ALL SQUARE AND RECTANGULAR PIT/ACCESS HOLES MUST HAVE TOOL JOINTS AT 45 DEGREE ANGLE TO THE HORIZONTAL OR VERTICAL
3. 'D' DENOTES DEPTH OF PAVEMENT

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

REINFORCED CONCRETE PAVEMENT ISOLATION JOINT

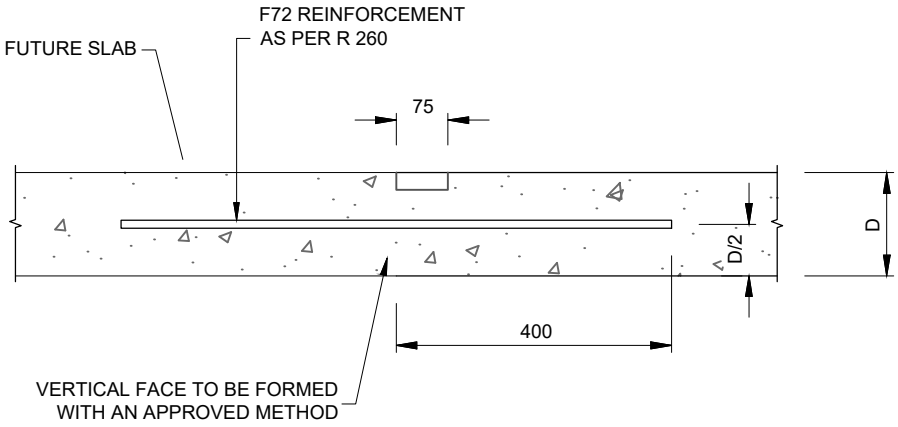
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly, Manager Delivery & Assets

