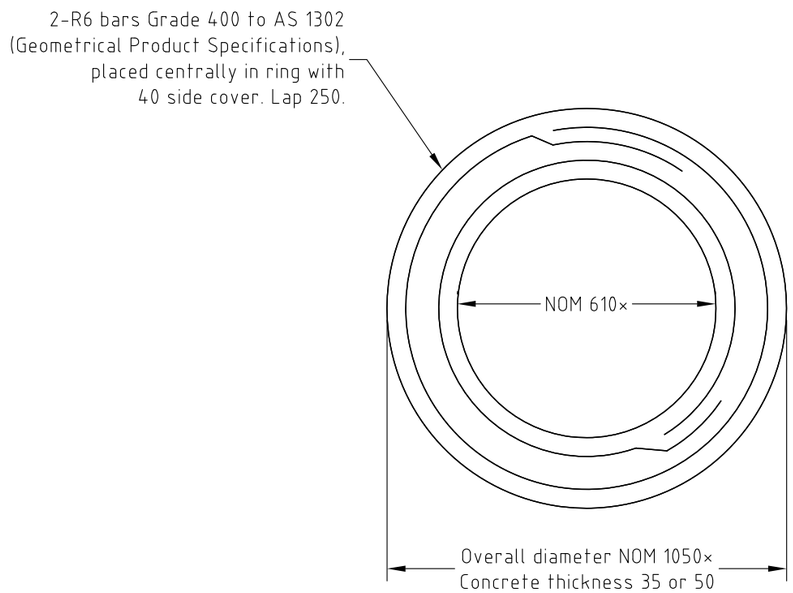


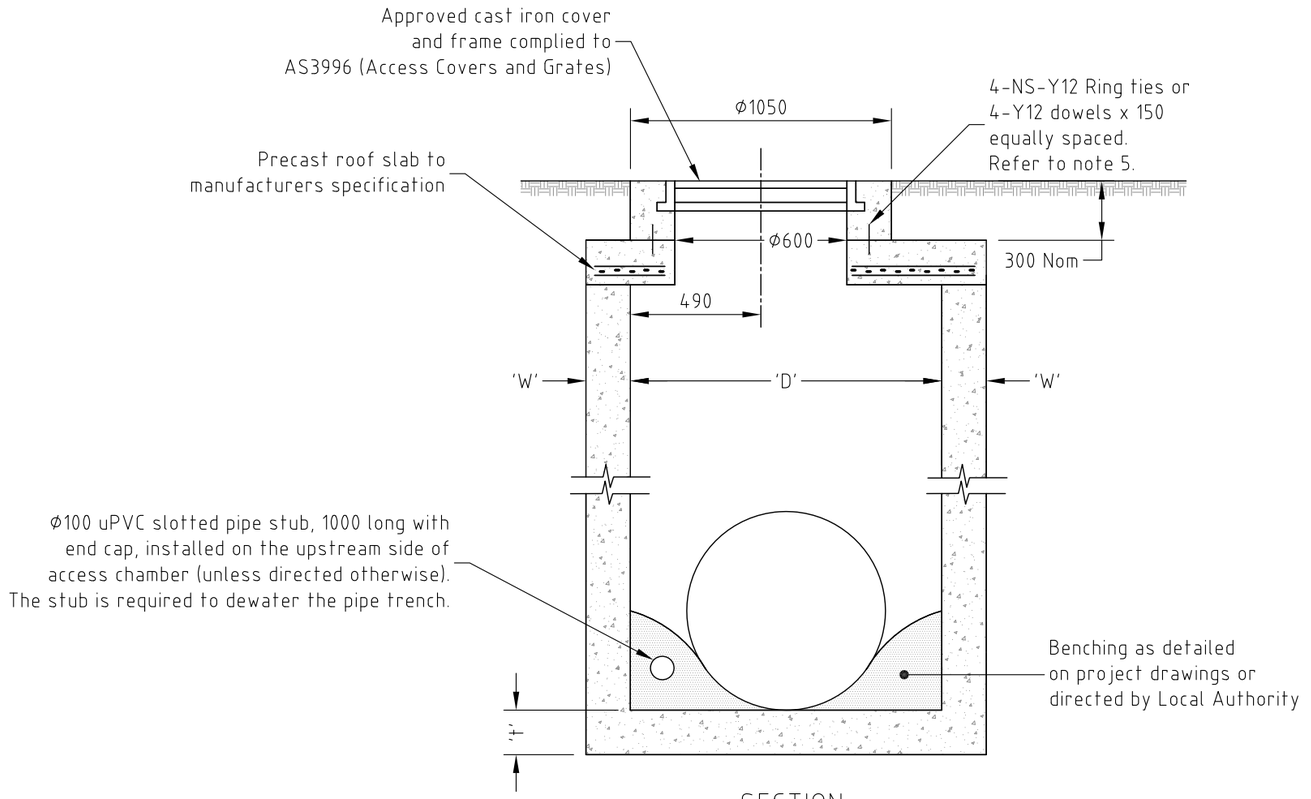
PLAN

ROOF RING

For use is raising covers and frames of existing access chambers.
× Size to suit existing access chamber.

DIMENSION

Access Chamber DIA 'D'	Floor Thickness 't'		Wall Thickness 'W'	Roof/Floor Slab DIA
	INLET	OUTLET		
1050	175	150	150	1350
1200	250	225	225	1650
1350	250	225	225	1800
1500	250	225	225	1950
1800	250	225	250	2300
2100	275	250	275	2650



SECTION

ACCESS CHAMBER DETAILS

NOTES:

1. Structural concrete N25, benching N10 in accordance with AS 1379 (Specifications and Supply of Concrete) and AS 3600 (Concrete Structures).
2. Access chambers which are propriety items are required to be designed and certified to AS 3996 (Access Covers and Grates). Access covers subject to road traffic shall be of Class D design, where Minimum Ultimate Limit State Design Load = 210kN. Access covers subject to pedestrian traffic and occasional vehicle load shall be of Class C design, where Minimum Ultimate Limit State Design Load = 150kN. (Refer to AS 3996 (Access Covers and Grates) and Austroads Bridge Design Code 1992).
3. Cover and frame, gray cast iron, grade > T220 to AS 1830 (Grey Cast Iron).
4. Refer Project Drawings for size and level of culverts, and chamber cover level.
5. Precast manhole top slabs are to be supplied with four (4) factory installed ring ties or alternately dowel bars may be accepted, subject to approval from the Local Authority.
6. All dimensions are in millimetres.

DERIVED FROM IPWEA STD DWG D-010
SUPERCEDES BOONAH - STD.D-0005,
BEAUDESERT - 50500, IPSWICH - SD.02

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 15 October 2010

Scales

Do NOT Scale this Drawing
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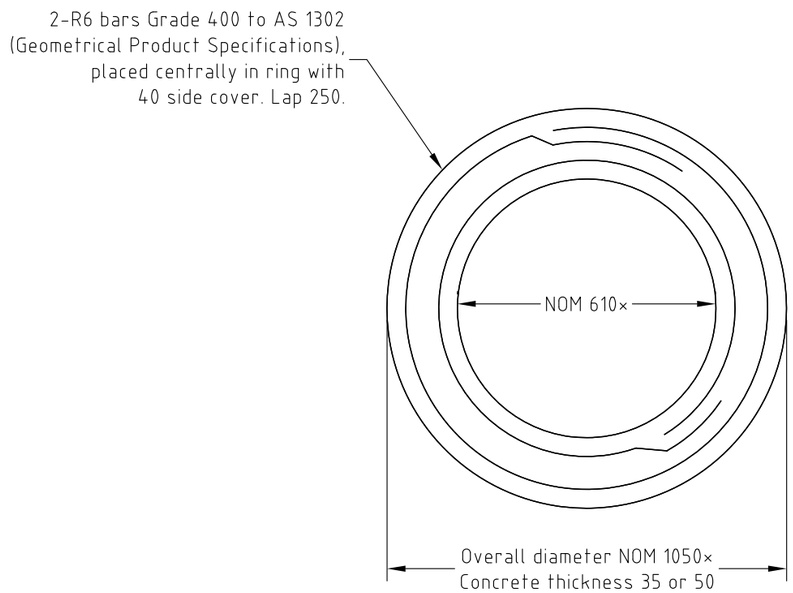
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
DRAINAGE

Drawing
STORMWATER ACCESS CHAMBER DETAIL
DIA 1050 TO 2100

Design File
Drawing No. D-02
Sheet of
Revision A
A3



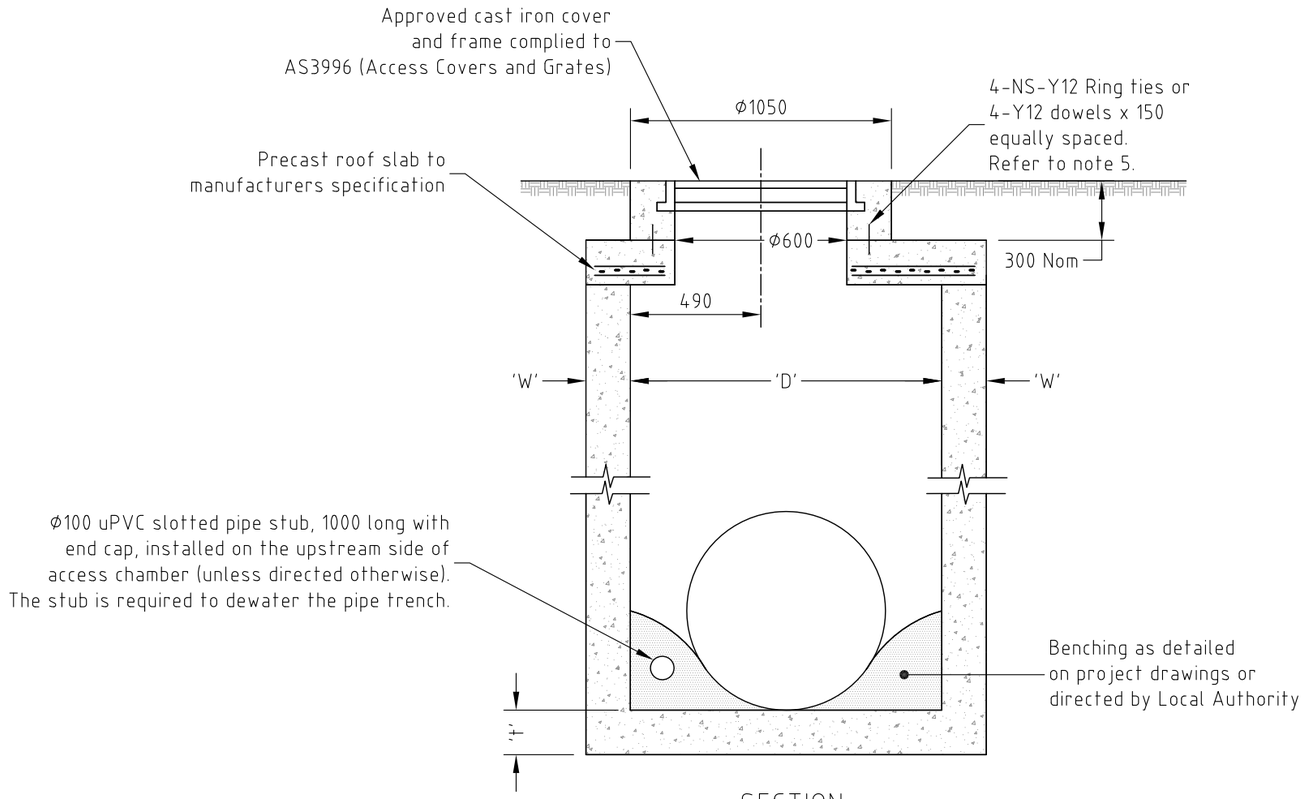
PLAN

ROOF RING

For use is raising covers and frames of existing access chambers.
× Size to suit existing access chamber.

DIMENSION

Access Chamber DIA 'D'	Floor Thickness 't'		Wall Thickness 'W'	Roof/Floor Slab DIA
	INLET	OUTLET		
1050	175	150	150	1350
1200	250	225	225	1650
1350	250	225	225	1800
1500	250	225	225	1950
1800	250	225	250	2300
2100	275	250	275	2650



SECTION

ACCESS CHAMBER DETAILS

NOTES:

1. Structural concrete N25, benching N10 in accordance with AS 1379 (Specifications and Supply of Concrete) and AS 3600 (Concrete Structures).
2. Access chambers which are propriety items are required to be designed and certified to AS 3996 (Access Covers and Grates). Access covers subject to road traffic shall be of Class D design, where Minimum Ultimate Limit State Design Load = 210kN. Access covers subject to pedestrian traffic and occasional vehicle load shall be of Class C design, where Minimum Ultimate Limit State Design Load = 150kN. (Refer to AS 3996 (Access Covers and Grates) and Austroads Bridge Design Code 1992).
3. Cover and frame, gray cast iron, grade > T220 to AS 1830 (Grey Cast Iron).
4. Refer Project Drawings for size and level of culverts, and chamber cover level.
5. Precast manhole top slabs are to be supplied with four (4) factory installed ring ties or alternately dowel bars may be accepted, subject to approval from the Local Authority.
6. All dimensions are in millimetres.

DERIVED FROM IPWEA STD DWG D-010
SUPERCEDES BOONAH - STD.D-0005,
BEAUDESERT - 50500, IPSWICH - SD.02

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

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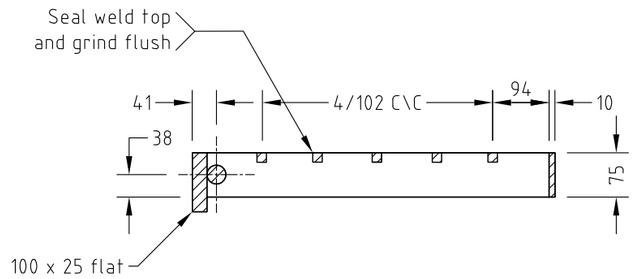
SCENIC RIM Regional Council

Works & Infrastructure Services

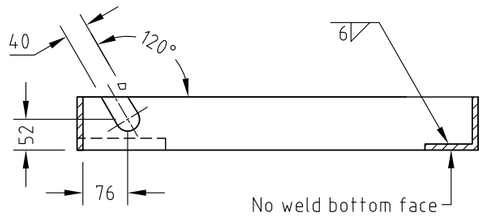
Project
SRRC STANDARD DRAWINGS
DRAINAGE

Drawing
STORMWATER ACCESS CHAMBER DETAIL
DIA 1050 TO 2100

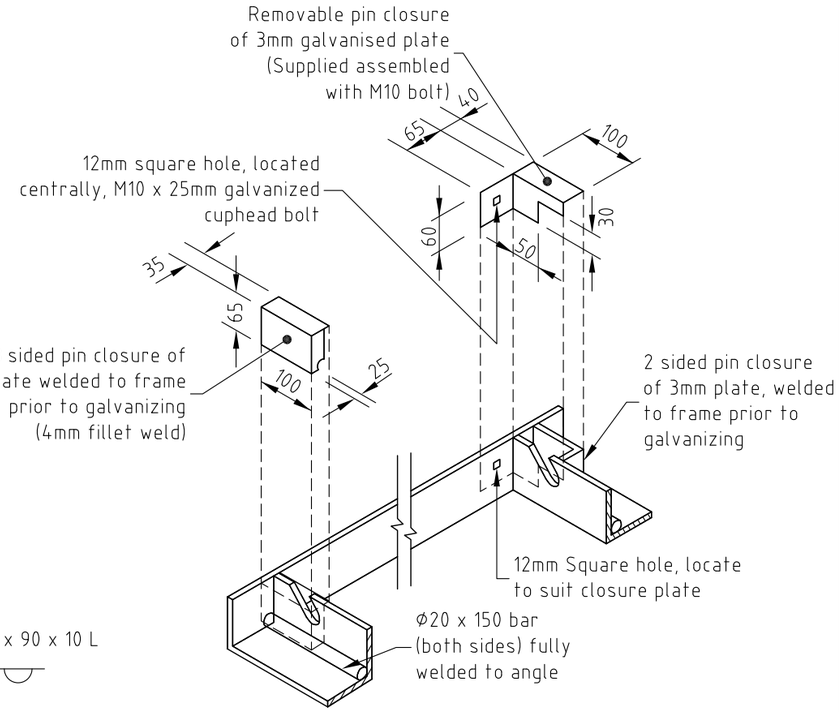
Design File
Drawing No. D-02
Sheet of
Revision A
A3



SECTION B
SCALE NTS

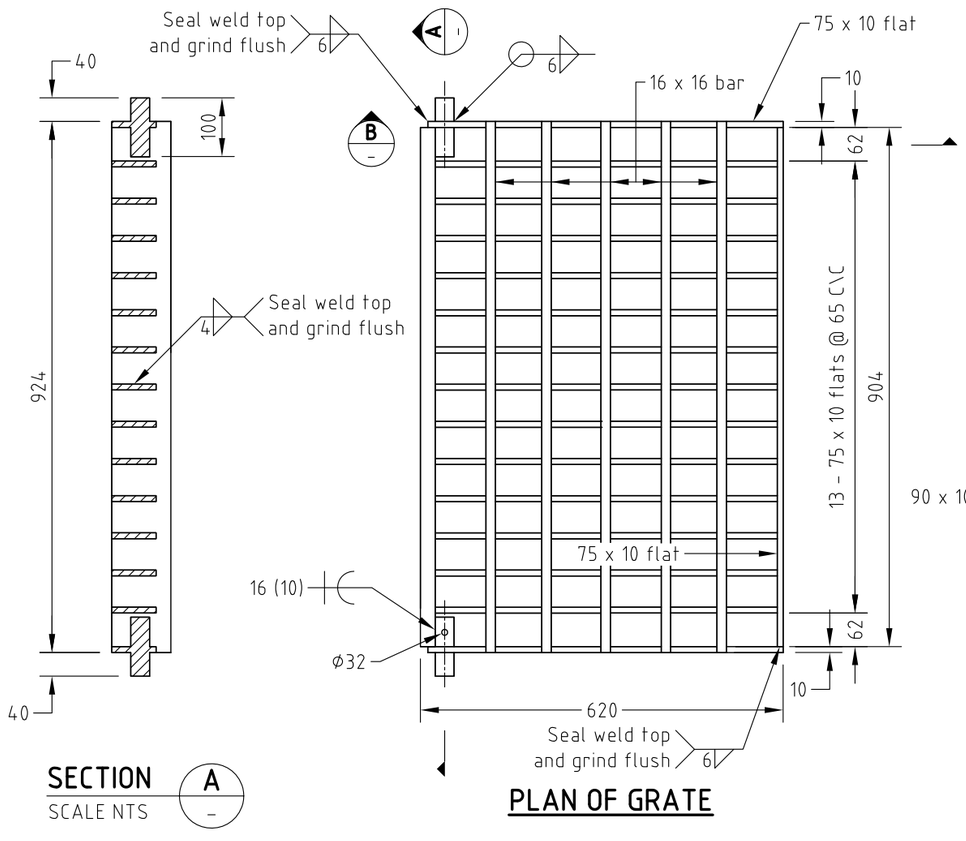


SECTION C
SCALE NTS



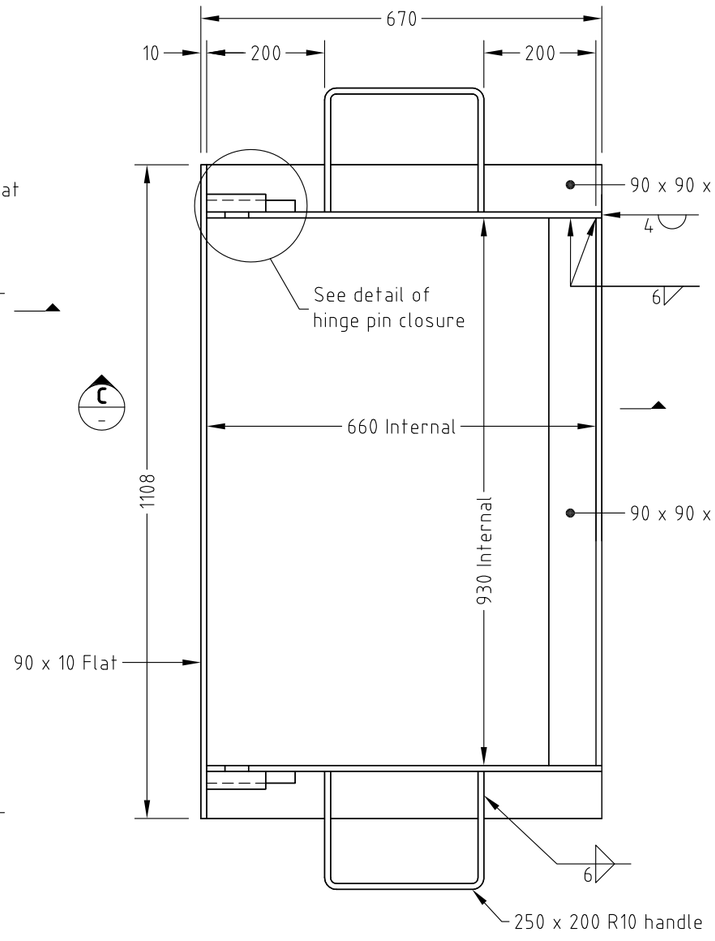
TYPICAL DETAIL OF HINGE PIN CLOSURES

A locking device shall be provided in accordance with clause 3.2.1.4 of AS 3996



SECTION A
SCALE NTS

PLAN OF GRATE



PLAN OF FRAME

NOTES:

1. Mass of grate = 85kg
2. Mass of frame = 39kg
3. All steel flats Grade 250 to AS 3678 (Structural Steel - Hot Rolled Plates, Floorplates & Slabs).
4. All steel bars and angles Grade 250 to AS 3679 (Structural Steel - Hot Rolled Bars and Sections).
5. Grate and frame to be hot dip galvanized, after fabrication to AS 1650 (Hot-Dipped Galvanized Coatings on Ferrous Articles).
6. All welds to AS 1554 (Structural Steel Welding set). Welding symbols to AS 1101.3 (Graphical Symbols for General Engineering).
7. Refer to SRRC D-18 & D-19 for gully details and D-21 for pre cast lintel details.
8. Grate and frame Class D to AS 3996 (Access Covers and Grates).
9. Alternative fabricated steel grate and frame, Grade 250 to AS 3679 (Structural Steel - Hot Rolled Bards and Sections), may be used when approved.
10. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG D-0062
SUPERCEDES BOONAH - STD.D-0018,
BEAUDESERT - 50516, IPSWICH - SD.07

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 15 October 2010

Scales

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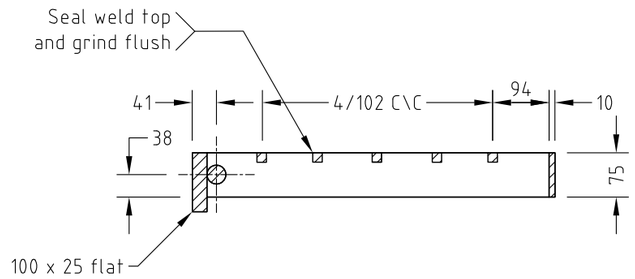
SCENIC RIM Regional Council

Works & Infrastructure Services

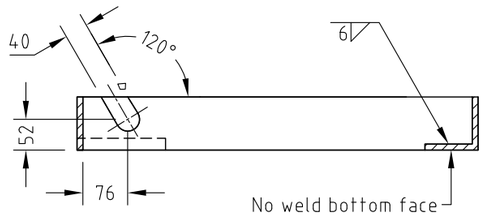
Project
SRRC STANDARD DRAWINGS
DRAINAGE

Drawing
STORMWATER GULLY
ROADWAY TYPE - GRATE AND FRAME

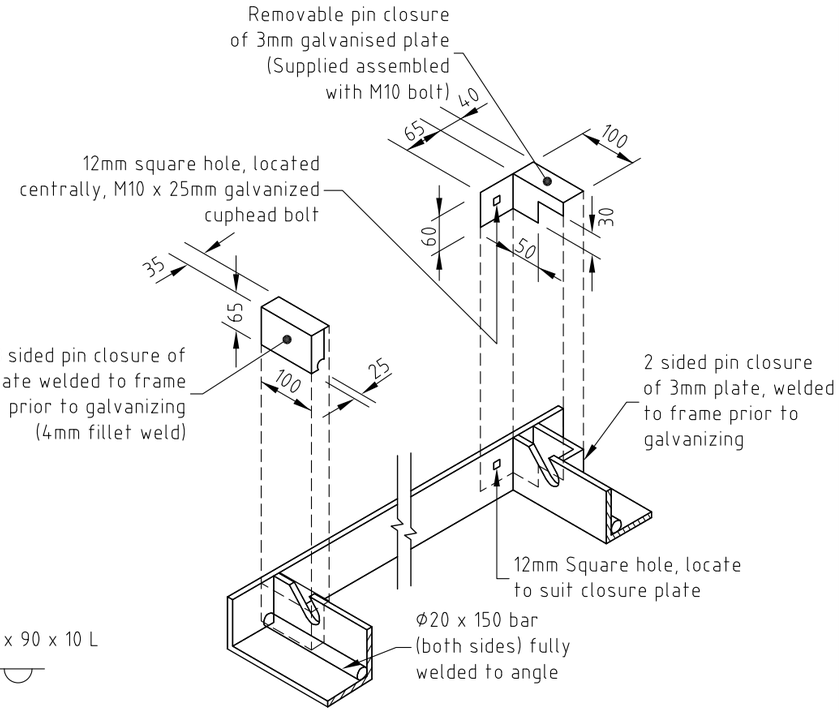
Design File
Drawing No. D-03
Sheet of
Revision A
A3



SECTION B
SCALE NTS

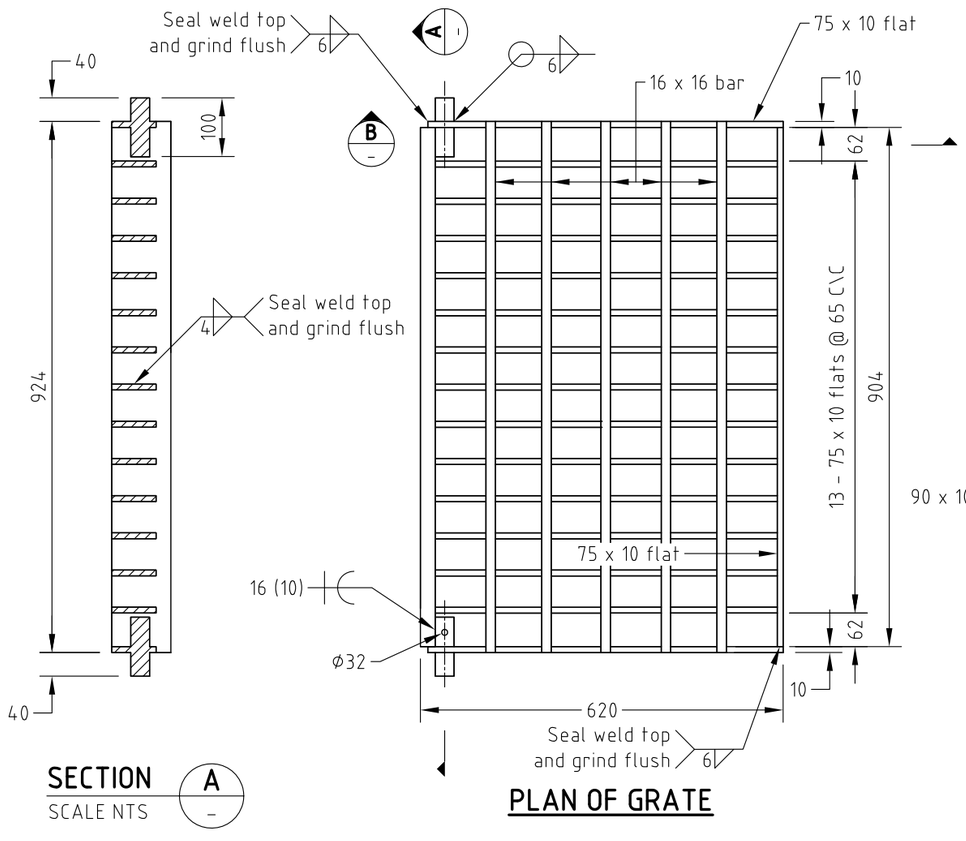


SECTION C
SCALE NTS



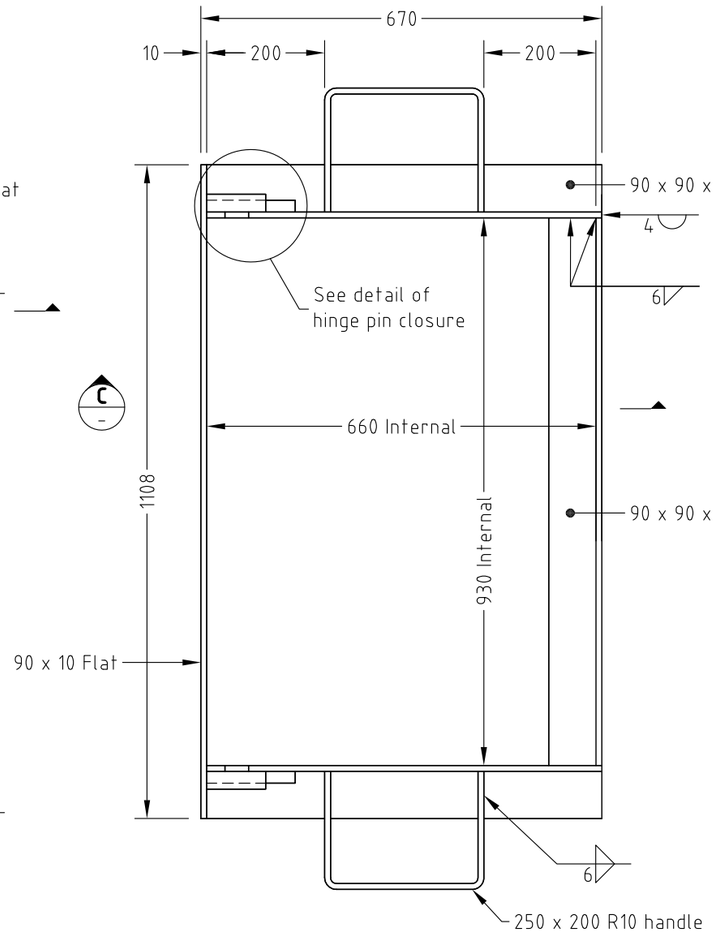
TYPICAL DETAIL OF HINGE PIN CLOSURES

A locking device shall be provided in accordance with clause 3.2.1.4 of AS 3996



SECTION A
SCALE NTS

PLAN OF GRATE



PLAN OF FRAME

NOTES:

1. Mass of grate = 85kg
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9. Alternative fabricated steel grate and frame, Grade 250 to AS 3679 (Structural Steel - Hot Rolled Bards and Sections), may be used when approved.
10. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG D-0062
SUPERCEDES BOONAH - STD.D-0018,
BEAUDESERT - 50516, IPSWICH - SD.07

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 15 October 2010

Scales

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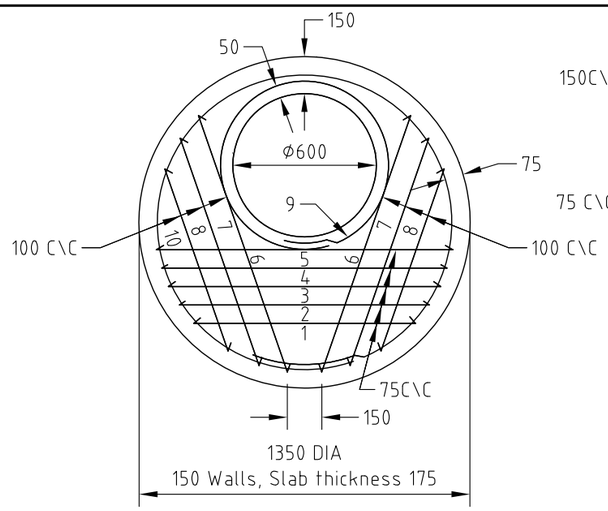
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
DRAINAGE

Drawing
STORMWATER GULLY
ROADWAY TYPE - GRATE AND FRAME

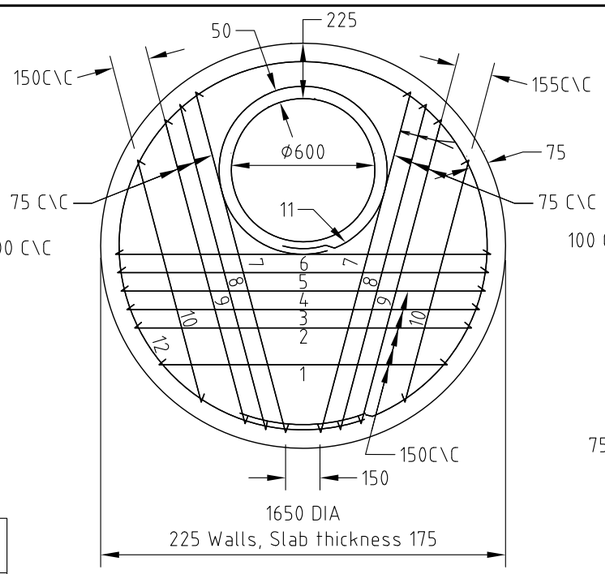
Design File
Drawing No. D-03
Sheet of
Revision A
A3



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		937	1175	1	1175
2		1030	1255	1	1255
3	'a'	1125	1350	1	1350
4		1175	1400	1	1400
5		1225	1450	1	1450
6		1125	1350	2	2700
7		1000	1225	2	2450
8		812	1050	2	2100
9	'b'	700	2600	1	2600
10		1200	4200	1	4200
				TOTAL	20680

STEEL MASS: 19kg
CONCRETE: 0.20m³
TOTAL MASS: 508kg

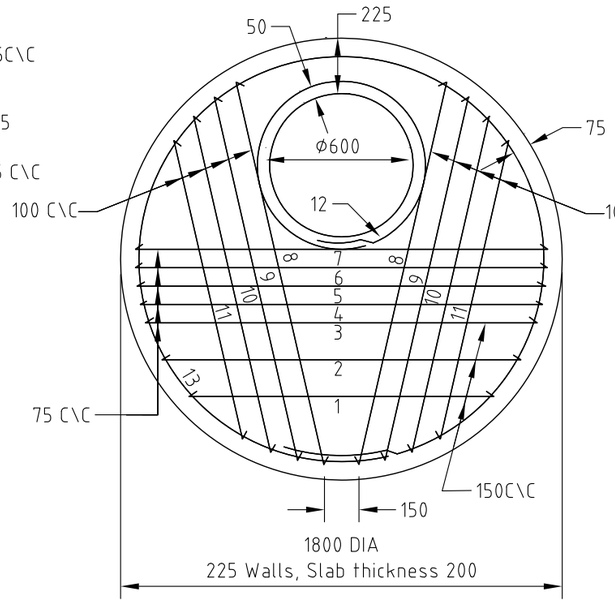
1050 DIA ACCESS CHAMBER



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1200	1425	1	1425
2		1400	1625	1	1625
3	'a'	1450	1675	1	1675
4		1500	1725	1	1725
5		1520	1745	1	1745
6		1537	1775	1	1775
7		1450	1675	2	3350
8		1375	1600	2	3200
9		1300	1525	2	3050
10		1050	1275	2	2550
11	'b'	700	2600	1	2600
12		1500	5150	1	5150
				TOTAL	23250

STEEL MASS: 27kg
CONCRETE: 0.33m³
TOTAL MASS: 818kg

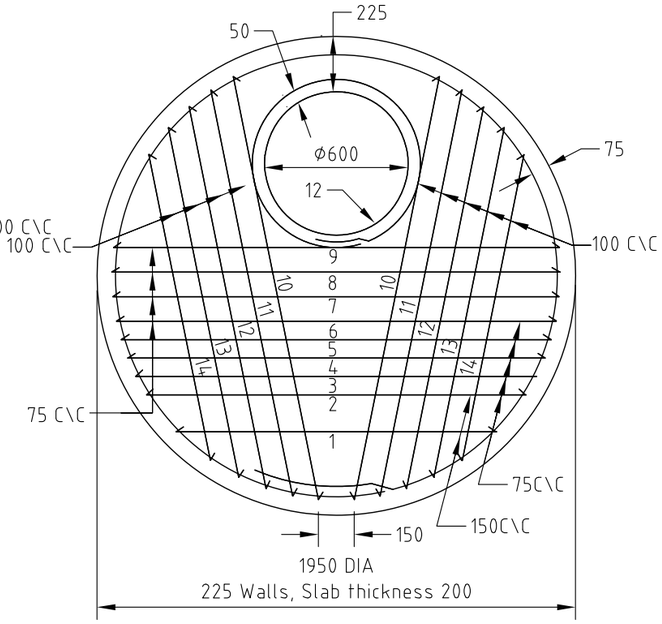
1200 DIA ACCESS CHAMBER



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1275	1500	1	1500
2		1488	1725	1	1725
3	'a'	1612	1850	1	1850
4		1645	1870	1	1870
5		1675	1900	1	1900
6		1675	1900	1	1900
7		1675	1900	1	1900
8		1600	1825	2	3650
9		1525	1750	2	3500
10		1412	1650	2	3300
11		1262	1500	2	3000
12	'b'	700	2600	1	2600
13		1650	6525	1	6525
				TOTAL	34320

STEEL MASS: 31kg
CONCRETE: 0.45m³
TOTAL MASS: 1138kg

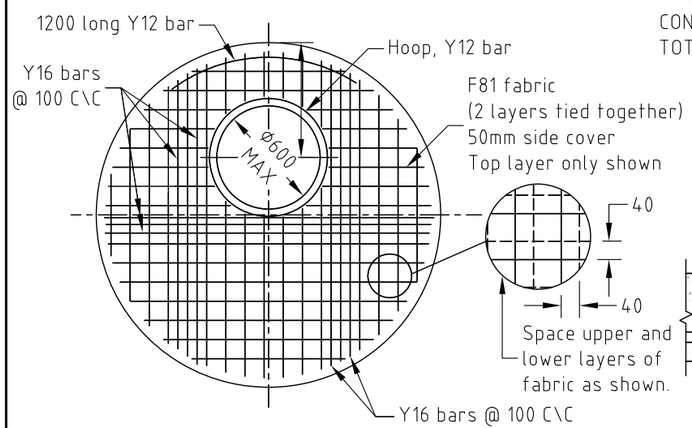
1800 DIA ACCESS CHAMBER



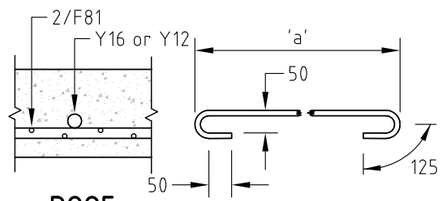
BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1337	1575	1	1575
2		1575	1800	1	1800
3	'a'	1645	1870	1	1870
4		1712	1950	1	1950
5		1756	1980	1	1980
6		1800	2025	1	2025
7		1825	2050	1	2050
8		1837	2075	1	2075
9		1825	2050	1	2050
10		1762	2000	2	2000
11		1700	1925	2	3850
12		1600	1825	2	3650
13		1462	1700	2	3400
14		1275	1500	2	3000
15	'b'	700	2600	1	2600
16		1800	6100	1	6100
				TOTAL	43975

STEEL MASS: 39kg
CONCRETE: 0.55m³
TOTAL MASS: 1360kg

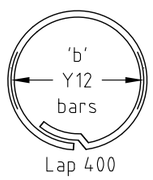
1950 DIA ACCESS CHAMBER



FABRIC REINFORCEMENT ALTERNATIVE AND ϕ1800 AND ϕ2100



ROOF SECTION



REINFORCEMENT DIMENSIONS

NOTES:

1. Concrete N40 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Reinforcement cover 30 MIN (bottom cover).
3. Reinforcement :- F81 Fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications).
4. For lifting anchor locations and details, refer to SRRC D-06.
5. Roof design based on Austroads bridge code, W7 wheel load, dynamic factor 0.4.
6. All dimensions in millimetres.

Fabric Reinforced Slab

Nom Chamber Dia	Roof Thickness
1050	175
1200	175
1350	200
1500	250
1800	250
2100	250

DERIVED FROM IPWEA STD DWG D-011
SUPERCEDES BOONAH - STD.D-0006,
BEAUDESERT - 50501, IPSWICH - SD.03

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 15 October 2010

Scales

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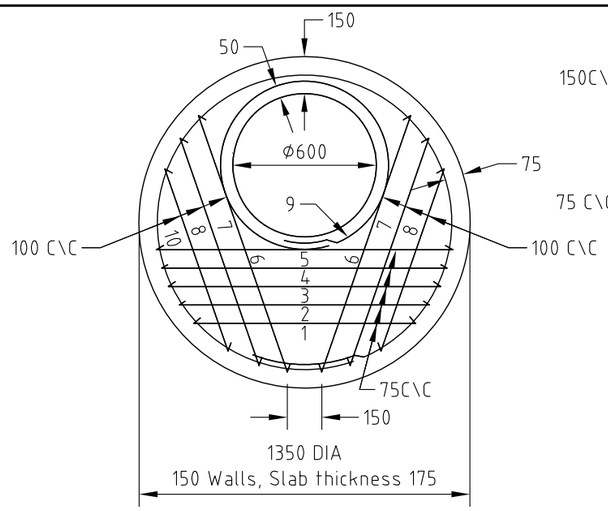
SCENIC RIM Regional Council
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE
Drawing: STORMWATER MANHOLE ROOF SLABS
DIA 1050 TO 2100

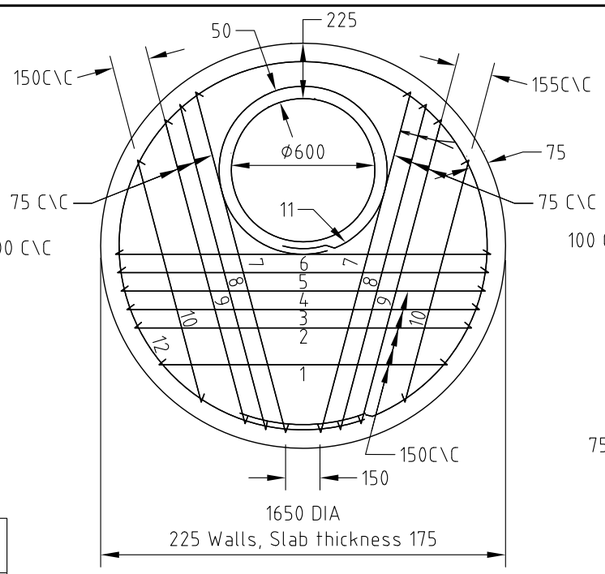
Design File
Drawing No. D-04
Sheet of
RevIslon A
A3



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		937	1175	1	1175
2		1030	1255	1	1255
3	'a'	1125	1350	1	1350
4		1175	1400	1	1400
5		1225	1450	1	1450
6		1125	1350	2	2700
7		1000	1225	2	2450
8		812	1050	2	2100
9	'b'	700	2600	1	2600
10		1200	4200	1	4200
				TOTAL	20680

STEEL MASS: 19kg
CONCRETE: 0.20m³
TOTAL MASS: 508kg

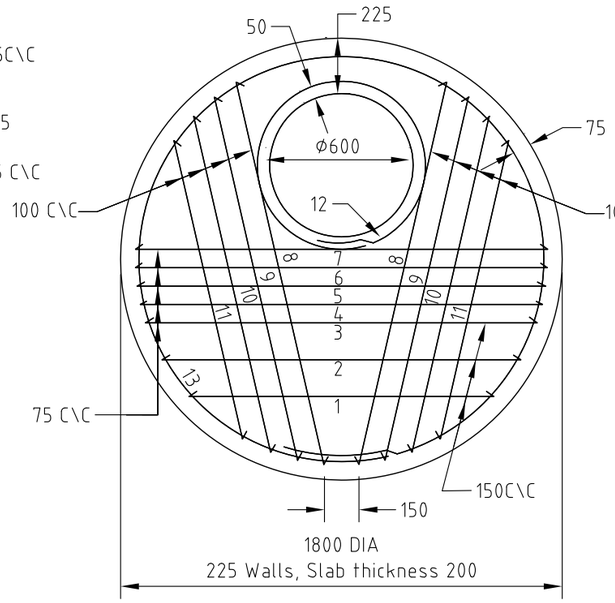
1050 DIA ACCESS CHAMBER



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1200	1425	1	1425
2		1400	1625	1	1625
3	'a'	1450	1675	1	1675
4		1500	1725	1	1725
5		1520	1745	1	1745
6		1537	1775	1	1775
7		1450	1675	2	3350
8		1375	1600	2	3200
9		1300	1525	2	3050
10		1050	1275	2	2550
11	'b'	700	2600	1	2600
12		1500	5150	1	5150
				TOTAL	23250

STEEL MASS: 27kg
CONCRETE: 0.33m³
TOTAL MASS: 818kg

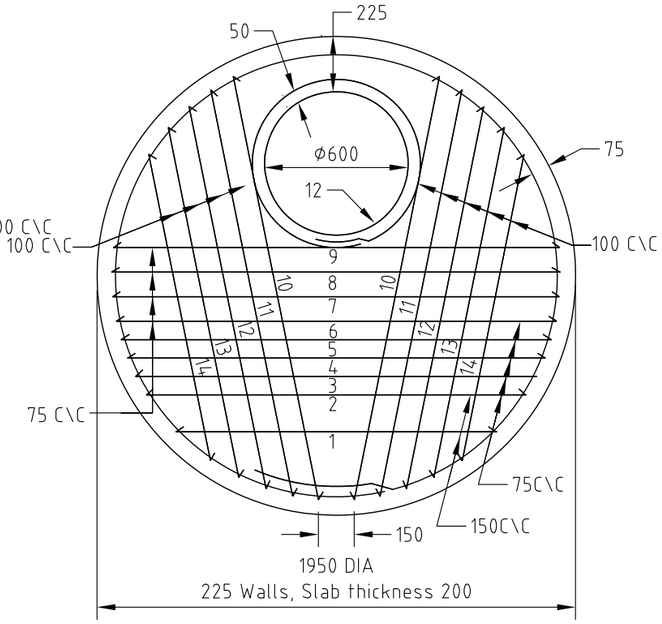
1200 DIA ACCESS CHAMBER



BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1275	1500	1	1500
2		1488	1725	1	1725
3	'a'	1612	1850	1	1850
4		1645	1870	1	1870
5		1675	1900	1	1900
6		1675	1900	1	1900
7		1675	1900	1	1900
8		1600	1825	2	3650
9		1525	1750	2	3500
10		1412	1650	2	3300
11		1262	1500	2	3000
12	'b'	700	2600	1	2600
13		1650	6525	1	6525
				TOTAL	34320

STEEL MASS: 31kg
CONCRETE: 0.45m³
TOTAL MASS: 1138kg

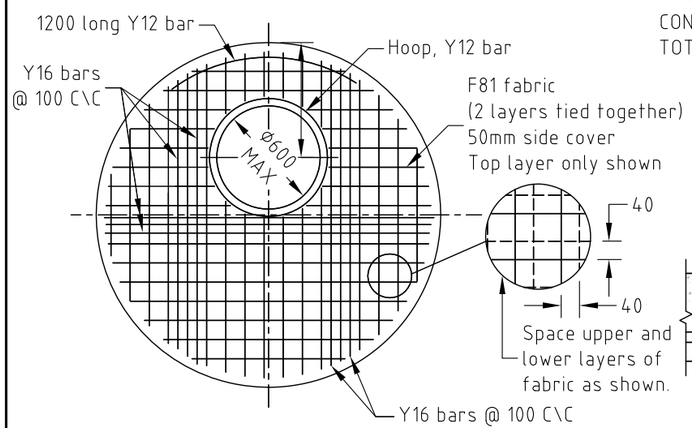
1800 DIA ACCESS CHAMBER



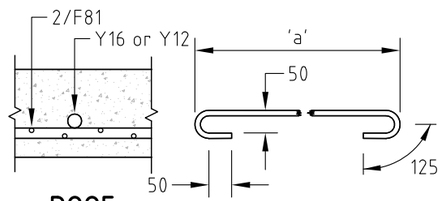
BAR No.	SHAPE	'a'/'b'	OVERALL LENGTH	No. OFF	TOTAL LENGTH
1		1337	1575	1	1575
2		1575	1800	1	1800
3	'a'	1645	1870	1	1870
4		1712	1950	1	1950
5		1756	1980	1	1980
6		1800	2025	1	2025
7		1825	2050	1	2050
8		1837	2075	1	2075
9		1825	2050	1	2050
10		1762	2000	2	2000
11		1700	1925	2	3850
12		1600	1825	2	3650
13		1462	1700	2	3400
14		1275	1500	2	3000
15	'b'	700	2600	1	2600
16		1800	6100	1	6100
				TOTAL	43975

STEEL MASS: 39kg
CONCRETE: 0.55m³
TOTAL MASS: 1360kg

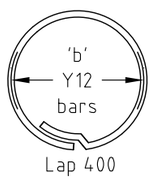
1950 DIA ACCESS CHAMBER



FABRIC REINFORCEMENT ALTERNATIVE AND ϕ1800 AND ϕ2100



ROOF SECTION



REINFORCEMENT DIMENSIONS

NOTES:

1. Concrete N40 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Reinforcement cover 30 MIN (bottom cover).
3. Reinforcement :- F81 Fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications).
4. For lifting anchor locations and details, refer to SRRC D-06.
5. Roof design based on Austroads bridge code, W7 wheel load, dynamic factor 0.4.
6. All dimensions in millimetres.

Fabric Reinforced Slab

Nom Chamber Dia	Roof Thickness
1050	175
1200	175
1350	200
1500	250
1800	250
2100	250

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SUPERCEDES BOONAH - STD.D-0006,
BEAUDESERT - 50501, IPSWICH - SD.03

Issue	Amendment	App'd	Date
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Project: SRRC STANDARD DRAWINGS
DRAINAGE
Drawing: STORMWATER MANHOLE ROOF SLABS
DIA 1050 TO 2100

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Drawing No. D-04
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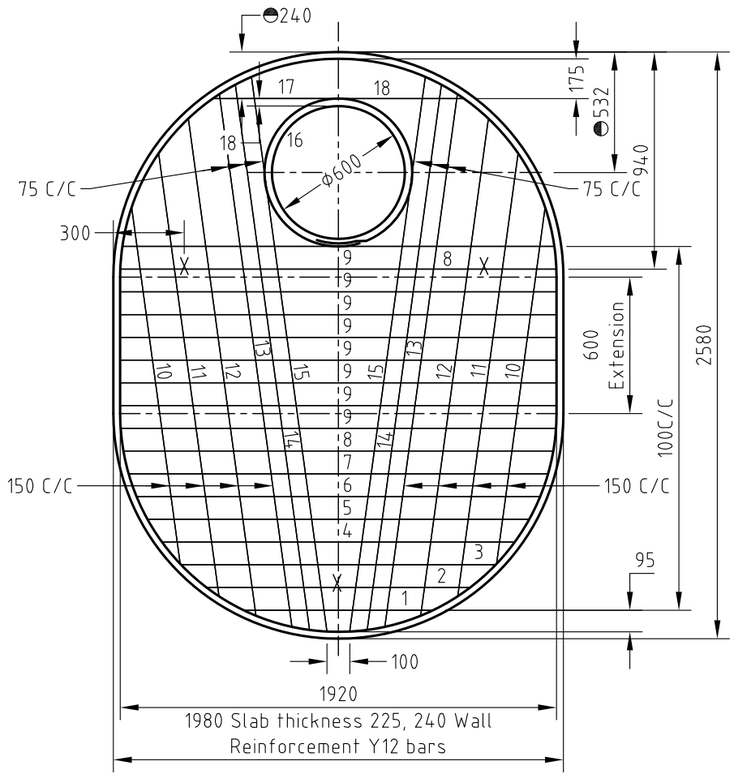
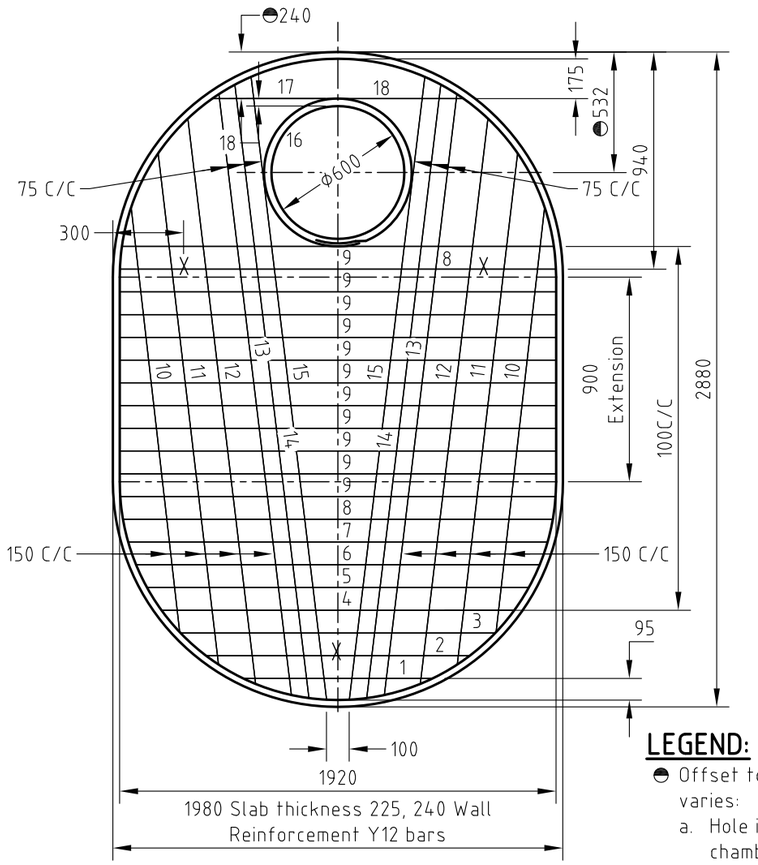
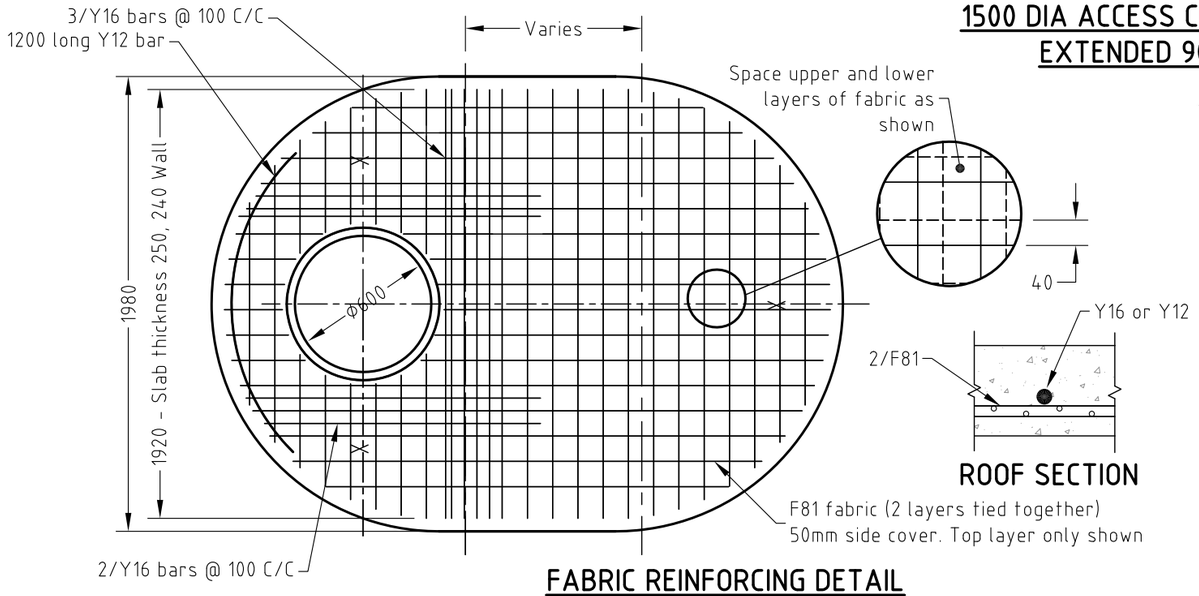
A3



1500 DIA ACCESS CHAMBER EXTENDED 600



1500 DIA ACCESS CHAMBER EXTENDED 900



ROOF SECTION

FABRIC REINFORCING DETAIL

LEGEND:

◓ Offset to access hole varies:
a. Hole in lines with chamber wall, or
b. Hole offset from wall 460mm (refer Alternative 2 on SRRC D-03)

NOTES:

1. Roof design based on Austroads Bridge code, W7 wheel load, dynamic factor 0.4.
2. Concrete N40 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
3. Reinforcement cover 30 min (bottom face).
4. Reinforcement: F81 Fabric to AS1304 (Symbols for SI Units for Systems with Limited Character Sets, Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications)
5. Refer to SRRC D-05 for 'reinforcement dimensions'.
6. Lifting anchors to be 'swiftlift' or equivalent 1.8 tonne, galvanized to AS1650 (Hot Dipped Galvanized Coatings on Ferrous Articles) and fitted to manufacturer's specification at points shown 'X'.
7. Lifting capacity of mechanical devices to be no less than 4 tonnes.
8. All dimensions in millimetres.

1500 DIA ACCESS CHAMBER - EXT 600

Bar No.	Shape	Length	No. Of	Total
1	——	835	1	835
2	——	1160	1	1160
3	——	1385	1	1385
4	——	1550	1	1550
5	——	1680	1	1680
6	——	1775	1	1775
7	——	1845	1	1845
8	——	1890	2	3780
9	——	1920	8	15360
10	——	1560	2	3120
11	——	1920	2	3840
12	——	2170	2	4340
13	——	2300	2	4600
14	——	2375	2	4750
15	——	2450	2	4900
16	○	2600	1	2600
17	⬭	7195	1	7195
18	——	1105	1	1105
			Total Length	65820

Steel Mass - 59kg
Concrete Volume - 0.90m
Total Mass - 2250kg

1500 DIA ACCESS CHAMBER - EXT 900

Bar No.	Shape	Length	No. Of	Total
1	——	835	1	835
2	——	1160	1	1160
3	——	1385	1	1385
4	——	1550	1	1550
5	——	1680	1	1680
6	——	1775	1	1775
7	——	1845	1	1845
8	——	1890	2	3780
9	——	1920	11	21120
10	——	1560	2	3120
11	——	1920	2	3840
12	——	2170	2	4340
13	——	2300	2	4600
14	——	2375	2	4750
15	——	2450	2	4900
16	○	2600	1	2600
17	⬭	7195	1	7195
18	——	1105	1	1105
			Total Length	75770

Steel Mass - 67kg
Concrete Volume - 1.03m
Total Mass - 2575kg

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SUPERCEDES BOONAH - STD.D-0007,
BEAUDESERT - 50502

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DRAINAGE

Drawing
STORMWATER MANHOLE ROOF SLABS
DIA 1500 - EXTENDED 600 AND 900

Design File
Drawing No. D-05

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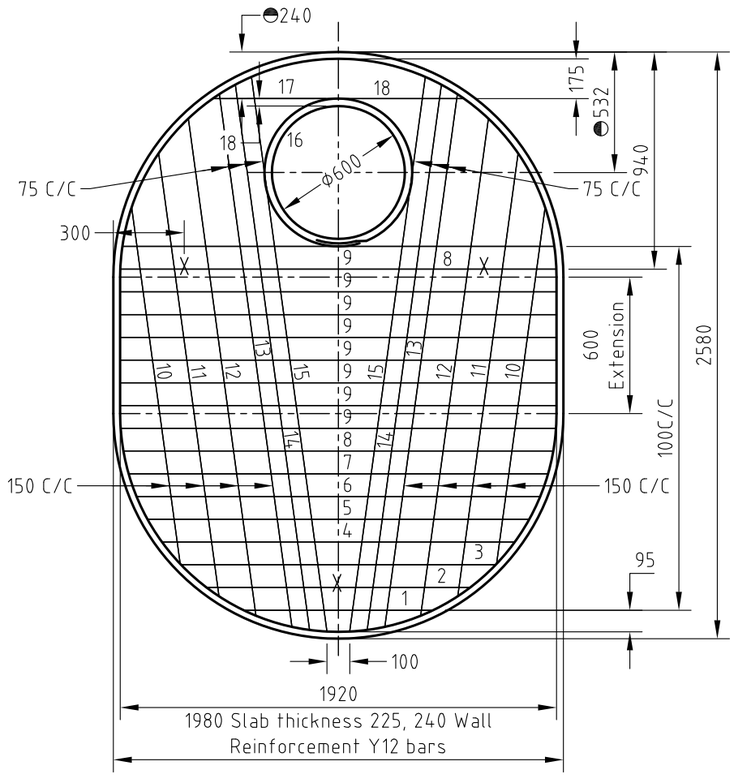
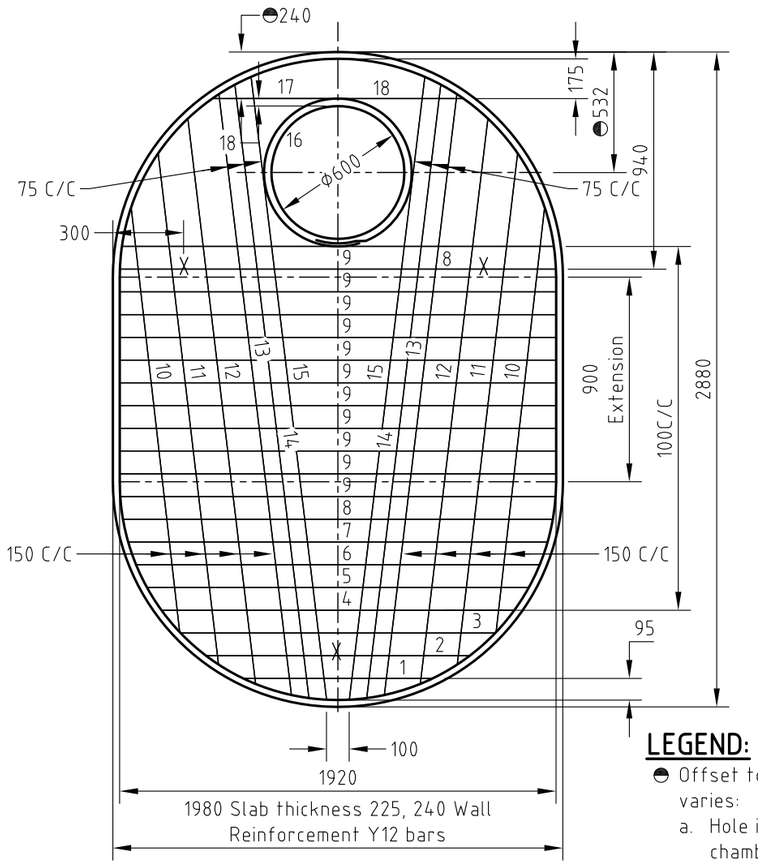
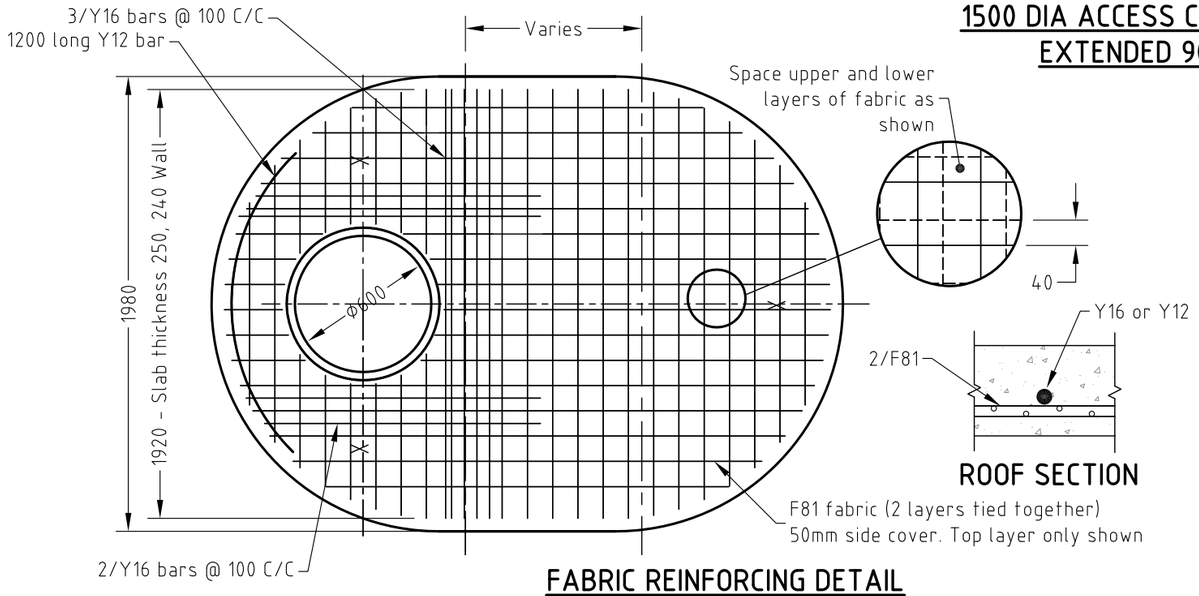


1500 DIA ACCESS CHAMBER EXTENDED 600



1500 DIA ACCESS CHAMBER EXTENDED 900



ROOF SECTION

FABRIC REINFORCING DETAIL

LEGEND:

◓ Offset to access hole varies:
a. Hole in lines with chamber wall, or
b. Hole offset from wall 460mm (refer Alternative 2 on SRRC D-03)

NOTES:

1. Roof design based on Austroads Bridge code, W7 wheel load, dynamic factor 0.4.
2. Concrete N40 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
3. Reinforcement cover 30 min (bottom face).
4. Reinforcement: F81 Fabric to AS1304 (Symbols for SI Units for Systems with Limited Character Sets, Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications)
5. Refer to SRRC D-05 for 'reinforcement dimensions'.
6. Lifting anchors to be 'swiftlift' or equivalent 1.8 tonne, galvanized to AS1650 (Hot Dipped Galvanized Coatings on Ferrous Articles) and fitted to manufacturer's specification at points shown 'X'.
7. Lifting capacity of mechanical devices to be no less than 4 tonnes.
8. All dimensions in millimetres.

1500 DIA ACCESS CHAMBER - EXT 600

Bar No.	Shape	Length	No. Of	Total
1	——	835	1	835
2	——	1160	1	1160
3	——	1385	1	1385
4	——	1550	1	1550
5	——	1680	1	1680
6	——	1775	1	1775
7	——	1845	1	1845
8	——	1890	2	3780
9	——	1920	8	15360
10	——	1560	2	3120
11	——	1920	2	3840
12	——	2170	2	4340
13	——	2300	2	4600
14	——	2375	2	4750
15	——	2450	2	4900
16	○	2600	1	2600
17	⬭	7195	1	7195
18	——	1105	1	1105
			Total Length	65820

Steel Mass - 59kg
Concrete Volume - 0.90m
Total Mass - 2250kg

1500 DIA ACCESS CHAMBER - EXT 900

Bar No.	Shape	Length	No. Of	Total
1	——	835	1	835
2	——	1160	1	1160
3	——	1385	1	1385
4	——	1550	1	1550
5	——	1680	1	1680
6	——	1775	1	1775
7	——	1845	1	1845
8	——	1890	2	3780
9	——	1920	11	21120
10	——	1560	2	3120
11	——	1920	2	3840
12	——	2170	2	4340
13	——	2300	2	4600
14	——	2375	2	4750
15	——	2450	2	4900
16	○	2600	1	2600
17	⬭	7195	1	7195
18	——	1105	1	1105
			Total Length	75770

Steel Mass - 67kg
Concrete Volume - 1.03m
Total Mass - 2575kg

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BEAUDESERT - 50502

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DIA 1500 - EXTENDED 600 AND 900

Design File
Drawing No. D-05

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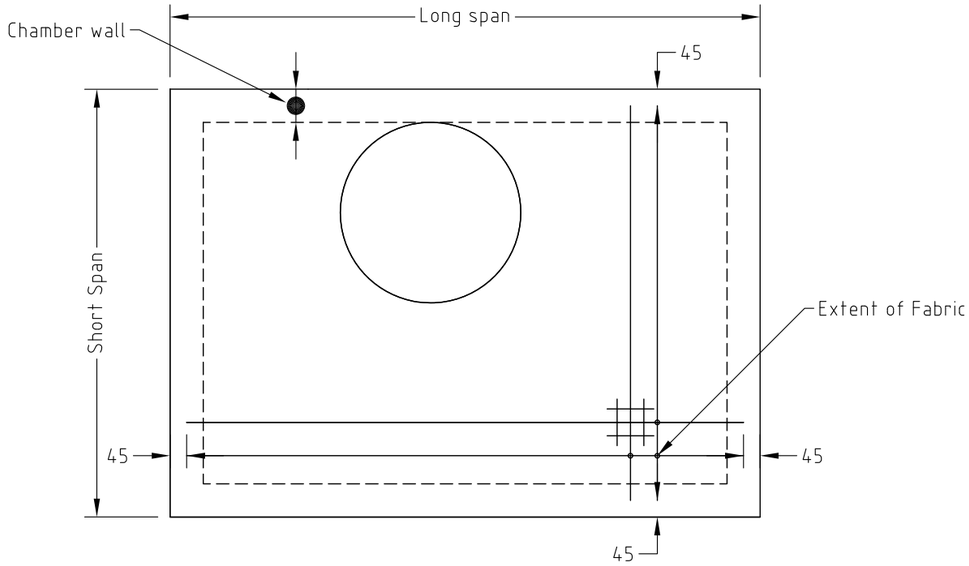
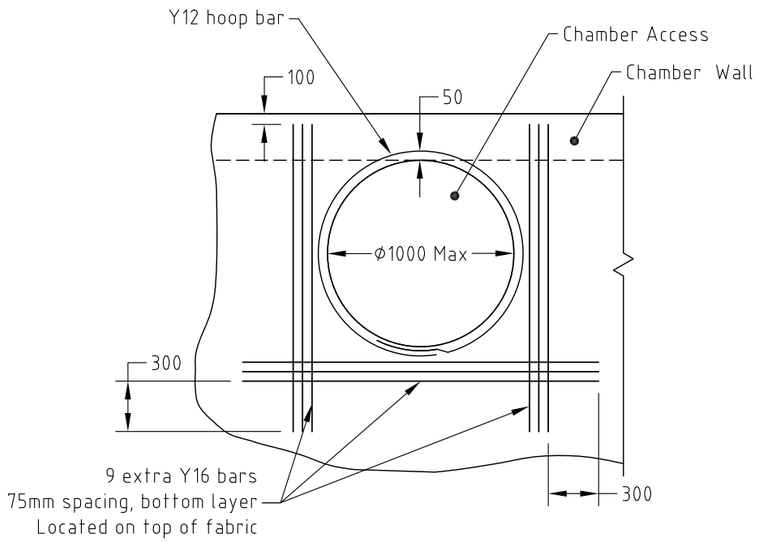
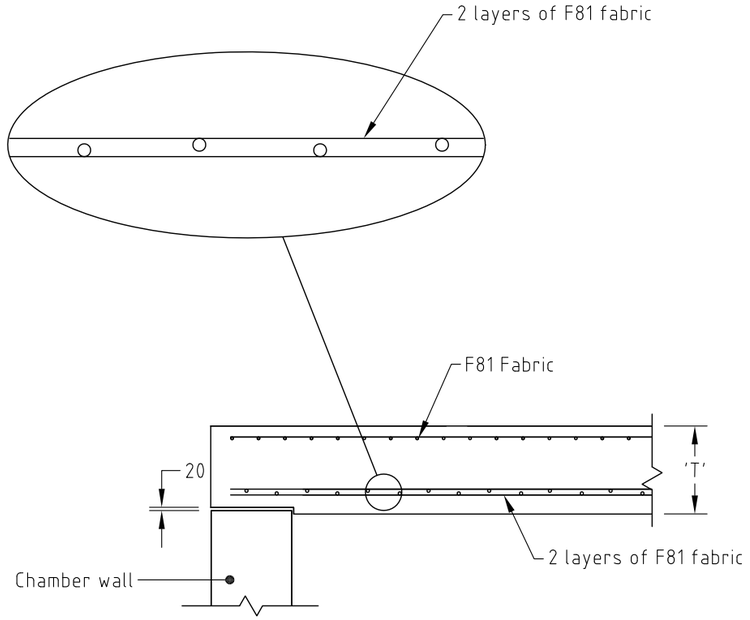


TYPICAL SLAB REINFORCEMENT



SLAB REINFORCEMENT AROUND CHAMBER ACCESS



TYPICAL SECTION

Fabric Reinforced Slab

Short Span	Slab Thickness 'T'
1200 to 1600	225
1800 to 2400	250
2600 to 3000	275

NOTES:

1. Concrete N32/20 in accordance with AS 1379 (specifications and Supply of Concrete) and AS 3600 (Concrete Structures).
2. Reinforcement: F81 Fabric to AS 1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y16, Grade 400 to AS 1302 (Geometrical Product Specifications).
3. All laps in reinforcement shall be:
   Y12 - 300
   Y16 - 400
   Fabric - 250
4. Formwork is accordance with AS 3610 (Formwork for Concrete).
5. Designed to Austroads Bridge Code, W7 wheel load, dynamic factor 0.4.
6. Maximum fill over roof slab shall be 3000mm.
7. Reinforcement cover 45 min.
8. Refer Service Authority for access hole diameter to be adopted.
9. Refer project drawings for details of chamber walls and floors.
10. For sections at chamber access refer SRRC D-03.
11. All dimensions in millimetres.

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Drawing
STORMWATER MANHOLE ROOF SLAB
RECTANGULAR FABRIC REINFORCEMENT

Design File
Drawing No. D-06

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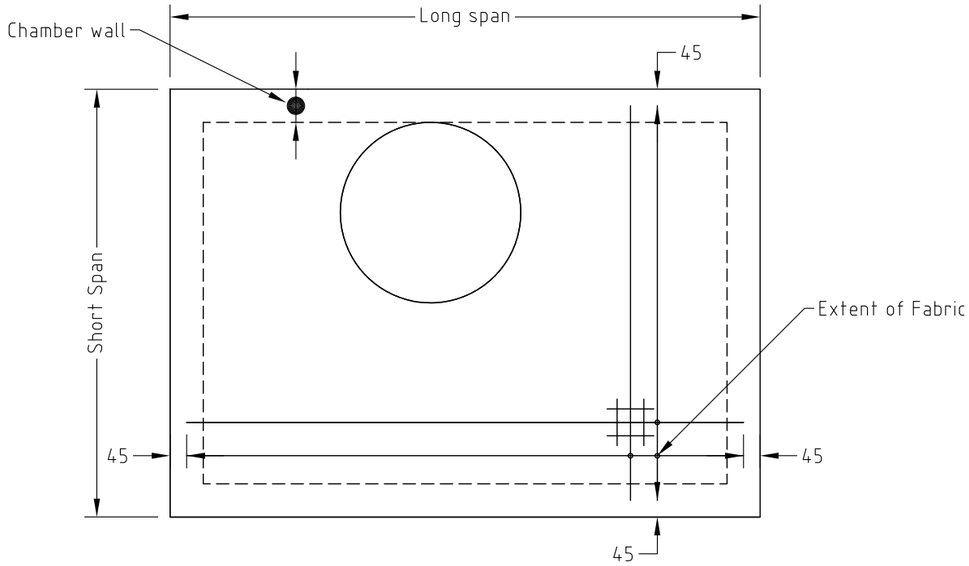
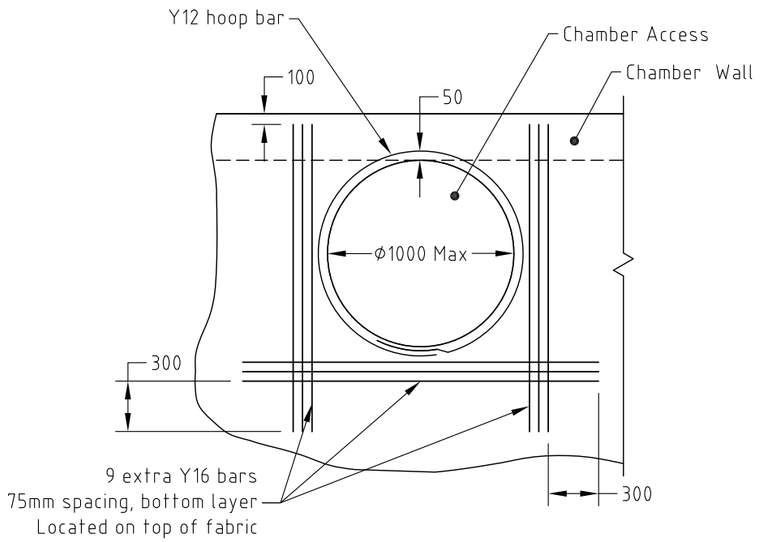
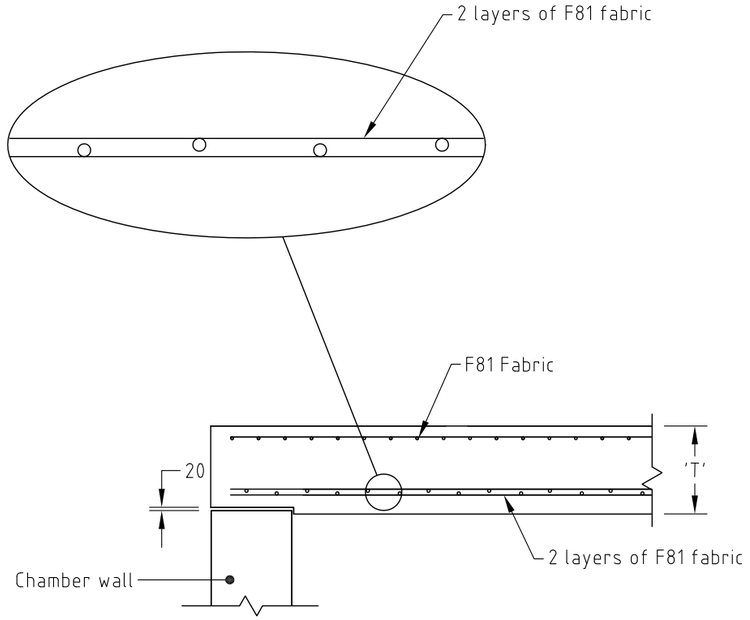
A3



TYPICAL SLAB REINFORCEMENT



SLAB REINFORCEMENT AROUND CHAMBER ACCESS



TYPICAL SECTION

Fabric Reinforced Slab

Short Span	Slab Thickness 'T'
1200 to 1600	225
1800 to 2400	250
2600 to 3000	275

NOTES:

1. Concrete N32/20 in accordance with AS 1379 (specifications and Supply of Concrete) and AS 3600 (Concrete Structures).
2. Reinforcement: F81 Fabric to AS 1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y16, Grade 400 to AS 1302 (Geometrical Product Specifications).
3. All laps in reinforcement shall be:
   Y12 - 300
   Y16 - 400
   Fabric - 250
4. Formwork is accordance with AS 3610 (Formwork for Concrete).
5. Designed to Austroads Bridge Code, W7 wheel load, dynamic factor 0.4.
6. Maximum fill over roof slab shall be 3000mm.
7. Reinforcement cover 45 min.
8. Refer Service Authority for access hole diameter to be adopted.
9. Refer project drawings for details of chamber walls and floors.
10. For sections at chamber access refer SRRC D-03.
11. All dimensions in millimetres.

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Drawing
STORMWATER MANHOLE ROOF SLAB
RECTANGULAR FABRIC REINFORCEMENT

Design File
Drawing No. D-06

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Revision A

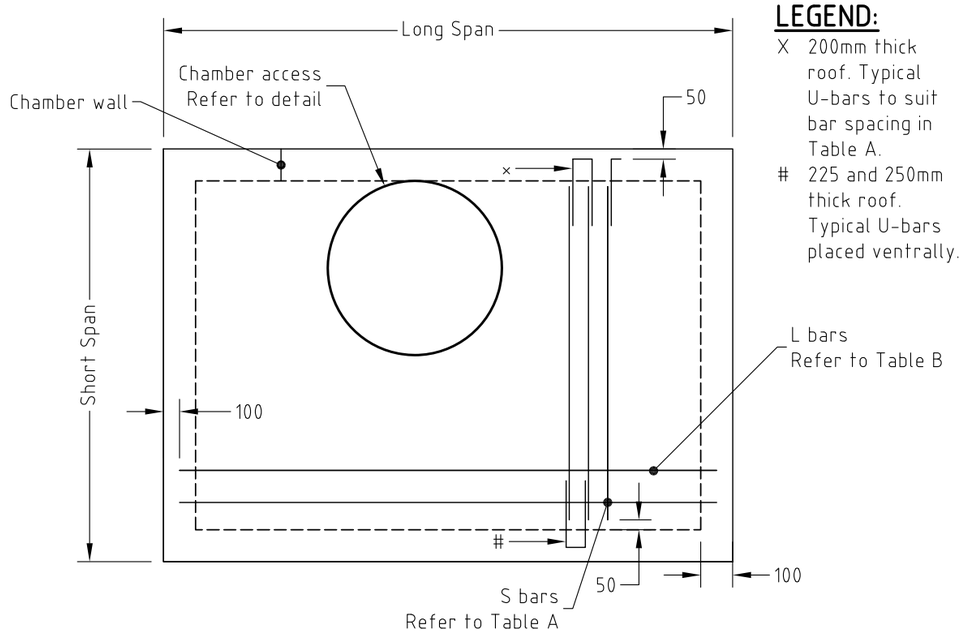
A3

SHORT SPAN \ LONG SPAN	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	SLAB DEPTH
1200	Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	200
1400		Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	Y16 at 150	200
1600			Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	Y16 at 150	200
1800				Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 175	225
2000					Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	225
2200						Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	225
2400							Y16 at200	Y16 at 200	Y16 at 200	Y16 at 175	225
2600								Y16 at 200	Y16 at 200	Y16 at 175	250
2800									Y16 at 200	Y16 at 175	250
3000										Y16 at 175	250

TABLE A : S BARS

SHORT SPAN \ LONG SPAN	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	SLAB DEPTH
1200	Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at200	Y16 at 200	Y16 at 200	Y16 at 200	200
1400		Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	200
1600			Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	200
1800				Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	225
2000					Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	225
2200						Y16 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	225
2400							Y16 at200	Y16 at 150	Y16 at 150	Y16 at 150	225
2600								Y16 at 200	Y16 at 200	Y16 at 200	250
2800									Y16 at 200	Y16 at 200	250
3000										Y16 at 175	250

TABLE B : L BARS

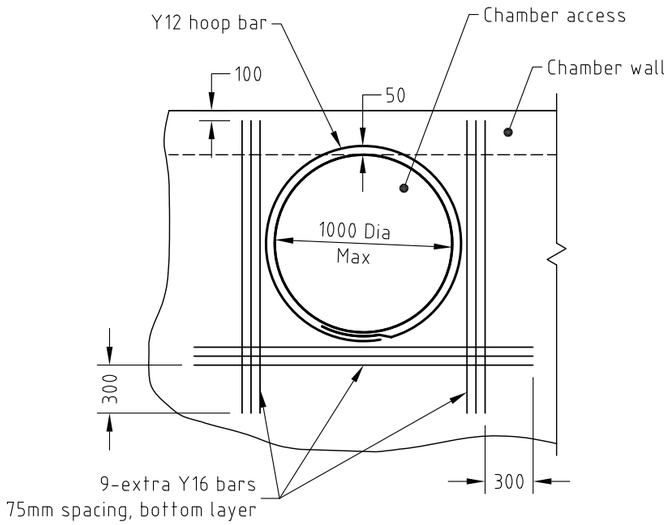


TYPICAL SLAB REINFORCEMENT

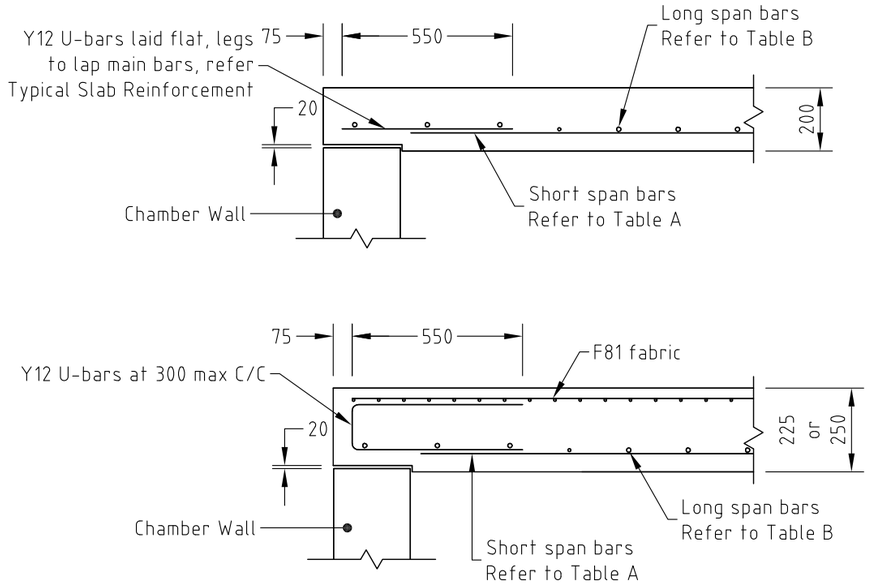
LEGEND:

X 200mm thick roof. Typical U-bars to suit bar spacing in Table A.

\# 225 and 250mm thick roof. Typical U-bars placed ventrally.



SLAB REINFORCEMENT AROUND CHAMBER ACCESS



TYPICAL SECTIONS

NOTES:

1. Concrete N32/20 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Reinforcement: F81 fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications)
3. All laps in reinforcement shall be:
   Y12 - 300
   Y16 - 400
4. Formwork in accordance with AS3610 (Formwork for Concrete).
5. Designed to Austroads Bridge Code, W7 wheel load, dynamic factor 0.4.
6. Maximum fill over roof slab shall be 3000mm.
7. Reinforcement cover 45 min.
8. Refer Service Authority for access hole diameter to be adopted.
9. Refer project drawings for details of chamber walls and floors.
10. For sections at chamber access refer SRRC D-03.
11. All dimensions in millimetres.

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Drawing
STORMWATER MANHOLE ROOF SLABS
RECTANGULAR STANDARD REINFORCEMENT

Design File
Drawing No. D-07

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Revision A

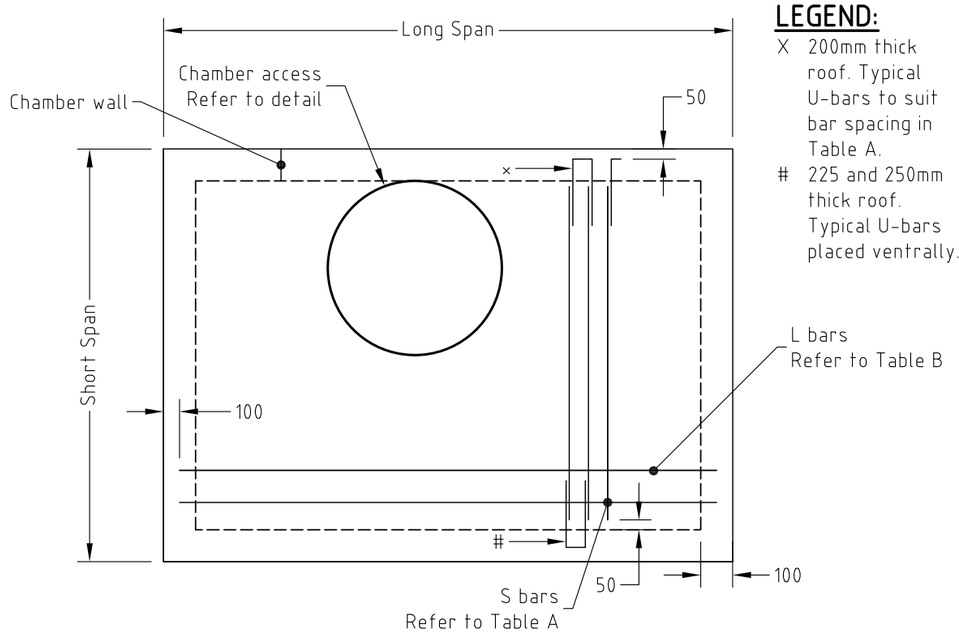
A3

SHORT SPAN \ LONG SPAN	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	SLAB DEPTH
1200	Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	200
1400		Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	Y16 at 150	200
1600			Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 150	Y16 at 150	Y16 at 150	Y16 at 150	200
1800				Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	Y16 at 175	225
2000					Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	225
2200						Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 175	Y16 at 175	225
2400							Y16 at200	Y16 at 200	Y16 at 200	Y16 at 175	225
2600								Y16 at 200	Y16 at 200	Y16 at 175	250
2800									Y16 at 200	Y16 at 175	250
3000										Y16 at 175	250

TABLE A : S BARS

SHORT SPAN \ LONG SPAN	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	SLAB DEPTH
1200	Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at200	Y16 at 200	Y16 at 200	Y16 at 200	200
1400		Y12 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	200
1600			Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	200
1800				Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	225
2000					Y12 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	Y16 at 200	225
2200						Y16 at 150	Y16 at 150	Y16 at 200	Y16 at 200	Y16 at 200	225
2400							Y16 at200	Y16 at 150	Y16 at 150	Y16 at 150	225
2600								Y16 at 200	Y16 at 200	Y16 at 200	250
2800									Y16 at 200	Y16 at 200	250
3000										Y16 at 175	250

TABLE B : L BARS

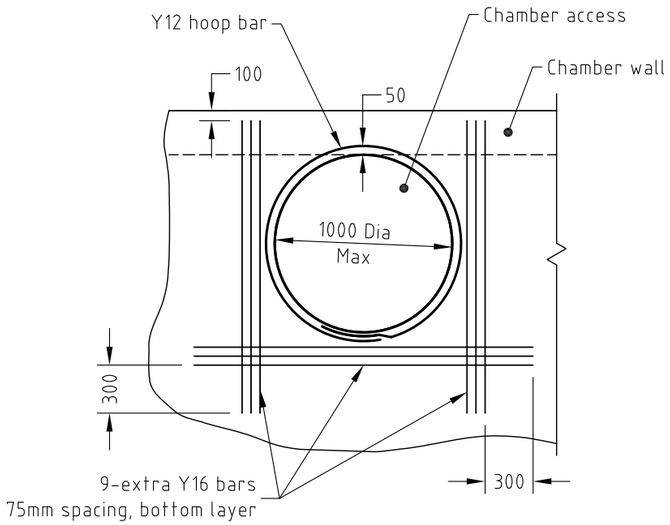


TYPICAL SLAB REINFORCEMENT

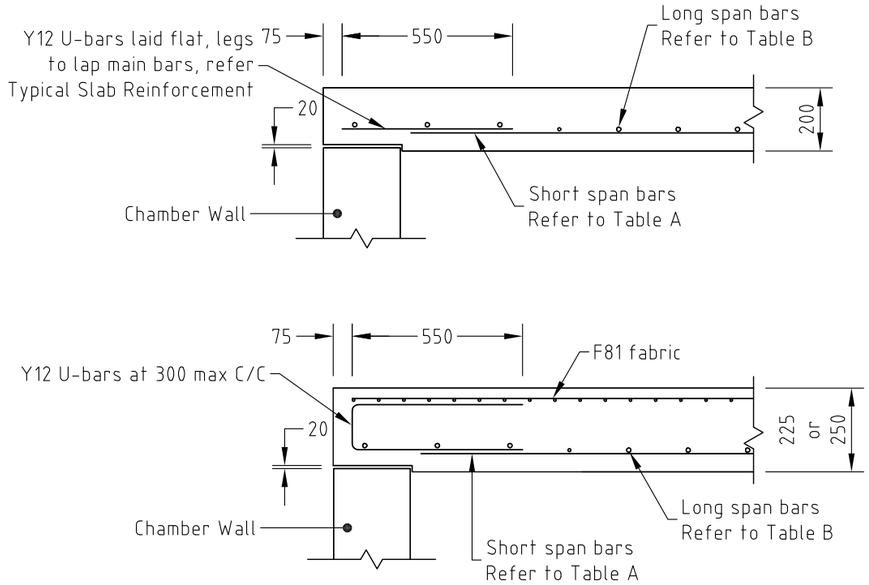
LEGEND:

X 200mm thick roof. Typical U-bars to suit bar spacing in Table A.

\# 225 and 250mm thick roof. Typical U-bars placed ventrally.



SLAB REINFORCEMENT AROUND CHAMBER ACCESS



TYPICAL SECTIONS

NOTES:

1. Concrete N32/20 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Reinforcement: F81 fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete), Bars Y12 and Y16, Grade 400 to AS1302 (Geometrical Product Specifications)
3. All laps in reinforcement shall be:
   Y12 - 300
   Y16 - 400
4. Formwork in accordance with AS3610 (Formwork for Concrete).
5. Designed to Austroads Bridge Code, W7 wheel load, dynamic factor 0.4.
6. Maximum fill over roof slab shall be 3000mm.
7. Reinforcement cover 45 min.
8. Refer Service Authority for access hole diameter to be adopted.
9. Refer project drawings for details of chamber walls and floors.
10. For sections at chamber access refer SRRC D-03.
11. All dimensions in millimetres.

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Project
SRRC STANDARD DRAWINGS
DRAINAGE

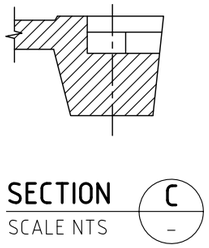
Drawing
STORMWATER MANHOLE ROOF SLABS
RECTANGULAR STANDARD REINFORCEMENT

Design File
Drawing No. D-07

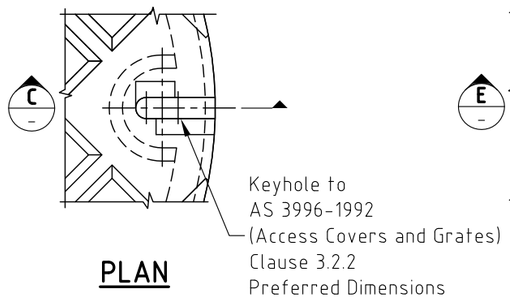
Sheet of

Revision A

A3

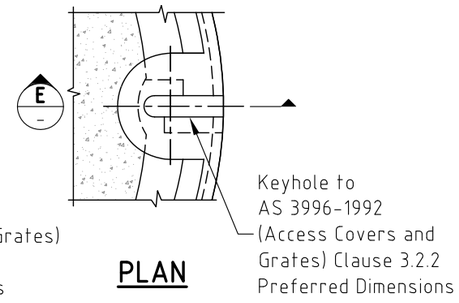


SECTION C
SCALE NTS

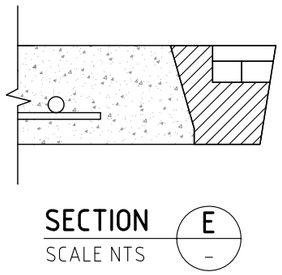


PLAN

LIFTING SLOTS - DETAIL A

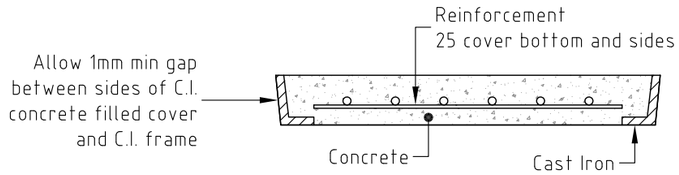


PLAN

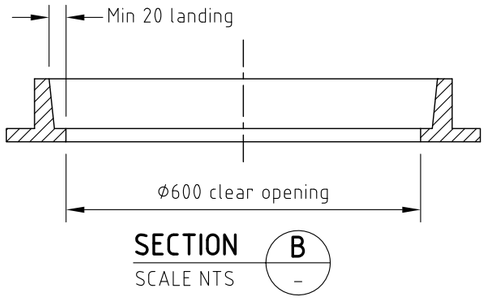


SECTION E
SCALE NTS

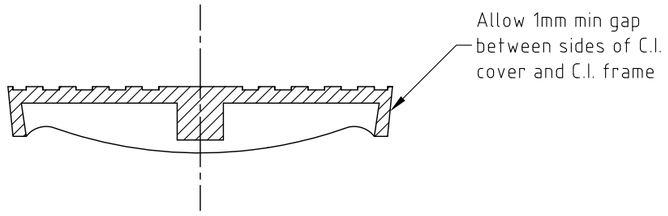
SLOTS - DETAIL B



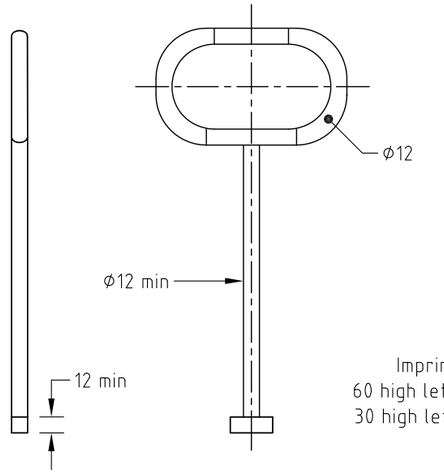
SECTION D
SCALE NTS



SECTION B
SCALE NTS

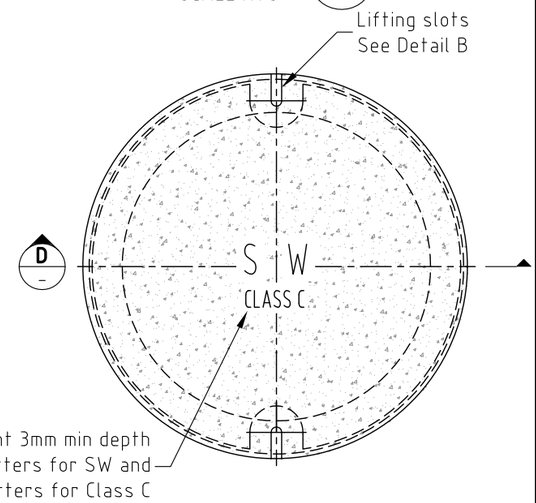


SECTION A
SCALE NTS

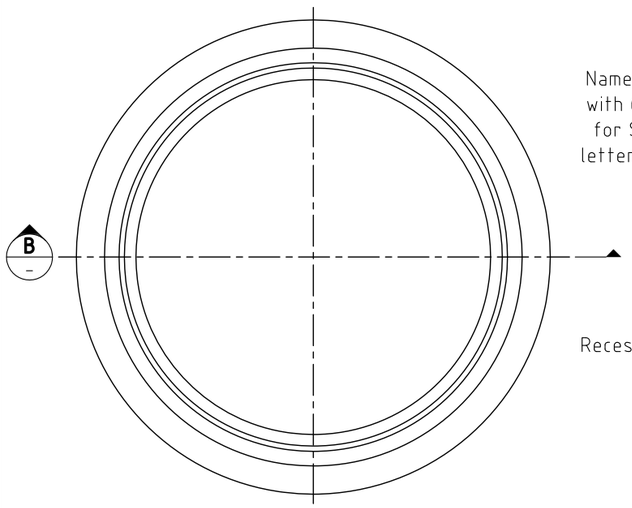


STEEL LIFTING KEY

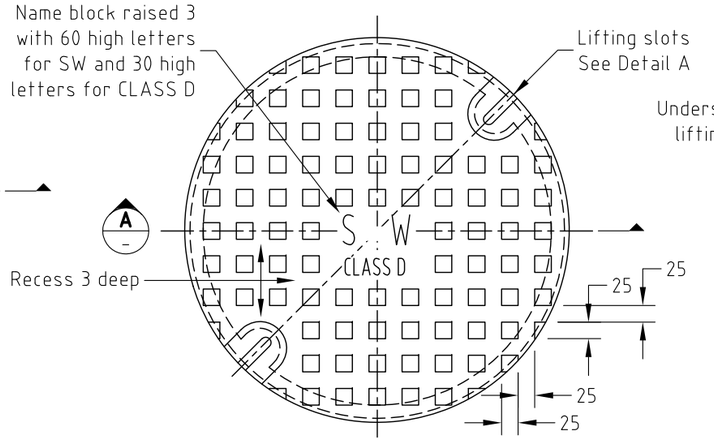
Hot dip galvanized to AS1650



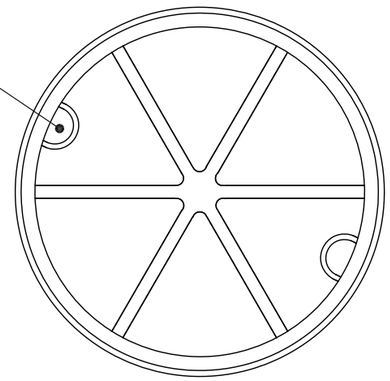
PLAN - C.I. CONCRETE FILLED COVER



PLAN - FRAME



PLAN - C.I. COVER



UNDERSIDE OF C.I. COVER

NOTES:

1. This drawings is intended to provide the performance specification only for the types of access chambers shown. The structures as shown are schematic as sizes and shapes may vary.
2. Access chambers which are proprietary items are required to be designed and certified to AS 3996 (Access Covers and Grates). Access covers subject to road traffic shall be of Class D design, where Minimum Ultimate Limit State Design Load = 210kN. Access covers subject to pedestrian traffic and occasional vehicle load shall be of Class C design, where Minimum Ultimate Limit State Design Load = 150kM (Ref AS 3996 (Access Covers and Grates) and Austroads Bridge Design Code 1992).
3. Cover and frame, grey cast iron, Grade > T220 to AS 1830 (Grey Cast Iron).
4. All reinforcement to be Grade 400 to AS 1302 (Geometrical Product Specifications). All other steel to be min Grade 250 to AS 1442 (Carbon Steels and Cabon-Manganese Steels).
5. Concrete infill N32/10 in accordance with AS 1379 (Specifications and Supply of Concrete) and AS 3600 (Concrete Structures).
6. All welds to AS 1554 (Structural Steel Welds).
7. Bitumen paint cover and frame to AS/NZS 3750.4 (Paints for Steel Structures - Bitumen Paint).
8. All dimensions in millimetres.

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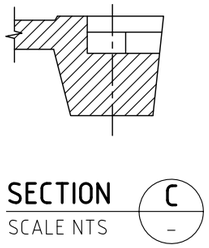
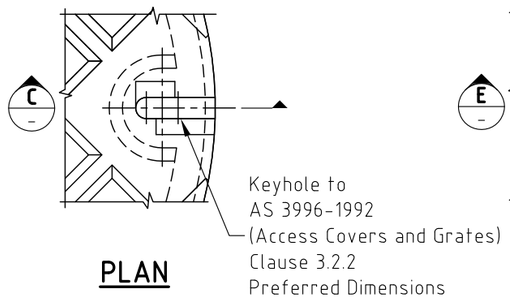
DRAINAGE

Drawing
STORMWATER MANHOLE CAST IRON COVER AND FRAME
C.I. CONCRETE FILLED COVER

Design File
Drawing No. D-08
Sheet of
Revision A
A3

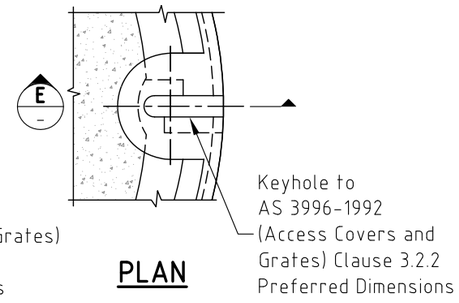


SECTION C
SCALE NTS

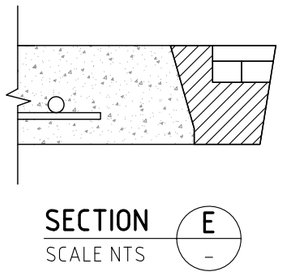


PLAN

LIFTING SLOTS - DETAIL A

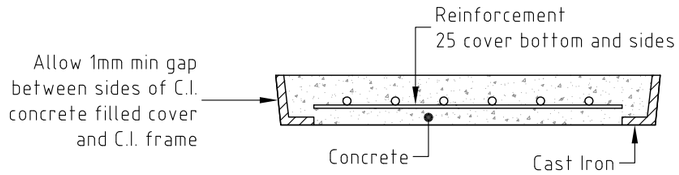


PLAN



SECTION E
SCALE NTS

SLOTS - DETAIL B



SECTION D
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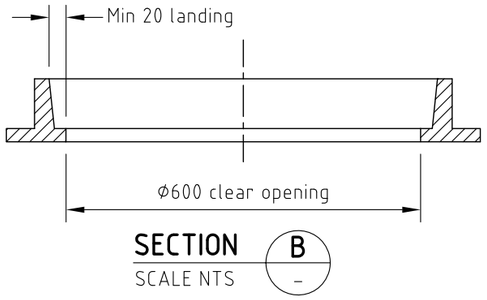

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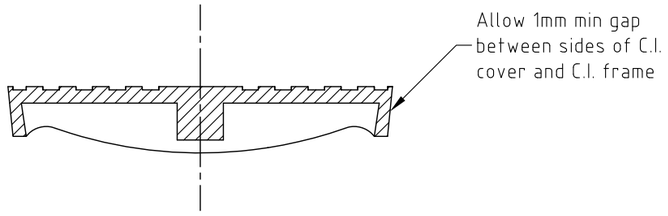
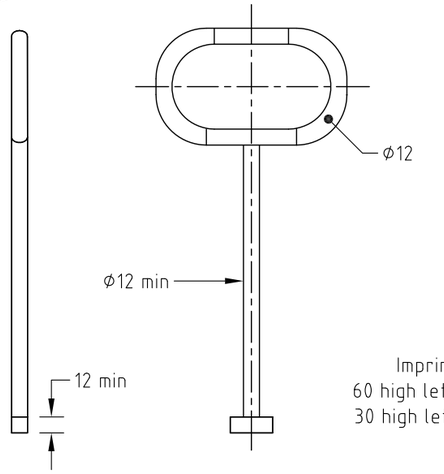
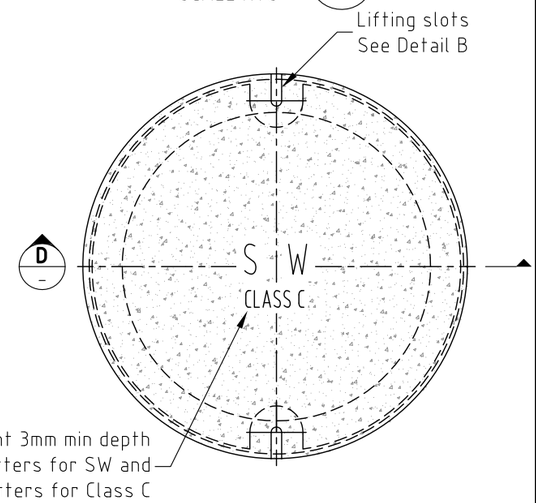


SECTION A
SCALE NTS

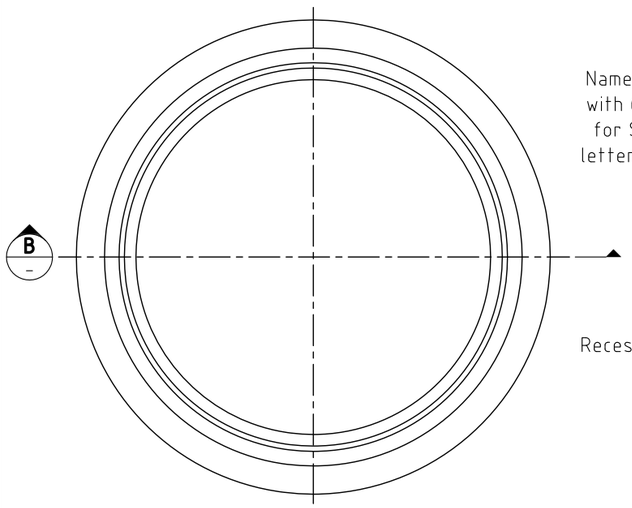


STEEL LIFTING KEY

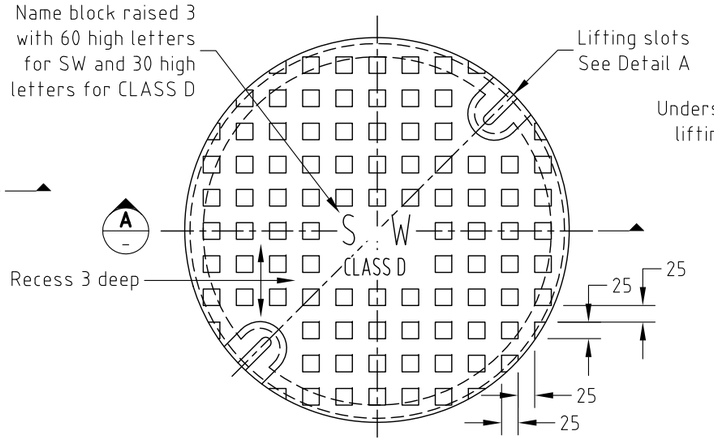
Hot dip galvanized to AS1650



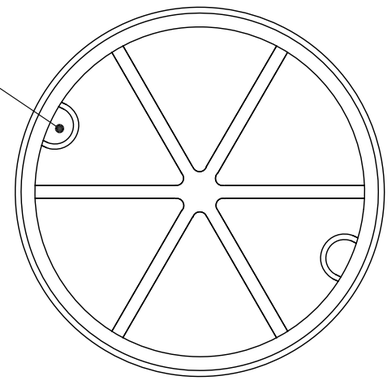
PLAN - C.I. CONCRETE FILLED COVER



PLAN - FRAME



PLAN - C.I. COVER



UNDERSIDE OF C.I. COVER

NOTES:

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6. All welds to AS 1554 (Structural Steel Welds).
7. Bitumen paint cover and frame to AS/NZS 3750.4 (Paints for Steel Structures - Bitumen Paint).
8. All dimensions in millimetres.

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DRAINAGE

Drawing
STORMWATER MANHOLE CAST IRON COVER AND FRAME
C.I. CONCRETE FILLED COVER

Design File
Drawing No. D-08
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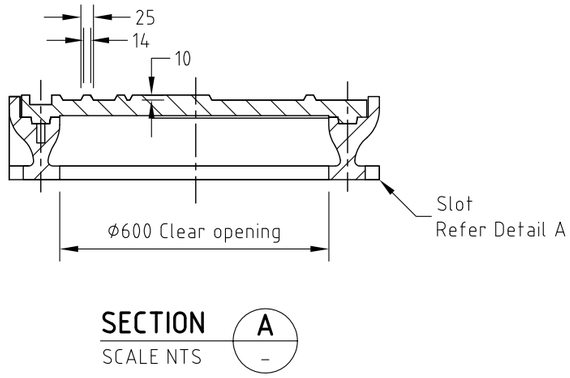
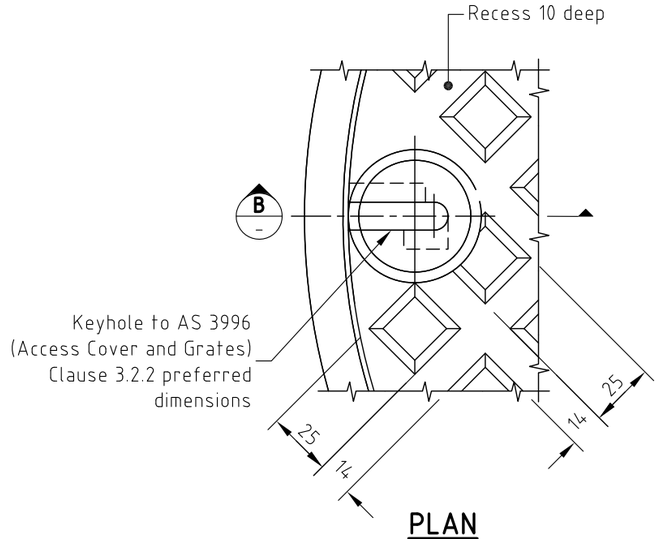
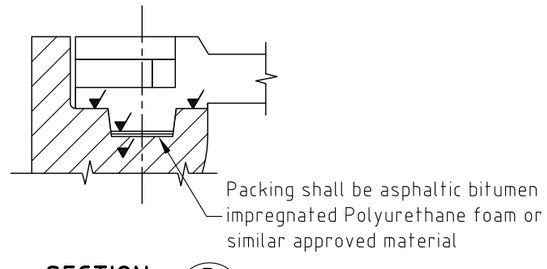
Revision A
A3



SECTION A
SCALE NTS

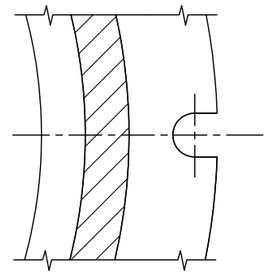


PLAN

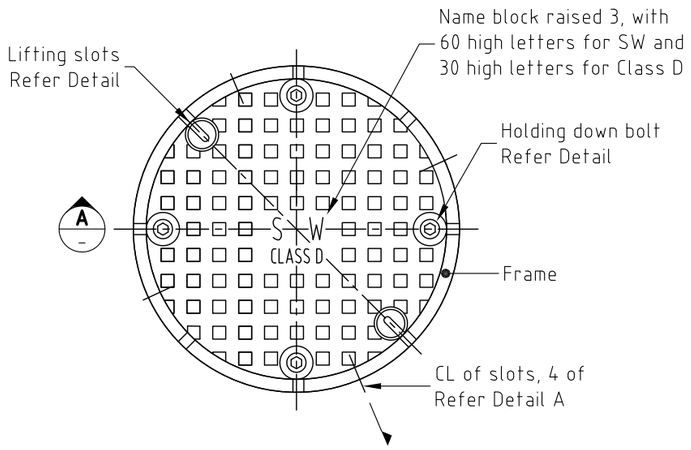


SECTION B
SCALE NTS

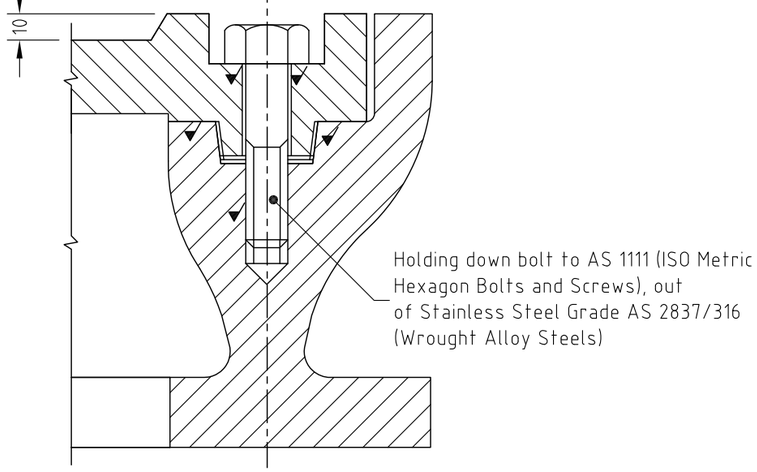
DETAIL AT LIFTING SLOTS



DETAIL A
4 slots as shown



COVER AND FRAME



DETAIL OF HOLDING DOWN BOLTS

LEGEND:

✓ Denotes machine surface

NOTES:

1. This drawing is intended to provide the performance specification only for the type of access chamber shown. The structure as shown is schematic as sizes and shape may vary.
2. Access chambers which are proprietary items are required to be designed and certified to AS 3996 (Access Cover and Grates).
3. Cover and frame, grey cast iron, Grade > T220 to AS1830 (Grey Cast Iron).
4. Cover design to be Class D to AS 3996 (Access Covers and Grates), where Minimum Ultimate Limit State Design Load = 210kN.
5. All welds to AS1554 (Structural Steel Welding Set).
6. Bitumen paint cover and frame to AS/NZS 3750 (Paints for Steel Structures).
7. All dimensions in millimetres.

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DRAINAGE

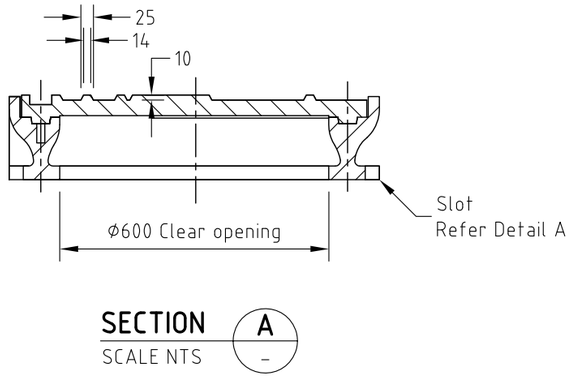
Drawing
STORMWATER MANHOLE CAST IRON COVER AND FRAME
BOLT DOWN

Design File
Drawing No. D-09

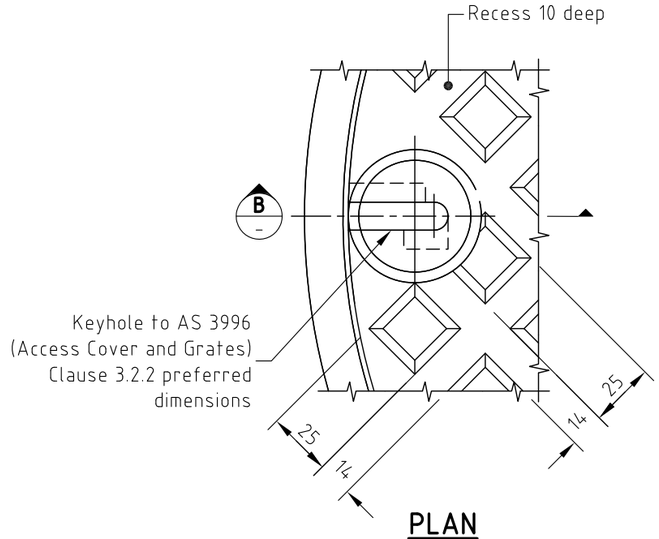
Sheet of

Revision A

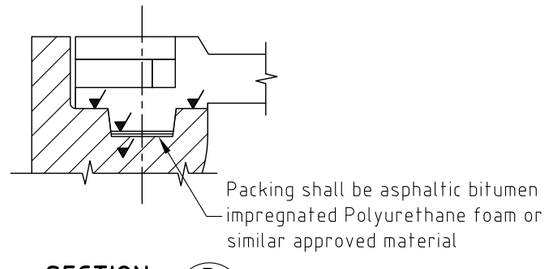
A3



SECTION A
SCALE NTS

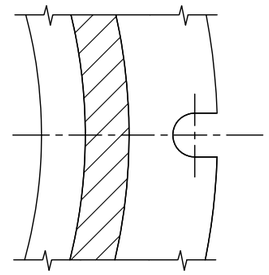


PLAN

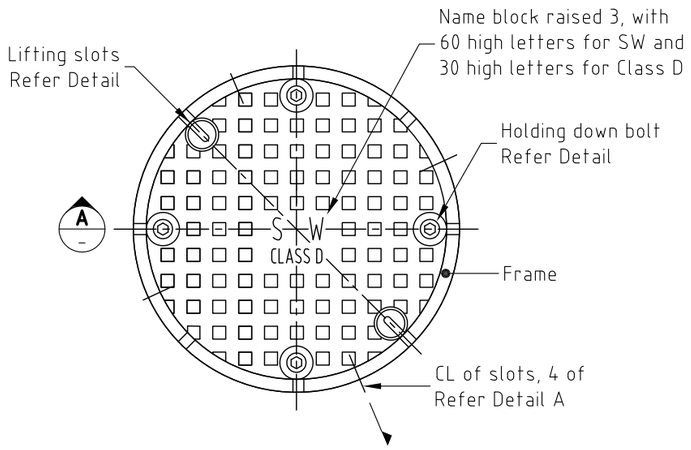


SECTION B
SCALE NTS

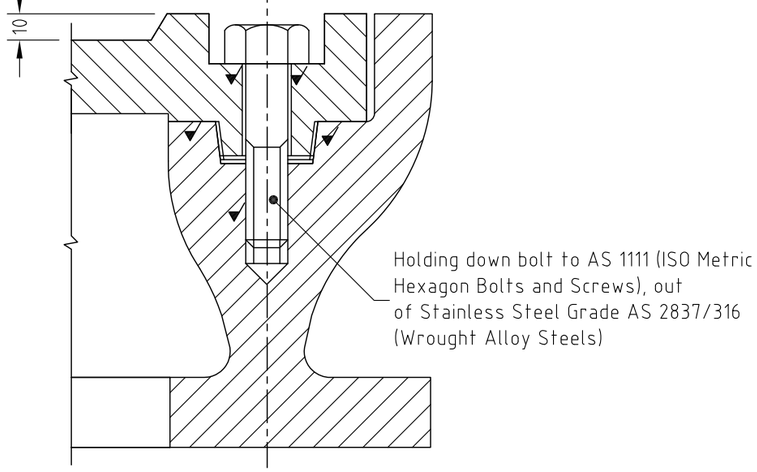
DETAIL AT LIFTING SLOTS



DETAIL A
4 slots as shown



COVER AND FRAME



DETAIL OF HOLDING DOWN BOLTS

LEGEND:

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NOTES:

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6. Bitumen paint cover and frame to AS/NZS 3750 (Paints for Steel Structures).
7. All dimensions in millimetres.

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Drawing
STORMWATER MANHOLE CAST IRON COVER AND FRAME
BOLT DOWN

Design File
Drawing No. D-09

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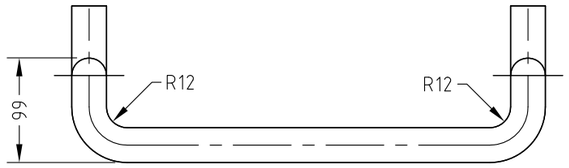
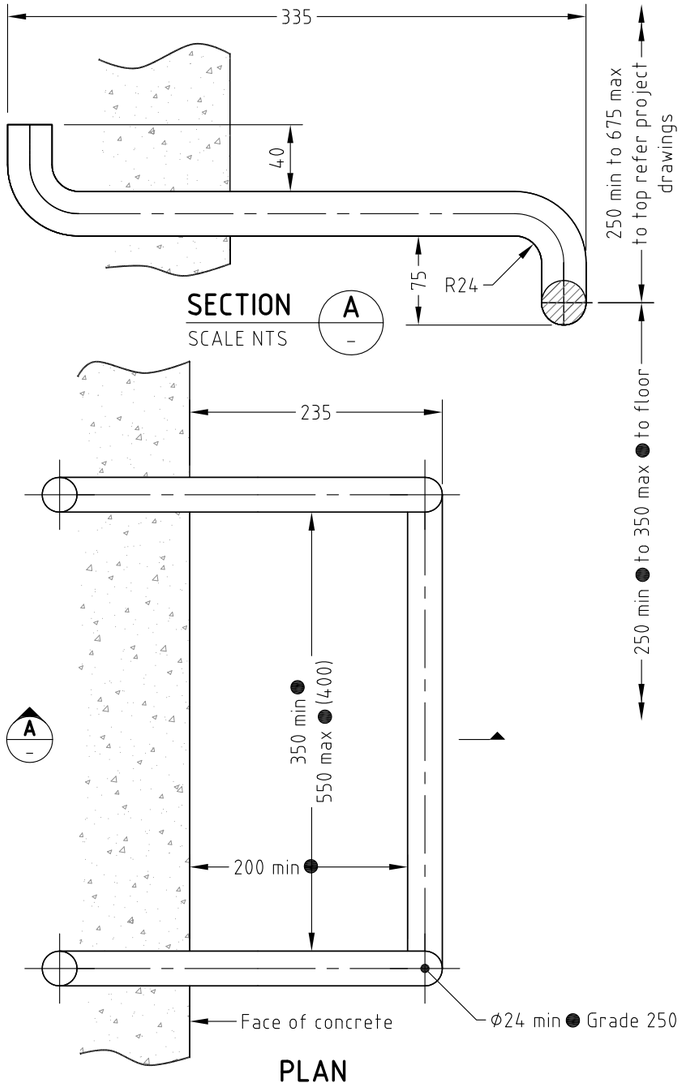
Revision A

A3



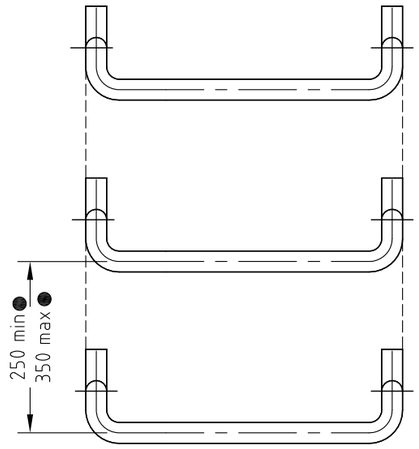
END ELEVATION



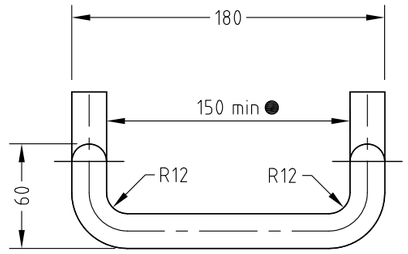
SECTION A
SCALE NTS

PLAN

TYPE 1 - INDIVIDUAL RUNG



ELEVATION



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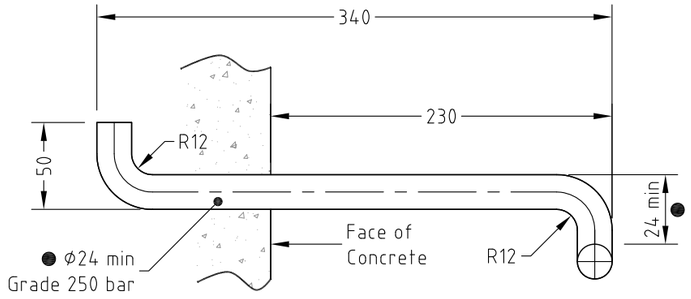
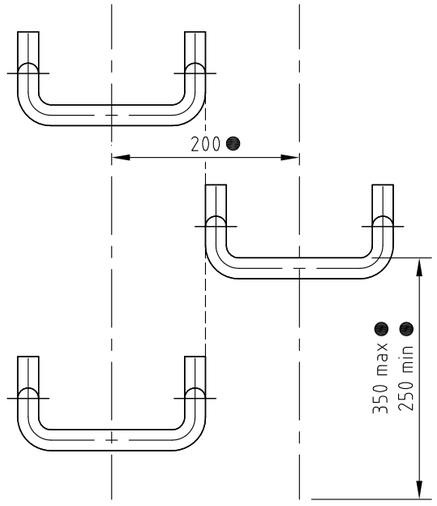


SECTION B
SCALE NTS



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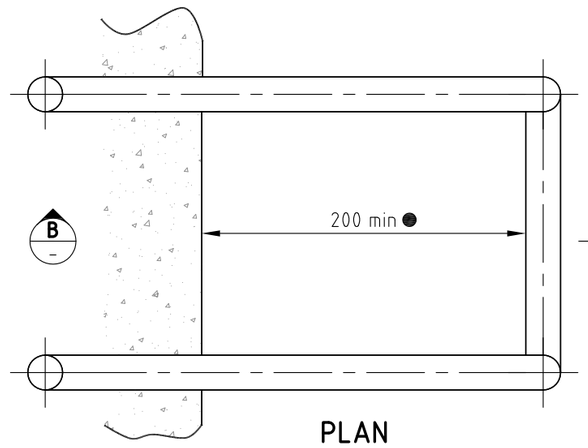

PLAN

TYPE 2 - INDIVIDUAL RUNG WITH COPLANAR RUNGS

LEGEND:

- Min and max dimensions in AS1657 (Fixed Platforms, Walkways, Stairways and Ladders)

NOTES:

1. Steel grade 250 bar to AS3679 (Structural Steel - Hot-Rolled Bars and Sections), hot dip galvanized after bending to AS1650 (Hot-Dipped Galvanized Coatings on Ferrous Articles).
2. Alternative step irons complying with AS1657 may be used.
3. Step irons may be set in approved epoxy compound if approved.
4. Step irons may only be used when approved by Local Authority.
5. All dimensions in millimetres.

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SUPERCEDES BOONAH - STD.D-0011,
BEAUDESERT - 50507, IPSWICH - SD.10

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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DATE 15 October 2010

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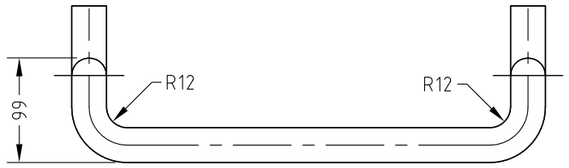
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE

Drawing: STORMWATER MANHOLE STEP IRONS

Design File
Drawing No. D-10
Sheet of
Revision A
A3



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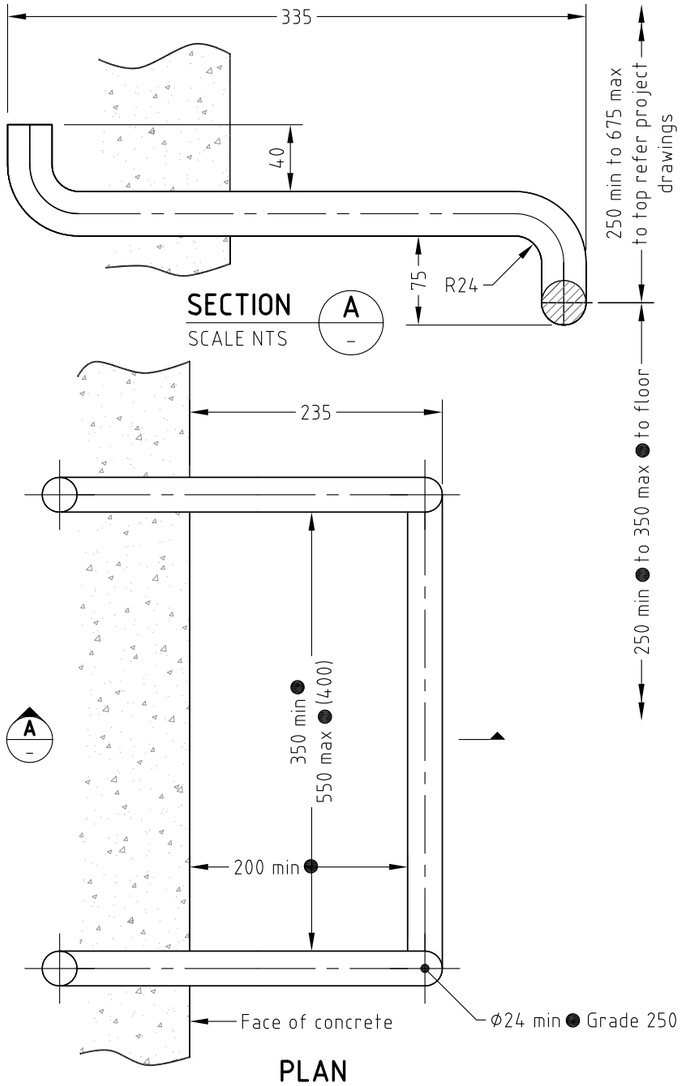
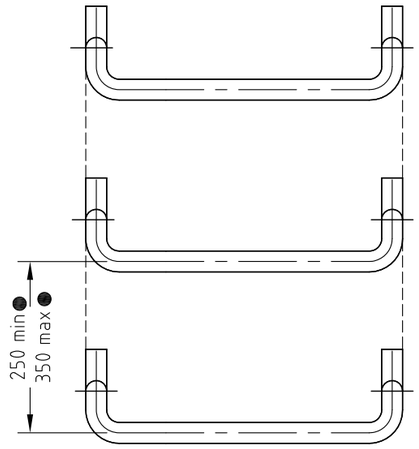


SECTION A
SCALE NTS

PLAN

TYPE 1 - INDIVIDUAL RUNG



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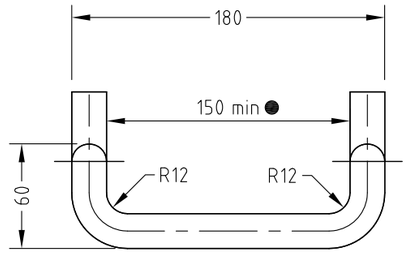

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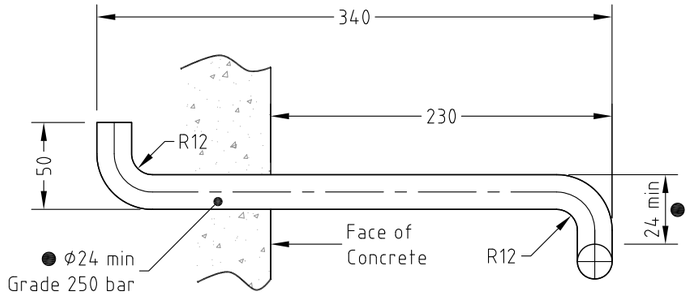
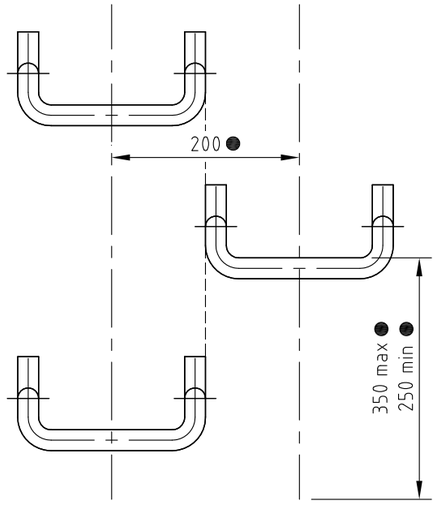


SECTION B
SCALE NTS



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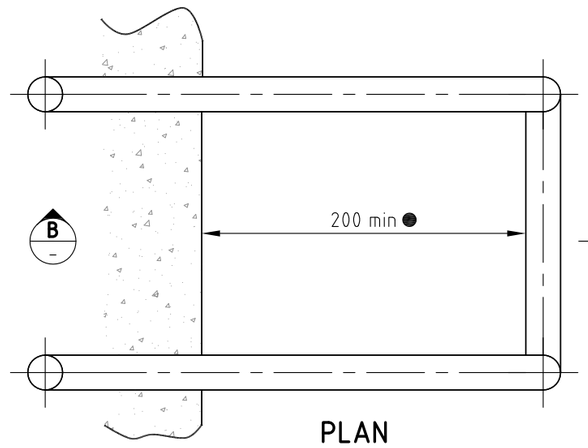

PLAN

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4. Step irons may only be used when approved by Local Authority.
5. All dimensions in millimetres.

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BEAUDESERT - 50507, IPSWICH - SD.10

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Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE

Drawing: STORMWATER MANHOLE STEP IRONS

Design File
Drawing No. D-10
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Revision A
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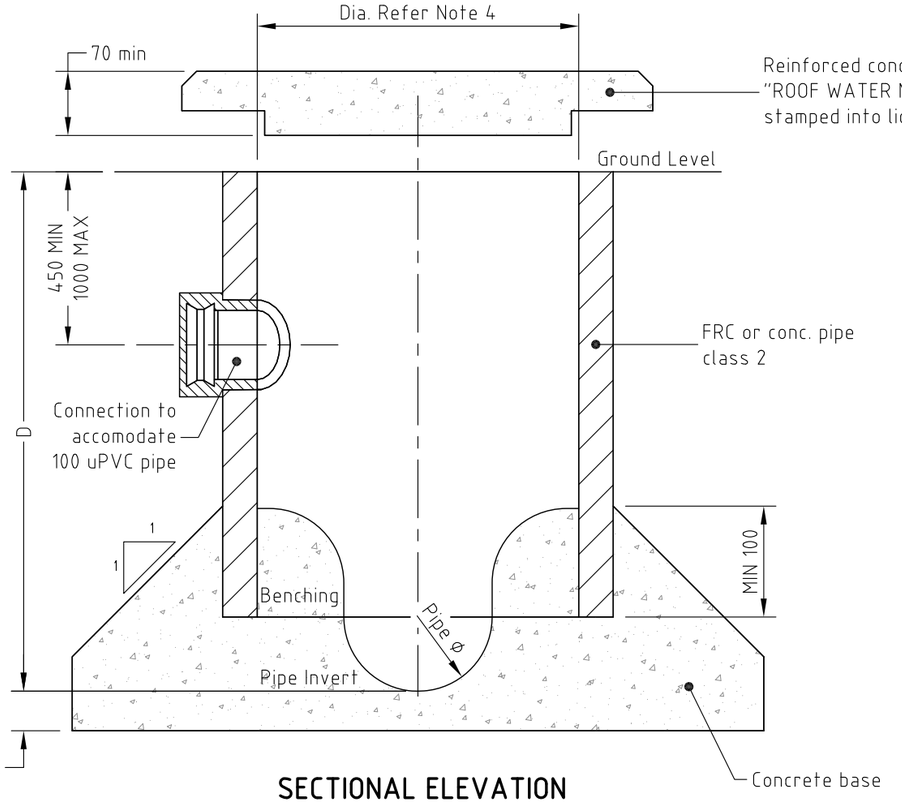
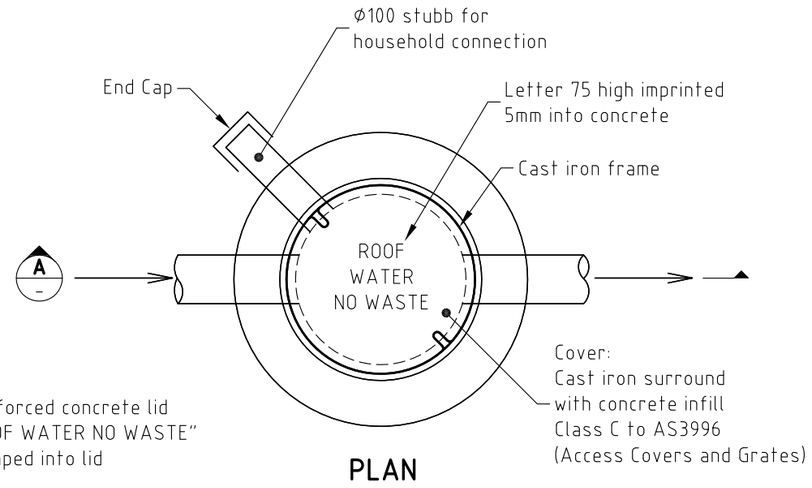
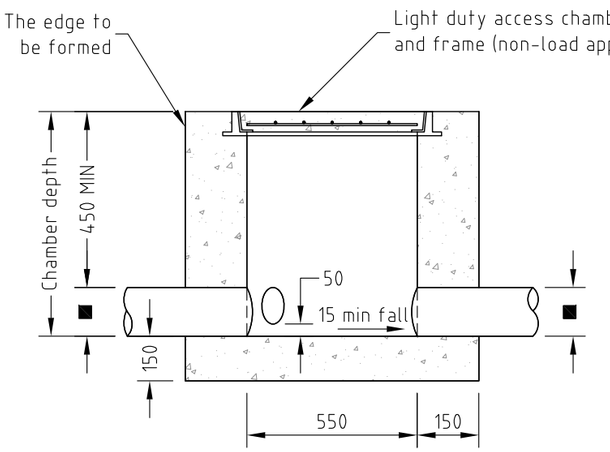


SECTIONAL ELEVATION

TYPE 2
PRECAST/INSITU



PLAN



SECTION A
SCALE NTS

TYPE 1
CAST INSITU

LEGEND:

- ■ Refer project drawings for pipe diameter and type
- ● At ø900 chambers adopt roof design off SRRC D-05

NOTES:

1. Roofwater systems are to be connected to stormwater gullies or access chambers. Where the system is to be connected to kerb and channel one property can be connected via a 100 Class SH uPVC pipe or a 100 x 75 galvanized RHS to a kerb adaptor. A maximum of two properties can be connected via a 200 x 75 galvanized RHS.
2. The pipe material and joint types shall be as follows:

Material	Aust. Std	Joint Type	Restrictions
Fibre reinforced, Class 2	AS4139 (Fibre Reinforced Concrete Pipes and Fittings)	Rubber Ring	N/A
Concrete, Class 2	AS1342 (Guidelines for the Selection of Statistical Methods in Standardization and Specification)	Rubber Ring	N/A
uPVC, sewer Class SH	AS1260 (PVC-U Pipes and Fittings for Drain, Waste and Vent Application)	Solvent Welded	Not to be used in easements

3. Minimum cover to roofwater pipes to be 450mm except where less cover is necessary to discharge to kerb and channel.
4. The access chamber depths and minimum diameters shall be as follows:
   Depth < 600 - min ø300, Depth 600 - 750 - min ø550, Depth > 750 - min ø900
5. Alternative designs, materials and methods of construction will be considered for approval including precast roofwater chambers available from various manufacturers. Alternative precast units will require to be bedded and encased in 150 thick concrete (Grade N25) up to 150 above crown of the inlet pipe with all subsequent backfill compacted to 95% MDD (modified compaction to AS1289 (Methods of Testing Soils for Engineering Purposes)) to ensure stability and robustness.
6. Alternative covers and frames proposed for approval must be circular, and be designed as Class C to AS3996 (Access Covers and Grates).
7. Concrete, base N25, cover infill N32 in accordance with AS1379 (Specifications and Supply of Concrete) and AS3600 (Concrete Structures).
8. The roofwater drainage system shall be shown on the stormwater drainage plans for the development.
9. The following 'as constructed' information shall be submitted to Superintendent:
   - Offsets of the main line to property boundary
   - The locations of access chambers and Y junctions measured from the property boundary
10. Where individual lots can be directly discharge to the kerb and channel, kerb adaptors shall be used.
11. All dimensions in millimetres.

