

PINE RIVERS SHIRE COUNCIL

STANDARD DRAWINGS



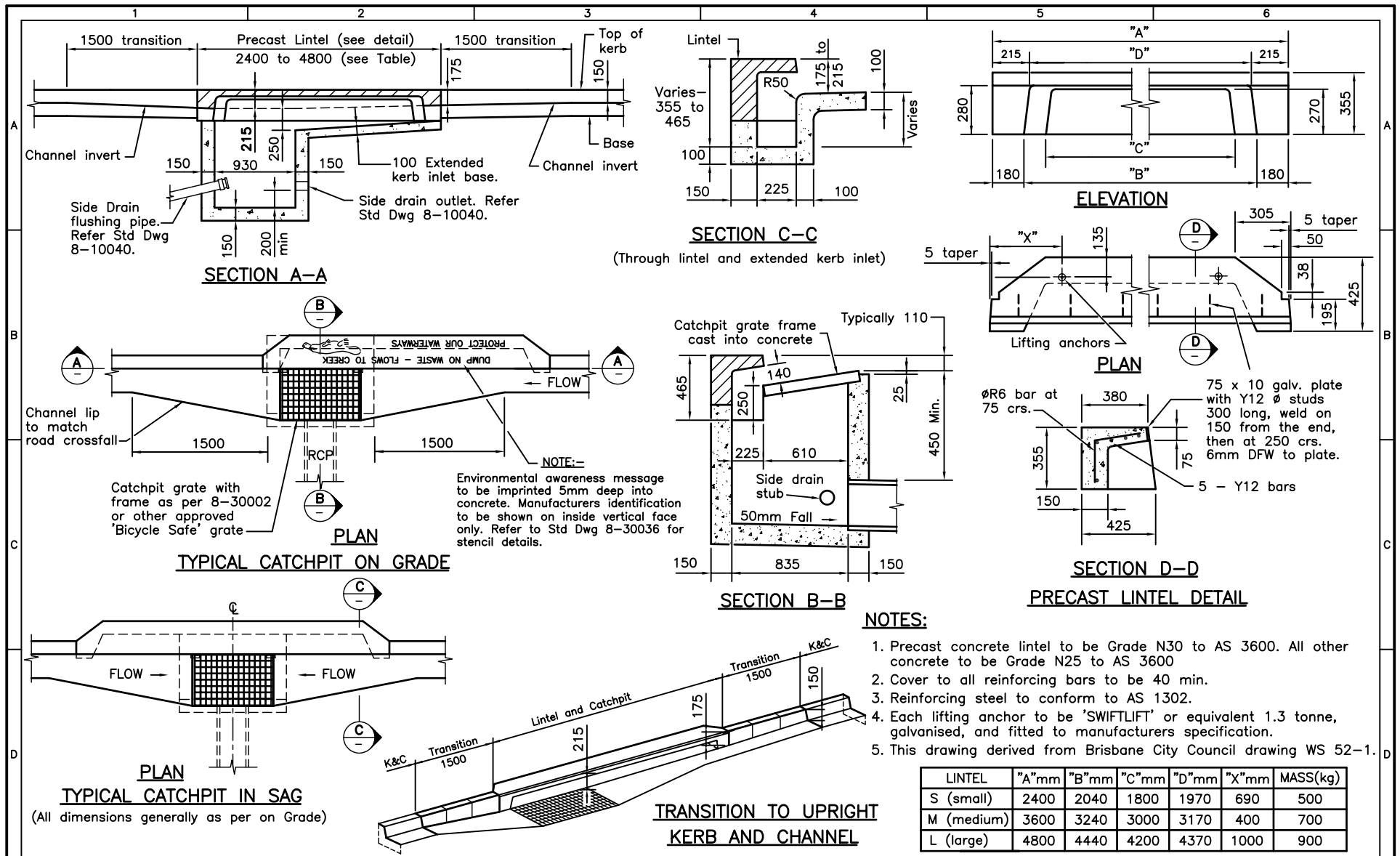
8-30000 Series

STORMWATER DRAINAGE

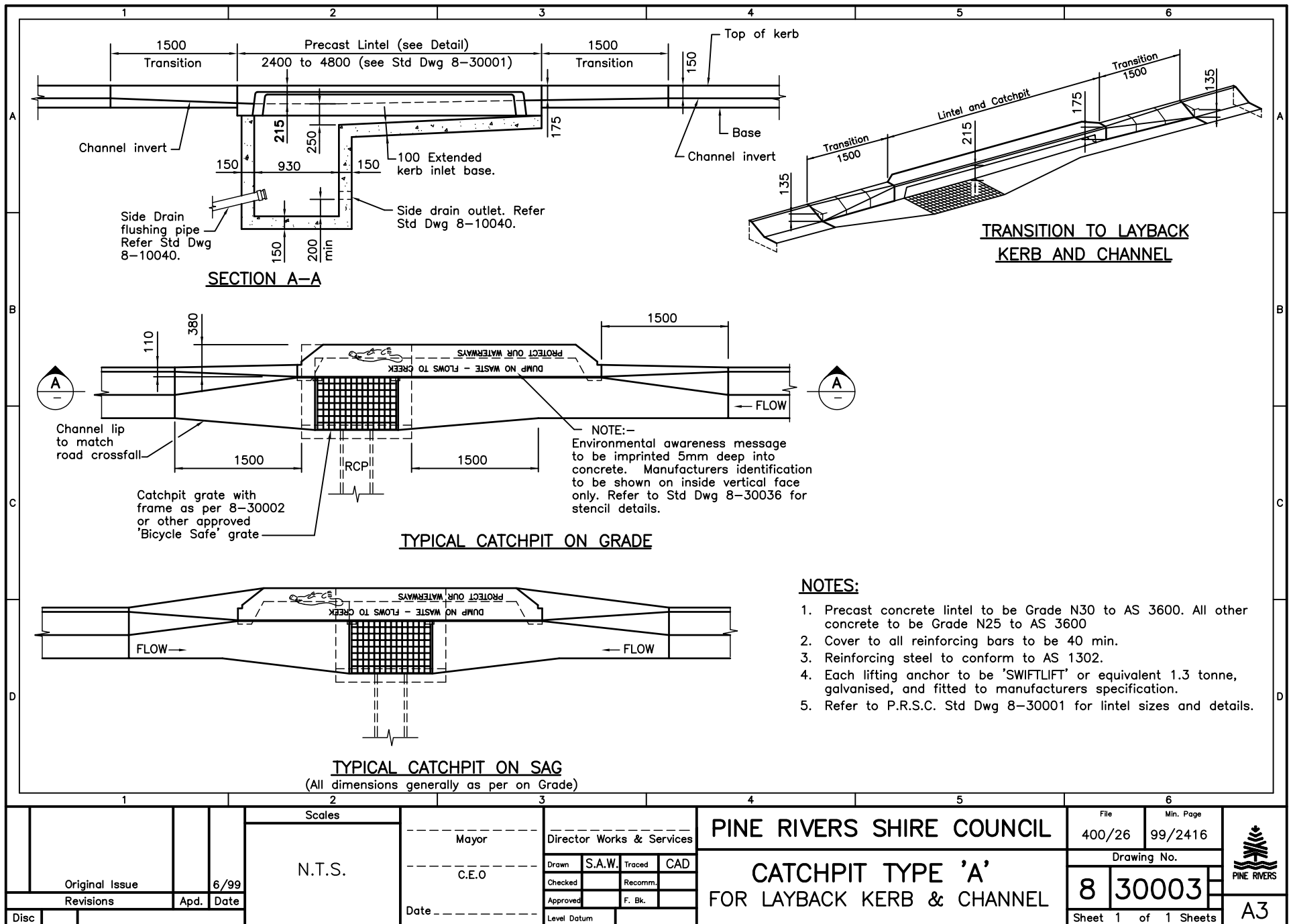


DRAWING	AMEND	DESCRIPTION	DATE
8-30001	B	Gully Type 'A' for Upright Kerb and Channel	06/1999
8-30002	C	Gully Grate and Frame - Type 'A'	08/1999
8-30003	-	Catchpit Type 'A' for Layback Kerb and Channel	06/1999
8-30004	-	Standard Field Inlet	11/1995
8-30005	-	Side Entry Field Inlet	11/2004
8-30006	B	Standard 1100 dia. Stormwater Manhole	11/2004
8-30007	B	Standard 1350 dia. Stormwater Manhole	11/2004
8-30008	B	Standard 1500 dia. Stormwater Manhole	11/2004
8-30010	-	Standard Stormwater Manhole Cover & Frame - Concrete Filled	11/1995
8-30011	-	Standard Stormwater Manhole Cover and Frame - Cast Iron	09/1996
8-30012	-	Field inlet Pit Dome Top Cover	02/2005
8-30013	B	Bedding and Backfill to Pipes and Culverts Sheet 1 of 2	01/2005
8-30014	A	Bedding and Backfill to Pipes and Culverts Sheet 2 of 2	08/1999
8-30015	-	End Walls for Pipe Culverts 300 - 675 dia.	11/1995
8-30016	-	Wing Walls, Headwalls and Aprons for Pipe Culverts 750 - 2400 dia. - General arrangement	11/1995
8-30017	-	Wing Walls, Headwalls and Aprons for Pipe Culverts 750 - 2400 dia. - Details Sheet 1 of 2	11/1995
8-30018	-	Wing Walls, Headwalls and Aprons for Pipe Culverts 750 - 2400 dia. - Detail Sheet 2 of 2	11/1995
8-30019	-	End Walls to R.C. Box Culverts H > 750	11/1995
8-30020	-	Wing Walls and Headwalls for R.C. Box Culverts - Reinforcing Details Sheet 1 of 2	11/1995

DRAWING	AMEND	DESCRIPTION	DATE
8-30021	-	Wing Walls and Headwalls for R.C. box Culverts - Reinforcing Details Sheet 2 of 2	11/1995
8-30022	-	Bases and Aprons to R.C. Box Culverts - General arrangements	11/1995
8-30023	-	Bases and aprons to R.C. Box Culverts - Reinforcing details	11/1996
8-30024	-	R. C. Box Culvert crown unit holding down anchors	11/1995
8-30025	B	Security Grate for Stormwater Outlets	11/2004
8-30026	A	Pathway Detail as an Overland Flow Path	08/1999
8-30027	-	Sample Roofwater As-Constructed Plan	11/1996
8-30028	-	Roofwater & Stormwater Drains in Verge with Kerb Outlet	06/2003
8-30029	-	Weir Type Sediment and Trash Trap	11/1996
8-30030	-	Scour Basin Typical Details	11/1996
8-30031	-	Water Course Advisory Sign	11/1996
8-30032	-	Minor Gross Pollutant Trap - General Arrangement	02/1997
8-30033	-	Stormwater Drainage Calculation Sheet	02/2005
8-30034	-	New Pits and Manholes Over Existing Stormwater Pipes	02/2005
8-30035	-	Saddle Joint to Stormwater Systems	02/2005
8-30036	-	Catchpit Stencil / Imprint Environmental Awareness Message	06/1999
8-30037	-	Special 610 x 380 Catchpit	11/2004
8-30038	-	Roofwater Drainage Pit	11/2004



B		Protect our waterways wording and logo added, apron and lintel changed		6/99		Scales		N.T.S.		Mayor		Director Works & Services		PINE RIVERS SHIRE COUNCIL		File		Min. Page			
A		Title and lintel changed Original Issue		9/96						C.E.O.		Drawn S.W. Traced CAD		CATCHPIT TYPE 'A' FOR UPRIGHT KERB & CHANNEL		400/26		94/5411			
		Revisions		Apd. Date						Date		Checked T.T. Recomm. F.J.K				Drawing No.		8 30001			
Disc												Approved F. Bk.				Sheet 1 of 1 Sheets		A3			



						Scales				----- Mayor -----		Director Works & Services		PINE RIVERS SHIRE COUNCIL				File 400/26		Min. Page 99/2416		 PINE RIVERS			
						N.T.S.				C.E.O		Drawn S.A.W. Traced CAD		CATCHPIT TYPE 'A' FOR LAYBACK KERB & CHANNEL				Drawing No.							
Original Issue		6/99										Checked						Recomm.		8				30003	
Revisions		Apd.		Date								Approved						F. Bk.							
Disc								Date -----				Level Datum						Sheet 1 of 1 Sheets				A3			

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NOTES

- In paved areas, the grate supplied shall be of either Cast (Grey) Ductile Iron or hot dipped galvanised Mild Steel complying with A.S.3996 and shall be hinged (Bicycle safe) Type C except where otherwise stated.
- Certificate of Compliance with Standard to be supplied by Contractor
- A minimum surface area of 50% of total area shall be available for stormwater inlet flow.
- Grate shown is indicative only.

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

ELEVATION

PLAN

SECTION F-F

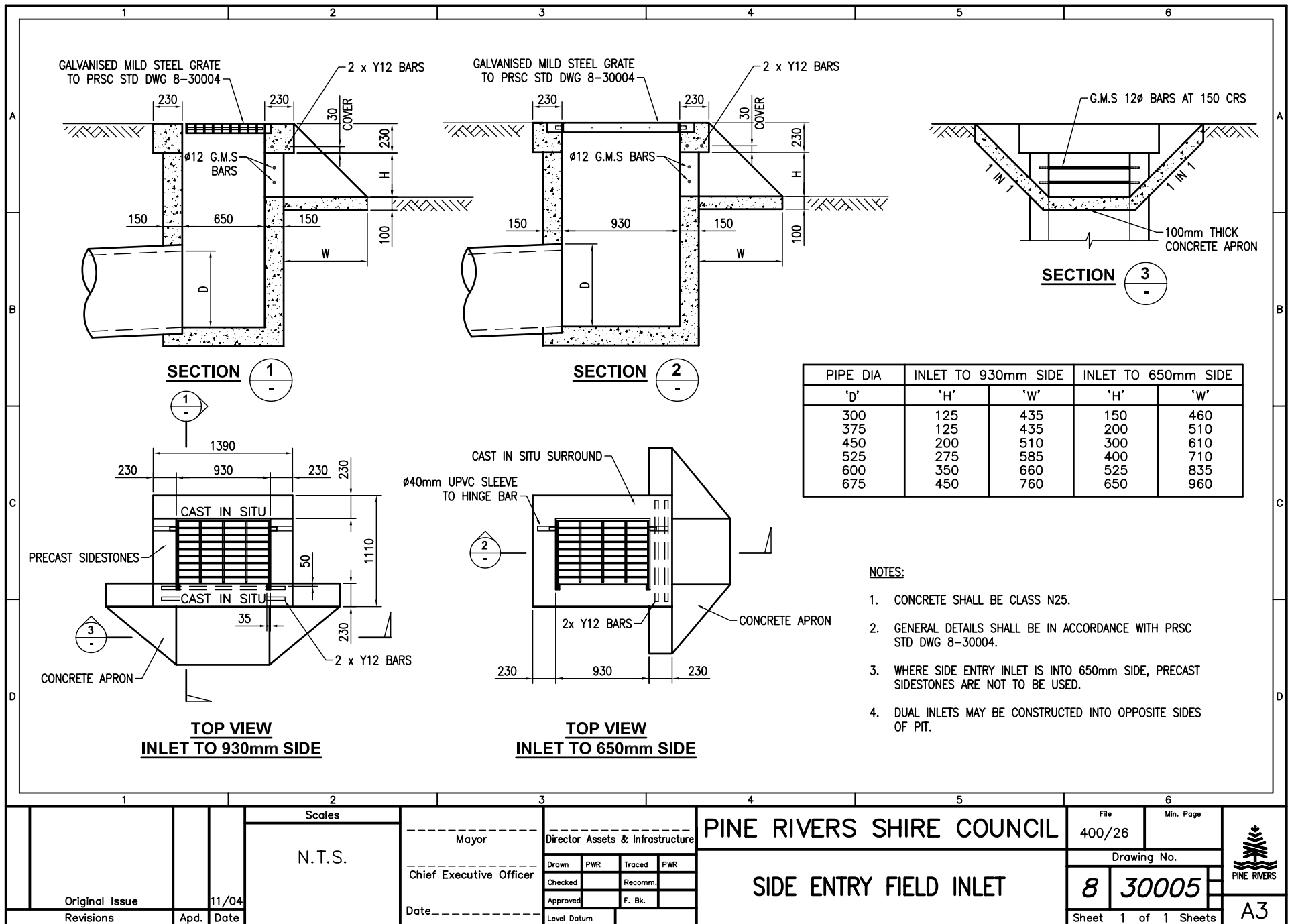
DETAIL OF REINFORCEMENT SIDESTONES

FIELD INLET FOR PAVED AREAS
(Refer to Notes 1 to 4)

