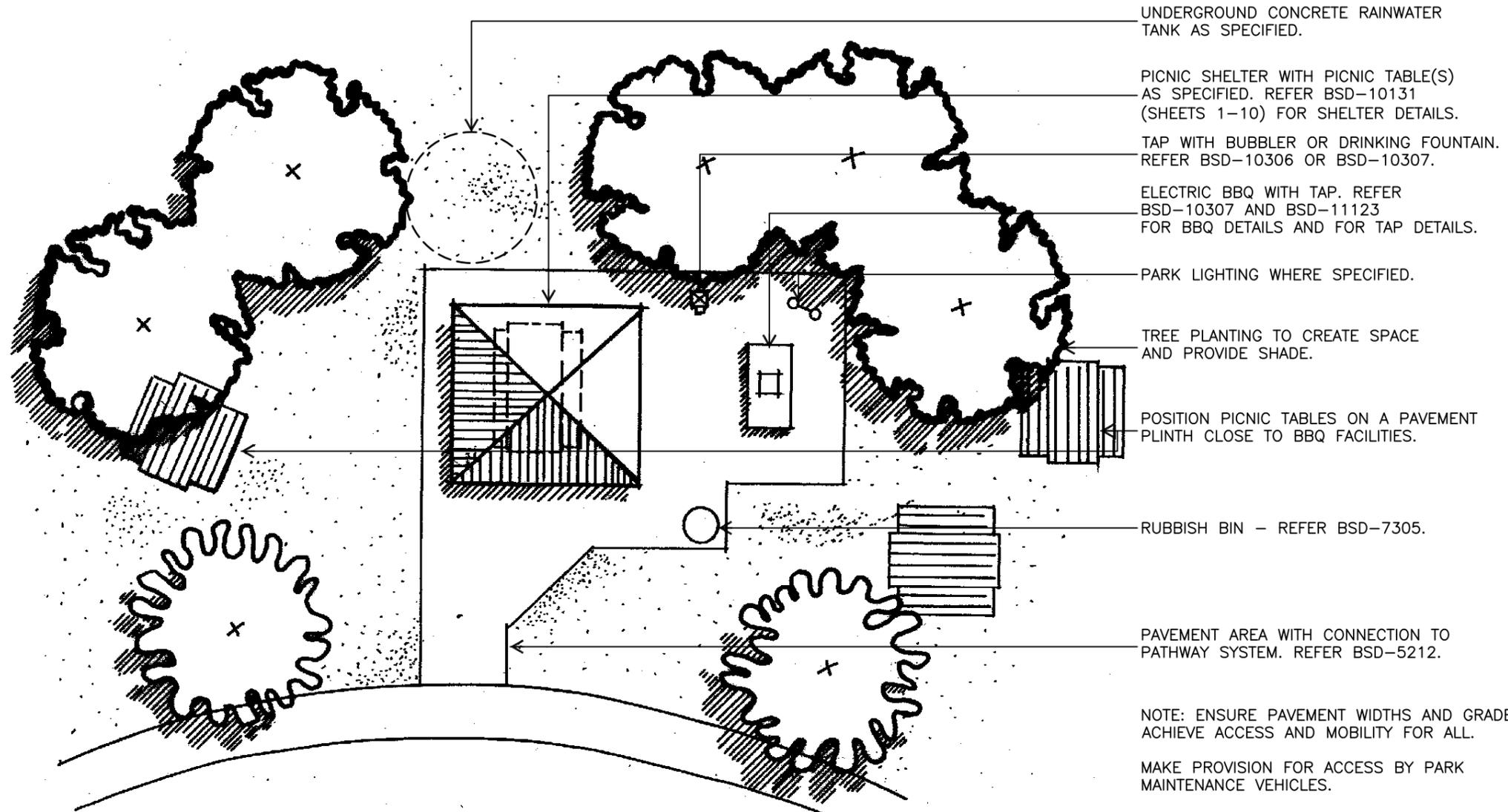


GENERAL NOTES

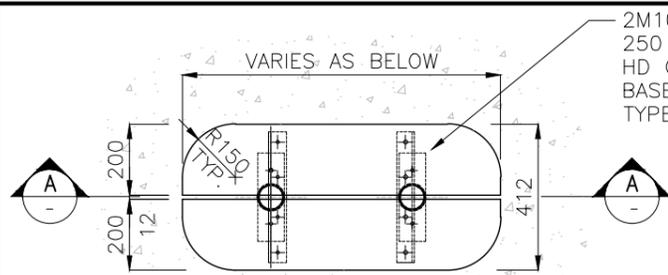
- ENSURE PARK ELEMENTS ARE LOCATED AND CONSTRUCTED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS. MATERIALS ARE TO BE LOCALLY SOUCED.
- WHERE SPECIFIED - SITE FURNITURE IS TO BE INCORPORATED AS PART OF INTEGRATED PICNIC SETTING NODE. REFER BSD-10003 FOR SUPPLIERS.
- ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISHES FLUSH WITH PAVEMENT AREAS.
- ENSURE GARDEN AREAS (MULCH) FINISH 25mm BELOW ADJACENT F.S.L's OF PAVEMENT AREAS.
- PICNIC NODES TO COMPLY WITH AUSTRALIAN STANDARDS AND COUNCIL REQUIREMENTS FOR ACCESS & MOBILITY (AS 1428).
- ENSURE PARK ELEMENTS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC CORPORATE COLOUR PALETTE.
- REFER TO THE BRISBANE ACCESS AND INCLUSION PLAN 2012-2017 FOR FURTHER INFORMATION WHEN PLANNING AND DESIGNING THE BUILT ENVIRONMENT TO REASONABLY CONSIDER ACCESS AND INCLUSION FOR ALL WHERE APPROPRIATE.
- ALL DIMENSION IN MILLIMETRES (U.N.O.).



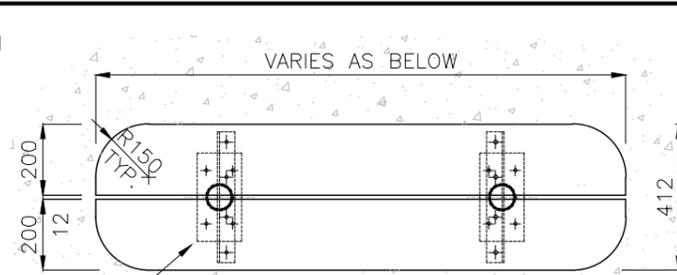
- UNDERGROUND CONCRETE RAINWATER TANK AS SPECIFIED.
 - PICNIC SHELTER WITH PICNIC TABLE(S) AS SPECIFIED. REFER BSD-10131 (SHEETS 1-10) FOR SHELTER DETAILS.
 - TAP WITH BUBBLER OR DRINKING FOUNTAIN. REFER BSD-10306 OR BSD-10307.
 - ELECTRIC BBQ WITH TAP. REFER BSD-10307 AND BSD-11123 FOR BBQ DETAILS AND FOR TAP DETAILS.
 - PARK LIGHTING WHERE SPECIFIED.
 - TREE PLANTING TO CREATE SPACE AND PROVIDE SHADE.
 - POSITION PICNIC TABLES ON A PAVEMENT PLINTH CLOSE TO BBQ FACILITIES.
 - RUBBISH BIN - REFER BSD-7305.
 - PAVEMENT AREA WITH CONNECTION TO PATHWAY SYSTEM. REFER BSD-5212.
- NOTE: ENSURE PAVEMENT WIDTHS AND GRADES ACHIEVE ACCESS AND MOBILITY FOR ALL.
- MAKE PROVISION FOR ACCESS BY PARK MAINTENANCE VEHICLES.

PICNIC NODE - PLAN

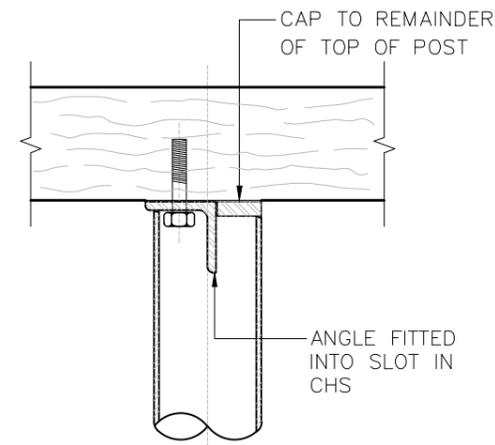
				DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04 MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q: 2546				DESIGN	Std Dwgs WG	DATE	OCT '13		BRISBANE CITY COUNCIL STANDARD DRAWING					
				DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04				DRAWN	CPO - P&D	DATE	OCT '13				SCALE	1:100		
				PRICIPAL PROGRAM OFFICER PARKS				CHECKED	UMD - E&P & IMB	DATE	OCT '13		PICNIC NODE SITING PLAN					
								DRAWING FILENAME	BSD-10101_2of2.dwg				DWG No.	BSD-10101				
A	Drawing Converted From UMS Series April 2014			APR '14	APR '14	APR '14					ASSOCIATED PLANS	SUPERSEDES UMS-751			ORIGINAL SIZE	A3	REVISION	A



INDICATIVE PLAN
BENCH SEAT TYPE 1 DETAIL
SCALE 1:20



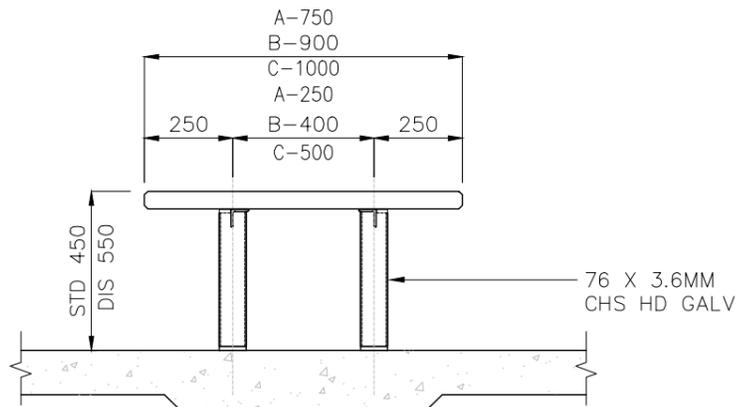
INDICATIVE PLAN
BENCH SEAT TYPE 2 DETAIL
SCALE 1:20



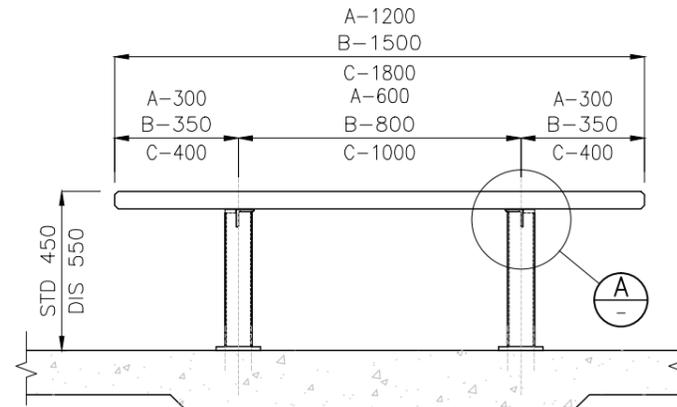
DETAIL A
SCALE: 1:5

NOTES

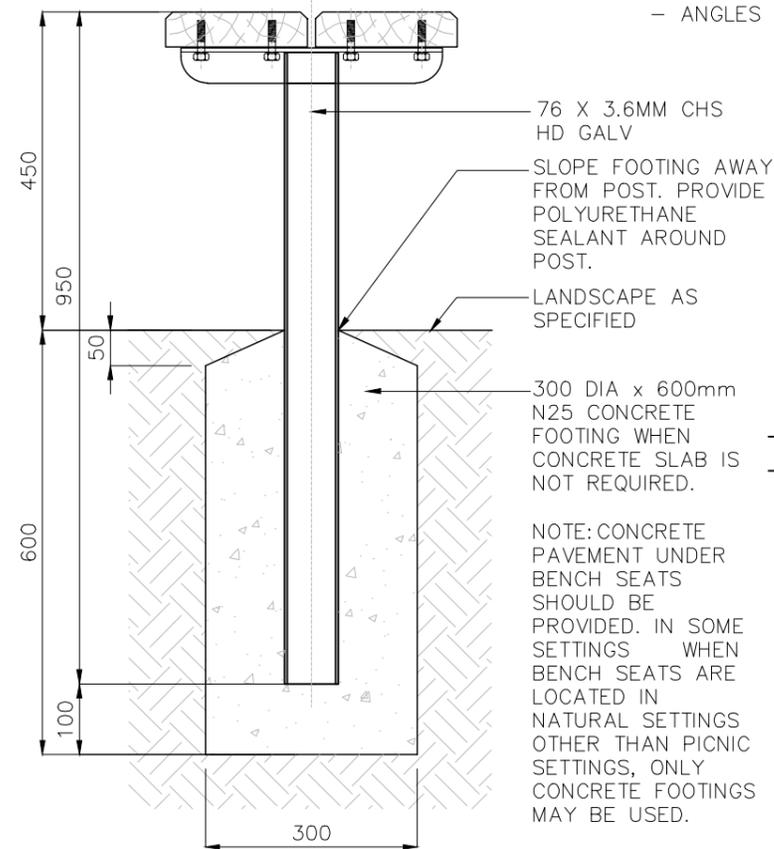
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE U.N.O
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OFF DRAWINGS
- REFER TO BSD-10124 FOR SETOUT OF BENCH SEATS IN PICNIC SETTINGS.
- ALL METALWORK TO BE HD GALVANISED AFTER FABRICATION UNLESS OTHERWISE NOTED
- ALL WELDS TO BE CONTINUOUS, GROUND OFF SMOOTH AND FLUSH
- ANGLES TO BE 50X50X6 MS ROUNDED AT EDGES



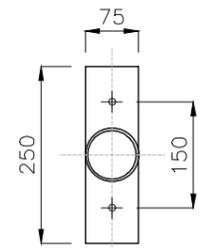
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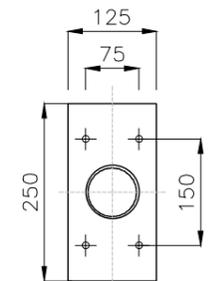
ELEVATION
SCALE 1:20



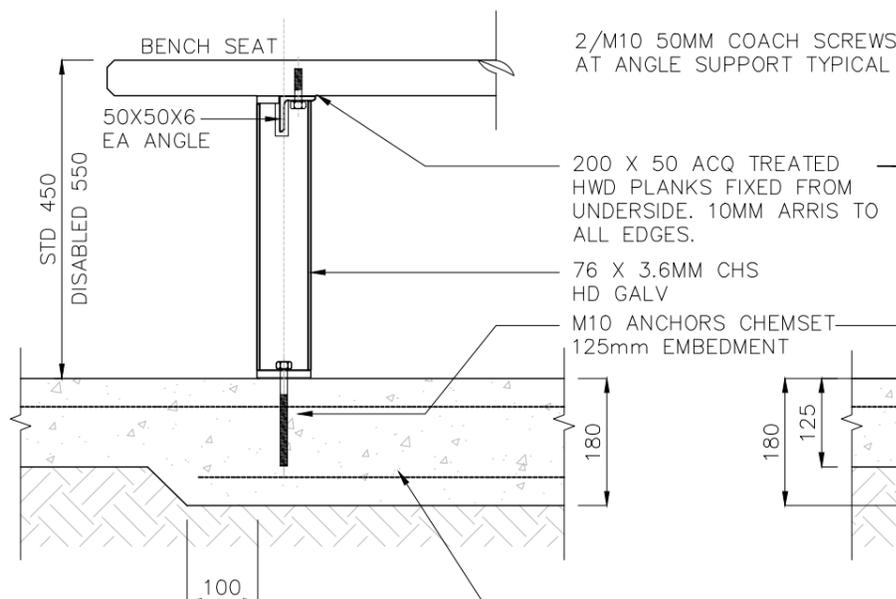
ALTERNATIVE FOOTING DETAIL
SCALE: 1:10



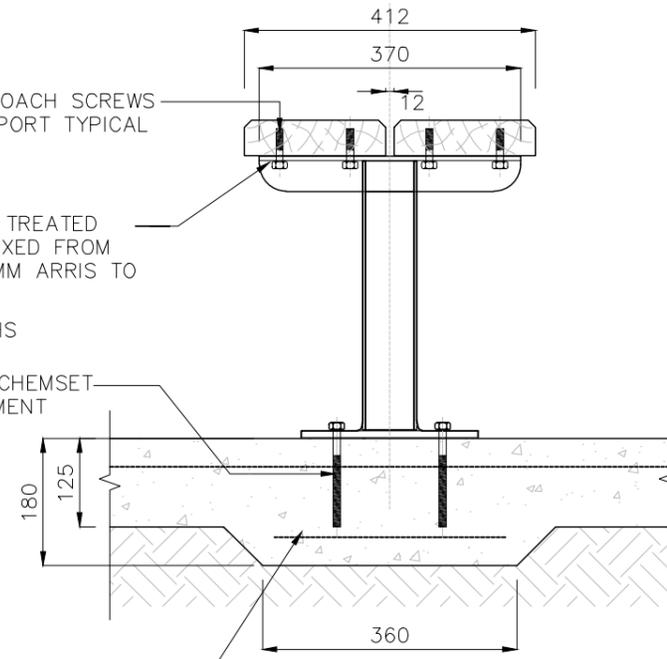
TYPE 1 BASE DETAIL
SCALE: 1:10



TYPE 2 BASE DETAIL
SCALE: 1:10



SECTION A-A
SCALE: 1:10



TYPICAL SECTION
SCALE: 1:10

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Cendric
2015.06.04 14:43:44+10'00'
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

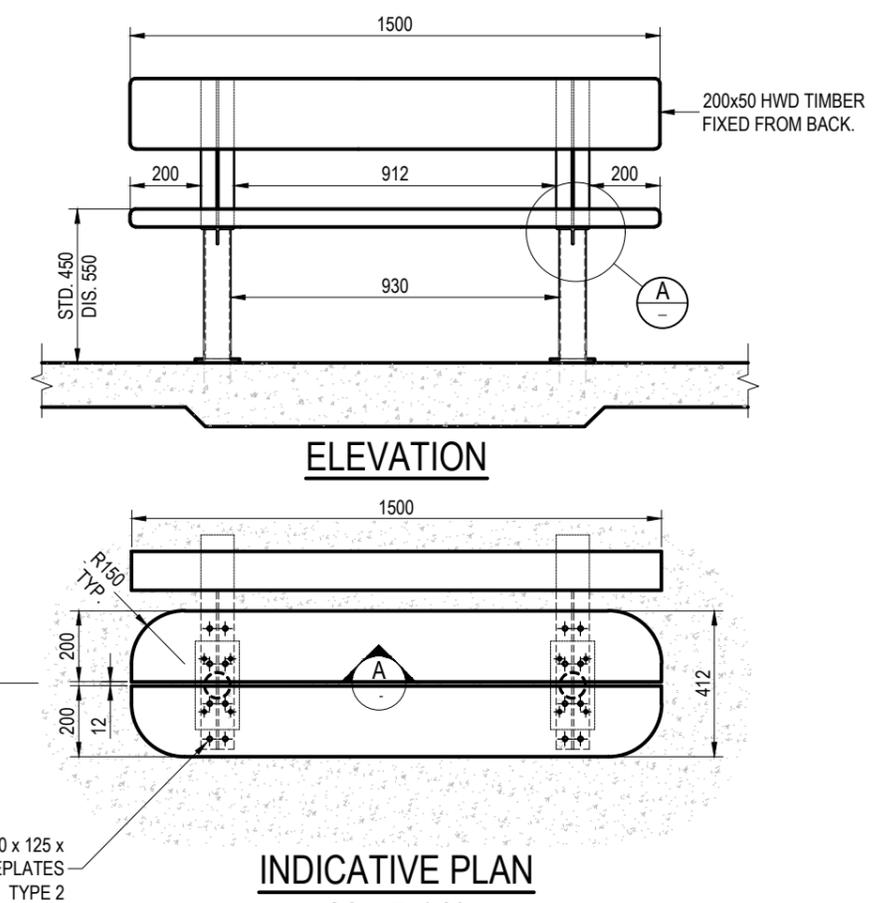
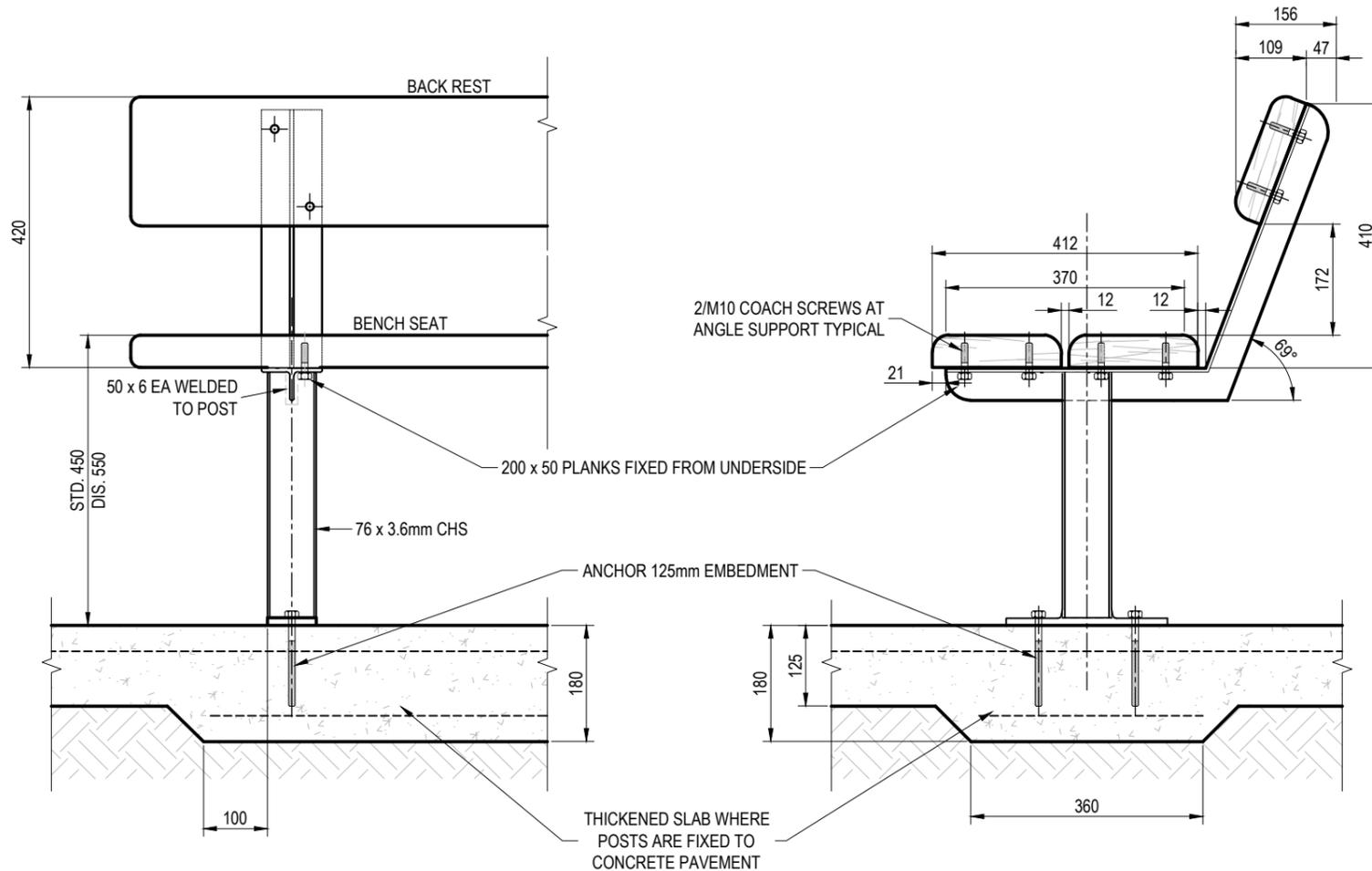
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DRAWN	DATE
CPO - P&D	DEC '14
CHECKED	DATE
BI - FSG - AS	DEC '14
DRAWING FILENAME	BSD-10116 (A) Bench seat - Natural area.dwg
ASSOCIATED PLANS	



BRISBANE CITY COUNCIL STANDARD DRAWING

BENCH SEAT NATURAL AREA

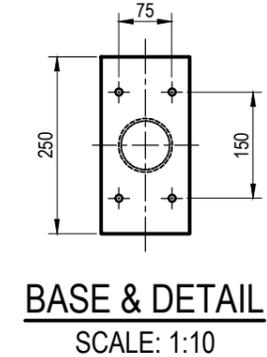
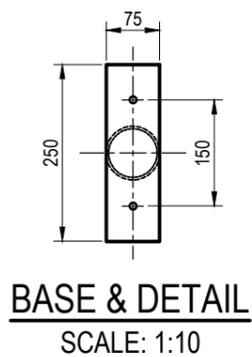
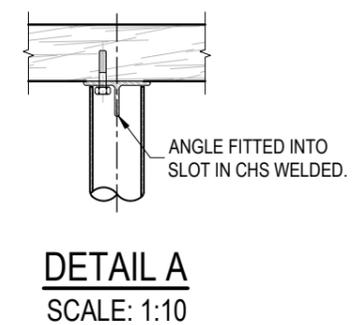
SCALE: AS SHOWN
DWG No: BSD - 10116
ORIGINAL SIZE: A3
REVISION: A



SECTION A-A
SCALE: 1:10

TYPICAL SECTION
SCALE: 1:10

INDICATIVE PLAN
SCALE: 1:20



NOTES

1. ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
2. SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
3. VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
5. VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
6. STRUCTURES HAVE BEEN DESIGNED FOR STANDARD SOIL AND TERRAIN CATEGORY CONDITIONS. TERRAIN CATEGORY = 2.5 AND MINIMUM ALLOWABLE BEARING CAPACITY = 100KPA.
7. IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
8. THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Redundant Note Removed From Drawing (Note 9)	DEC '18	APR '19	APR '19
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION

Inga Condric
2019.06.04 14:44:33+10'00'
for ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT

DESIGN APPROVED

C. Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CP0 - P&D	DATE	DEC '14
DRAWN	CP0 - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10117 (A) Bench seat with backrest - Natural area.dwg		
ASSOCIATED PLANS			



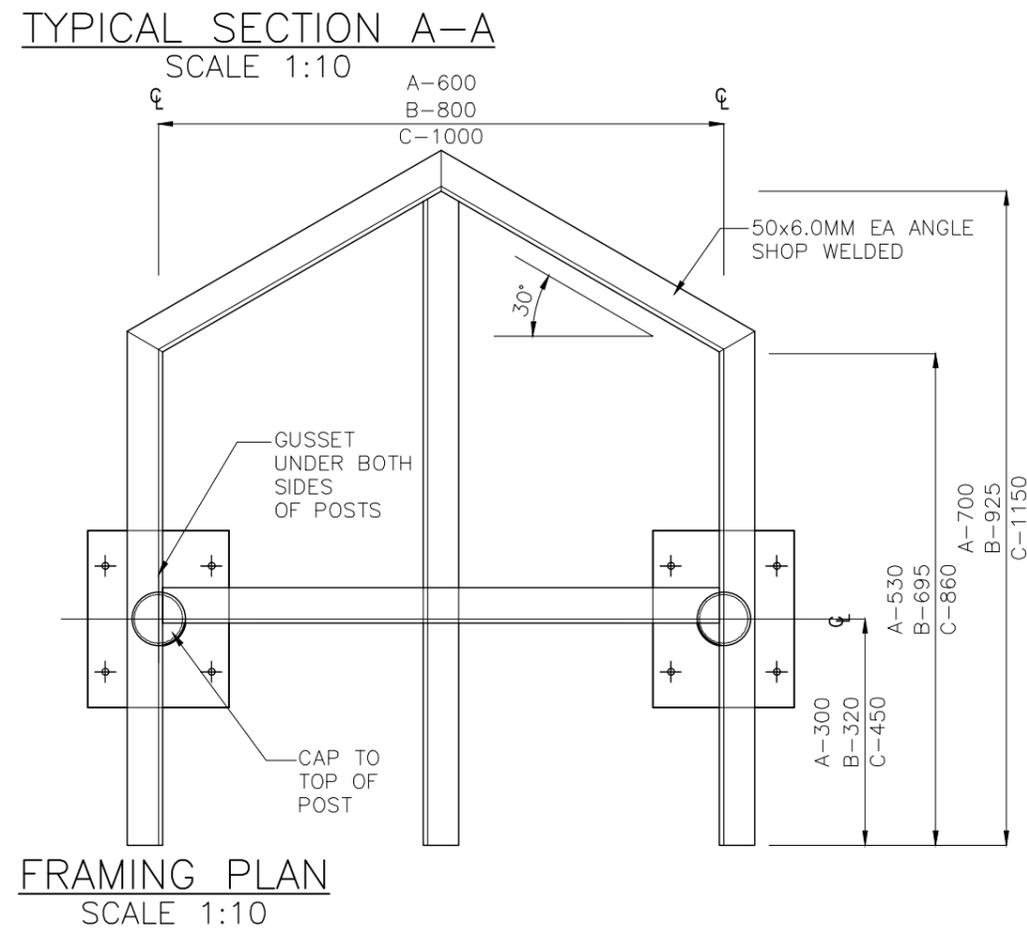
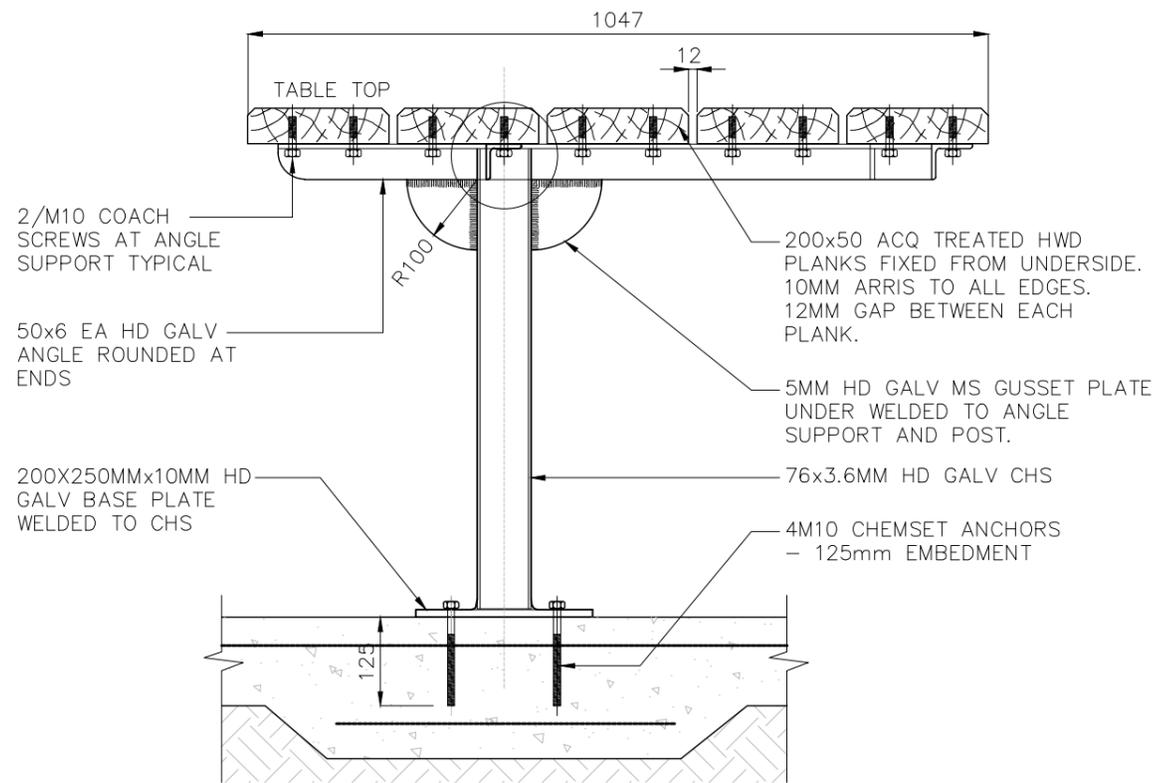
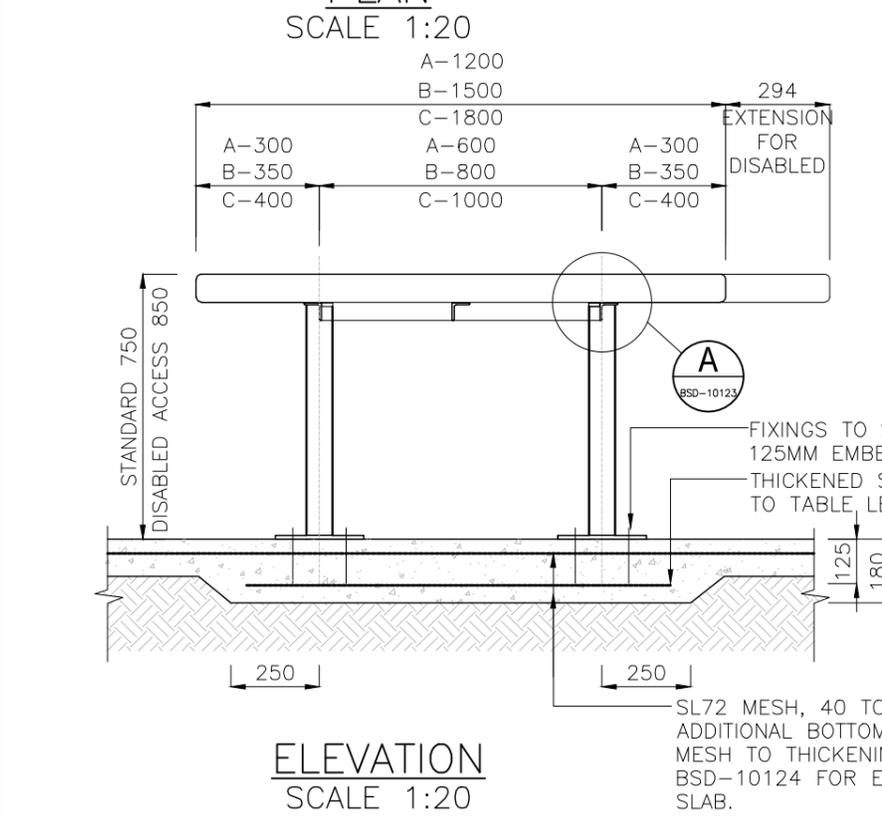
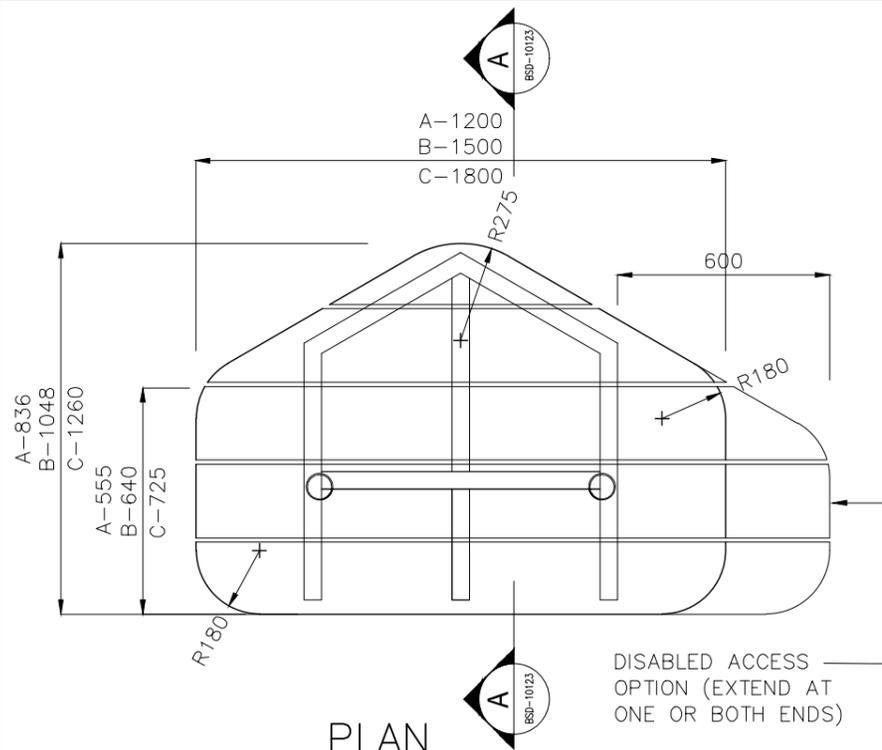
BRISBANE CITY COUNCIL STANDARD DRAWING