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SUPERCEDES BOONAH - STD.D-0027,
BEAUDESERT - 50508, IPSWICH - SD.12

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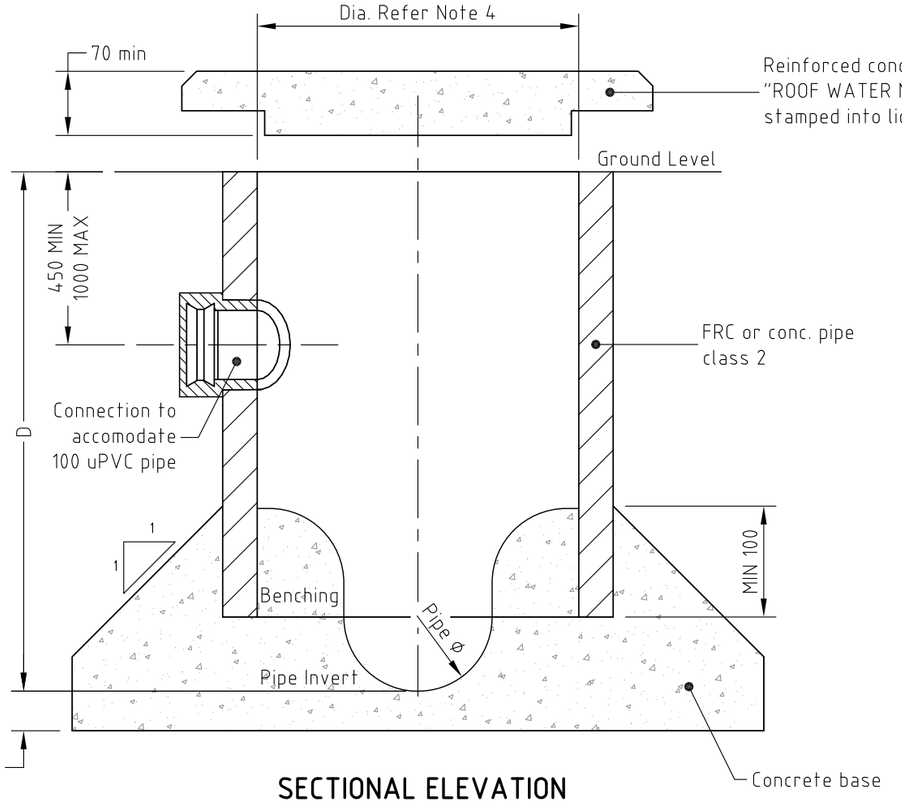
Project: SRRC STANDARD DRAWINGS
DRAINAGE

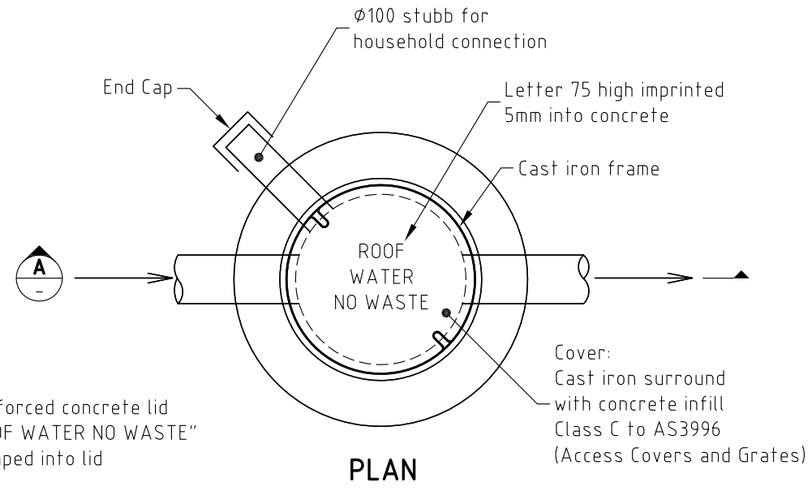
Drawing: ROOFWATER INSPECTION CHAMBER
INTERALLOTMENT DRAINAGE

Design File / Drawing No. D-11 | Sheet of | Revision A | A3

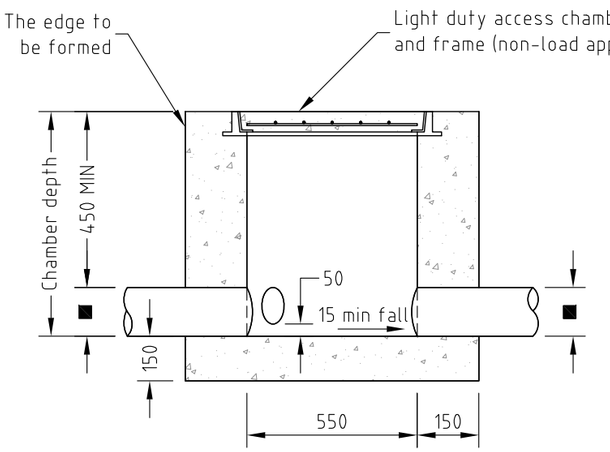


SECTIONAL ELEVATION

TYPE 2
PRECAST/INSITU



PLAN



SECTION A
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TYPE 1
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10. Where individual lots can be directly discharge to the kerb and channel, kerb adaptors shall be used.
11. All dimensions in millimetres.

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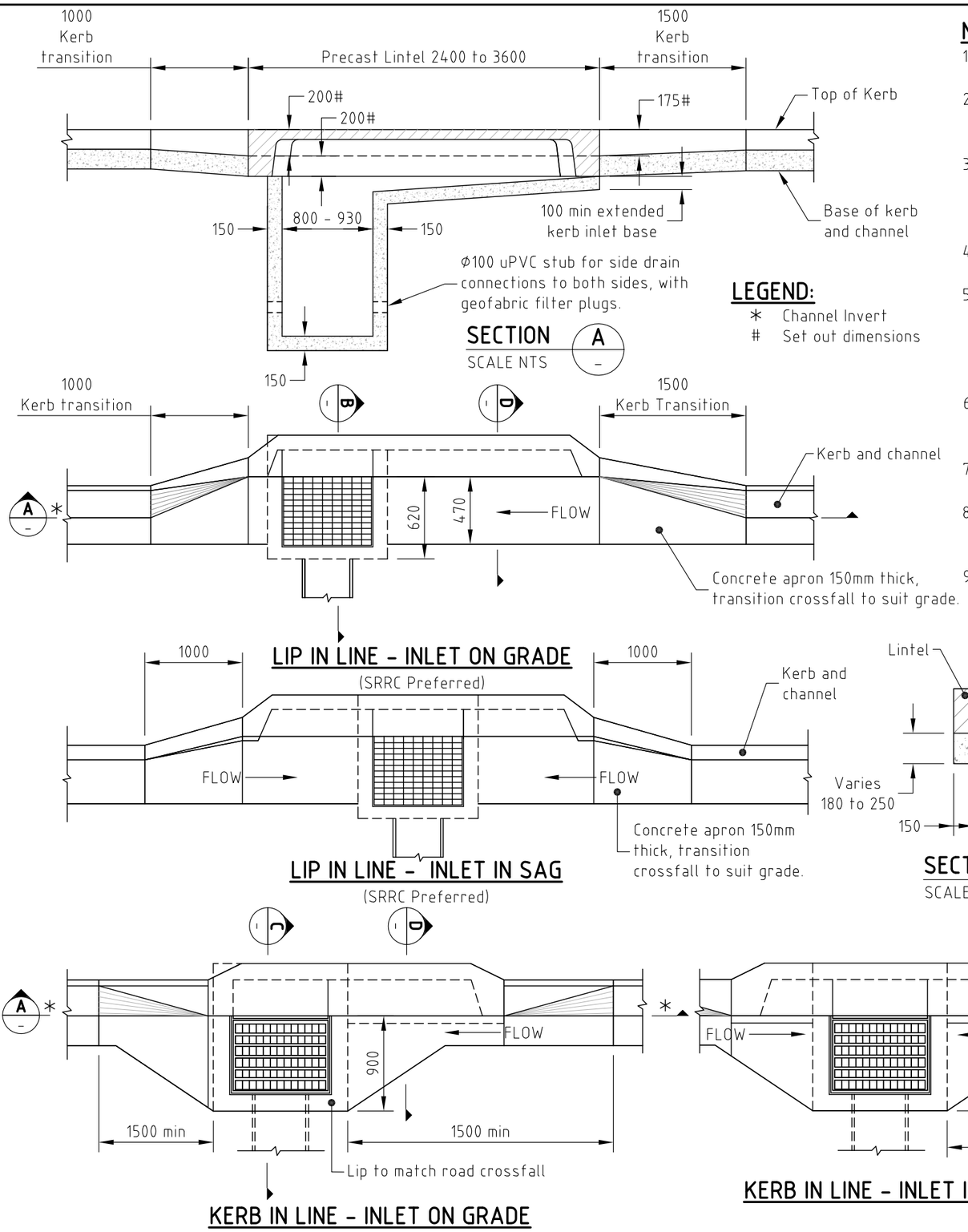
Project: SRRC STANDARD DRAWINGS
DRAINAGE

Drawing: ROOFWATER INSPECTION CHAMBER
INTERALLOTMENT DRAINAGE

Design File / Drawing No. D-11 | Sheet of | Revision A | A3

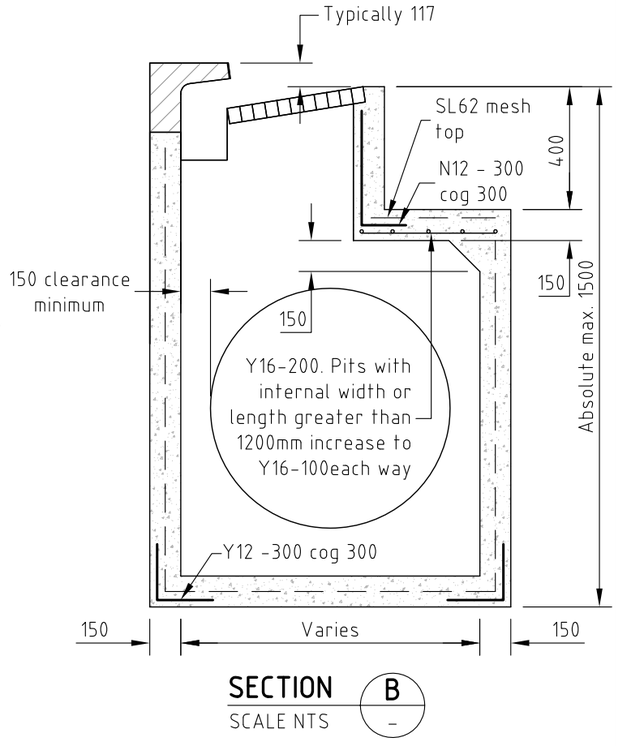


NOTES:

1. The kerb inlet to be precast. Gully pit may be precast or cast in-situ.
2. Precast concrete N32, cast-in-situ concrete N25 in accordance with AS1379 (Specifications and Supply of Concrete) and AS3600 (Concrete Structures).
3. Each lifting anchor to be 'swiftlift' or equivalent 1.3 tonne, galvanised to AS4680 (Hot-Dipped Galvanized Coatings on Fabricated Ferrous Articles) and fitted to manufacturer's specification.
4. Reinforcing bars Grade 400 to AS4671 (Steel Reinforcing Material), place centrally, 40 MIN end cover.
5. Grate and frame shall be bicycle safe, with positive safety hinge, open position safety lock and shall be hot dip galvanised to AS4680 (Hot-Dipped Galvanized Coatings on Fabricated Ferrous Articles). Grate shall be 850mm x 460mm in size.
6. Grate and frame Class D to AS3996 (Access Covers and Grates). A locking device should be proved in accordance with Clause 3.2.1.4 of AS3996 (Access Covers and Grates).
7. Steel plate hot dip galvanised to AS4680 (Hot-Dipped Galvanized Coatings on Fabricated Ferrous Articles).
8. An alternative precast concrete, kerb inlet, apron and pit surround may be provided subject to the approval of Council.
9. All dimensions in millimetres.

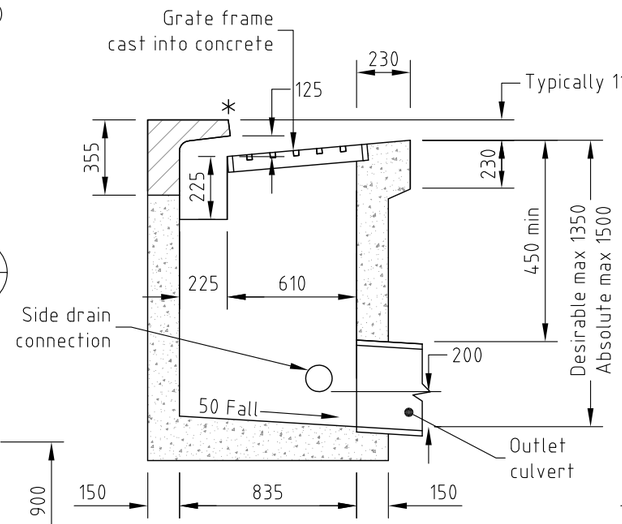
LEGEND:

* Channel Invert
\# Set out dimensions

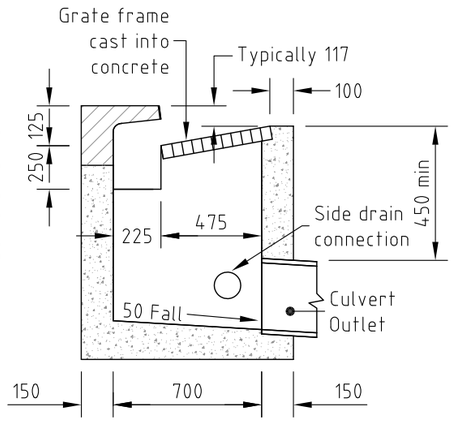


SECTION B
SCALE NTS

For pipes > 675mm



SECTION C
SCALE NTS



SECTION B
SCALE NTS

For pipes < 600mm

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DRAINAGE

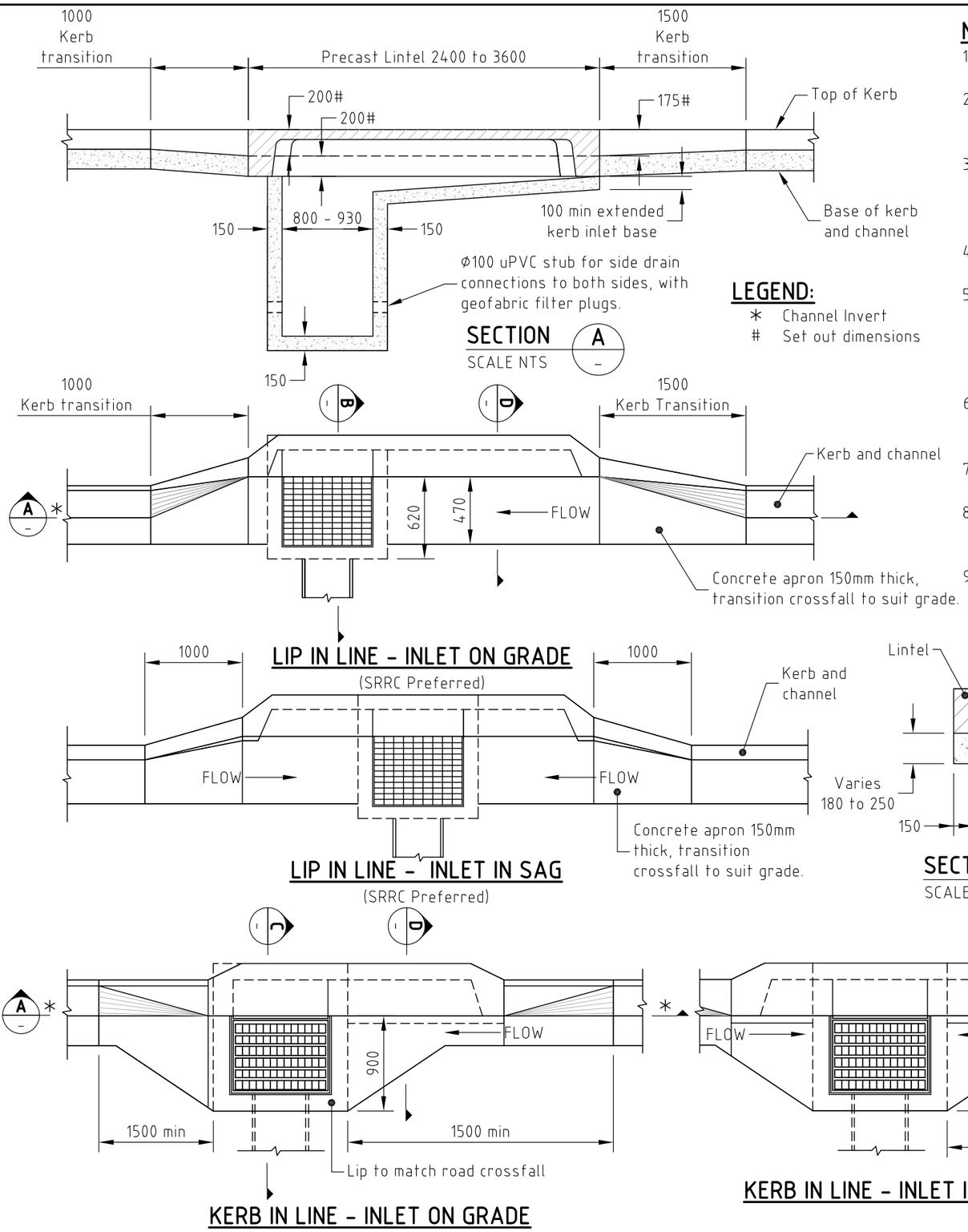
Drawing
DRAINAGE PITS
KERB INLETS - KERB & LIP IN LINE
GENERAL ARRANGEMENT

Design File
Drawing No. D-12

Sheet of

Revision A

A3



NOTES:

1. The kerb inlet to be precast. Gully pit may be precast or cast in-situ.
2. Precast concrete N32, cast-in-situ concrete N25 in accordance with AS1379 (Specifications and Supply of Concrete) and AS3600 (Concrete Structures).
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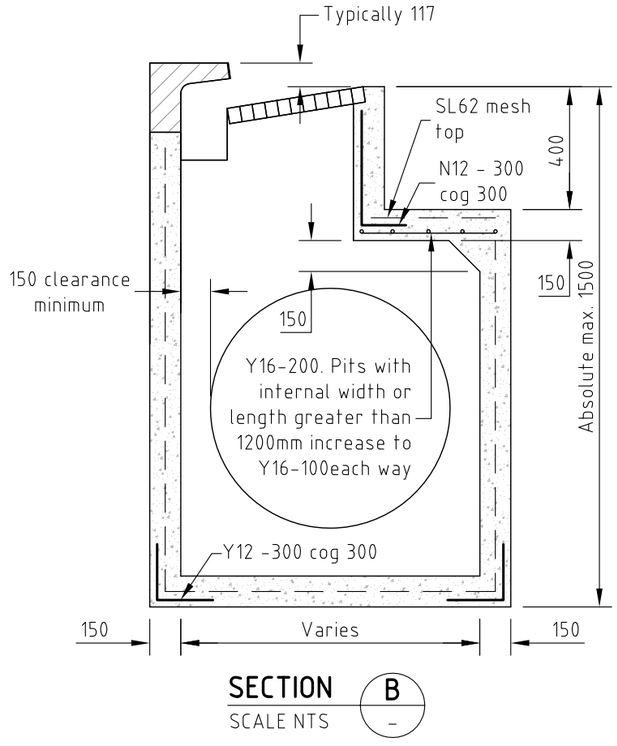
9. All dimensions in millimetres.

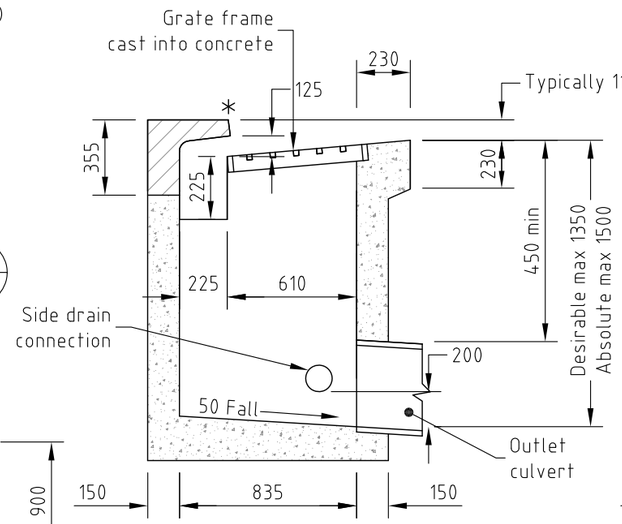
LEGEND:

* Channel Invert
\# Set out dimensions

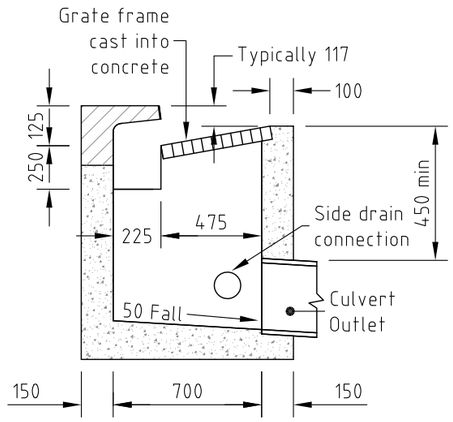


SECTION B
SCALE NTS

For pipes > 675mm



SECTION C
SCALE NTS



SECTION B
SCALE NTS

For pipes < 600mm

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DRAINAGE

Drawing
DRAINAGE PITS
KERB INLETS - KERB & LIP IN LINE
GENERAL ARRANGEMENT

Design File
Drawing No. D-12

Sheet of

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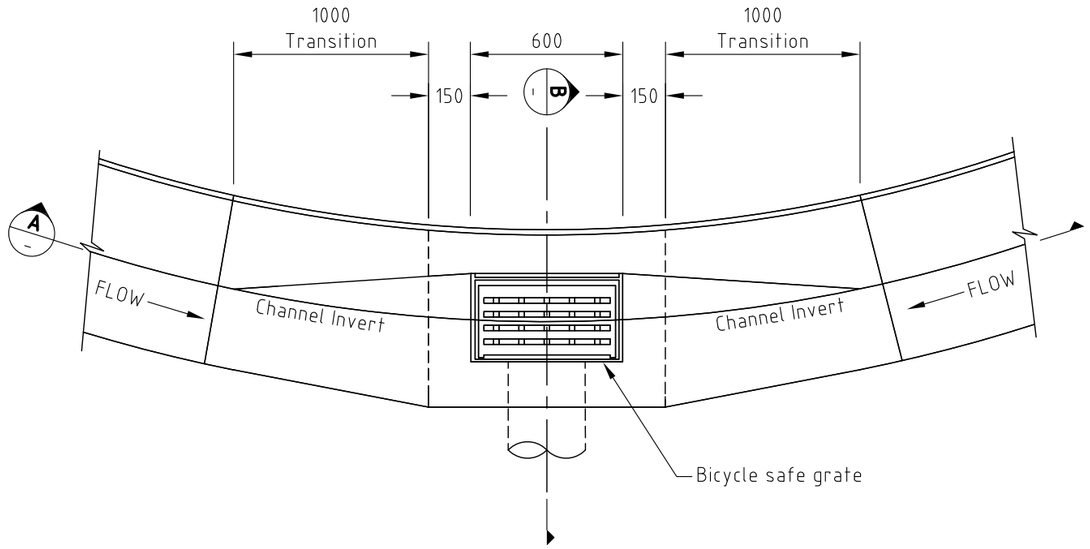
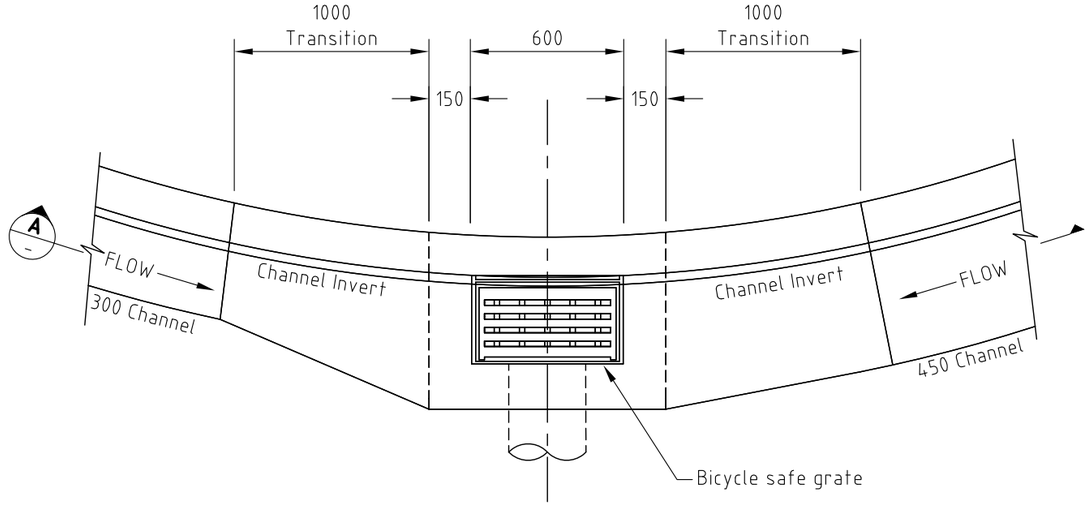
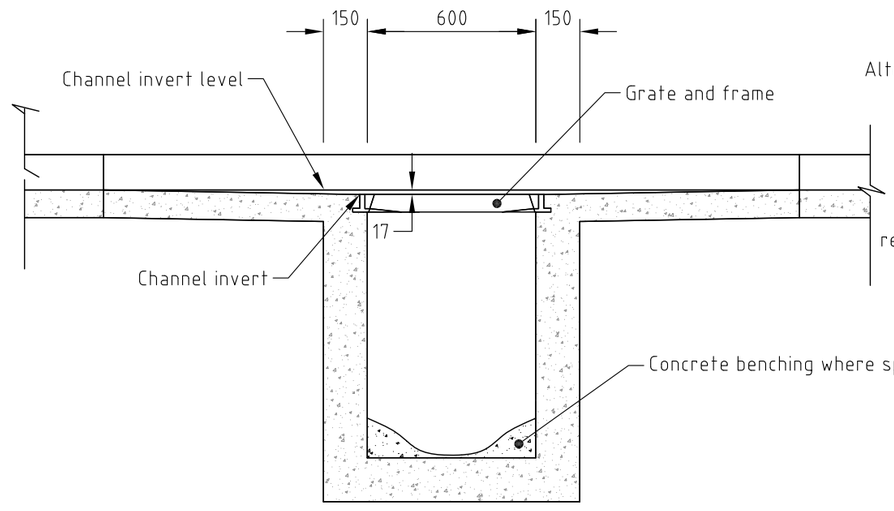


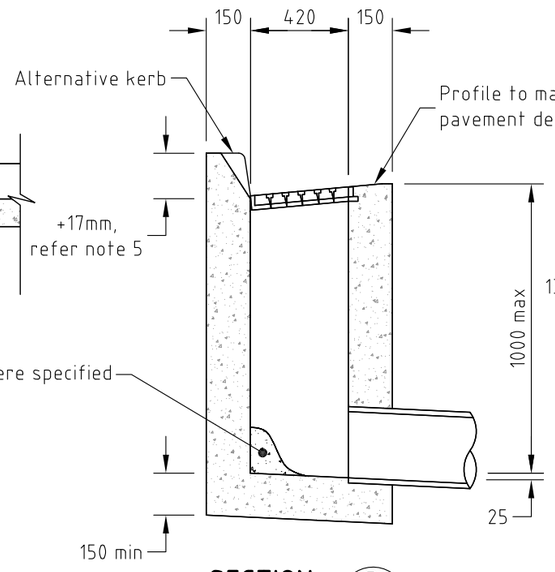
MOUNTABLE KERB AND CHANNEL PLAN



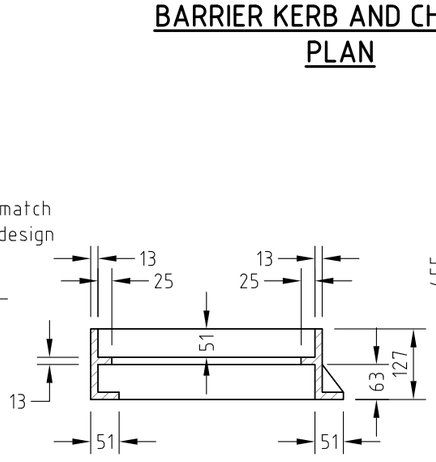
BARRIER KERB AND CHANNEL PLAN



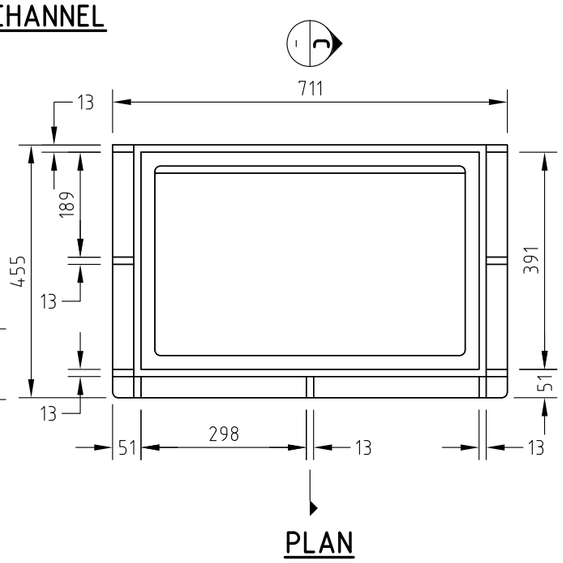
SECTION A
SCALE NTS



SECTION B
SCALE NTS



SECTION C
SCALE NTS



PLAN

ANTI-PONDING KERB INLET

C.I. FRAME OR FABRICATED GALV. STEEL

NOTES:

1. Dimensions of grate and frame may be varied subject to approval.
2. Grate and frame Class D bicycle sage to AS3996 (Access Covers and Grates), with locking device.
3. Grate and frame, grey cast iron Grade T220 to AS1830 (Grey Cast Iron) and coated to AS/NZS3750.4 (Paints for Steel Structures - Bitumen Paint) or alternatively fabricated steel Grade 250 to AS3678/3679 (Structural Steel Plates/Bars) and hot dip galvanised to AS4680 (Hot-Dipped Galvanized Coatings on Fabricated Ferrous Articles) may be used when approved.
4. Concrete: Benching N10, Structural N20 in accordance with AS1379 (Specifications and Supply of Concrete) and AS3600 (Concrete Structures).
5. Examples indicate mountable and barrier kerb and channel types. Refer SRRC R-04, adjust for other alternative.
6. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG D-068
SUPERCEDES BOONAH - STD.D-0024,
BEAUDESERT - 50522

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 15 October 2010

Scales

Do NOT Scale this Drawing
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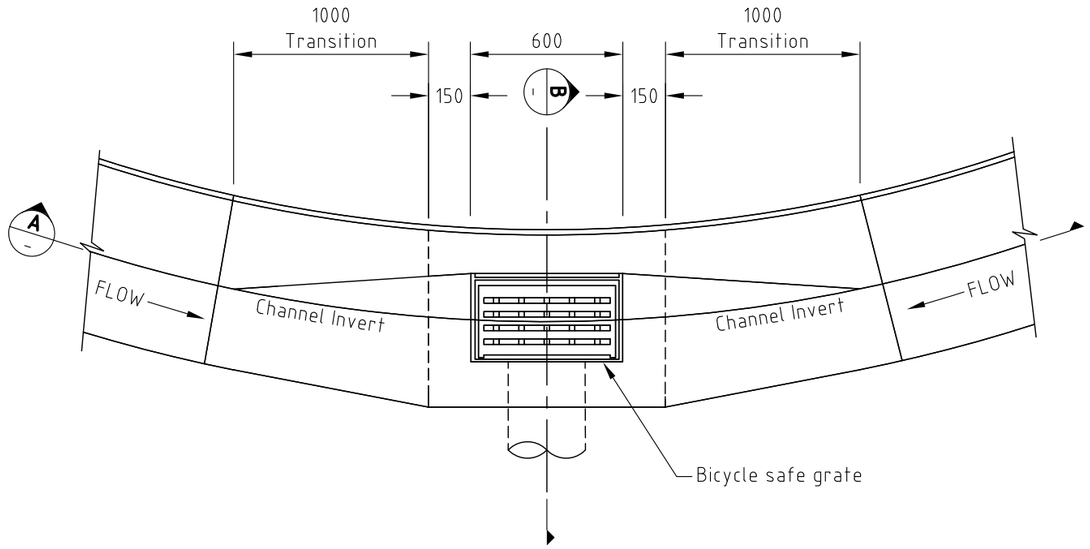
SCENIC RIM Regional Council
Works & Infrastructure Services

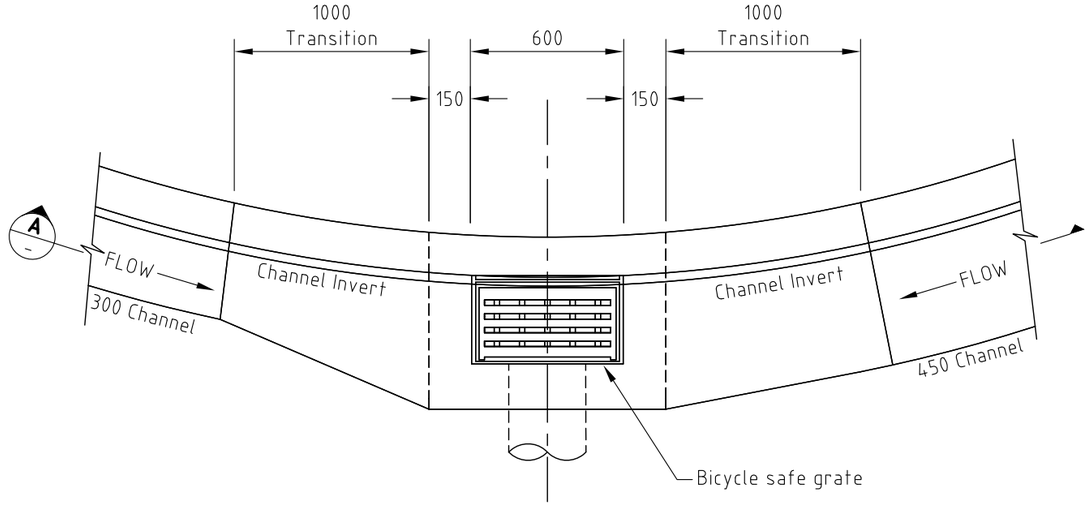
Project: SRRC STANDARD DRAWINGS
DRAINAGE

Drawing: DRAINAGE PITS
KERB INLET - KERB IN LINE
ANTI-PONDING

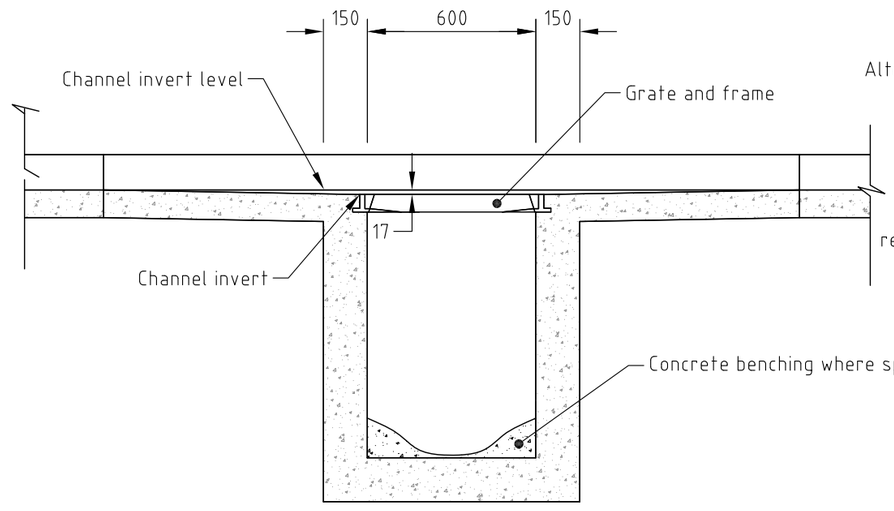
Design File
Drawing No. D-13
Sheet of
Revision A
A3



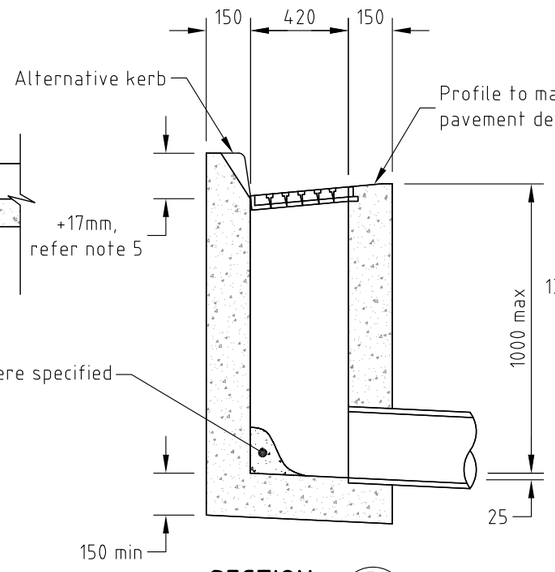
MOUNTABLE KERB AND CHANNEL PLAN



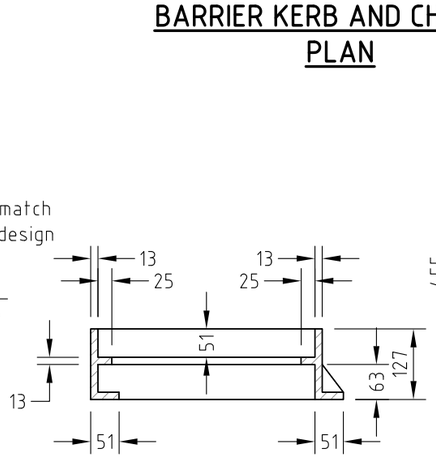
BARRIER KERB AND CHANNEL PLAN



SECTION A
SCALE NTS



SECTION B
SCALE NTS



SECTION C
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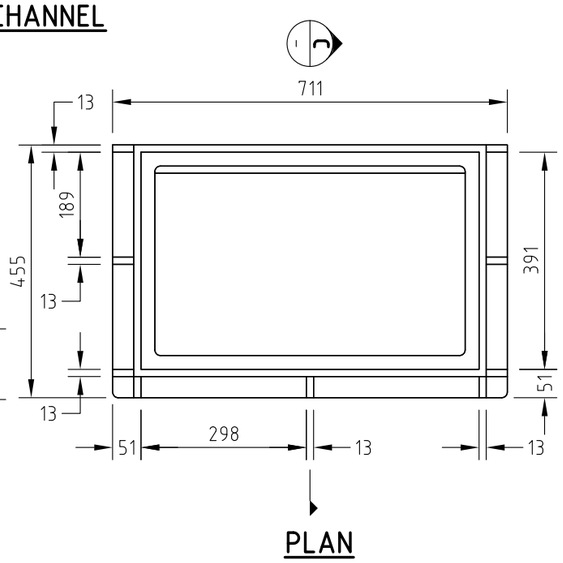

PLAN

ANTI-PONDING KERB INLET

C.I. FRAME OR FABRICATED GALV. STEEL

NOTES:

1. Dimensions of grate and frame may be varied subject to approval.
2. Grate and frame Class D bicycle sage to AS3996 (Access Covers and Grates), with locking device.
3. Grate and frame, grey cast iron Grade T220 to AS1830 (Grey Cast Iron) and coated to AS/NZS3750.4 (Paints for Steel Structures - Bitumen Paint) or alternatively fabricated steel Grade 250 to AS3678/3679 (Structural Steel Plates/Bars) and hot dip galvanised to AS4680 (Hot-Dipped Galvanized Coatings on Fabricated Ferrous Articles) may be used when approved.
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6. All dimensions in millimetres.

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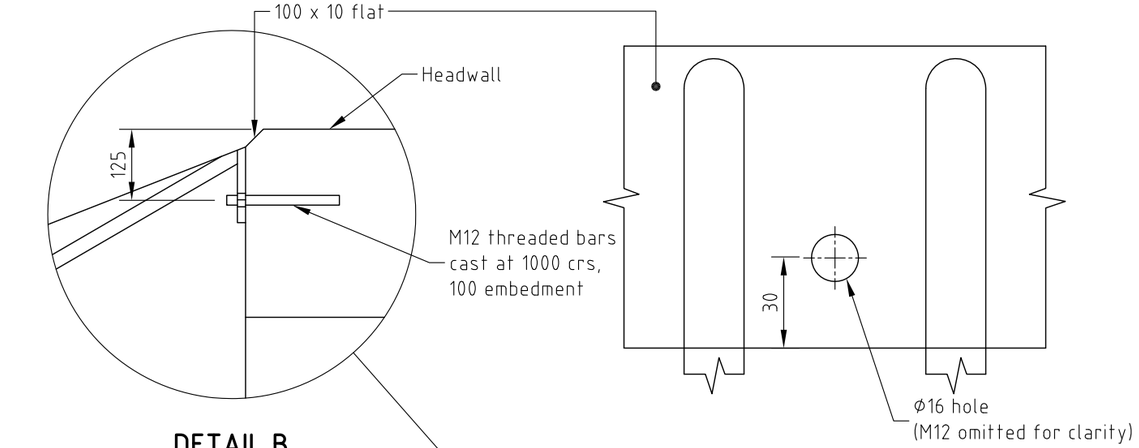
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE

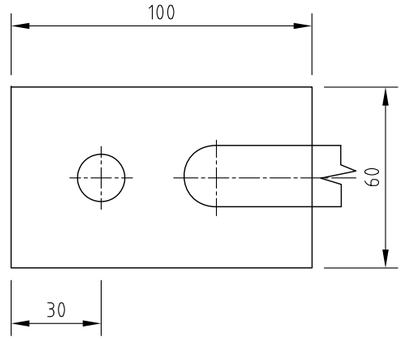
Drawing: DRAINAGE PITS
KERB INLET - KERB IN LINE
ANTI-PONDING

Design File
Drawing No. D-13
Sheet of
Revision A
A3

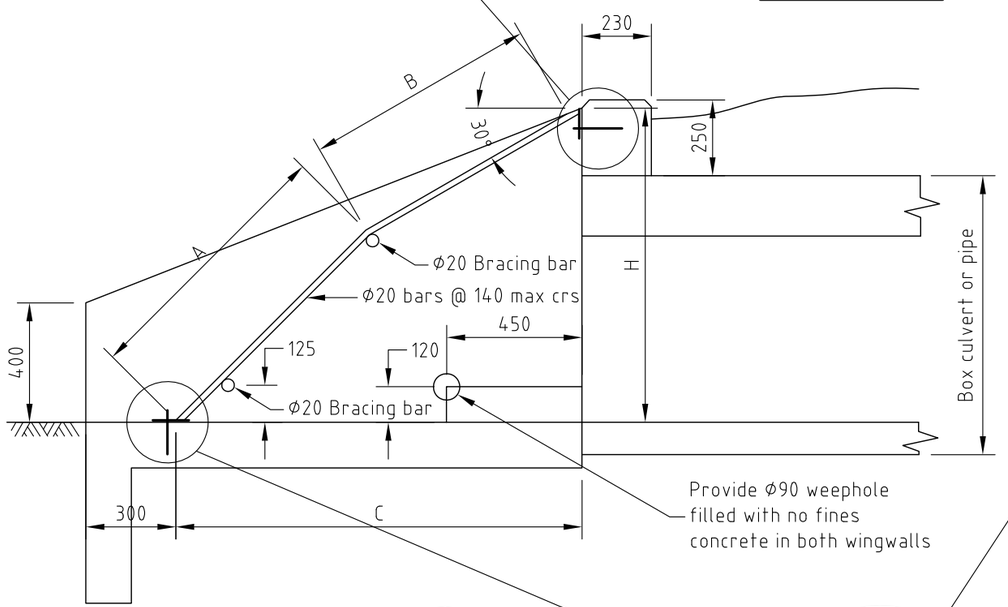


DETAIL B

PLATE DETAIL



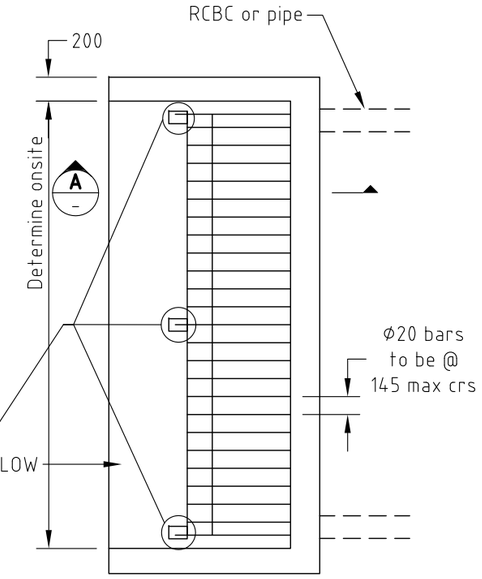
ANCHOR PLATE DETAIL



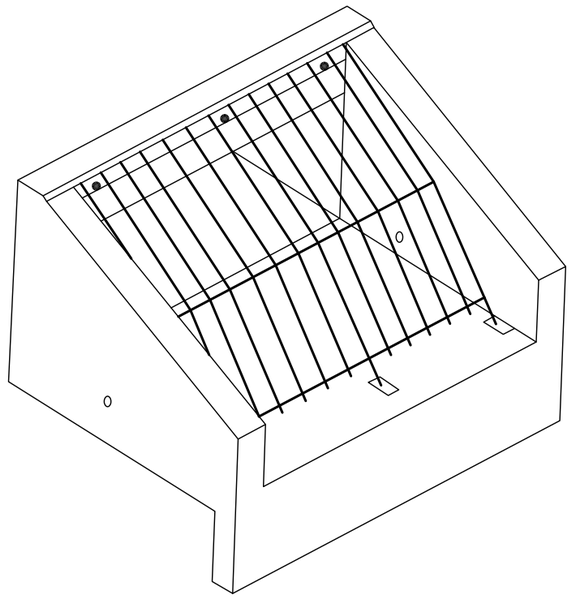
SECTION A

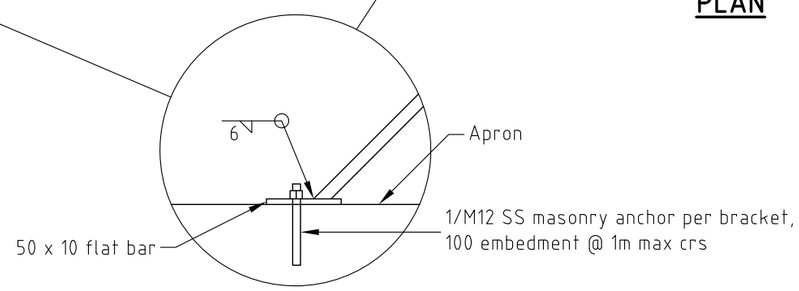
SCALE NTS

Reinforcement omitted for clarity



PLAN





DETAIL A

TABLE 1

CULVERT HEIGHT	A	B	C	SCREEN HEIGHT (H)
375	500	613	884	660
450	575	671	988	742
600	675	841	1206	898
750	800	977	1411	1054
900	900	1181	1659	1227
1200	1150	1478	2093	1552

NOTES:

1. For wingwall and headwall details and reinforcement, refer to MRD STD DWG 1303.
2. Apron details and reinforcement, refer to MRD STD DWG 1318 (Type 3 apron).
3. Concrete to be Class N32/20 AS1379 (Specification and Supply of Concrete).
4. All cover to reinforcement to be 50mm min.
5. Cover in aggressive environments, refer to MRD STD DWG 1303.
6. All sections to be grade 300 and all bar to be grade 400.
7. All welds to conform to AS1554 (Structural Steel Welding Set) and be 6m continuous fillet welds unless otherwise noted.
8. All steelwork to be hot dip galvanised after fabrication to AS4680 (Hot-dipped Galvanized Coatings on Fabricated Ferrous Articles).
9. All nuts, bolts and washers to be stainless steel grade 316 with isolation washers.
10. Refer to MRD Standards for safe distances to carriageways.

DERIVED FROM IPWEA STD DWG D-082

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 15 October 2010

Scales

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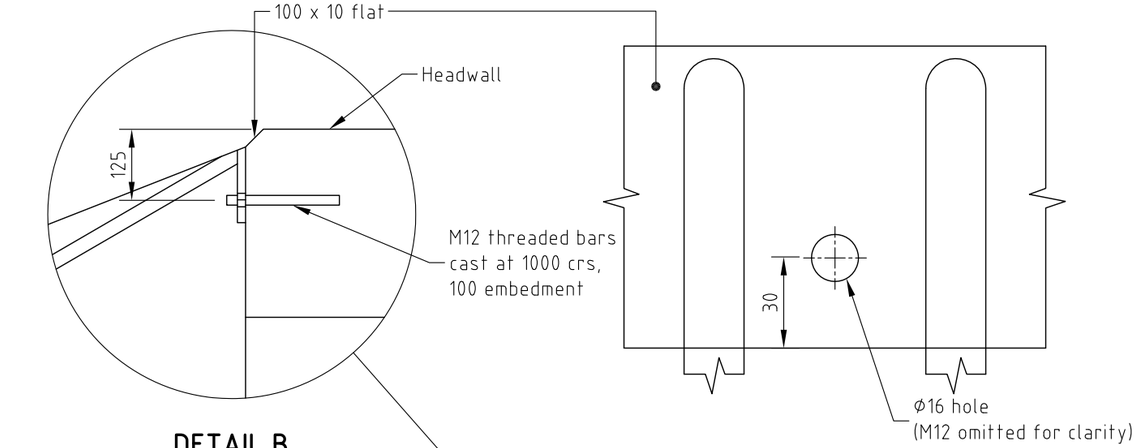
Scenic Rim Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE

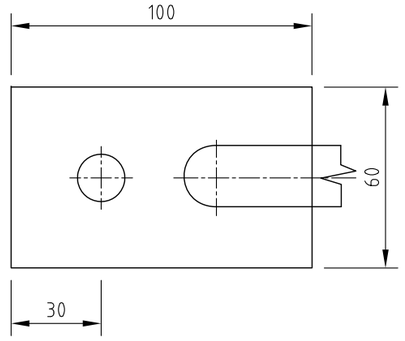
Drawing: DRAINAGE DETAILS
CULVERT INLET SCREEN

Design File
Drawing No. D-14
Sheet of
Revision A
A3

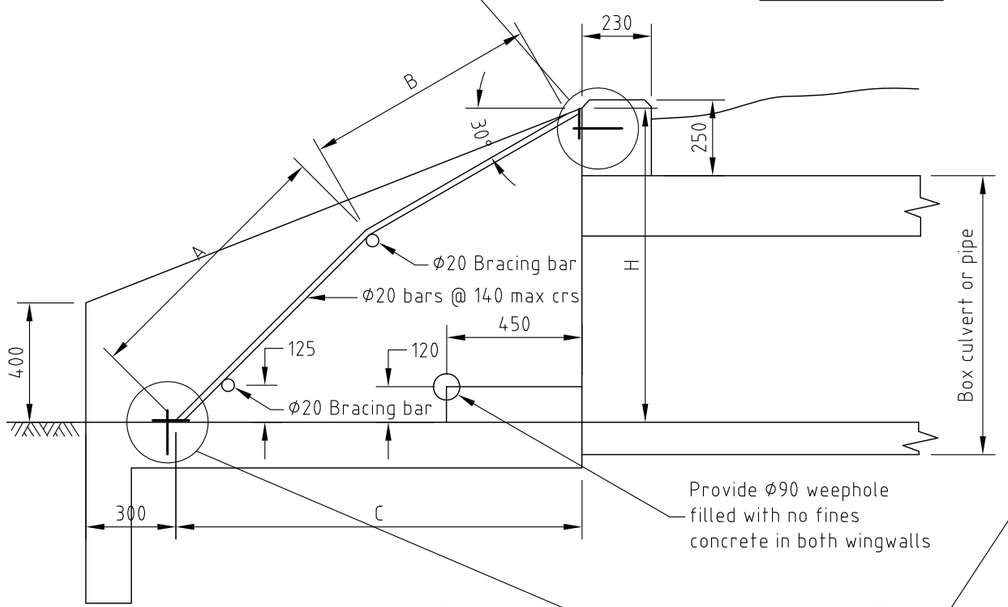


DETAIL B

PLATE DETAIL



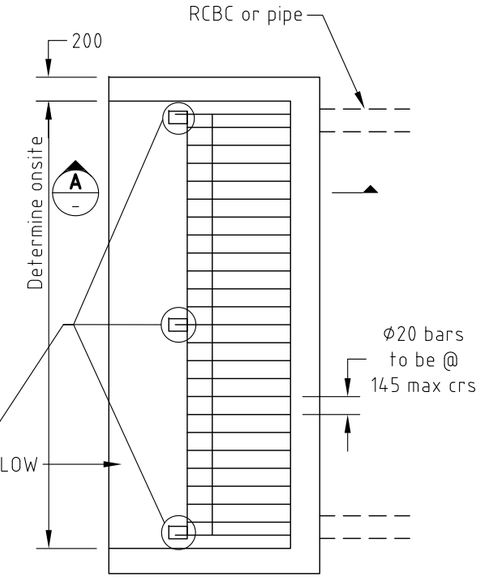
ANCHOR PLATE DETAIL



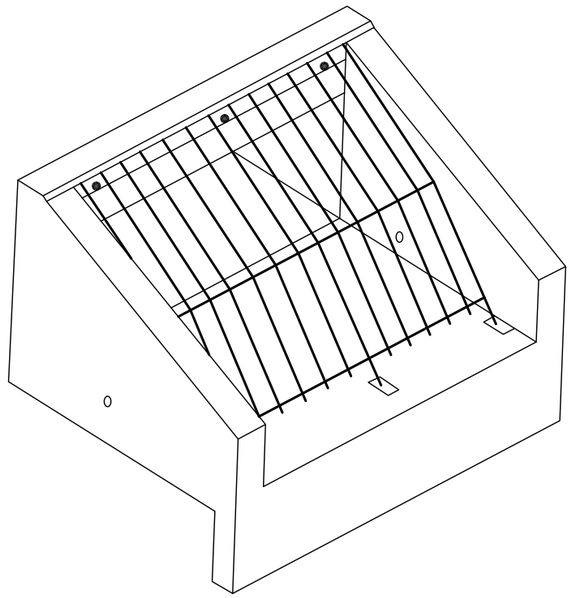
SECTION A

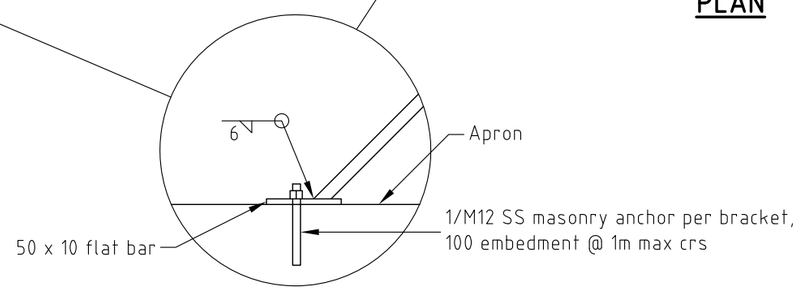
SCALE NTS

Reinforcement omitted for clarity



PLAN





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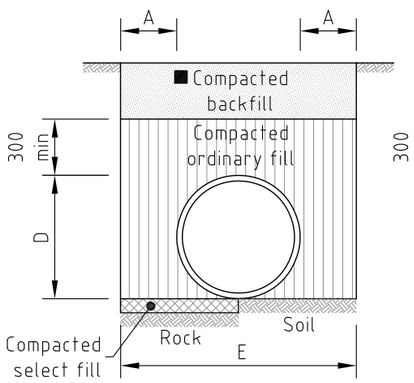
Scenic Rim Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
DRAINAGE

Drawing: DRAINAGE DETAILS
CULVERT INLET SCREEN

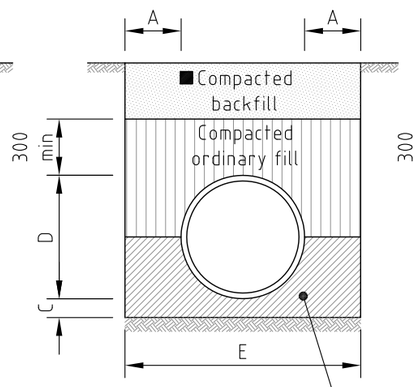
Design File
Drawing No. D-14
Sheet of
Revision A
A3



FOOTPATHS/PRIVATE PROPERTY/ROADS

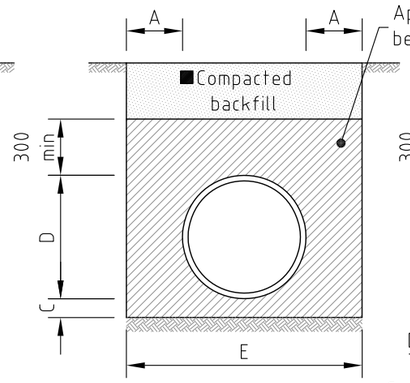
TYPE 1

Conforms to Support Type U (AS3725)



TYPE 2

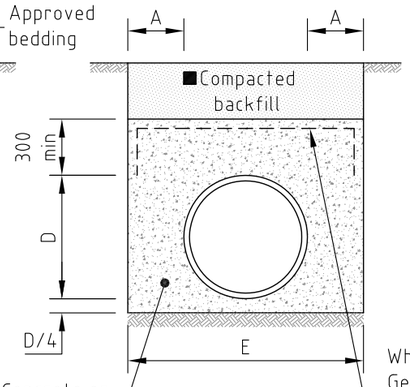
Conforms to Support Type H1 (AS3725)



ROADS

TYPE 3

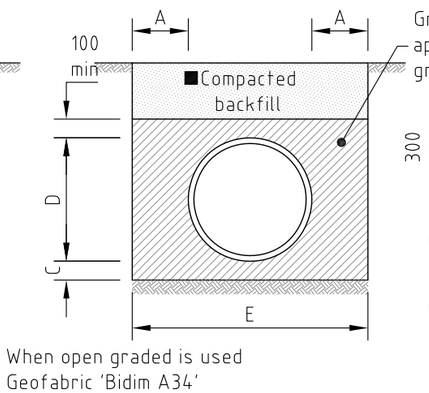
Sand Surround



ROADS

TYPE 4

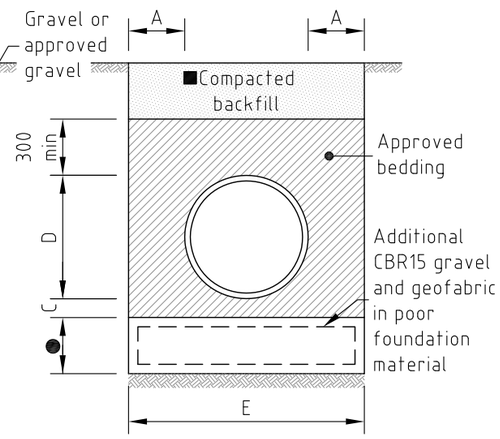
Concrete or Gravel Surround



ROADS

TYPE 5

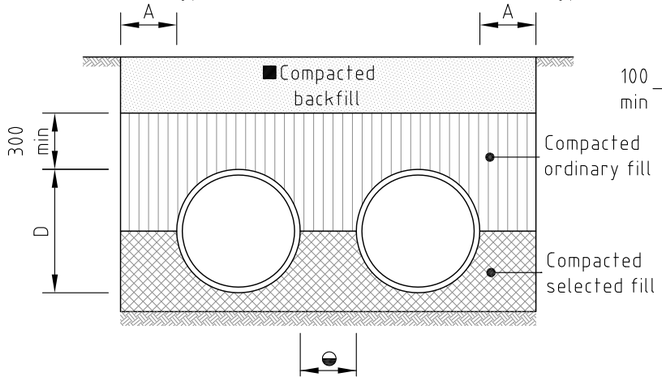
Concrete or Gravel Encasement



FOOTPATH/PRIVATE PROPERTY/ROADS

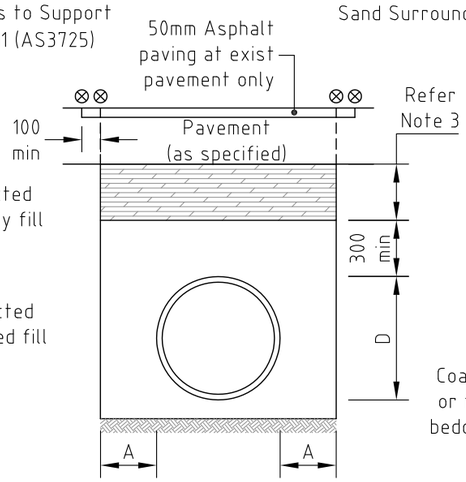
TYPE 6

Bedding in Poor Ground



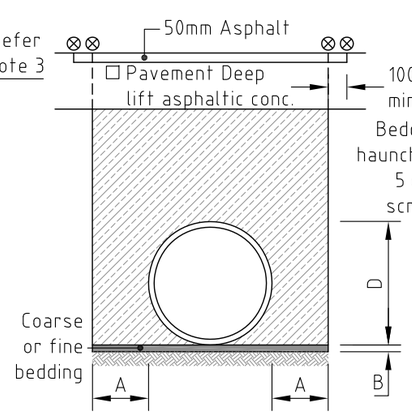
TYPE 7

Conforms to Support Type H1 (AS3725)



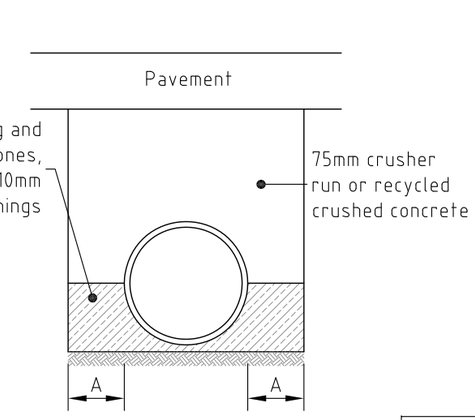
ALTERNATIVE A

At new pavement on residential streets, rural roads and existing sealed pavements



ALTERNATIVE B

At existing surfaced pavement on industrial, truck collector, sub-arterial & arterial streets/roads



ALTERNATIVE C

LEGEND:

- ☐ Pavement. Refer project documentation for detail.
- ⊗ Saw cut at existing pavement.
- ◒ Pipes: 300 when NOMINAL D 600 <
  600 when NOMINAL D 600-1800
  900 when NOMINAL D 1800 >
- ■ Refer Alternative A, B and C for backfill requirements.
- ● Depth to be approved by Council.
- Gravel (MIN CBR15) backfill
- No fines concrete backfill (8 parts 10mm NOM size)

NOTES:

1. Selected backfill in all cases shall be carried through to the wings and continued 300 thick for the length and height of wings.
2. Bedding compaction (compacted selected fill/sand bedding):
   - Cohesive material - 95% standard compaction
   - Non-cohesive material - density index of 70min, refer AS1289.E5.1 (Methods of Testing Soils for Engineering Purposes)
   - Sand - compact by flooding and use of vibrators
3. Backfill compaction:
   - Compacted gravel (300mm) layer under road pavement - 95% standard compaction
   - Compacted ordinary fill/CBR15 Gravel - 90% standard compaction - below 300mm zone
   - Compacted backfill -at footpaths/private property - 90% standard compaction
   - Max densities determined by standard compaction test to AS1289.5.1.1 (Methods of Testing Soils for Engineering Purposes)
4. Refer project drawings for types and/or alternative to be adopted.
5. Type U & Type H1 to conform to AS3725 (Design for Installation of Buried Concrete Pipes).
6. Dimension A can be reduced to 150 min for non mechanical compaction of backfill.
7. Pipe are to be designed to their correct strength class under all construction loads, dead loads and in-service loads.
8. All dimensions in millimeters.

Standards Referenced:
AS3725 - Design for Installation of Buried Concrete Pipes

Bedding & Haunch Material Grading

(gravel, loam, sand or mixture)

AS Sieve Size	% Passing by mass	
	Type 1 Pipes < Ø1200	Type 2 Pipes > Ø1350
19.0	100	98-100
9.5	-	35-50
4.75	-	5-10
2.36	40-100	0-2
0.425	15-70	0-1
0.075	3-30	0-1

NOMINAL Ø culvert D(mm)	MINIMUM width A (mm)	HAUNCH depth B	Bedding depth C	Allowable width E(m)	
				Des	Max
300	300	36	100	1.0	1.1
375	300	45	100	1.1	1.2
450	300	53	100	1.1	1.3
525	300	61	100	1.2	1.5
600	300	69	100	1.3	1.6
750	300	85	100	1.5	1.8
900	300	103	100	1.6	1.9
1050	300	120	100	1.8	2.1
1200	300	135	100	2.0	2.2
1350	300	150	100	2.1	2.4
1500	300	169	100	2.3	2.7
1650	330	184	150	2.6	2.9
1800	360	200	150	2.8	3.1
1950	390	222	150	3.1	3.3
2100	420	239	150	3.4	3.5
2400	480	270	150	3.9	4.2
2700	540	303	150	4.3	4.6
3000	600	335	150	4.9	5.0

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SUPERCEDES BOONAH - STD.D-0013, BEAUDESERT - 50510, IPSWICH - SD.11

Issue	Amendment	App'd	Date
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Director of Works & Infrastructure

DATE 15 October 2010

Scales

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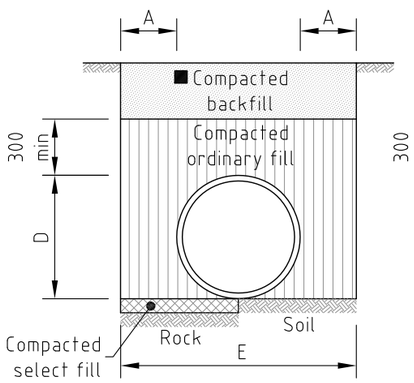
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS DRAINAGE

Drawing: EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE REINFORCED DRAINAGE PIPES

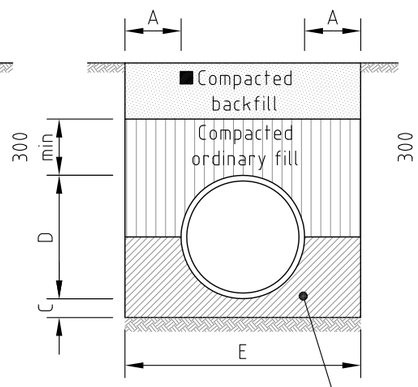
Design File / Drawing No. D-15 | Sheet of | Revision A | A3



FOOTPATHS/PRIVATE PROPERTY/ROADS

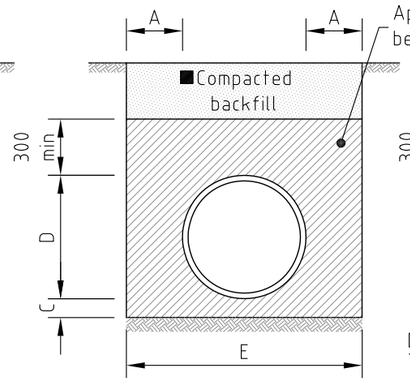
TYPE 1

Conforms to Support Type U (AS3725)



TYPE 2

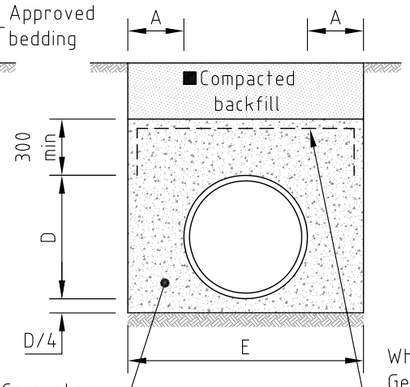
Conforms to Support Type H1 (AS3725)



ROADS

TYPE 3

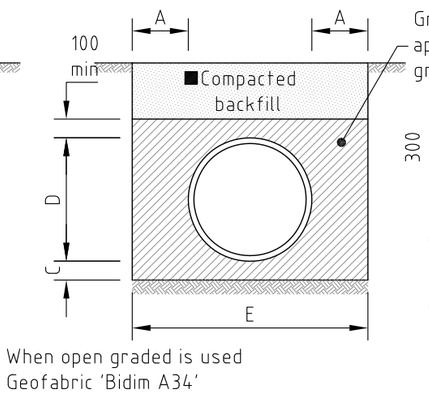
Sand Surround



ROADS

TYPE 4

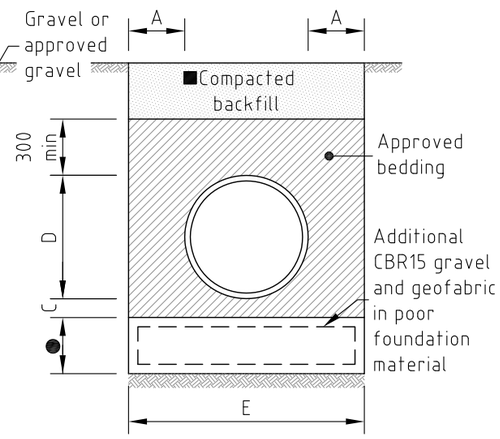
Concrete or Gravel Surround



ROADS

TYPE 5

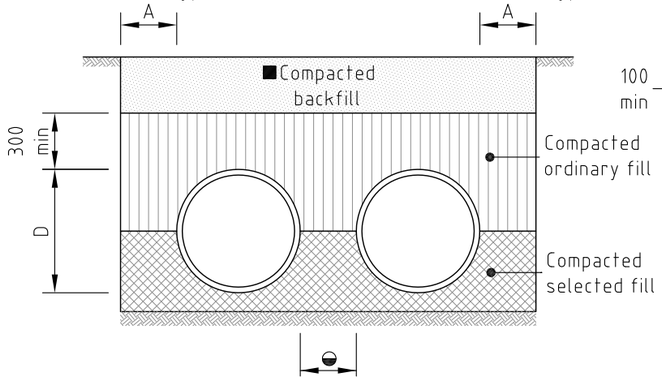
Concrete or Gravel Encasement



FOOTPATH/PRIVATE PROPERTY/ROADS

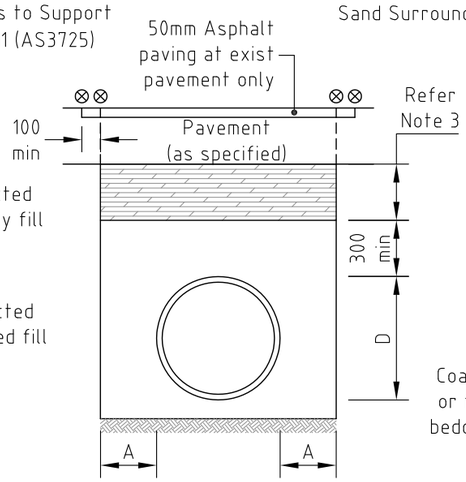
TYPE 6

Bedding in Poor Ground



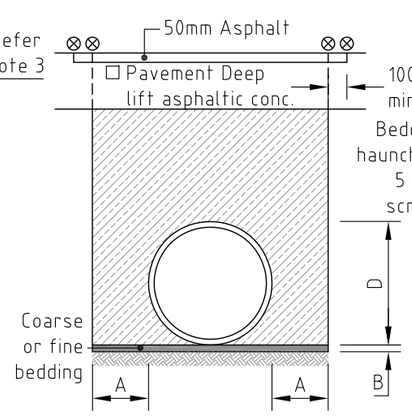
TYPE 7

Conforms to Support Type H1 (AS3725)



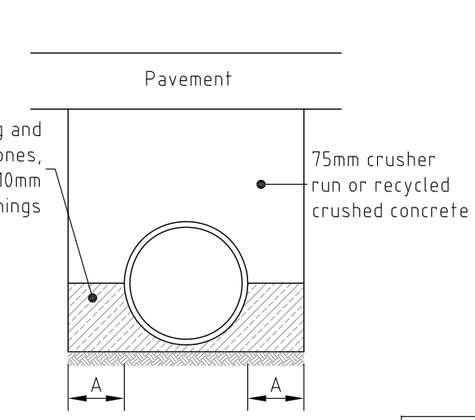
ALTERNATIVE A

At new pavement on residential streets, rural roads and existing sealed pavements



ALTERNATIVE B

At existing surfaced pavement on industrial, truck collector, sub-arterial & arterial streets/roads



ALTERNATIVE C

LEGEND:

- ☐ Pavement. Refer project documentation for detail.
- ⊗ Saw cut at existing pavement.
- ◒ Pipes: 300 when NOMINAL D 600 <
  600 when NOMINAL D 600-1800
  900 when NOMINAL D 1800 >
- ■ Refer Alternative A, B and C for backfill requirements.
- ● Depth to be approved by Council.
- Gravel (MIN CBR15) backfill
- No fines concrete backfill (8 parts 10mm NOM size)

NOTES:

1. Selected backfill in all cases shall be carried through to the wings and continued 300 thick for the length and height of wings.
2. Bedding compaction (compacted selected fill/sand bedding):
   - Cohesive material - 95% standard compaction
   - Non-cohesive material - density index of 70min, refer AS1289.E5.1 (Methods of Testing Soils for Engineering Purposes)
   - Sand - compact by flooding and use of vibrators
3. Backfill compaction:
   - Compacted gravel (300mm) layer under road pavement - 95% standard compaction
   - Compacted ordinary fill/CBR15 Gravel - 90% standard compaction - below 300mm zone
   - Compacted backfill -at footpaths/private property - 90% standard compaction
   - Max densities determined by standard compaction test to AS1289.5.1.1 (Methods of Testing Soils for Engineering Purposes)
4. Refer project drawings for types and/or alternative to be adopted.
5. Type U & Type H1 to conform to AS3725 (Design for Installation of Buried Concrete Pipes).
6. Dimension A can be reduced to 150 min for non mechanical compaction of backfill.
7. Pipe are to be designed to their correct strength class under all construction loads, dead loads and in-service loads.
8. All dimensions in millimeters.

Standards Referenced:
AS3725 - Design for Installation of Buried Concrete Pipes

Bedding & Haunch Material Grading

(gravel, loam, sand or mixture)

AS Sieve Size	% Passing by mass	
	Type 1 Pipes < Ø1200	Type 2 Pipes > Ø1350
19.0	100	98-100
9.5	-	35-50
4.75	-	5-10
2.36	40-100	0-2
0.425	15-70	0-1
0.075	3-30	0-1

NOMINAL Ø culvert D(mm)	MINIMUM width A (mm)	HAUNCH depth B	Bedding depth C	Allowable width E(m)	
				Des	Max
300	300	36	100	1.0	1.1
375	300	45	100	1.1	1.2
450	300	53	100	1.1	1.3
525	300	61	100	1.2	1.5
600	300	69	100	1.3	1.6
750	300	85	100	1.5	1.8
900	300	103	100	1.6	1.9
1050	300	120	100	1.8	2.1
1200	300	135	100	2.0	2.2
1350	300	150	100	2.1	2.4
1500	300	169	100	2.3	2.7
1650	330	184	150	2.6	2.9
1800	360	200	150	2.8	3.1
1950	390	222	150	3.1	3.3
2100	420	239	150	3.4	3.5
2400	480	270	150	3.9	4.2
2700	540	303	150	4.3	4.6
3000	600	335	150	4.9	5.0

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Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 15 October 2010

Scales

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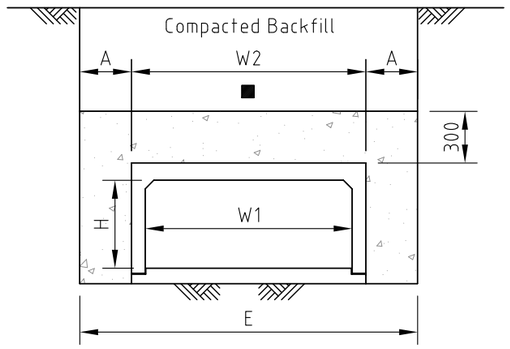
SCENIC RIM Regional Council

Works & Infrastructure Services

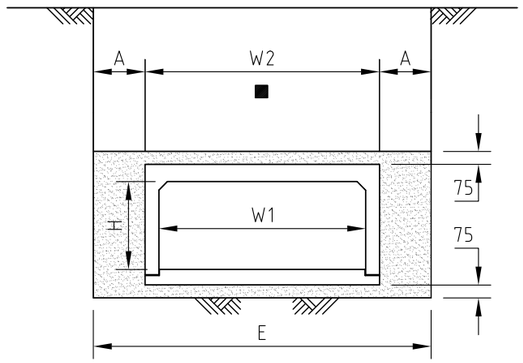
Project: SRRC STANDARD DRAWINGS DRAINAGE

Drawing: EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE REINFORCED DRAINAGE PIPES

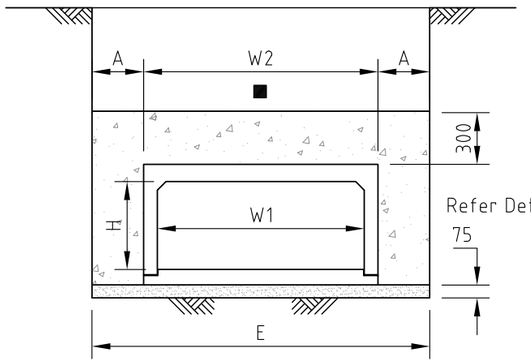
Design File / Drawing No. D-15 | Sheet of | Revision A | A3



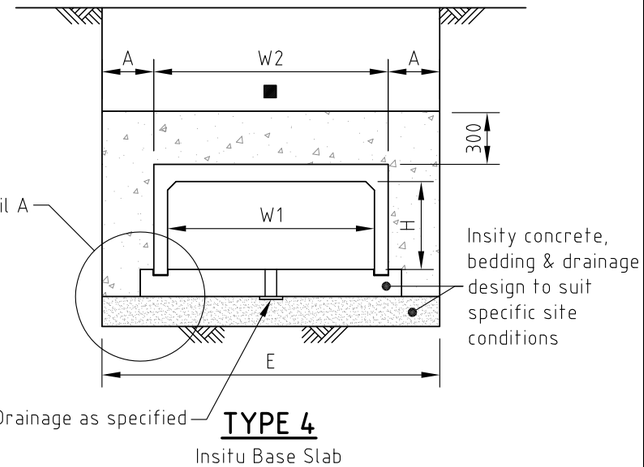
TYPE 1
Natural Bedding



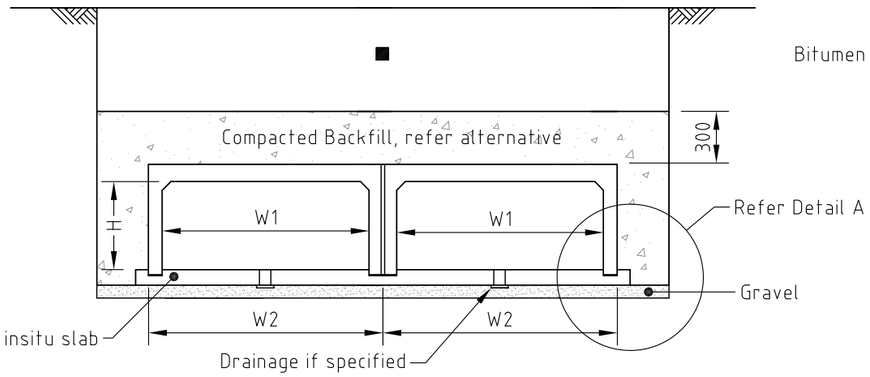
TYPE 2
Sand Surround



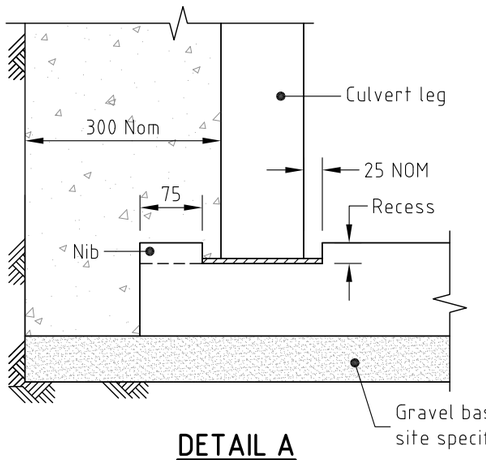
TYPE 3
Sand Bedding



TYPE 4
Insitu Base Slab



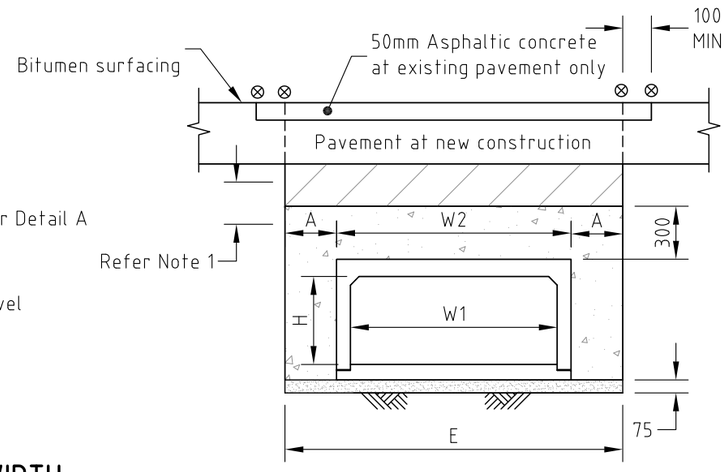
MULTIPLE CULVERTS



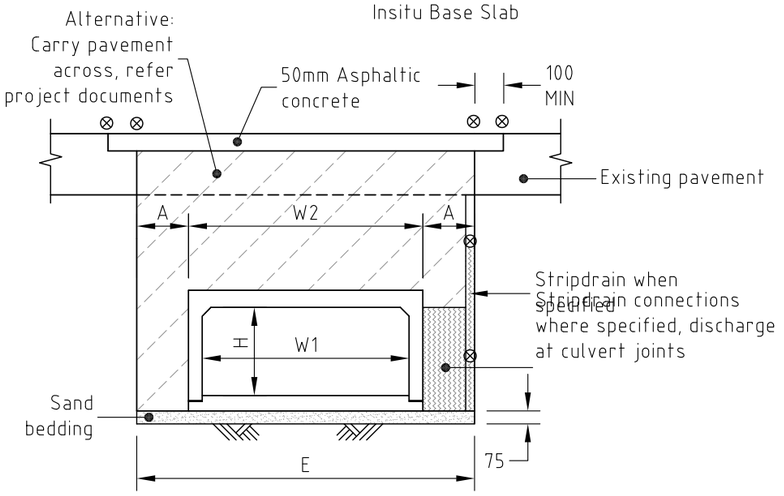
DETAIL A

EXCAVATION WIDTH

W1	W2	E NOM.
300	420	1000
375	500	1100
450	570	1200
600	730	1300
750	890	1500
900	1050	1700
1200	1360	2000
1520	1700	2300
1820	2010	2600
2130	2340	3000
2440	2670	3300



ALTERNATIVE A
At existing surfaced pavements or at new pavements on residential streets & rural roads



ALTERNATIVE B
At existing surfaced pavements on industrial, trunk collector, sub-arterial & arterial streets/roads

LEGEND:

- A — 300mm Nominal
- ■ — Refer Alternative A for backfill requirements at new pavement
- ⊗ — Saw cut at existing pavement
- Gravel (Min CBR15) or 75mm crusher run backfill
- Lean mix concrete backfill (1:15 mix)
- 10mm Cement mortar bed (1:3 mix)

NOTES:

1. Backfill compaction:
   - Approved fill/approved bedding/compacted backfill/CBR15 Gravel 90%
   - Compacted gravel (300mm) layer under road pavement - 95% standard compaction
   - Compacted backfill -at footpaths/private property - 90% standard compaction
   - Max densities determined by standard compaction tests to AS1289.E5.1 (Methods of Testing Soils for Engineering Purposes)
2. Refer to Main Roads Std Dwg 1316 for installation of precast culverts.
3. Tape all joints with 75mm wide Denso (600) Tape or equivalent.
4. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG D-0031
SUPERCEDES BOONAH - STD.D-0014,
BEAUDESERT - 50511, IPSWICH - SD.11

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

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Director of Works & Infrastructure

DATE 15 October 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
DRAINAGE

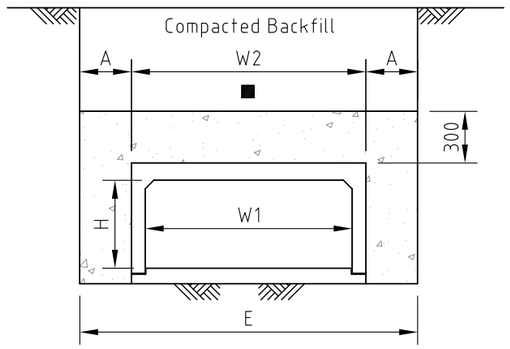
Drawing
EXCAVATION, BEDDING AND BACKFILLING OF PRECAST BOX CULVERTS

Design File
Drawing No. D-16

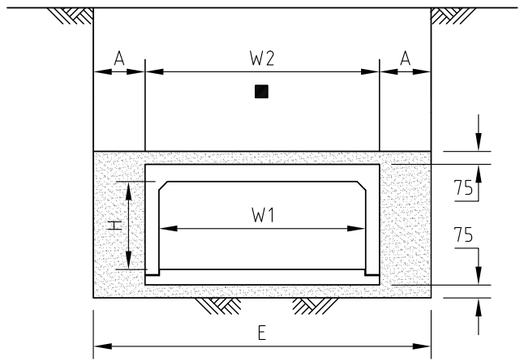
Sheet of

Revision A

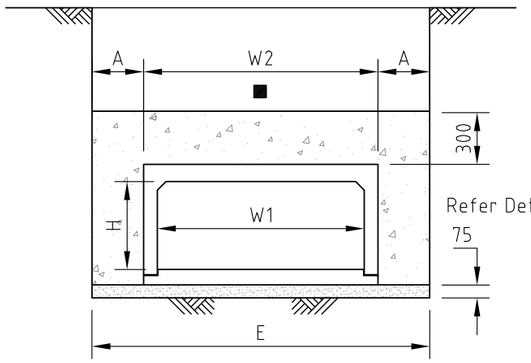
A3



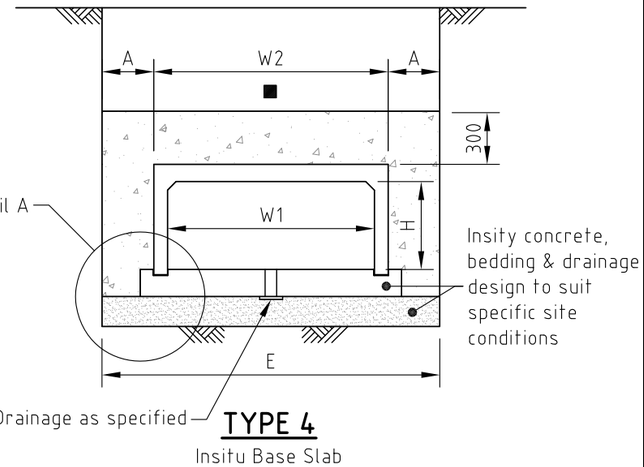
TYPE 1
Natural Bedding



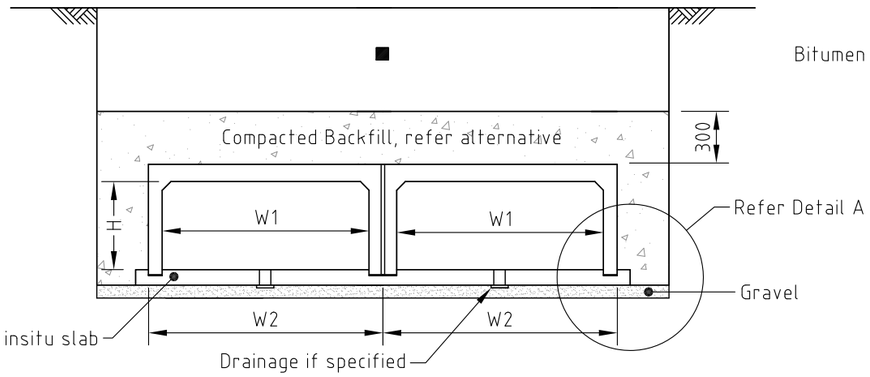
TYPE 2
Sand Surround



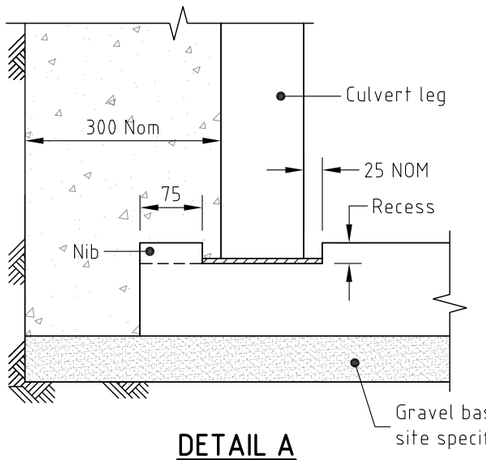
TYPE 3
Sand Bedding



TYPE 4
Insitu Base Slab



MULTIPLE CULVERTS



DETAIL A

EXCAVATION WIDTH

W1	W2	E NOM.
300	420	1000
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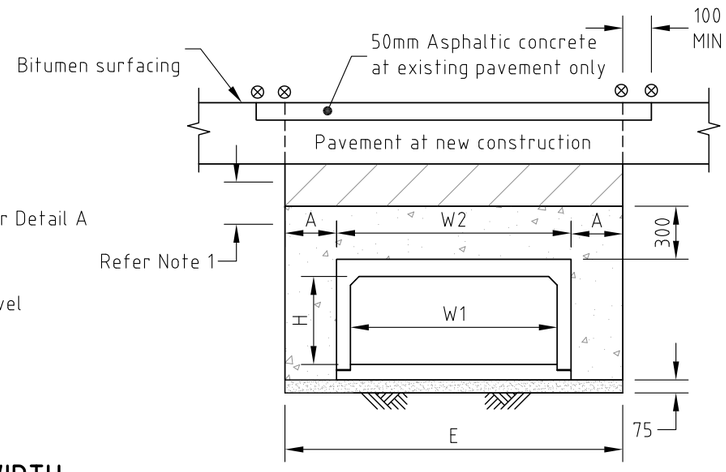
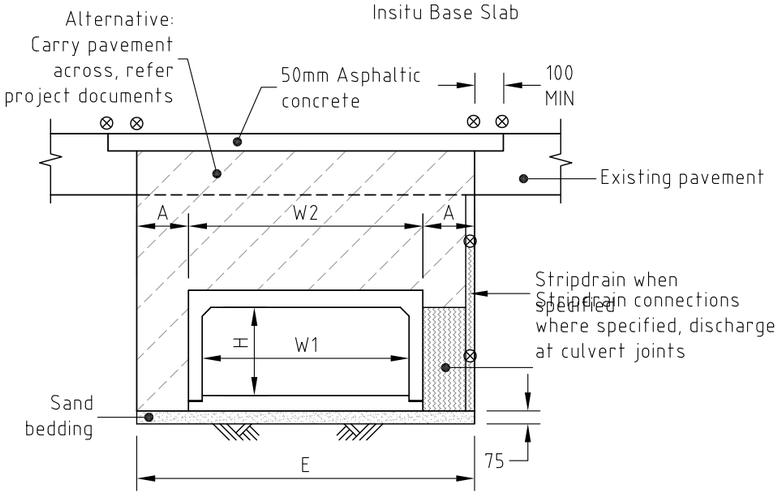
2440	2670	3300



ALTERNATIVE A
At existing surfaced pavements or at new pavements on residential streets & rural roads



ALTERNATIVE B
At existing surfaced pavements on industrial, trunk collector, sub-arterial & arterial streets/roads

LEGEND:

- A — 300mm Nominal
- ■ — Refer Alternative A for backfill requirements at new pavement
- ⊗ — Saw cut at existing pavement
- Gravel (Min CBR15) or 75mm crusher run backfill
- Lean mix concrete backfill (1:15 mix)
- 10mm Cement mortar bed (1:3 mix)

NOTES:

1. Backfill compaction:
   - Approved fill/approved bedding/compacted backfill/CBR15 Gravel 90%
   - Compacted gravel (300mm) layer under road pavement - 95% standard compaction
   - Compacted backfill -at footpaths/private property - 90% standard compaction
   - Max densities determined by standard compaction tests to AS1289.E5.1 (Methods of Testing Soils for Engineering Purposes)
2. Refer to Main Roads Std Dwg 1316 for installation of precast culverts.
3. Tape all joints with 75mm wide Denso (600) Tape or equivalent.
4. All dimensions in millimetres.

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SUPERCEDES BOONAH - STD.D-0014,
BEAUDESERT - 50511, IPSWICH - SD.11

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 15 October 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
DRAINAGE

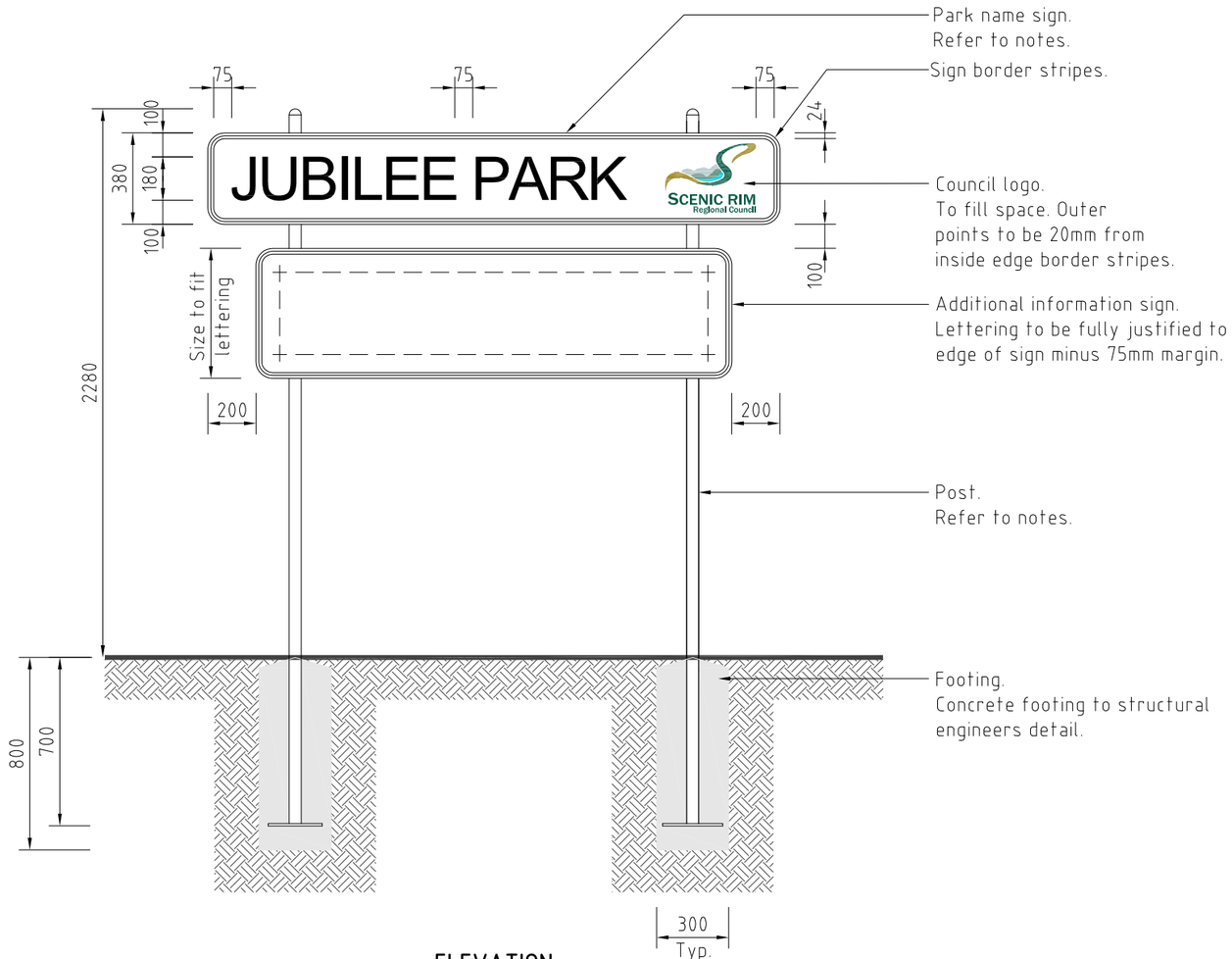
Drawing
EXCAVATION, BEDDING AND BACKFILLING OF PRECAST BOX CULVERTS

Design File
Drawing No. D-16

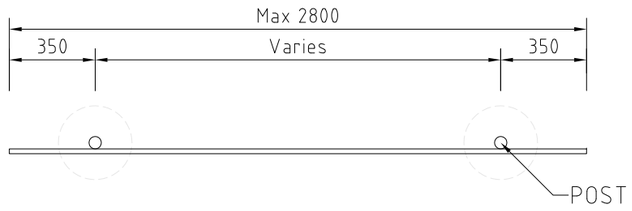
Sheet of

Revision A

A3



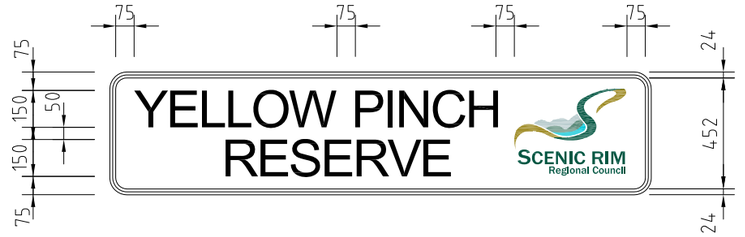
ELEVATION
Scale 1:25



PLAN
Scale 1:25

NOTES:

1. Park names are to be approved by Council. Park signs are to be approved by Council prior to fabrication. Additional subsidiary signs with information are to be in the same specified colours with 50mm lettering.
2. Sign to installed on highest visibility property boundary. Obtain approval from Council for location prior to installation.
3. Overall width: Maximum 2800mm. If overall width using 180mm lettering is greater than 2800mm all dimensions are to be reduced until dimensions are less than 2800mm or lettering wrapped and dimensioned as per E2 size and detail.
4. Lettering: Font 180mm high (30mm thickness), 20mm between letters, 75mm between words. Border Stripes each 12mm wide.
5. Background: Cream - Colorbond Paperbark
6. Letters: Green - Colorbond Cottage Green
7. Border stripe external: Green - Colorbond Cottage Green
8. Border stripe internal - Maroon - Manor Red
9. Logo: Standard colour (refer to SRRC logo guidelines).
10. 50mm NB galvanised pipe 3000mm long with galvanised cap all painted green - Colorbond Cottage Green.



DOUBLE LINE LETTERING
Scale 1:25

SUPERSEDES DRAWING NO. 50801

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council
Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

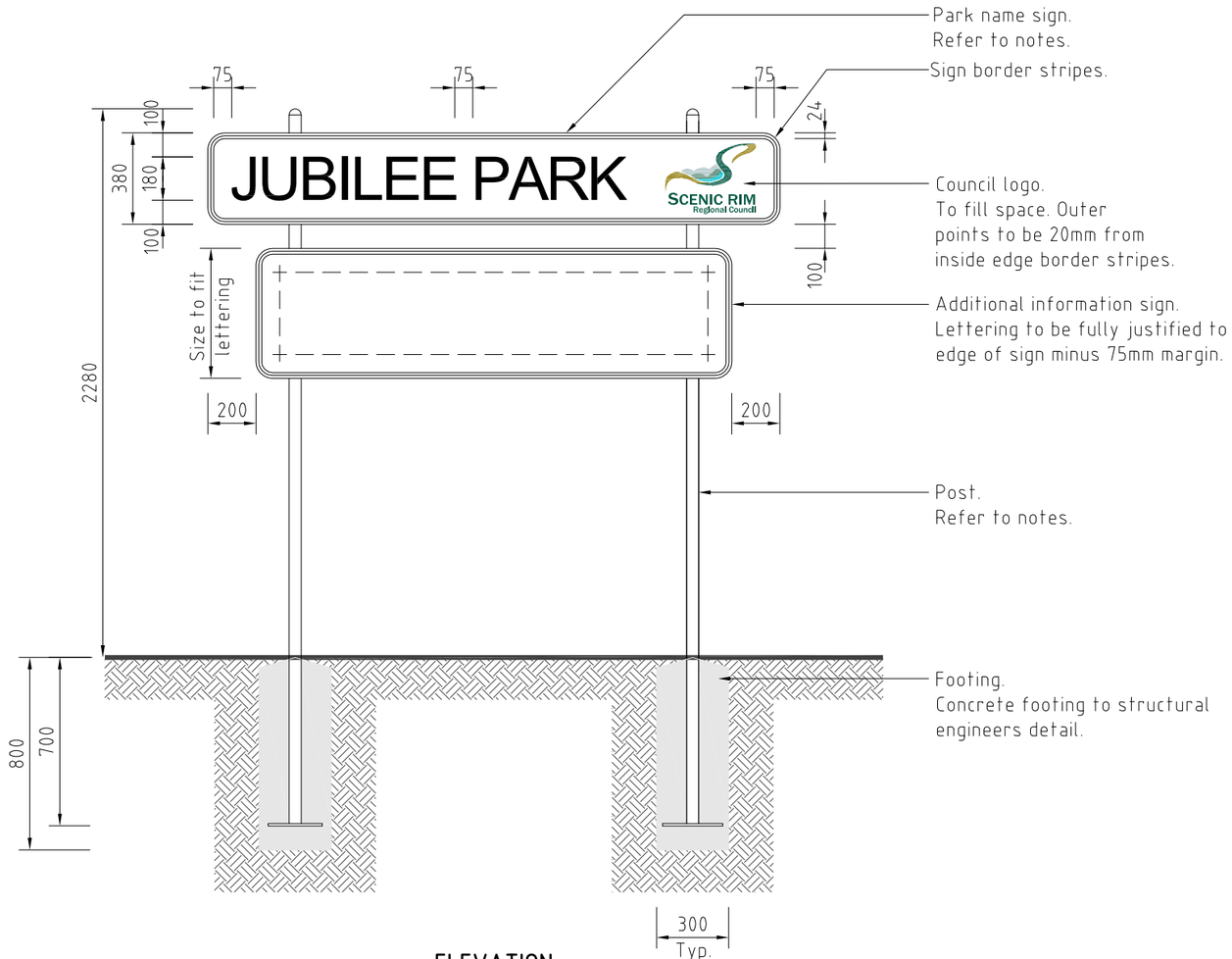
Drawing
PARK NAME SIGN

Design File
Drawing No. P-02

Sheet of

Revision A

A3



ELEVATION
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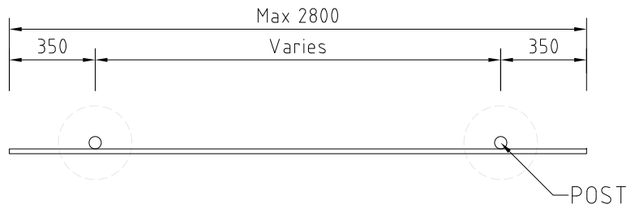
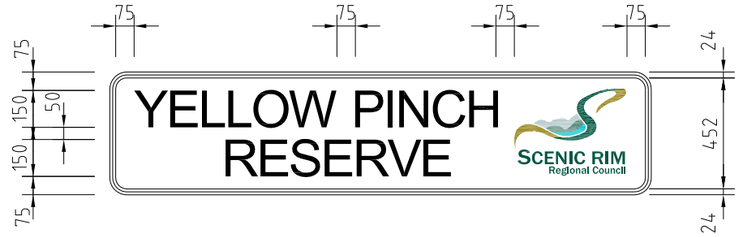


PLAN
Scale 1:25

NOTES:

1. Park names are to be approved by Council. Park signs are to be approved by Council prior to fabrication. Additional subsidiary signs with information are to be in the same specified colours with 50mm lettering.
2. Sign to installed on highest visibility property boundary. Obtain approval from Council for location prior to installation.
3. Overall width: Maximum 2800mm. If overall width using 180mm lettering is greater than 2800mm all dimensions are to be reduced until dimensions are less than 2800mm or lettering wrapped and dimensioned as per E2 size and detail.
4. Lettering: Font 180mm high (30mm thickness), 20mm between letters, 75mm between words. Border Stripes each 12mm wide.
5. Background: Cream - Colorbond Paperbark
6. Letters: Green - Colorbond Cottage Green
7. Border stripe external: Green - Colorbond Cottage Green
8. Border stripe internal - Maroon - Manor Red
9. Logo: Standard colour (refer to SRRC logo guidelines).
10. 50mm NB galvanised pipe 3000mm long with galvanised cap all painted green - Colorbond Cottage Green.



DOUBLE LINE LETTERING
Scale 1:25

SUPERSEDES DRAWING NO. 50801

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

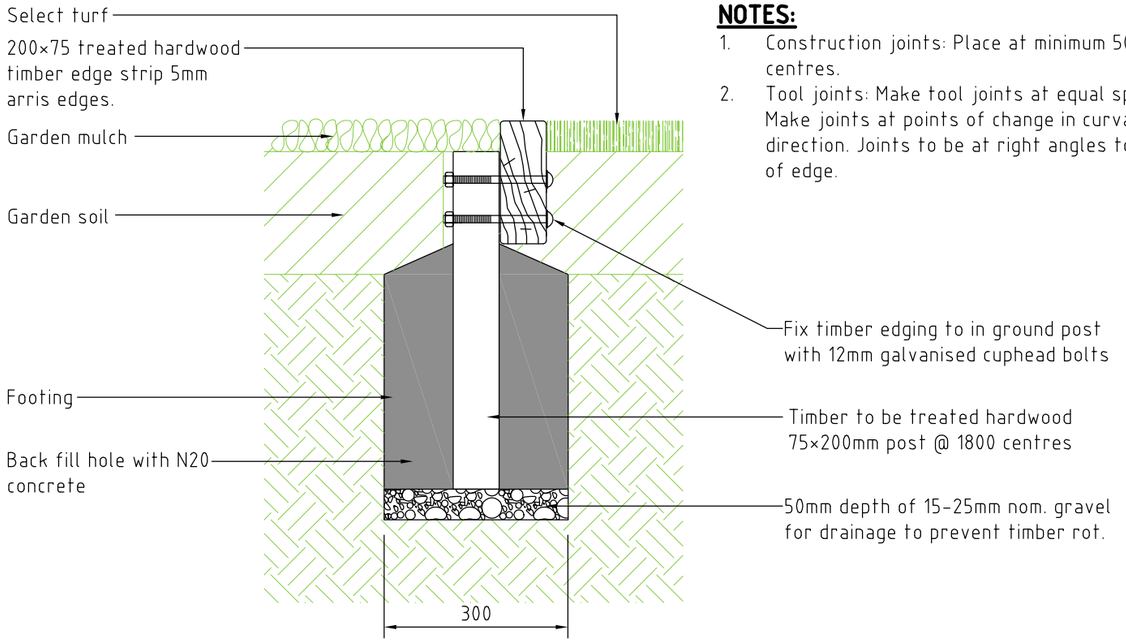
Drawing
PARK NAME SIGN

Design File
Drawing No. P-02

Sheet of

Revision A

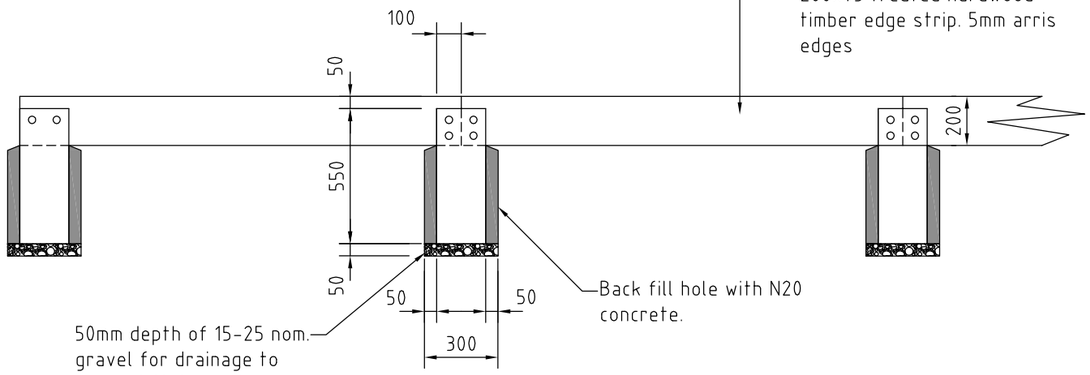
A3



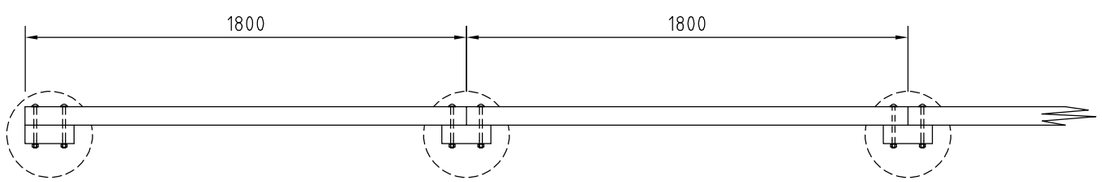
NOTES:

1. Construction joints: Place at minimum 5000mm centres.
2. Tool joints: Make tool joints at equal spacing. Make joints at points of change in curvature or direction. Joints to be at right angles to direction of edge.

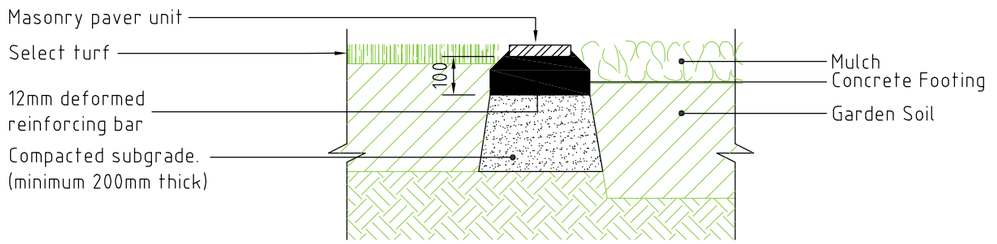
TIMBER SLEEPER EDGE
Scale 1:10



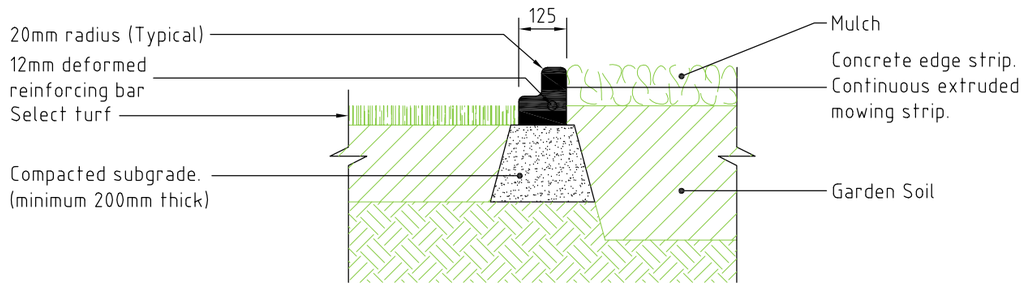
TIMBER SLEEPER EDGE ELEVATION
Scale 1:25



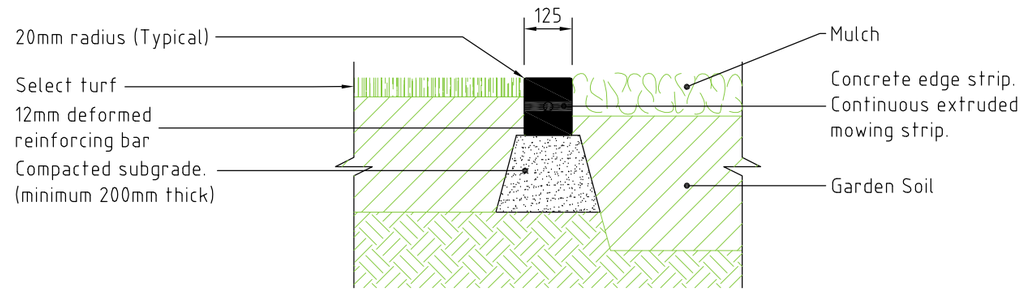
TIMBER SLEEPER EDGE PLAN
Scale 1:25



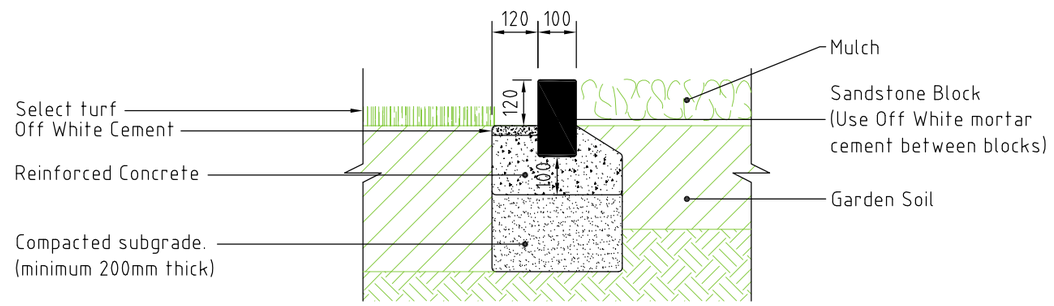
PAVING EDGE
Scale NTS



CONCRETE EDGE TYPE 1
Scale NTS



CONCRETE EDGE TYPE 2
Scale NTS



SANDSTONE EDGE
Scale NTS

SUPERSEDES DRAWING NO. 50802

Issue	Amendment	App'd	Date
B	ADDITION OF SANDSTONE EDGE DETAIL	PM	03/2013
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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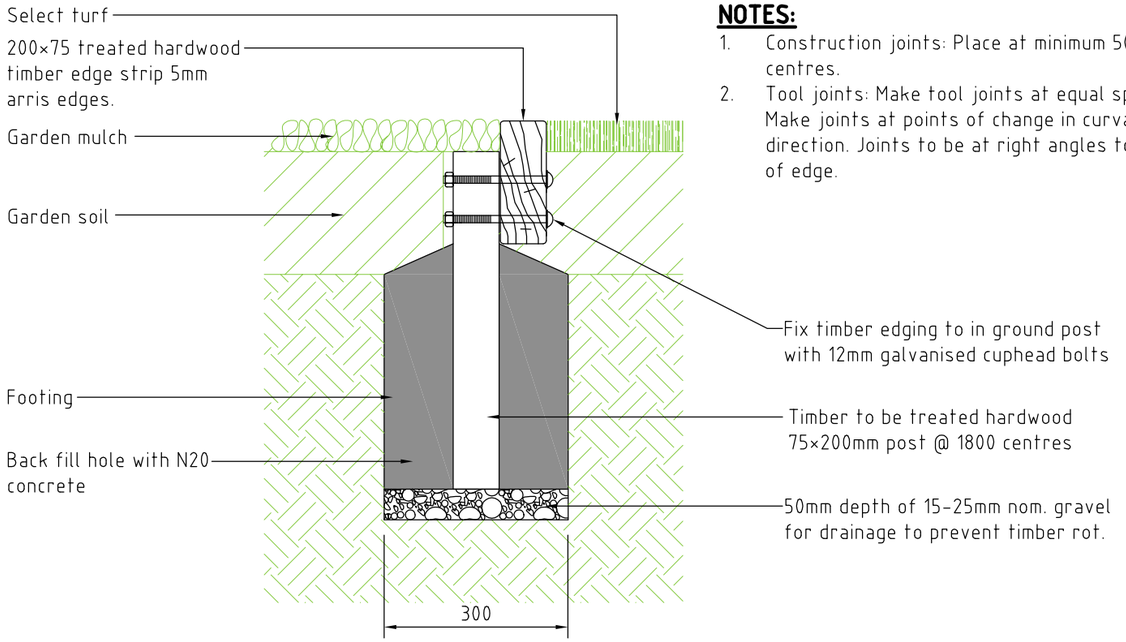
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: GARDEN BED EDGES

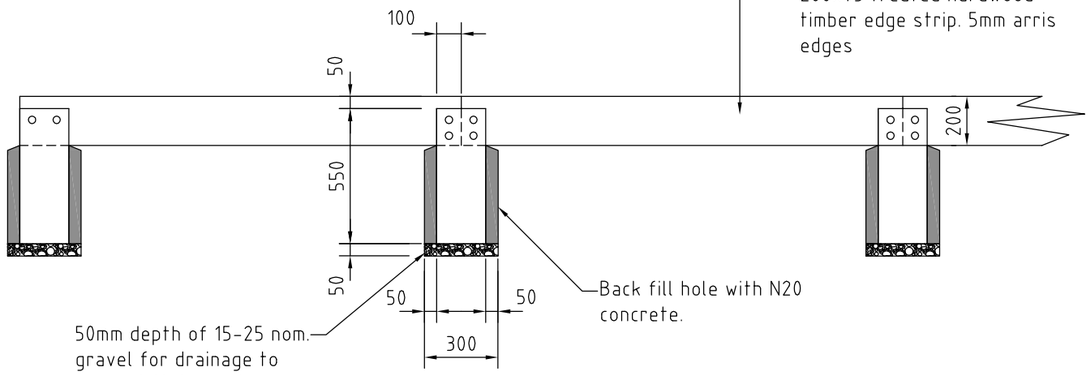
Design File / Drawing No. P-03 | Sheet of | Revision B | A3



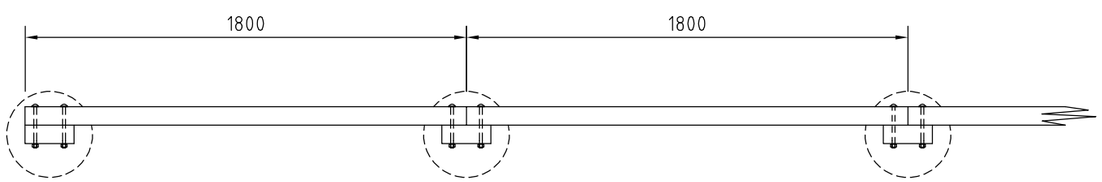
NOTES:

1. Construction joints: Place at minimum 5000mm centres.
2. Tool joints: Make tool joints at equal spacing. Make joints at points of change in curvature or direction. Joints to be at right angles to direction of edge.