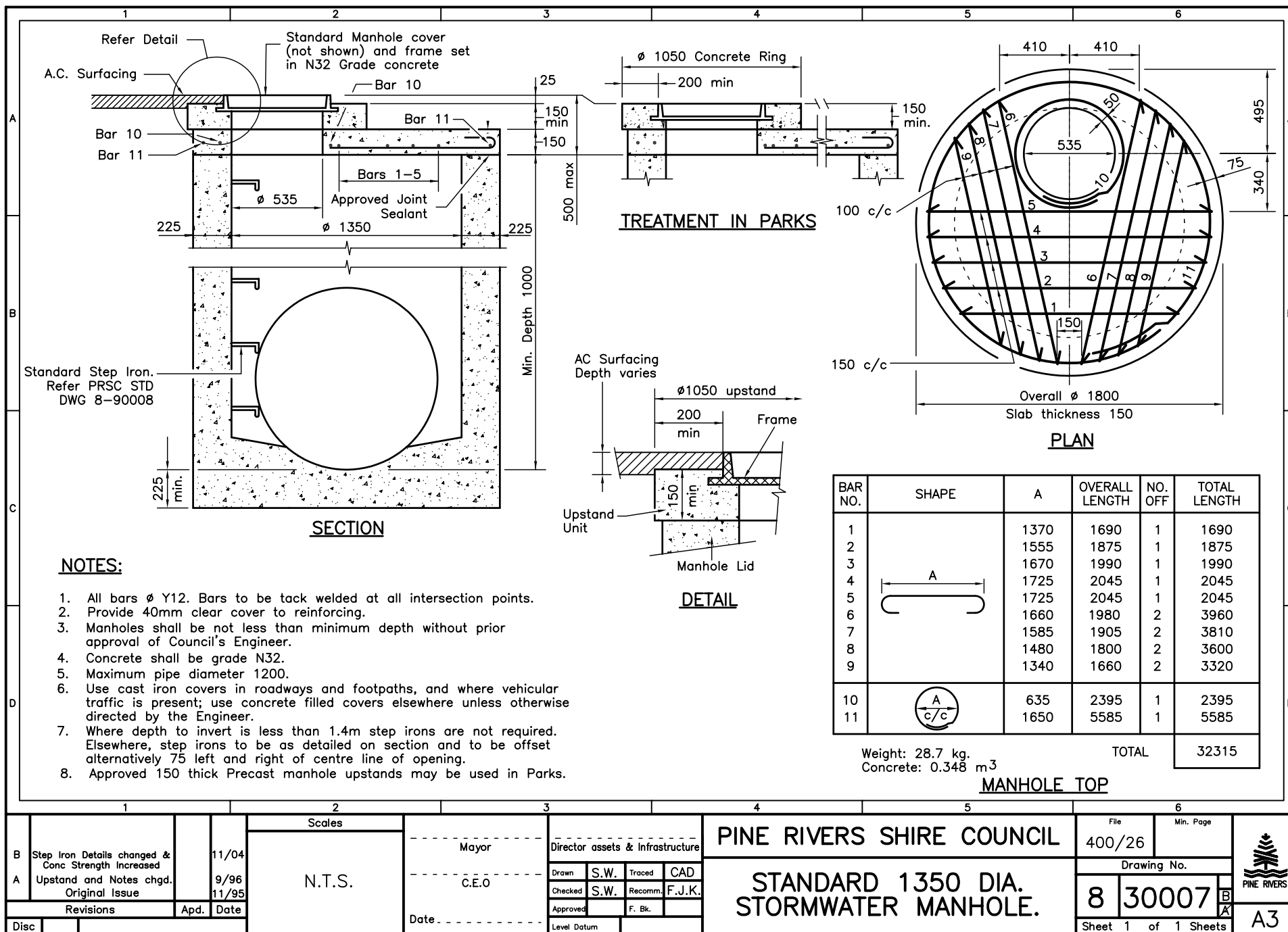
FIELD INLET FOR GRASSED AREAS

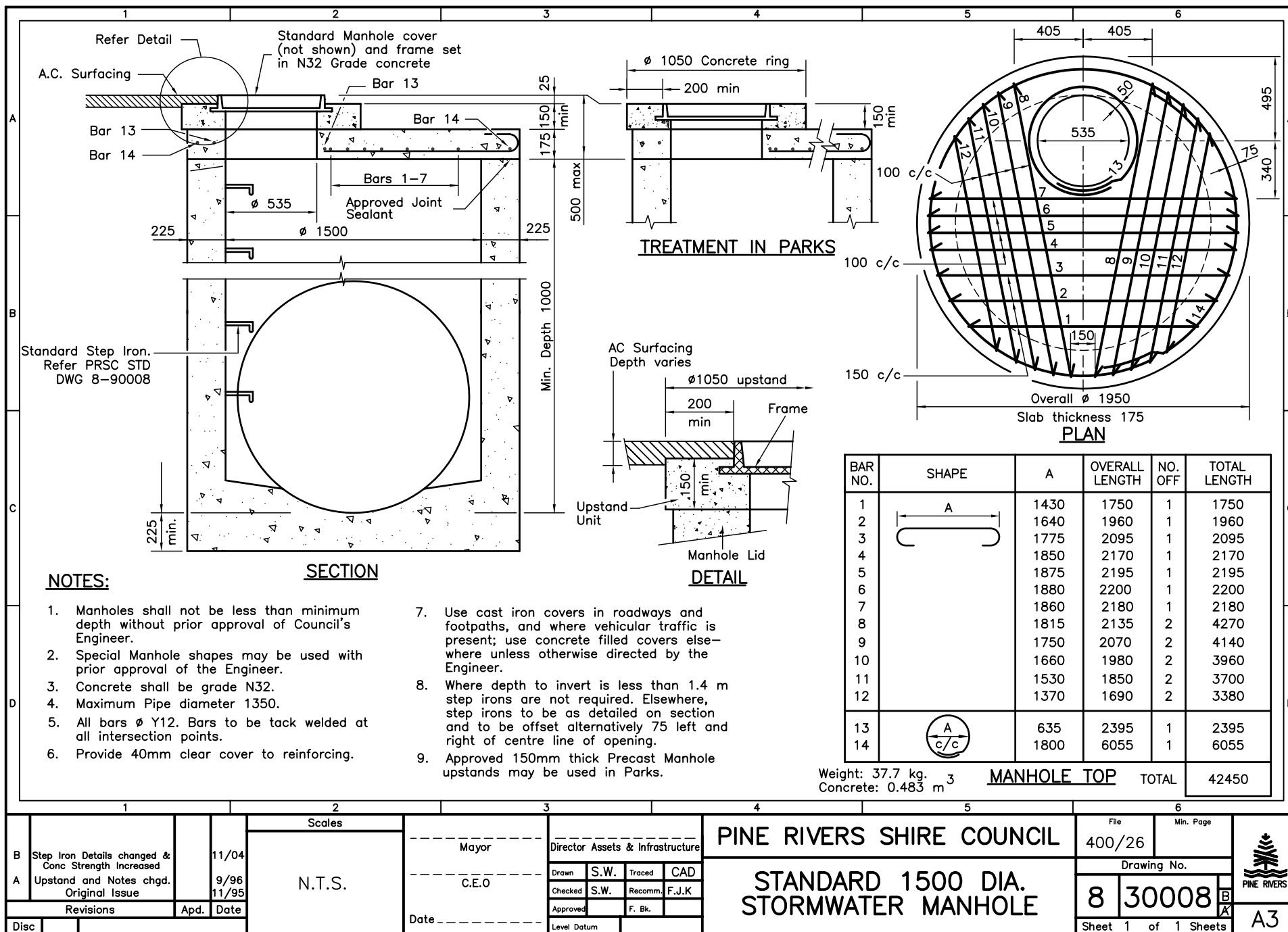
PLAN OF GRATE

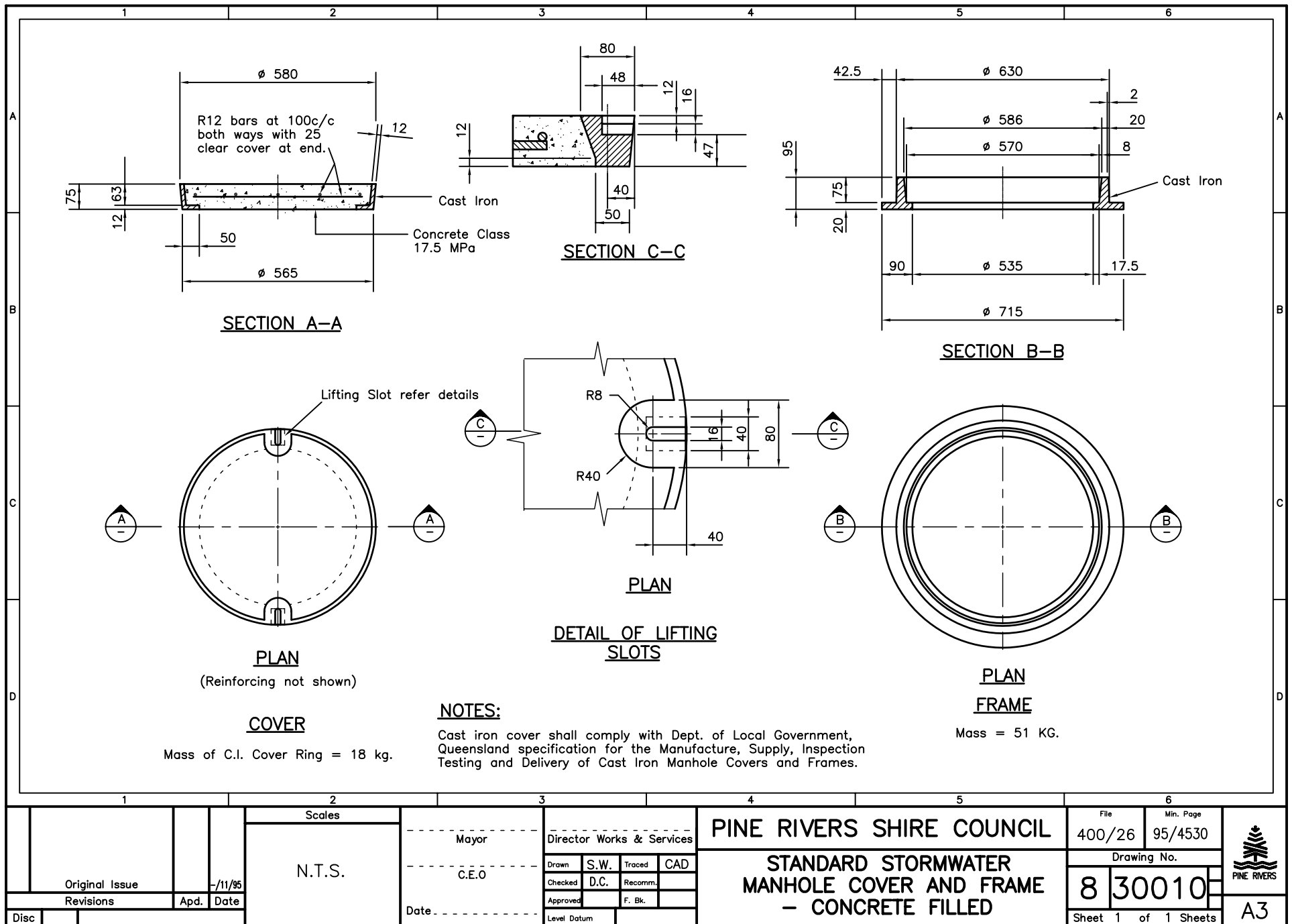
1				2		3		4		5		6		 PINE RIVERS								
				Scales		----- Mayor ----- ----- C.E.O. ----- Date -----		Director Works & Services		PINE RIVERS SHIRE COUNCIL		File 400/26	Min. Page 95/4530									
								<table><tr><td>Drawn</td><td>S.W.</td><td>Traced</td><td>CAD</td></tr><tr><td>Checked</td><td>D.C.</td><td>Approved</td><td></td></tr><tr><td>L. Bk.</td><td></td><td>F. Bk.</td><td></td></tr><tr><td colspan="2">Level Datum</td><td colspan="2"></td></tr></table>		Drawn	S.W.	Traced	CAD		Checked	D.C.	Approved		L. Bk.		F. Bk.	
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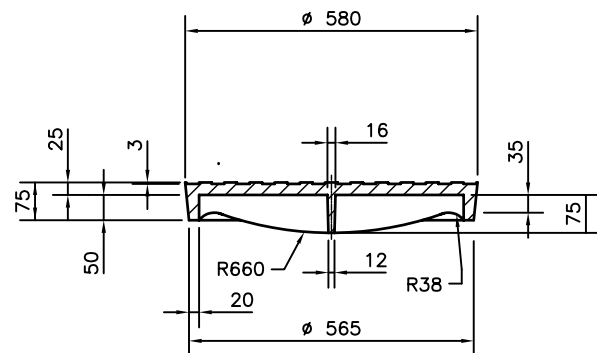


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		Scales		Director Assets & Infrastructure		PINE RIVERS SHIRE COUNCIL		File		Min. Page	
		N.T.S.		Mayor		SIDE ENTRY FIELD INLET		400/26			
				Chief Executive Officer				Drawing No.			
				Date				8 30005			
Original Issue		11/04						Sheet		1 of 1 Sheets	
Revisions		Apd. Date								A3	

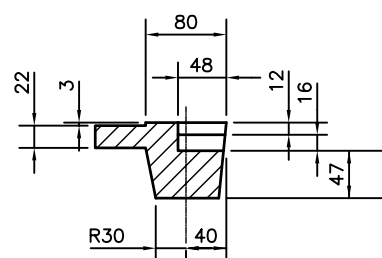




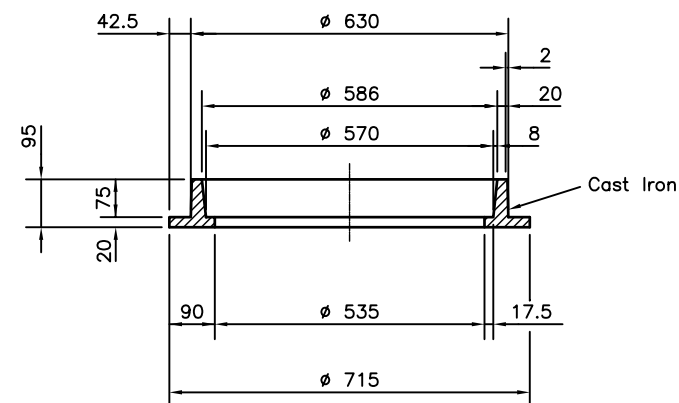




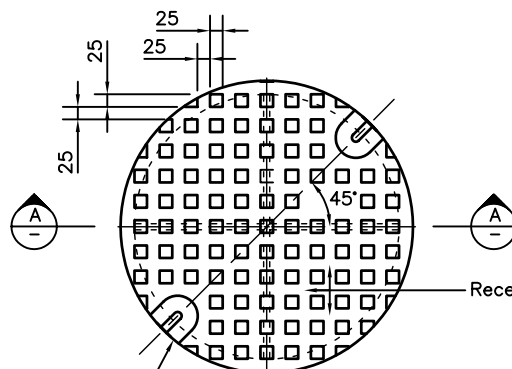
SECTION A-A



SECTION C-C

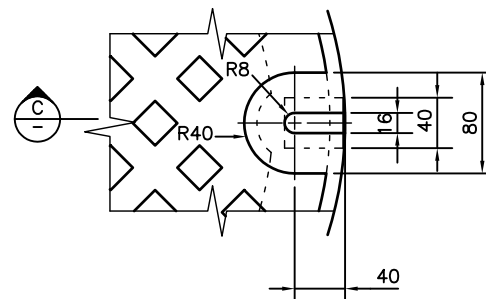


SECTION B-B



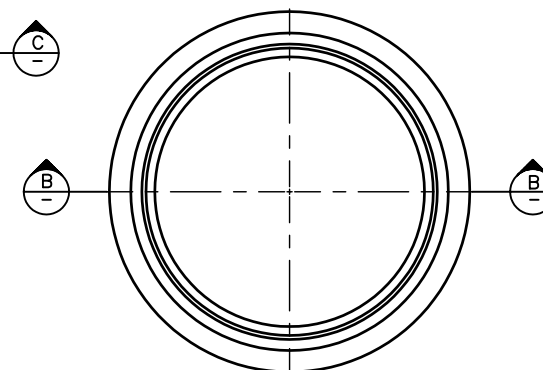
PLAN COVER

Mass = 62 kg.