**BENCH SEAT WITH BACKREST
NATURAL AREA**

SCALE: AS SHOWN

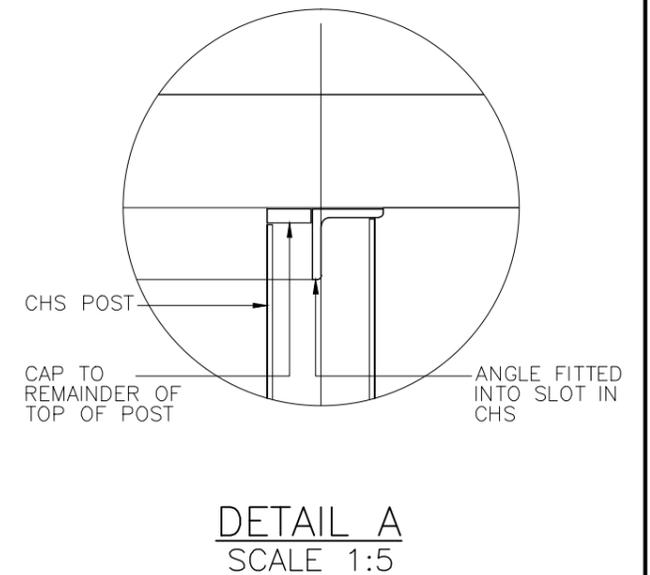
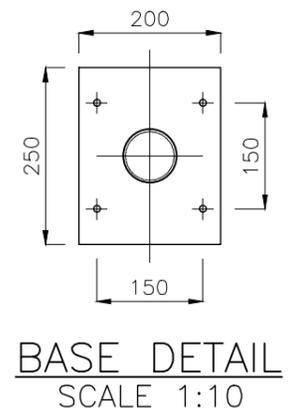
DWG No. **BSD-10117**

ORIGINAL SIZE: **A3** REVISION: **B**



NOTES

- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
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- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE U.N.O
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OFF DRAWINGS
- REFER TO BSD-10124 FOR SETOUT OF PICNIC TABLES IN PICNIC SETTINGS.
- ALL METALWORK TO BE HD GALVANISED AFTER FABRICATION UNLESS OTHERWISE NOTED
- ALL WELDS TO BE CONTINUOUS, GROUND OFF SMOOTH AND FLUSH
- ANGLES TO BE 50X50X6 MS ROUNDED AT EDGES



A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

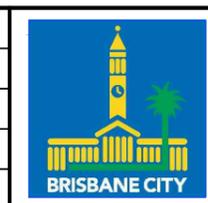
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Inga Cundric
2015.06.04. 14:45:14+10'00'

ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED

C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
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ASSOCIATED PLANS			



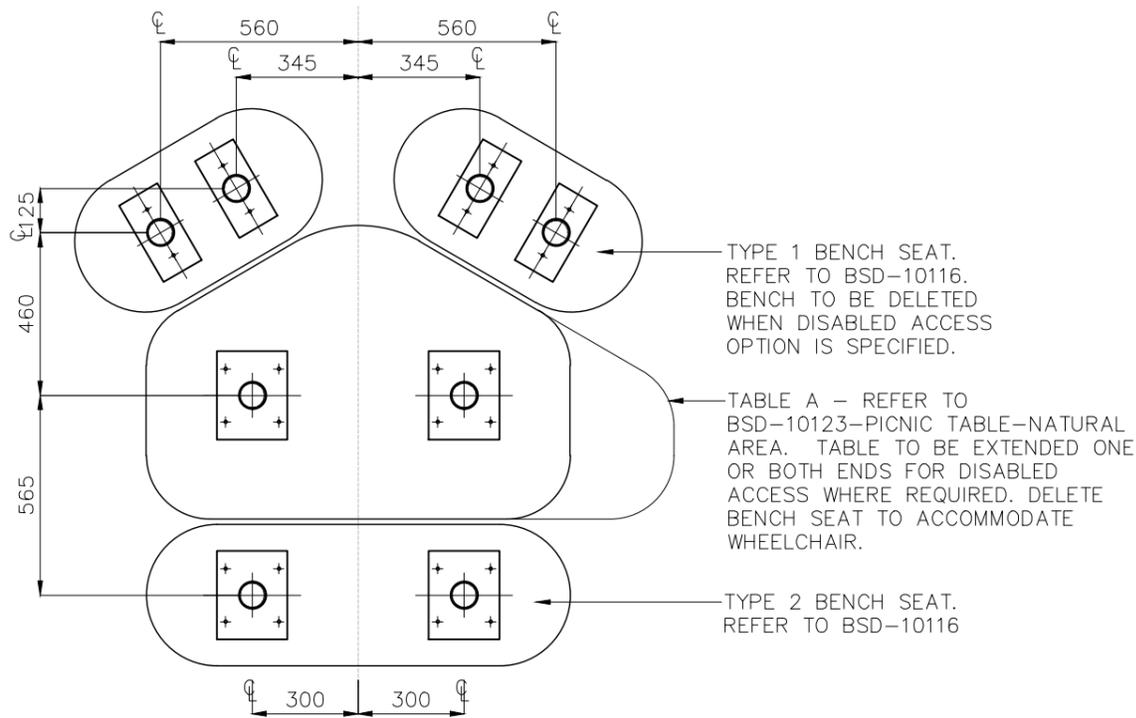
BRISBANE CITY COUNCIL STANDARD DRAWING

PICNIC TABLE
NATURAL AREA

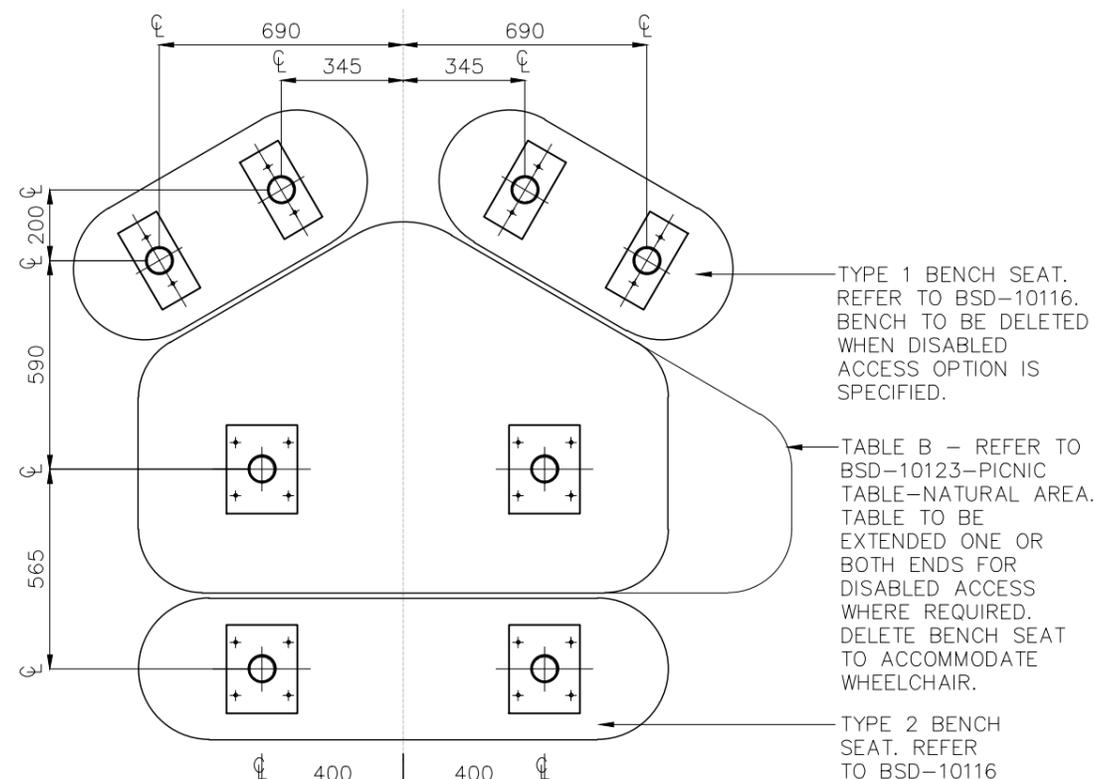
SCALE AS SHOWN

DWG No. **BSD - 10123**

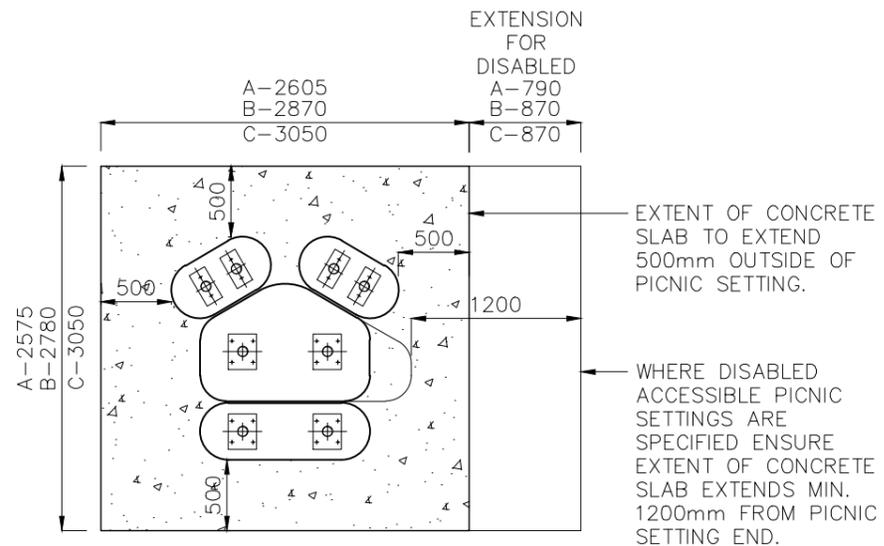
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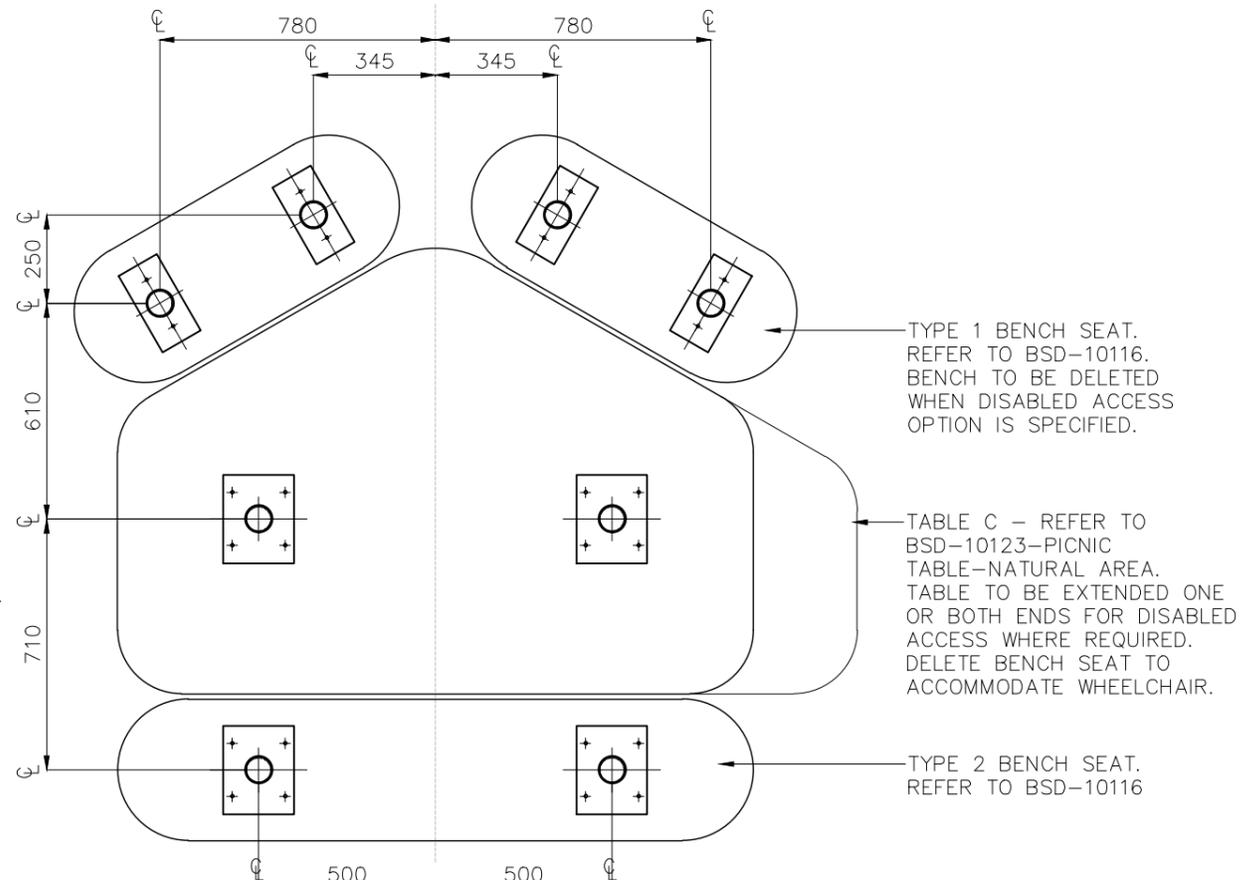
TYPE A SETTING - PLAN
SCALE 1:20



TYPE B SETTING - PLAN
SCALE 1:20



PICNIC SETTING ON
CONCRETE SLAB - PLAN
SCALE 1:50



TYPE C SETTING - PLAN
SCALE 1:20

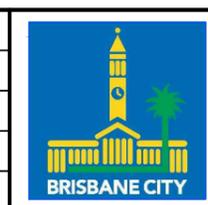
NOTES

- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
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- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE U.N.O
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OFF DRAWINGS
- REFER TO BSD-10116 FOR BENCH SEAT DETAILS AND BSD-10123 FOR PICNIC TABLE DETAILS.
- ALL METALWORK TO BE HD GALVANISED AFTER FABRICATION UNLESS OTHERWISE NOTED
- ALL WELDS TO BE CONTINUOUS, GROUND OFF SMOOTH AND FLUSH
- ANGLES TO BE 50X50X6 MS ROUNDED AT EDGES

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
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ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

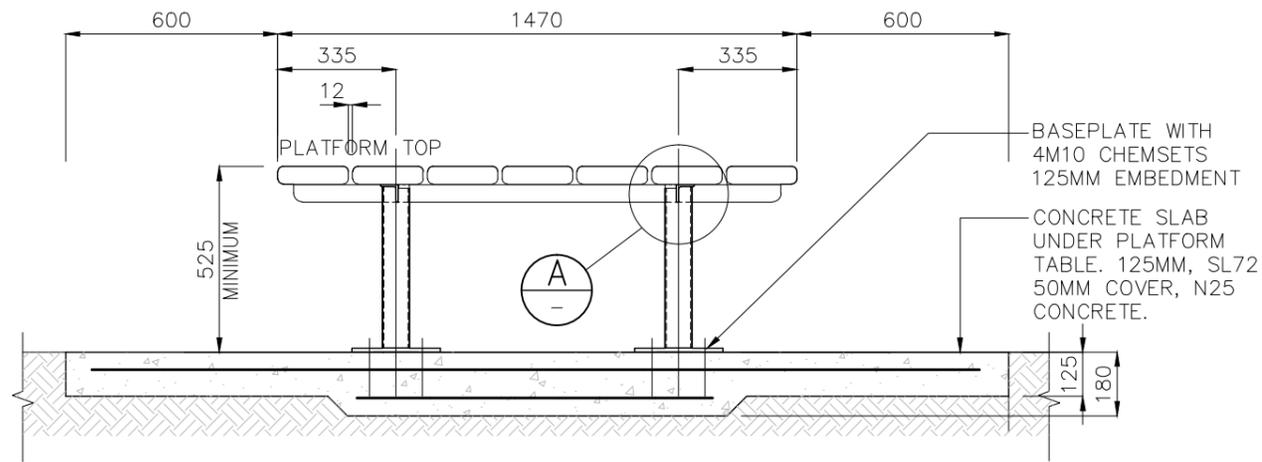
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ASSOCIATED PLANS	



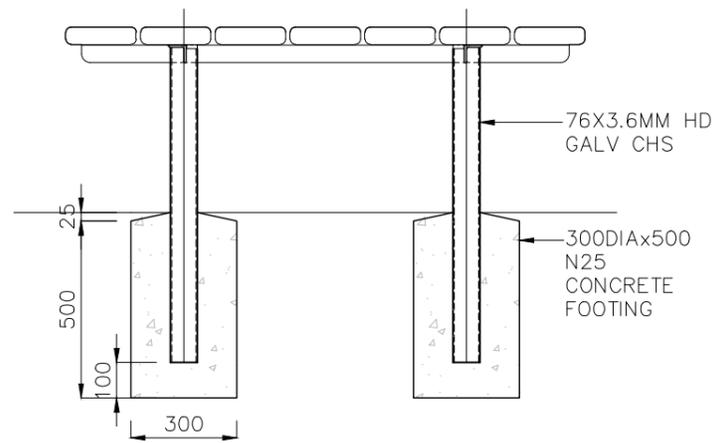
BRISBANE CITY COUNCIL STANDARD DRAWING

PICNIC TABLE
NATURAL AREA
SETOUT DETAILS

SCALE AS SHOWN
DWG No. BSD - 10124
ORIGINAL SIZE A3 REVISION A

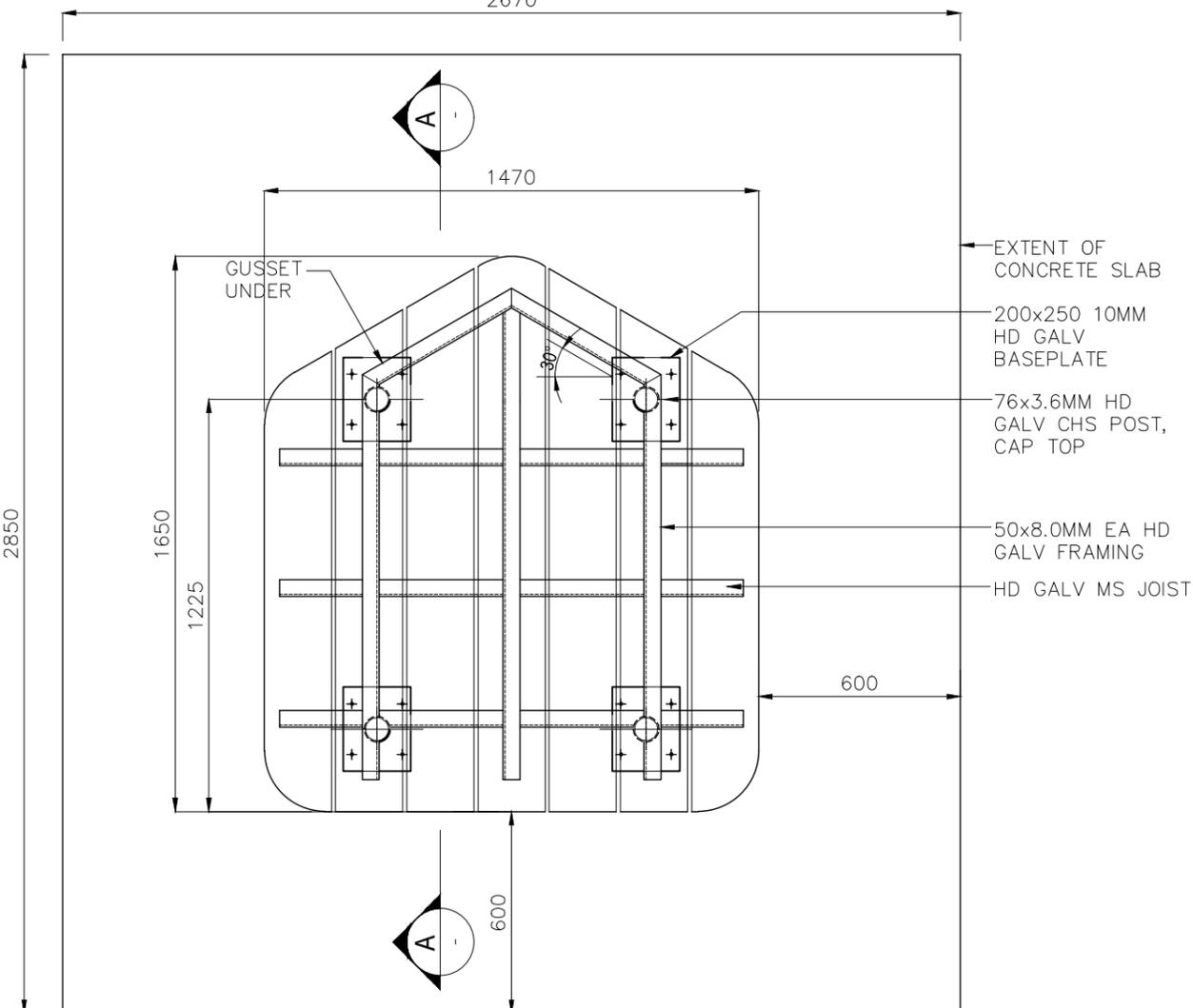


ELEVATION
SCALE 1:20
2670

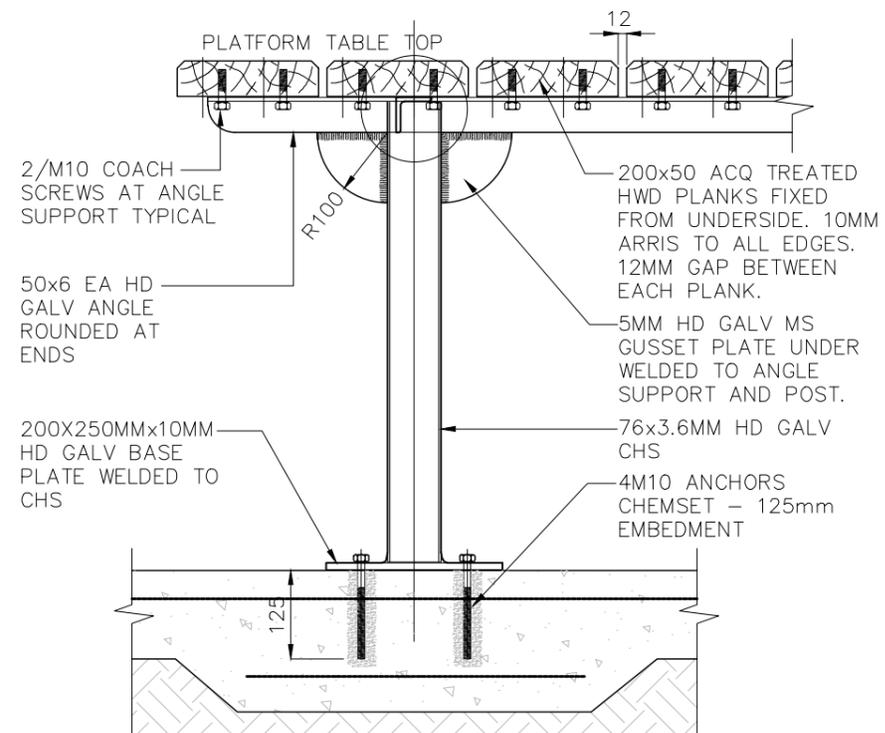


NOTE: ALTERNATIVE FOOTING TO BE USED WHERE PLATFORM TABLE IS TO BE INSTALLED WITHOUT A CONCRETE SLAB. THIS IS TO BE USED ONLY IN REMOTE AREAS WHERE CONSTRUCTION ACCESS IS LIMITED.

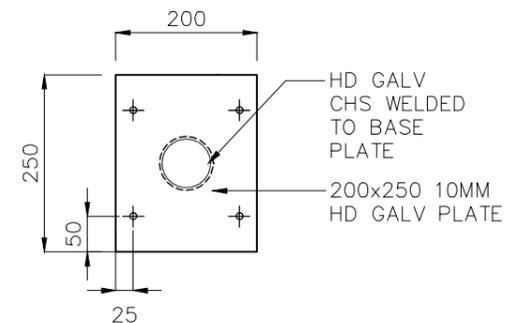
ALTERNATIVE FOOTING DETAIL
SCALE 1:20



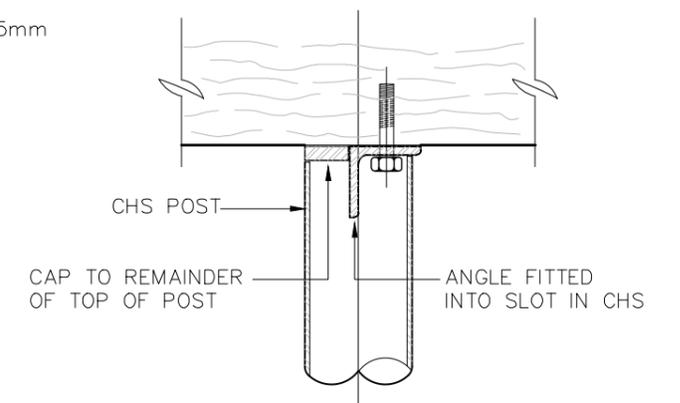
PLAN
SCALE 1:20



SECTION A-A
SCALE 1:20



BASE PLATE DETAIL
SCALE 1:10



DETAIL A
SCALE 1:5

- NOTES**
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
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ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	DATE
CPO - P&D	DEC '14
DRAWN	DATE
CPO - P&D	DEC '14
CHECKED	DATE
BI - FSG - AS	DEC '14
DRAWING FILENAME	BSD-10126 (A) Platform table - Natural area.dwg
ASSOCIATED PLANS	



BRISBANE CITY COUNCIL STANDARD DRAWING	
PLATFORM TABLE NATURAL AREA	SCALE AS SHOWN
DWG No. BSD - 10126	REVISION A
ORIGINAL SIZE A3	

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
 AS 1684.2(2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
 AS 1720.1(2010) TIMBER STRUCTURES
 AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS
 AS 3600 CONCRETE STRUCTURES
 AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
 AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE U.N.O.
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF HIP ROOF SHELTERS INCLUDED IN DRAWING SHEETS 1 TO 7.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.
- G13 LIGHTNING PROTECTION AS PER BSD-10133.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 1.5
 ULTIMATE WIND SPEED = 54.0 m/s
 SHELTER IS DESIGNED FOR THE CONDITION "EMPTY UNDER" ACCORDING TO AS 1170.2 (2011)
 DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE
 LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.
 STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.
 TERRAIN CATEGORY 1.5 CORRESPONDS TO AN ENVIRONMENT WITH OPEN WATER SURFACES SUBJECTED TO SHOALING WAVES AT SERVICEABILITY AND ULTIMATE WIND SPEEDS IN ALL WIND REGIONS

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCT CLASS I MATERIAL.
- F5 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL AND WATER PRIOR TO POURING CONCRETE.
- F6 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F7 SLABS ON GRADE SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LEVEL OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 JOIST HANGERS ARE TO HAVE A MINIMUM OF SIX (6) No. 3.15mm DIA. x 35mm LONG NAILS PER LEG/END.
- T4 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
 IN MARINE ENVIRONMENT, ALL FASTENERS, CLEATS, STEEL MEMBERS, NAILS AND BOLTS SHALL BE STAINLESS STEEL GR. 316 U.N.O. THE MARINE ENVIRONMENT EXTENDS 1km FROM FORESHORE.
- T5 TIMBER JOINT GROUP JD4 OR BETTER.
- T6 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T7 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T8 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T9 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

CONCRETE NOTES:

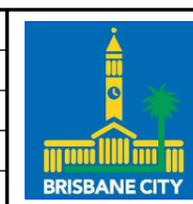
- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE
- | U.N.O. | ELEMENT: | F'C (MPa) | REINFORCEMENT COVER |
|--------|----------|-----------|---------------------|
| | PIERS | 32 | 75 MIN. |
| | SLAB | 32 | CENTRALLY PLACED |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR | LAP LENGTH (mm) |
|------|-----------------|
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS: R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
 N DEFORMED BAR GRADE D500N TO AS 4671.
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND THE CONTRACT DOCUMENT. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ)

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE G13 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

DESIGN	L.M.	DATE	Sept '14
DRAWN	G.B.	DATE	Sept '14
CHECKED	D.B.	DATE	Sept '14
DRAWING FILENAME	BSD-10131 (C) Hip roof shelter - Park - Structural notes (Page 1 of 2) - Sheet 1 of 7.dwg		
ASSOCIATED PLANS	BSD-10131 SHEETS 2 TO 7		



STRUCTURAL DESIGN CERTIFICATION		
DESIGN Original signed by : L. Mendis RPEQ: 8950 – 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 – 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 – 2014.11.27
BRISBANE CITY COUNCIL STANDARD DRAWING		
HIP ROOF SHELTER-PARK- STRUCTURAL NOTES (PAGE 1 OF 2) SHEET 1 OF 7		SCALE NOT TO SCALE DWG No. BSD-10131 ORIGINAL SIZE A3 REVISION C

HIP ROOF SHELTERS SCHEDULE

SHELTER TYPE	DIMENSIONS						POST HEIGHT H(m)	FASCIA Size in timber stress grade MGP12 G(mm)	No. of bridging equally spaced along fascia/purlin length				RIDGE 2/170x45 yes/no	APEX Connector Type (Refer sheet 7)	PURLINS		HIP RAFTER Size in timber stress grade MGP12 Q(mm)	POST C1		ANNEX			POST C2	
	A(m)	B(m)	C(m)	D(m)	E(m)	F(m)			Less than 1.5m	1.51m to 2.7m	2.71m to 5m	5.01m to 6m			Spacing	Size in timber stress grade MGP12*		Hot dip galv. grade 350	Stainless steel grade 316	Ground pad	Rafter spacing	Length of beam	Hot dip galvanised grade 350	Stainless steel grade 316
									Fascia/Purlin length						K(mm)	M(mm)				N(m)	L(m)	P(m)		
4x4	4.0	4.0	3.0	3.0	5.0	5.0	2.55	190x45	-	1	1	-	no	1	780	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x4+ANNEX	4.0	4.0	3.0	3.0	5.0	5.0	2.55	190x45	-	1	1	-	no	1	780	140x45	2/170x45	100x6 SHS	100x5 SHS	7.8	0.45	4.4	75x5 SHS	100x5 SHS
4x5	4.0	5.0	3.0	4.0	5.0	6.0	2.55	190x45	-	1	2	-	yes	2	780	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x5+ANNEX	4.0	5.0	3.0	4.0	5.0	6.0	2.55	190x45	-	1	2	-	yes	2	780	140x45	2/170x45	100x6 SHS	100x5 SHS	8.8	0.45	4.4	75x5 SHS	100x5 SHS
4x6	4.0	6.0	3.0	5.0	5.0	7.0	2.55	240x45	-	1	2	3	yes	2	780	*170x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x6+ANNEX	4.0	6.0	3.0	5.0	5.0	7.0	2.55	240x45	-	1	2	3	yes	2	780	*170x45	2/170x45	100x6 SHS	100x5 SHS	9.8	0.45	4.4	75x5 SHS	100x5 SHS
5x5	5.0	5.0	4.0	4.0	6.0	6.0	2.55	190x45	-	1	2	-	no	1	730	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
5x5+ANNEX	5.0	5.0	4.0	4.0	6.0	6.0	2.55	190x45	-	1	2	-	no	1	730	140x45	2/170x45	100x6 SHS	100x5 SHS	8.8	0.575	5.4	75x5 SHS	100x5 SHS
5x6	5.0	6.0	4.0	5.0	6.0	7.0	2.55	240x45	-	1	2	3	yes	2	730	*170x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
5x6+ANNEX	5.0	6.0	4.0	5.0	6.0	7.0	2.55	240x45	-	1	2	3	yes	2	730	*170x45	2/170x45	100x6 SHS	100x5 SHS	9.8	0.575	5.4	75x5 SHS	100x5 SHS

Provide bridging with 140x45 timber grade same as purlins

* For spans greater than 3750 provide 2/170x45 with 2 No. M16 bolts equally spaced along the purlin, c/w washers and nuts thru purlins.

