

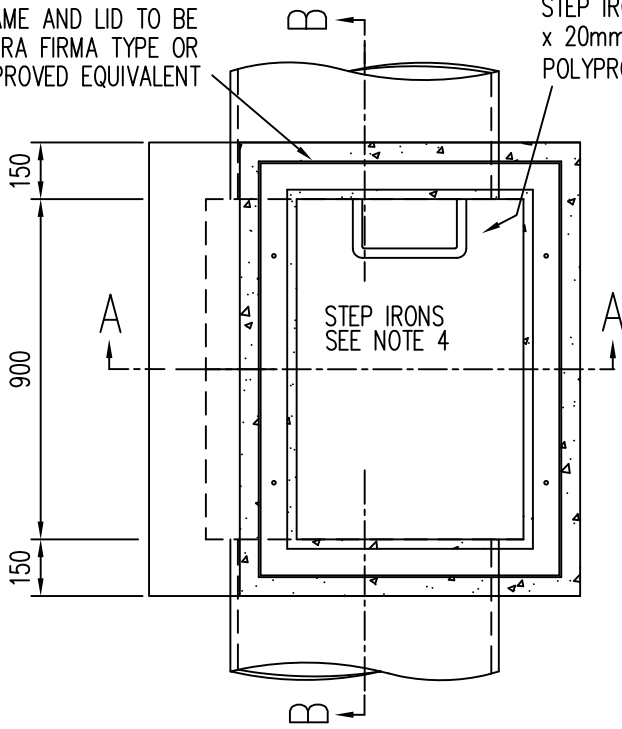
SECTION 2

ROAD OPENING DRAWINGS

DRAINAGE

FRAME AND LID TO BE TERRA FIRMA TYPE OR APPROVED EQUIVALENT

STEP IRONS 250mm x 230mm x 20mm DIA GALV. MS, GATIC POLYPROPELENE STEPS (OR EQUIV.)



PLAN

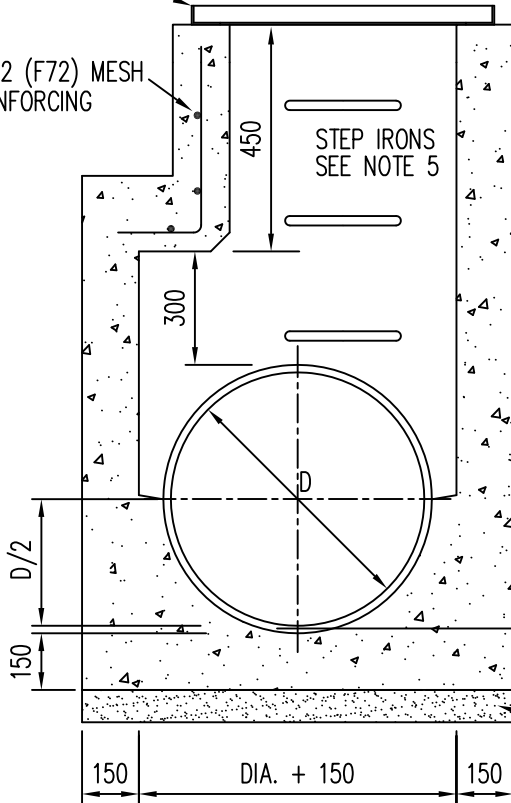
SCALE 1:20

NOTES:

1. FOR FRAME FIXING DETAILS SEE MANUFACTURERS SPECIFICATIONS
2. IN NATURE STRIPS PIT LIDS TO BE KHAKI GREEN. IN NATURAL COLOUR CONCRETE PAVING PIT LIDS TO BE STORM GREY COLOUR. IN OTHER PAVED AREAS COLOUR OF PIT LIDS SHALL BE MATCHED TO COLOUR OF PROPOSED FINISHED SURFACE. CONTACT PIT LID MANUFACTURER TO ARRANGE A SUITABLE CUSTOM COLOUR MATCH.
3. ALL MEASUREMENTS ARE IN MILLIMETERS.
4. FOR PITS MORE THAN 1.5m DEEP, MINIMUM WALL AND BASE THICKNESS SHALL BE 200mm
5. STEP IRONS TO BE PROVIDED IN ALL PITS OVER 900mm DEEP.
6. WHERE PITS ARE BEHIND BACK OF KERB, 100mm DIA STUBS ARE TO BE PLACED ON BOTH SIDES OF PIT FOR SUBSOIL DRAINAGE CONNECTION.
7. CONCRETE STRENGTH F'C = 25MPa.

FRAME AND LID TO BE TERRA FIRMA TYPE OR APPROVED EQUIVALENT

SL72 (F72) MESH REINFORCING



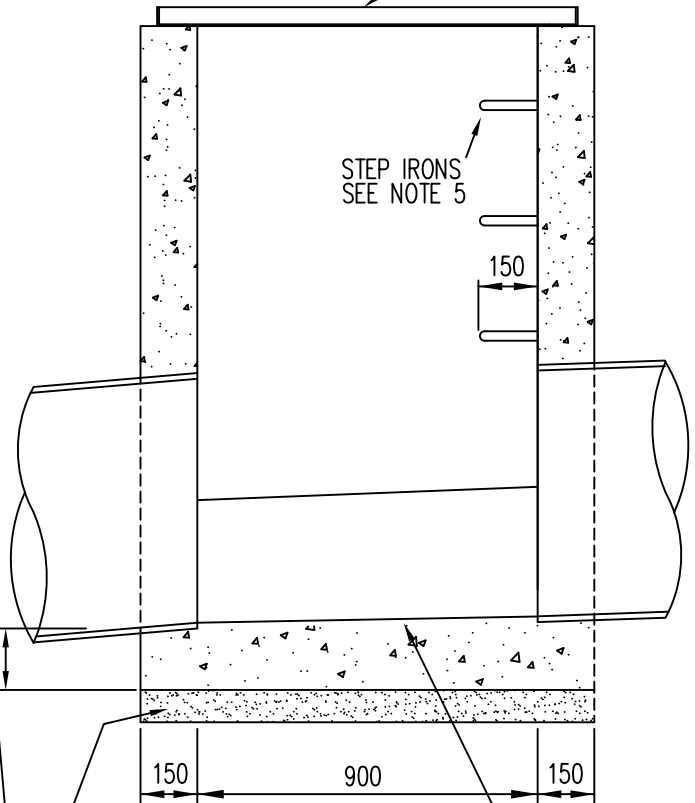
SECTION A-A

SCALE 1:20

50mm COMPACTED DEPTH OF 20mm CLASS 3 F.C.R. BEDDING

FRAME AND LID TO BE TERRA FIRMA TYPE OR APPROVED EQUIVALENT

STEP IRONS SEE NOTE 5



SECTION B-B

SCALE 1:20

SHAPE BOTTOM OF PIT AS SHOWN

CITY OF CASEY

ROAD RESERVE JUNCTION PIT TYPE 3
PIPE DIAMETER EXCEEDS 450mm

MANAGER OF ENGINEERING & ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: REINFORCING TYPE AMENDED, GENERAL UPGRADE

S-309

V2

RECTANGULAR PRE-CAST PITS INSTALLATION PROCEDURE

1. Excavation

The excavation shall provide a clearance from all external faces of the pit to each face of the *excavation* of not less than 300mm.

2. Bedding

Bedding shall be 20mm class 3 F.C.R, placed and compacted to a thickness not less than 75mm.

3. Backfilling

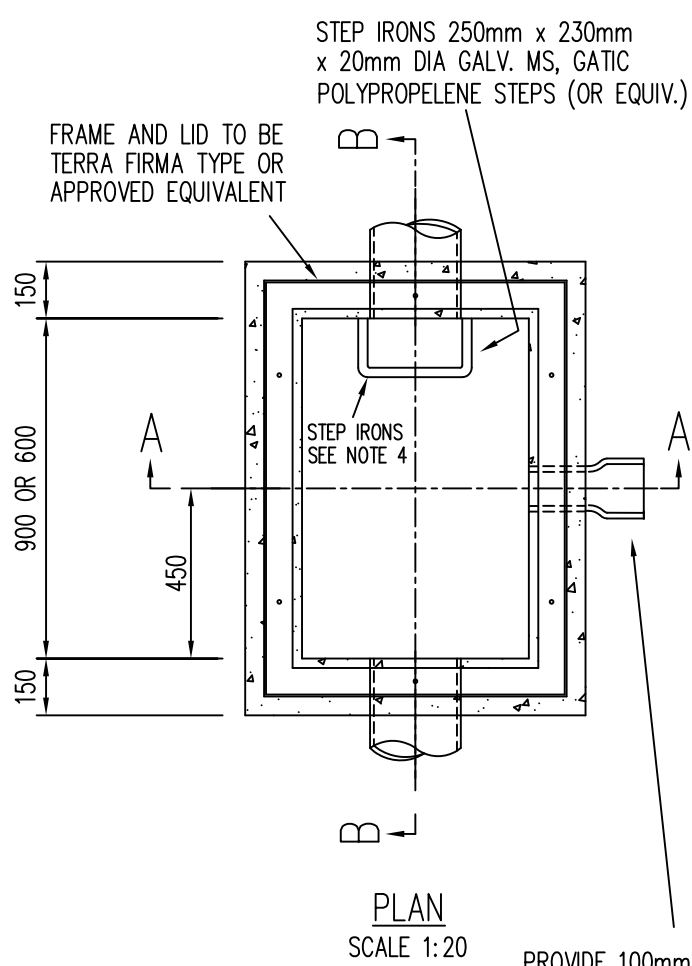
All pits are to be backfilled with clean granular or friable material. The backfilling shall be placed in layers not exceeding 300mm loose in thickness and compacted to refusal using hand held mechanical equipment.

4. Pipe Connections

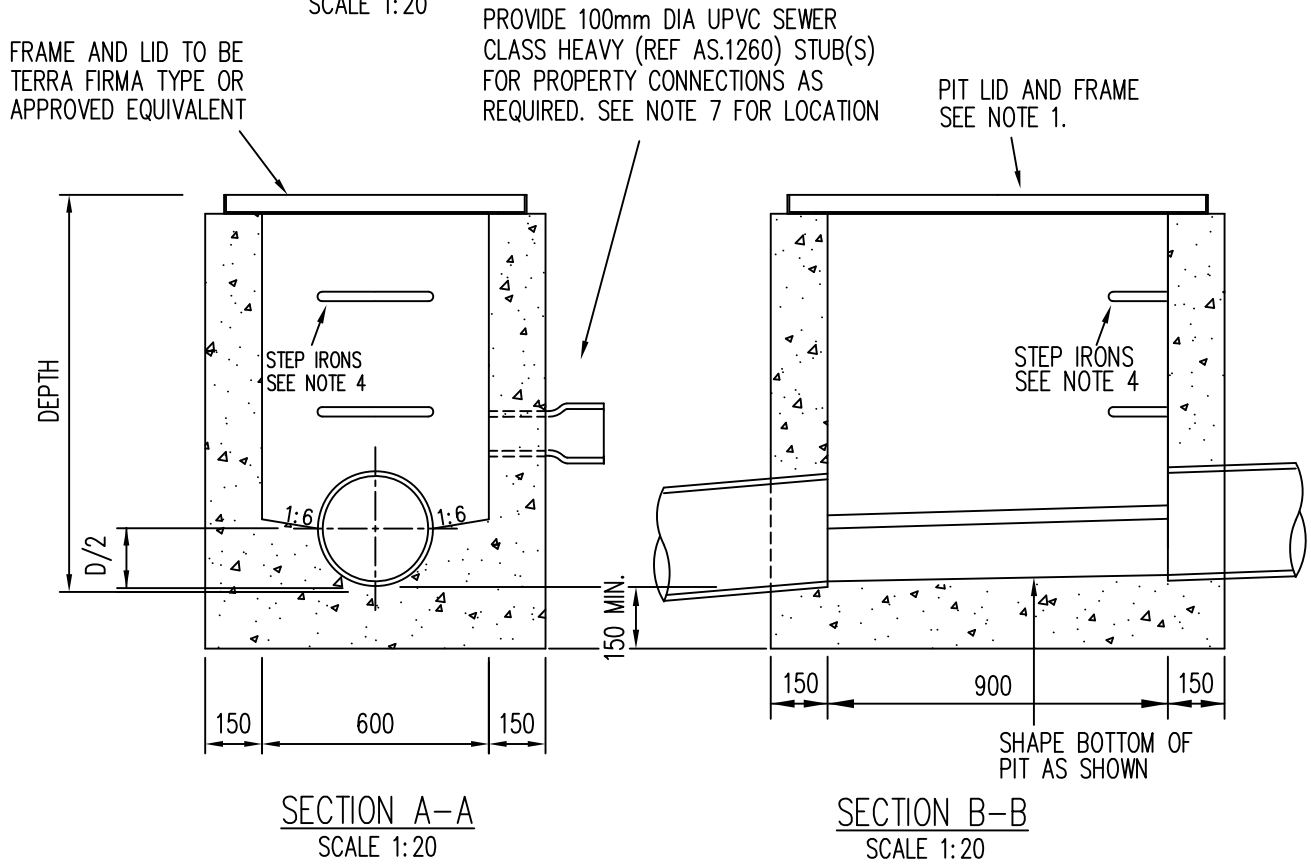
A concrete bandage is to be placed for the full circumference of the pipe on the external walls of the pit. A cement mortar mix is to be used on the internal walls.

5. Shaping of Floor

A semi circular section transitioning from the size of the outlet pipe to the size of the inlet pipe shall be constructed in all pits using mass concrete. Generally the shape shall be the same as specified for insitu pits.



- NOTES:**
1. FOR FRAME FIXING DETAILS SEE MANUFACTURES SPECIFICATIONS
 2. ALL MEASUREMENTS ARE IN MILLIMETRES.
 3. FOR PITS MORE THAN 1.5m DEEP, MINIMUM WALL AND BASE THICKNESS SHALL BE 200mm
 4. STEP IRONS TO BE PROVIDED IN ALL PITS OVER 900mm DEEP.
 5. WHERE PIPE DIAMETER EXCEEDS 450mm PIT IS TO BE CORBELLED AS PER S-309.
 6. CONCRETE STRENGTH F'C = 25MPa.
 7. 100mm DIA SEWER CLASS UPVC STUB(S) FOR PROPERTY INLET CONNECTIONS TO BE PROVIDED AS REQUIRED LOCATE STUBS AS APPROPRIATE FOR CONNECTIONS OF PROPERTY INLETS AND HOUSE DRAINS AS DETAILED ON DESIGN CONSTRUCTION PLANS. STUBS TO BE PLACED AT AN APPROPRIATE DEPTH TO ALLOW FOR ACCEPTABLE GRADES AND COVER ON HOUSE DRAINS. (DESIRABLE MINIMUM COVER 500 - 600mm)
 8. 600mm x 600mm JUNCTION PIT TO BE USED FOR PIPE DRAINS UP TO 450 DIA AND TO HAVE A MAXIMUM DEPTH OF 900mm



CITY OF CASEY

EASEMENT PIT
600mm x 600mm AND 900mm x 600mm

MANAGER OF ENGINEERING & ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-311

V2

RECTANGULAR PRE-CAST PITS INSTALLATION PROCEDURE

1. Excavation

The excavation shall provide a clearance from all external faces of the pit to each face of the *excavation* of not less than 300mm.

2. Bedding

Bedding shall be 20mm class 3 F.C.R, placed and compacted to a thickness not less than 75mm.

3. Backfilling

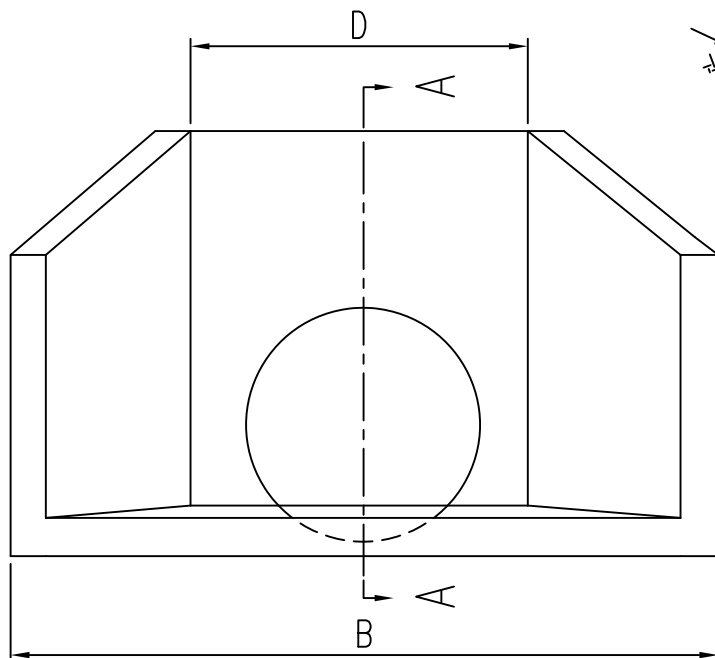
All pits are to be backfilled with clean granular or friable material. The backfilling shall be placed in layers not exceeding 300mm loose in thickness and compacted to refusal using hand held mechanical equipment.