PLAN

DETAIL OF LIFTING SLOTS



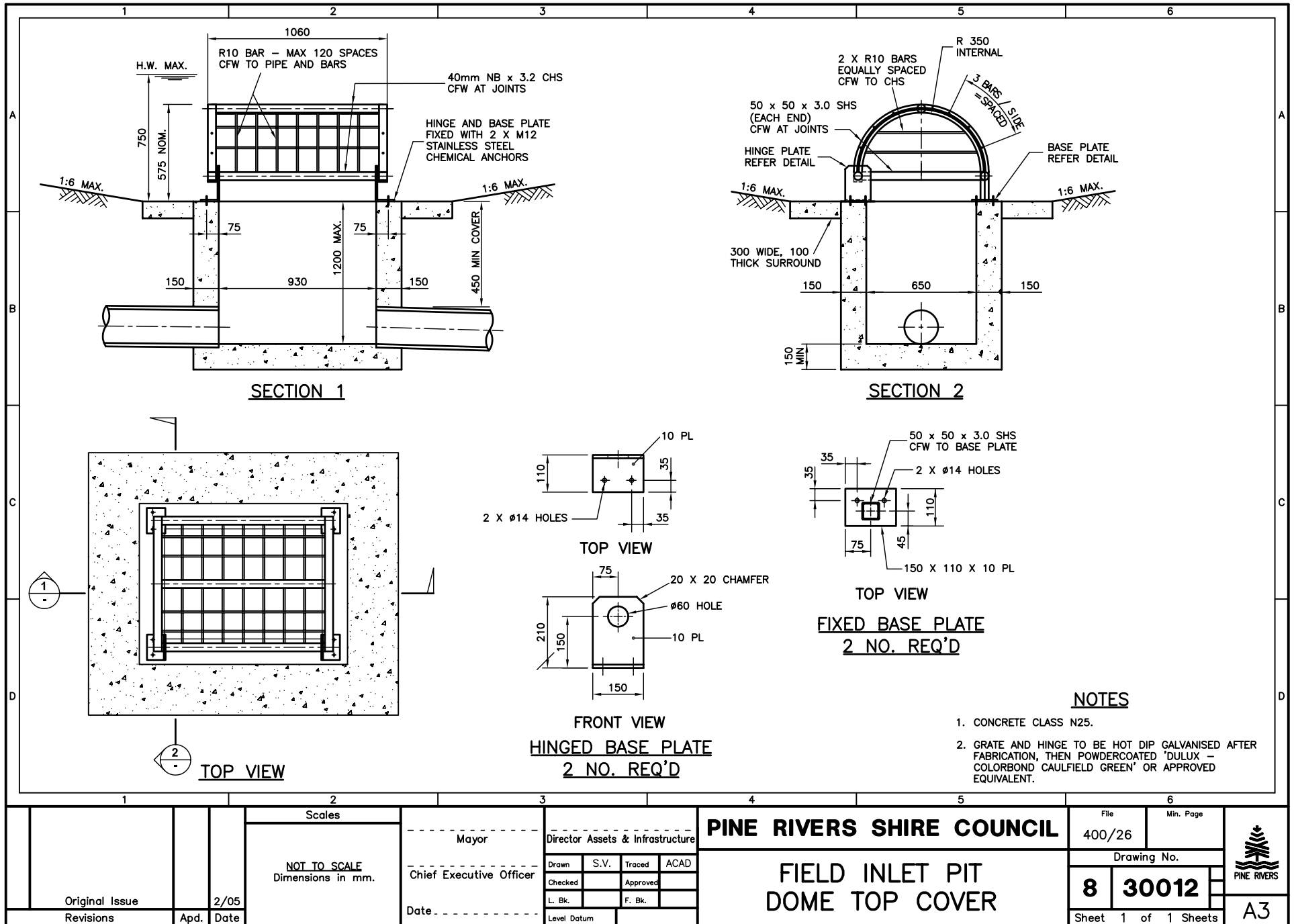
PLAN FRAME

Mass = 51 KG.

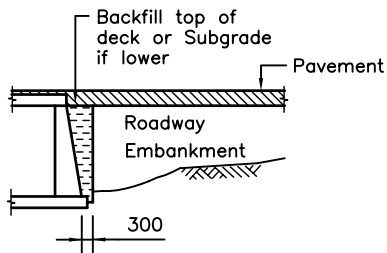
NOTES:

Cast iron cover shall comply with Dept. of Local Government, Queensland specification for the Manufacture, Supply, Inspection Testing and Delivery of Cast Iron Manhole Covers and Frames.

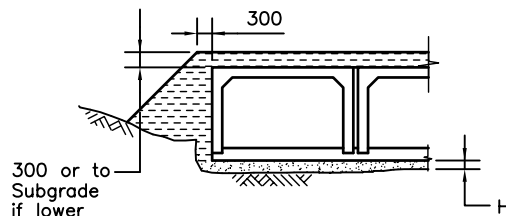
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Original Issue		Revisions		Apd. Date		Scales		N.T.S.		Director Works & Services	
Disc		Date		Date		C.E.O.		PINE RIVERS SHIRE COUNCIL		File 400/26 Min. Page 95/4530	
Level Datum		Date		Date		C.E.O.		STANDARD STORMWATER MANHOLE COVER AND FRAME - CAST IRON		Drawing No. 8 30011	
Level Datum		Date		Date		C.E.O.		STANDARD STORMWATER MANHOLE COVER AND FRAME - CAST IRON		Sheet 1 of 1 Sheets	
Level Datum		Date		Date		C.E.O.		STANDARD STORMWATER MANHOLE COVER AND FRAME - CAST IRON		A3	



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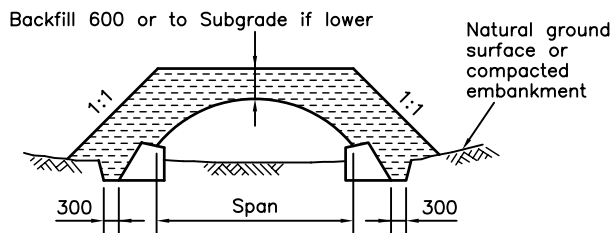


R.C. SLAB DECK CULVERT



The same backfill details apply for R.C.B.C Crown units on a cast in-situ base slab. However, due to local conditions, bedding materials for cast in-situ slabs may not be required, and should be determined on a case by case basis.

PRECAST R.C. BOX CULVERT



CORRUGATED STEEL PLATE ARCH CULVERT

NOMINAL EXTERNAL DIAMETER D (mm)	MINIMUM WIDTH, A (mm)	HAUNCH DEPTH, B (0.3 x D mm)	MAXIMUM ALLOWABLE TRENCH INSTALLATION WIDTH, E(m)
300	300	110	1.1
375	300	135	1.2
450	300	160	1.3
525	300	180	1.5
600	300	205	1.6
750	450	255	1.8
900	450	310	1.9
1050	450	360	2.1
1200	450	405	2.2
1350	450	450	2.4
1500	500	505	2.7
1650	500	550	2.9
1800	500	600	3.1
1950	500	665	3.3
2100	500	715	3.5
2400	600	810	4.2
2700	600	910	4.6
3000	700	1005	5.0

LEGEND

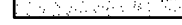
Overlay material



Fill/Backfill material



Foundation Bedding,
Haunch material
R.C. Pipes and
R.C. Box Culverts



Foundation Bedding
material, Corrugated
Steel Pipes



Alternative construction methods in accordance with the Cement and Concrete Pipe Associations' "Concrete Pipe Selection and Installation" Manual may be permitted with written approval from Councils Engineer.

This Drawing is to be read in conjunction with Standard Drawing 8-30014.

NOTES

1. FOUNDATION BEDDING

C - R.C. Pipes
100 if $D \leq 1500$
150 if $D > 1500$

G - Corrugated Steel Culverts
100 in firm material other than rock
 $\frac{D}{4}$ or 250 which ever the lesser in rock

H - Precast Box Culverts
75 min. in firm material other than rock
150 min. in rock.

2. SPACING BETWEEN MULTIPLE CULVERTS

S* - R.C. Pipes
300 when nominal $D \leq 600$
600 when nominal $D 600 \geq 1800$
900 when nominal $D > 1800$

S† - Corrugated Steel Culverts

1. Nestable Culverts:

$\frac{\text{Dia}}{2}$ or 300 min.

2. Helical Lock-seam Culvert:
300 (when nominal $D \leq 600$)

$\frac{\text{Dia}}{2}$ (when nominal $D 600 \geq 1800$)
1200 (when nominal $D > 1800$)

3. Plate Culverts:

$\frac{\text{Dia (or span)}}{2}$ or 1200 max.

3. WINGWALLS fill/backfill material shall be placed 300mm thick behind wingwalls for the length and height of the wings.

4. OVERLAY MATERIAL can be obtained from excavation of the pipe trench or elsewhere, having 100% less than 150mm and at least 80% less than 75mm, and and capable of achieving required compaction standards.

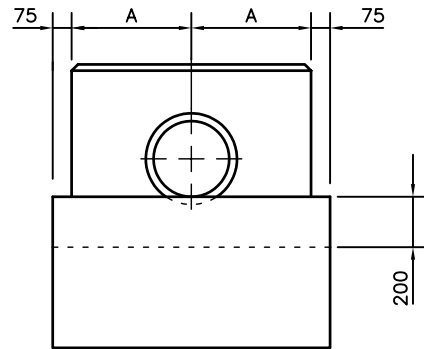
5. SIDE SUPPORT COMPACTION of natural ground or embankment.
Minimum 90% Standard RDD for minimum 2.5D each side of trench wall and to a minimum depth of 0.7D

6. WORKING LOADS are those due to fill material and standard highway vehicles as per AS 3725.
Construction loads have not been allowed for.

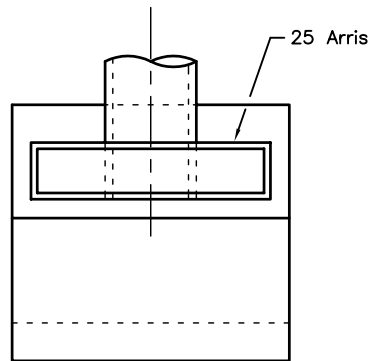
7. These drawings have been compiled from Queensland Transport Department drawing 1359

8. Dimensions are in millimetres unless shown otherwise.

B A		Notes 4 and 6 updated Addition to Legend Original Issue	1/05 9/96 11/95	Scales N.T.S.		Mayor C.E.O.	Director Assets & Infrastructure Drawn S.W. Traced CAD Checked M.J. Recomm. F.J.K Approved F. Bk.	PINE RIVERS SHIRE COUNCIL		File 400/26	Min. Page	 PINE RIVERS
Revisions		Apd.	Date	Date		Level Datum		BEDDING AND BACKFILL TO PIPES AND CULVERTS		Drawing No. 8 30013		
Disc										Sheet 1 of 2 Sheets		



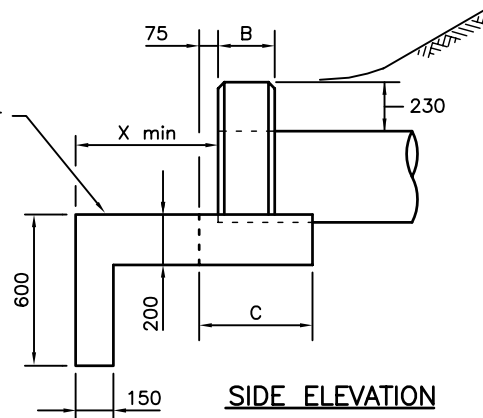
ELEVATION



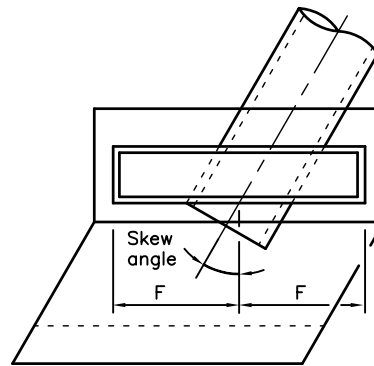
PLAN

SINGLE SQUARE PIPE

Aprons— Refer
Note 4

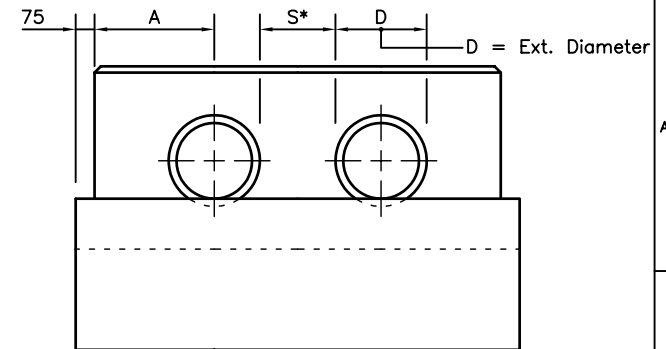


SIDE ELEVATION



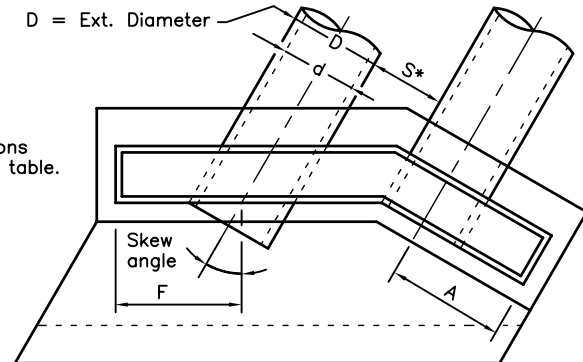
PLAN

SINGLE SKEW PIPE



ELEVATION

MULTIPLE SQUARE PIPES



PLAN

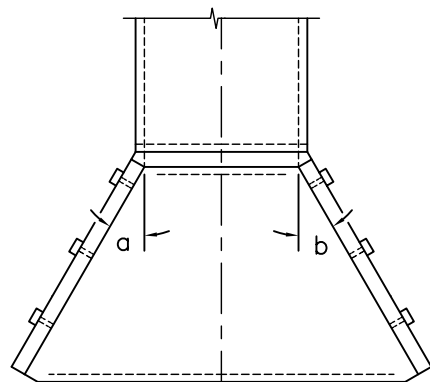
MULTIPLE SKEW PIPES

TABLE OF DIMENSIONS

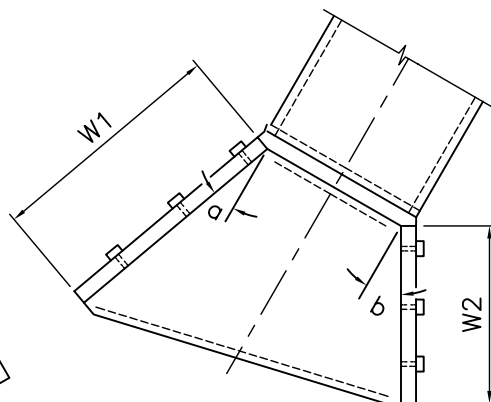
Dimension	Nominal Internal Diameter (d)					
	300	375	450	525	600	675
A	475	600	725	850	975	1100
B	225	225	225	300	300	300
C	450	450	450	600	600	600
F	550	700	825	950	1100	1250
X	450	565	675	790	900	1015

- NOTES:-**
1. All Concrete shall be grade N20
 2. S* = Space between multiple R.C. Pipes for any method of laying is:
300 for (d) = 600 or less
600 for (d) = greater than 600
 3. Refer to Standard Drawings 8-30013 & 8-30014 for Bedding and Backfilling details
 4. Refer to Standard Drawing 8-30017 for Apron types 1, 2 & 3.
 5. Dimensions are in millimetres unless shown otherwise.
 6. These Drawings have been compiled from Queensland Transport Drawings 1305 & 1306

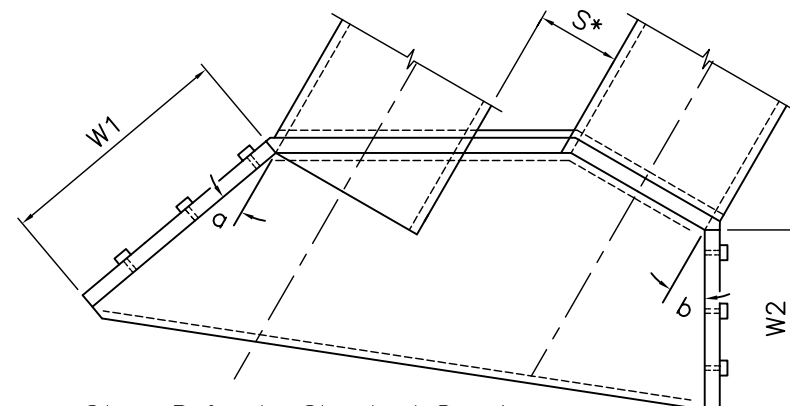
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Revisions		N.T.S.		C.E.O.		END WALLS FOR PIPE CULVERTS 300 – 675 DIA.		400/26		95/4530	
Apd. Date		Date		Level Datum				Drawing No.			
								8		30015	
								Sheet 1		of 1 Sheets	
										A3	



PLAN

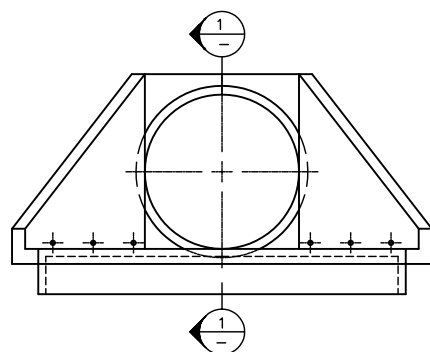


PLAN - SINGLE SKEW CULVERT

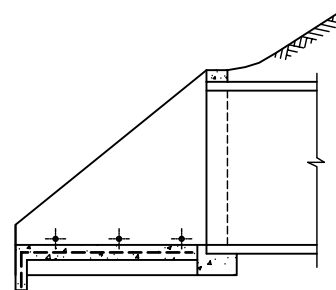


S* - Refer to Standard Drawings
8-30013 & 8-30014 Bedding
& Backfill to Pipes & Culverts