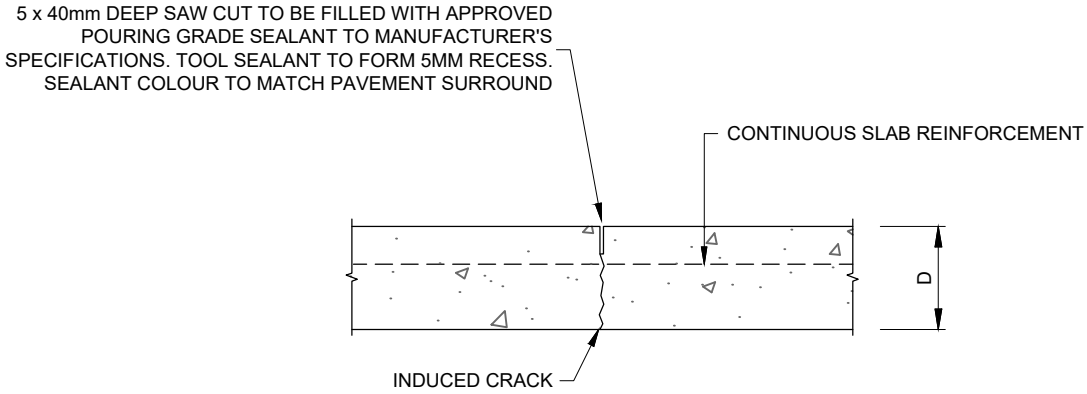
LAST UPDATED JULY 2019

A 155

NOT TO SCALE



TYPICAL FUTURE CONSTRUCTION JOINT



TYPICAL SAWN CONTRACTION JOINT

* 'D' DENOTES DEPTH OF FOOTPATH

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

REINFORCED CONCRETE PAVEMENT JOINT DETAIL

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

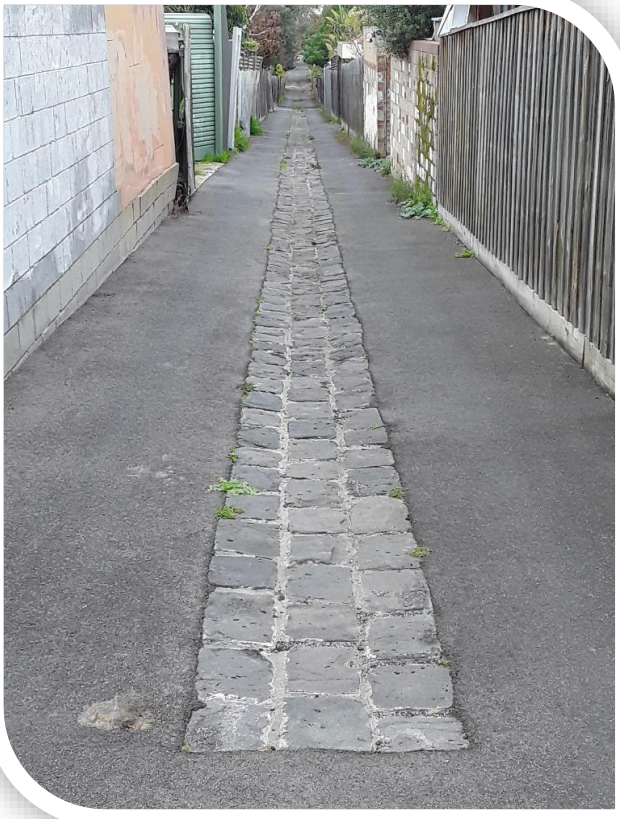
LAST UPDATED JULY 2019

A 160

NOT TO SCALE

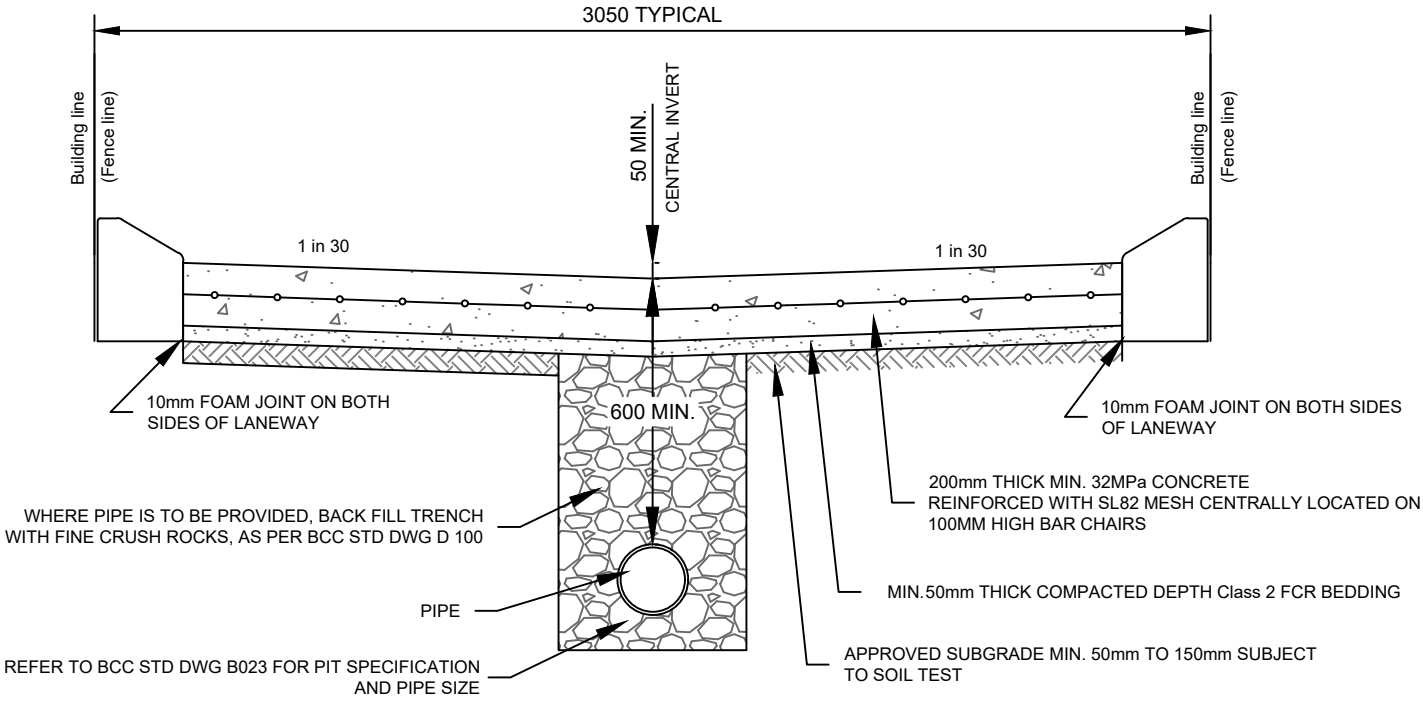
This page was intentionally left blank

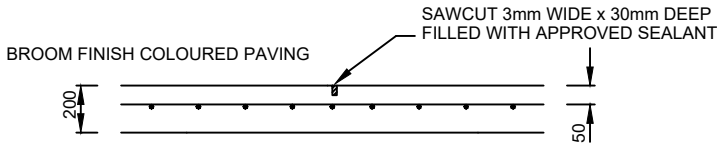
Other



Banyule
CITY COUNCIL

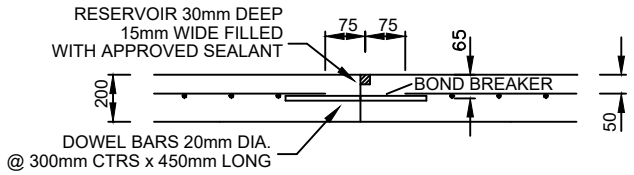
This page was intentionally left blank





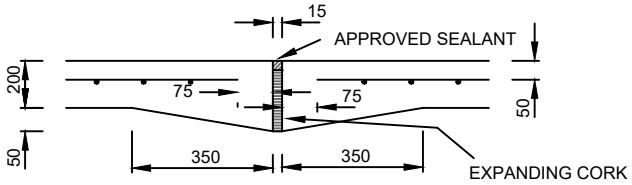
SAWCUT JOINT

PLACE AT MAXIMUM 2m SPACING
SAWCUT TO BE MADE 18-24 HOURS AFTER POURING



CONSTRUCTION JOINT

PLACE AT LOCATIONS MARKED ON PLANS PLUS TRANSVERSE JOINTS