STEELWORK NOTES

- ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350LO FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS UNO
- ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O. ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O. ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS - COLORBOND COLOUR AS PER SPECIFICATION. IN MARINE ENVIRONMENT, PROVIDE COLORBOND ULTRA FINISH OR APPROVED EQUAL.
- ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. CORROSION PROTECTION COATING TO SURFACE PREPARATION OF SUBSTRATE MATERIAL IS CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.

- ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- FOR MARINE ENVIRONMENTAL ZONES (WITHIN 1km OF THE SHORELINE), ALL STEEL MEMBERS, FASTENERS, INCLUDING BOLTS, NUTS, AND CLEATS SHALL BE STAINLESS STEEL. PLASTIC SEPARATORS SHALL BE PROVIDED TO AVOID CONTACT BETWEEN DISSIMILAR MATERIALS. STAINLESS STEEL GRADE 316 TO BE USED.
- CO-ORDINATE WITH LIGHTNING PROTECTION DETAILS - REFER TO BSD-10133.

STAINLESS STEEL:

- BEFORE FABRICATION SUBMIT COPIES OF SHOP DRAWINGS FOR REVIEW. REVIEW DOES NOT INCLUDE DIMENSION CHECKING.
- STAINLESS STEEL MATERIAL SHALL NOT BE STORED WITH CARBON STEEL.
- TOOLS USED FOR CARBON STEEL SHALL NOT BE USED TO FABRICATE OR ASSEMBLE STAINLESS STEEL COMPONENTS.
- THE STAINLESS STEEL SHALL BE WRAPPED OR OTHERWISE PROTECTED DURING TRANSPORT TO AVOID CONTAMINATION BY FERROUS PRODUCTS.
- WELDING SHALL BE IN ACCORDANCE WITH AS1554.6.
- LIMIT THE INPUT OF HEAT INTO THE WELD. THE WELD SHALL NOT BE PREHEATED, POST-HEATED OR STRESS RELIEVED.
- GRADE 316L ELECTRODES SHALL BE USED FOR 316L.
- WELDS SHALL BE CATEGORY 2B IN ACCORDANCE WITH AS1554.6.
- SURFACE FINISHES OF WELDS SHALL BE GRADE 1, POLISHED USING 320 GRIT OR FINER, SILICONE CARBIDE ABRASIVES WITH LUBRICATION. AFTER POLISHING, WELDS SHALL BE PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- ALL STAINLESS STEEL COMPONENTS SHALL HAVE A Ra<0.5µm AND PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- CHEMICAL ANCHORS AND BOLTS TO BE GRADE 316 STAINLESS STEEL A4-50 MINIMUM.

STRUCTURAL DESIGN CERTIFICATION

DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27
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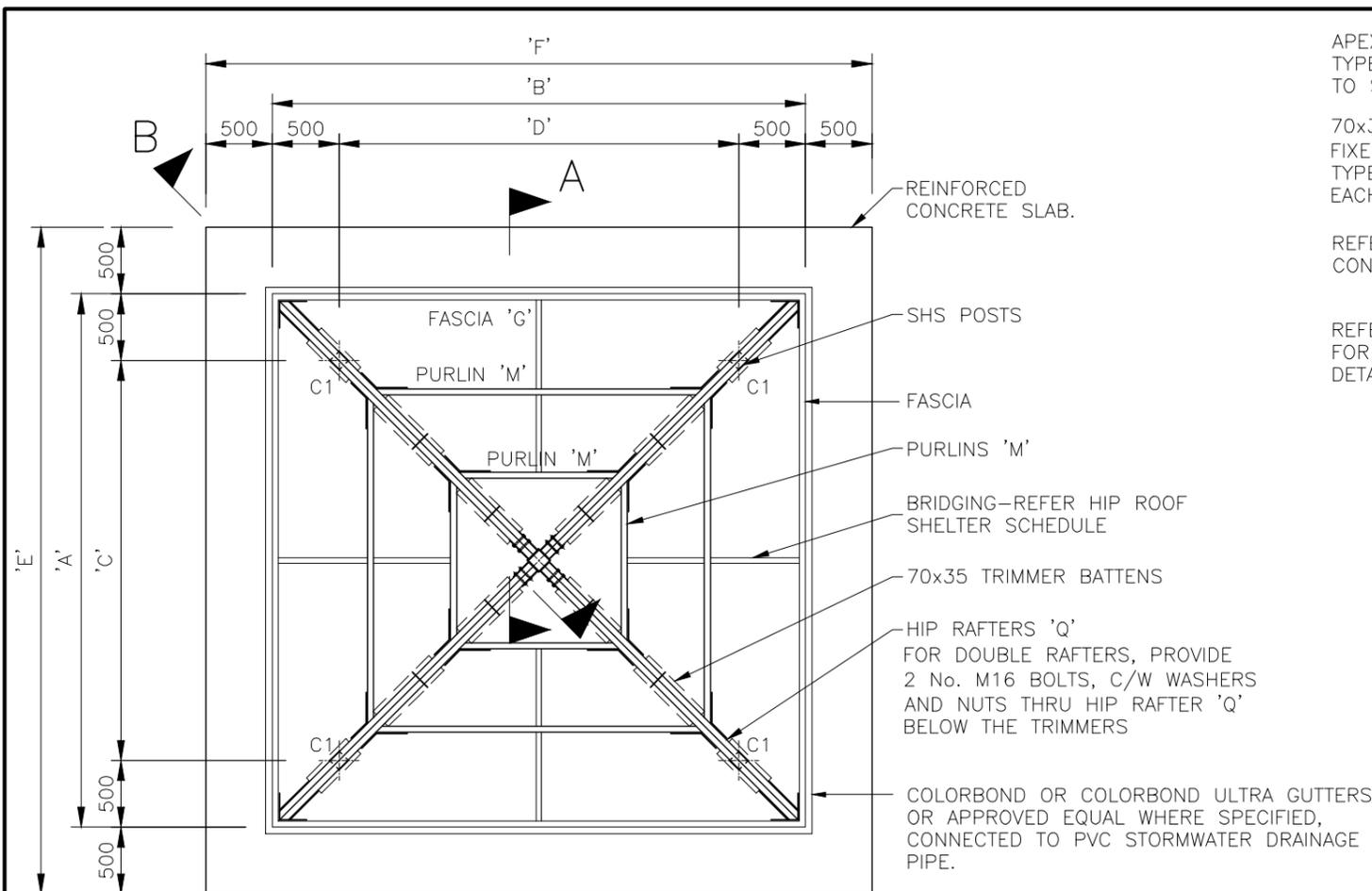
BRISBANE CITY COUNCIL STANDARD DRAWING

**HIP ROOF SHELTER-PARK-
STRUCTURAL NOTES (PAGE 2 OF 2)
SHEET 2 OF 7**

SCALE: NOT TO SCALE
DWG No. **BSD-10131**
ORIGINAL SIZE: A3 REVISION: C

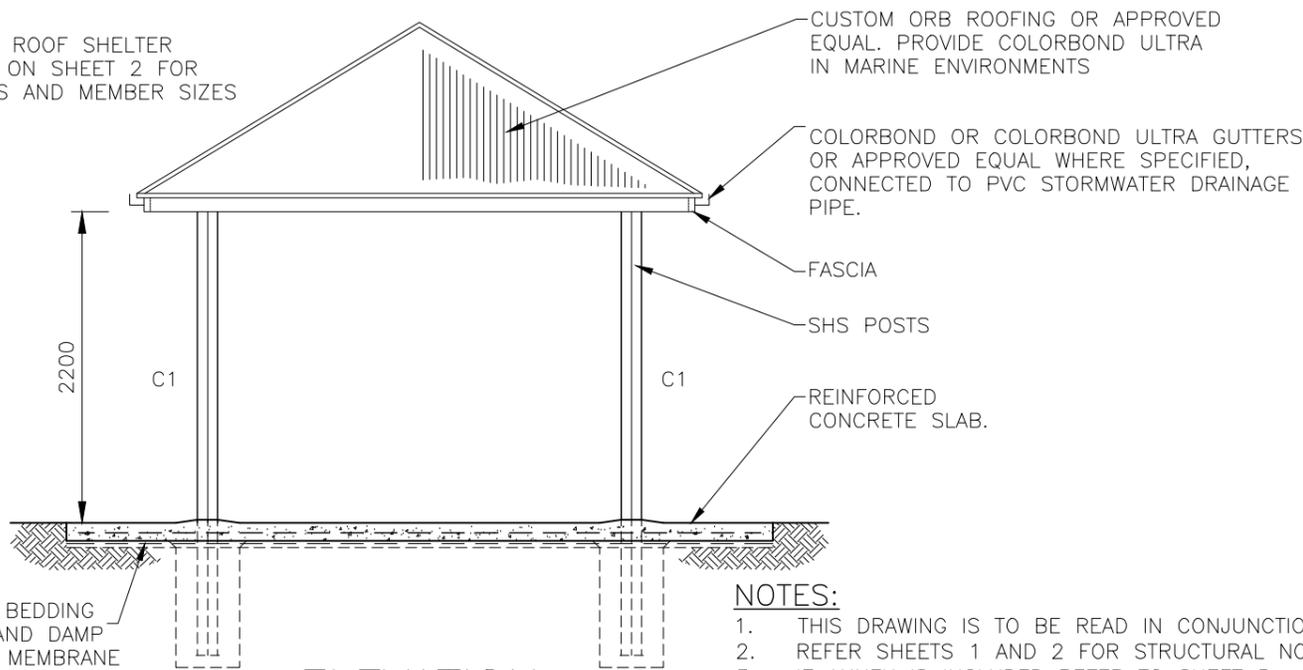
DRAWING AUTHORISED FOR PUBLICATION I. CONDRIK AUTHORISED JUNE 2015				DESIGN	L.M.	DATE	Sept '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				DRAWN	G.B.	DATE	Sept '14
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015				CHECKED	D.B.	DATE	Sept '14
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP				DRAWING FILENAME	BSD-10131 (C) Hip roof shelter - Park - Structural notes (Page 2 of 2) - Sheet 2 of 7.dwg		
ISSUE				ASSOCIATED PLANS	BSD-10131 SHEETS 1,3,4,5,6&7		
C	Drawing Title Amended, Hip Roof Shelters Schedule (mm) to (m)	FEB '16	JUL '16	JUL '16			
B	NOTE S13 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15			
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14			
	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE			





PLAN
1:50

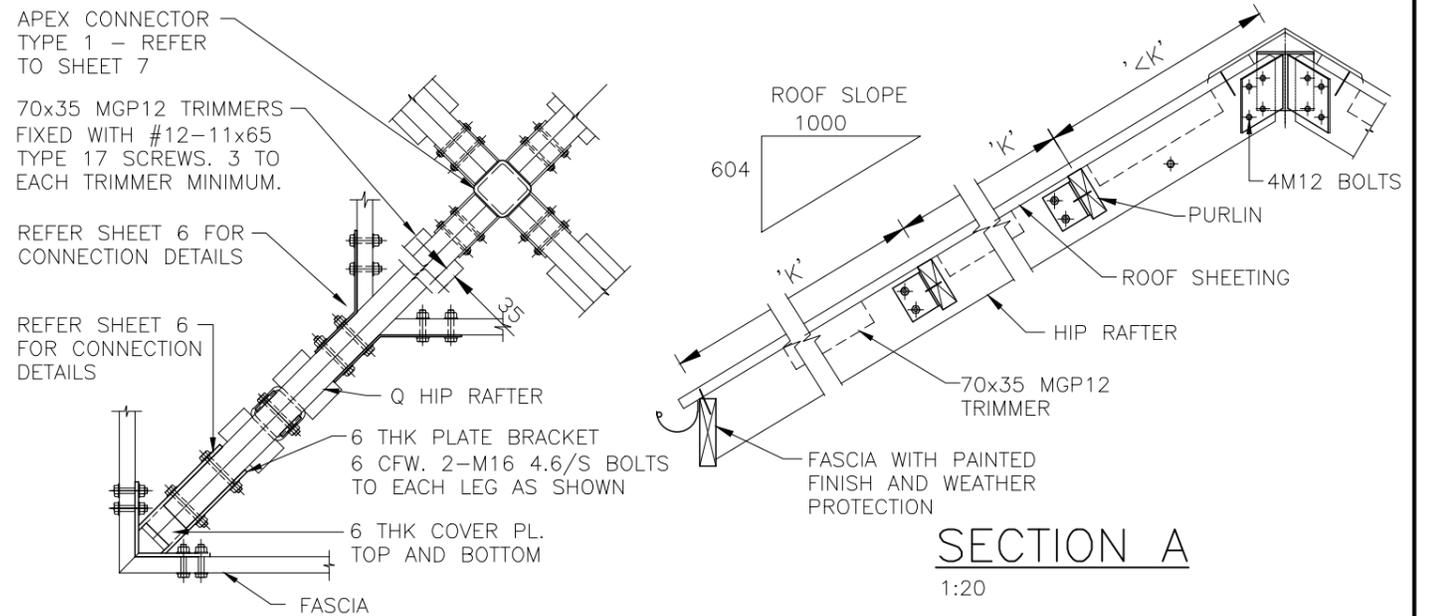
REFER HIP ROOF SHELTER SCHEDULE ON SHEET 2 FOR DIMENSIONS AND MEMBER SIZES



ELEVATION
1:50

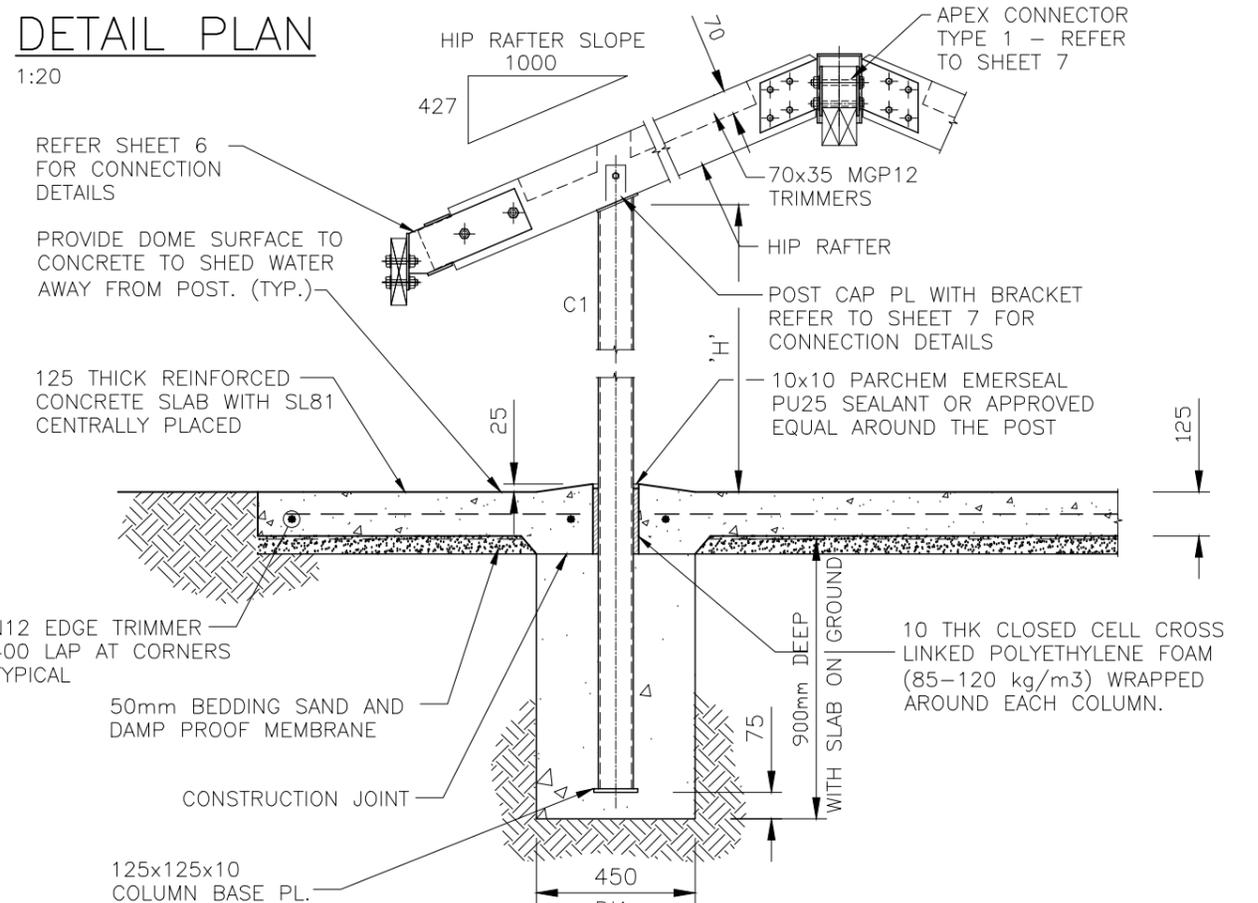
NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 4, 6 & 7.
2. REFER SHEETS 1 AND 2 FOR STRUCTURAL NOTES AND SPECIFICATIONS.
3. IF ANNEX IS INCLUDED REFER TO SHEET 5.
4. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
5. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.



DETAIL PLAN
1:20

SECTION A
1:20



SECTION B
1:20

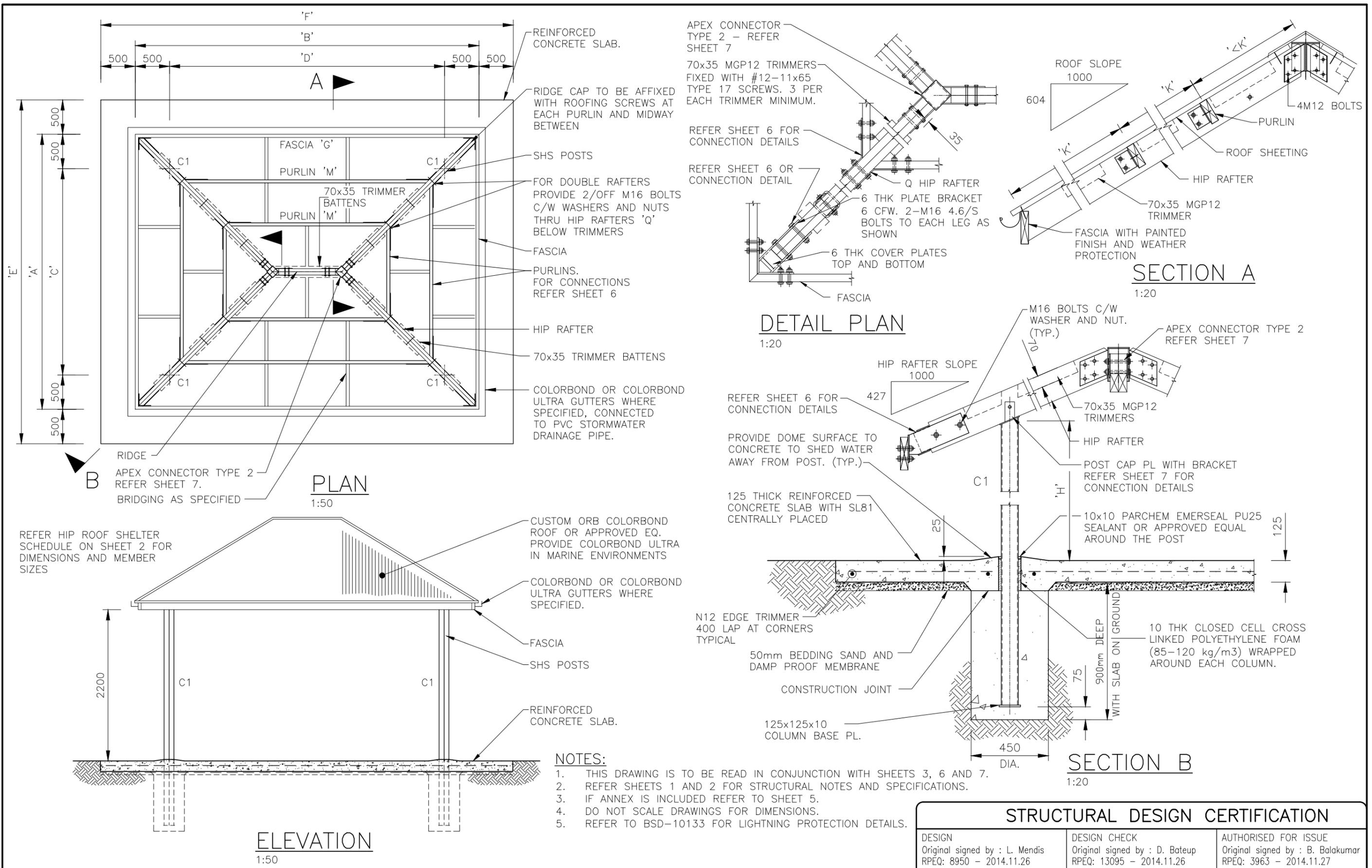
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE 5 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

DRAWING AUTHORISED FOR PUBLICATION I. CONDRIK AUTHORISED JUNE 2015				DESIGN	L.M.	DATE	Sept '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				DRAWN	G.B.	DATE	Sept '14
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015				CHECKED	D.B.	DATE	Sept '14
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP				DRAWING FILENAME	BSD-10131(1) Hip roof shelter - Park - Square shelter - Plan and details - Sheet 3 of 7.dwg		
				ASSOCIATED PLANS	BSD-10131 SHEETS 1,2,4,5,6 & 7		



BRISBANE CITY COUNCIL STANDARD DRAWING		SCALE	1:50, 1:20
HIP ROOF SHELTER - PARK-SQUARE SHELTER - PLAN AND DETAILS SHEET 3 OF 7		DWG No.	BSD-10131
ORIGINAL SIZE	A3	REVISION	C

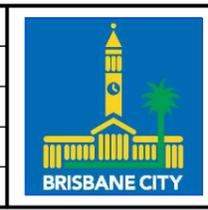


- NOTES:**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 3, 6 AND 7.
 2. REFER SHEETS 1 AND 2 FOR STRUCTURAL NOTES AND SPECIFICATIONS.
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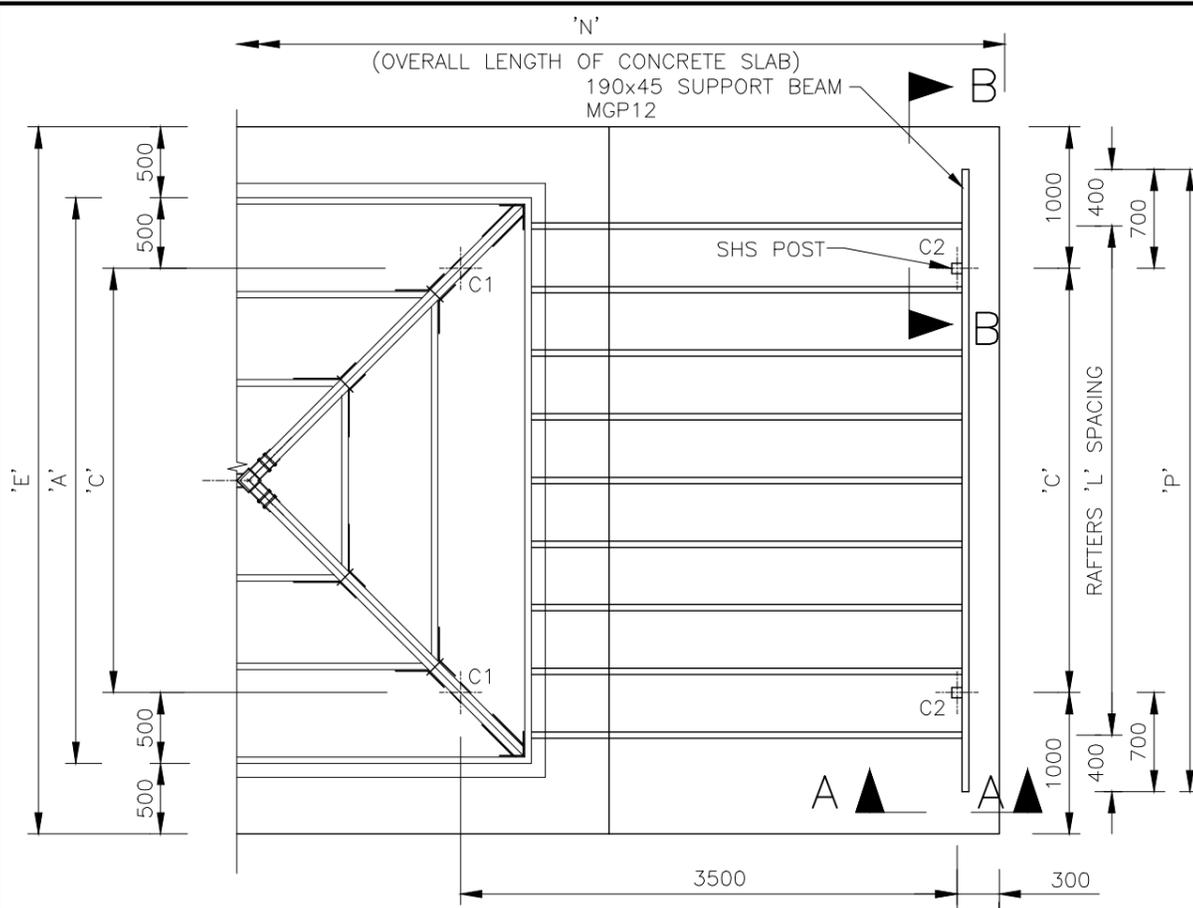
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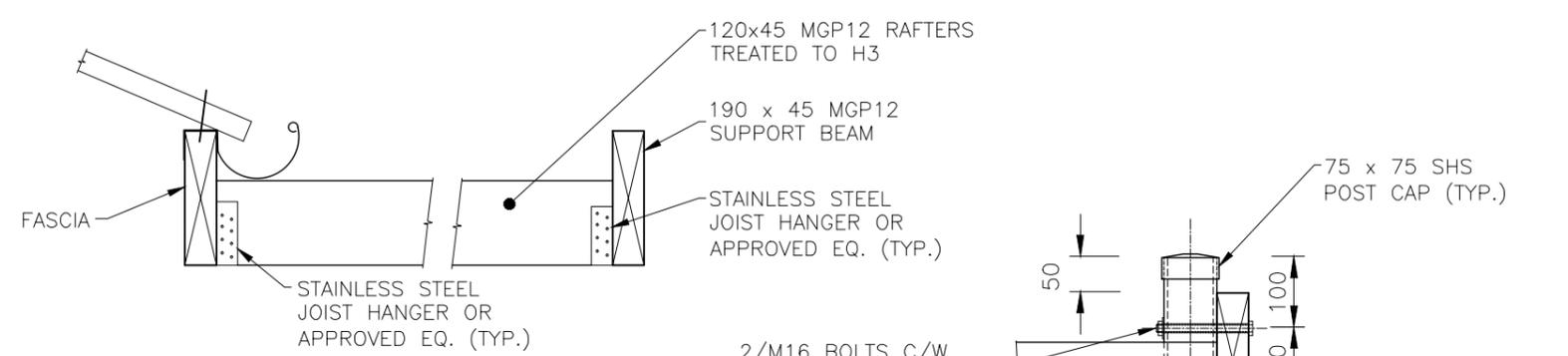
DRAWING AUTHORISED FOR PUBLICATION			
I. CONDRIK AUTHORISED JUNE 2015			
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015			
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP			
DESIGN	L.M.	DATE	Sept '14
DRAWN	G.B.	DATE	Sept '14
CHECKED	D.B.	DATE	Sept '14
DRAWING FILENAME	BSD-10131(1) Hip roof shelter - Park - Rectangular shelter - Plan and details - Sheet 4 of 7.dwg		
ASSOCIATED PLANS	BSD-10131 SHEETS 1,2,3,5,6 & 7		



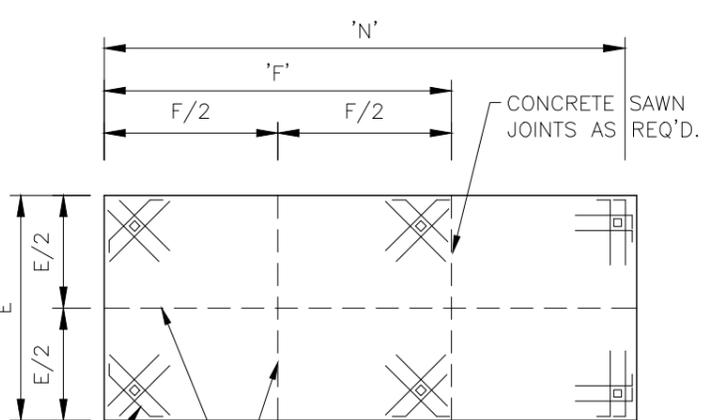
BRISBANE CITY COUNCIL STANDARD DRAWING	
HIP ROOF SHELTER-PARK-RECTANGULAR SHELTER-PLAN AND DETAILS-SHEET 4 OF 7	
SCALE 1:50, 1:20	DWG No. BSD-10131
ORIGINAL SIZE A3	REVISION C



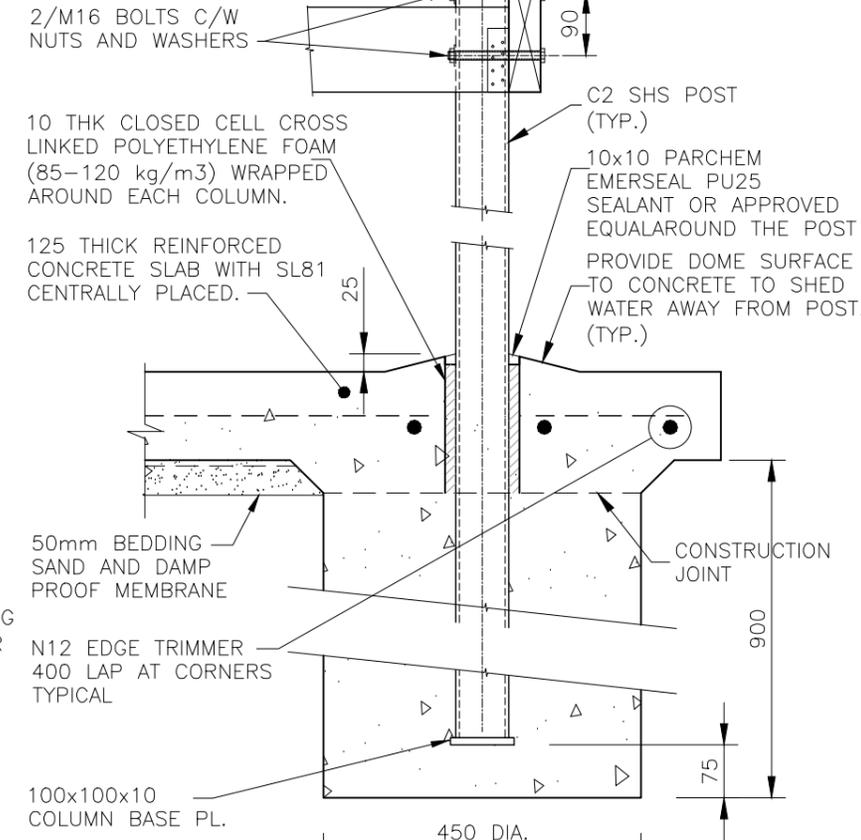
OPTIONAL ANNEX SLAB - CONTINUATION OF SHELTER SLAB
PLAN
 1:50



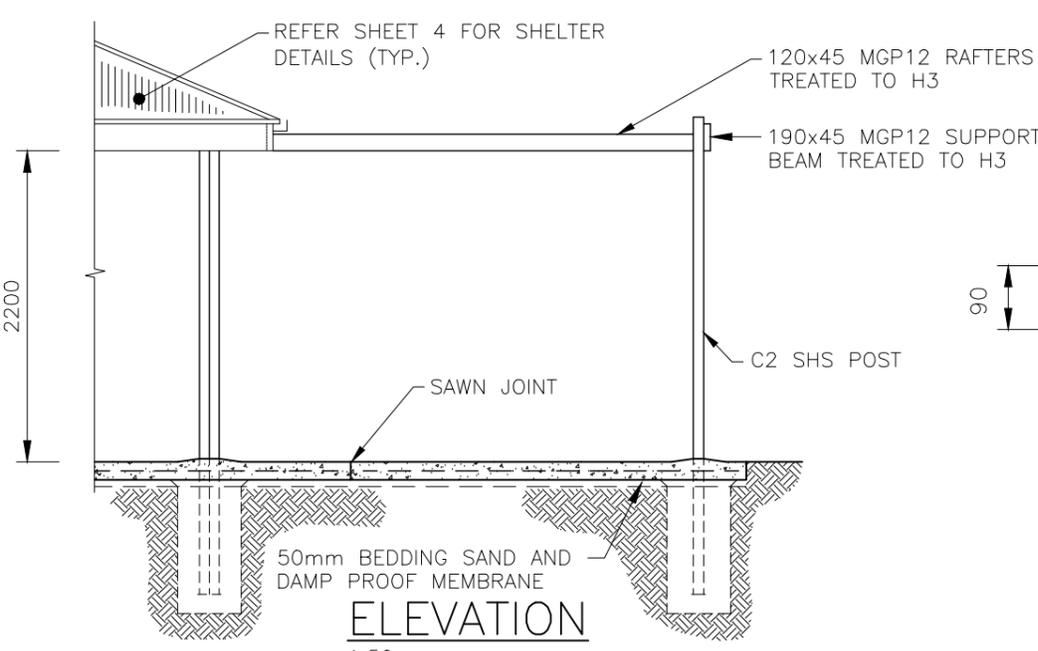
RAFTER-FASCIA DETAIL
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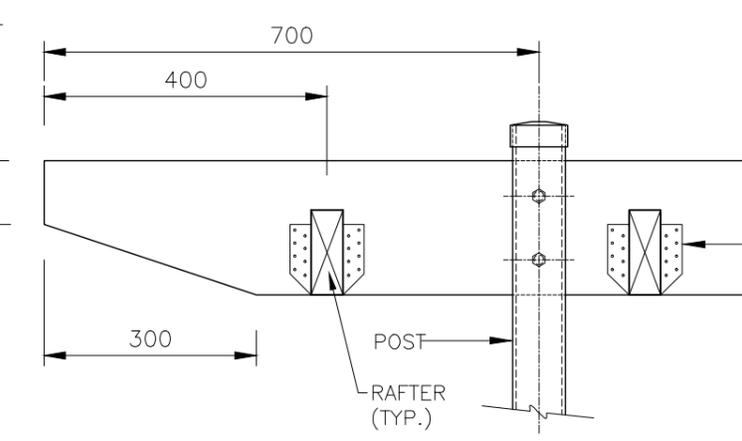
SLAB LAYOUT DIAGRAM
 NO SCALE



POST - FOOTING DETAIL
 1:10
 (SECTION A-A)



ELEVATION
 1:50



POST - RAFTER DETAIL
 1:10
 (SECTION B-B)

GANGNAIL JH47120 S.S. JOIST HANGER (BY MITEK AUSTRALIA LTD) OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATION.