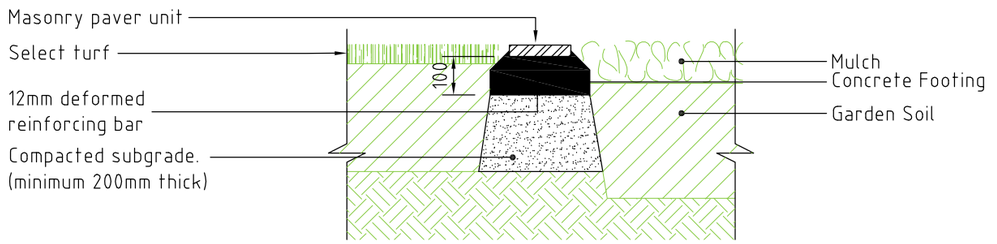
TIMBER SLEEPER EDGE
Scale 1:10



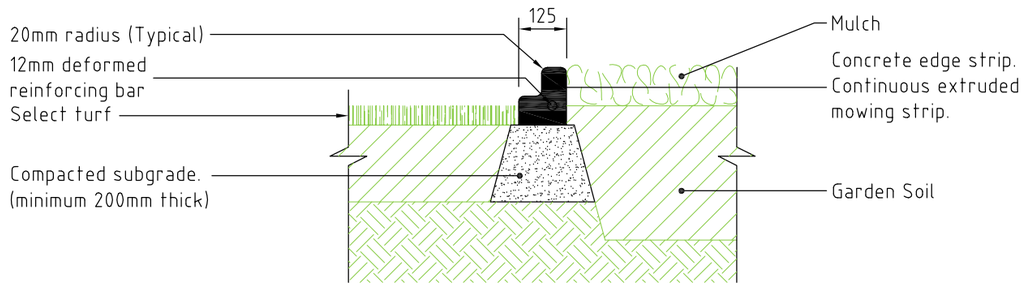
TIMBER SLEEPER EDGE ELEVATION
Scale 1:25



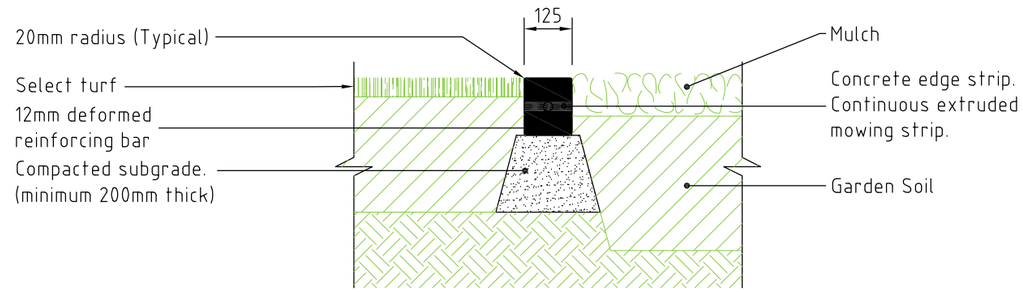
TIMBER SLEEPER EDGE PLAN
Scale 1:25



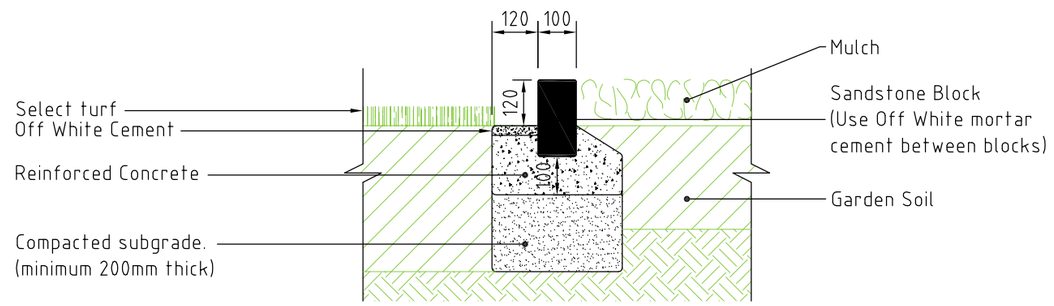
PAVING EDGE
Scale NTS



CONCRETE EDGE TYPE 1
Scale NTS



CONCRETE EDGE TYPE 2
Scale NTS



SANDSTONE EDGE
Scale NTS

SUPERSEDES DRAWING NO. 50802

Issue	Amendment	App'd	Date
B	ADDITION OF SANDSTONE EDGE DETAIL	PM	03/2013
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

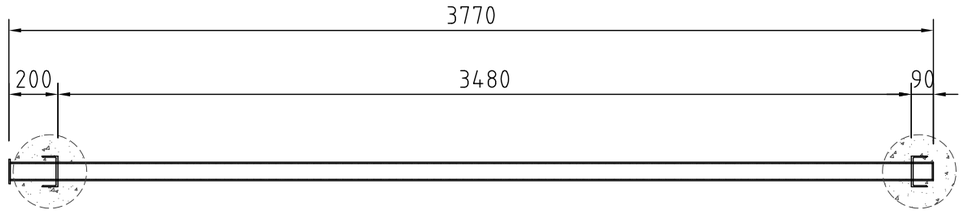
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: GARDEN BED EDGES

Design File / Drawing No. P-03 | Sheet of | Revision B | A3

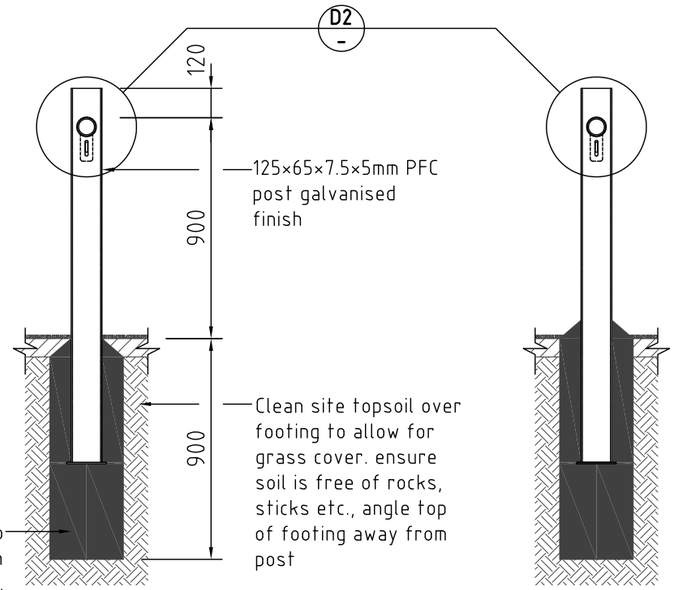


PLAN
Scale 1:25

NOTES:

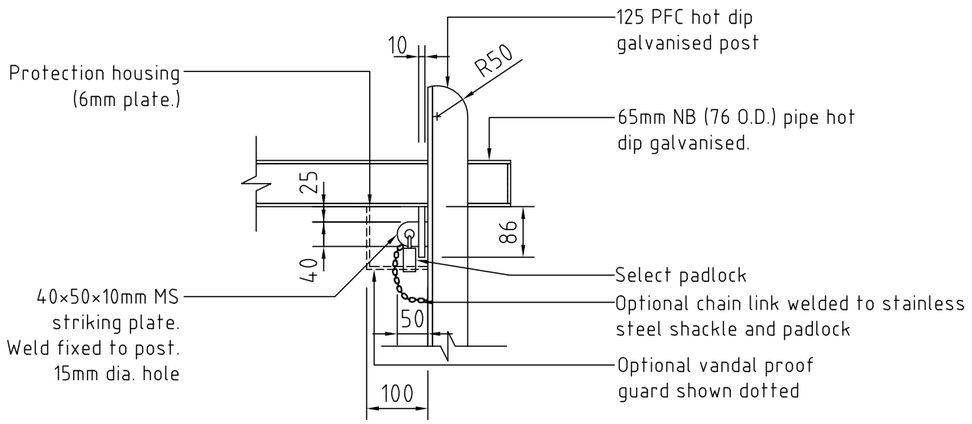
1. Entire fabrication to be mild steel hot-dipped galvanized to Australian Standards.
2. Metal work within footings to be coal tar epoxy.
3. Ensure all welds are continuous fillet welds.
4. Arris all leading edges.
5. Ensure all welding slack and barbs are removed prior to galvanizing and applied finishes.
6. Ensure lock rails are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
7. Padlocks as per SRRC standards. All fixings to be tamper/vandal proof to minimize damage or theft.
8. Scenic Rim Regional Council to supply lock for installation contact council for detail.
9. Position lock rails away from main pedestrian areas.
10. Ensure that maintenance vehicles can access the lock rail via the street or roads areas within the park.
11. Provide a setback or queuing area and form driveway between the lock rail and street. (Incorporate driveway invert where required)

ELEVATION
Scale 1:25



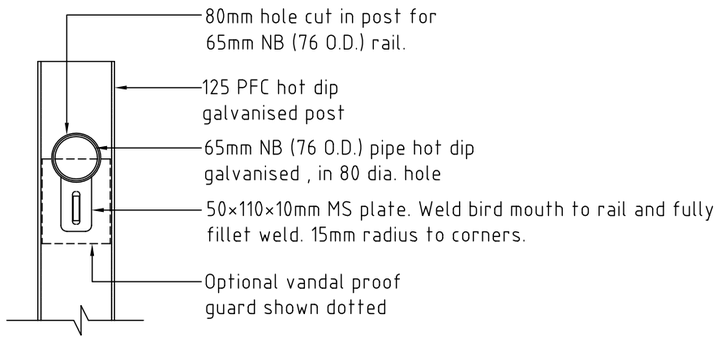
END ELEVATION
Scale 1:25

END ELEVATION
(Alternative detail for wet areas & community centres)



LOCK SIDE VIEW
SCALE 1:10

D1
-



LOCK END VIEW
SCALE 1:10

D2
-

SUPERSEDES DRAWING NO. 50803

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

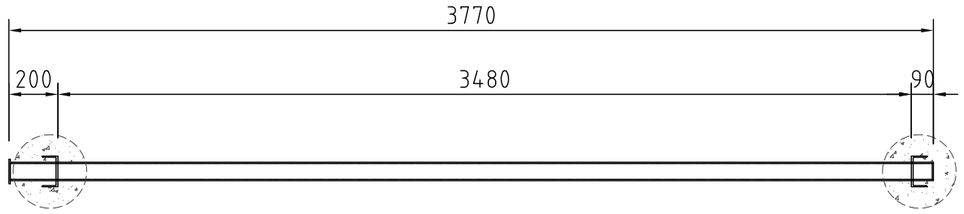
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: LOCK RAIL WITH STEEL POST

Design File / Drawing No. P-04 | Sheet of | Revision A | A3

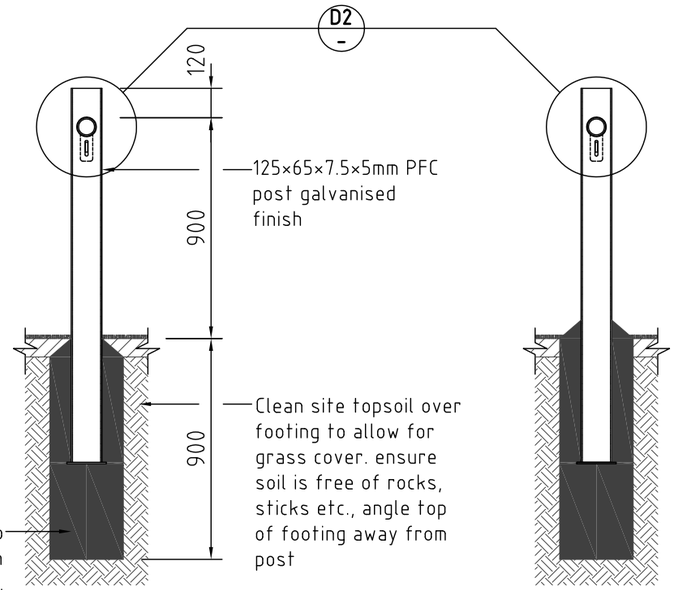


PLAN
Scale 1:25

NOTES:

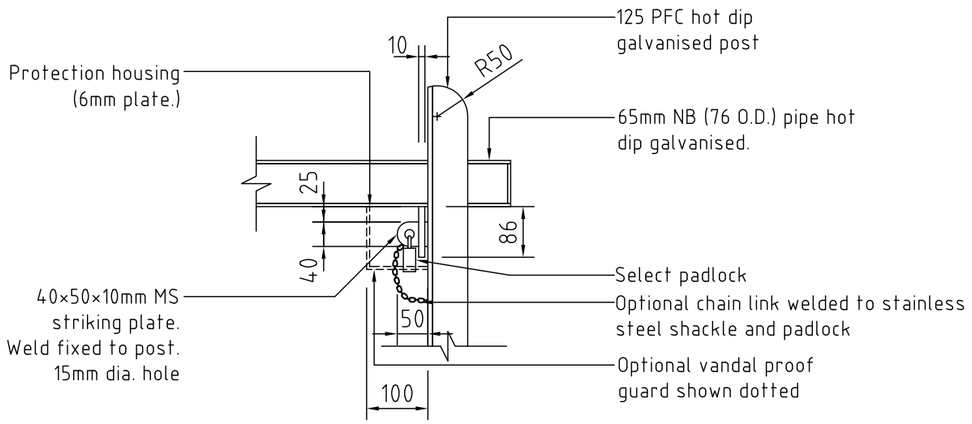
1. Entire fabrication to be mild steel hot-dipped galvanized to Australian Standards.
2. Metal work within footings to be coal tar epoxy.
3. Ensure all welds are continuous fillet welds.
4. Arris all leading edges.
5. Ensure all welding slack and barbs are removed prior to galvanizing and applied finishes.
6. Ensure lock rails are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
7. Padlocks as per SRRC standards. All fixings to be tamper/vandal proof to minimize damage or theft.
8. Scenic Rim Regional Council to supply lock for installation contact council for detail.
9. Position lock rails away from main pedestrian areas.
10. Ensure that maintenance vehicles can access the lock rail via the street or roads areas within the park.
11. Provide a setback or queuing area and form driveway between the lock rail and street. (Incorporate driveway invert where required)

ELEVATION
Scale 1:25



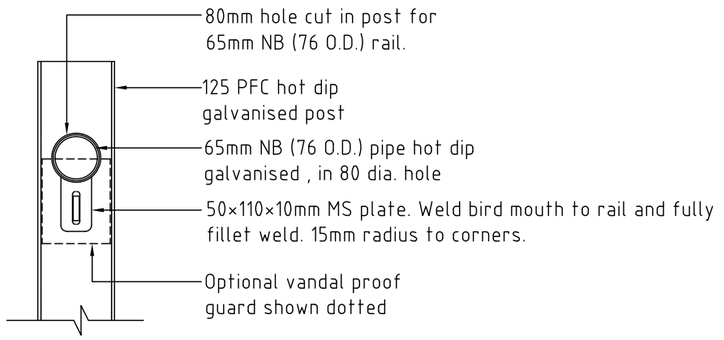
END ELEVATION
Scale 1:25

END ELEVATION
(Alternative detail for wet areas & community centres)



LOCK SIDE VIEW
SCALE 1:10

D1
-



LOCK END VIEW
SCALE 1:10

D2
-

SUPERSEDES DRAWING NO. 50803

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

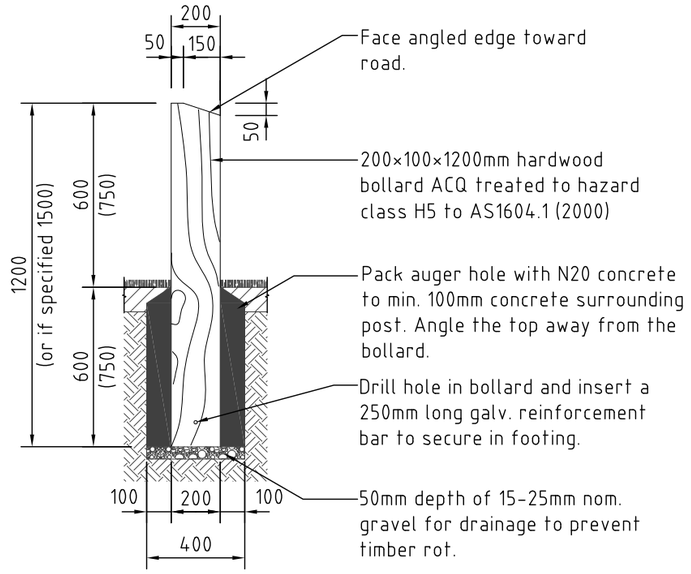
SCENIC RIM Regional Council

Works & Infrastructure Services

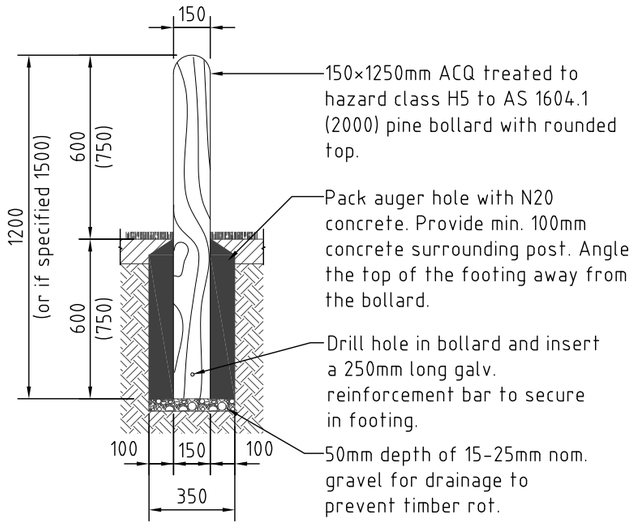
Project: SRRC STANDARD DRAWINGS PARKS

Drawing: LOCK RAIL WITH STEEL POST

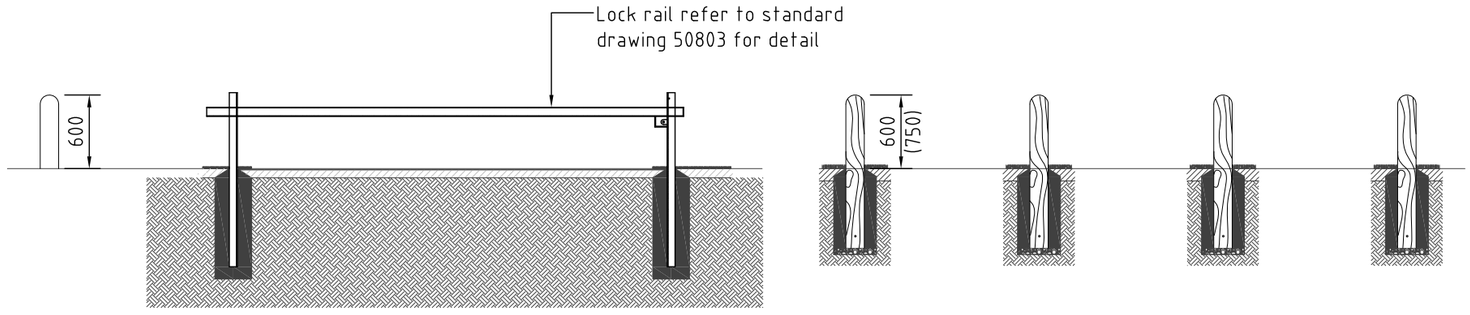
Design File / Drawing No. P-04 | Sheet of | Revision A | A3



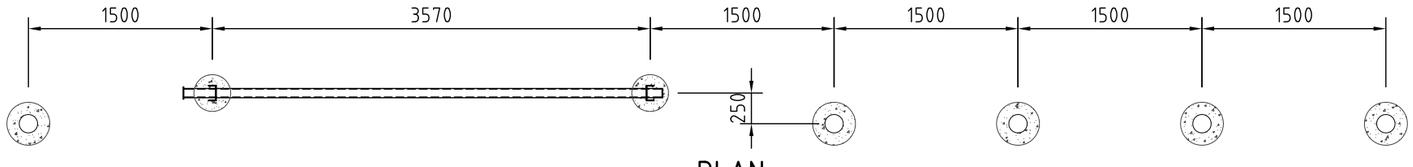
ANGLE TOP BOLLARD
Scale 1:25



DOME TOP BOLLARD
Scale 1:25



ELEVATION
Scale 1:50



PLAN
Scale 1:50

NOTES:

1. Concrete slurry/powder is to be cleaned from the base of the bollards so that no concrete is visible on the post above ground level.
2. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the bollards. It is to be installed as specified on SRRC P-04.
3. 'Alkina' lock rails can be ordered with optional anti vandal box around lock and a pre drilled hole to attach chain welded to lock.
4. Where there is existing bollards install fence to match height of existing bollards.
5. All fences to be square and true to line. Unless otherwise specified bollards should follow the slope of the land, without frequent dips and bumps.
6. Fence to be located on park boundary, or set back 500mm from edge of internal road, or as shown on plan.
7. Timber for hardwood bollard to be treated rough sawn appearance grade hardwood of one species.
8. All exposed edges on angled top bollard to recline min. 5mm wide arris.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used).
11. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50804

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

Scenic Rim Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

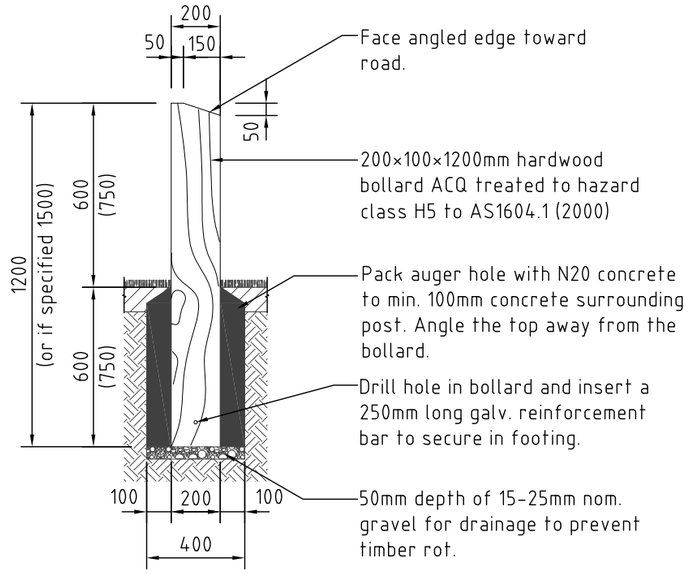
Drawing
ROUND TOP AND ANGLE TOP BOLLARD

Design File
Drawing No. P-05

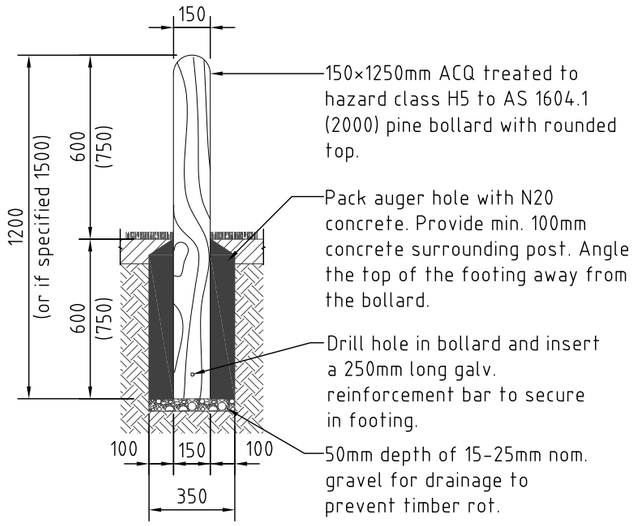
Sheet of

Revision A

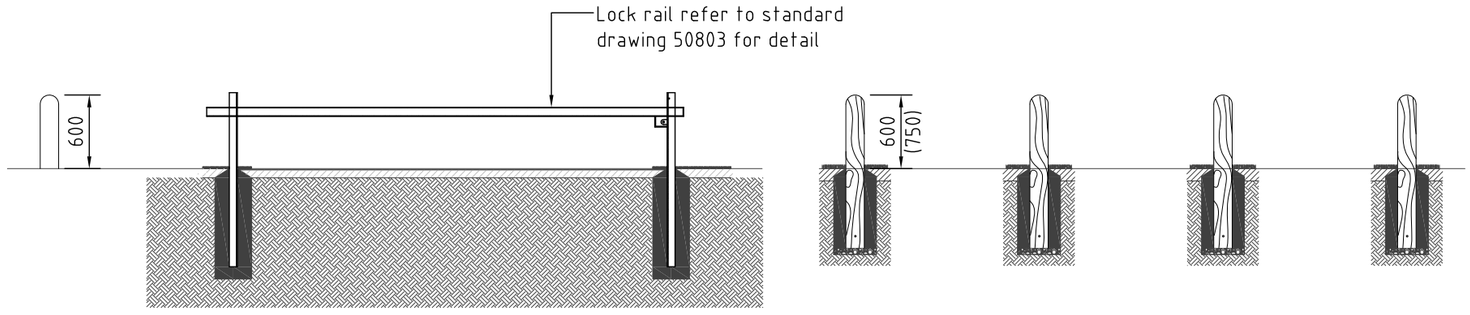
A3



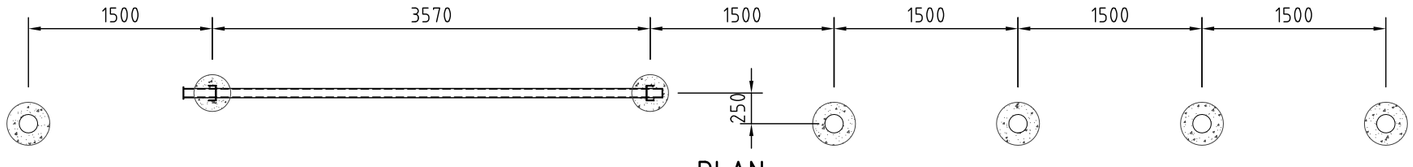
ANGLE TOP BOLLARD
Scale 1:25



DOME TOP BOLLARD
Scale 1:25



ELEVATION
Scale 1:50



PLAN
Scale 1:50

NOTES:

1. Concrete slurry/powder is to be cleaned from the base of the bollards so that no concrete is visible on the post above ground level.
2. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the bollards. It is to be installed as specified on SRRC P-04.
3. 'Alkina' lock rails can be ordered with optional anti vandal box around lock and a pre drilled hole to attach chain welded to lock.
4. Where there is existing bollards install fence to match height of existing bollards.
5. All fences to be square and true to line. Unless otherwise specified bollards should follow the slope of the land, without frequent dips and bumps.
6. Fence to be located on park boundary, or set back 500mm from edge of internal road, or as shown on plan.
7. Timber for hardwood bollard to be treated rough sawn appearance grade hardwood of one species.
8. All exposed edges on angled top bollard to recline min. 5mm wide arris.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used).
11. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50804

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

Scenic Rim Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

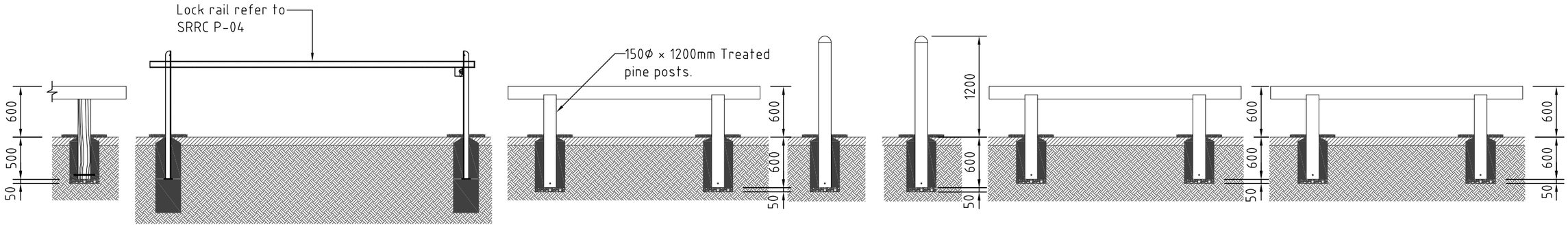
Drawing
ROUND TOP AND ANGLE TOP BOLLARD

Design File
Drawing No. P-05

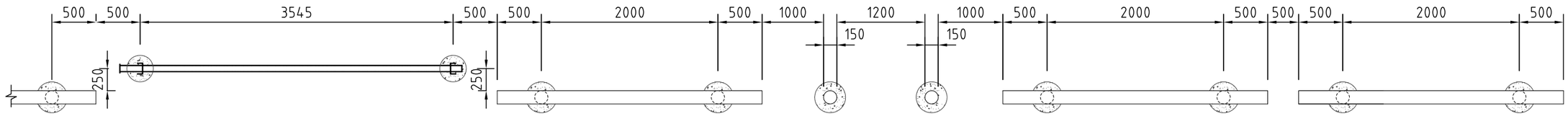
Sheet of

Revision A

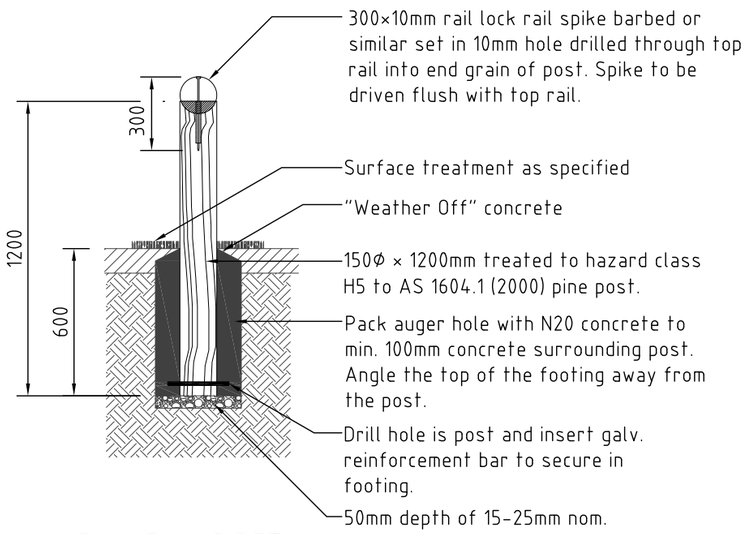
A3



ELEVATION
Scale 1:50



PLAN
Scale 1:50



RAIL FIXING DETAIL
Scale 1:50

NOTES:

1. This design of fence is to be used only where similar fencing is already in existence.
2. Concrete slurry/powder is to be cleaned from the base of the posts so that no concrete is visible on the post above ground level.
3. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the fence. it is to be installed as specified on SRRC P-04.
4. Lock rails can be ordered with optional anti vandal box around lock and a pre drilled hole to attach chain welded to lock.
5. Where there is existing fence install to match height of existing fence.
6. All fences to be square and true to line. Unless otherwise specified fence should follow the slope of the land, without frequent dips and bumps.
7. Fence to be located on park boundary, or set back 500mm from edge of internal road, or as shown on plan.
8. Timber for fence posts to be treated pine.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003
11. (CCA treatment not to be used)
12. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50805

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

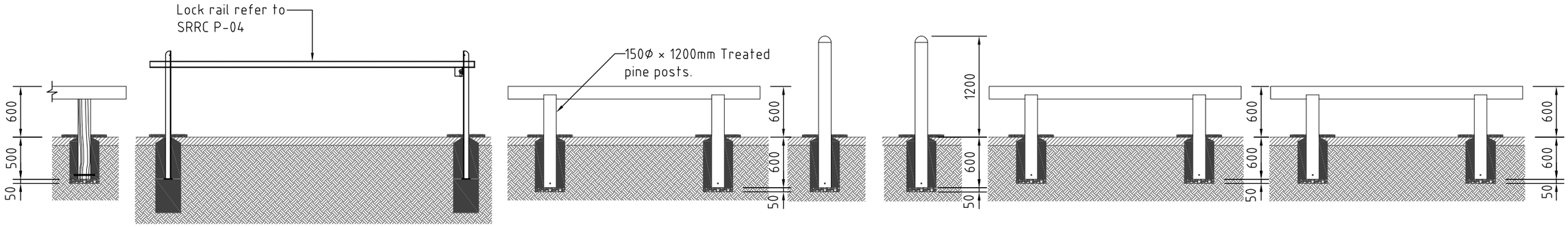
Drawing
LOG BARRIER FENCE

Design File
Drawing No. P-06

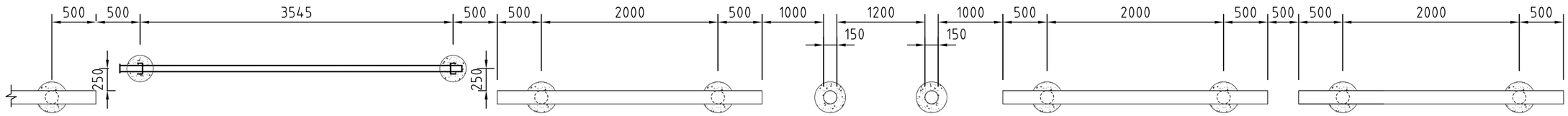
Sheet of

Revision A

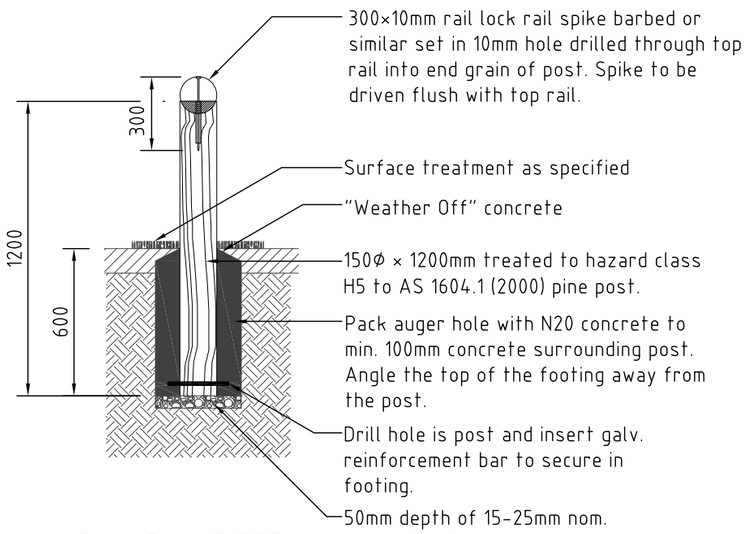
A3



ELEVATION
Scale 1:50



PLAN
Scale 1:50



RAIL FIXING DETAIL
Scale 1:50

NOTES:

1. This design of fence is to be used only where similar fencing is already in existence.
2. Concrete slurry/powder is to be cleaned from the base of the posts so that no concrete is visible on the post above ground level.
3. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the fence. it is to be installed as specified on SRRC P-04.
4. Lock rails can be ordered with optional anti vandal box around lock and a pre drilled hole to attach chain welded to lock.
5. Where there is existing fence install to match height of existing fence.
6. All fences to be square and true to line. Unless otherwise specified fence should follow the slope of the land, without frequent dips and bumps.
7. Fence to be located on park boundary, or set back 500mm from edge of internal road, or as shown on plan.
8. Timber for fence posts to be treated pine.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003
11. (CCA treatment not to be used)
12. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50805

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

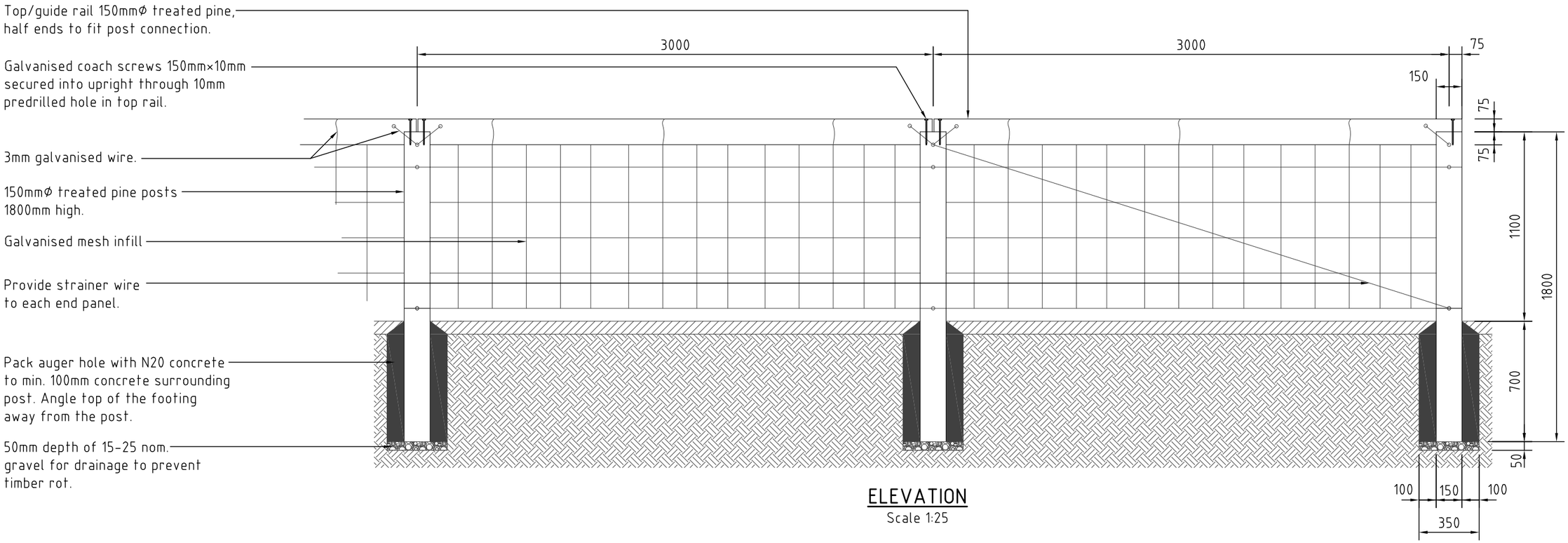
Drawing
LOG BARRIER FENCE

Design File
Drawing No. P-06

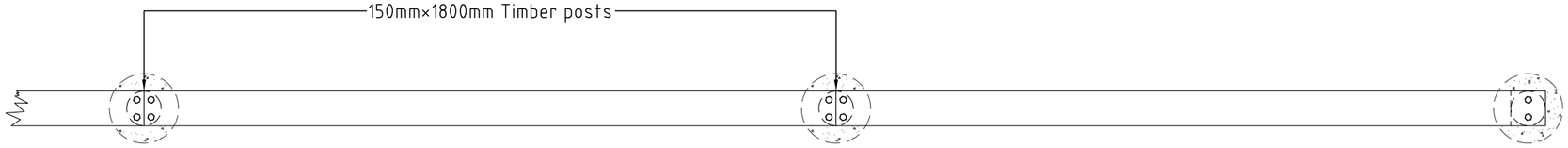
Sheet of

Revision A

A3



ELEVATION
Scale 1:25



PLAN
Scale 1:25

NOTES:

1. This style of fence to be only used where it is required to restrict access to a park or reserve.
2. Concrete slurry/powder is to be cleaned from the base of the bollards so that no concrete is visible on the post above ground level.
3. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the fence. It is to be installed as specified on SRRC P-04.
4. Where there is existing fence install to match height of existing fence.
5. All fences to be square and true to line. Unless otherwise specified fence should follow the slope of the land, without frequent dips and bumps.
6. Access gate to be heavy duty "farm style" gate of similar height to above ground portion of fence.
7. Incorporate personal gate refer to SRRC P-10 or turnstile refer to SRRC P-11 and horse step over refer to SRRC P-09.
8. Timber posts to be treated pine.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
11. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50806

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

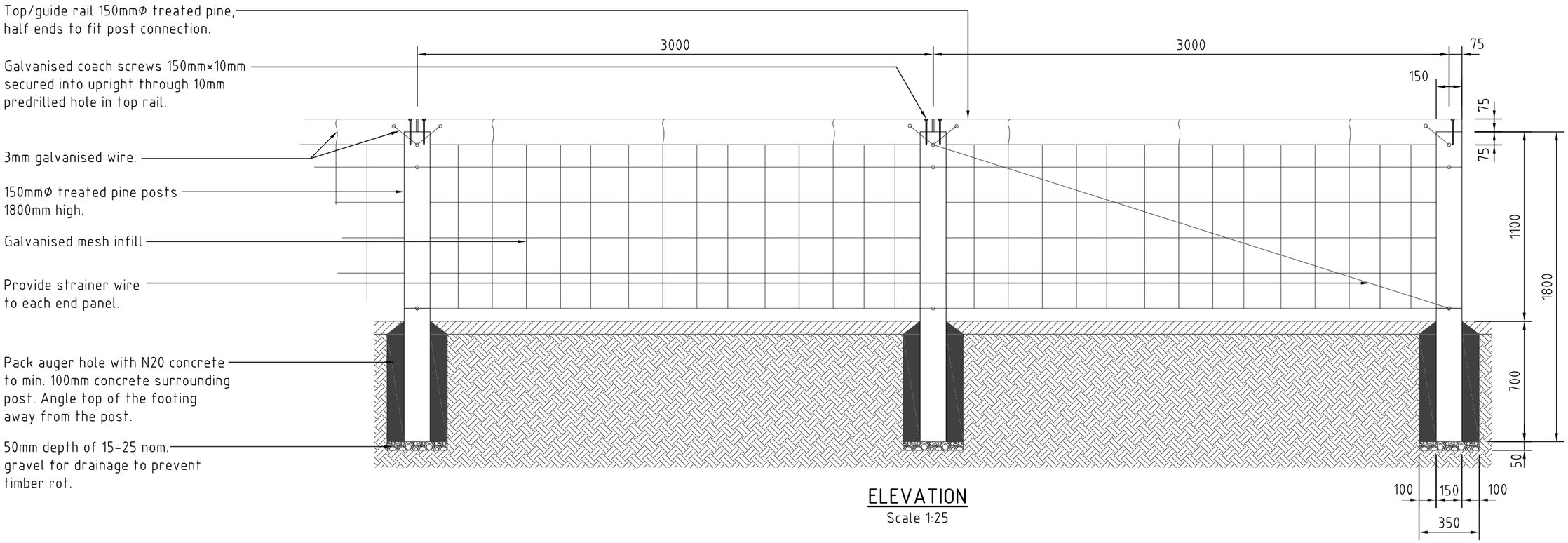
Drawing
TIMBER AND MESH FENCE

Design File
Drawing No. P-07

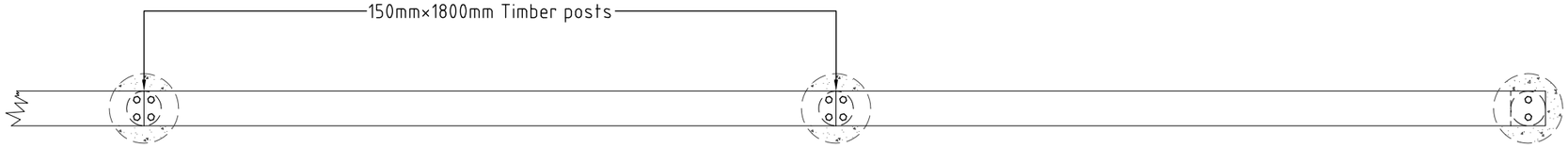
Sheet of

Revision A

A3



ELEVATION
Scale 1:25



PLAN
Scale 1:25

NOTES:

1. This style of fence to be only used where it is required to restrict access to a park or reserve.
2. Concrete slurry/powder is to be cleaned from the base of the bollards so that no concrete is visible on the post above ground level.
3. When installing lock rail it is to be set back into park from the central longitudinal axis of the fence line by 250mm to prevent lock rail from crashing on top of the fence. It is to be installed as specified on SRRC P-04.
4. Where there is existing fence install to match height of existing fence.
5. All fences to be square and true to line. Unless otherwise specified fence should follow the slope of the land, without frequent dips and bumps.
6. Access gate to be heavy duty "farm style" gate of similar height to above ground portion of fence.
7. Incorporate personal gate refer to SRRC P-10 or turnstile refer to SRRC P-11 and horse step over refer to SRRC P-09.
8. Timber posts to be treated pine.
9. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
10. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
11. All timber to be free of knots, splinters, cracks or any major defect.

SUPERSEDES DRAWING NO. 50806

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

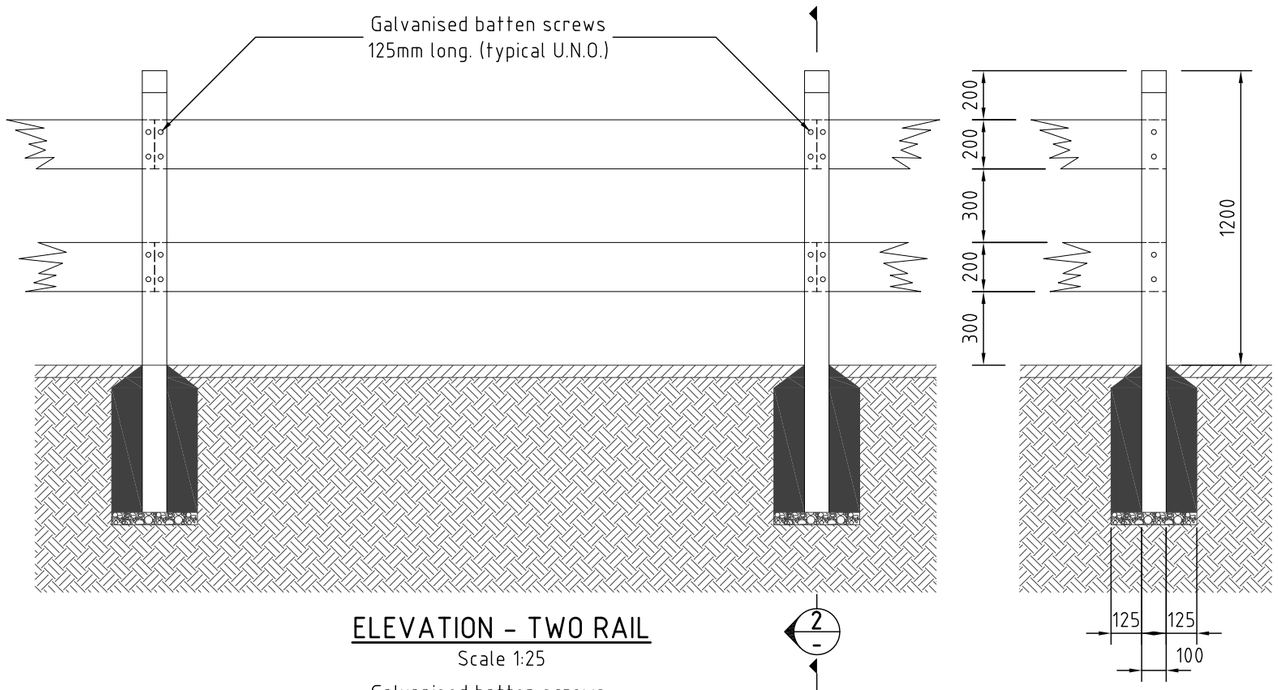
Drawing
TIMBER AND MESH FENCE

Design File
Drawing No. P-07

Sheet of

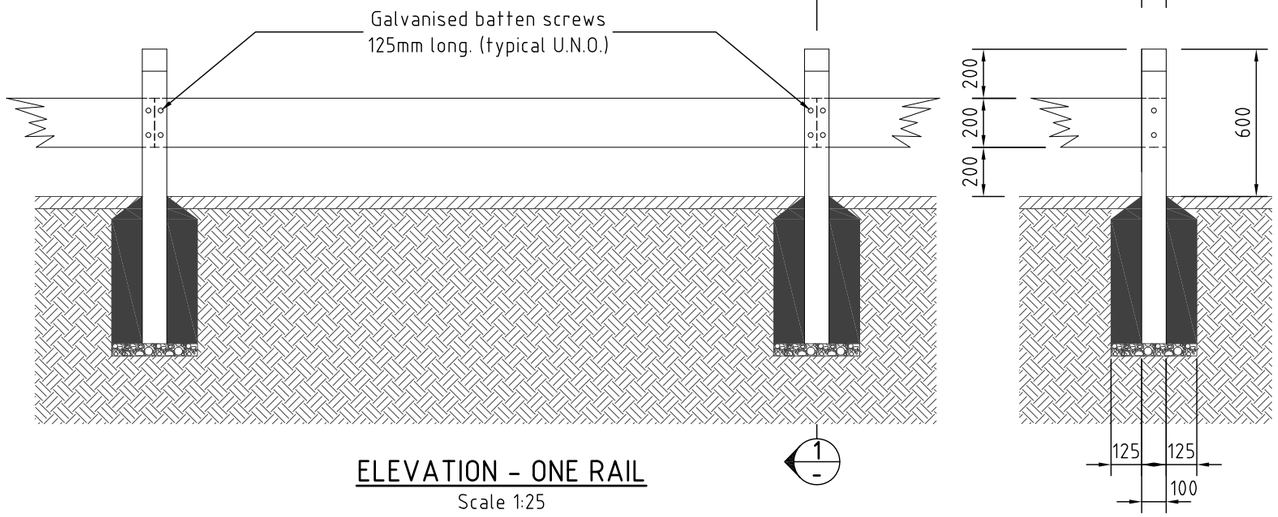
Revision A

A3



ELEVATION - TWO RAIL

Scale 1:25



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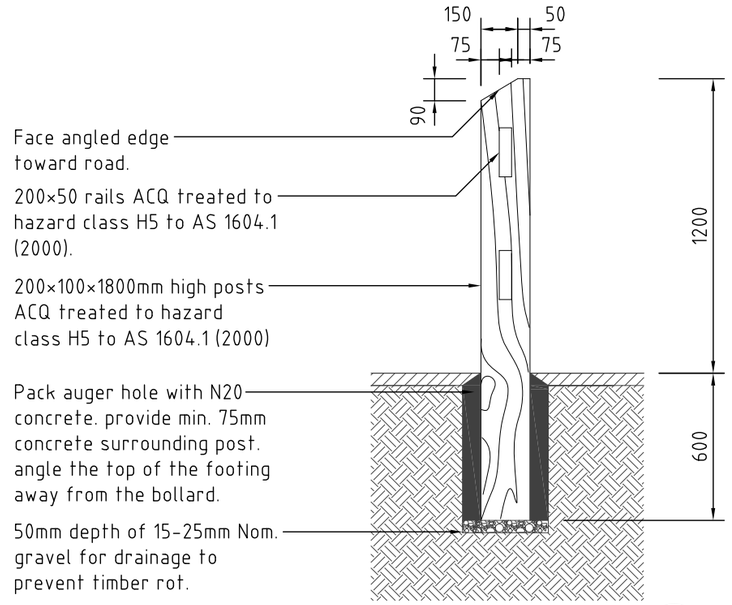
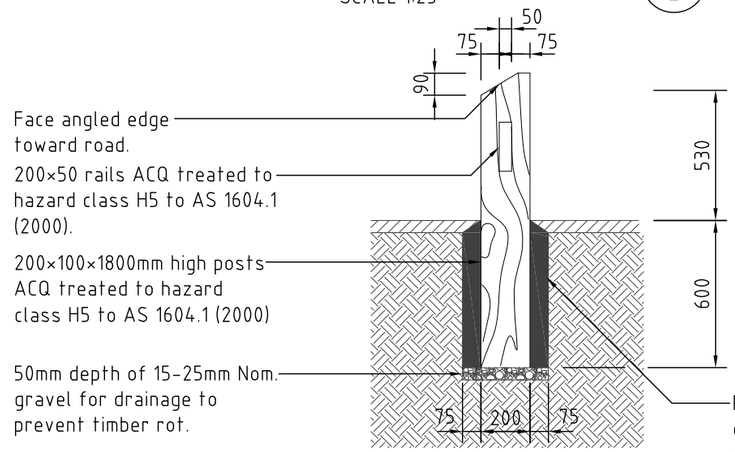


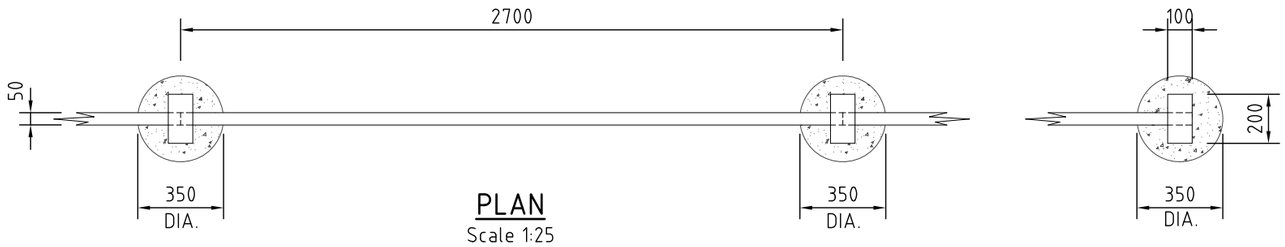
SECTION - TWO RAIL

SCALE 1:25



SECTION - ONE RAIL

SCALE 1:25



PLAN

Scale 1:25

NOTES:

1. Prior to installation, all cuts,edges,joints to receive liberal coatings with an approved timber preservative.
2. All timber to be preservative treated to hazard class H5 TO AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
3. All timber to be free of knots,splinters,cracks or any major defect.
4. All fences to be square and true to line, unless otherwise specified.
5. Fence should follow the slope of the land, without frequent dips and bumps.
6. Fence to be located on park boundary, or set back 500mm from edge of internal road, or as shown on plan.
7. Concrete slurry/powder to be cleaned from the base of the timber so that no concrete is visible on the post above ground level.

SUPERSEDES DRAWING NO. 50807

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

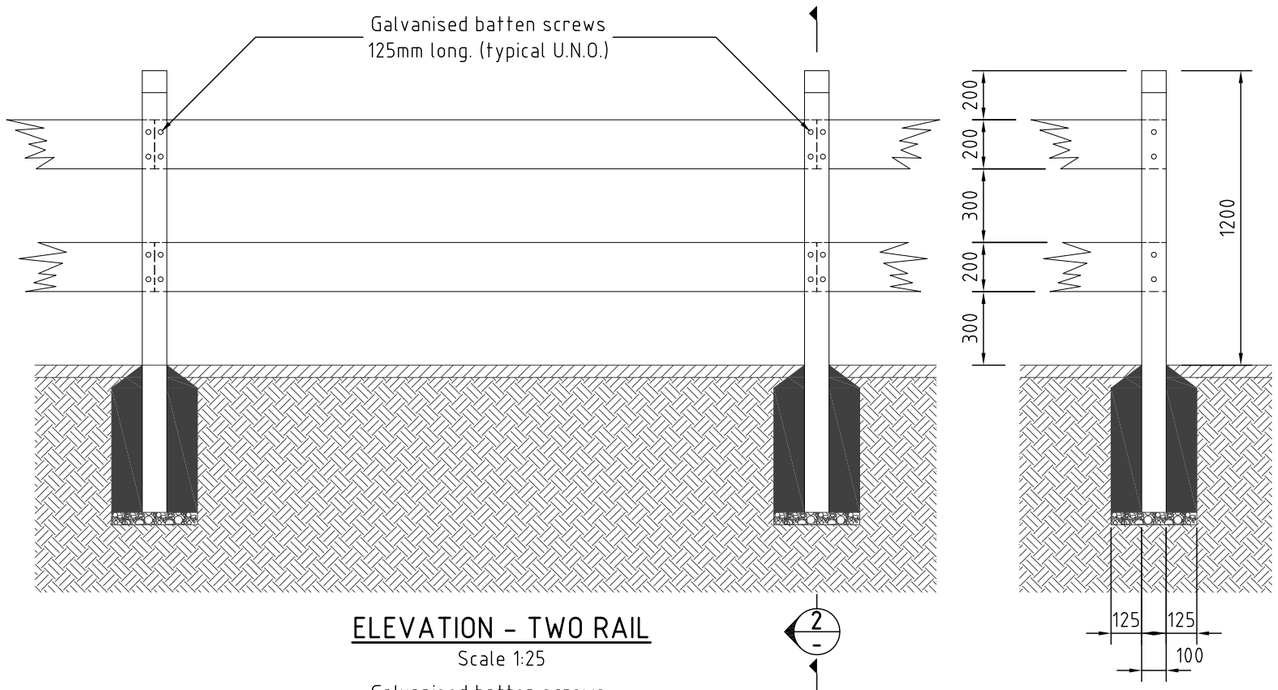
Drawing
TIMBER ONE RAIL AND TWO RAIL FENCE

Design File
Drawing No. P-08

Sheet of

Revision A

A3



ELEVATION - TWO RAIL

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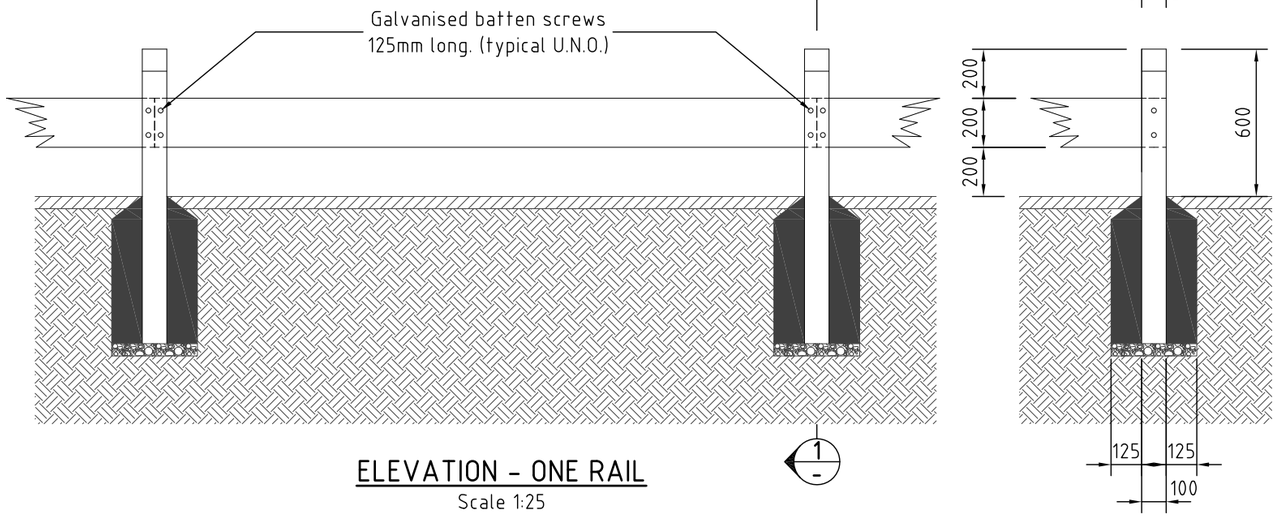

ELEVATION - ONE RAIL

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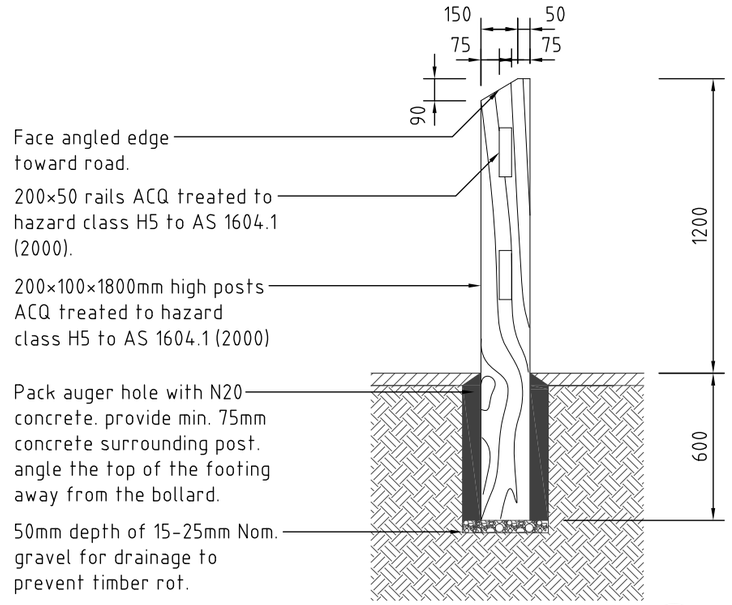
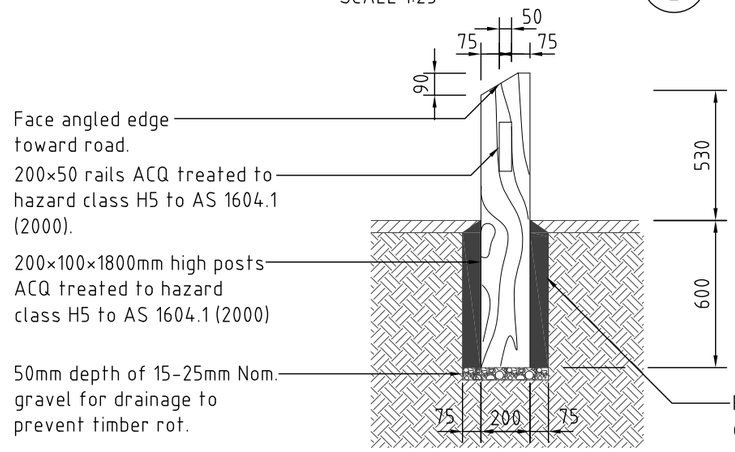


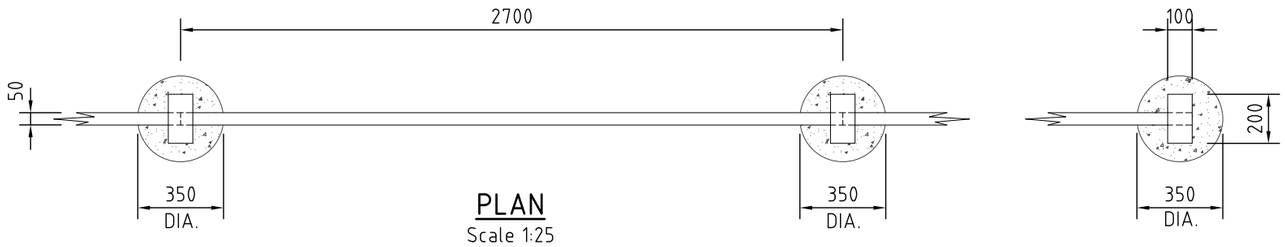
SECTION - TWO RAIL

SCALE 1:25



SECTION - ONE RAIL

SCALE 1:25



PLAN

Scale 1:25

NOTES:

1. Prior to installation, all cuts,edges,joints to receive liberal coatings with an approved timber preservative.
2. All timber to be preservative treated to hazard class H5 TO AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
3. All timber to be free of knots,splinters,cracks or any major defect.
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7. Concrete slurry/powder to be cleaned from the base of the timber so that no concrete is visible on the post above ground level.

SUPERSEDES DRAWING NO. 50807

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
TIMBER ONE RAIL AND TWO RAIL FENCE

Design File
Drawing No. P-08

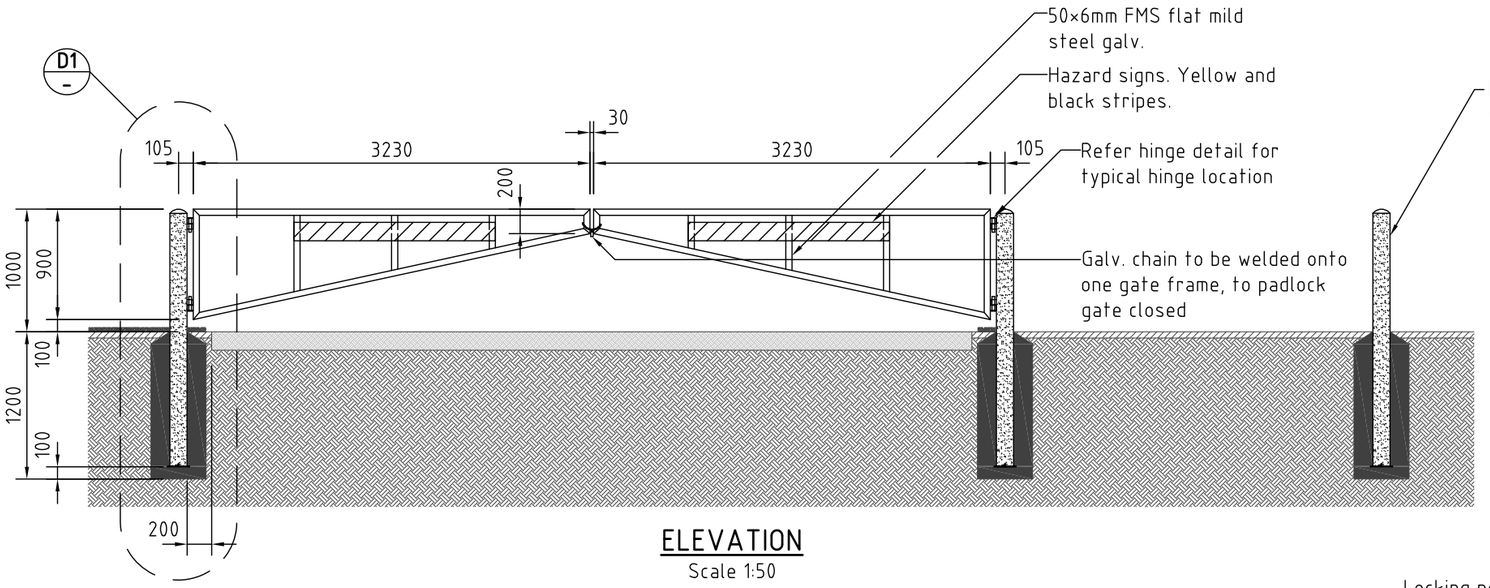
Sheet of

Revision A

A3

NOTES:

1. Entire fabrication mild steel hot dipped galvanized to Australian standards.
2. Ensure all welds are continuous fillet welds. Grind smooth edges & welds prior to H.D.G. or applied finishes.
3. Arris all leading edges, ensuring all welding slag and barbs are removed prior to galvanising.
4. Metal work within footings to be coal tar epoxy.
5. Ensure posts are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
6. Padlocks to be supplied by Scenic Rim Regional Council for welding to chain.
7. Position gates away from main pedestrian areas.
8. Ensure that maintenance vehicles can access the gate via the street or pathway areas within the park



ELEVATION
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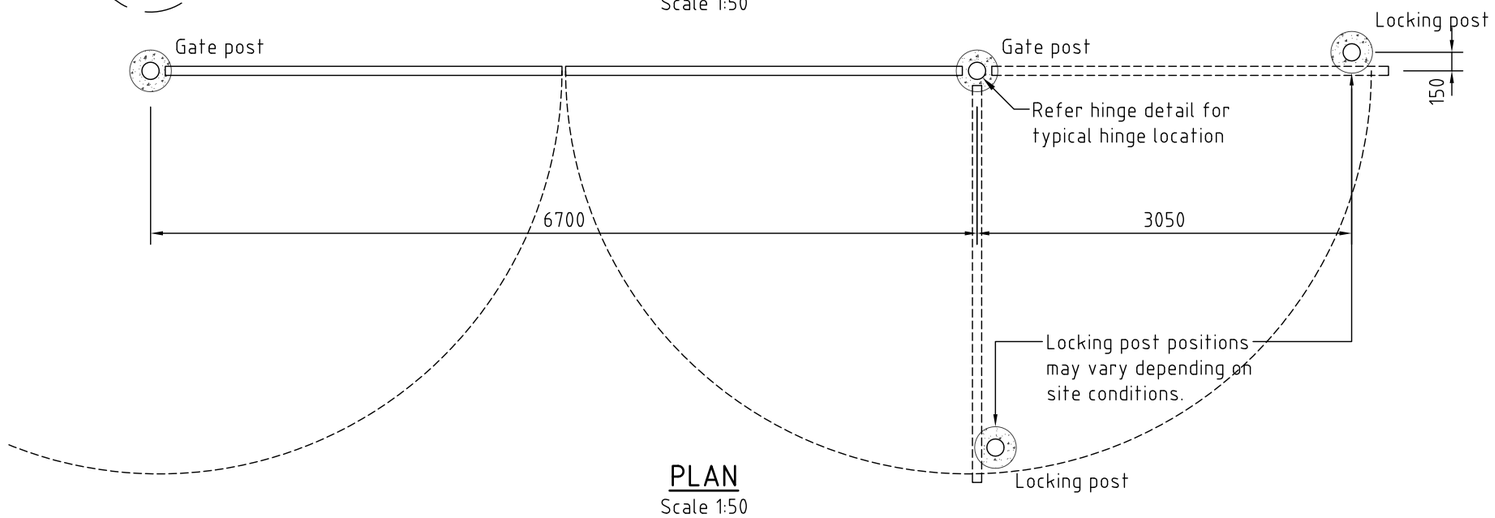
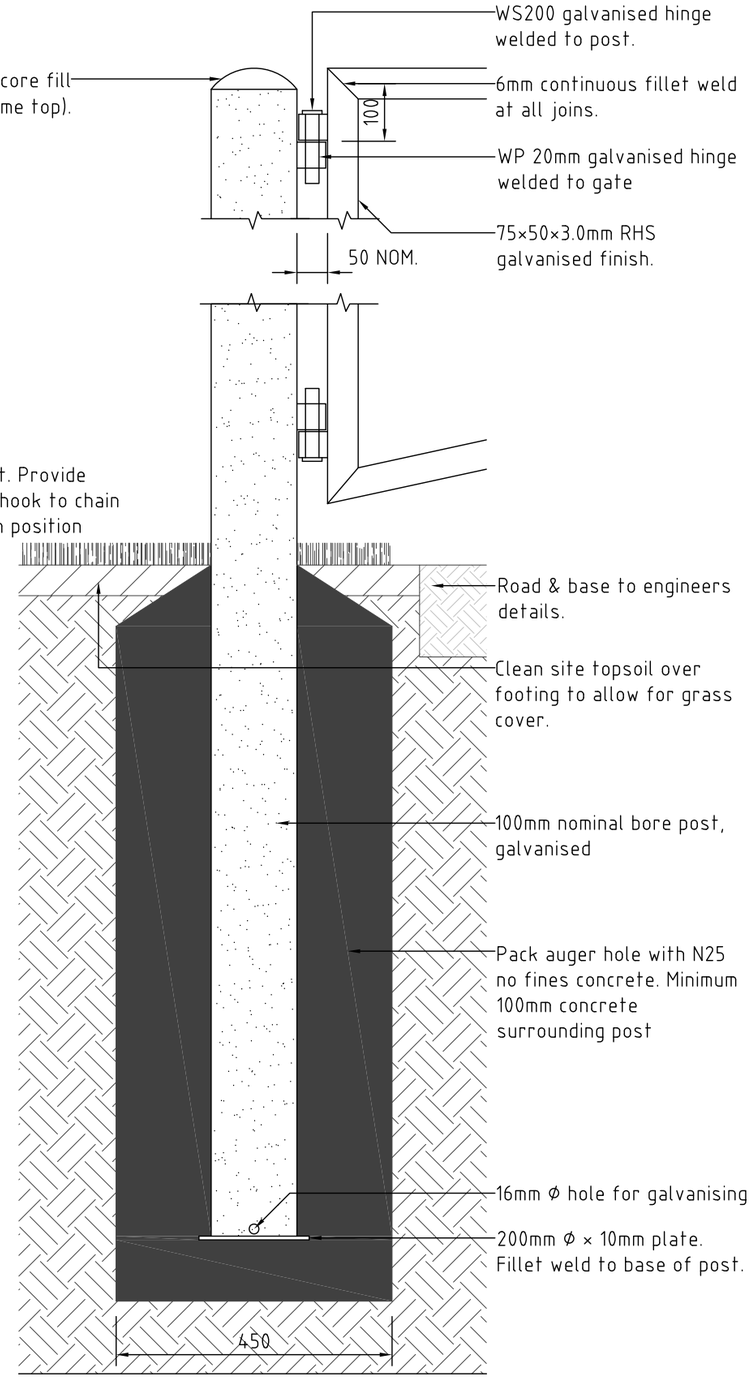


PLAN
Scale 1:50



DETAIL D1
SCALE 1:10

SUPERSEDES DRAWING NO. 50808

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

Drawing: STEEL GATE

Design File
Drawing No. P-09

Sheet of

Revision A

A3

NOTES:

1. Entire fabrication mild steel hot dipped galvanized to Australian standards.
2. Ensure all welds are continuous fillet welds. Grind smooth edges & welds prior to H.D.G. or applied finishes.
3. Arris all leading edges, ensuring all welding slag and barbs are removed prior to galvanising.
4. Metal work within footings to be coal tar epoxy.
5. Ensure posts are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
6. Padlocks to be supplied by Scenic Rim Regional Council for welding to chain.
7. Position gates away from main pedestrian areas.
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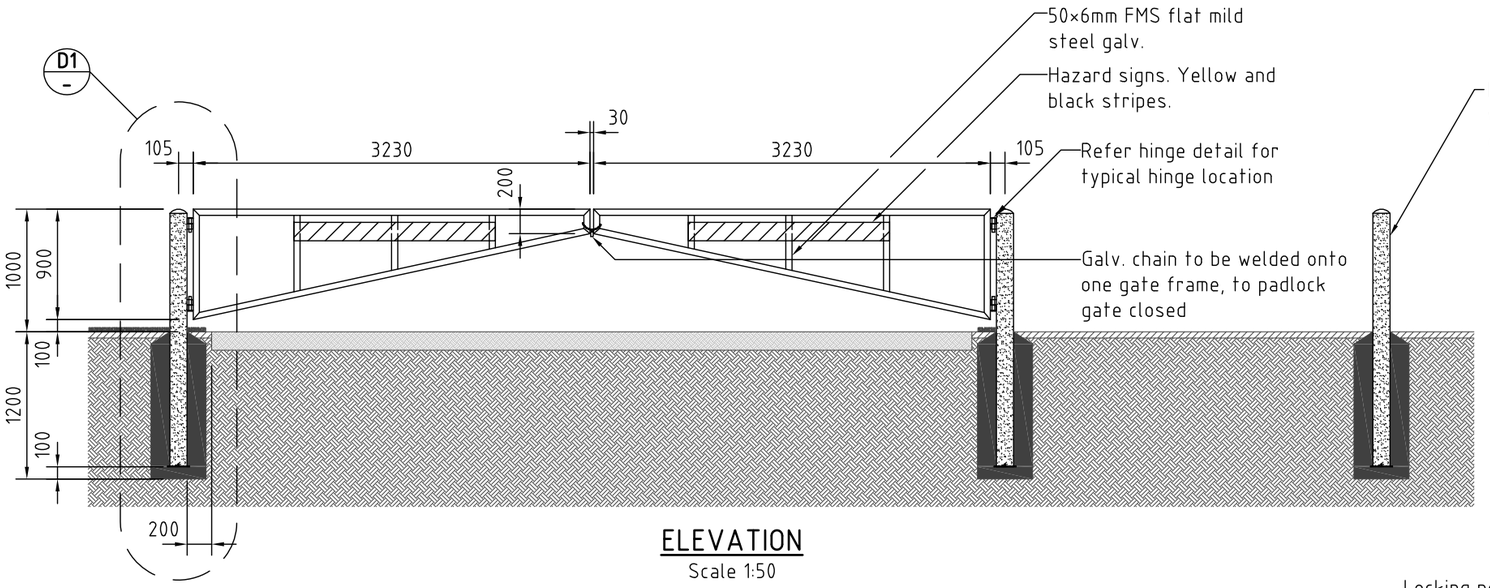

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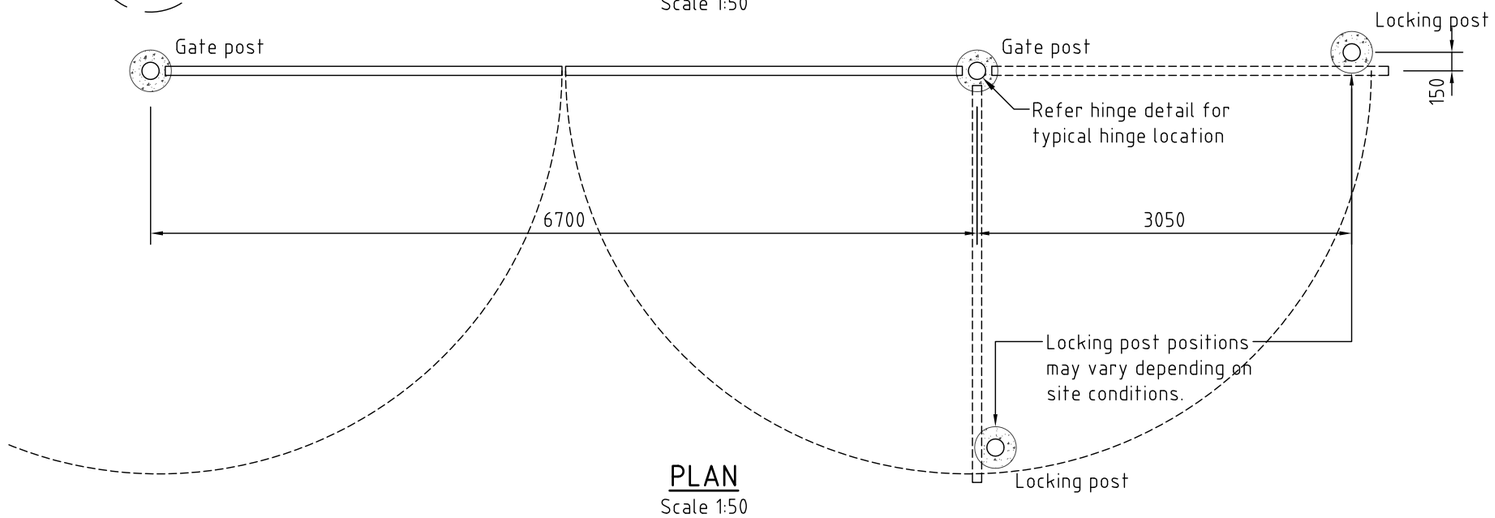
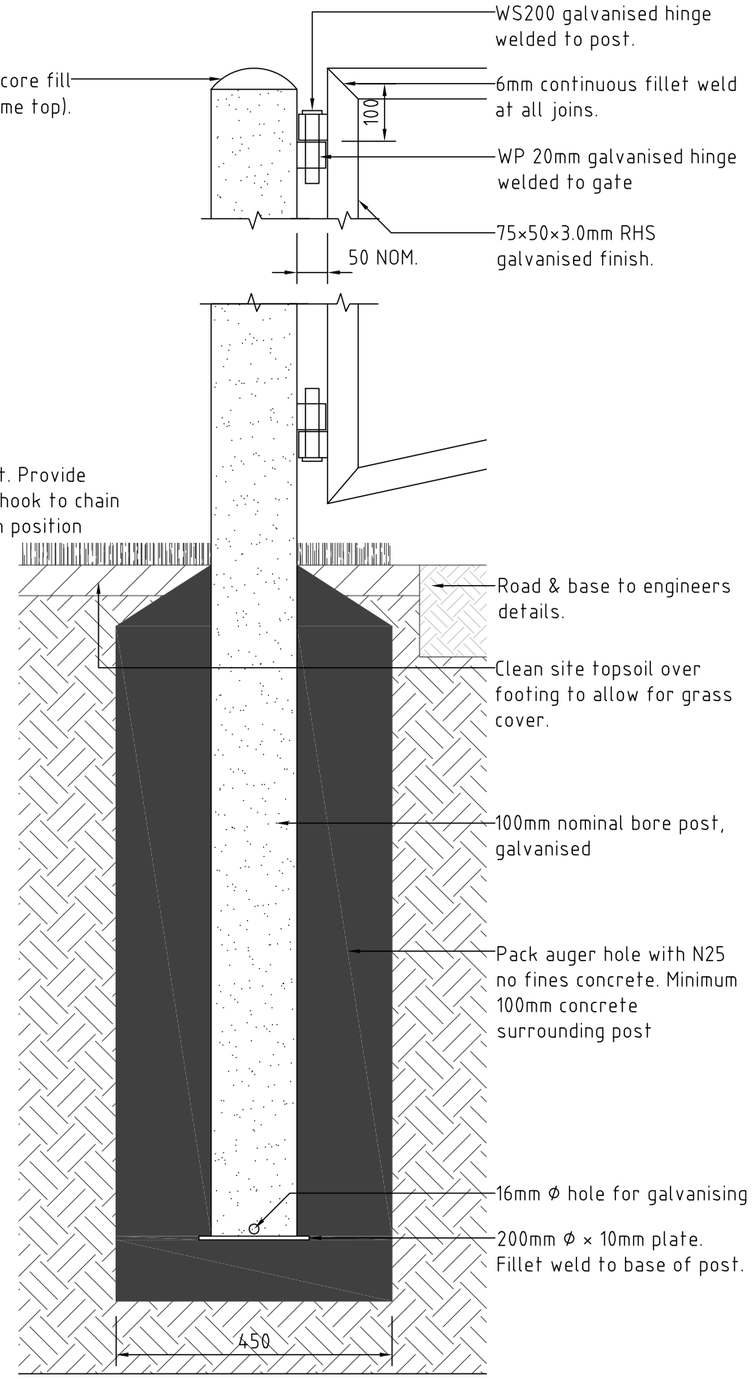


PLAN
Scale 1:50



DETAIL D1
SCALE 1:10

SUPERSEDES DRAWING NO. 50808

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

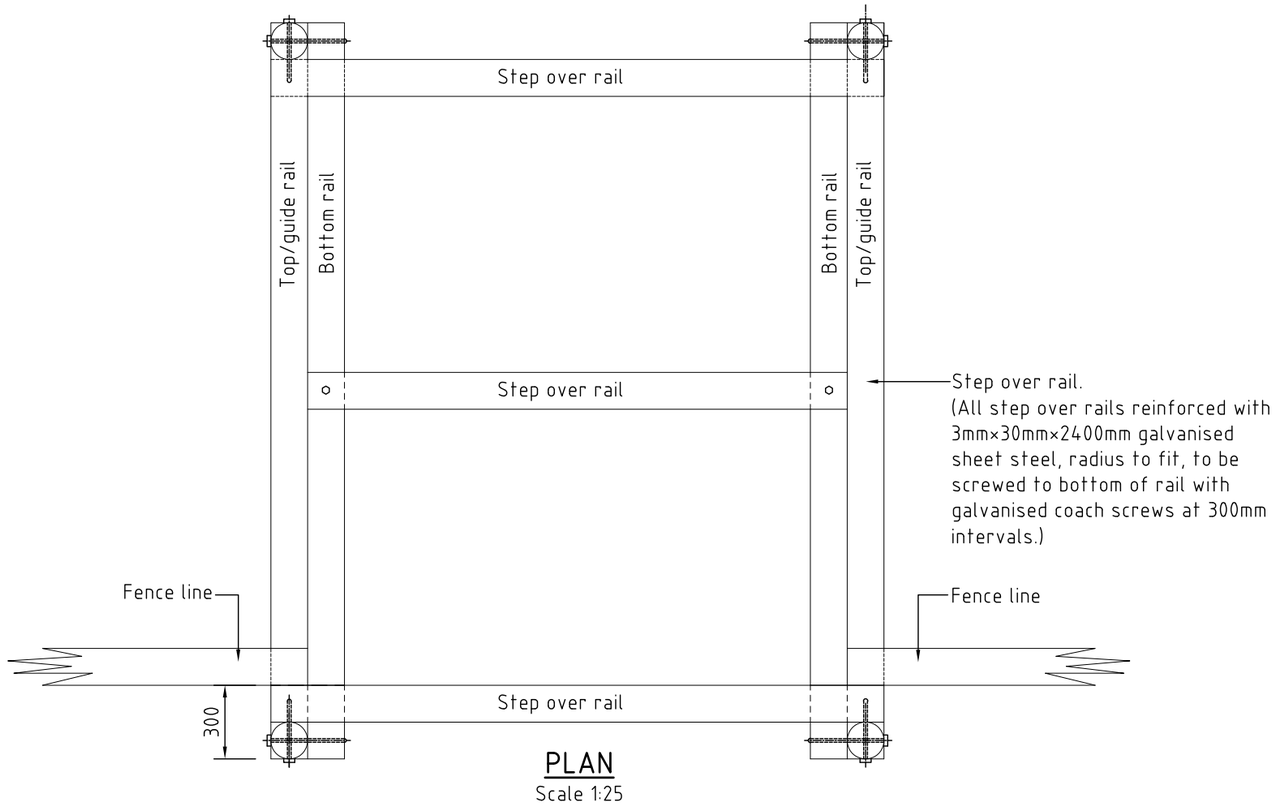
Drawing: STEEL GATE

Design File
Drawing No. P-09

Sheet of

Revision A

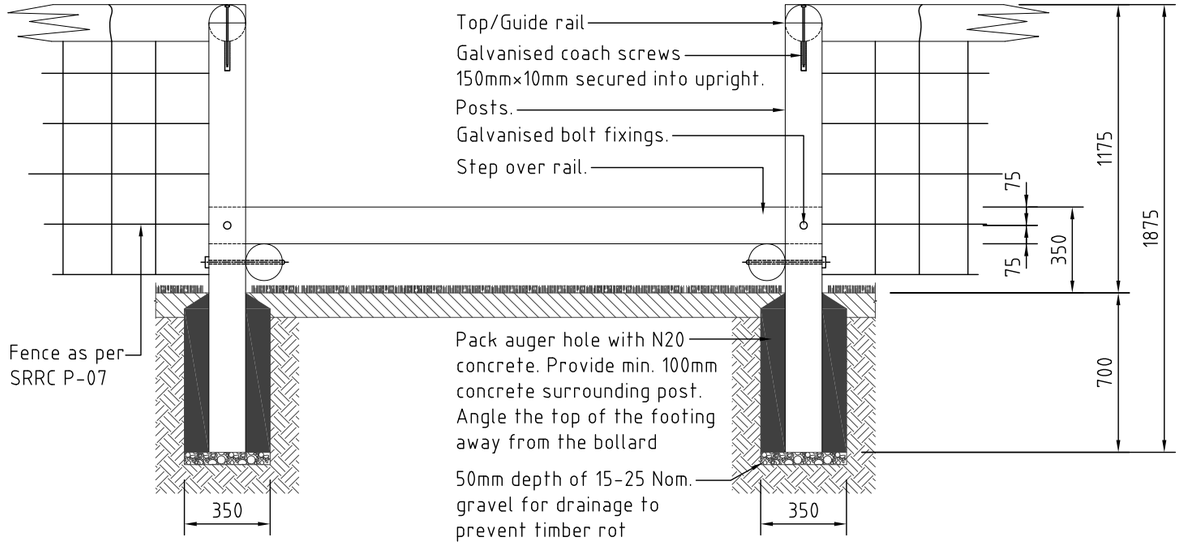
A3



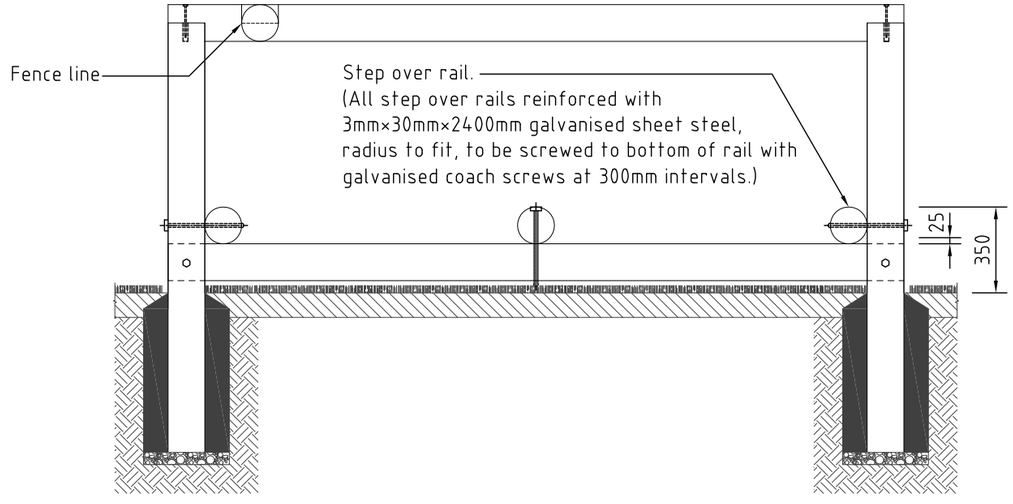
PLAN
Scale 1:25

NOTES:

1. All posts and rails 150mmϕ treated pine.
2. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
3. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
4. All timber to be free of knots, splinters, cracks or any major defect.
5. All bolts 16mm ϕ x 350 mm galvanised cuphead bolts. Bolts to be recessed into timber so not exposed.
6. Concrete slurry/powder to be cleaned from the base of the timber so that no concrete is visible on the post above ground level.



ELEVATION
Scale 1:25



END ELEVATION
Scale 1:25

SUPERSEDES DRAWING NO. 50809

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

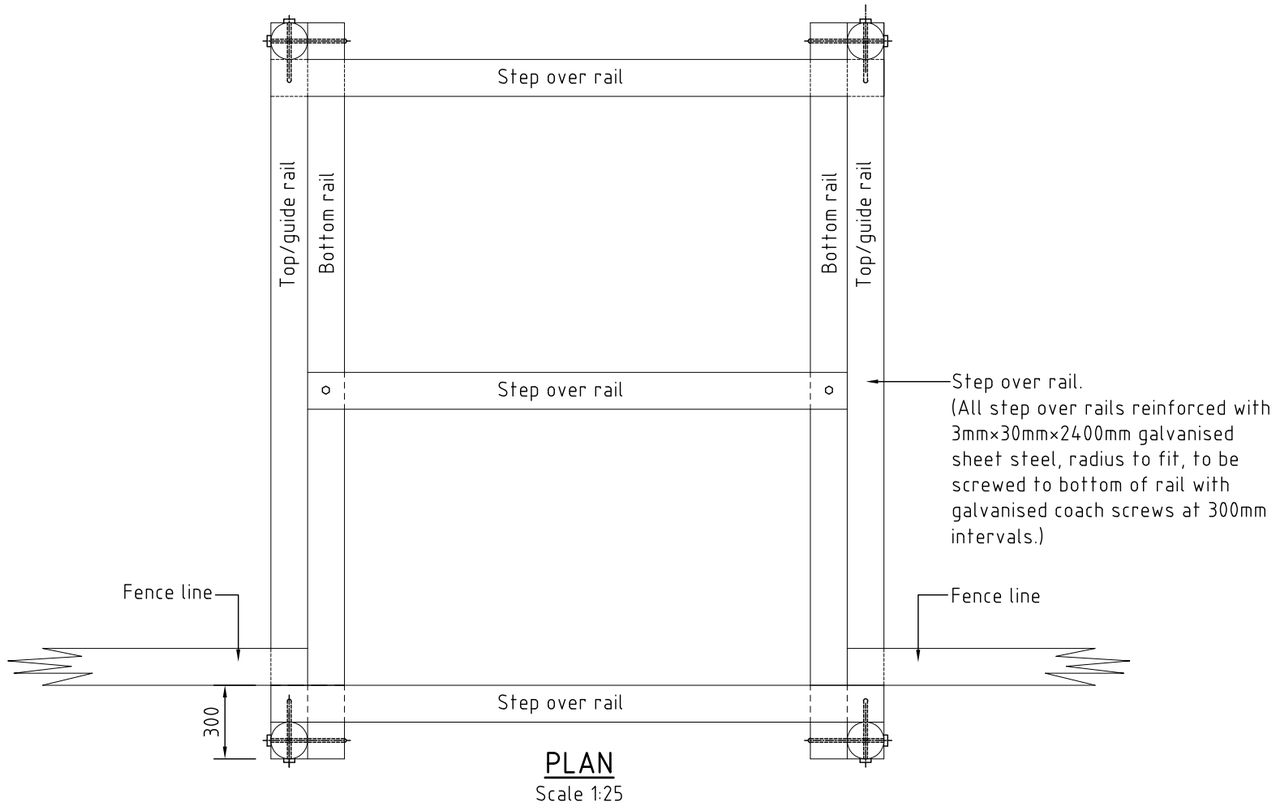
Drawing
HORSE STEP OVER

Design File
Drawing No. P-10

Sheet of

Revision A

A3



PLAN
Scale 1:25

NOTES:

1. All posts and rails 150mmϕ treated pine.
2. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
3. All timber to be preservative treated to hazard class H5 to AS 1604.1-2000 and have a durability class 1 or 2 to AS 5604-2003 (CCA treatment not to be used)
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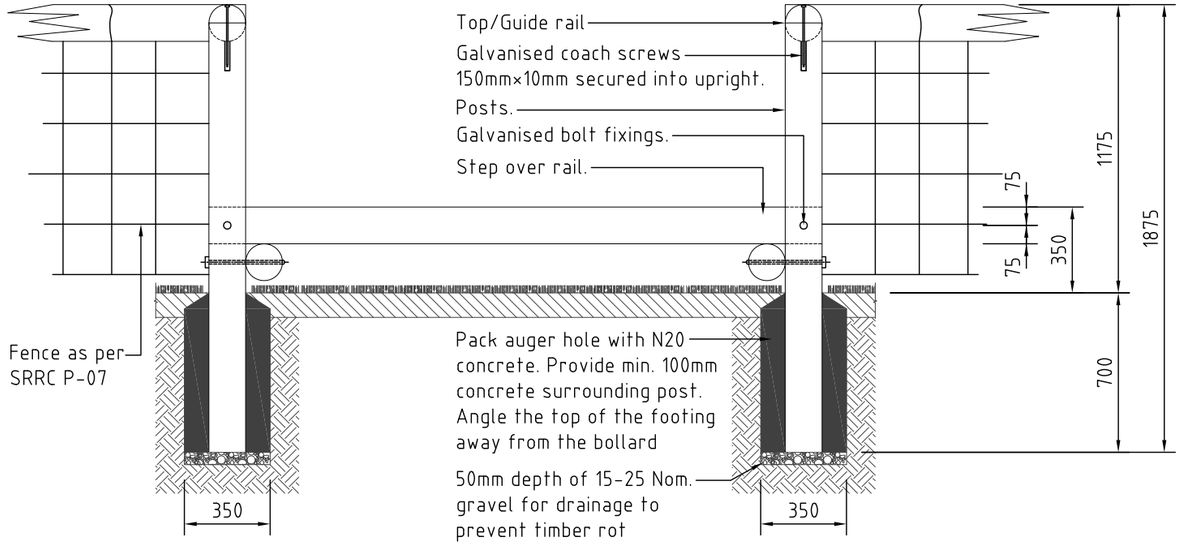
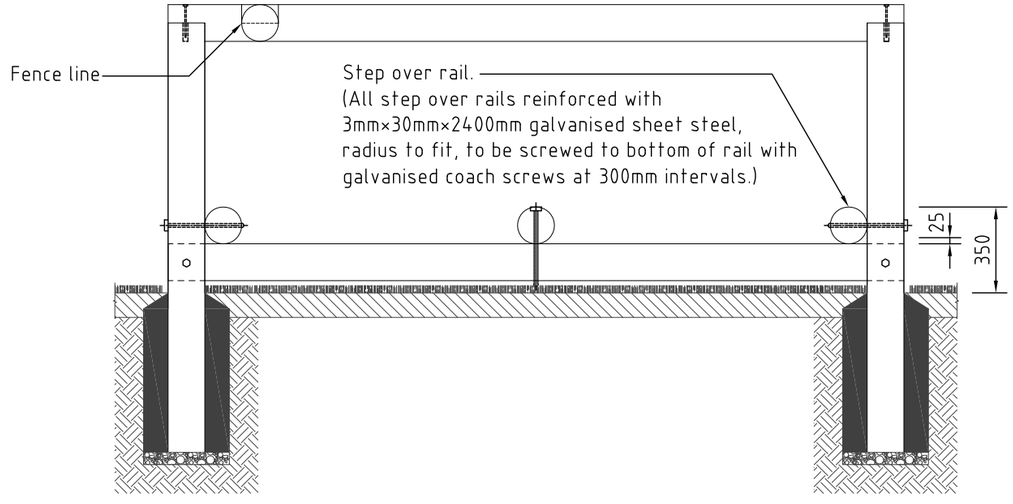


ELEVATION
Scale 1:25



END ELEVATION
Scale 1:25

SUPERSEDES DRAWING NO. 50809

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

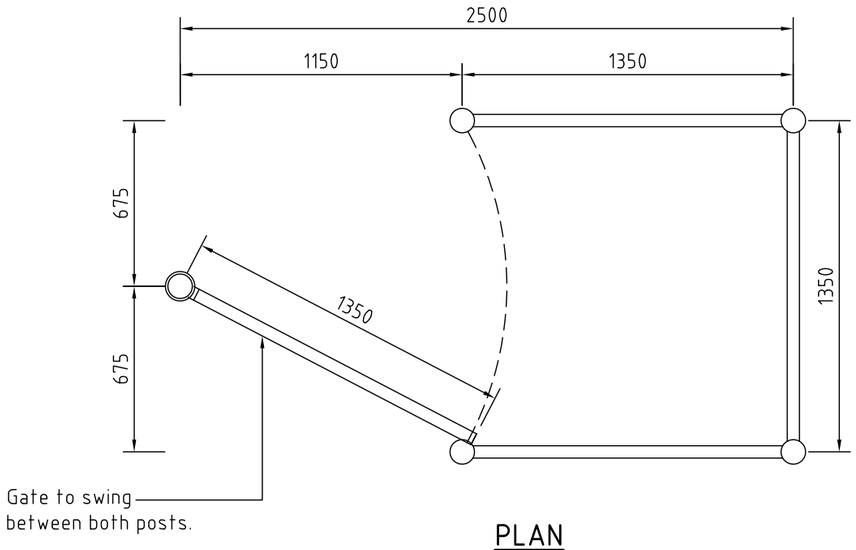
Drawing
HORSE STEP OVER

Design File
Drawing No. P-10

Sheet of

Revision A

A3



PLAN
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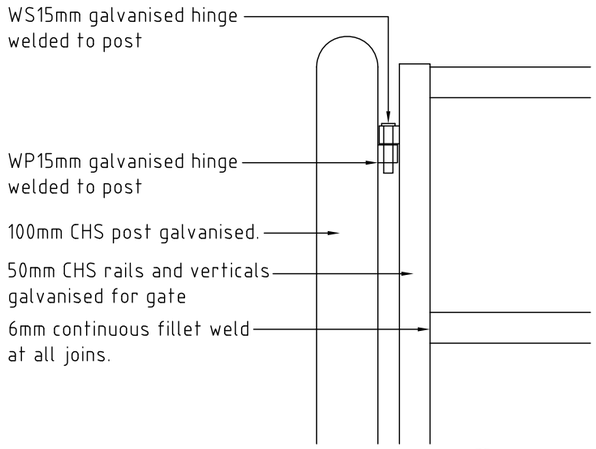
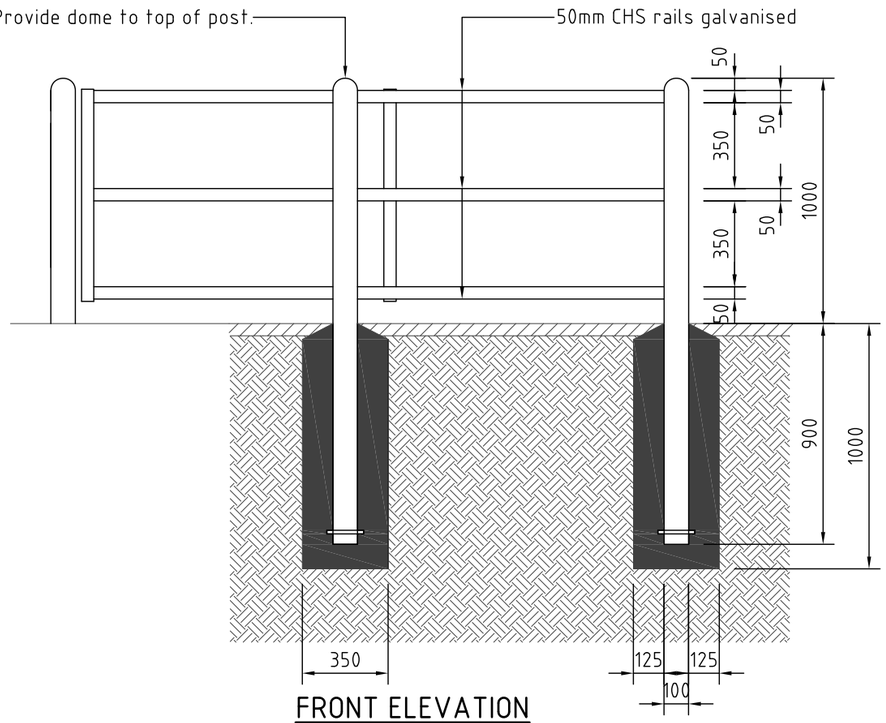


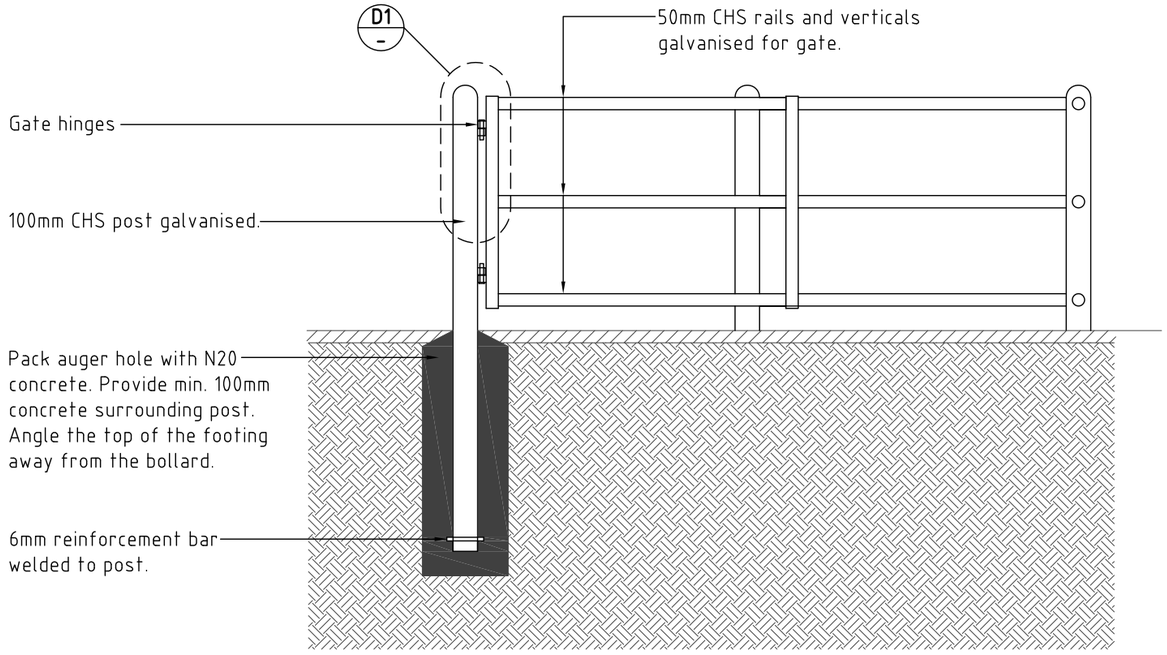
DETAIL D1
SCALE 1:10

NOTES:

1. Entire fabrication mild steel hot dipped galvanized to australian standards.
2. Ensure all welds are continuous fillet welds. Grind smooth edges & welds prior to H.D.G. or applied finishes.
3. Arris all leading edges, ensuring all welding slag and barbs are removed prior to galvanising.
4. Metal work within footings to be coal tar epoxy.
5. Ensure posts are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.



FRONT ELEVATION
Scale 1:25



END ELEVATION
Scale 1:25

SUPERSEDES DRAWING NO. 50810

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

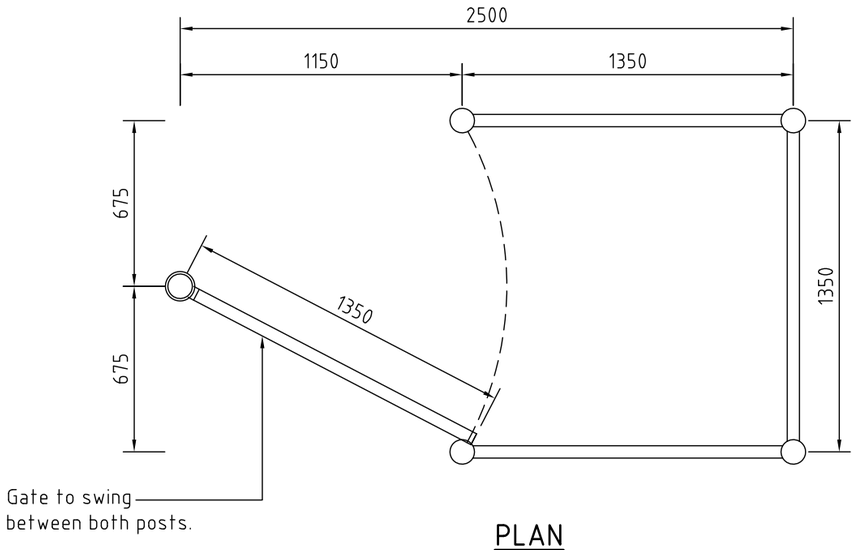
Drawing
PERSONNEL GATE

Design File
Drawing No. P-11

Sheet of

Revision A

A3



PLAN
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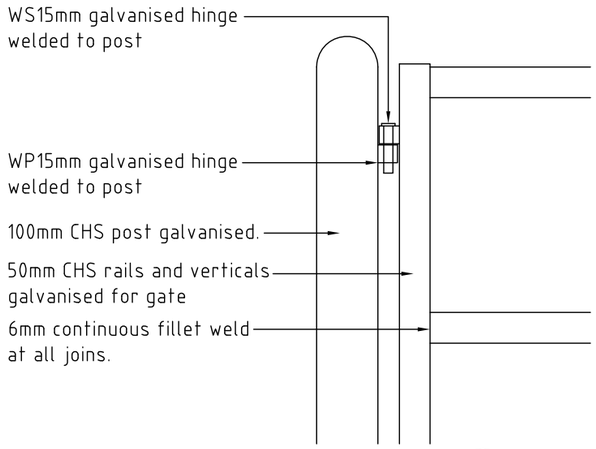

DETAIL D1
SCALE 1:10

NOTES:

1. Entire fabrication mild steel hot dipped galvanized to australian standards.
2. Ensure all welds are continuous fillet welds. Grind smooth edges & welds prior to H.D.G. or applied finishes.
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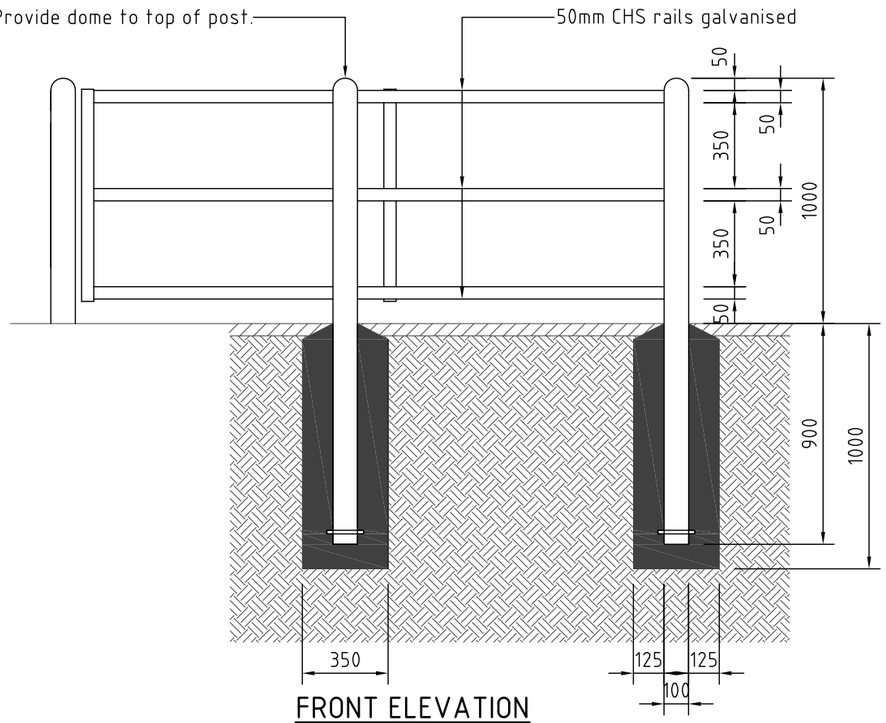
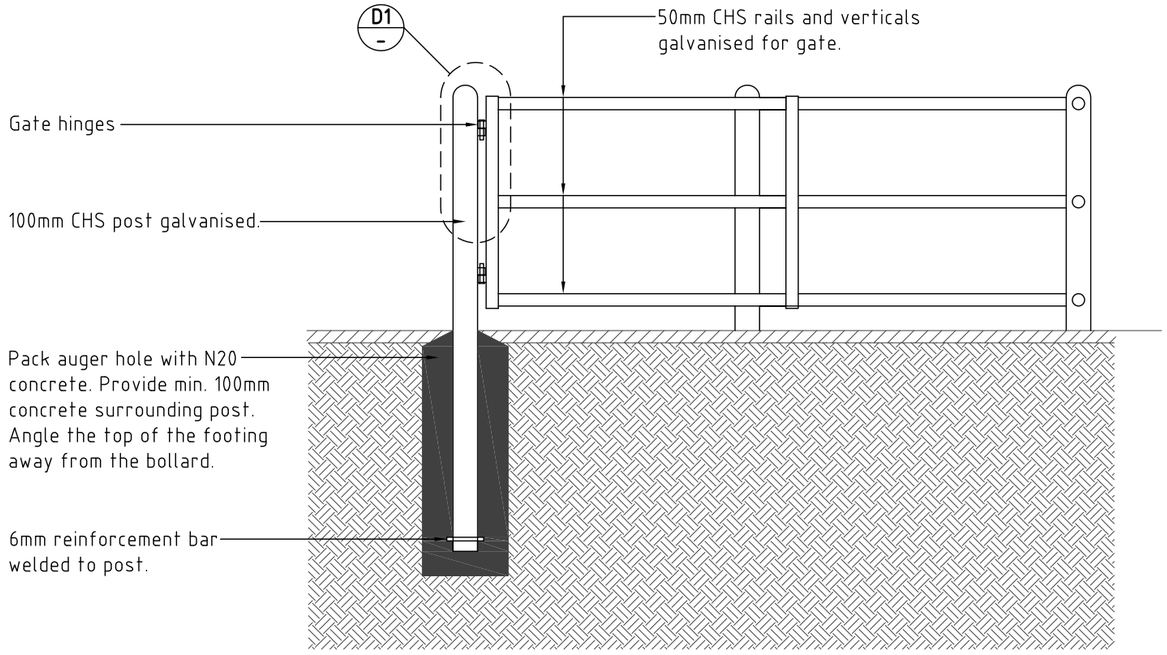


FRONT ELEVATION
Scale 1:25



END ELEVATION
Scale 1:25

SUPERSEDES DRAWING NO. 50810

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

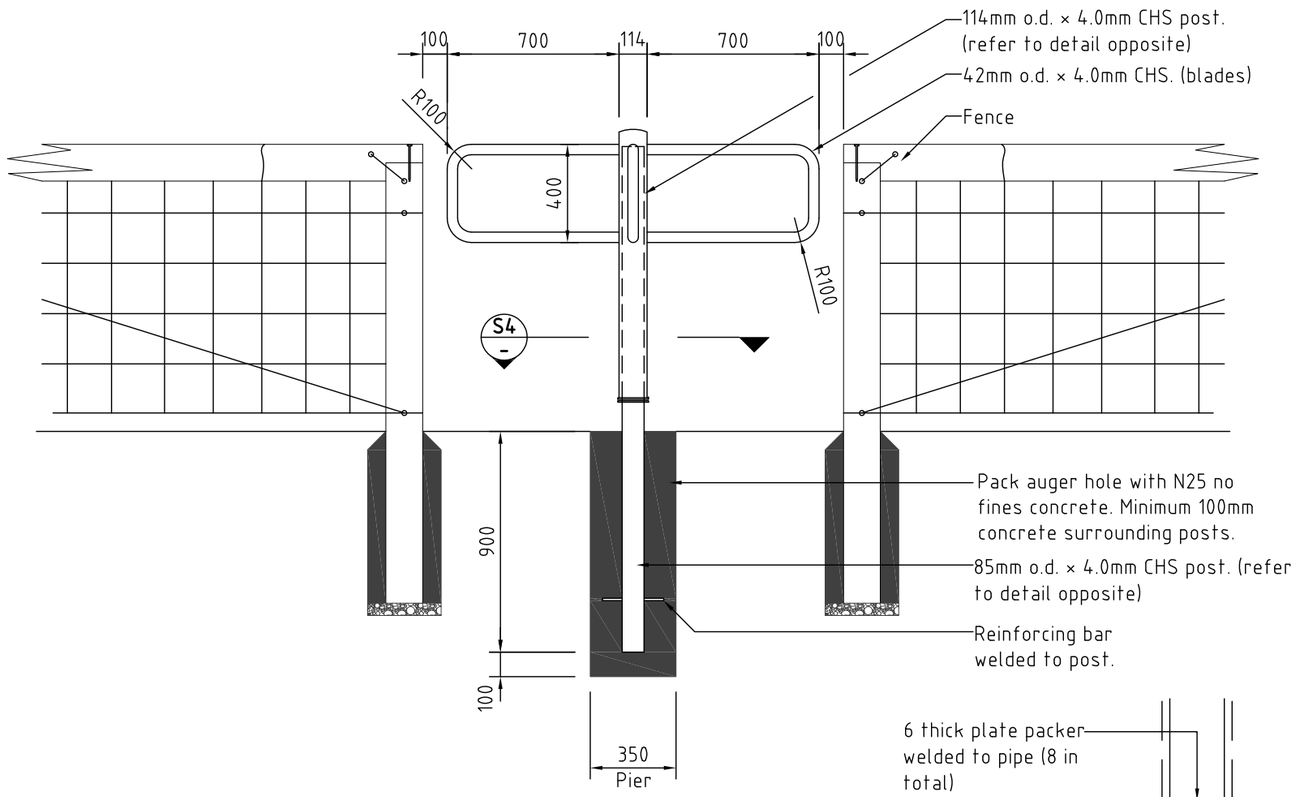
Drawing
PERSONNEL GATE

Design File
Drawing No. P-11

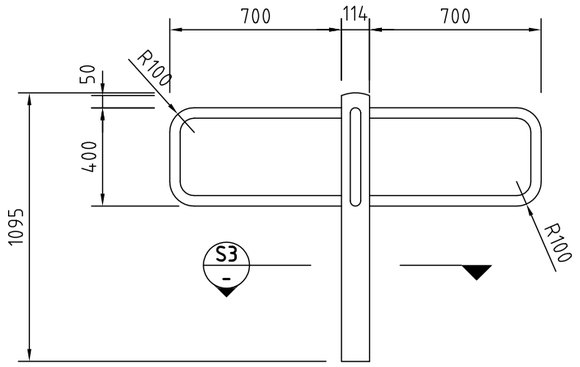
Sheet of

Revision A

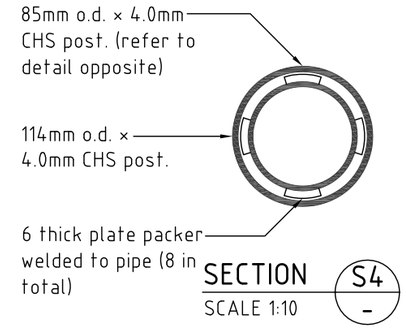
A3



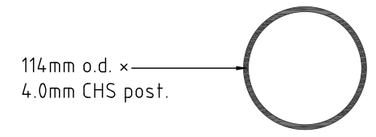
ELEVATION
Scale 1:25



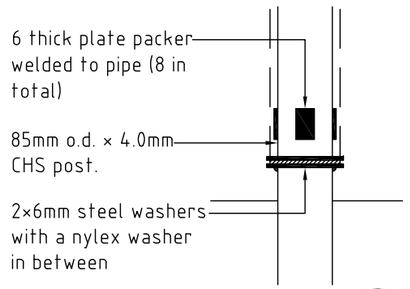
85 O.D. TURNSTYLE
Scale 1:25



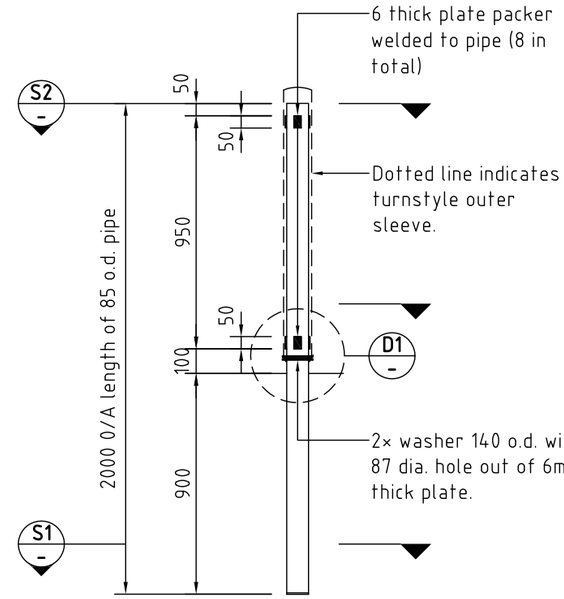
SECTION S4
SCALE 1:10



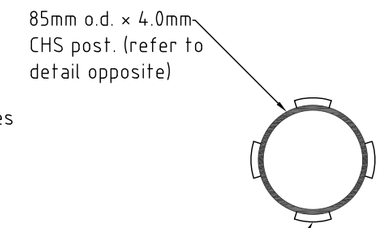
SECTION S3
SCALE 1:10



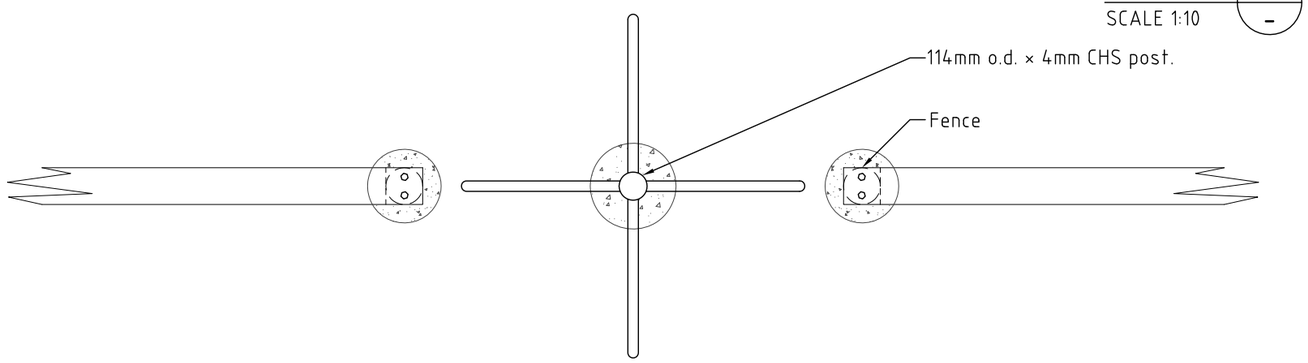
DETAIL D1
SCALE 1:10



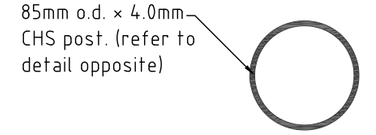
85 O.D. INNER SUPPORT
Scale 1:25



SECTION S2
SCALE 1:10



PLAN
Scale 1:25



SECTION S1
SCALE 1:10

NOTE:
1. All steel work to be hot dipped galvanised

SUPERSEDES DRAWING NO. 50811

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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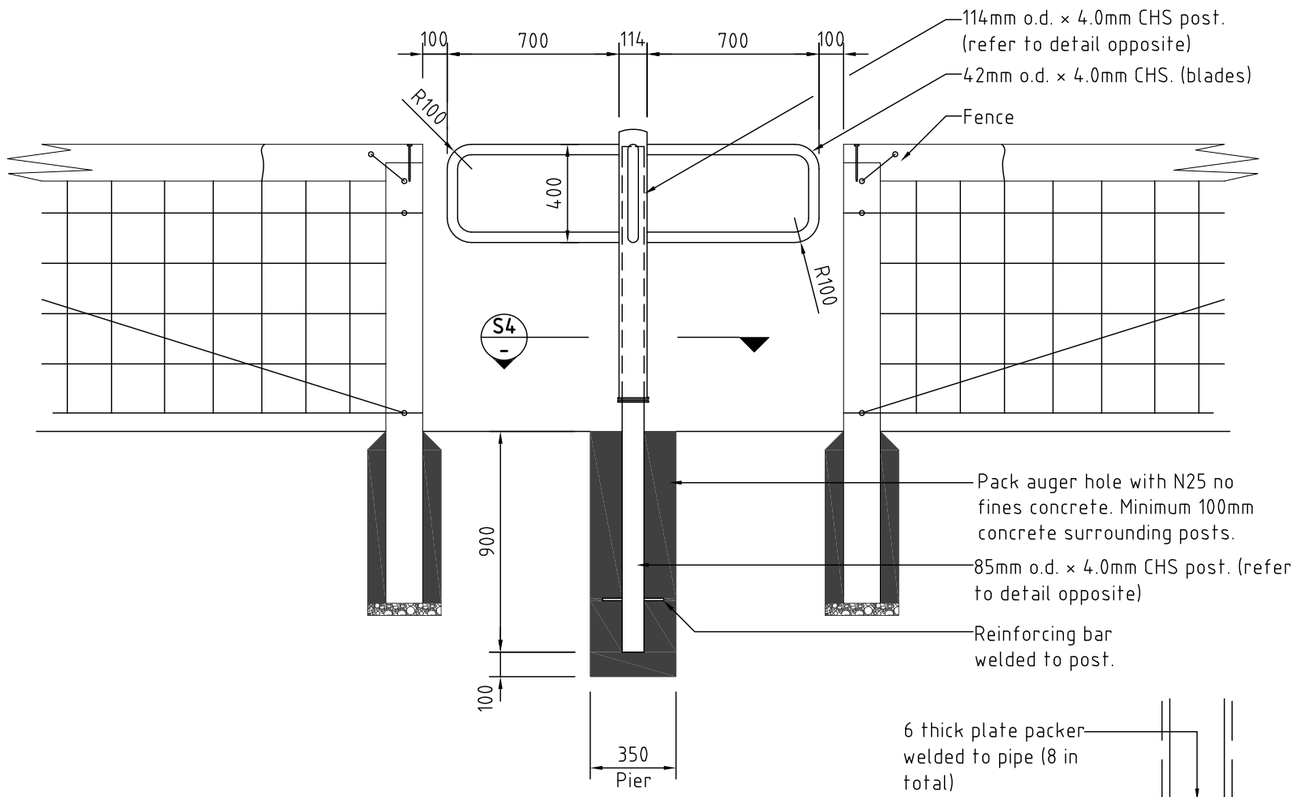
SCENIC RIM Regional Council

Works & Infrastructure Services

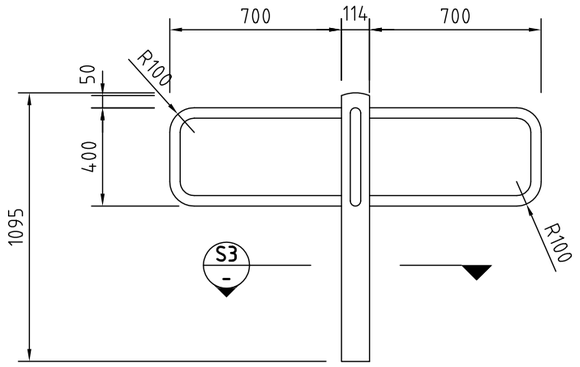
Project: SRRC STANDARD DRAWINGS PARKS

Drawing: TURNSTYLE

Design File
Drawing No. P-12
Sheet of
Revision A
A3



ELEVATION
Scale 1:25



85 O.D. TURNSTYLE
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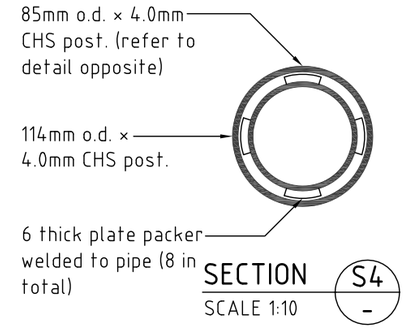
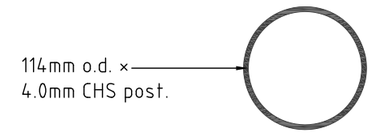
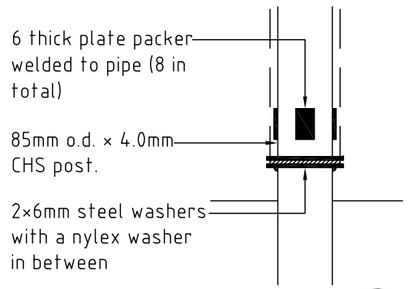


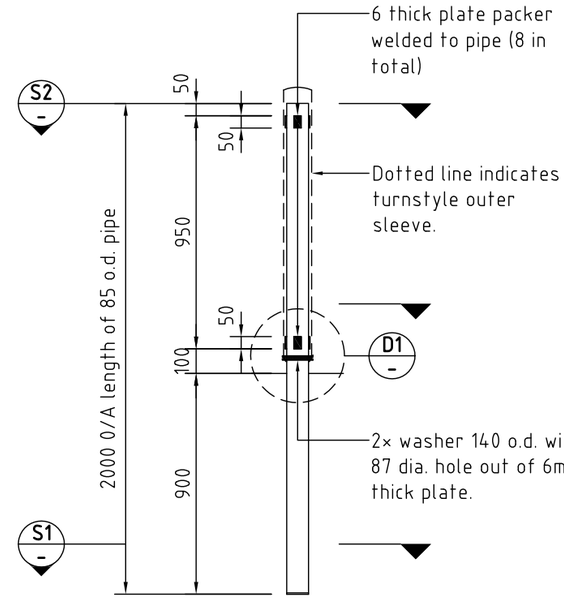
SECTION S4
SCALE 1:10



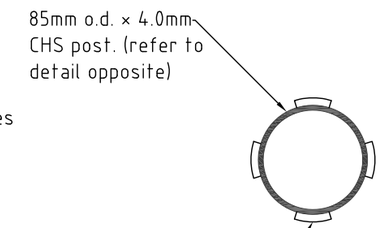
SECTION S3
SCALE 1:10



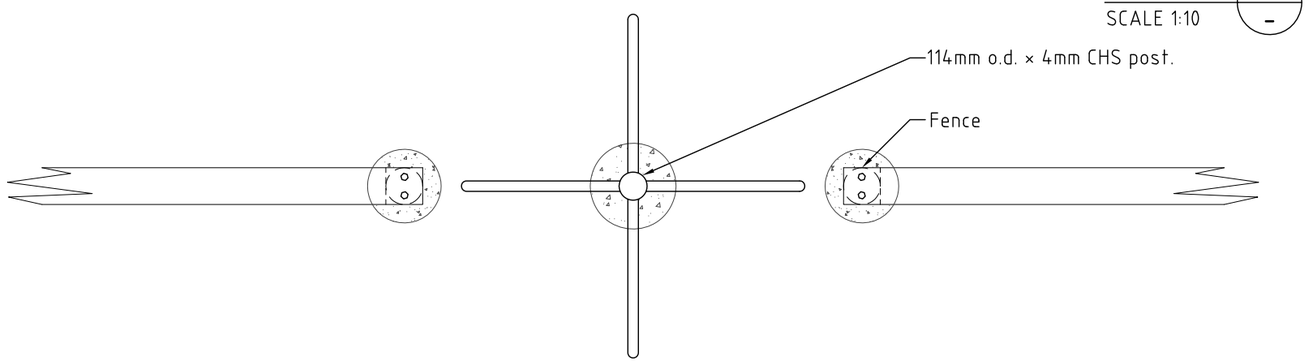
DETAIL D1
SCALE 1:10



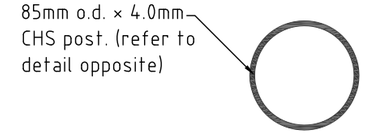
85 O.D. INNER SUPPORT
Scale 1:25



SECTION S2
SCALE 1:10



PLAN
Scale 1:25



SECTION S1
SCALE 1:10

NOTE:
1. All steel work to be hot dipped galvanised

SUPERSEDES DRAWING NO. 50811

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

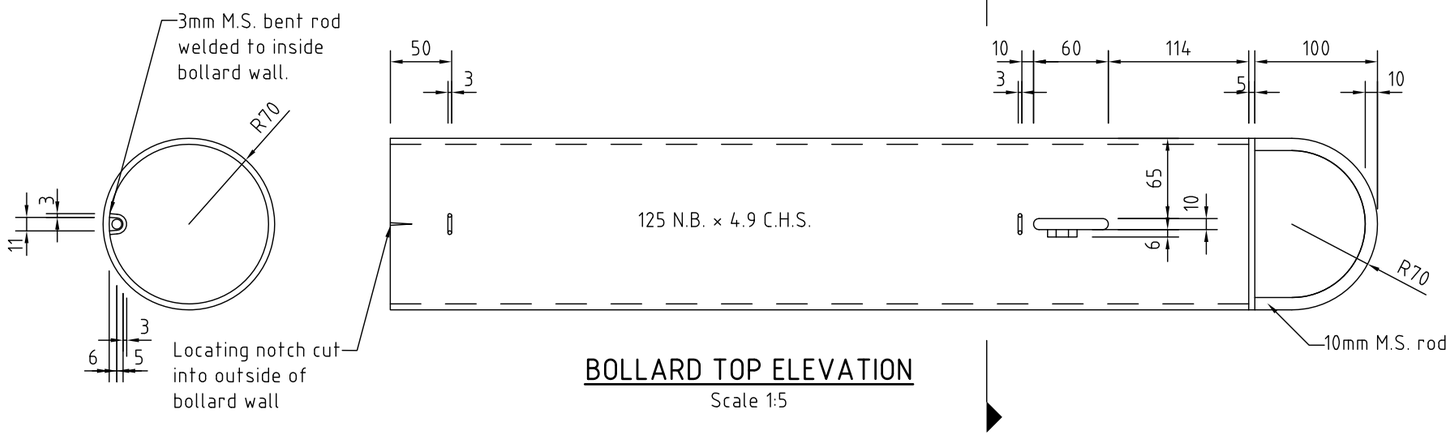
Project: SRRC STANDARD DRAWINGS PARKS

Drawing: TURNSTYLE

Design File
Drawing No. P-12
Sheet of
Revision A
A3

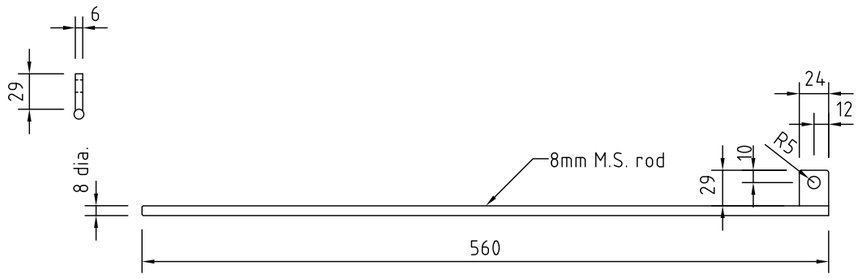
NOTE:

1. All welds to be 6mm fillet welds unless noted otherwise



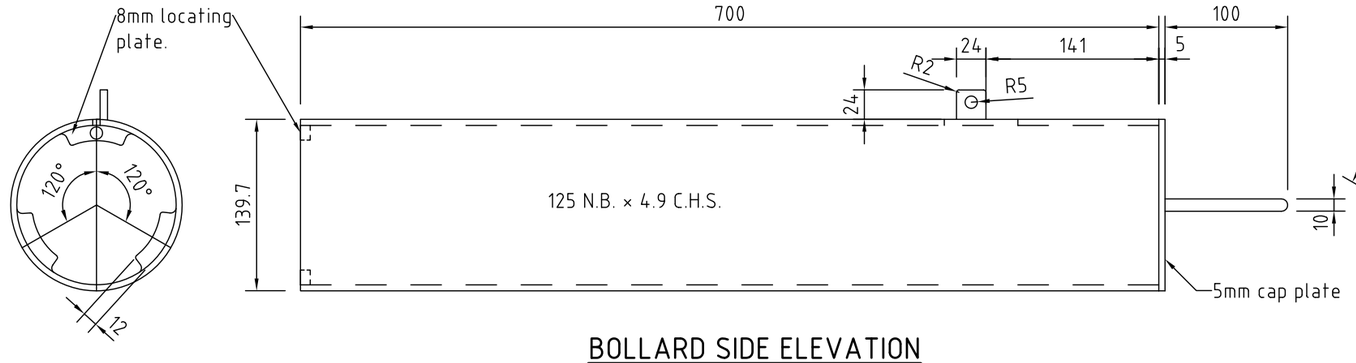
BOLLARD TOP ELEVATION

Scale 1:5



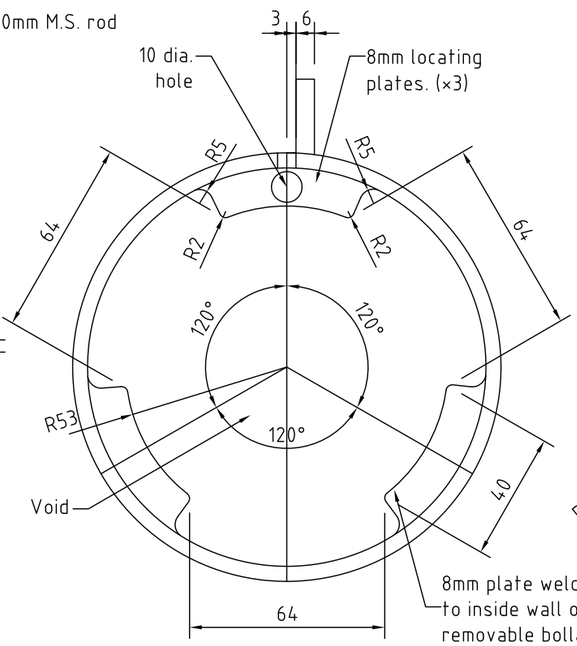
LOCKING ROD

Scale 1:5



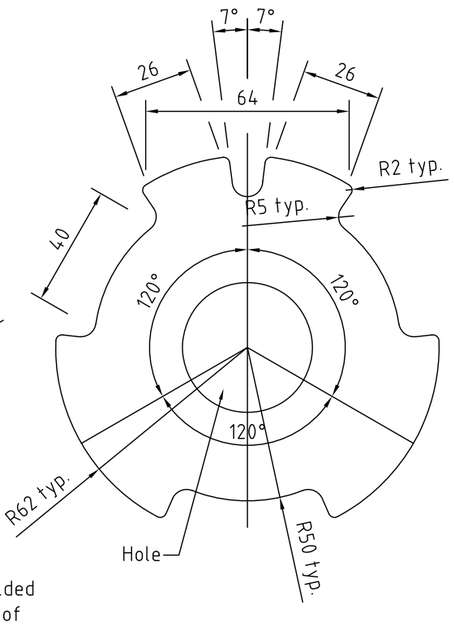
BOLLARD SIDE ELEVATION

Scale 1:5



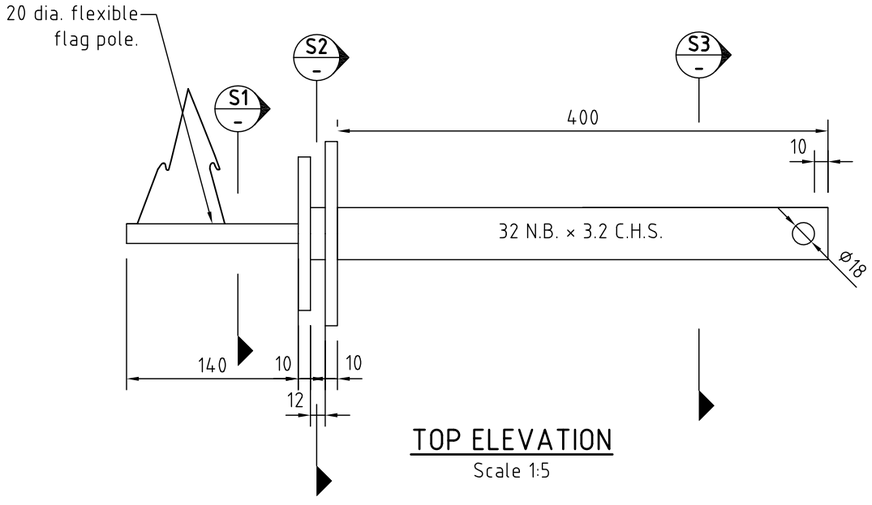
END ELEVATION

Scale 1:2



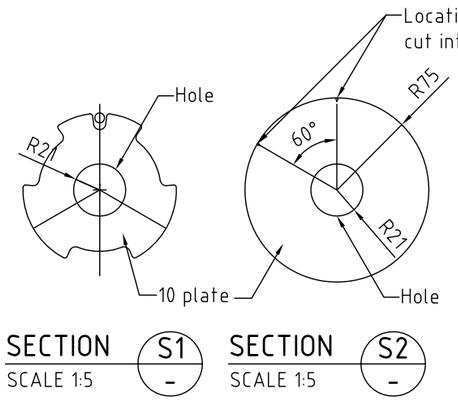
END ELEVATION

Scale 1:2



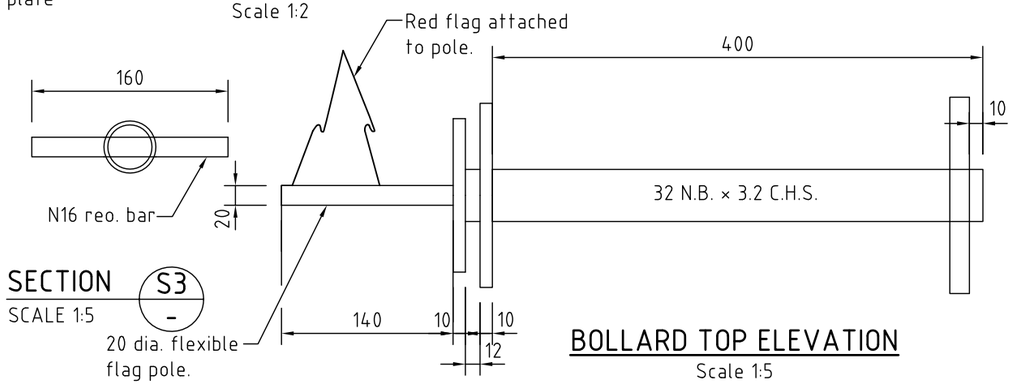
TOP ELEVATION

Scale 1:5



SECTION S1 -
SCALE 1:5

SECTION S2 -
SCALE 1:5



SECTION S3 -
SCALE 1:5

BOLLARD TOP ELEVATION

Scale 1:5

SUPERSEDES DRAWING NO. 50812

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
REMOVABLE BOLLARD

Design File
Drawing No. P-13

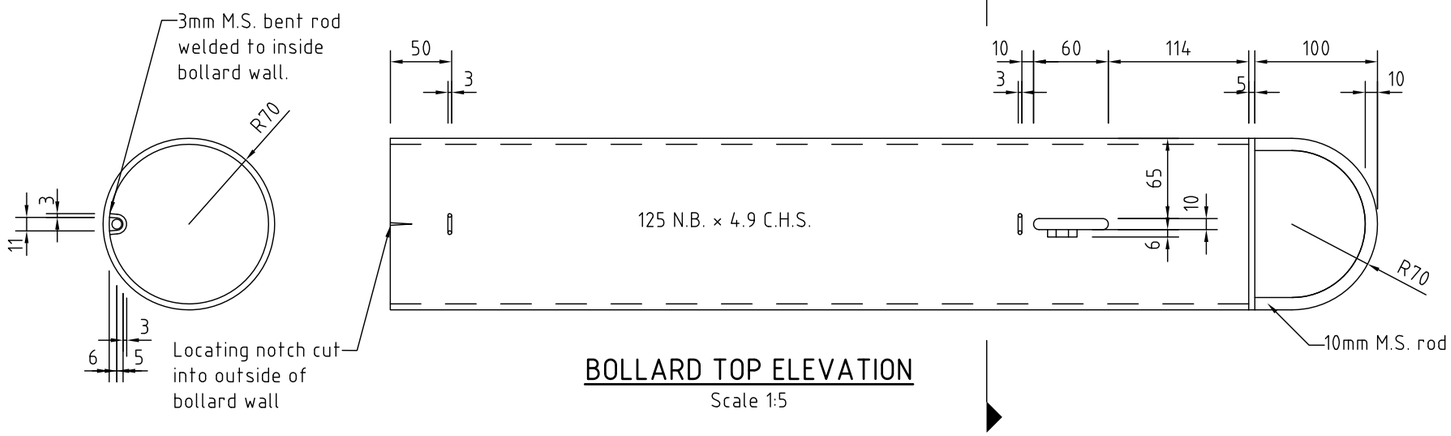
Sheet of

Revision A

A3

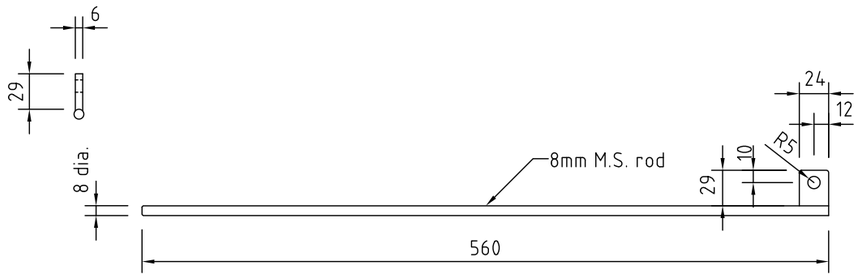
NOTE:

1. All welds to be 6mm fillet welds unless noted otherwise



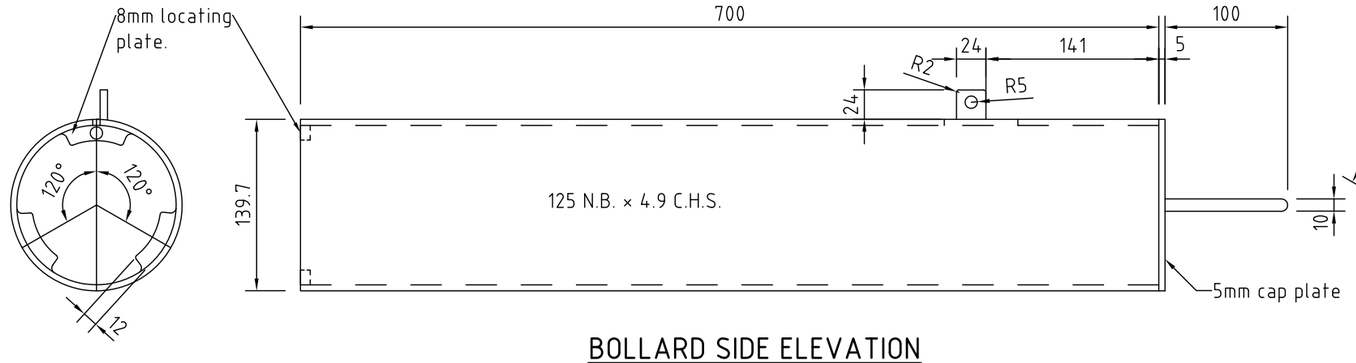
BOLLARD TOP ELEVATION

Scale 1:5



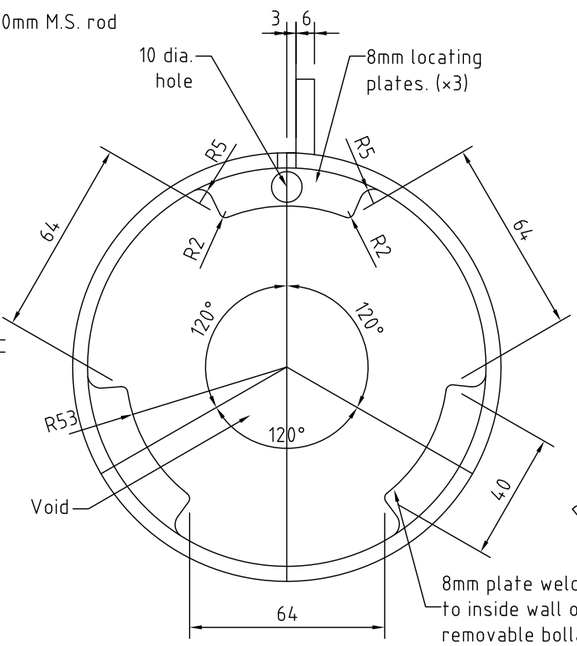
LOCKING ROD

Scale 1:5



BOLLARD SIDE ELEVATION

Scale 1:5



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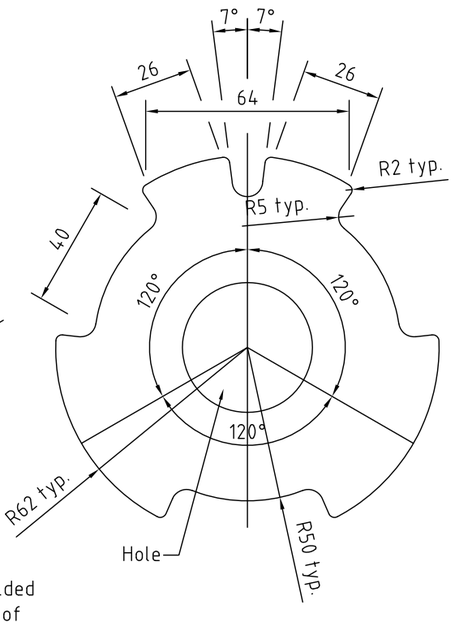
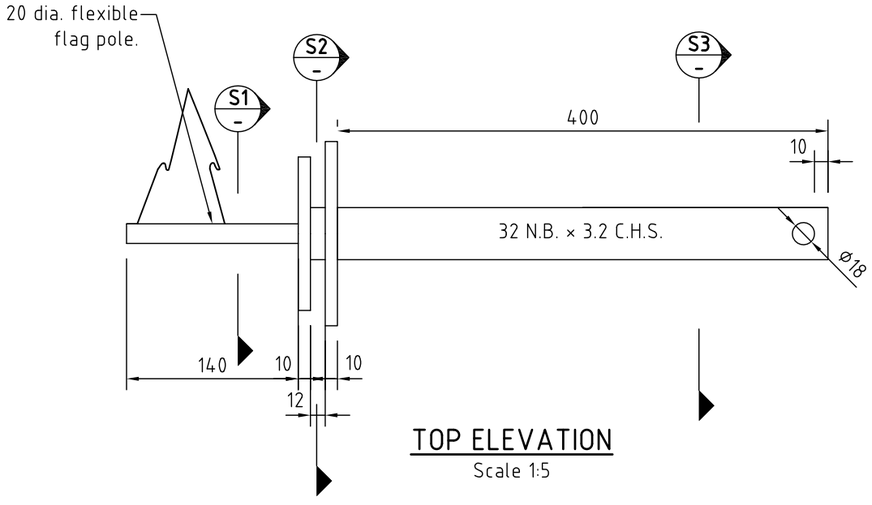


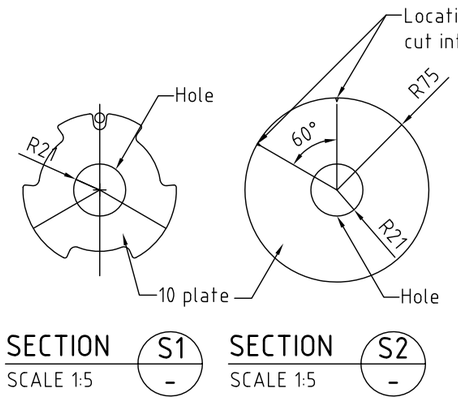
END ELEVATION

Scale 1:2



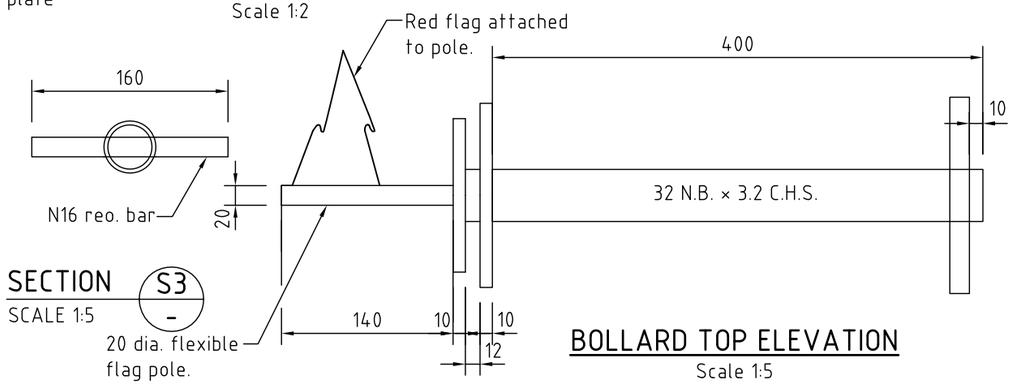
TOP ELEVATION

Scale 1:5



SECTION S1 -
SCALE 1:5

SECTION S2 -
SCALE 1:5



SECTION S3 -
SCALE 1:5

BOLLARD TOP ELEVATION

Scale 1:5

SUPERSEDES DRAWING NO. 50812

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
REMOVABLE BOLLARD

Design File
Drawing No. P-13

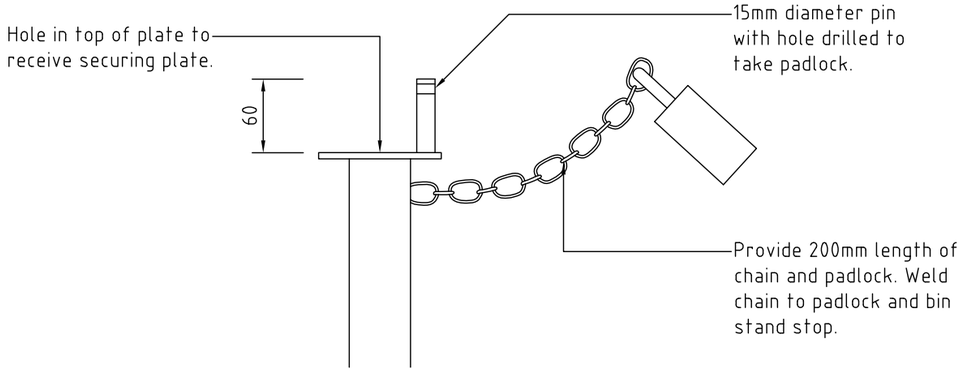
Sheet of

Revision A

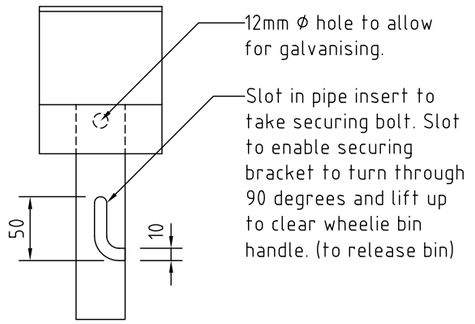
A3

NOTES:

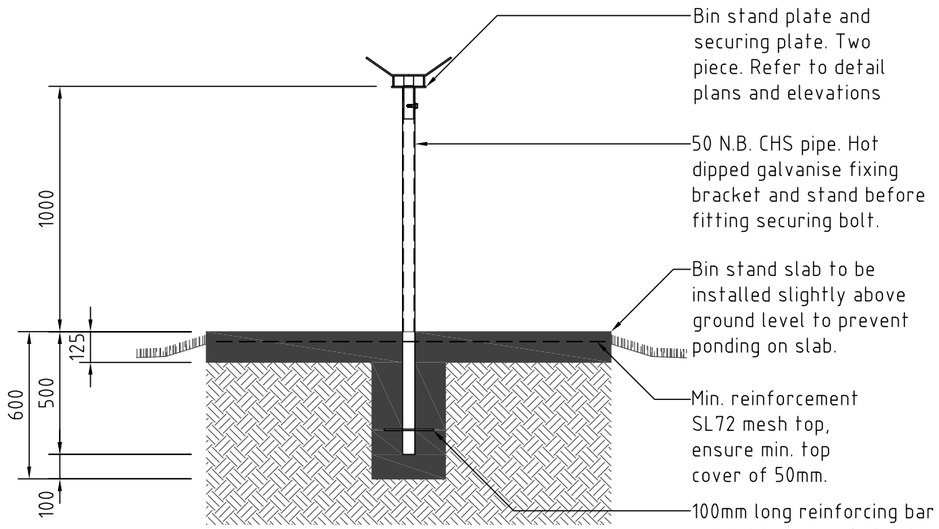
1. Refuse bins are only provided under exceptional circumstances in local corridor link, landscape amenity parks, and natural areas. The high cost of servicing refuse bins means a limit is placed on the numbers. Park visitors are encouraged to take their litter home in these parks.
2. Locate bin stand at least 6m away from seating/picnic furniture.
3. Locate so that the bin cannot be easily accessed for the dumping of household rubbish.
4. All steel work to be hot dipped galvanised.
5. Size the concrete slab the same for both the single & double bin stand head so that if an extra bin is required in the future it is only a matter of changing the heads over.
6. Bin stand slab to be installed slightly above ground level to prevent ponding on slab.
7. Provide 10mm arris edges to concrete slab.