PLAN - MULTIPLE SKEW CULVERT

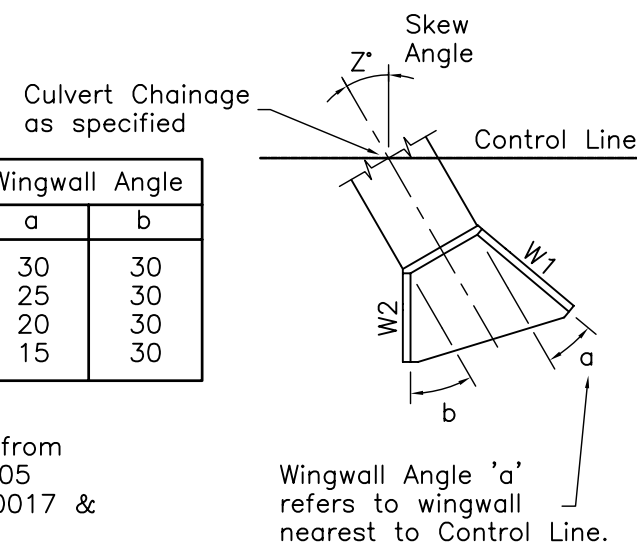


ELEVATION



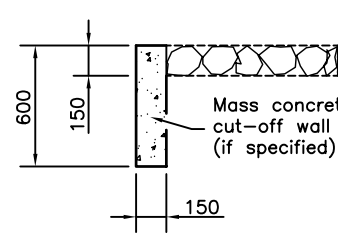
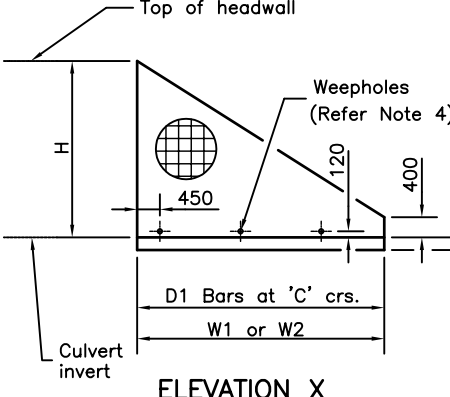
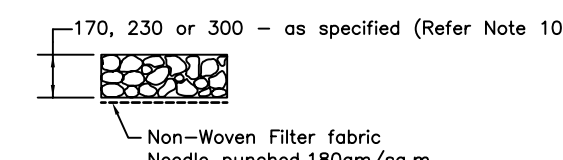
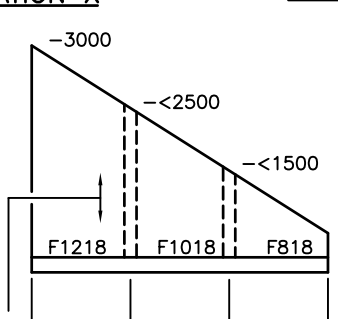
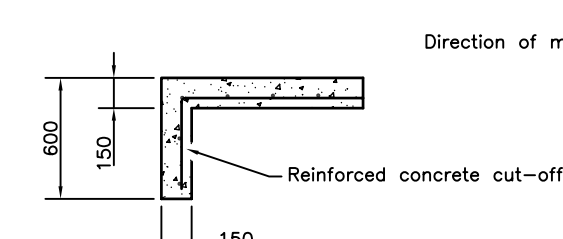
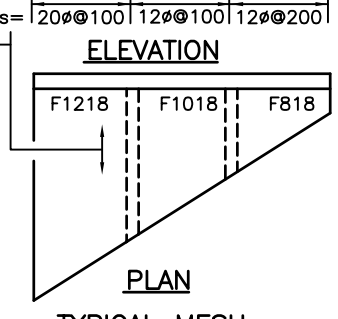
SECTION 1

- NOTES**
1. This drawing has been compiled from Queensland Transport Drawing 1305
 2. Refer to Standard Drawings 8-30017 & 8-30018 for Reinforcing details.

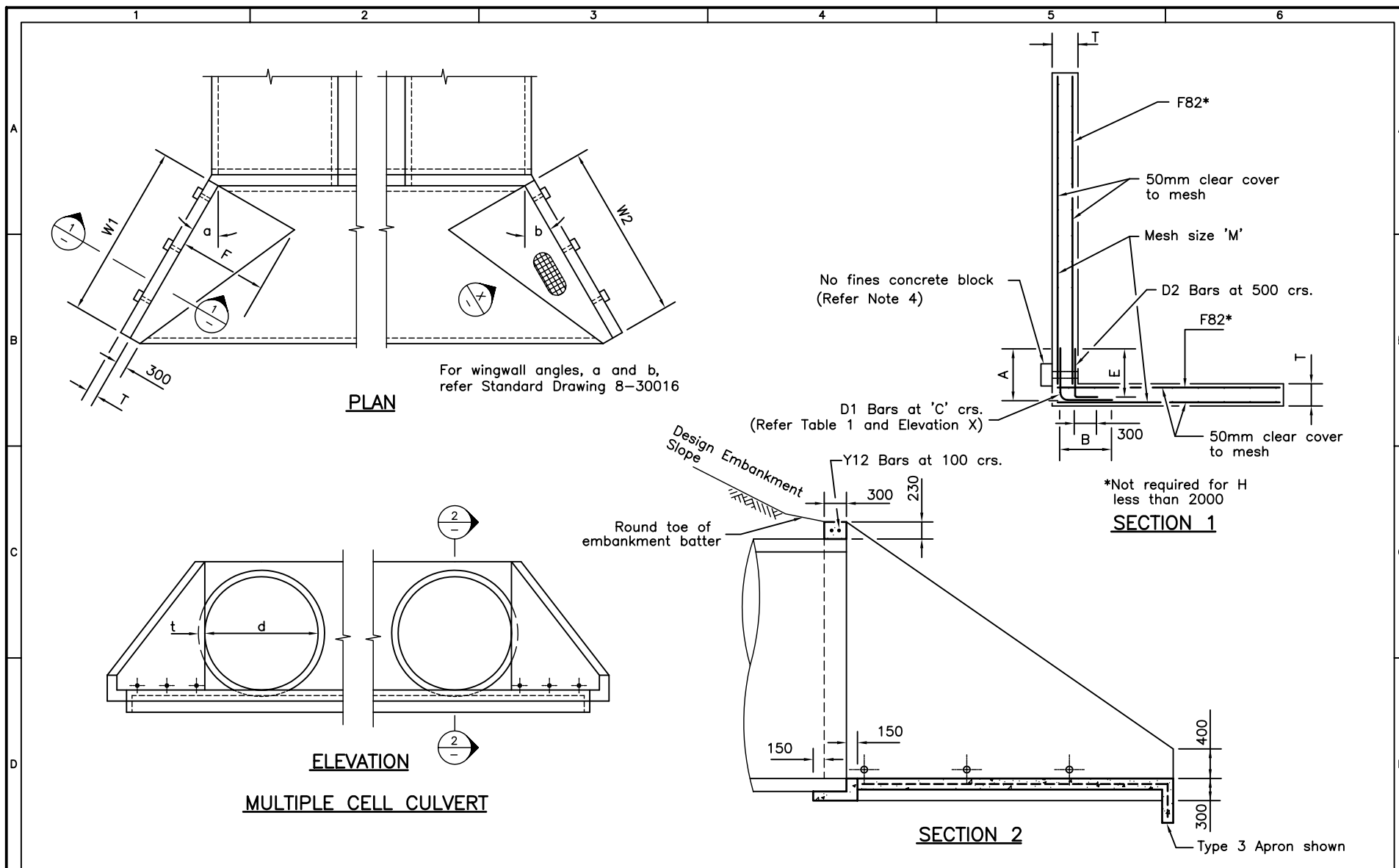


Skew Angle Z^*	Wingwall Angle	
	a	b
0-10	30	30
11-20	25	30
21-30	20	30
31-45	15	30

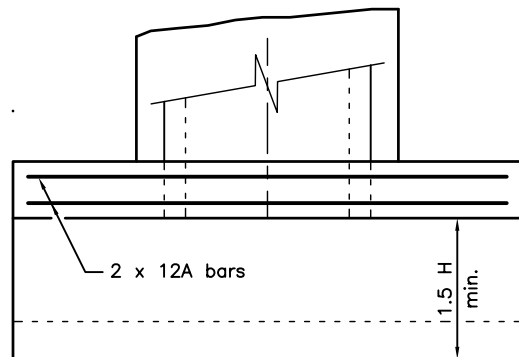
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Disc								C.E.O.		Date	
								Level Datum			
PINE RIVERS SHIRE COUNCIL						WINGWALLS, HEADWALLS AND APRONS PIPE CULVERTS 750 - 2400 DIA. GENERAL ARRANGEMENT					
File 400/26						Min. Page 95/4530					
Drawing No.						8 30016					
Sheet 1 of 1 Sheets						A3					

 TYPE 1 APRON (Stone pitched)		 ELEVATION X		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">up to H *</th> <th rowspan="2">F</th> <th rowspan="2">T</th> <th rowspan="2">M</th> <th colspan="3">D1 Bars</th> <th>12 dia. D2 Bars</th> </tr> <tr> <th>dia.</th> <th>A</th> <th>B</th> <th>C</th> <th>E</th> </tr> <tr> <td>1000</td> <td rowspan="5">0.75H</td> <td>200 (230)</td> <td>F818</td> <td>12</td> <td>550</td> <td>400</td> <td>200</td> <td>450</td> </tr> <tr> <td>1500</td> <td>200 (230)</td> <td>F818</td> <td>12</td> <td>550</td> <td>400</td> <td>200</td> <td>550</td> </tr> <tr> <td>2000</td> <td>250 (280)</td> <td>F1018</td> <td>12</td> <td>600</td> <td>400</td> <td>100</td> <td>600</td> </tr> <tr> <td>2500</td> <td>300 (330)</td> <td>F1018</td> <td>12</td> <td>650</td> <td>400</td> <td>100</td> <td>650</td> </tr> <tr> <td>3000</td> <td>300 (330)</td> <td>F1218</td> <td>20</td> <td>750</td> <td>500</td> <td>100</td> <td>650</td> </tr> </table> * Where H= Internal Pipe Diameter (d) + Pipe Thickness (t) + 230 TABLE 1 – CULVERT DETAILS (Refer Notes 2,3)		up to H *	F	T	M	D1 Bars			12 dia. D2 Bars	dia.	A	B	C	E	1000	0.75H	200 (230)	F818	12	550	400	200	450	1500	200 (230)	F818	12	550	400	200	550	2000	250 (280)	F1018	12	600	400	100	600	2500	300 (330)	F1018	12	650	400	100	650	3000	300 (330)	F1218	20	750	500	100	650
up to H *	F	T	M	D1 Bars						12 dia. D2 Bars																																																	
				dia.	A	B	C	E																																																			
1000	0.75H	200 (230)	F818	12	550	400	200	450																																																			
1500		200 (230)	F818	12	550	400	200	550																																																			
2000		250 (280)	F1018	12	600	400	100	600																																																			
2500		300 (330)	F1018	12	650	400	100	650																																																			
3000		300 (330)	F1218	20	750	500	100	650																																																			
 TYPE 2 APRON (Rock filled wire mattresses)		 ELEVATION		NOTES: - All concrete shall be grade N32. (N40) Concrete clear cover to be 50 mm unless otherwise shown. - All bars 10 Ø to be grade 230R to AS1302. All other bars to be grade 410Y to AS1302. - Dimensions indicating steel cover and 'T' are shown in brackets for aggressive environment. - Weepholes of 90 dia. are to be provided at 800 crs. for wingwall lengths >3000. A 300 x 300 x 150 no fines concrete block is to be provided at each weephole. - Mesh layouts shown are minimum requirements, actual detailing depending on most efficient use of materials. Details for the appropriate value of 'H' may be used for lower parts of the wing. - Laps shall be made so that the two outermost wires of one fabric overlap the two outermost wires of the sheet being lapped. - Excess bar length protruding outside the dimensions of the wall or the footing shall be cut to provide the minimum cover. - A continuous reinforced concrete apron is to be provided between the walls when 'H' > 3000. - Dimensions are in millimetres unless otherwise shown. - Details to be shown elsewhere on the documents include:- Wingwall lengths W1 and W2. Apron type(1,2 or 3), Depth of type 2 Apron (if required). Apron cut-off wall, u/s and/or d/s (if required). - These Drawings have been compiled from Queensland Transport Drawing 1304																																																							
 TYPE 3 APRON (F52 fabric reinforced concrete)		 PLAN TYPICAL MESH LAYOUT DETAILS (Refer Notes 5,6)																																																									

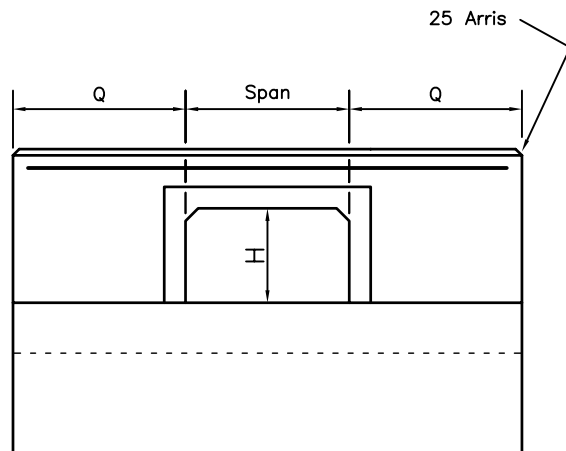
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Revisions		C.E.O.		Date				Sheet 1 of 2 Sheets		A3	
Disc											



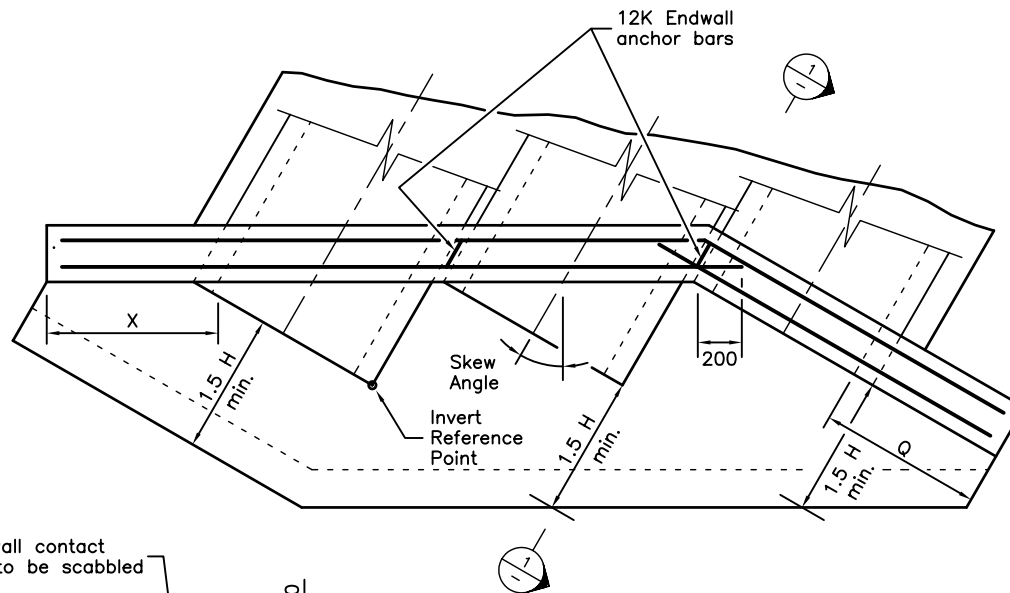
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						Drawn S.W. Traced CAD		WINGWALLS, HEADWALLS AND APRONS FOR PIPE CULVERTS 750 - 2400 DIA REINFORCING DETAILS		Min. Page 95/4530	
						Checked D.C. Recomm.				Drawing No.	
						Approved F. Bk.				8 30018	
						Level Datum				Sheet 2 of 2 Sheets	
										A3	