- NOTES:**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 3, 4, 6 AND 7.
 2. REFER TO SHEETS 1 & 2 FOR STRUCTURAL NOTES AND SPECIFICATION.
 3. DO NOT SCALE DRAWING FOR DIMENSIONS.
 4. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.

STRUCTURAL DESIGN CERTIFICATION		
DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE 4 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

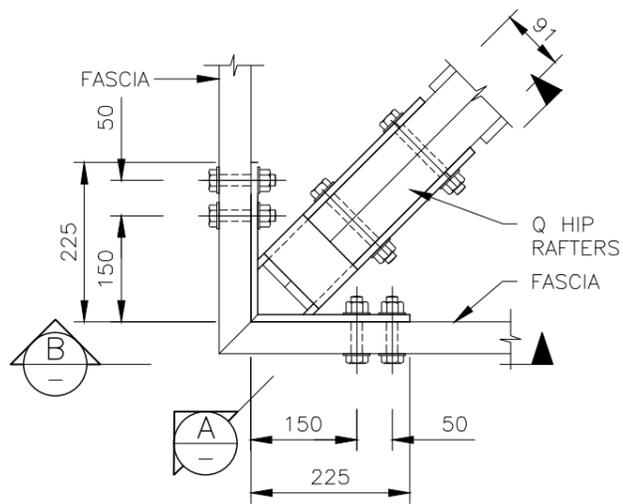
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DESIGN	L.M.	DATE	Sept '14
DRAWN	G.B.	DATE	Sept '14
CHECKED	D.B.	DATE	Sept '14
DRAWING FILENAME	BSD-10131(C) Hip roof shelter - Park - Optional annex - Plan and details - Sheet 5 of 7.dwg		
ASSOCIATED PLANS	BSD-10131 SHEETS 1,2,3,4,6 & 7		



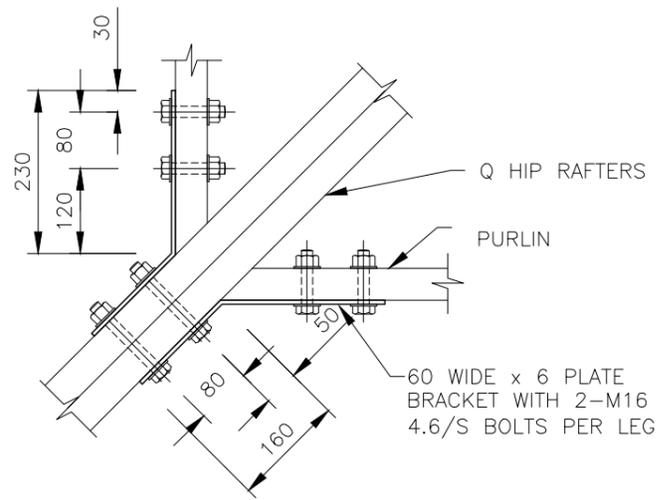
BRISBANE CITY COUNCIL STANDARD DRAWING

**HIP ROOF SHELTER-PARK-
OPTIONAL ANNEX-PLAN AND
DETAILS-SHEET 5 OF 7**

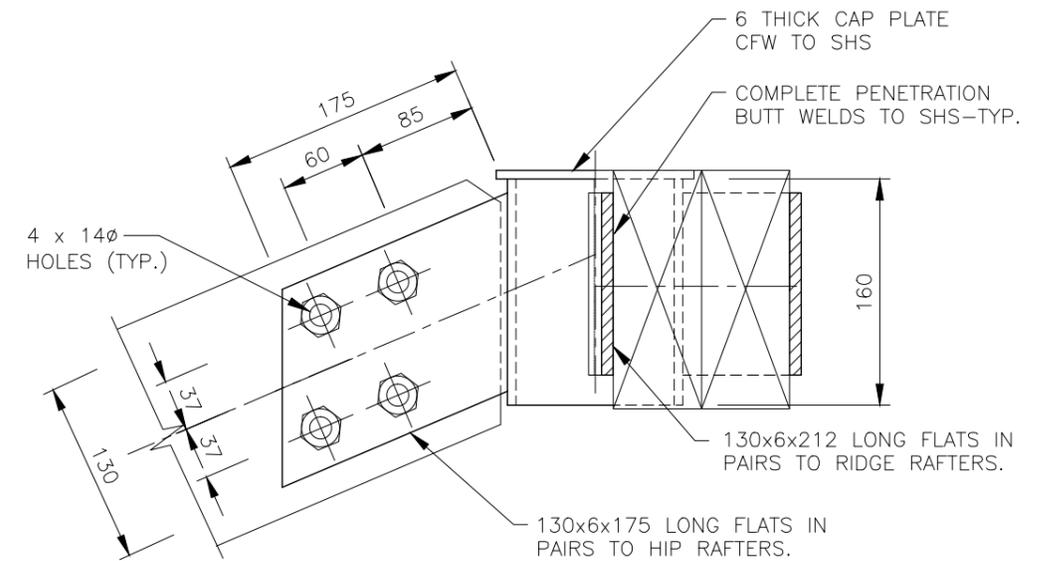
SCALE: 1:50, 1:10
 DWG NO: **BSD-10131**
 ORIGINAL SIZE: A3
 REVISION: C



HIP RAFTER-FASCIA CONNECTOR
SCALE 1:10



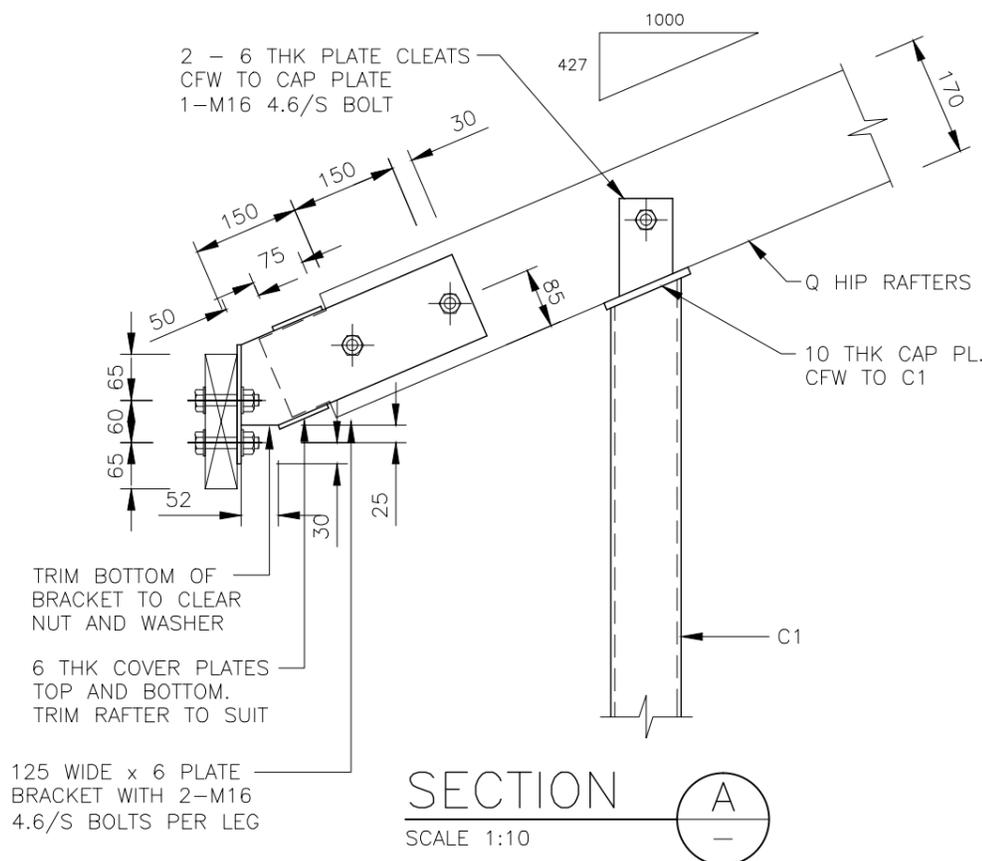
HIP RAFTER-PURLIN CONNECTOR
SCALE 1:10



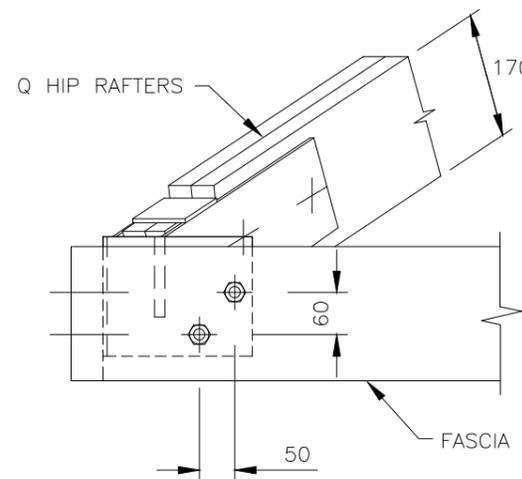
SECTION A
SCALE 1:5
Sh7

NOTES:

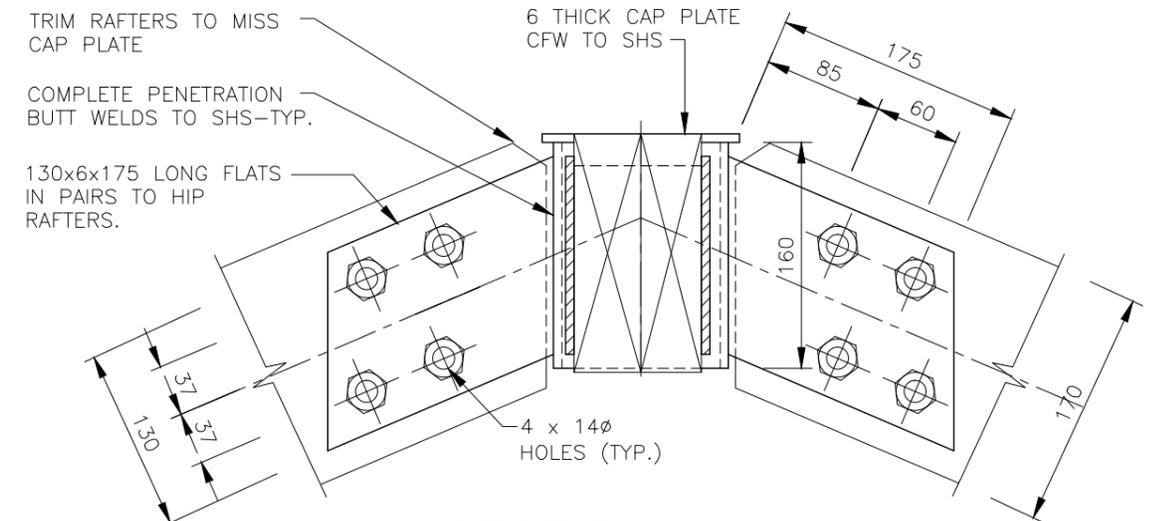
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 3, 4, & 7.
2. REFER SHEETS 1 & 2 FOR STRUCTURAL NOTES AND SPECIFICATION.
3. IF ANNEX IS INCLUDED REFER TO SHEET 5.
4. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
5. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.



SECTION A
SCALE 1:10



SECTION B
SCALE 1:10



SECTION C
SCALE 1:5
Sh7

STRUCTURAL DESIGN CERTIFICATION

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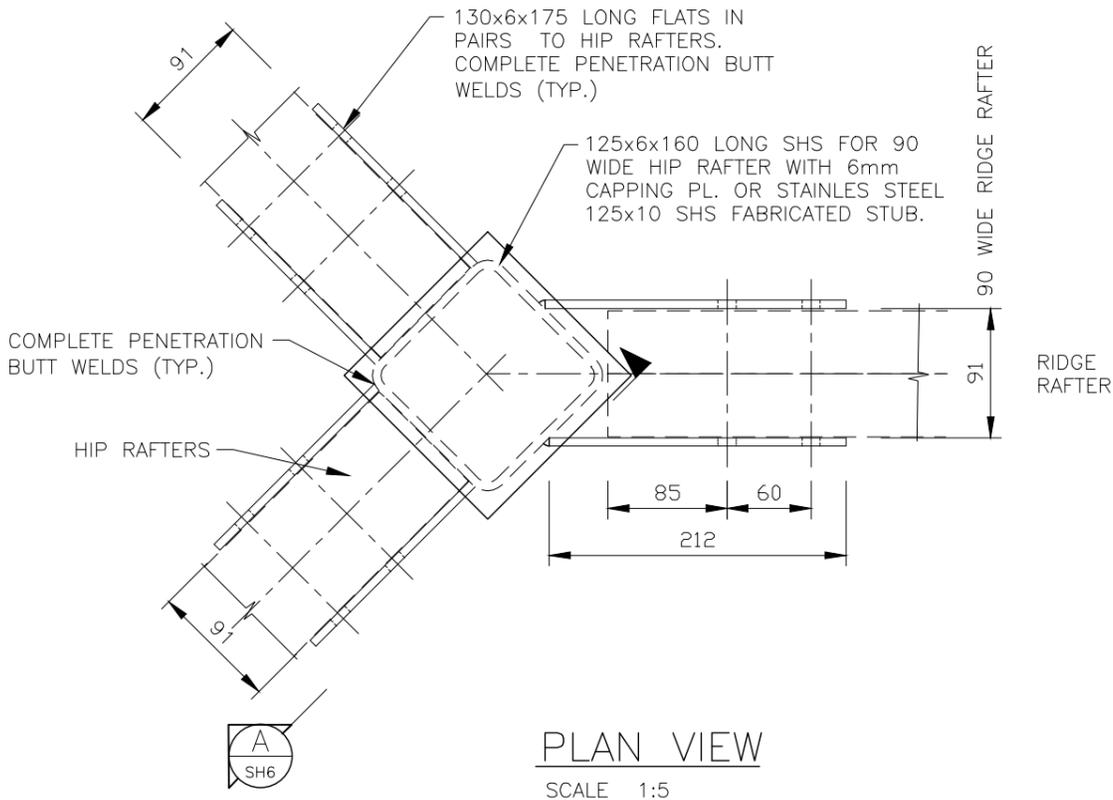
BRISBANE CITY COUNCIL STANDARD DRAWING

	SCALE 1:10, 1:5 DWG No. BSD-10131	
	ORIGINAL SIZE A3 REVISION C	
	HIP ROOF SHELTER-PARK-DETAILS SHEET 6 OF 7	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE 5 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

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CHECKED	D.B.	DATE	Sept '14
DRAWING FILENAME	BSD-10131(C) Hip roof shelter - Park - Details - Sheet 6 of 7.dwg		
ASSOCIATED PLANS	BSD-10131 SHEETS 1,2,3,4,5 & 7		

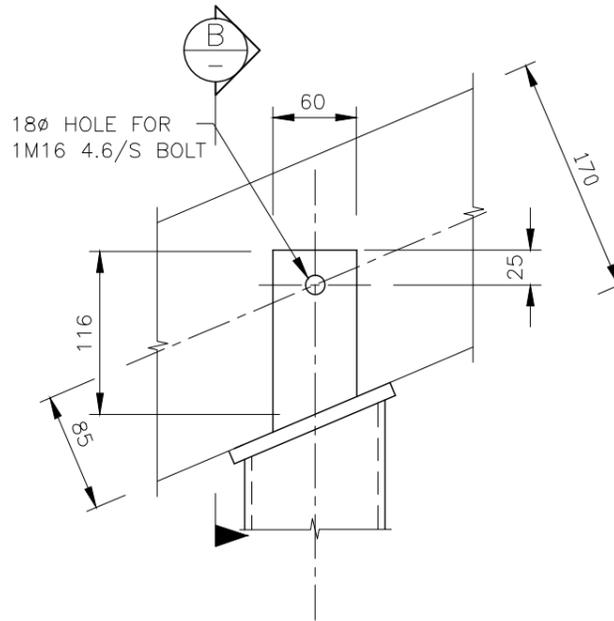
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
D. VAN DER WALLE
APPROVED JUNE 2015
SENIOR CO-ORDINATOR PARKS
ASSET SERVICES BRANCH - FIELD SERVICES GROUP



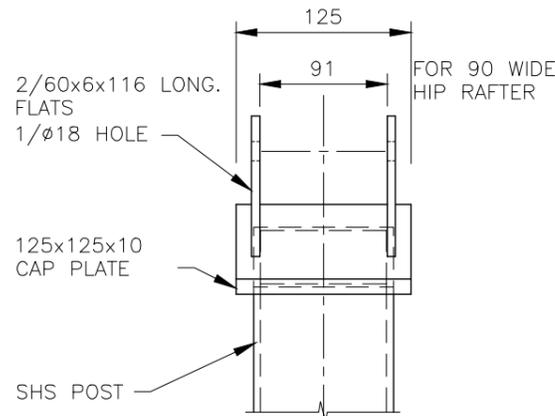
PLAN VIEW
SCALE 1:5

NOTES:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH SHEETS 3, 4 & 6.
2. REFER SHEETS 1 & 2 FOR STRUCTURAL NOTES AND SPECIFICATIONS.
3. IF ANNEX IS INCLUDED REFER TO SHEET 5.
4. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
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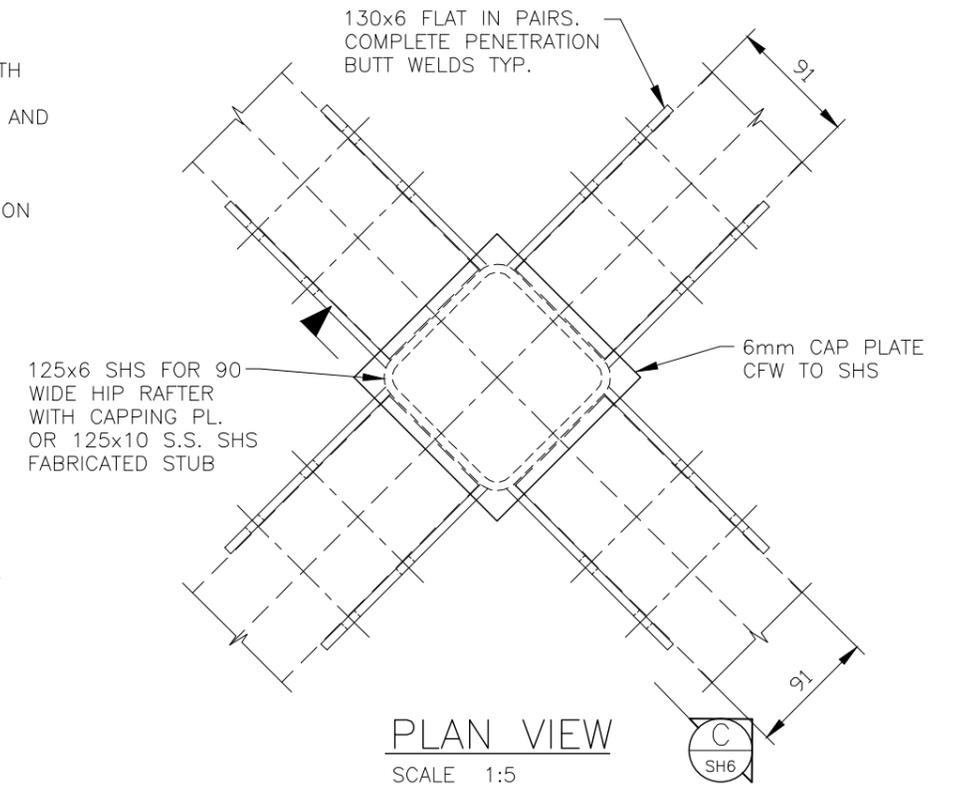


ELEVATION
SCALE 1:5

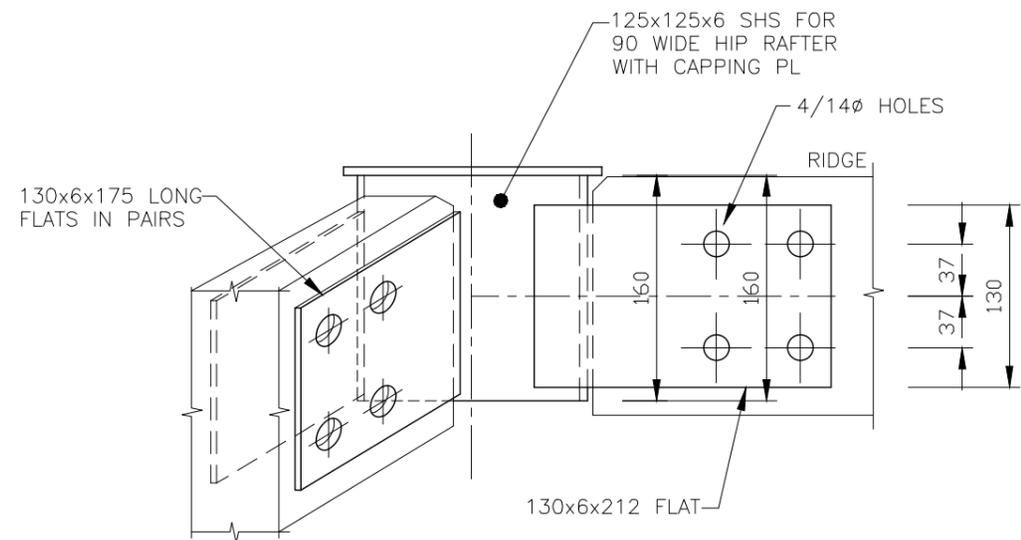


SECTION B
SCALE 1:5

POST TOP CONNECTION

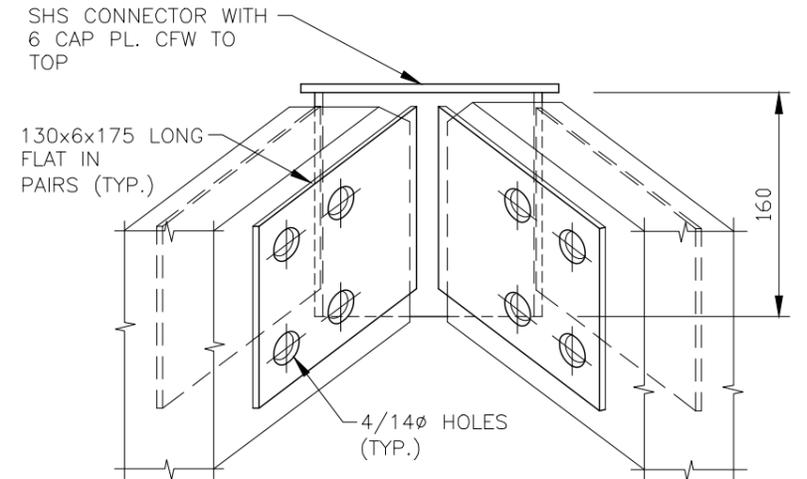


PLAN VIEW
SCALE 1:5



ELEVATION
SCALE 1:5

APEX CONNECTOR TYPE 2



ELEVATION
SCALE 1:5

APEX CONNECTOR TYPE 1

STRUCTURAL DESIGN CERTIFICATION

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BRISBANE CITY COUNCIL STANDARD DRAWING

HIP ROOF SHELTER-PARK-DETAILS		SCALE 1:5
SHEET 7 OF 7		DWG No. BSD-10131
ORIGINAL SIZE A3	REVISION C	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE 5 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	JUNE '14	JUNE '14	JUNE '14

DRAWING AUTHORISED FOR PUBLICATION
I. CONDRIK AUTHORISED
JUNE 2015

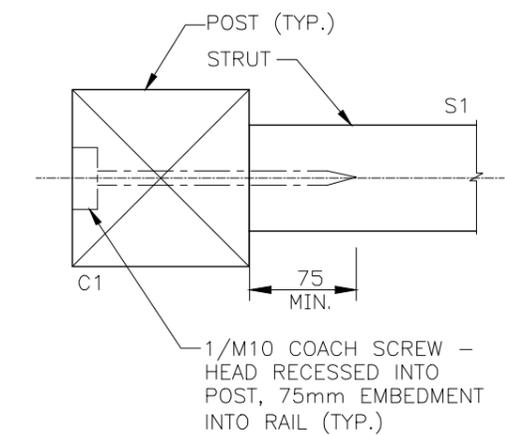
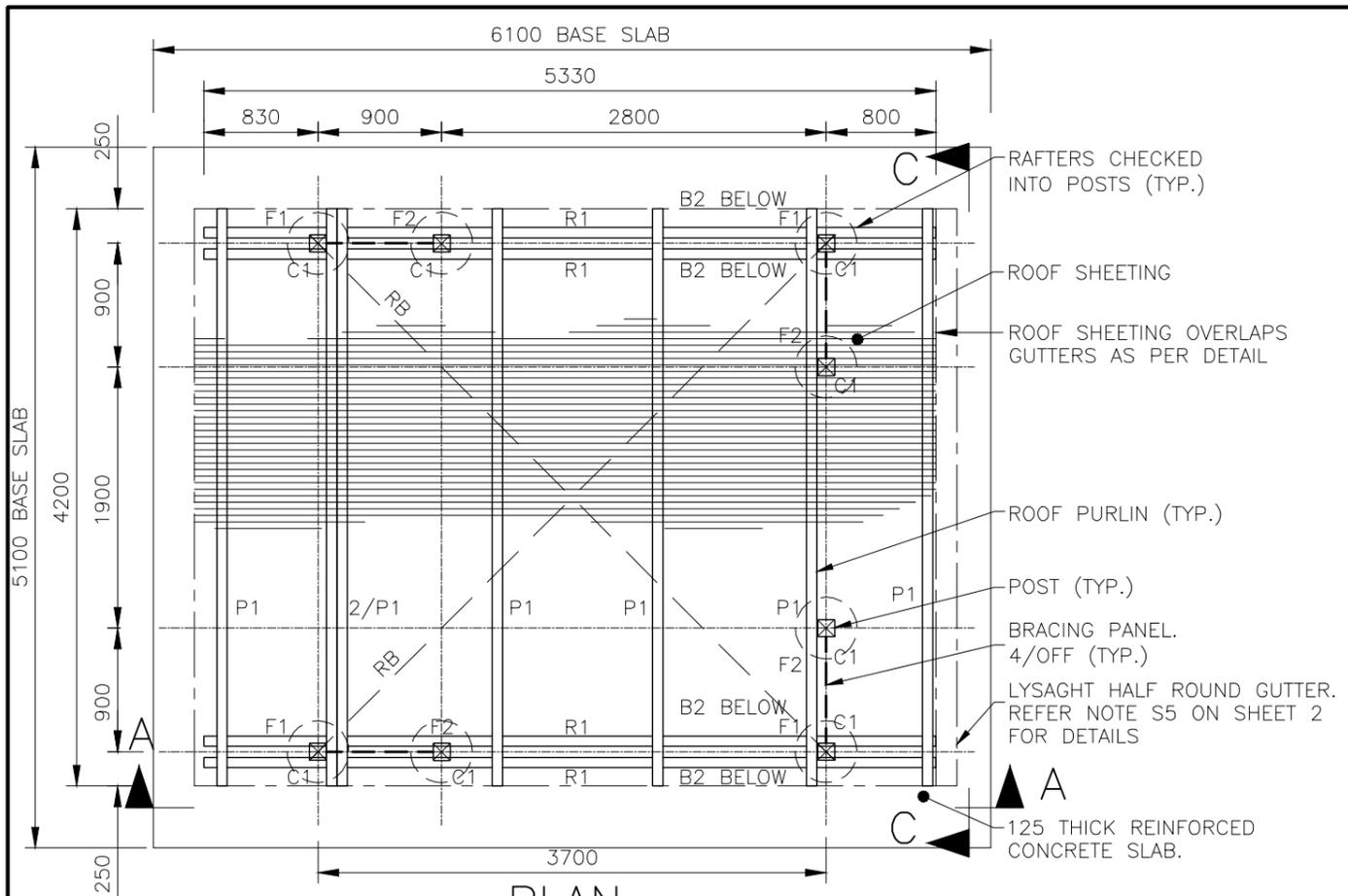
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT

DESIGN APPROVED
D. VAN DER WALLE
APPROVED JUNE 2015

SENIOR CO-ORDINATOR PARKS
ASSET SERVICES BRANCH - FIELD SERVICES GROUP

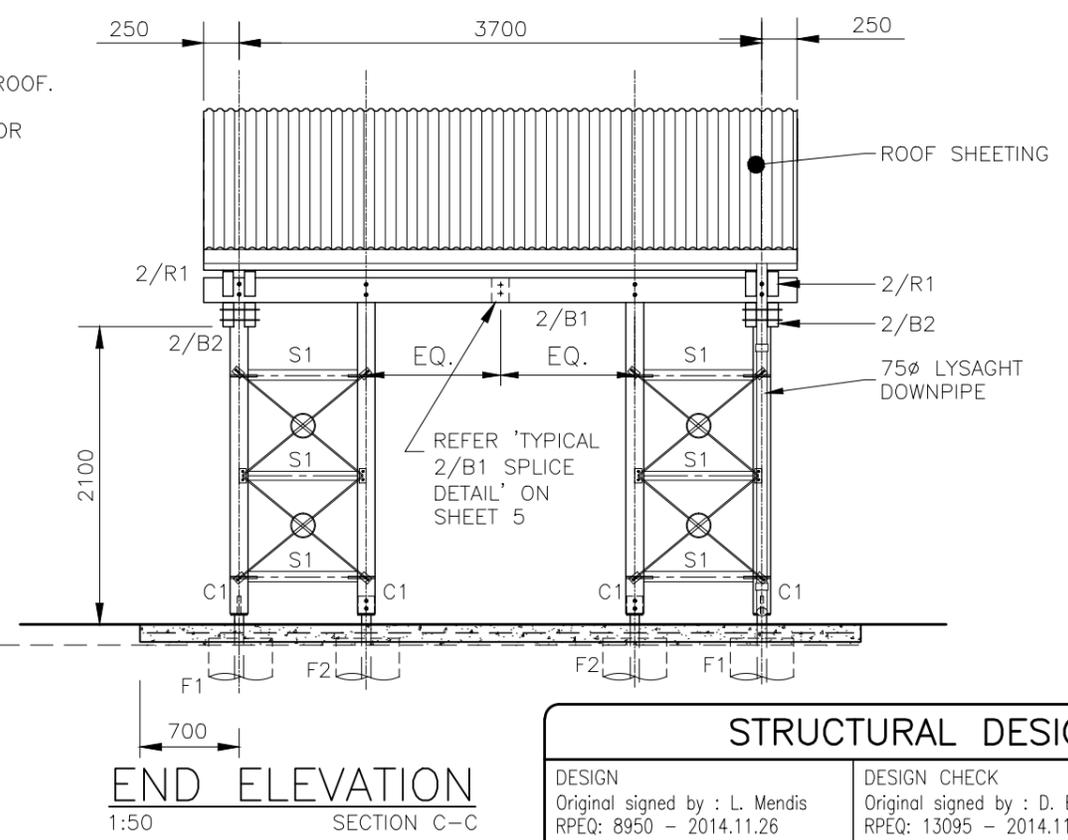
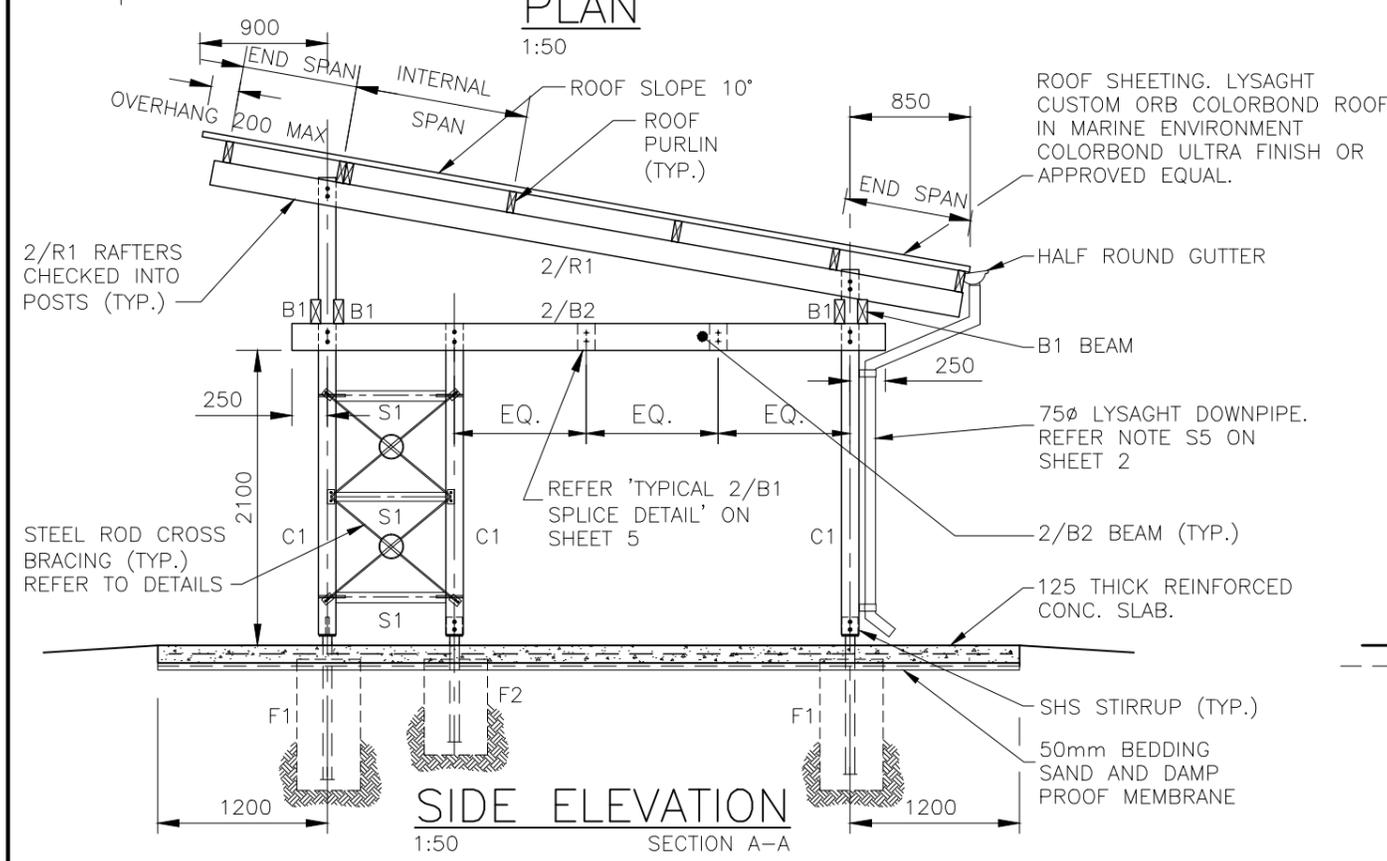
DESIGN	L.M.	DATE	Apl '14
DRAWN	G.B.	DATE	Apl '14
CHECKED	D.B.	DATE	Jun 14
DRAWING FILENAME	BSD-10131 (C) Hip roof shelter - Park - Details - Sheet 7 of 7.dwg		
ASSOCIATED PLANS	BSD-10131 SHEETS 1 TO 6		





STRUT/POST CONNECTION DETAIL
SCALE 1:5

- NOTES:**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 1, 2, 4 AND 5.
 2. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.