MAXIMUM OF 15m SPACING



EXPANSION & ISOLATION JOINT

PLACE AROUND PITS & ALONG ALL EDGES OF STRUCTURES

NOTES:

1. CONCRETE STRENGTH SHOULD BE MIN. 25MPa TO 32MPa, SEASON DEPENDENT, SUBJECT TO BCC APPROVAL
2. SUBGRADE TO BE GRADED AND ROLLED TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT PRIOR LAYING CONCRETE
3. PREVAILING SUGARED CONDITIONS DETERMENT THICKENS OF BEDDING, SUBJECT TO BCC APPROVAL
4. EXPANSION JOINTS TO BE EVERY 12 METERS AND AROUND POLES, MANEHOLES AND OTHER SERVICE AUTHORITY FIXTURES
5. CHAIRS TO BE USED TO SUPPORT F82x2 REINFORCEMENT MESH
6. SURFACE FINISH IS TO BE A ROUGH BROOM FINISH
7. PIT COVERS TO BE HEAVY DUTY GATIC LIDS OR BIKE SAFE GRATED COVERS, SUBJECT TO BCC APPROVAL
8. TRAFFIC SIGNS AND LINEMARKING REQUIRED TO BE APPROVED BY BCC TRANSPORT UNIT
9. MAINTENANCE PERIOD OF 12 MONTHS IS REQUIRED FROM COMPLETION OF WORKS