4. Pipe Connections

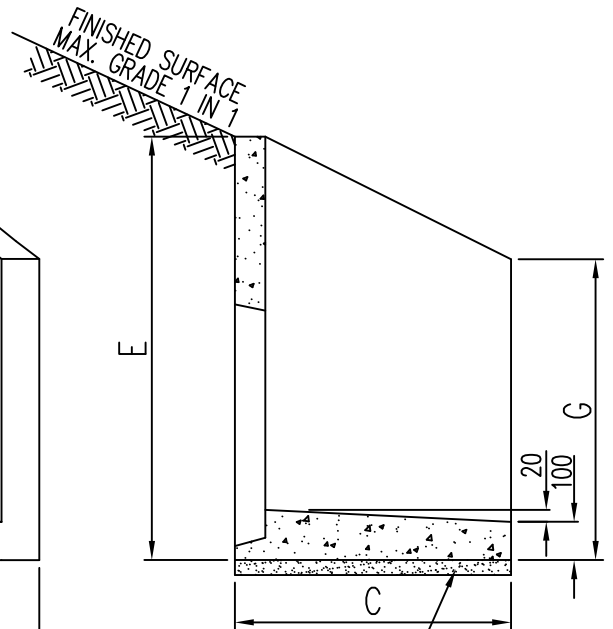
A concrete bandage is to be placed for the full circumference of the pipe on the external walls of the pit. A cement mortar mix is to be used on the internal walls.

5. Shaping of Floor

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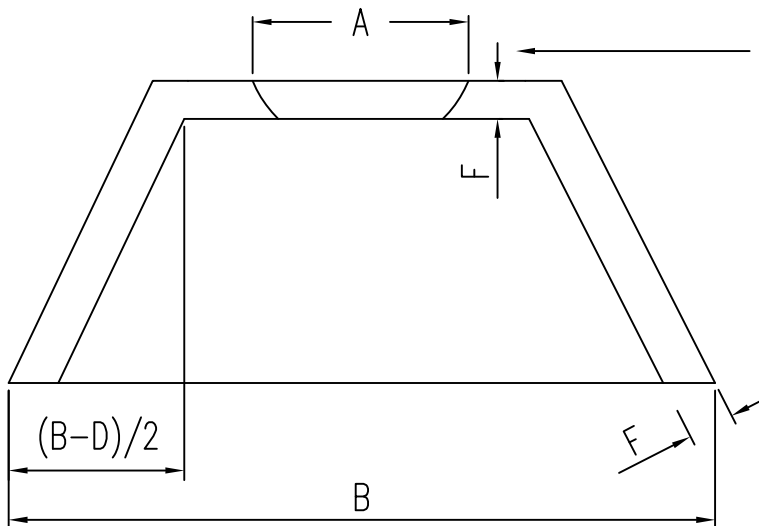


FRONT ELEVATION



50mm COMPACTED DEPTH OF 20MM CLASS 3 F.C.R. BEDDING

SECTION A-A



PLAN

SPIGOT MAX LENGTH:
 450 MM FOR PIPE $\leq 375\phi$
 600MM FOR PIPE $\geq 450\phi$
 SPIGOT TO BE FIXED TO CONCRETE COLLAR

NOTE:
 WHEN USING CONCRETE ENDWALL MAKE SURE THAT THERE IS SUFFICIENT CLEAR ZONE. IF CLEAR ZONE IS NOT ACHIEVABLE USE VICROADS TYPE DRIVEABLE ENDWALL SEE S-804A

NOM. PIPE SIZE	NOMINAL DIMENSIONS IN MM						
	A	B	C	D	E	F	G
300	385	1600	640	750	915	95	710
375	475	1600	640	750	915	95	710
450	550	1600	640	750	915	95	710
525	640	1700	685	800	1035	95	775
600	730	1700	685	800	1035	95	775
675	775	2040	1015	1195	1410	92	1095
750	905	2040	1015	1195	1410	92	1095
825	950	2000	1050	1195	1400	92	1095
900	1055	2040	1015	1195	1410	92	1095

CITY OF CASEY

PRECAST CONCRETE ENDWALL
 PIPE SIZES 300 TO 900

MANAGER OF ENGINEERING & ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-313

V2

RECTANGULAR PRE-CAST PITS INSTALLATION PROCEDURE

1. Excavation

The excavation shall provide a clearance from all external faces of the pit to each face of the *excavation* of not less than 300mm.

2. Bedding

Bedding shall be 20mm class 3 F.C.R, placed and compacted to a thickness not less than 75mm.

3. Backfilling

All pits are to be backfilled with clean granular or friable material. The backfilling shall be placed in layers not exceeding 300mm loose in thickness and compacted to refusal using hand held mechanical equipment.

4. Pipe Connections

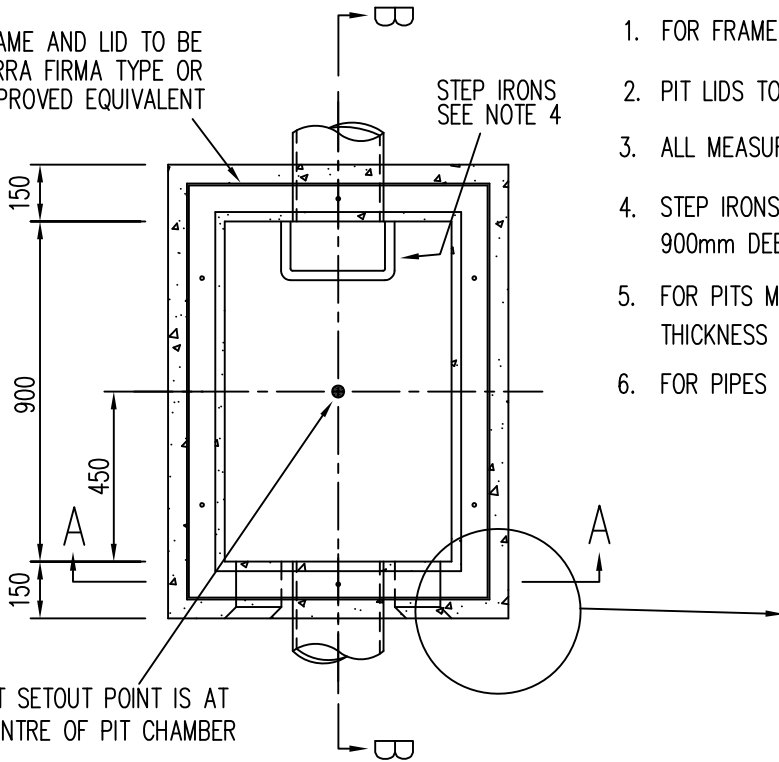
A concrete bandage is to be placed for the full circumference of the pipe on the external walls of the pit. A cement mortar mix is to be used on the internal walls.

5. Shaping of Floor

A semi circular section transitioning from the size of the outlet pipe to the size of the inlet pipe shall be constructed in all pits using mass concrete. Generally the shape shall be the same as specified for insitu pits.

FRAME AND LID TO BE TERRA FIRMA TYPE OR APPROVED EQUIVALENT

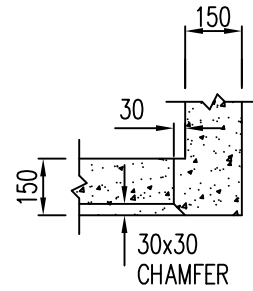
STEP IRONS SEE NOTE 4



PLAN
SCALE 1:20

NOTES:

1. FOR FRAME FIXING DETAILS SEE MANUFACTURES SPECIFICATIONS
2. PIT LIDS TO BE KHAKI GREEN.
3. ALL MEASUREMENTS ARE IN MILLIMETRES.
4. STEP IRONS TO BE PROVIDED IN ALL PITS OVER 900mm DEEP.
5. FOR PITS MORE THAN 1.5m DEEP, MINIMUM WALL AND BASE THICKNESS SHALL BE 200mm
6. FOR PIPES UP TO 450mm DIA.

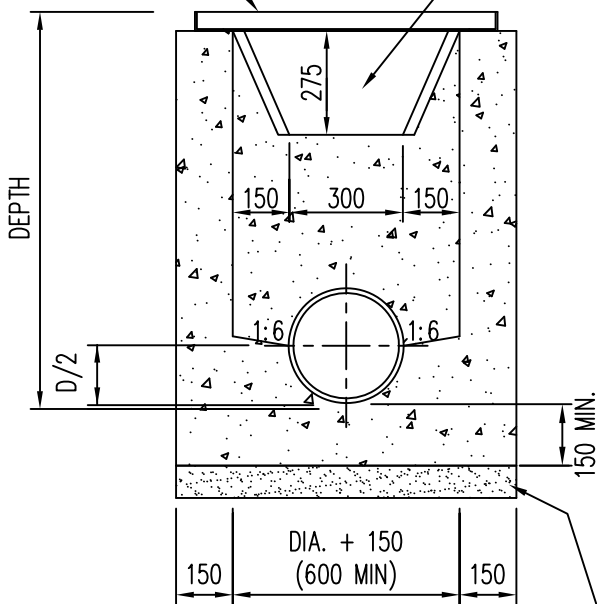


CORNER DETAIL

SCALE 1:20
NOTE: LID NOT SHOWN

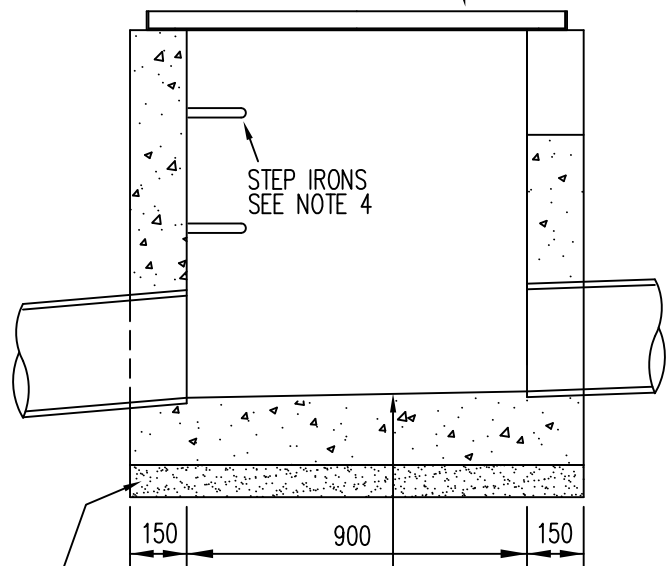
FRAME AND LID TO BE TERRA FIRMA TYPE OR APPROVED EQUIVALENT

DEPTH OF V-NOTCH TO BE SET TO MATCH DEPTH OF TABLE DRAIN



SECTION A-A
SCALE 1:20

PIT LID AND FRAME TO BE. SEE NOTE 1.



SECTION B-B
SCALE 1:20

CITY OF CASEY

ROADSIDE CATCH PIT
900mm x 600mm

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: OPENING TO TABLE DRAIN AMENDED

S-314

V2

RECTANGULAR PRE-CAST PITS INSTALLATION PROCEDURE

1. Excavation

The excavation shall provide a clearance from all external faces of the pit to each face of the *excavation* of not less than 300mm.

2. Bedding

Bedding shall be 20mm class 3 F.C.R, placed and compacted to a thickness not less than 75mm.

3. Backfilling

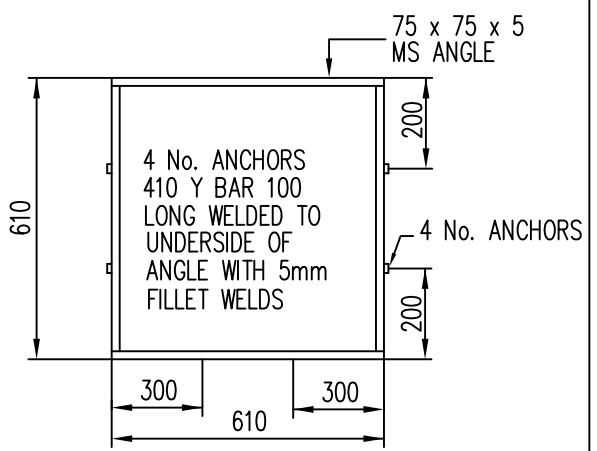
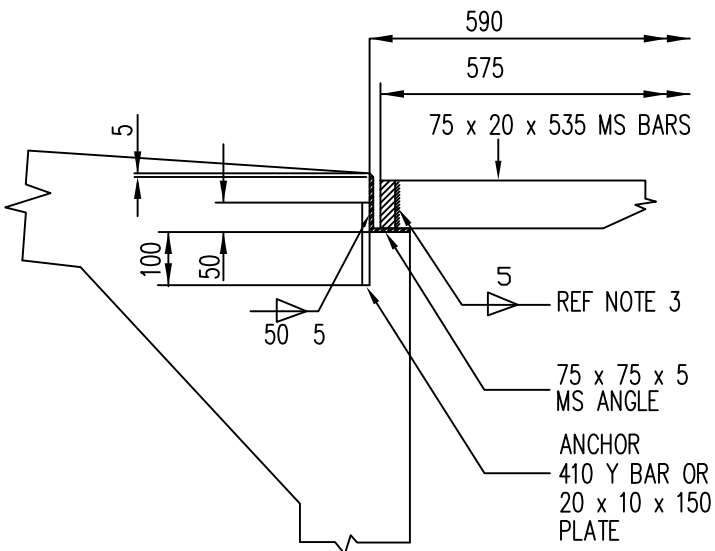
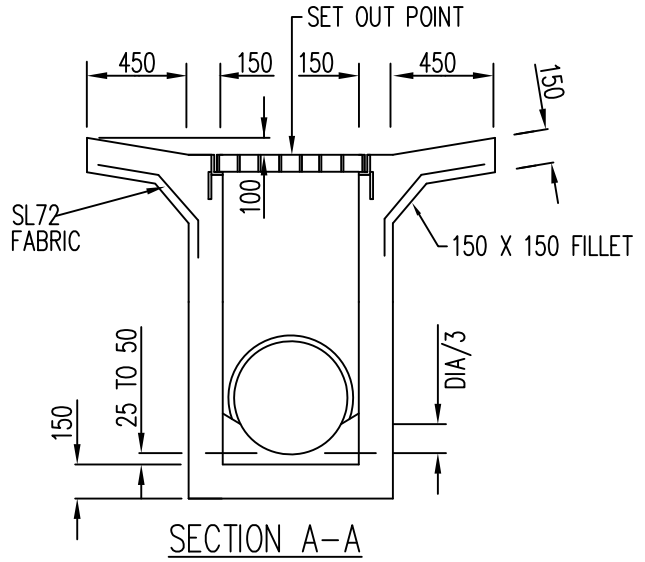
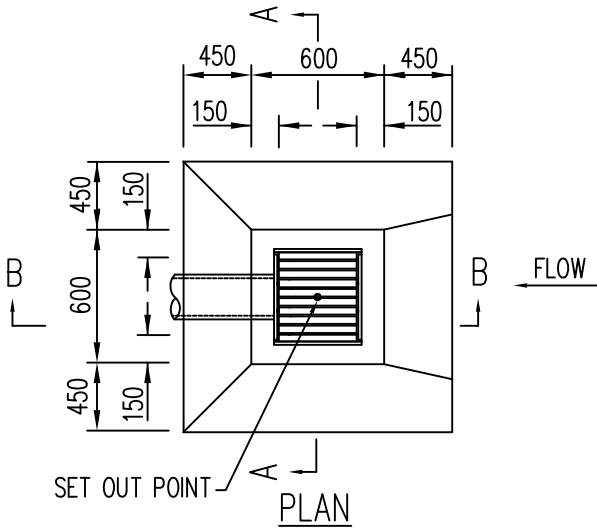
All pits are to be backfilled with clean granular or friable material. The backfilling shall be placed in layers not exceeding 300mm loose in thickness and compacted to refusal using hand held mechanical equipment.

4. Pipe Connections

A concrete bandage is to be placed for the full circumference of the pipe on the external walls of the pit. A cement mortar mix is to be used on the internal walls.

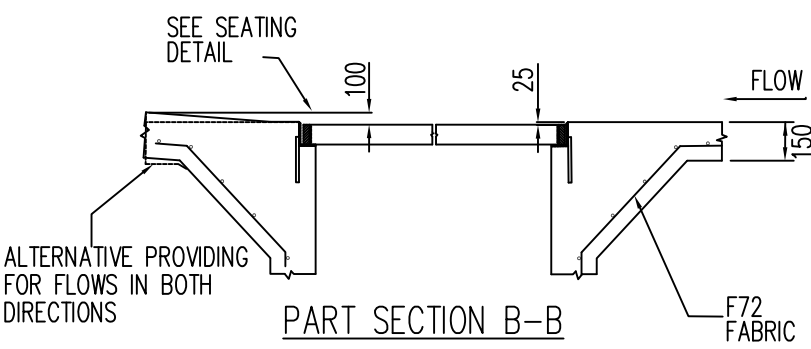
5. Shaping of Floor

A semi circular section transitioning from the size of the outlet pipe to the size of the inlet pipe shall be constructed in all pits using mass concrete. Generally the shape shall be the same as specified for insitu pits.