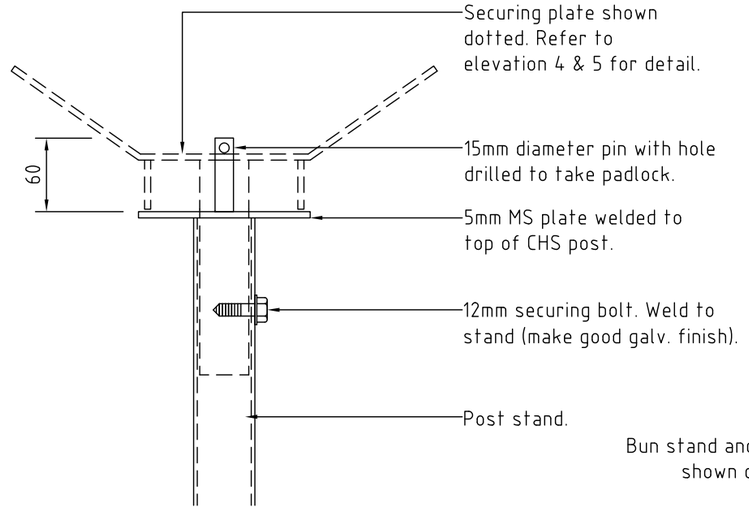
BIN STAND TOP - SIDE ELEVATION
Scale 1:5



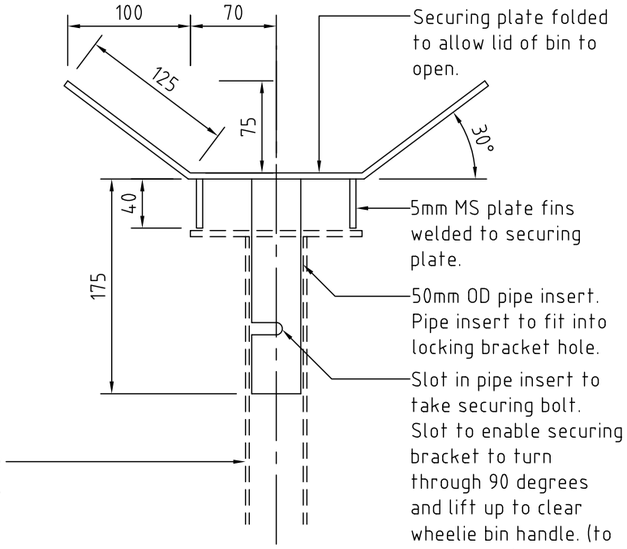
SECURING PLATE - SIDE ELEVATION
Scale 1:5



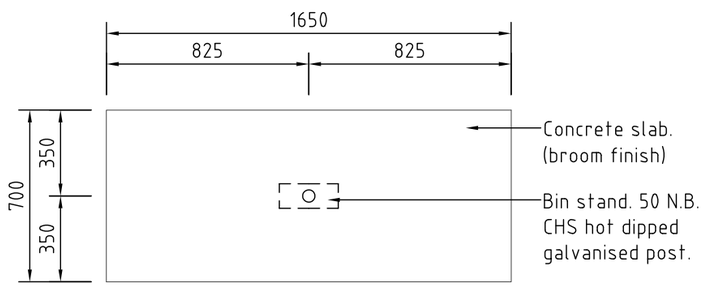
SIDE ELEVATION
Scale 1:25



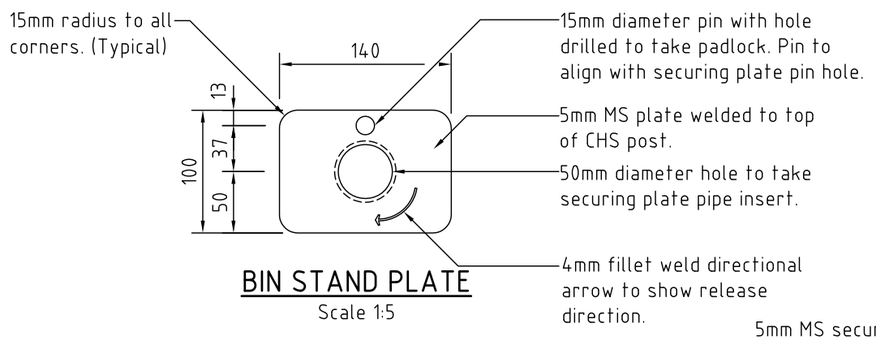
BIN STAND TOP
Scale 1:5



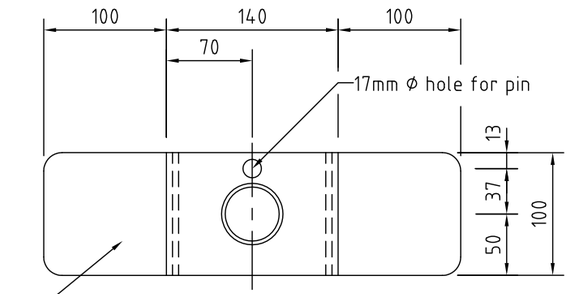
SECURING PLATE
Scale 1:5



PLAN
Scale 1:25



BIN STAND PLATE
Scale 1:5



SECURING PLATE - PLAN
Scale 1:5

SUPERSEDES DRAWING NO. 50813

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

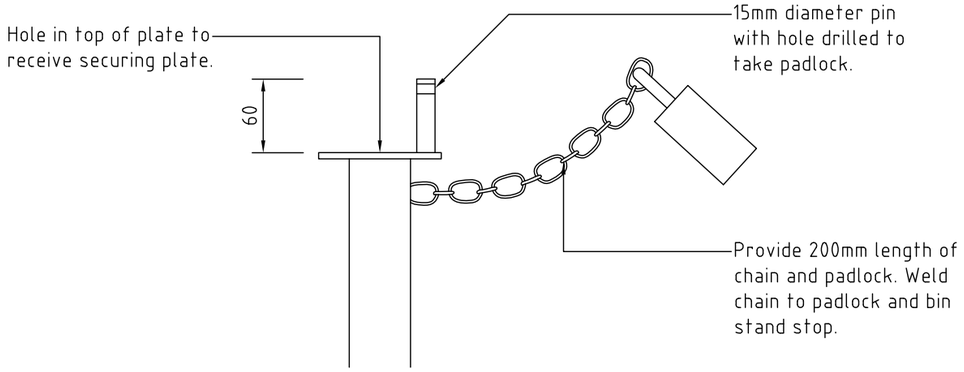
Project: SRRC STANDARD DRAWINGS PARKS

Drawing: WHEELIE BIN STAND

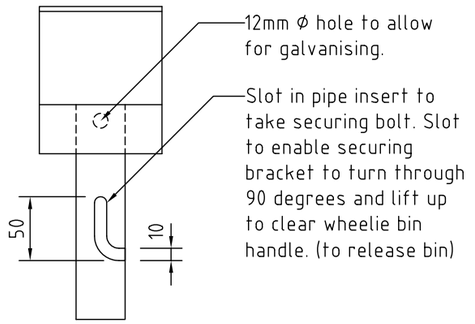
Design File / Drawing No. P-14 | Sheet of | Revision A | A3

NOTES:

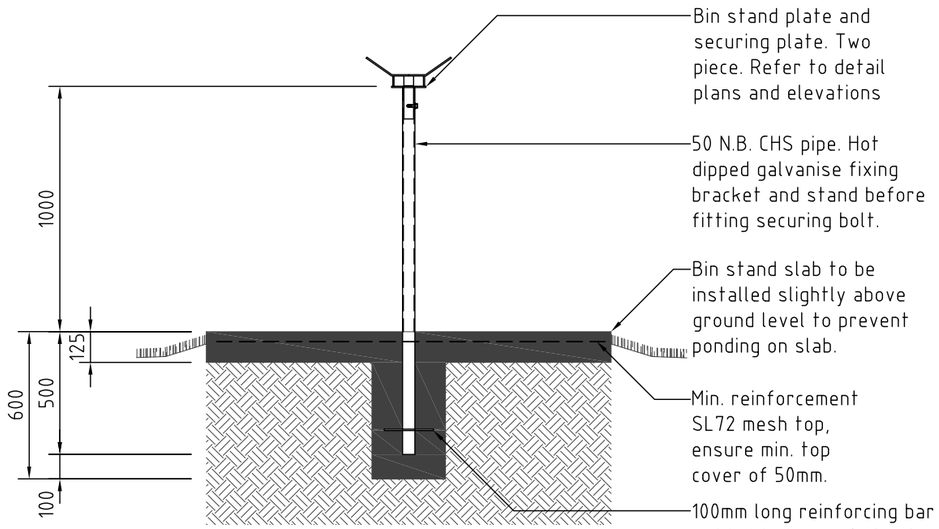
1. Refuse bins are only provided under exceptional circumstances in local corridor link, landscape amenity parks, and natural areas. The high cost of servicing refuse bins means a limit is placed on the numbers. Park visitors are encouraged to take their litter home in these parks.
2. Locate bin stand at least 6m away from seating/picnic furniture.
3. Locate so that the bin cannot be easily accessed for the dumping of household rubbish.
4. All steel work to be hot dipped galvanised.
5. Size the concrete slab the same for both the single & double bin stand head so that if an extra bin is required in the future it is only a matter of changing the heads over.
6. Bin stand slab to be installed slightly above ground level to prevent ponding on slab.
7. Provide 10mm arris edges to concrete slab.



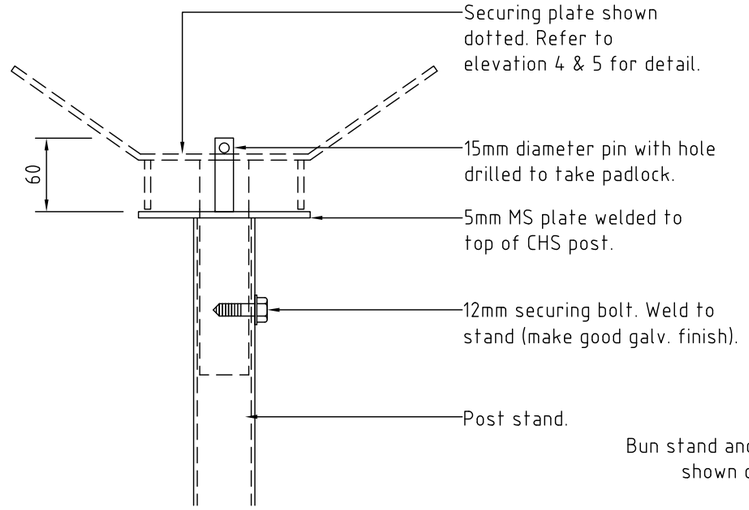
BIN STAND TOP - SIDE ELEVATION
Scale 1:5



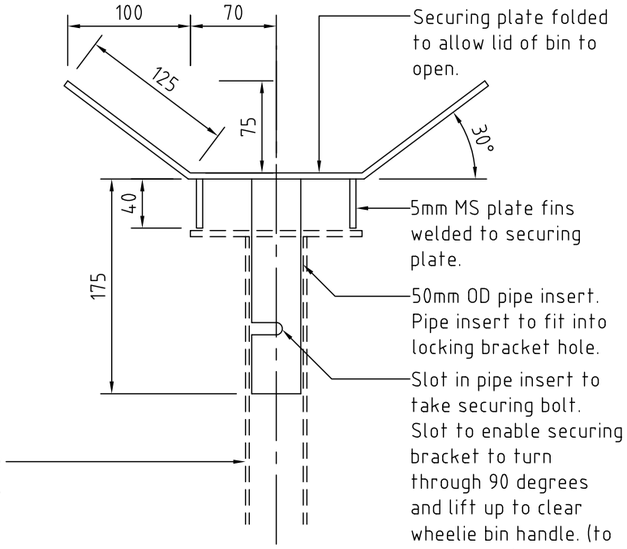
SECURING PLATE - SIDE ELEVATION
Scale 1:5



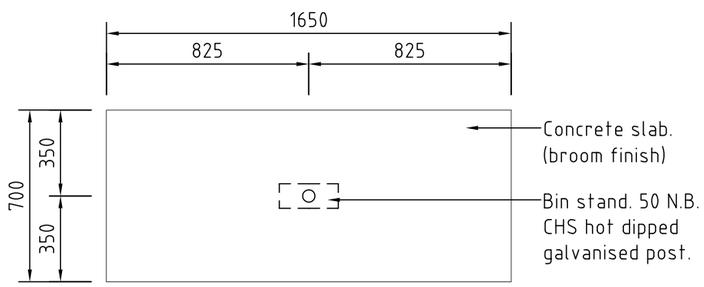
SIDE ELEVATION
Scale 1:25



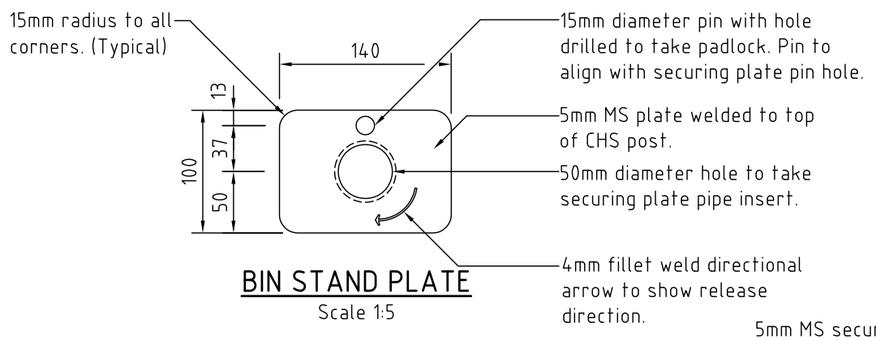
BIN STAND TOP
Scale 1:5



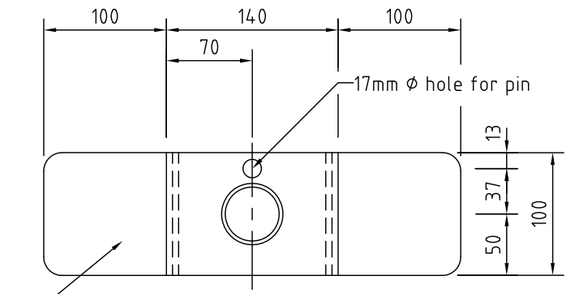
SECURING PLATE
Scale 1:5



PLAN
Scale 1:25



BIN STAND PLATE
Scale 1:5



SECURING PLATE - PLAN
Scale 1:5

SUPERSEDES DRAWING NO. 50813

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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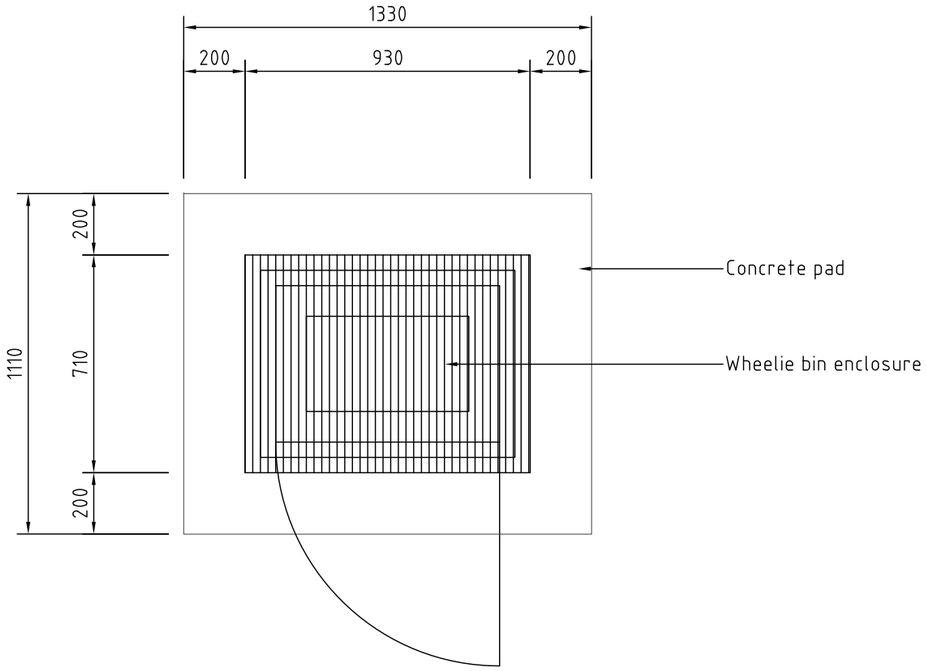
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: WHEELIE BIN STAND

Design File / Drawing No. P-14 | Sheet of | Revision A | A3



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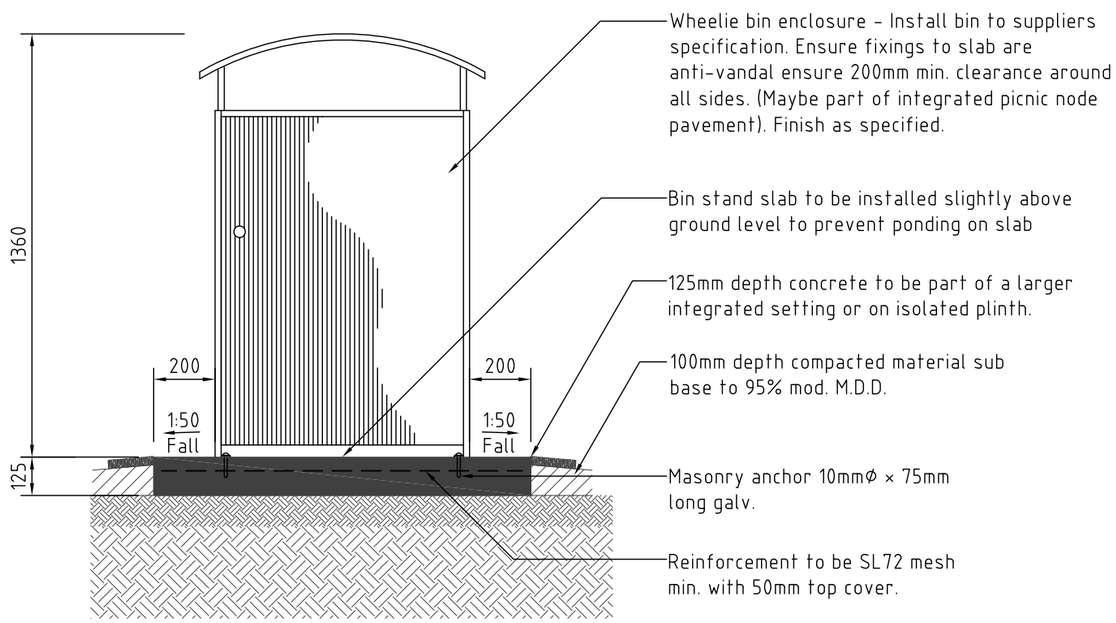

ELEVATION
Scale 1:20

NOTES:

1. Refuse bins are only provided under exceptional circumstances in local corridor link, landscape amenity parks, and natural areas. The high cost of servicing refuse bins means a limit is placed on the numbers. Park visitors are encouraged to take their litter home in these parks.
2. Bin enclosure colour to be Green - Colorbond Cottage Green or closest green.
3. Bin enclosure door to incorporate a night latch keyed to a SRRC park key.
4. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of pavement area.
5. Where applicable - incorporate bin enclosure as part of integrated picnic setting nodes.
6. Ensure bin enclosures are located and landscaped in accordance with detailed landscape plan and subdivision and development guidelines.
7. Ensure bin enclosures are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
8. Bin enclosure to be of burn resistant materials and surfaces are to allow for ease of graffiti removal.
9. At a minimum all concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh. Ensure min. top cover of 50mm. Arris edges 10mm.
10. All fixtures/fittings unless specified are to be hot dipped galvanised. Specify stainless steel fixings in vicinity of saltwater - ensure separation between various metals to prevent metal corrosion.
11. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.

SUPERSEDES DRAWING NO. 50814

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

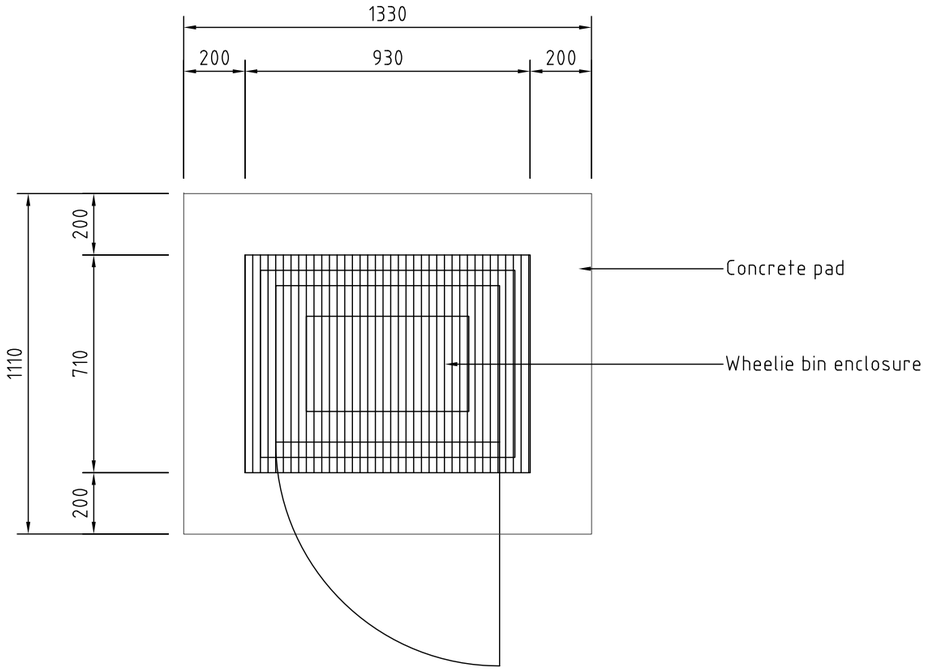
Drawing
WHEELIE BIN ENCLOSURE

Design File
Drawing No. P-15

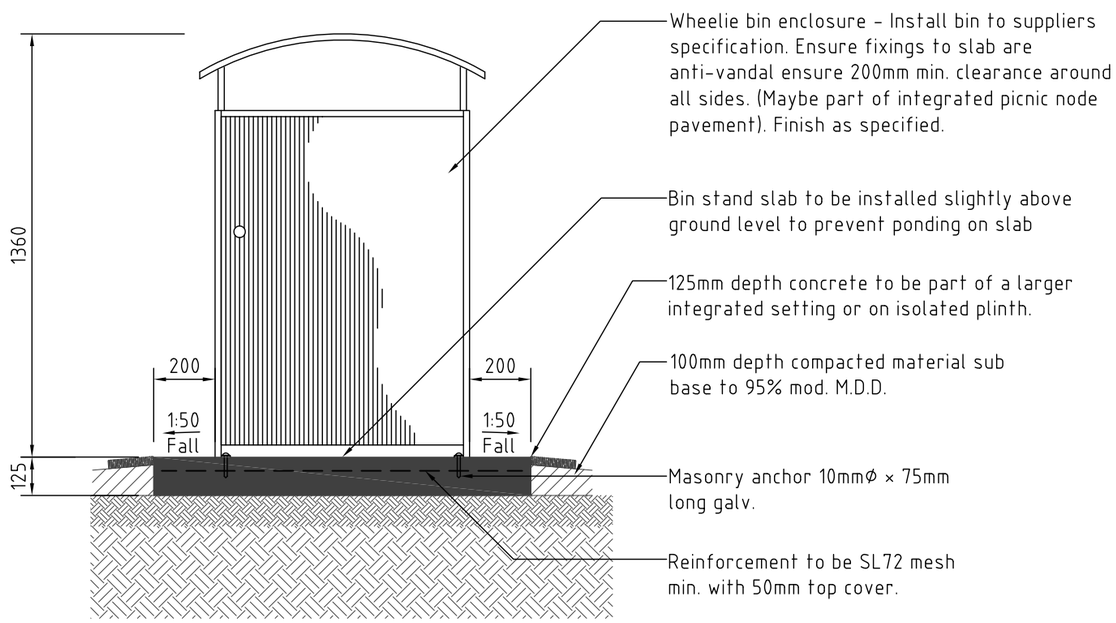
Sheet of

Revision A

A3



PLAN
Scale 1:20



ELEVATION
Scale 1:20

NOTES:

1. Refuse bins are only provided under exceptional circumstances in local corridor link, landscape amenity parks, and natural areas. The high cost of servicing refuse bins means a limit is placed on the numbers. Park visitors are encouraged to take their litter home in these parks.
2. Bin enclosure colour to be Green - Colorbond Cottage Green or closest green.
3. Bin enclosure door to incorporate a night latch keyed to a SRRC park key.
4. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of pavement area.
5. Where applicable - incorporate bin enclosure as part of integrated picnic setting nodes.
6. Ensure bin enclosures are located and landscaped in accordance with detailed landscape plan and subdivision and development guidelines.
7. Ensure bin enclosures are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
8. Bin enclosure to be of burn resistant materials and surfaces are to allow for ease of graffiti removal.
9. At a minimum all concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh. Ensure min. top cover of 50mm. Arris edges 10mm.
10. All fixtures/fittings unless specified are to be hot dipped galvanised. Specify stainless steel fixings in vicinity of saltwater - ensure separation between various metals to prevent metal corrosion.
11. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.

SUPERSEDES DRAWING NO. 50814

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

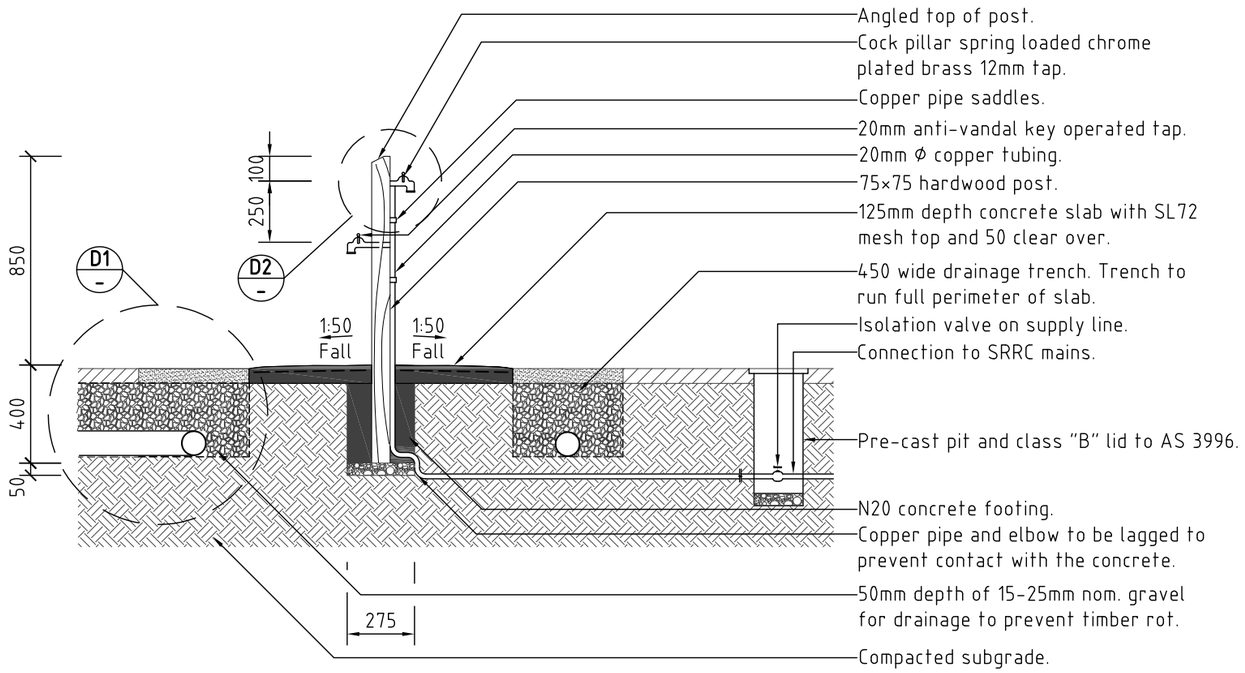
Drawing
WHEELIE BIN ENCLOSURE

Design File
Drawing No. P-15

Sheet of

Revision A

A3

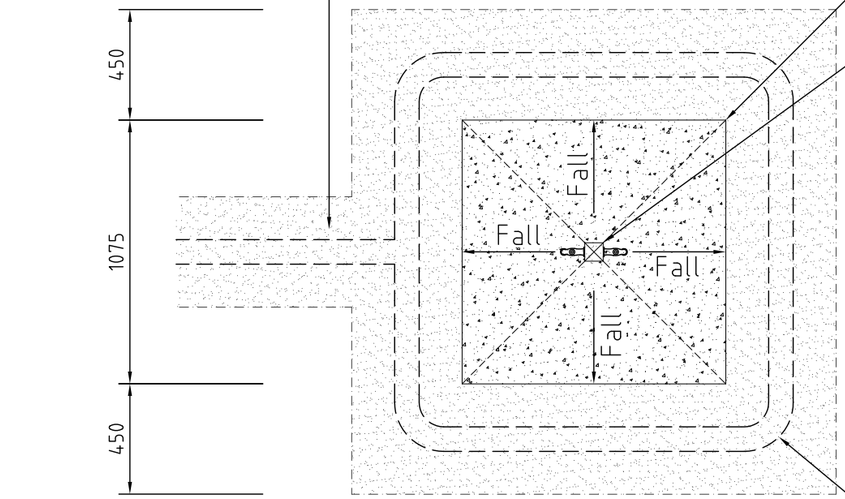


GENERAL TAP ELEVATION

Scale 1:25

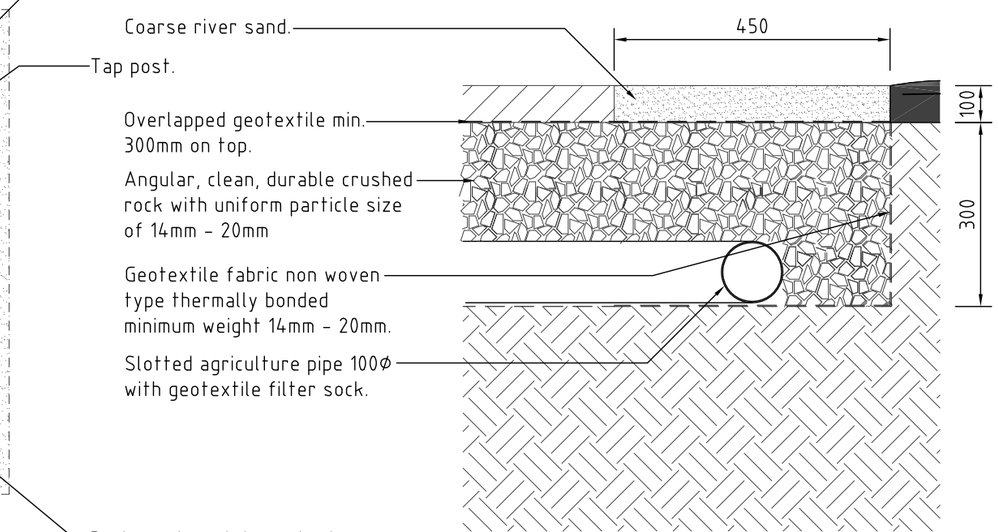
NOTES:

1. Applicable. Incorporate taps as part of integrated picnic setting nodes.
2. Ensure tap stands and taps are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. All fixtures/fittings unless specified are to be hot dipped galvanised. Ensure separation between various metals to prevent metal corrosion.
4. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
5. All concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh, ensure min top cover of 50mm. Arris edges 10mm.
6. All timber to be ACQ treated rough sawn appearance grade hardwood of single species.
7. All timber to be preservative treated to hazard class H5 to AS 1604.1 (2000) and have a durability class 1 or 2 to AS 5604 (2003).
8. All timber to be free of knots, splinters, cracks or any major defect.
9. All exposed edges to receive min. 5mm wide arris.
10. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
11. Post to be painted Green - Colorbond Cottage Green or Taubmans Mid-Bristol Green.



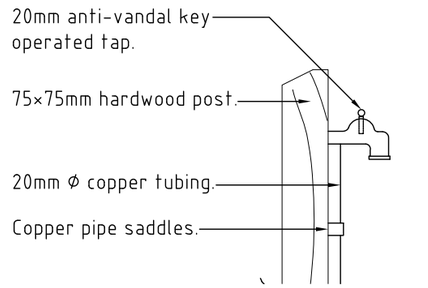
GENERAL TAP PLAN

Scale 1:25



DETAIL - DRAINAGE TRENCH D1

SCALE 1:10



DETAIL - MAINTENANCE TAP D2

SCALE 1:10

SUPERSEDES DRAWING NO. 50815

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

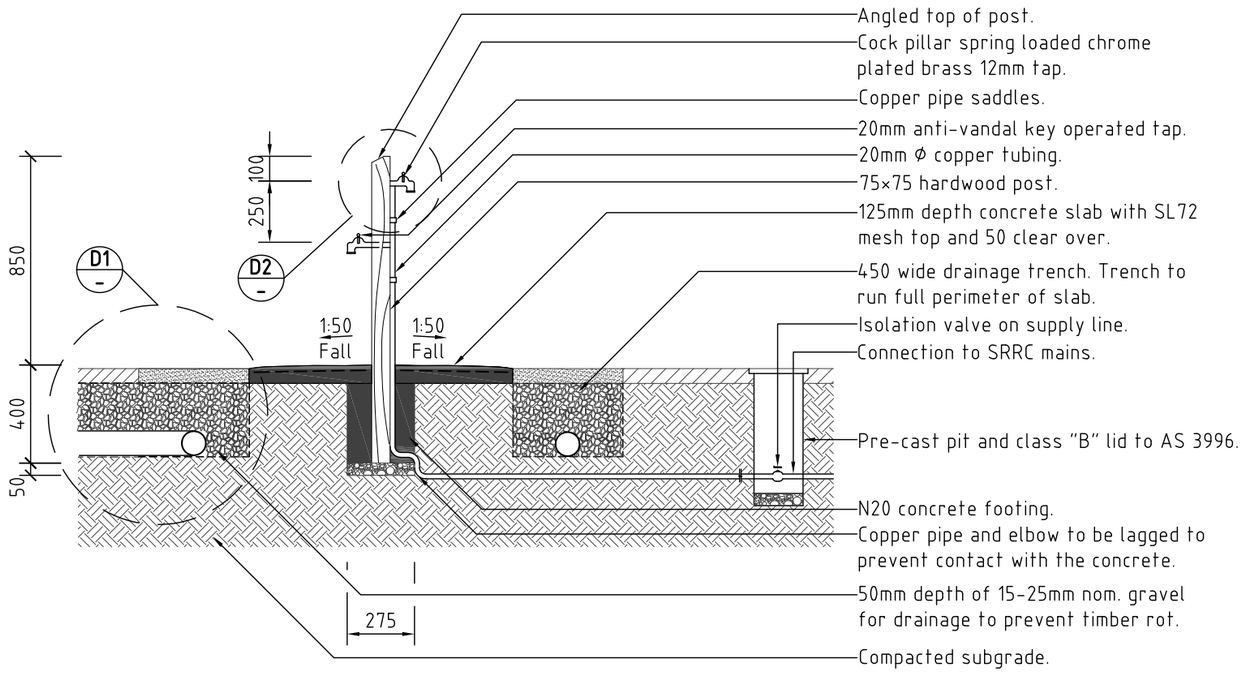
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: GENERAL TAP AND MAINTENANCE TAP

Design File / Drawing No. P-16 | Sheet of | Revision A | A3

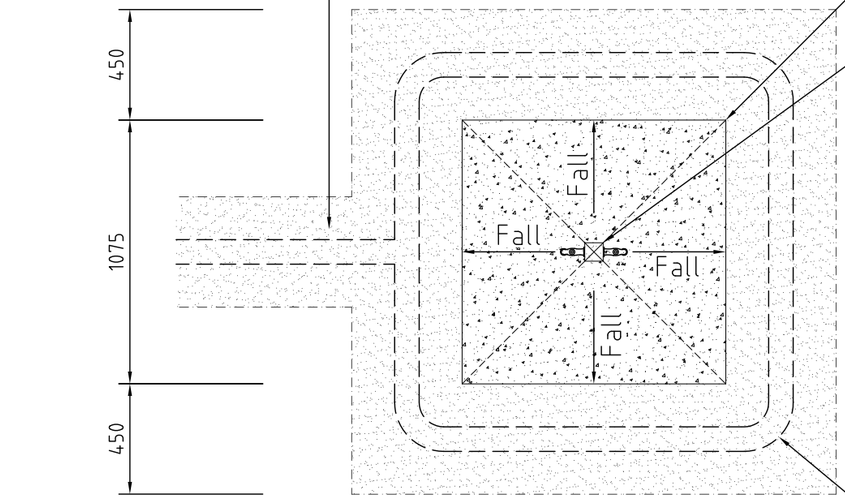


GENERAL TAP ELEVATION

Scale 1:25

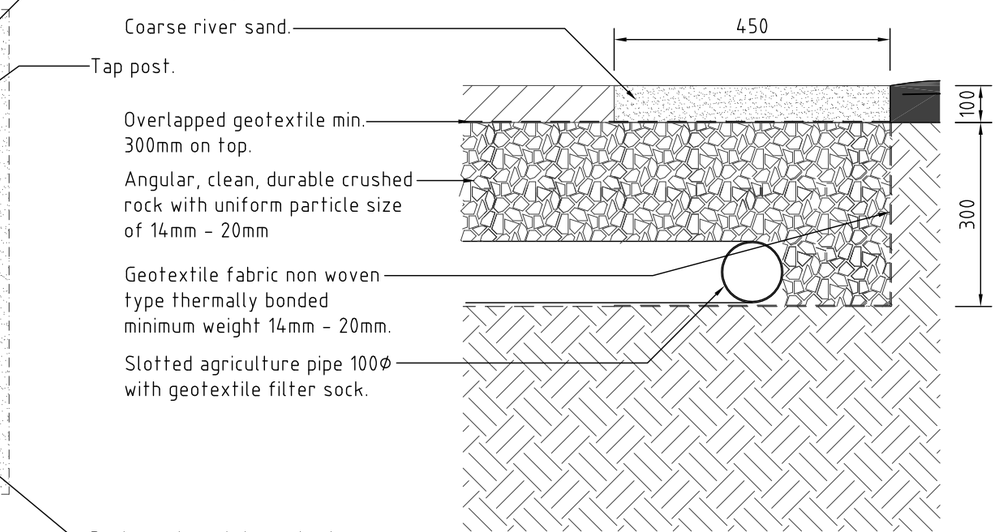
NOTES:

1. Applicable. Incorporate taps as part of integrated picnic setting nodes.
2. Ensure tap stands and taps are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. All fixtures/fittings unless specified are to be hot dipped galvanised. Ensure separation between various metals to prevent metal corrosion.
4. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
5. All concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh, ensure min top cover of 50mm. Arris edges 10mm.
6. All timber to be ACQ treated rough sawn appearance grade hardwood of single species.
7. All timber to be preservative treated to hazard class H5 to AS 1604.1 (2000) and have a durability class 1 or 2 to AS 5604 (2003).
8. All timber to be free of knots, splinters, cracks or any major defect.
9. All exposed edges to receive min. 5mm wide arris.
10. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
11. Post to be painted Green - Colorbond Cottage Green or Taubmans Mid-Bristol Green.



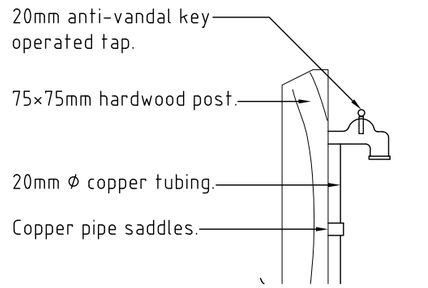
GENERAL TAP PLAN

Scale 1:25



DETAIL - DRAINAGE TRENCH D1

SCALE 1:10



DETAIL - MAINTENANCE TAP D2

SCALE 1:10

SUPERSEDES DRAWING NO. 50815

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

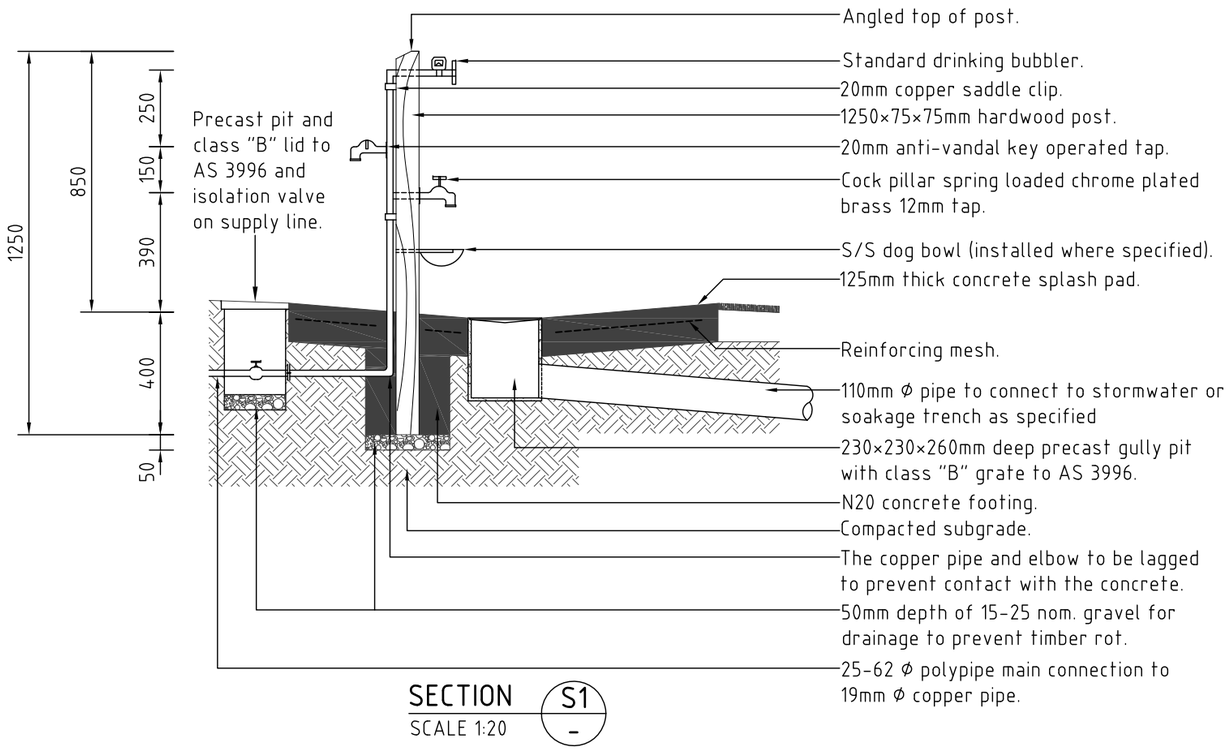
SCENIC RIM Regional Council

Works & Infrastructure Services

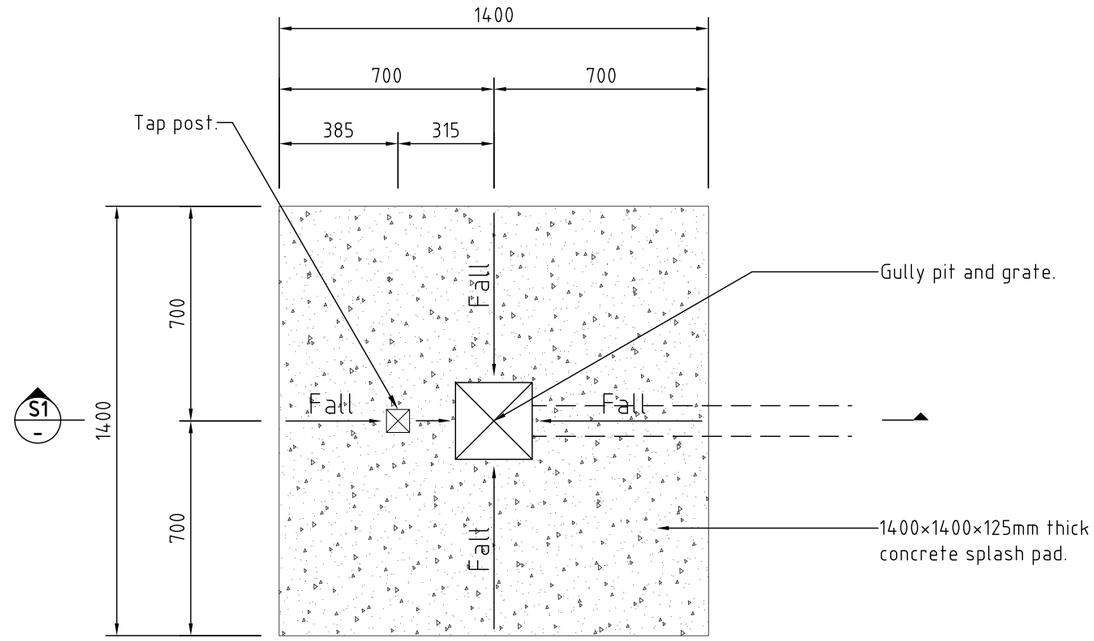
Project: SRRC STANDARD DRAWINGS PARKS

Drawing: GENERAL TAP AND MAINTENANCE TAP

Design File / Drawing No. P-16 | Sheet of | Revision A | A3



SECTION S1
SCALE 1:20



PLAN
Scale 1:20

NOTES:

1. Where applicable. Incorporate taps as part of integrated picnic setting nodes.
2. Ensure tap stand and taps are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. All fixtures/fittings unless specified are to be hot dipped galvanised. Ensure separation between various metals to prevent metal corrosion.
4. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
5. All concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh, ensure min. top cover of 50mm. Arris edges 10mm.
6. All timber to ACQ treated rough sawn appearance grade hardwood of single species.
7. All timber to be preservative treated to hazard class H5 to AS 1604.1 (2000) and have a durability class 1 or 2 to AS 5604 (2003).
8. All timber to be free of knots, splinters, cracks or any major defect.
9. All exposed edges to receive min. 5mm wide arris.
10. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
11. Posts to be painted Colorbond Cottage Green or Taubmans Mid-Bristol Green.

SUPERSEDES DRAWING NO. 50816

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

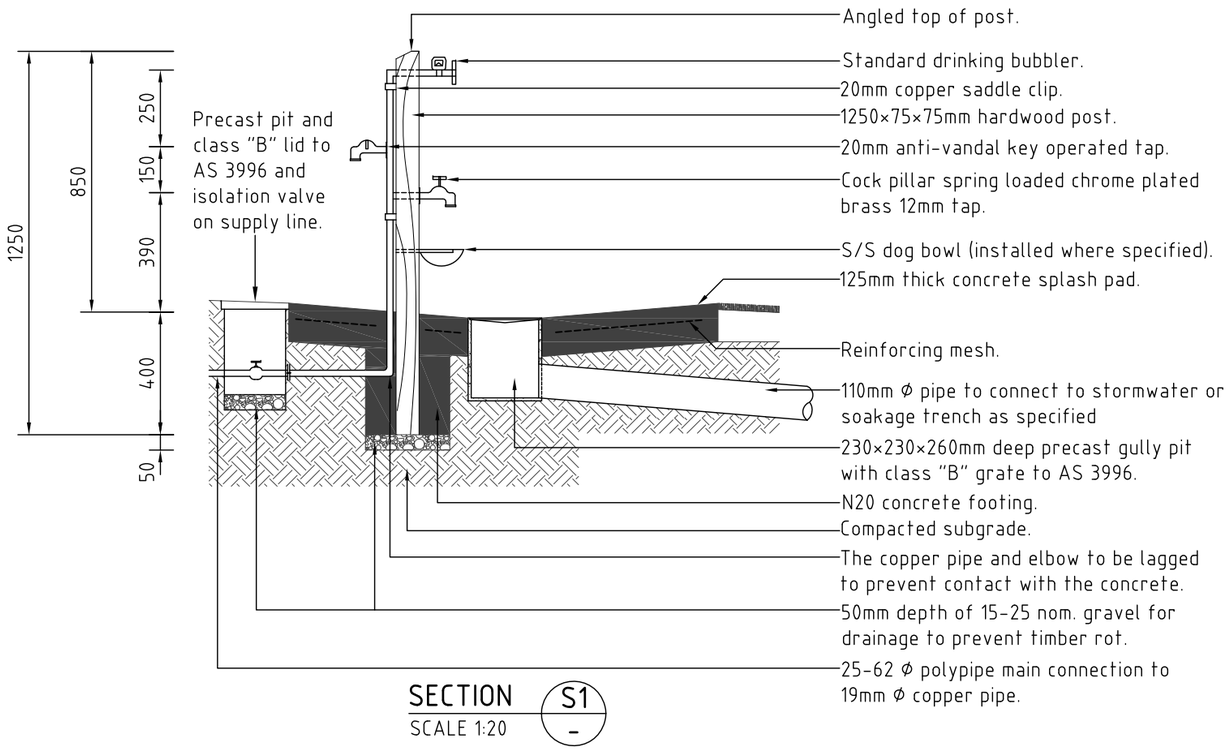
Drawing
WATER TAP AND BUBBLER
WITH DOG BOWL

Design File
Drawing No. P-17

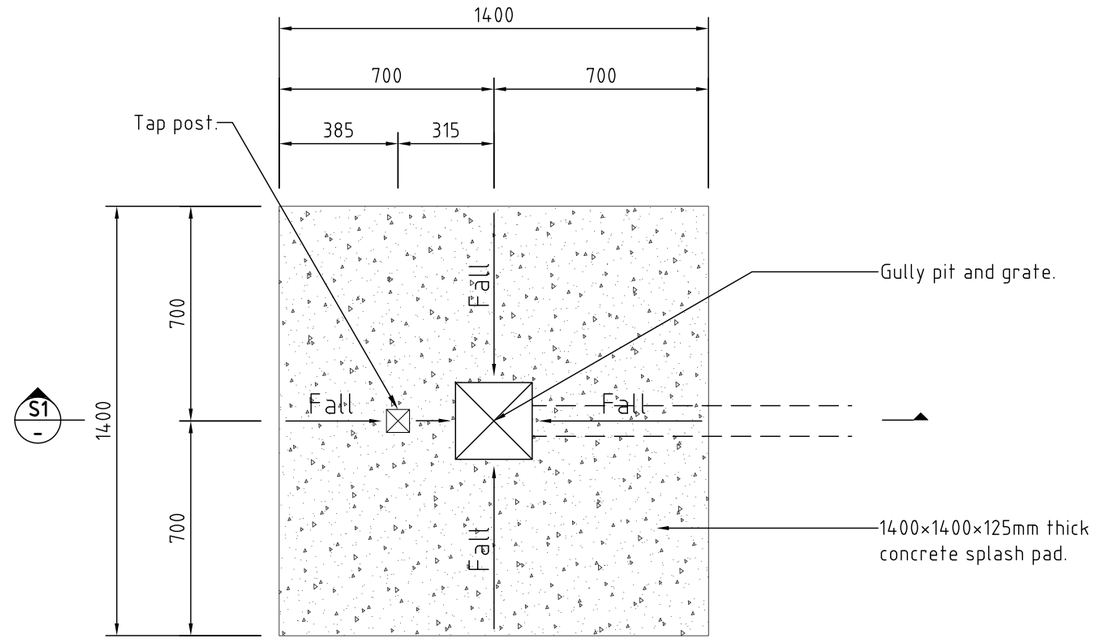
Sheet of

Revision A

A3



SECTION S1
SCALE 1:20



PLAN
Scale 1:20

NOTES:

1. Where applicable. Incorporate taps as part of integrated picnic setting nodes.
2. Ensure tap stand and taps are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. All fixtures/fittings unless specified are to be hot dipped galvanised. Ensure separation between various metals to prevent metal corrosion.
4. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
5. All concrete to be grade N25 broom finished 125mm min. thickness. All concrete works to be reinforced min. SL72 mesh, ensure min. top cover of 50mm. Arris edges 10mm.
6. All timber to ACQ treated rough sawn appearance grade hardwood of single species.
7. All timber to be preservative treated to hazard class H5 to AS 1604.1 (2000) and have a durability class 1 or 2 to AS 5604 (2003).
8. All timber to be free of knots, splinters, cracks or any major defect.
9. All exposed edges to receive min. 5mm wide arris.
10. Prior to installation, all cuts, edges, joints to receive liberal coatings with an approved timber preservative.
11. Posts to be painted Colorbond Cottage Green or Taubmans Mid-Bristol Green.

SUPERSEDES DRAWING NO. 50816

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
WATER TAP AND BUBBLER
WITH DOG BOWL

Design File
Drawing No. P-17

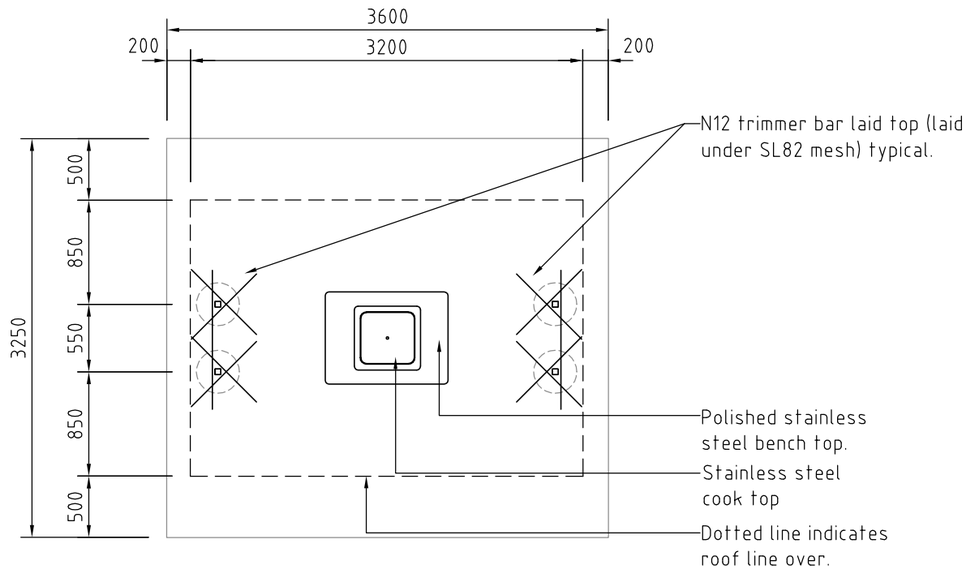
Sheet of

Revision A

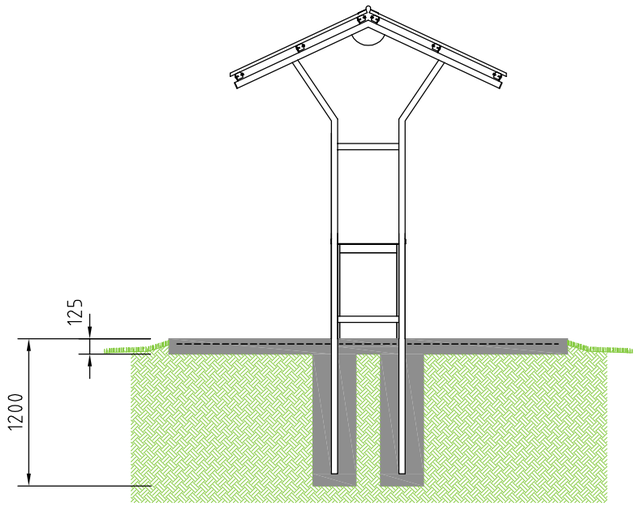
A3

NOTES:

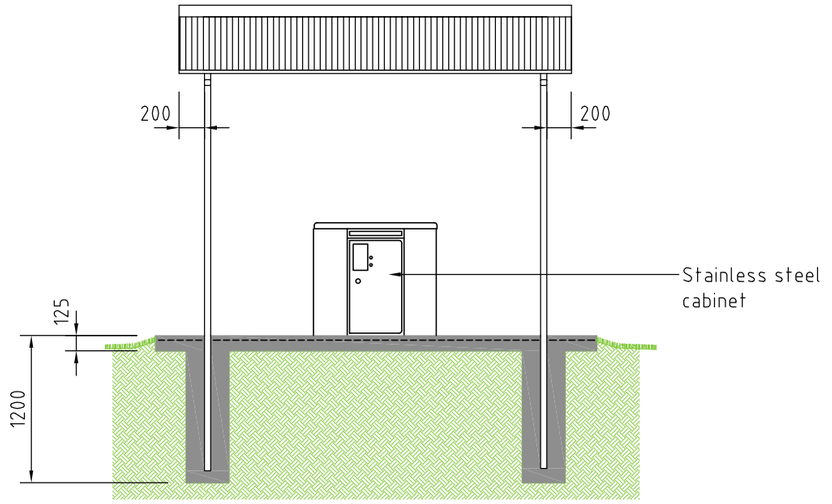
1. Where applicable - Incorporated BBQ as part of integrated picnic setting nodes.
2. Ensure Barbecues are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. At a minimum all concrete to be grade N25 broom finished 125mm min. thickness.
4. All concrete works to be reinforced min SL82 mesh. Ensure min. top cover of 50mm.
5. Arris edges 10mm.
6. All concrete areas to have 1:50 minimum crossfall away from BBQ.
7. Design includes galv., mild steel sttrcture, electrical, waste trap elements, stainless steel bench.
8. Install under shelter or within picnic shelter
9. Provide lighting where specified for BBQ picnic node.
10. Electrics to be connected by a qualified electrician.
11. All fixtures/fittings unless specified are to be hot dipped galvanised.
12. Ensure separation between various metals to prevent metal corrosion.
13. Grind smooth edges & welds prior to H.D.G. or applied finish.
14. All welds to be continuous, ground off smooth & flush.
15. Metal work within footing to be coal tar epoxied.
16. Fix to slab as per manufacturer's specification.
17. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
18. Gang nail plates used for the trusses and portals are stainless steel.
19. All screws are class 3, except the roofing screws, which are class 4.
20. All brackets and bolts are hot dip galvanised to AS 1650.
21. Anti-vandal nuts are 'Hollymetal' coated to AS 1791 type A,B,C,D to A minimum thickness of 25um.
22. Optional 316 grade stainless steel for all the above as appropriate for the atmospheric conditions.
23. Posts to be hot dip galvanised and powder-coated RHS, SHS, CHS steel (curved aluminium braces on most designs) all powder-coat finish. Optional 2 pack epoxy paint finish in lieu of powder-coat as appropriate for the atmospheric conditions.
24. Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guidelines.
25. Semi-gloss or gloss acrylic paint to be used (enamel in high wear areas).



PLAN
Scale 1:50



SIDE ELEVATION
Scale 1:50



FRONT ELEVATION
Scale 1:50

SUPERSEDES DRAWING NO. 50817

Issue	Amendment	App'd	Date
B	LENGTHENED SLAB TO 3.6m, INCLUDED 200mm OVERHANG FOR ROOF	PM	03/2013
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
ELECTRIC BARBECUE SHELTER

Design File
Drawing No. P-18

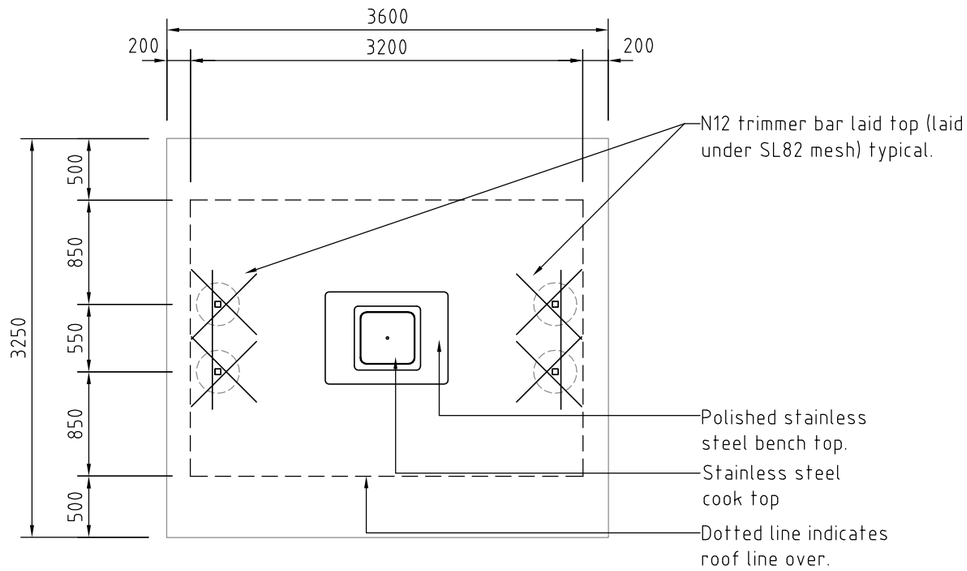
Sheet of

Revision B

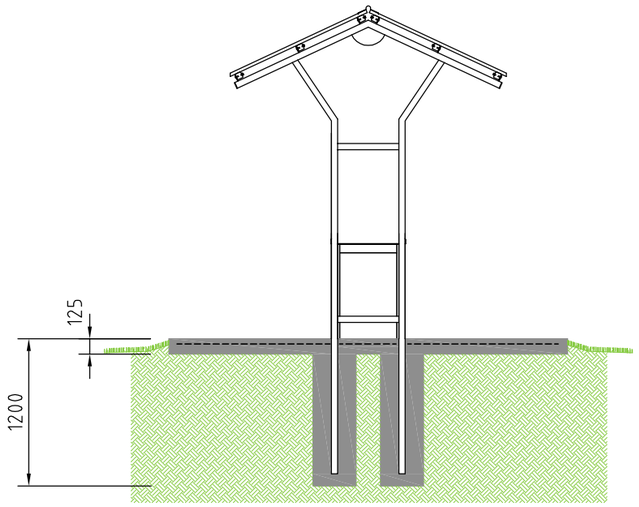
A3

NOTES:

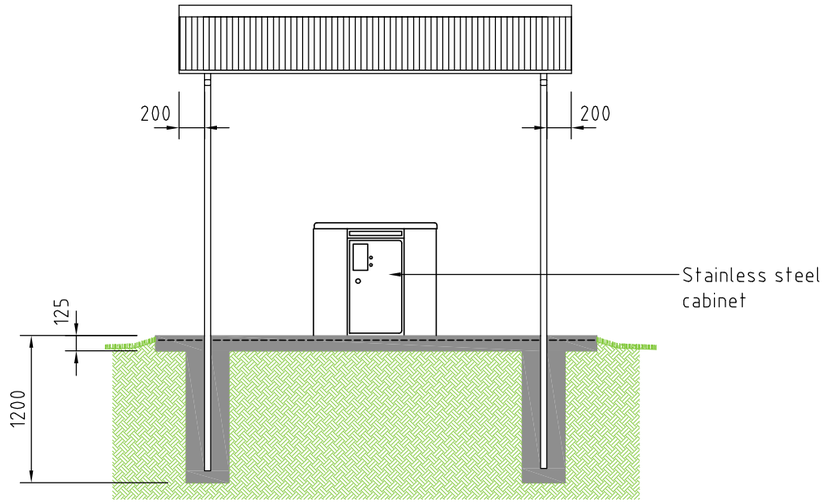
1. Where applicable - Incorporated BBQ as part of integrated picnic setting nodes.
2. Ensure Barbecues are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
3. At a minimum all concrete to be grade N25 broom finished 125mm min. thickness.
4. All concrete works to be reinforced min SL82 mesh. Ensure min. top cover of 50mm.
5. Arris edges 10mm.
6. All concrete areas to have 1:50 minimum crossfall away from BBQ.
7. Design includes galv., mild steel sttrcture, electrical, waste trap elements, stainless steel bench.
8. Install under shelter or within picnic shelter
9. Provide lighting where specified for BBQ picnic node.
10. Electrics to be connected by a qualified electrician.
11. All fixtures/fittings unless specified are to be hot dipped galvanised.
12. Ensure separation between various metals to prevent metal corrosion.
13. Grind smooth edges & welds prior to H.D.G. or applied finish.
14. All welds to be continuous, ground off smooth & flush.
15. Metal work within footing to be coal tar epoxied.
16. Fix to slab as per manufacturer's specification.
17. Where possible all fixings to be tamper/vandal proof to minimise damage or theft.
18. Gang nail plates used for the trusses and portals are stainless steel.
19. All screws are class 3, except the roofing screws, which are class 4.
20. All brackets and bolts are hot dip galvanised to AS 1650.
21. Anti-vandal nuts are 'Hollymetal' coated to AS 1791 type A,B,C,D to A minimum thickness of 25um.
22. Optional 316 grade stainless steel for all the above as appropriate for the atmospheric conditions.
23. Posts to be hot dip galvanised and powder-coated RHS, SHS, CHS steel (curved aluminium braces on most designs) all powder-coat finish. Optional 2 pack epoxy paint finish in lieu of powder-coat as appropriate for the atmospheric conditions.
24. Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guidelines.
25. Semi-gloss or gloss acrylic paint to be used (enamel in high wear areas).



PLAN
Scale 1:50



SIDE ELEVATION
Scale 1:50



FRONT ELEVATION
Scale 1:50

SUPERSEDES DRAWING NO. 50817

Issue	Amendment	App'd	Date
B	LENGTHENED SLAB TO 3.6m, INCLUDED 200mm OVERHANG FOR ROOF	PM	03/2013
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

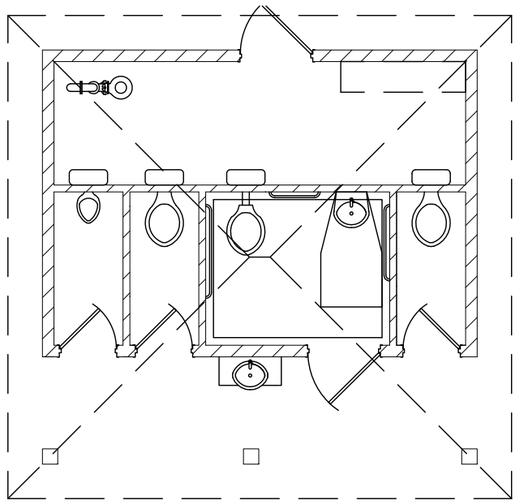
Drawing
ELECTRIC BARBECUE SHELTER

Design File
Drawing No. P-18

Sheet of

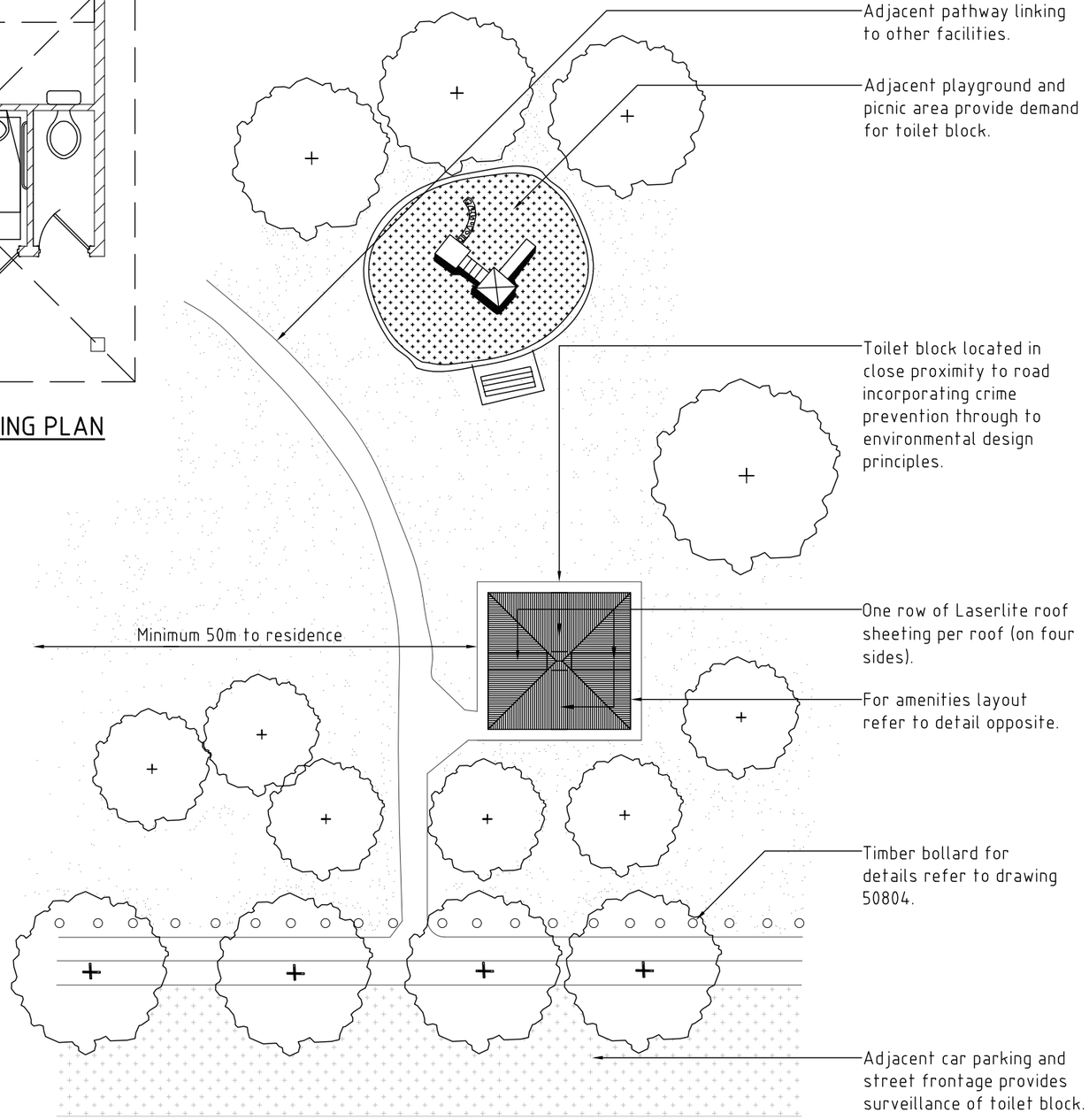
Revision B

A3



TOILET AMENITIES SITING PLAN

Scale 1:10



NOTES:

1. Public toilets are only provided in parks after an objective assessment of potential demand, and where applicable, consideration of the availability of conveniently located alternative non-council facilities.
2. Building to be located above Q100 flood level.
3. Black F gray water disposal system to comply with SRRC requirements.
4. Disabled toilet, access ramp & path in accordance with AS 1428.1.
5. To be constructed in shire wide and district parks where there is high demand (not local parks. Landscape amenity or corridor links such as waterways). Demand may occur because of high visitor numbers. An average length of stay that exceeds an hour. Visitors traveling more than 15 minutes from home to visit the park, and where elderly, children, tourists and vehicle based workers comprise a high proportion of the visitors.
6. Not provided where alternative toilet facilities are available e.g. a 7 day a week shopping centre nearby. A community building with toilet etc.
7. Sited more than 50m from nearest private residence or sited so as to not cause a nuisance to neighbours.
8. Reasonable proximity to one or more demand sources such as a car park, picnic area, playground, bikeway network, etc.
9. Built on suitable terrain to facilitate accessibility. Continuous accessible path of travel from demand sources to toilet.
10. Close proximity to a road, gate or internal track for servicing.
11. Ensure sited so unobtrusive in the landscape.
12. Facing towards most active space.
13. Incorporating "crime prevention through environmental design" principles e.g. surveillance possible from a public road or other site of regular people presence. No concealing vegetation.
14. Colours - Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guide lines.
15. Paint - Semi-gloss or gloss acrylic (enamel in high wear areas).
16. Roofing - "Roma" profile corrugated iron/with one row of Laserlite XPT or equivalent.
17. Not obstructing links between visitor nodes and park facilities.
18. External shelter provided.
19. Toilet cubicles and urinals to be accessed directly from path without using airlocks.
20. Shared hand wash facilities located externally to toilets and under cover of roof.

SUPERSEDES DRAWING NO. 50819

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

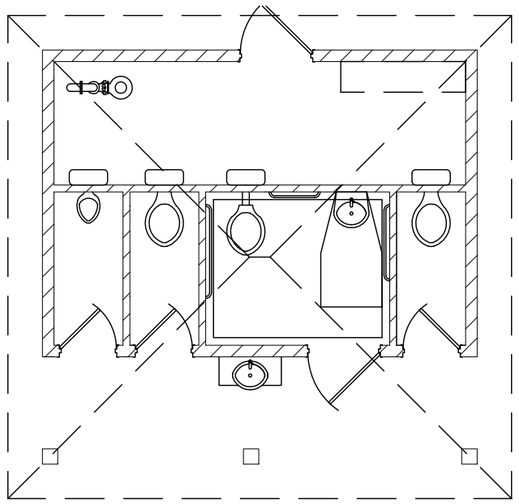
Drawing: TOILET BLOCK SITING

Design File
Drawing No. P-20

Sheet of

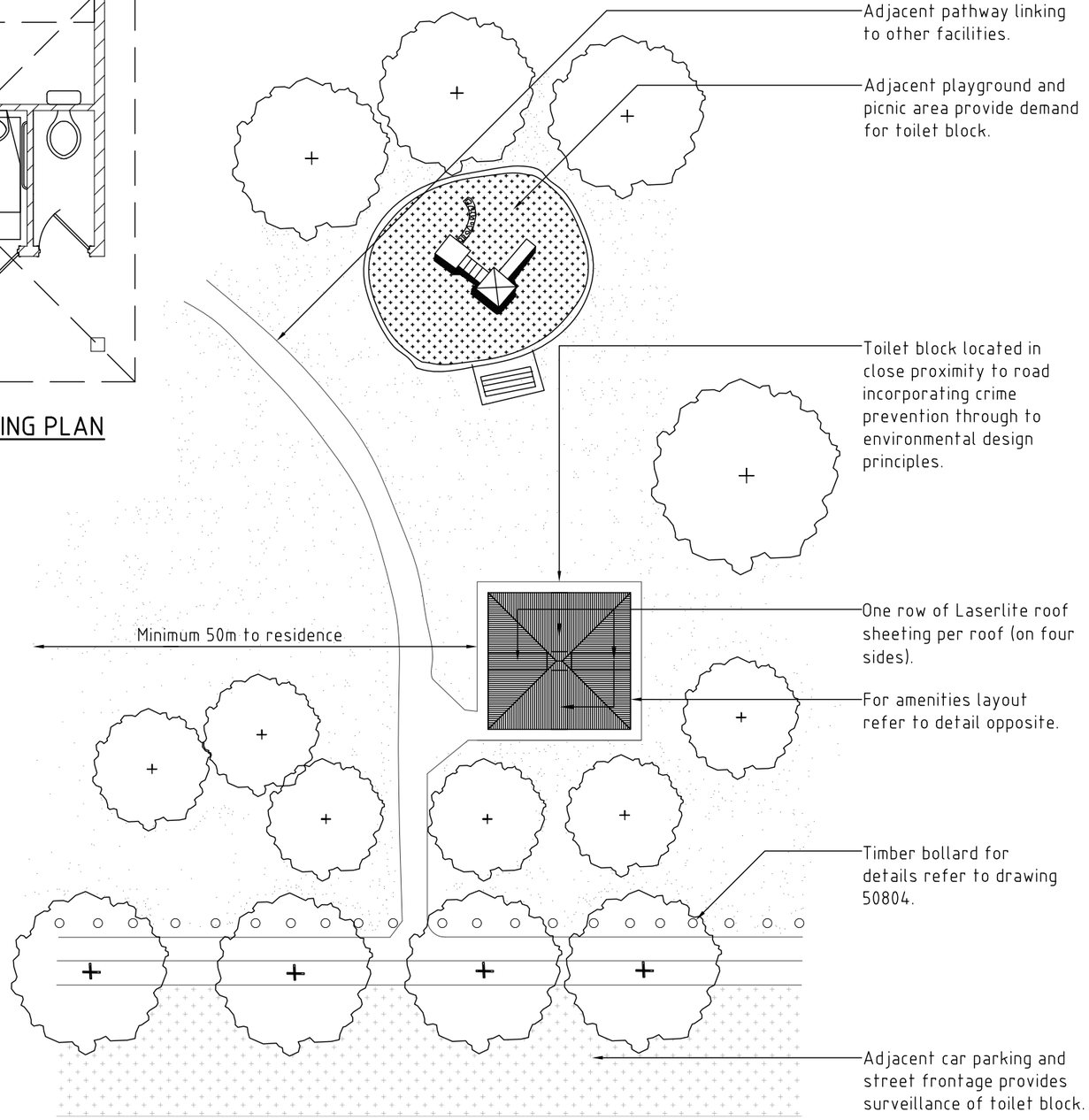
Revision A

A3



TOILET AMENITIES SITING PLAN

Scale 1:10



NOTES:

1. Public toilets are only provided in parks after an objective assessment of potential demand, and where applicable, consideration of the availability of conveniently located alternative non-council facilities.
2. Building to be located above Q100 flood level.
3. Black F gray water disposal system to comply with SRRC requirements.
4. Disabled toilet, access ramp & path in accordance with AS 1428.1.
5. To be constructed in shire wide and district parks where there is high demand (not local parks. Landscape amenity or corridor links such as waterways). Demand may occur because of high visitor numbers. An average length of stay that exceeds an hour. Visitors traveling more than 15 minutes from home to visit the park, and where elderly, children, tourists and vehicle based workers comprise a high proportion of the visitors.
6. Not provided where alternative toilet facilities are available e.g. a 7 day a week shopping centre nearby. A community building with toilet etc.
7. Sited more than 50m from nearest private residence or sited so as to not cause a nuisance to neighbours.
8. Reasonable proximity to one or more demand sources such as a car park, picnic area, playground, bikeway network, etc.
9. Built on suitable terrain to facilitate accessibility. Continuous accessible path of travel from demand sources to toilet.
10. Close proximity to a road, gate or internal track for servicing.
11. Ensure sited so unobtrusive in the landscape.
12. Facing towards most active space.
13. Incorporating "crime prevention through environmental design" principles e.g. surveillance possible from a public road or other site of regular people presence. No concealing vegetation.
14. Colours - Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guide lines.
15. Paint - Semi-gloss or gloss acrylic (enamel in high wear areas).
16. Roofing - "Roma" profile corrugated iron/with one row of Laserlite XPT or equivalent.
17. Not obstructing links between visitor nodes and park facilities.
18. External shelter provided.
19. Toilet cubicles and urinals to be accessed directly from path without using airlocks.
20. Shared hand wash facilities located externally to toilets and under cover of roof.

SUPERSEDES DRAWING NO. 50819

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A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

Drawing: TOILET BLOCK SITING

Design File
Drawing No. P-20

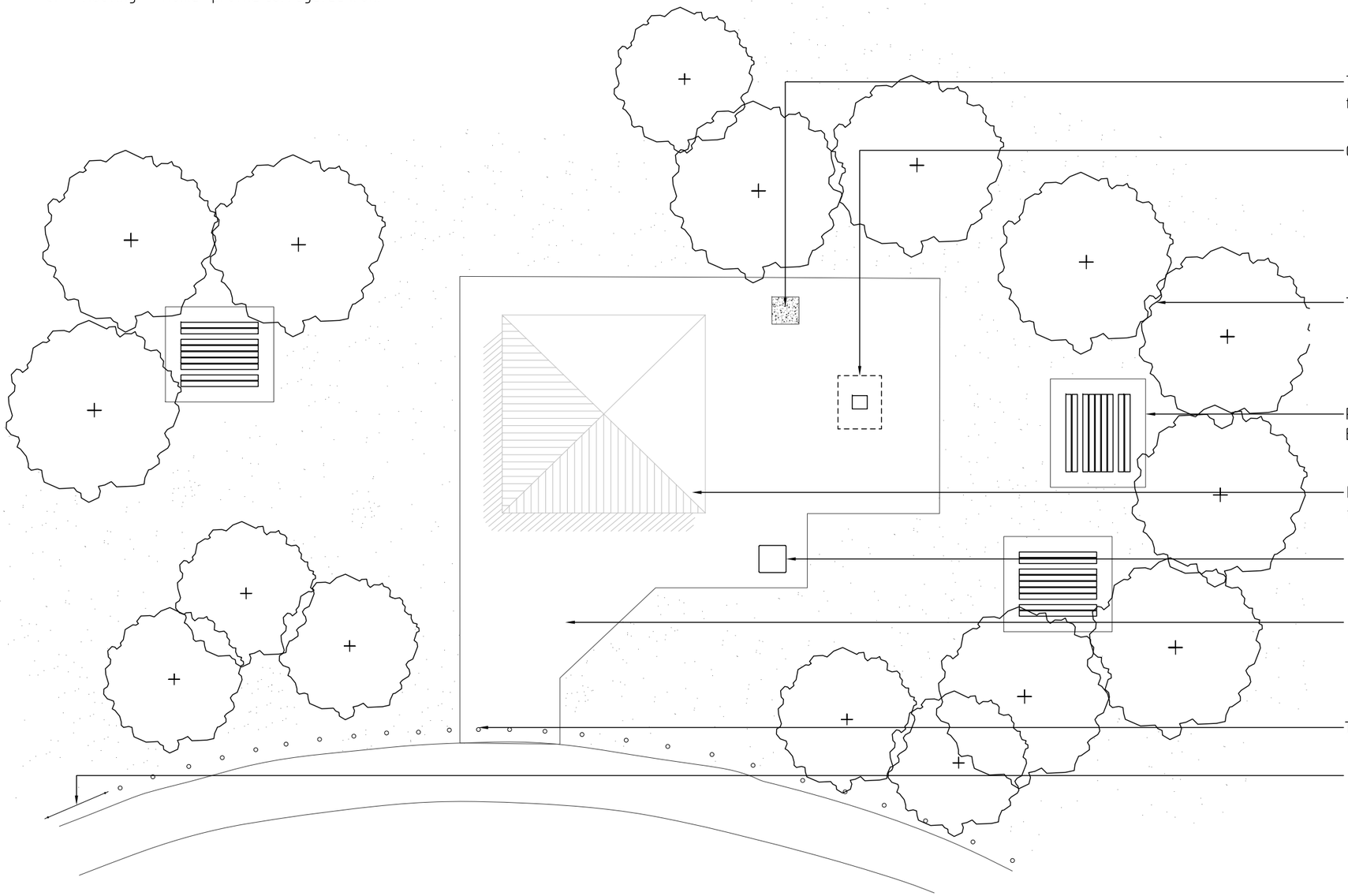
Sheet of

Revision A

A3

NOTES:

1. Ensure mown height of grass (turf) areas finishes flush with pavement areas.
2. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of pavement areas.
3. Where specified - site furniture to be incorporated as part of integrated picnic setting node.
4. Ensure park elements are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
5. Council may accept wood burning rather than standard electric barbecues in picnic nodes where mains power is not available, where smoke will not interfere with neighbours, where the risk of bushfire is low, and where fuel collection will not cause environmental harm.
6. Colours - Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guidelines.
7. Paint - Semi-gloss or gloss acrylic (enamel in high wear areas).
8. Roofing - "Roma" profile corrugated iron.
9. All concrete to be minimum grade N25
10. All concrete to be broom finished or other finish as specified for park type/precinct.
11. Concrete works to be reinforced as specified. Ensure min. top cover or 45mm. (min. SL72 Mesh) 125 min. thickness.
12. All pathway/pavement areas to have a 1:50 minimum cross-fall. Expansion joints as a guide @ 6m CCS with tool joints @ 1.5m CCS. Larger areas of pavement to be reviewed by engineer.
13. Pathways & pavements to comply with Australian Standards and council requirements for access and mobility AS 1428 (2003)
14. Ensure pavement widths and grades achieve access and mobility for all.



SUPERSEDES DRAWING NO. 50820

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PICNIC NODE

Design File
Drawing No. P-21

Sheet of

Revision A

A3

NOTES:

1. Ensure mown height of grass (turf) areas finishes flush with pavement areas.
2. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of pavement areas.
3. Where specified - site furniture to be incorporated as part of integrated picnic setting node.
4. Ensure park elements are cleaned of concrete slurry or spray when installed to prevent staining or damage to applied finishes.
5. Council may accept wood burning rather than standard electric barbecues in picnic nodes where mains power is not available, where smoke will not interfere with neighbours, where the risk of bushfire is low, and where fuel collection will not cause environmental harm.
6. Colours - Council to be consulted in regard to either matching existing infrastructure or in accordance with Scenic Rim Regional Council Parks and Cemeteries colour scheme guidelines.
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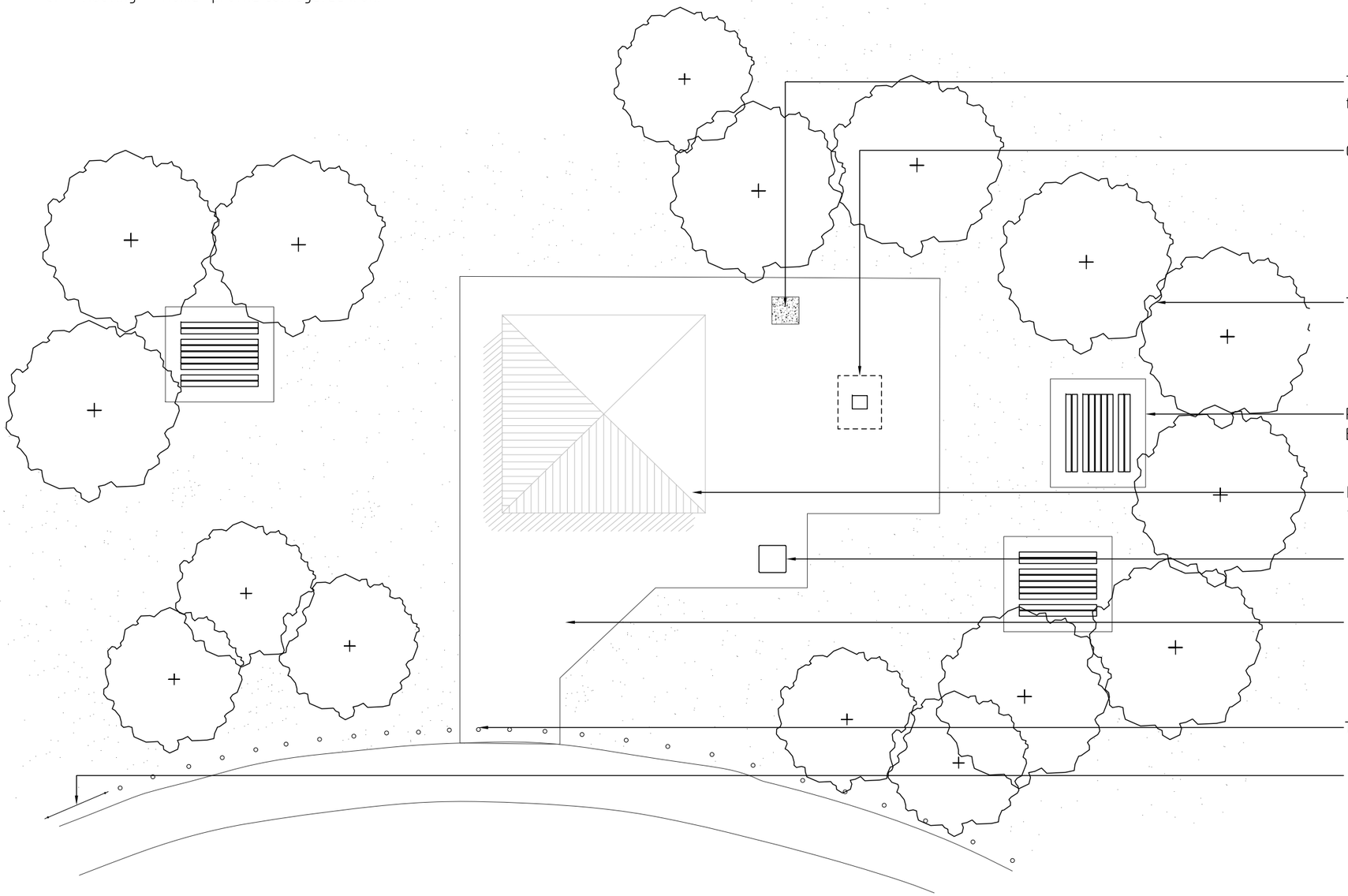

SUPERSEDES DRAWING NO. 50820

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

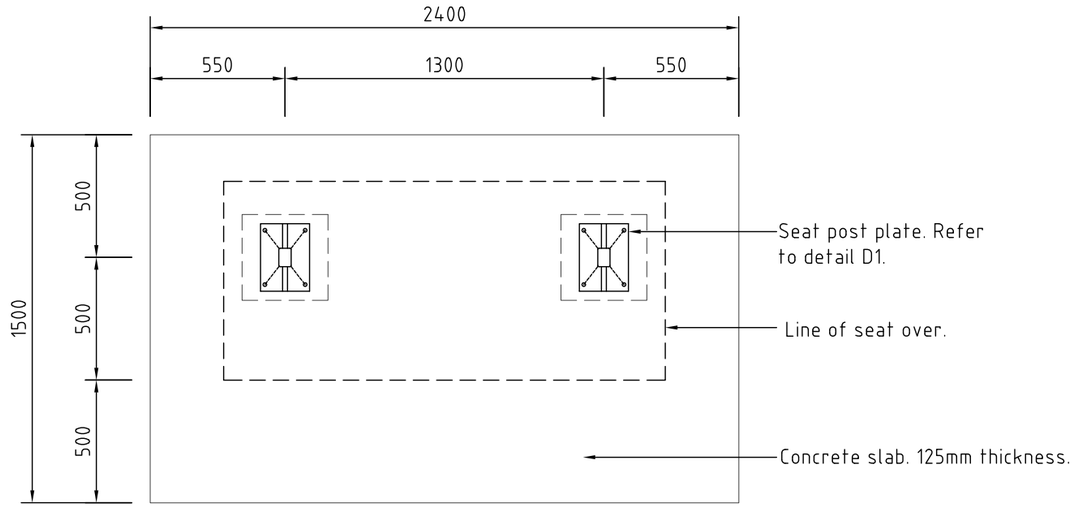
Drawing
PICNIC NODE

Design File
Drawing No. P-21

Sheet of

Revision A

A3



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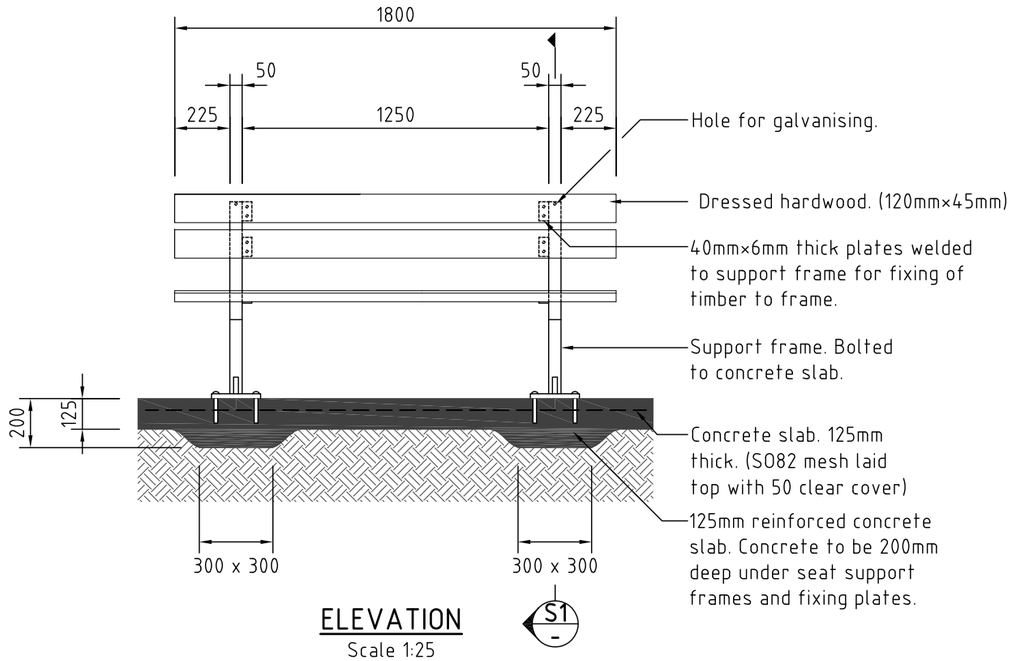
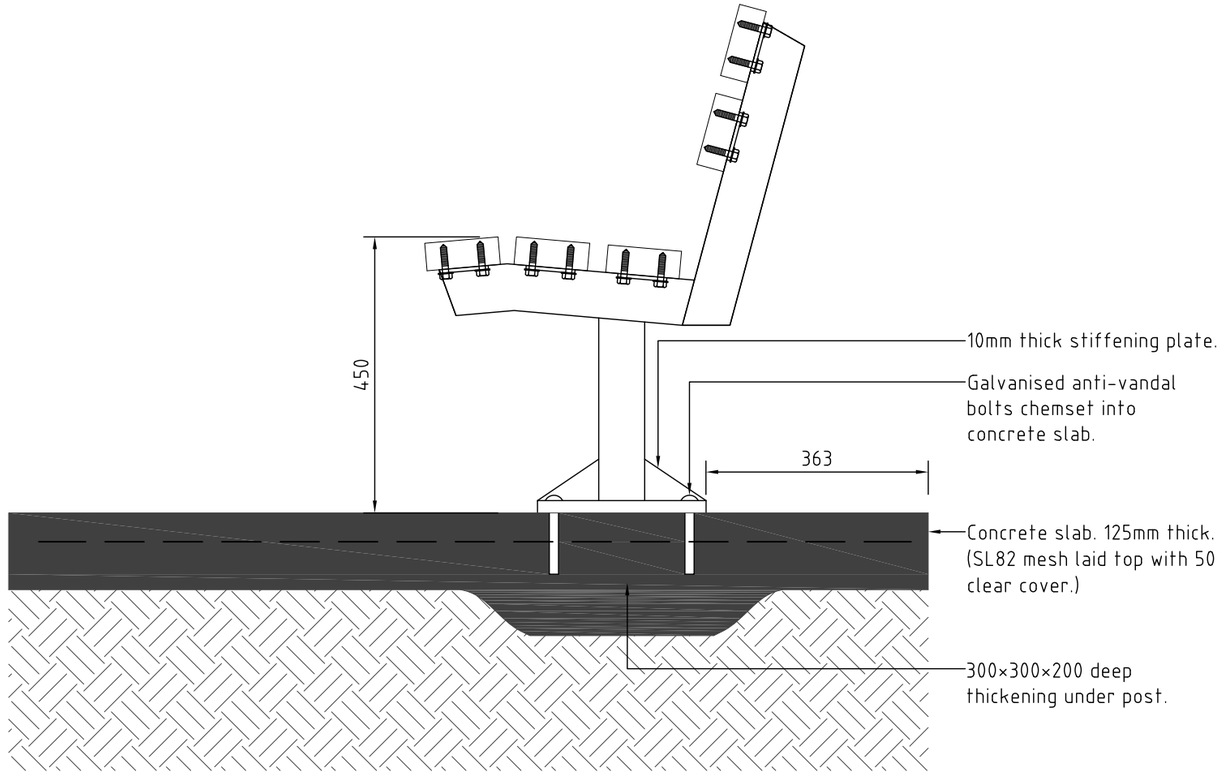


ELEVATION
Scale 1:25

S1
-

NOTES:

1. Uprights to be hot dipped galvanised and painted.
2. Colours - Council to be consulted in regard to either matching existing infrastructure or in accordance with SRRC Parks and Cemeteries colour scheme guidelines.
3. Seats should be located to provide an interesting outlook and to maximise summer and midday shade. Seats should be provided in close proximity to a playground or active recreation node, aound sports fields, at viewpoints, and at resting points along pathways.
4. Timber to be dressed hardwood with arrised edges.
5. Paint - Semi-gloss or gloss acrylic (enamel in high wear areas).
6. At a minimum all concrete to be grade N25 broom finished 125mm min. thickness.
7. All concrete works to be reinforced min. SL82 mesh. Ensure min. top cover of 50mm.
8. All concrete areas to have 1:50 minimum crossfall away from park bench



SECTION
SCALE 1:10

S1
-

SUPERSEDES DRAWING NO. 50821

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

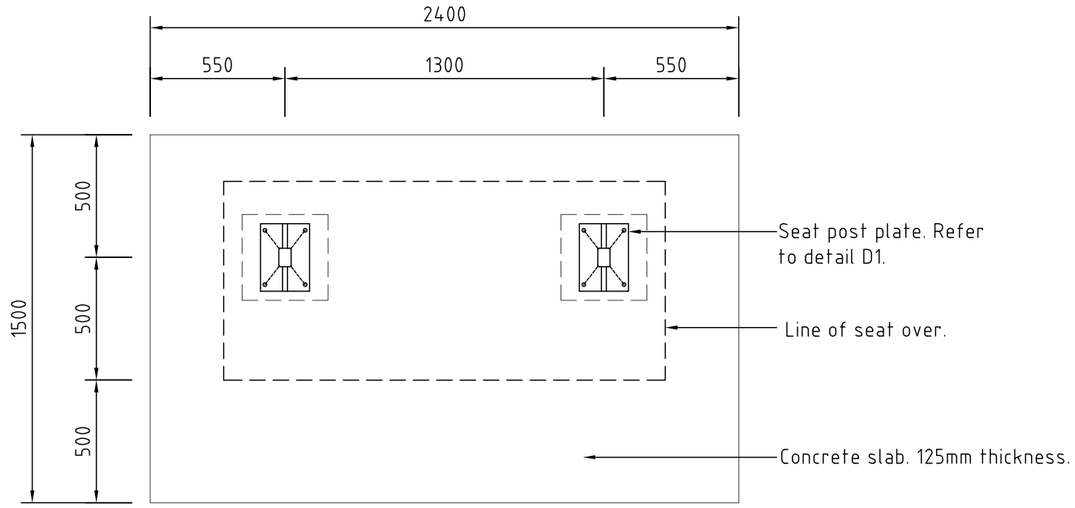
Drawing
PARK BENCH
BOLT DOWN

Design File
Drawing No. P-22

Sheet of

Revision A

A3



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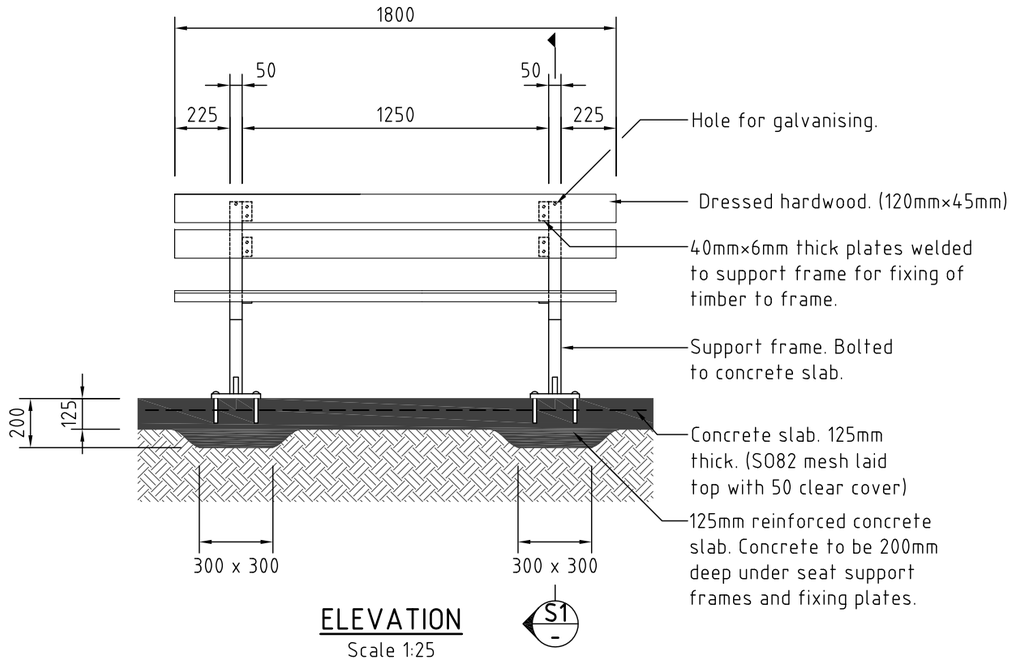

ELEVATION
Scale 1:25

S1
-

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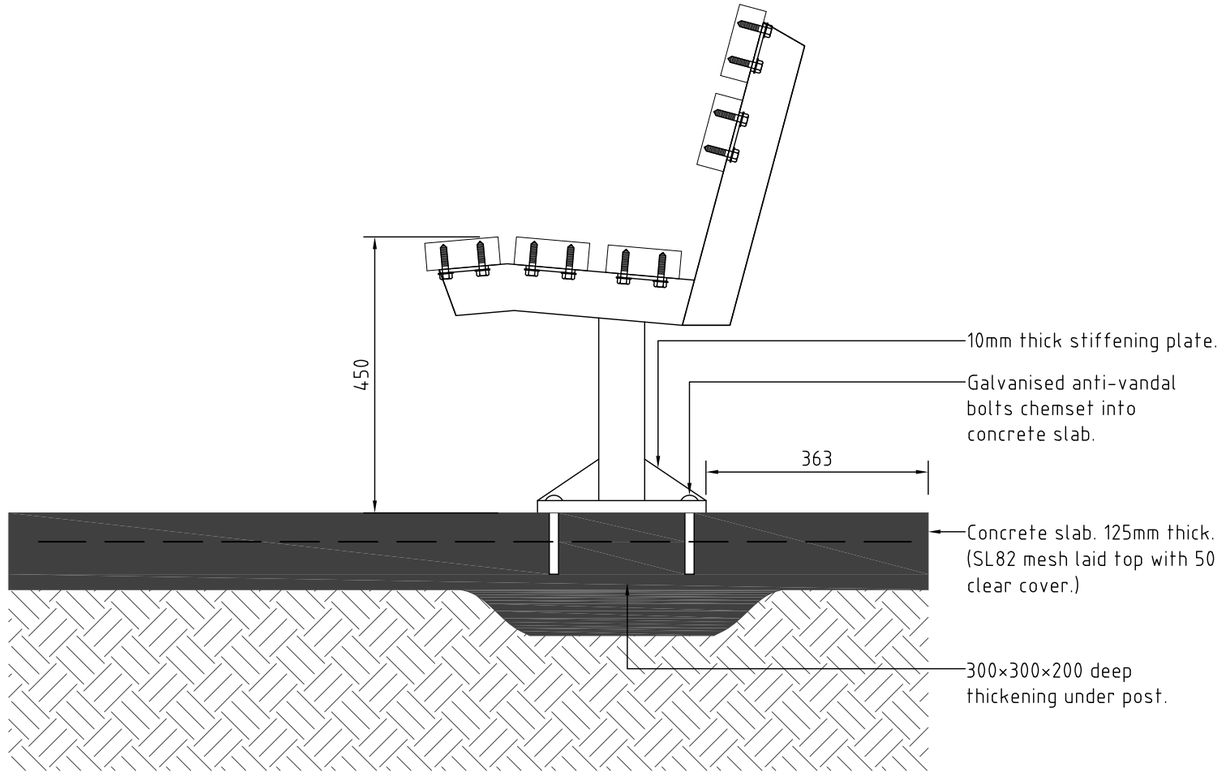

SECTION
SCALE 1:10

S1
-

SUPERSEDES DRAWING NO. 50821

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APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PARK BENCH
BOLT DOWN

Design File
Drawing No. P-22

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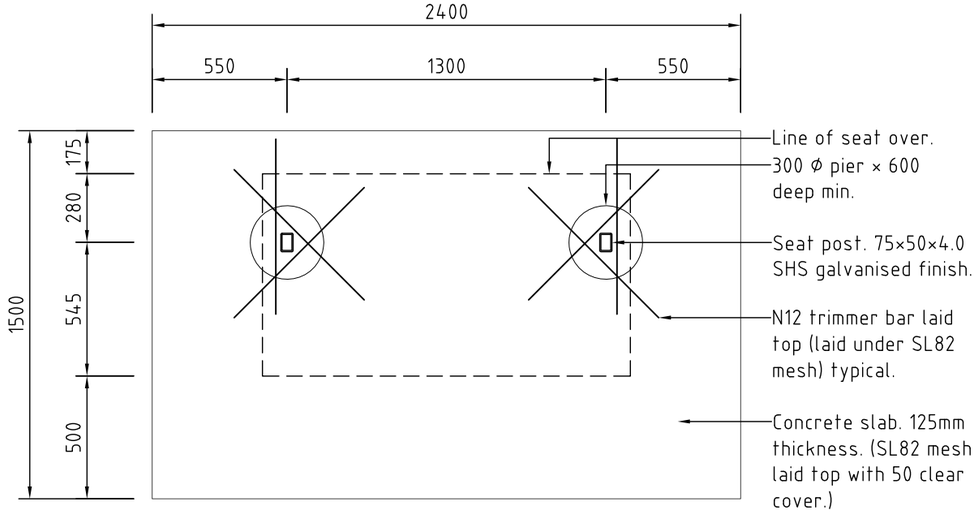
Revision A

A3



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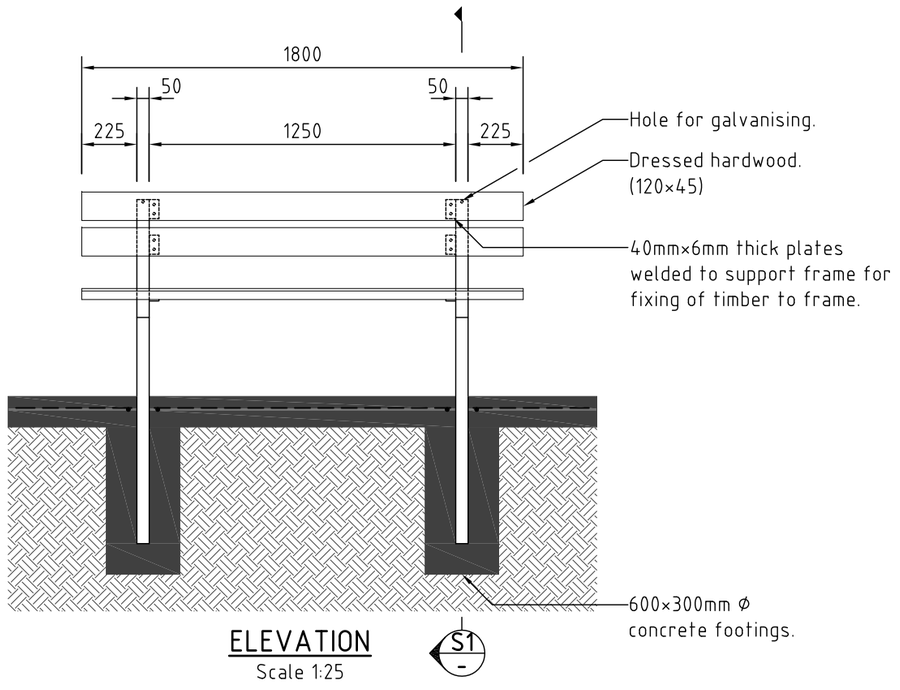

ELEVATION
Scale 1:25
S1
-

NOTES:

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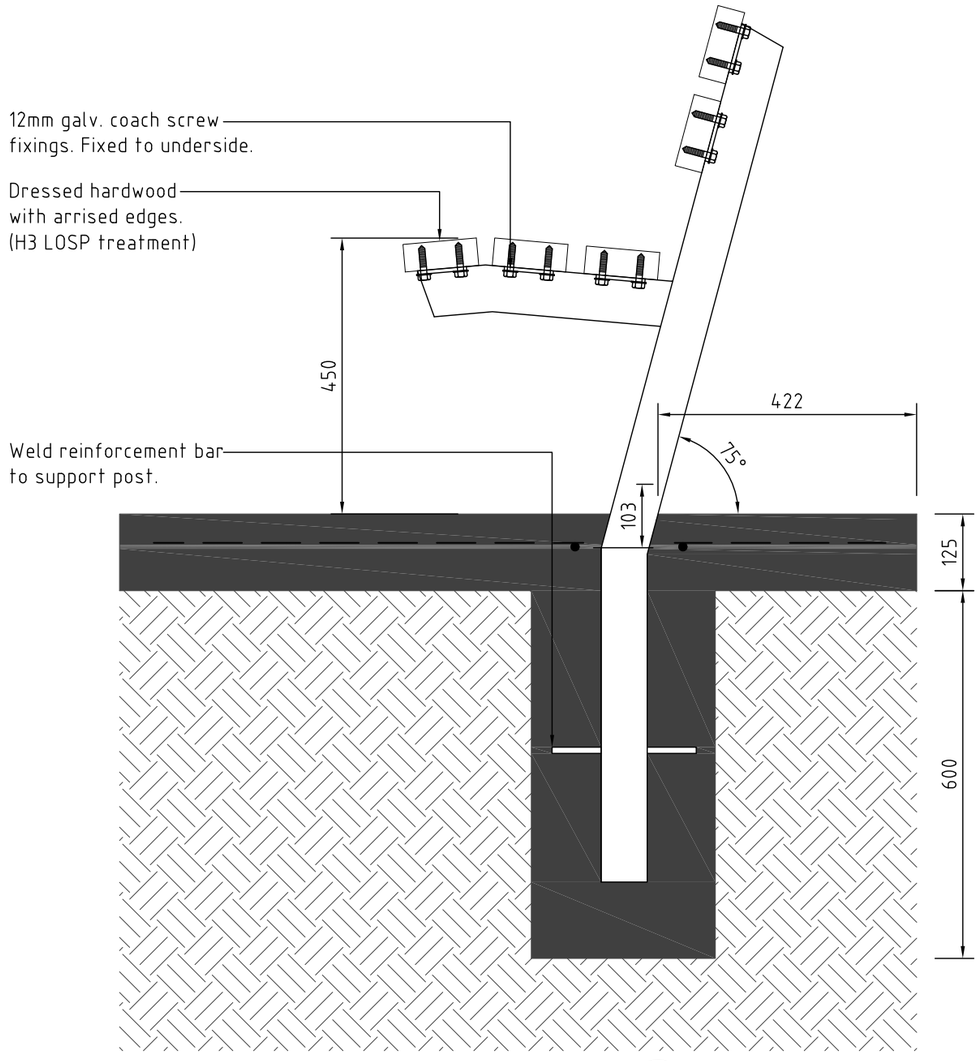

SECTION
SCALE 1:10
S1
-

SUPERSEDES DRAWING NO. 50822

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 08 June 2010

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PARK BENCH
EMBEDDED

Design File
Drawing No. P-23

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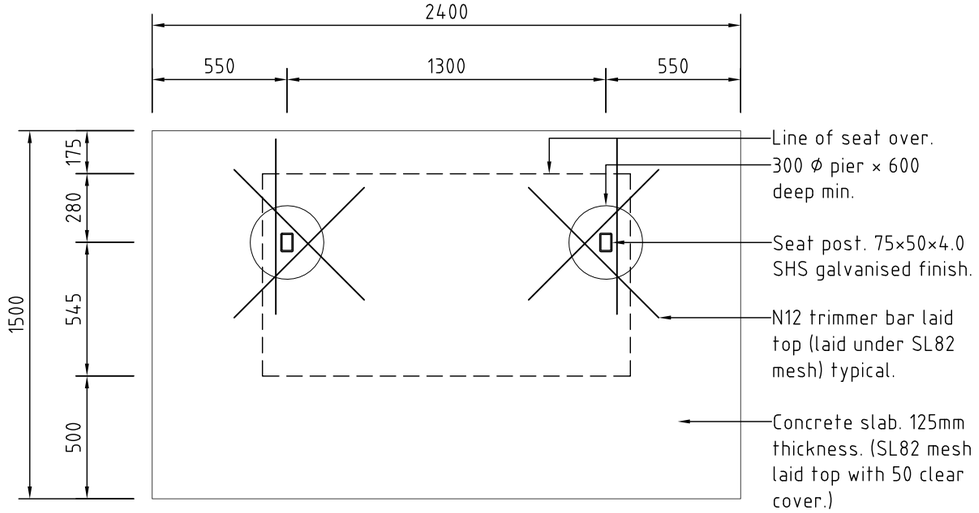

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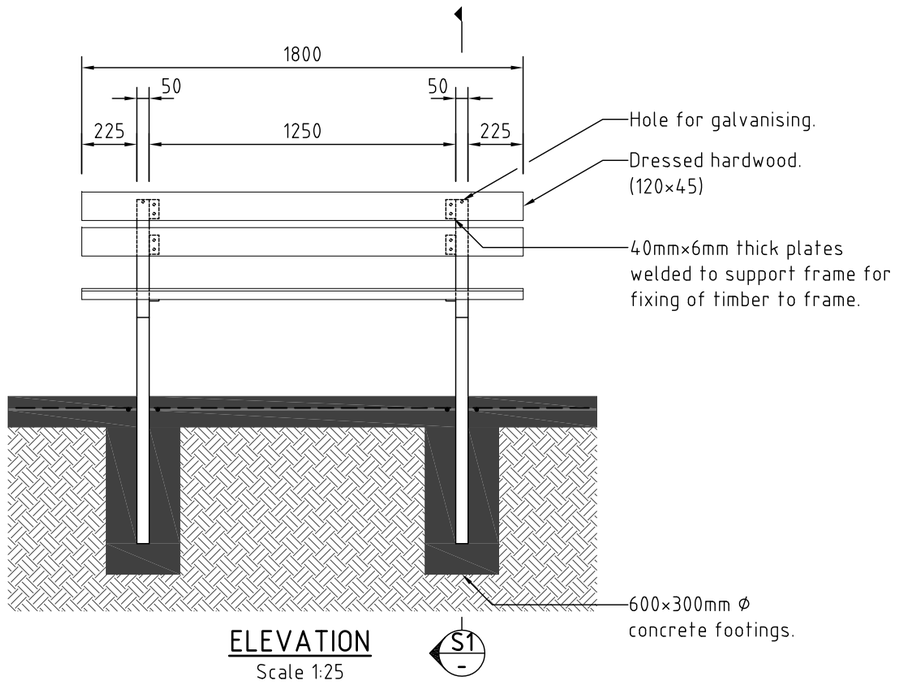

ELEVATION
Scale 1:25
S1
-

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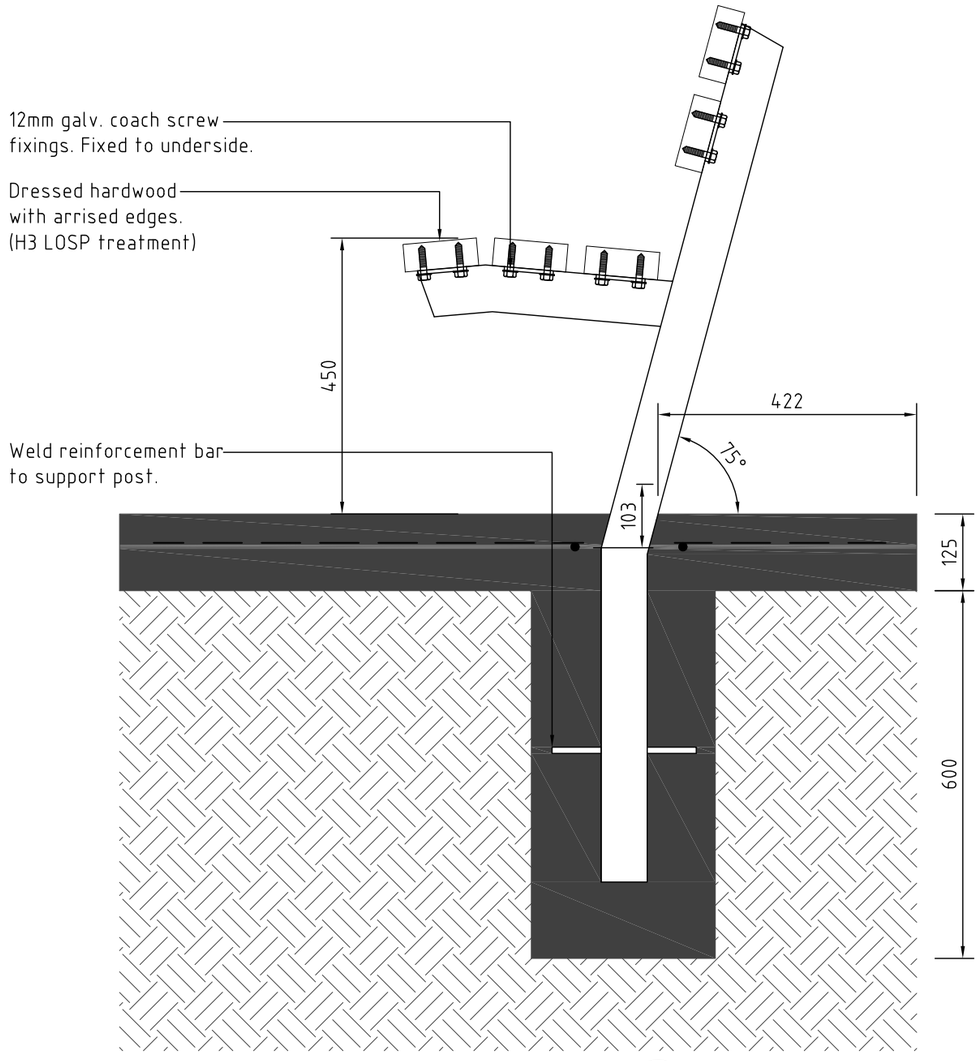

SECTION
SCALE 1:10
S1
-

SUPERSEDES DRAWING NO. 50822

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A	ORIGINAL ISSUE		

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DATE 08 June 2010

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

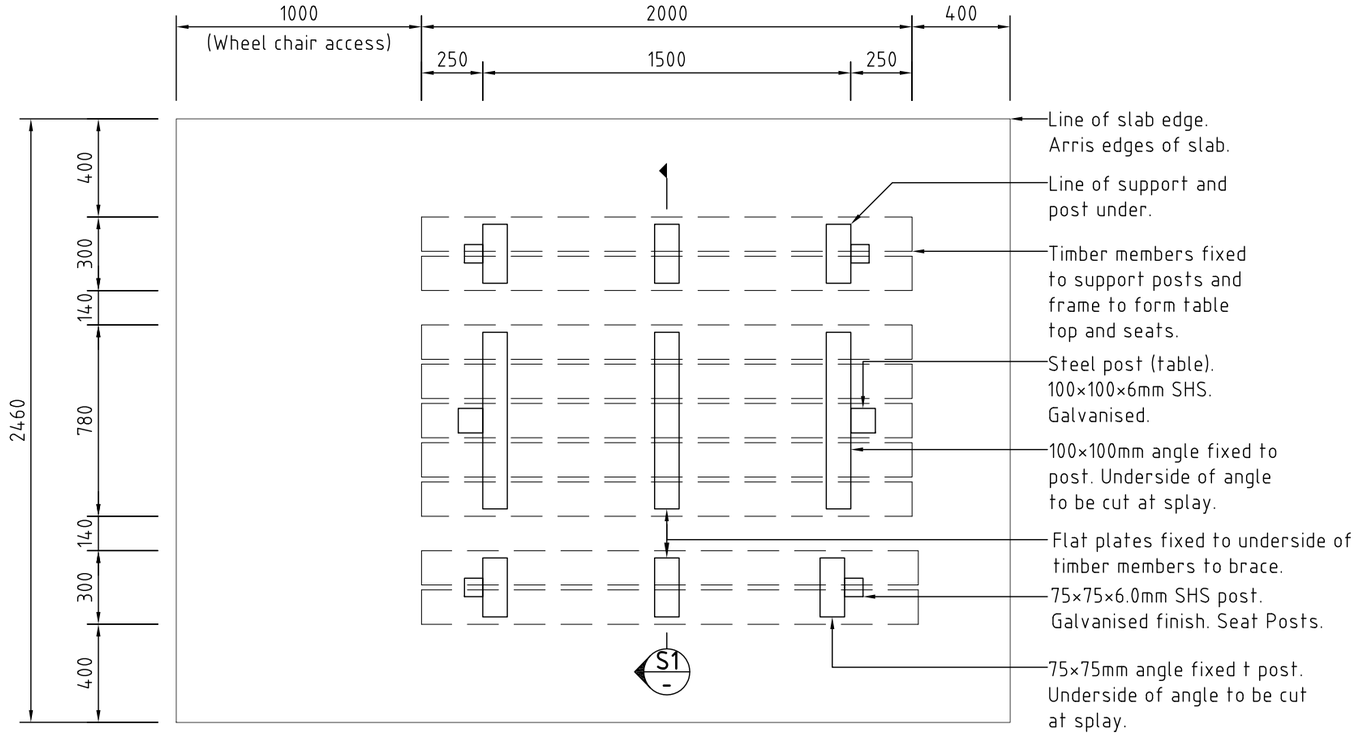
Drawing
PARK BENCH
EMBEDDED

Design File
Drawing No. P-23

Sheet of

Revision A

A3



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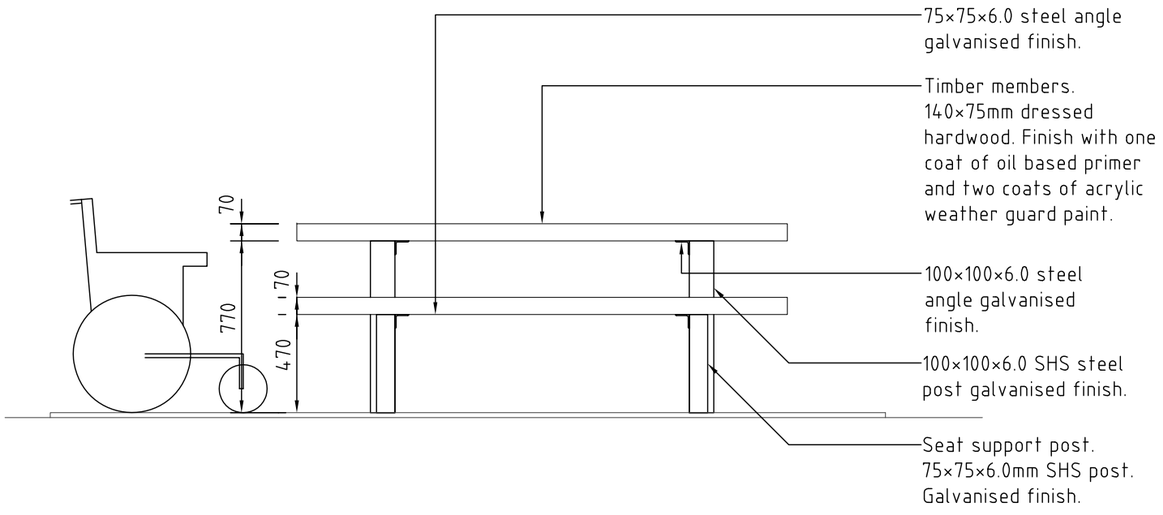

ELEVATION
Scale 1:25

NOTES:

1. Uprights to be hot dipped galvanised and powder coated or painted.
2. Colours - Council to be consulted in regard to either matching either existing infrastructure or in accordance with SRRC Parks and Cemeteries colour scheme guidelines.
3. All steel to be hot dipped galvanised with select colour powder coat finish.
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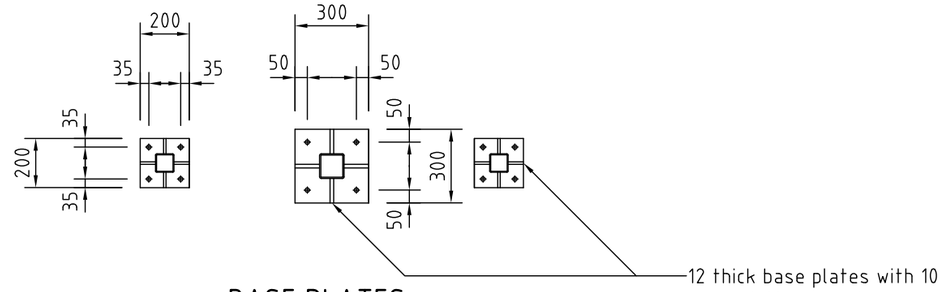
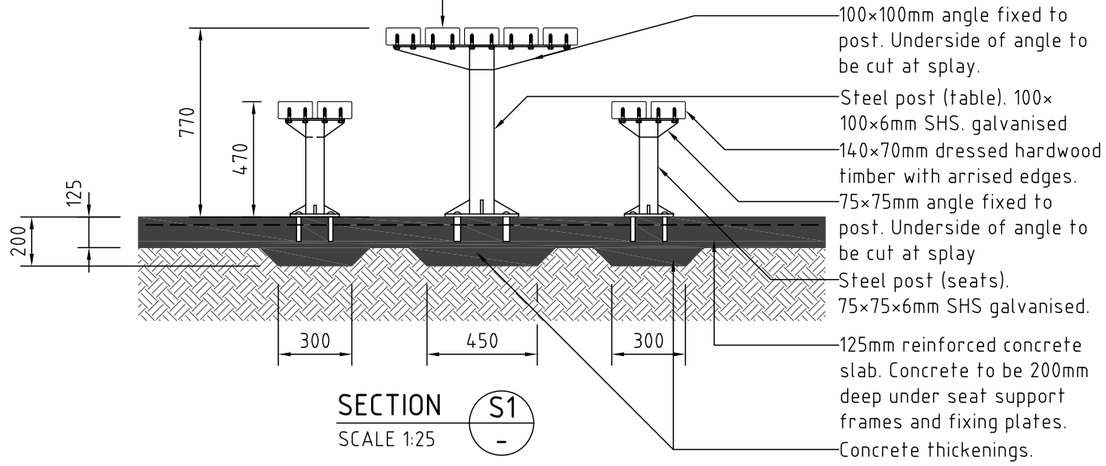


BASE PLATES
Scale 1:25



SECTION S1
SCALE 1:25

SUPERSEDES DRAWING NO. 50823

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

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Scenic Rim Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

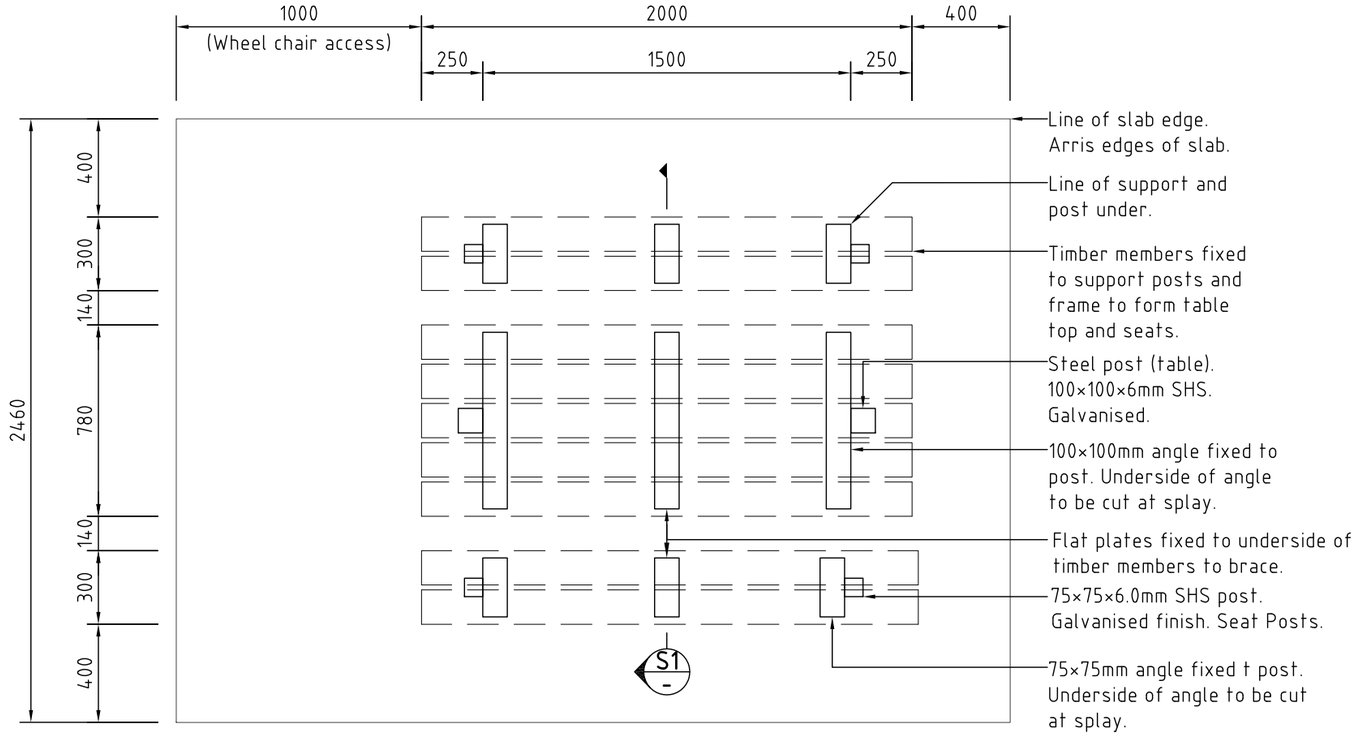
Drawing
PICNIC TABLE/DOUBLE PEDESTAL
BOLT DOWN

Design File
Drawing No. P-24

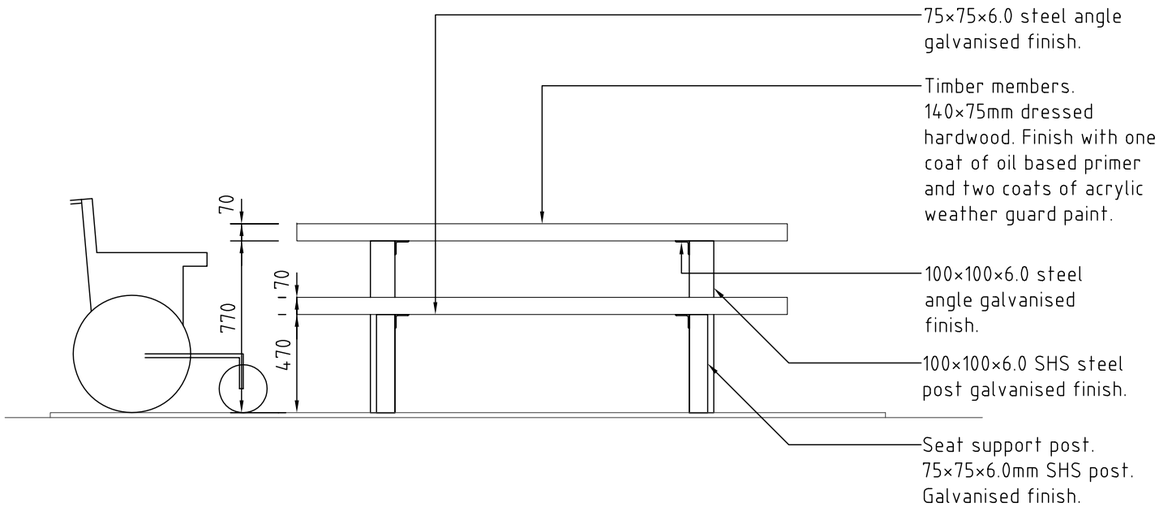
Sheet of

Revision A

A3



PLAN
Scale 1:25



ELEVATION
Scale 1:25

NOTES:

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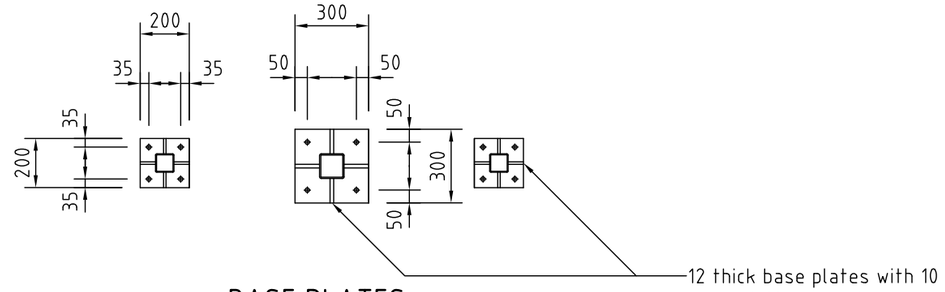

BASE PLATES
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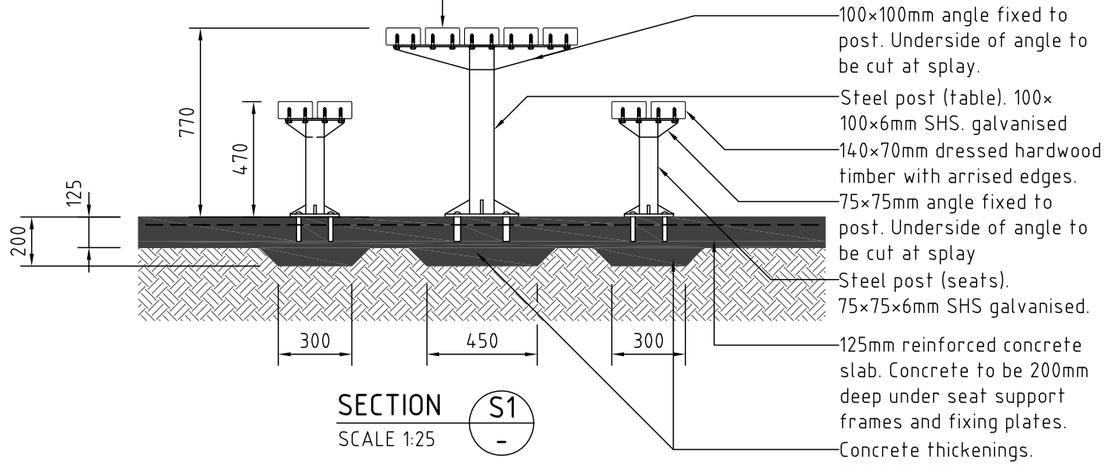

SECTION S1
SCALE 1:25

SUPERSEDES DRAWING NO. 50823

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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DATE 08 June 2010

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PICNIC TABLE/DOUBLE PEDESTAL
BOLT DOWN

Design File
Drawing No. P-24

Sheet of

Revision A

A3

NOTES:

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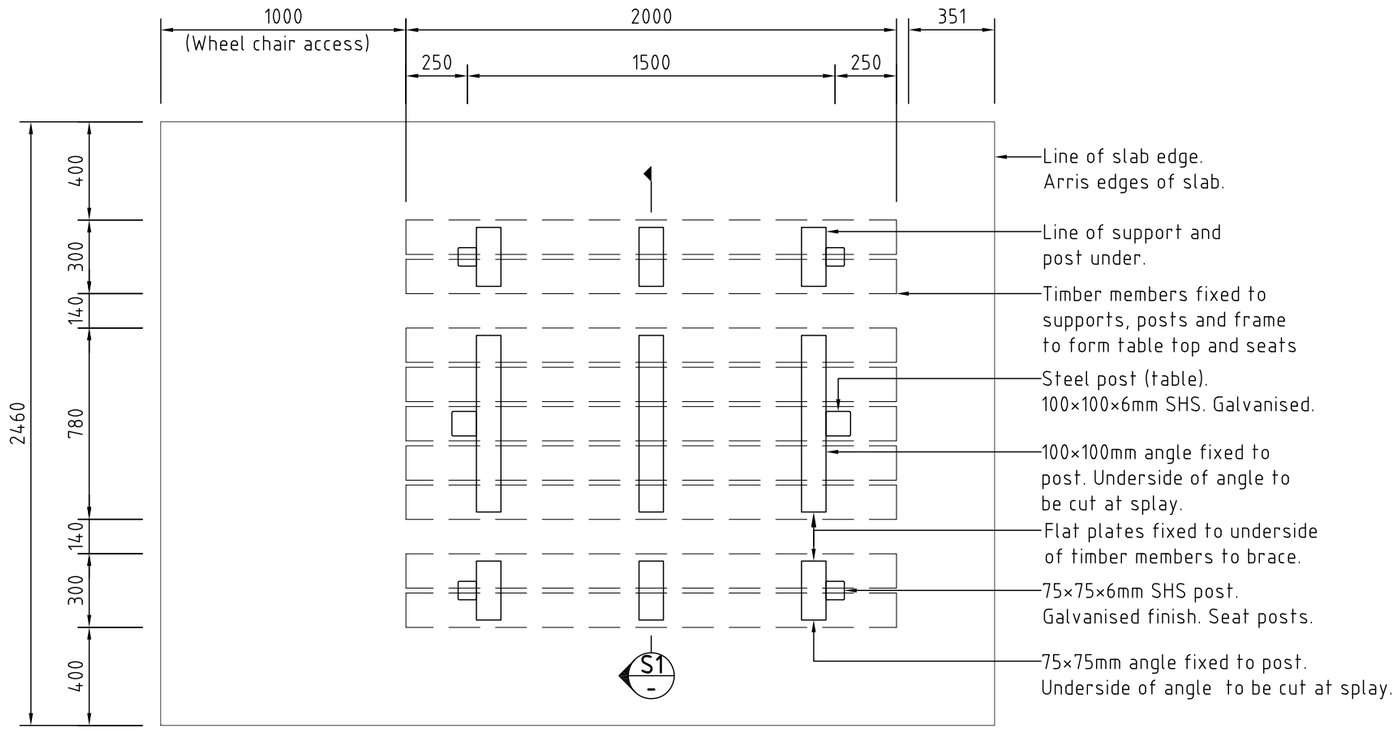

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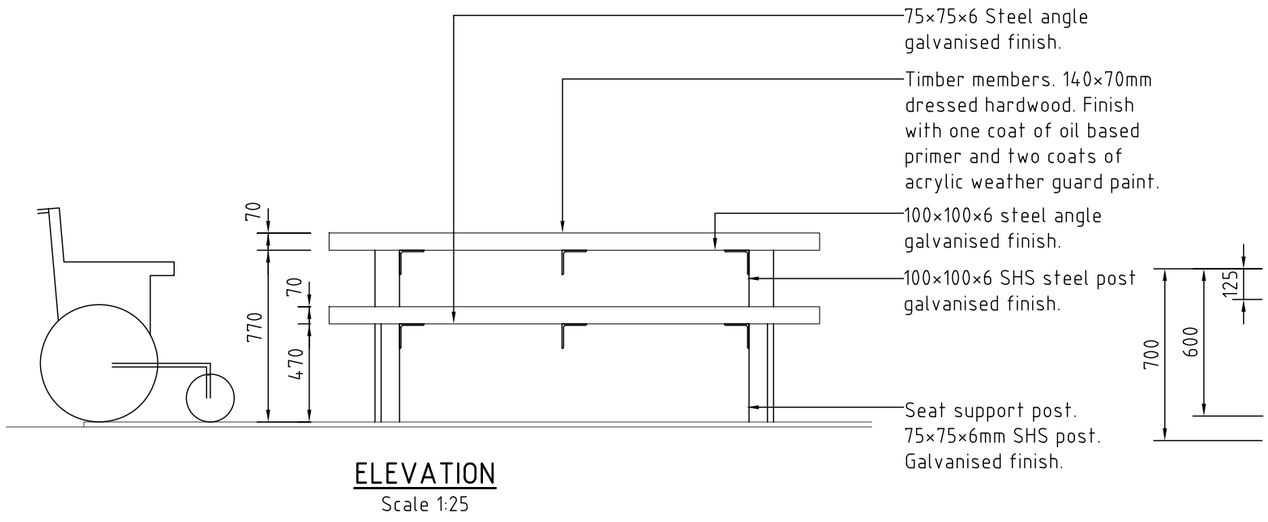

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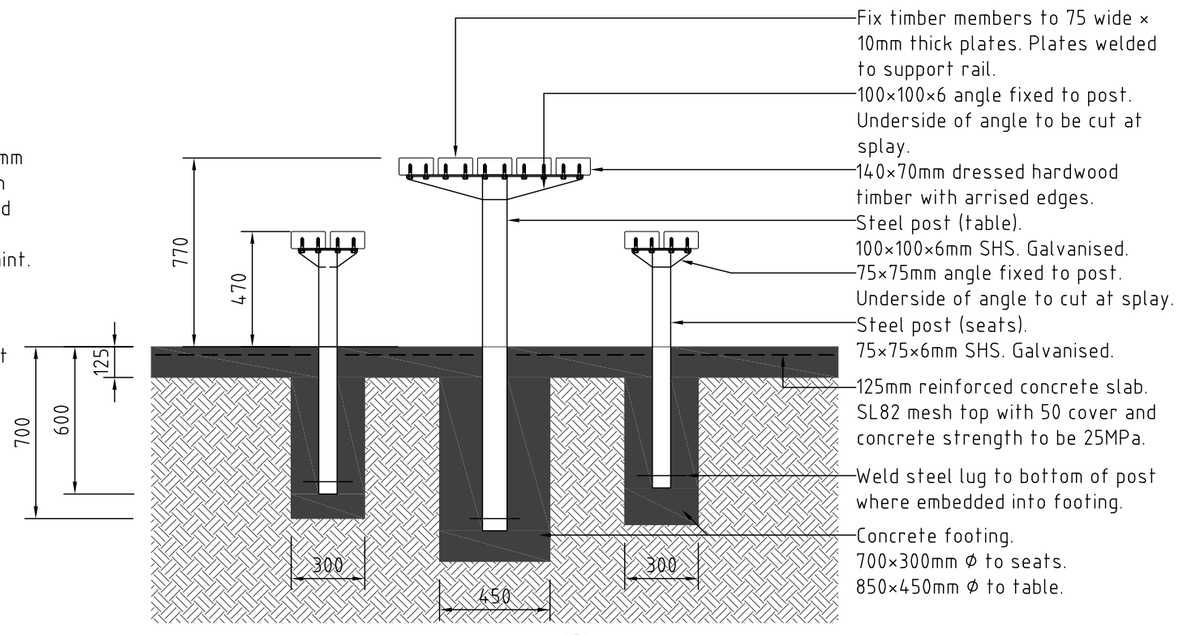

SECTION S1 -
SCALE 1:25

SUPERSEDES DRAWING NO. 50824

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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SRRC STANDARD DRAWINGS
PARKS

Drawing
PICNIC TABLE/DOUBLE PEDESTAL
EMBEDDED

Design File
Drawing No. P-25
Sheet of
Revision A
A3

NOTES:

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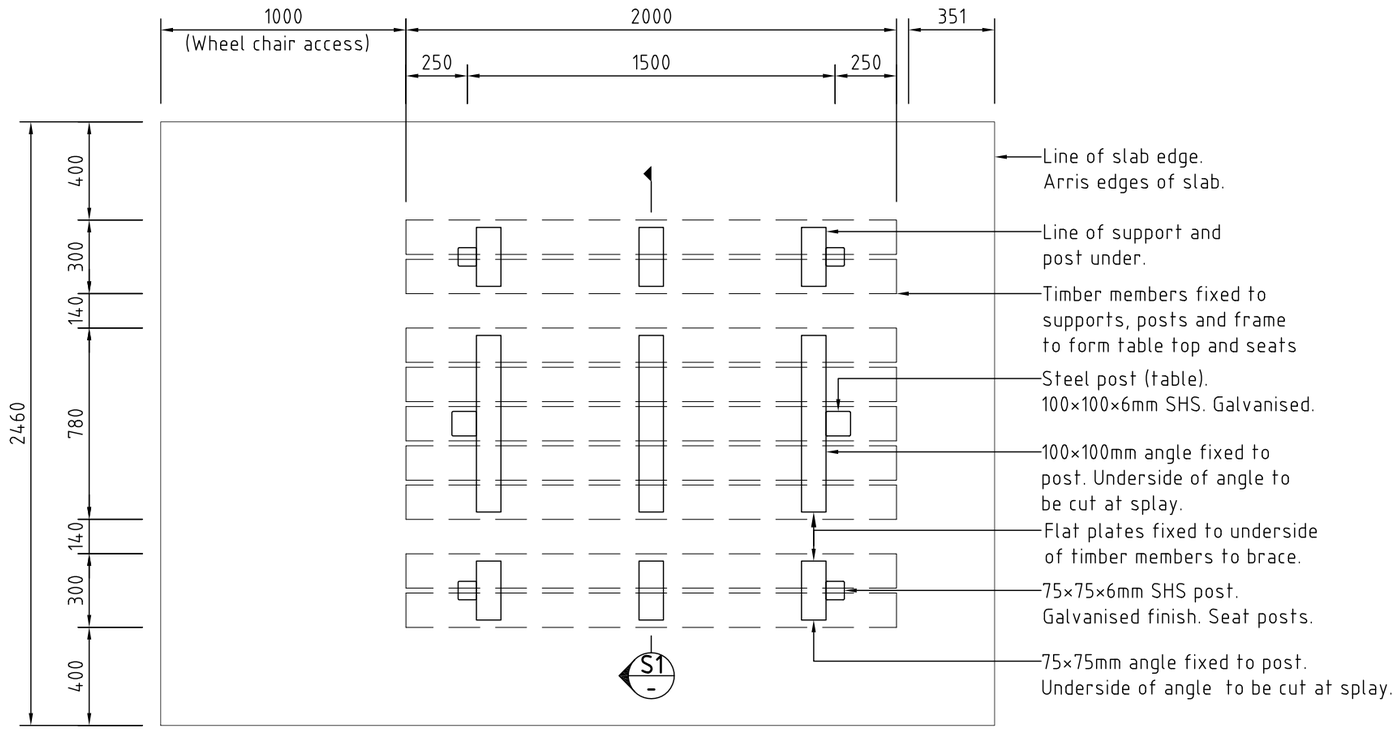

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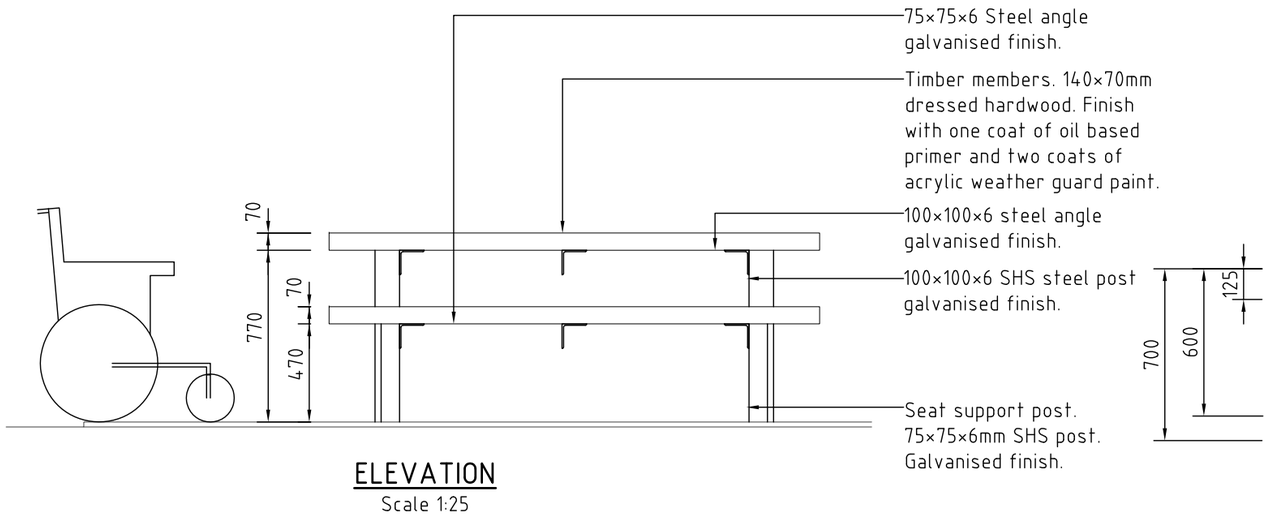

ELEVATION
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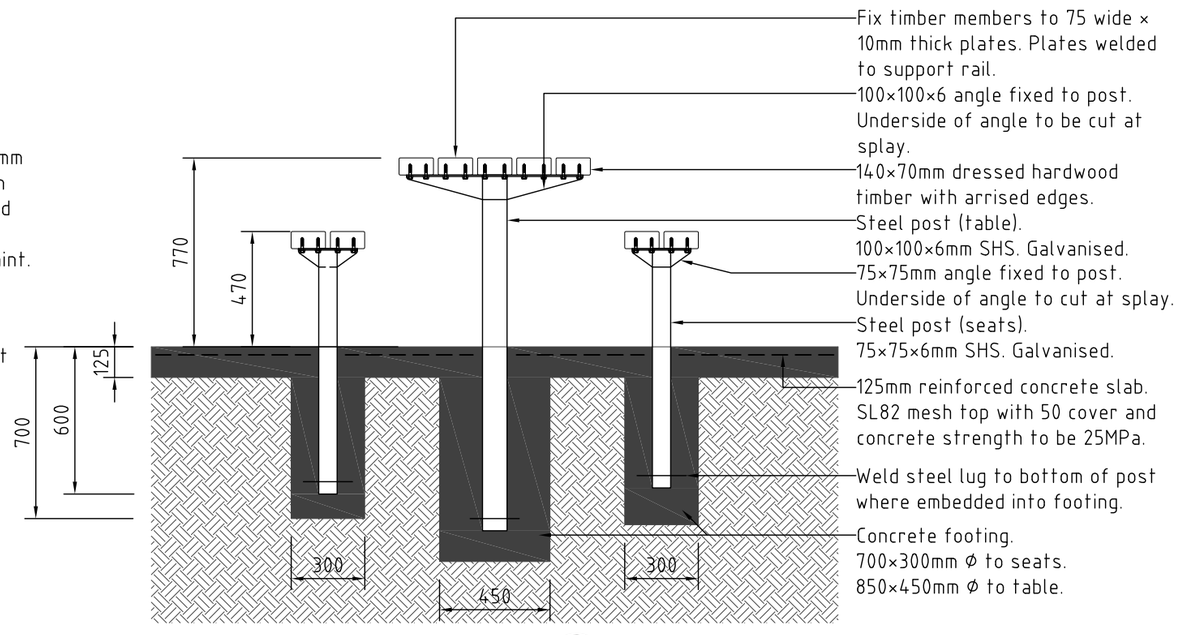

SECTION S1 -
SCALE 1:25

SUPERSEDES DRAWING NO. 50824

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

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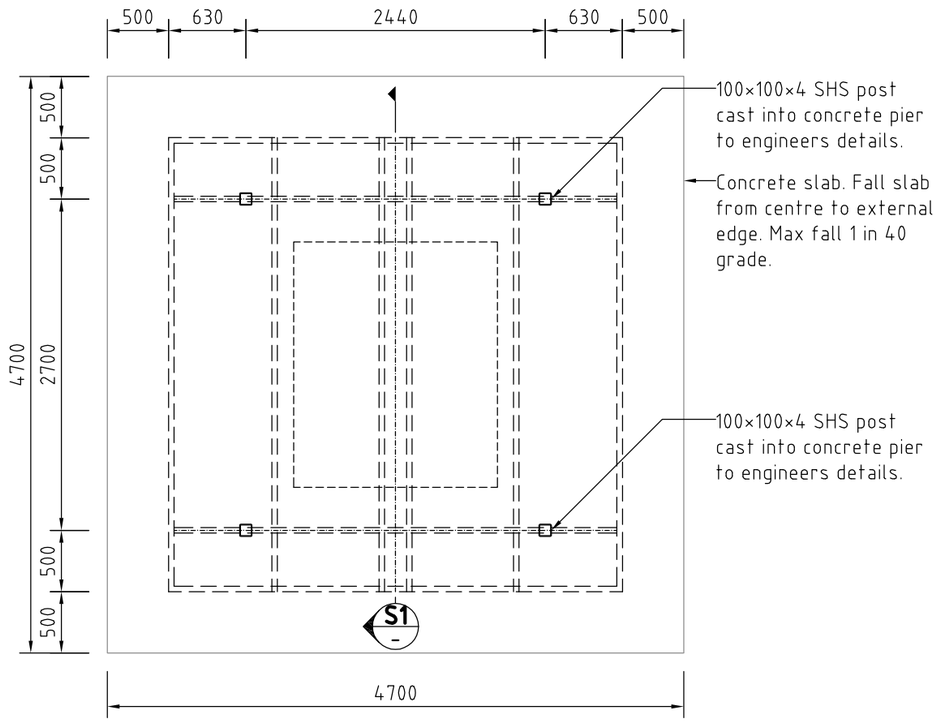
Works & Infrastructure Services

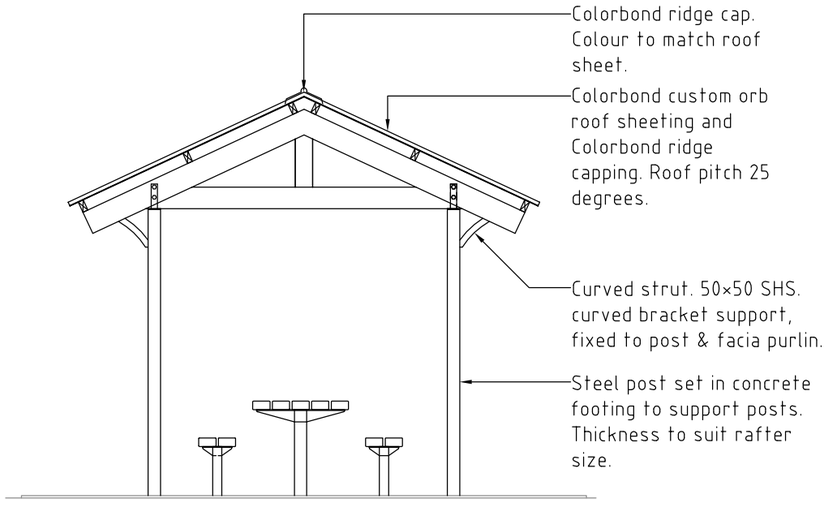
Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PICNIC TABLE/DOUBLE PEDESTAL
EMBEDDED

Design File
Drawing No. P-25
Sheet of
Revision A
A3



PLAN
Scale 1:50



ELEVATION
Scale 1:50

NOTES:

1. Roof styles: Gable with overhang.
2. Roof cladding: Sheeting is pre-cut colorbond custom orb, complete with flashing and gutters if required.
3. Roof Frame (timber): Plantation hoop pine, stress grade F8 or better, LOSP treated to hazard level 3.
4. Posts (steel): Hot dipped galvanised and powder-coated RHS, SHS, CHS steel (curved aluminium braces on most designs) all powdercoat finish. Optional 2 pack epoxy paint finish in lieu of powdercoat as appropriate for the atmospheric conditions.
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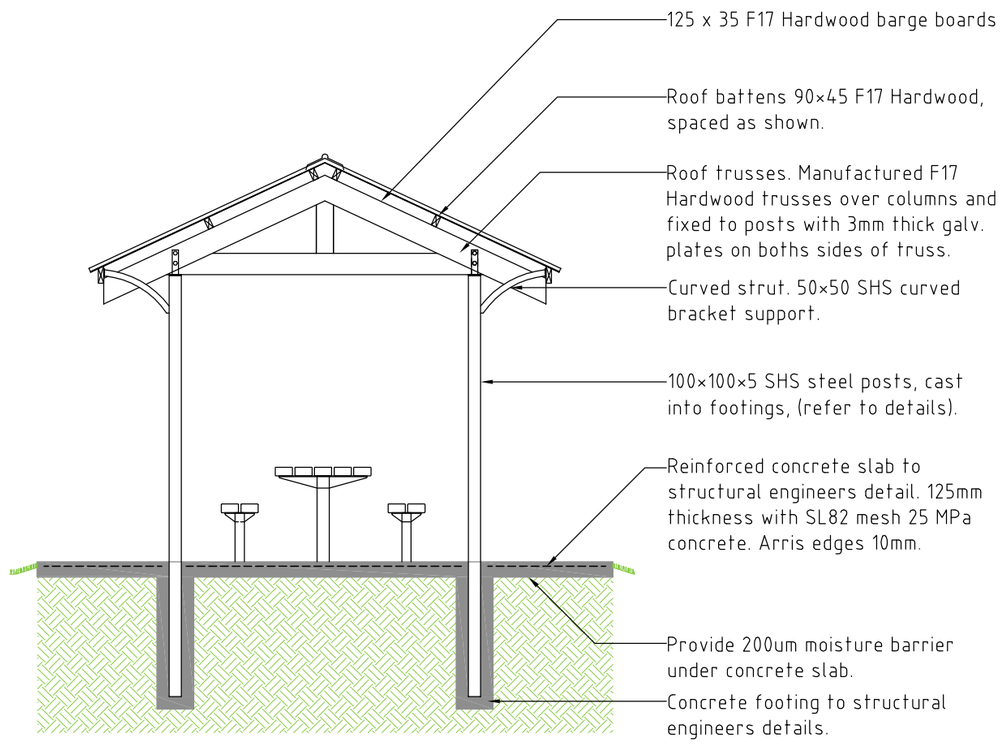
7. Paint - Semi-gloss or gloss acrylic (enamel in high wear areas).