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

LANEWAY TYPICAL SECTION

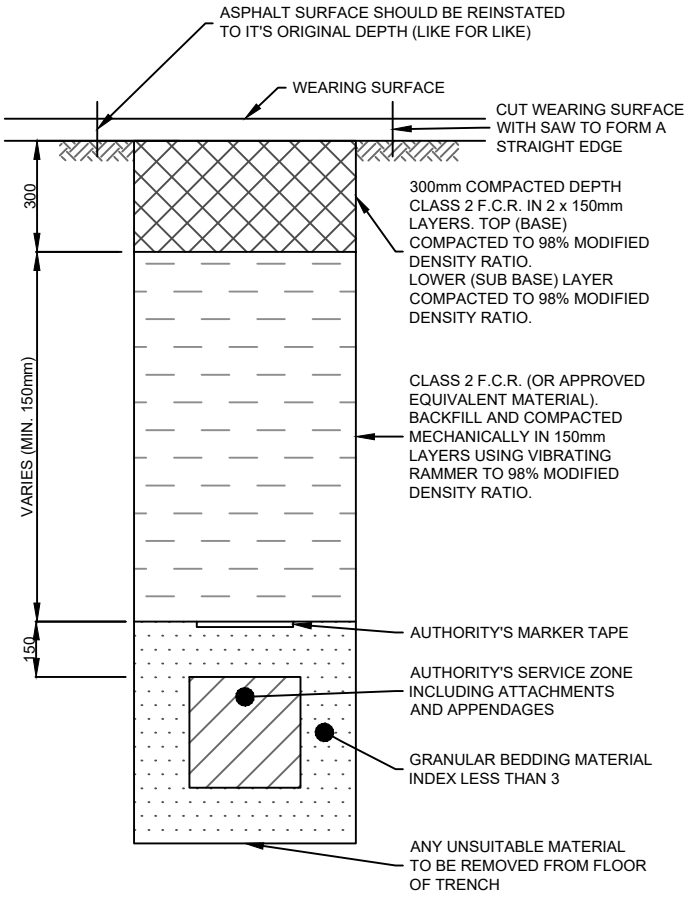
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