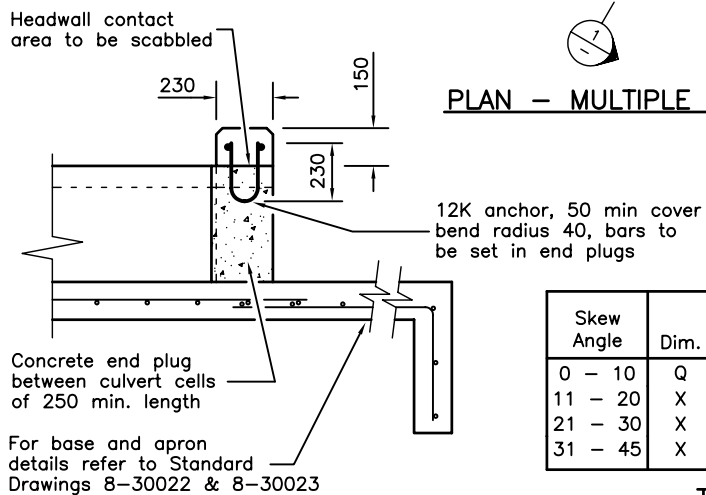
PLAN



ELEVATION



PLAN - MULTIPLE SKEW CULVERT



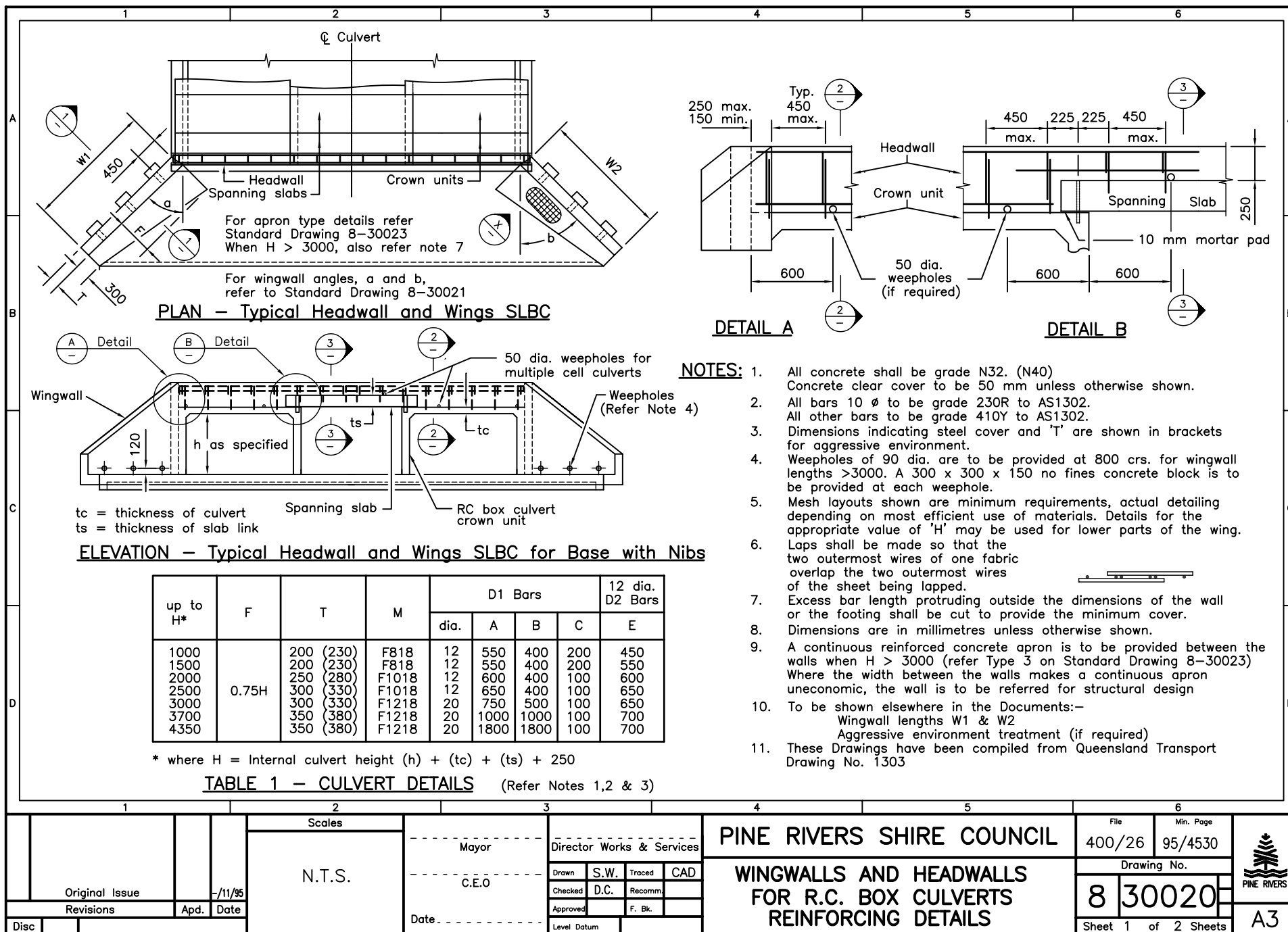
SECTION 1

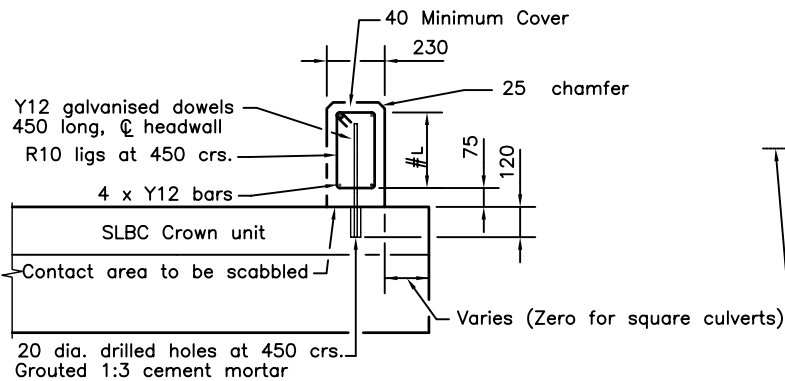
Skew Angle	Dim.	Height of Culvert, H					
		150	225	300	375	450	600
0 - 10	Q	250	300	450	600	750	900
11 - 20	X	250	300	500	650	800	1000
21 - 30	X	300	350	550	700	900	1100
31 - 45	X	300	400	600	800	1000	1200

TABLE OF DIMENSIONS

NOTE 1. This drawing has been compiled from Queensland Transport Drawings 1174 & 1318

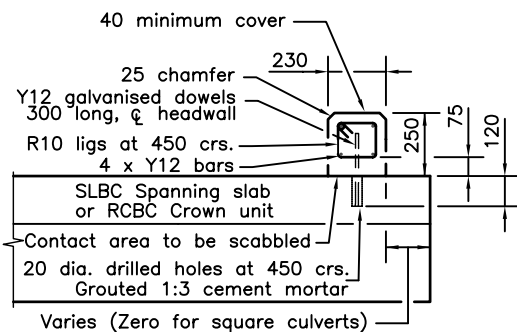
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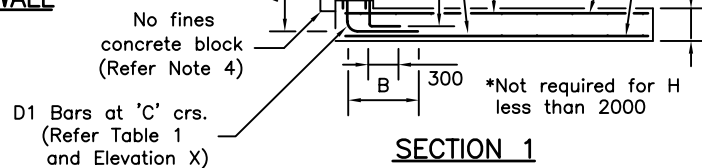


Refer Table 2

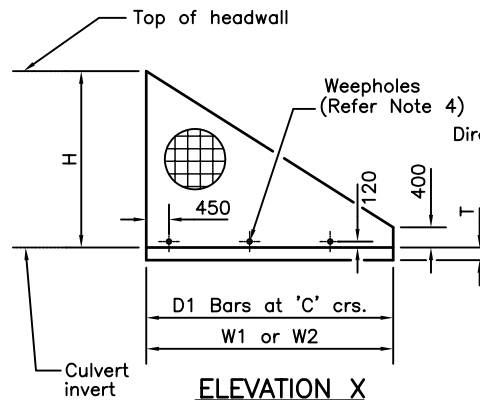
SECTION 2 HEADWALL



SECTION 3 HEADWALL

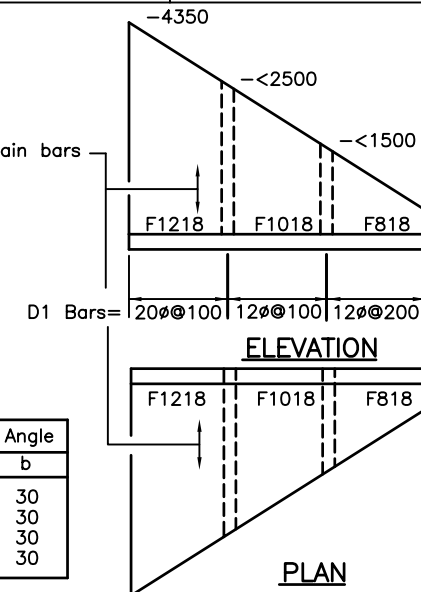


SECTION 1



ELEVATION X

Skew Angle Z	Wingwall Angle	
	a	b
0-10	30	30
11-20	25	30
21-30	20	30
31-45	15	30



ELEVATION

PLAN

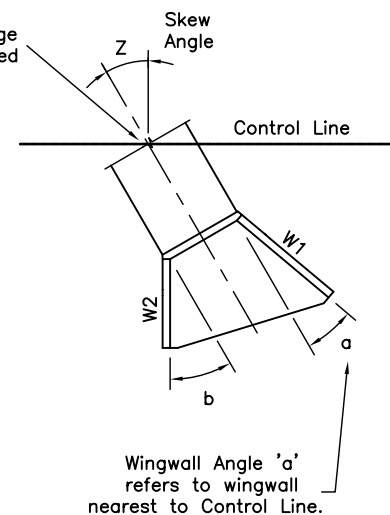
TYPICAL MESH LAYOUT DETAILS

(Refer Notes 5,6)

Nominal span of slab	Dimension L
1200	290
1500	300
1800	315
2100	325
2400	335
2700	350
3000	360
3300	370
3600	380

TABLE 2

Depth of
endwall reinforcing

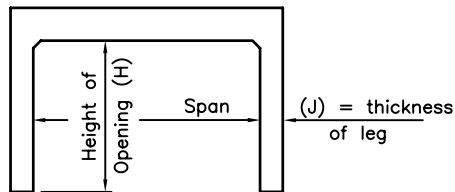


Wingwall Angle 'a' refers to wingwall nearest to Control Line.

1		2		3		4		5		6	
Original Issue		Revisions		Apd. Date		Scales		N.T.S.		PINE RIVERS SHIRE COUNCIL	
-/11/95						Director Works & Services		File 400/26		Min. Page 95/4530	
						Drawn S.W. Traced CAD		Drawing No.		8 30021	
						Checked D.C. Recomm.		Sheet 2 of 2 Sheets		A3	
						Approved F. Bk.					
Disc						Level Datum					
						Mayor					
						C.E.O.					
						Date					

WINGWALLS AND HEADWALLS
FOR R.C. BOX CULVERTS
REINFORCING DETAILS



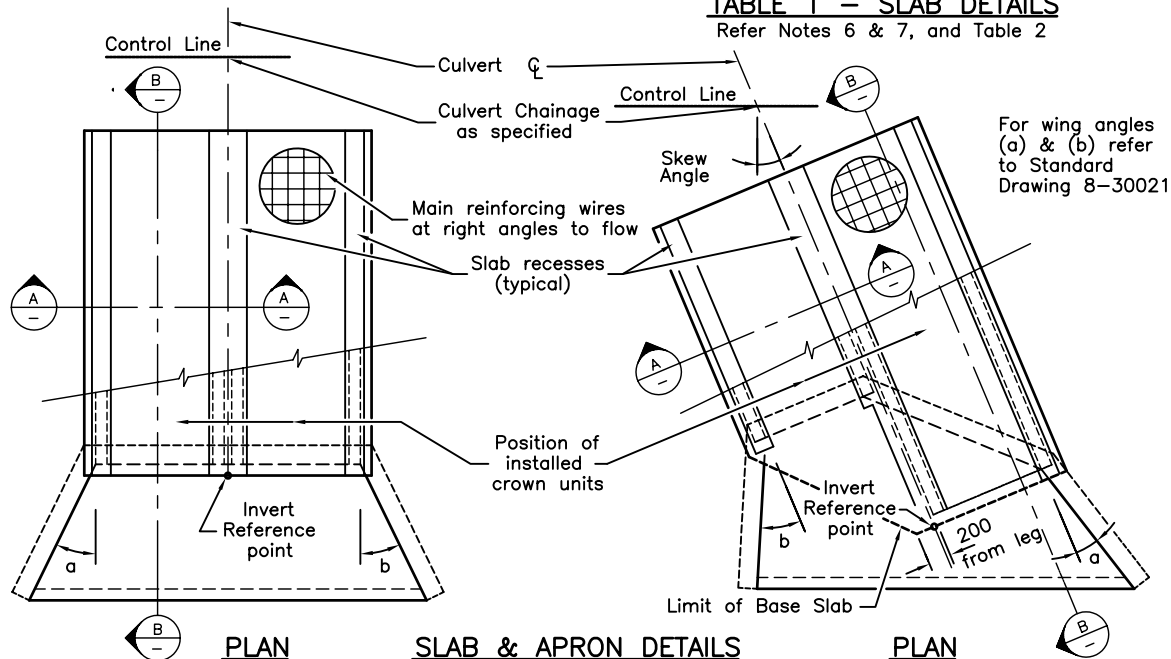


UNIT DIMENSIONS

Span	Thickness of Slab (d)	Reinforcing fabric type	Position of fabric in slab
300	120	F718	Single layer on centre line
375	120	"	
450	120	"	
600	120	"	
750	130	F818	
900	140	F1018	Single layer at top and bottom 40 (50) cover
1200	150	F1118	
1520	160 (170)	F818	
1830	170 (180)	"	
2130	180 (190)	F918	
2440	190 (200)	"	
2740	200 (210)	F1018	
3050	210 (220)	"	
3350	220 (230)	F1118	
3660	230 (240)	"	