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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE 2 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

DRAWING AUTHORISED FOR PUBLICATION I. CONDRIK AUTHORIZED JUNE 2015				DESIGN	L.M.	DATE	Sept '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				DRAWN	G.B.	DATE	Sept '14
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015				CHECKED	D.B.	DATE	Sept '14
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP				DRAWING FILENAME	BSD-10132 (C) Skillion Roof Shelter - Park - Plan and details - Sheet 3 of 5.dwg		
				ASSOCIATED PLANS	BSD-10132 SHEETS 1, 2, 4 AND 5		



BRISBANE CITY COUNCIL STANDARD DRAWING

SKILLION ROOF SHELTER-PARK PLAN AND DETAILS SHEET 3 OF 5

SCALE 1:50, 1:20, 1:5

DWG No. **BSD-10132**

ORIGINAL SIZE A3 REVISION C

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
 AS 1684.2 (2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
 AS 1720.1 (2010) TIMBER STRUCTURES
 AS 2870 (2011) RESIDENTIAL SLABS AND FOOTINGS
 AS 3600 (2009) CONCRETE STRUCTURES
 AS 3798 (2007) GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
 AS 4100 (1998) STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE U.N.O.
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEET 2 TO 4.
- G12 CONSULT BCC ARCHITECT FOR COLOUR SCHEME OF THE STRUCTURE.
- G13 LIGHTNING PROTECTION AS PER BSD-10133.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 1.5

ULTIMATE WIND SPEED = 54.0 m/s

SHELTER IS DESIGNED FOR THE CONDITION "EMPTY UNDER" ACCORDING TO AS 1170.2 (2011)

DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE.

LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

TERRAIN CATEGORY 1.5 CORRESPONDS TO AN ENVIRONMENT WITH OPEN WATER SURFACES, SUBJECTED TO SHOALING WAVES AT SERVICEABILITY AND ULTIMATE WIND SPEEDS IN ALL WIND REGIONS.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCTS CLASS I MATERIAL.
- F5 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL AND WATER PRIOR TO POURING CONCRETE.
- F6 SLABS ON GRADE SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 USE NON-HUMUS CUT MATERIAL OR IMPORTED APPROVED NON-REACTIVE SOIL AS FILL.
- E4 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LEVEL OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED HARD WOOD, NATURAL DURABILITY CLASS 1 (ABOVE GROUND) WITH SAPWOOD REMOVED OR SAPWOOD PRESERVATIVE – TREATED TO H3. IN ACCORDANCE WITH AS1684.2 APPENDIX B.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
 IN MARINE ENVIRONMENT, ALL FASTENERS, CLEATS, STEEL MEMBERS, NAILS, AND BOLTS SHALL BE STAINLESS STEEL GR. 316 U.N.O. THE MARINE ENVIRONMENT EXTENDS 1km FROM FORESHORE.
- T4 TIMBER JOINT GROUP JD2 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT, NO TIMBER IS IN CONTACT WITH THE GROUND,
- T8 ALL TIMBER TO BE PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION.
- T9 WASHER SIZES TO BE:
 M10 – 45 DIA.
 M12 – 55 DIA.
 M16 – 65 DIA.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE

U.N.O.	ELEMENT:	F'C (MPa)	REINFORCEMENT COVER
	PIERS	32	75
	SLAB	32	CENTRALLY PLACED.
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.

BAR	LAP LENGTH (mm)
N12	500
N16	650
MESH	350
- C7 REINFORCEMENT SYMBOLS:
 R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
 N DEFORMED BAR GRADE D500N TO AS 4671.
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND THE CONTRACT DOCUMENT. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ).

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16
B	NOTE G13 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14

DESIGN	L.M.	DATE	Sept '14
DRAWN	G.B.	DATE	Sept '14
CHECKED	D.B.	DATE	Sept '14
DRAWING FILENAME	BSD-10132 (K) Skillion Roof Shelter - Park - Structural notes (Page 1 of 2) - Sheet 1 of 5.dwg		
ASSOCIATED PLANS	BSD-10132 SHEETS 2 TO 5		



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BRISBANE CITY COUNCIL STANDARD DRAWING		
SKILLION ROOF SHELTER-PARK STRUCTURAL NOTES (PAGE 1 OF 2) SHEET 1 OF 5		SCALE NOT TO SCALE DWG No. BSD-10132 ORIGINAL SIZE A3 REVISION C

SKILLION ROOF PARK SHELTER

STEELWORK NOTES

- S1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS 1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH AS1163 GRADE C350LO FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS1252 U.N.O
ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O
ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS 3678 GRADE 250 U.N.O
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS. COLORBOND COLOUR AS PER PROJECT SPECIFICATION. IN MARINE ENVIRONMENT, PROVIDE COLORBOND ULTRA FINISH OR APPROVED EQUAL.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. BOLT DIAMETERS HAVE BEEN INCREASED IN POST AND BEAM CONNECTIONS TO ALLOW FOR LONGER TERM DURABILITY.
- S8. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. EXCEPT IN MARINE ENVIRONMENTAL ZONES. REFER TO NOTE 12. CORROSION PROTECTION COATING TO SURFACE PREPARATION OF SUBSTRATE MATERIAL IS CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 5mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S12. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S13. FOR MARINE ENVIRONMENTAL ZONES (WITHIN 1km OF THE SHORELINE), ALL STEEL MEMBERS, FASTENERS, INCLUDING BOLTS, NUTS, AND CLEATS SHALL BE STAINLESS STEEL. PLASTIC SEPARATORS SHALL BE PROVIDED TO AVOID CONTACT BETWEEN DISSIMILAR MATERIALS. STAINLESS STEEL GRADE 316 TO BE USED. BOLTS TO BE GRADE 316 (A4-CLASS 50). REFER TO STAINLESS STEEL NOTES.
- S14. CO-ORDINATE WITH LIGHTNING PROTECTION DETAILS - REFER TO BSD-10133.

MEMBER	DESCRIPTION	MINIMUM SIZE	GRADE	SPACING	COMMENTS
C1	POST	120x120 HWD	F17	AS SHOWN	2/M16 BOLTS PER CONNECTION
B1	BEAM No 1.	170x45 HWD	F17	AS SHOWN	2/M16 BOLTS PER CONNECTION
B2	BEAM No 2.	190x45 HWD	F17	AS SHOWN	2/M16 BOLTS PER CONNECTION
R1	RAFTER	190x45 HWD	F17	AS SHOWN	2/M16 BOLTS PER CONNECTION TO C1
S1	STRUT	90x90 HWD	F17	AS SHOWN	1/M10 BOLTS PER CONNECTION TO C1
P1	ROOF PURLIN	140x45 HWD	F17	900 END SPANS 1200 INTERNAL SPANS	CONNECTIONS TO EACH RAFTER VIA 125x75x6 UA ANGLE BRACKET-50mm LONG, WITH 2/M10 BOLTS THROUGH THE PURLIN & 1/M10 x 70 COACH SCREW INTO THE RAFTER
RB	ROOF BRACING TO TOP OF RAFTERS	2/30x1.0 GALV. IRON STRAPPING WITH TENSIONER OR 'PRYDA' 2-25x1.0 S.S. OR APPROVED EQUAL			5/3.15ø x 35mm NAILS AT EACH END FIXED TO SIDES OF RAFTERS AND 1 NAIL TO TOP OF EACH PURLIN
F1	PIER FOOTING FOR MAIN COL.	450ø x 750 DEEP	N32 CONC.	AS SHOWN	STIRRUP TO BE EMBEDDED AS SHOWN
F2	PIER FOOTING FOR BRACING PANEL	450ø x 600 DEEP	N32 CONC.	AS SHOWN	STIRRUP TO BE EMBEDDED AS SHOWN

STAINLESS STEEL:

- BEFORE FABRICATION SUBMIT COPIES OF SHOP DRAWINGS FOR REVIEW. REVIEW DOES NOT INCLUDE DIMENSION CHECKING.
- STAINLESS STEEL MATERIAL SHALL NOT BE STORED WITH CARBON STEEL.
- TOOLS USED FOR CARBON STEEL SHALL NOT BE USED TO FABRICATE OR ASSEMBLE STAINLESS STEEL COMPONENTS.
- THE STAINLESS STEEL SHALL BE WRAPPED OR OTHERWISE PROTECTED DURING TRANSPORT TO AVOID CONTAMINATION BY FERROUS PRODUCTS.
- WELDING SHALL BE IN ACCORDANCE WITH AS1554.6.
- LIMIT THE INPUT OF HEAT INTO THE WELD. THE WELD SHALL NOT BE PREHEATED, POST-HEATED OR STRESS RELIEVED.
- GRADE 316L ELECTRODES SHALL BE USED FOR 316L.
- WELDS SHALL BE CATEGORY 2B IN ACCORDANCE WITH AS1554.6.
- SURFACE FINISHES OF WELDS SHALL BE GRADE 1, POLISHED USING 320 GRIT OR FINER, SILICONE CARBIDE ABRASIVES WITH LUBRICATION. AFTER POLISHING, WELDS SHALL BE PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- ALL STAINLESS STEEL COMPONENTS SHALL HAVE A $R_a < 0.5\mu m$ AND PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- CHEMICAL ANCHORS AND BOLTS TO BE GRADE 316 STAINLESS STEEL A4-50 MINIMUM.

STRUCTURAL DESIGN CERTIFICATION

DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27
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BRISBANE CITY COUNCIL STANDARD DRAWING

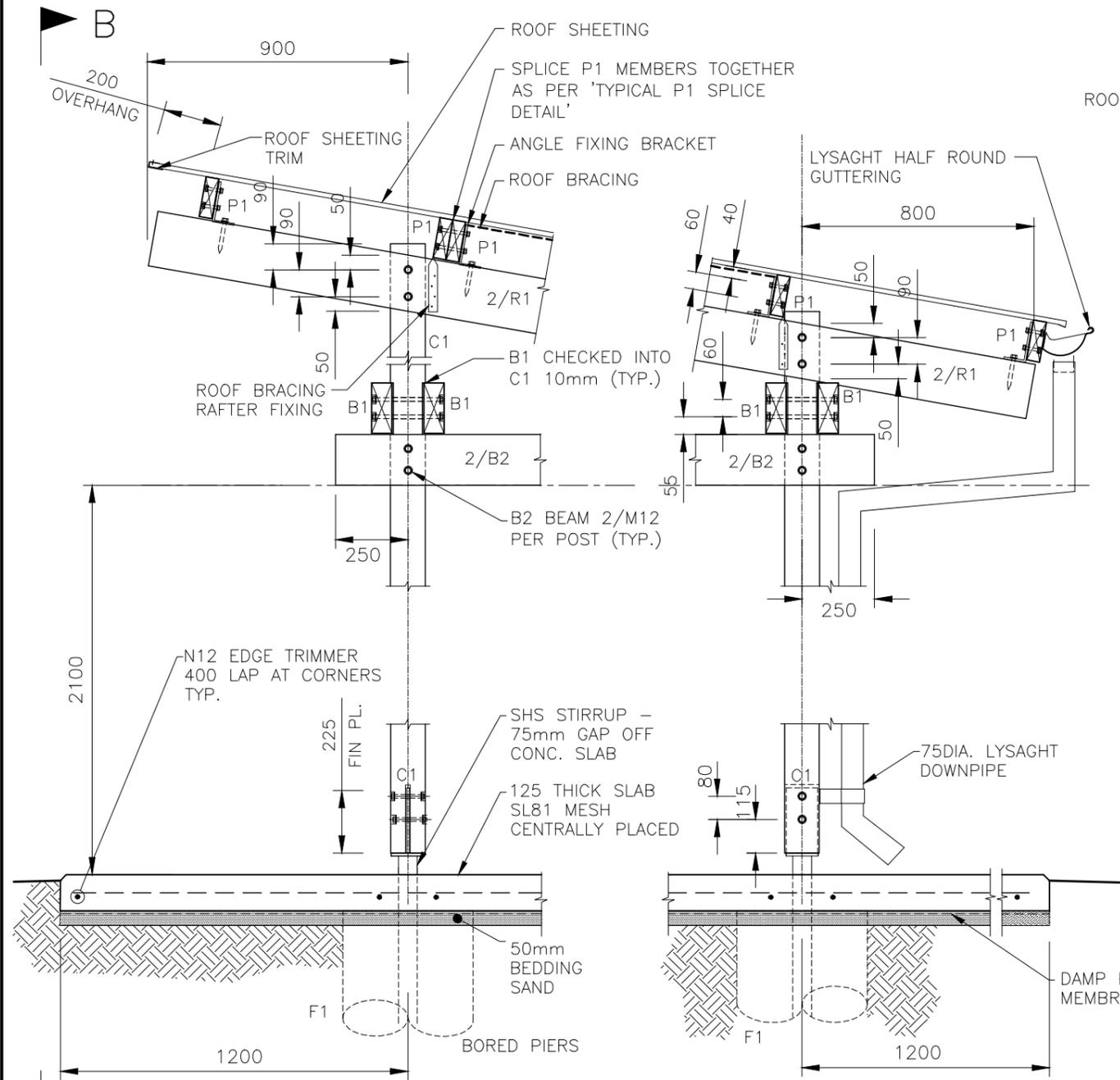
SKILLION ROOF SHELTER-PARK
STRUCTURAL NOTES (PAGE 2 OF 2)
SHEET 2 OF 5

SCALE NOT TO SCALE	DWG NO. BSD-10132
ORIGINAL SIZE A3	REVISION C

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	ASSOCIATED PLANS
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16	DESIGN L.M. DATE Sept '14
B	NOTE S14 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15	DRAWN G.B. DATE Sept '14
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14	CHECKED D.B. DATE Sept '14

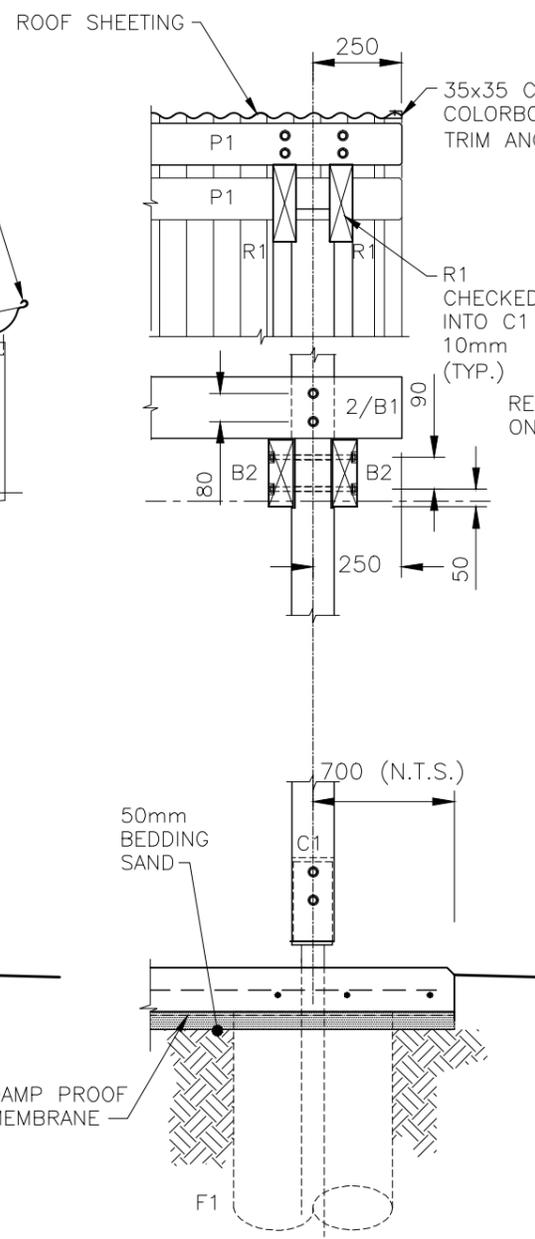
DRAWING AUTHORISED FOR PUBLICATION
I. CONDRIK AUTHORISED
JUNE 2015
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
D. VAN DER WALLE
APPROVED JUNE 2015
SENIOR CO-ORDINATOR PARKS
ASSET SERVICES BRANCH - FIELD SERVICES GROUP





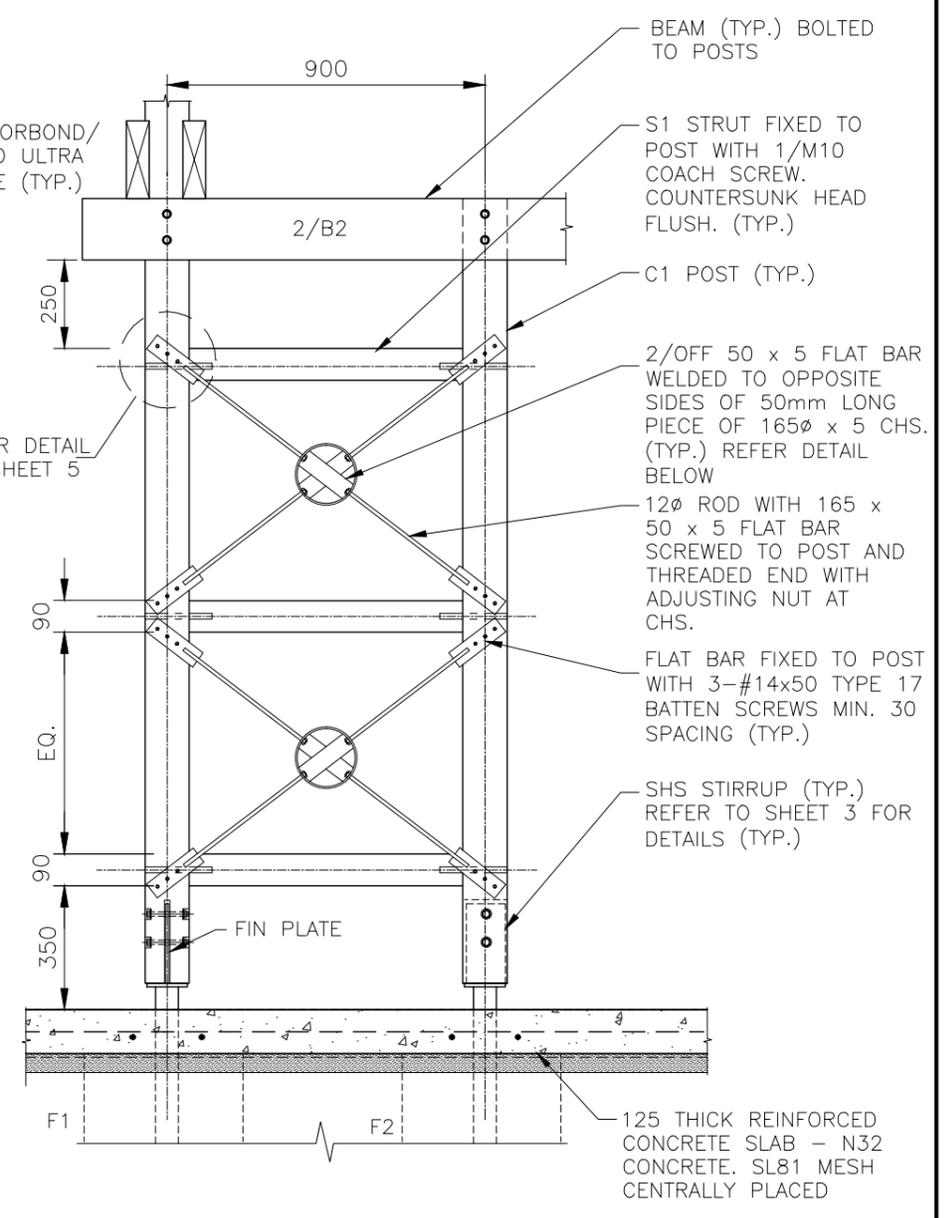
B POST-BEAM-RAFTER CONNECTION DETAILS

1:20



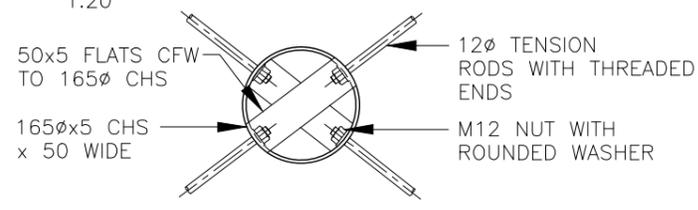
SECTION B-B

1:20



BRACING PANEL - STRUT DETAILS

1:20



TENSION RING DETAIL

SCALE 1:10

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 1,2 3 AND 5.
2. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.

STRUCTURAL DESIGN CERTIFICATION

DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27
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BRISBANE CITY COUNCIL STANDARD DRAWING

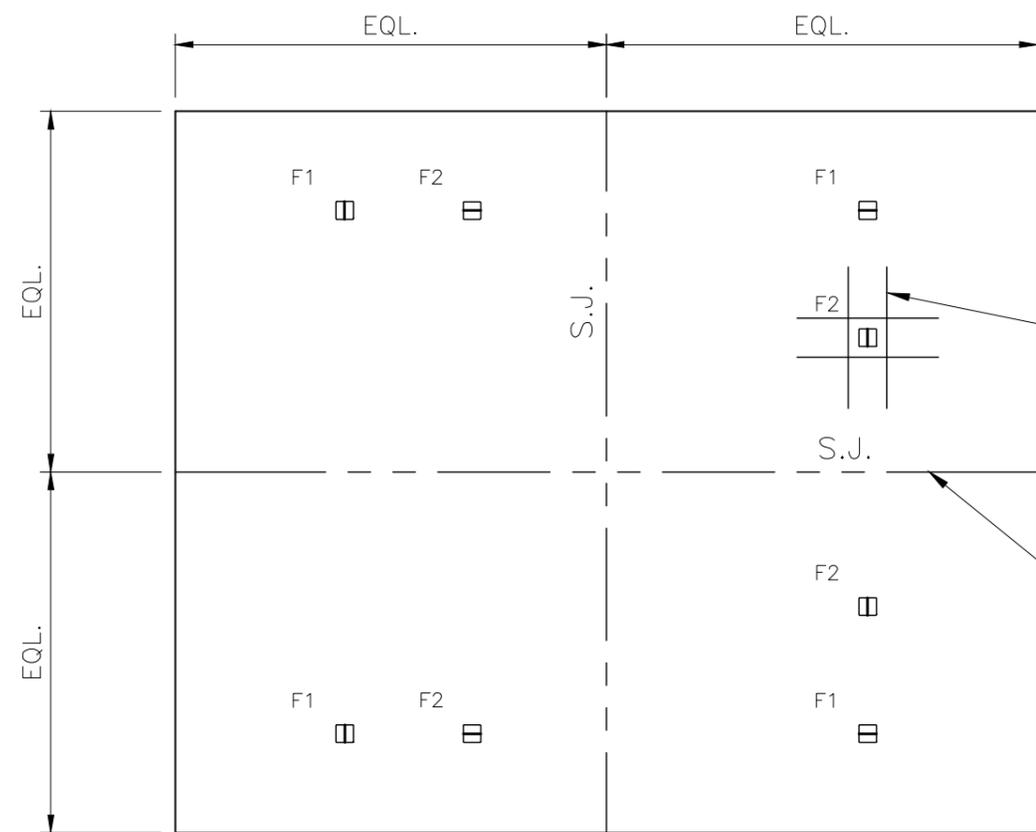
SKILLION ROOF SHELTER-PARK DETAILS

SHEET 4 OF 5

SCALE 1:20, 1:10
DWG No. **BSD-10132**
ORIGINAL SIZE A3 REVISION C

DRAWING AUTHORISED FOR PUBLICATION I. CONDRIK AUTHORISED JUNE 2015					DESIGN	L.M.	DATE	Sept '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT					DRAWN	G.B.	DATE	Sept '14
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015					CHECKED	D.B.	DATE	Sept '14
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP					DRAWING FILENAME	BSD-10132 (C) Skillion Roof Shelter - Park - Details - Sheet 4 of 5 dwg		
					ASSOCIATED PLANS	BSD-10132 SHEETS 1, 2, 3 AND 5		
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16				
B	NOTE 2 ADDED - LIGHTNING PROTECTION	JUNE 15	JUNE '15	JUNE '15				
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14				
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE				





SLAB JOINT DIAGRAM

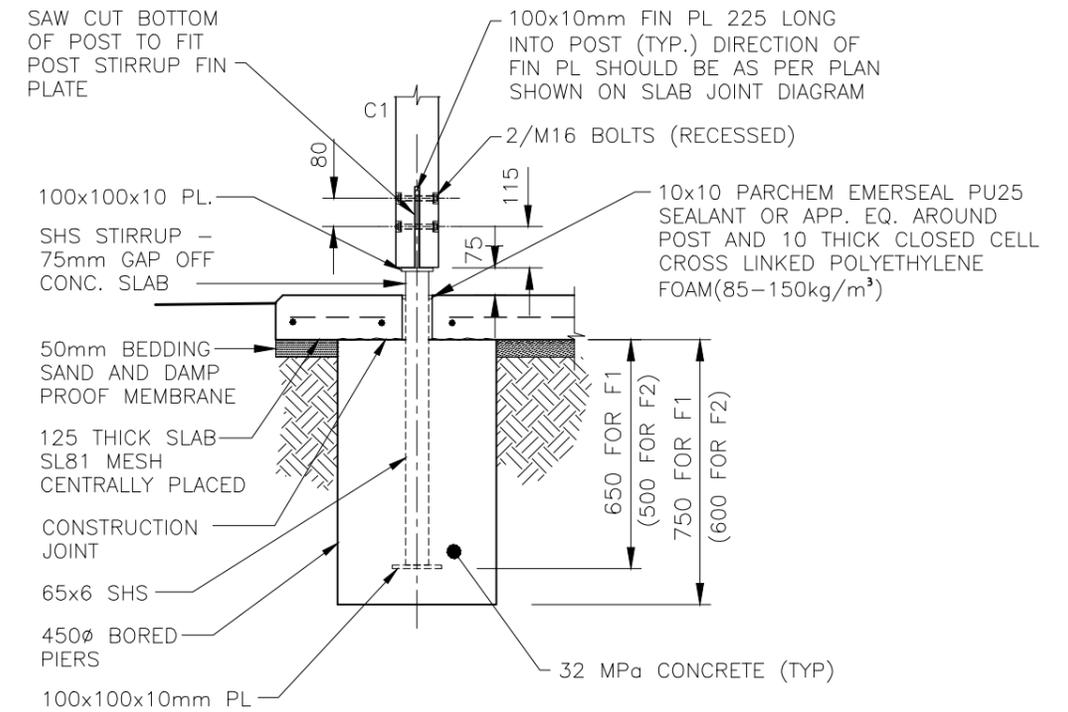
SCALE 1:50

NOTES:

1. ALLOWABLE BEARING CAPACITY OF SOIL 100 kPa MIN. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEETS 1, 2, 3 AND 4.
3. REFER TO BSD-10133 FOR LIGHTNING PROTECTION DETAILS.

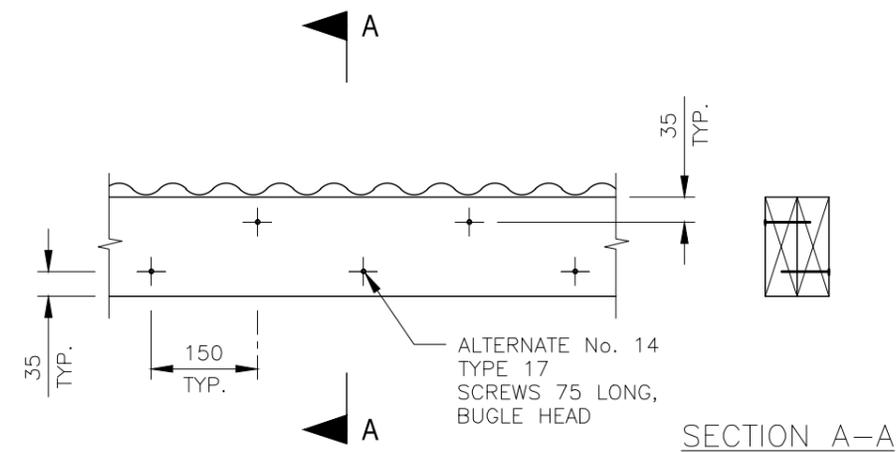
PROVIDE N12 TRIMMERS x 1000 LONG CENTRALLY PLACED AT EACH STIRRUP LOCATION

REFER TO DRAWING BSD-5206 FOR SAWN JOINT (S.J.) DETAIL



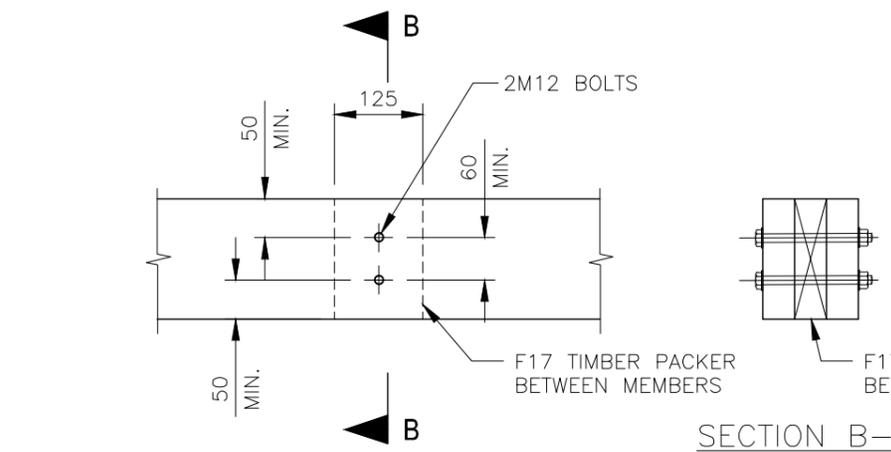
FOOTING DETAIL (F1, F2)

1:20



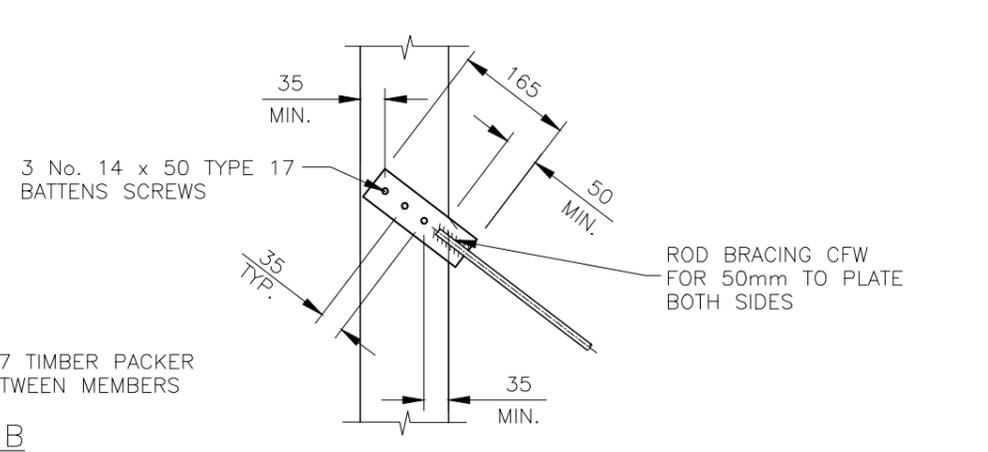
TYPICAL 2/P1 SPLICE DETAIL

SCALE 1:10



TYPICAL 2/B1 SPLICE DETAIL (2/B2 SPLICE SIMILAR)

SCALE 1:10



ROD BRACING ATTACHMENT TO C1

SCALE 1:10

STRUCTURAL DESIGN CERTIFICATION		
DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27
BRISBANE CITY COUNCIL STANDARD DRAWING		
SKILLION ROOF SHELTER-PARK DETAILS		SCALE 1:20, 1:10
SHEET 5 OF 5		DWG No. BSD-10132
ORIGINAL SIZE A3	REVISION C	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	DRAWING FILENAME	ASSOCIATED PLANS
C	Drawing Title Amended	FEB '16	JUL '16	JUL '16	BSD-10132 (C) Skillion Roof Shelter - Park - Details - Sheet 5 of 5.dwg	BSD-10132 SHEETS 1, 2, 3 AND 4
B	NOTE 3 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15		
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14		