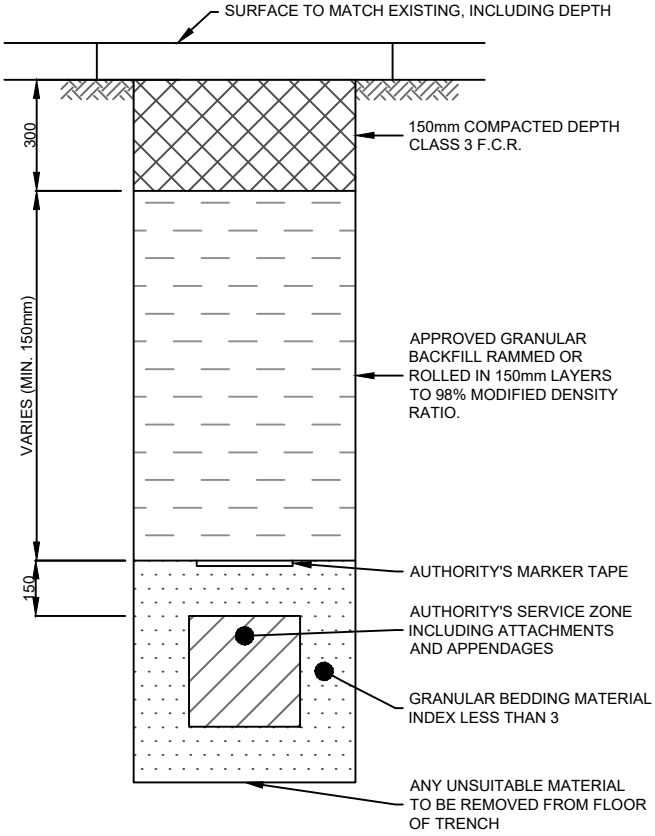
LAST UPDATED JULY 2019

A 200

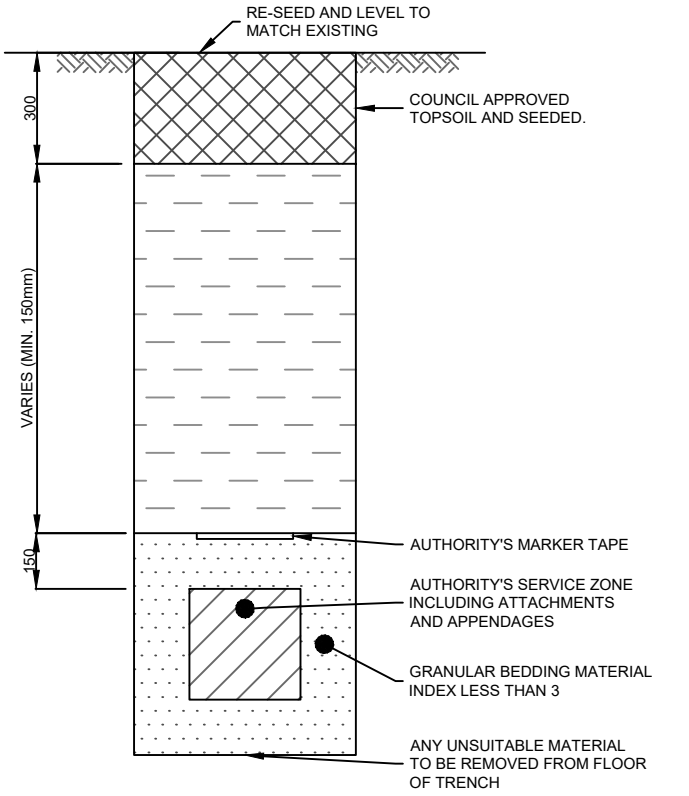
NOT TO SCALE



TRENCHES UNDER ROADS



TRENCHES UNDER FOOTPATHS



TRENCHES UNDER SWALES

NOTES:

1. COMPULSORY MEASURES FOR THE PROTECTION OF TRENCHES 1.5 OR MORE IN DEPTH ARE TO COMPLY WITH THE REQUIREMENTS OF THE MINES ACT 1958 & OH&S ACT 1985.
2. BITUMEN ROAD SURFACE SHALL BE CUT WITH A APPROPRIATE EQUIPMENT (ROAD SAW, DEMO SAW).
3. UNDER THE ROAD MANAGEMENT ACT 2004 THESE WORKS SHALL BE GUARANTEED FOR 12 MONTHS.
4. ALL WORKS TO BE COMPACTED TO THE SATISFACTION OF COUNCIL

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

TRENCHING BACKFILL
(TRENCHES WITHIN 1m OF COUNCIL ASSETS)

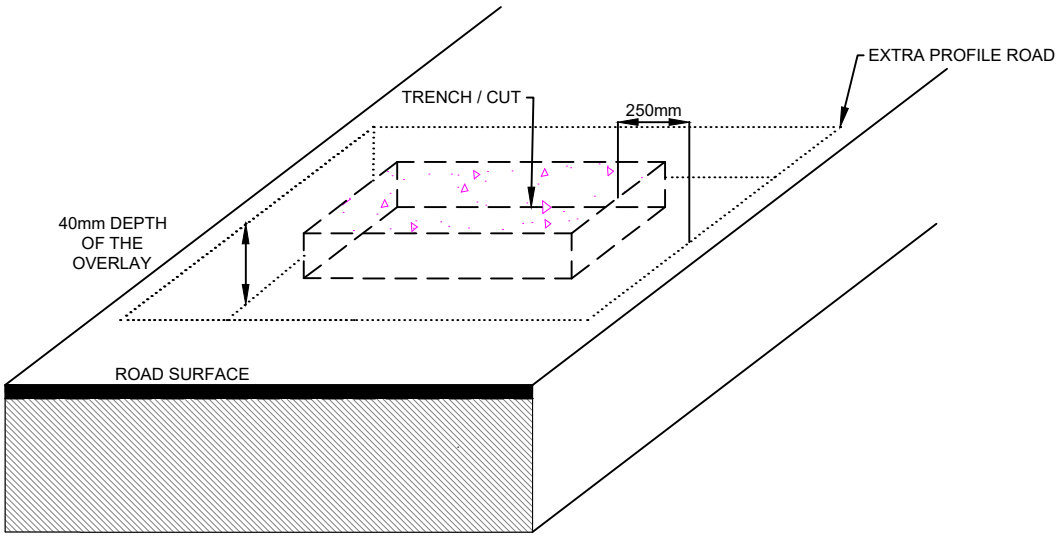
Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