TABLE 1 – SLAB DETAILS

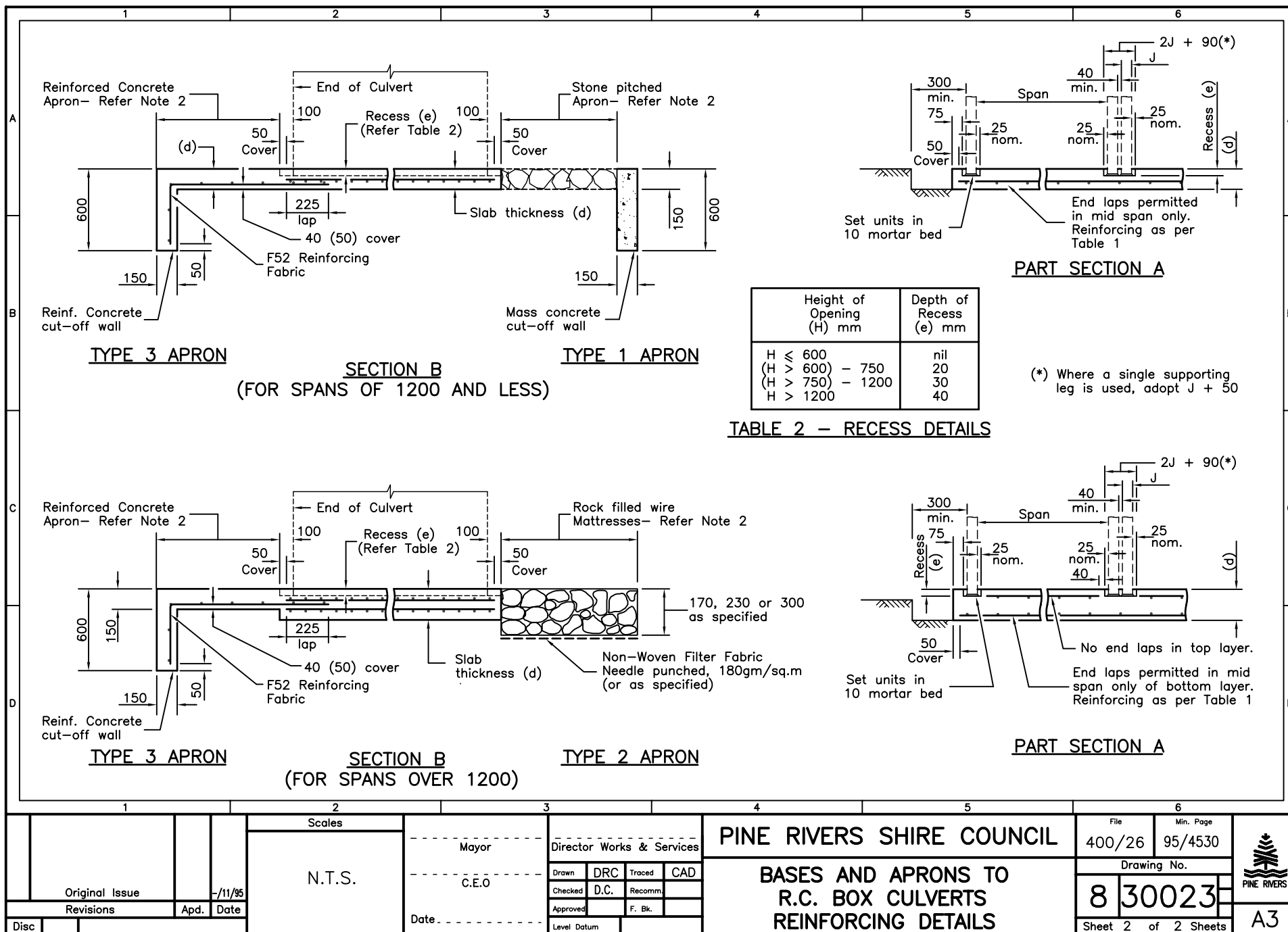
Refer Notes 6 & 7, and Table 2

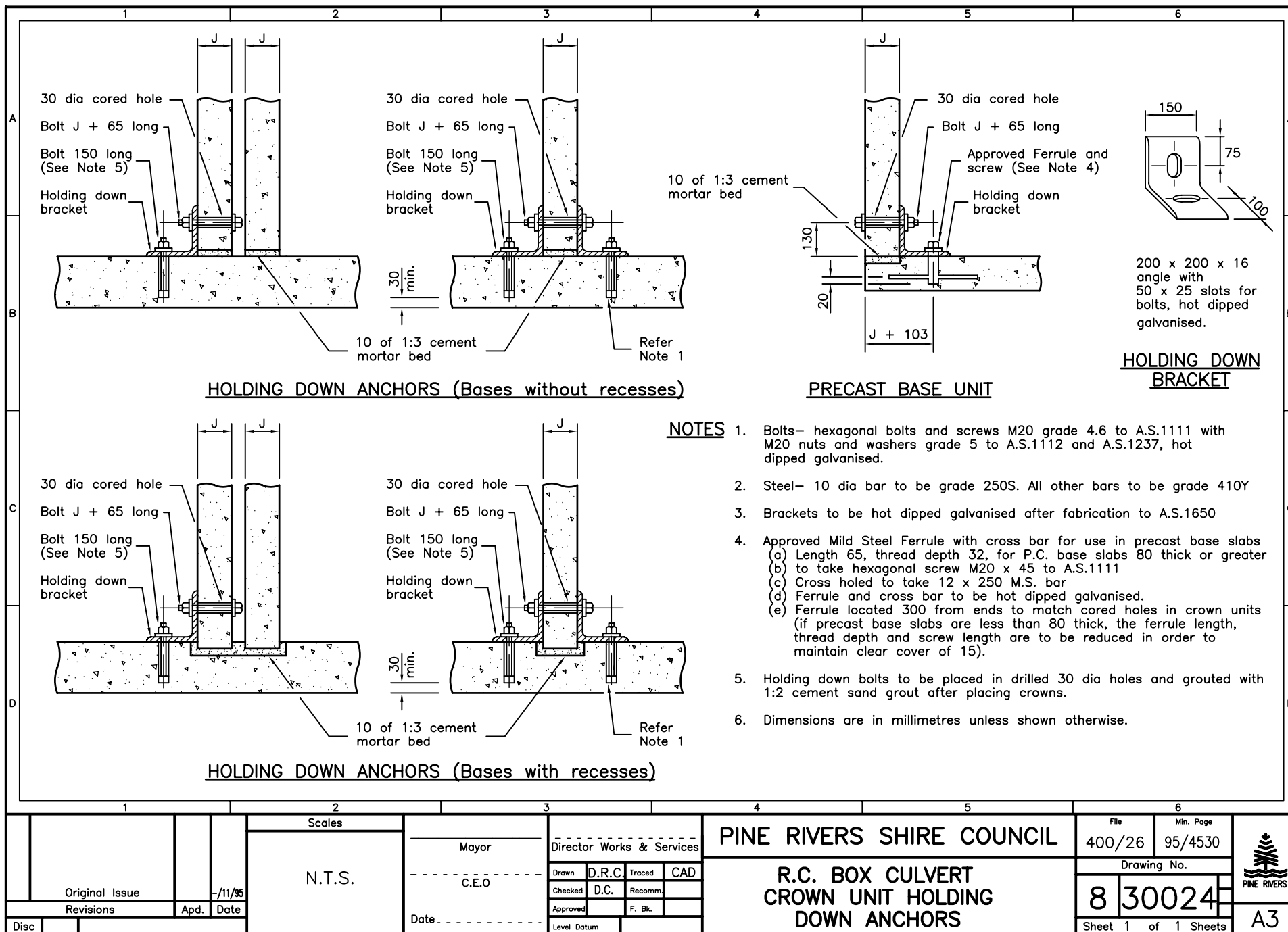


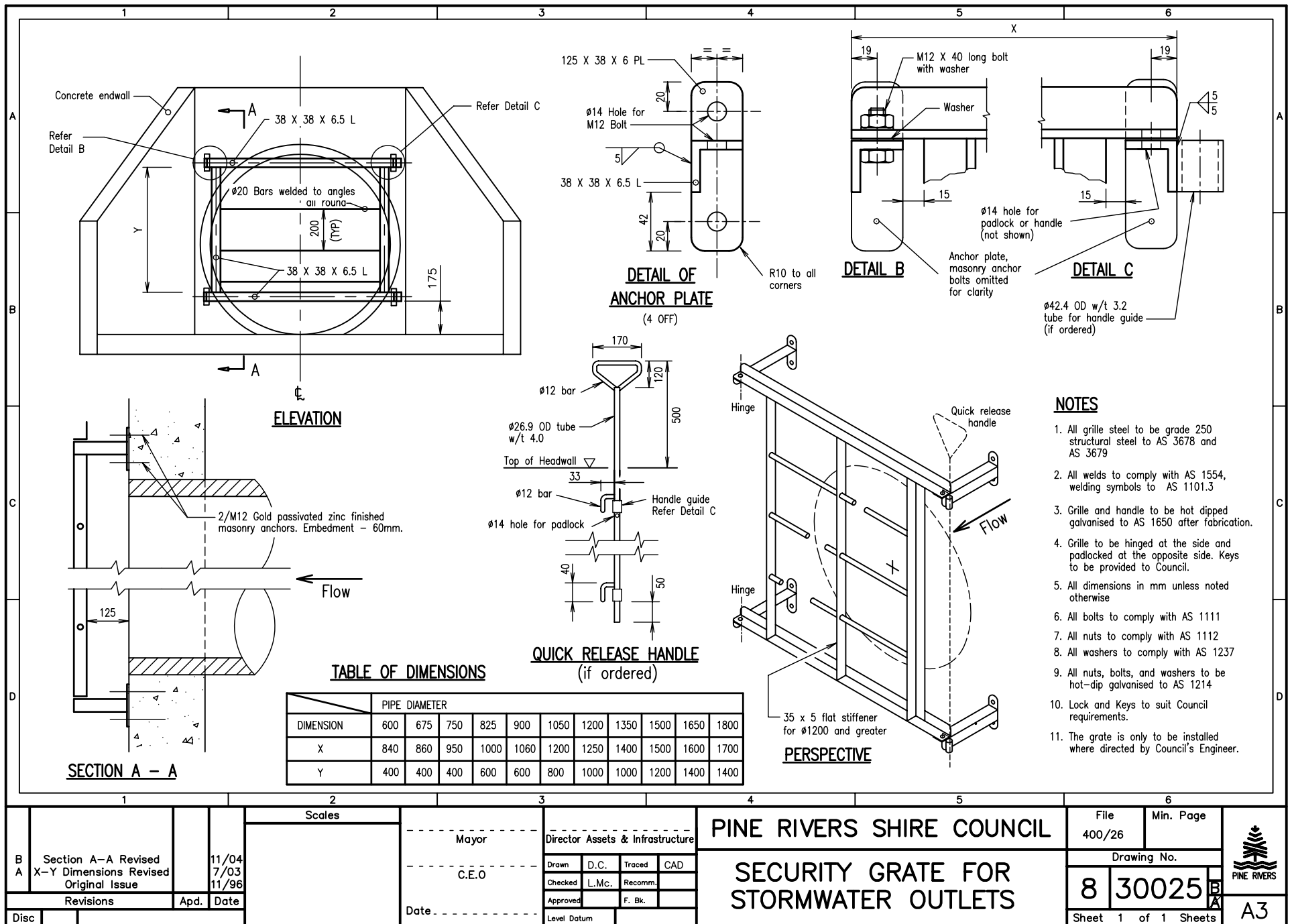
NOTES

- Construction Joints are to be provided where:—
(a) the length of the base slab and/or
(b) the width of the base slab exceed 20m.
When construction joints are required across the width of the base slab, they are to be located at 1/4 span points of crown units. 24 hours (min) is to be allowed between pours. Reinforcing fabric is to be continuous across construction joints.
- Aprons— protection works at outlets/inlets are typical and may be varied to suit local conditions (where approved by Council's Engineer).
- Base Slab dimensions given are applicable to a maximum height over the culvert crown of 1.5m. An on site check of the units dimensions should be made before setting out the base slab as there are variations between manufacturers.
- Laps shall be made so that the two outermost wires of one fabric overlap the two outermost wires of the sheet being lapped.
- Overlaps— Where 4 sheets overlap, cut out cross wires to limit build up in thickness of fabric.
- Aggressive Environment— Dimensions indicating slab thickness, steel cover and concrete class are shown in brackets for aggressive environment.
- Design Loading— Design loading T44
- All concrete shall be grade N32 (N40)
- Steel —Bar reinforced to be grade 410Y to AS 1302
—Fabric reinforced to AS 1304
- Dimensions are in millimetres unless shown otherwise.
- These Drawings have been compiled from Queensland Transport Drawing 1318

1		2		3		4		5		6	
Original Issue		Scales		Director Works & Services		PINE RIVERS SHIRE COUNCIL		File		Min. Page	
Revisions		N.T.S.		C.E.O.		BASES AND APRONS TO R.C. BOX CULVERTS GENERAL ARRANGEMENT		400/26		95/4530	
Apd. Date		Date		Level Datum				Drawing No.			
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								Sheet 1 of 2 Sheets		A3	



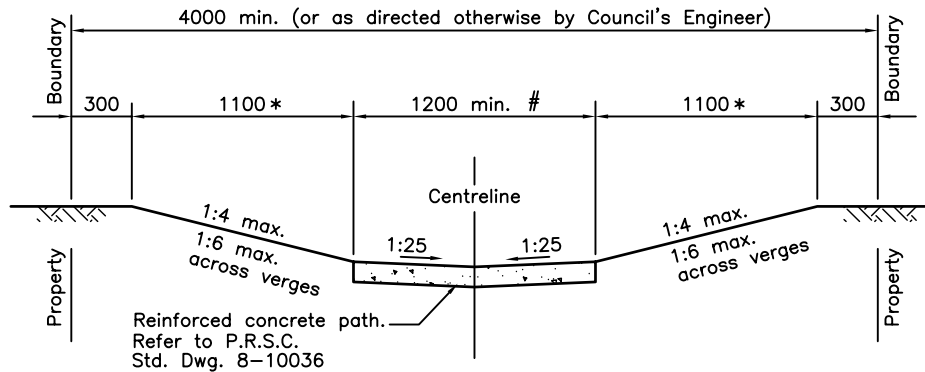




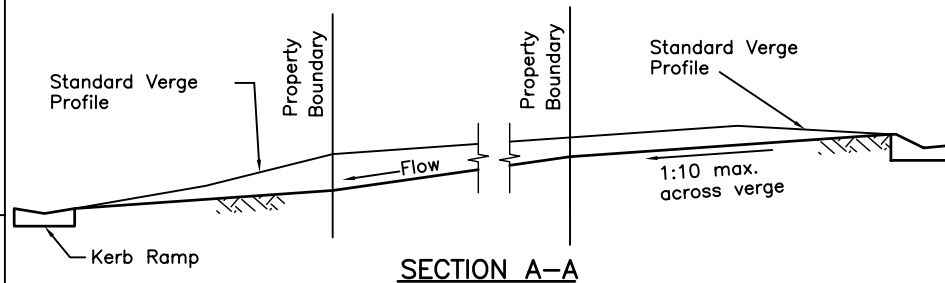
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Revisions		Apd.	Date	Date		Level Datum		Drawn D.C. Traced CAD Checked L.Mc. Recomm. Approved F. Bk.		SECURITY GRATE FOR STORMWATER OUTLETS		Drawing No. 8 30025			Sheet 1 of 1 Sheets
Disc															

* Width varies according to pathway width. The concrete path is to be along the centreline of the pathway in every case, unless directed otherwise.

Width of concrete path may vary to accommodate a bikeway etc. Refer to P.R.S.C. Std. Dwg 8-10036.



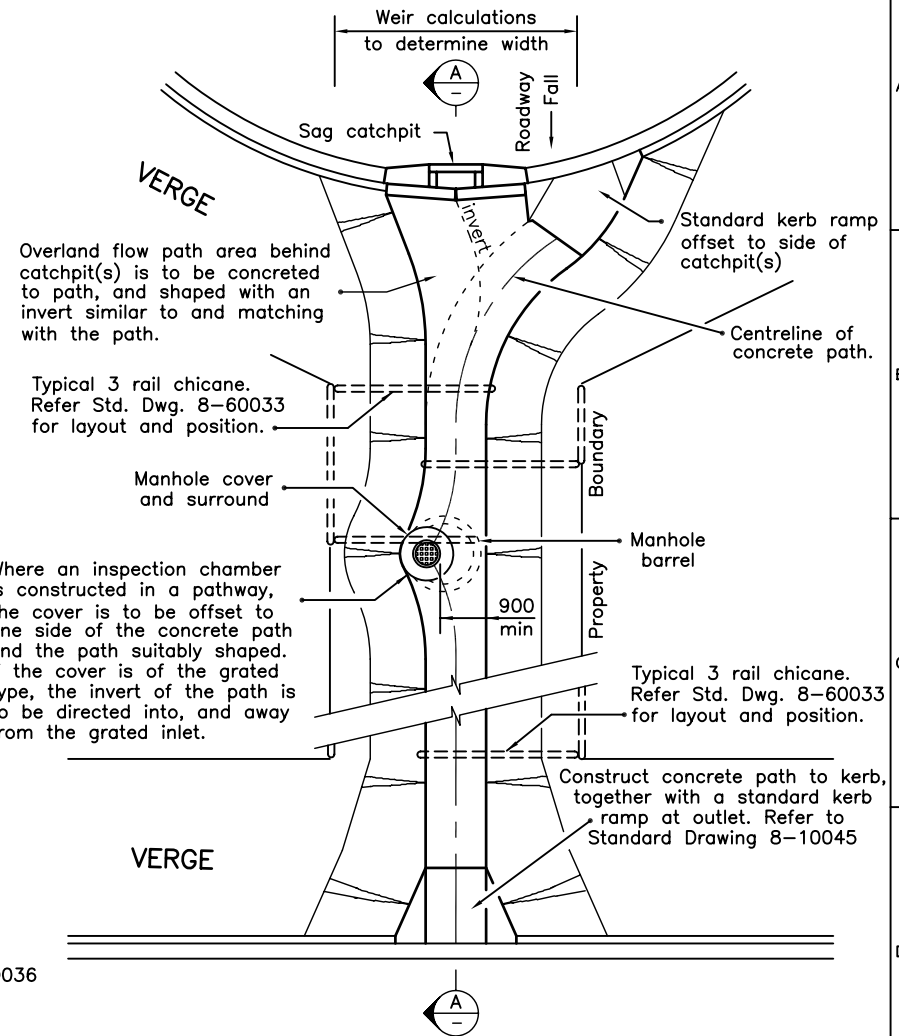
PATHWAY CROSS SECTION



SECTION A-A

NOTES :-

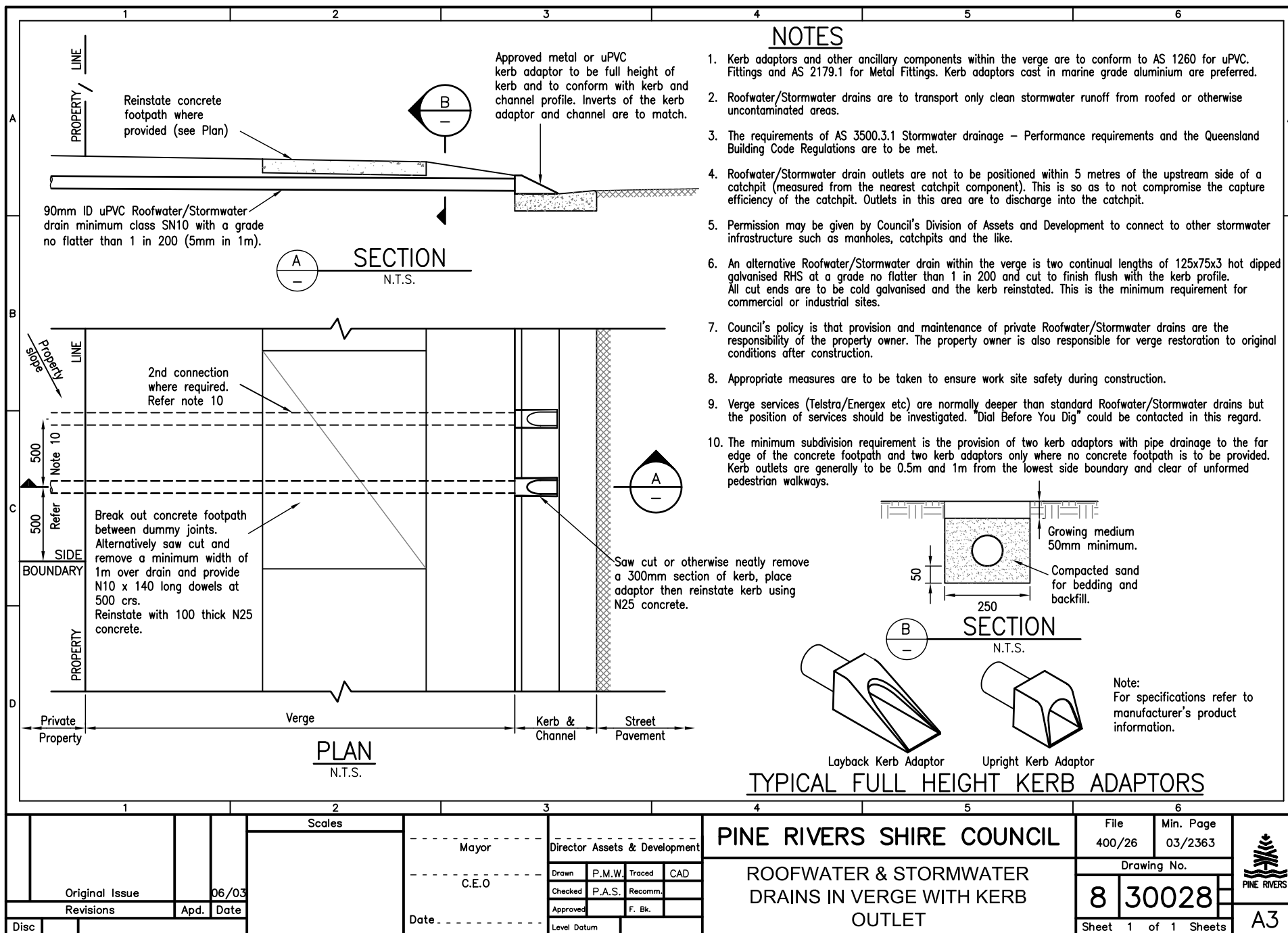
1. Concrete is to be grade N20 and generally in accordance with Standard Drawing No. 8-10036
2. The concrete is to be finished with either a wooden float or stiff broom to achieve a non-slip surface.
3. This drawing to be read in conjunction with Std. Dwg. 8-60033 to 8-60038.