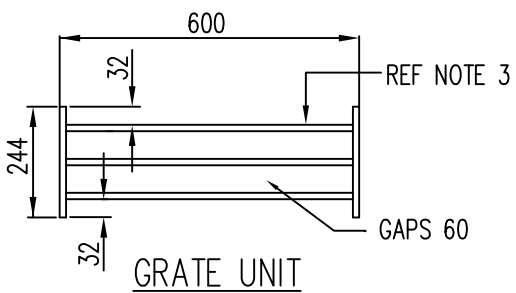


FRAME SEATING DETAIL

GRATE FRAME



PART SECTION B-B



GRATE UNIT

NOTES:

1. GRATE FRAME SHALL BE CONSTRUCTED FROM 75X50X5 MS ANGLE. CORNER JOINTS SHALL BE WELDED ON UNDERSIDE OF HORIZONTAL LEG AND ON THE INSIDE OF THE VERTICAL LEG WITH SIZE 5 FILLETS. GRATE FRAME TO BE FASTENED DOWN BY SUITABLE BOLTS.
2. EXPOSED CONCRETE EDGES SHALL HAVE 10X10 CHAMFERS.
3. WHERE GALVANIZING OF THE GRATE UNITS IS SPECIFIED, THE TOP AND BOTTOM EDGES OF THE BAR ENDS SHALL BE CHAMFERED 5mm x 5mm BEFORE CONTINUOUSLY WELDING ALL AROUND AND GROUND FLUSH BEFORE GALVANIZING.
4. CONCRETE STRENGTH F'C = 25MPa.
5. MINIMUM REINFORCING COVER TO BE 60-mm.

CITY OF CASEY

OFF ROAD GRATED PIT

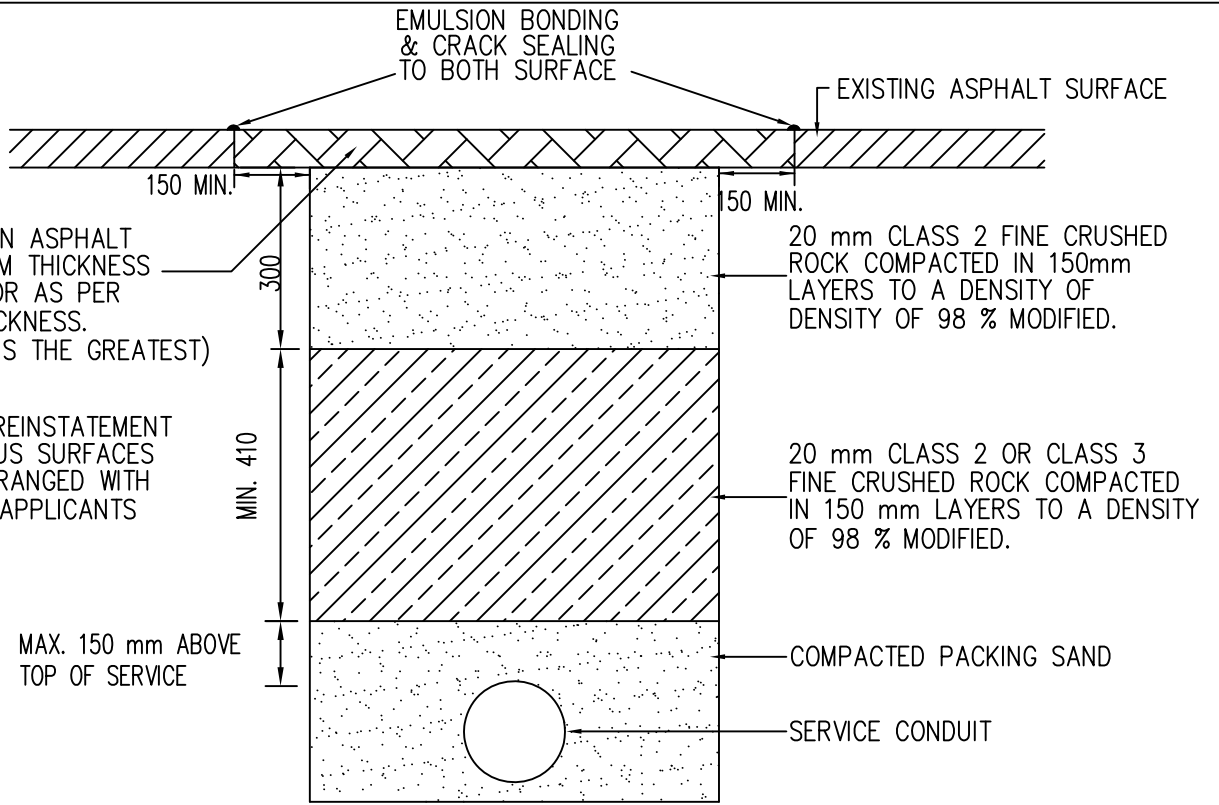
MANAGER OF ENGINEERING & ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

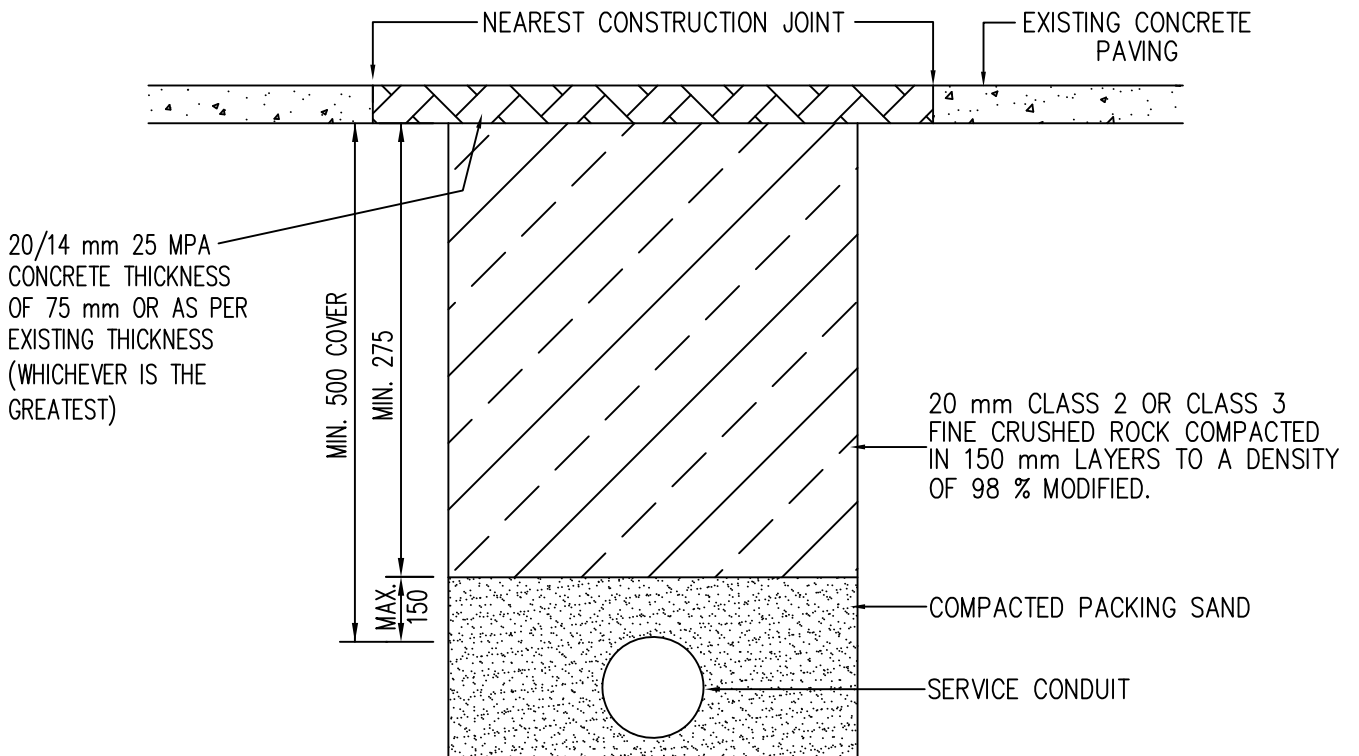
AMENDMENTS: GENERAL UPGRADE

S-320

V2



BACKFILLING REQUIREMENT FOR SEALED ROAD PAVEMENT



BACKFILLING REQUIREMENTS FOR CONCRETE PAVING

CITY OF CASEY

Robert

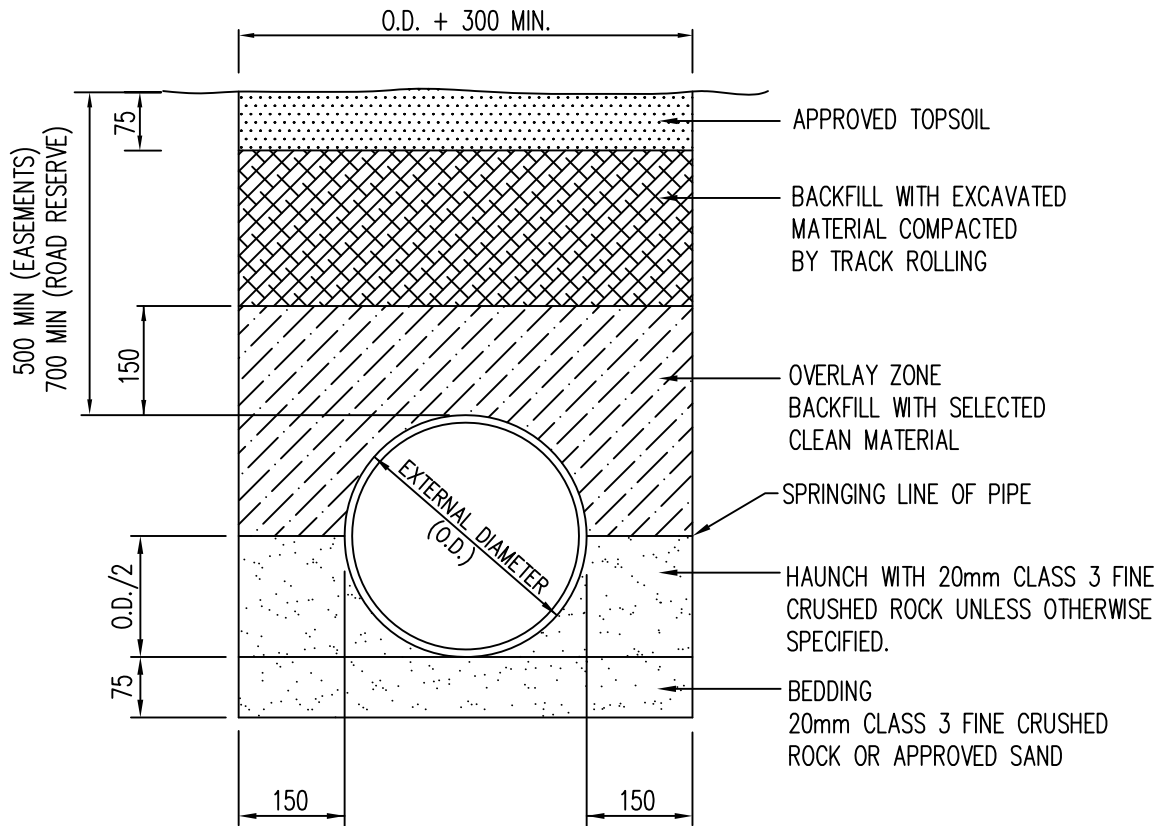
CONDITIONS FOR INSTALLATION OF SERVICES UNDER SEALED ROAD PAVEMENTS AND CONCRETE PAVING BY APPROVED OPEN CUTTING

MANAGER OF ENGINEERING & ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-322

V3



PIPE BEDDING DETAIL

SCALE 1:10

NOTES

1. ALL TRENCHES UNDER KERB AND CHANNEL, DRIVEWAYS, FOOTPATHS AND ROAD PAVEMENT SHOULD BE BACKFILLED AS PER COUNCIL'S SPECIFICATION, SECTION 18
2. ALL 150 PIPES TO BE PVC (SH), 225 TO BE PVC (SH) OR RRJ R.C./FRC, PIPES > 300 TO 600 INCLUSIVE TO BE RRJ WITH COLLAR, R.C / F.C.R.
3. ALL R.C./ F.R.C. PIPES TO BE CLASS 2 UNLESS SPECIFIED DIFFERENTLY.
4. EASEMENT DRAINS TO BE LOCATED TO ENSURE 500mm MINIMUM FROM EDGE OF PIPE TO EDGE OF EASEMENT. REINSTATEMENT WORKS REFER TO NOTE 1.
5. IF TRENCH IS WITHIN 150mm OF KERB THEN TRENCH IS TO BE BACKFILLED WITH SELECT BACKFILL FROM SITE AS DIRECTED. FOR NEW WORKS OR REINSTATEMENT WORKS REFER TO NOTE 1.
6. MINIMUM PIPE REQUIREMENTS UNDER ROAD PAVEMENTS AND TAKING ROAD RUNOFF TO BE 300MM DIA. RRJ R.C.

CITY OF CASEY

PIPE LAYING DETAIL
NOT UNDER ROAD PAVEMENT

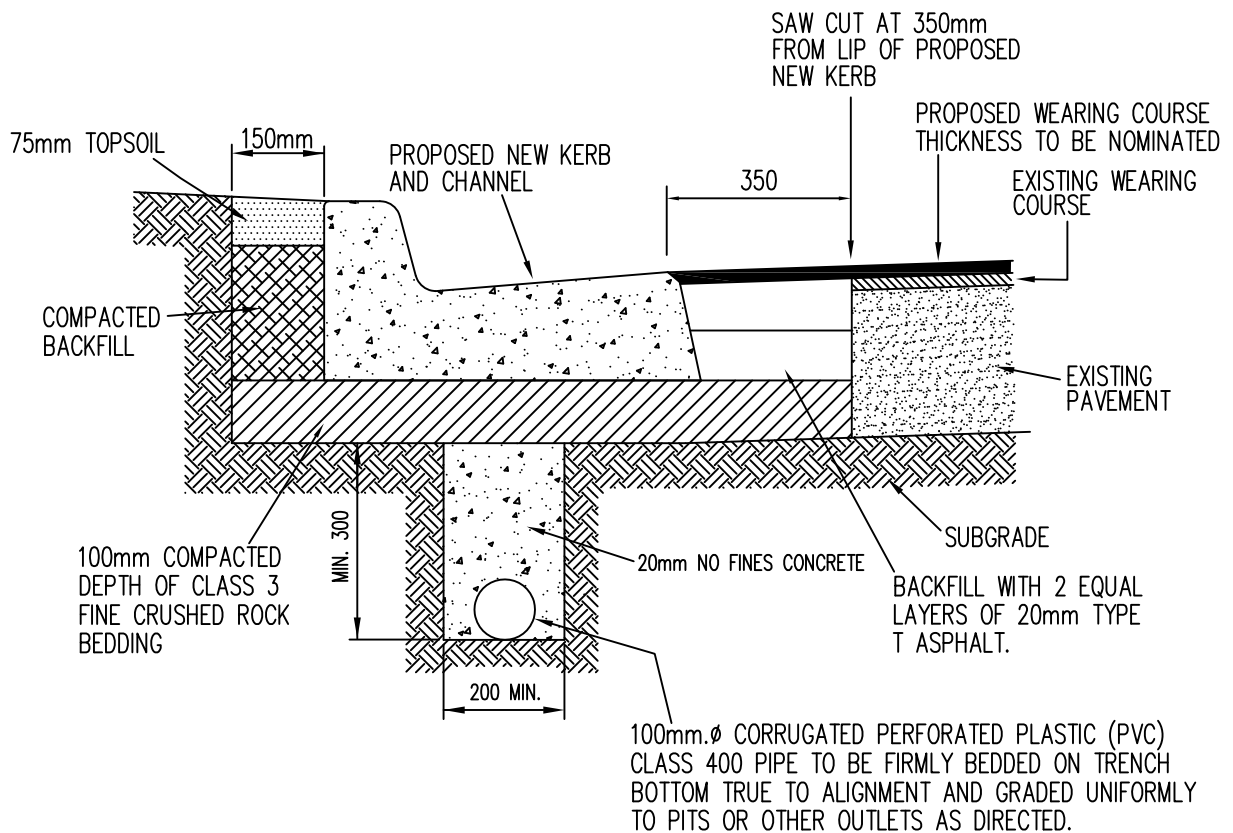
MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-323

V2



NOTES

1. DEFLECT TRENCH OVER LAST 2.0m TO CONNECT TO PITS
2. SUBSOIL DRAIN TO BE A MINIMUM OF 25mm CLEAR BELOW SERVICE CONDUITS ON BOTH SIDES OF ROAD
3. SUBSOIL DRAINS TO BE LOCATED UNDER KERB AND CHANNEL, WHERE CONSTRAINTS PREVENT PLACEMENT BEHIND KERB AND CHANNEL

CITY OF CASEY

KERB AND CHANNEL RECONSTRUCTION
SUBSOIL DRAINAGE DETAIL

Robert

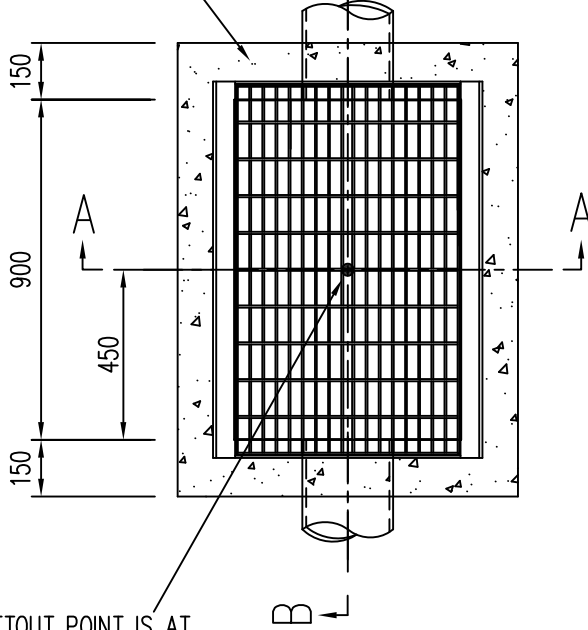
MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-326A