SECTION S1
SCALE 1:50

SUPERSEDES DRAWING NO. 50826

Issue	Amendment	App'd	Date
B	REMOVAL OF FACIA AND NOTE CHANGES FROM PINE TO HARDWOOD	PM	03/2013
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 08 June 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

Scenic Rim Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

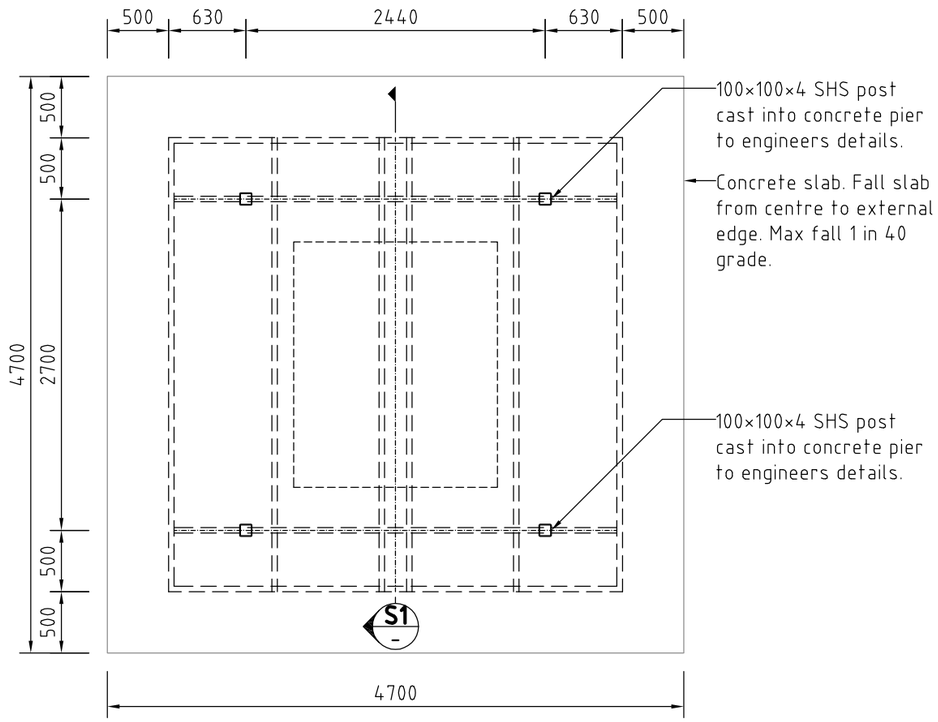
Drawing: SHELTER SHED - SMALL

Design File
Drawing No. P-27

Sheet of

Revision B

A3



PLAN
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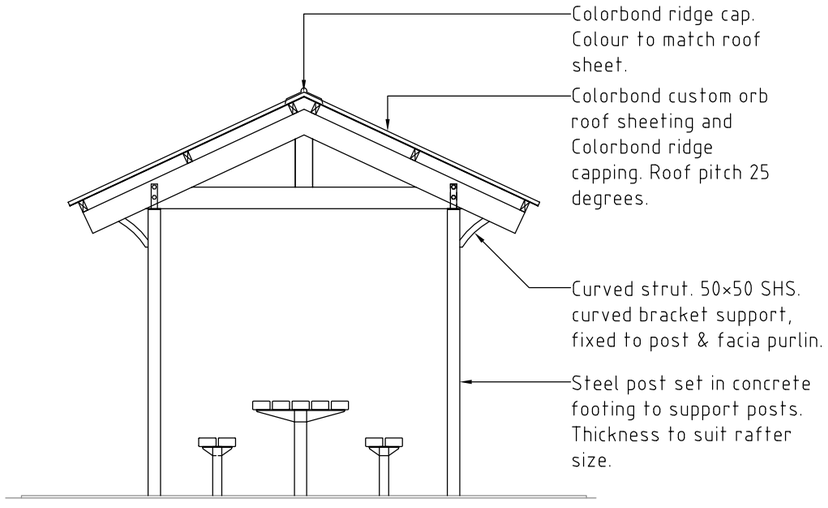

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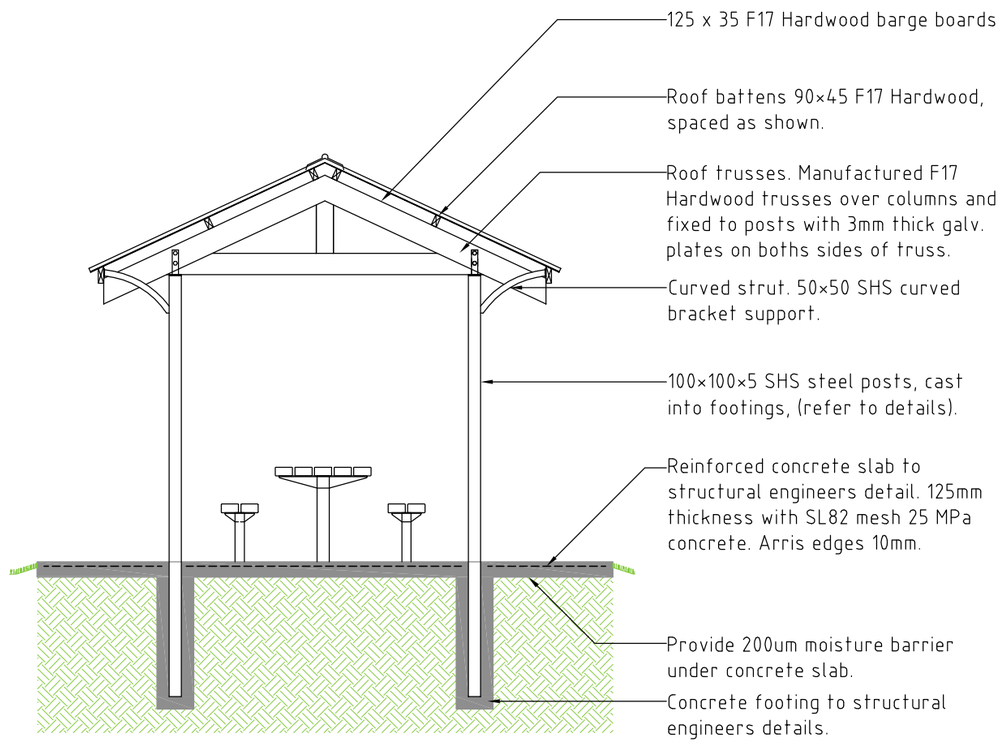

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Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

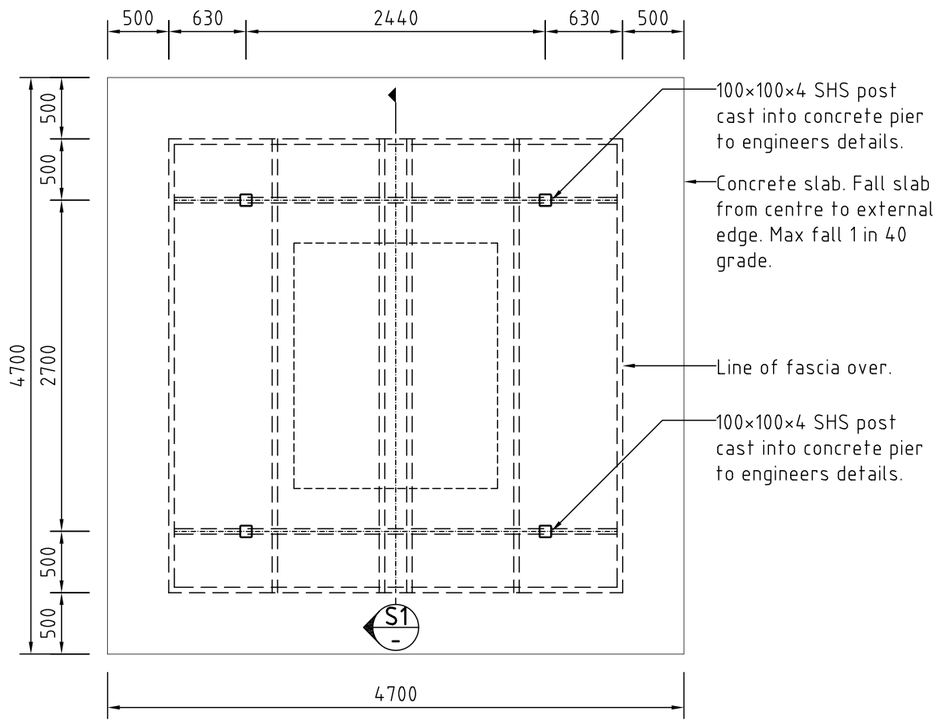
Drawing: SHELTER SHED - SMALL

Design File
Drawing No. P-27

Sheet of

Revision B

A3



PLAN

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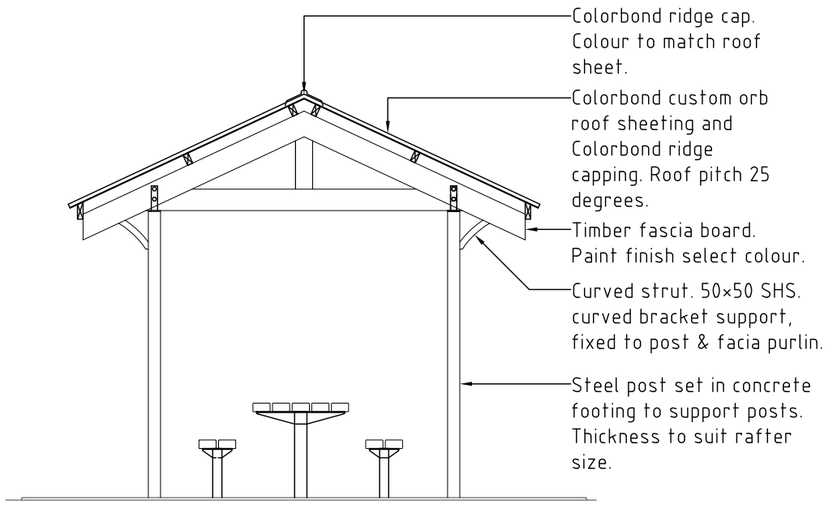

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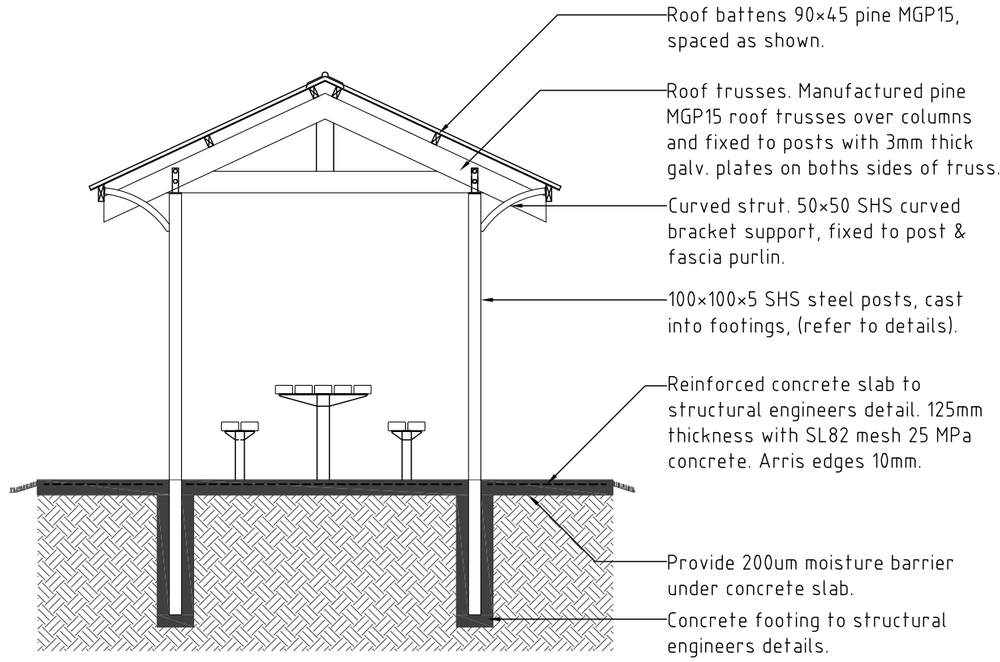

SECTION S1

SCALE 1:50

SUPERSEDES DRAWING NO. 50826

Issue	Amendment	App'd	Date
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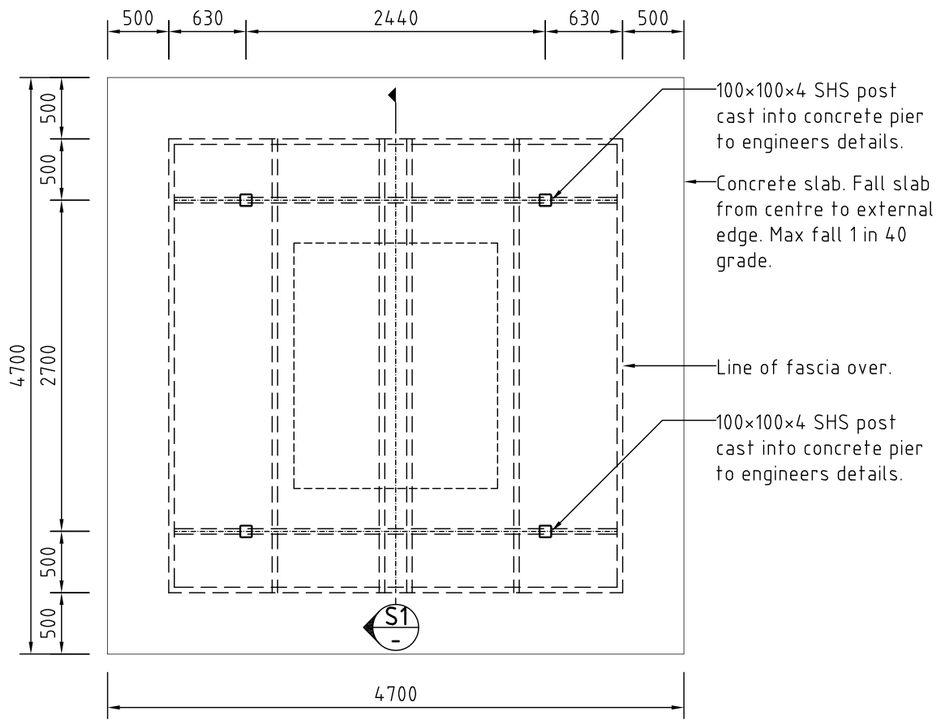
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SHELTER SHED - SMALL

Design File / Drawing No. P-27 | Sheet | of | Revision A | A3



PLAN

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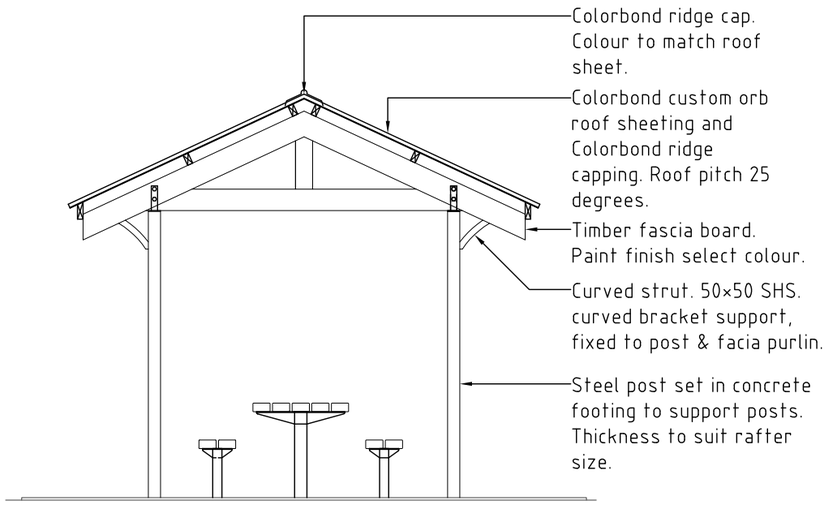

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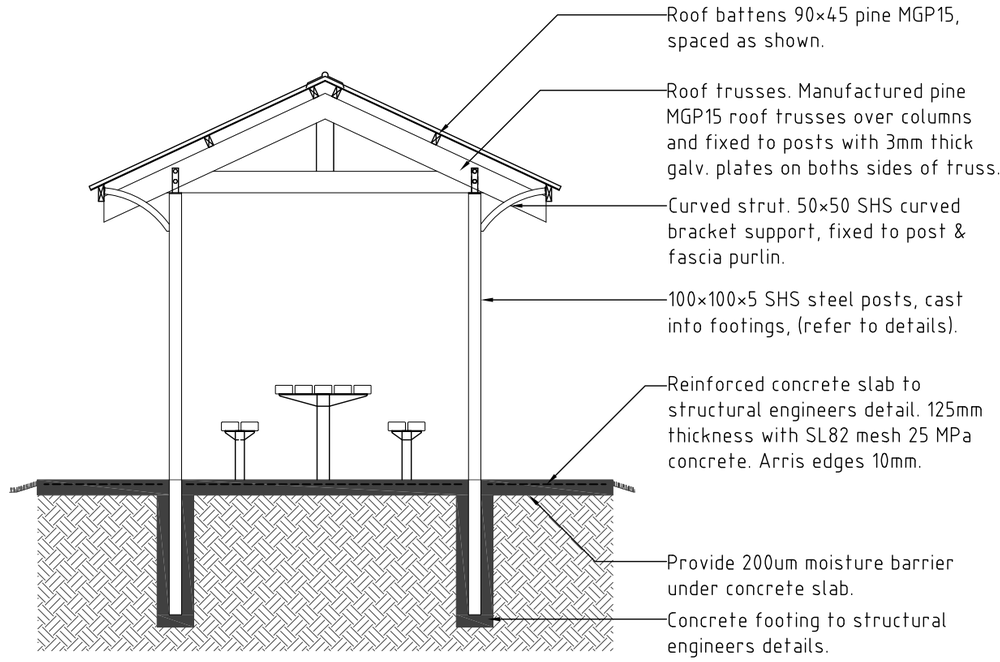

SECTION S1

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Director of Works & Infrastructure

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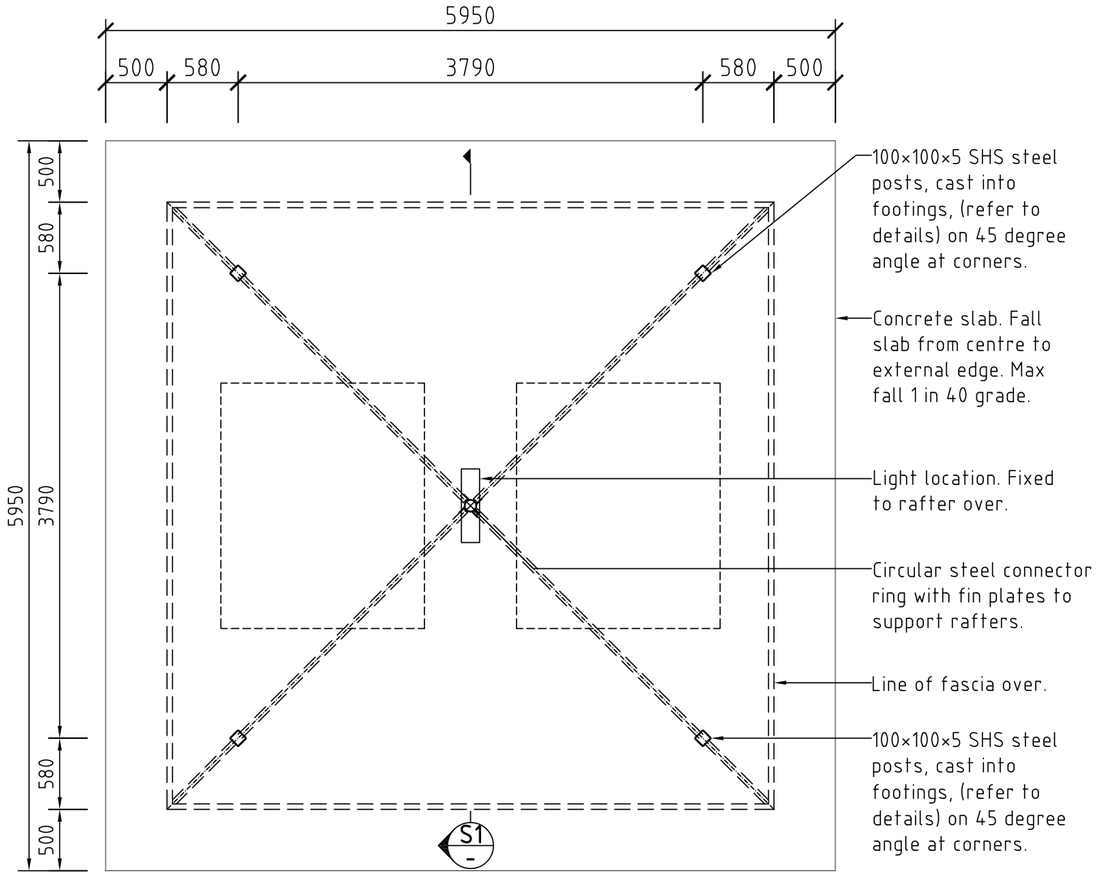
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SHELTER SHED - SMALL

Design File / Drawing No. P-27 | Sheet | of | Revision A | A3



PLAN
Scale 1:50

NOTES:

1. Roof Style: Pavilion 4 sides (pyramid).
2. Roof Cladding: Sheeting is pre-cut Colorbond custom orb, grade 'XRW', 'Ultra' or 'Stainless steel' as appropriate for the atmospheric conditions complete with flashing and gutters if required.
3. Roof Frame (Timber): Plantation hoop pine, stress grade F8 or better, LOSP treated to hazard level 3 and factory stained in 'Bunnings oil-based stain' Colour - 'Landmark brown".
4. Posts (steel): 100×100×5 SHS posts hot dipped galvanised and embedded 1100mm into concrete piers to engineers details. (powder coated to SRRC Parks, Gardens and Cemeteries colour guideline scheme).

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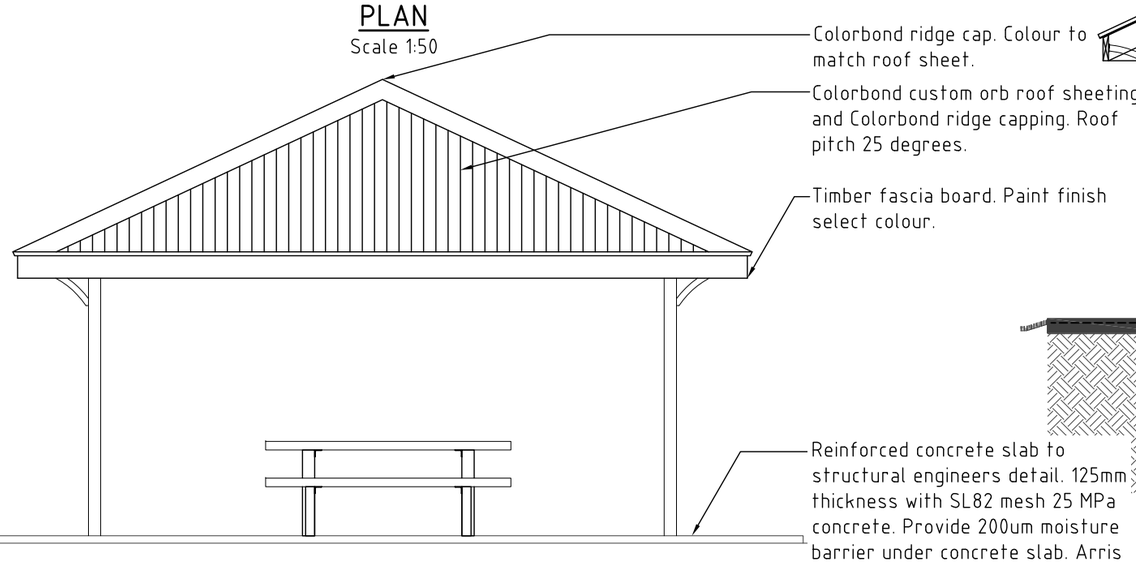
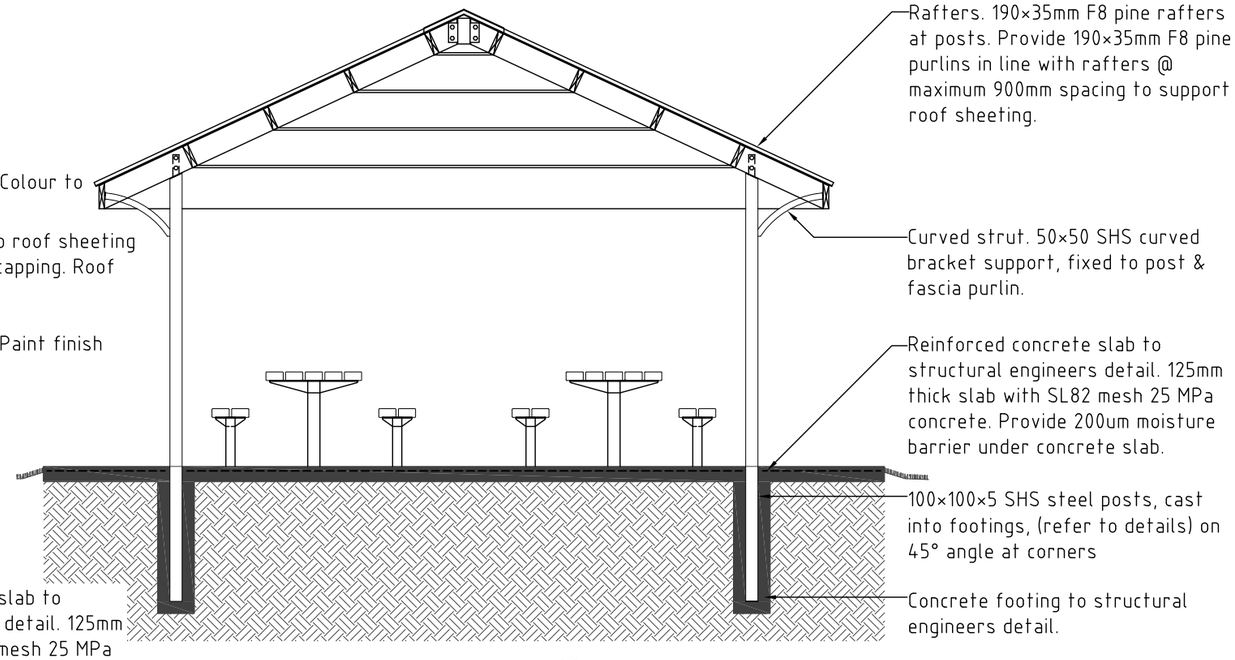


ELEVATION
Scale 1:50



SECTION S1 / -
SCALE 1:50

SUPERSEDES DRAWING NO. 50827

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A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Scenic Rim Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

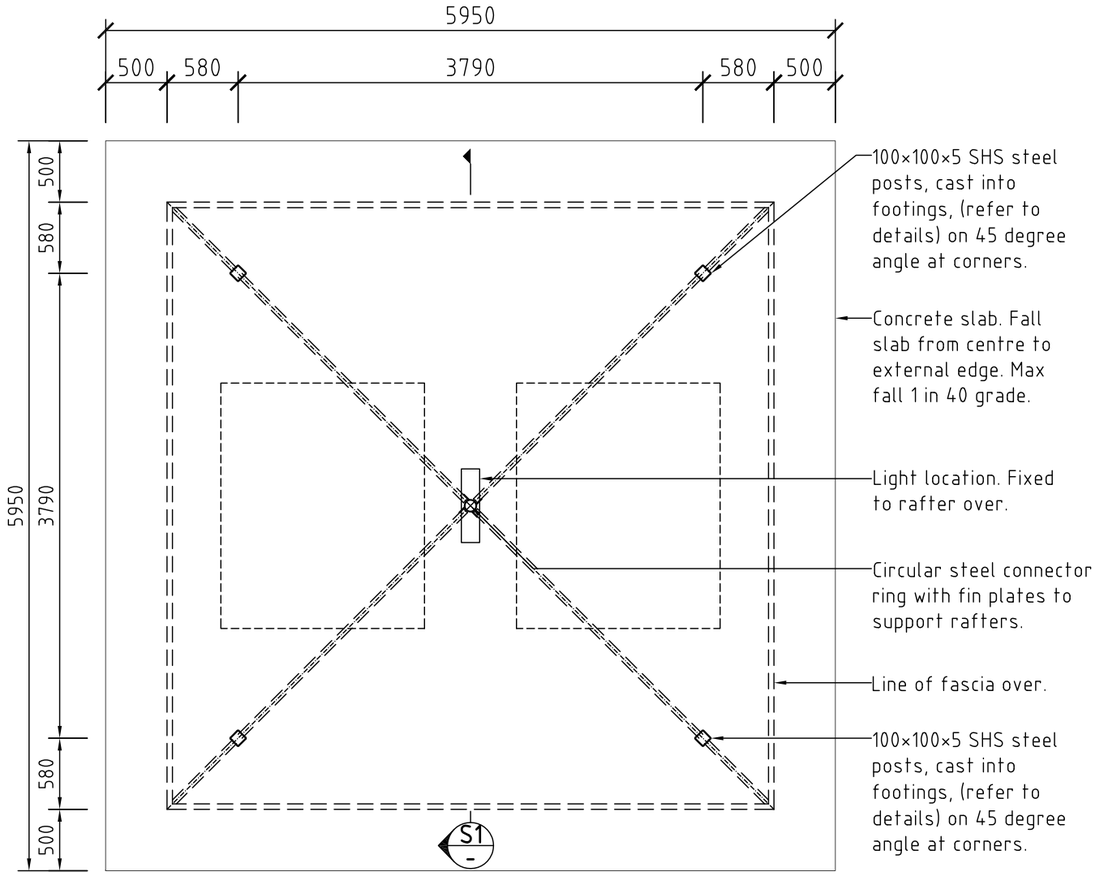
Drawing
SHELTER SHED - MEDIUM

Design File
Drawing No. P-28

Sheet of

Revision A

A3



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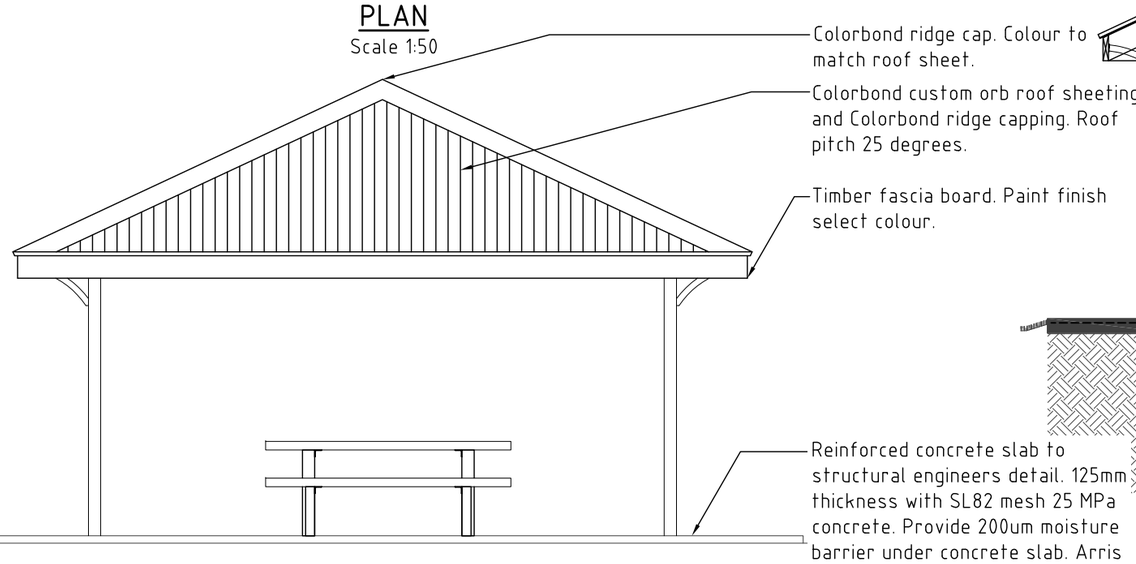

ELEVATION
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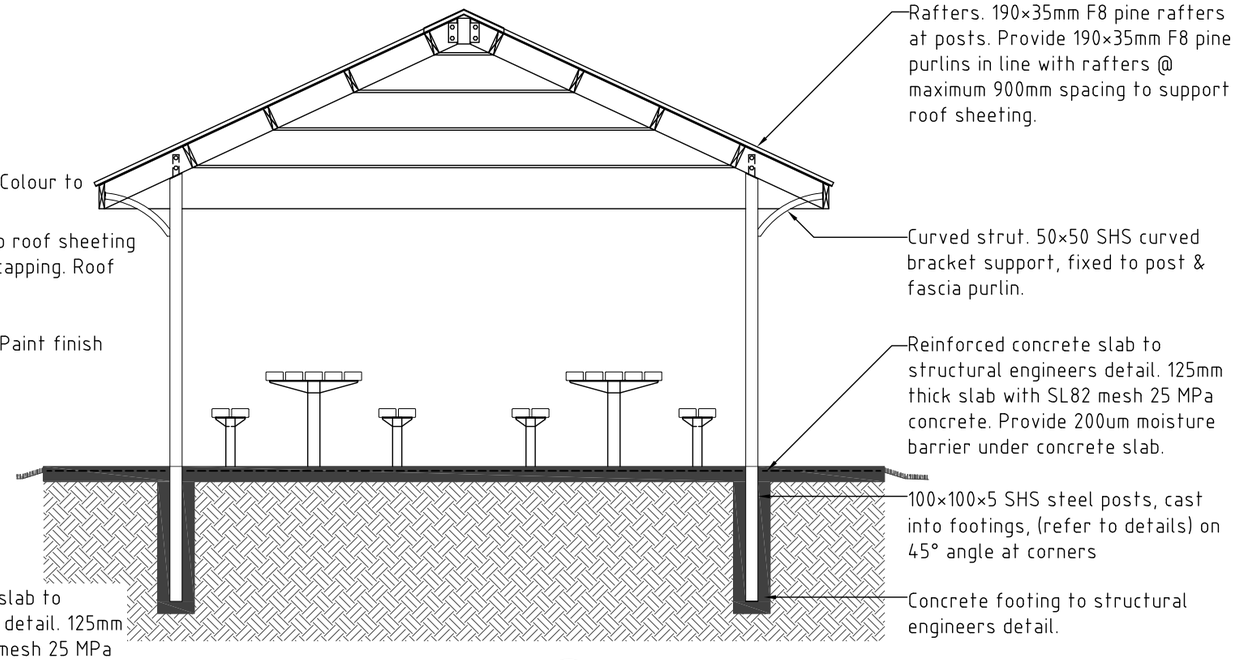

SECTION S1 / -
SCALE 1:50

SUPERSEDES DRAWING NO. 50827

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Director of Works & Infrastructure

DATE 08 June 2010

Scales

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Scenic Rim Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
SHELTER SHED - MEDIUM

Design File
Drawing No. P-28

Sheet of

Revision A

A3

NOTES:

1. Roof styles: Hip
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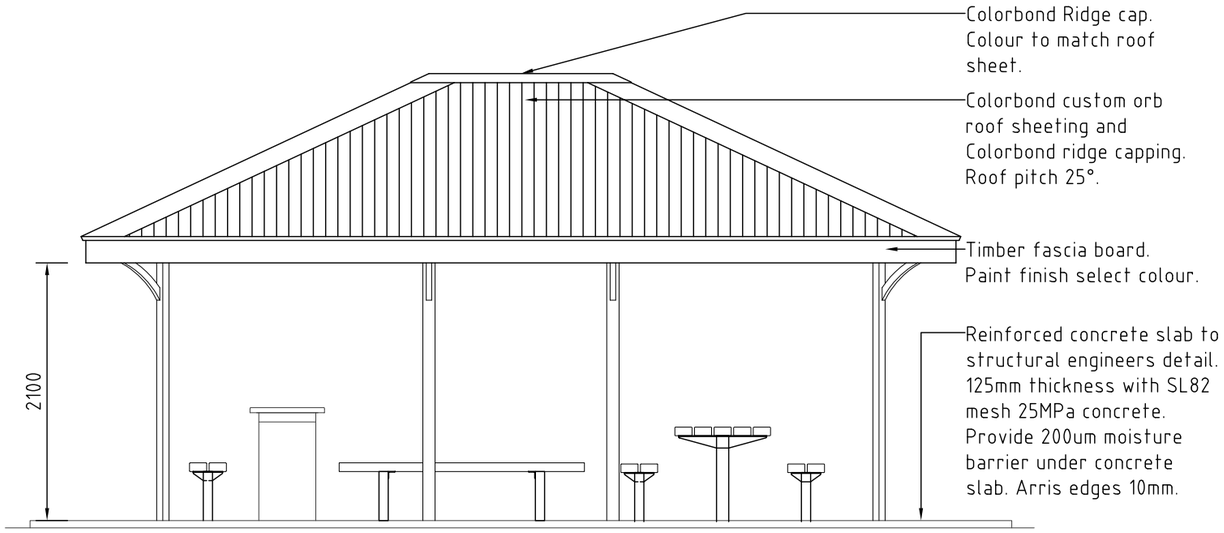

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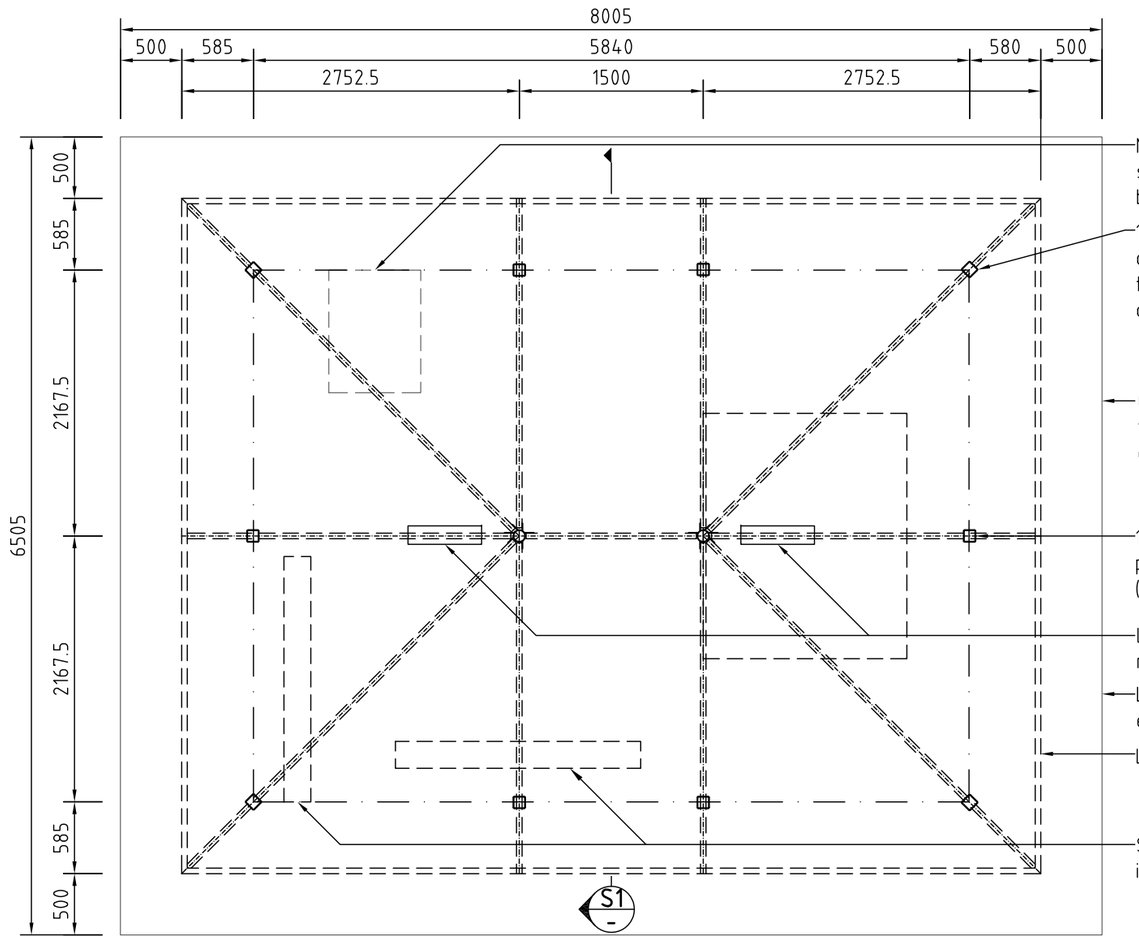

PLAN
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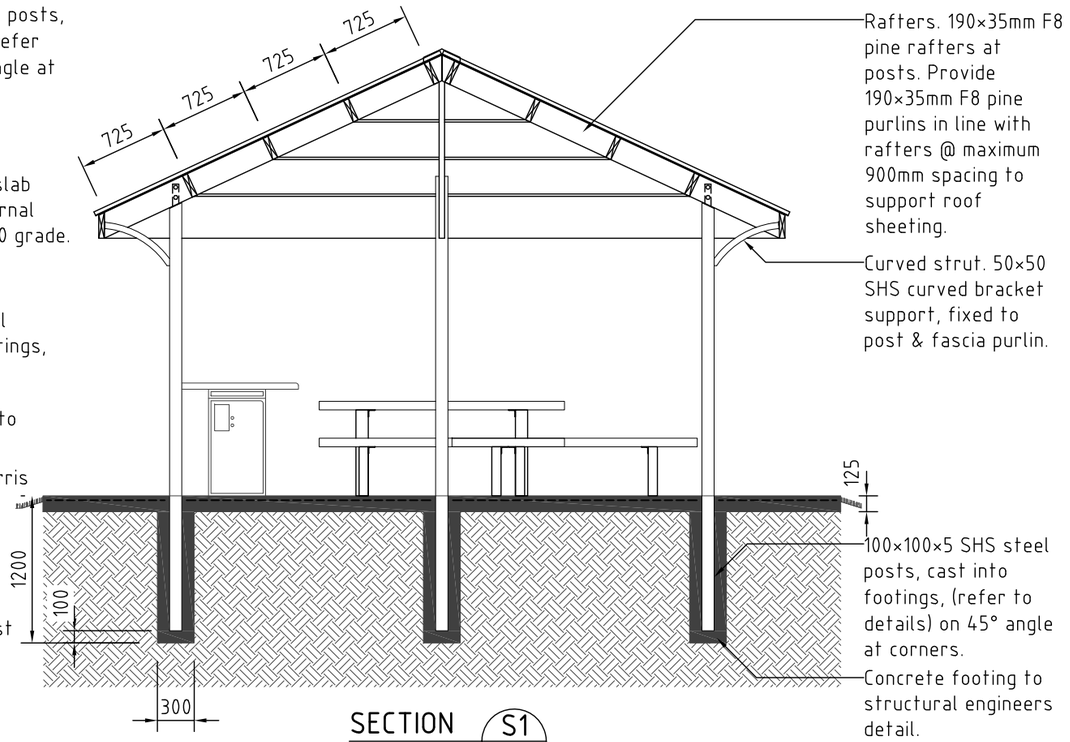

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SCALE 1:50

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SHELTER SHED - LARGE

Design File / Drawing No. P-29 | Sheet of | Revision A | A3

NOTES:

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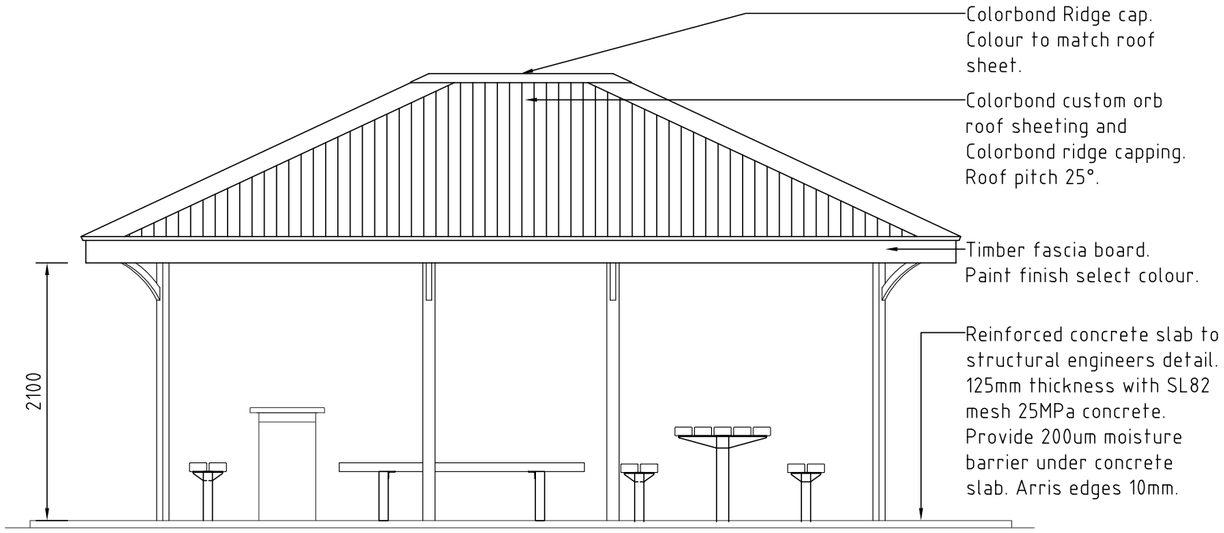

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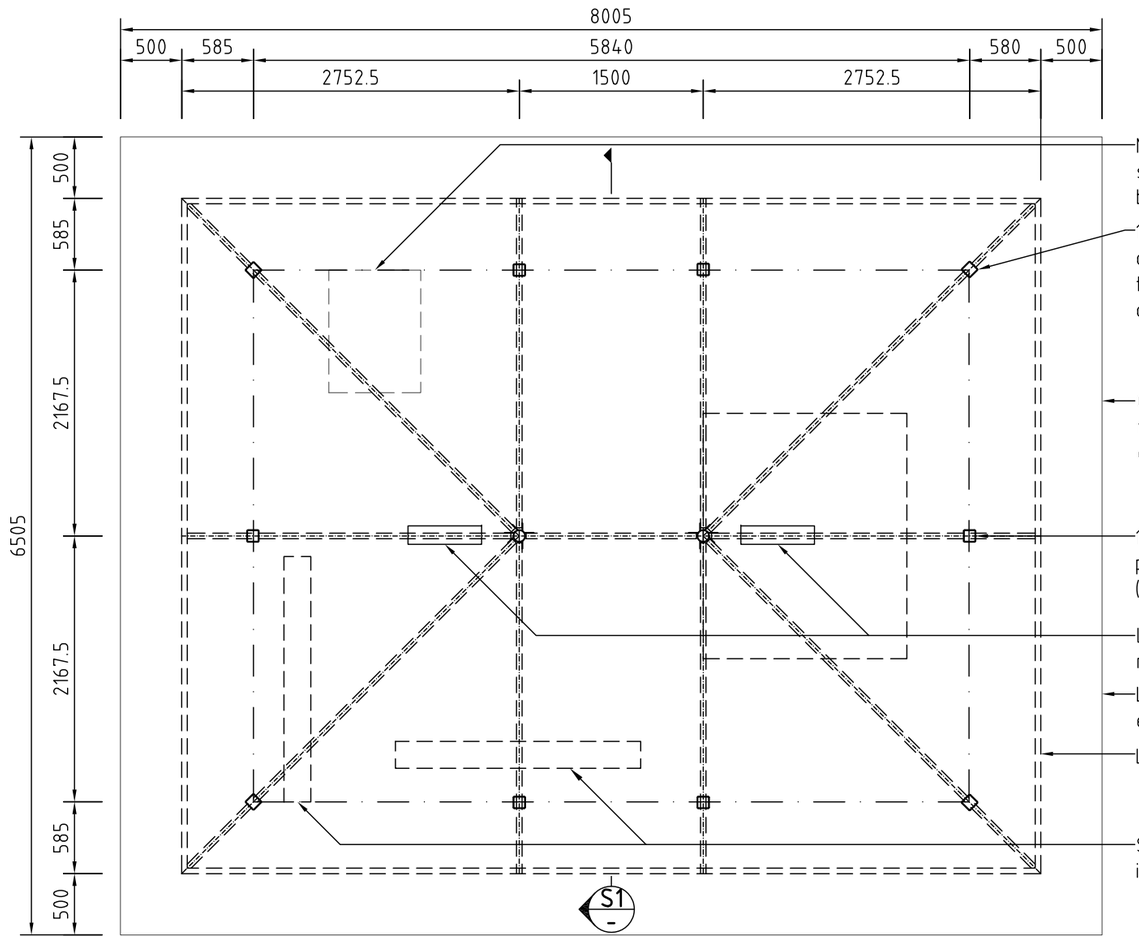

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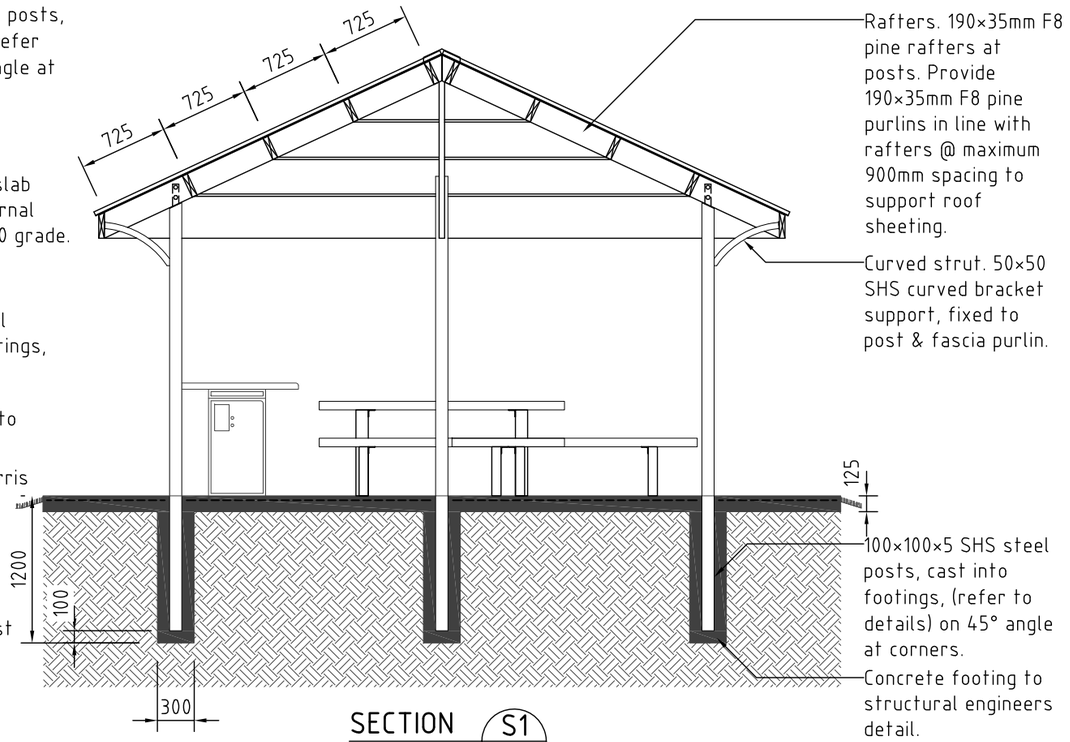

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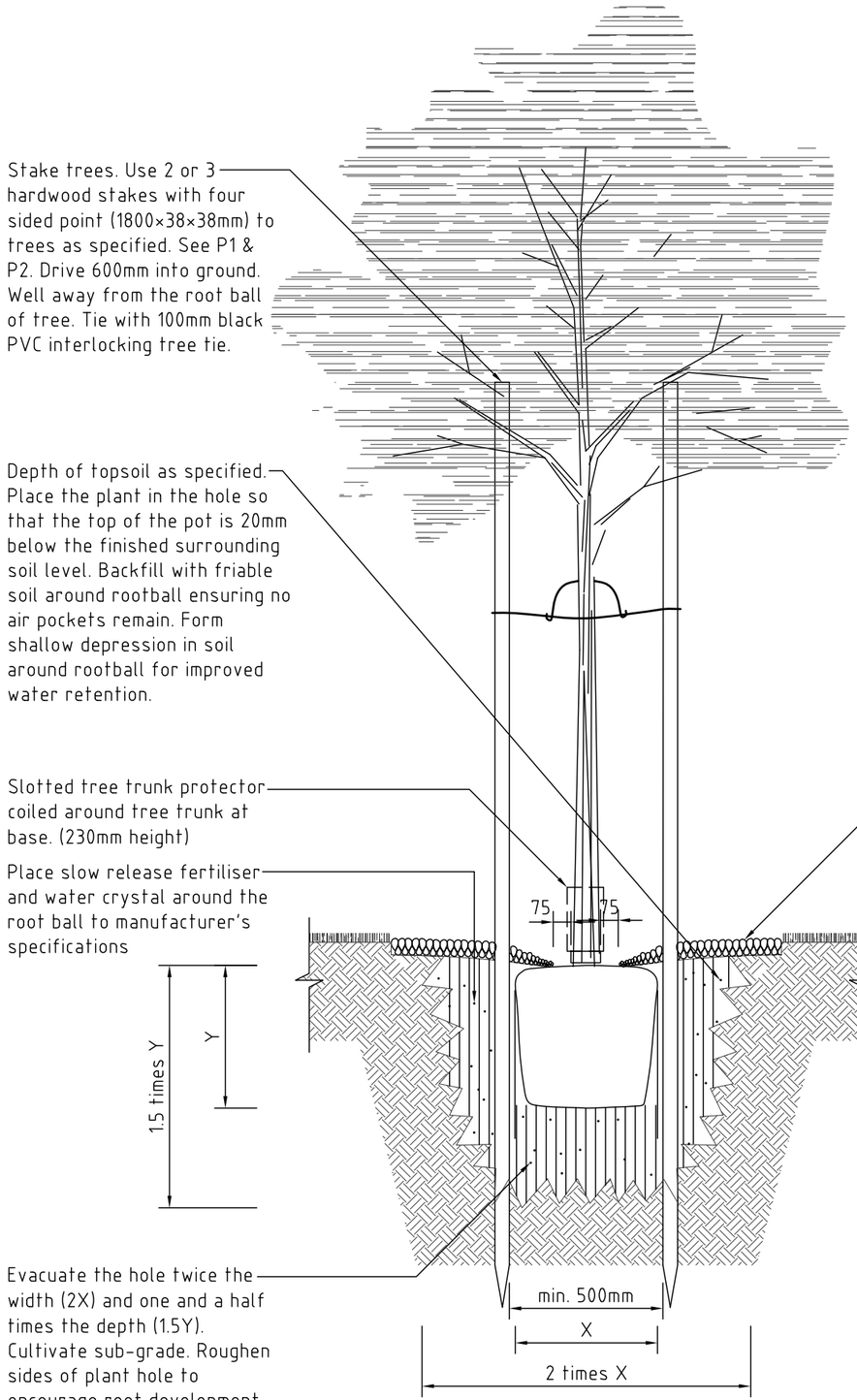
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SHELTER SHED - LARGE

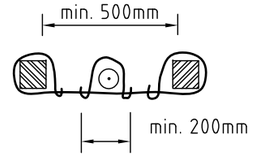
Design File / Drawing No. P-29 | Sheet of | Revision A | A3



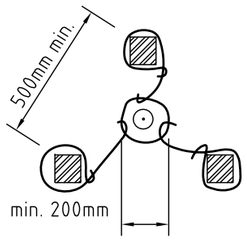
ELEVATION
Scale 1:25

KEY:

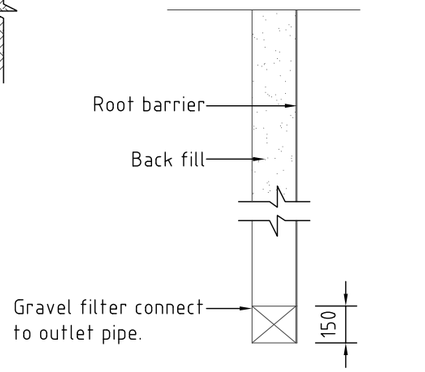
- Tree
- Stake
- 10mm black PVC interlocking tree tie. (loop to have min. 200mm ⌀)



2 STAKES PLAN
Scale 1:25



3 STAKES PLAN
Scale 1:25



If required use root barrier min. 600mm depth. length as required

ROOT BARRIER
Scale 1:25

GENERAL NOTES:

1. In parks individual specimen trees are to be spaced at a minimum of 6m from each other (preferred spacing for a small crown tree/shrub is 8m, for medium crown tree is 10m and for a large crown tree 15m). Where located near infrastructure the tree is to be kept 3m away to allow for ease of maintenance.
2. Remove existing weeds and ground cover by cultivation or prior herbicide treatment (minimum of a week prior to planting).
3. Cultivate sub grade to a depth of 100mm below the depth of the root ball.
4. Excavate existing soil and fill planting hole with water and allow to soak away before planting. Clay/heavy soils may be amended with gypsum or coarse river sand to improve drainage. Sandy soils may be amended with well rotted organic matter to improve soil texture and moisture retention. Water saving granules/materials may also be incorporated into the soil to improve water retention and availability
5. Prior to planting, tight root balls should be lightly teased out, the hole should be pack filled with friable quality soil and firmed down.Quality long lasting mulch should be applied and the tree watered in approx. 10-30 litres per plant depending on size). At the first application utilise a liquid wetting agent added o the water.
6. Where the tree needs to be supported by a tie ensure that it is loosely tied to allow tree to move and develop required thickening/strengthening of the trunk. (where required use suitable tie covers to avoid damage to park)
7. All individual specimen trees planted in the footpath area or in park are to be staked. Where kerbing or fencing exists nearby, the stakes are to be located parallel with this infrastructure. Do not use star pickets to stake trees.
8. Species selection should avoid existing environmental weeds and potential environmental weeds (those non-endemic species that are hardy, spread quickly and or seed prolifically).

POSITIONING NOTES:

1. Trees and shrubs planted within road reserve need to be planted at a 3m alignment from the property boundary (parameter open to negotiating with council dependent on services locations and width of road reserve, however normal parameters are between 2.5-3m).
2. Consideration needs to be given to the ultimate size and shape of the tree in relation to the space available. Recommended spacing for a small crown/tree is 8m, for medium crown tree is 10m and for a large crown tree is 15m. Street trees are to be planted in a single straight row not staggered or offset at varying intervals from the property boundary.
3. In addition planting needs to be done according to the following:
   Not within 3 metres of either side of a property access or electricity/communication pole or pad mounted transformer or fire hydrant or water valve.
   Not within 8m of a street light or traffic signal or road signs.
   Not on footpaths less than 3m wide.
   Not within 10 metres of property boundary corner alignment associated with an intersection, leaving clear vision for approaching motorists.
   Not within 20m from the approach or 6m of the departure side of a bus stop.
   Not within 450mm of the kerb and channeling
   Not within 15m of the approach side or 5m of the departure side of a pedestrian crossing
   Not within, or on the roadway side of a roadside stormwater drain.
4. Where the road reserve borders a park the tree planting should occur within the real property alignment of the park (permission needs to sought from Councils park section).
5. Tree planting in vicinity of powerlines are to be performed in accordance with electricity provider agreements using power friendly trees.
6. Trees or shrubs are required to be maintained in such a manner as they do not obstruct pedestrian traffic or create a traffic hazard.

SUPERSEDES DRAWING NO. 50829

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

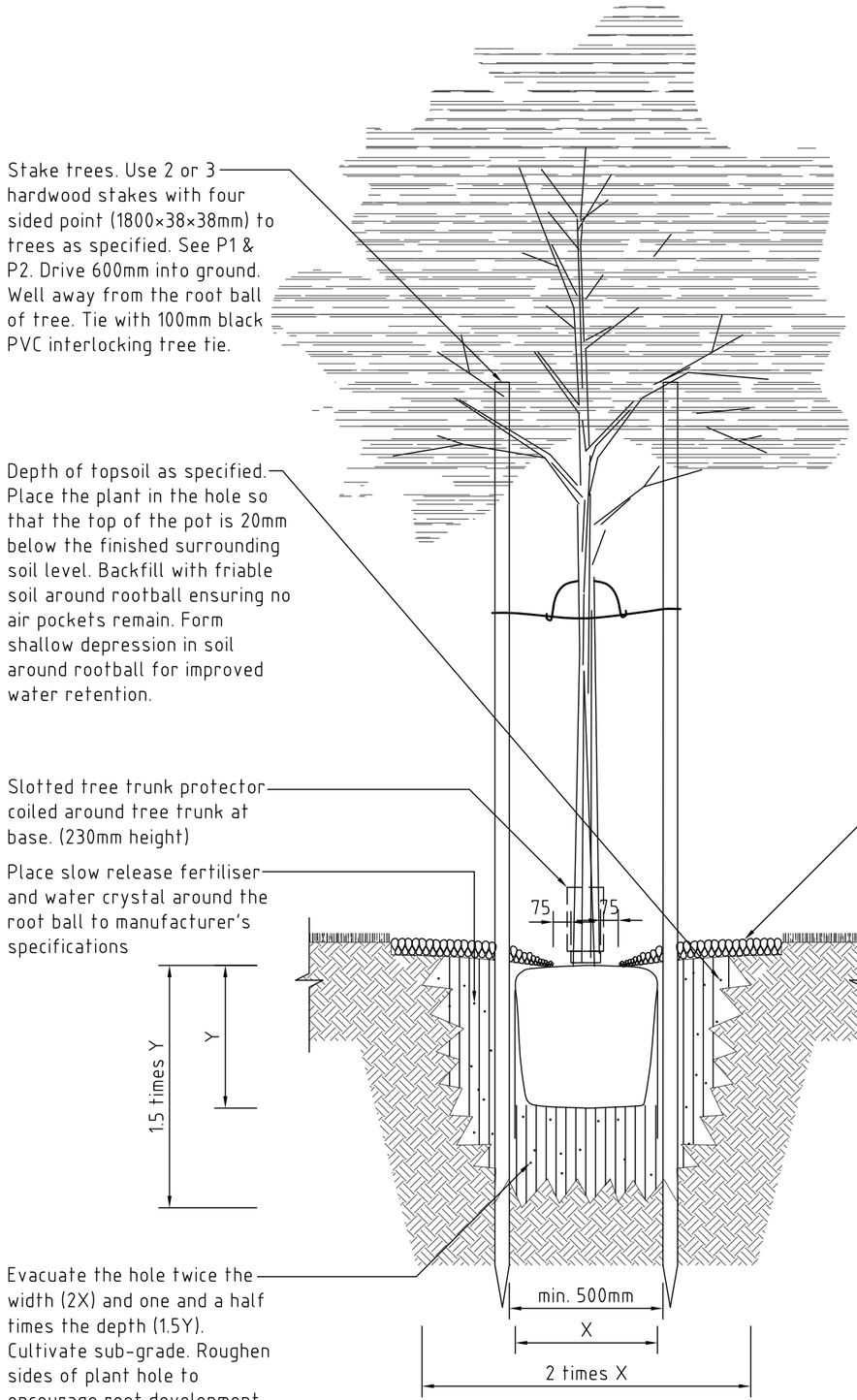
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SPECIMEN PARK/STREET TREE PLANTING

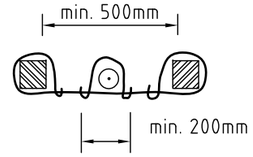
Design File / Drawing No. P-30 | Sheet of | Revision A | A3



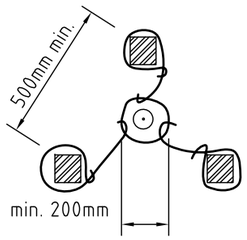
ELEVATION
Scale 1:25

KEY:

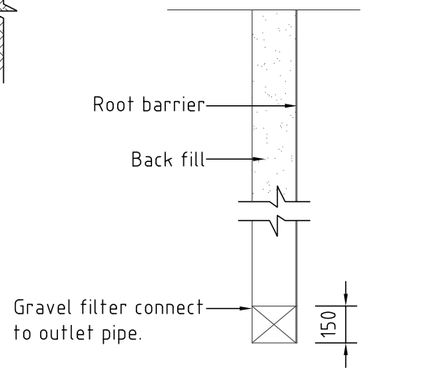
- Tree
- Stake
- 10mm black PVC interlocking tree tie. (loop to have min. 200mm ⌀)



2 STAKES PLAN
Scale 1:25



3 STAKES PLAN
Scale 1:25



If required use root barrier min. 600mm depth. length as required

ROOT BARRIER
Scale 1:25

GENERAL NOTES:

1. In parks individual specimen trees are to be spaced at a minimum of 6m from each other (preferred spacing for a small crown tree/shrub is 8m, for medium crown tree is 10m and for a large crown tree 15m). Where located near infrastructure the tree is to be kept 3m away to allow for ease of maintenance.
2. Remove existing weeds and ground cover by cultivation or prior herbicide treatment (minimum of a week prior to planting).
3. Cultivate sub grade to a depth of 100mm below the depth of the root ball.
4. Excavate existing soil and fill planting hole with water and allow to soak away before planting. Clay/heavy soils may be amended with gypsum or coarse river sand to improve drainage. Sandy soils may be amended with well rotted organic matter to improve soil texture and moisture retention. Water saving granules/materials may also be incorporated into the soil to improve water retention and availability
5. Prior to planting, tight root balls should be lightly teased out, the hole should be pack filled with friable quality soil and firmed down.Quality long lasting mulch should be applied and the tree watered in approx. 10-30 litres per plant depending on size). At the first application utilise a liquid wetting agent added o the water.
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POSITIONING NOTES:

1. Trees and shrubs planted within road reserve need to be planted at a 3m alignment from the property boundary (parameter open to negotiating with council dependent on services locations and width of road reserve, however normal parameters are between 2.5-3m).
2. Consideration needs to be given to the ultimate size and shape of the tree in relation to the space available. Recommended spacing for a small crown/tree is 8m, for medium crown tree is 10m and for a large crown tree is 15m. Street trees are to be planted in a single straight row not staggered or offset at varying intervals from the property boundary.
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   Not within 8m of a street light or traffic signal or road signs.
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   Not within 20m from the approach or 6m of the departure side of a bus stop.
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DATE 08 June 2010

Scales

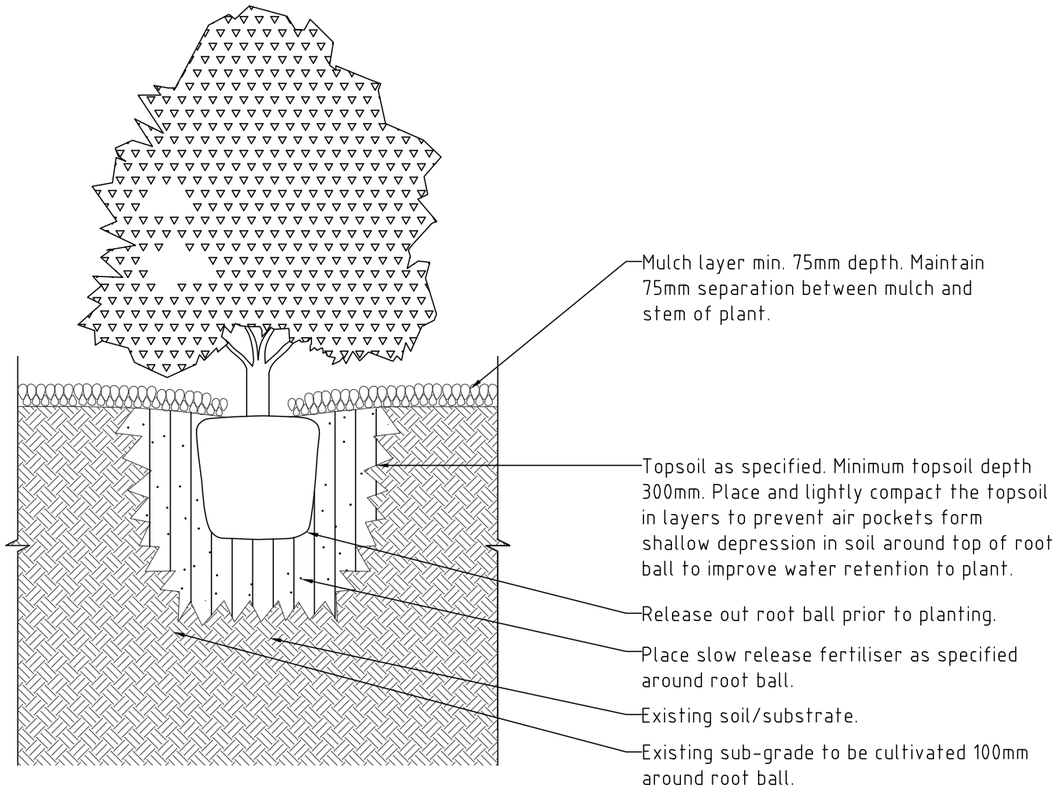
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS PARKS

Drawing: SPECIMEN PARK/STREET TREE PLANTING

Design File / Drawing No. P-30 | Sheet of | Revision A | A3



TYPICAL SHRUB GROUND COVER PLANTING

Scale 1:25

NOTES:

1. Remove existing weeds and ground cover by cultivation or prior herbicide treatment. (minimum of one week prior to planting)
2. Cultivate sub-grade to a depth of 100mm below the depth of the root ball. Excavate existing soil and fill planting hole with water and allow to soak away before planting. Clay/heavy soil may be amended with gypsum or course river sand to improve drainage. Sandy soils may be amended with well rotted organic matter to improve moisture retention and availability.
3. Prior to planting. Tight root balls should be lightly teased out. The hole should be back filled with friable quality soil firmed down.
4. Quality long lasting mulch should be applied and the tree watered in (approx. 10 - 30 litres per plant plant depending on size). At the first application utilise a liquid wetting agent added to the water.

SUPERSEDES DRAWING NO. 50830

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

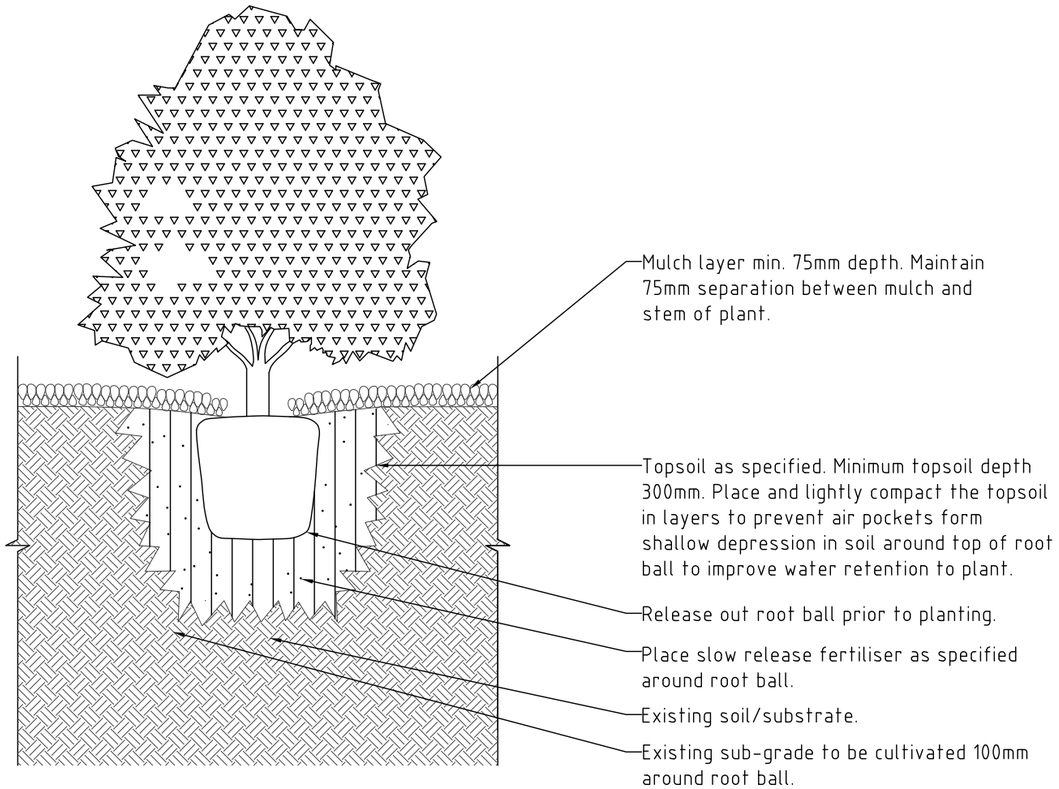
Drawing
LANDSCAPE
SHRUB/GROUND COVER PLANTING

Design File
Drawing No. P-31

Sheet of

Revision A

A3



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Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

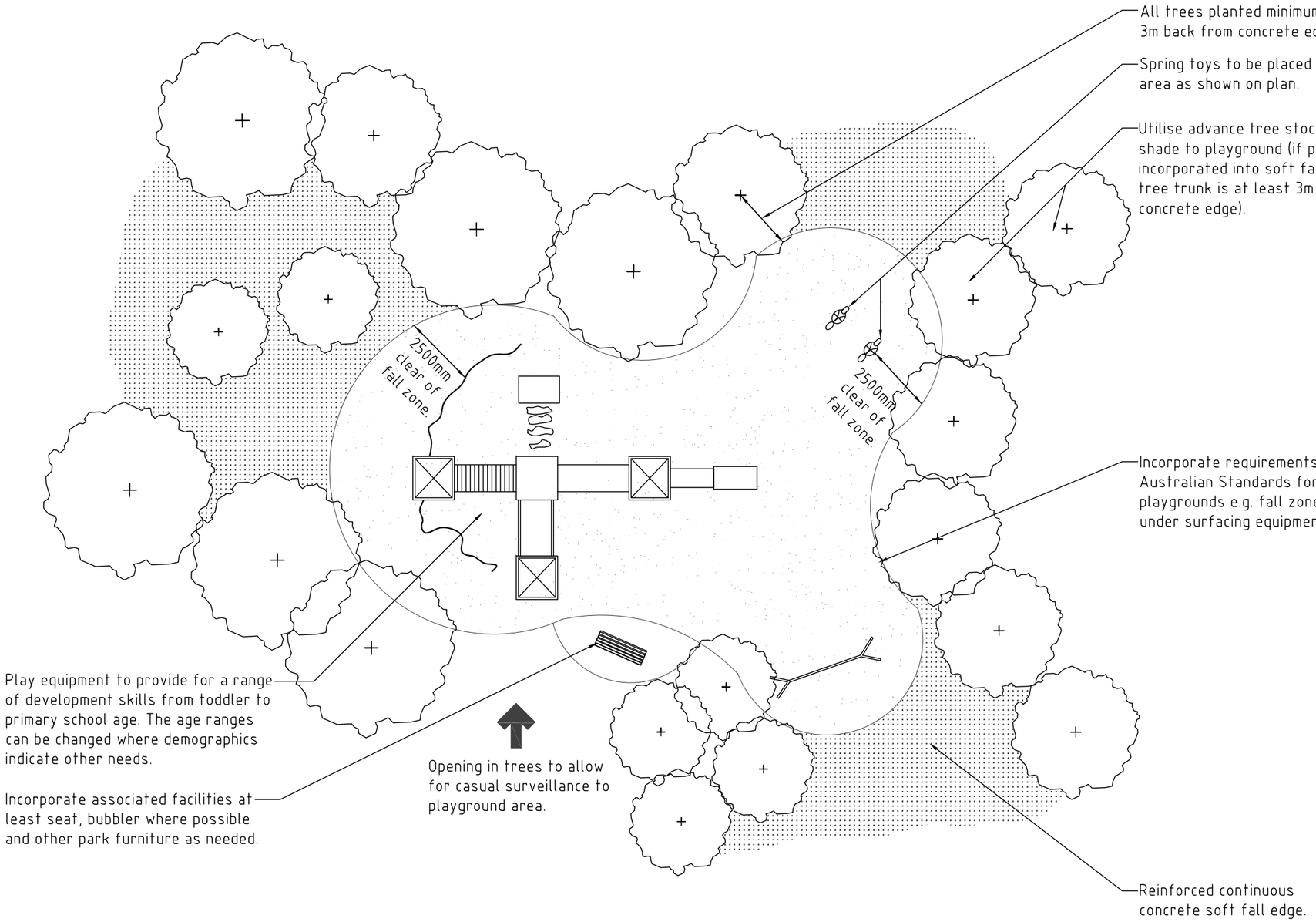
Drawing
LANDSCAPE
SHRUB/GROUND COVER PLANTING

Design File
Drawing No. P-31

Sheet of

Revision A

A3



NOTES:

1. Located where demographics indicate a high proportion of young children. Within 500m walking distance of residences and without major obstacles e.g. a major road.
2. Avoid installing in small 'pocket parks'.
3. Consider amenity of local residents and provide good accessibility to the playground.
4. Maximise opportunities for casual surveillance from activity spaces, car parks, seating, park neighbours and/or surrounding streets.
5. Where possible link playground to path network.
6. Setback playground from major roads, drains, bikeways etc. or construct safety fencing to manage the risk. (Where playground is within 20m of a main road a safety fence is required)
7. All play is to be subject to supervision. Fences are not a substitute for supervision.
8. Playground equipment should be readily maintainable.
9. Provide play elements in nodes. Clustered according to age group.
10. Check adjacent parks to determine what age group existing playgrounds are focused at and design for a different group.
11. Park's playgrounds should be located, designed and constructed to Australian Standards, Council requirements and playground equipment manufacturers specifications.
12. Within local areas and developing estates aim to have a few large playgrounds in high profile accessible areas rather than multiple small playgrounds scattered throughout the area or estate.

SUPERSEDES DRAWING NO. 50831

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Scales

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

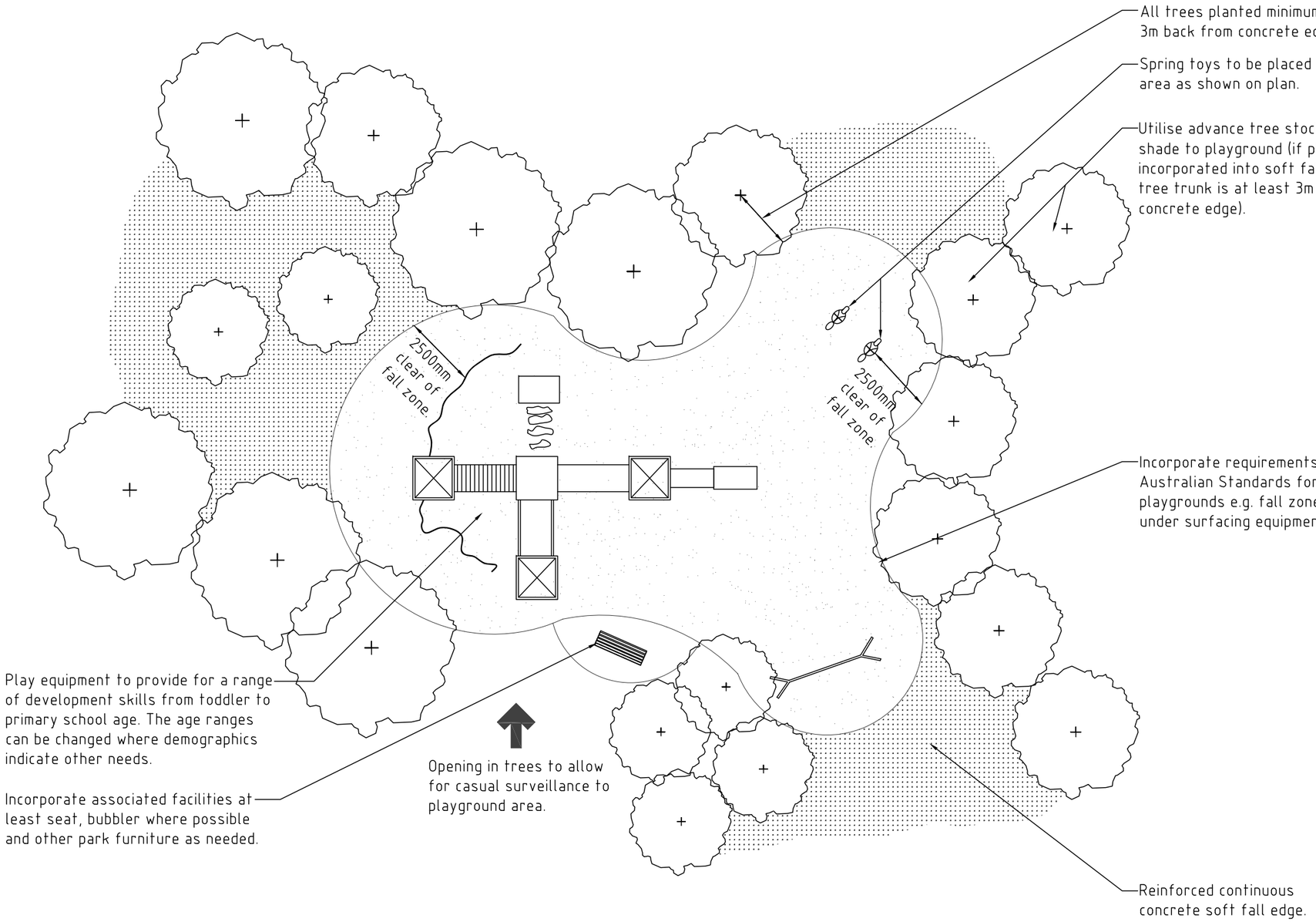
Drawing
PLAYGROUND SITING PLAN

Design File
Drawing No. P-32

Sheet of

Revision A

A3



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Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PLAYGROUND SITING PLAN

Design File
Drawing No. P-32

Sheet of

Revision A

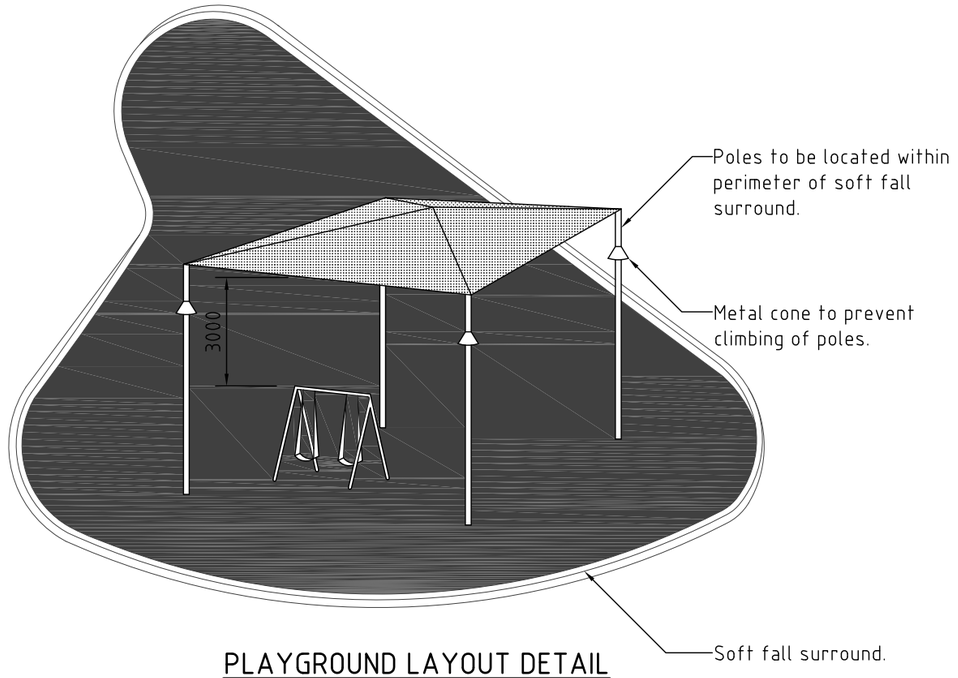
A3

SHADE STRUCTURES:

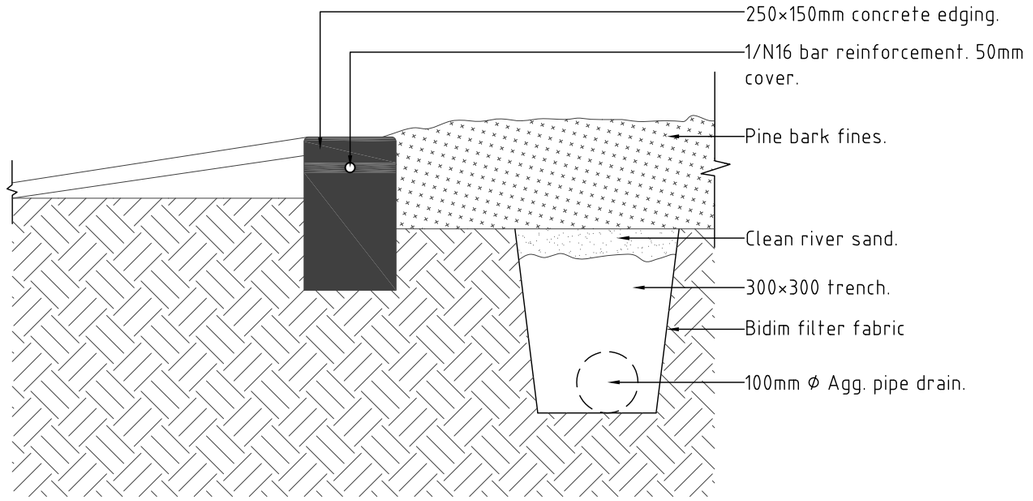
1. Shade structures are to be of suitable height over playground so that they cannot be reached from accessible positions (e.g. playground roofs) minimum clearance 3 metres.
2. Shade structures are provided over playgrounds to reduce the harmful effects of ultraviolet radiation, and to reduce heat. Radiation is at peak levels a few hours either side of midday, whereas heat from the sun can impact on play for longer periods. Shade structures should be RPEQ certified, designed and constructed in accordance with relevant Australian Standards, and readily maintainable and approved by Council.
3. A shade structure should be provided over play elements in district and or district park playgrounds. Shade structures are not required at local playgrounds, except where the park is totally devoid of natural shade. Suitable tree species should be planted to provide future shade around local playgrounds, and to ultimately replace the need for a shade structure in shire-wide or district parks.

PLAYGROUND SOFT FALL INSTALLATION SPECIFICATION FOR SUBSOIL DRAIN, CONCRETE EDGING AND SOFT FALL:

1. All features within 3000mm if the proposed playground node (e.g. shade structure posts, seats and trees), should be incorporated within the boundary of the under surfacing by at least 500mm, to enhance the aesthetics of the playground and for ease of maintenance of the park.
2. Excavate perimeter as required for concrete edge beam (2.5m min. clearance from play equipment as per AS2004 Australian Standards). Attached sketch is indicative only, shape of edge to be discussed.
3. Footprint of soft fall area to be excavated to a depth of 100mm.
4. Excavate a network of trench drain 300mm×300mm and run into 1m×1m×0.9m soakage pit.
5. Place 100mm agricultural pipe in centre of drainage trench.
6. Place geo-textile filter fabric (Bidim or similar approved) into drain and pit, lay agg. pipe with geo-textile sock, fill clean 25mm gravel to specified height, fold fabric over gravel (overlap 300mm) and cover with coarse river sand or 'crusher dust' to finish level to underside of soft fall.
7. Place 2.0m lengths of reinforcing as shown support on bar chairs to achieve min. 50mm cover to the reinforcing.
8. Cast 30 MPa premixed concrete and form special tooled joint 25mm deep at every 2.1m centres to coincide where steel ends.
9. Caulk all joints with polysulphide using a cartridge gun to a min. depth of 25mm. Allow to mask adjoining surfaces to avoid spillage.
10. Back fill soil and turf from top outer edge of concrete edging as shown and finish to match existing (turf to be minimum 1200mm wide, allow for watering for 7 days.
11. Impact attenuation should be provided over the entire free fall zone, which extends 2.5m from the furthest extension of any piece of equipment, mobile or static.
12. Loose fill (soft fall) impact attenuation material should be screened 5mm to 10mm pine bark, installed to a minimum depth of 250mm not compacted or 200mm compacted. Where fixings or anchors are required they must be completely concealed. The loose fill material is to be inspected regularly throughout the maintenance period and further fill added if necessary to maintain the required depth.
13. Solid impact attenuation surfacing may be pre-formed matting or wet pour synthetic surfacing. As a minimum solid surfacing impact attenuation should be installed under swings, scale swings, slippery dip exits, fireman's poles, and at the entrance and exits of flying foxes. Coverage should extend the length and width of a flying fox.
14. Clear all debris and rubbish, rake up area and leave in a tidy condition.
15. Council requires inspections to:
    Subsoil drain prior to backfilling.
    Concrete edging excavation with reinforcing in place prior to concreting.



PLAYGROUND LAYOUT DETAIL
Scale 1:20



SOFT FALL SURFACE FILL & DRAINAGE
Scale 1:10

SUPERSEDES DRAWING NO. 50832

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A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PLAYGROUND SOFT FALL INSTALLATION &
PLAYGROUND SHADE NOTES

Design File
Drawing No. P-33

Sheet of

Revision A

A3

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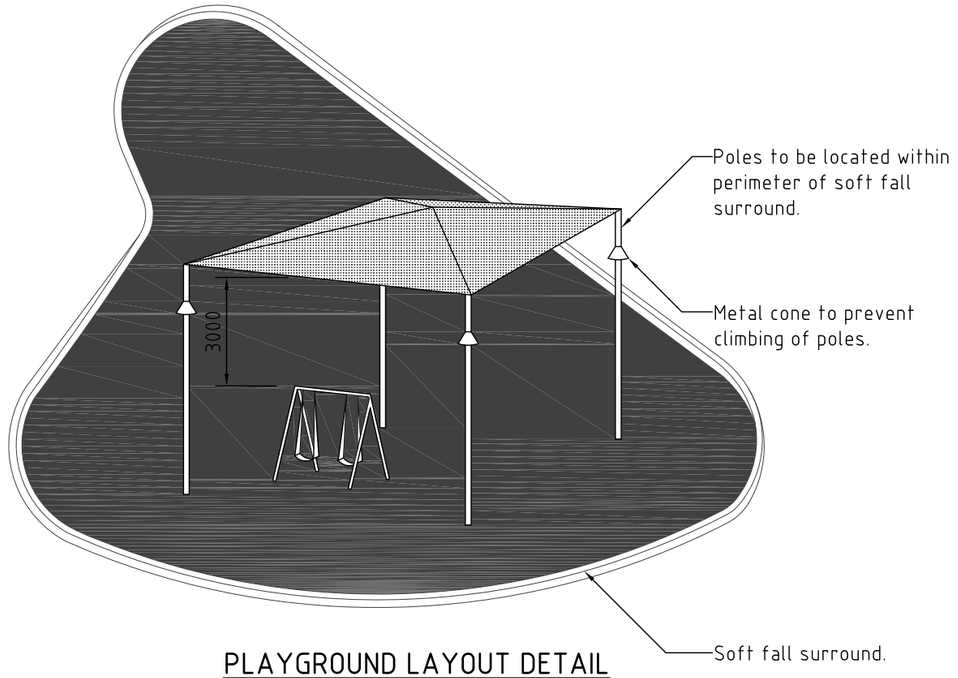
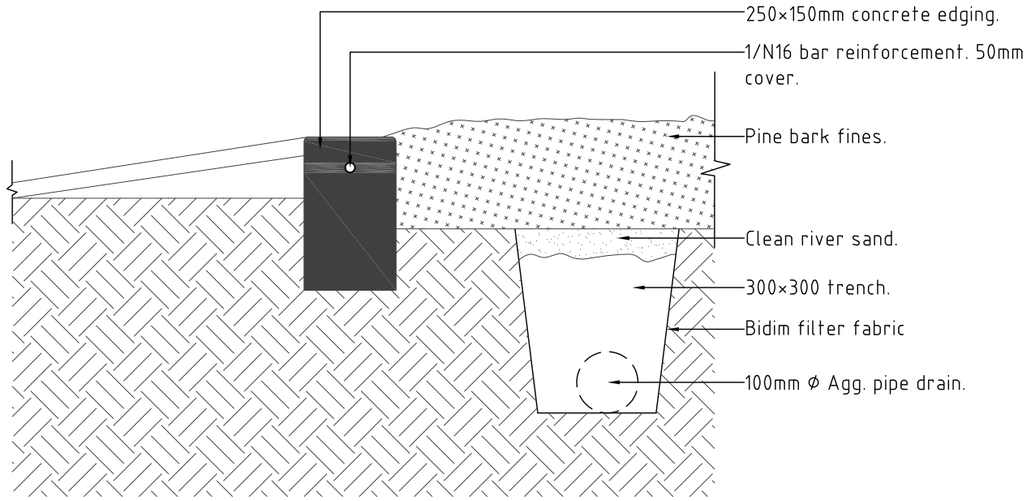


PLAYGROUND LAYOUT DETAIL
Scale 1:20



SOFT FALL SURFACE FILL & DRAINAGE
Scale 1:10

SUPERSEDES DRAWING NO. 50832

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
PARKS

Drawing
PLAYGROUND SOFT FALL INSTALLATION &
PLAYGROUND SHADE NOTES

Design File
Drawing No. P-33

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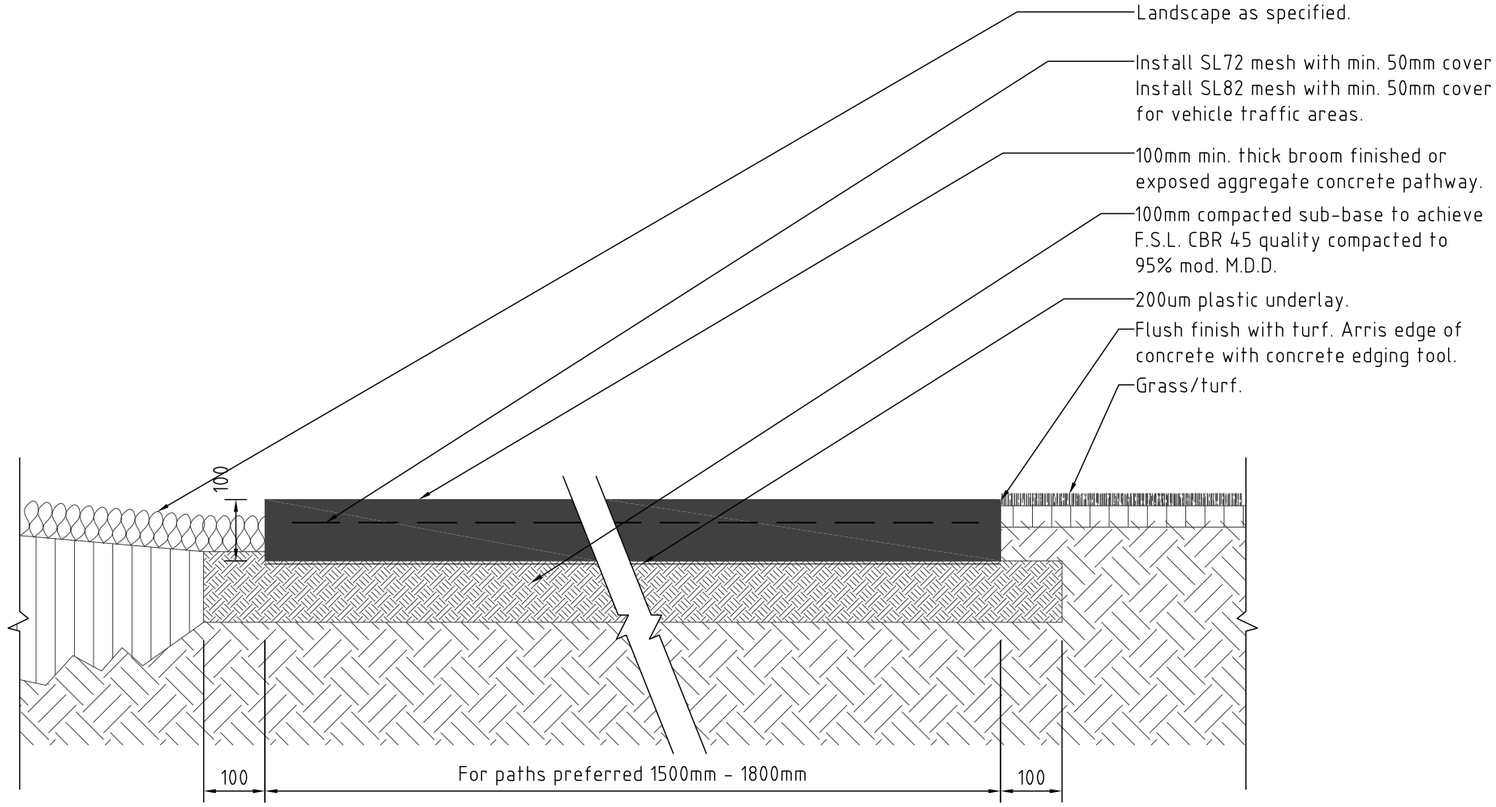
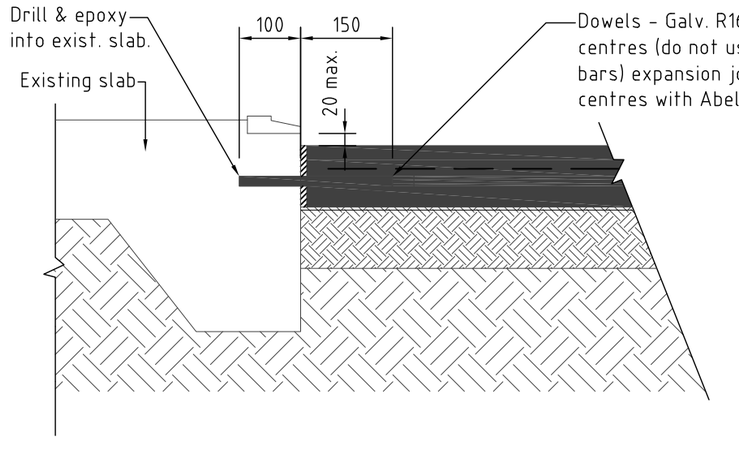
Revision A

A3



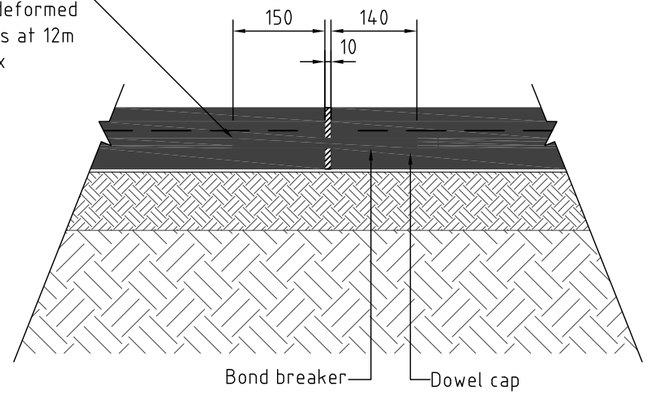
CONCRETE & EXPOSED AGGREGATE & PATHS & PAVEMENT AREAS

Scale 1:10



PATH TO EXISTING SLAB DETAIL

Scale 1:10



PATH TO EXISTING JOINT DETAIL

Scale 1:10

GENERAL NOTES:

1. Ensure mown height of grass (turf) finished flush with paths and pavement areas.
2. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of paths and pavement areas.
3. Ensure even grade cross fall min. 1:50 to path.

CONCRETE WORKS:

1. All workmanship and materials shall comply with the current Australian Standards in particular AS3600, and any requirements of the relevant authorities. Slab to be 125mm thick minimum N25 grade concrete. Concrete shall be normal class concrete unless specified otherwise. N25 shall mean normal class concrete with a 28 day characteristic strength of 25 MPa. Concrete mix shall be approved by the superintendent prior to placing.
2. Maximum aggregate size 20mm (10mm for decorative finishes) minimum slump 80mm.
3. For exposed aggregate finish. Acid etch in accordance with current cement and concrete association of Australia - Concrete information sheet QD-9 "cleaning of exposed aggregate surfaces." Show at least 80% clean. Evenly distributed aggregate. All aggregate well bonded in the cement matrix. Use a weak mix of 10% commercial hydrochloric acid to remove cement slurry. Do not allow acid to enter garden beds or the stormwater system.
4. Where possible pathways to follow long sweeping curves/bends and avoid short zigzags and unnatural repetitive curves/bends. Where necessary pathways to follow geometric lines.
5. Pathways to reflect anticipated pedestrian lines where appropriate.
6. Pathways to provide convenient links to park infrastructure, features and attributes.
7. Where pathways link to other paths or infrastructure they should incorporate wide geometric or curved transition pathways.
8. Supply and lay SL72 mesh. Mesh to be supported by 60mm bar chairs. Mesh to overlap 200mm.
9. Reinforcement is shown diagrammatically and not necessarily in position.
10. Ensure new grade falls min. 1:50 to pavement areas finished surface.
11. All paths to have a 1:50 minimum crossfall.
12. For contraction and expansion joints. Refer to SRRC R-13 - Concrete Path.
13. Large areas of pavement to be reviewed by engineer.
14. Paths & pavement areas to comply with Australian Standards and Council requirements for access & mobility AS1428 (2003).

SUPERSEDES DRAWING NO. 50833

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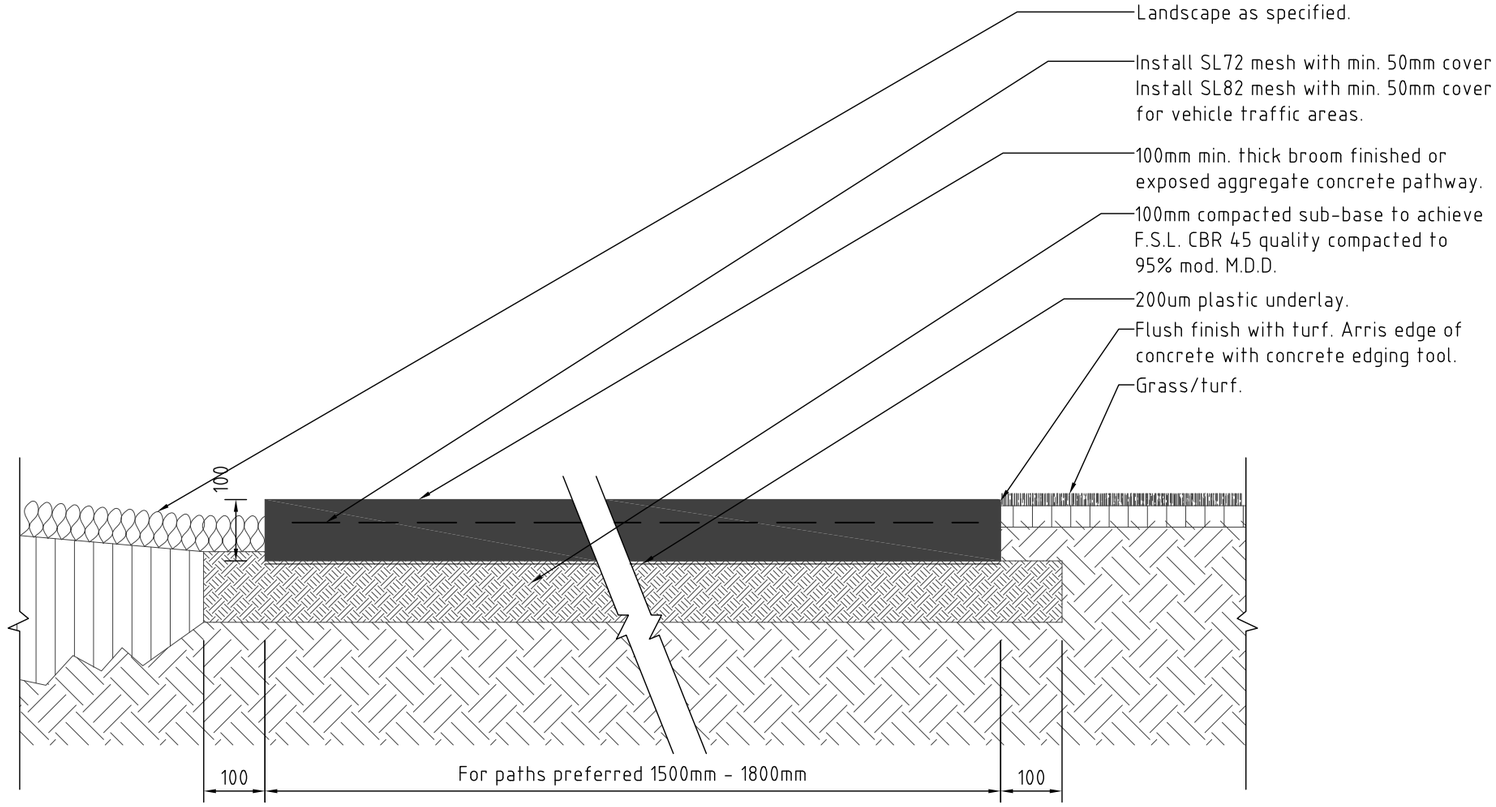
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

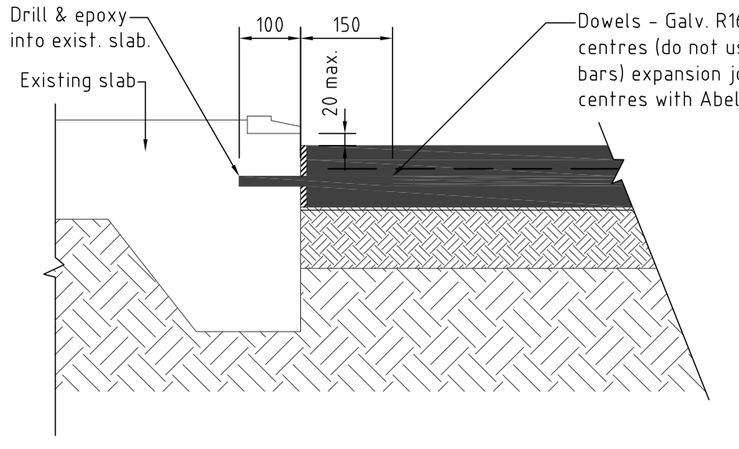
Drawing: PARK FOOTPATH DESIGN

Design File
Drawing No. P-34
Sheet of
Revision A
A3



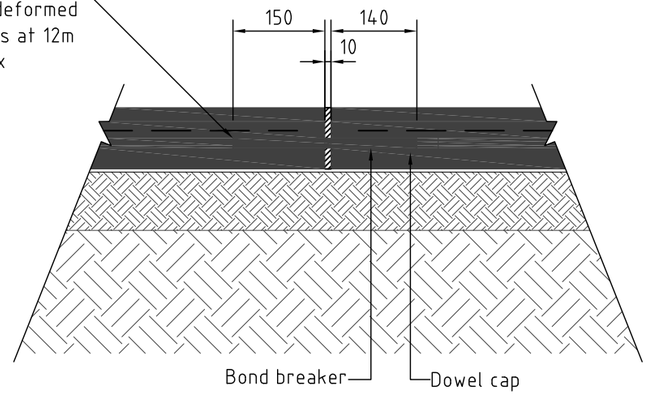
CONCRETE & EXPOSED AGGREGATE & PATHS & PAVEMENT AREAS

Scale 1:10



PATH TO EXISTING SLAB DETAIL

Scale 1:10



PATH TO EXISTING JOINT DETAIL

Scale 1:10

GENERAL NOTES:

1. Ensure mown height of grass (turf) finished flush with paths and pavement areas.
2. Ensure garden areas (mulch) finish 25mm below adjacent F.S.L's of paths and pavement areas.
3. Ensure even grade cross fall min. 1:50 to path.

CONCRETE WORKS:

1. All workmanship and materials shall comply with the current Australian Standards in particular AS3600, and any requirements of the relevant authorities. Slab to be 125mm thick minimum N25 grade concrete. Concrete shall be normal class concrete unless specified otherwise. N25 shall mean normal class concrete with a 28 day characteristic strength of 25 MPa. Concrete mix shall be approved by the superintendent prior to placing.
2. Maximum aggregate size 20mm (10mm for decorative finishes) minimum slump 80mm.
3. For exposed aggregate finish. Acid etch in accordance with current cement and concrete association of Australia - Concrete information sheet QD-9 "cleaning of exposed aggregate surfaces." Show at least 80% clean. Evenly distributed aggregate. All aggregate well bonded in the cement matrix. Use a weak mix of 10% commercial hydrochloric acid to remove cement slurry. Do not allow acid to enter garden beds or the stormwater system.
4. Where possible pathways to follow long sweeping curves/bends and avoid short zigzags and unnatural repetitive curves/bends. Where necessary pathways to follow geometric lines.
5. Pathways to reflect anticipated pedestrian lines where appropriate.
6. Pathways to provide convenient links to park infrastructure, features and attributes.
7. Where pathways link to other paths or infrastructure they should incorporate wide geometric or curved transition pathways.
8. Supply and lay SL72 mesh. Mesh to be supported by 60mm bar chairs. Mesh to overlap 200mm.
9. Reinforcement is shown diagrammatically and not necessarily in position.
10. Ensure new grade falls min. 1:50 to pavement areas finished surface.
11. All paths to have a 1:50 minimum crossfall.
12. For contraction and expansion joints. Refer to SRRC R-13 - Concrete Path.
13. Large areas of pavement to be reviewed by engineer.
14. Paths & pavement areas to comply with Australian Standards and Council requirements for access & mobility AS1428 (2003).

SUPERSEDES DRAWING NO. 50833

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

Director of Works & Infrastructure

DATE 08 June 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
PARKS

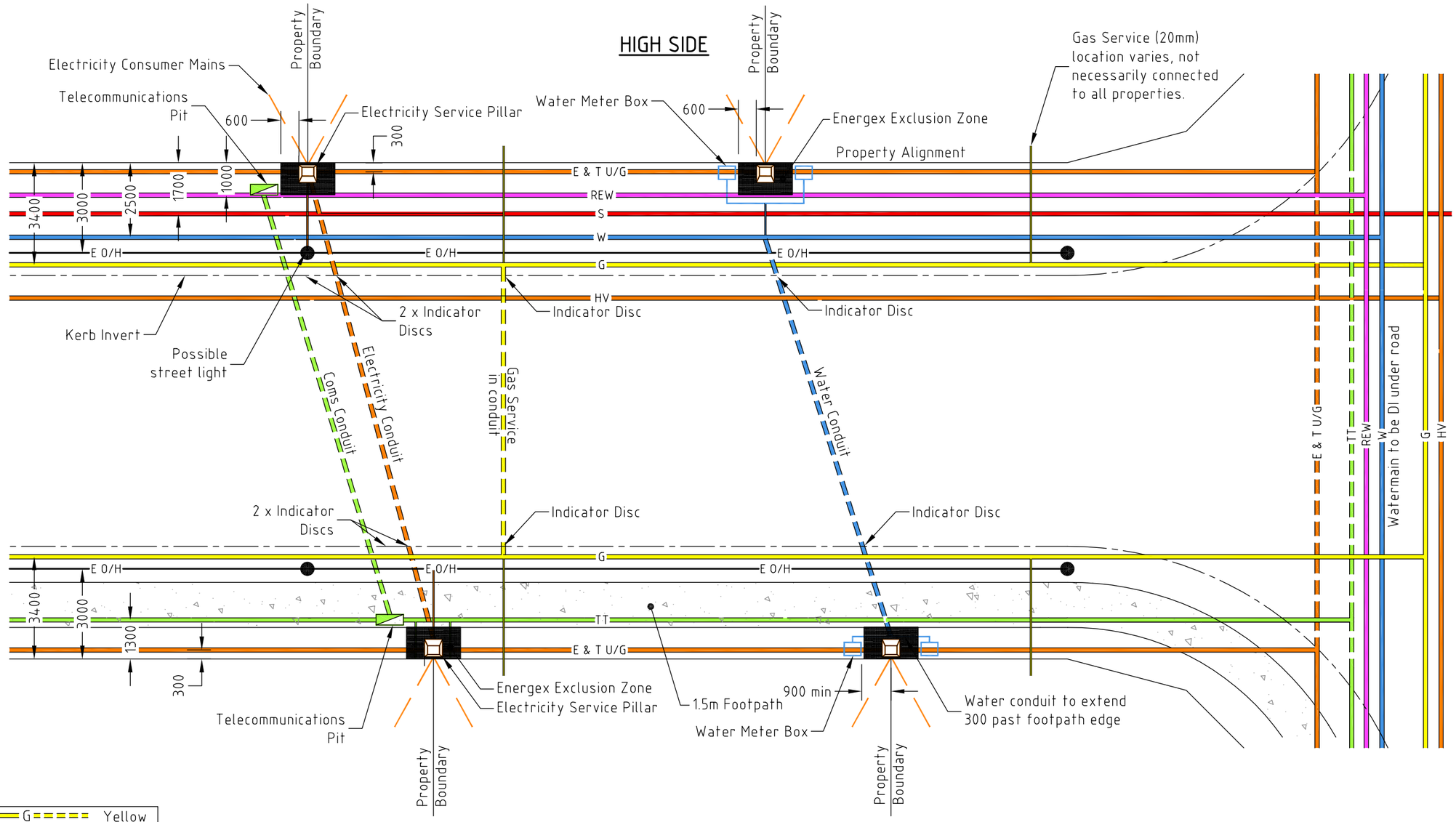
Drawing: PARK FOOTPATH DESIGN

Design File
Drawing No. P-34
Sheet of
Revision A
A3

Service Corridor	
Electricity, Gas & Telecommunications	900
Sewerage	900
Water	900
Poles/Trees/Gas/ SW	900
High Voltage Electricity	1000*

Service Corridor	
Poles/Trees/Gas/SW	900

Trunk Telecommunications	900▲
Electricity, Gas & Telecommunications	900



LEGEND:

Gas	G	Yellow
Water	W	Blue
Recycled Water	REW	Purple
Sewer	S	Red
Trunk Telecommunications	TT	Green
Electricity/Telecommunications	E & T U/G	Orange
Electricity (Overhead)	E O/H	Black
Electricity (High Voltage)	HV	Orange

Conduits shown by dashed lines
*HV alternate location 300 from Lip of Kerb to CL
▲Refer to Note 2 on SRRC R-03

DERIVED FROM IPWEA STD DWG R-100
SUPERSEDES BOONAH - STD.R-0008,
BEAUDESERT - 50400, IPSWICH - SR.22

Issue	Amendment	App'd	Date
B	INCLUSION OF ENERGEX EXCLUSION ZONE, OFFSET TO WATER METER CHANGED		07/11
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 11 August 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

SCENIC RIM Regional Council
Works & Infrastructure Services

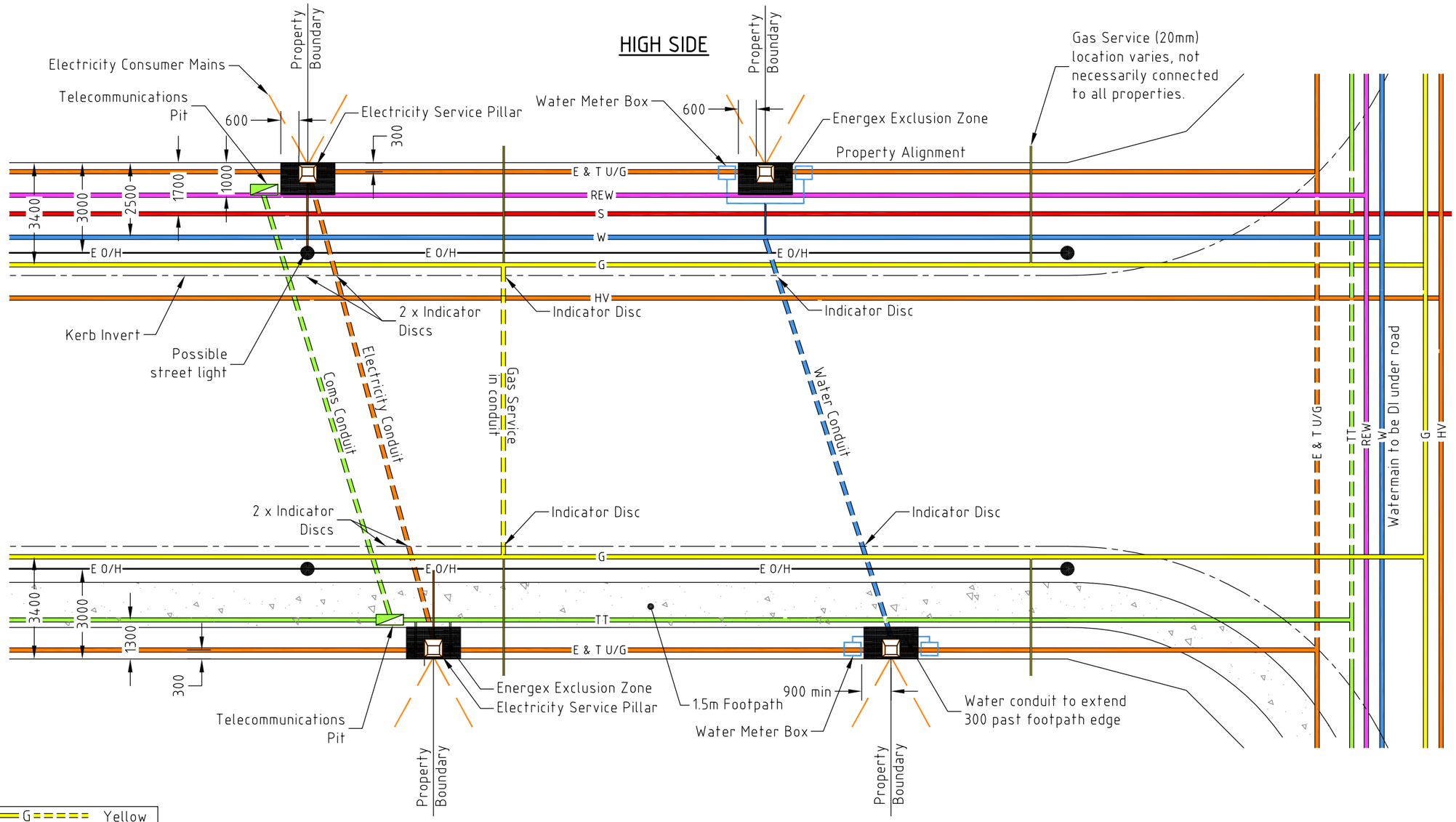
Project: SRRC STANDARD DRAWINGS
ROADS
Drawing: PUBLIC UTILITES
TYPICAL SERVICE CORRIDORS AND ALIGNMENTS

Design File
Drawing No. R-02
Sheet of
Revision B
A3

Service Corridor	
Electricity, Gas & Telecommunications	900
Sewerage	900
Water	900
Poles/Trees/Gas/ SW	900
High Voltage Electricity	1000*

Service Corridor	
Poles/Trees/Gas/SW	900

Trunk Telecommunications	900▲
Electricity, Gas & Telecommunications	900



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Trunk Telecommunications	TT	Green
Electricity/Telecommunications	E & T U/G	Orange
Electricity (Overhead)	E O/H	Black
Electricity (High Voltage)	HV	Orange

Conduits shown by dashed lines
*HV alternate location 300 from Lip of Kerb to CL
▲Refer to Note 2 on SRRC R-03

DERIVED FROM IPWEA STD DWG R-100
SUPERSEDES BOONAH - STD.R-0008,
BEAUDESERT - 50400, IPSWICH - SR.22

Issue	Amendment	App'd	Date
B	INCLUSION OF ENERGEX EXCLUSION ZONE, OFFSET TO WATER METER CHANGED		07/11
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 11 August 2010

Scales

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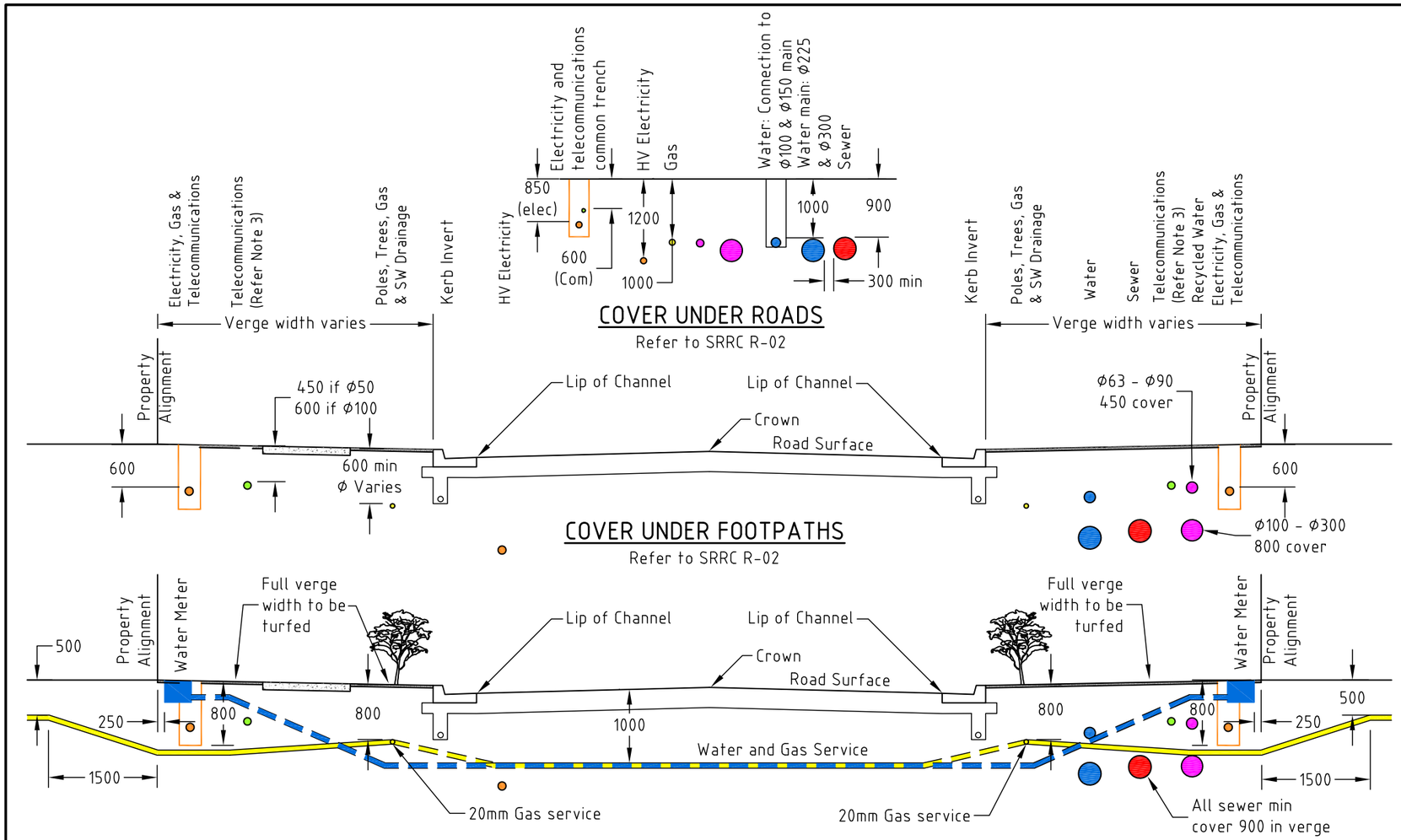
SCENIC RIM Regional Council
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS
Drawing: PUBLIC UTILITES
TYPICAL SERVICE CORRIDORS AND ALIGNMENTS

Design File
Drawing No. R-02
Sheet of
Revision B
A3



COVER UNDER ROADS

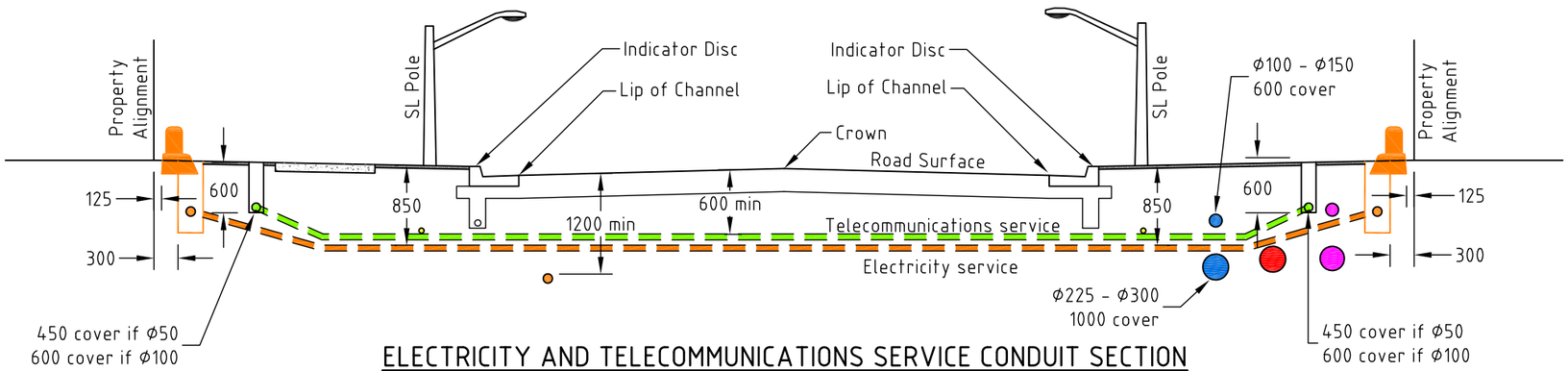
Refer to SRRC R-02

COVER UNDER FOOTPATHS

Refer to SRRC R-02

WATER AND GAS SERVICE CONDUIT SECTION

Refer to SRRC R-02



ELECTRICITY AND TELECOMMUNICATIONS SERVICE CONDUIT SECTION

Refer to SRRC R-02

LEGEND:

Gas	G	Yellow
Water	W	Blue
Recycled Water	REW	Purple
Sewer	S	Red
Trunk Telecommunications	TT	Green
Electricity/Telecommunications	E & T U/G	Orange
Electricity (Overhead)	E O/H	Black
Electricity (High Voltage)	HV	Orange

Conduits shown by dashed lines
*HV alternate location 300 from Lip of Kerb to CL
▲Refer to Note 2 on SRRC R-03

NOTES:

1. All dimensions are in millimeters (unless otherwise noted).
2. Allowable service area for Water Mains depends on Water Main diameter and acceptable trench widths.
3. Alternate telecommunications corridor if shared trenching is unacceptable. The Telecommunications corridor is to be shared by all Telecommunications carriers.
4. Refer to SRRC R-02 for footpath details.
5. Water conduit to be encased in lean mix concrete if less than 150mm cover below the bottom of pavement.
6. Brass or stainless steel indicator discs to be placed in kerb over all conduits.
7. The alignment and depth of existing services shall be confirmed on site in consultation with relevant service authorities prior to any excavation and shall not be inferred from the service allocation drawings.
8. Developers shall negotiate with all relevant communications companies for the provision of conduits at the design phase of development. Various joint use arrangements exist amongst electricity and communications providers.
9. Various configurations of trench width and conduit numbers/diameters exist for common trench arrangements between service providers of electricity, communications and gas. Refer to Electricity and Telecommunications authorities Standard Drawings.
10. Tunnel boring techniques are to be utilised for road/footpath crossing services conduits in existing roads.
11. For landscaping considerations the intent is to generally provide a main services corridor on one side of the street only. The utilisation of verges is dependant on service authority infrastructure demands.
12. Landscaping designs shall give due consideration to the provision of driveway accesses and clearances to service pits, pillars and poles for maintenance access.
13. Plants species shall be selected which minimise the potential for root damage to underground services, pathways and kerb and channel.
14. The mature height and spread of plants shall be considered when assessing visibility sight lines for safe vehicular and pedestrian functions and street lighting requirements applicable to the road classification.
15. Planting of approved shrubs may be permitted over water mains (including recycled water mains) greater than 300mm in diameter and over gas mains.