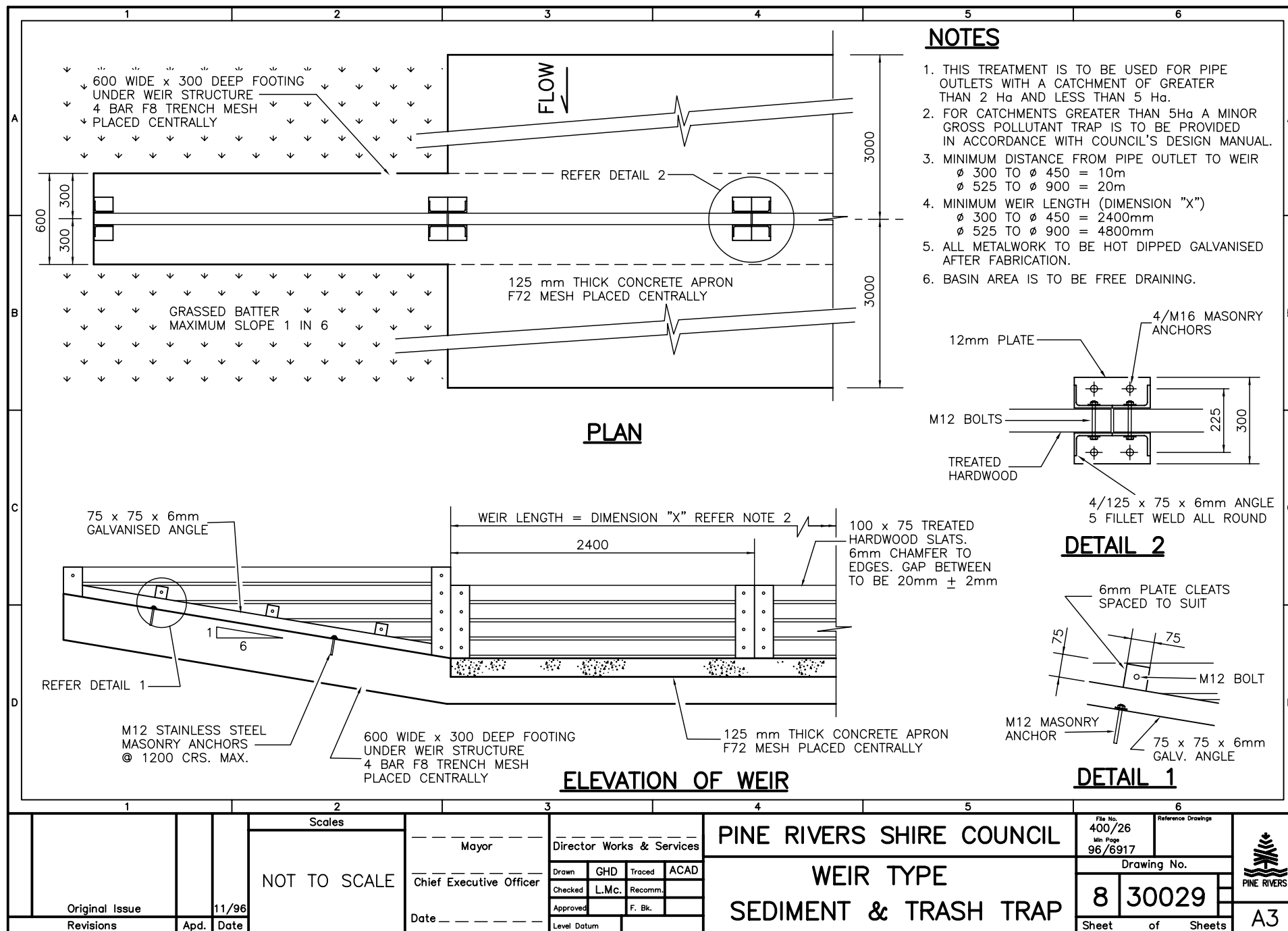


TYPICAL CONSTRUCTION DETAIL - PLAN

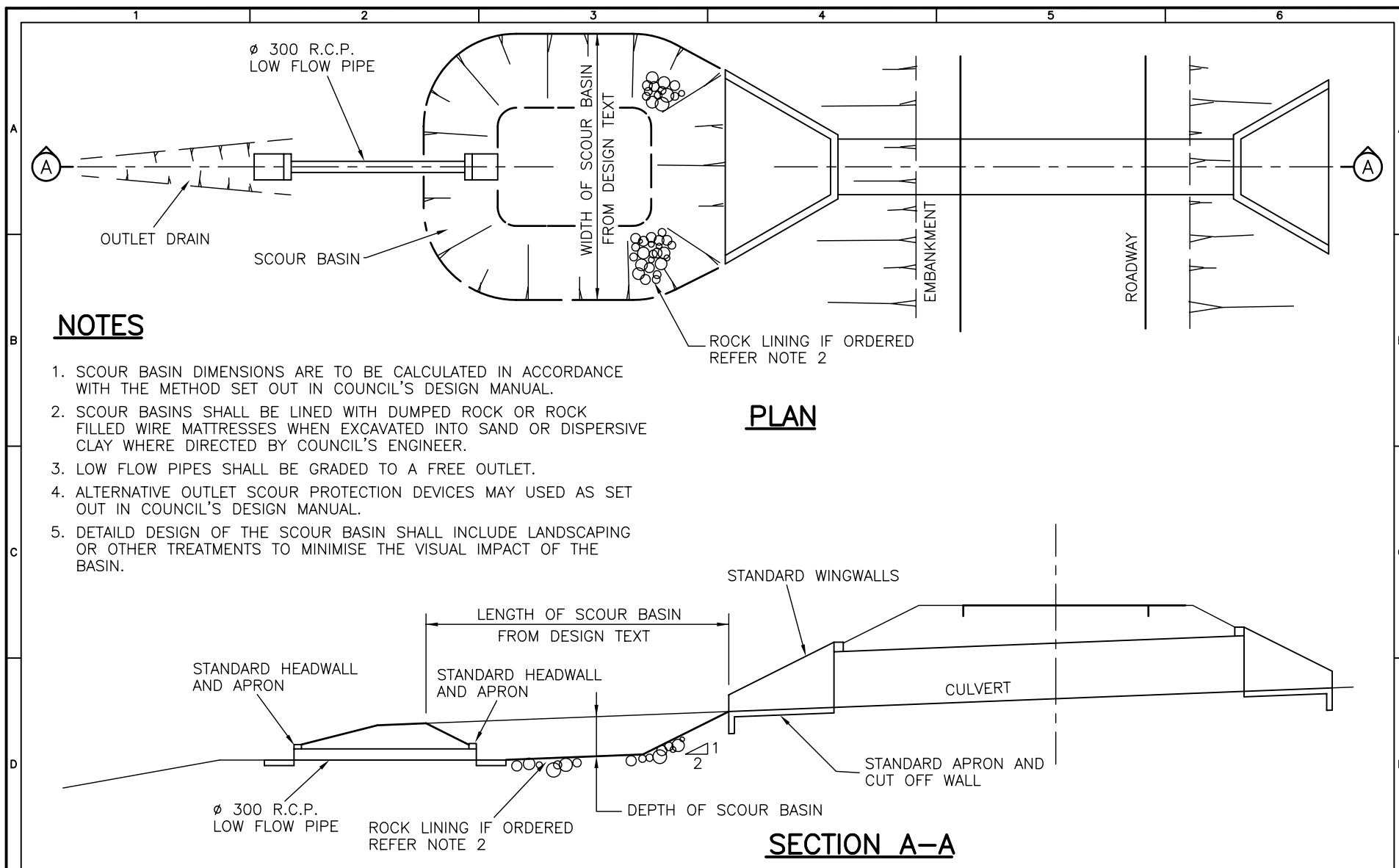
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Revisions		Apd. Date		Date						Drawing No.	
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										A3	

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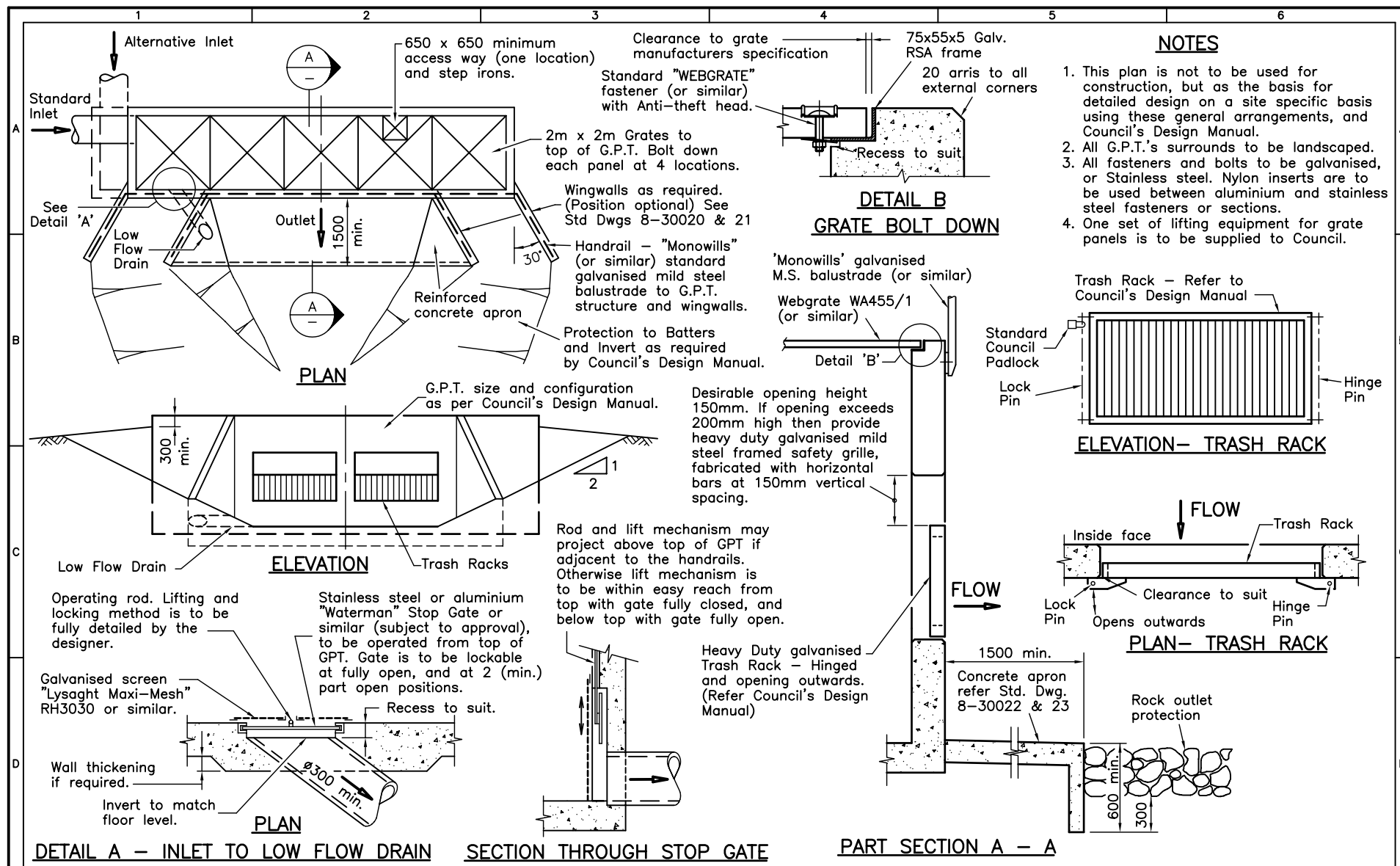


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Revisions		Apd. Date		Level Datum		WEIR TYPE SEDIMENT & TRASH TRAP		Min Page 96/6917		Drawing No.	
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								Sheet		of Sheets	
										A3	



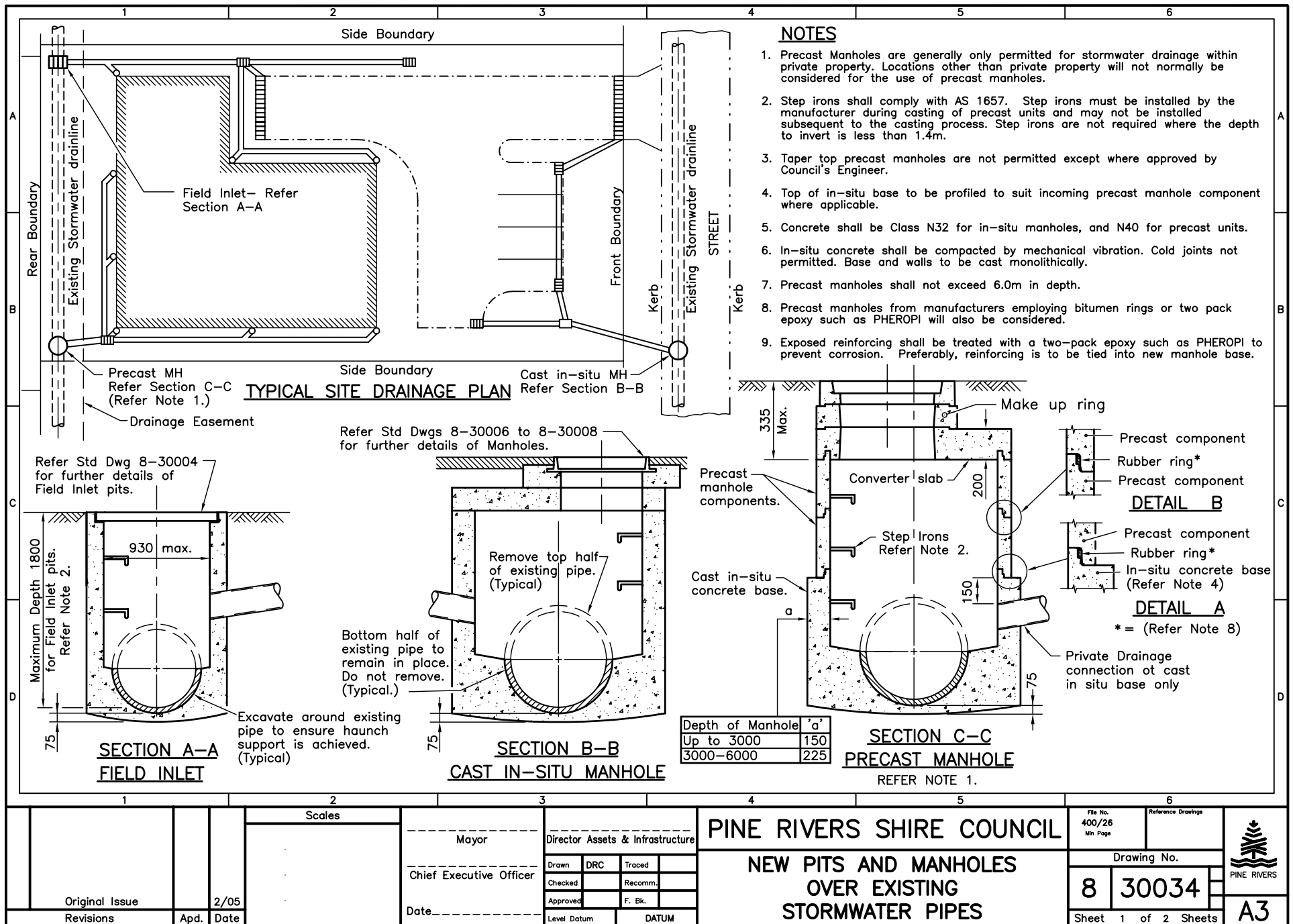
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		Scales		Mayor		Director Works & Services		PINE RIVERS SHIRE COUNCIL		File No. 400/26 Min Page 96/6917	
		NOT TO SCALE		Chief Executive Officer		Drawn GHD Traced ACAD Checked L.Mc. Recomm. F.J.K. Approved F. Bk. Level Datum		SCOUR BASIN TYPICAL DETAILS		Reference Drawings	
Original Issue		11/96		Date						Drawing No.	
Revisions		Apd.		Date						8 30030	
										Sheet 1 of 1 Sheets	
										A3	