V2

HINGED WEBFORGE WG-12
OR APPROVED EQUIVALENT
WITH 40mm INVERT



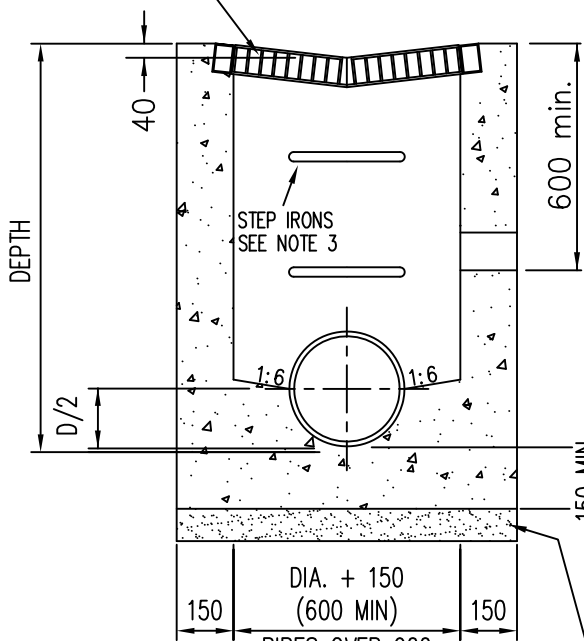
PIT SETOUT POINT IS AT
CENTRE OF PIT CHAMBER

PLAN
SCALE 1:20

NOTES:

1. FOR PIT DEPTH GREATER THAN 1.5 METRES OR PIPE DIAMETER GREATER THAN 450mm REFER TO S-309 REGARDING CORBELLING, WALL THICKNESS AND REINFORCING OF PIT WALLS
2. ALL MEASUREMENTS ARE IN MILLIMETRES.
3. STEP IRONS TO BE PROVIDED IN ALL PITS OVER 900mm DEEP.
4. PIT LID TO BE GRATED HINGED WEBFORGE WG-12 OR APPROVED EQUIVALENT WITH 40mm INVERT. GRATE TO BE "BICYCLE SAFE" IN ACCORDANCE WITH AUSTRALIAN STANDARDS.
5. WHERE NO AG PIPES ARE CONNECTED, SEAL STUBS WITH GEOTEXTILE FABRIC.

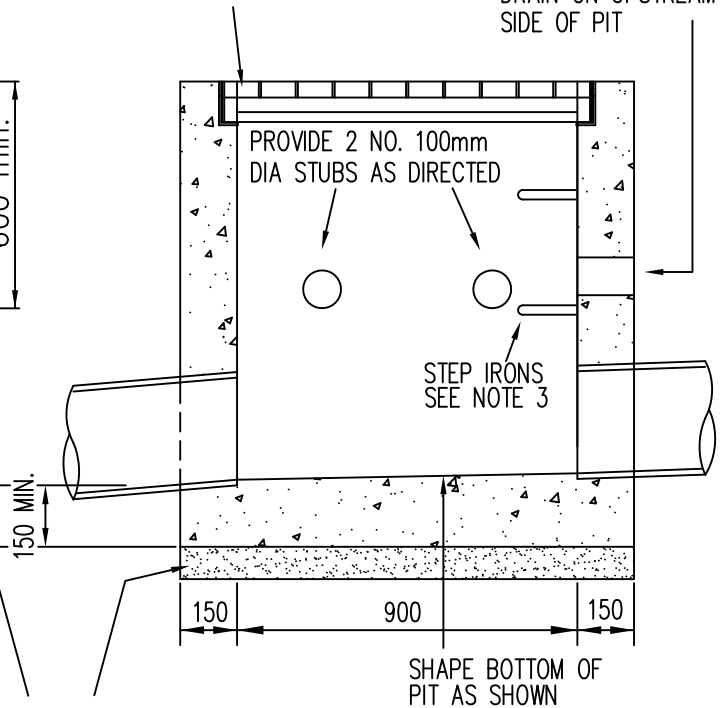
HINGED WEBFORGE WG-12
OR APPROVED EQUIVALENT
WITH 40mm INVERT



SECTION A-A
SCALE 1:20

HINGED WEBFORGE WG-12
OR APPROVED EQUIVALENT
WITH 40mm INVERT

PROVIDE 100mm AG
DRAIN ON UPSTREAM
SIDE OF PIT



SECTION B-B
SCALE 1:20

CITY OF CASEY

GRATED CATCH PIT
FOR USE IN PAVED TRAFFICKED AREAS

Robert

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS:

S-328

RECTANGULAR PRE-CAST PITS INSTALLATION PROCEDURE

1. Excavation

The excavation shall provide a clearance from all external faces of the pit to each face of the *excavation* of not less than 300mm.

2. Bedding

Bedding shall be 20mm class 3 F.C.R, placed and compacted to a thickness not less than 75mm.

3. Backfilling

All pits are to be backfilled with clean granular or friable material. The backfilling shall be placed in layers not exceeding 300mm loose in thickness and compacted to refusal using hand held mechanical equipment.

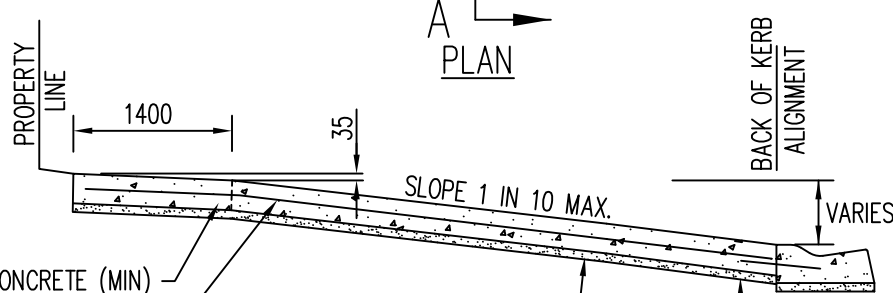
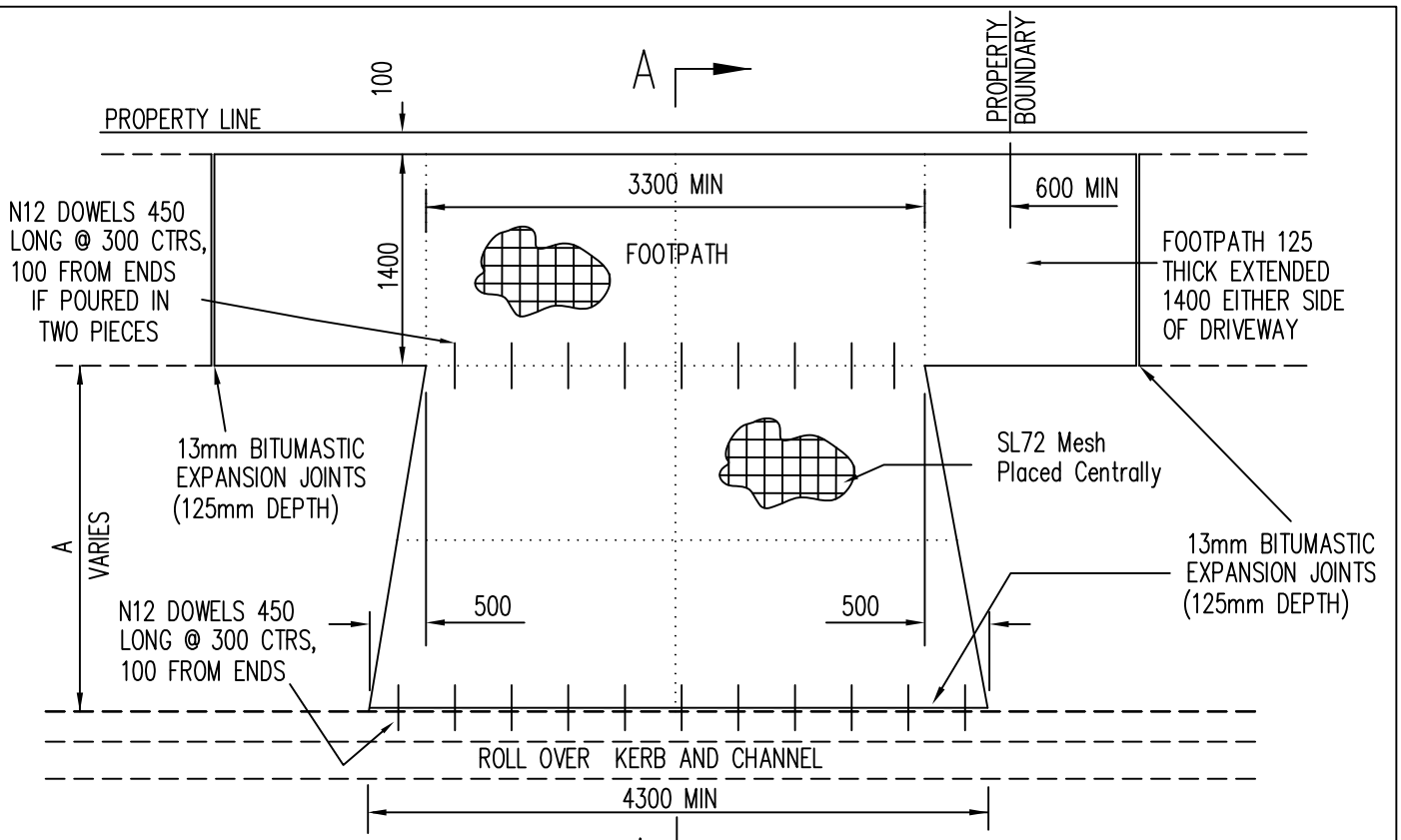
4. Pipe Connections

A concrete bandage is to be placed for the full circumference of the pipe on the external walls of the pit. A cement mortar mix is to be used on the internal walls.

5. Shaping of Floor

A semi circular section transitioning from the size of the outlet pipe to the size of the inlet pipe shall be constructed in all pits using mass concrete. Generally the shape shall be the same as specified for insitu pits.

CONCRETE PAVING



SECTION A-A

NOTES

1. CONCRETE STRENGTH TO BE $f'c=32MPa$, SLUMP = 80mm MAX.
2. VEHICLE CROSSING TO BE OFFSET 0.60m MIN. FROM SIDE BOUNDARY.
3. DOUBLE DRIVEWAY IS TWO DRIVEWAYS WITH INNER SPLAYS DELETED AND 1200mm WIDE GAP INFILLED WITH CONCRETE AND CAST INTEGRALLY WITH ENTIRE CROSSING
4. IF $A > 2000mm$ PROVIDE CONSTRUCTION JOINT AT $A/2$.
5. EXPANSION MATERIAL TO BE BIFB OR SEMI-RIGID CCPF (125mm DEPTH).
6. THE CENTRELINE OF VEHICLE CROSSING IS TO BE PERPENDICULAR TO THE ROAD CENTRELINE, WITH JOINTS ADJUSTED AS REQUIRED (EXCEPT EXPANSION JOINTS)
7. WHERE NO FOOTPATH IS CONSTRUCTED, DRIVEWAY SETOUT IS NOT VARIED.
8. CONSTRUCTION JOINTS LOCATIONS SHOWN THUS
9. FOOTPATH AND INFILL TO BE FORMED AND POURED AS AN INTEGRAL UNIT OR DOWELLED. SEE NOTE 12
10. EXISTING ASPHALT ROAD PAVEMENT IS TO BE REINSTATED IF DAMAGED
11. VEHICLE CROSSING SHALL BE A MINIMUM OF 6m OFFSET FROM TANGENT POINT OF ANY SIDE STREETS
12. WHERE EXISTING FOOTPATH IS 125mm THICK, THE FOOTPATH IS NOT REQUIRED TO BE REPLACED. JOINT BETWEEN NEW CONCRETE AND EXISTING PATH SHALL BE DOWELLED IN A SIMILAR FASHION AS JOINT WITH KERB AND CHANNEL.
13. VEHICLE CROSSINGS IN COURT HEADS TO BE 150mm THICK REINFORCED WITH SL72 (F72) MESH, PLACED CENTRALLY.
14. VEHICLE CROSSINGS ARE TO BE CONSTRUCTED TO COUNCIL APPROVED LEVELS.

CITY OF CASEY

VEHICULAR ENTRANCE DETAIL
RESIDENTIAL
(ROLLOVER KERB & CHANNEL)

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: DOWELLING NOTATION ADDED, GENERAL UPGRADE

S-401

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

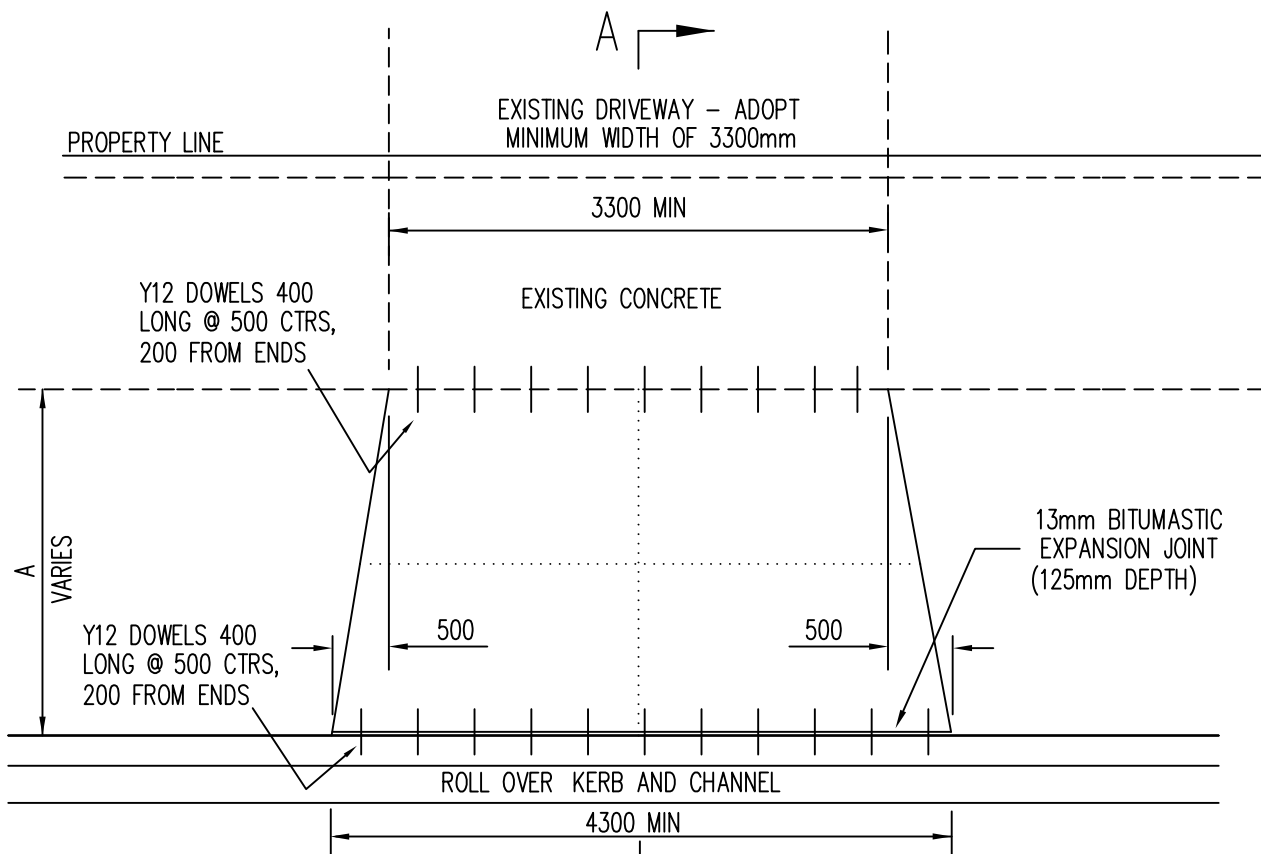
Thickness – 200mm at Roadside edge; 150mm at Invert of channel; at back of layback match crossing thickness (ie 125mm thick for residential and 150mm thick for industrial).