DRAWING DERIVED FROM IPWEA STD DWG R-101
SUPERSEDES BOONAH - STD.R-0009,
BEAUDESERT - 50400, IPSWICH - SR.23

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

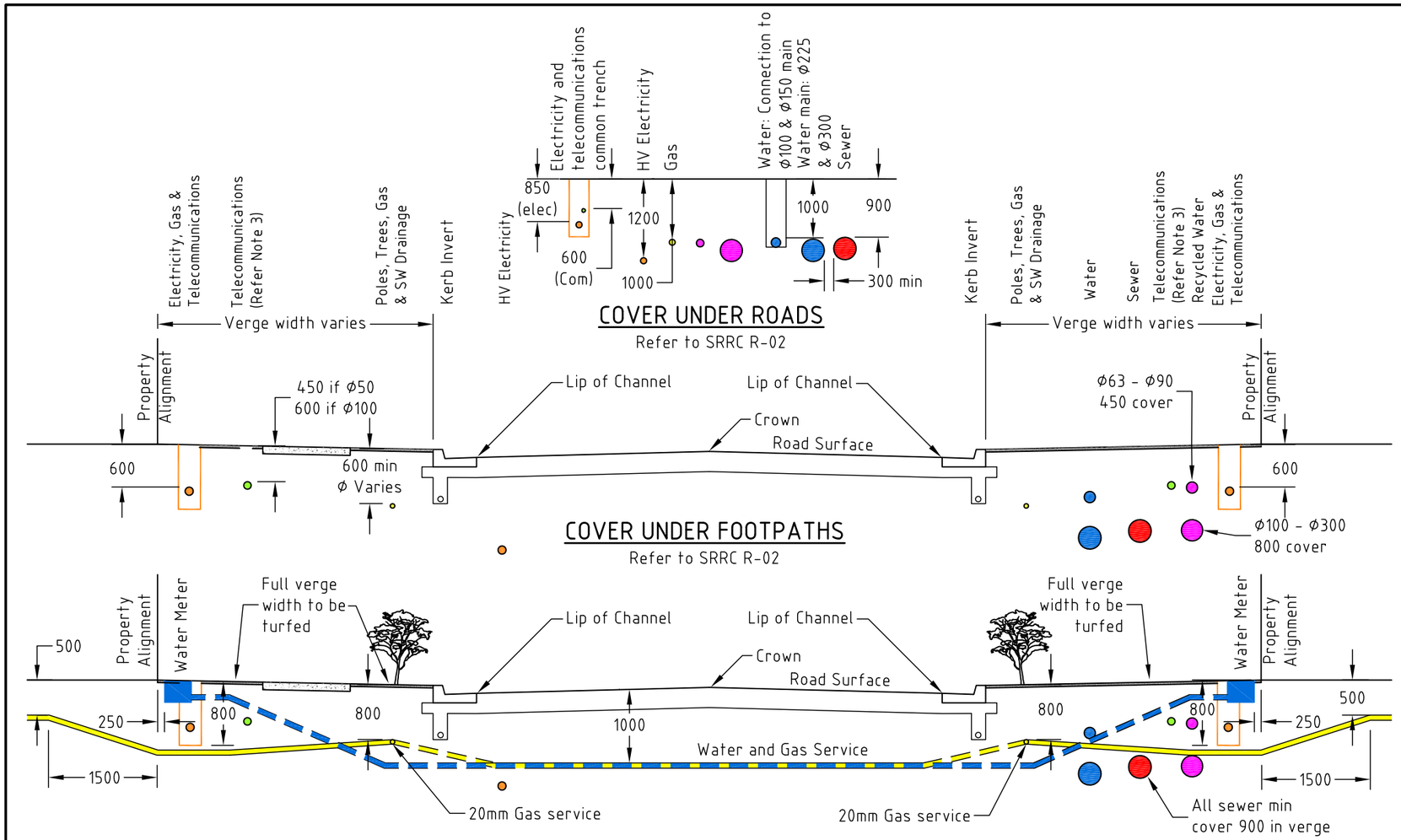
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: PUBLIC UTILITES
TYPICAL SERVICE CONDUIT SECTIONS

Design File
Drawing No. R-03
Sheet of
Revision A
A3



COVER UNDER ROADS

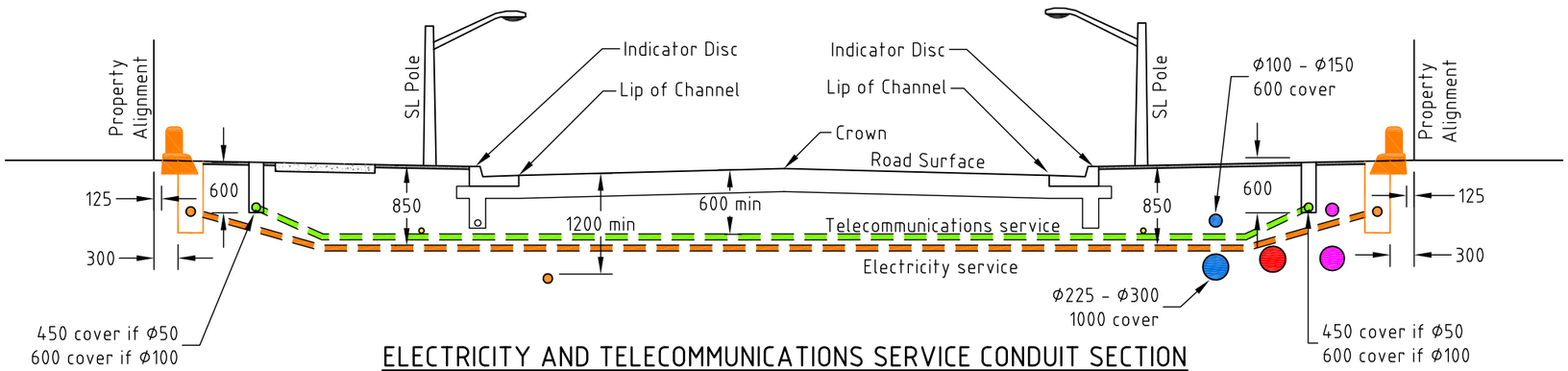
Refer to SRRC R-02

COVER UNDER FOOTPATHS

Refer to SRRC R-02

WATER AND GAS SERVICE CONDUIT SECTION

Refer to SRRC R-02



ELECTRICITY AND TELECOMMUNICATIONS SERVICE CONDUIT SECTION

Refer to SRRC R-02

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Gas	G	Yellow
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DRAWING DERIVED FROM IPWEA STD DWG R-101
SUPERSEDES BOONAH - STD.R-0009,
BEAUDESERT - 50400, IPSWICH - SR.23

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

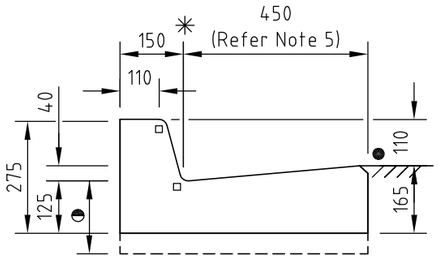
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: PUBLIC UTILITES
TYPICAL SERVICE CONDUIT SECTIONS

Design File
Drawing No. R-03
Sheet of
Revision A
A3



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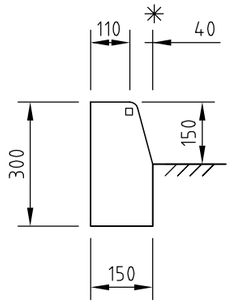

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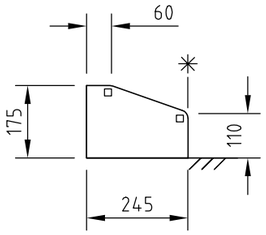

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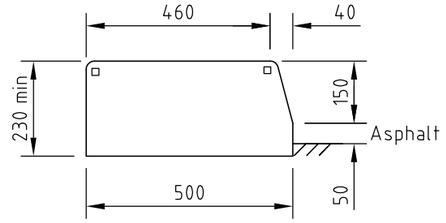
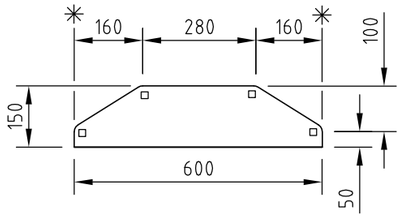
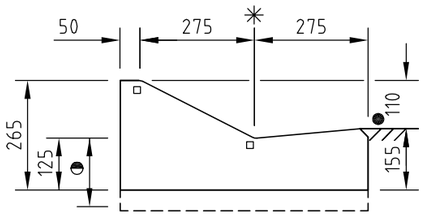


B6
(For use in High traffic areas)

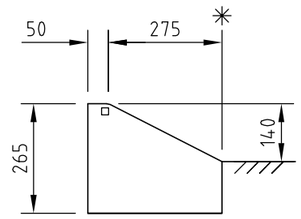
BARRIER TYPE



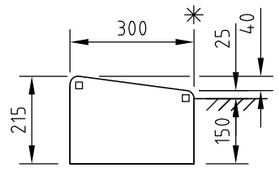
MEDIAN



M1



M4



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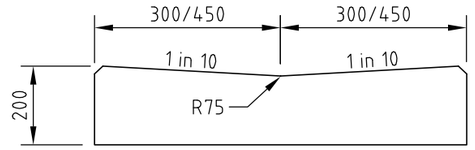
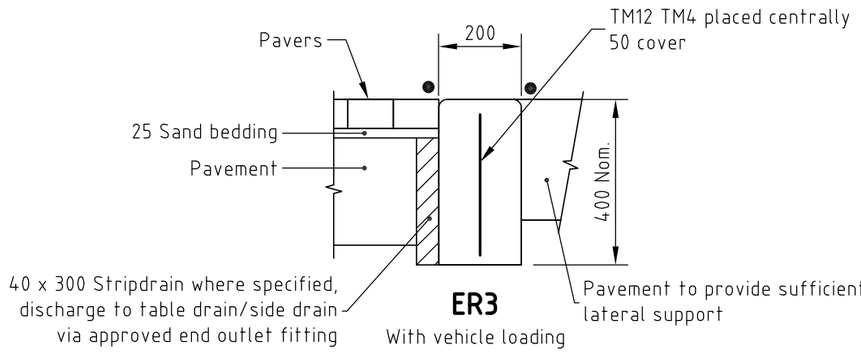
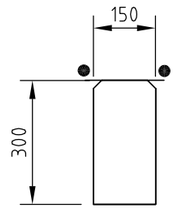


INVERT

MOUNTABLE TYPE



ER3
With vehicle loading



ER5
No vehicle loading

EDGE RESTRAINT

Refer to Project Drawings for Kerb Setout

LEGEND:

- ✳ Nominal kerb face.
- ■ Channel, invert width - refer to project drawings.
- ● 20 Arris.
- ▫ R20 Radius.
- ◓ 175 for commercial and industrial applications, refer project drawings.

NOTES:

1. All materials and construction shall comply with AS 2876 (Concrete Kerbs and Channels (gutters) - Manually or Machine Placed) except for dimensions on this drawing.
2. All concrete N25 min (refer project documentation) in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
3. Reinforcing steel to AS 4671 (Steel Reinforcing Materials).
4. All dimensions in millimeters.
5. 300mm B1 Channel may be used if justified and approval is given by Council.

DERIVED FROM IPWEA STD DWG R-0080
SUPERSEDES BOONAH - STD.R-0013,
BEAUDESERT - 50410, IPSWICH - SR.11

Issue	Amendment	App'd	Date
C	REMOVAL OF M3 & M7 PROFILES AND NOTE CHANGES REGARDING SETOUT AND KERB FACE	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

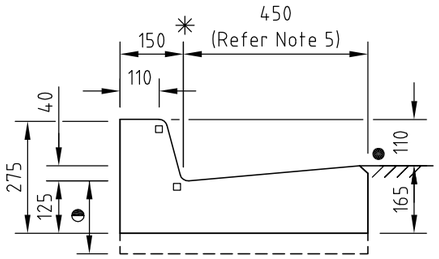
SCENIC RIM Regional Council

Works & Infrastructure Services

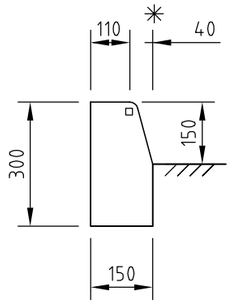
Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
KERB AND CHANNEL
PROFILES AND DIMENSIONS
INCLUDING EDGE RESTRAINTS, MEDIAN & INVERT

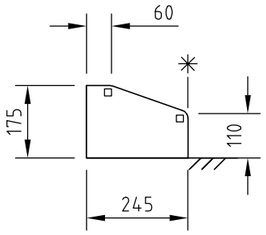
Design File
Drawing No. R-04
Sheet of
Revision C
A3



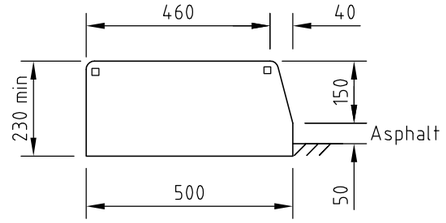
B1



B2

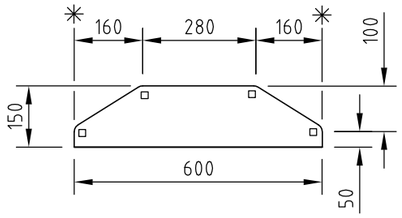


B5

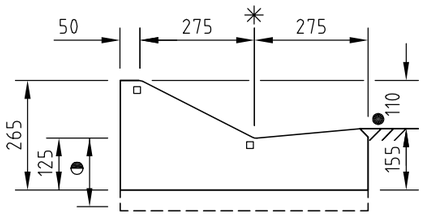


B6
(For use in High traffic areas)

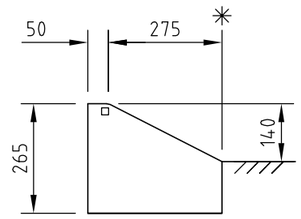
BARRIER TYPE



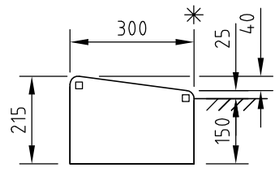
MEDIAN



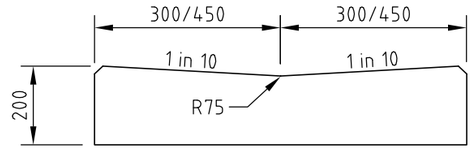
M1



M4

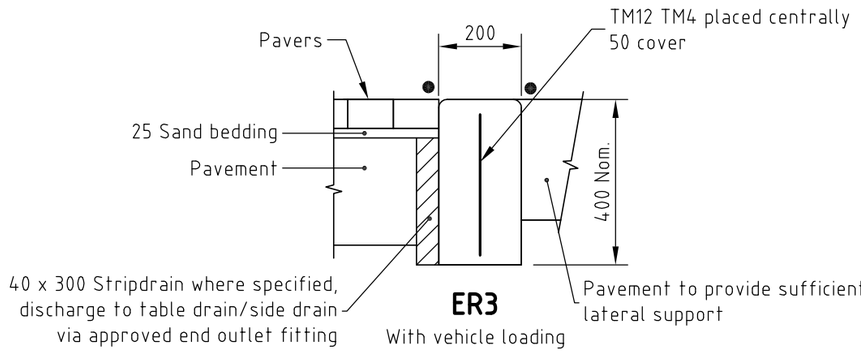


M6

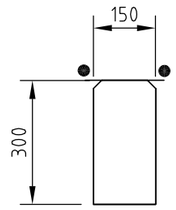


INVERT

MOUNTABLE TYPE



ER3
With vehicle loading



ER5
No vehicle loading

EDGE RESTRAINT

Refer to Project Drawings for Kerb Setout

LEGEND:

- ✳ Nominal kerb face.
- ■ Channel, invert width - refer to project drawings.
- ● 20 Arris.
- ▫ R20 Radius.
- ◓ 175 for commercial and industrial applications, refer project drawings.

NOTES:

1. All materials and construction shall comply with AS 2876 (Concrete Kerbs and Channels (gutters) - Manually or Machine Placed) except for dimensions on this drawing.
2. All concrete N25 min (refer project documentation) in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
3. Reinforcing steel to AS 4671 (Steel Reinforcing Materials).
4. All dimensions in millimeters.
5. 300mm B1 Channel may be used if justified and approval is given by Council.

DERIVED FROM IPWEA STD DWG R-0080
SUPERSEDES BOONAH - STD.R-0013,
BEAUDESERT - 50410, IPSWICH - SR.11

Issue	Amendment	App'd	Date
C	REMOVAL OF M3 & M7 PROFILES AND NOTE CHANGES REGARDING SETOUT AND KERB FACE	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

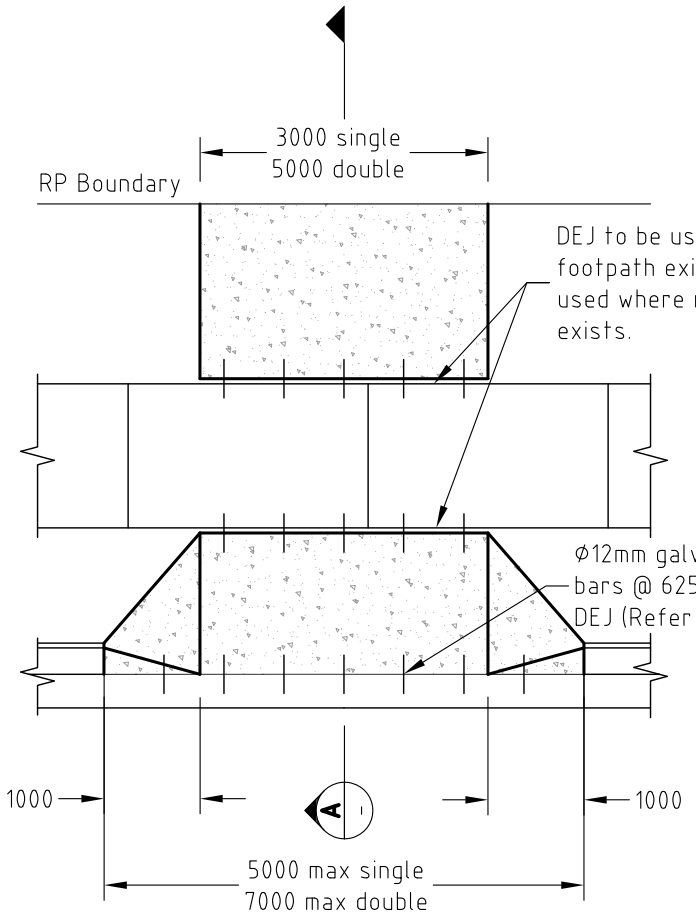
Drawing
KERB AND CHANNEL
PROFILES AND DIMENSIONS
INCLUDING EDGE RESTRAINTS, MEDIAN & INVERT

Design File
Drawing No. R-04
Sheet of
Revision C
A3

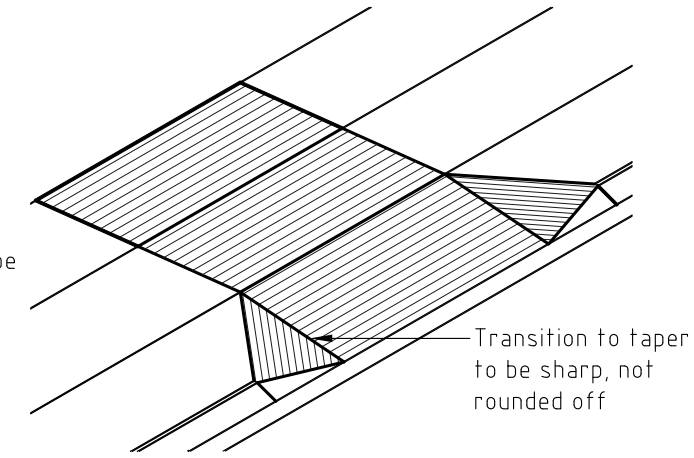
NOTES:

1. All appropriate permits must be obtained from Council, including approval of location and levels prior to excavation.
2. Crossings are not designed for commercial vehicles (See SRRC R-06).
3. Where a footpath is narrower than 1500 or does not exist, the driveway is to be graded as shown to provide for a future footpath.
4. Concrete surface tolerance to be +5mm/-0mm over 3m sections.
5. Concrete 25mPa in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
6. Reinforcement fabric to AS 1304 (Welded Wire Reinforcing Fabric for Concrete), lap fabric a minimum of 2 cross bars.
7. Existing footpath to be transitional to new driveway at a maximum grade of 1 in 10 (10%).
8. Crossfall of existing pavement adjacent to the driveway to be checked. If crossfall exceeds 3%, Council will decide if the driveway needs to be re-designed to ensure satisfactory clearance for vehicles.
9. Expansion joint material to be 10mm thick, full depth closed cell cross linked polyethylene foam (85-150kg/m^3) (which can be purchased from the Store in Council's depot in Beaudesert) or bitumen impregnated chipboard, installed to manufacturers' specification.
10. One access to be constructed per allotment.
11. Expansion and control joints to be sealed with a low modulus self priming sealant to the manufacturers specifications. The colour of sealant is to match the adjoining surface finish.
12. Earthworks cut and fill batters from edge of driveway to natural surface to be max grade of 1 in 10 (10%) and fully turfed.
13. Driveways must achieve a high point of 250mm above invert of channel to ensure stormwater is contained within the road reserve as per requirement of QDUM (Queensland Urban Drainage Manual). This constraint may be varied upon the approval of Council.
14. All dimensions are in millimetres.
15. These plans are designed for A, S & M soil types. If higher reactive soil type are encountered, provide alternative design for Council approval.

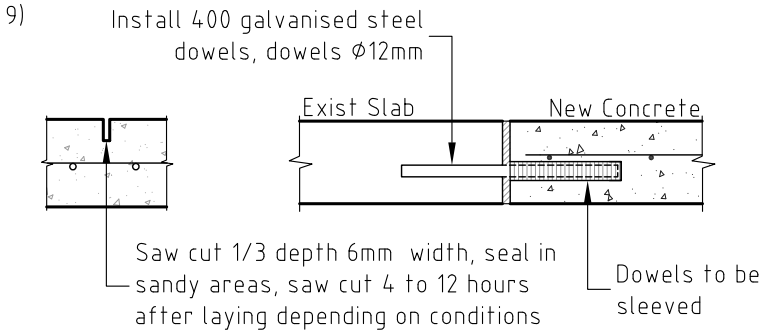
Height above invert of channel (mm)	0.0	175	215	250 (Note 13)
Distance from invert of channel (m)	0.0	1.525	3.025	3.665



PLAN

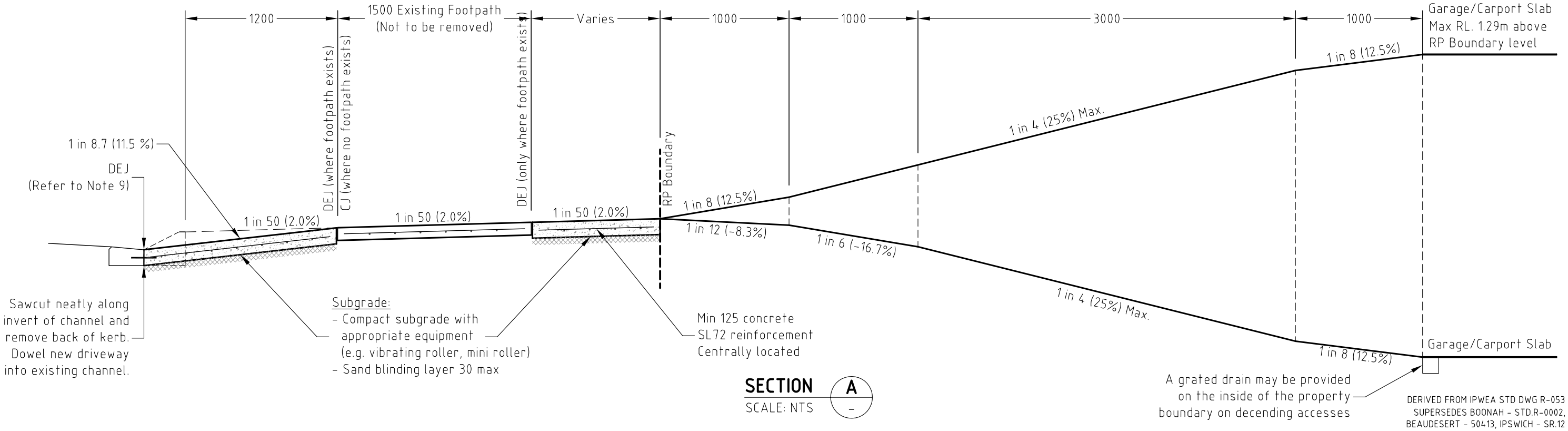


PERSPECTIVE VIEW OF DRIVEWAY



CONTROL JOINT (CJ)

DOWELLED EXPANSION JOINT DETAIL (DEJ)



SECTION A
SCALE: NTS

DERIVED FROM IPWEA STD DWG R-053
SUPERSEDES BOONAH - STD.R-0002,
BEAUDESERT - 50413, IPSWICH - SR.12

Issue	Amendment	App'd	Date
D	CHANGED N32 CONCRETE TO 25mPa, INCLUDED FULL PERSPECTIVE VIEW OF DRIVEWAY, DEJ & CJ DETAILS AND GRADING TO 6m SETBACK FOR SLAB LEVELS	PM	03/2013
C	INCLUSION OF DOWELS, JOINT DETAILS, 3D WING DETAIL & MINOR NOTE CHANGES	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

Drawing: RESIDENTIAL DRIVEWAY

Design File / Drawing No. R-05 | Sheet of | Revision D | A3

NOTES:

1. All appropriate permits must be obtained from Council, including approval of location and levels prior to excavation.
2. Crossings are not designed for commercial vehicles (See SRRC R-06).
3. Where a footpath is narrower than 1500 or does not exist, the driveway is to be graded as shown to provide for a future footpath.
4. Concrete surface tolerance to be +5mm/-0mm over 3m sections.
5. Concrete 25mPa in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
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15. These plans are designed for A, S & M soil types. If higher reactive soil type are encountered, provide alternative design for Council approval.

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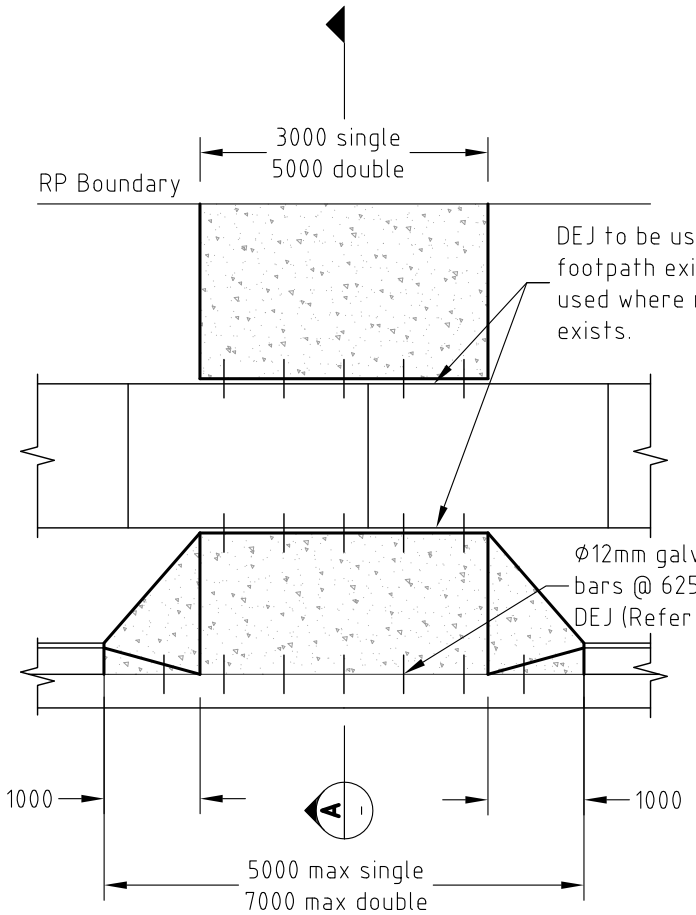
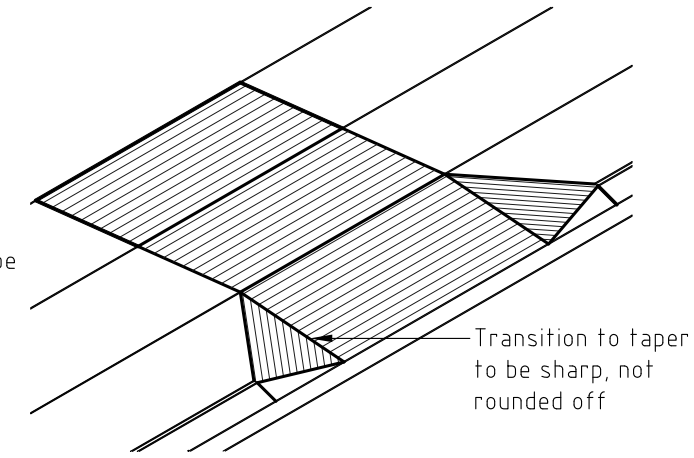
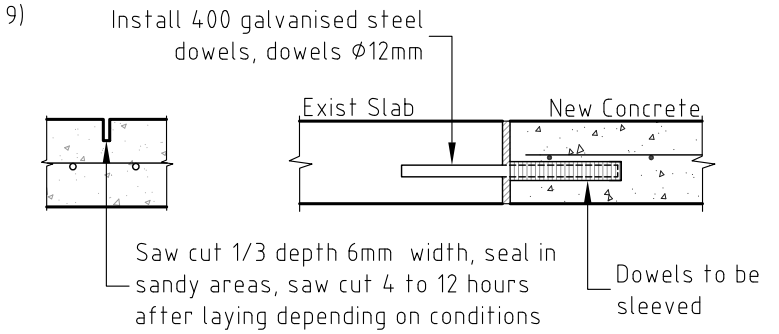


PLAN

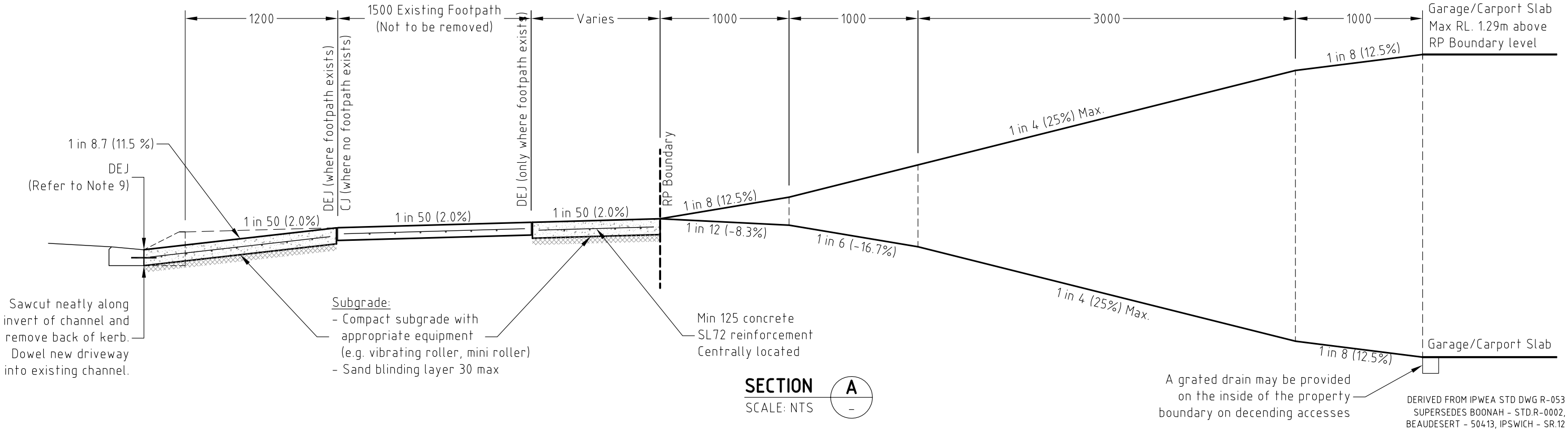


PERSPECTIVE VIEW OF DRIVEWAY



CONTROL JOINT (CJ)

DOWELLED EXPANSION JOINT DETAIL (DEJ)



SECTION A
SCALE: NTS

DERIVED FROM IPWEA STD DWG R-053
SUPERSEDES BOONAH - STD.R-0002,
BEAUDESERT - 50413, IPSWICH - SR.12

Issue	Amendment	App'd	Date
D	CHANGED N32 CONCRETE TO 25mPa, INCLUDED FULL PERSPECTIVE VIEW OF DRIVEWAY, DEJ & CJ DETAILS AND GRADING TO 6m SETBACK FOR SLAB LEVELS	PM	03/2013
C	INCLUSION OF DOWELS, JOINT DETAILS, 3D WING DETAIL & MINOR NOTE CHANGES	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

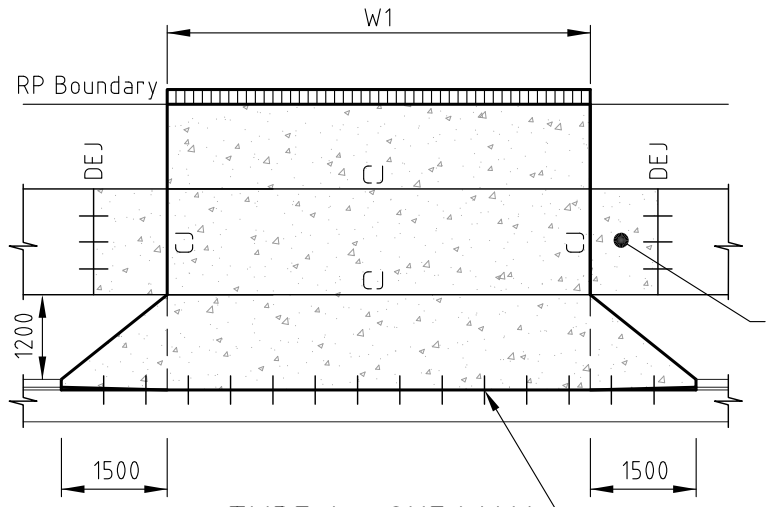
Drawing: RESIDENTIAL DRIVEWAY

Design File / Drawing No. R-05 | Sheet of | Revision D | A3

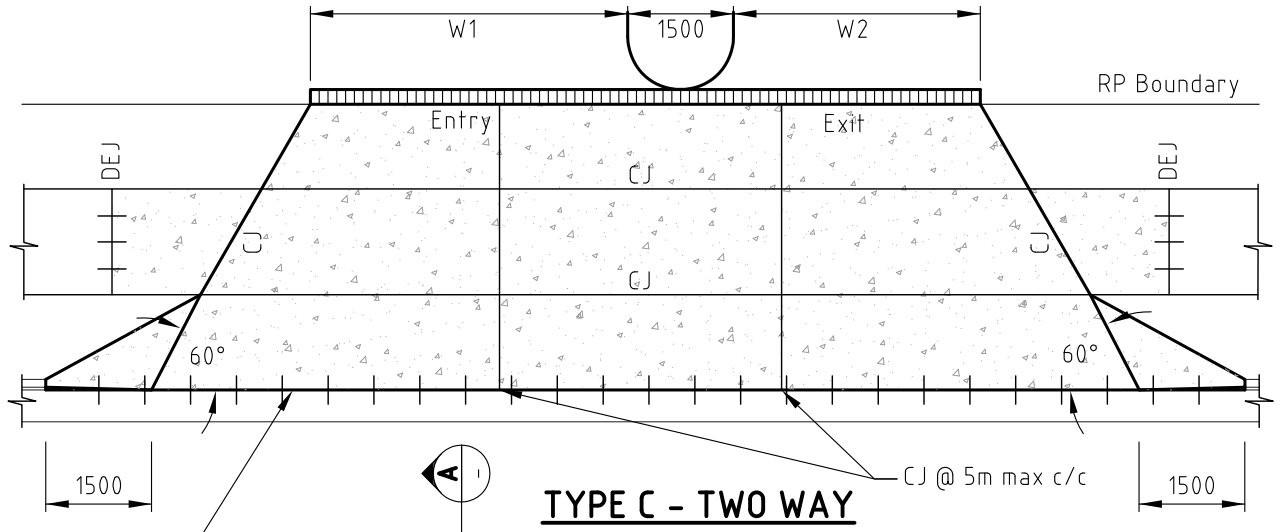
Vehicle Crossing Details

Type	W1 (m) ×	W2 (m) ×
A	6.0	-
B2	6.0-9.0	-
C1/D1	4.5	3.5
C2/D2	5.5	5.0
C3/D3	7.5	6.0
C4/D4	9.0	7.5

× In order to determine W1 & W2 all non-residential driveways to be designed with a turning template of the maximum class vehicle expected to use it and/or in accordance with AS2890 - Off-Street Commercial Parking. Appropriate clearances also need to be provided from the turning path.

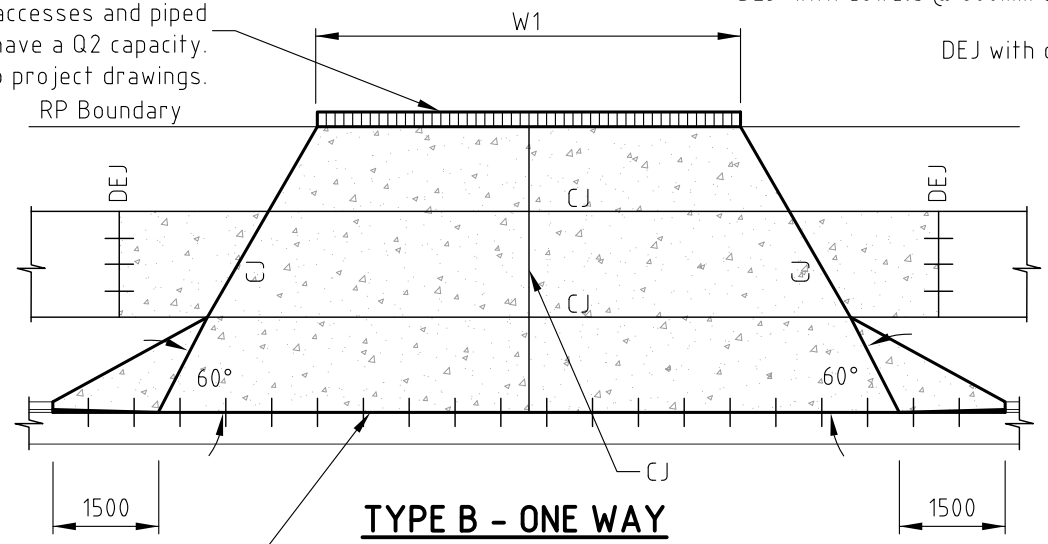


TYPE A - ONE WAY

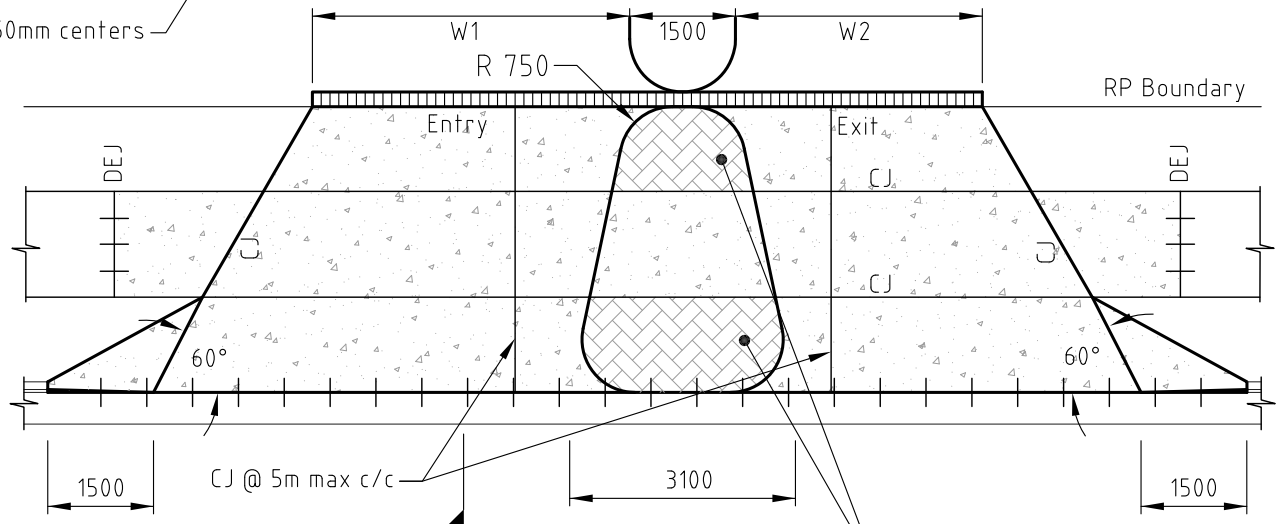


TYPE C - TWO WAY

A grated drain should be provided on the inside of the property boundary on asending accesses and piped to kerb and channel or gully. Must have a Q2 capacity. Refer to project drawings.



TYPE B - ONE WAY

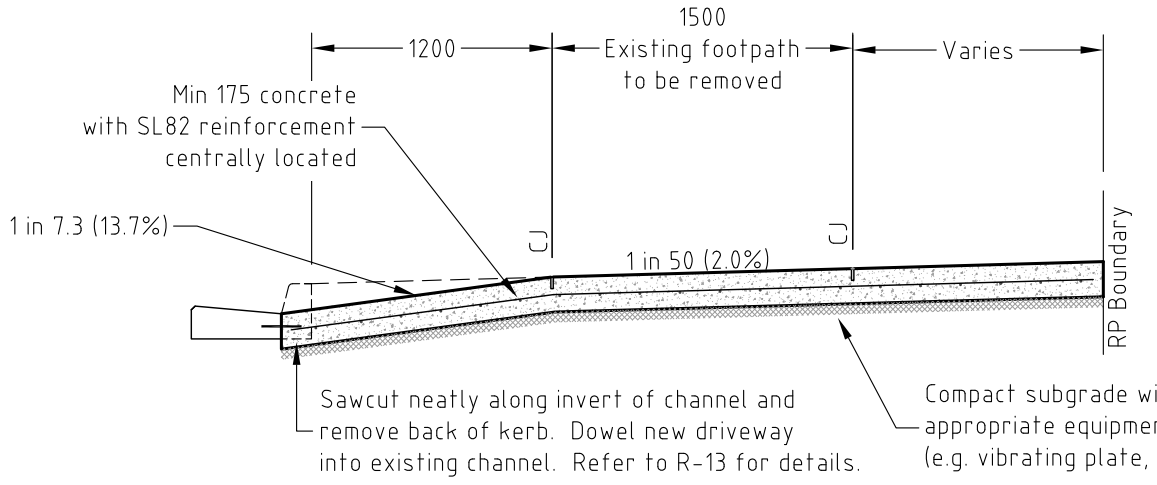


TYPE D - TWO WAY

NOTES:

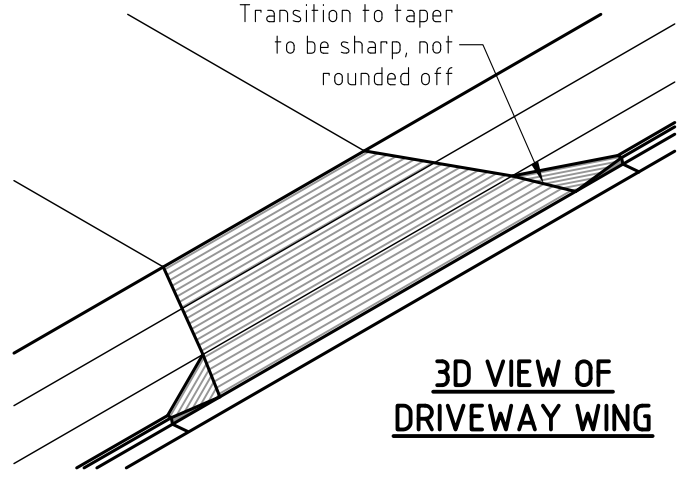
1. All appropriate permits must be obtained from Council, including approval of location and levels prior to excavation.
2. Concrete N32 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
3. Reinforcing fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete). Lap fabric a minimum of 2 cross bars.
4. Depths of concrete and reinforcing steel shown are the minimum requirements for good foundation conditions, and average traffic loading. Where this does not apply, depths of concrete and reinforcing shall be increased to suit specific conditions.
5. Design of crossings may vary, refer to project drawings.
6. Reprofile adjacent verge at max grade of 1 in 10 (10%) to match driveway. Footpath earthworks adjoining concrete must be compacted and turfed.
7. Compaction for subgrade 95% standard to AS1289.5.1.1 (Methods of Testing Soils for Engineering Purposes - Soil compaction and Density Tests).
8. Where subgrade is less than CBR5 excavate and provide imported material to the satisfaction of Council.
9. Driveway to match existing footpath.
10. Refer to project drawings and Scenic Rim Regional Council standard drawings for verge type cross sections.
11. All dimensions are in in millimetres.

Height above invert of channel (mm)	0.0	185	225	250
Distance from invert of channel (m)	0.0	1.350	2.850	4.100



SECTION A

SCALE: NTS



3D VIEW OF DRIVEWAY WING

DERIVED FROM IPWEA STD DWG R-051
SUPERSEDES BOONAH - STD.R-0003/04,
BEAUDESERT - 50429/30, IPSWICH - SR.13/14

Issue	Amendment	App'd	Date
C	REMOVED VERTICAL GRADING THAT WAS SHOWN INSIDE PROPERTY BOUNDARY, ADDED A 3D VIEW OF WIING & CONTROL JOINTS	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only DImensIons IndIcated
Copyright Scenic Rim Regional Council

SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

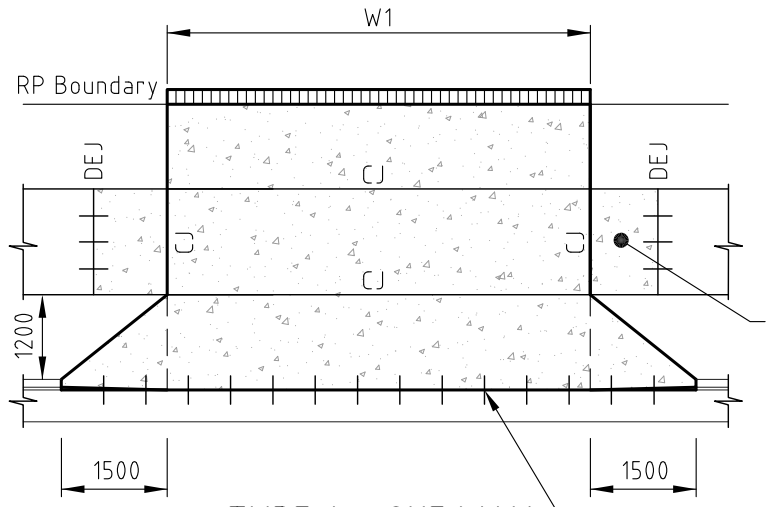
Drawing: NON-RESIDENTIAL DRIVEWAY

Design File / Drawing No. R-06 | Sheet of | Revision C | A3

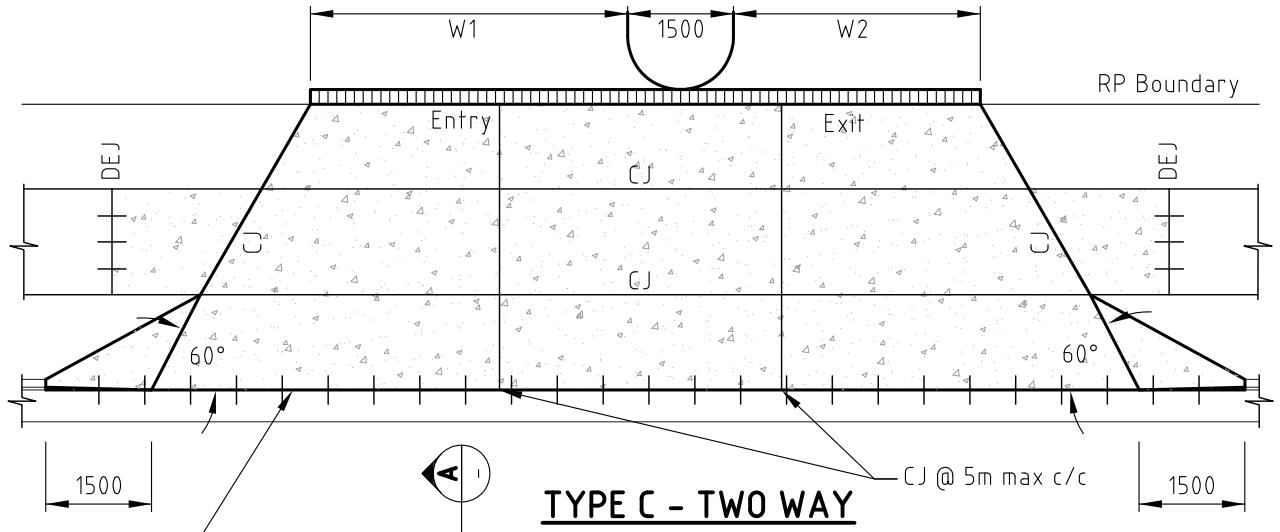
Vehicle Crossing Details

Type	W1 (m) ×	W2 (m) ×
A	6.0	-
B2	6.0-9.0	-
C1/D1	4.5	3.5
C2/D2	5.5	5.0
C3/D3	7.5	6.0
C4/D4	9.0	7.5

× In order to determine W1 & W2 all non-residential driveways to be designed with a turning template of the maximum class vehicle expected to use it and/or in accordance with AS2890 - Off-Street Commercial Parking. Appropriate clearances also need to be provided from the turning path.

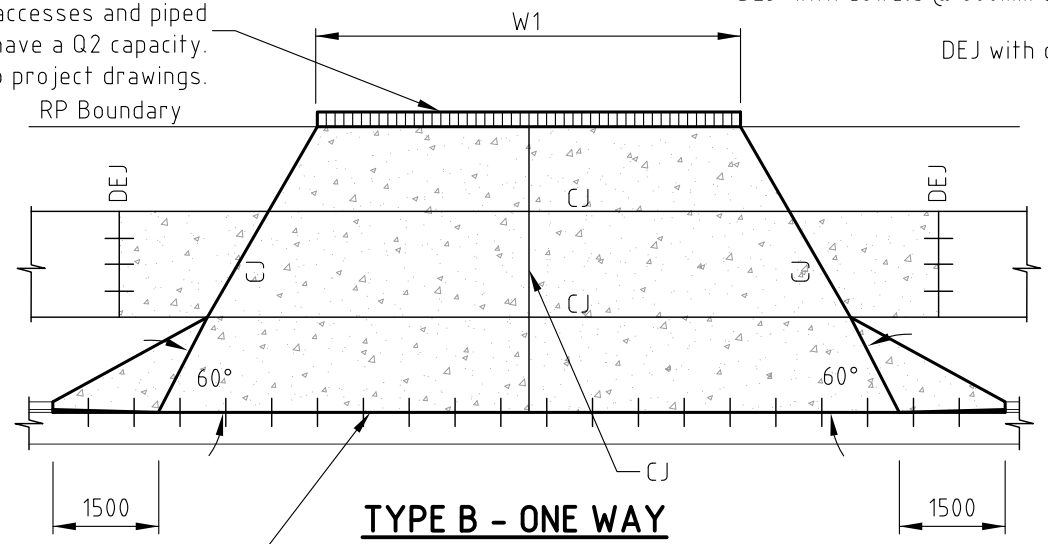


TYPE A - ONE WAY

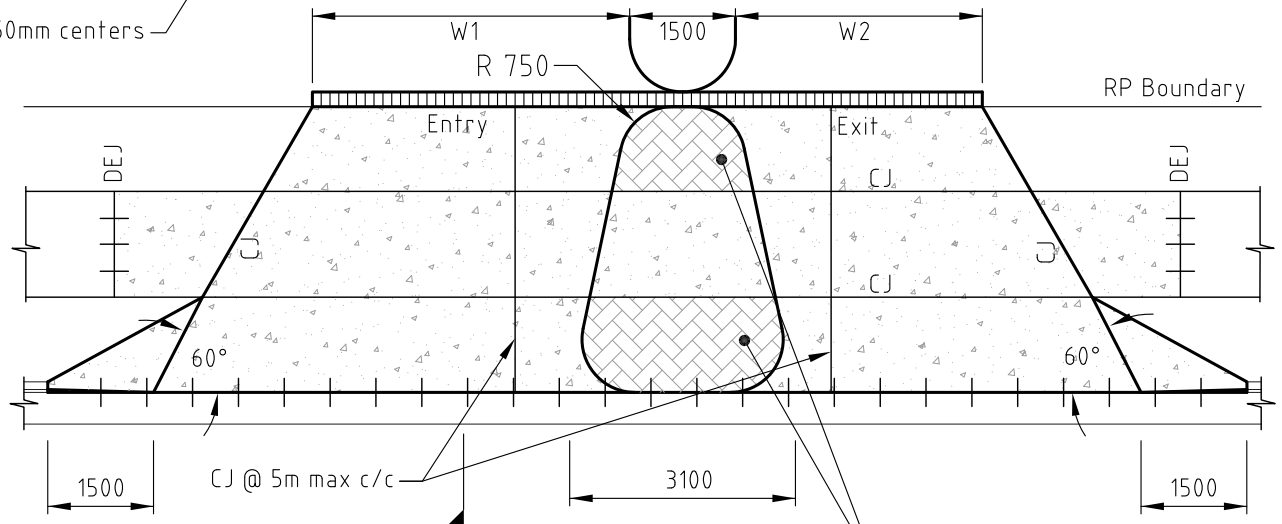


TYPE C - TWO WAY

A grated drain should be provided on the inside of the property boundary on asending accesses and piped to kerb and channel or gully. Must have a Q2 capacity. Refer to project drawings.



TYPE B - ONE WAY

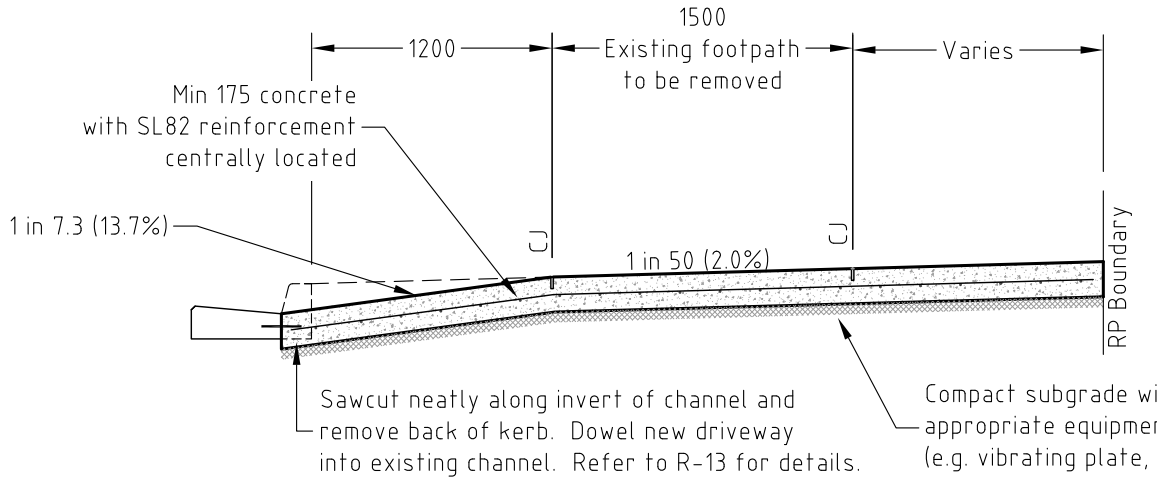


TYPE D - TWO WAY

NOTES:

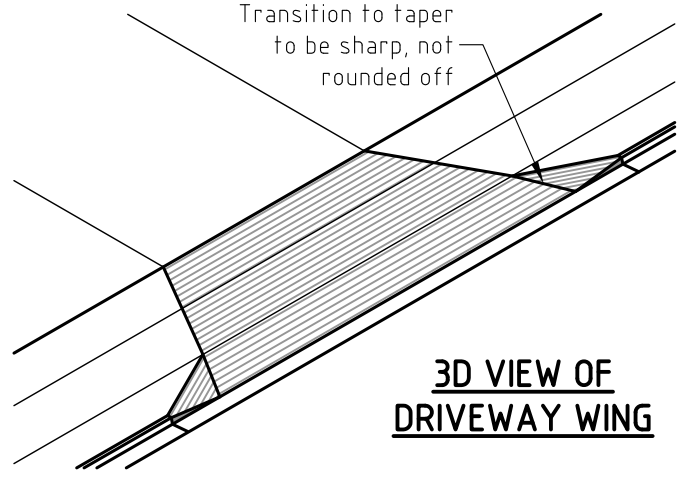
1. All appropriate permits must be obtained from Council, including approval of location and levels prior to excavation.
2. Concrete N32 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
3. Reinforcing fabric to AS1304 (Welded Wire Reinforcing Fabric for Concrete). Lap fabric a minimum of 2 cross bars.
4. Depths of concrete and reinforcing steel shown are the minimum requirements for good foundation conditions, and average traffic loading. Where this does not apply, depths of concrete and reinforcing shall be increased to suit specific conditions.
5. Design of crossings may vary, refer to project drawings.
6. Reprofile adjacent verge at max grade of 1 in 10 (10%) to match driveway. Footpath earthworks adjoining concrete must be compacted and turfed.
7. Compaction for subgrade 95% standard to AS1289.5.1.1 (Methods of Testing Soils for Engineering Purposes - Soil compaction and Density Tests).
8. Where subgrade is less than CBR5 excavate and provide imported material to the satisfaction of Council.
9. Driveway to match existing footpath.
10. Refer to project drawings and Scenic Rim Regional Council standard drawings for verge type cross sections.
11. All dimensions are in in millimetres.

Height above invert of channel (mm)	0.0	185	225	250
Distance from invert of channel (m)	0.0	1.350	2.850	4.100



SECTION A

SCALE: NTS



3D VIEW OF DRIVEWAY WING

DERIVED FROM IPWEA STD DWG R-051
SUPERSEDES BOONAH - STD.R-0003/04,
BEAUDESERT - 50429/30, IPSWICH - SR.13/14

Issue	Amendment	App'd	Date
C	REMOVED VERTICAL GRADING THAT WAS SHOWN INSIDE PROPERTY BOUNDARY, ADDED A 3D VIEW OF WIING & CONTROL JOINTS	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only DImensIons IndIcated
Copyright Scenic Rim Regional Council

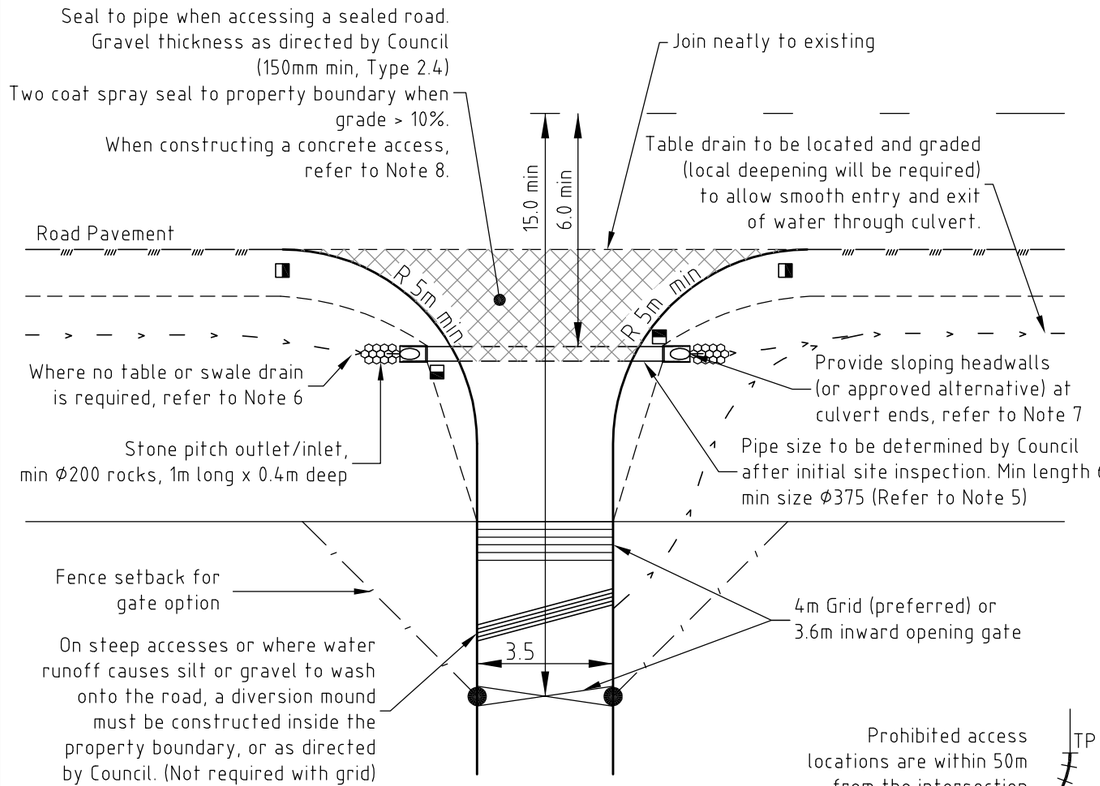
SCENIC RIM Regional Council

Works & Infrastructure Services

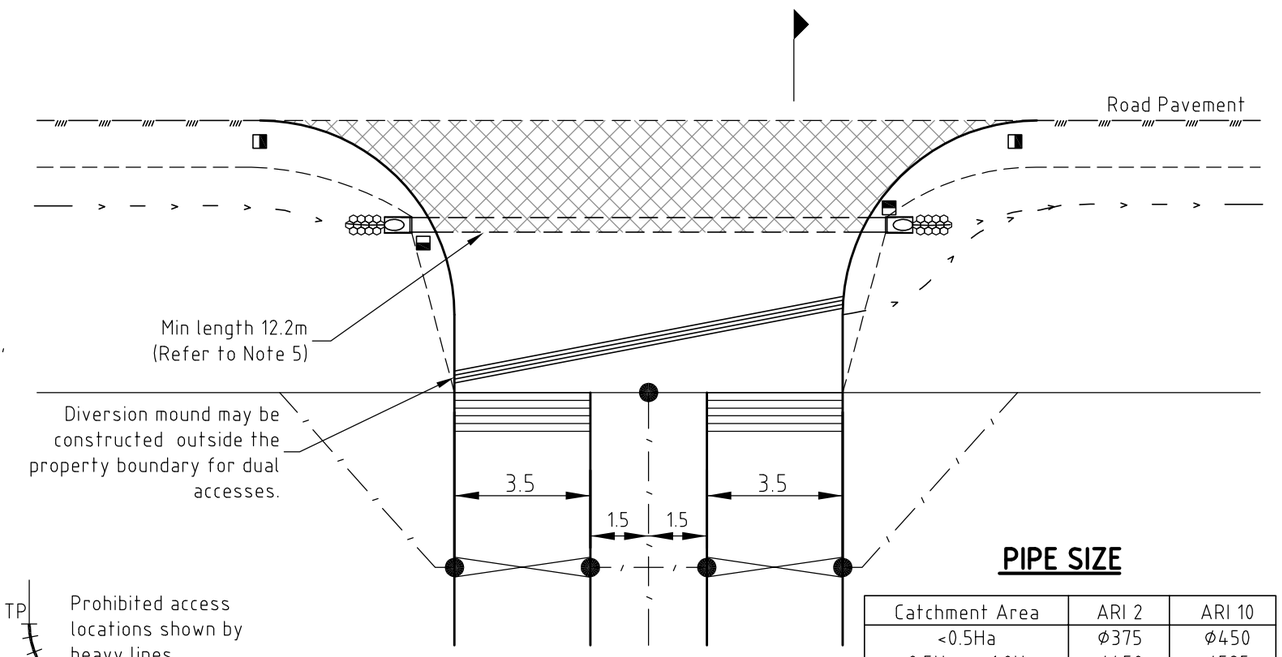
Project: SRRC STANDARD DRAWINGS ROADS

Drawing: NON-RESIDENTIAL DRIVEWAY

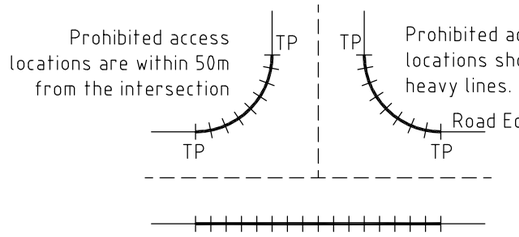
Design File / Drawing No. R-06 | Sheet of | Revision C | A3



SINGLE ACCESS



DUAL ACCESS



PROHIBITED ACCESS LOCATIONS AT INTERSECTIONS

PIPE SIZE

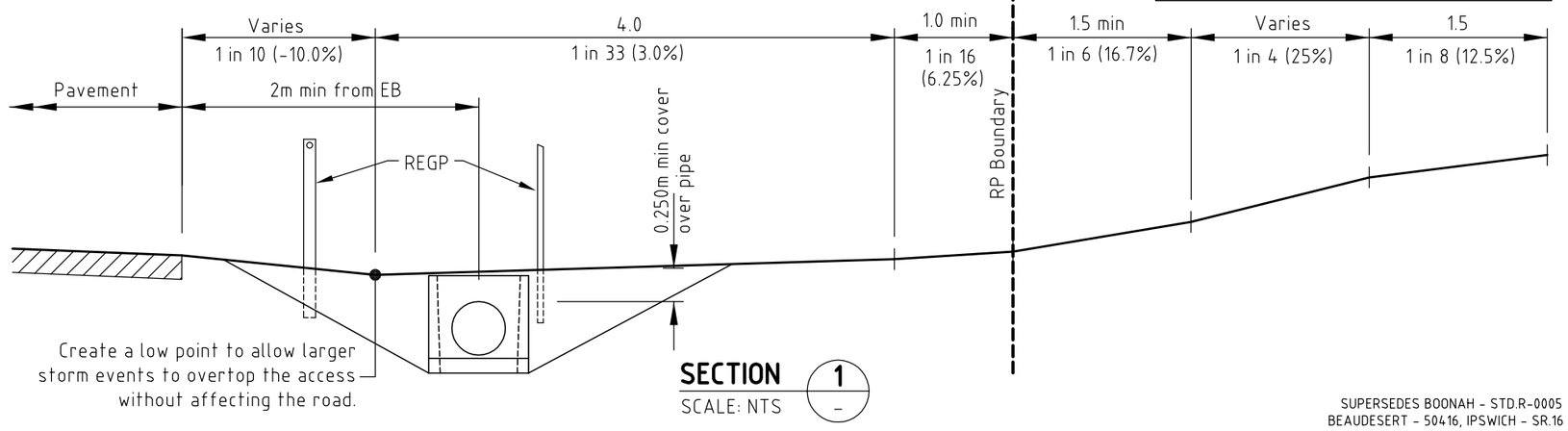
Catchment Area	ARI 2	ARI 10
<0.5Ha	Ø375	Ø450
>0.5Ha - <1.0Ha	Ø450	Ø525
>1.0Ha	Ø525	Ø600

LEGEND:

- Road Edge Guide Posts (REGP)
- Existing Road Centreline
- Existing Bitumen Edge
- Existing Shoulder Edge
- Table Drain Invert
- Real Property Boundary

NOTES:

1. Access pipe crossings to be provided at locations approved by Council.
2. Not suitable for commercial applications.
3. Provide rock, stone pitching or concrete protection to table drains and outlets prone to scour.
4. Minimum grade through pipe to be 1.0%.
5. Class of R.C. Pipe to be in accordance with the current Australian Standard AS 3725 (Design for Installation of Buried Concrete Pipes).
6. No pipe culvert is required where the property is lower than the road, (i.e. embankment or fill batter), or adjacent to road crests. Concrete invert crossings may be used in lieu of piped crossover subject to the approval of Council. For details of the concrete invert, refer to SRRC R-08.
7. Sloping headwalls are to be used if:
   - <4.6m from road edge for 60km/h zone
   - <6m from road edge for 80km/h zone
   - <9m from road edge for 100km/h zone
8. When installing a concrete access, concrete is to stop 1.5m from through road seal edge. Remaining section of access to be a two coat spray seal or asphalt. Refer to R-05 for connection of concrete access to edge restraints.
9. Accesses are NOT to be installed within 50m of an intersection.
10. Dimensions are in metres unless shown otherwise.



SECTION 1

SCALE: NTS

SUPERSEDES BOONAH - STD.R-0005
BEAUDESERT - 50416, IPSWICH - SR.16

Issue	Amendment	App'd	Date
E	ADDED STONEPITCHING, PROBHIBITED LOCATED DETAIL & PIPE SIZING REFERENCE TABLE	PM	01/2013
D	MODIFIED SEAL AREA & INCLUDED NOTE FOR CONCRETING UP TO SEALED ROAD	PM	09/2011
C	REVISED GRAVEL TYPE FROM 2.5 TO 2.4	PM	01/2011
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

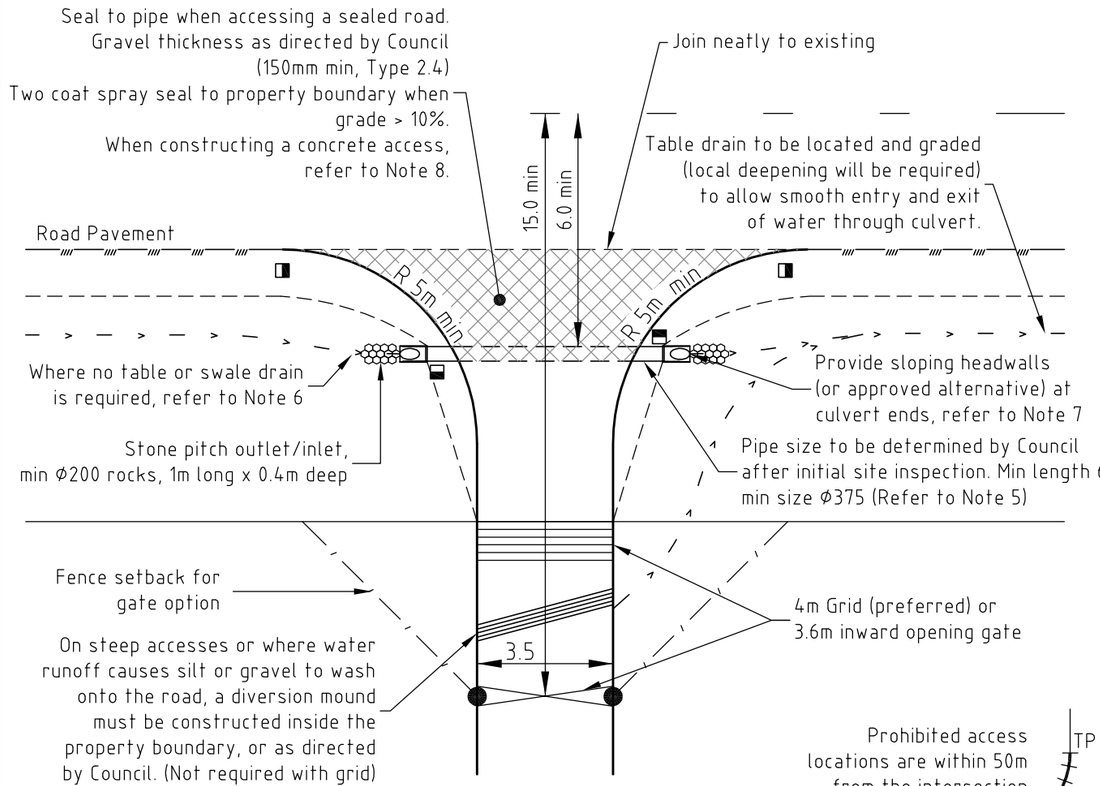
SCENIC RIM Regional Council

Works & Infrastructure Services

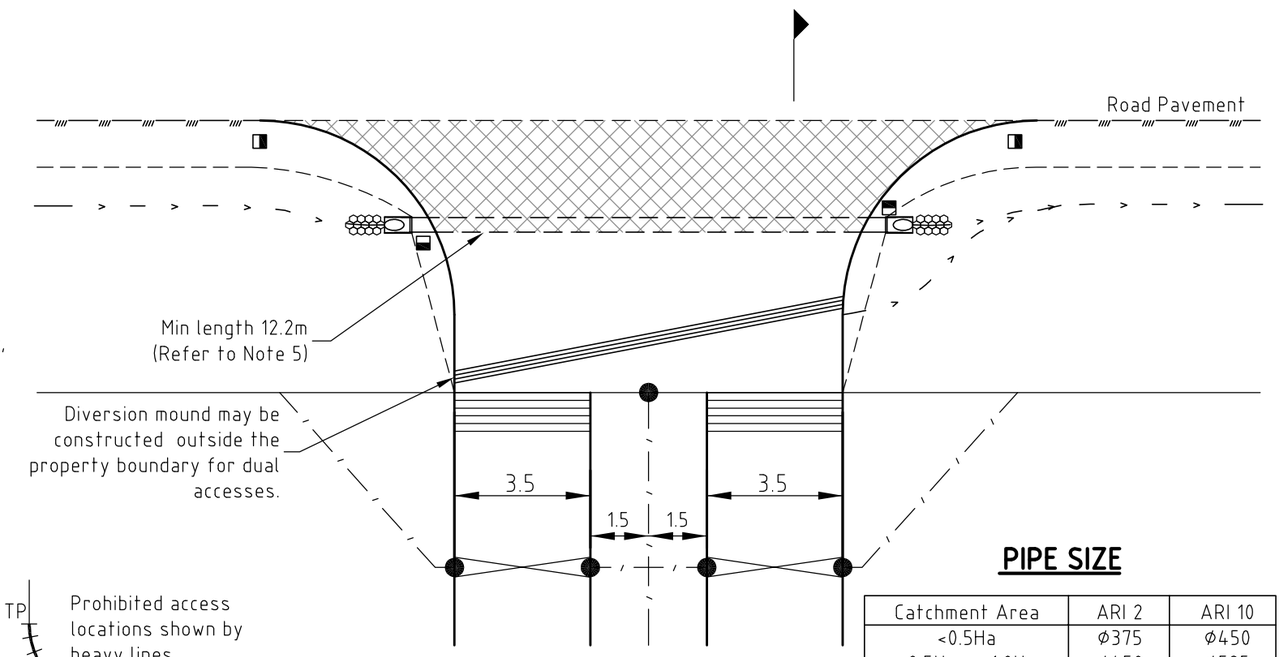
Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: RURAL ACCESS (SINGLE & DUAL)
PIPE REQUIRED

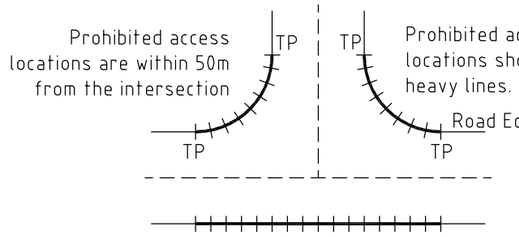
Design File
Drawing No. R-07
Sheet of
Revision E
A3



SINGLE ACCESS



DUAL ACCESS



PROHIBITED ACCESS LOCATIONS AT INTERSECTIONS

PIPE SIZE

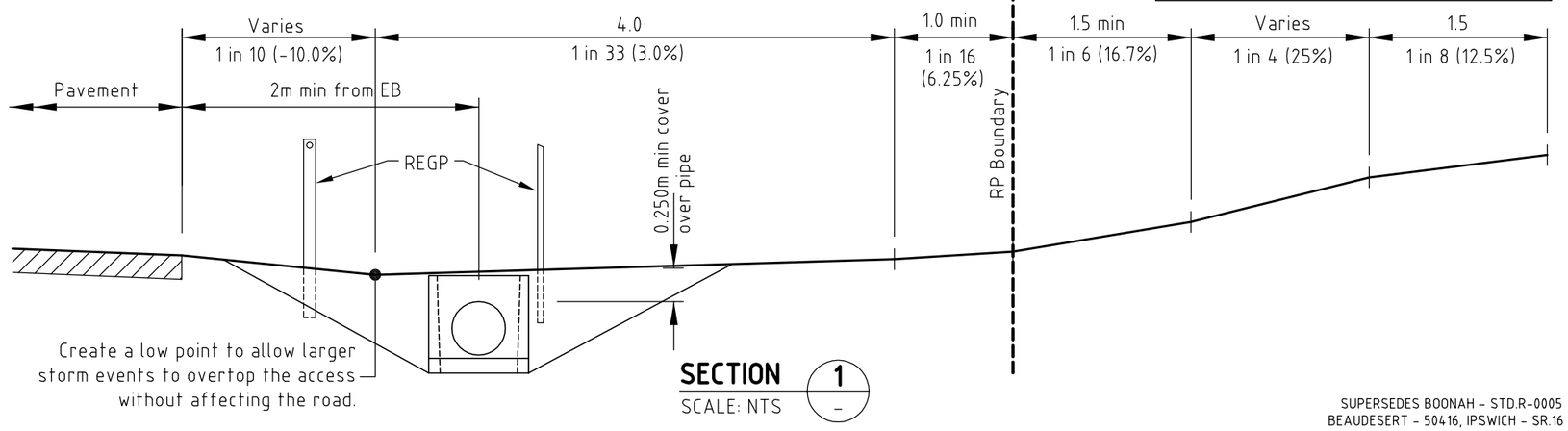
Catchment Area	ARI 2	ARI 10
<0.5Ha	Ø375	Ø450
>0.5Ha - <1.0Ha	Ø450	Ø525
>1.0Ha	Ø525	Ø600

LEGEND:

- Road Edge Guide Posts (REGP)
- Existing Road Centreline
- Existing Bitumen Edge
- Existing Shoulder Edge
- Table Drain Invert
- Real Property Boundary

NOTES:

1. Access pipe crossings to be provided at locations approved by Council.
2. Not suitable for commercial applications.
3. Provide rock, stone pitching or concrete protection to table drains and outlets prone to scour.
4. Minimum grade through pipe to be 1.0%.
5. Class of R.C. Pipe to be in accordance with the current Australian Standard AS 3725 (Design for Installation of Buried Concrete Pipes).
6. No pipe culvert is required where the property is lower than the road, (i.e. embankment or fill batter), or adjacent to road crests. Concrete invert crossings may be used in lieu of piped crossover subject to the approval of Council. For details of the concrete invert, refer to SRRC R-08.
7. Sloping headwalls are to be used if:
   - <4.6m from road edge for 60km/h zone
   - <6m from road edge for 80km/h zone
   - <9m from road edge for 100km/h zone
8. When installing a concrete access, concrete is to stop 1.5m from through road seal edge. Remaining section of access to be a two coat spray seal or asphalt. Refer to R-05 for connection of concrete access to edge restraints.
9. Accesses are NOT to be installed within 50m of an intersection.
10. Dimensions are in metres unless shown otherwise.



SECTION 1

SCALE: NTS

SUPERSEDES BOONAH - STD.R-0005
BEAUDESERT - 50416, IPSWICH - SR.16

Issue	Amendment	App'd	Date
E	ADDED STONEPITCHING, PROBHIBITED LOCATED DETAIL & PIPE SIZING REFERENCE TABLE	PM	01/2013
D	MODIFIED SEAL AREA & INCLUDED NOTE FOR CONCRETING UP TO SEALED ROAD	PM	09/2011
C	REVISED GRAVEL TYPE FROM 2.5 TO 2.4	PM	01/2011
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

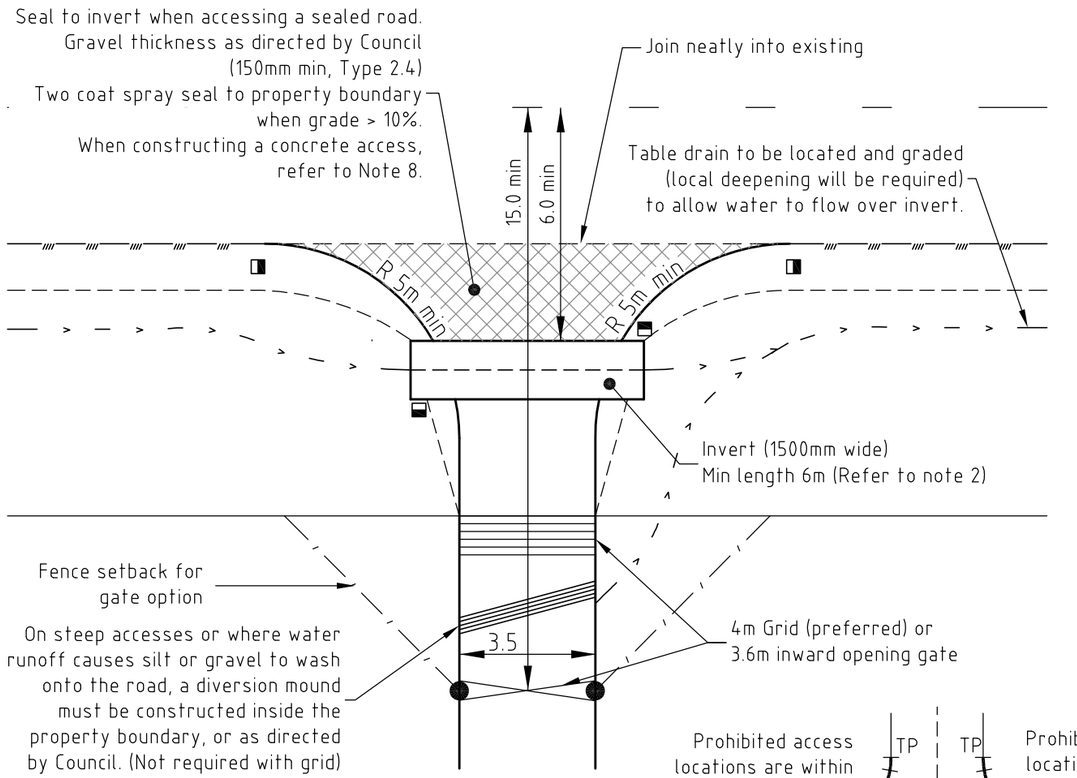
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: RURAL ACCESS (SINGLE & DUAL)
PIPE REQUIRED

Design File
Drawing No. R-07
Sheet of
Revision E
A3



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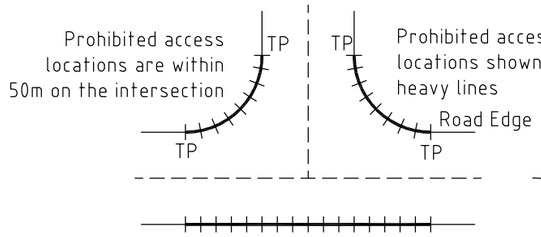
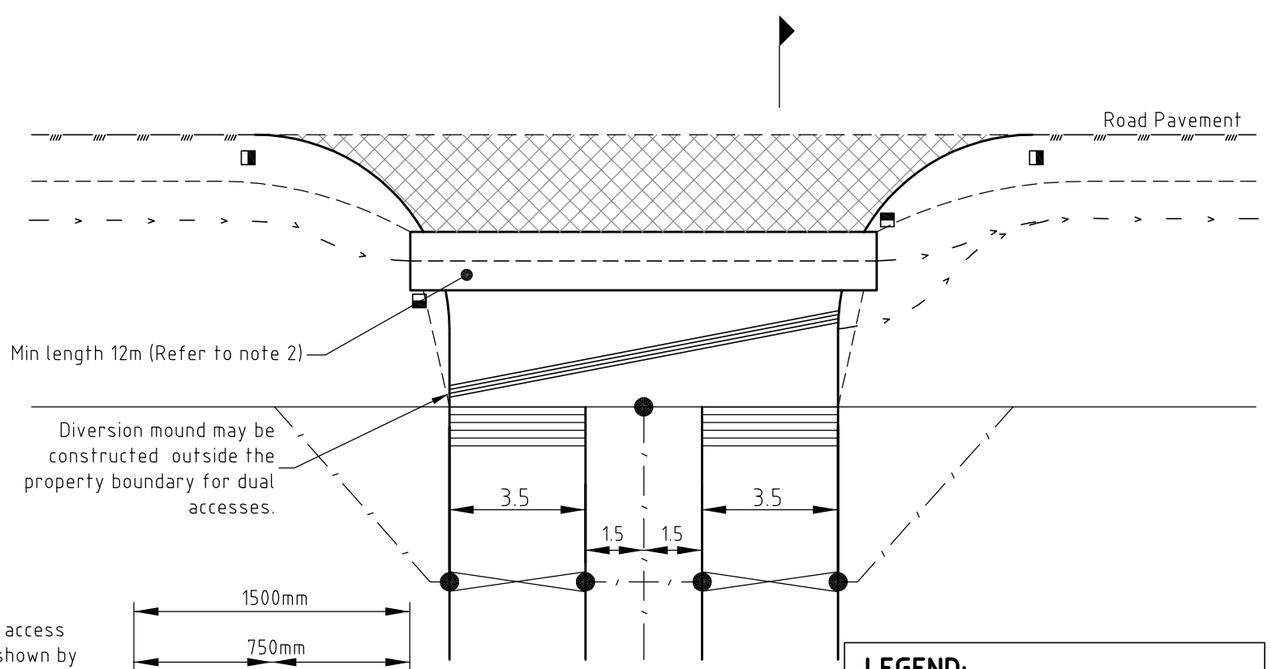


PROHIBITED ACCESS LOCATIONS AT INTERSECTIONS



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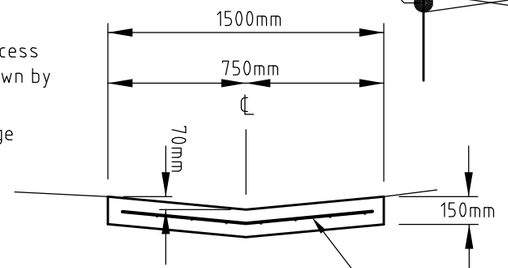


DETAIL A

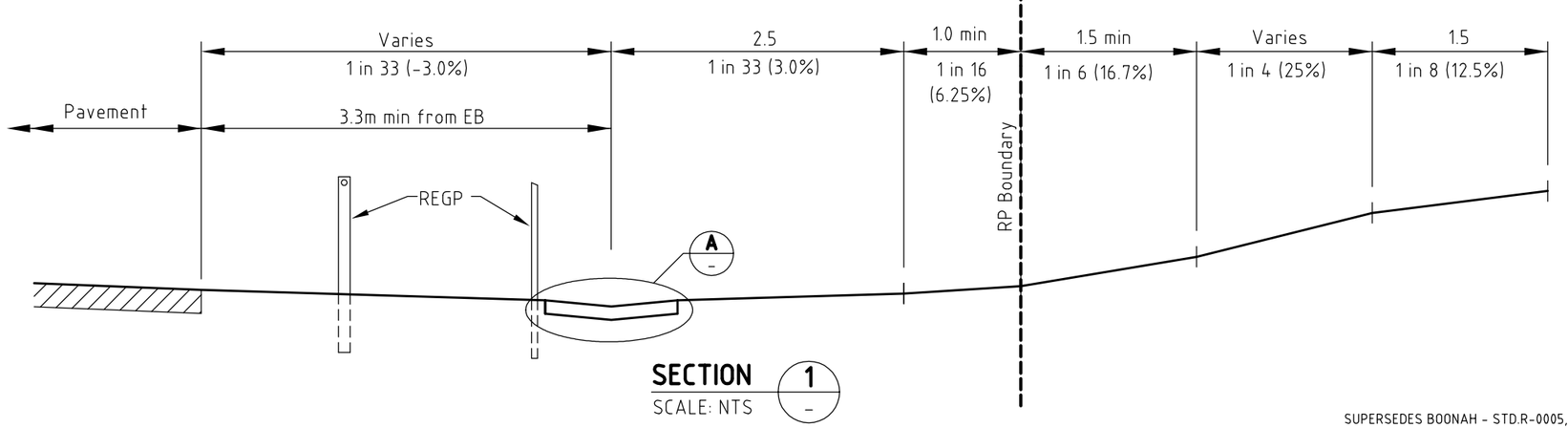
SCALE: NTS

LEGEND:

- Road Edge Guide Posts (REGP)
- Existing Road Centreline
- Existing Bitumen Edge
- Existing Shoulder Edge
- Table Drain Invert
- Real Property Boundary

NOTES:

1. Invert crossings to be provided at locations approved by Council.
2. Not suitable for commercial applications.
3. Type of invert is dependant on water flows within the area, Council to approve specific type. Types are as follows:
   - Concrete stabilised invert
   - Sealed invert
   - Full concrete invert
4. Concrete to be N25 min (refer to project documentation) in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
5. No pipe culvert is required where property is lower than the road (i.e. embankment or fill batter).
6. For details of access crossing through shallow table drain, refer to SRRC R-07.
7. Where shallow swail drain has been constructed, access grades to property boundary are to be adequate for design vehicle access.
8. When installing a concrete access, concrete is to stop 1.5m from through road seal edge. Remaining section of access to be a two coat spray seal or asphalt. Refer to R-05 for connection of concrete access to edge restraints.
9. Accesses are NOT to be installed within 50m of an intersection.
10. Dimensions are in metres unless shown otherwise.



SECTION 1

SCALE: NTS

SUPERSEDES BOONAH - STD.R-0005,
BEAUDESERT - 50417/18, IPSWICH - SR.15

Issue	Amendment	App'd	Date
E	ADDITION OF PROHIBITED LOCATIONS DETAIL	PM	01/2013
D	MODIFIED SEAL AREA & INCLUDED NOTE FOR CONCRETING UP TO SEALED ROAD	PM	09/2011
C	REVISED GRAVEL TYPE FROM 2.5 TO 2.4	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

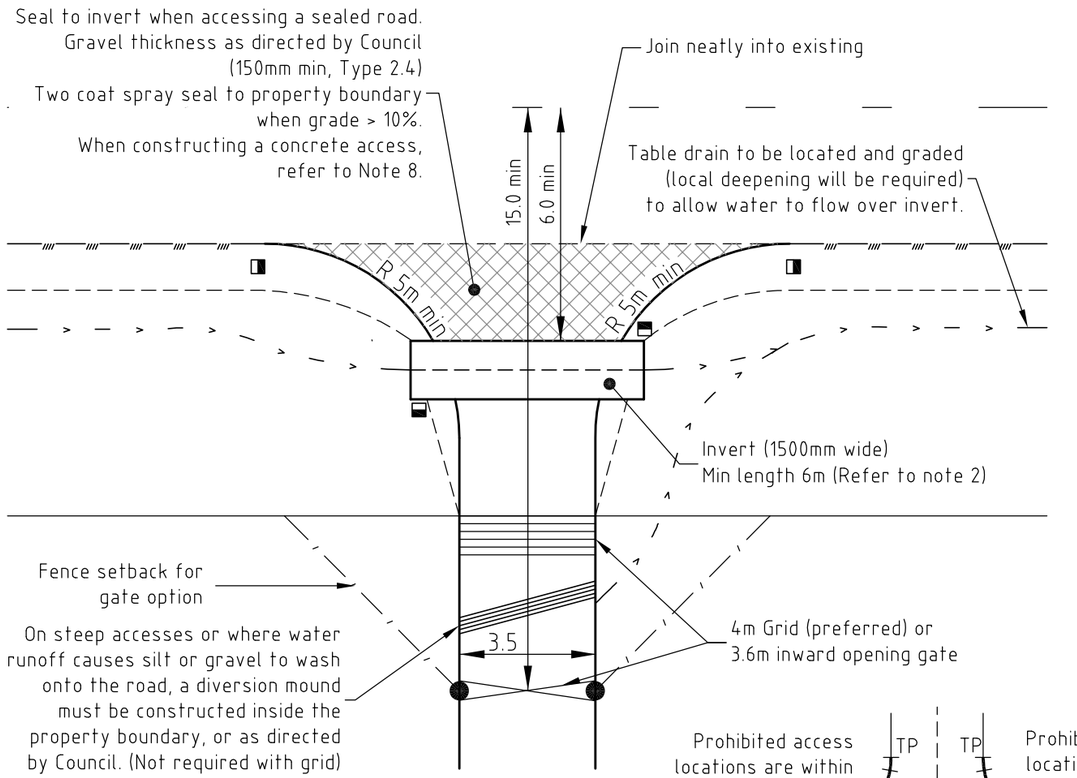
Drawing
RURAL ACCESS (SINGLE & DUAL)
NO PIPE REQUIRED - INVERT

Design File
Drawing No. R-08

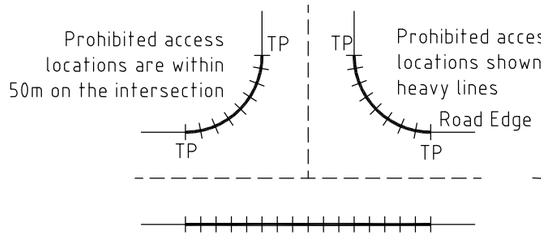
Sheet of

Revision E

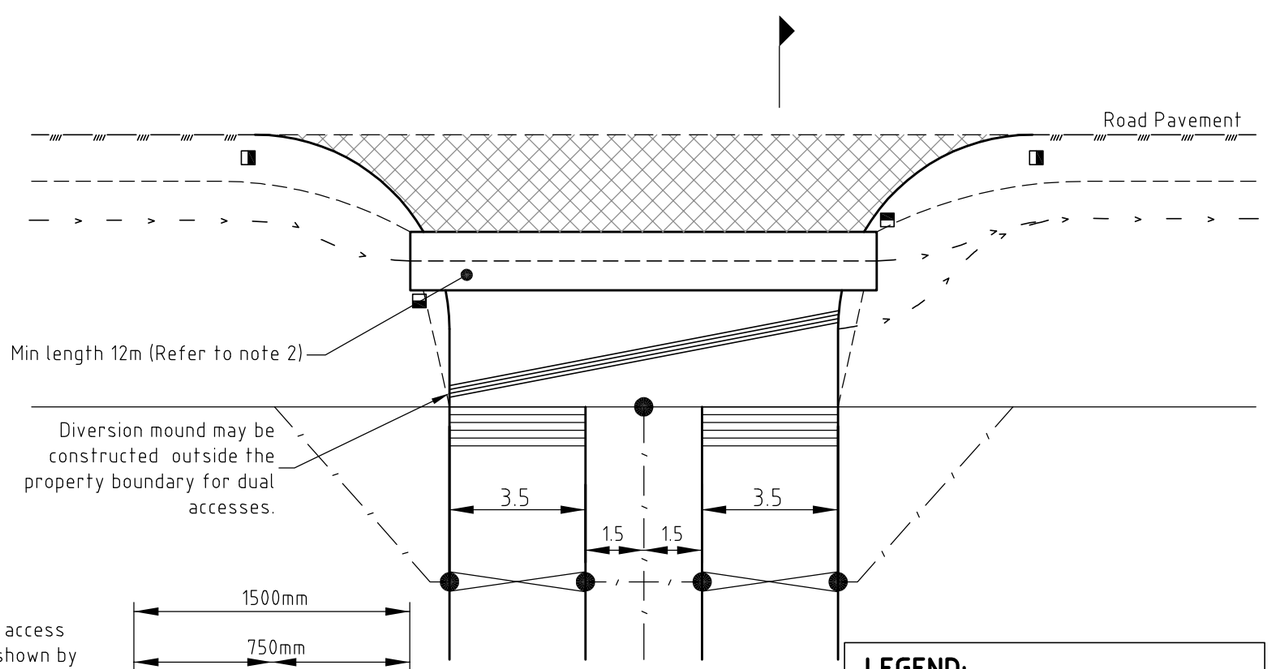
A3



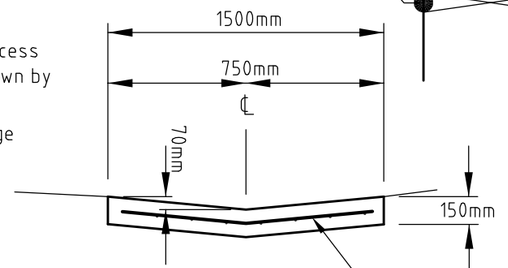
SINGLE ACCESS



PROHIBITED ACCESS LOCATIONS AT INTERSECTIONS



DUAL ACCESS



DETAIL A

SCALE: NTS

LEGEND:

- Road Edge Guide Posts (REGP)
- Existing Road Centreline
- Existing Bitumen Edge
- Existing Shoulder Edge
- Table Drain Invert
- Real Property Boundary

NOTES:

1. Invert crossings to be provided at locations approved by Council.
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3. Type of invert is dependant on water flows within the area, Council to approve specific type. Types are as follows:
   - Concrete stabilised invert
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4. Concrete to be N25 min (refer to project documentation) in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
5. No pipe culvert is required where property is lower than the road (i.e. embankment or fill batter).
6. For details of access crossing through shallow table drain, refer to SRRC R-07.
7. Where shallow swail drain has been constructed, access grades to property boundary are to be adequate for design vehicle access.
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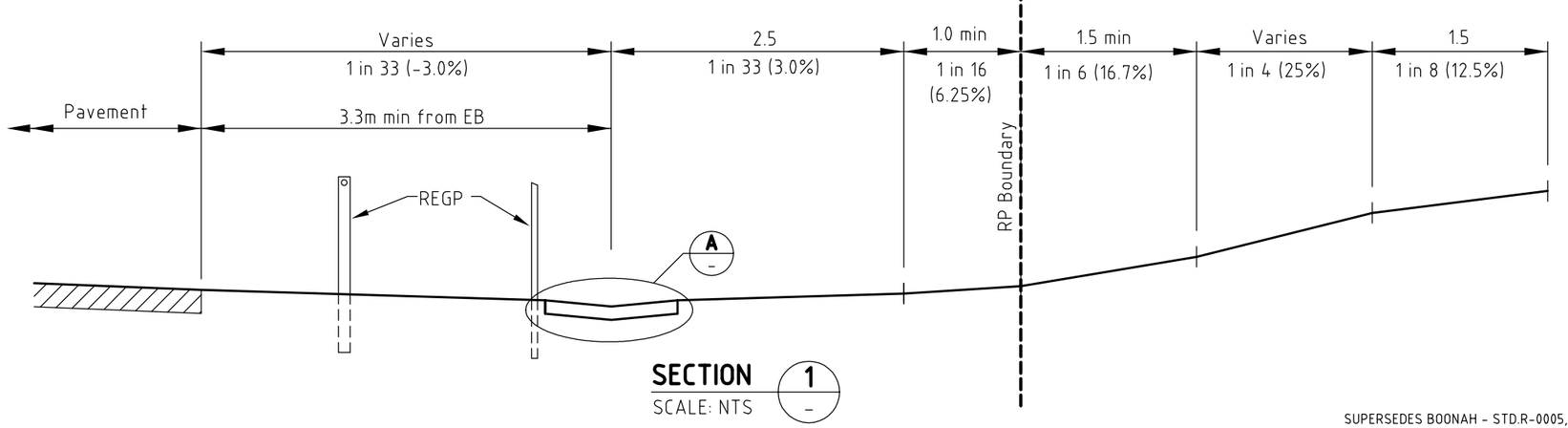


SECTION 1

SCALE: NTS

SUPERSEDES BOONAH - STD.R-0005,
BEAUDESERT - 50417/18, IPSWICH - SR.15

Issue	Amendment	App'd	Date
E	ADDITION OF PROHIBITED LOCATIONS DETAIL	PM	01/2013
D	MODIFIED SEAL AREA & INCLUDED NOTE FOR CONCRETING UP TO SEALED ROAD	PM	09/2011
C	REVISED GRAVEL TYPE FROM 2.5 TO 2.4	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

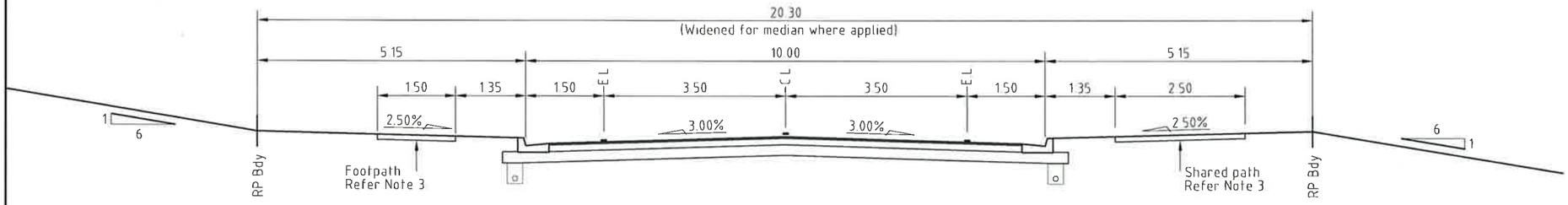
Drawing
RURAL ACCESS (SINGLE & DUAL)
NO PIPE REQUIRED - INVERT

Design File
Drawing No. R-08

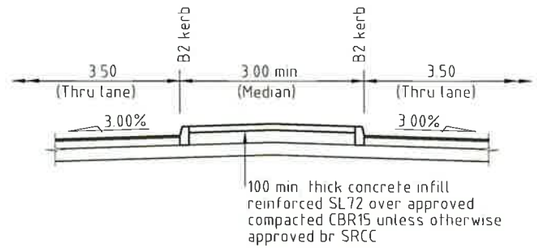
Sheet of

Revision E

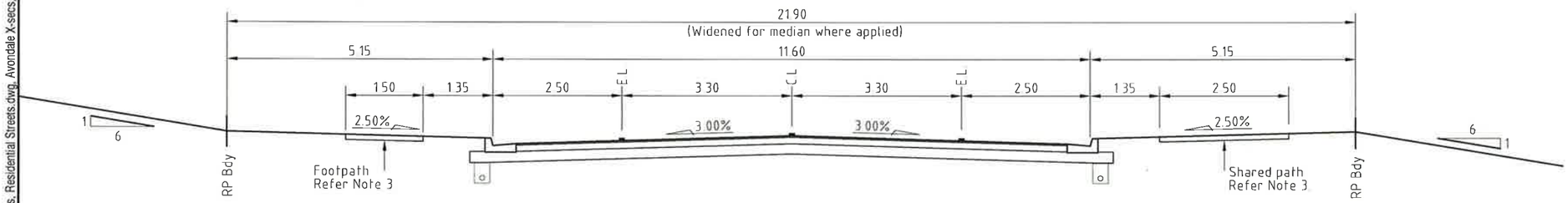
A3



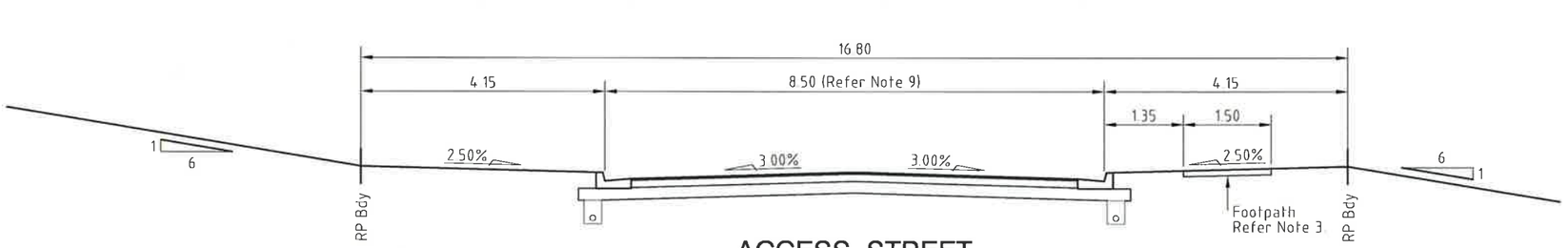
TRUNK COLLECTOR STREET (Bus route / No lot access / No parking)



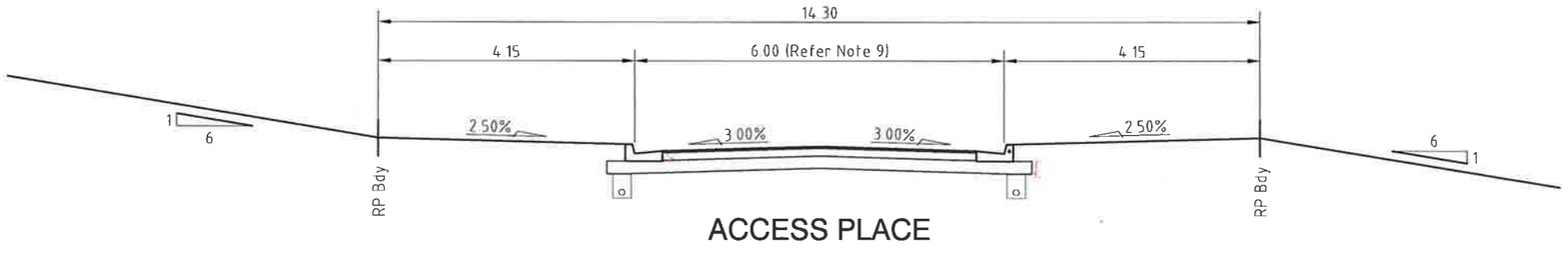
MEDIAN (Where applied)



COLLECTOR STREET (Bus route)



ACCESS STREET



ACCESS PLACE

NOTES:

1. These sections are suitable for residential applications only. All other applications to be approved by SRRC.
2. These typical sections define councils' minimum standards only and may vary to suit pedestrian/bikeway/parking and general network planning at the discretion of SRRC.
3. Footpaths and shared paths are to be located on the lower side of the street to allow for water and sewer services on the high side. Refer to SRRC drawing R-05 for footpath/bikeway requirements.
4. For service alignments and corridors refer to SRRC drawing R-02.
5. For parking requirements refer to Complete Streets guideline.
6. All streets to be designed in accordance with Austroads Guide to Pavement Technology and to have an asphalt wearing surface over primer seal designed in accordance with Austroads Technical Report AP-T68/06.
7. Verges have been designed to meet the requirements of Table 7.3.5 Section (b) of QUDM 2013. Min. verge height above channel invert to be 250mm to comply with major storm system design criteria.
8. Centre line and edge lines to be marked on Collector and Trunk Collector Streets.
9. Access Street allows 3.30m lane, 2.10m parking either side and 0.50m clearance from lane to parked cars.
   Access Place allows 3.40m lane, 2.10m parking one side and 0.50m clearance from lane to parked cars.
   Passing will occurr at driveways and where cars are not parked, however the locations of these areas need to be taken into account during design and passing bays may need to be provided.
10. Kerb and channel to be Type B1 on streets and Type B2 around medians.
11. TMR Spec. Type B subsoil drain under both kerb and channels.
12. All dimensions are in meters unless shown otherwise.

DERIVED FROM IPWEAQ COMPLETE STREETS, VERSION 1, AUGUST 2010

Issue	Amendment	App'd	Date
C	Cross sections revised to align with Complete Streets	PM	06/15
B	Minor note changes	PM	08/10
A	Original Issue		

APPROVED

ORIGINAL ISSUE SIGNED

Director Infrastructure Services

DATE 28 April 2010

Scales

0 1 2 3 4.0

SCALE 1:100

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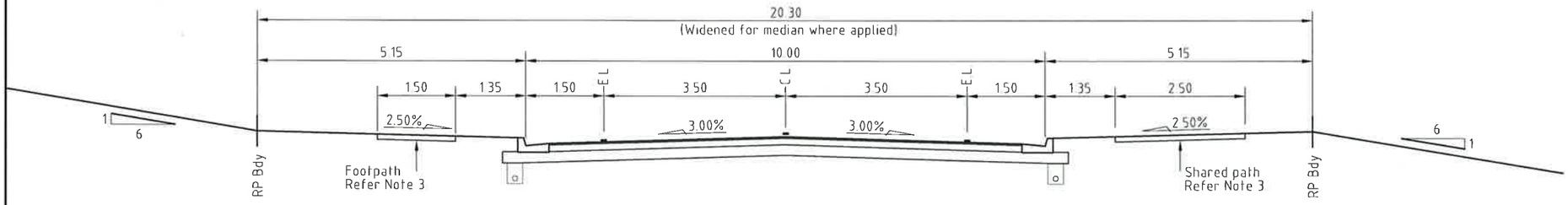
SCENIC RIM Regional Council

Works & Infrastructure Services

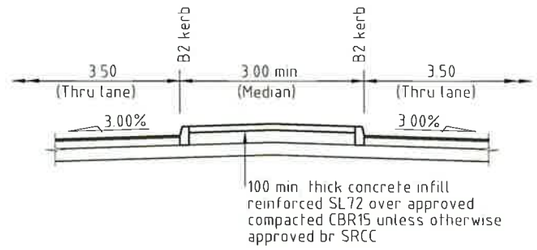
Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
TYPICAL CROSS SECTIONS
RESIDENTIAL STREETS

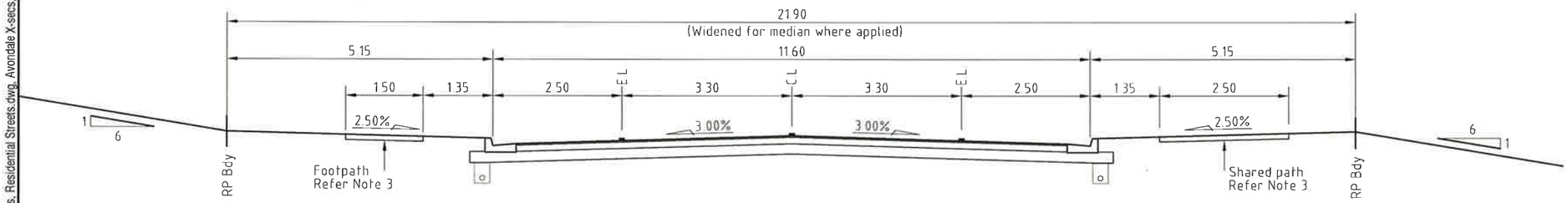
Design File / Drawing No. R-09 | Sheet of | Revision C | A3



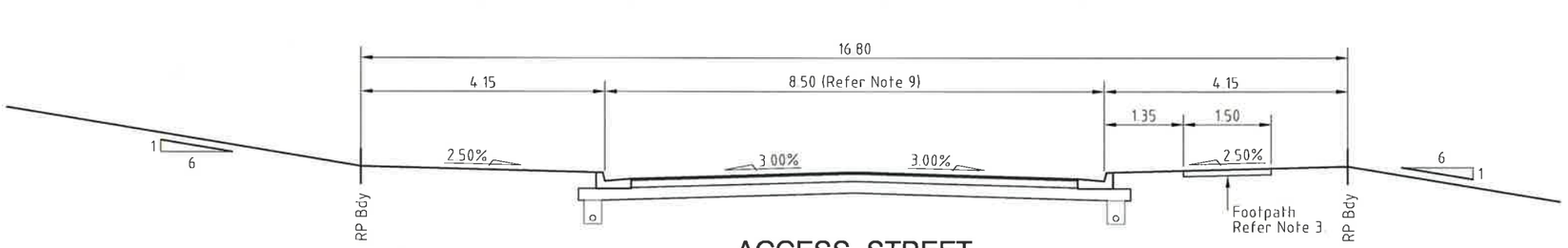
TRUNK COLLECTOR STREET (Bus route / No lot access / No parking)



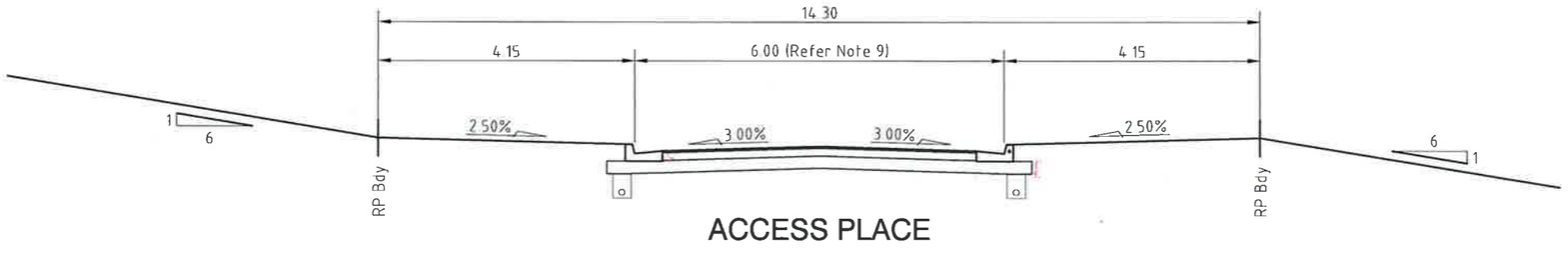
MEDIAN (Where applied)



COLLECTOR STREET (Bus route)



ACCESS STREET



ACCESS PLACE

NOTES:

1. These sections are suitable for residential applications only. All other applications to be approved by SRRC.
2. These typical sections define councils' minimum standards only and may vary to suit pedestrian/bikeway/parking and general network planning at the discretion of SRRC.
3. Footpaths and shared paths are to be located on the lower side of the street to allow for water and sewer services on the high side. Refer to SRRC drawing R-05 for footpath/bikeway requirements.
4. For service alignments and corridors refer to SRRC drawing R-02.
5. For parking requirements refer to Complete Streets guideline.
6. All streets to be designed in accordance with Austroads Guide to Pavement Technology and to have an asphalt wearing surface over primer seal designed in accordance with Austroads Technical Report AP-T68/06.
7. Verges have been designed to meet the requirements of Table 7.3.5 Section (b) of QUDM 2013. Min. verge height above channel invert to be 250mm to comply with major storm system design criteria.
8. Centre line and edge lines to be marked on Collector and Trunk Collector Streets.
9. Access Street allows 3.30m lane, 2.10m parking either side and 0.50m clearance from lane to parked cars.
   Access Place allows 3.40m lane, 2.10m parking one side and 0.50m clearance from lane to parked cars.
   Passing will occurr at driveways and where cars are not parked, however the locations of these areas need to be taken into account during design and passing bays may need to be provided.
10. Kerb and channel to be Type B1 on streets and Type B2 around medians.
11. TMR Spec. Type B subsoil drain under both kerb and channels.
12. All dimensions are in meters unless shown otherwise.

DERIVED FROM IPWEAQ COMPLETE STREETS, VERSION 1, AUGUST 2010

Issue	Amendment	App'd	Date
C	Cross sections revised to align with Complete Streets	PM	06/15
B	Minor note changes	PM	08/10
A	Original Issue		

APPROVED

ORIGINAL ISSUE SIGNED

Director Infrastructure Services

DATE 28 April 2010

Scales

0 1 2 3 4.0

SCALE 1:100

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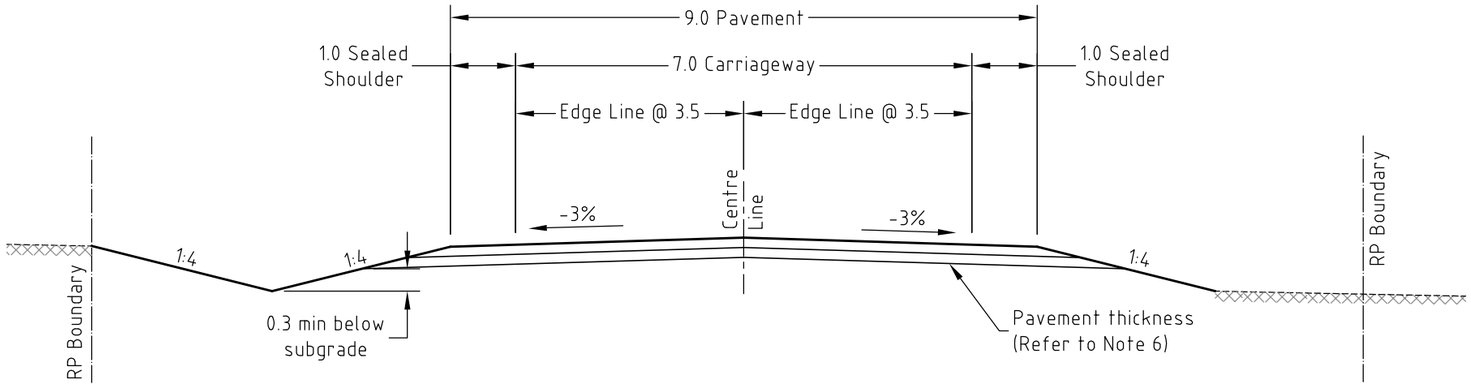
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

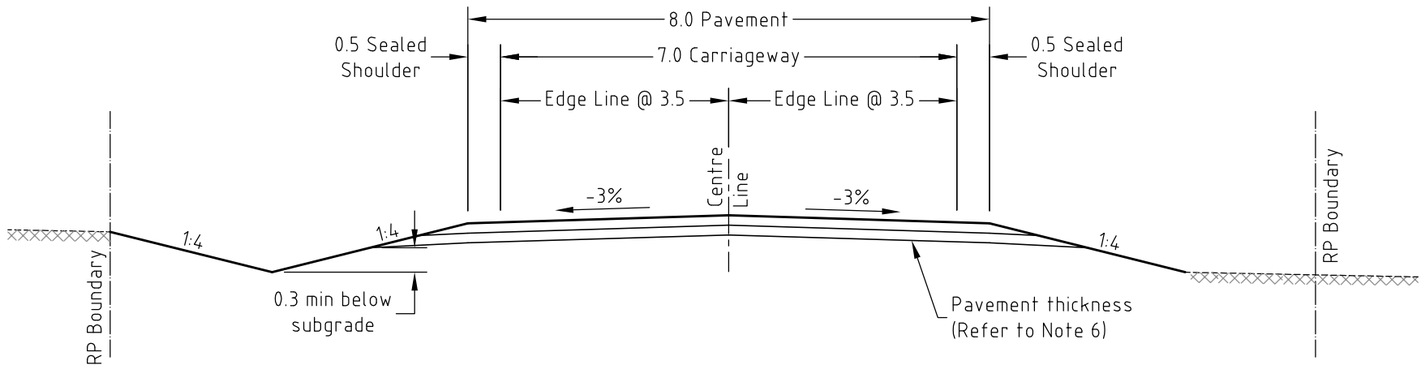
Drawing
TYPICAL CROSS SECTIONS
RESIDENTIAL STREETS

Design File / Drawing No. R-09 | Sheet of | Revision C | A3



CLASS 4A - RURAL CONNECTOR

AADT 1000 - 3000



CLASS 4B - RURAL COLLECTOR

AADT 500 - 1000

NOTES:

1. Table drains steeper than 5% should have erosion protection measures installed.
2. Cut batter slopes may be varied on site to ensure long term stability of batters.
3. Minimum slope of table drain inverts shall be 1% (1 in 100).
4. Roads shall be constructed with cross road drainage culverts/floodways designed in accordance with Austroads Guide to Road Design - Part 5 (Drainage Design).
5. One access point may be constructed to each lot frontage at a maximum slope of 1 in 6. Installation in accordance with SRRC R-08 or R-09.
6. For pavement design requirements, refer to Austroads Guide to Pavement Technology for sealed roads and ARRB Unsealed Road Design Manual for unsealed roads.
7. Class 4 roads connect to Class 1, 2 or 3 roads. Their main function is to form an avenue of communication for movement between important centres and serves the purpose of collection and distribution of traffic from local area to the wider road network, including access to abutting properties. They have significant economic, social, tourism or recreation role.
8. AADT to be based on actual counts, or if not available use 8 vehicles per day per projected total dwellings.
9. Curve widening and restricted visibility widening over crests to be determined by road design.
10. 1m single coat sealed shoulders where grades >16% or other traffic conditions require them to be protected.
11. Seal design in accordance with Austroads Spray Seal Design manual.
12. Appropriate Clear Zones are to be achieved based on Austroads Manuals.
13. All dimensions in meters unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-033
SUPERSEDES BOONAH - STD.R-0011,
BEAUDESERT - 50403, IPSWICH - SR.09

Issue	Amendment	App'd	Date
C	MODIFIED MAX BATTER SLOPE FROM 1:2 TO 1:4	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

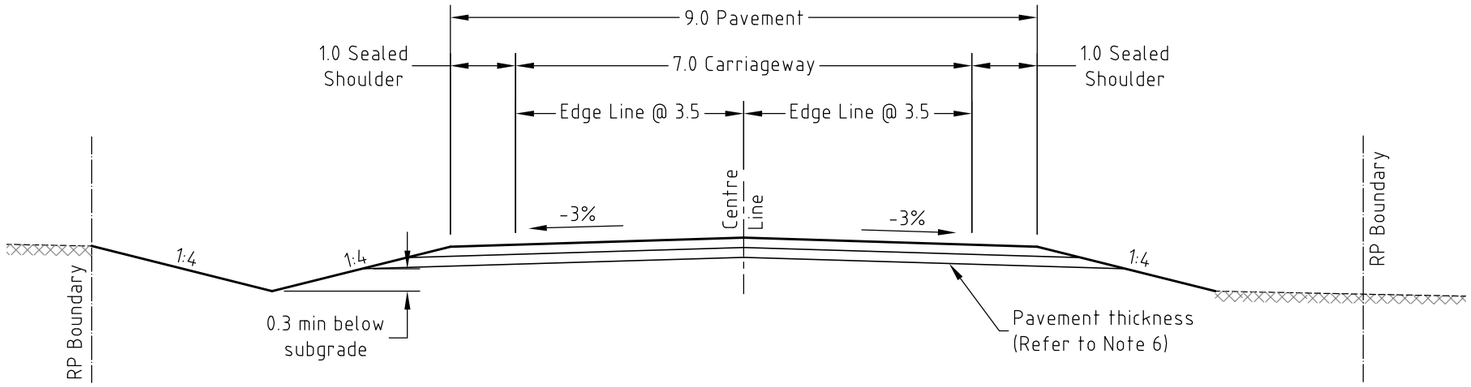
Drawing
TYPICAL CROSS SECTIONS
RURAL ROADS - CLASS 4

Design File
Drawing No. R-10

Sheet of

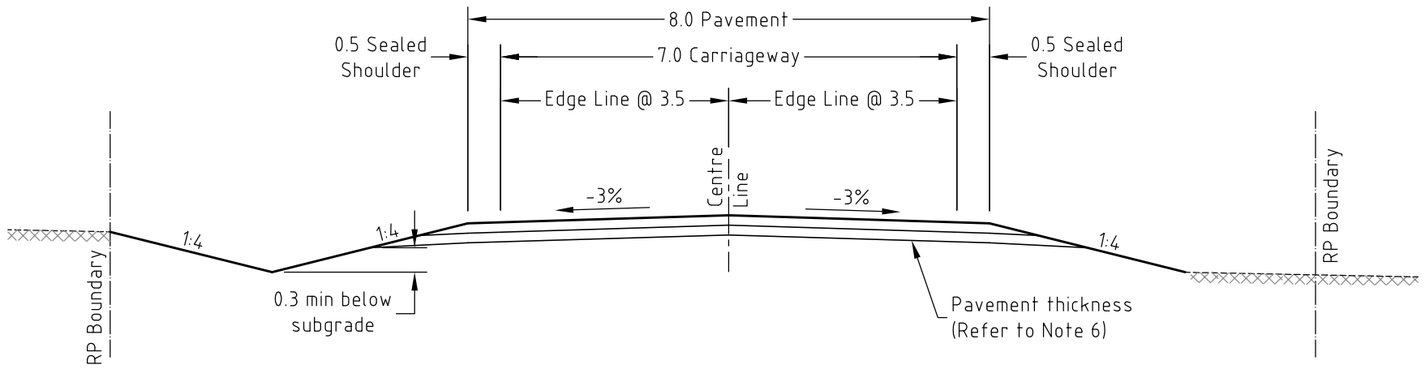
Revision C

A3



CLASS 4A - RURAL CONNECTOR

AADT 1000 - 3000



CLASS 4B - RURAL COLLECTOR

AADT 500 - 1000

NOTES:

1. Table drains steeper than 5% should have erosion protection measures installed.
2. Cut batter slopes may be varied on site to ensure long term stability of batters.
3. Minimum slope of table drain inverts shall be 1% (1 in 100).
4. Roads shall be constructed with cross road drainage culverts/floodways designed in accordance with Austroads Guide to Road Design - Part 5 (Drainage Design).
5. One access point may be constructed to each lot frontage at a maximum slope of 1 in 6. Installation in accordance with SRRC R-08 or R-09.
6. For pavement design requirements, refer to Austroads Guide to Pavement Technology for sealed roads and ARRB Unsealed Road Design Manual for unsealed roads.
7. Class 4 roads connect to Class 1, 2 or 3 roads. Their main function is to form an avenue of communication for movement between important centres and serves the purpose of collection and distribution of traffic from local area to the wider road network, including access to abutting properties. They have significant economic, social, tourism or recreation role.
8. AADT to be based on actual counts, or if not available use 8 vehicles per day per projected total dwellings.
9. Curve widening and restricted visibility widening over crests to be determined by road design.
10. 1m single coat sealed shoulders where grades >16% or other traffic conditions require them to be protected.
11. Seal design in accordance with Austroads Spray Seal Design manual.
12. Appropriate Clear Zones are to be achieved based on Austroads Manuals.
13. All dimensions in meters unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-033
SUPERSEDES BOONAH - STD.R-0011,
BEAUDESERT - 50403, IPSWICH - SR.09

Issue	Amendment	App'd	Date
C	MODIFIED MAX BATTER SLOPE FROM 1:2 TO 1:4	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

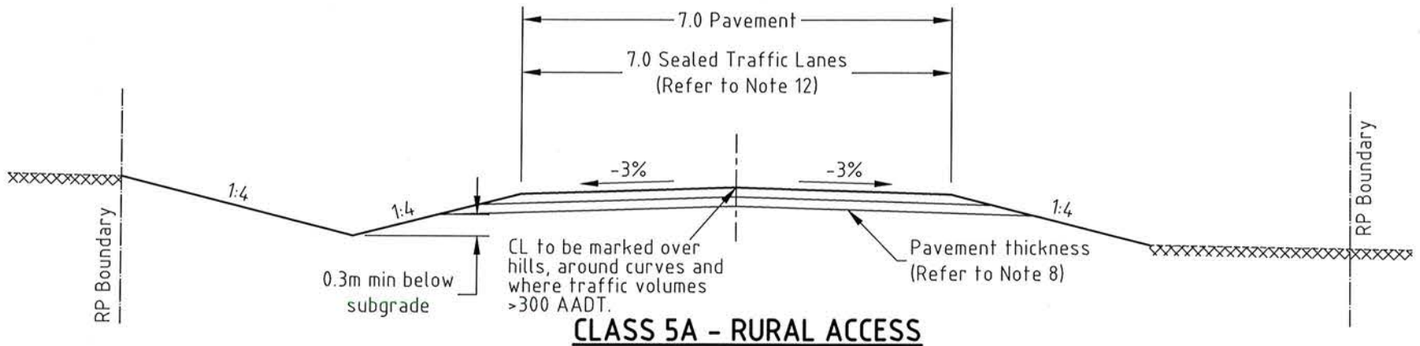
Drawing
TYPICAL CROSS SECTIONS
RURAL ROADS - CLASS 4

Design File
Drawing No. R-10

Sheet of

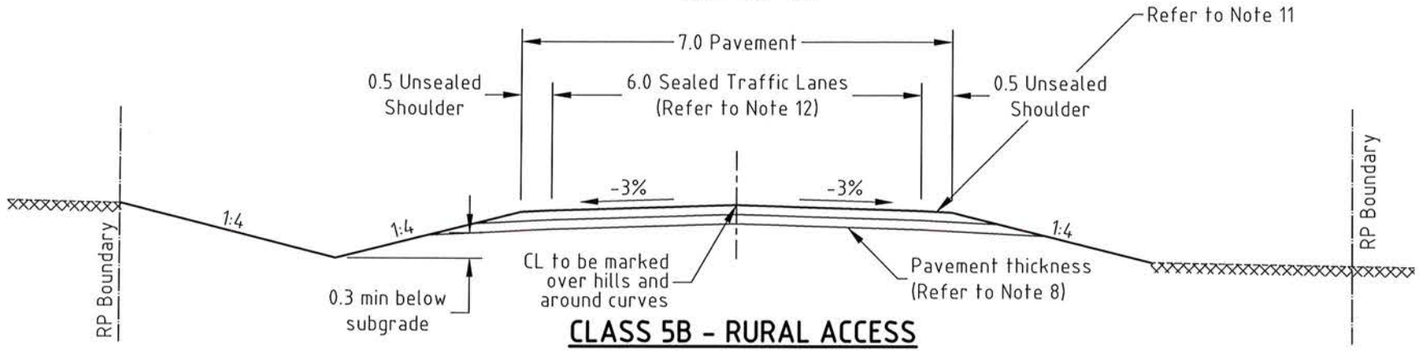
Revision C

A3



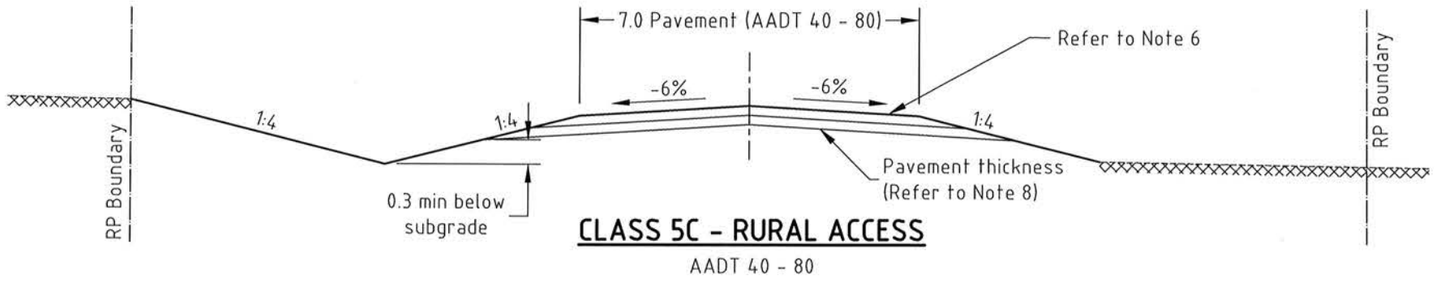
CLASS 5A - RURAL ACCESS

AADT 150 - 500



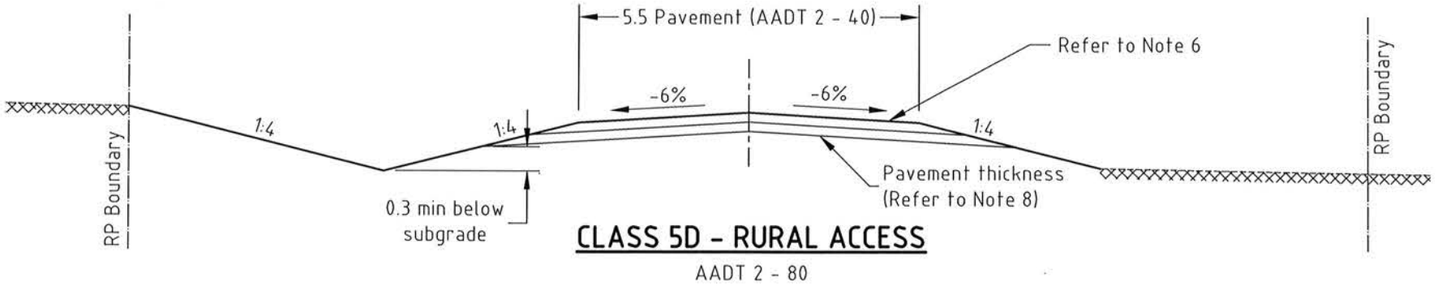
CLASS 5B - RURAL ACCESS

AADT 80 - 150



CLASS 5C - RURAL ACCESS

AADT 40 - 80



CLASS 5D - RURAL ACCESS

AADT 2 - 80

NOTES:

1. Class 5 roads connect to Class 1, 2, 3 or 4 roads. Their main function is to provide access to rural properties or to provide almost exclusively for one activity or function (e.g. access to National Parks, dam access or mining and forestry roads).
   Refer to Austroads Guide to Road Design, Part 2, Design Considerations, Table 2.2 - Austroads functional classification of rural roads.
2. Table drains steeper than 5% should have erosion protection measures installed.
3. Cut batter slopes may be varied on site to ensure long term stability of batters.
4. Minimum slope of table drain inverts shall be 1% (1 in 100).
5. Roads shall be constructed with cross road drainage culverts/floodways designed in accordance with Austroads Guide to Road Design - Part 5 (Drainage Design).
6. Unsealed roads shall be designed using parameters set out in ARRB Unsealed Roads Design Manual. The road is to be sealed for longitudinal grades > 10% and other high maintenance areas, ie. overland flow paths, intersections (min seal 30m).
7. One access point may be constructed to each lot frontage at a maximum slope of 1 in 6. Installation in accordance with SRRC R-08 or R-09.
8. For pavement design requirements, refer to Austroads Design Manual for sealed roads and ARRB Unsealed Road Design Manual for unsealed roads.
9. AADT to be based on actual counts, or if not available use, 8 vehicles per day per projected total dwellings.
10. Curve widening and restricted visibility widening over crests to be determined by road design.
11. 0.5m single coat sealed shoulders where grades >10% or other traffic conditions require them to be protected.
12. Seal design in accordance with Austroads Spray Seal Design manual.
13. Appropriate Clear Zones are to be achieved based on Austroads Design Manuals.