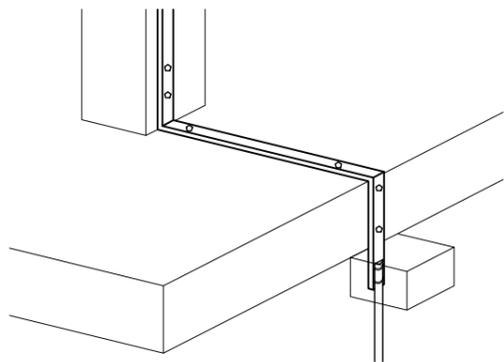
DRAWING AUTHORISED FOR PUBLICATION
I. CONDRIK AUTHORISED
JUNE 2015

ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT

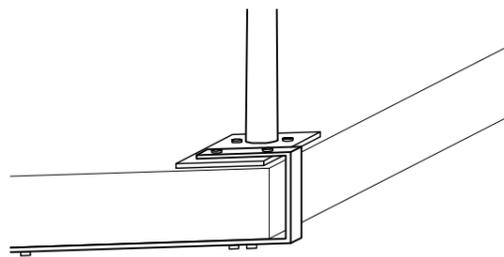
DESIGN APPROVED
D. VAN DER WALLE
APPROVED JUNE 2015

SENIOR CO-ORDINATOR PARKS
ASSET SERVICES BRANCH - FIELD SERVICES GROUP

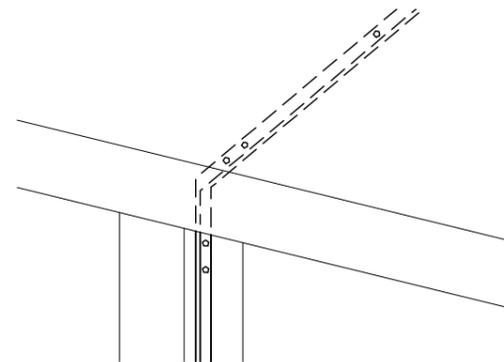




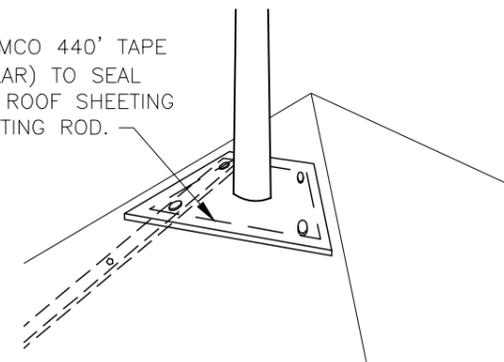
DETAIL 'A'



DETAIL 'B'

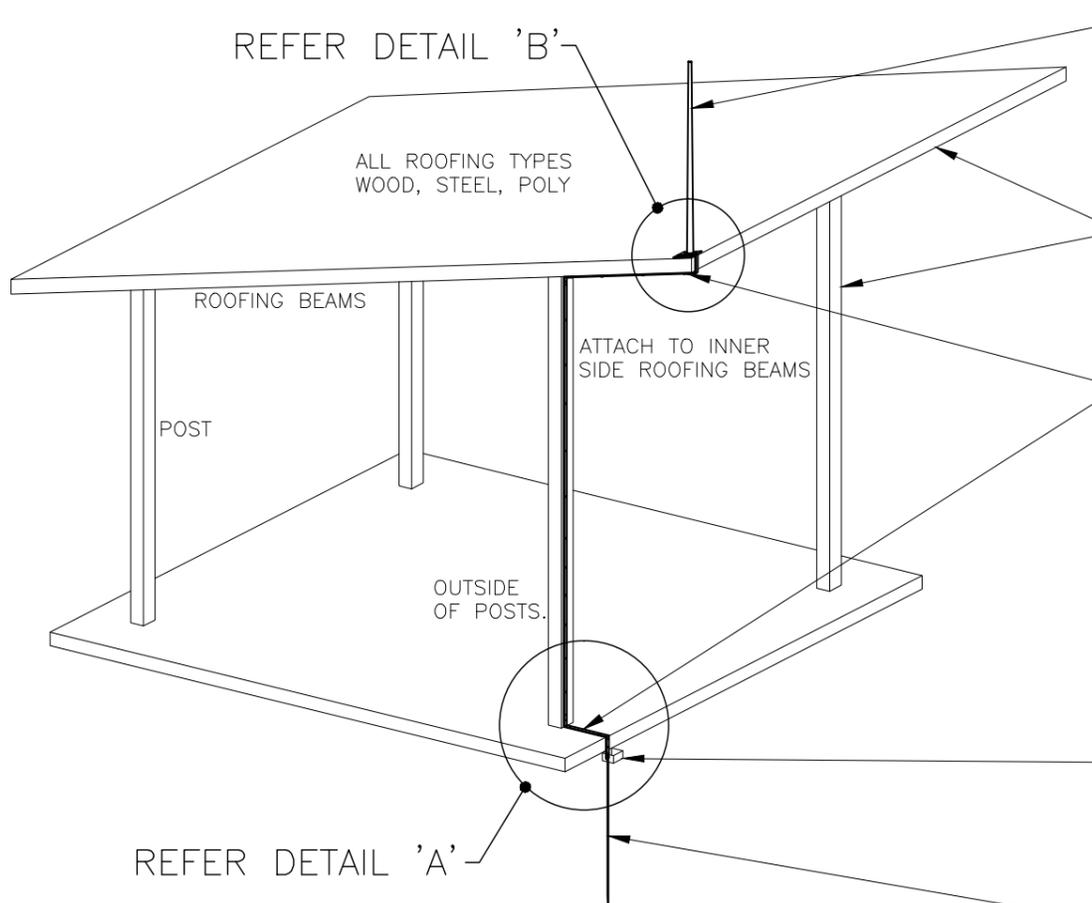


DETAIL 'C'



DETAIL 'D'

USE 'TREMCO 440' TAPE (OR SIMILAR) TO SEAL BETWEEN ROOF SHEETING AND LIGHTING ROD.



TYPICAL SMALL STRUCTURE SLOPING FLAT OR CURVED ROOF

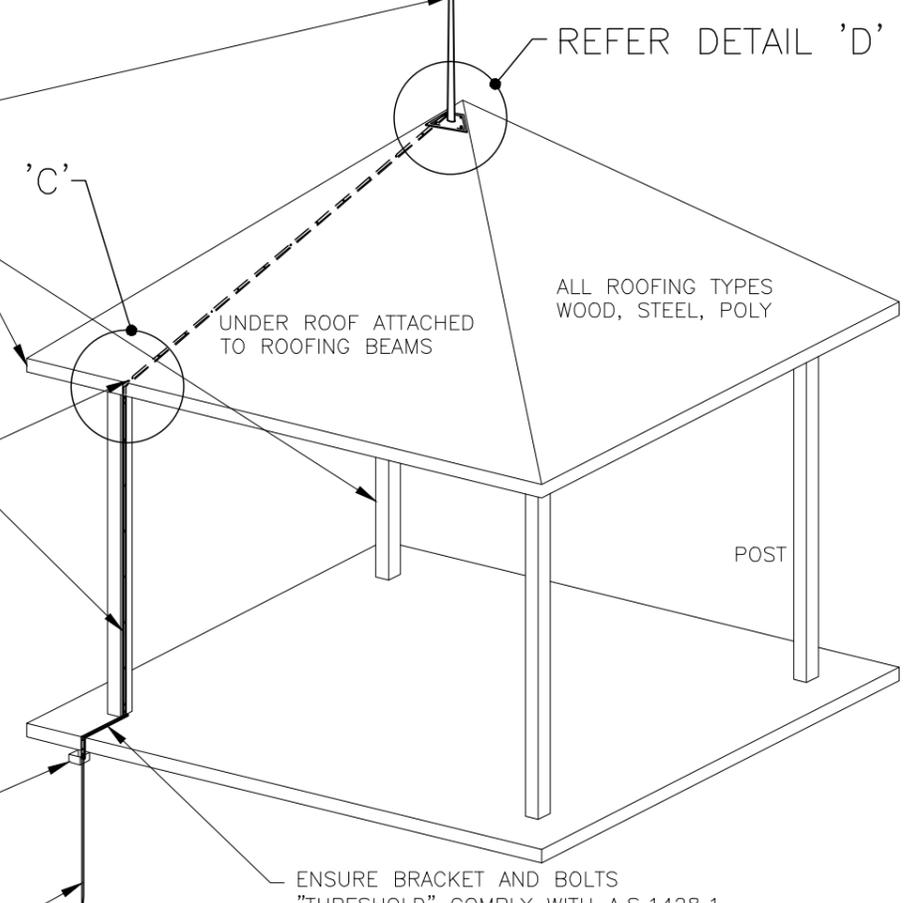
EARTH AIR ROD. LOCATE NEAR HIGHEST POINT OF STRUCTURE. APPROX. 1.0m LONG ϕ 15mm ALUMINIUM/STAINLESS STEEL ROD WITH ROOF MOUNTING PLATE. SECURELY MOUNT TO STRUCTURAL BEAM. WEATHER SEAL ALL ROOF PENETRATIONS WITH 25 YEAR GUARANTEE SILASTIC TYPE MATERIAL.

STRUCTURES WITH STEEL FRAMES/POSTS TO INCLUDE USE OF PENETRATING LOCKING WASHERS TO BRIDGE ANY NON CONDUCTIVE COVERING/PAINT MATERIALS AND PROVIDE ELECTRICAL CONTINUITY.

EARTH DOWN CONDUCTOR - ALUMINIUM/STAINLESS STEEL 10mm WIDE x 5mm THICK BAR (PREFERRED AS REDUCED TRIP ISSUES AT SLAB LEVEL) OR 12mm CABLE. SECURELY ATTACHED TO SIDE OF RAFTERS AND POST, AT APPROX. 300mm INTERVALS. USE SELF TAPING/SCREWING SCREWS (CABLE SADDLES) INTO BEAMS AND POSTS OF SUITABLE LENGTH TO PROVIDE ROBUST CONNECTION (PENETRATION INTO STRUCTURAL ELEMENTS - 10mm STEEL, 20mm WOOD). DOUBLY SECURE AT CORNERS AND BENDS.

SMALL EARTH PIT - POLY/PVC (INSPECTION TEST POINT) 200mm x 200mm x 200mm DEEP. MECHANICALLY SECURED LID (MIN. 2 CORNERS) WITH S/S CORNER LOCKING SCREWS.

DRIVEN EARTH STAKE. STAINLESS STEEL ϕ 15mm BAR x 3.0m LONG TO PROVIDED REQUIRED MIN 10 OHM EARTH CONDUCTIVITY.



TYPICAL SMALL STRUCTURE PEAKED ROOF

REFER DETAIL 'C'

REFER DETAIL 'D'

REFER DETAIL 'B'

ALL ROOFING TYPES WOOD, STEEL, POLY

ALL ROOFING TYPES WOOD, STEEL, POLY

UNDER ROOF ATTACHED TO ROOFING BEAMS

ROOFING BEAMS

ATTACH TO INNER SIDE ROOFING BEAMS

POST

OUTSIDE OF POSTS.

POST

ENSURE BRACKET AND BOLTS "THRESHOLD" COMPLY WITH A.S.1428.1

NOTE:

HYBRID SYSTEM ONLY AS1768-2007 LIGHTNING PROTECTION STANDARDS DO NOT REQUIRE PROTECTION TO SMALL STRUCTURES. ALL COMPONENTS TO BE COMPLIANT WITH AS1768-2007 LIGHTNING PROTECTION STANDARDS. ON STRUCTURES WITH STEEL FRAMES/POSTS ENSURE ELECTRICAL CONTINUITY AT ALL STRUCTURAL JOINTS BY USE OF PENETRATING LOCKING WASHERS TO BRIDGE ALL NON CONDUCTIVE COVERING/PAINT MATERIALS.

NOTE:

STEELWORK PAINTED TO MATCH EXISTING SHELTER'S COLOUR SCHEME.

BOQ - TYPICAL COMPONENT LIST - (TERCEL OR THOMPSON LIGHTING SYSTEMS) STAINLESS STEEL/ALUMINIUM SYSTEM (REDUCE RISK OF COPPER THEFT)

DESC	QTY
AIR ROD WITH BASE	1
GROUNDING DOWN CONDUCTOR	9m
EARTH PIT/WELL	1
GROUNDING ROD CLAMP	1
GROUNDING ROD	1

(LENGTH AS REQUIRED BY SOIL TYPE PROVIDE 100HMS OR LESS EARTH RESISTANCE)

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	JUN '15	JUN '15	JUN '15

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	J.K.	DATE	May '15
DRAWN	J.K.	DATE	May '15
CHECKED	J.K.	DATE	May '15
DRAWING FILENAME	BSD-10133 (B) Roof Shelter - Park - Hybrid Lightning Protection System.dwg		
ASSOCIATED PLANS			



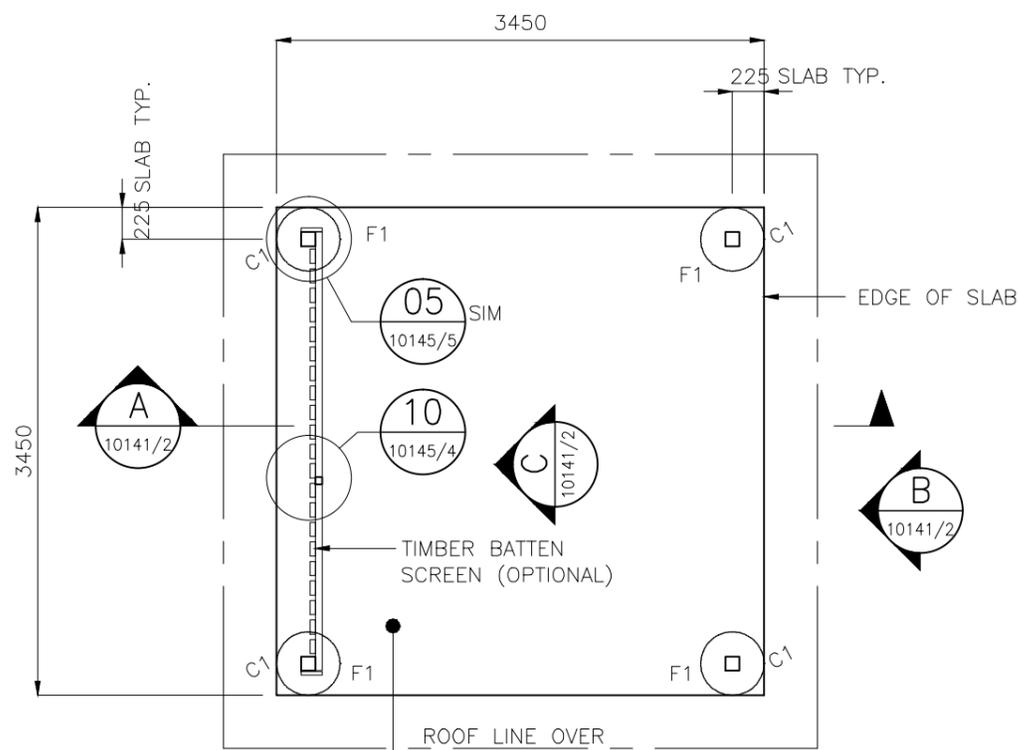
BRISBANE CITY COUNCIL STANDARD DRAWING

ROOF SHELTER - PARK HYBRID LIGHTNING PROTECTION SYSTEM

SCALE: NOT TO SCALE

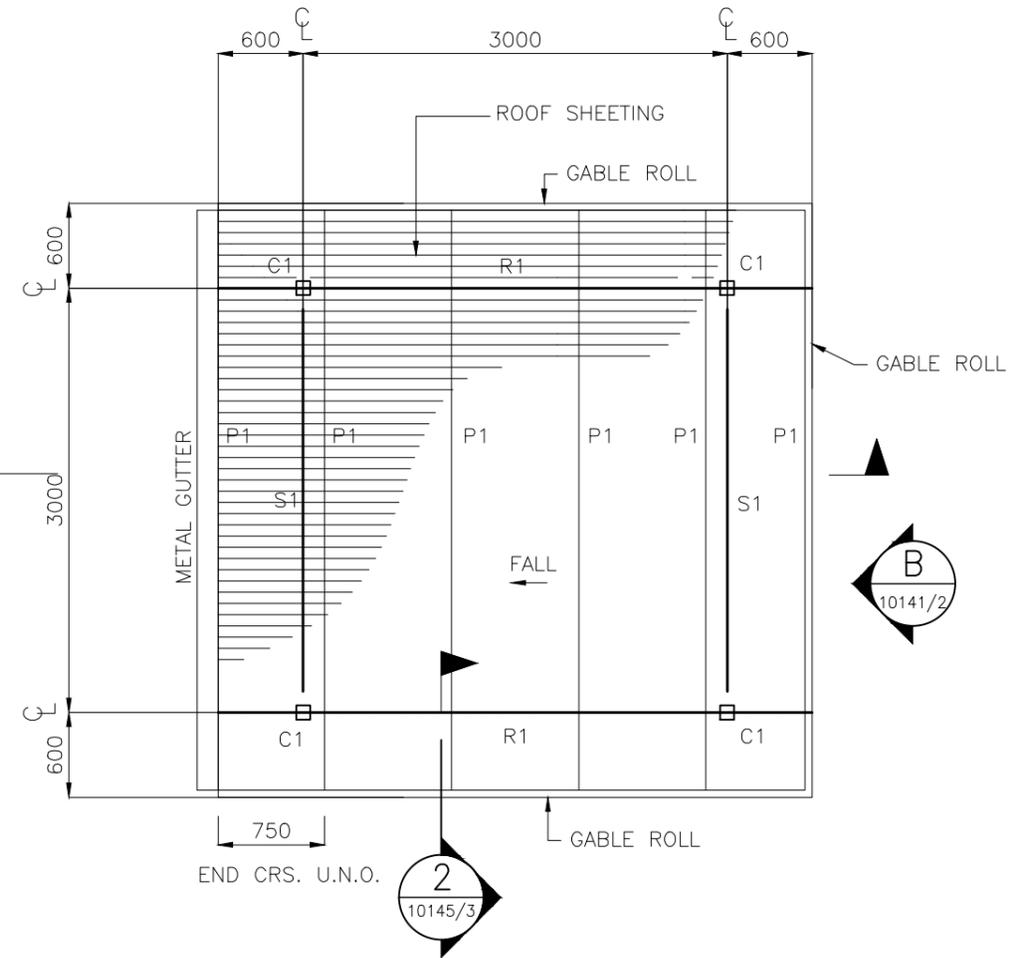
DWG No: **BSD-10133**

ORIGINAL SIZE: A3 REVISION: B



125 THICK R.C. SLAB,
SL81 MESH CENTRALLY
LOCATED. BROOM FINISH.
MIN. FALL TO STORMWATER
CATCHMENT

SLAB AND FOOTING PLAN
SCALE 1:50



ROOF FRAMING PLAN
SCALE 1:50

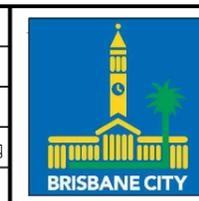
GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

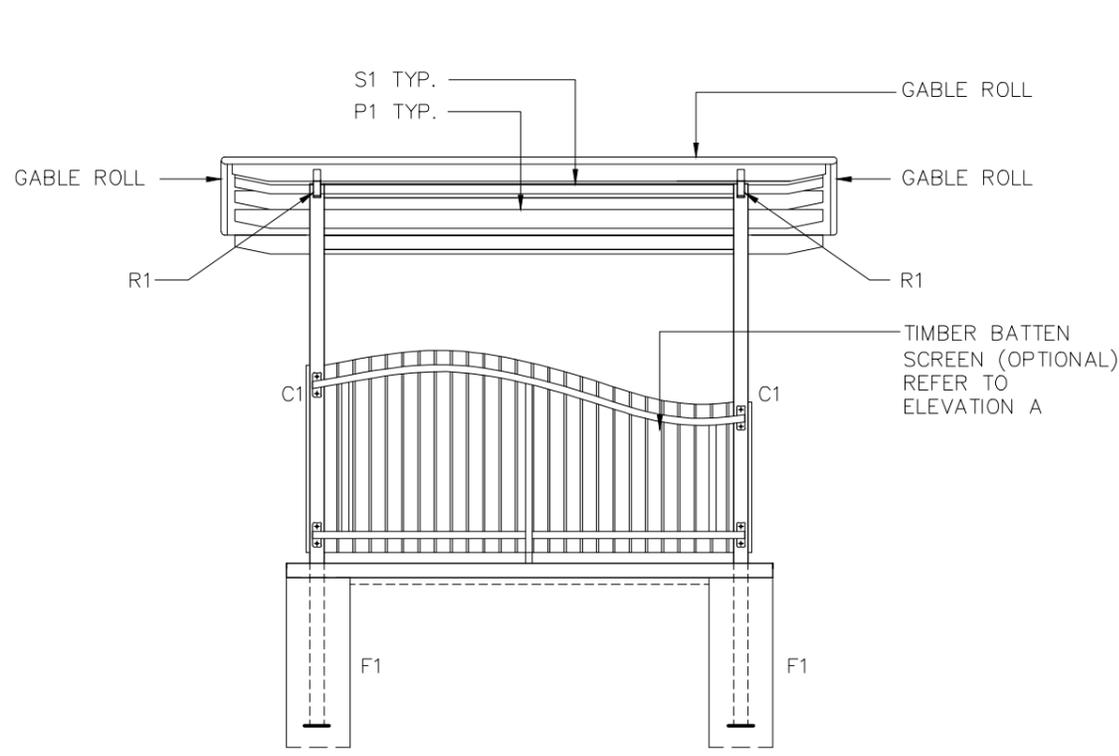
STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ:13885 2014.11.26 15:32:11+10'00'	D.Bateup RPEQ:13095 2014.11.26 16:07:50+10'00'	Bala Batakumar RPEQ 3963 2014.11.27 08:32:11 +10'00'

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

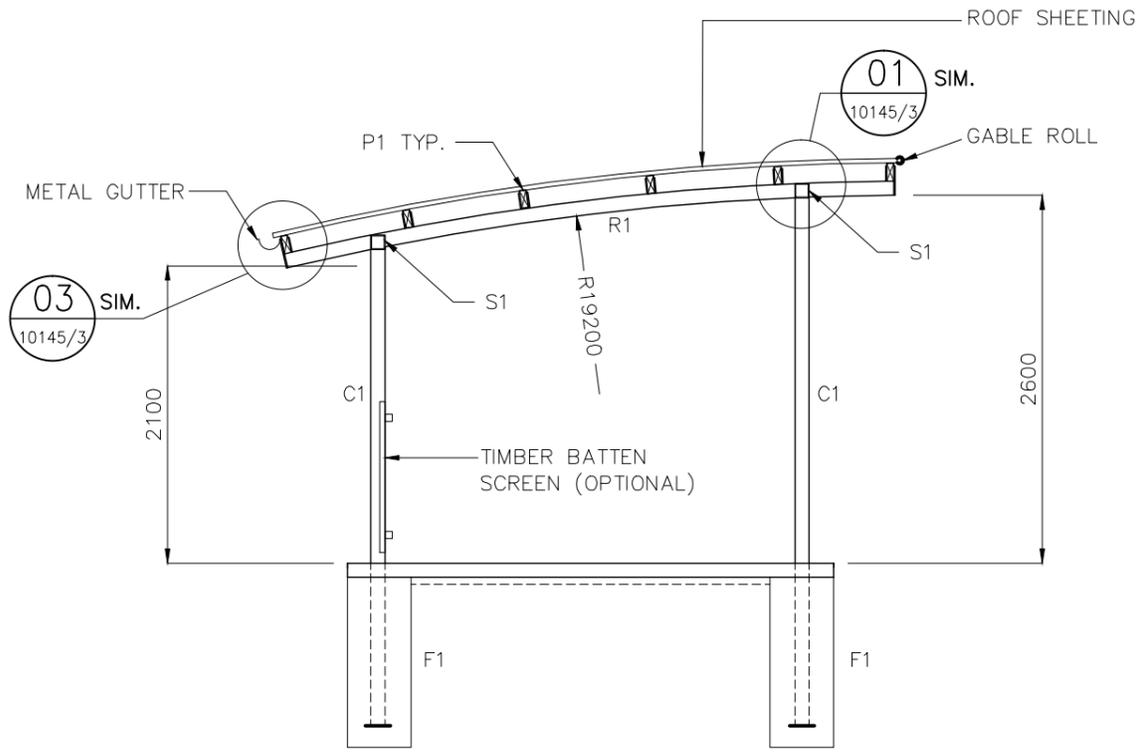
DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	NOV '14
DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10141 (B) Small Shelter - Natural area - Plan - Sheet 1 of 2.dwg		
ASSOCIATED PLANS	BSD-10141-Sheet 2		



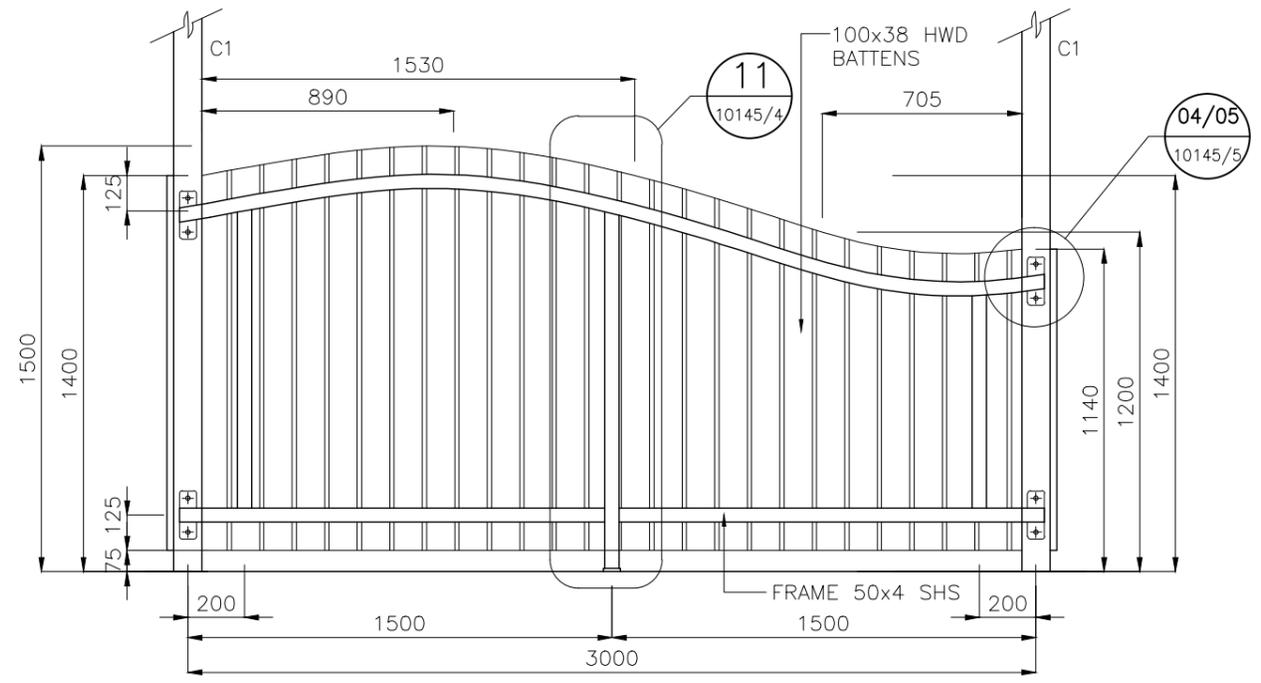
BRISBANE CITY COUNCIL STANDARD DRAWING	
<p>SMALL SHELTER NATURAL AREA - PLAN SHEET 1 OF 2</p>	<p>SCALE AS SHOWN DWG No. BSD-10141 ORIGINAL SIZE A3 REVISION B</p>



ELEVATION B
SCALE: 1:50



SECTION A
SCALE: 1:50



SCREEN ELEVATION C
SCALE: 1:25

GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ.13885 2014.11.26 15:32:30+10'00"	D.Bateup RPEQ.13095 2014.11.26 16:08:21+10'00"	Bala Balakumar RPEQ.3963 2014.11.27 08:33:06+10'00"

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.04 14:56:31+10'00"
of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

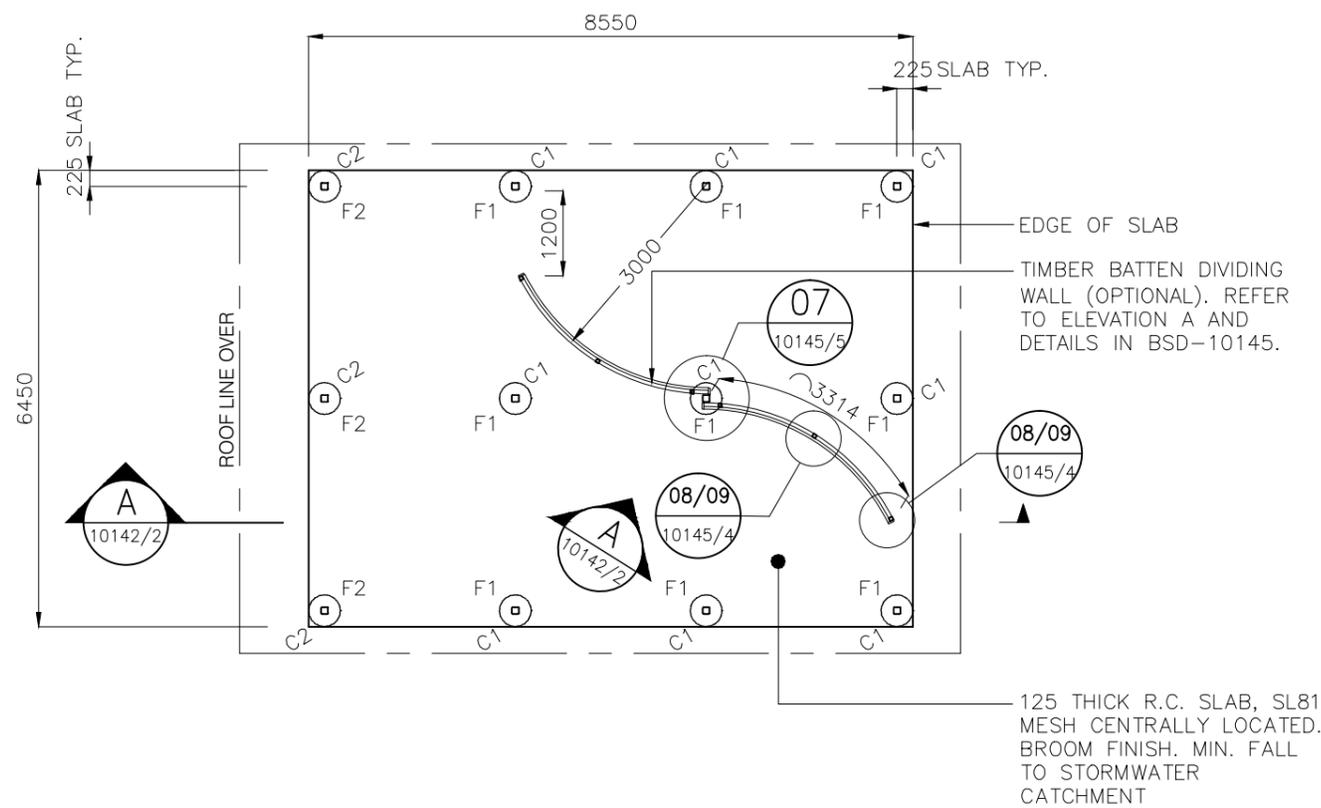
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DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10141 (B) Small Shelter - Natural area - Elevation and section - Sheet 2 of 2.dwg		
ASSOCIATED PLANS	BSD-10141-Sheet 1		



BRISBANE CITY COUNCIL STANDARD DRAWING

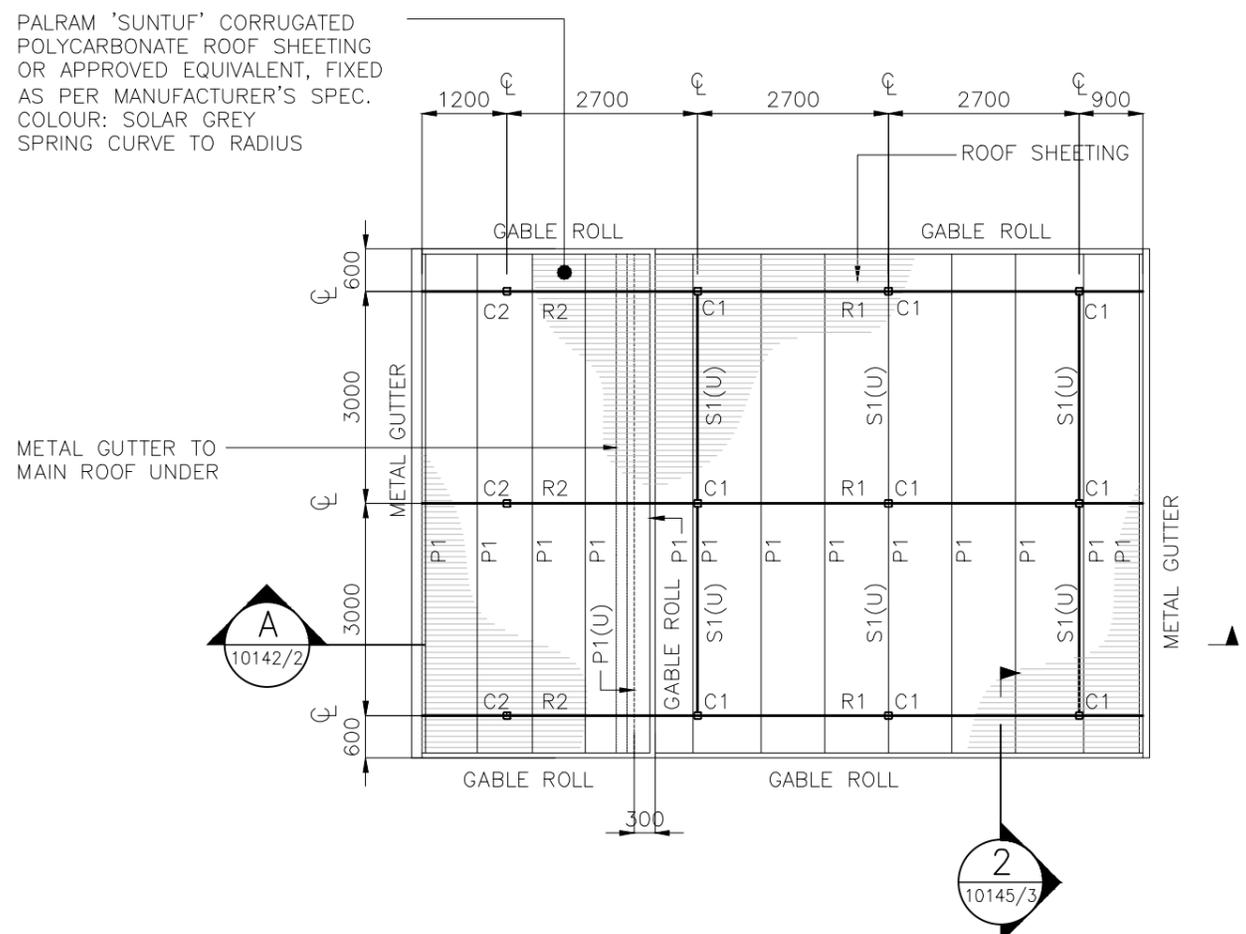
**SMALL SHELTER - NATURAL AREA
ELEVATION AND SECTION
SHEET 2 OF 2**

SCALE	AS SHOWN
DWG No.	BSD-10141
ORIGINAL SIZE	A3
REVISION	B



SLAB AND FOOTING PLAN
SCALE 1:100

PALRAM 'SUNTUF' CORRUGATED POLYCARBONATE ROOF SHEETING OR APPROVED EQUIVALENT, FIXED AS PER MANUFACTURER'S SPEC. COLOUR: SOLAR GREY SPRING CURVE TO RADIUS