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

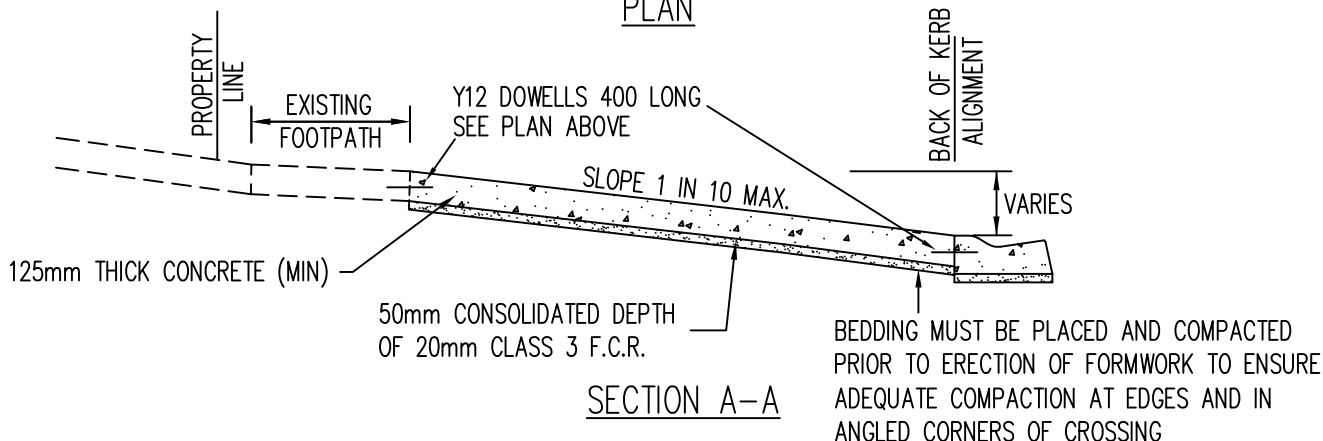
Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

1. A minimum of 24 hours notice is required to book an inspection of the works.
2. Weekday works in an arterial road reservation may only be undertaken between the hours of 9:00am and 3:30pm in order to avoid disrupting peak traffic flows.
3. A person conducting works in any road reservation must have in operation a traffic management plan prepared in accordance with the "Road Management Act 2004 – Worksite Safety – Traffic Management – Code of Practice".
4. All crossovers that are to be installed in the road reservation of VicRoads' Declared Main Roads are to be referred to VicRoads for approval and are to be constructed to VicRoads' standards.
5. If there is no existing footpath in the vicinity of the proposed crossing, contact Council's Engineering Department on 9705 5200 for required finished surface levels at the building line.
6. If the proposed crossing is adjacent to your neighbour's crossing, they must be combined to create a double crossing.
7. When widening an existing crossing, the additional section must be dowelled jointed to the existing crossing using 12mm bars x 500mm long @ 600 centres. Dowelled a minimum of 150mm into existing concrete crossing.
8. Once a new crossing is installed any redundant crossing must be removed unless it can be satisfactorily demonstrated that there is a need to access the property at another point.
9. If the proposed crossing is to be built over a water tapping, a cast iron or approved surface inspection box is to be cast into the concrete. Also to gain access to the valve, a 100mm PVC spindle protection sleeve is to be fitted from the water main to the box.
10. If a crossing is to be built over a house drain connection, the inspection tee joint must be extended so that the screwed cap is 150mm below the finished surface of the crossing. A cast iron or approved surface inspection box is to be cast into the concrete and a 225mm dia. by 300mm high PVC sleeve must be provided around the screwed cap.
11. If the crossing is to be built over a side entry drainage pit a heavy duty grate and frame must be fitted to match the new crossing levels. Otherwise the crossing shall be repositioned a minimum of 1m offset from the existing side entry drainage pit.
12. If there is a stormwater drainage junction pit behind the kerb (not catching water from the road) a medium duty cast iron manhole cover and frame or an approved equivalent must be fitted to match the new crossing levels. Otherwise 1m offset with barrier kerb and channel type crossover. (**In industrial areas Terra Firma fibreglass type or equivalent pit covers must be used**).
13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



A
PLAN



SECTION A-A

NOTES

1. CONCRETE STRENGTH TO BE $F'c=25MPa$, SLUMP = 80mm MAX.
2. THE REMOVAL OF EXISTING CROSSING IS TO BE CARRIED OUT IN CONJUNCTION WITH CONSTRUCTION OF NEW CROSSING
3. DOUBLE DRIVEWAY IS TWO DRIVEWAYS WITH INNER SPLAYS DELETED AND 1200mm WIDE GAP INFILLED WITH CONCRETE AND CAST INTEGRALLY WITH ENTIRE CROSSING
4. IF $A>2000mm$ PROVIDE CONSTRUCTION JOINT AT $A/2$.
5. IF THE EXISTING FOOTPATH DOES NOT COMPLY WITH THIS STANDARD IT MUST BE REPLACED WITH 125mm THICK CONCRETE AND SHALL BE CAST INTEGRALLY WITH THE CROSSING. DOWELS WILL NOT BE REQUIRED IN THIS CIRCUMSTANCE.
6. CONSTRUCTION JOINTS LOCATIONS SHOWN THUS
7. EXPANSION MATERIALS TO BE BIFB OR RIGID POLYETHYLENE FILLER.
8. VEHICLE CROSSINGS IN COURT HEADS TO BE 150mm THICK REINFORCED WITH SL72 (F72) MESH.
9. WHEN CONSTRUCTING NEW CROSSING THE EXISTING KERB AND CHANNEL TO BE SAWCUT AND REMOVED

CITY OF CASEY

KERB AND CHANNEL RECONSTRUCTION
VEHICULAR ENTRANCE DETAIL
FOR ROLLOVER KERB AND CHANNEL

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS:

S-401A

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

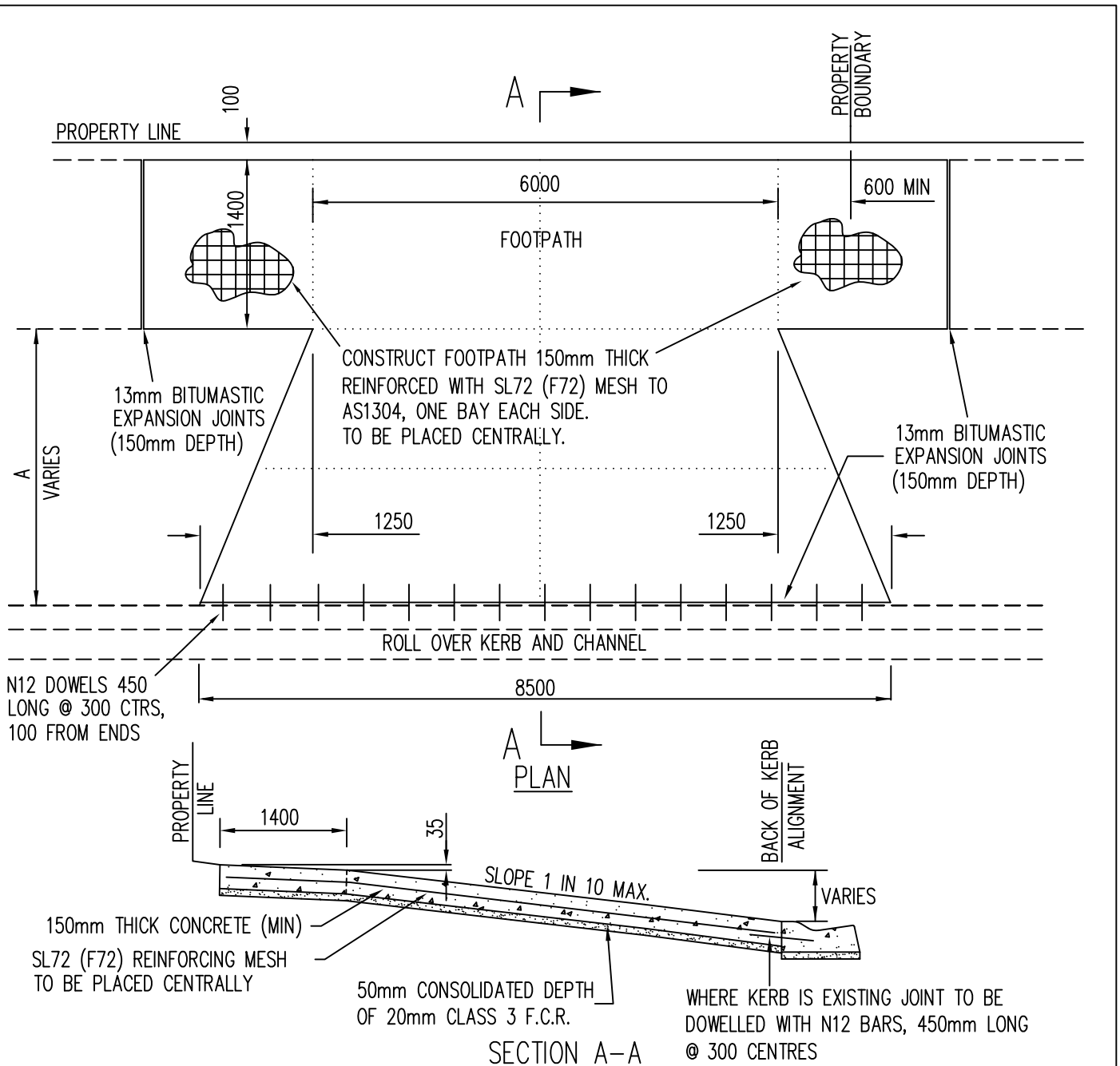
Thickness – 200mm at Roadside edge; 150mm at Invert of channel; at back of layback match crossing thickness (ie 125mm thick for residential and 150mm thick for industrial).

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

1. A minimum of 24 hours notice is required to book an inspection of the works.
2. Weekday works in an arterial road reservation may only be undertaken between the hours of 9:00am and 3:30pm in order to avoid disrupting peak traffic flows.
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6. If the proposed crossing is adjacent to your neighbour's crossing, they must be combined to create a double crossing.
7. When widening an existing crossing, the additional section must be dowelled jointed to the existing crossing using 12mm bars x 500mm long @ 600 centres. Dowelled a minimum of 150mm into existing concrete crossing.
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9. If the proposed crossing is to be built over a water tapping, a cast iron or approved surface inspection box is to be cast into the concrete. Also to gain access to the valve, a 100mm PVC spindle protection sleeve is to be fitted from the water main to the box.
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12. If there is a stormwater drainage junction pit behind the kerb (not catching water from the road) a medium duty cast iron manhole cover and frame or an approved equivalent must be fitted to match the new crossing levels. Otherwise 1m offset with barrier kerb and channel type crossover. (**In industrial areas Terra Firma fibreglass type or equivalent pit covers must be used**).
13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



NOTES

1. CONCRETE STRENGTH TO BE $f'c=32MPa$, SLUMP = 80mm MAX.
2. EXISTING KERB AND CHANNEL IS TO BE SAWCUT AND REPLACED IF REQUIRED
3. SUITABLE FOR SMALL RIGID VEHICLES
4. EXPANSION MATERIAL TO BE BIFB OR SEMI-RIGID CCPF (125mm DEPTH).
5. NEW VEHICLE CROSSINGS ARE TO BE DOWELLED TO EXISTING KERB AND CHANNEL AS SHOWN
6. IF $A < 3m$ FINAL ARRANGEMENTS SHALL BE APPROVED BY COUNCIL
7. CONTROLLED CRACKING JOINT LOCATIONS SHOWN THUS
8. FOOTPATH AND INFILL TO BE FORMED AND POURED AS AN INTEGRAL UNIT.
9. EXISTING ASPHALT ROAD PAVEMENT IS TO BE REINSTATED IF DAMAGED
10. WHERE EXISTING FOOTPATH DOES NOT COMPLY WITH THIS STANDARD IT MUST BE REPLACED WITH 150mm THICK CONCRETE REINFORCED WITH SL72 (F72) MESH TO AS.1304
11. VEHICLE CROSSINGS ARE TO BE CONSTRUCTED TO COUNCIL APPROVED LEVELS.

CITY OF CASEY

VEHICULAR ENTRANCE DETAIL
INDUSTRIAL
(ROLLOVER KERB & CHANNEL)

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-403

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

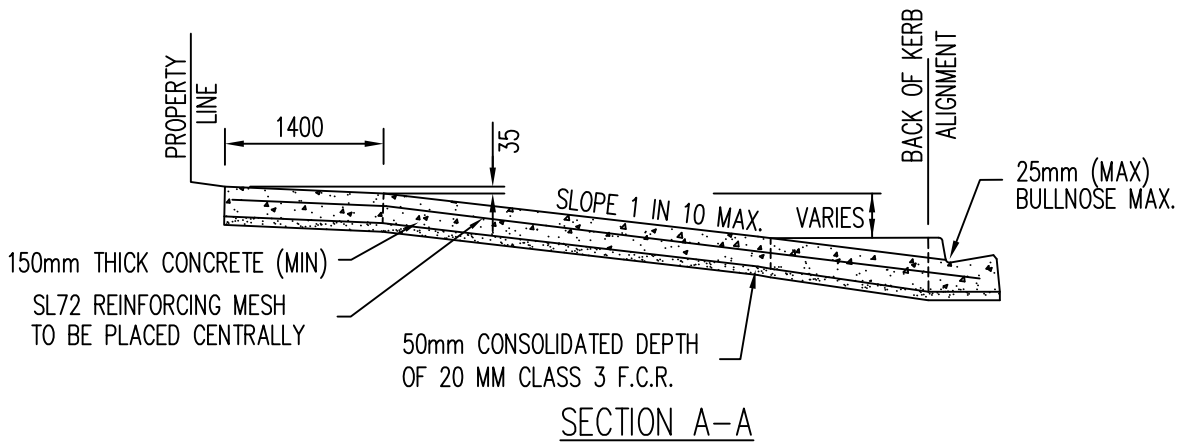
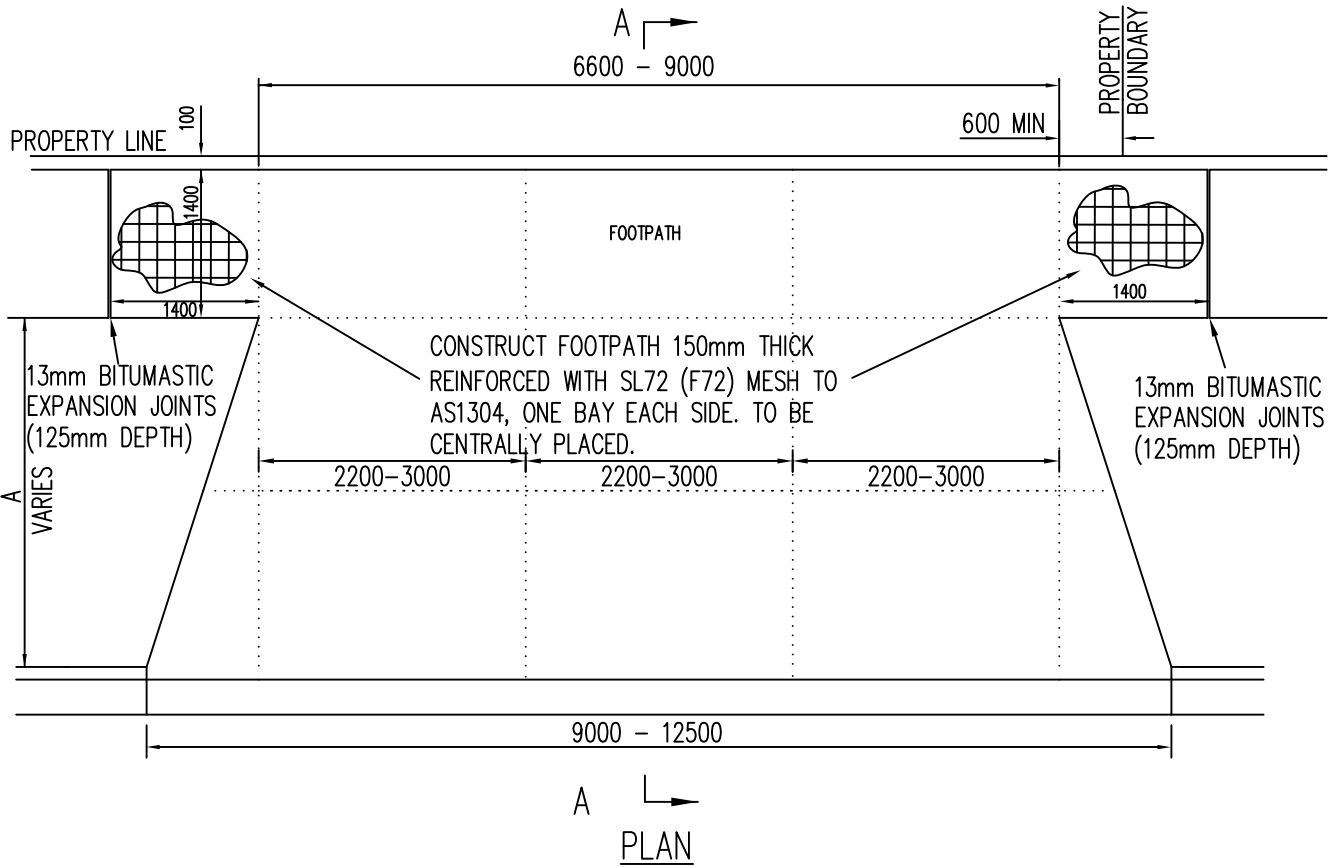
Thickness – 200mm at Roadside edge; 150mm at Invert of channel; at back of layback match crossing thickness (ie 125mm thick for residential and 150mm thick for industrial).