DERIVED FROM IPWEA STD DWG R-033
SUPERSEDES BOONAH - STD.R-0012,
BEAUDESERT - 50403, IPSWICH - SR.09

Issue	Amendment	App'd	Date
D	CLASS 5A CENTRE LINE ADDED WHERE AADT > 300. MINOR CHANGES TO GENERAL NOTES.		6-17
C	CLASS 5D CROSS SECTION ADDED, MAX. UNSEALED LONGITUDINAL GRADE REDUCED.	PM	12/13
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

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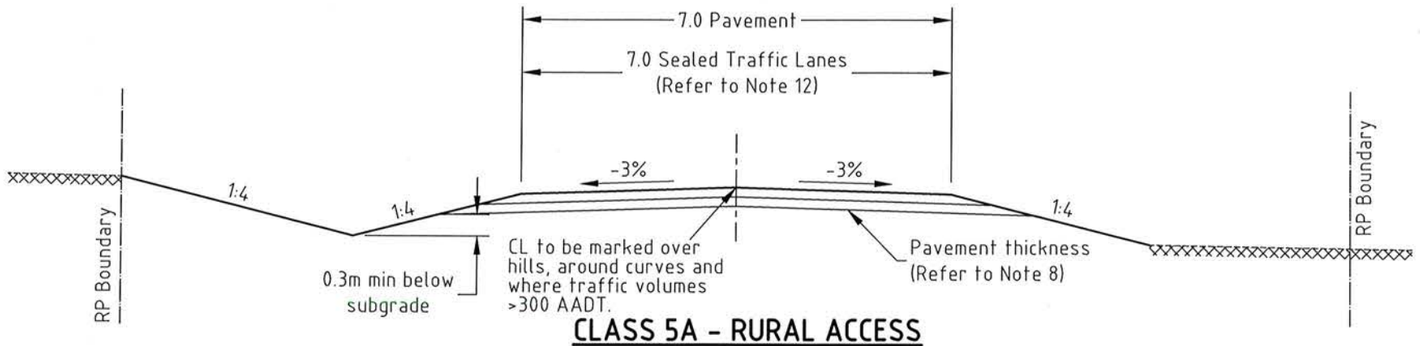
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

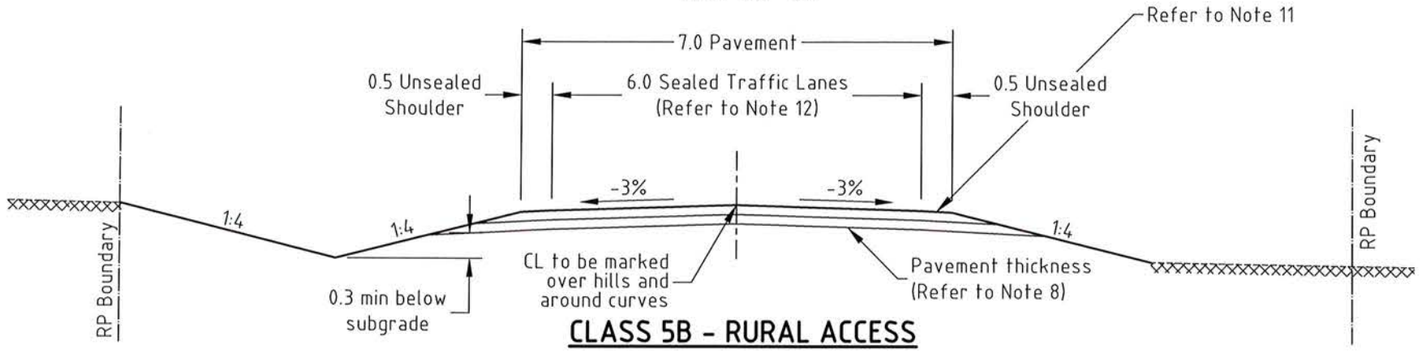
Drawing: TYPICAL CROSS SECTIONS
RURAL ROADS - CLASS 5

Design File / Drawing No. R-11 | Sheet of | Revision D | A3



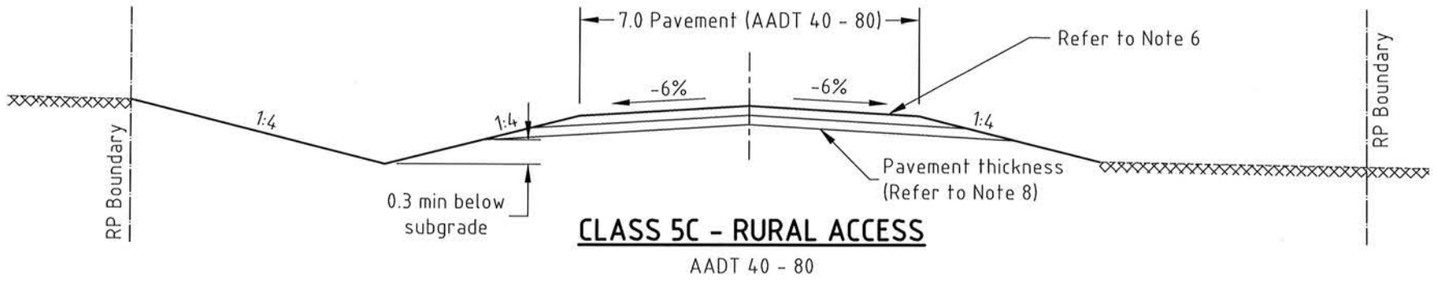
CLASS 5A - RURAL ACCESS

AADT 150 - 500



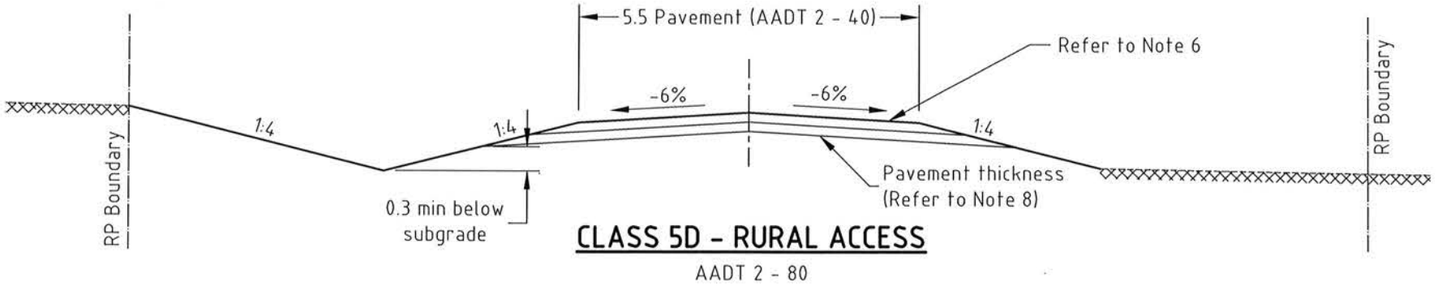
CLASS 5B - RURAL ACCESS

AADT 80 - 150



CLASS 5C - RURAL ACCESS

AADT 40 - 80



CLASS 5D - RURAL ACCESS

AADT 2 - 80

NOTES:

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11. 0.5m single coat sealed shoulders where grades >10% or other traffic conditions require them to be protected.
12. Seal design in accordance with Austroads Spray Seal Design manual.
13. Appropriate Clear Zones are to be achieved based on Austroads Design Manuals.

DERIVED FROM IPWEA STD DWG R-033
SUPERSEDES BOONAH - STD.R-0012,
BEAUDESERT - 50403, IPSWICH - SR.09

Issue	Amendment	App'd	Date
D	CLASS 5A CENTRE LINE ADDED WHERE AADT > 300. MINOR CHANGES TO GENERAL NOTES.		6-17
C	CLASS 5D CROSS SECTION ADDED, MAX. UNSEALED LONGITUDINAL GRADE REDUCED.	PM	12/13
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

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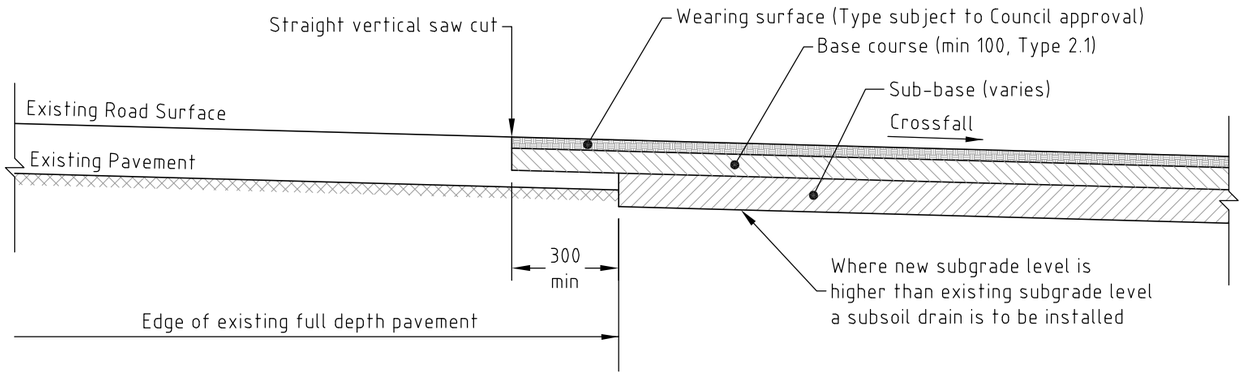
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

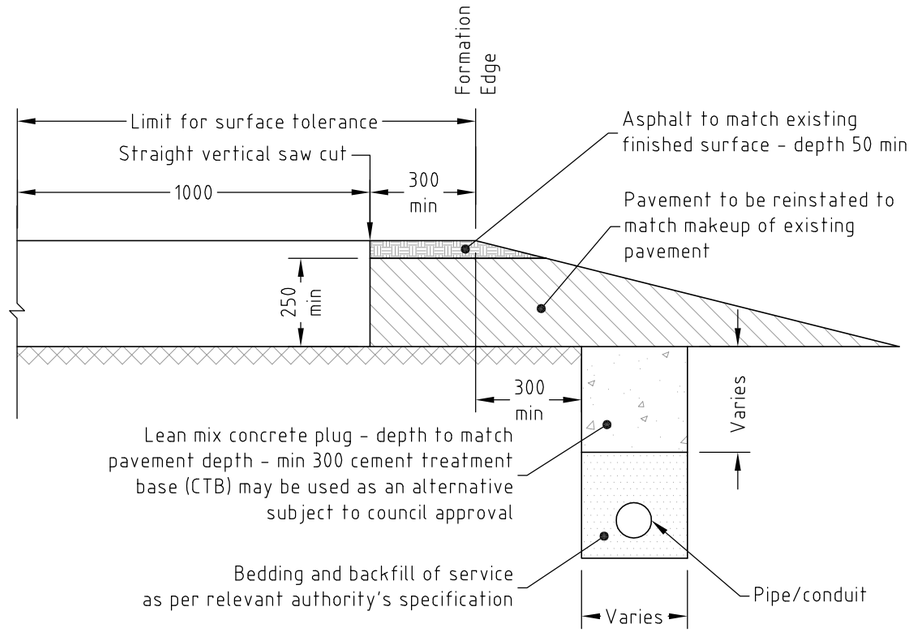
Drawing: TYPICAL CROSS SECTIONS
RURAL ROADS - CLASS 5

Design File / Drawing No. R-11 | Sheet of | Revision D | A3

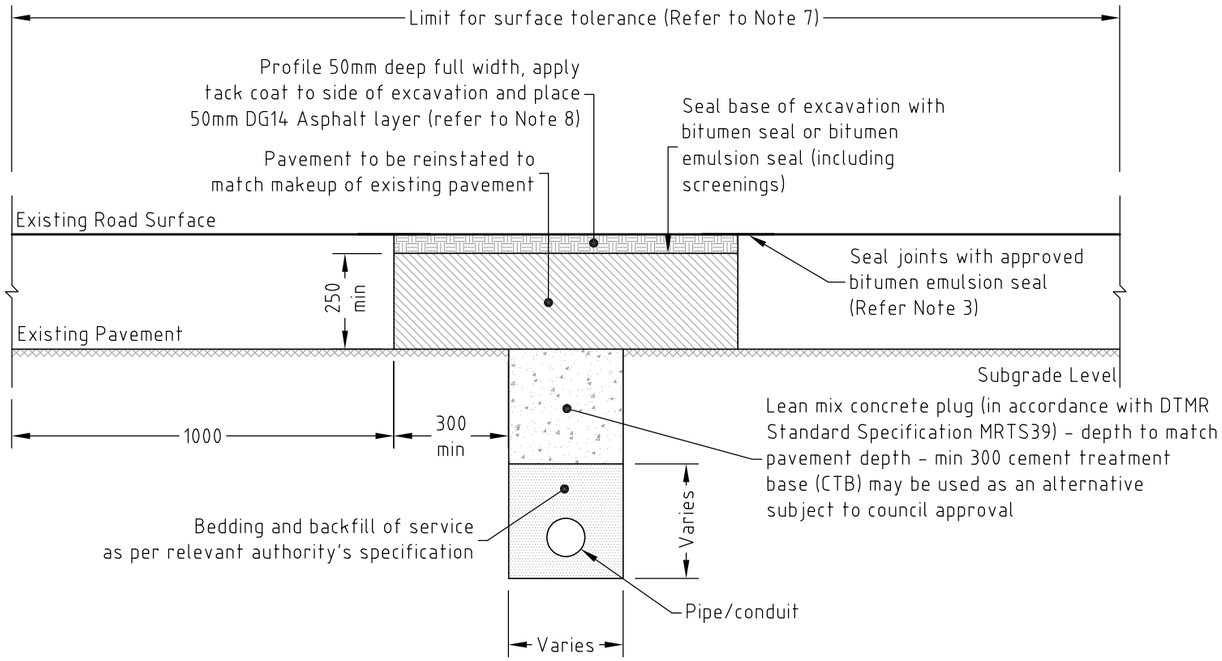


JOINING TO EXISTING PAVEMENT

Extension or Widening



LONGITUDINAL CONDUITS SECTION



TRENCHING THROUGH EXISTING PAVEMENT

NOTES:

1. Tunnel boring techniques are the preferred method for road crossing services conduits in existing roadways.
2. AC to AC joint - saw cut existing AC where shown or as agreed on site to provide clean cut.
3. Sprayed seal to AC joint - spray seal to extend 150mm either side of join.
4. Pavement material and compaction to conform to Department of Transport and Main Roads standard specification.
5. Apply bitumen emulsion tack coat to all newly exposed surfaces.
6. Where the trench has been constructed longitudinally in the road, then the final asphalt repair width is to terminate 50mm clear of the linemarking to allow for the bitumen emulsion joint seal.
7. The vertical deviation from a straight edge parallel to the centre line of the existing road as shown on the drawing, is not to exceed 5mm.
8. Asphalt surface repairs are to be undertaken within 24 hours unless approved otherwise by Council.
9. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG R-170
SUPERSEDES BEAUDESERT - 50404

Issue	Amendment	App'd	Date
C	MODIFIED NOTES AND TRENCHING DETAIL SPECIFYING DG14 ASPHALT LAYER	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

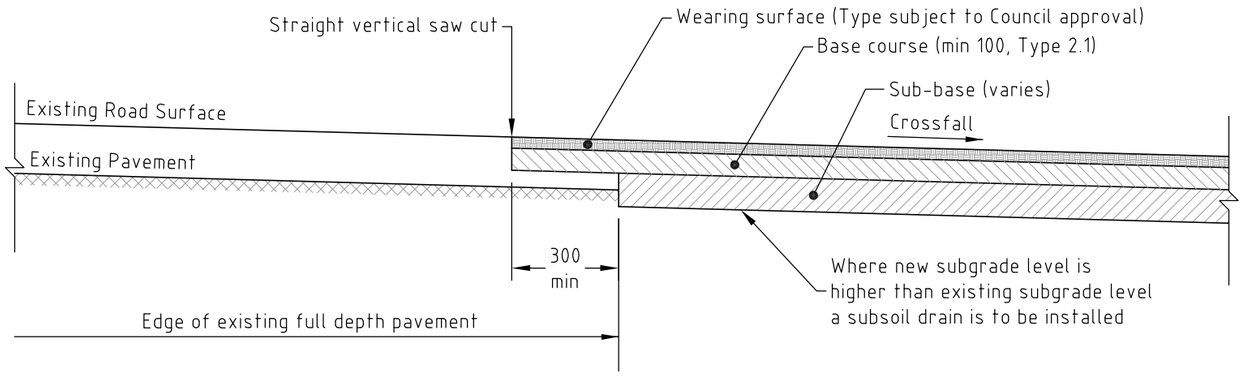
Drawing
PAVEMENT EXTENSION
TRENCHING AND WIDENING

Design File
Drawing No. R-12

Sheet of

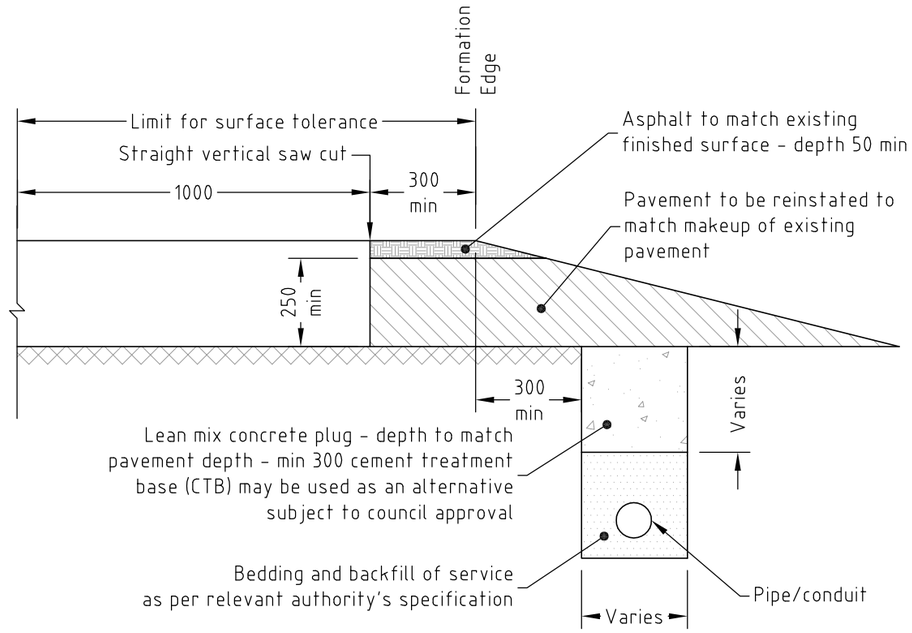
Revision C

A3

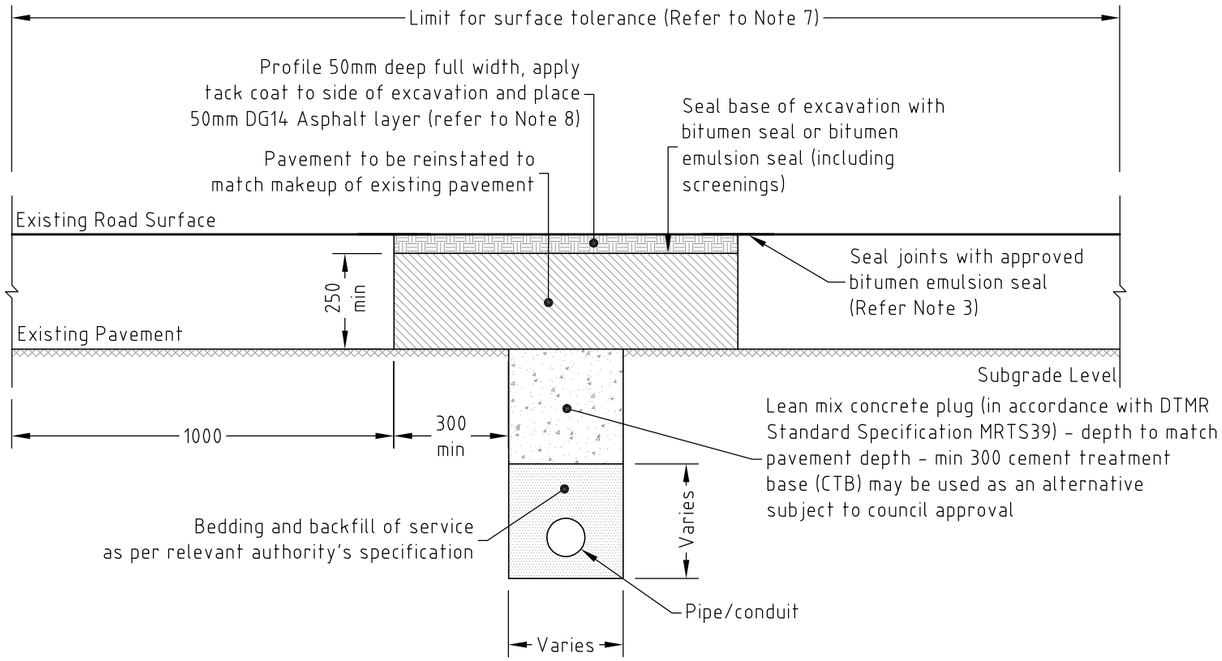


JOINING TO EXISTING PAVEMENT

Extension or Widening



LONGITUDINAL CONDUITS SECTION



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DERIVED FROM IPWEA STD DWG R-170
SUPERSEDES BEAUDESERT - 50404

Issue	Amendment	App'd	Date
C	MODIFIED NOTES AND TRENCHING DETAIL SPECIFYING DG14 ASPHALT LAYER	PM	03/2013
B	MINOR NOTE CHANGES	PM	08/10
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 28 April 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

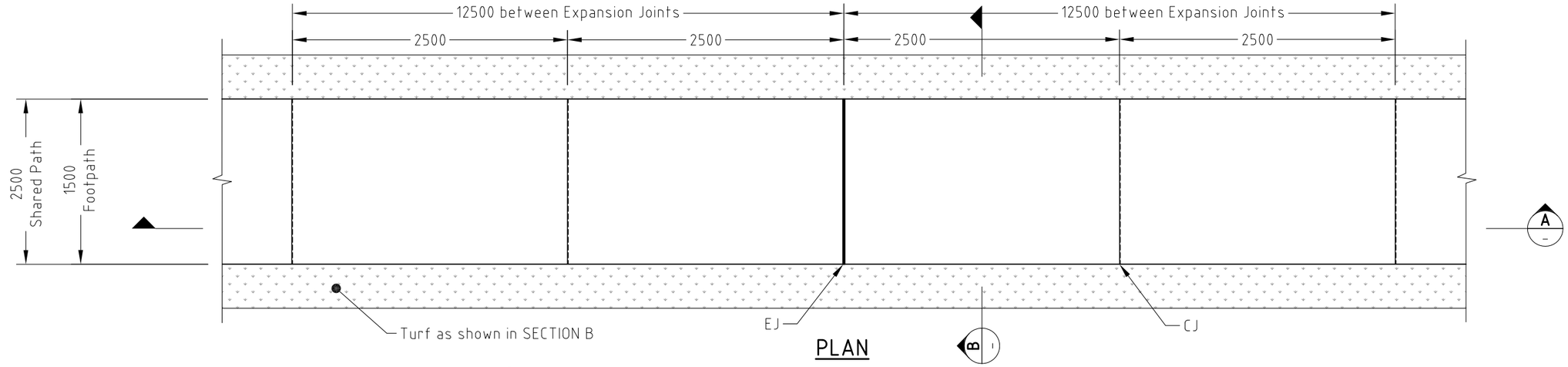
Drawing
PAVEMENT EXTENSION
TRENCHING AND WIDENING

Design File
Drawing No. R-12

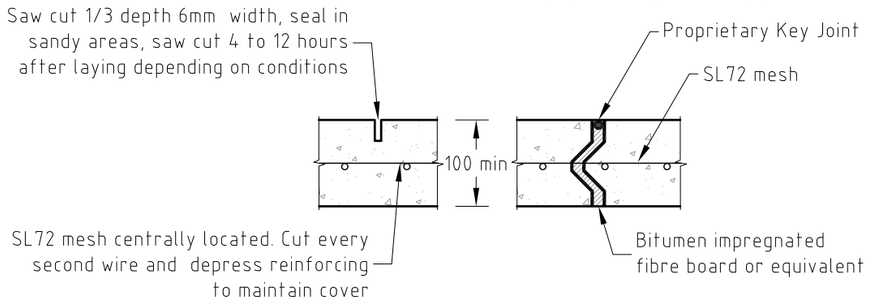
Sheet of

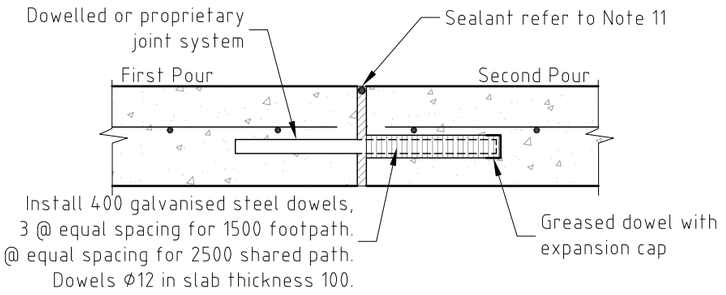
Revision C

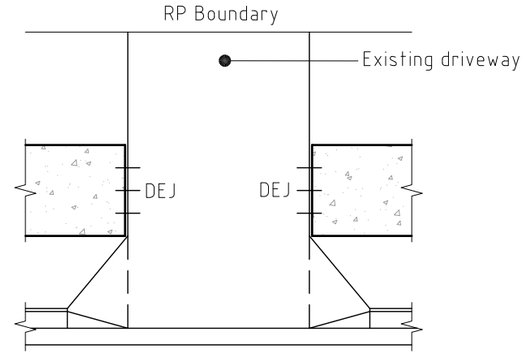
A3



SECTION A – SCALE: NTS







JOINT ARRANGEMENT
FOOTPATH AT EXISTING DRIVEWAY

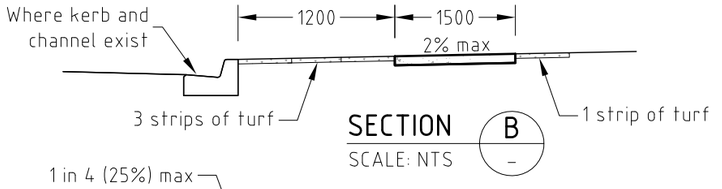
NOTES:

CONTROL JOINT (CJ)

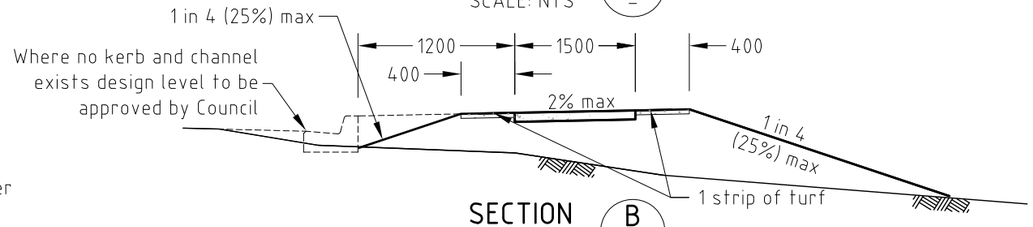
EXPANSION JOINT (EJ)

1. This standard is to be read in conjunction with SRRC R-05 (Residential Driveways).
2. Concrete N32 in accordance with AS 1379 (The Specification and Manufacture of Concrete) and AS 3600 (Concrete Structures).
3. Reinforcing requirements may be amended on written instructions from Council.
4. Surface to be non-slip concrete finish to AS 4586 (Slip Resistance Classification of New Pedestrian Surface Materials).
5. Contraction/expansion joints, 2500 max spacing.
6. Thickness to be increased to 125 at residential vehicular crossings. Reinforce with SL72 fabric, centrally located.
7. For appropriate treatment of grades greater than 1 in 8 (12.5%), refer to AS 1428 (Design for Access & Mobility).
8. Doweled or keyed joints to be used as required by Council. Refer to specification.
9. All dimensions are in millimeters.
10. Where a vehicle crossing point, or path is subject to longitudinal traffic the pathway details shall be per relevant residential driveway standard details, SRRC R-05.
11. Expansion and control joints to be sealed with a low modulus self priming sealant to the manufacturers specifications. The colour of sealant is to match the adjoining surface finish.
12. Roofwater drains may affect the grade of the footpath, with the need for gently sloping the footpath up and over the roofwater drain. This will need to be reviewed if required.
13. These plans are designed for A, S & M soil types. If higher reactive soil type and encountered, provide alternate design for Council approval.

DOWELLED EXPANSION JOINT DETAIL (DEJ)



SECTION B – SCALE: NTS



SECTION B – SCALE: NTS

DERIVED FROM IPWEA STD DWG R-0065
SUPERSEDES BOONAH - STD.R-0006,
BEAUDESERT - 50419, IPSWICH - SR.19

Issue	Amendment	App'd	Date
C	CHANGED TO GALVANISED DOWELS	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 28 April 2010

Scales

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Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

Drawing: CONCRETE PATH RESIDENTIAL AREAS

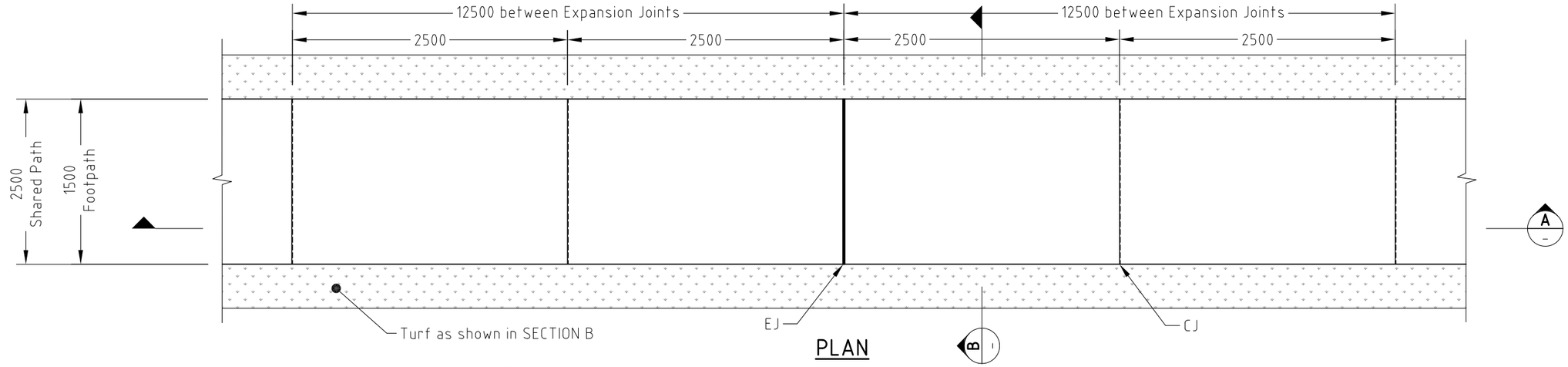
Design File

Drawing No. R-13

Sheet of

Revision C

A3



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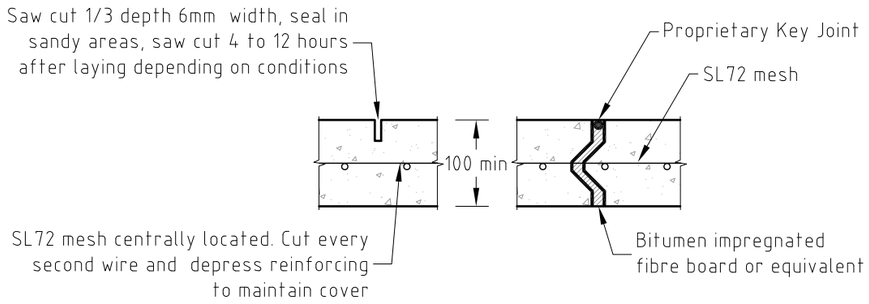

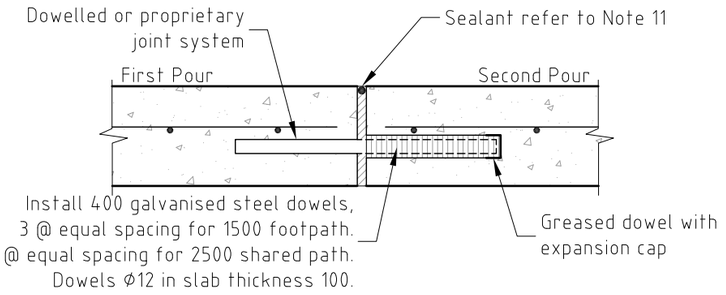

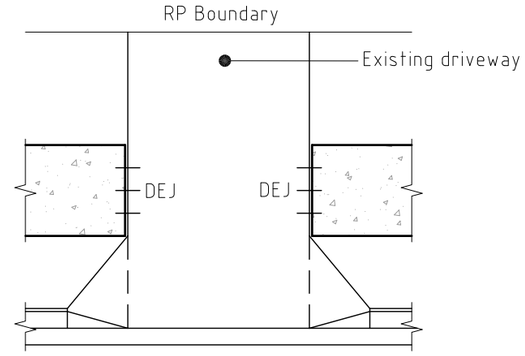

JOINT ARRANGEMENT
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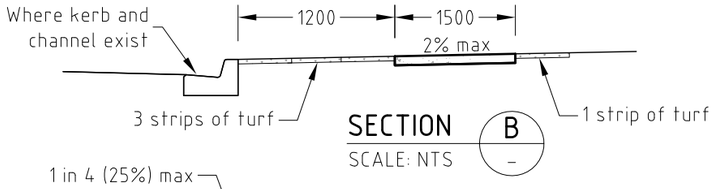
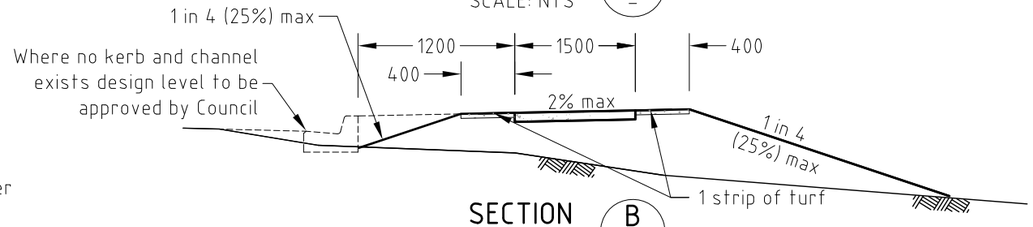
DOWELLED EXPANSION JOINT DETAIL (DEJ)



SECTION B – SCALE: NTS



SECTION B – SCALE: NTS

DERIVED FROM IPWEA STD DWG R-0065
SUPERSEDES BOONAH - STD.R-0006,
BEAUDESERT - 50419, IPSWICH - SR.19

Issue	Amendment	App'd	Date
C	CHANGED TO GALVANISED DOWELS	PM	12/2010
B	MINOR NOTE CHANGES	PM	08/2010
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ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

Drawing: CONCRETE PATH RESIDENTIAL AREAS

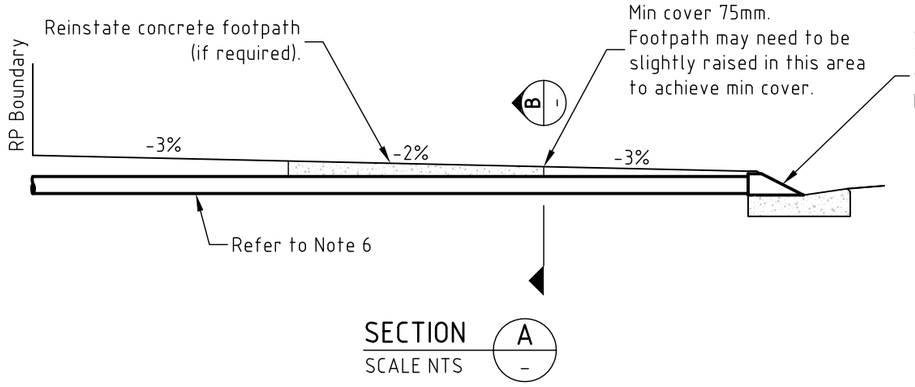
Design File

Drawing No. R-13

Sheet of

Revision C

A3



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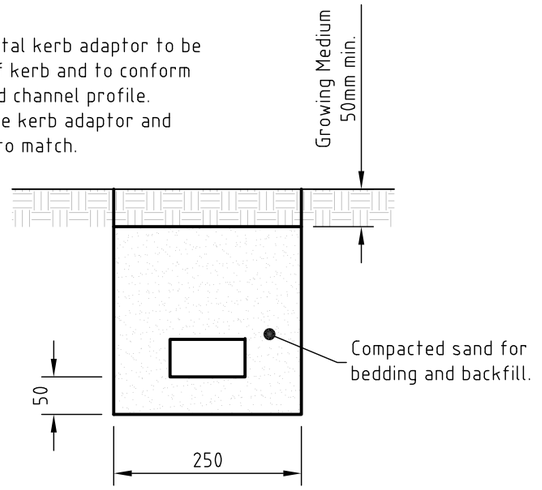
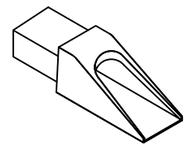
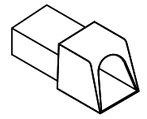


SECTION B
SCALE NTS

Note:
For specifications refer to manufacturer's product information.

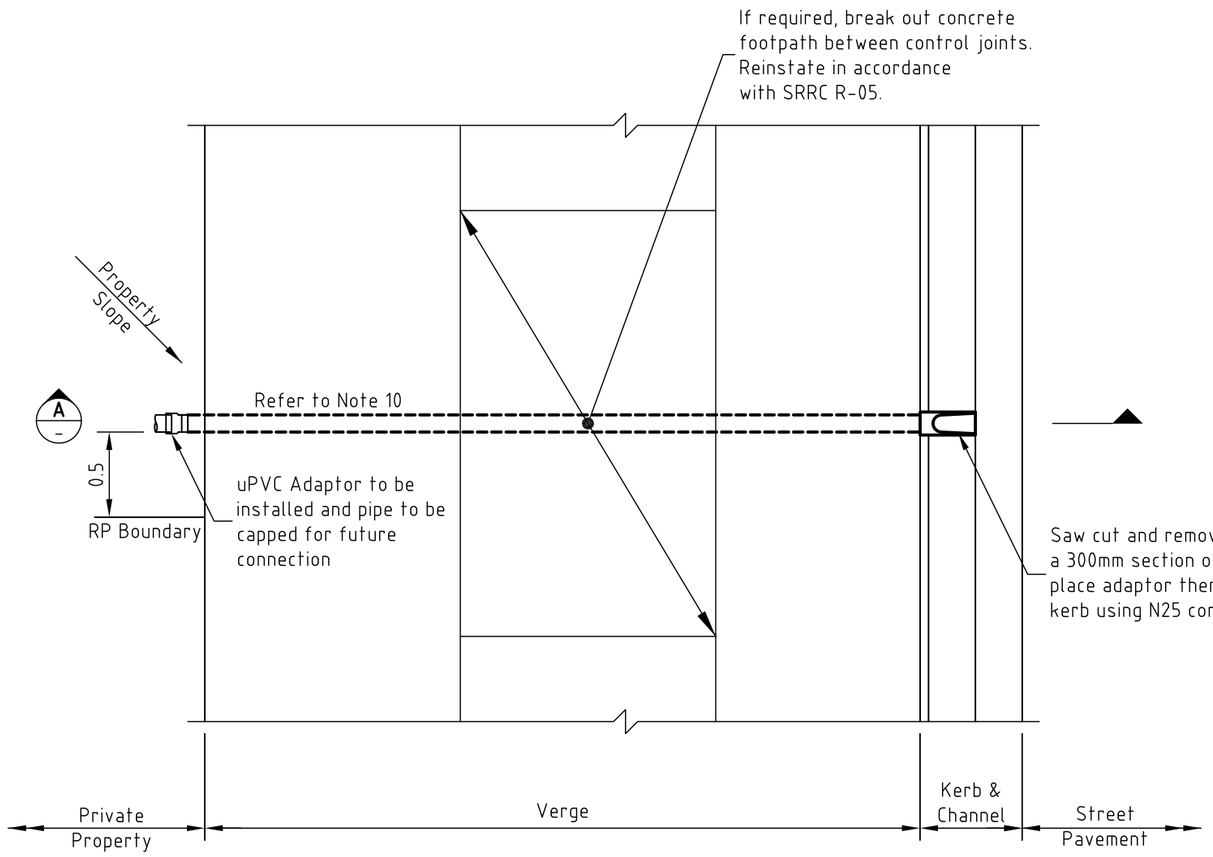


Mountable Kerb Adapter



Barrier Kerb Adapter

TYPICAL FULL HEIGHT KERB ADAPTORS



PLAN

NOTES:

1. Kerb adaptors and other ancillary components within the verge are to conform to AS 2179.1 (Specifications for Rainwater Accessories and Fasteners) for Metal Fittings. Kerb adaptors cast in marine grade aluminum are preferred.
2. Roofwater/Stormwater drains are to transport only clean stormwater runoff from roofed or otherwise uncontaminated areas.
3. The requirements of AS 3500.3.1 (Stormwater drainage - Performance Requirements) and the Queensland Building Code Regulations are to be met.
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5. Councils preferred option is to connect to stormwater infrastructure such as manholes, catchpits and the like however approval is required for this.
6. 125 x 75 x 3 hot dipped galvanised RHS is to be installed. Minimum fall 1 in 200. Cut to finish flush with the kerb profile. All cut ends are to be cold galvanised and the kerb reinstated (if required).
7. Council's policy is that provision and maintenance of private Roofwater/Stormwater drains are the responsibility of the property owner. The property owner is also responsible for verge restoration to original conditions after construction.
8. Appropriate measures are to be taken to ensure work site and road user safety during construction.
9. Verge services (Telstra/Energex etc) are normally deeper than standard Roofwater/Stormwater drains but the position of services should be investigated. "Dial Before You Dig" must be contacted prior to work commencing.
10. The minimum requirement for an allotment (including subdivisions) is the provision of one kerb adaptor with pipe drainage to the property boundary. Kerb outlets are generally to be 0.5m from the lowest side boundary.

DERIVED FROM IPWEA STD DWG R-0081
SUPERSEDES BOONAH - STD.R-0017,
BEAUDESERT - 50415, IPSWICH - SR.17

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 11 August 2010

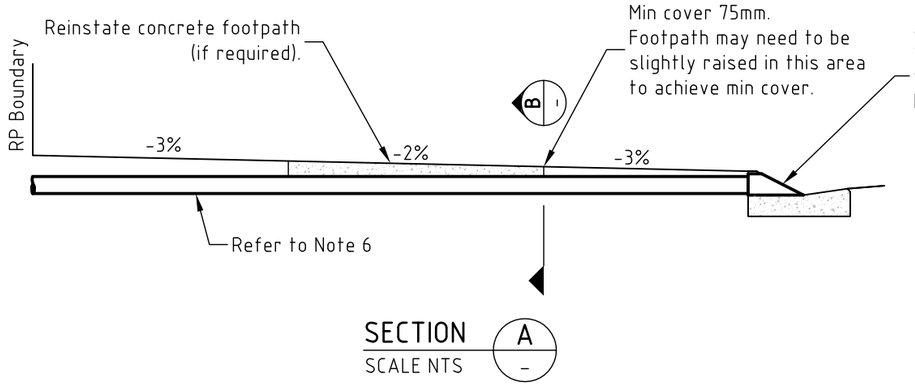
Scales

Do NOT Scale this Drawing
Use only Dimensions indicated

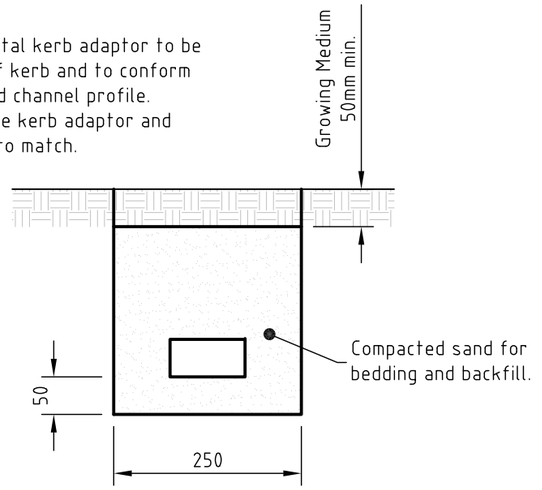
SCENIC RIM Regional Council
Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS
Drawing
KERB AND CHANNEL
RESIDENTIAL DRAINAGE CONNECTIONS

Design File
Drawing No. R-14
Sheet of
Revision A
A3

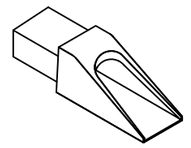


SECTION A
SCALE NTS

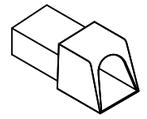


SECTION B
SCALE NTS

Note:
For specifications refer to manufacturer's product information.

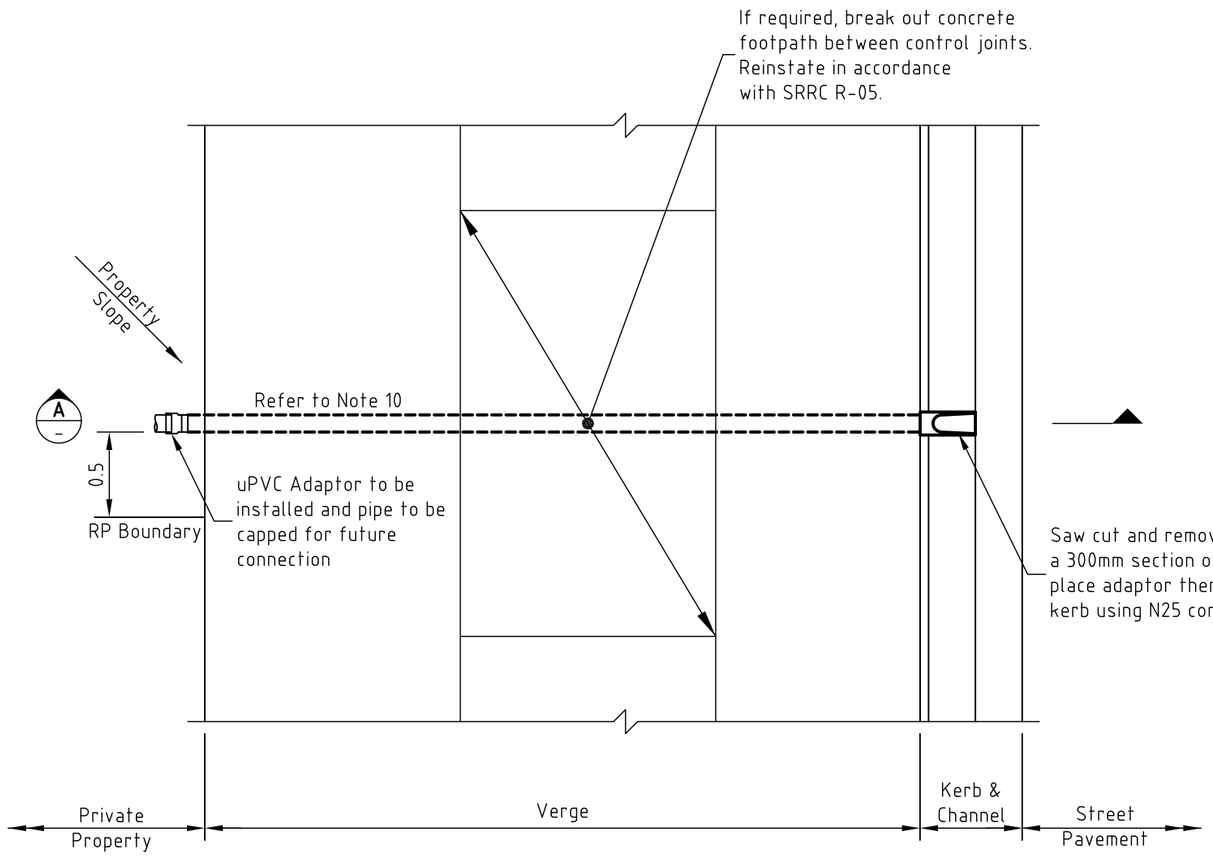


Mountable Kerb Adapter



Barrier Kerb Adapter

TYPICAL FULL HEIGHT KERB ADAPTORS



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SCENIC RIM Regional Council
Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS
Drawing
KERB AND CHANNEL
RESIDENTIAL DRAINAGE CONNECTIONS

Design File
Drawing No. R-14
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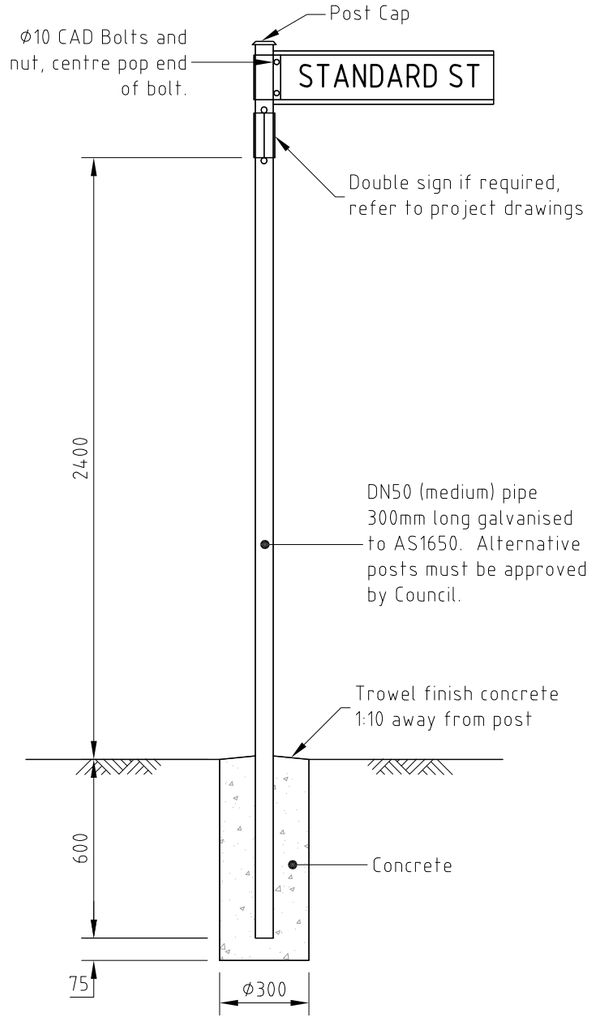
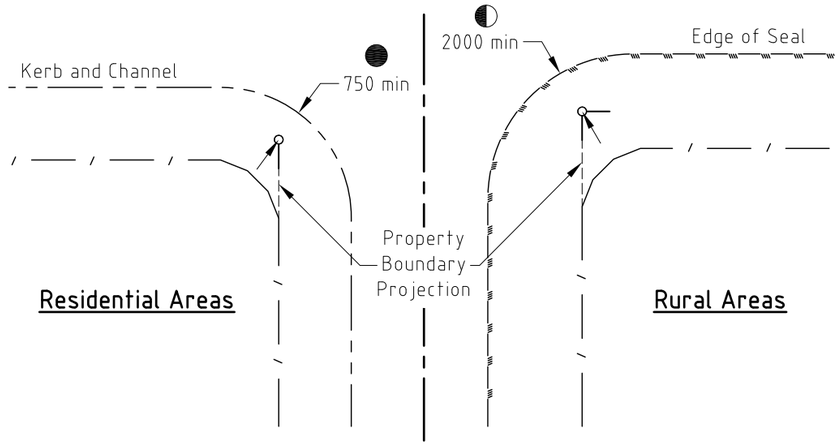
Revision A
A3



ELEVATION WITH CONCRETE FOOTING



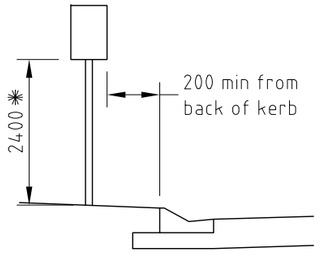
SIGN LOCATIONS

LEGEND:

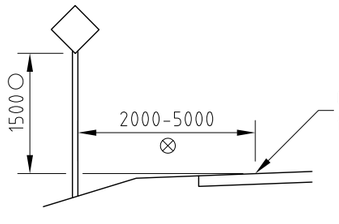
- ● Sign post is to be located 750mm behind nominal kerb line.
- ◐ Sign post is to be located 2000mm from edge of seal, or as directed by Council.
- ✳ When sign overhangs a footpath, dimension to be 2500.
- ○ Parking and Guide Signs to be 2200 above road surface.
- ■ Some signs (Keep Left, No U-Turn, D4 Hazard series) to be mounted at 525. Height can be adjusted if there is a visibility problem.
- ⊗ At least 600 clearance to be provided to outer edge of shoulder, line of guide posts or guardrail.

Table of Abbreviations			
Avenue	AV	Circuit	CCT
Court	CT	Crescent	CR
Esplanade	ESP	Lane	LA
Parade	PDE	Road	RD
Street	ST	Terrace	TCE

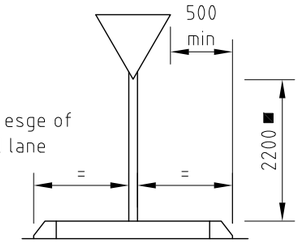
Other abbreviations to be approved by Council (Refer to MUTCD)



RESIDENTIAL AREAS



RURAL ROADS



MEDIANS

LOCATION OF SIGNS

NOTES:

1. Street name must be approved by Council, prior to installation and be in accordance with the MUTCD, Chapter 5. Where conflict exists, this drawing overrides.
2. Name Plates: 150mm wide and 3mm thick extruded aluminium or polypropylene section.
3. Bracket: Standard 150mm wide and 3mm thick aluminium extruded bracket (including 2 x M10 x 25 Cadmium or stainless steel bolts, nuts and washers). Cadmium plated bolts and washers to AS 1897 (Electroplated Coatings on Threaded Components). Locking nut to be utilised if specificed by relevant Council.
4. Letters and numbers: Class 1 black on class 2 white reflectorised background (both sides) to AS1743 (Road Signs - Specifications). Letters: 100mm high, series B, medium spacing (spacing may be varied to suit length of street name when approved by Council). Numbers: 50m high, series C, narrow spacing. All text to AS1744 (Forms of Letters and Numerals for Road Signs). Alternate colours must be approved by Council.
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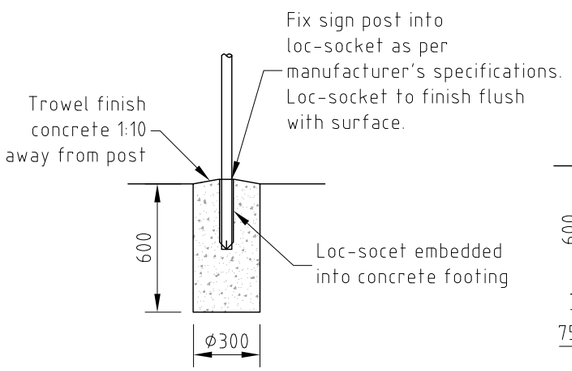
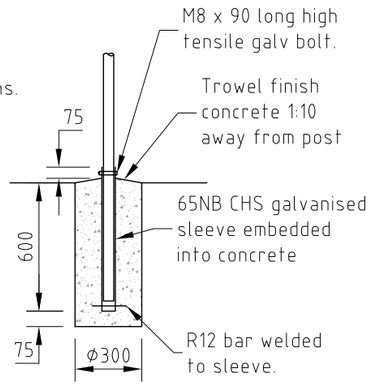
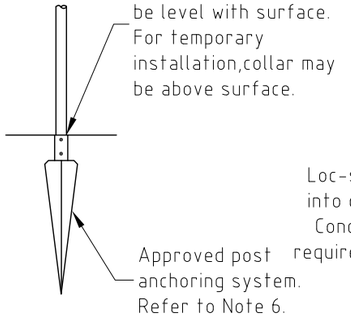


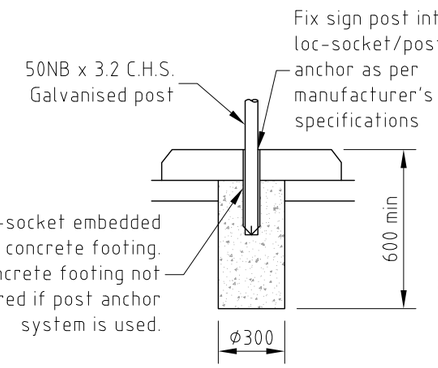
LOC-SOCKET (OR SIMILAR)



TYPICAL SLEEVE



TYPICAL POST ANCHOR



MEDIANS

DERIVED FROM IPWEA STD DWG R-0130
SUPERSEDES BOONAH - STD.R-0014,
BEAUDESERT - 50421, IPSWICH - SR.26

Issue	Amendment	App'd	Date
C	MODIFIED SIGN SIZING TO COMPLY WITH MUTCD	PM	09/12/2010
B	MODIFIED TO INCLUDE INSTALLATION AND LOCATION SPECIFICATIONS	PM	06/09/2010
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

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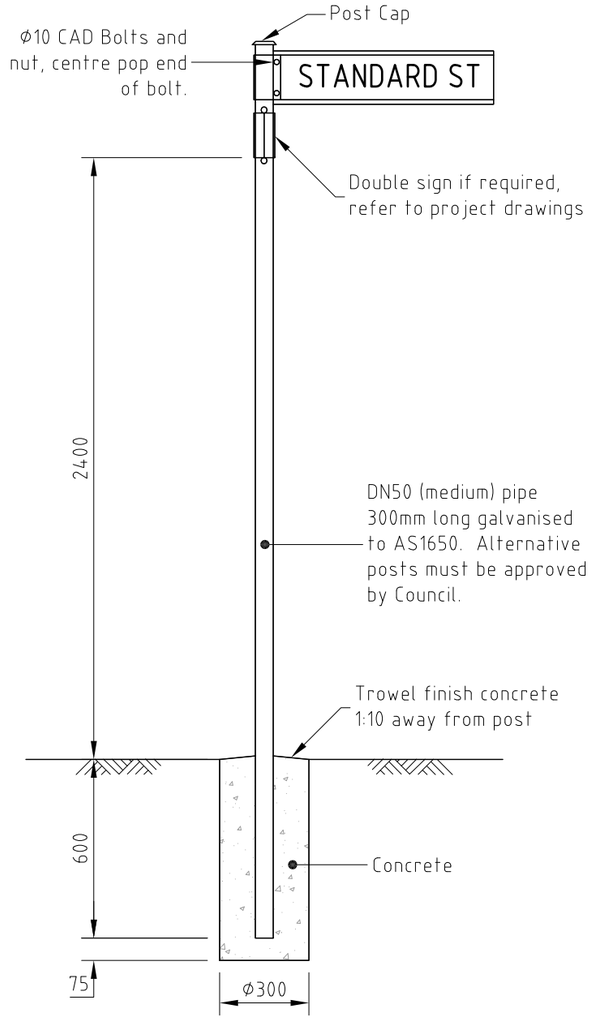
SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: STREET NAME SIGN

Design File / Drawing No. R-15 | Sheet of | Revision C | A3



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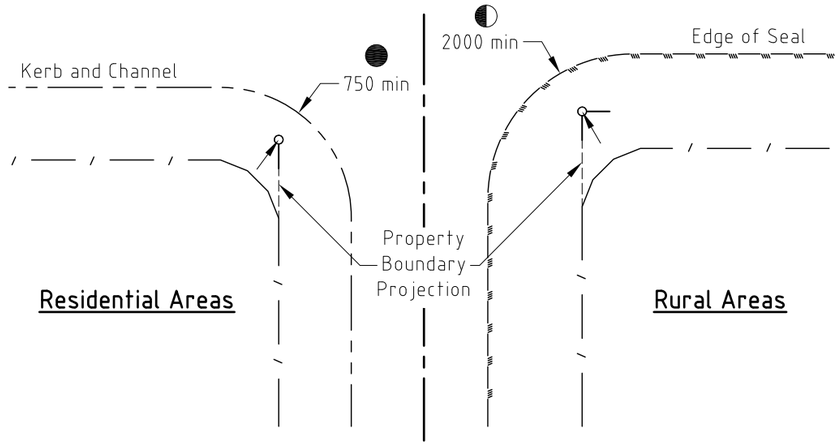

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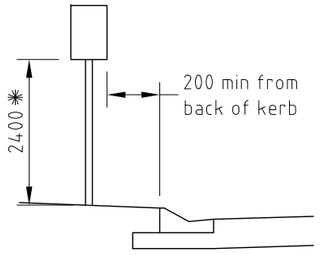

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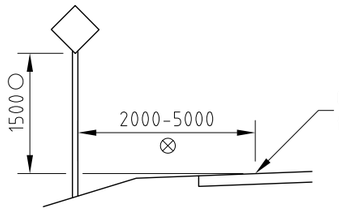
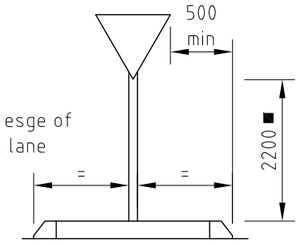


RURAL ROADS



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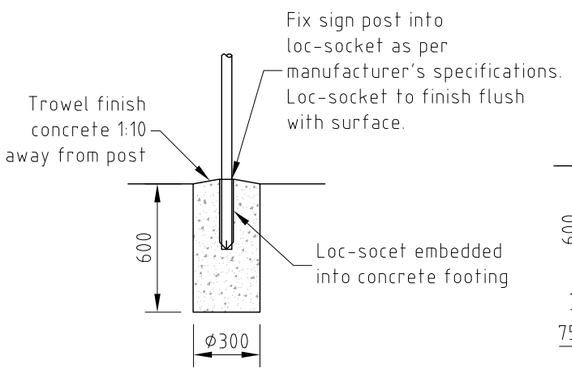

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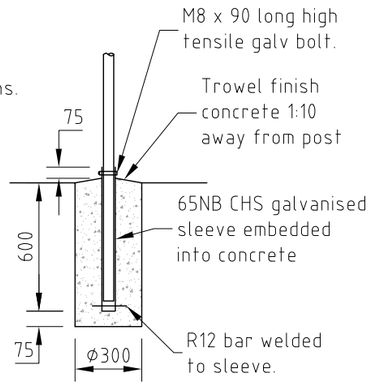

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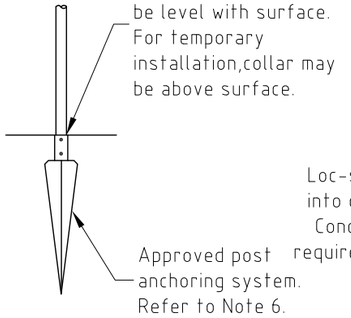

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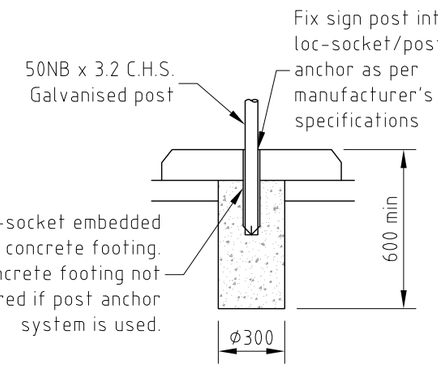

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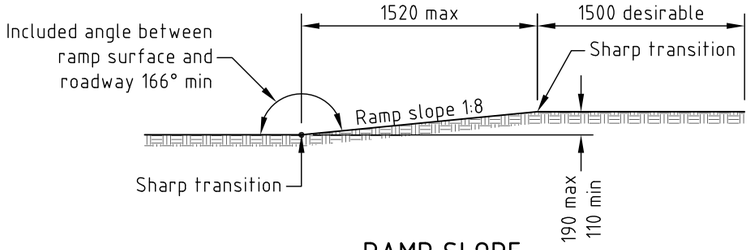
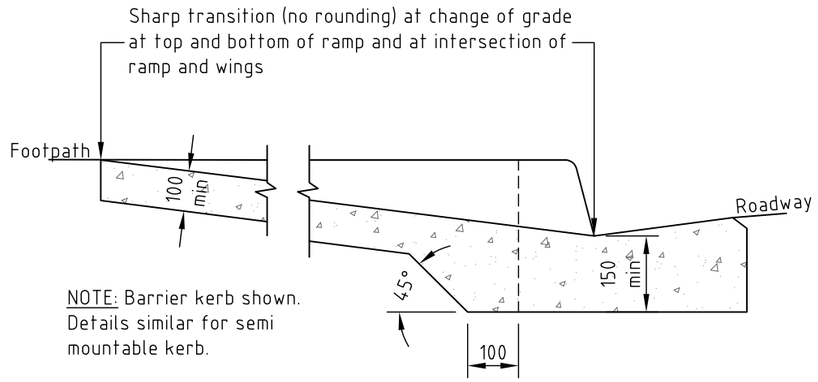
Drawing: STREET NAME SIGN

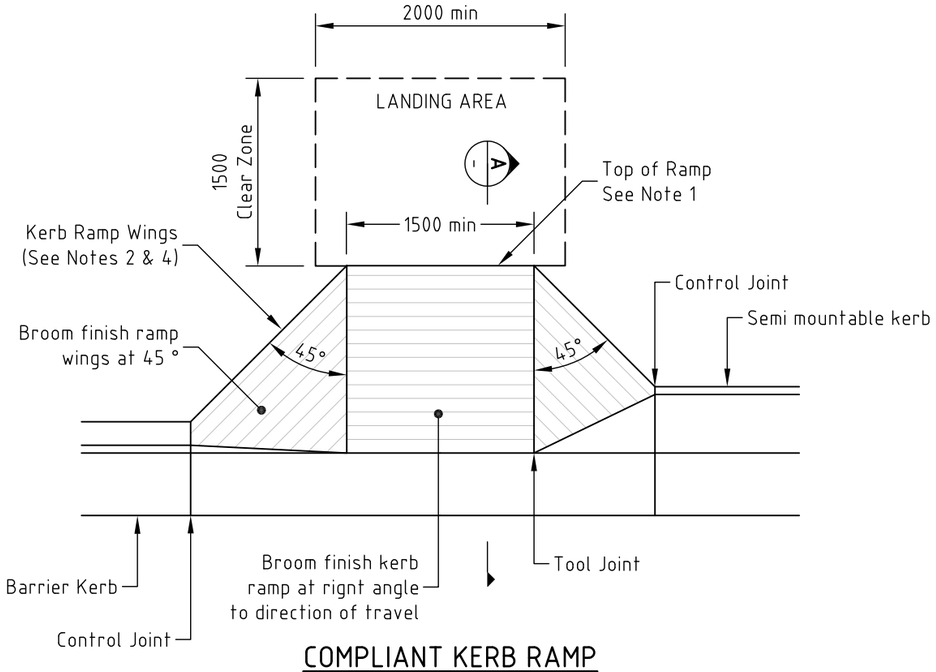
Design File / Drawing No. R-15 | Sheet of | Revision C | A3



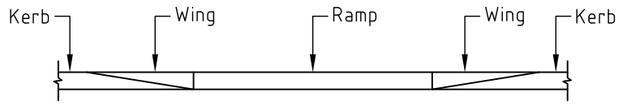
RAMP SLOPE



SECTION A

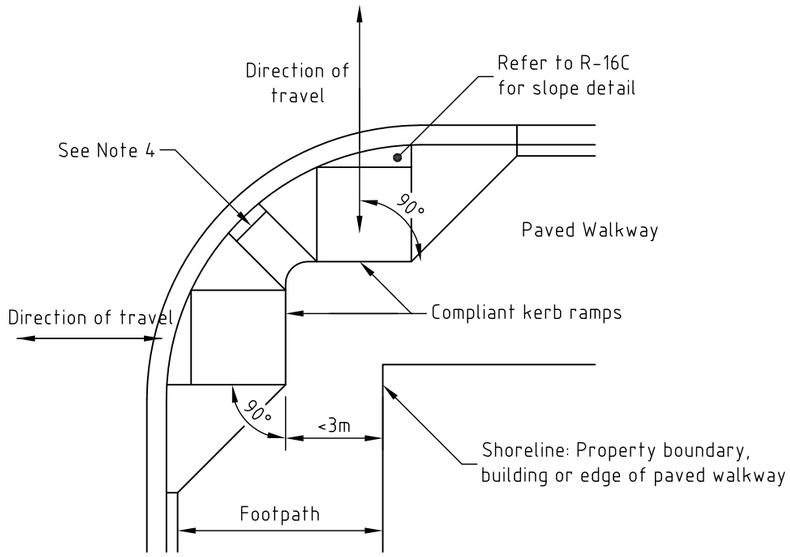


COMPLIANT KERB RAMP



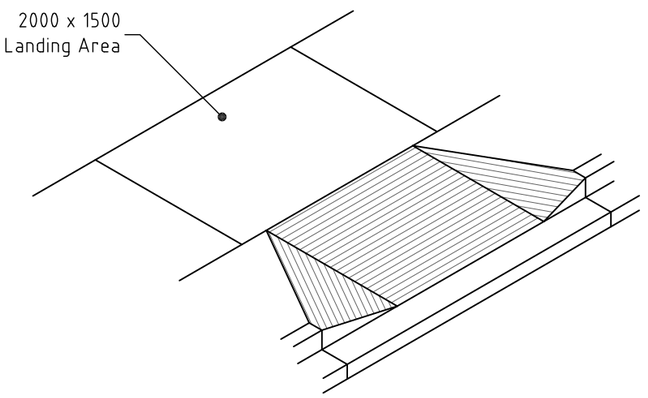
No rounding at intersection of kerb ramp and wings or at top and bottom of ramp.

RAMP ELEVATION



COMPLIANT KERB RAMP ALIGNMENT

Refer to R-16C/D for criteria where TGSI's are required.



PERSPECTIVE VIEW OF KERB RAMP

NOTES:

A compliant kerb ramp exists where all of the following are satisfied:

1. TOP OF RAMP: There shall be a minimum obstruction free wheelchair turnaround distance of 1500 beyond the top of the ramp. The sharp transition at the top and bottom of the ramp shall be perpendicular to the direction of travel. The top of ramp landing area shall have a minimum of 2000 long by 1500 wide clear zone.
2. RAMP: Maximum ramp slope for wheelchair access shall be 1:8. A sharp transition (no rounding) is to be maintained at the intersection of graded plane surfaces (top & bottom of ramp and intersection of ramp and wings). The intersection of the ramp and wings should be a tooled joint.
3. RAMP ALIGNMENT: Ramps shall be aligned parallel to the pedestrian direction of travel. Ramps on both sides of a carriageway shall be aligned with one another and the direction of travel.
4. KERB RAMP WINGS: The required wing angle is 45°. Subject to the approval of Council, wings may be angled less than 45° if the wing is required to be clear of traffic signals hardware, other wings or utility pits/manholes. Wing mangle may also be reduces at obtuse angles intersections. Wing widths shall be between 600 and 1500. A maximum slope of 1 on 4 is to be maintained on the wings at the kerb face (ie. min. 600 wide wing for a 150 kerb). At least a 1m kerb upstand is desirable between adjacent kerb ramps wings on an intersection surface.
5. SURFACE OF RAMP: : Surface of ramp and sloping sides shall be slip resistant as specified in AS/NZS 1428.1.

General:

6. CONCRETE: To be class N32/10. All concrete to be broom finished. Ramp to be cast monolithically with the channel or tray.
7. All dimensions are in millimetres unless shown otherwise.

Australian Standards to Reference:

AS2876-200 : Concrete Kerbs and Channels (Gutters) - Manually or Machine Placed)
AS1428.1-2009 : Design for access and mobility - Part 1 General Requirements for Access - New Building Work
AS/NZS 1428.4.1-2009 : Design for Access and Mobility - Part 4.1 Means to assist the orientation of people with vision impairment - Tactile Ground Surface Indicators

DERIVED FROM IPWEA STD DWG R-090
SUPERSEDES BOONAH - STD.R-0007,
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Scenic Rim Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

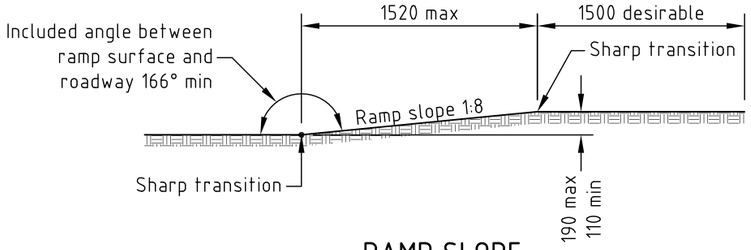
Drawing: KERB RAMP RAMPED REDESTRIAN CROSSINGS

Design File
Drawing No. R-16A

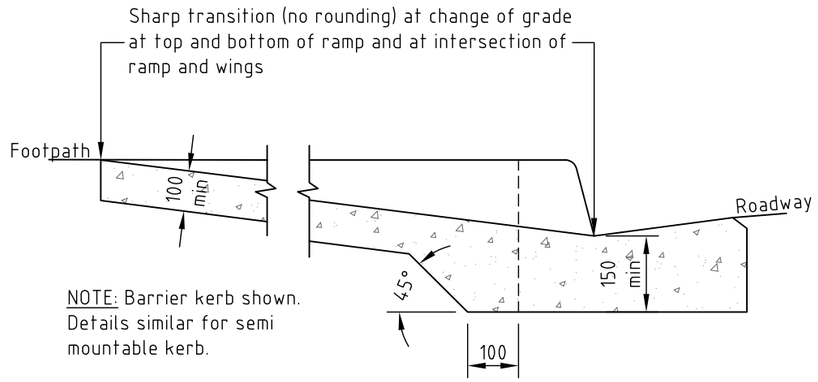
Sheet of

Revision A

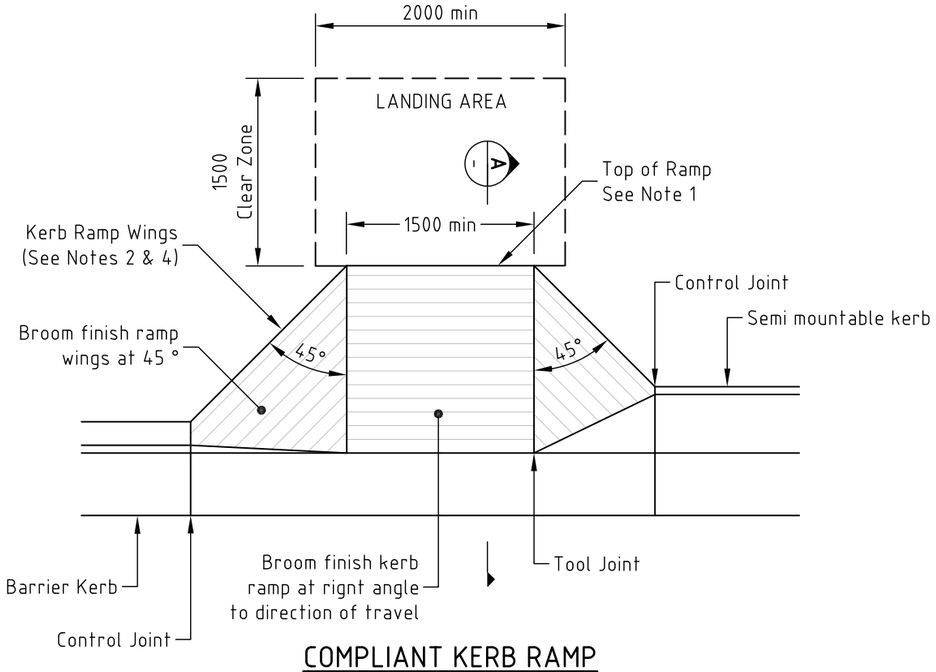
A3



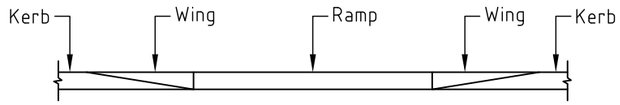
RAMP SLOPE



SECTION A

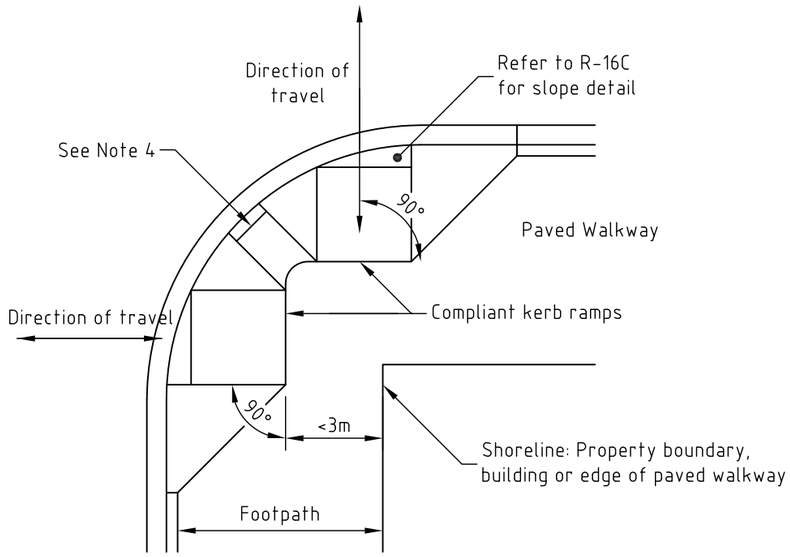


COMPLIANT KERB RAMP



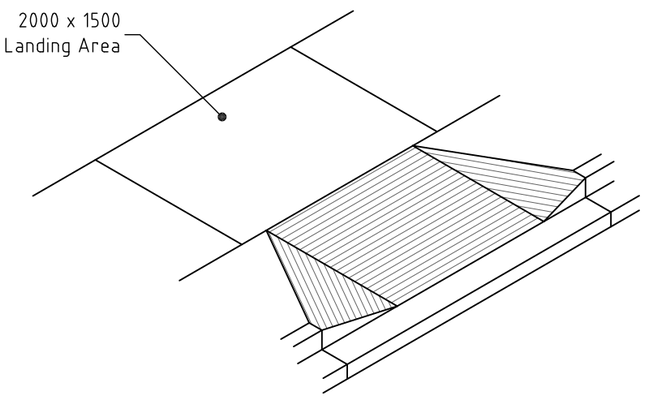
No rounding at intersection of kerb ramp and wings or at top and bottom of ramp.

RAMP ELEVATION



COMPLIANT KERB RAMP ALIGNMENT

Refer to R-16C/D for criteria where TGSI's are required.



PERSPECTIVE VIEW OF KERB RAMP

NOTES:

A compliant kerb ramp exists where all of the following are satisfied:

1. TOP OF RAMP: There shall be a minimum obstruction free wheelchair turnaround distance of 1500 beyond the top of the ramp. The sharp transition at the top and bottom of the ramp shall be perpendicular to the direction of travel. The top of ramp landing area shall have a minimum of 2000 long by 1500 wide clear zone.
2. RAMP: Maximum ramp slope for wheelchair access shall be 1:8. A sharp transition (no rounding) is to be maintained at the intersection of graded plane surfaces (top & bottom of ramp and intersection of ramp and wings). The intersection of the ramp and wings should be a tooled joint.
3. RAMP ALIGNMENT: Ramps shall be aligned parallel to the pedestrian direction of travel. Ramps on both sides of a carriageway shall be aligned with one another and the direction of travel.
4. KERB RAMP WINGS: The required wing angle is 45°. Subject to the approval of Council, wings may be angled less than 45° if the wing is required to be clear of traffic signals hardware, other wings or utility pits/manholes. Wing mangle may also be reduces at obtuse angles intersections. Wing widths shall be between 600 and 1500. A maximum slope of 1 on 4 is to be maintained on the wings at the kerb face (ie. min. 600 wide wing for a 150 kerb). At least a 1m kerb upstand is desirable between adjacent kerb ramps wings on an intersection surface.
5. SURFACE OF RAMP: : Surface of ramp and sloping sides shall be slip resistant as specified in AS/NZS 1428.1.

General:

6. CONCRETE: To be class N32/10. All concrete to be broom finished. Ramp to be cast monolithically with the channel or tray.
7. All dimensions are in millimetres unless shown otherwise.

Australian Standards to Reference:

AS2876-200 : Concrete Kerbs and Channels (Gutters) - Manually or Machine Placed)
AS1428.1-2009 : Design for access and mobility - Part 1 General Requirements for Access - New Building Work
AS/NZS 1428.4.1-2009 : Design for Access and Mobility - Part 4.1 Means to assist the orientation of people with vision impairment - Tactile Ground Surface Indicators

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SUPERSEDES BOONAH - STD.R-0007,
BEAUDESERT - 50414, IPSWICH - SR.18

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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DATE 6 September 2010

Scales

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Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS

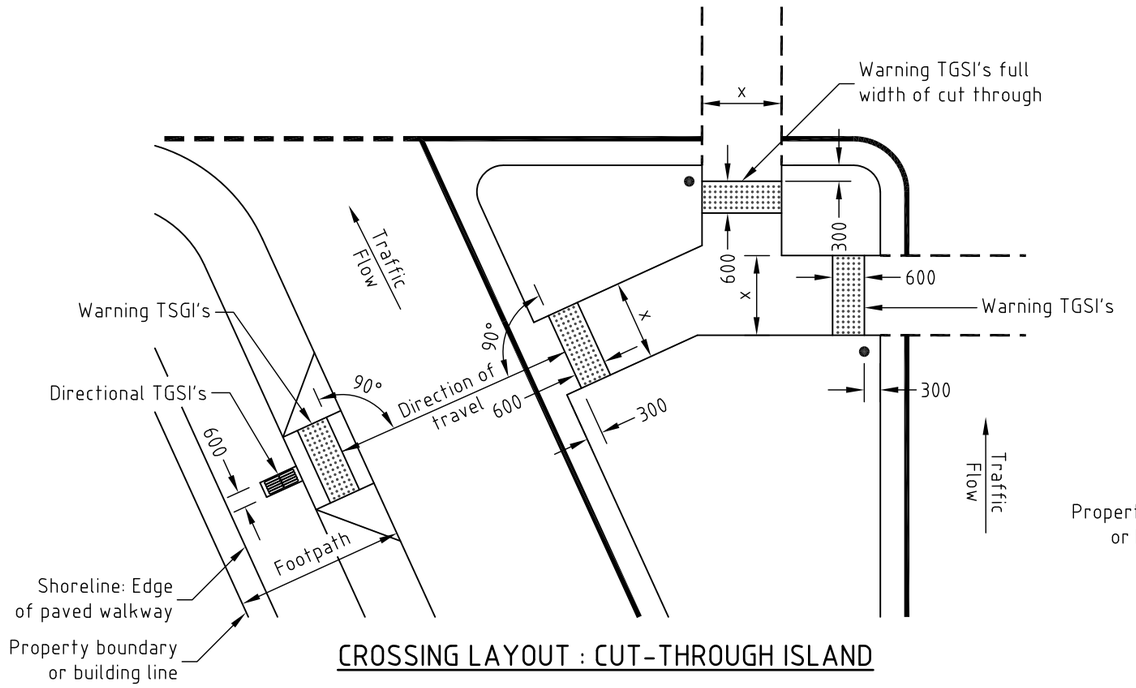
Drawing: KERB RAMP RAMPED REDESTRIAN CROSSINGS

Design File
Drawing No. R-16A

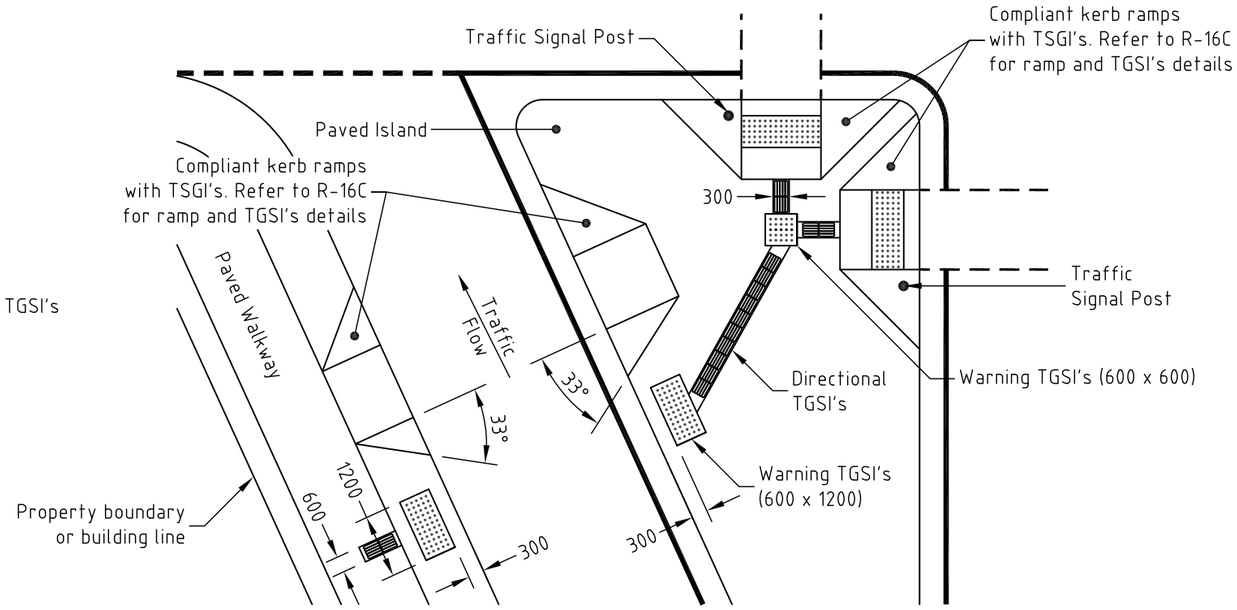
Sheet of

Revision A

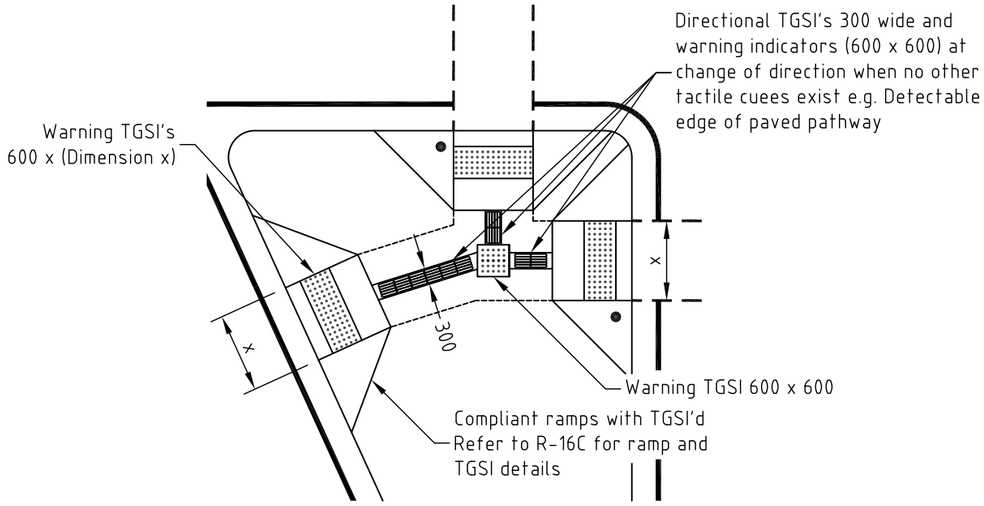
A3



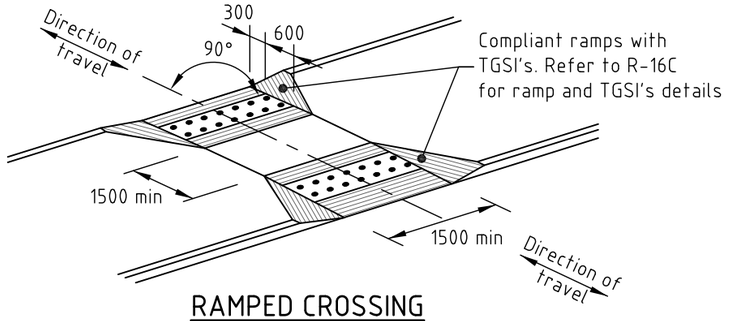
CROSSING LAYOUT : CUT-THROUGH ISLAND



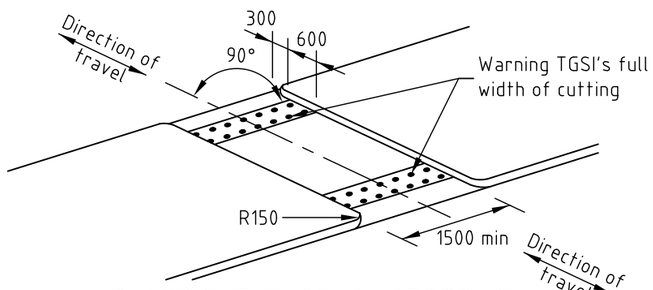
CROSSING LAYOUT : ALTERNATIVE DUAL SPERATE TGSI TREATMENT



CROSSING LAYOUT : KERB RAMPS WITH DIRECTIONAL TGSI OR WALKWAY EDGE



RAMPED CROSSING



ISLAND CUT-THROUGH CROSSING

NOTES:

1. Ramp details and notes as per R-16A.
2. Tactile Ground Surface Indicator's (TGSI's) shall be in accordance with AS1428.4.1-2009.
3. Directional TGSI's to continue to the top of kerb ramp, unless edge of paved walkway provides consistent detectable cue for pedestrians with vision impairment.
4. Cut-through islands are to be constructed parallel to the direction of travel.
5. Installation of TGSI's on ramped kerb crossings, refer to R-16C/D.
6. TGSI's to be provided at designated crossing points when new designs or modifications are being carried out to island or median cut through's.
7. All dimensions are in millimetres unless shown otherwise.

Australia Standards to Reference:

AS2876-2000 : Concrete Kerbs and Channels (Gutters) - Manually or Machine Placed.
AS1428.1-2009 : Design for Access and Mobility - Part 1 General Requirements for Access - New building work.
AS/NZS 1428.4.1-2009 : Design for Access and Mobility - Part 4.1 Means to assist the orientation of people with vision impairment - Tactile Ground Surface Indicators.

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SUPERSEDES BOONAH - STD.R-0007,
BEAUDESERT - 50414, IPSWICH - SR.18

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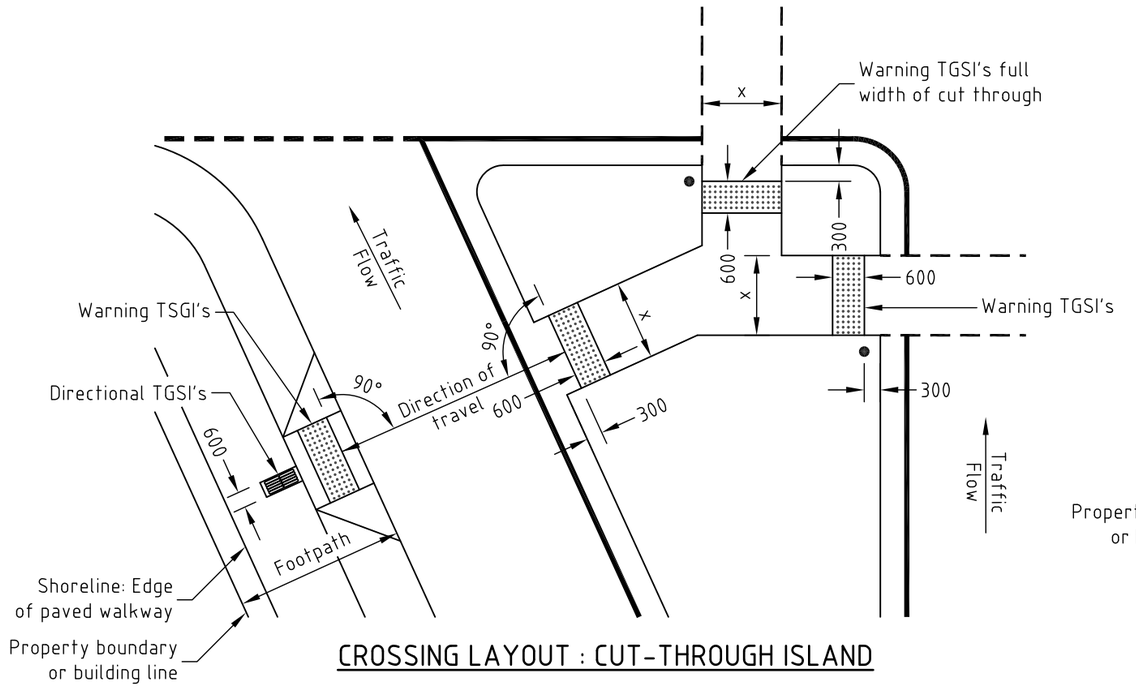
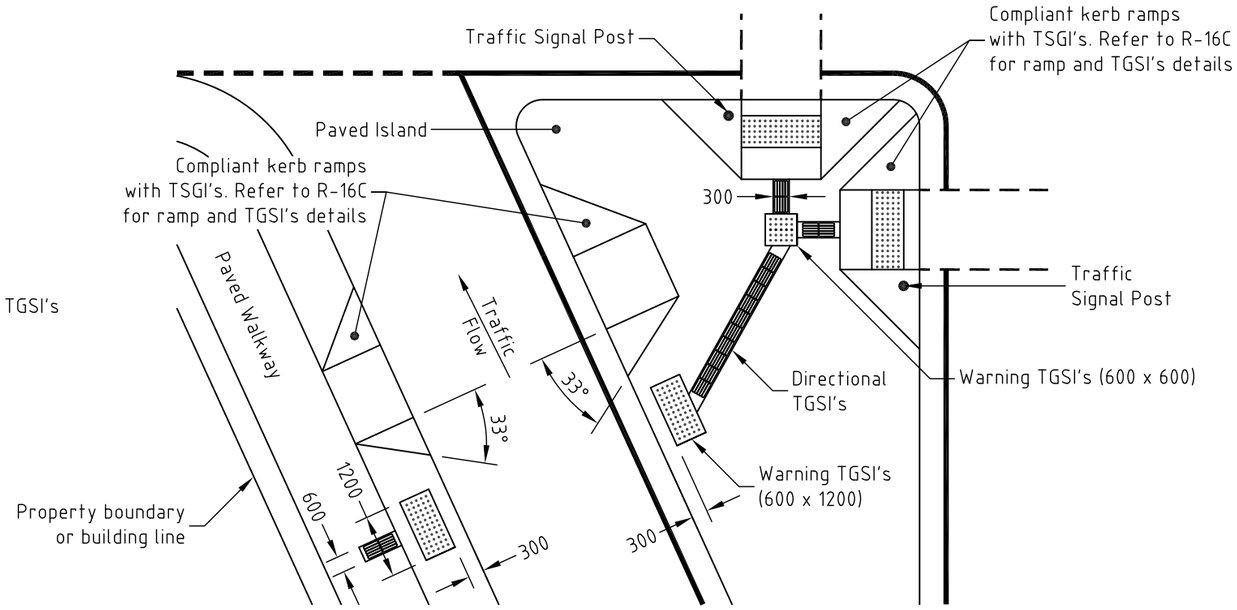
SCENIC RIM Regional Council
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS
Drawing: KERB RAMP
RAMPED AND CUT THROUGH TREATMENTS FOR PEDESTRIAN CROSSINGS, SLIP LANES AND MEDIANS

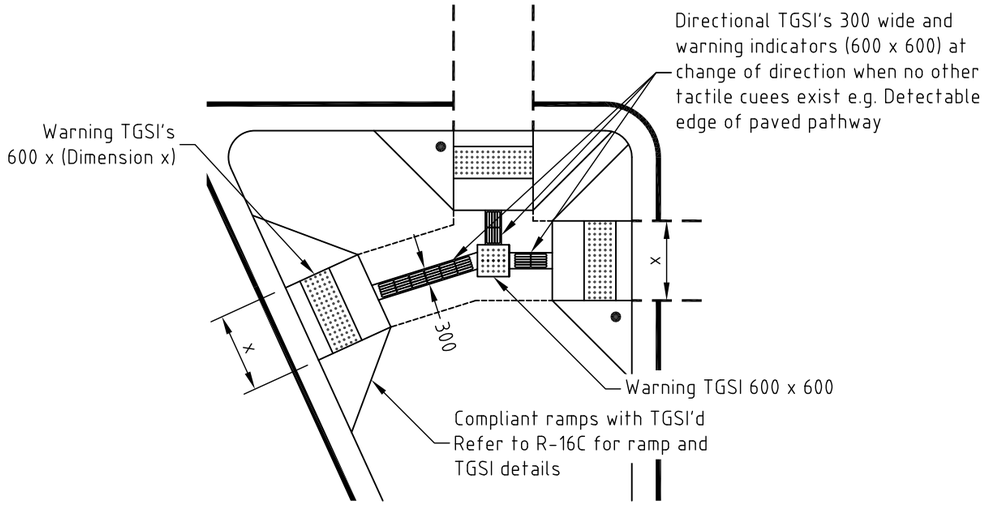
Design File / Drawing No. R-16B | Sheet of | Revision A | A3



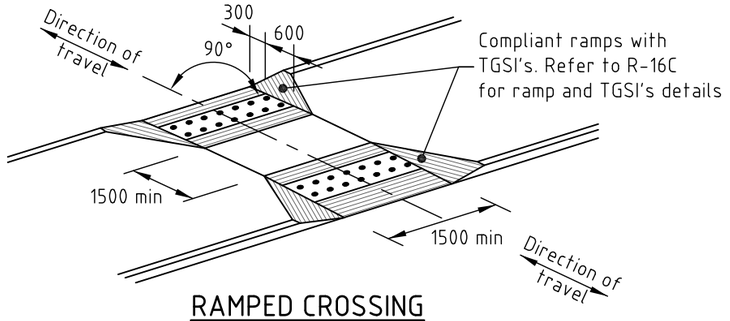
CROSSING LAYOUT : CUT-THROUGH ISLAND



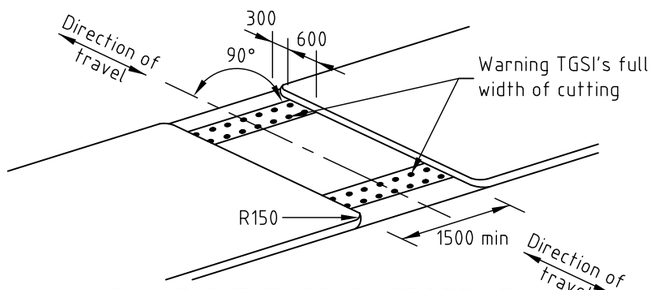
CROSSING LAYOUT : ALTERNATIVE DUAL SPERATE TGSI TREATMENT



CROSSING LAYOUT : KERB RAMPS WITH DIRECTIONAL TGSI OR WALKWAY EDGE



RAMPED CROSSING



ISLAND CUT-THROUGH CROSSING

NOTES:

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AS/NZS 1428.4.1-2009 : Design for Access and Mobility - Part 4.1 Means to assist the orientation of people with vision impairment - Tactile Ground Surface Indicators.

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SUPERSEDES BOONAH - STD.R-0007,
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SCENIC RIM Regional Council
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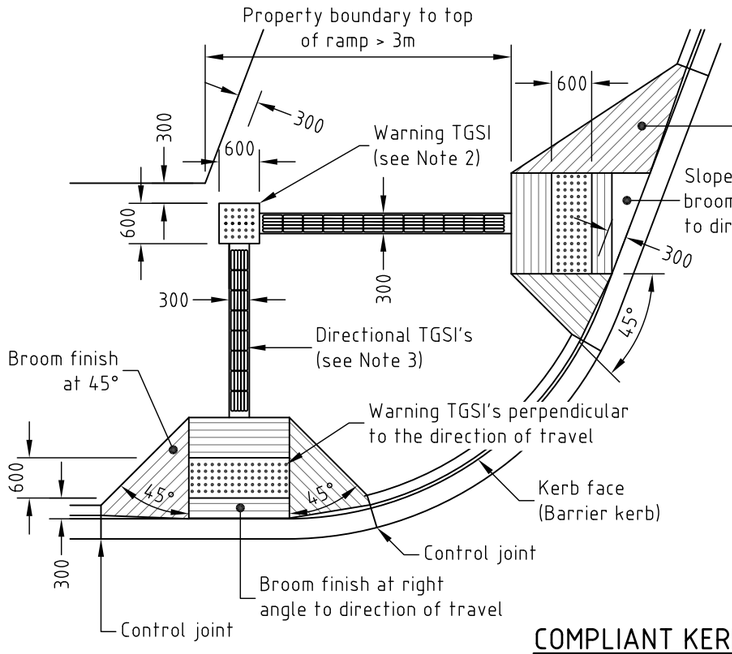
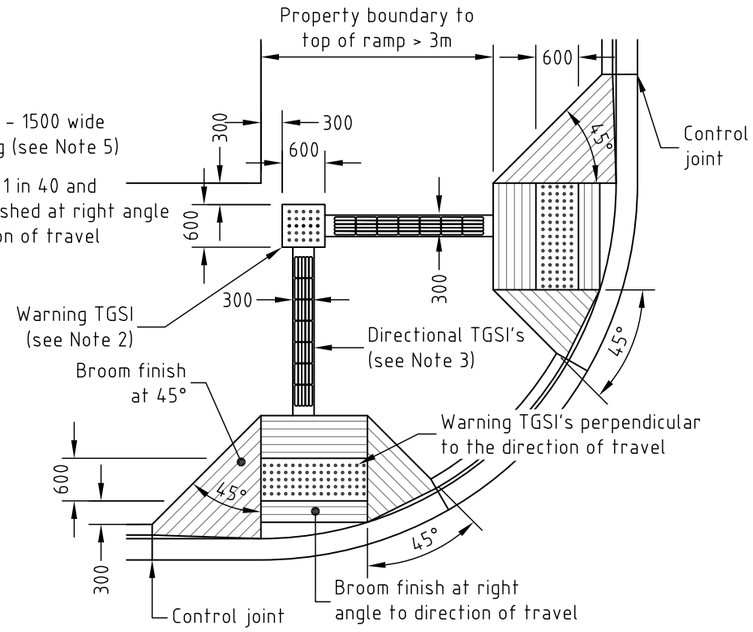
Project: SRRC STANDARD DRAWINGS ROADS
Drawing: KERB RAMP
RAMPED AND CUT THROUGH TREATMENTS FOR PEDESTRIAN CROSSINGS, SLIP LANES AND MEDIANS

Design File / Drawing No. R-16B | Sheet of | Revision A | A3





COMPLIANT KERB RAMPS - INCL. TGSI'S APPLICATION EXAMPLES

COMPLIANT KERB RAMP - INCL. TGSI'S

NOTES:

1. For details of compliant kerb ramps, refer to R-16A/B.
2. Warning indicators required adjacent to shoreline (property boundary) to indicate change/choice of direction.
3. Directional indicators are required from the warning indicator pad to the top of the kerb ramps.
4. Warning indicators are required on the kerb ramp to warn of the hazard (the road/traffic). Can be omitted if kerb ramp is in accordance with AS1428.1-2009 and <3m from building line.
5. Kerb ramp wings may be angled at less than 45 ° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced to obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
6. All dimensions are in millimetres unless shown otherwise.

GUIDELINES:

Guidelines for the installation of Tactile Ground Surface Indicators (TGSI's) for pedestrians with a vision impairment at ramped kerb crossings (kerb ramp).

A. Warning and directions TGSI's shall conform with AS/NZS 1428.4.1-2009 - Design for Access and Mobility - Part 4 : Tactile Indicators
B. Tactile indicators shall have 30% minimum luminance contract to the surrounding surfaces, and be of contrasting colour, preferably safety yellow (Golden Yellow Y14 or Sunflower Yellow Y15 - AS2700). Luminance contrast shall be achieved in all conditions (eg. wet/dry, day/night). Tactile indicators and their base shall be slip resistant. Refer to AS/NZS 1428.4.1-2009 for luminance contrast and slip resistance requirements.
C. Warning TGSI's shall be installed (dimensions in brackets are warning TGSI dimensions):
   a. to warn pedestrians with a vision impairment of hazards.
   b. 300 from any hazard e.g. roadway (600 deep x full width of kerb ramp, path of travel or cut through median/island)
   c. perpendicular to the direction of travel
   d. at the intersection of 2 (or more) directional indictor strips to indicate a change of directions (600 x 600)
   e. when kerb ramp gradient is shallower than 1:8.5
D. Directional TGSI's shall be installed (Dimensions in brackets are directional TGSI dimensions):
   a. to give directional guidance to pedestrians with a vision impairment in the absence of normally available cues
   b. along the centreline of the direction of travel
   c. at mid-block kerb ramps or street crossing to direct pedestrians with a vision impairment to the crossing point (600 x property boundary to top of kerb ramp)
   d. between a warning indicator pad indicating a choice of directions and the top of kerb ramps where 2 pedestrian crossings exist on a corner of an intersection
E. The installation of TGSI should be prioritised as follows:
   a. NO TGSI's REQUIRED when all criteria at Not G are satisfied
   b. multiple entry kerb ramp treatment installed (dual entry or dual separate). Multiple entry kerb ramps must only be installed when there is sufficient space on both sides of the crossing (See AS/NZS 1428.4.1-2009 for details of multiple entry treatments)
   c. warning TGSI on the face of a compliant kerb ramp
F. If a warning TGSI treatment is installed, a warning TGSI treatment must be installed on the other side of the crossing.
G. TGSI's are not required at a crossing point it:
   a. a compliant kerb ramp is installed refer to R-16A
   b. the top of ramp is within 3m of the end of the shore line (property boundary, building line or edge of paved walkway), and orientated in terms of normally available cues

In these situations, a colour treatment of the full width and length of the face of the ramp may assist pedestrians with a vision impairment.

H. Examples of normally available cues that aid people with a vision impairment are:
   a. sharp transitions in grade between surfaces eg. top and bottom of a 1 on 8 kerb ramp, change in grade between ramp and ramp wings
   b. audio tactile push buttons, refer MUTCD Parts 10 & 14 for location and orientation or pedestrian push button along is an insufficient cue for a pedestrian with a vision impairment to find the crossing point
   c. a detectable edge of paved walkway or cut through island

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SUPERSEDES BOONAH - STD.R-0007,
BEAUDESERT - 50414, IPSWICH - SR.18

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DATE 6 September 2010

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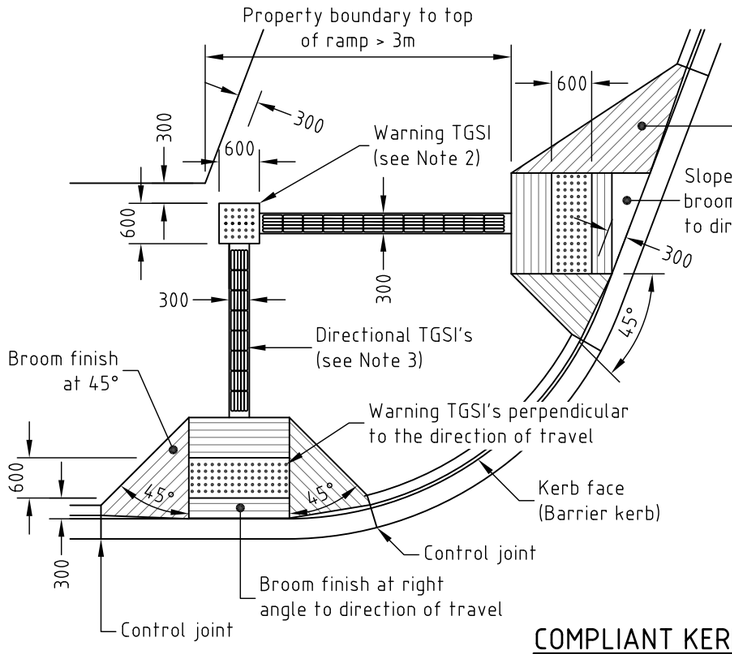
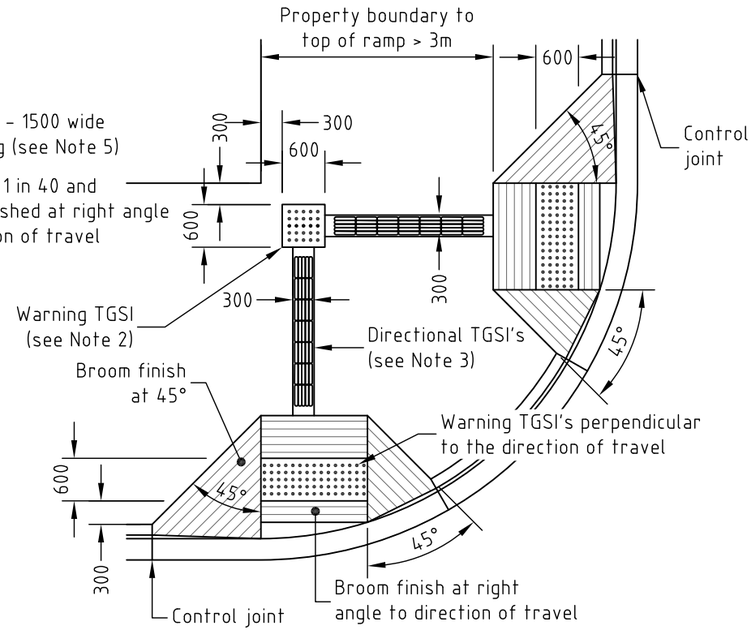
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS ROADS
Drawing: INSTALLATION OF TGSI'S ON RAMPED KERB CROSSINGS
Design File / Drawing No. R-16C | Sheet | of | Revision A | A3





COMPLIANT KERB RAMPS - INCL. TGSI'S APPLICATION EXAMPLES

COMPLIANT KERB RAMP - INCL. TGSI'S

NOTES:

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5. Kerb ramp wings may be angled at less than 45 ° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced to obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
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   b. audio tactile push buttons, refer MUTCD Parts 10 & 14 for location and orientation or pedestrian push button along is an insufficient cue for a pedestrian with a vision impairment to find the crossing point
   c. a detectable edge of paved walkway or cut through island

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SUPERSEDES BOONAH - STD.R-0007,
BEAUDESERT - 50414, IPSWICH - SR.18

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Scales

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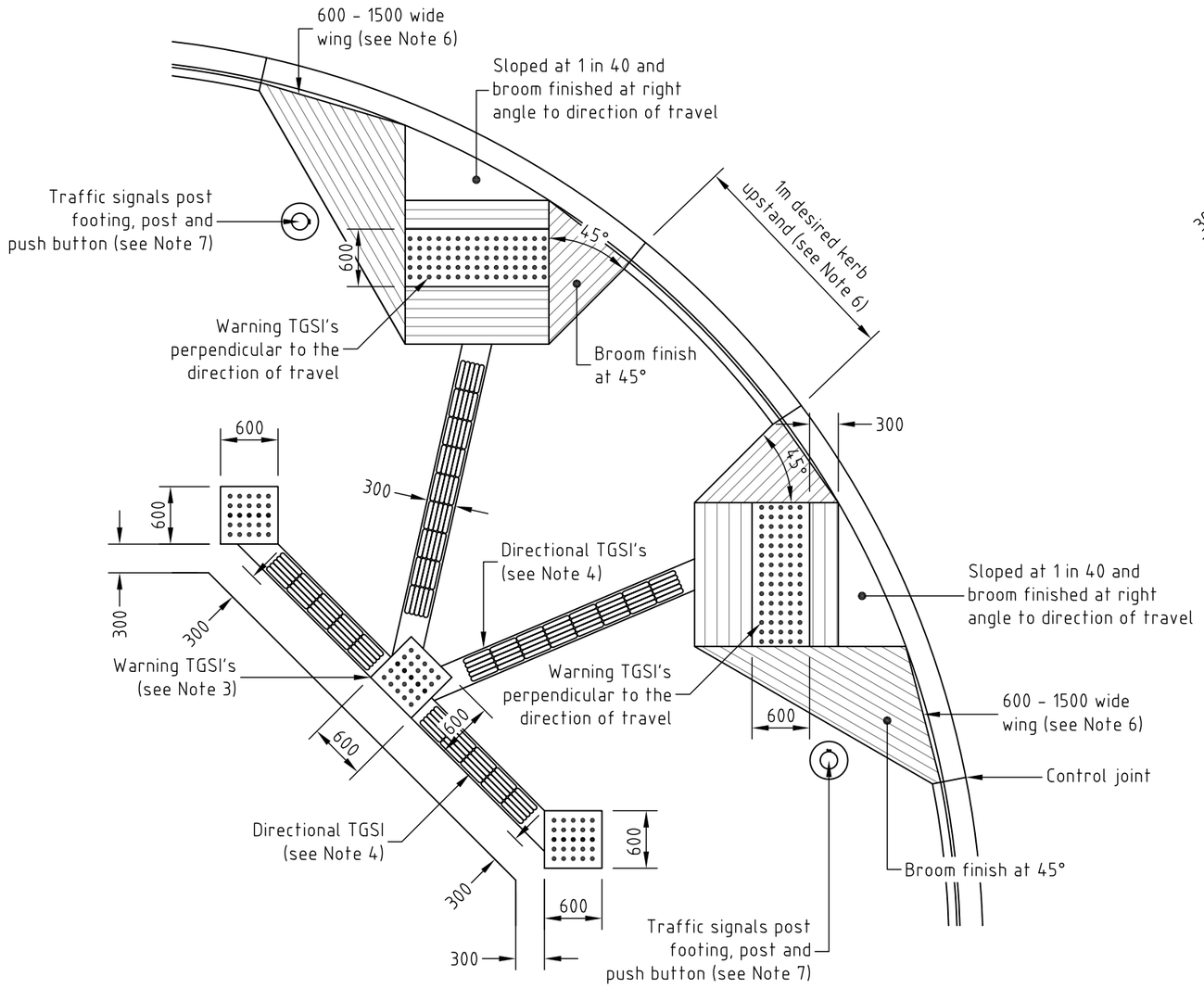
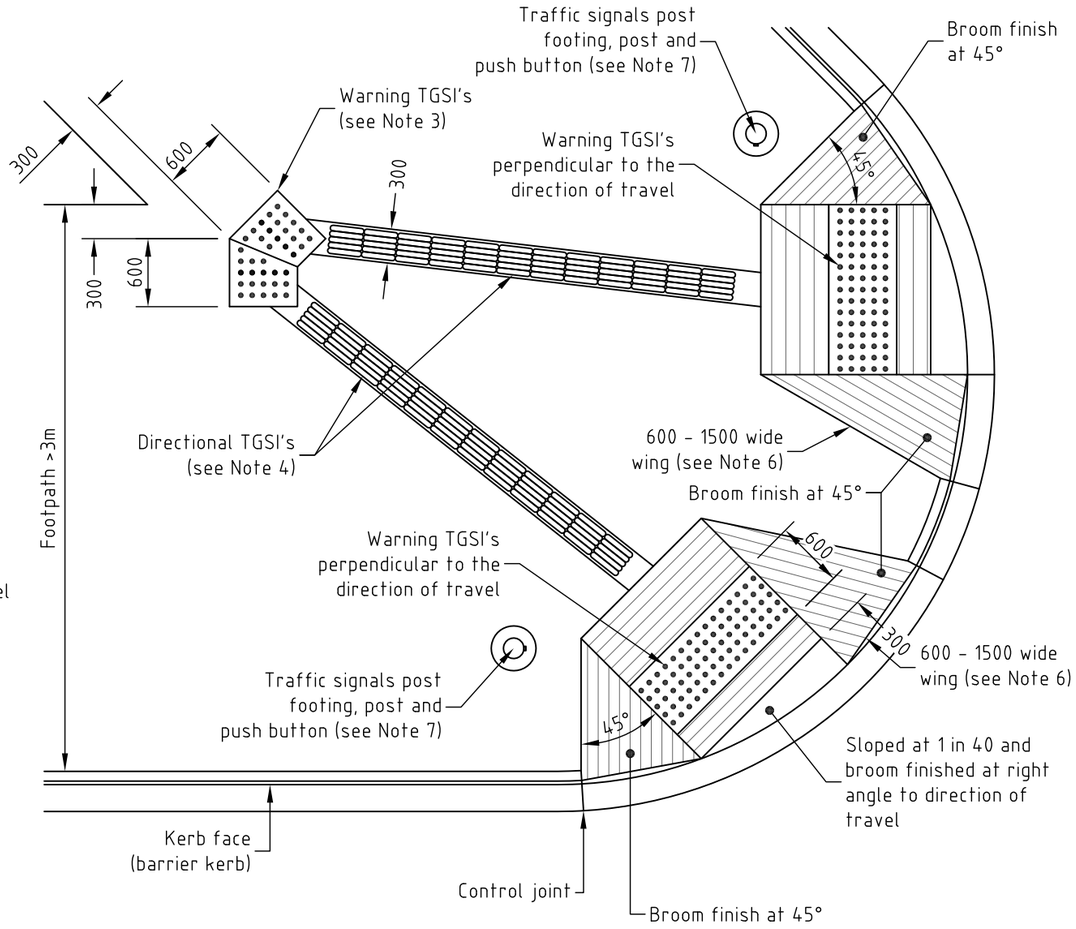
Project: SRRC STANDARD DRAWINGS ROADS
Drawing: INSTALLATION OF TGSI'S ON RAMPED KERB CROSSINGS
Design File / Drawing No. R-16C | Sheet | of | Revision A | A3





COMPLIANT KERB RAMPS AND TGSI'S APPLICATION EXAMPLES

NOTES:

1. for details of compliant kerb rams refer to R-16A.
2. For details of warning and directional TGSI's, refer to AS1428.1.12009.
3. Warning indicators required adjacent to property boundary to indicate change of direction.
4. Directional indicators are required from the warning indicator pad to the top of the kerb ramps.
5. Warning indicators are required on the kerb ramp to worn of the hazard (the road/traffic).
6. Kerb ramp wings may be angled at less than 45° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced to obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
7. For location of traffic signal posts and location and orientation of pedestrian push button assemblies refer to MUTCD Part 14. The push button post should be located on a level surface and the push button assembly located within the zone of common reach. refer to AS1428.2 i.e. button to be no more than 400mm outside the edge of a pathway or kerb ramp.
8. All dimensions are in millmetres unless shown otherwise.

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SUPERSEDES BOONAH – STD.R-0007,
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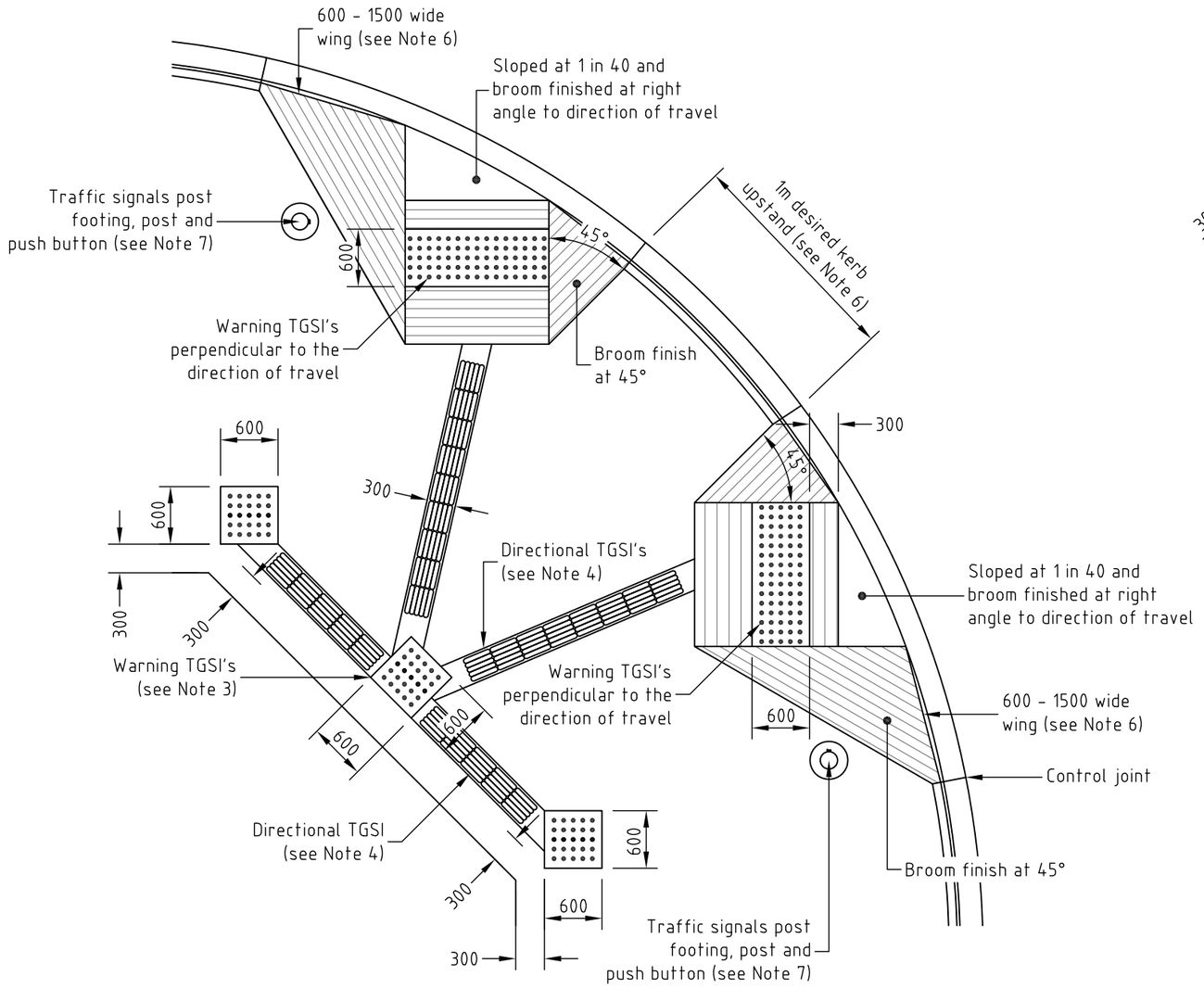
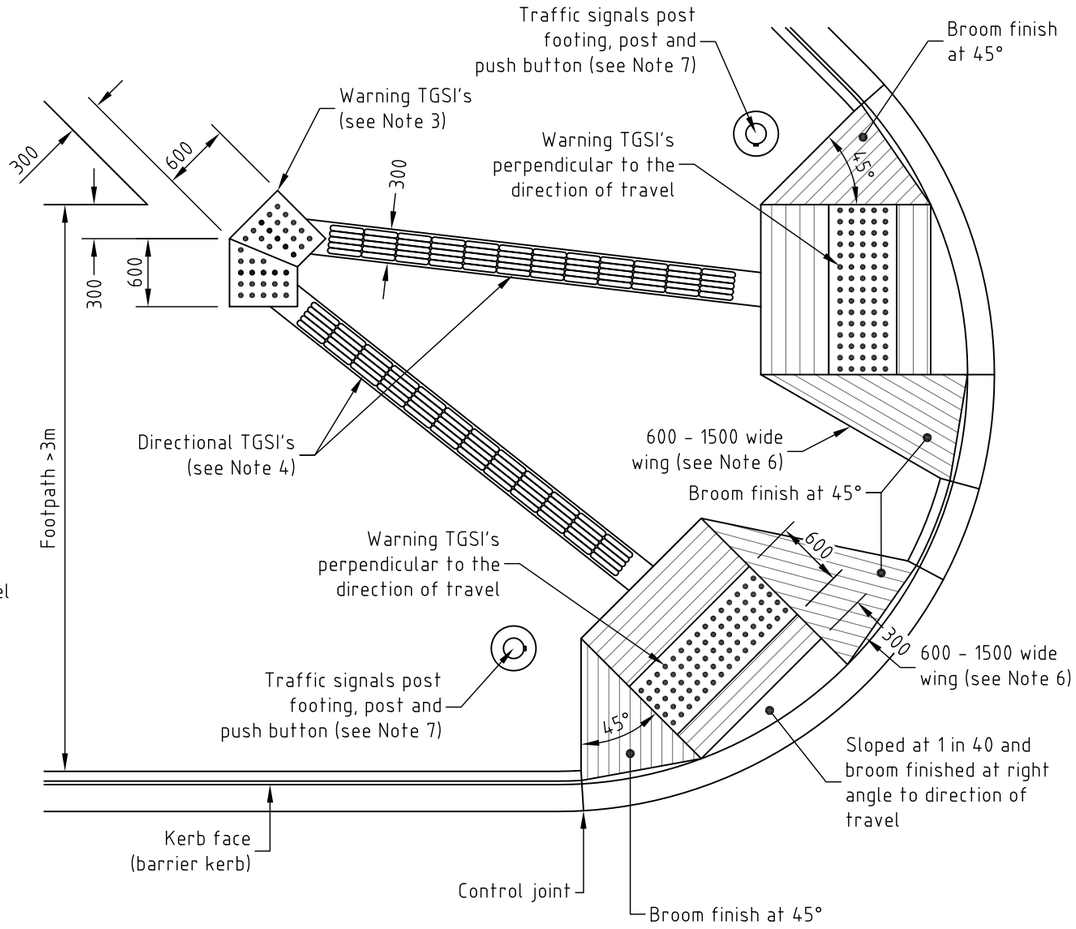
Project: SRRC STANDARD DRAWINGS ROADS

Drawing: INSTALLAION OF TGSI'S ON RAMPED KERB CROSSINGS APPLICATION EXAMPLES

Design File / Drawing No. R-16D | Sheet of | Revision A | A3





COMPLIANT KERB RAMPS AND TGSI'S APPLICATION EXAMPLES

NOTES:

1. for details of compliant kerb rams refer to R-16A.
2. For details of warning and directional TGSI's, refer to AS1428.1.12009.
3. Warning indicators required adjacent to property boundary to indicate change of direction.
4. Directional indicators are required from the warning indicator pad to the top of the kerb ramps.
5. Warning indicators are required on the kerb ramp to worn of the hazard (the road/traffic).
6. Kerb ramp wings may be angled at less than 45° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced to obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
7. For location of traffic signal posts and location and orientation of pedestrian push button assemblies refer to MUTCD Part 14. The push button post should be located on a level surface and the push button assembly located within the zone of common reach. refer to AS1428.2 i.e. button to be no more than 400mm outside the edge of a pathway or kerb ramp.
8. All dimensions are in millmetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-093
SUPERSEDES BOONAH – STD.R-0007,
BEAUDESERT – 50414, IPSWICH – SR.18

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales

Do NOT Scale this Drawing
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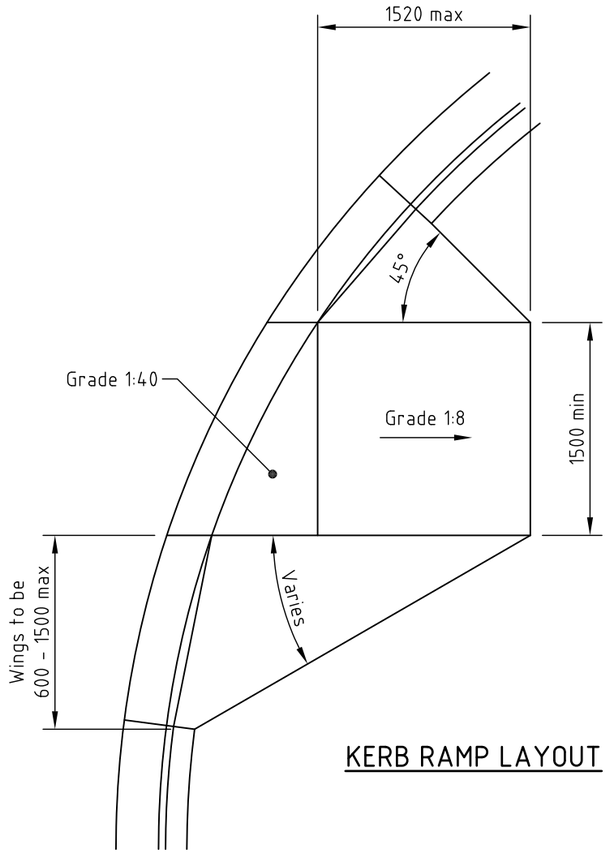
SCENIC RIM Regional Council

Works & Infrastructure Services

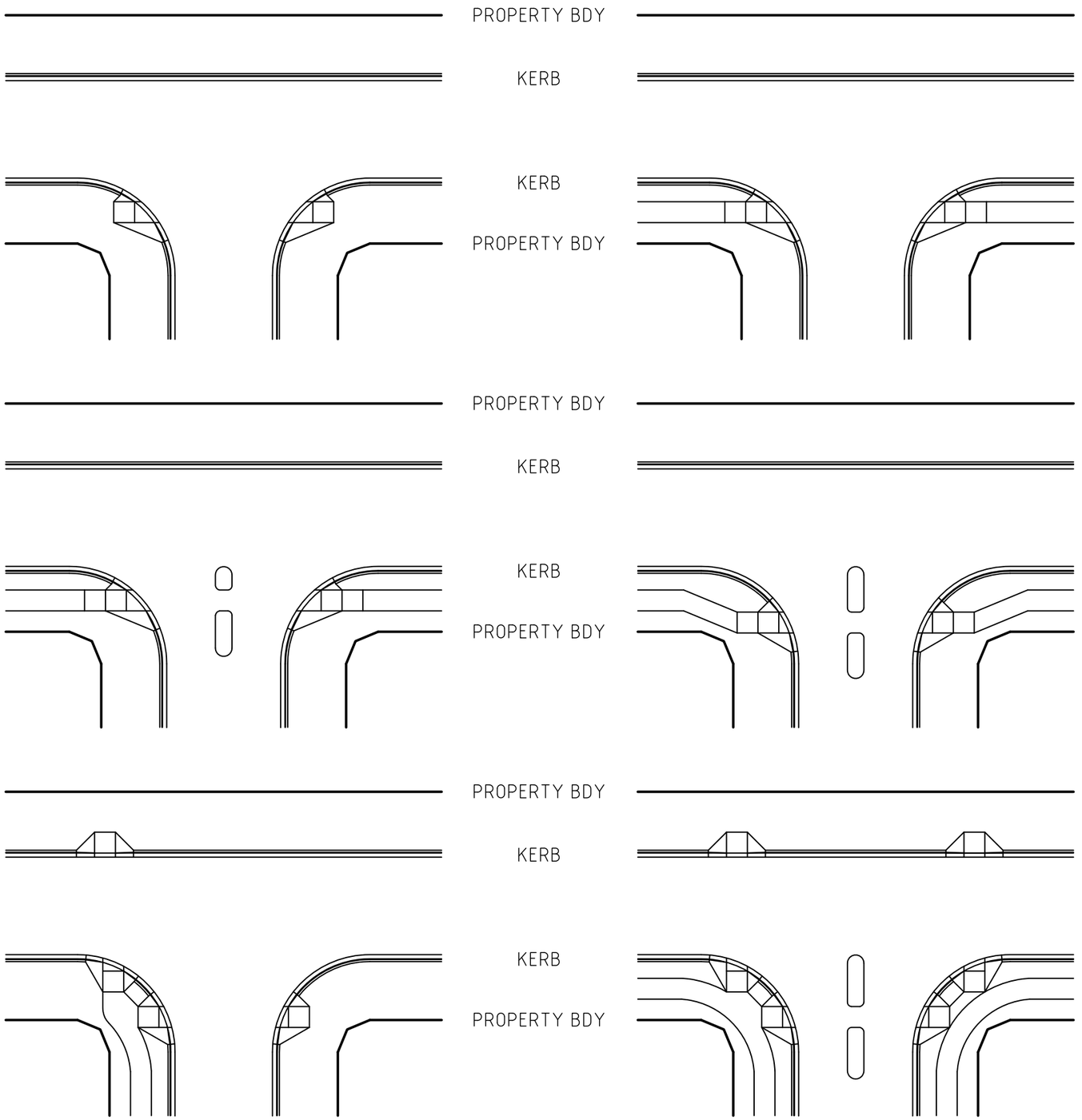
Project: SRRC STANDARD DRAWINGS ROADS

Drawing: INSTALLAION OF TGSI'S ON RAMPED KERB CROSSINGS APPLICATION EXAMPLES

Design File / Drawing No. R-16D | Sheet of | Revision A | A3



KERB RAMP LAYOUT



KERB RAMPS MUST ALWAYS ALIGN WITH THE OPPOSITE KERB RAMP & MEDIAN/ISLAND CUT THROUGHS

NOTES:

1. For details of compliant kerb ramps refer to R-16A.
2. For details of warning and directional TGSI's, refer to AS 1428.4.1-2009.
3. Kerb ramp wings may be angles at less than 45° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced at obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
4. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-094
SUPERSEDES BOONAH -STD.R-0007, BEAUDESERT - 50414, IPSWICH - SR.18

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

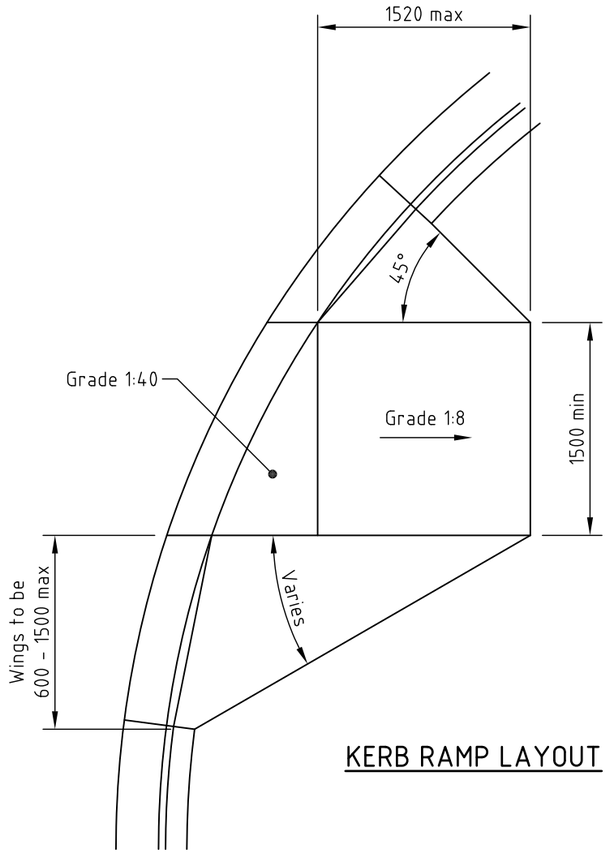
Drawing
KERB RAMP
LOCATIONS AND CONFIGURATIONS

Design File
Drawing No. R-17

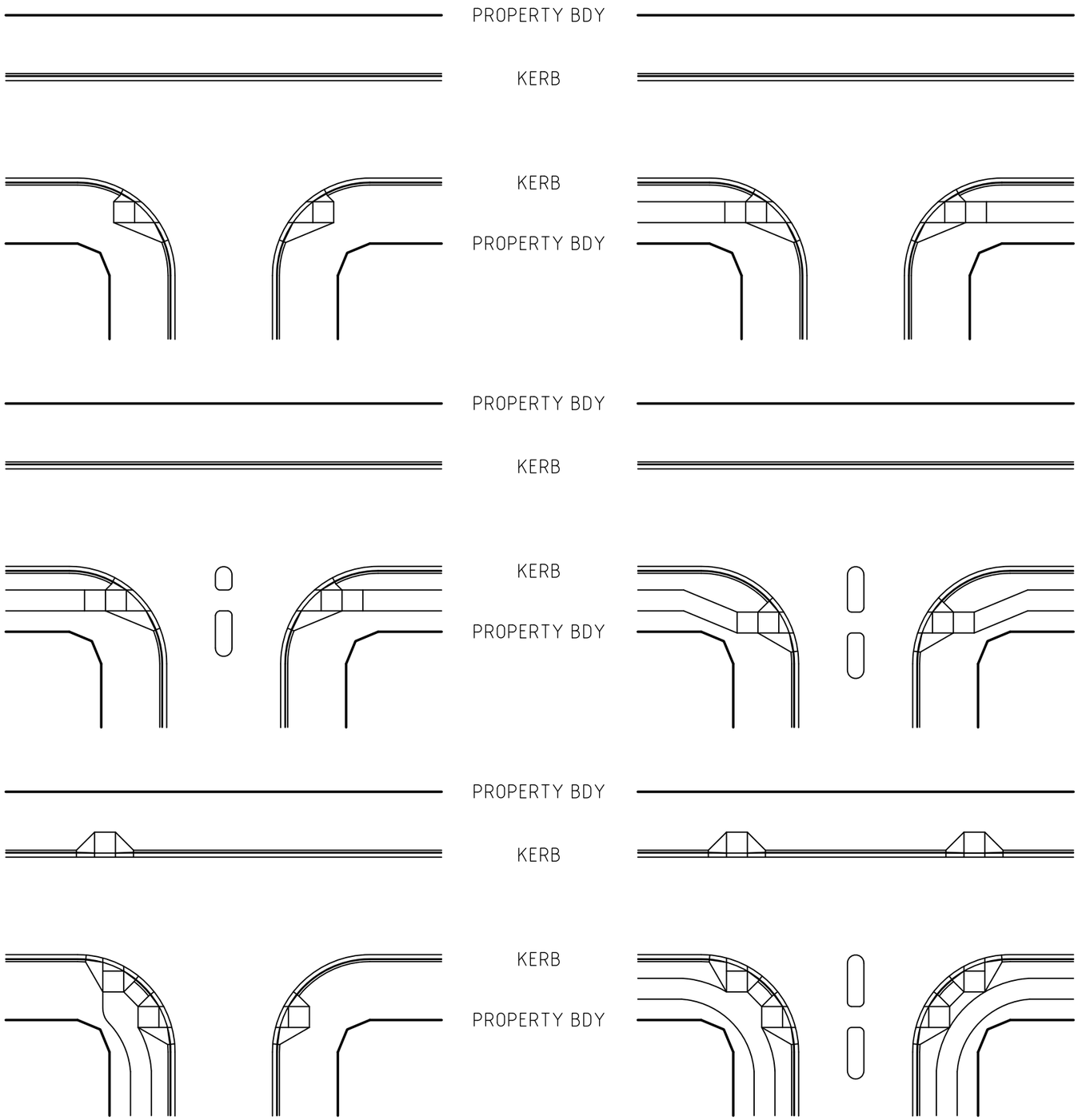
Sheet of

Revision A

A3



KERB RAMP LAYOUT



KERB RAMPS MUST ALWAYS ALIGN WITH THE OPPOSITE KERB RAMP & MEDIAN/ISLAND CUT THROUGHS

NOTES:

1. For details of compliant kerb ramps refer to R-16A.
2. For details of warning and directional TGSI's, refer to AS 1428.4.1-2009.
3. Kerb ramp wings may be angles at less than 45° if required to be clear of signals hardware, other kerb ramps or utility pits/manholes. Kerb ramp wings may also be reduced at obtuse angled intersections, wings shall have a width between 600mm and 1500mm. A maximum of 1:4 slope on kerb ramp wings should be maintained (600mm wide wing for a 150mm kerb). A 1m kerb upstand is desirable between adjacent ramp wings (which may necessitate reduced wing angles).
4. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-094
SUPERSEDES BOONAH -STD.R-0007, BEAUDESERT - 50414, IPSWICH - SR.18

Issue	Amendment	App'd	Date
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ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

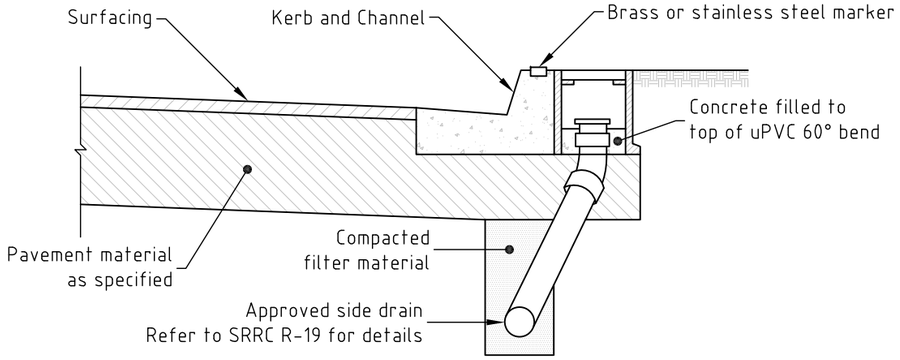
Drawing
KERB RAMP
LOCATIONS AND CONFIGURATIONS

Design File
Drawing No. R-17

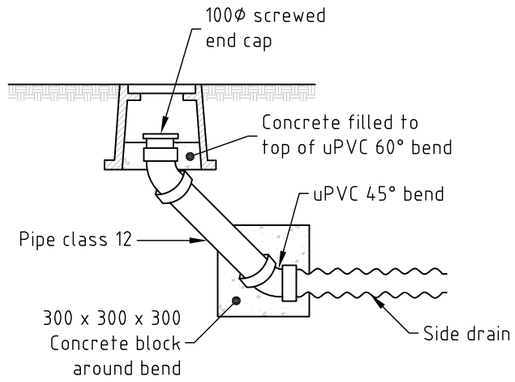
Sheet of

Revision A

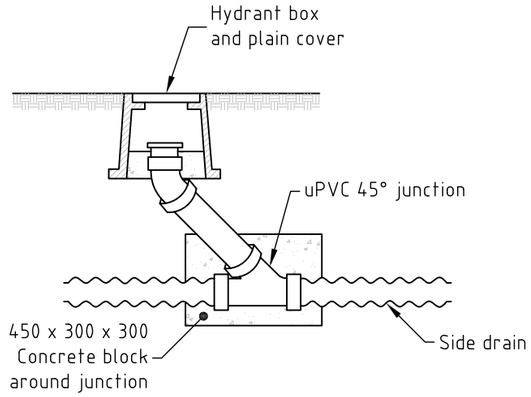
A3



BEHIND KERB



SIDE DRAIN



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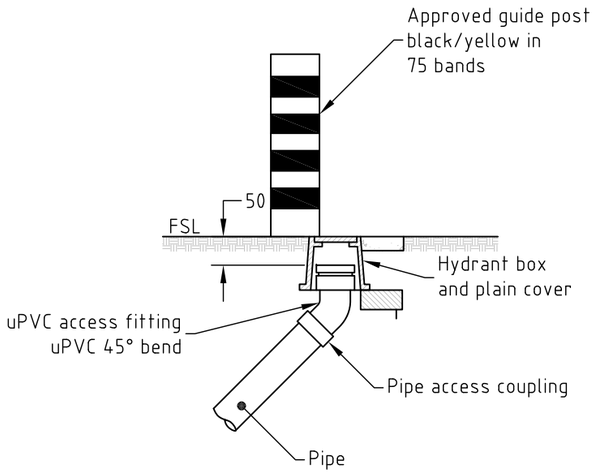
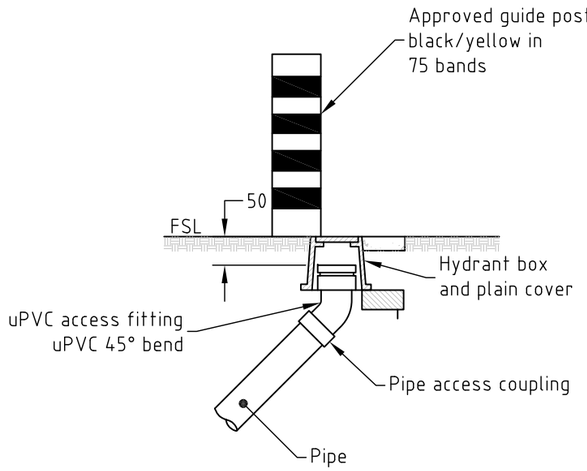
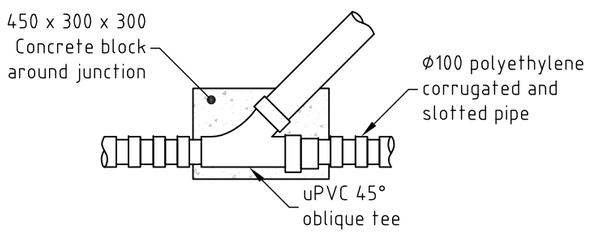
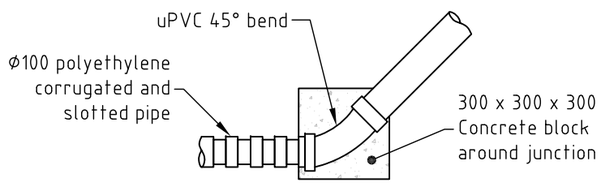
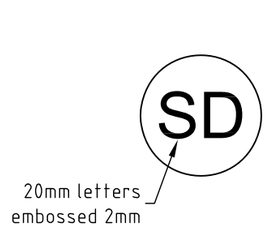




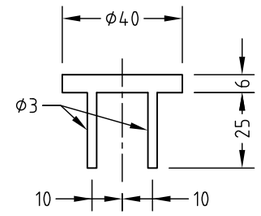




SUBSOIL DRAIN



PLAN



SECTION

BRASS MARKER DEATAIL

Approved proprietary stainless steel markers
also permitted.