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A							A															
B							B															
C							C															
D	NOTES 1. SIGNS ARE TO BE ERECTED WHERE REQUIRED BY COUNCIL'S ENGINEER. 2. SHIRE LOGO IS TO BE USED IN STANDARD COLOURS – PMS 300 BLUE, PMS 349 GREEN, AND BLACK, AS SHOWN. 3. BORDER AND LETTERING IS TO BE STANDARD DARK GREEN ON A WHITE NON-REFLECTIVE BACKGROUND.						D															
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	Original Issue Revisions		11/96 Apd. Date	WATER COURSE ADVISORY SIGN		File 400/26 Min. Page 96/6917 Drawing No. 8 30031 Sheet 1 of 1 Sheets																
	Scales		Mayor Chief Executive Officer Date	Director Works & Services <table border="1"> <tr> <td>Drawn</td><td>GHD</td><td>Traced</td><td>ACAD</td></tr> <tr> <td>Checked</td><td>L.Mc.</td><td>Recomm.</td><td>F.J.K.</td></tr> <tr> <td>Approved</td><td></td><td>F. Bk.</td><td></td></tr> <tr> <td>Level Datum</td><td colspan="3"></td></tr> </table>	Drawn	GHD	Traced	ACAD	Checked	L.Mc.	Recomm.	F.J.K.	Approved		F. Bk.		Level Datum				PINE RIVERS SHIRE COUNCIL	 A3
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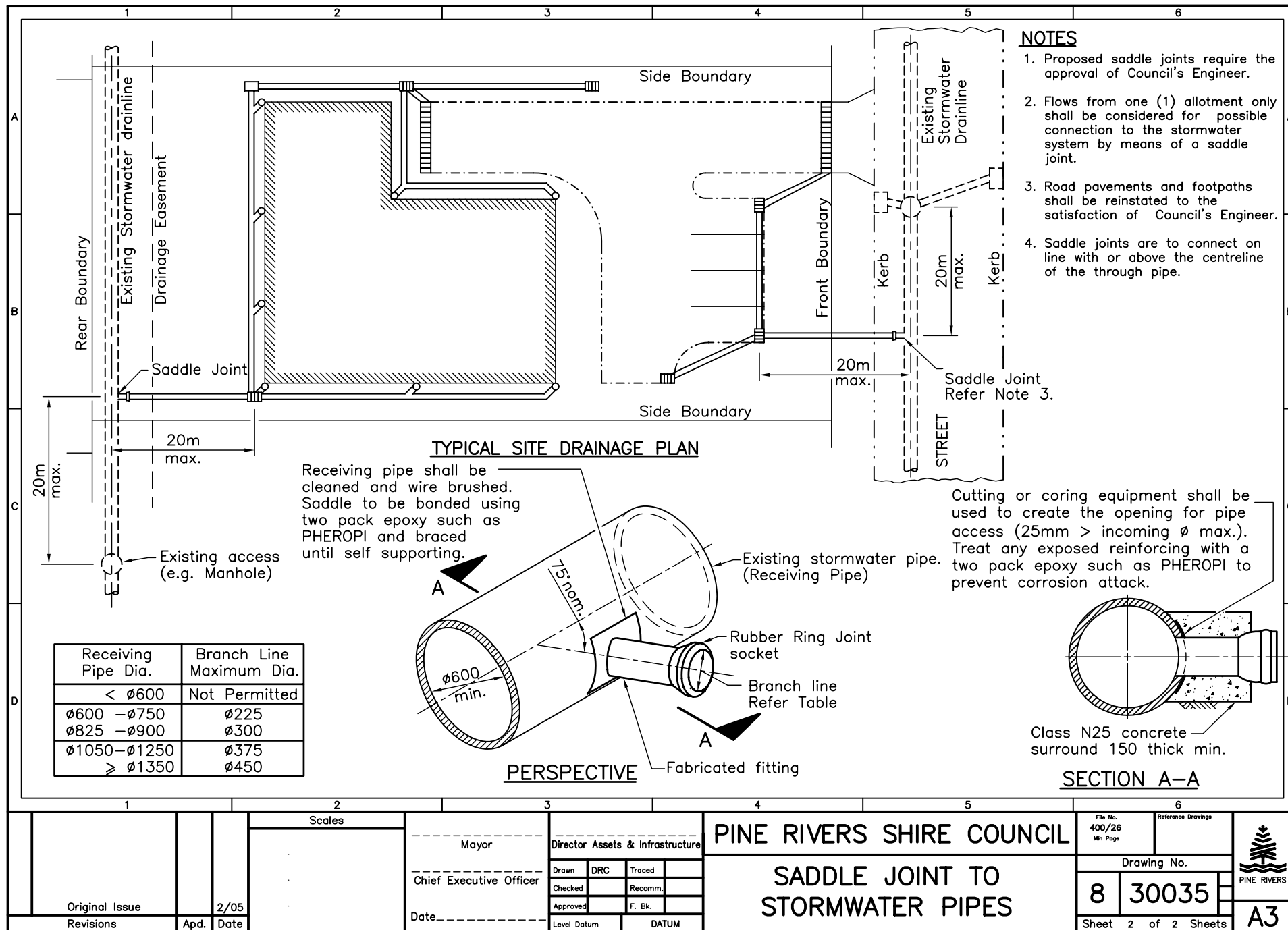


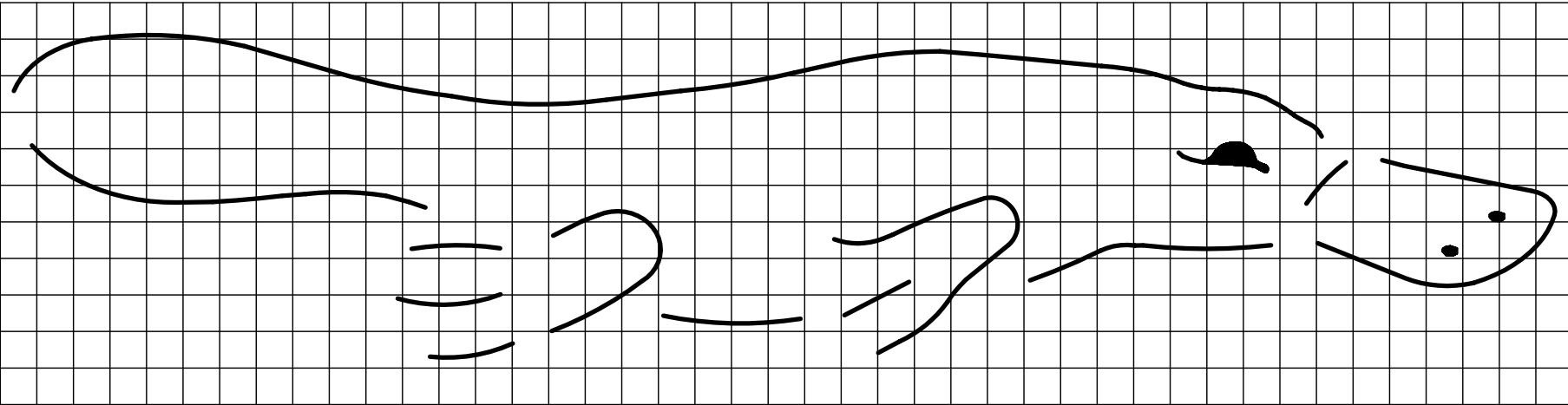
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Original Issue		11/96		Mayor		Director Works & Services		PINE RIVERS SHIRE COUNCIL		File	Min. Page
Revisions		Apd. Date		C.E.O.		Drawn D.R.C. Traced CAD		MINOR GROSS POLLUTANT TRAP GENERAL ARRANGEMENT		400/26	96-6917
Disc				Date		Checked L.Mc. Approved				Drawing No.	
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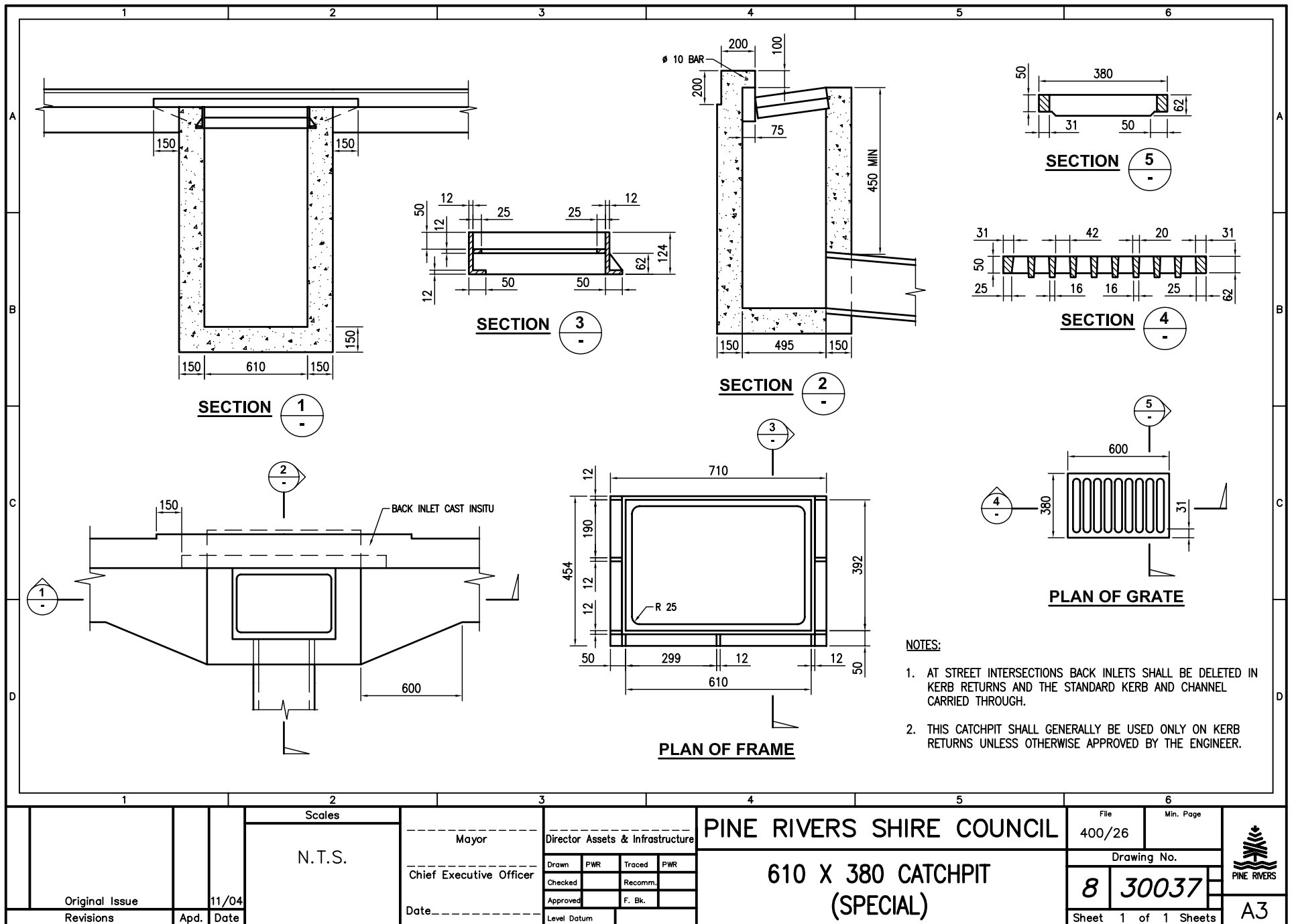


Scales		Mayor		Director Assets & Infrastructure		PINE RIVERS SHIRE COUNCIL		File No. 400/26 Min Page		Reference Drawings		 PINE RIVERS
Original Issue Revisions		Chief Executive Officer Date		Drawn DRC Checked Approved Level Datum		Traced Recomm. F. Bk. DATUM		Drawing No.		8 30034		
								2/05				
								Sheet 1 of 2 Sheets				
Revisions Apd. Date		Date		NEW PITS AND MANHOLES OVER EXISTING STORMWATER PIPES		A3						



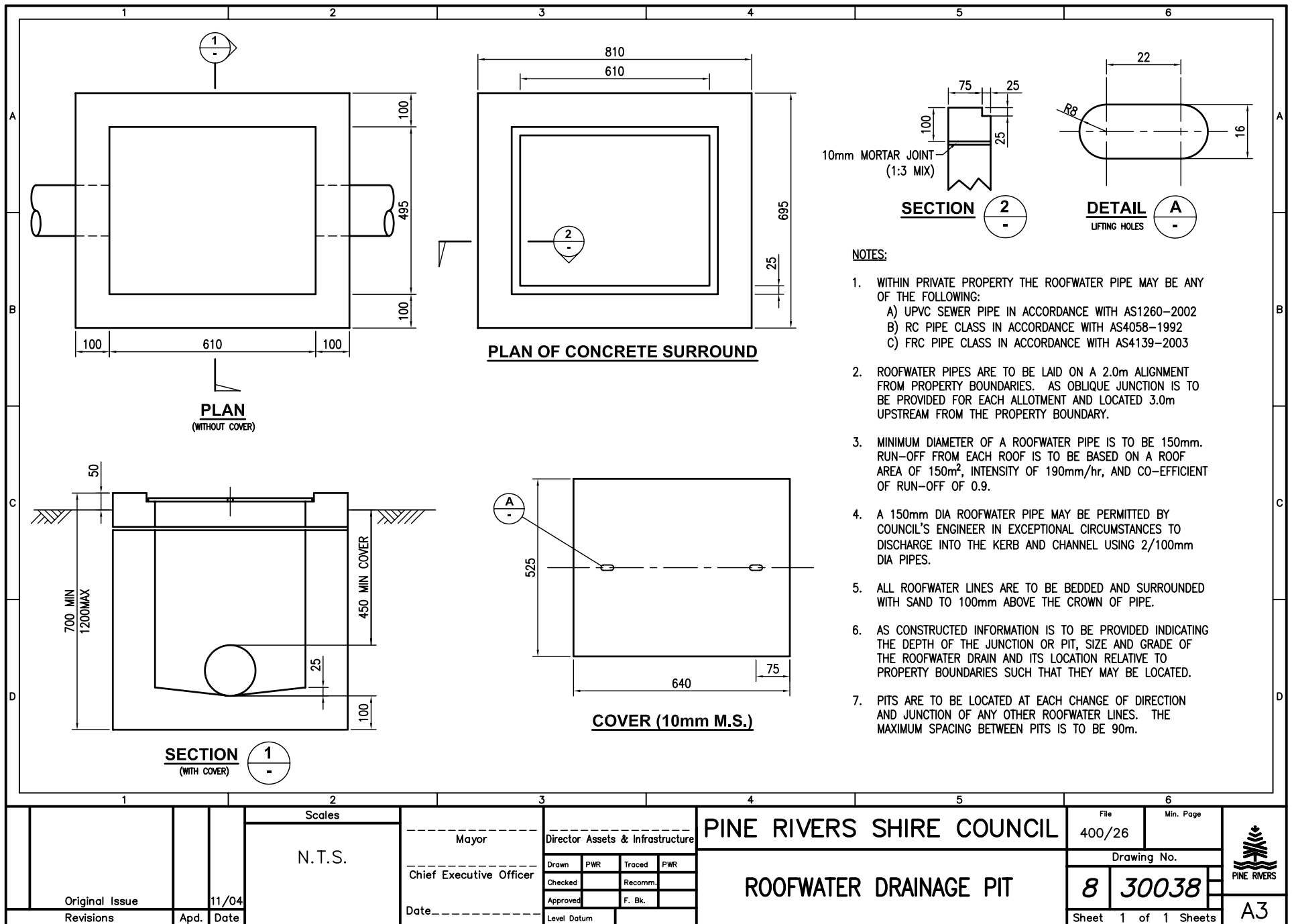
1	2	3	4	5	6
A	40mm high text DUMP NO WASTE – FLOWS TO CREEK PROTECT OUR WATERWAYS Refer detail below				A
B	Precast concrete lintel <u>PLAN</u> <u>TYPICAL CONCRETE LINTEL</u>				B
C					C
D	<u>PLATYPUS TEMPLATE DETAIL</u> 10mm Grid Squares at full size – Template 430mm x 110mm at full size. 7.5mm line thickness				D
1	2	3	4	5	6

Original Issue Revisions		6/99 Apd. Date	Scales N.T.S.	Mayor ----- C.E.O ----- Date -----	Director Works & Services				PINE RIVERS SHIRE COUNCIL		File 400/26	Min. Page 99/2416	
					Drawn S.A.W. Traced CAD Checked L.M.C. Recomm. L.M.C. Approved F. Bk.	CATCHPIT STENCIL/IMPRINT ENVIRONMENTAL AWARENESS MESSAGE		Drawing No. 8	30036				
Disc										Sheet 1 of 1 Sheets		A3	



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		Scales				PINE RIVERS SHIRE COUNCIL		File 400/26		Min. Page	
		N.T.S.		Mayor		Director Assets & Infrastructure		Drawing No.		PINE RIVERS	
				Chief Executive Officer		Drawn PWR Traced PWR		8		30037	
				Date		Checked Recomm.		Sheet 1 of 1 Sheets		A3	
						Approved F. Bk.					
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610 X 380 CATCHPIT
(SPECIAL)



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