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

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7. When widening an existing crossing, the additional section must be dowelled jointed to the existing crossing using 12mm bars x 500mm long @ 600 centres. Dowelled a minimum of 150mm into existing concrete crossing.
8. Once a new crossing is installed any redundant crossing must be removed unless it can be satisfactorily demonstrated that there is a need to access the property at another point.
9. If the proposed crossing is to be built over a water tapping, a cast iron or approved surface inspection box is to be cast into the concrete. Also to gain access to the valve, a 100mm PVC spindle protection sleeve is to be fitted from the water main to the box.
10. If a crossing is to be built over a house drain connection, the inspection tee joint must be extended so that the screwed cap is 150mm below the finished surface of the crossing. A cast iron or approved surface inspection box is to be cast into the concrete and a 225mm dia. by 300mm high PVC sleeve must be provided around the screwed cap.
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12. If there is a stormwater drainage junction pit behind the kerb (not catching water from the road) a medium duty cast iron manhole cover and frame or an approved equivalent must be fitted to match the new crossing levels. Otherwise 1m offset with barrier kerb and channel type crossover. (**In industrial areas Terra Firma fibreglass type or equivalent pit covers must be used**).
13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



NOTES

1. CONCRETE STRENGTH TO BE $f'c=32MPa$, SLUMP = 80mm MAX.
2. IF $A>2000mm$ PROVIDE CONSTRUCTION JOINT AT $A/2$.
3. CONSTRUCTION JOINTS LOCATIONS SHOWN THUS
4. EXISTING KERB AND CHANNEL TO BE SAWCUT AND REMOVED. IF DISTANCE FROM EXTENTS OF CROSSING TO AN EXISTING JOINT IS LESS THAN 1 METRE, EXTRA KERB AND CHANNEL SHALL BE REMOVED TO THAT JOINT.
5. MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR MEDIUM / HEAVY RIGID VEHICLES
6. MAXIMUM DIMENSIONS SHOWN ARE SUITABLE FOR SEMI TRAILER
7. VEHICLE CROSSINGS ARE TO BE CONSTRUCTED TO COUNCIL APPROVED LEVELS.

CITY OF CASEY

VEHICULAR ENTRANCE DETAIL
INDUSTRIAL

Shah

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: PROPERTY OFFSET AMENDED, GENERAL UPGRADE

S-404

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

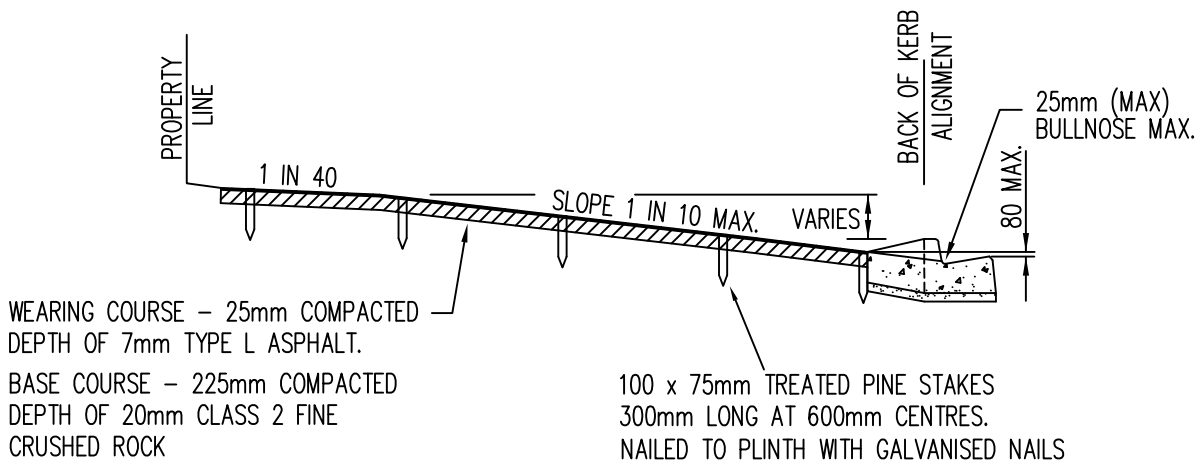
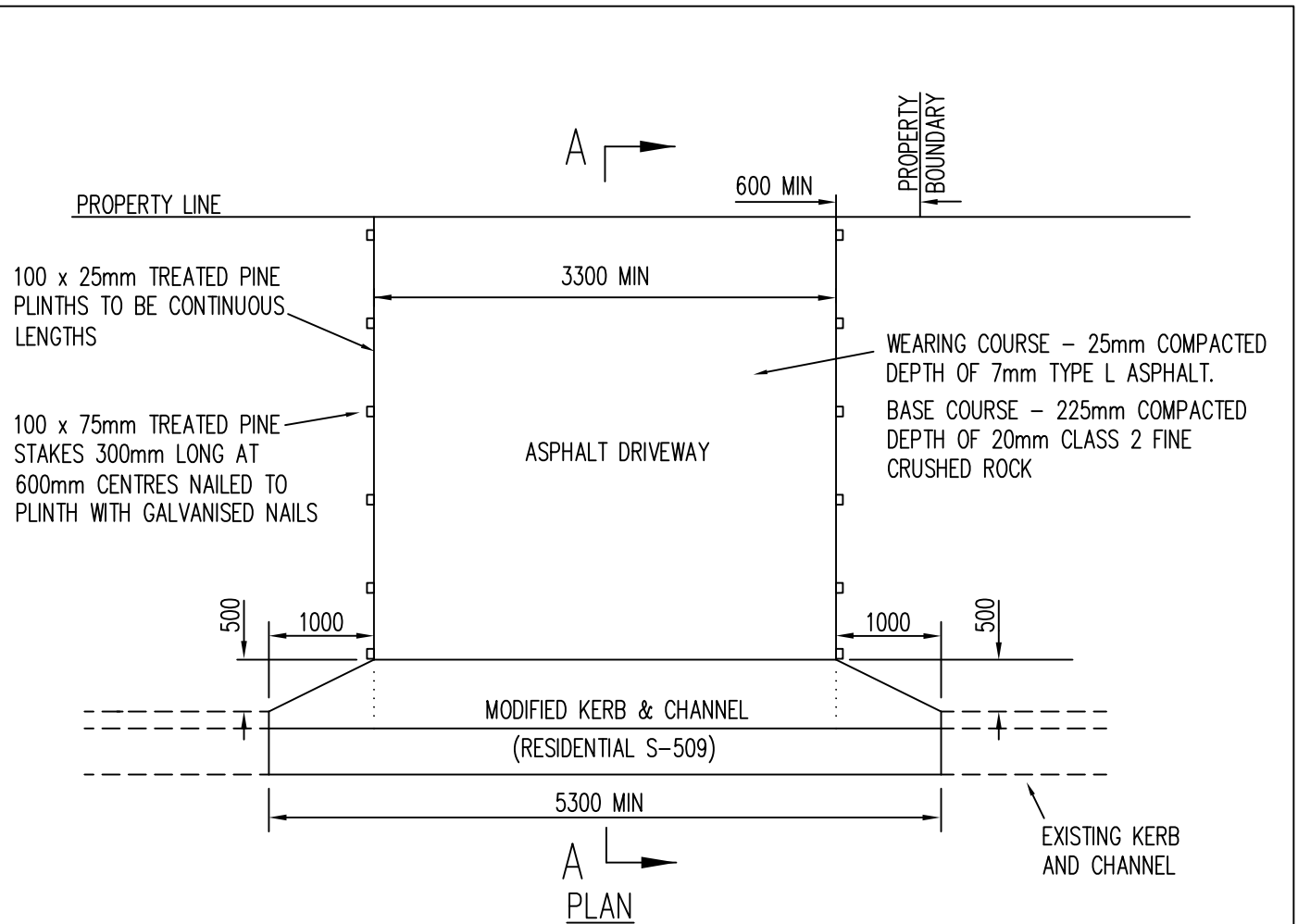
Thickness – 200mm at Roadside edge; 150mm at Invert of channel; at back of layback match crossing thickness (ie 125mm thick for residential and 150mm thick for industrial).

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

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13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



SECTION A-A

CITY OF CASEY

VEHICULAR ENTRANCE DETAIL
 ASPHALT - MODIFIED KERB AND CHANNEL
 (LOW DENSITY AREAS ONLY)

Robert

MANAGER OF ENGINEERING &
 ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE, PROPERTY BOUNDARY OFFSET AMENDED

S-405

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

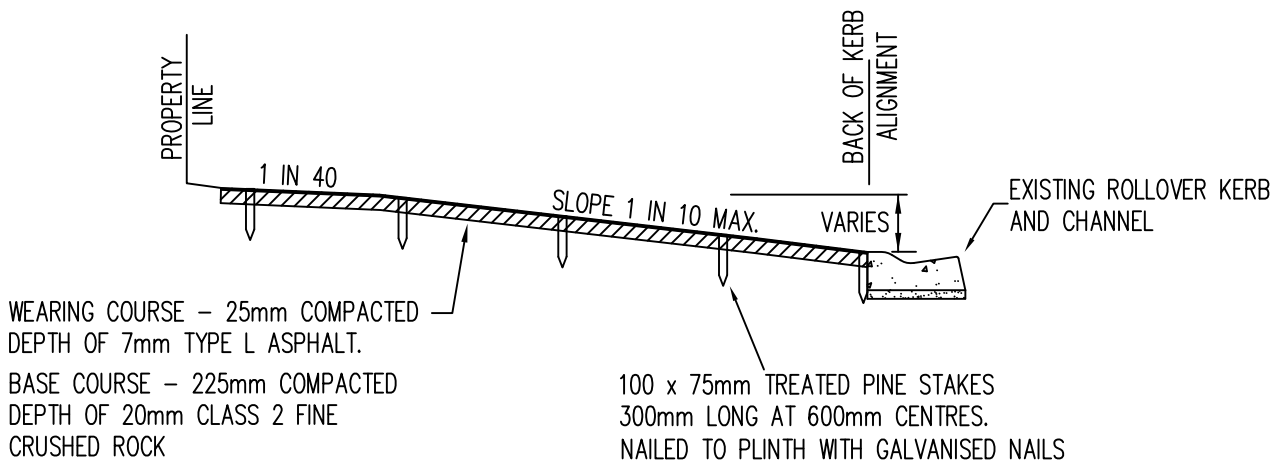
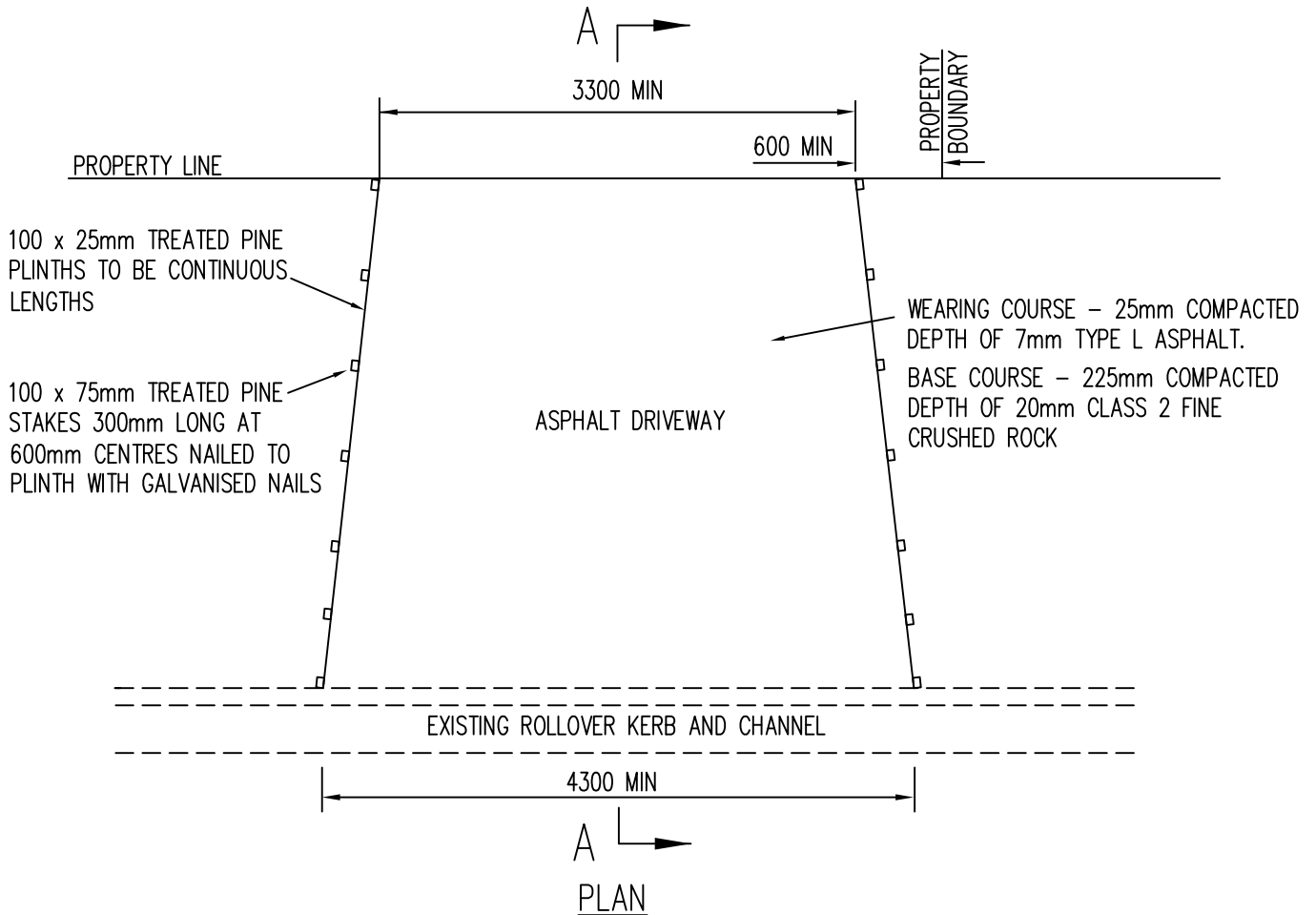
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Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

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13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



SECTION A-A

CITY OF CASEY

VEHICULAR ENTRANCE DETAIL
 ASPHALT - ROLLOVER KERB AND CHANNEL
 (LOW DENSITY AREAS ONLY)

MANAGER OF ENGINEERING &
 ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE, PROPERTY BOUNDARY OFFSET AMENDED

S-406

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

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Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

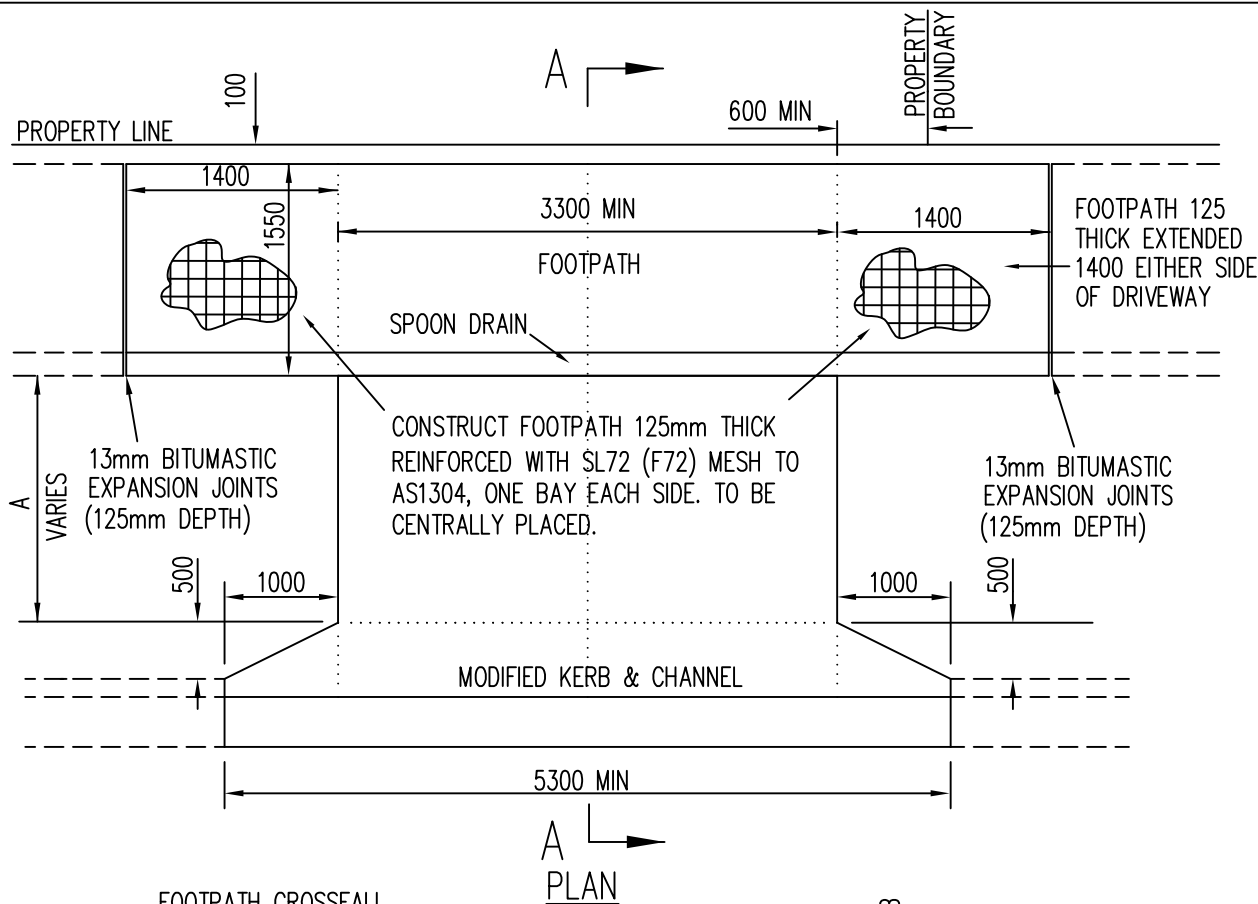
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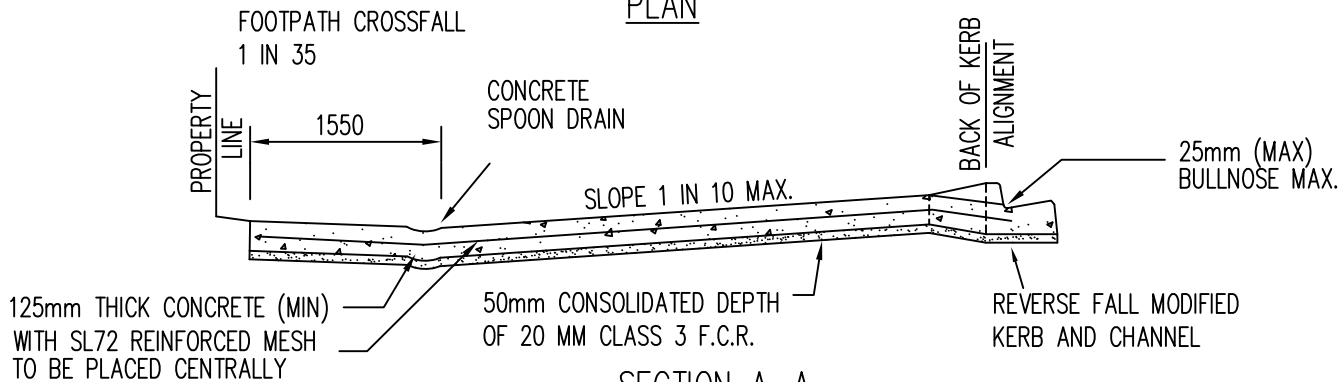
Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