NOTES:

1. All pipes and fittings other than subsoil drains to be Ø100 Class 12 pipe.
2. All subsoil drains, polyethylene corrugated slotted pipe to AS 2439.1 (Perforated Plastics Drainage and Effluent Pipe and Fittings), with sock, discharge at 200 above invert level unless approved otherwise (0.5% min grade).
3. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG R-141
SUPERSEDES BOONAH - STD.R-0018,
BEAUDESERT - 50411, IPSWICH - SR.20

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

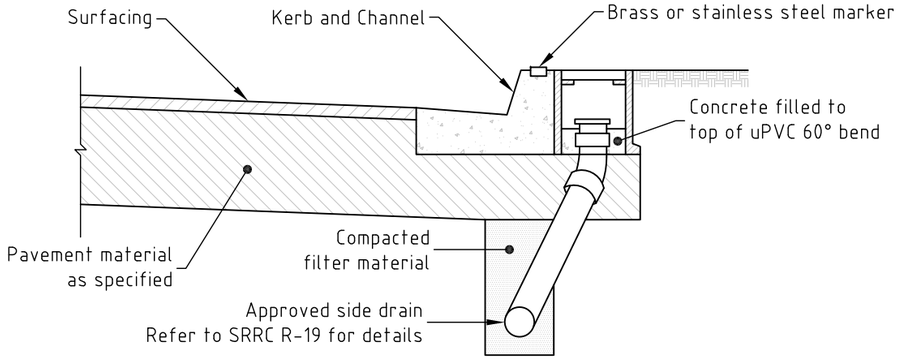
Drawing
SUBSOIL DRAINS
ACCESS POINTS

Design File
Drawing No. R-18

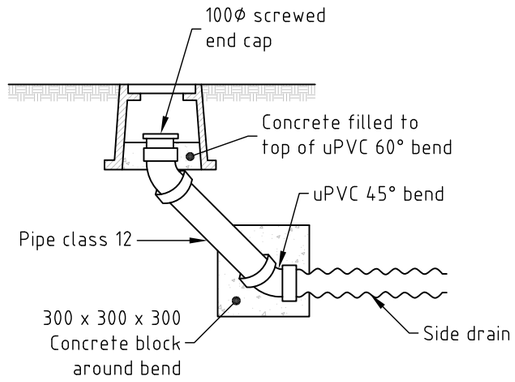
Sheet of

Revision A

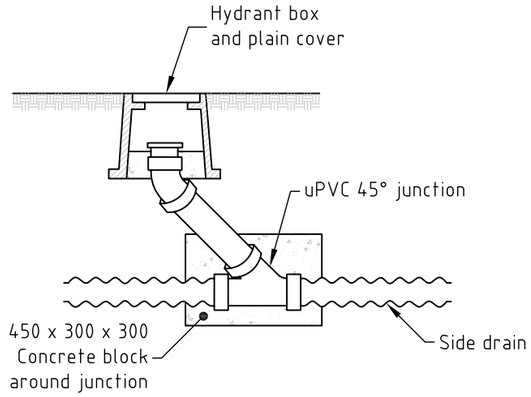
A3



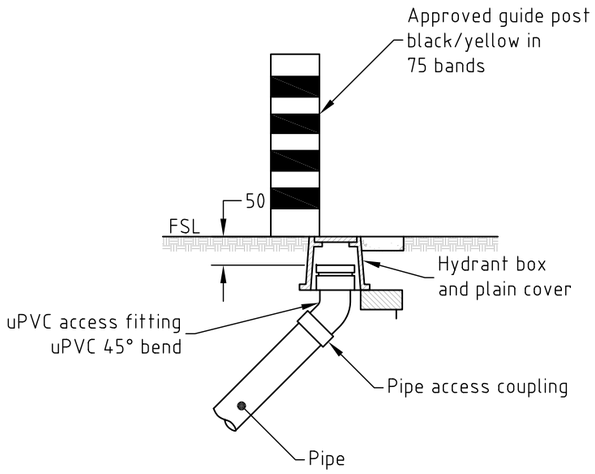
BEHIND KERB

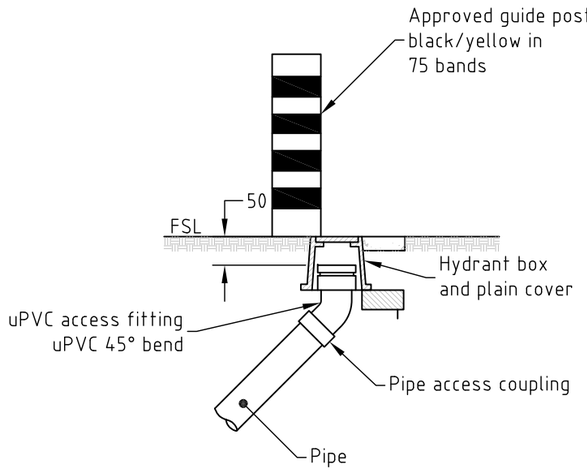


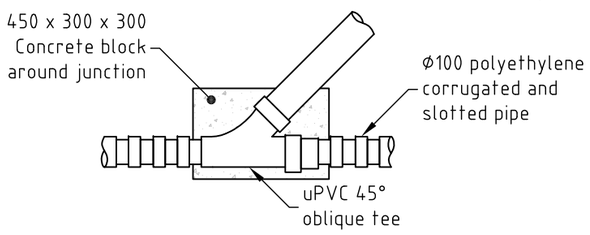
SIDE DRAIN

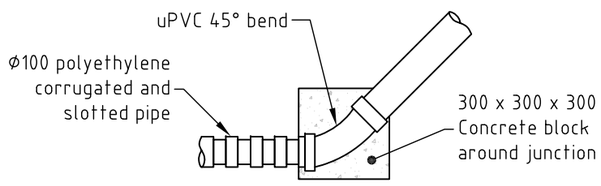


BEHIND KERB ELEVATION

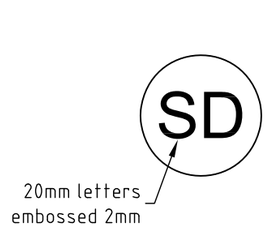




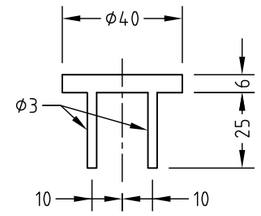




SUBSOIL DRAIN



PLAN



SECTION

BRASS MARKER DEATAIL

Approved proprietary stainless steel markers
also permitted.

NOTES:

1. All pipes and fittings other than subsoil drains to be Ø100 Class 12 pipe.
2. All subsoil drains, polyethylene corrugated slotted pipe to AS 2439.1 (Perforated Plastics Drainage and Effluent Pipe and Fittings), with sock, discharge at 200 above invert level unless approved otherwise (0.5% min grade).
3. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG R-141
SUPERSEDES BOONAH - STD.R-0018,
BEAUDESERT - 50411, IPSWICH - SR.20

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

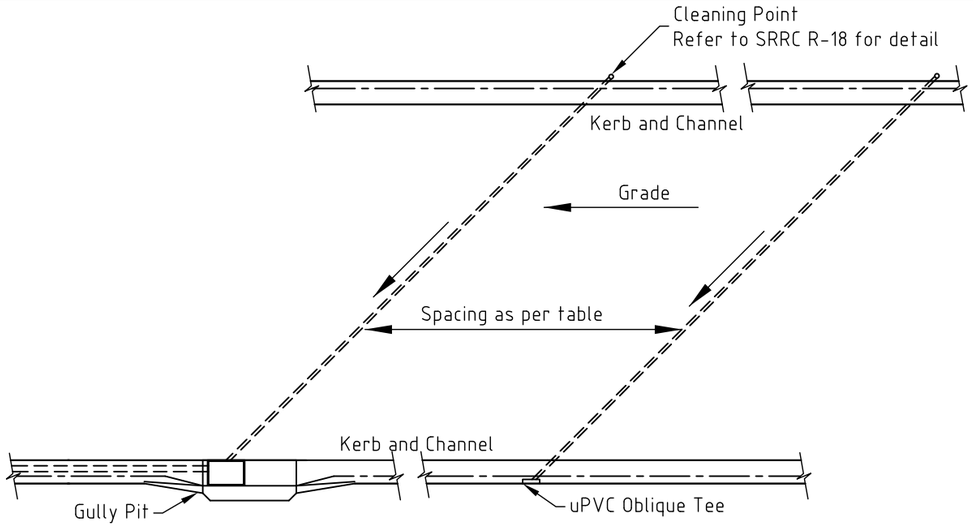
Drawing
SUBSOIL DRAINS
ACCESS POINTS

Design File
Drawing No. R-18

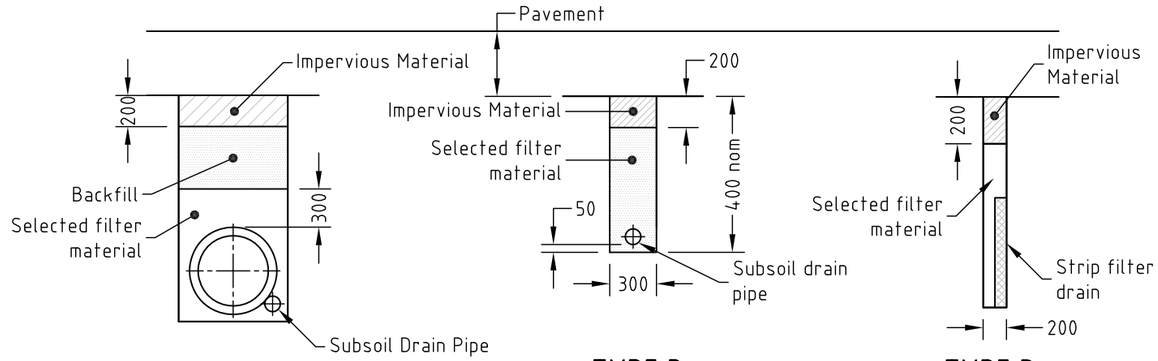
Sheet of

Revision A

A3



TYPICAL MITRE DRAIN LOCATIONS

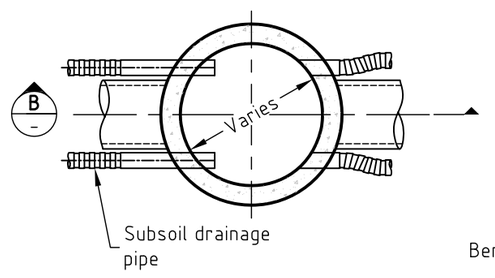


STORMWATER DRAINAGE TRENCHES WITH SUBSOIL DRAINAGE

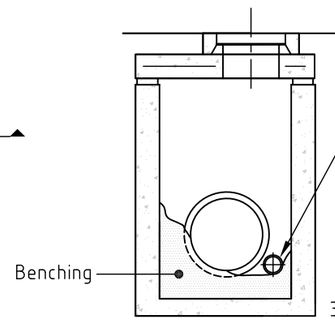
TYPE B

TYPE D

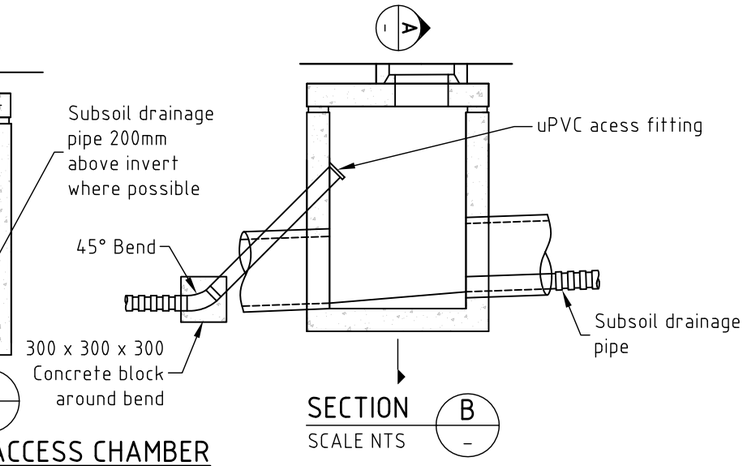
STANDARD SUBSOIL DRAIN



PLAN

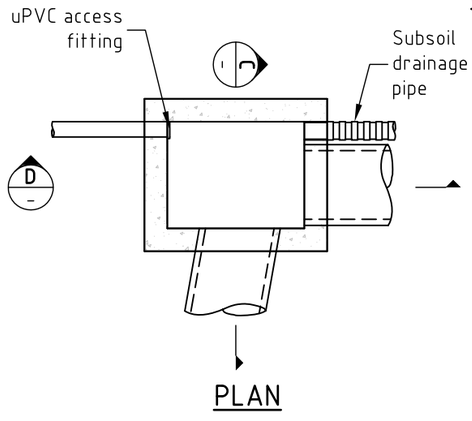


SECTION A – SCALE NTS



SECTION B – SCALE NTS

CONNECTION DETAIL - ACCESS CHAMBER



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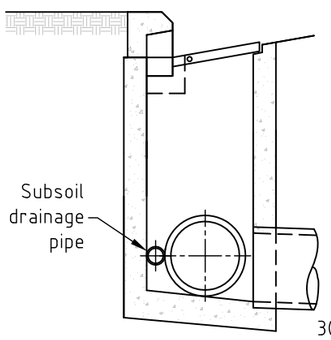
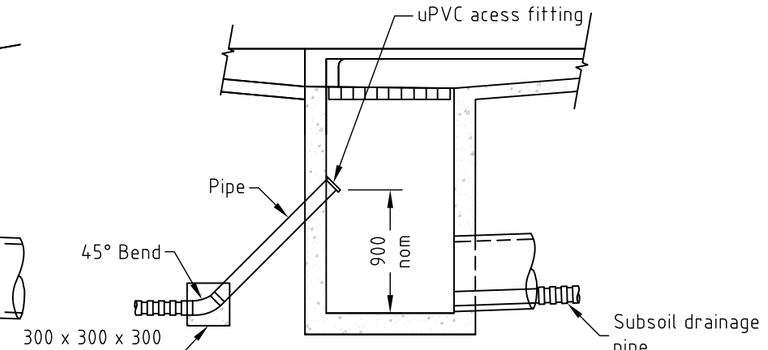


SECTION C – SCALE NTS



SECTION D – SCALE NTS

CONNECTION DETAIL - KERB INLET

MITRE DRAIN SPACING

Nom Grade	Spacing
<7.5%	40m centres
>7.5% <10%	30m centres
>10%	20m centres

Spacing maybe reduced if required.

FILTER MATERIAL GRADING

Unless otherwise stated

A.S. Sieve Size	% By WT. Passing
9.50 mm	100
4.75 mm	90 - 100
1.18 mm	45 - 80
300 μm	10 - 30
150 μm	0 - 10
75 μm	0 - 1

NOTES:

1. All subsoil drains, polyethylene corrugated slotted pipe to AS2439.1 (Perforated Plastics Drianage and Effluent Pipe and Fittings), with sock discharge at 200mm above invert level unless approved otherwise (0.5% min grade). Other pipes and fittings to be uPVC to AS1254 (PVC Pipes and Fittings for Storm and Surface Water Applications).
2. Filter materials not complying with the specified grading requirements may be used when approved by the Superintendent. A geofabric may be used to line trenches where approved by the Superintendent.
3. Concrete anchors N20 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
4. Impervious material to be provided where subsoil drainage is not under a pavement. When impervious material is omitted the backfill/selected filter material shall extend to underside of pavement.
5. Subsoil drainage details shall be in accordance with DMR specification 11.03 and DMR Standard Drawing 1116.
6. Dimensions are in millimeters unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-140
SUPERSEDES BOONAH - STD.R-0018,
BEAUDESERT - 50411, IPSWICH - SR.20

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

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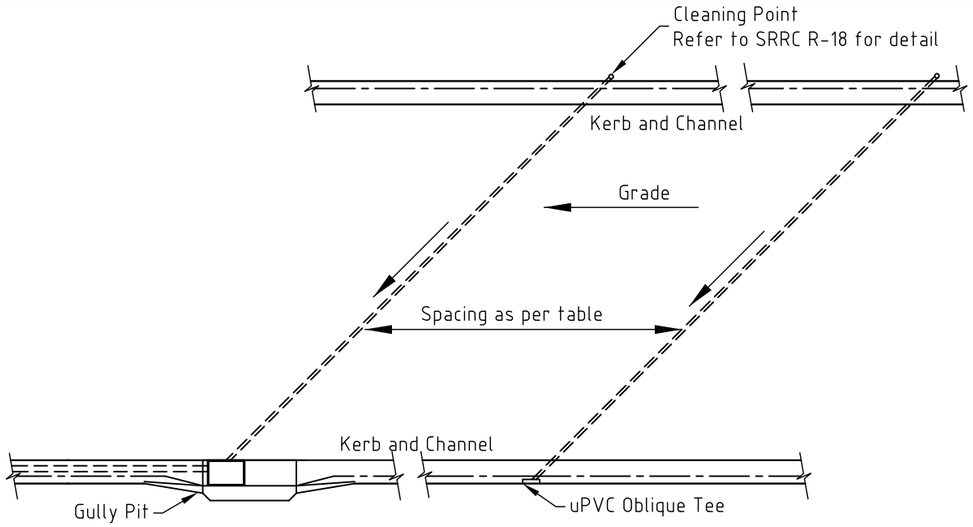
SCENIC RIM Regional Council

Works & Infrastructure Services

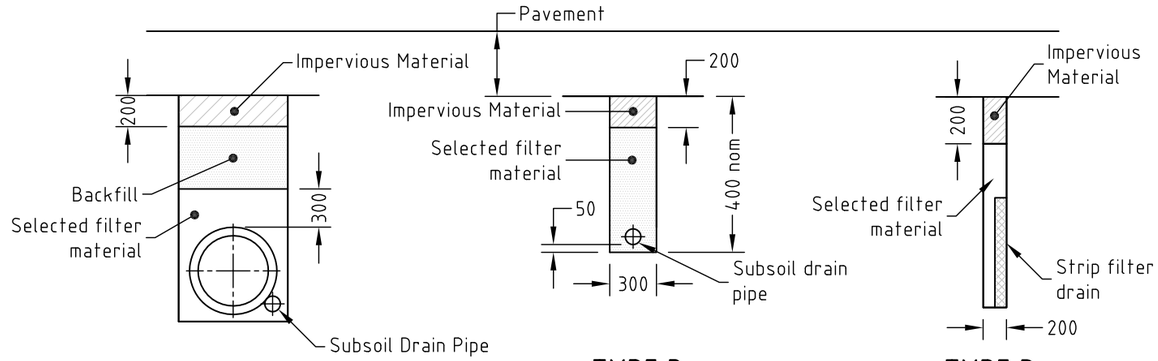
Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
SUBSOIL DRAINS
DETAIL

Design File
Drawing No. R-19
Sheet of
Revision A
A3



TYPICAL MITRE DRAIN LOCATIONS

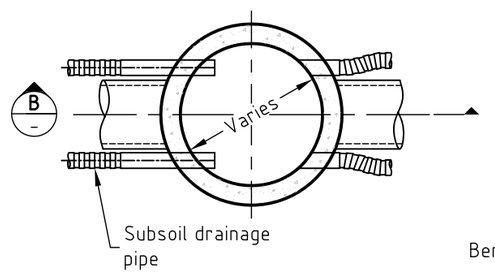


STORMWATER DRAINAGE TRENCHES WITH SUBSOIL DRAINAGE

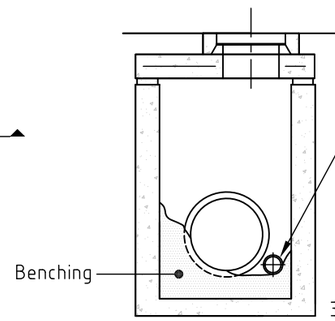
TYPE B

TYPE D

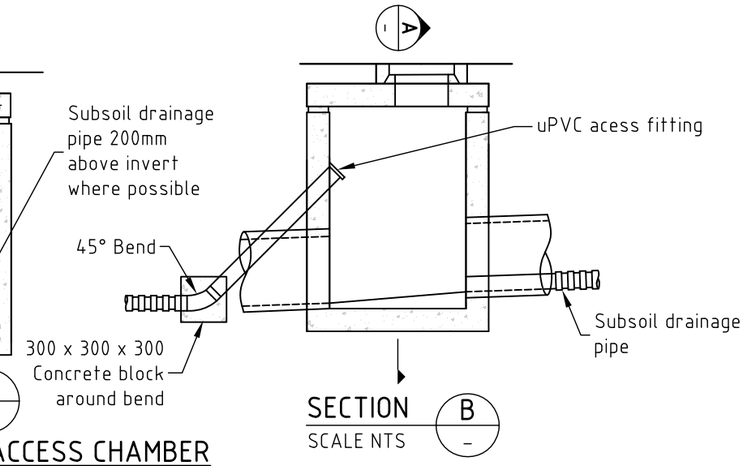
STANDARD SUBSOIL DRAIN



PLAN

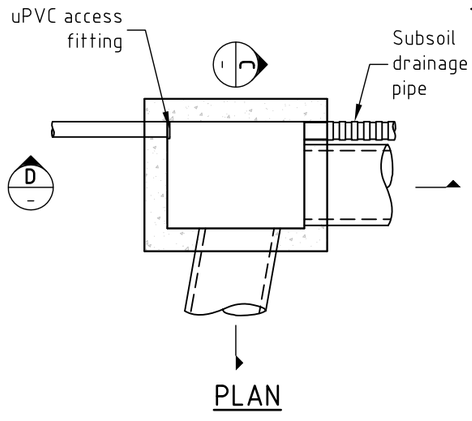


SECTION A – SCALE NTS



SECTION B – SCALE NTS

CONNECTION DETAIL - ACCESS CHAMBER



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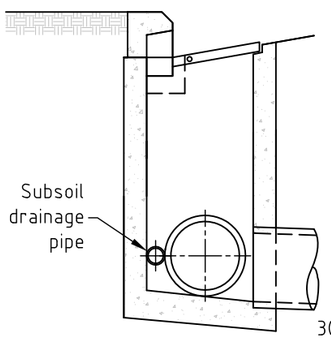
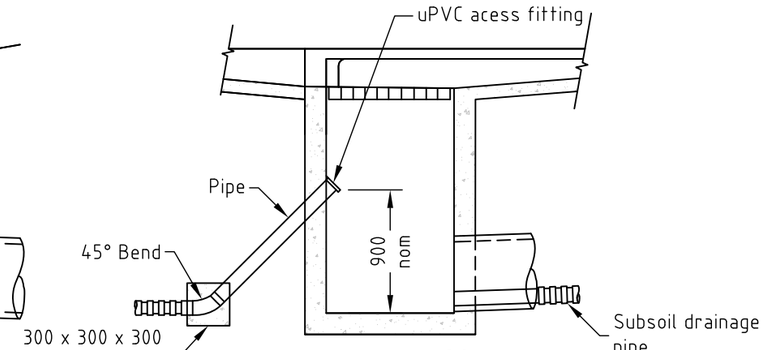


SECTION C – SCALE NTS



SECTION D – SCALE NTS

CONNECTION DETAIL - KERB INLET

MITRE DRAIN SPACING

Nom Grade	Spacing
<7.5%	40m centres
>7.5% <10%	30m centres
>10%	20m centres

Spacing maybe reduced if required.

FILTER MATERIAL GRADING

Unless otherwise stated

A.S. Sieve Size	% By WT. Passing
9.50 mm	100
4.75 mm	90 - 100
1.18 mm	45 - 80
300 μm	10 - 30
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75 μm	0 - 1

NOTES:

1. All subsoil drains, polyethylene corrugated slotted pipe to AS2439.1 (Perforated Plastics Drianage and Effluent Pipe and Fittings), with sock discharge at 200mm above invert level unless approved otherwise (0.5% min grade). Other pipes and fittings to be uPVC to AS1254 (PVC Pipes and Fittings for Storm and Surface Water Applications).
2. Filter materials not complying with the specified grading requirements may be used when approved by the Superintendent. A geofabric may be used to line trenches where approved by the Superintendent.
3. Concrete anchors N20 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
4. Impervious material to be provided where subsoil drainage is not under a pavement. When impervious material is omitted the backfill/selected filter material shall extend to underside of pavement.
5. Subsoil drainage details shall be in accordance with DMR specification 11.03 and DMR Standard Drawing 1116.
6. Dimensions are in millimeters unless shown otherwise.

DERIVED FROM IPWEA STD DWG R-140
SUPERSEDES BOONAH - STD.R-0018,
BEAUDESERT - 50411, IPSWICH - SR.20

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 11 August 2010

Scales

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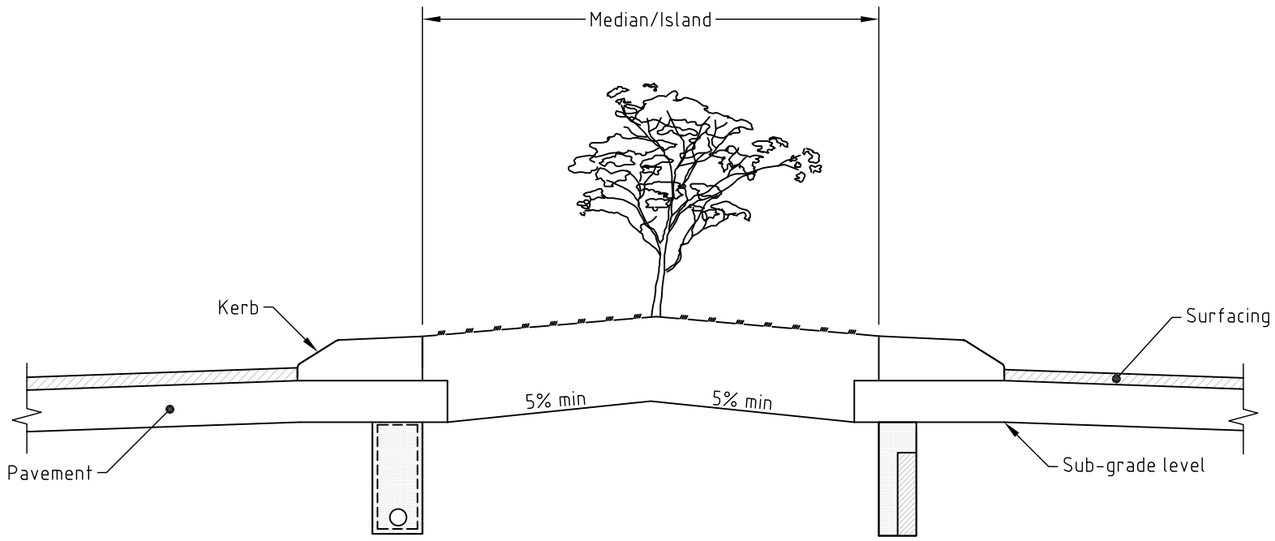
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
SUBSOIL DRAINS
DETAIL

Design File
Drawing No. R-19
Sheet of
Revision A
A3



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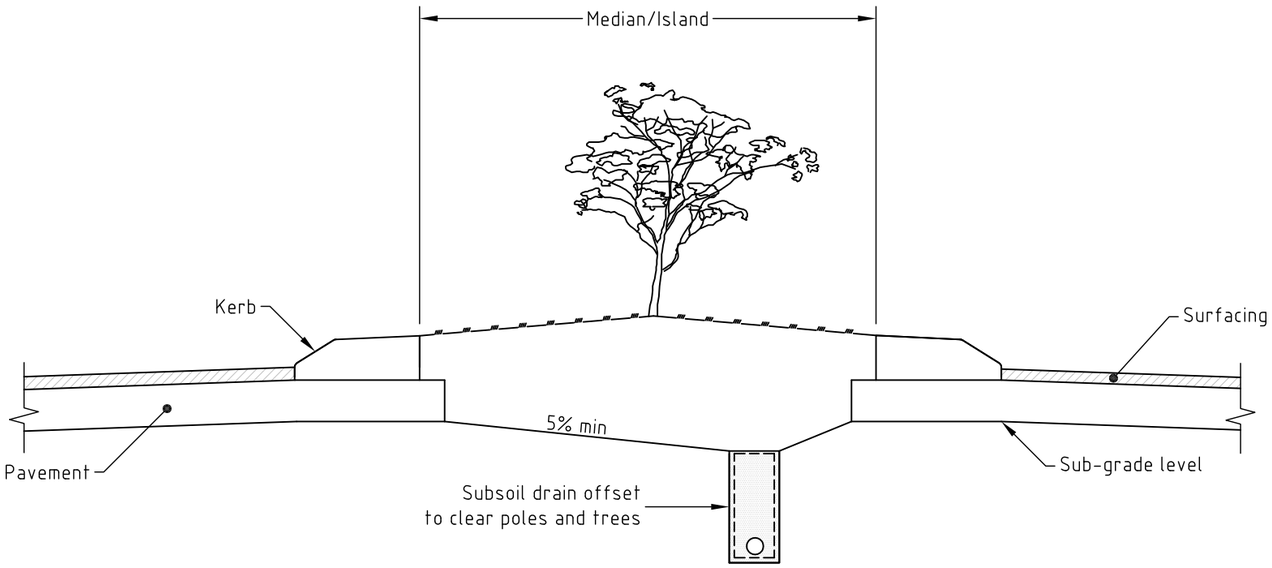

SUBSOIL TYPE B OR D

NOTES:

1. Geotextile surround, propriety product, U.V. stabilised, non-woven type, flow rate > 50 L/m/sec, G > 1300 and E.O.S. < 200 µm.
2. ø100 subsoil drainage pipe - corrugated slotted polyethylene, connect to drainage system (0.5% min grade).
3. Strip drain - proprietary product, deep-fin plastic core, 120 kPa min crush strength, 40mm min thickness, full enclosed by a non-woven geotextile (0.5 % min grade).
4. Subsoil details shall be in accordance with DMR Specification 11.03.
5. For location of subsoil drainage considerations should be given to location of future and existing services and the incorporation of water sensitive urban design.
6. Subsoil drainage details and access points refer to SRRC R-18 and R-19.

DERIVED FROM IPWEA STD DWG R-142
SUPERSEDES BOONAH - STD.R-0019,
BEAUDESERT - 50412, IPSWICH - SR.20

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 11 August 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
SUBSOIL DRAINS
TYPICAL MEDIAN LOCATIONS

Design File
Drawing No. R-20

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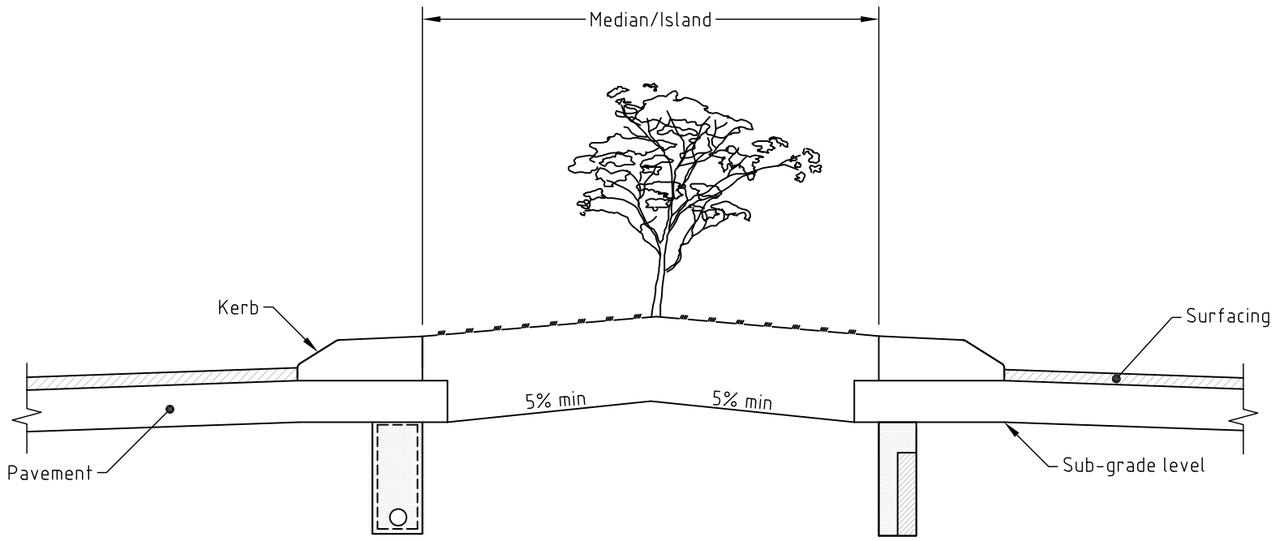

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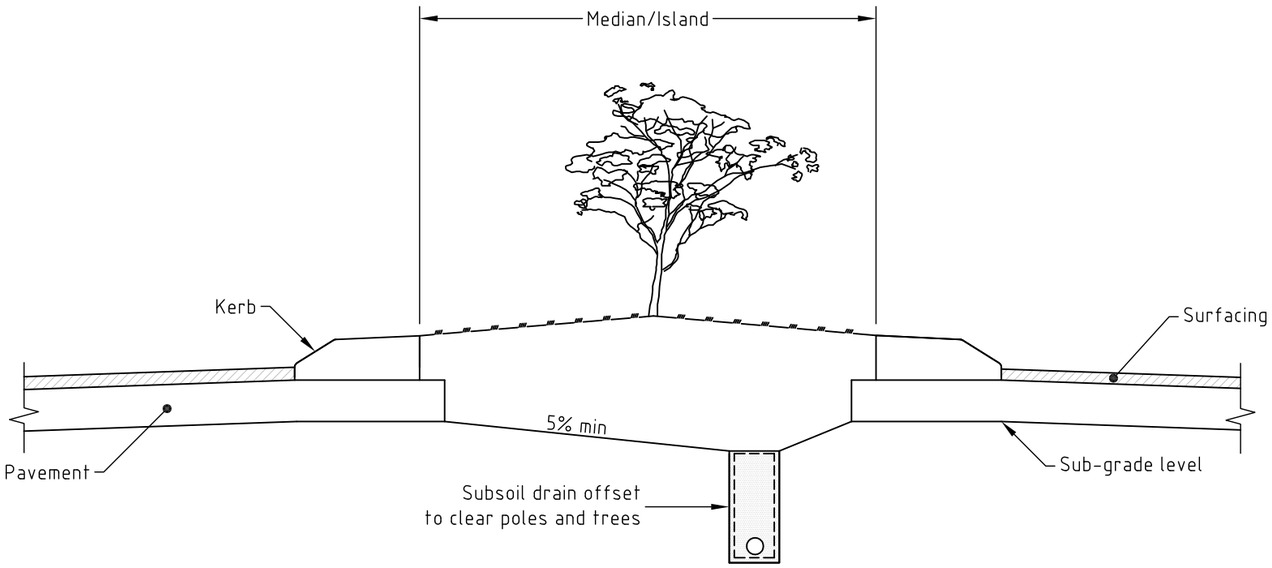

SUBSOIL TYPE B OR D

NOTES:

1. Geotextile surround, propriety product, U.V. stabilised, non-woven type, flow rate > 50 L/m/sec, G > 1300 and E.O.S. < 200 µm.
2. ø100 subsoil drainage pipe - corrugated slotted polyethylene, connect to drainage system (0.5% min grade).
3. Strip drain - proprietary product, deep-fin plastic core, 120 kPa min crush strength, 40mm min thickness, full enclosed by a non-woven geotextile (0.5 % min grade).
4. Subsoil details shall be in accordance with DMR Specification 11.03.
5. For location of subsoil drainage considerations should be given to location of future and existing services and the incorporation of water sensitive urban design.
6. Subsoil drainage details and access points refer to SRRC R-18 and R-19.

DERIVED FROM IPWEA STD DWG R-142
SUPERSEDES BOONAH - STD.R-0019,
BEAUDESERT - 50412, IPSWICH - SR.20

Issue	Amendment	App'd	Date
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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

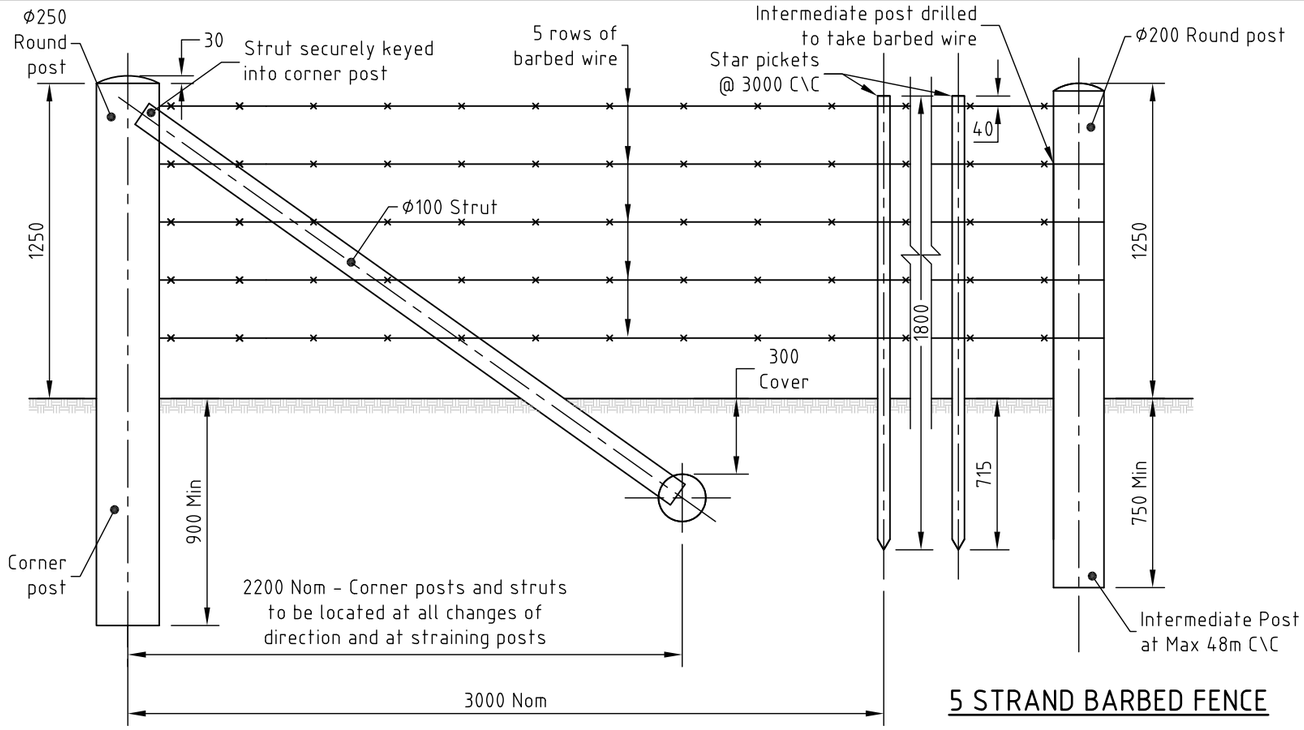
Drawing
SUBSOIL DRAINS
TYPICAL MEDIAN LOCATIONS

Design File
Drawing No. R-20

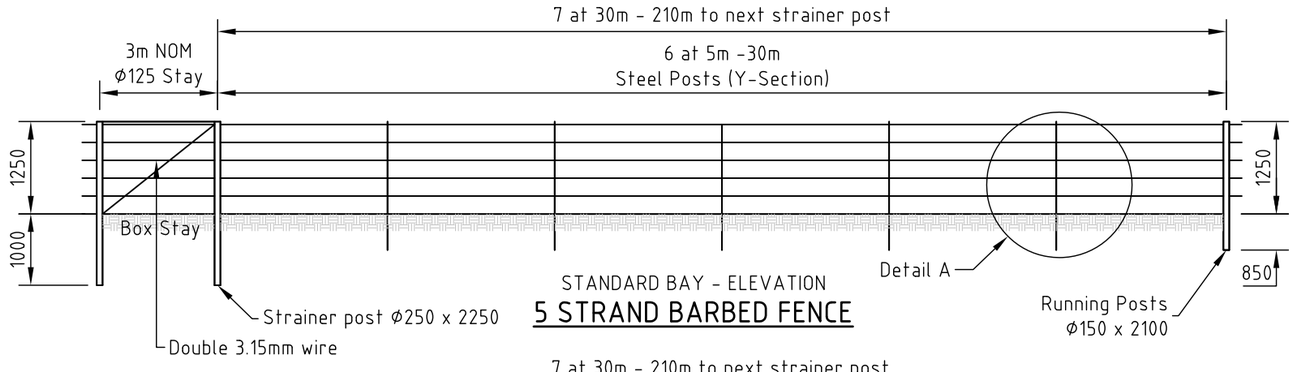
Sheet of

Revision A

A3

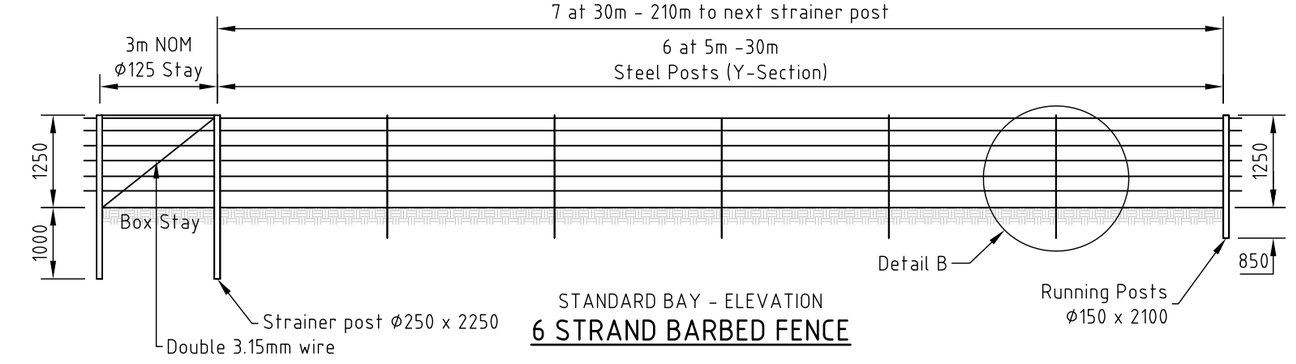


5 STRAND BARBED FENCE



STANDARD BAY - ELEVATION

5 STRAND BARBED FENCE

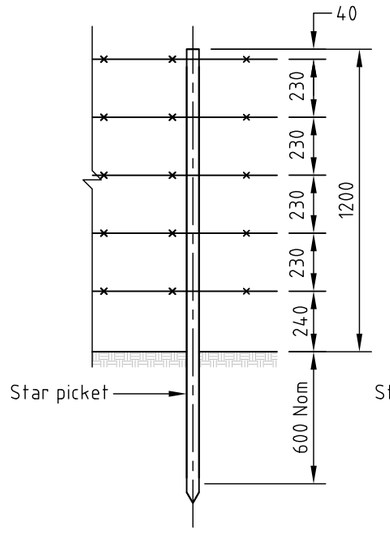


STANDARD BAY - ELEVATION

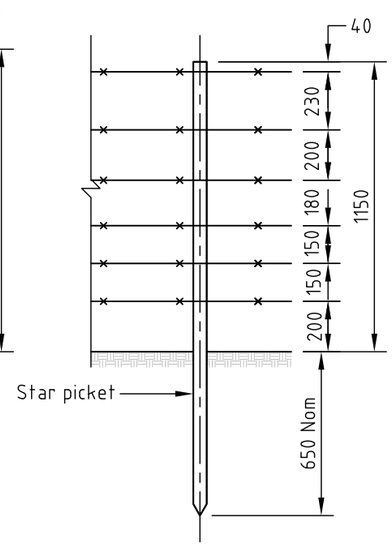
6 STRAND BARBED FENCE

NOTES:

1. Timber posts and struts shall be of approved hardwood.
2. All buried timber to be creosoted to AS1143 (High Temperature Creosote for the Preservation of Timber).
3. Steel posts are standard 1.8m (6ft) BHP star pickets. Black tar, bronze star or galvanized to AS1650 (Hot-Dipped Galvanized Coatings on Ferrous Articles), refer project documentation.
4. At alignment changes of less than 90 degrees, the box stay bisects the angle of change.
5. Galvanised fencing wire to AS2423 (Coated Steel Wire Fencing Prodcuts for Terrestrial, Aquatic and General Use).
6. All dimensions in millimetres, unless shown otherwise.



DETAIL A



DETAIL B

DERIVED FROM IPWEA STD DWG G-0040
SUPERSEDES BOONAH - STD.G-0003,
BEAUDESERT - 50435, IPSWICH - SR.37

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 6 September 2010

Scales

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Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: FENCING - 5 & 6 STRAND BARBED WIRE FENCE

Design File
Drawing No. R-21
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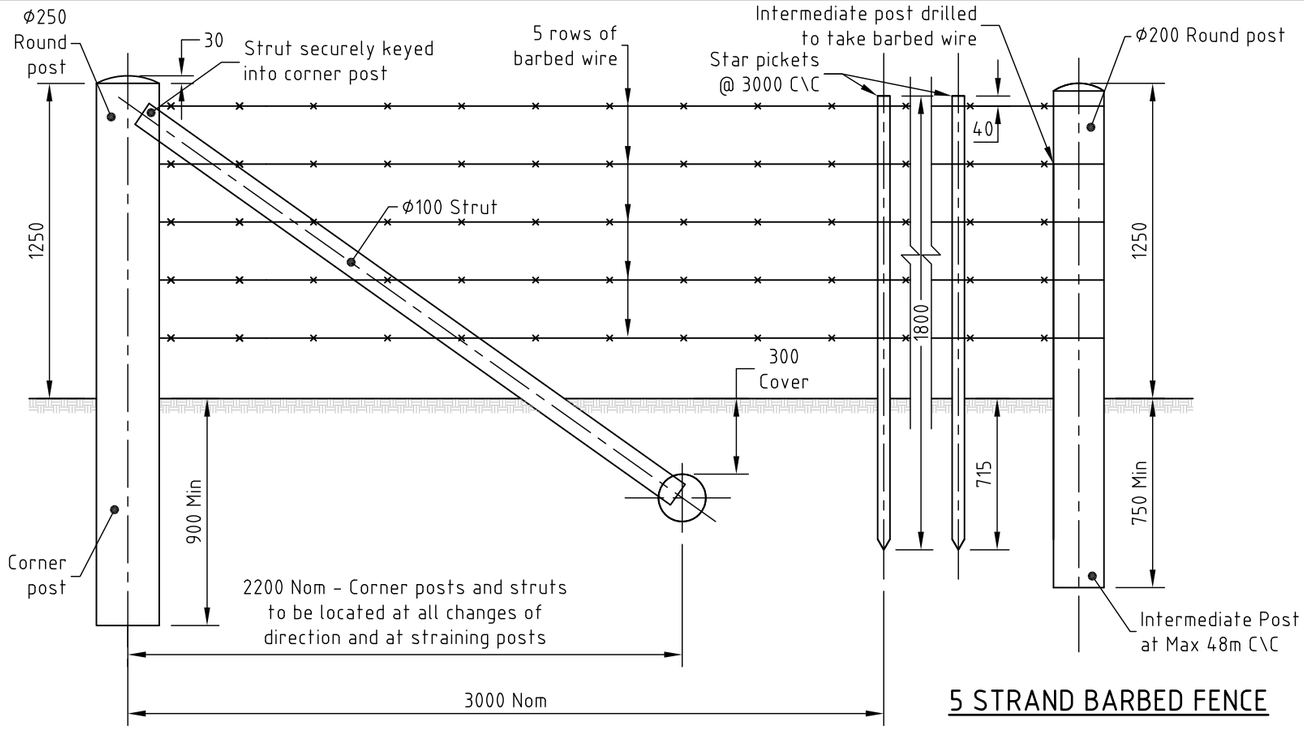
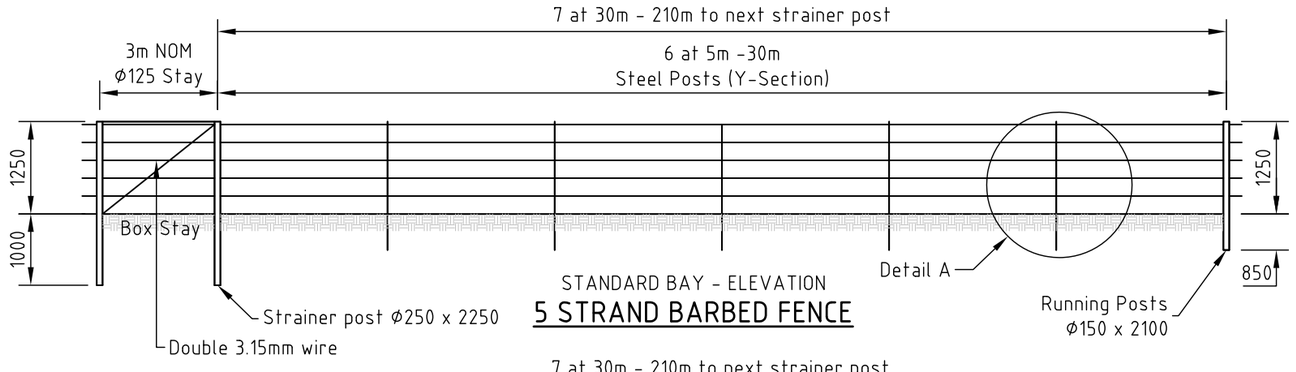
Revision A
A3

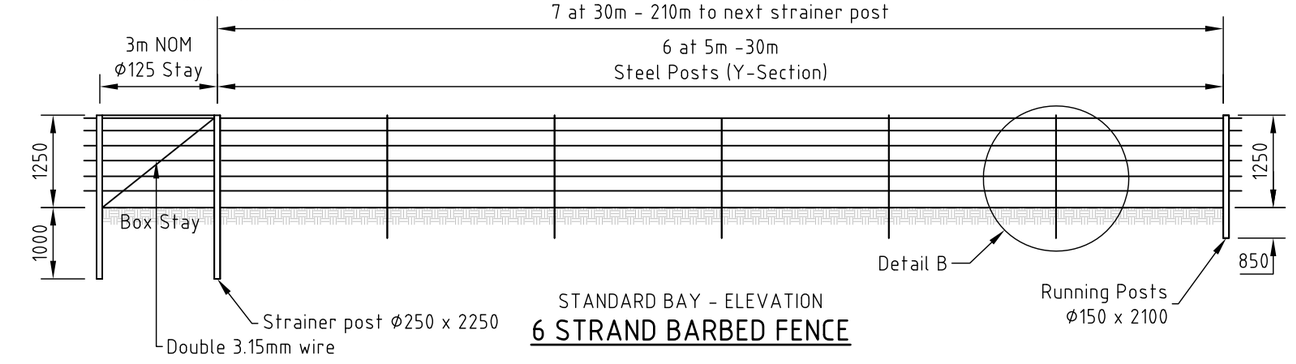


5 STRAND BARBED FENCE



STANDARD BAY - ELEVATION

5 STRAND BARBED FENCE

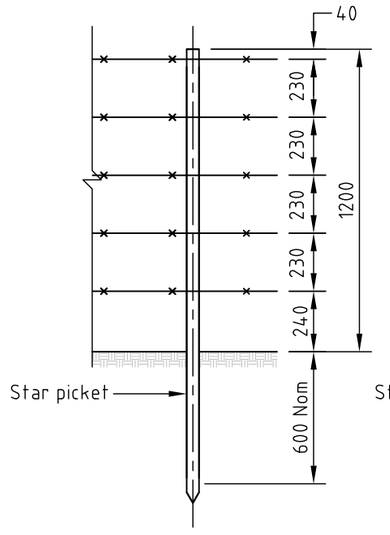


STANDARD BAY - ELEVATION

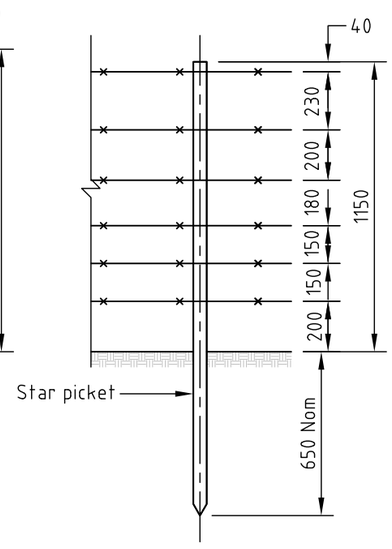
6 STRAND BARBED FENCE

NOTES:

1. Timber posts and struts shall be of approved hardwood.
2. All buried timber to be creosoted to AS1143 (High Temperature Creosote for the Preservation of Timber).
3. Steel posts are standard 1.8m (6ft) BHP star pickets. Black tar, bronze star or galvanized to AS1650 (Hot-Dipped Galvanized Coatings on Ferrous Articles), refer project documentation.
4. At alignment changes of less than 90 degrees, the box stay bisects the angle of change.
5. Galvanised fencing wire to AS2423 (Coated Steel Wire Fencing Prodcuts for Terrestrial, Aquatic and General Use).
6. All dimensions in millimetres, unless shown otherwise.



DETAIL A



DETAIL B

DERIVED FROM IPWEA STD DWG G-0040
SUPERSEDES BOONAH - STD.G-0003,
BEAUDESERT - 50435, IPSWICH - SR.37

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 6 September 2010

Scales

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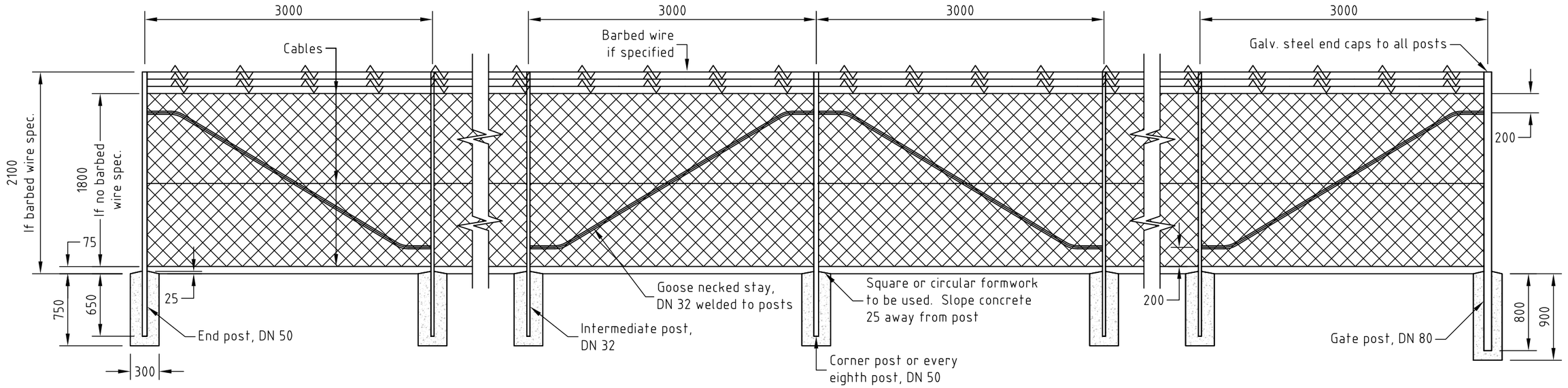
SCENIC RIM Regional Council

Works & Infrastructure Services

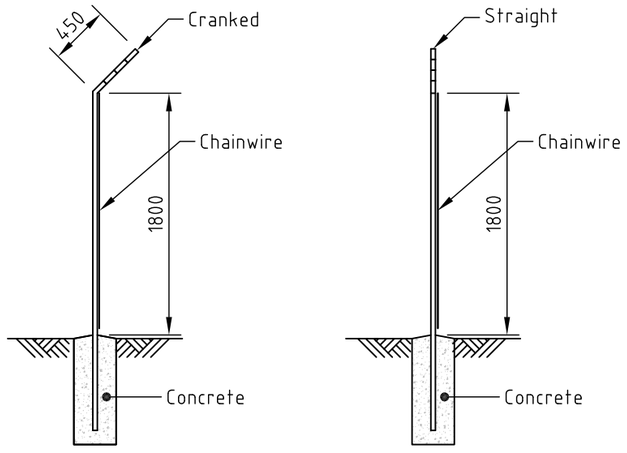
Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: FENCING - 5 & 6 STRAND BARBED WIRE FENCE

Design File
Drawing No. R-21
Sheet of
Revision A
A3



TYPICAL SECTION



TYPE 1

TYPE 2

NOTES:

1. Posts:
   Gate posts to be DN 80 (light) galvanized steel tube, to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Corner, end and every eighth post to be DN 50 (light) galvanized steel tube to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Intermediate posts and goose necked stays to be DN 32 (light) galvanized steel tube to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Galvanized steel end caps to be provided to all posts.
   All posts to be vertical.
2. Corner posts to be adopted where the change in angle in horizontal alignment exceeds 20 degrees.
3. Stays to be provided at end posts, gate posts, corner posts and every eighth post.
4. Standard couplings may be used as an alternative to welds. For all connections except goose necked stays which shall be welded to posts.
5. All welds to be 5 thick continuous fillet welds to AS 1554 (Structural Steel Welding Set) with cold galvanizing treatment to completed welds.
6. Cables to be formed from two 3.15mm diameter wires twisted together and installed in accordance with AS 1725 (Chain-link Fabric Security Fencing and Gates).
7. All posts, stays and cables are to be galvanized in accordance with AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification).
8. All concrete N25 in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
9. Chain wire to be fixed using 1.6 wire ties as follows:
   - Intermediate posts at 3 locations
   - End posts at 3 locations
   - Horizontal cable at 375 centres to top cable
   - Horizontal cable at 600 centres to middle cable
   - Horizontal cable at 450 centres to bottom cable
10. Barbed wire to AS 2423 (Coated Steel Wire Fencing Products for Terrestrial, Aquatic and General Use).
11. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG G-0041
SUPERSEDES BOONAH - STD.G-0005,
BEAUDESERT - 50440, IPSWICH - SR.34

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 6 September 2010

Scales

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

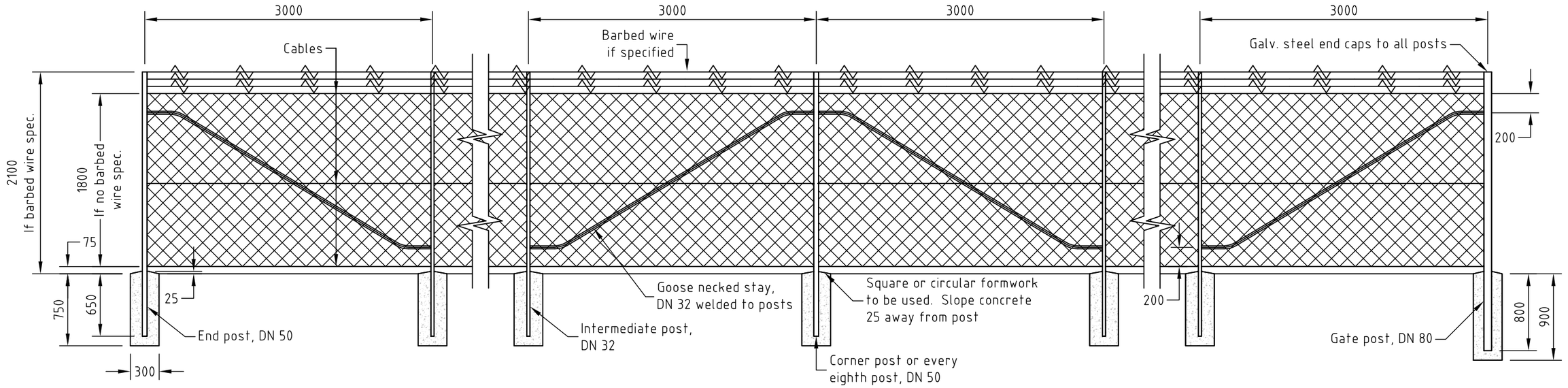
Drawing
FENCING - CHAIN WIRE SECURITY FENCING

Design File
Drawing No. R-22

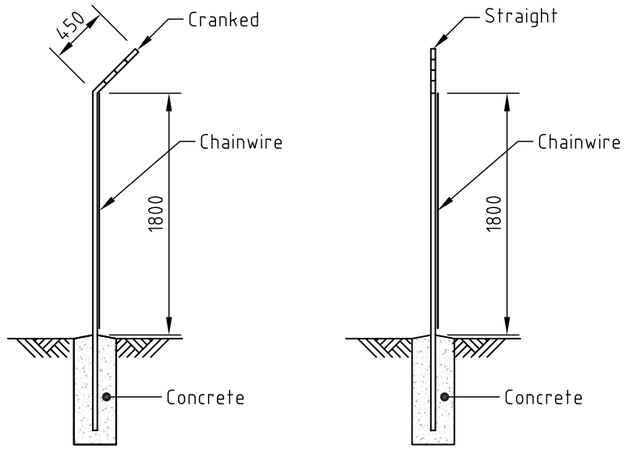
Sheet of

Revision A

A3



TYPICAL SECTION



TYPE 1

TYPE 2

NOTES:

1. Posts:
   Gate posts to be DN 80 (light) galvanized steel tube, to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Corner, end and every eighth post to be DN 50 (light) galvanized steel tube to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Intermediate posts and goose necked stays to be DN 32 (light) galvanized steel tube to AS 1074 (Steel Tubes and Tubulars to Ordinary Service).
   Galvanized steel end caps to be provided to all posts.
   All posts to be vertical.
2. Corner posts to be adopted where the change in angle in horizontal alignment exceeds 20 degrees.
3. Stays to be provided at end posts, gate posts, corner posts and every eighth post.
4. Standard couplings may be used as an alternative to welds. For all connections except goose necked stays which shall be welded to posts.
5. All welds to be 5 thick continuous fillet welds to AS 1554 (Structural Steel Welding Set) with cold galvanizing treatment to completed welds.
6. Cables to be formed from two 3.15mm diameter wires twisted together and installed in accordance with AS 1725 (Chain-link Fabric Security Fencing and Gates).
7. All posts, stays and cables are to be galvanized in accordance with AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification).
8. All concrete N25 in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures).
9. Chain wire to be fixed using 1.6 wire ties as follows:
   - Intermediate posts at 3 locations
   - End posts at 3 locations
   - Horizontal cable at 375 centres to top cable
   - Horizontal cable at 600 centres to middle cable
   - Horizontal cable at 450 centres to bottom cable
10. Barbed wire to AS 2423 (Coated Steel Wire Fencing Products for Terrestrial, Aquatic and General Use).
11. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG G-0041
SUPERSEDES BOONAH - STD.G-0005,
BEAUDESERT - 50440, IPSWICH - SR.34

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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DATE 6 September 2010

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Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

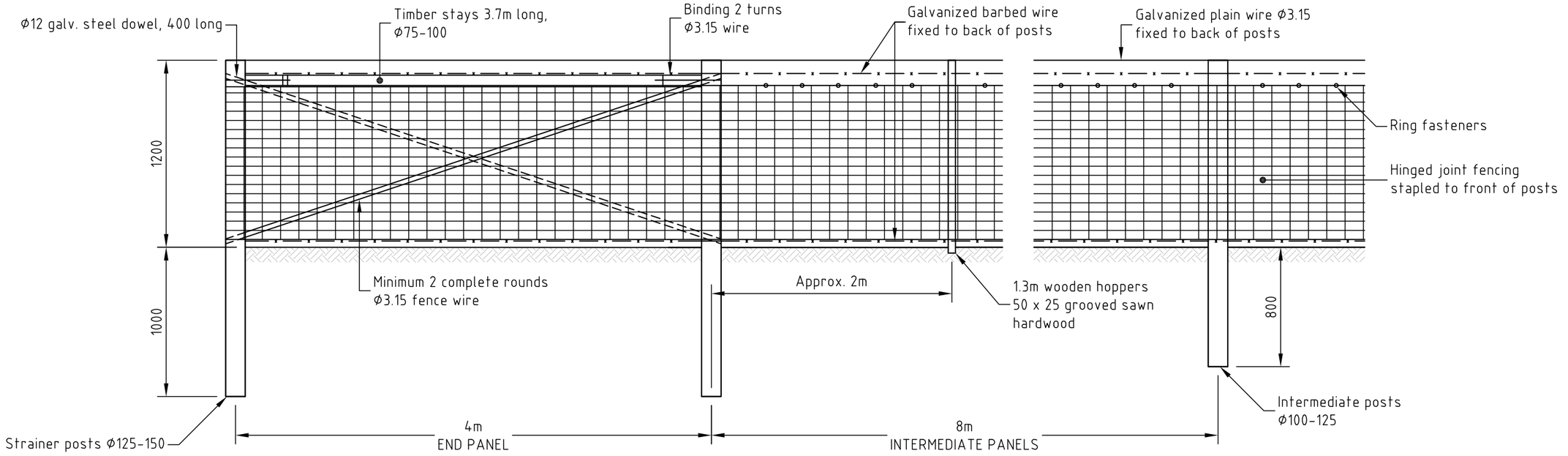
Drawing
FENCING - CHAIN WIRE SECURITY FENCING

Design File
Drawing No. R-22

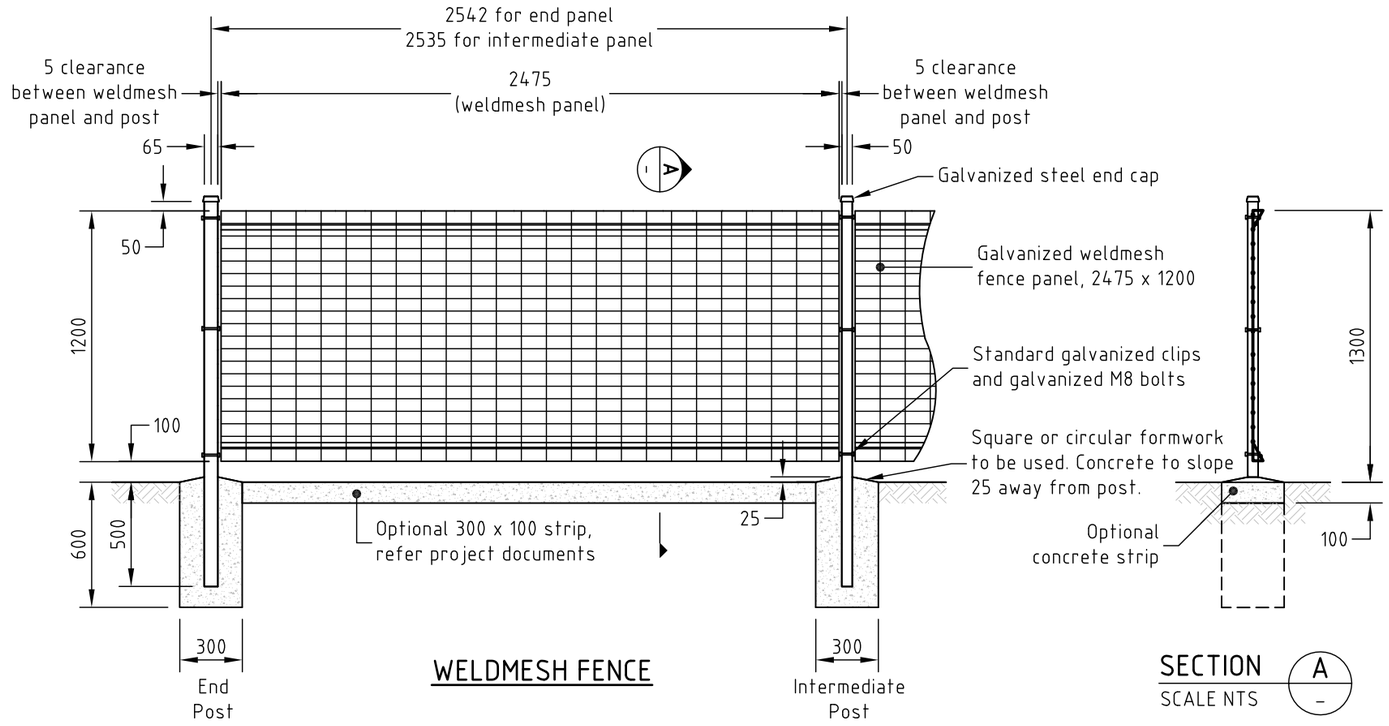
Sheet of

Revision A

A3



CONTROL FENCE



WELDMESH FENCE

SECTION A
SCALE NTS

NOTES:

A - Weldmesh Fence

1. Gate and end posts to be 65 x 65 x 2 galvanized steel section AS 1163 (Cold-formed Structural Steel Hollow Sections)
2. Intermediate posts to be 50 x 50 x 2 galvanized steel section to AS 1163 (Cold-formed Structural Steel Hollow Sections)
3. Panel to be fixed to posts using standard galvanized clips and galvanized M8 bolts.
4. Galvanizing to AS 1214 (Hot-dip Galvanized Coatings on Threaded Fasteners) and AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification)
5. Concrete N25 in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures)
6. Posts are to be vertical.
7. Raked panels are available for slopes up to 1 in 5.
8. Nuts to be spot welded to bolts as an anti-theft deterrent.

B - Control Fence

1. All barbed wire, plain wire, hinged joint fencing, staples and ring fasteners to be galvanized to AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification)
2. Provide strainer panels at 100 to 140m spacing. Panels to be as for 'End Panels' with an extra 2/3.15mm wire brace as indicated by broken lines.
3. Posts may be tea-tree, split hardwood or sawn timber.
4. Where fences turn 90° adopt an end panel going away in each direction.
5. Dowels, Grade 250 to AS 3679 (Structural Street - Hot-rolled Bars and Sections)

C- General

1. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG G-0045
SUPERSEDES BOONAH - STD.G-0008,
BEAUDESERT - 50438, IPSWICH - SR.32

Issue	Amendment	App'd	Date
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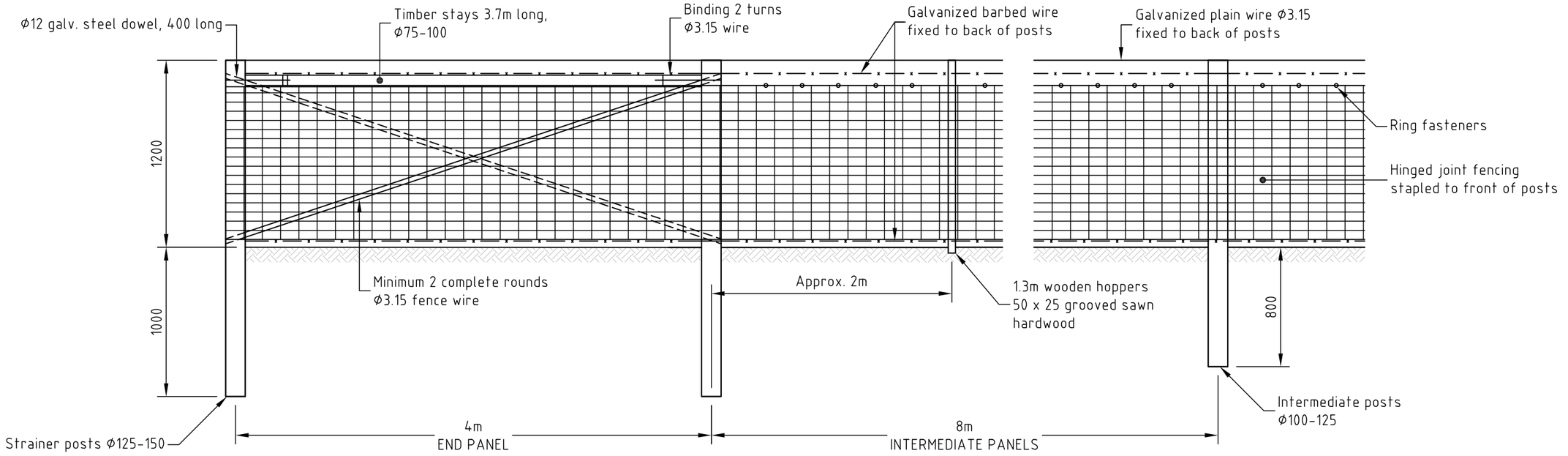
Works & Infrastructure Services

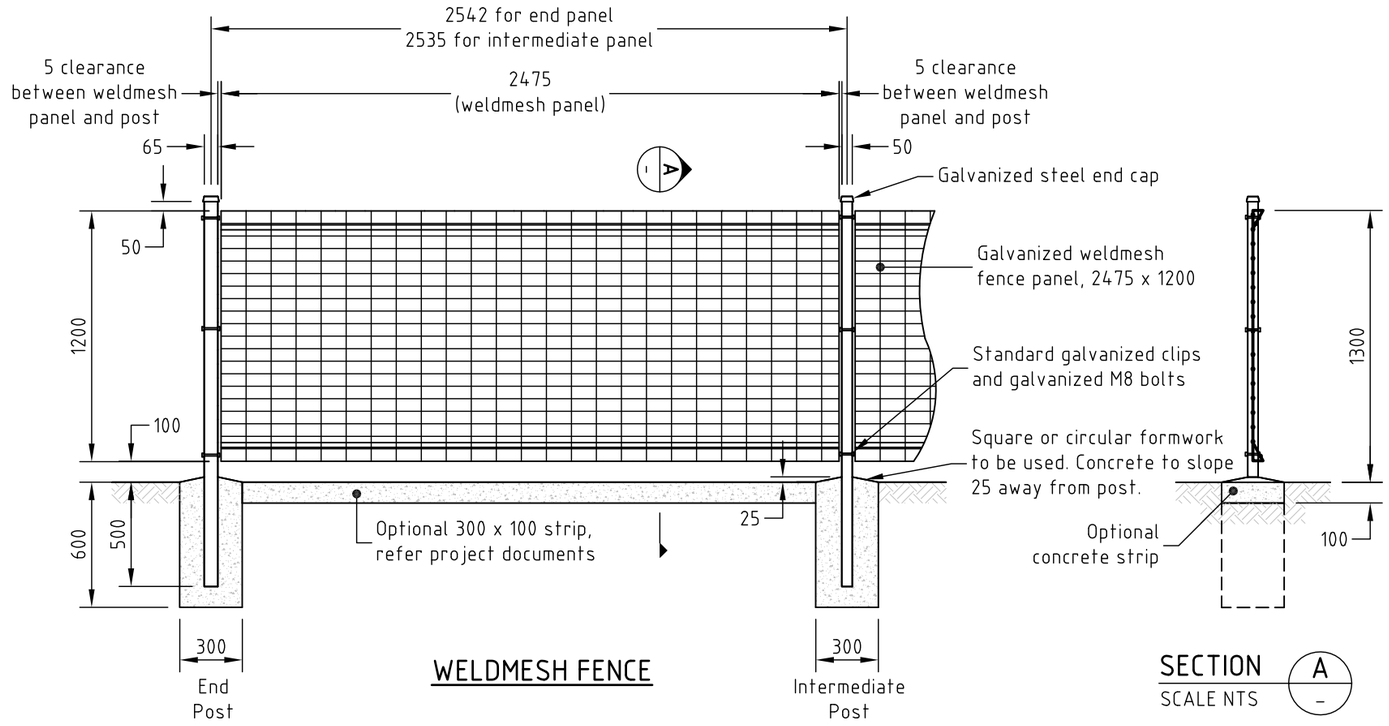
Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
FENCING - WELDMESH FENCING AND CONTROL FENCE

Design File
Drawing No. R-23
Sheet of
Revision A
A3



CONTROL FENCE



WELDMESH FENCE

SECTION A
SCALE NTS

NOTES:

A - Weldmesh Fence

1. Gate and end posts to be 65 x 65 x 2 galvanized steel section AS 1163 (Cold-formed Structural Steel Hollow Sections)
2. Intermediate posts to be 50 x 50 x 2 galvanized steel section to AS 1163 (Cold-formed Structural Steel Hollow Sections)
3. Panel to be fixed to posts using standard galvanized clips and galvanized M8 bolts.
4. Galvanizing to AS 1214 (Hot-dip Galvanized Coatings on Threaded Fasteners) and AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification)
5. Concrete N25 in accordance with AS 1379 (Specification and Supply of Concrete) and AS 3600 (Concrete Structures)
6. Posts are to be vertical.
7. Raked panels are available for slopes up to 1 in 5.
8. Nuts to be spot welded to bolts as an anti-theft deterrent.

B - Control Fence

1. All barbed wire, plain wire, hinged joint fencing, staples and ring fasteners to be galvanized to AS 1650 (Coupling Assembly, Threadless, Flexible, Fixed Cavity, Self-bonding, Procurement Specification)
2. Provide strainer panels at 100 to 140m spacing. Panels to be as for 'End Panels' with an extra 2/3.15mm wire brace as indicated by broken lines.
3. Posts may be tea-tree, split hardwood or sawn timber.
4. Where fences turn 90° adopt an end panel going away in each direction.
5. Dowels, Grade 250 to AS 3679 (Structural Street - Hot-rolled Bars and Sections)

C- General

1. All dimensions in millimetres.

DERIVED FROM IPWEA STD DWG G-0045
SUPERSEDES BOONAH - STD.G-0008,
BEAUDESERT - 50438, IPSWICH - SR.32

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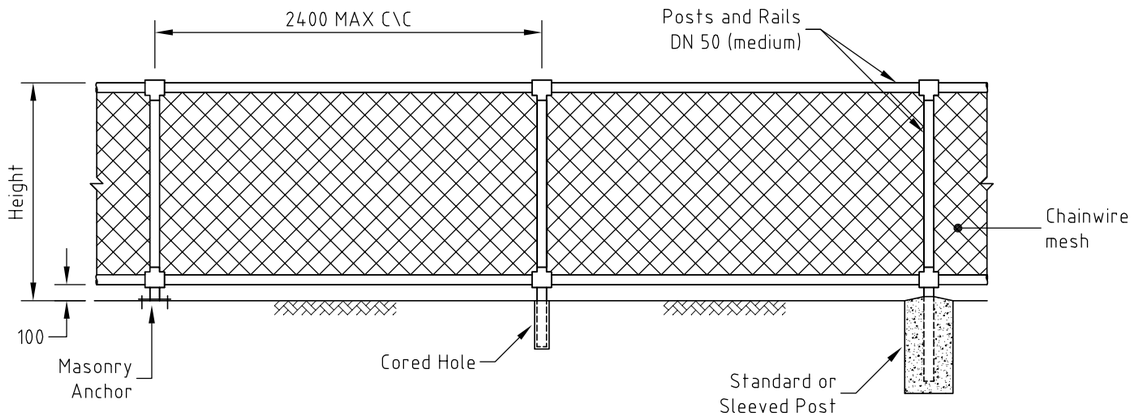
Works & Infrastructure Services

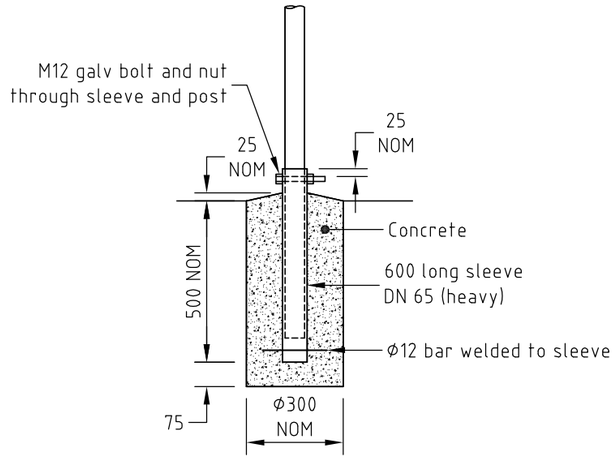
Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
FENCING - WELDMESH FENCING AND CONTROL FENCE

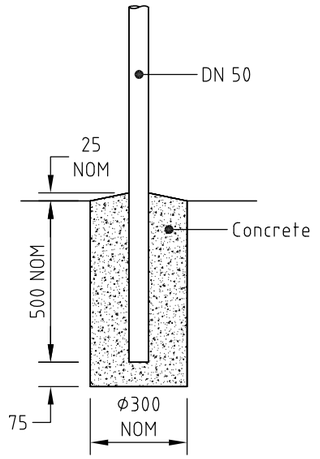
Design File
Drawing No. R-23
Sheet of
Revision A
A3



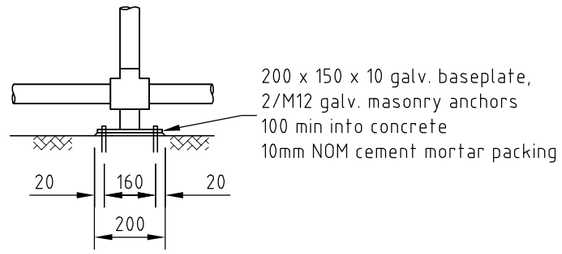
TYPE 1 - A (Height - 1100)
TYPE 1 - B (Height - 1350)



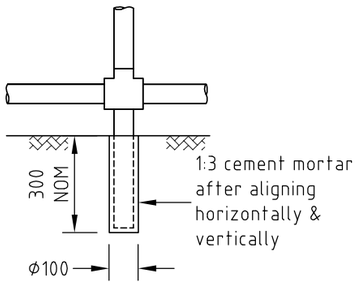
SLEEVED POST



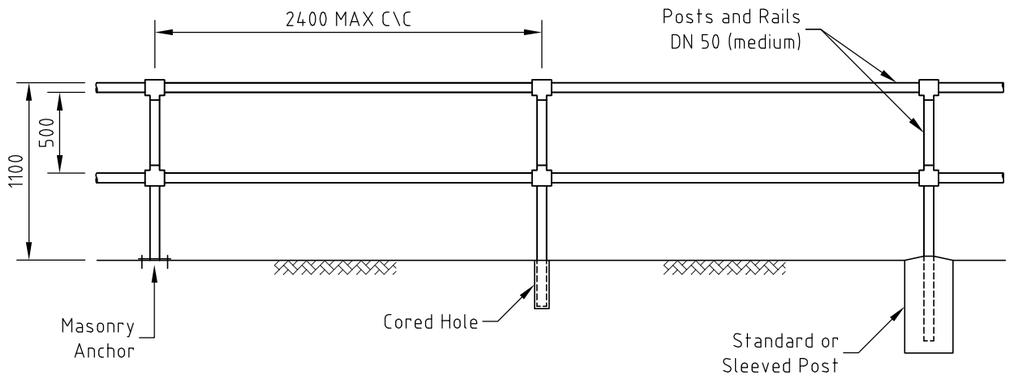
STANDARD POST



MASONRY ANCHORS



CORED HOLE



TYPE 2

FOOTING DETAILS

NOTES:

1. Refer project drawings for type of fence to be installed and type of footing to be adopted.
2. Construction of posts and rails shall be done using standard coupling connection only (no welds).
3. Galvanized chainwire to be 2.6mm thick x 50 mesh to AS2423 (Coated Steel Wire Fencing Products for Terrestrial, Aquatic and General Use).
4. ϕ12 bars, Grade 250 steel to AS1302 (Geometrical Product Specifications).
5. Hexagonal head bolts to AS1111 (ISO Metric Hexagon Bolts and Screws).
   Nuts to AS1112 (ISO Metric Hexagon Nuts).
   Washers to AS1237 (Plain Washers for Metric Bolts, Screws and Nuts for General Purpose).
   Galvanizing to AS1214 (Hot-dip Galvanized Coatings on Threaded Fasteners).
6. All rails and posts galvanized steel tube to AS1074 (Steel Tubes and Tubulars for Ordinary Service).
7. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
8. All dimensions in millimeters.

DERIVED FROM IPWEA STD DWG G-0044
SUPERSEDES BOONAH - STD.G-0002,
BEAUDESERT - 50439, IPSWICH - SR.33

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 6 September 2010

Scales

Do NOT Scale this Drawing
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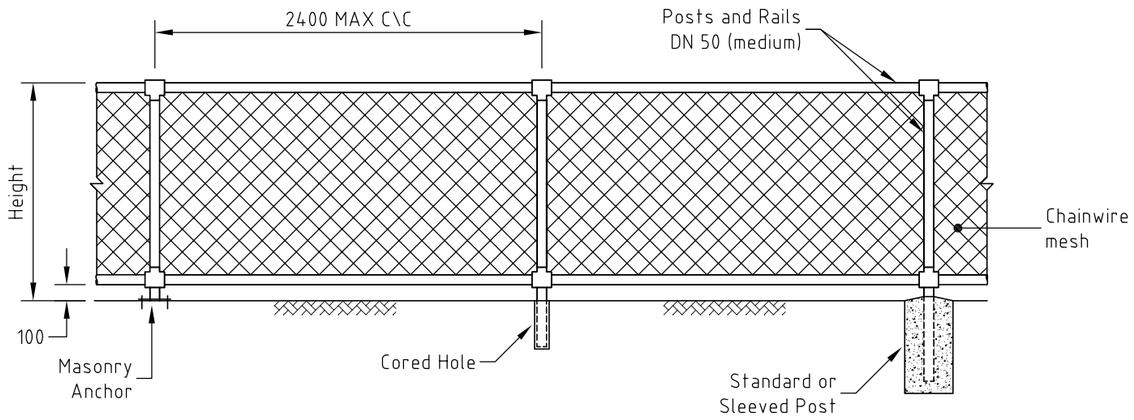
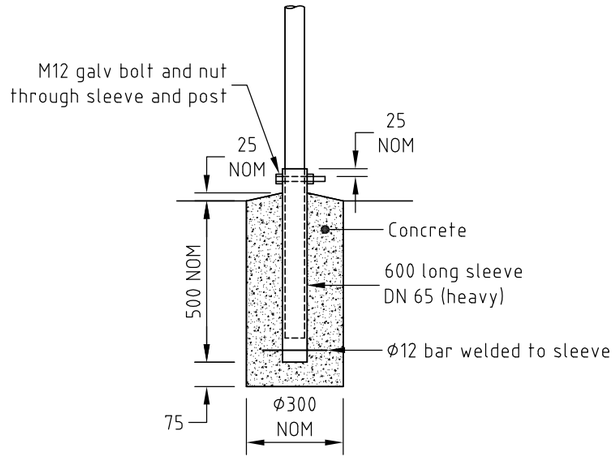
SCENIC RIM Regional Council
Works & Infrastructure Services

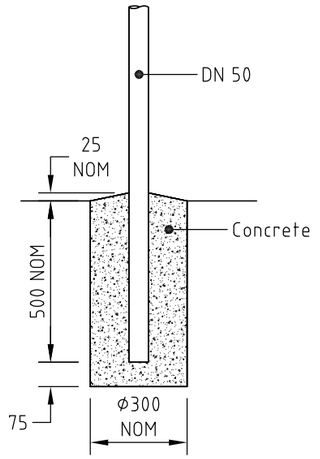
Project: SRRC STANDARD DRAWINGS
ROADS
Drawing: FENCING - TUBULAR STEEL FENCE
WITH & WITHOUT CHAIN WIRE
Design File
Drawing No. R-24
Sheet of
Revision A
A3



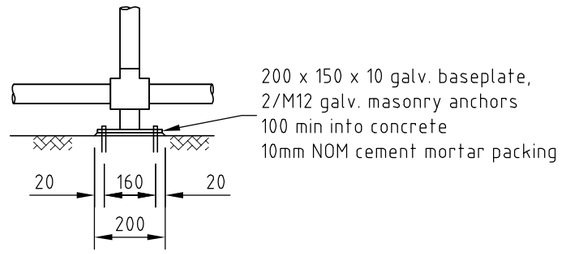
TYPE 1 - A (Height - 1100)
TYPE 1 - B (Height - 1350)



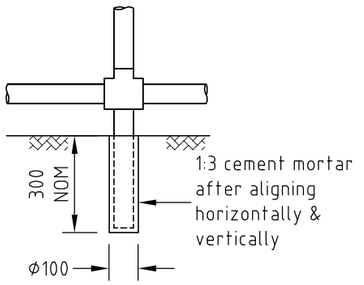
SLEEVED POST



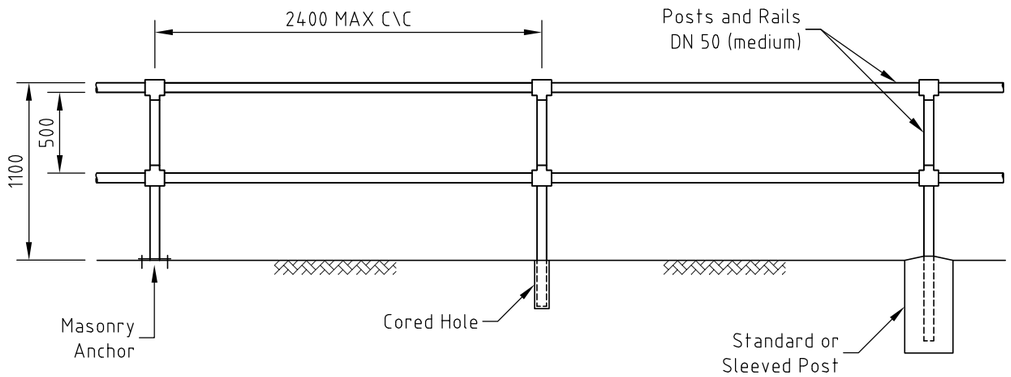
STANDARD POST



MASONRY ANCHORS



CORED HOLE



TYPE 2

FOOTING DETAILS

NOTES:

1. Refer project drawings for type of fence to be installed and type of footing to be adopted.
2. Construction of posts and rails shall be done using standard coupling connection only (no welds).
3. Galvanized chainwire to be 2.6mm thick x 50 mesh to AS2423 (Coated Steel Wire Fencing Products for Terrestrial, Aquatic and General Use).
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   Nuts to AS1112 (ISO Metric Hexagon Nuts).
   Washers to AS1237 (Plain Washers for Metric Bolts, Screws and Nuts for General Purpose).
   Galvanizing to AS1214 (Hot-dip Galvanized Coatings on Threaded Fasteners).
6. All rails and posts galvanized steel tube to AS1074 (Steel Tubes and Tubulars for Ordinary Service).
7. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
8. All dimensions in millimeters.

DERIVED FROM IPWEA STD DWG G-0044
SUPERSEDES BOONAH - STD.G-0002,
BEAUDESERT - 50439, IPSWICH - SR.33

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED
ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure
DATE 6 September 2010

Scales

Do NOT Scale this Drawing
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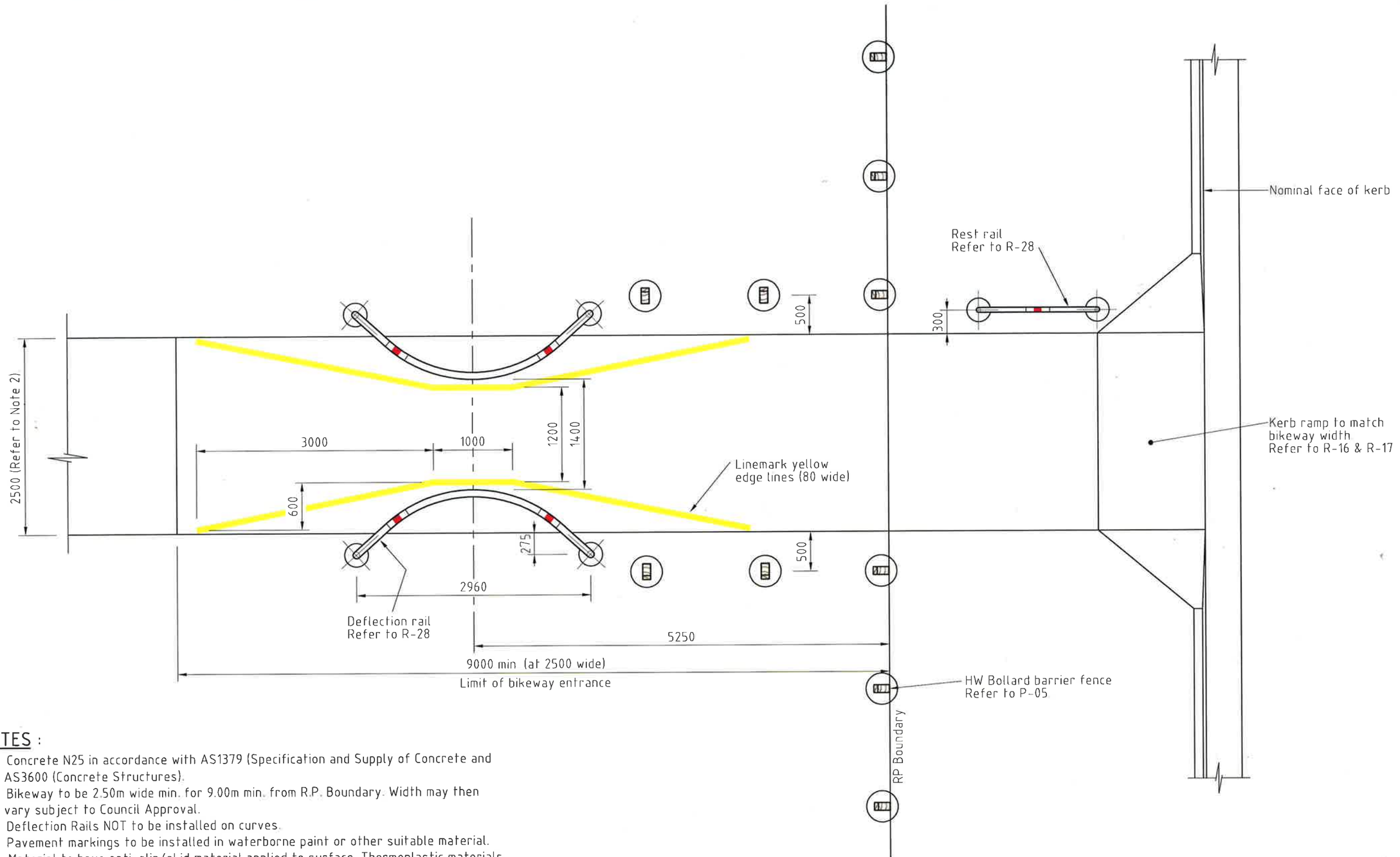
SCENIC RIM Regional Council
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS
Drawing: FENCING - TUBULAR STEEL FENCE
WITH & WITHOUT CHAIN WIRE
Design File
Drawing No. R-24
Sheet of
Revision A
A3



NOTES :

1. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete and AS3600 (Concrete Structures).
2. Bikeway to be 2.50m wide min. for 9.00m min. from R.P. Boundary. Width may then vary subject to Council Approval.
3. Deflection Rails NOT to be installed on curves.
4. Pavement markings to be installed in waterborne paint or other suitable material. Material to have anti-slip/skid material applied to surface. Thermoplastic materials are not to be used.
5. Refer to R-13 for Concrete Path construction details.
6. Refer to R-26 for Bikeway Slowdown Control - Reverse Curve.
7. Refer to R-28 for Bikeway Deflection and Rest Rail details.
8. Refer to MUTCD for Bikeway signage.
9. All dimensions are in millimetres unless shown otherwise (UNO).

DERIVED FROM IPWEA STD DWG SEQ P-0010
AND BCC STD DWG UMS 251
SUPERSEDES BOONAH - STD.P-0002
BEAUDESERT - 50425

Issue	Amendment	App'd	Date
B	REST RAIL INSTALLATION LOCATION, DEFLECTION RAIL SET-OUT AND BARRIER FENCE TYPE REVISED		14/12/16
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales
0 1000 2000
SCALE 1:50

Do NOT Scale this Drawing
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SCENIC RIM Regional Council

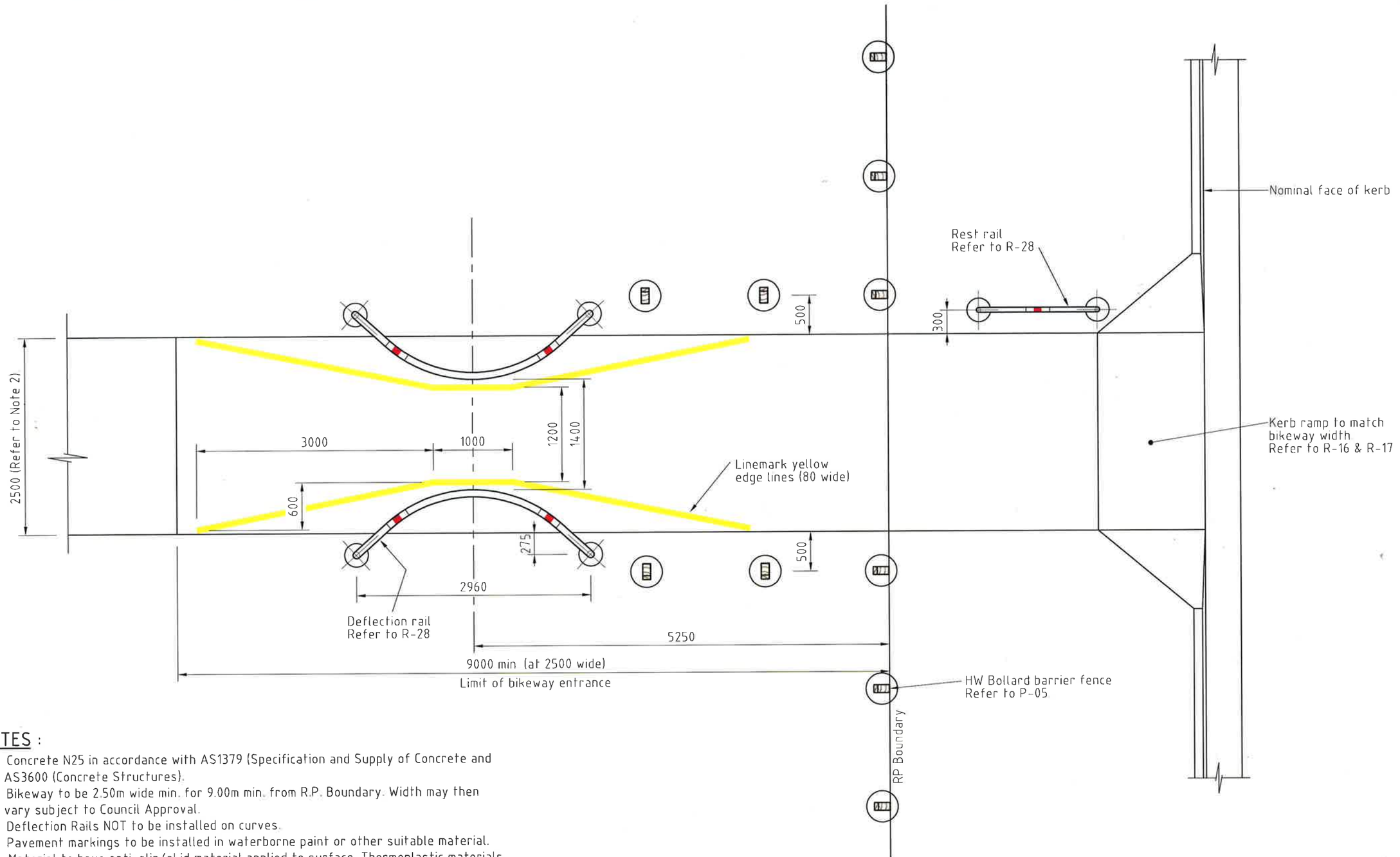
Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
BIKEPATH ENTRANCE TO ROAD RESERVE

Design File / Drawing No. R-25 | Sheet of | Revision B | A3

FILE: S:\Works and Infrastructure Services\Infrastructure and Design\Technical Services\Stds & Refs\#SRRC\Standard Drawings\#Scenic Rim\Roads\ACAD\R-25 Rev B - Bikepath Entrance to Road Reserve.dwg PLOTTED: 14 December, 2016 - 10:30am



NOTES :

1. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete and AS3600 (Concrete Structures).
2. Bikeway to be 2.50m wide min. for 9.00m min. from R.P. Boundary. Width may then vary subject to Council Approval.
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6. Refer to R-26 for Bikeway Slowdown Control - Reverse Curve.
7. Refer to R-28 for Bikeway Deflection and Rest Rail details.
8. Refer to MUTCD for Bikeway signage.
9. All dimensions are in millimetres unless shown otherwise (UNO).

DERIVED FROM IPWEA STD DWG SEQ P-0010
AND BCC STD DWG UMS 251
SUPERSEDES BOONAH - STD.P-0002
BEAUDESERT - 50425

Issue	Amendment	App'd	Date
B	REST RAIL INSTALLATION LOCATION, DEFLECTION RAIL SET-OUT AND BARRIER FENCE TYPE REVISED		14/12/16
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales
0 1000 2000
SCALE 1:50

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SCENIC RIM Regional Council

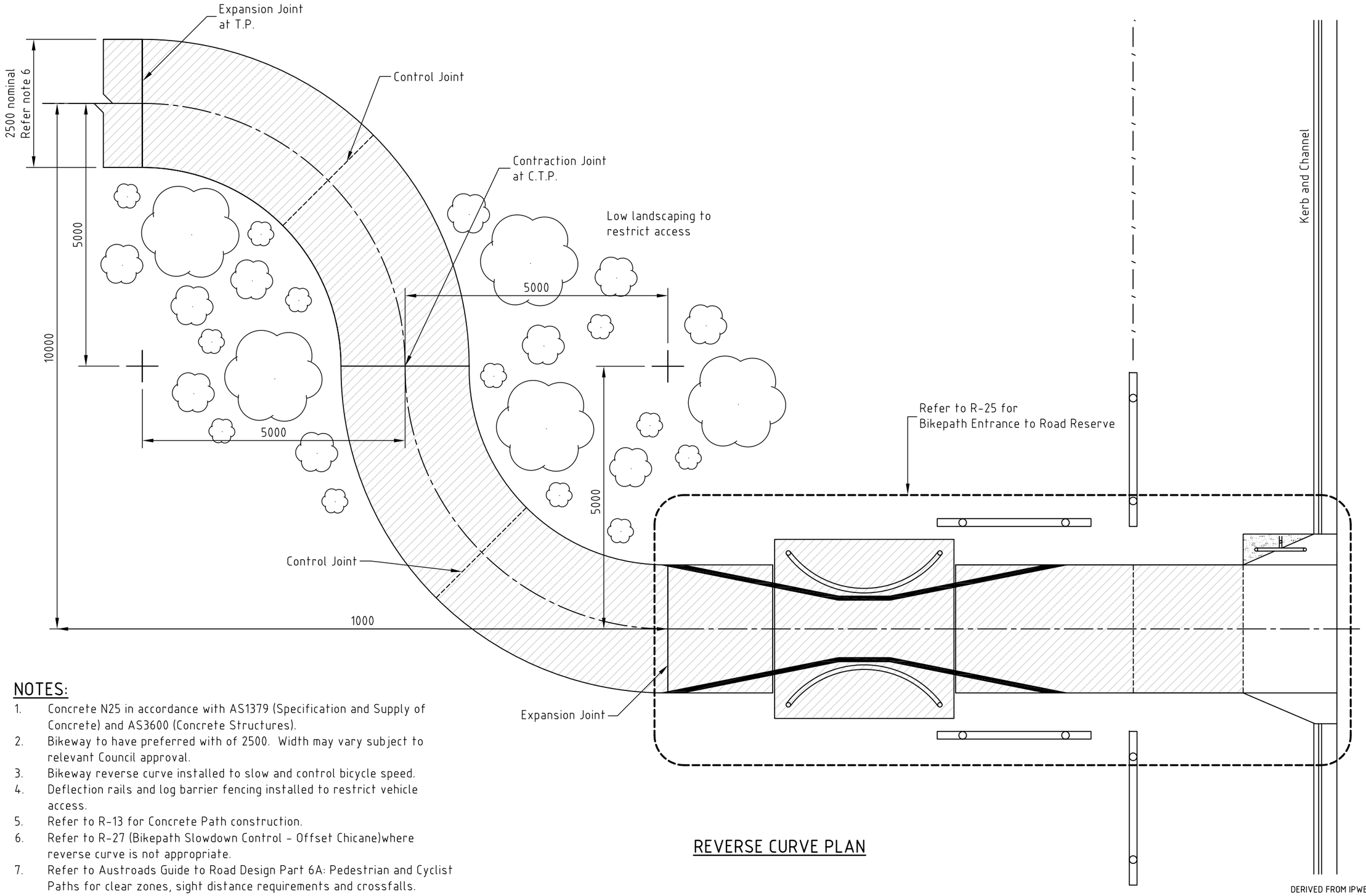
Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
BIKEPATH ENTRANCE TO ROAD RESERVE

Design File / Drawing No. R-25 | Sheet of | Revision B | A3

FILE: S:\Works and Infrastructure Services\Infrastructure and Design\Technical Services\Stds & Refs\#SRRC\Standard Drawings\#Scenic Rim\Roads\ACAD\R-25 Rev B - Bikepath Entrance to Road Reserve.dwg PLOTTED: 14 December, 2016 - 10:30am



NOTES:

1. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Bikeway to have preferred with of 2500. Width may vary subject to relevant Council approval.
3. Bikeway reverse curve installed to slow and control bicycle speed.
4. Deflection rails and log barrier fencing installed to restrict vehicle access.
5. Refer to R-13 for Concrete Path construction.
6. Refer to R-27 (Bikepath Slowdown Control - Offset Chicane)where reverse curve is not appropriate.
7. Refer to Austroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths for clear zones, sight distance requirements and crossfalls.
8. All dimensions are in millimetres unless shown otherwise.

REVERSE CURVE PLAN

DERIVED FROM IPWEA STD DWG P-0013
SUPERSEDES BOONAH - STD.P-0004,
BEAUDESERT - 50426

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales

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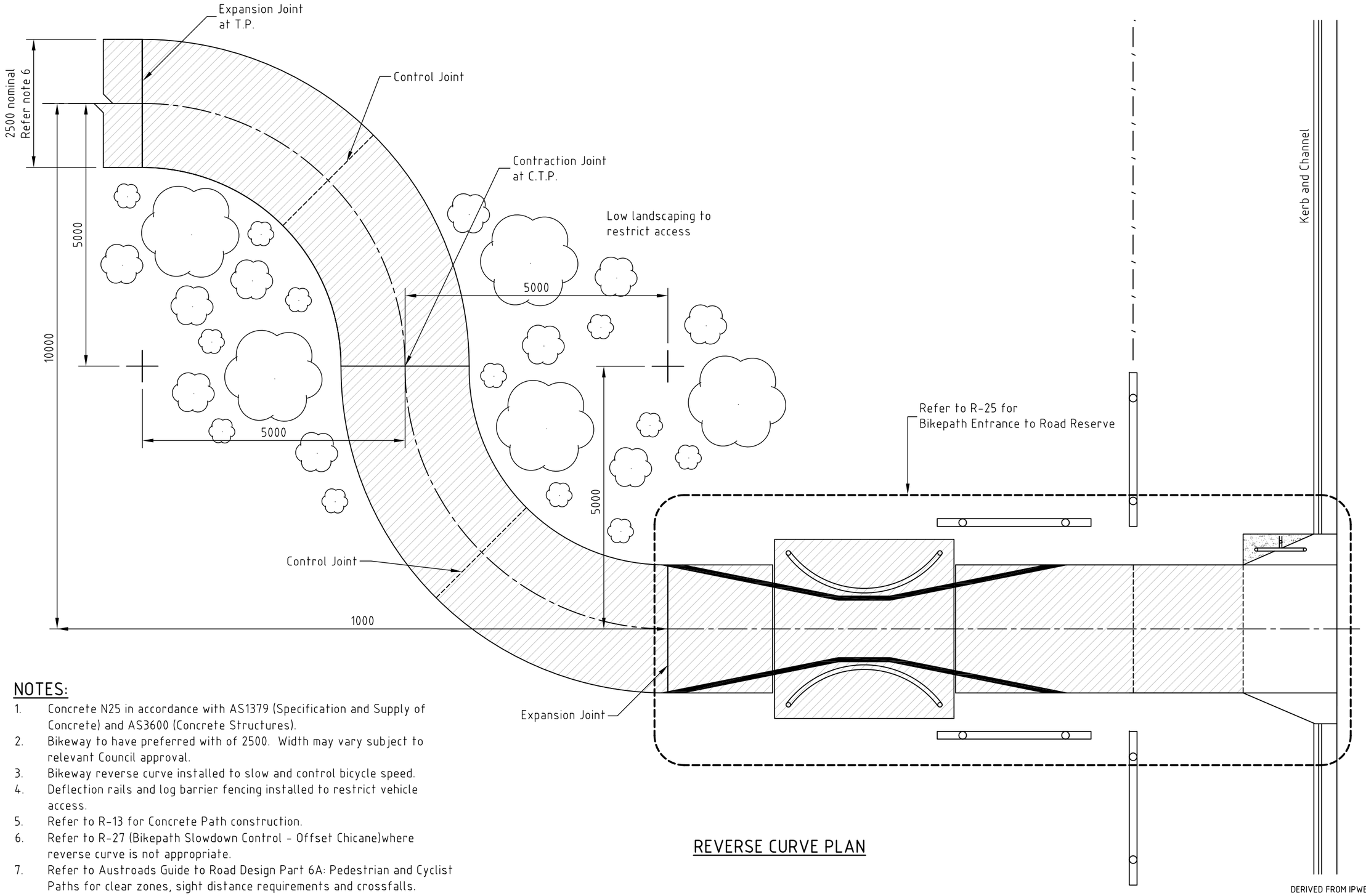
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
BIKEPATH SLOWDOWN CONTROL
REVERSE CURVE

Design File
Drawing No. R-26
Sheet of
Revision A
A3



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2. Bikeway to have preferred with of 2500. Width may vary subject to relevant Council approval.
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REVERSE CURVE PLAN

DERIVED FROM IPWEA STD DWG P-0013
SUPERSEDES BOONAH - STD.P-0004,
BEAUDESERT - 50426

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales

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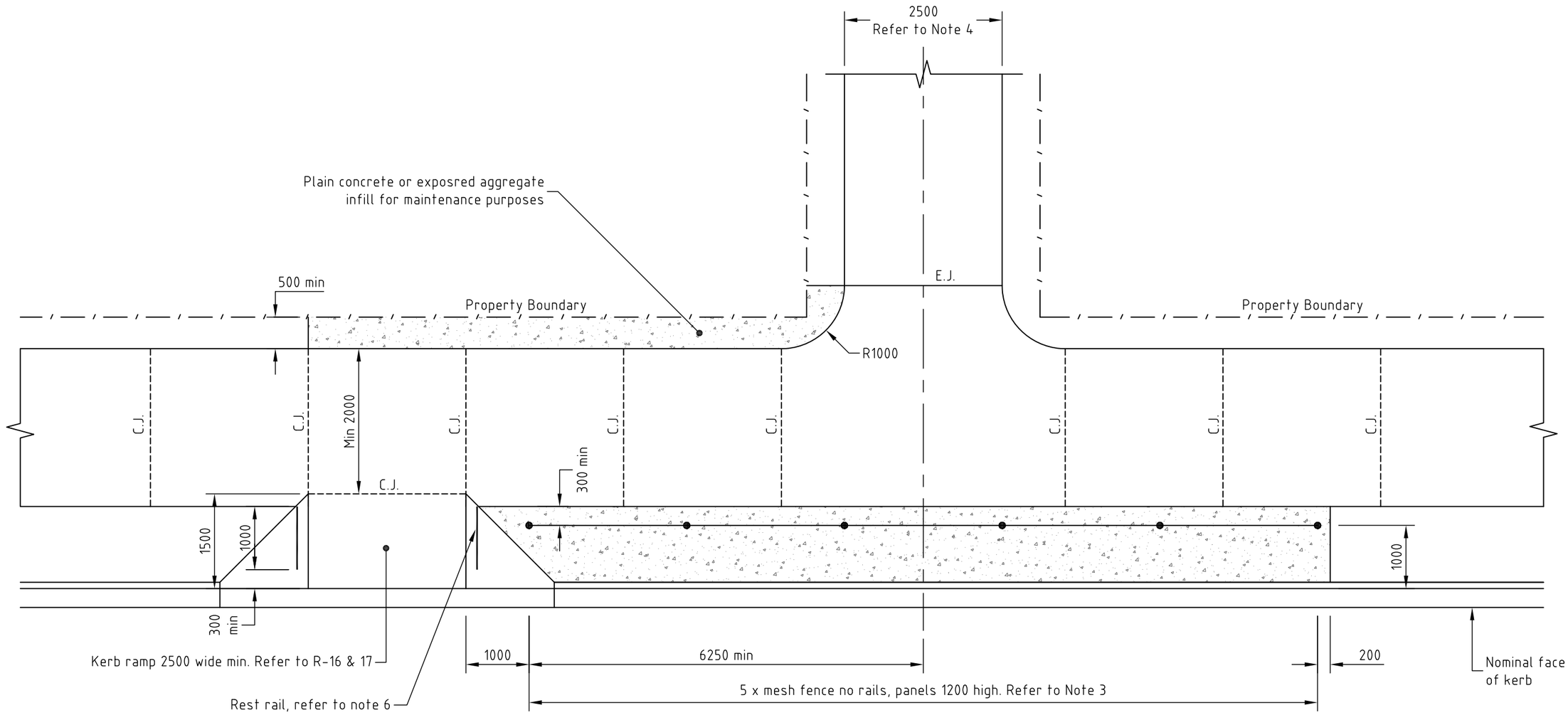
SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

Drawing
BIKEPATH SLOWDOWN CONTROL
REVERSE CURVE

Design File
Drawing No. R-26
Sheet of
Revision A
A3



OFFSET CHICANE

(For use where reverse curve is not practical,
recommended for areas with high primary school traffic)

NOTES:

1. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Refer to R-13 for Concrete Path construction details.
3. Mesh fence no rails details, refer to R-23.
4. Bikeway to have preferred width of 2500. Width may vary, subject to relevant Council approval.
5. Kerb ramp details refer to R-16 & 17.
6. Rest rail details refer to R-25 & 28.
7. Installation of TGSI's refer to R-16 & 17. TGSI's are required on a bikeway where a need for vision impaired pedestrian has been identified. TGSI's shall comply with AS1428.4.1 (Design for Access and Mobility).
8. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG P-0015
SUPERSEDES BOONAH - STD.G-0005,
BEAUDESERT - 50427

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

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Director of Works & Infrastructure

DATE 6 September 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

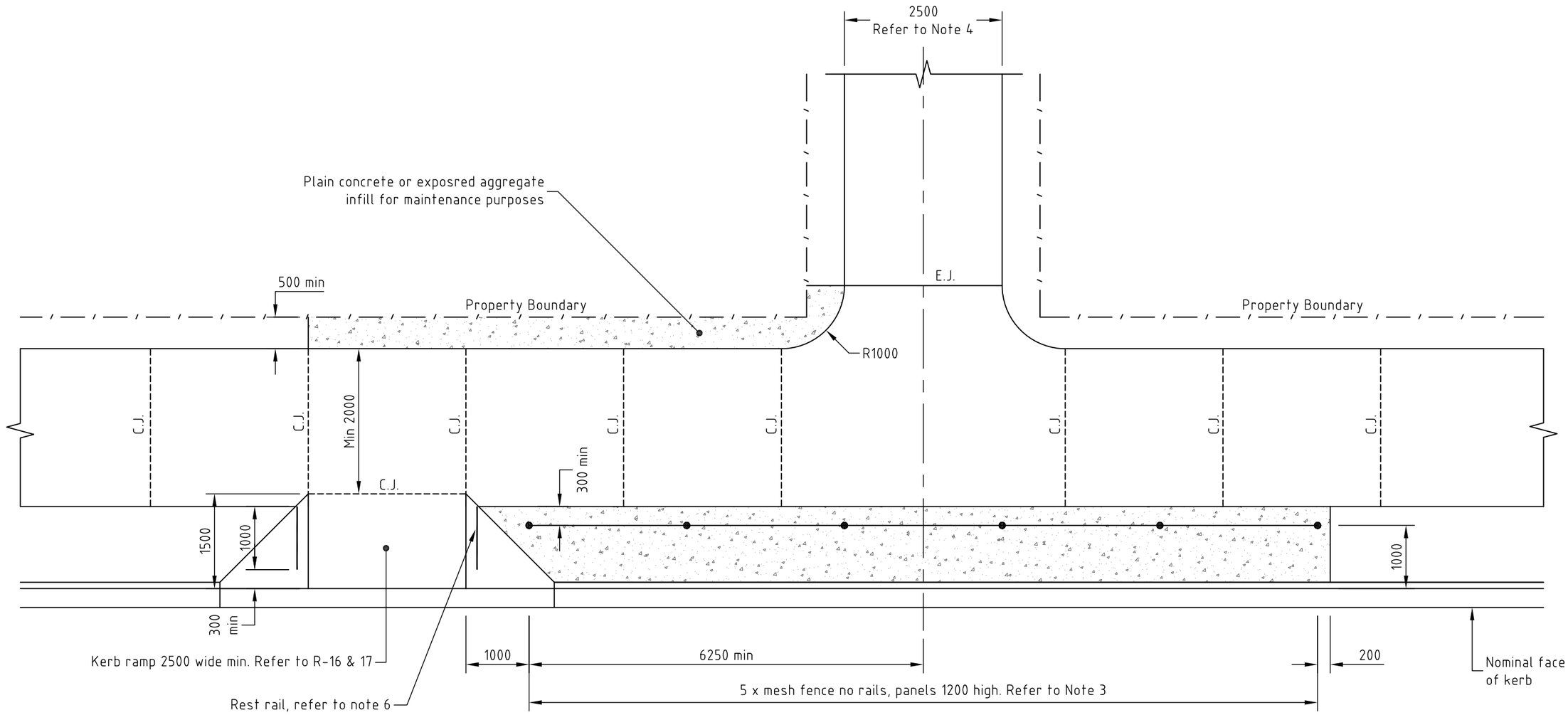
Drawing
BIKEPATH SLOWDOWN CONTROL
OFFSET CHICANE

Design File
Drawing No. R-27

Sheet of

Revision A

A3



OFFSET CHICANE

(For use where reverse curve is not practical,
recommended for areas with high primary school traffic)

NOTES:

1. Concrete N25 in accordance with AS1379 (Specification and Supply of Concrete) and AS3600 (Concrete Structures).
2. Refer to R-13 for Concrete Path construction details.
3. Mesh fence no rails details, refer to R-23.
4. Bikeway to have preferred width of 2500. Width may vary, subject to relevant Council approval.
5. Kerb ramp details refer to R-16 & 17.
6. Rest rail details refer to R-25 & 28.
7. Installation of TGSI's refer to R-16 & 17. TGSI's are required on a bikeway where a need for vision impaired pedestrian has been identified. TGSI's shall comply with AS1428.4.1 (Design for Access and Mobility).
8. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG P-0015
SUPERSEDES BOONAH - STD.G-0005,
BEAUDESERT - 50427

Issue	Amendment	App'd	Date
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED
Director of Works & Infrastructure

DATE 6 September 2010

Scales

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project
SRRC STANDARD DRAWINGS
ROADS

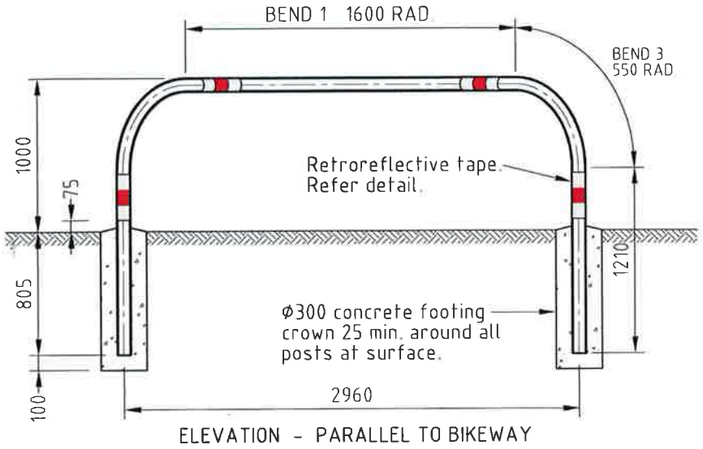
Drawing
BIKEPATH SLOWDOWN CONTROL
OFFSET CHICANE

Design File
Drawing No. R-27

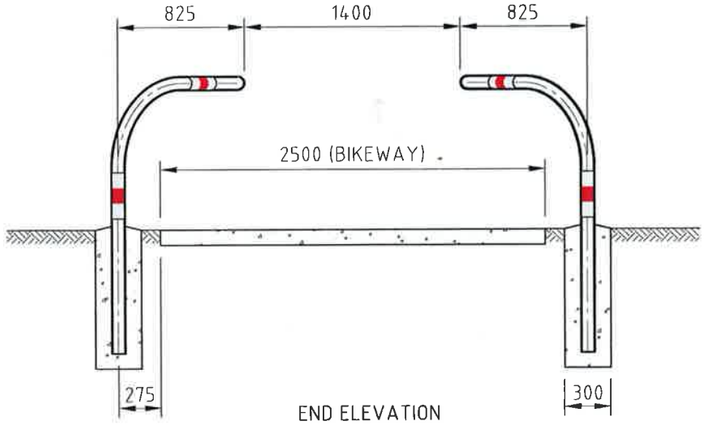
Sheet of

Revision A

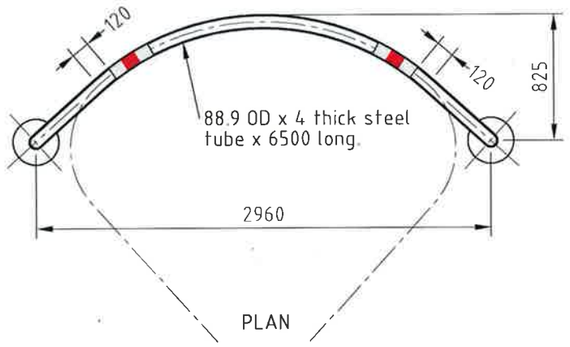
A3



ELEVATION - PARALLEL TO BIKEWAY

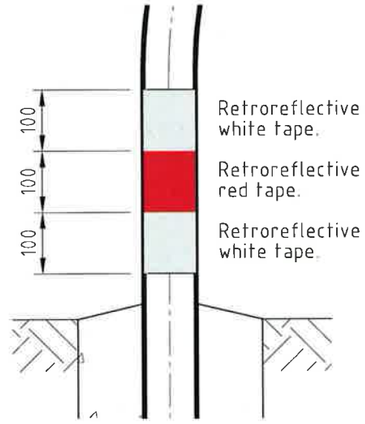


END ELEVATION

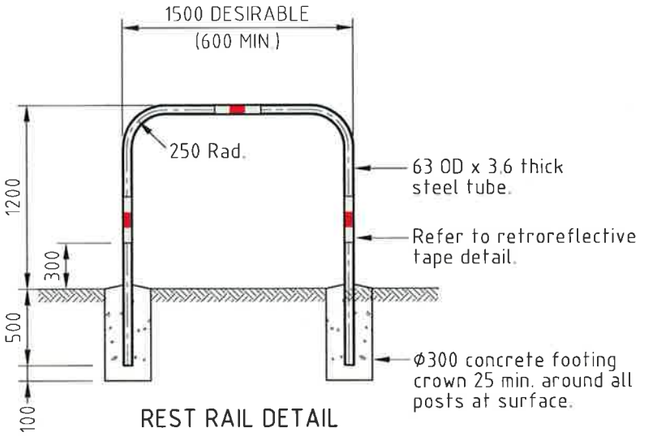


PLAN

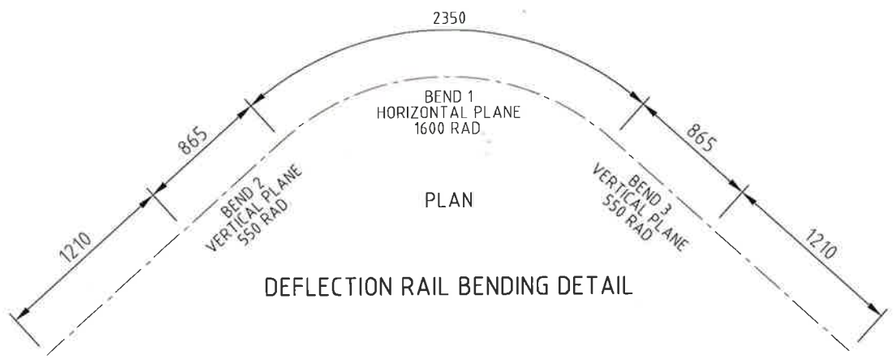
DEFLECTION RAIL INSTALLATION DETAIL



RETROREFLECTIVE TAPE DETAIL



REST RAIL DETAIL



PLAN

DEFLECTION RAIL BENDING DETAIL

NOTES :

1. Concrete footings to be grade N25 in accordance with AS3600 (Concrete Structures).
2. Galvanised steel tube in accordance with AS1163 (Cold-formed Structural Steel Hollow Sections).
3. Rollform deflection rail from a single piece 6500 long tube.
4. Galvanised steel to be powder coated in Y11 canary yellow to AS2700-1996 (Colour Standards for General Purposes
5. Retroreflective Tape to be white and red class 1 in accordance with AS1906.1 (Retroreflective Materials and Devices for Road Traffic Control Purposes - Retroreflective Sheeting).
6. Refer to R-25 for deflection rail installation on bikeways.
7. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG PS-016

Issue	Amendment	App'd	Date
B	GENERAL REVISIONS, REVISED RETROREFLECTIVE TAPE POSITIONS AND BANDING WIDTHS		14/12/16
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 6 September 2010

Scales: NOT TO SCALE

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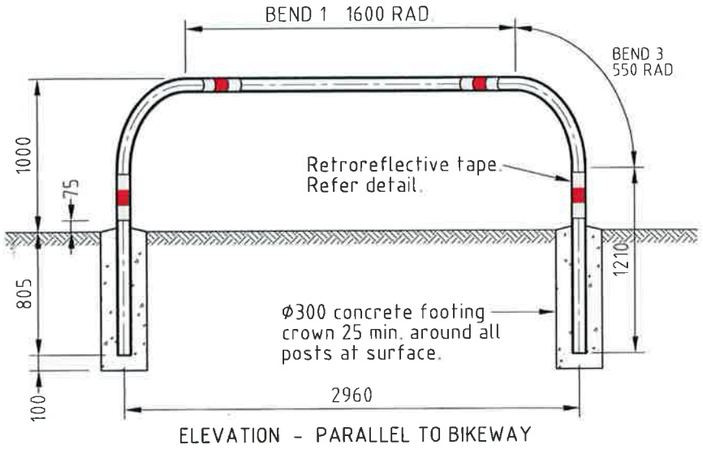
Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

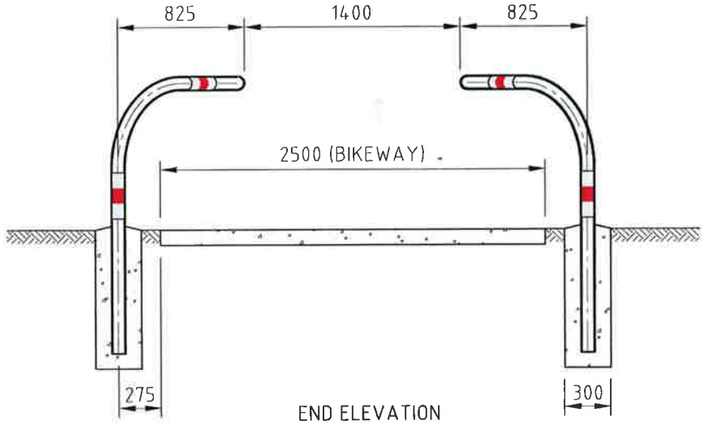
Drawing: BIKEWAY DEFLECTION AND REST RAIL DETAILS

Design File / Drawing No. R-28 | Sheet of | Revision B | A3

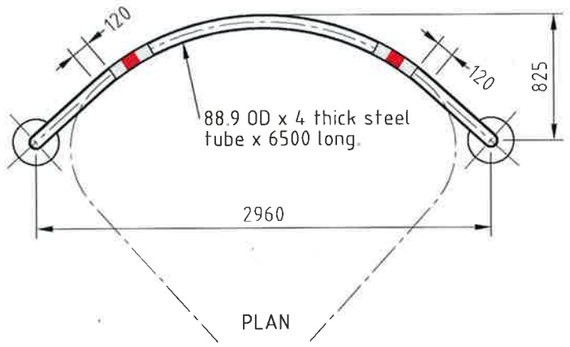
FILE: S:\Works and Infrastructure Services\Infrastructure and Design\Technical Services\Stds & Refs\#SRRC\Standard Drawings\#Scenic Rim\Roads\ACAD\R-28 Rev B - Bikeway Deflection and Rest Rail Detail.dwg PLOTTED: 14 December, 2016 - 10:35am



ELEVATION - PARALLEL TO BIKEWAY

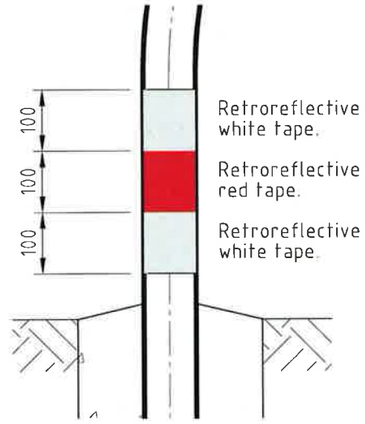


END ELEVATION

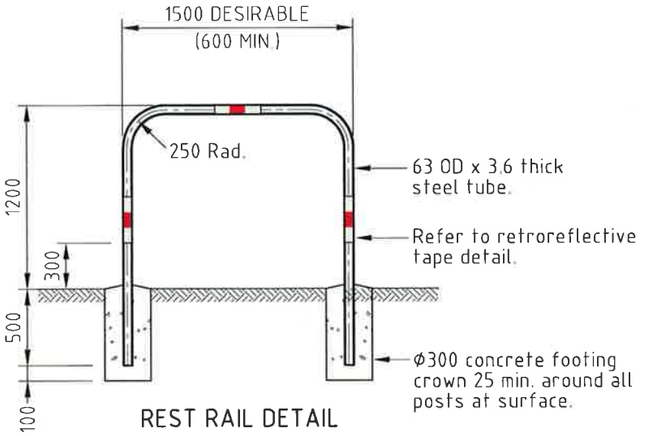


PLAN

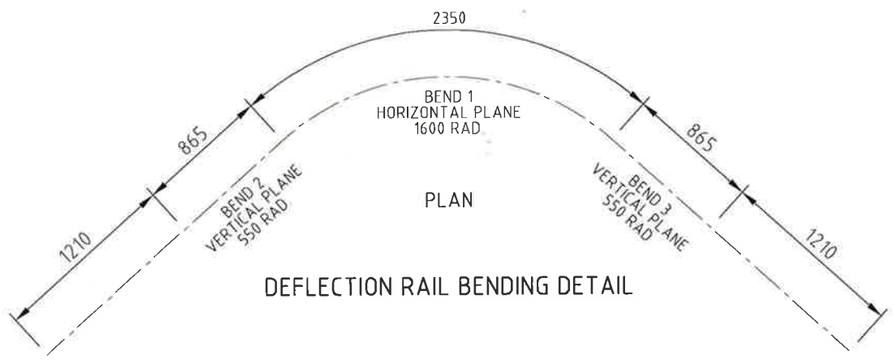
DEFLECTION RAIL INSTALLATION DETAIL



RETROREFLECTIVE TAPE DETAIL



REST RAIL DETAIL



PLAN

DEFLECTION RAIL BENDING DETAIL

NOTES :

1. Concrete footings to be grade N25 in accordance with AS3600 (Concrete Structures).
2. Galvanised steel tube in accordance with AS1163 (Cold-formed Structural Steel Hollow Sections).
3. Rollform deflection rail from a single piece 6500 long tube.
4. Galvanised steel to be powder coated in Y11 canary yellow to AS2700-1996 (Colour Standards for General Purposes
5. Retroreflective Tape to be white and red class 1 in accordance with AS1906.1 (Retroreflective Materials and Devices for Road Traffic Control Purposes - Retroreflective Sheeting).
6. Refer to R-25 for deflection rail installation on bikeways.
7. All dimensions are in millimetres unless shown otherwise.

DERIVED FROM IPWEA STD DWG PS-016

Issue	Amendment	App'd	Date
B	GENERAL REVISIONS, REVISED RETROREFLECTIVE TAPE POSITIONS AND BANDING WIDTHS		14/12/16
A	ORIGINAL ISSUE		

APPROVED

ORIGINAL ISSUE SIGNED

Director of Works & Infrastructure

DATE 6 September 2010

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SCENIC RIM Regional Council

Works & Infrastructure Services

Project: SRRC STANDARD DRAWINGS
ROADS

Drawing: BIKEWAY DEFLECTION AND REST RAIL DETAILS

Design File / Drawing No. R-28 | Sheet of | Revision B | A3

FILE: S:\Works and Infrastructure Services\Infrastructure and Design\Technical Services\Stds & Refs\#SRRC\Standard Drawings\#Scenic Rim\Roads\ACAD\R-28 Rev B - Bikeway Deflection and Rest Rail Detail.dwg PLOTTED: 14 December, 2016 - 10:35am