ROOF FRAMING PLAN
SCALE 1:100

GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.04 15:18:05+10'00'
of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

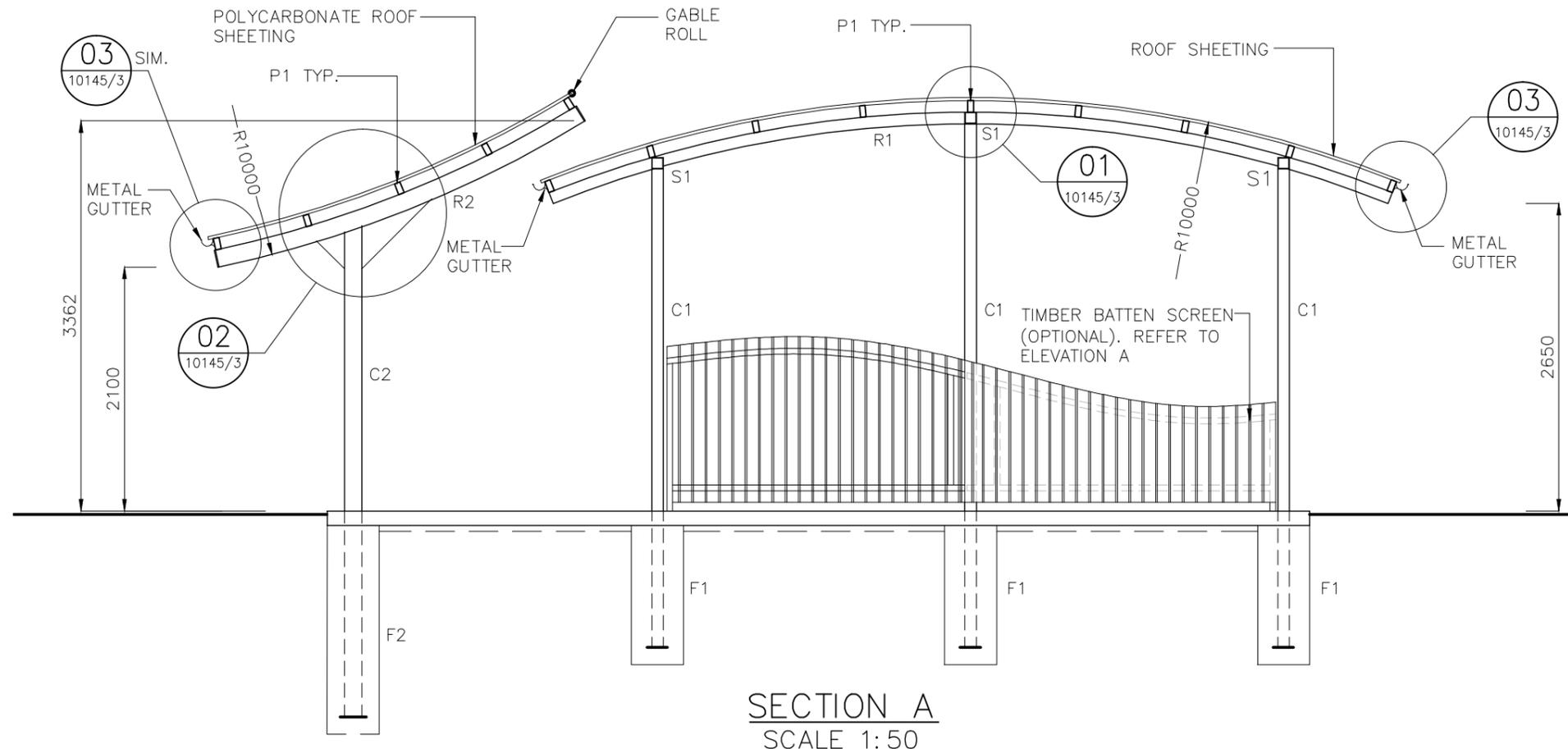
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DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10142 (B) Medium_large shelter - Natural area - Plan - Sheet 1 of 2.dwg		
ASSOCIATED PLANS	BSD-10142-Sheet 2		



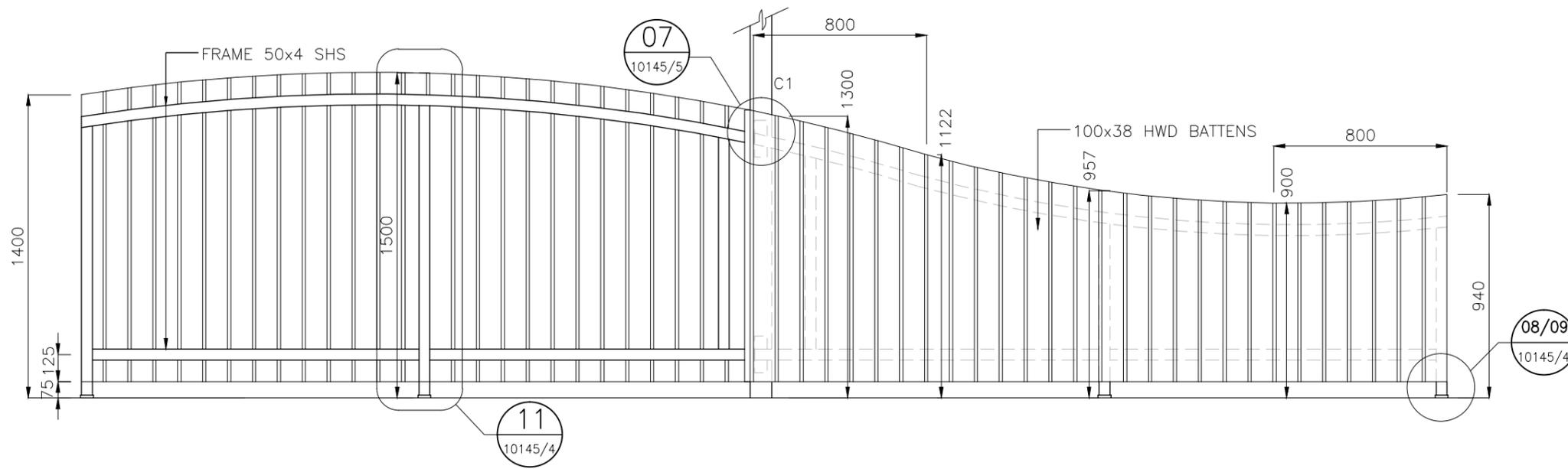
BRISBANE CITY COUNCIL STANDARD DRAWING

MEDIUM/LARGE SHELTER NATURAL AREA - PLAN SHEET 1 OF 2

SCALE: AS SHOWN
DWG No: **BSD-10142**
ORIGINAL SIZE: A3 REVISION: B



SECTION A
SCALE 1:50



SCREEN ELEVATION A
SCALE 1:25

GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.04 15:19:37+10'00"
for ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

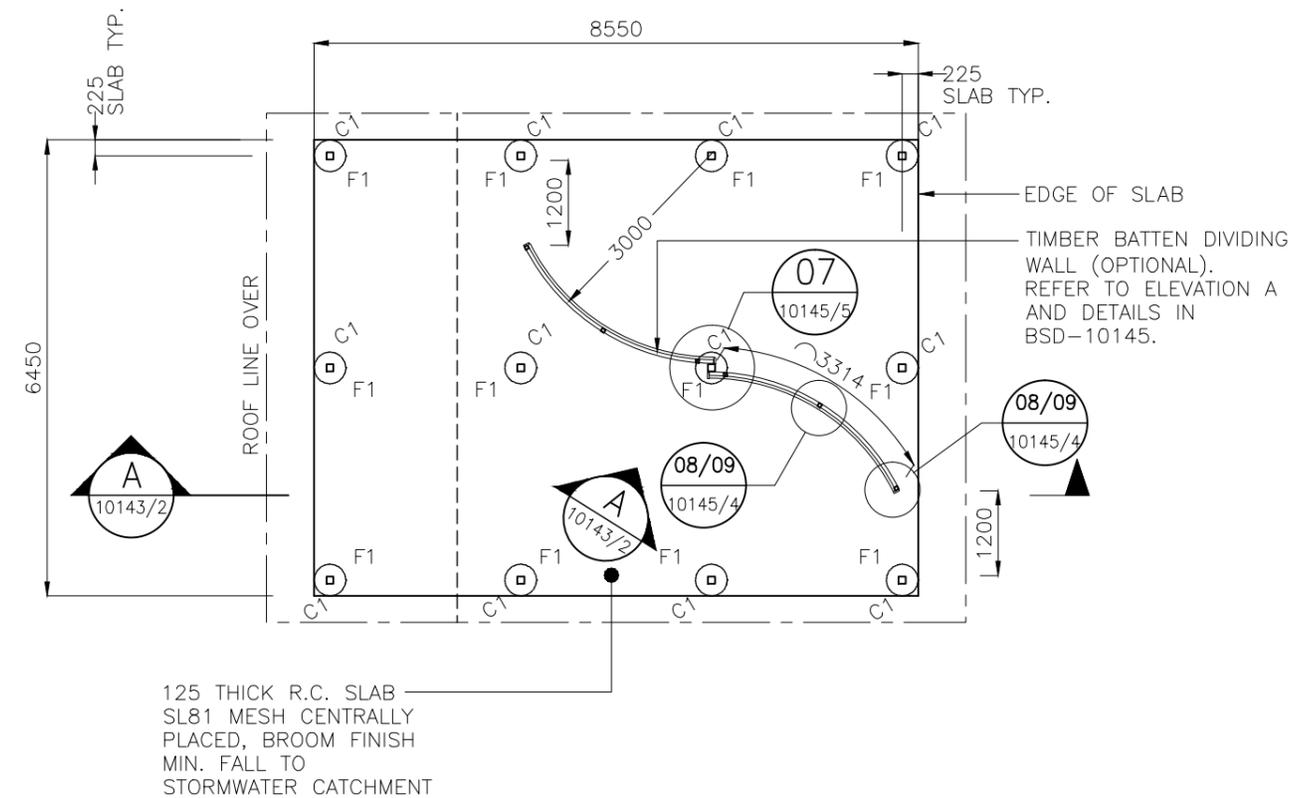
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CHECKED	BI - FSG - AS	DATE	NOV '14
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ASSOCIATED PLANS	BSD-10142-Sheet 1		



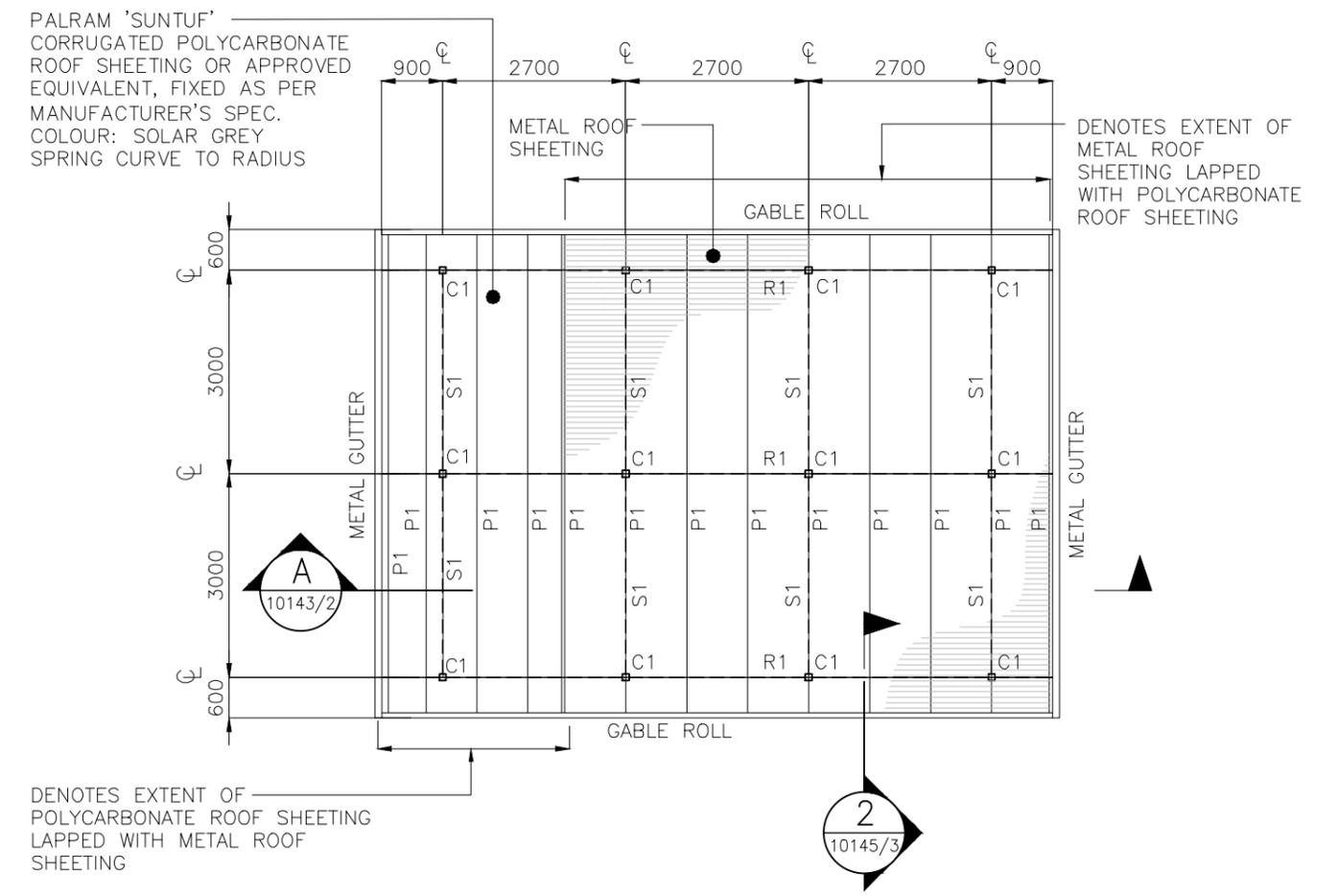
BRISBANE CITY COUNCIL STANDARD DRAWING

MEDIUM/LARGE SHELTER – NATURAL AREA – ELEVATION & SECTION
SHEET 2 OF 2

SCALE	AS SHOWN
DWG No.	BSD-10142
ORIGINAL SIZE	A3
REVISION	B



SLAB AND FOOTING PLAN
SCALE 1:100



ROOF FRAMING PLAN
SCALE 1:100

GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
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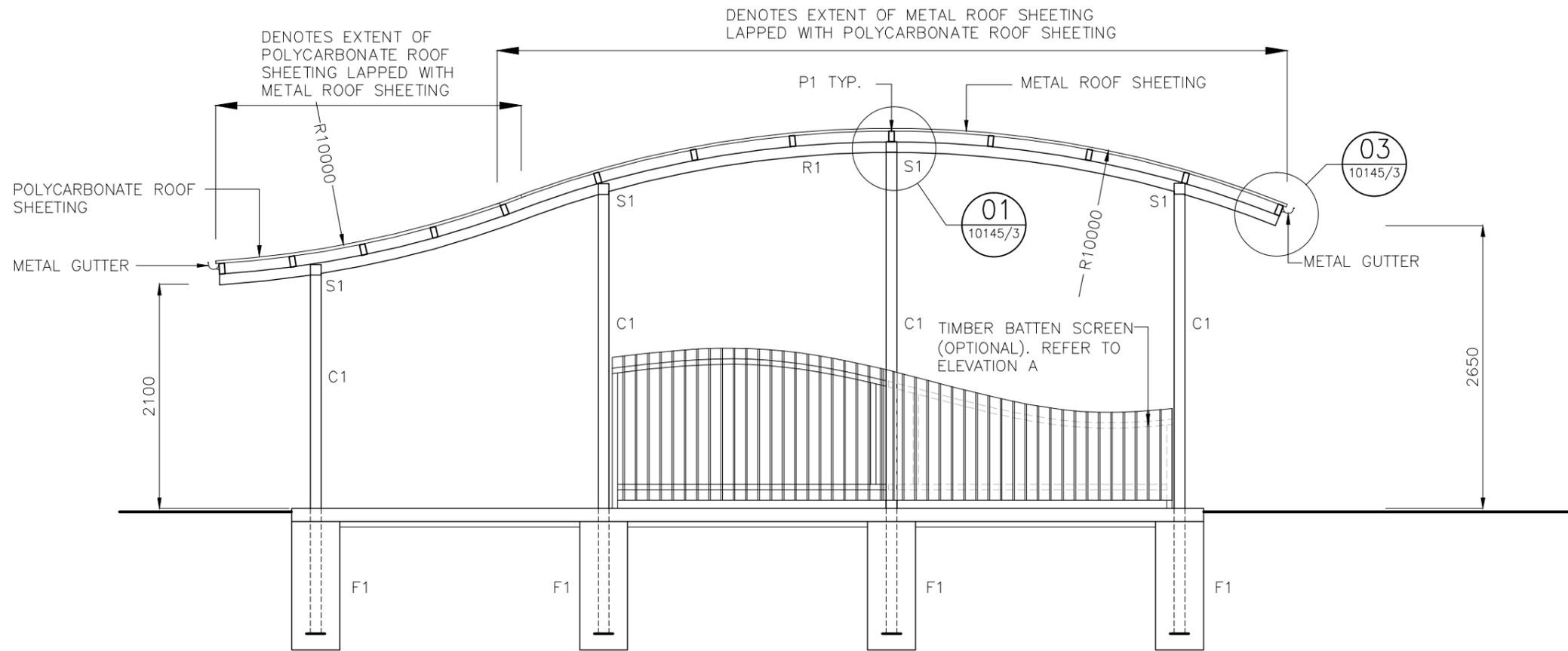
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B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14
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BRISBANE CITY COUNCIL STANDARD DRAWING

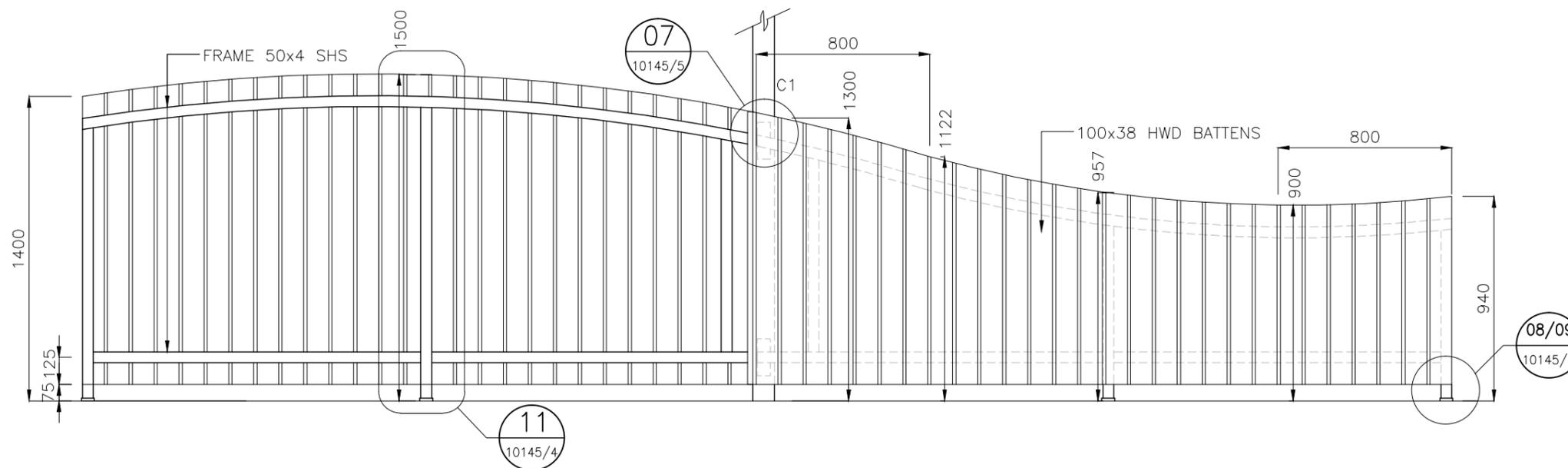
**LARGE SHELTER
NATURAL AREA - PLAN
SHEET 1 OF 2**

SCALE AS SHOWN
DWG No. **BSD-10143**
ORIGINAL SIZE A3 REVISION B





SECTION A
SCALE: 1:50



SCREEN ELEVATION A
SCALE 1:25

GENERAL NOTES

1. REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES AND STEEL MEMBER SCHEDULE
2. REFER TO BSD-10145 SHEET 3 FOR TYPICAL FOOTING AND SLAB DETAILS.
3. REFER TO BSD-10145 SHEET 4 & 5 FOR SCREEN DETAILS IF SCREEN IS SPECIFIED FOR SHELTER.
4. (U) DENOTES UNDER

STRUCTURAL DESIGN CERTIFICATION		
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

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of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

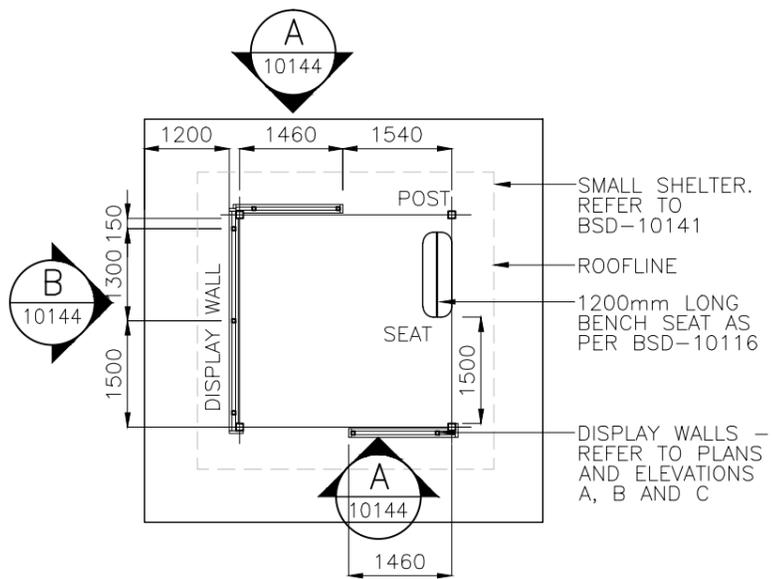
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ASSOCIATED PLANS	BSD-10143-Sheet 1		



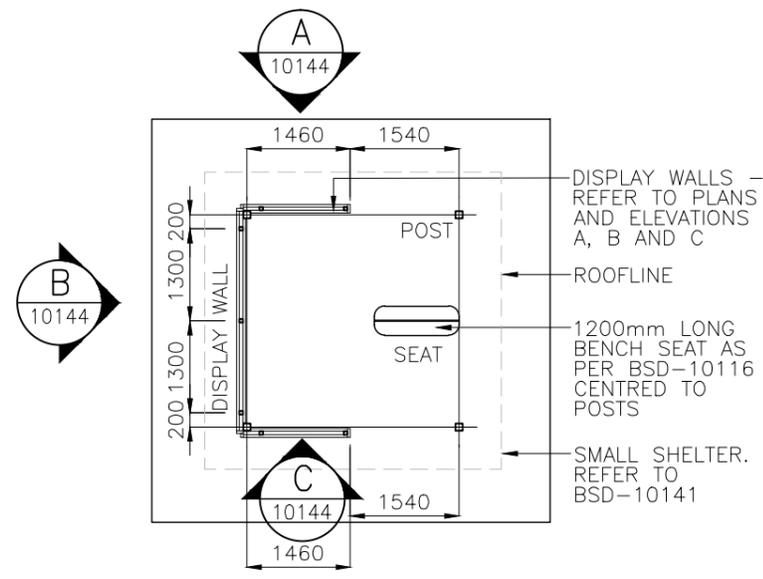
BRISBANE CITY COUNCIL STANDARD DRAWING

LARGE SHELTER – NATURAL AREA ELEVATION & SECTION SHEET 2 OF 2

SCALE: AS SHOWN
DWG No: **BSD-10143**
ORIGINAL SIZE: A3 REVISION: B



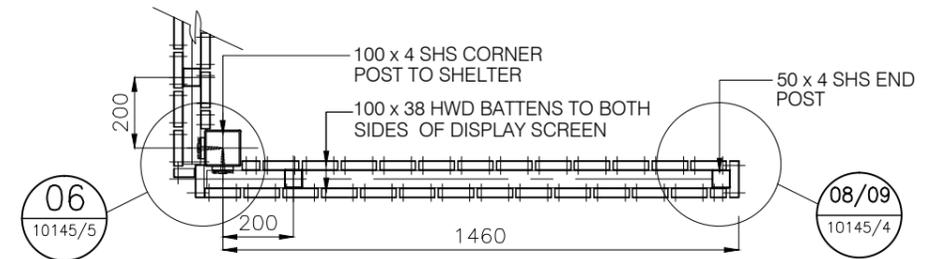
PLAN - OPTION 1
SCALE 1:100



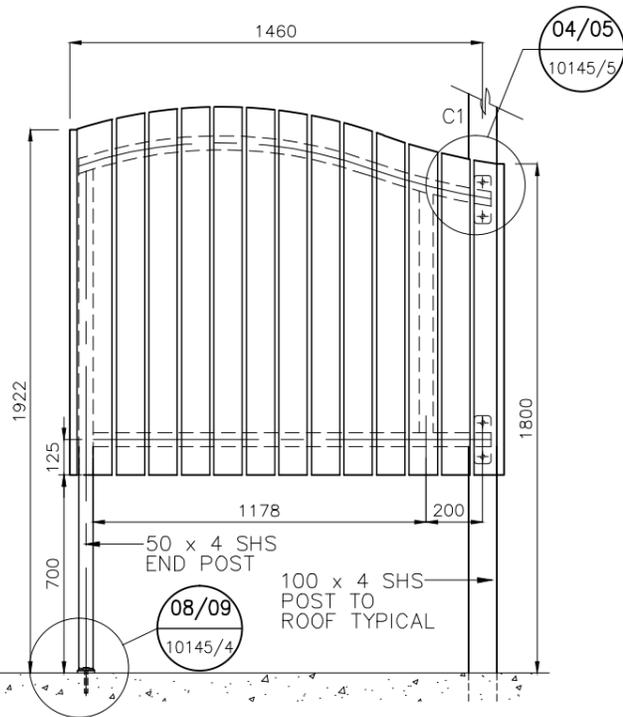
PLAN - OPTION 2
SCALE 1:100

NOTES

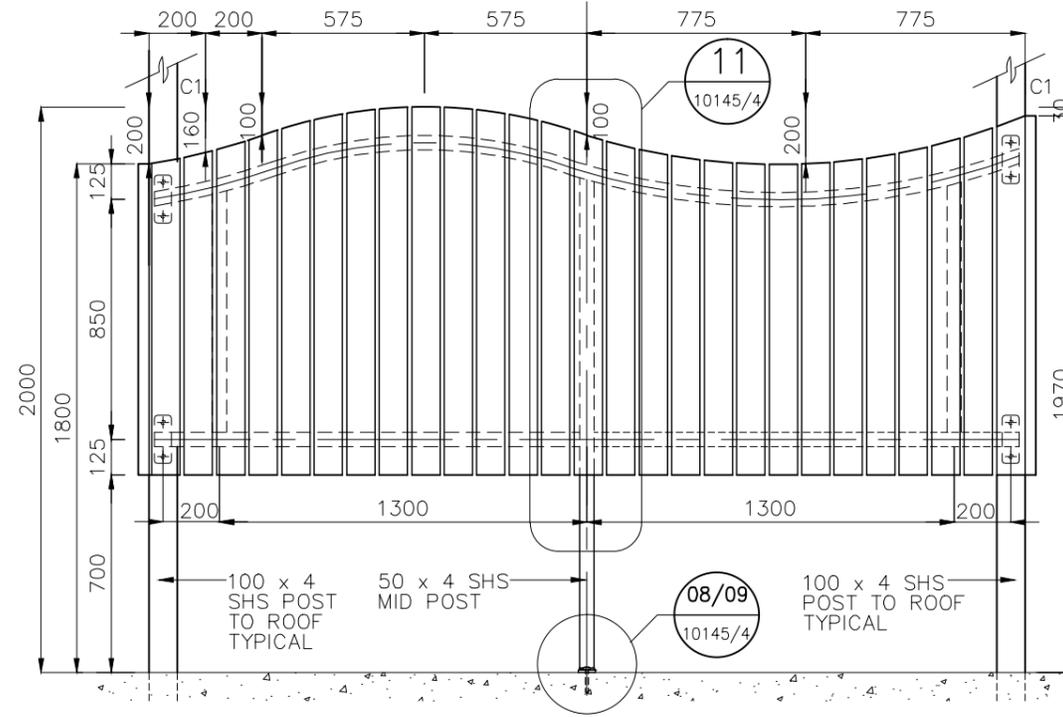
- INFORMATION SHELTER INCLUDES DISPLAY SCREENS WITHIN A SMALL SHELTER. FOR DETAILS RELATING TO THE SMALL SHELTER CONSTRUCTION REFER TO:
 - BSD-10141 SMALL SHELTER-NATURAL AREA-PLAN-SHEET 1 OF 2
 - BSD-10141 SMALL SHELTER-NATURAL AREA-ELEVATION AND SECTION-SHEET 2 OF 2
 - BSD-10145 SMALL/MEDIUM/LARGE SHELTERS-NATURAL AREA-GENERAL NOTES-SHEET 1 OF 5
 - BSD-10145 SMALL/MEDIUM/LARGE SHELTERS-GENERAL NOTES-SHEET 2 OF 5
 - BSD-10145 SMALL/MEDIUM/LARGE SHELTERS-NATURAL AREA-DETAILS-SHEET 3 OF 5
- FOR DISPLAY SCREEN DETAILS REFER TO:
 - BSD-10145 SMALL/MEDIUM/LARGE SHELTERS-NATURAL AREA-SCREEN DETAILS-SHEET 4 OF 5
 - BSD-10145 SMALL/MEDIUM/LARGE SHELTERS-NATURAL AREA-SCREEN DETAILS-SHEET 5 OF 5



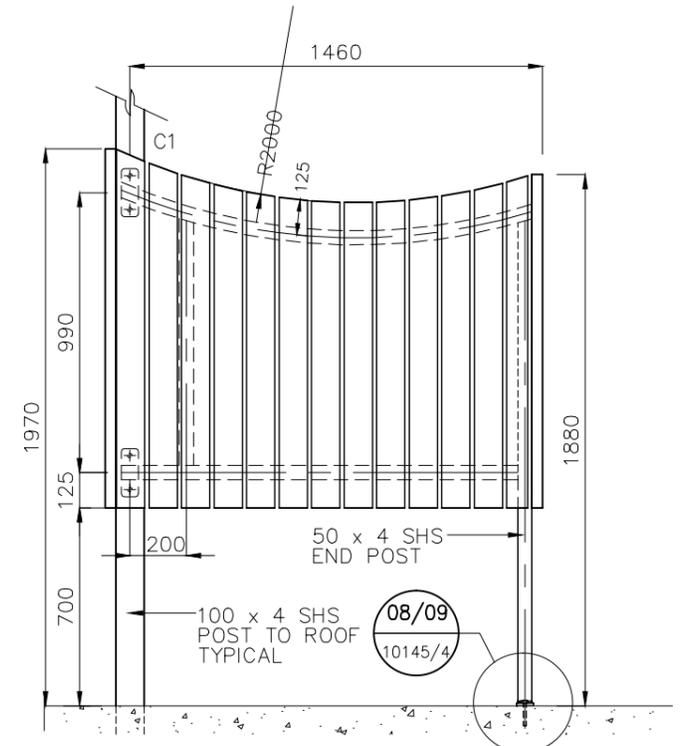
PLAN - TYPICAL DISPLAY SCREEN
SCALE 1:20



ELEVATION - VIEW A
SCALE 1:25



ELEVATION - VIEW B
SCALE 1:25



ELEVATION - VIEW C
SCALE 1:25

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Notes Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION			
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DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10144 (B) Small information shelter - Natural area.dwg		
ASSOCIATED PLANS			



BRISBANE CITY COUNCIL STANDARD DRAWING	
SMALL INFORMATION SHELTER NATURAL AREA	SCALE AS SHOWN DWG No. BSD-10144 ORIGINAL SIZE A3 REVISION B

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
AS 1684.2 (2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
AS 1720.1 (2010) TIMBER STRUCTURES
AS 2870 (2011) RESIDENTIAL SLABS AND FOOTINGS
AS 3600 (2009) CONCRETE STRUCTURES
AS 3798 (2007) GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
AS 4100 (1998) STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEET 2 TO 5.
- G12 CONSULT BCC ARCHITECT FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 1.5
ULTIMATE WIND SPEED = 54.0 m/s
DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE.
LIVE LOADS: : FLOOR = 5.0 kPa. ROOF= 0.25 kPa / 1.4 kN.
NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED UNLESS SHOWN ON THE DRAWINGS.