1. A minimum of 24 hours notice is required to book an inspection of the works.
2. Weekday works in an arterial road reservation may only be undertaken between the hours of 9:00am and 3:30pm in order to avoid disrupting peak traffic flows.
3. A person conducting works in any road reservation must have in operation a traffic management plan prepared in accordance with the "Road Management Act 2004 – Worksite Safety – Traffic Management – Code of Practice".
4. All crossovers that are to be installed in the road reservation of VicRoads' Declared Main Roads are to be referred to VicRoads for approval and are to be constructed to VicRoads' standards.
5. If there is no existing footpath in the vicinity of the proposed crossing, contact Council's Engineering Department on 9705 5200 for required finished surface levels at the building line.
6. If the proposed crossing is adjacent to your neighbour's crossing, they must be combined to create a double crossing.
7. When widening an existing crossing, the additional section must be dowelled jointed to the existing crossing using 12mm bars x 500mm long @ 600 centres. Dowelled a minimum of 150mm into existing concrete crossing.
8. Once a new crossing is installed any redundant crossing must be removed unless it can be satisfactorily demonstrated that there is a need to access the property at another point.
9. If the proposed crossing is to be built over a water tapping, a cast iron or approved surface inspection box is to be cast into the concrete. Also to gain access to the valve, a 100mm PVC spindle protection sleeve is to be fitted from the water main to the box.
10. If a crossing is to be built over a house drain connection, the inspection tee joint must be extended so that the screwed cap is 150mm below the finished surface of the crossing. A cast iron or approved surface inspection box is to be cast into the concrete and a 225mm dia. by 300mm high PVC sleeve must be provided around the screwed cap.
11. If the crossing is to be built over a side entry drainage pit a heavy duty grate and frame must be fitted to match the new crossing levels. Otherwise the crossing shall be repositioned a minimum of 1m offset from the existing side entry drainage pit.
12. If there is a stormwater drainage junction pit behind the kerb (not catching water from the road) a medium duty cast iron manhole cover and frame or an approved equivalent must be fitted to match the new crossing levels. Otherwise 1m offset with barrier kerb and channel type crossover. (**In industrial areas Terra Firma fibreglass type or equivalent pit covers must be used**).
13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



PLAN



SECTION A-A

NOTES

1. CONCRETE STRENGTH TO BE $f'c=25MPa$, SLUMP = 80mm MAX.
2. VEHICLE CROSSING TO BE OFFSET 0.60m MIN. FROM SIDE BOUNDARY.
3. DOUBLE DRIVEWAY IS TWO DRIVEWAYS WITH INNER SPLAYS DELETED AND 1200mm WIDE GAP INFILLED WITH CONCRETE AND CAST INTEGRALLY WITH ENTIRE CROSSING
4. IF $A>2000mm$ PROVIDE CONSTRUCTION JOINT AT $A/2$.
5. EXPANSION MATERIAL TO BE BIFB OR SEMI-RIGID CCPF (125mm DEPTH).
6. THE CENTRELINE OF VEHICLE CROSSING IS TO BE PERPENDICULAR TO THE ROAD CENTRELINE, WITH JOINTS ADJUSTED AS REQUIRED (EXCEPT EXPANSION JOINTS)
7. WHERE NO FOOTPATH IS CONSTRUCTED, DRIVEWAY SETOUT IS NOT VARIED.
8. CONSTRUCTION JOINTS LOCATIONS SHOWN THUS
9. FOOTPATH AND INFILL TO BE FORMED AND Poured AS AN INTEGRAL UNIT.
10. THE MINIMUM INSIDE RADIUS ON CURVED DRIVEWAYS SHALL BE 8m
11. VEHICLE CROSSINGS ARE TO BE CONSTRUCTED TO COUNCIL APPROVED LEVELS.
12. WHERE EXISTING FOOTPATH DOES NOT COMPLY WITH THIS STANDARD IT MUST BE REPLACED WITH 125mm THICK CONCRETE REINFORCED WITH SL72 (F72) MESH TO AS.1304 TO BE CENTRALLY PLACED.

CITY OF CASEY

**VEHICULAR ENTRANCE DETAIL
REVERSE FALL – RESIDENTIAL
(KERB & CHANNEL)**

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: PROPERTY BOUNDARY OFFSET AMENDED, GENERAL UPGRADE

S-409

V2

CROSSING SPECIFICATIONS & CONDITIONS OF APPROVAL FOR NEW DRIVEWAYS IN ESTABLISHED AREAS

Inspections:

An inspection date and time must be booked a minimum of 24 hours prior to concrete being poured. Inspection bookings are taken by Casey's Works & Operations Dept. on (03) 9705 5345.

Removal of existing concrete paving and/or kerb and channel:

Paving – All 75mm thick concrete paving must be removed and replaced to the same thickness as the new crossing. Any paving that is to be removed must be removed to the nearest construction joint either side of the crossing. Any damage to adjoining bays will result in the replacement of those bays at the contractor's cost.

Kerb & channel – Any kerb & channel that is to be removed is to be neatly saw cut at the edge of the modified kerb & channel. If the remaining section of kerb & channel would be shorter than 1.2m in length to the nearest joint, then remove this section of kerb as well and replace to Casey standard. Any damage to adjoining kerb will result in the replacement of those sections at the contractor's cost. When saw cutting the kerb the contractor is to ensure that the asphalt surface is not cut in the process.

Crushed Rock Bedding:

20mm Size, Class 3 crushed rock compacted to a minimum thickness of 50mm. Prior to compaction the crushed rock is to have an optimum moisture content of about 6% which can be achieved by a light sprinkle of water using a garden hose. The bedding rock is to be compacted with a vibrating plate for a minimum of 2 passes per plate width per 50mm layer.

Concrete Paving:

Thickness – Footpath outside crossing 125mm.
Residential Crossing (building line to back of kerb) 125mm.
Industrial Crossing (building line to back of kerb) 150 mm with SL72 (F72) mesh.

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

Surface Finish – To be rolled with twin drum mesh roller. Then Light broom finish with trowelled high-lighted edges and joints.

Modified Kerb and Channel:

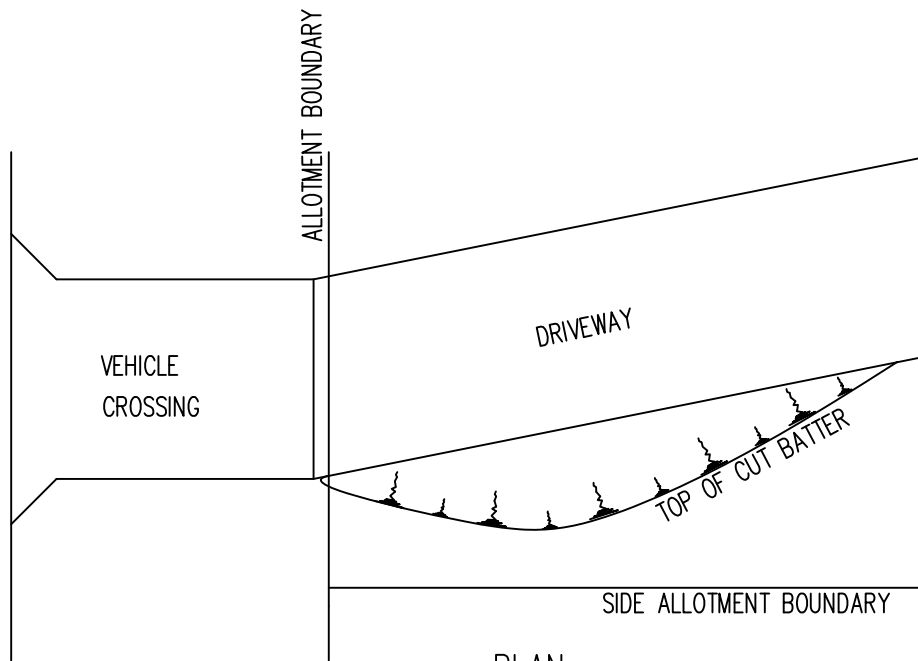
Thickness – 200mm at Roadside edge; 150mm at Invert of channel; at back of layback match crossing thickness (ie 125mm thick for residential and 150mm thick for industrial).

Strength – Minimum strength of concrete is to be 25Mpa with a maximum slump of 80mm.

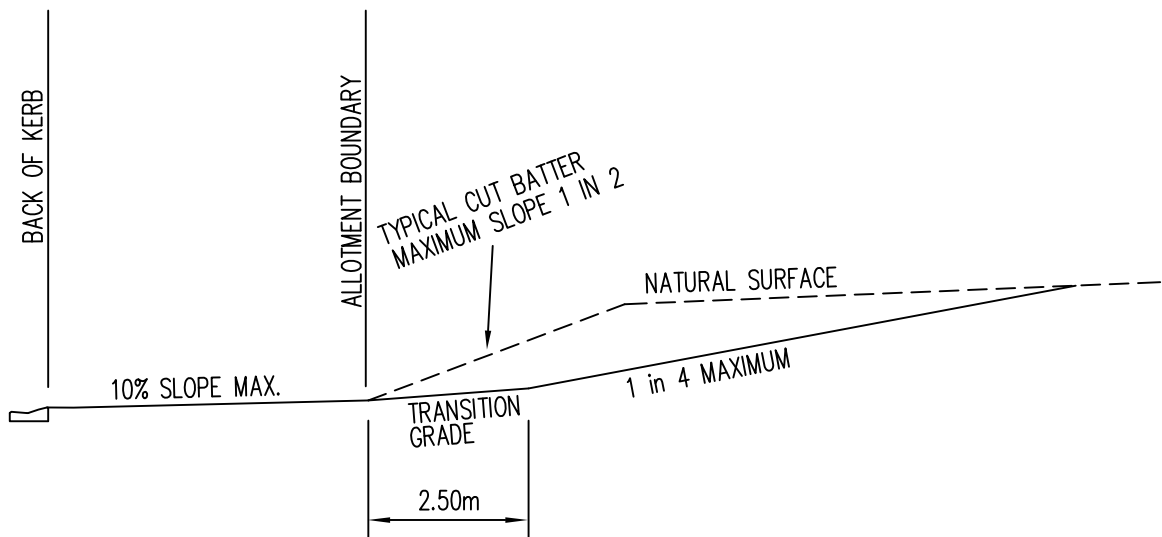
Surface Finish – Smooth trowelled rendered surface (render to consist of one part sand, one part cement and one part stone dust).

General Conditions:

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13. If an **electricity pole** in the vicinity of the proposed crossing there must be a minimum clearance of 1m.



PLAN
NOT TO SCALE



- NOTES - 1. WHERE EXCESSIVE CUT OCCURS, RAMP CUT DIAGONALLY ACROSS ALLOTMENT.
2. DRIVEWAYS TO BE LOCATED TO ENSURE THAT BATTERS TO ACCESS RAMP DO NOT ENCROACH INTO ADJOINING LOTS

CITY OF CASEY

DRIVEWAYS
ACCESS RAMPS TO ALLOTMENTS

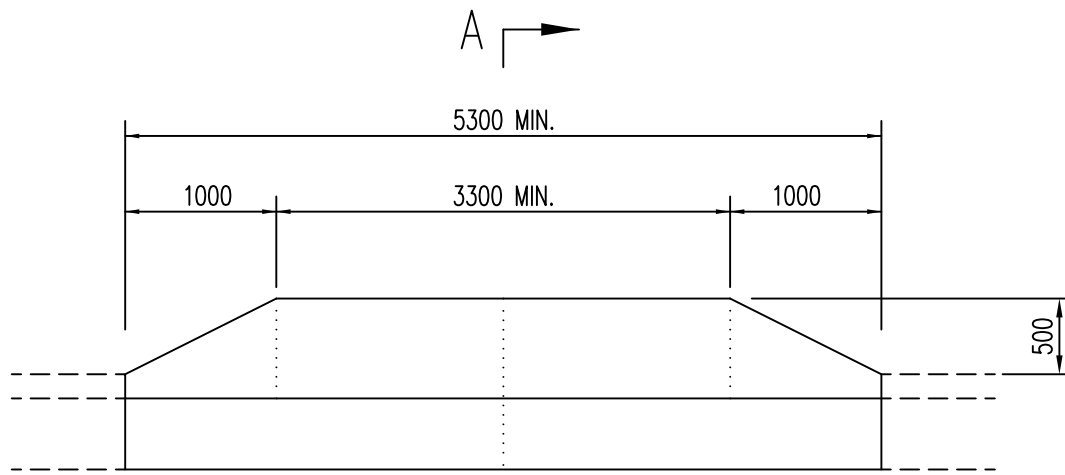
AMENDMENTS: GENERAL UPGRADE

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

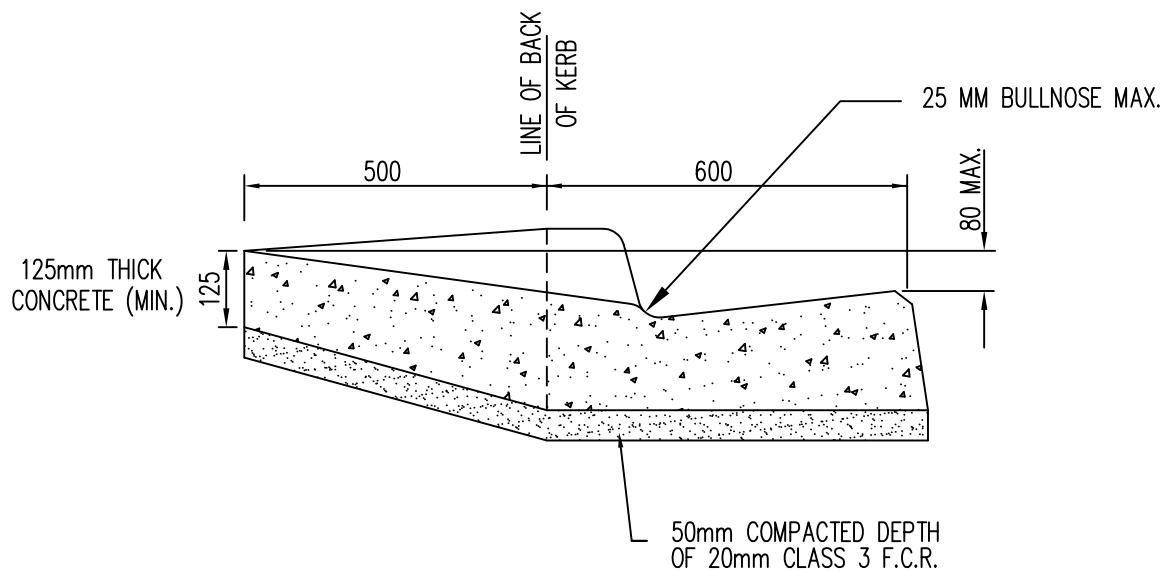
S-410

V2

CONCRETE KERB & CHANNEL



A
PLAN



SECTION A-A

NOTES

1. CONSTRUCTION JOINT LOCATIONS ARE SHOWN THUS
2. EXISTING KERB & CHANNEL TO BE SAWCUT AND REMOVED.
3. ASPHALT IS TO BE REINSTATED IF DAMAGED.
4. CONCRETE STRENGTH F'C = 25MPa, SLUMP = 80mm MAX.