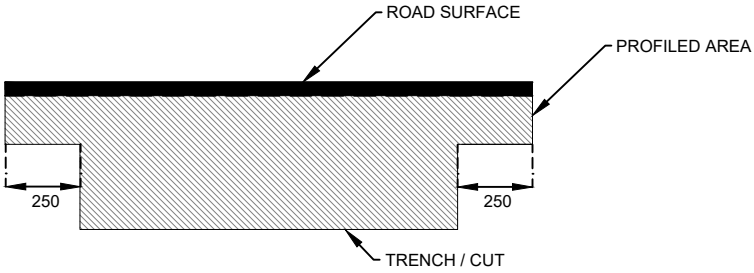
LAST UPDATED JULY 2019

A 205

NOT TO SCALE



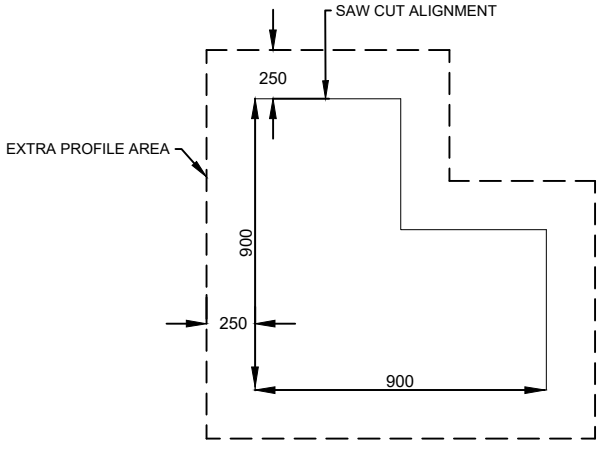
PLAN



CROSS SECTION

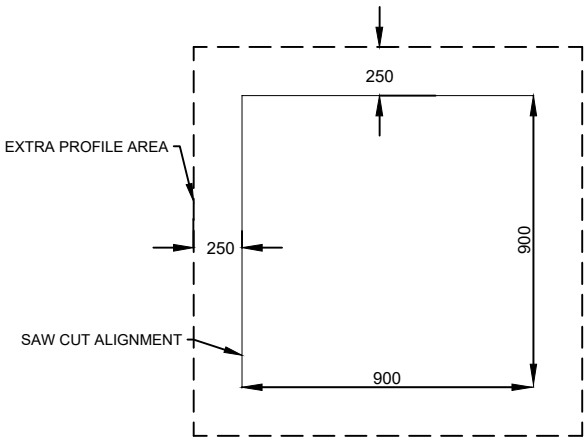
NOTES:

1. AREA TO BE PROFILE SHOULD CONSIST OF EXTRA 250mm AROUND THE TRENCH OR CUT TO A DEPTH OF 40mm BEFORE THE FINAL OVERLAY.
2. ALL TRENCHES / CUTS LOCATED WITHIN A PAVED AREA SHALL BE SAW CUT VERTICALLY AND PROVIDE A FLUSH JOINT FOR REINSTATEMENT UPON COMPLETION OF WORKS.
3. THE LINE OF TRENCH / CUT SHALL BE STRAIGHT AT ALL TIMES, CURVED EDGES NOT ACCEPTABLE.
4. AREA OF REINSTATEMENT MUST BE CONFINED TO EITHER A SQUARE OR RECTANGLE SHAPE.
5. ALL BACK FILL MUST BE CLASS 2 CRUSHED ROCK.
6. CRACK SEALING MUST BE DONE ON ALL REPAIRS.
7. ALL WORK CARRIED OUT WITH REINSTATEMENT PROCESS SHOULD BE CONFIRMED BY AN AUTHORIZED COUNCIL OFFICER.



EXAMPLE - NOT ACCEPTABLE

IRREGULAR SHAPES NOT ACCEPTED. ALL TRENCHES MUST BE SQUARED OFF



EXAMPLE - ACCEPTABLE

ALL MEASUREMENTS IN MILLIMETRES

Banyule CITY COUNCIL

REINSTATEMENT OF ROAD OPENINGS

Banyule's Standard Drawings
A copy can be found on Banyule's website
www.banyule.vic.gov.au

Approved by: James Kelly
Manager Delivery & Assets

LAST UPDATED JAN 2020

A 210

NOT TO SCALE

This page was intentionally left blank