CITY OF CASEY

MODIFIED KERB AND CHANNEL
RESIDENTIAL
(BARRIER KERB AND CHANNEL)

Robert

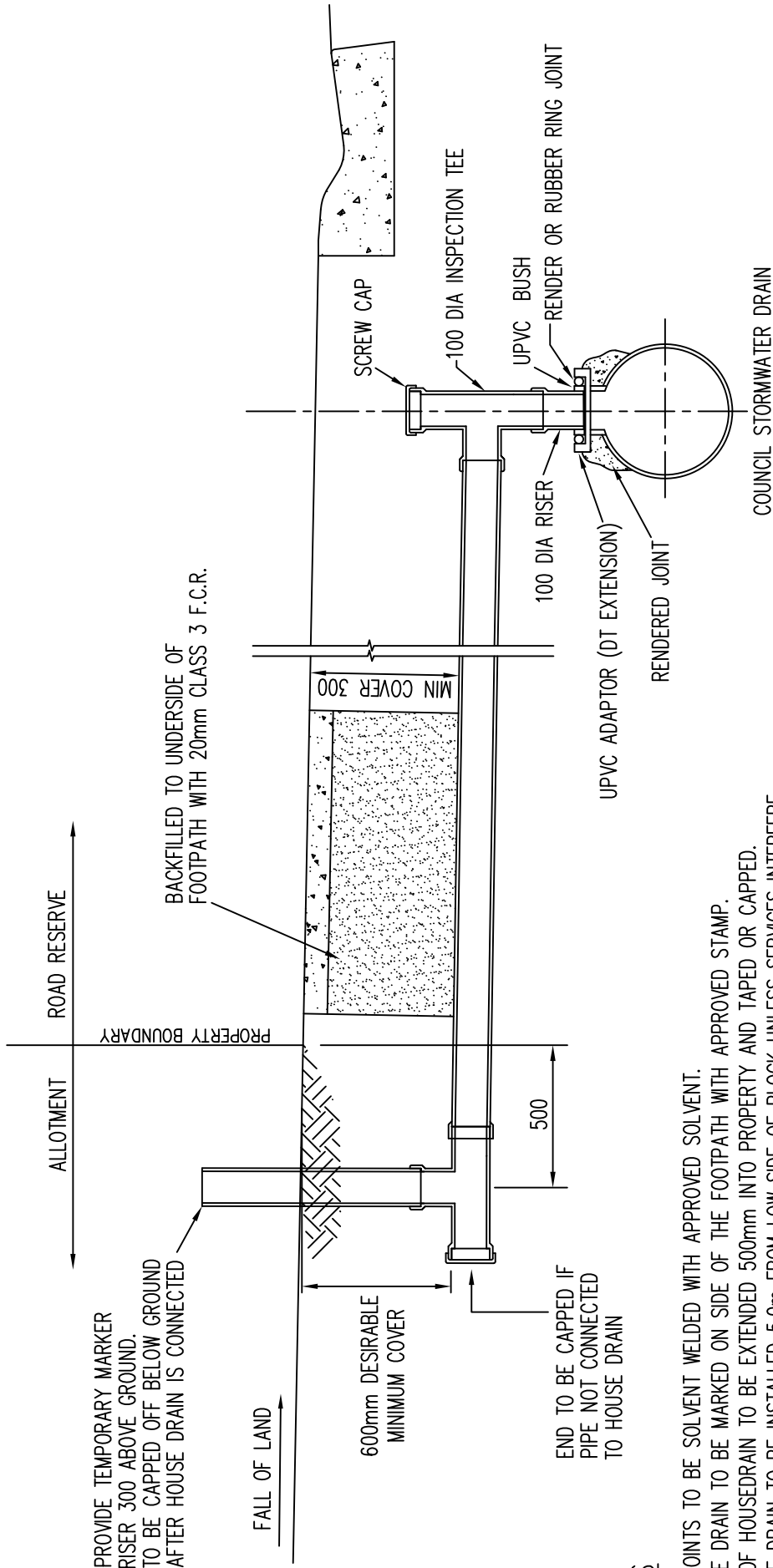
MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE

S-509

V2

PROPERTY DRAINAGE



PROVIDE TEMPORARY MARKER RISER 300 ABOVE GROUND. TO BE CAPPED OFF BELOW GROUND AFTER HOUSE DRAIN IS CONNECTED

FALL OF LAND

600mm DESIRABLE MINIMUM COVER

END TO BE CAPPED IF PIPE NOT CONNECTED TO HOUSE DRAIN

NOTES

1. ALL JOINTS TO BE SOLVENT WELDED WITH APPROVED SOLVENT.
2. HOUSE DRAIN TO BE MARKED ON SIDE OF THE FOOTPATH WITH APPROVED STAMP.
3. END OF HOUSEDRAIN TO BE EXTENDED 500mm INTO PROPERTY AND TAPED OR CAPPED.
4. HOUSE DRAIN TO BE INSTALLED 5.0m FROM LOW SIDE OF BLOCK UNLESS SERVICES INTERFERE.
5. IN SITUATIONS WHERE THERE IS NO FOOTPATH, A PEG IS TO BE INSTALLED AT END OF HOUSEDRAIN.
6. HAUNCHING OF PIPE REQUIRED IF TRENCH INFERIOR.
7. WHERE PIPE NOT INSTALLED IN SINGLE LENGTH, APPROVED CONNECTORS MUST BE USED.
8. ALL UPVC PIPES AND FITTINGS TO BE SEWER GRADE HEAVY – AS 1260
9. USE SIMILAR DETAIL FOR CONNECTION TO STORMWATER DRAINAGE PIT

CITY OF CASEY

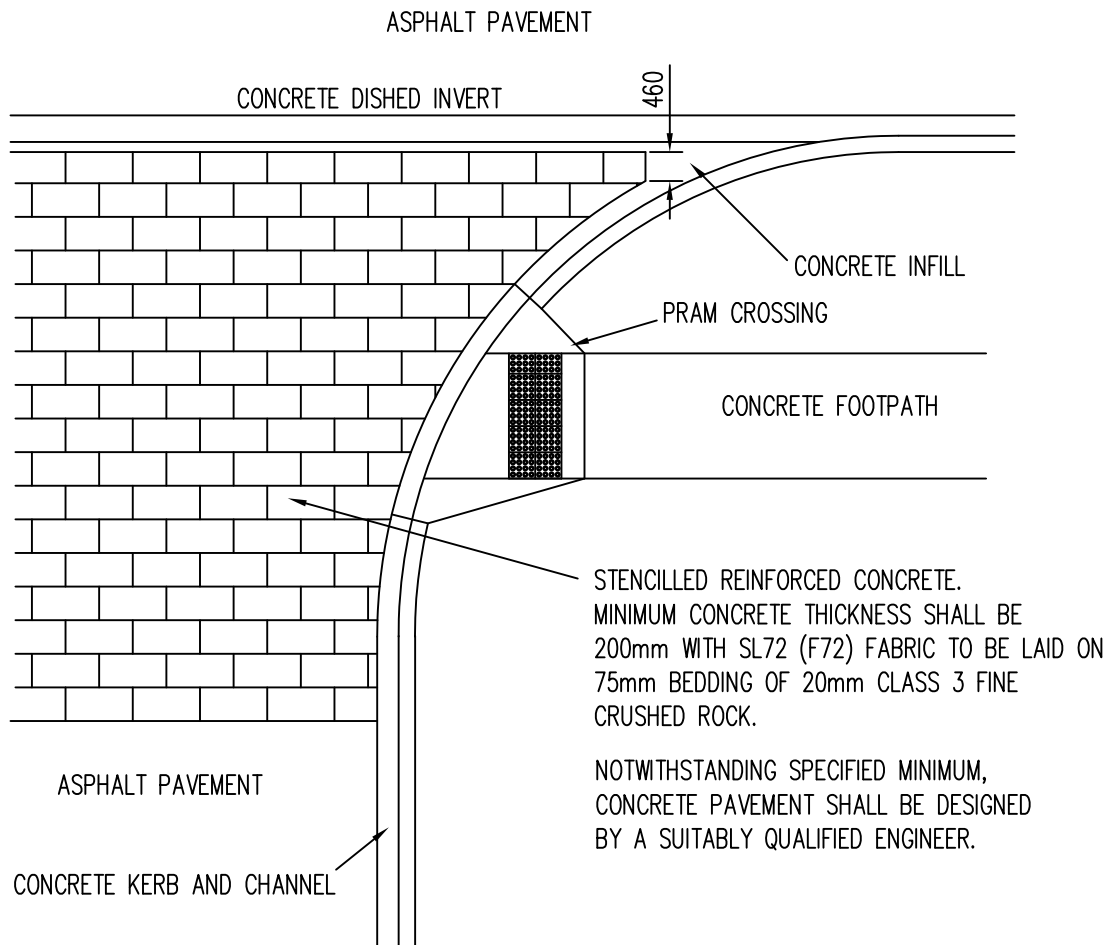
PROPERTY DRAIN CONNECTION
TO STORMWATER DRAIN IN ROAD RESERVE

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES
LAST UPDATE 09.11.2012

S-607 V2

AMENDMENTS: GENERAL UPGRADE, LOCATING RISER ADDED

PAVING



PLAN OF TYPICAL LAYOUT
NOT TO SCALE

NOTES

1. CONCRETE STRENGTH F'C = 25MPa. IF COLOURED CONCRETE IS USED STRENGTH TO BE 32MPa
2. MINIMUM REINFORCEMENT COVER TO BE 100mm.
3. IN THE EVENT THAT A BRICK PAVED ENTRY THRESHOLD IS USED BRICK PAVERS SHALL BE PLACED ON 200mm DEPTH CONCRETE BASE REINFORCED WITH SL72 (F72) MESH (MORTAR BEDDING TO BE 4:1 SAND TO CEMENT RATIO).

CITY OF CASEY

REINFORCED STENCILED CONCRETE
ENTRY THRESHOLD

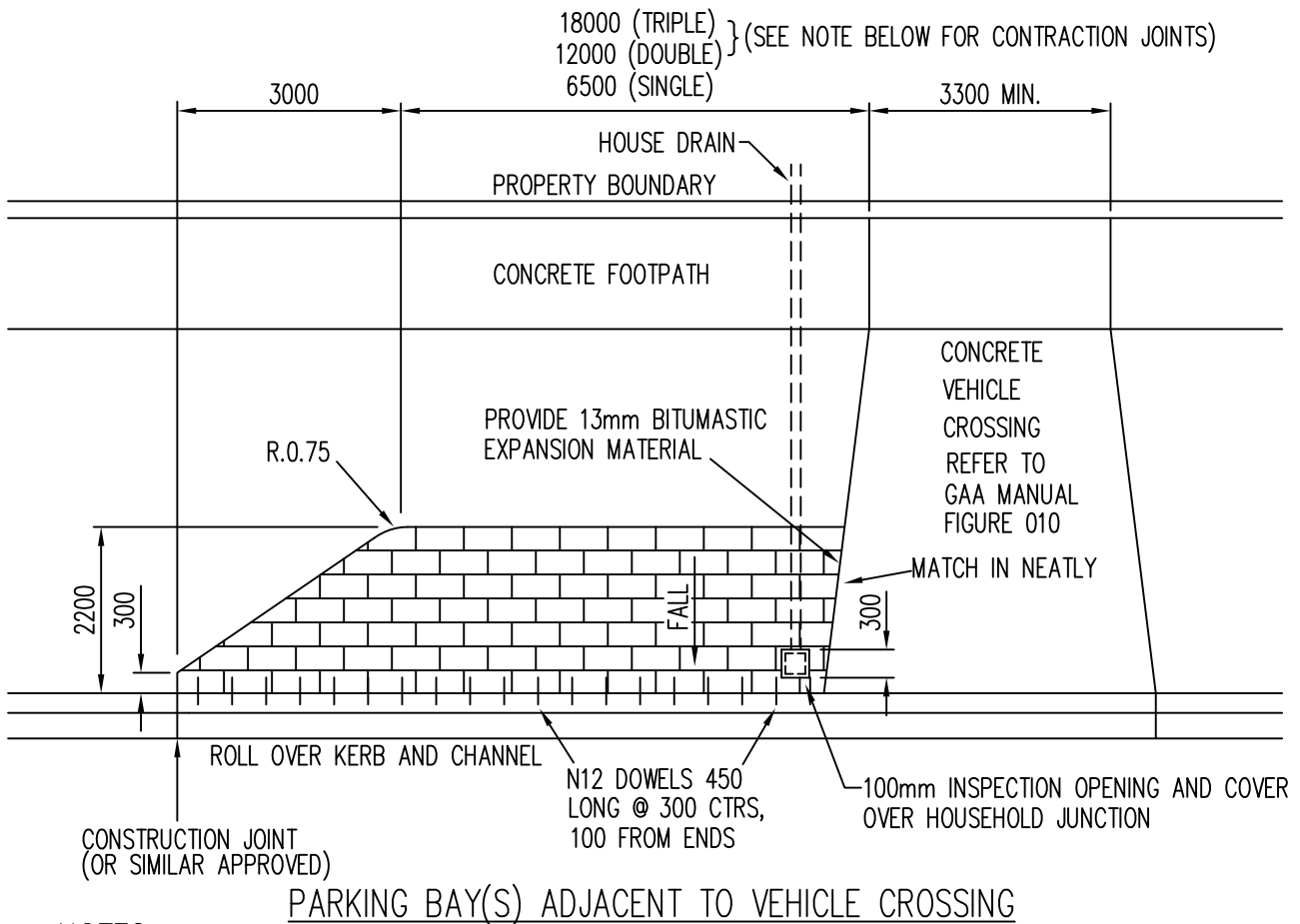
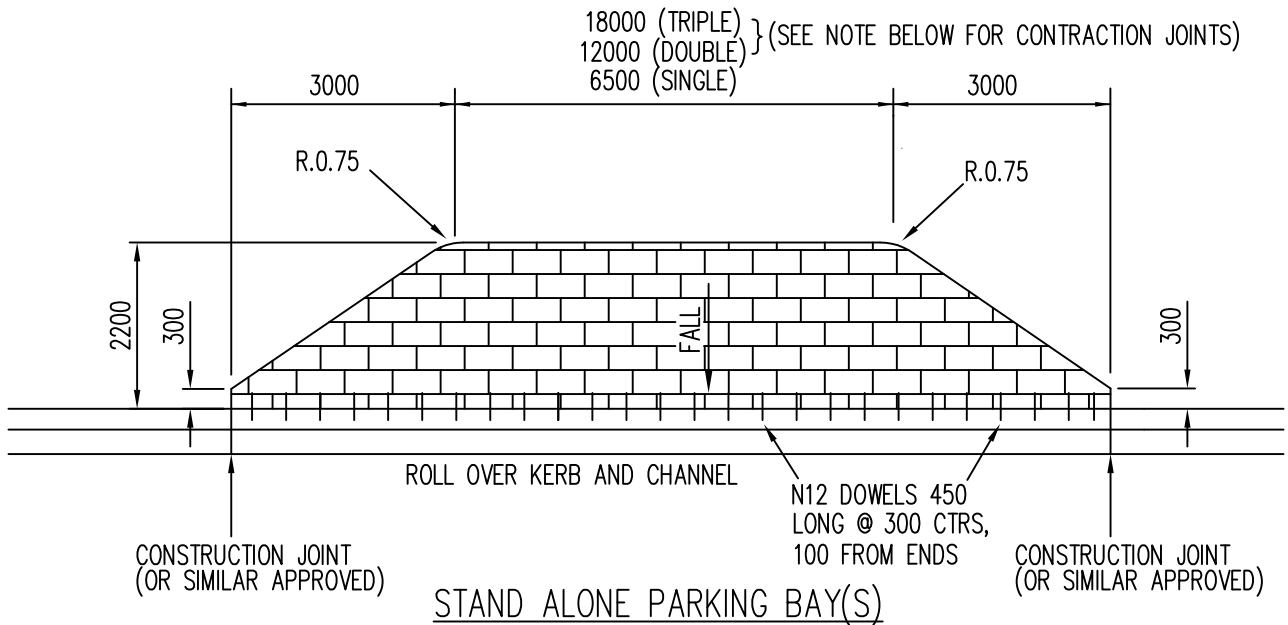
MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE, PRAM CROSSING UPDATED

S-901

V2



NOTES

1. PARKING BAYS TO BE STENCIL PATTERNED CONCRETE 150mm THICK, REINFORCED WITH SL72 (F72) TO BE PLACED CENTRALLY, MINIMUM COMPACTED DEPTH OF 20mm CLASS 3 FINE CRUSHED ROCK
2. FOR A DOUBLE PARKING BAY, CONTRACTION JOINT TO BE PROVIDED AT 5500 AND FOR A TRIPLE PARKING BAY, CONTRACTION JOINTS TO BE PROVIDED AT 5000 AND 6000 INTERVALS.

CITY OF CASEY

**ROAD RESERVE PARKING BAYS
DETAILS**

MANAGER OF ENGINEERING &
ENVIRONMENTAL SERVICES

LAST UPDATE 09.11.2012

AMENDMENTS: GENERAL UPGRADE, CROSSING DETAILS AMENDED, DOWELS ADDED

S-903

V2