TERRAIN CATEGORY 1.5 CORRESPONDS TO AN ENVIRONMENT WITH OPEN WATER SURFACES, SUBJECTED TO SHOALING WAVES AT SERVICEABILITY AND ULTIMATE WIND SPEEDS IN ALL WIND REGIONS.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCTS CLASS I MATERIAL.
- F5 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL AND WATER PRIOR TO POURING CONCRETE.
- F6 SLABS ON GRADE SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 USE NON-HUMUS CUT MATERIAL OR IMPORTED APPROVED NON-REACTIVE SOIL AS FILL.
- E4 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LEVEL OF FILL. EVERY TEST MUST PASS.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O.ELEMENT:
- | F'C (MPa) | REINFORCEMENT COVER |
|-----------|----------------------|
| PIERS | 32 75 |
| SLAB | 32 CENTRALLY PLACED. |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR LAP LENGTH (mm) | |
|---------------------|-----|
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS: R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
N DEFORMED BAR GRADE D500N TO AS 4671.
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION

NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND THE CONTRACT DOCUMENT. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ).

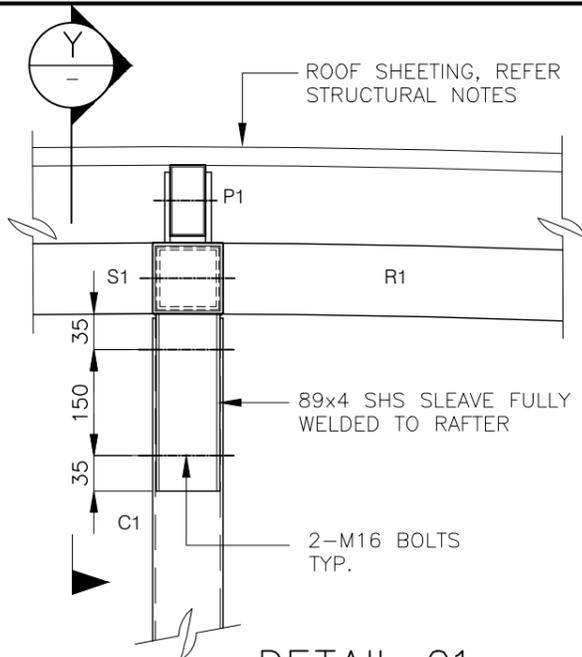
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B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

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for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
C.Wood			
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			

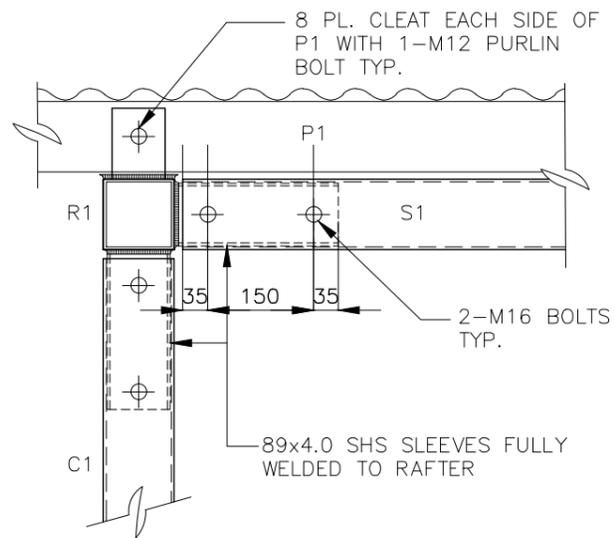
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ASSOCIATED PLANS	BSD-10145-Sheets 2,3,4 & 5		



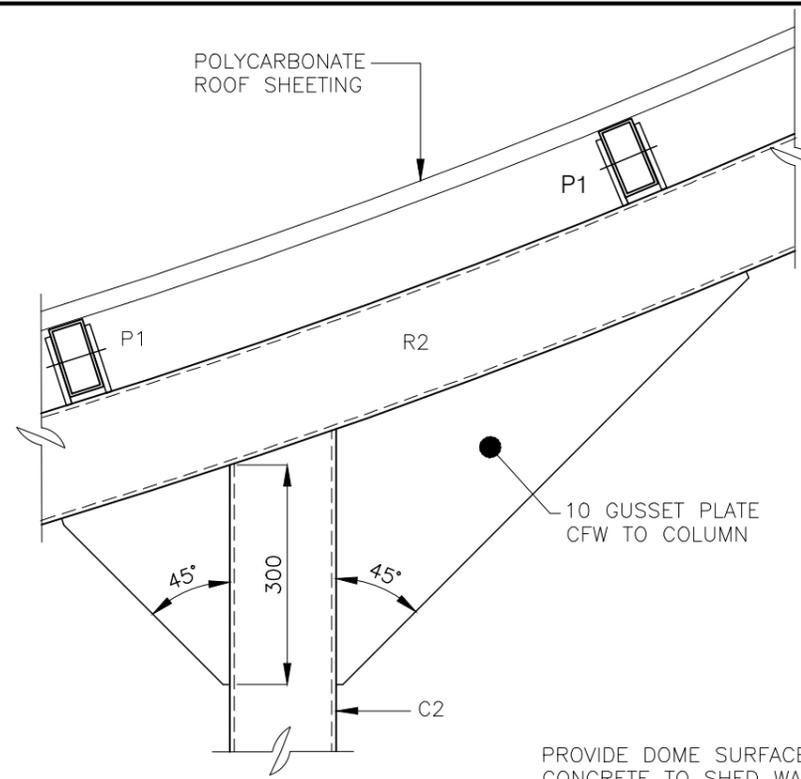
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BRISBANE CITY COUNCIL STANDARD DRAWING		
SMALL/MEDIUM/LARGE SHELTERS NATURAL AREA – GENERAL NOTES SHEET 1 OF 5		SCALE N.T.S DWG No. BSD-10145 ORIGINAL SIZE A3 REVISION B



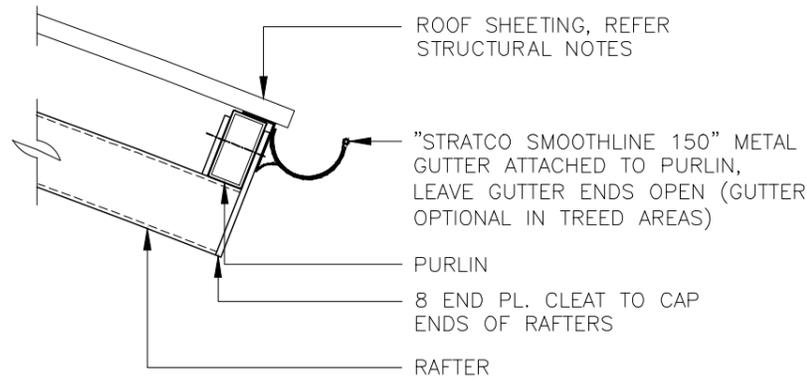
DETAIL 01
SCALE 1:10



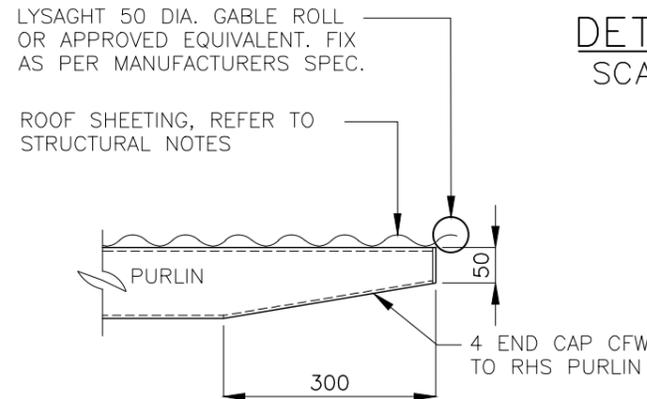
SECTION Y
SCALE 1:10



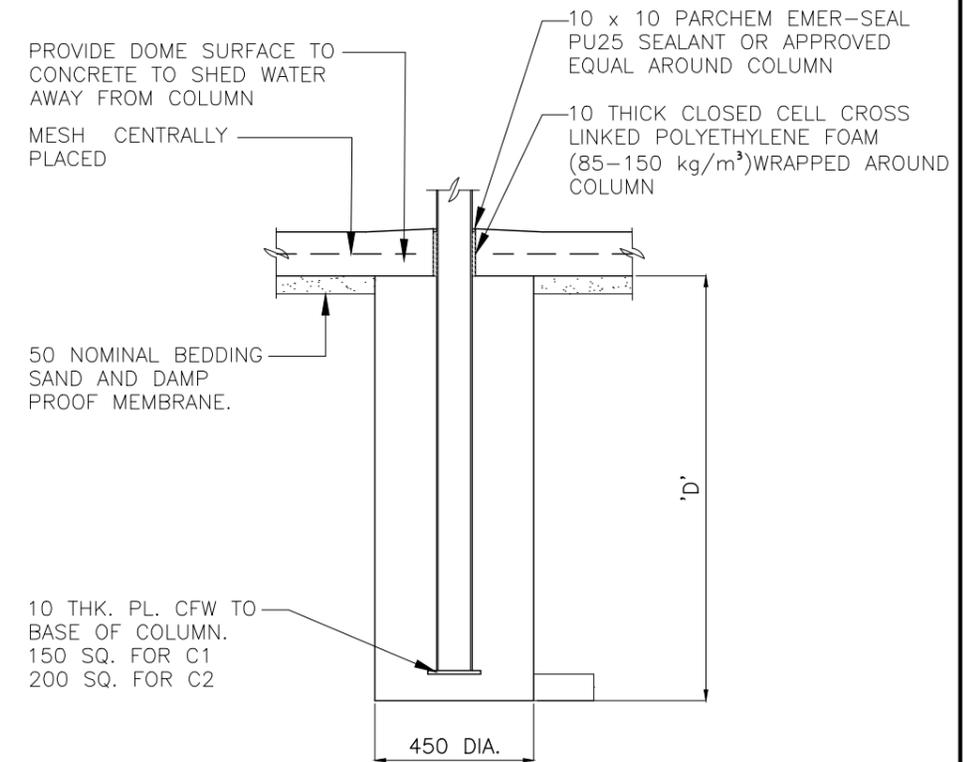
DETAIL 02
SCALE 1:10



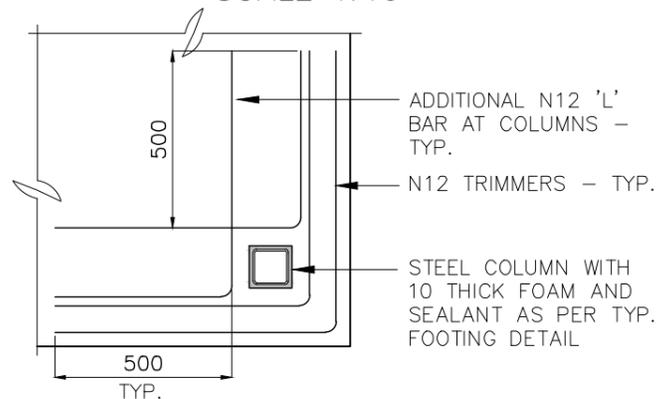
DETAIL 03
SCALE 1:10



SECTION 2
SCALE 1:10



TYPICAL FOOTING DETAIL
SCALE 1:20



TYPICAL CORNER DETAIL
SCALE 1:20

GENERAL NOTES

- REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES.
- REFER TO BSD-10145 SHEET 2 FOR STEEL MEMBER SCHEDULE.
- FOR SHELTER PLANS, SECTIONS AND ELEVATIONS REFER TO:
 - BSD-10141 - SMALL SHELTER - SHEETS 1 TO 2
 - BSD-10142 - MEDIUM/LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10143 - LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10144 - SMALL INFORMATION SHELTER

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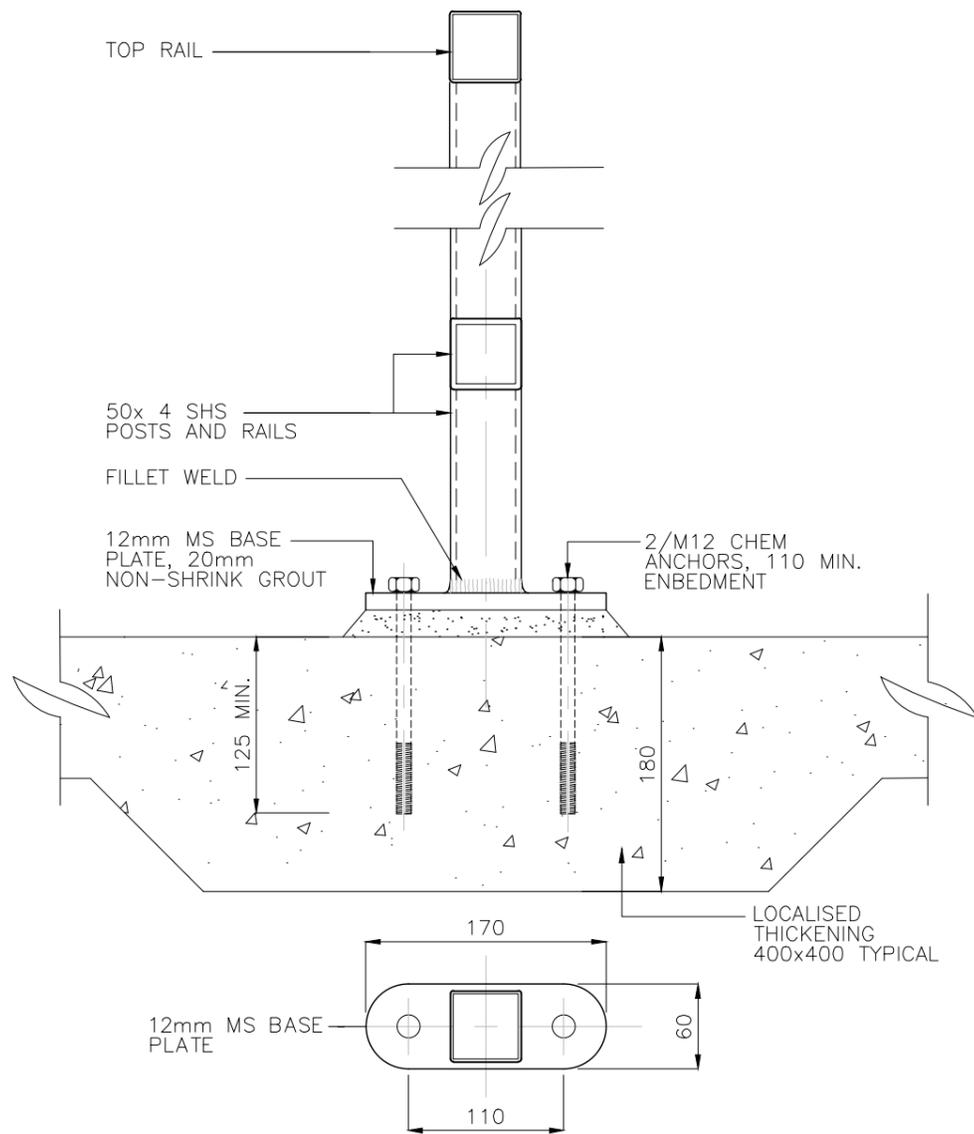
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DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
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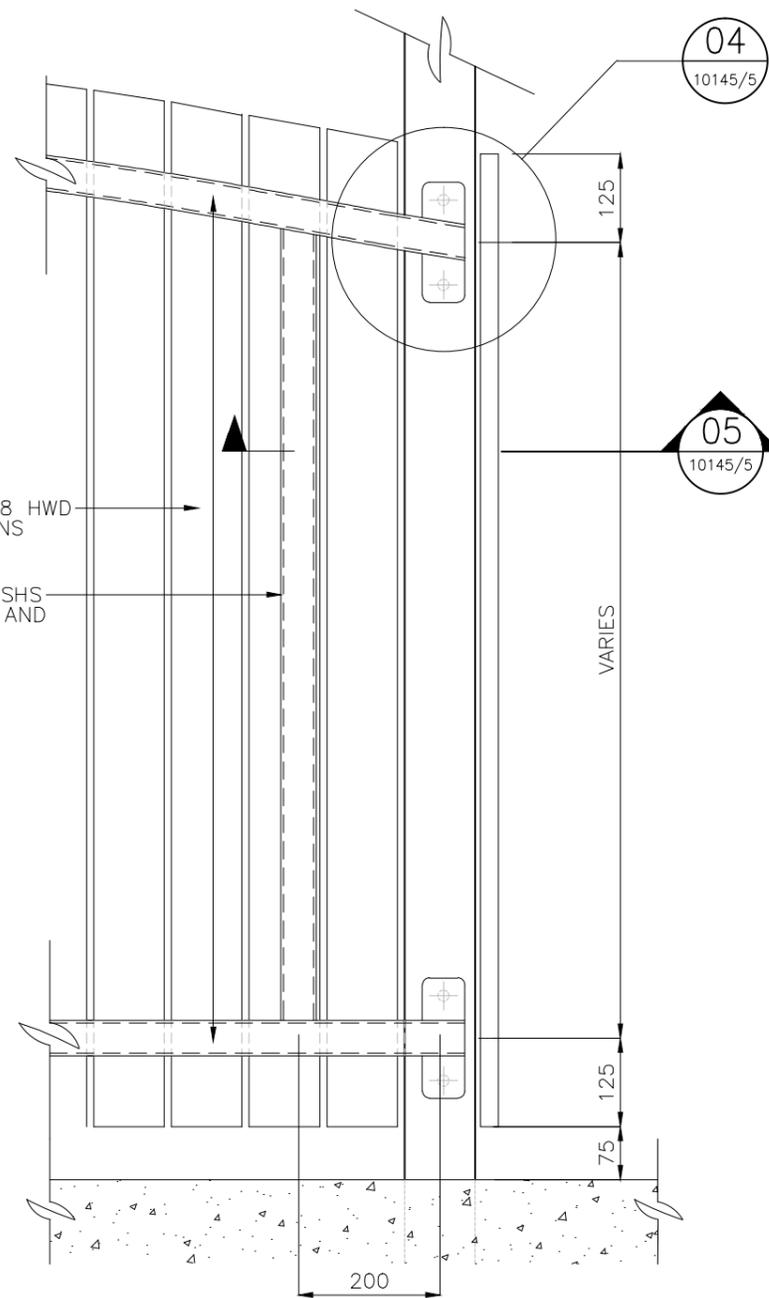
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ASSOCIATED PLANS	BSD-10145-Sheets 1,2,4 & 5		



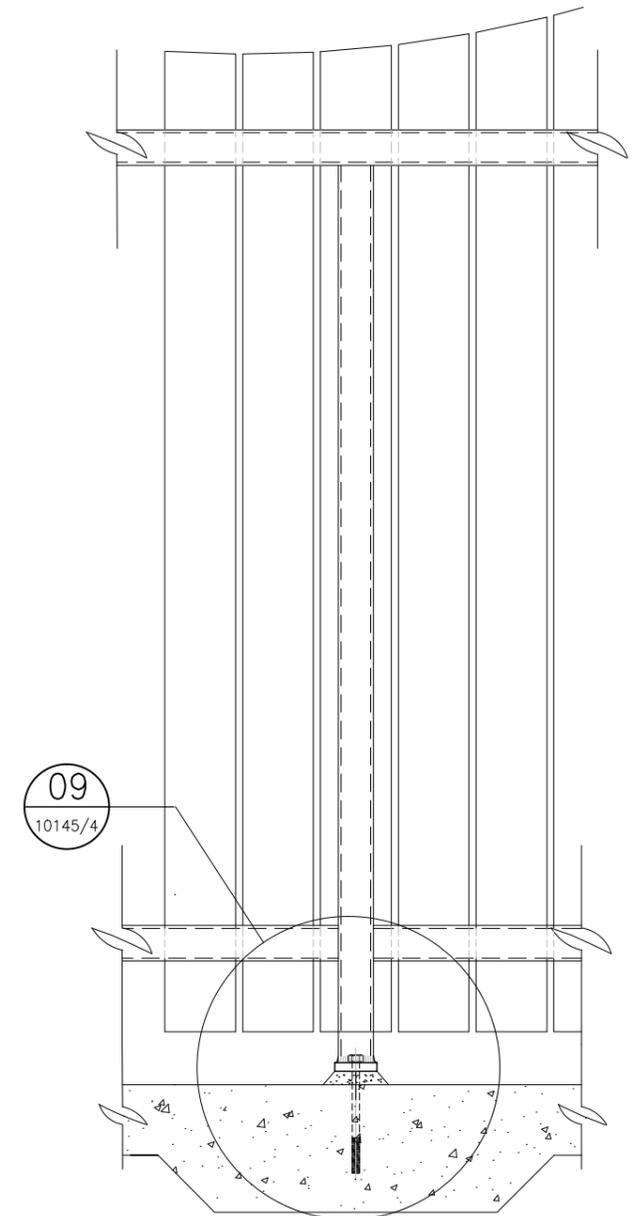
BRISBANE CITY COUNCIL STANDARD DRAWING	
SMALL/MEDIUM/LARGE SHELTERS NATURAL AREA - DETAILS SHEET 3 OF 5	SCALE AS SHOWN DWG No. BSD-10145 ORIGINAL SIZE A3 REVISION B



DETAIL 09 – SCREEN TO MID/END POST DETAIL
SCALE 1:5



DETAIL 10 – SCREEN TO SHELTER POST DETAIL
SCALE 1:10



DETAIL 11 – SCREEN TO MID-POST DETAIL
SCALE 1:10

GENERAL NOTES

- REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES.
- REFER TO BSD-10145 SHEET 3 & 5 FOR SHELTER AND SCREEN DETAILS.
- FOR SHELTER PLANS, SECTIONS AND ELEVATIONS REFER TO:
 - BSD-10141 - SMALL SHELTER - SHEETS 1 TO 2
 - BSD-10142 - MEDIUM/LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10143 - LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10144 - SMALL INFORMATION SHELTER

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ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
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for ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C. Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

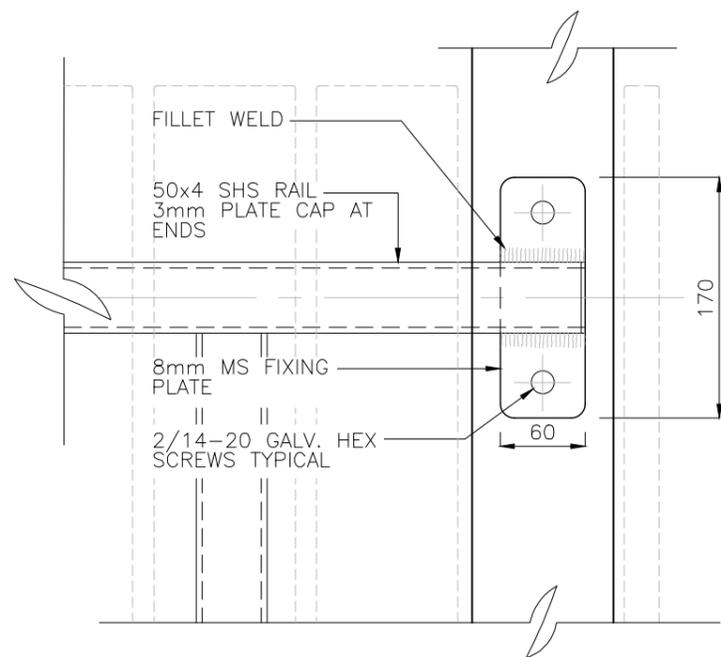
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ASSOCIATED PLANS	BSD-10145-Sheets 1,2,3 & 5		



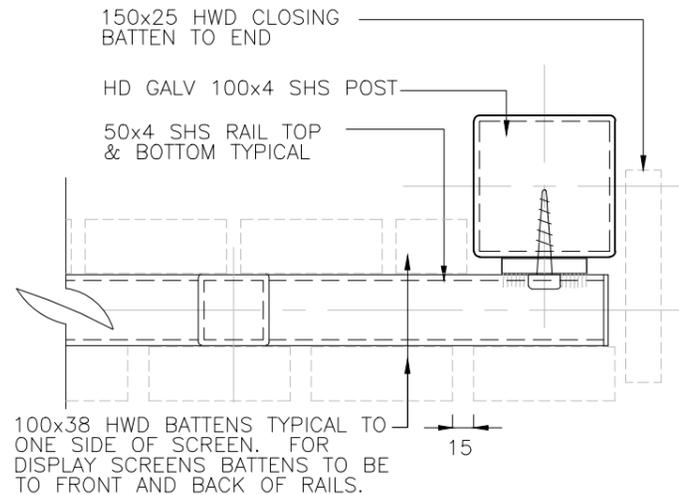
BRISBANE CITY COUNCIL STANDARD DRAWING

SMALL/MEDIUM/LARGE SHELTERS NATURAL AREA – SCREEN DETAILS SHEET 4 OF 5

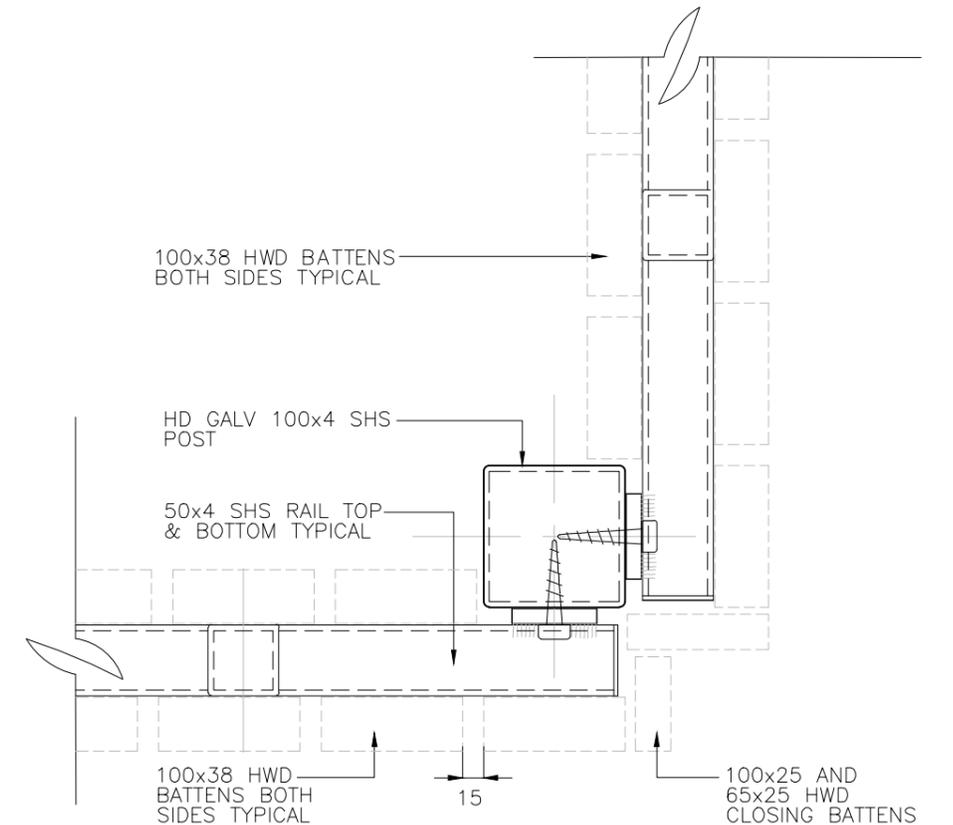
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REVISION	B



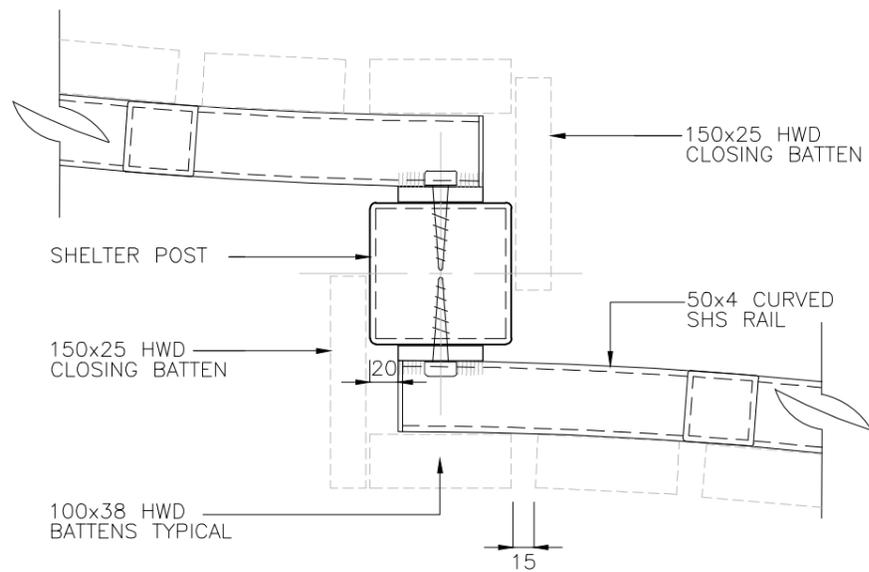
DETAIL 04 – RAIL END CONNECTION TO SHELTER POST – ELEVATION
SCALE 1:5



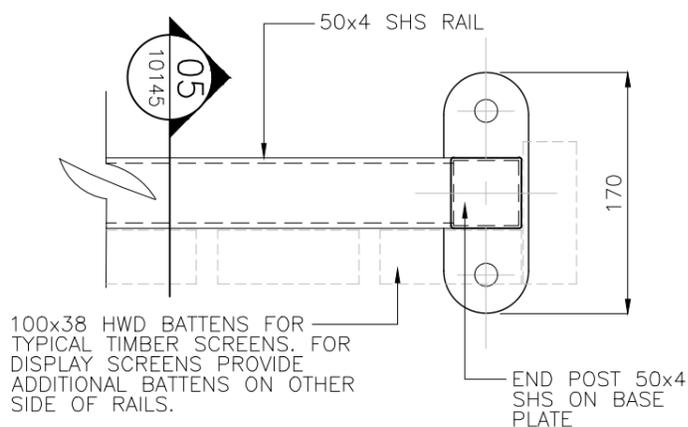
DETAIL 05 – RAIL END CONNECTION TO SHELTER POST – SECTION
SCALE 1:5



DETAIL 06 – CORNER DETAIL FOR DISPLAY SCREENS TO SHELTER POST
SCALE 1:5



DETAIL 07 – DIVIDING WALL – RAIL CONNECTION TO SHELTER POST – SECTION
SCALE 1:5



DETAIL 08 – MID AND END POST – BASE PLATE – PLAN
SCALE 1:5

GENERAL NOTES

- REFER TO BSD-10145 SHEET 1 AND 2 FOR STRUCTURAL NOTES.
- REFER TO BSD-10145 SHEET 3 & 4 FOR SHELTER AND SCREEN DETAILS.
- FOR SHELTER PLANS, SECTIONS AND ELEVATIONS REFER TO:
 - BSD-10141 - SMALL SHELTER - SHEETS 1 TO 2
 - BSD-10142 - MEDIUM/LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10143 - LARGE SHELTER - SHEETS 1 TO 2
 - BSD-10144 - SMALL INFORMATION SHELTER

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2014.11.26 15:38:52+10'00'	D. Bateup RPEQ 13095 2014.11.26 16:15:03+10'00'	Bala Balakumar RPEQ 3963 2014.11.27 08:39:22+10'00'

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.04 15:28:20+10'00'
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CPO - P&D	DATE	NOV '14
DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10145 BI_Small_Medium_Large shelters - Natural area - Screen details - Sheet 5 of 5.dwg		
ASSOCIATED PLANS	BSD-10145-Sheets 1,2,3 & 4		



BRISBANE CITY COUNCIL STANDARD DRAWING

SMALL/MEDIUM/LARGE SHELTERS NATURAL AREA – SCREEN DETAILS SHEET 5 OF 5

SCALE: AS SHOWN
DWG No: **BSD-10145**
ORIGINAL SIZE: A3 REVISION: B

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
 AS 1684.2 (2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
 AS 1720.1 (2010) TIMBER STRUCTURES
 AS 2870 (2011) RESIDENTIAL SLABS AND FOOTINGS
 AS 3600 (2009) CONCRETE STRUCTURES
 AS 3798 (2007) GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
 AS 4100 (1998) STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEET 2 TO 5.
- G12 CONSULT BCC ARCHITECT FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 1.5
 ULTIMATE WIND SPEED = 54.0 m/s
 DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE.
 LIVE LOADS: : FLOOR = 5.0 kPa. ROOF= 0.25 kPa / 1.4 kN.
 NO SCREENS (IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED UNLESS SHOWN ON THE DRAWINGS.

TERRAIN CATEGORY 1.5 CORRESPONDS TO AN ENVIRONMENT WITH OPEN WATER SURFACES, SUBJECTED TO SHOALING WAVES AT SERVICEABILITY AND ULTIMATE WIND SPEEDS IN ALL WIND REGIONS.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCTS CLASS I MATERIAL.
- F5 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL AND WATER PRIOR TO POURING CONCRETE.
- F6 SLABS ON GRADE SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 USE NON-HUMUS CUT MATERIAL OR IMPORTED APPROVED NON-REACTIVE SOIL AS FILL.
- E4 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LEVEL OF FILL. EVERY TEST MUST PASS.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O. ELEMENT:
- | | | |
|-------------------------------|----|-------------------|
| F'C (MPa) REINFORCEMENT COVER | | |
| PIERS | 32 | 75 |
| SLAB | 32 | CENTRALLY PLACED. |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | | |
|---------------------|-----|
| BAR LAP LENGTH (mm) | |
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS: R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
 N DEFORMED BAR GRADE D500N TO AS 4671.
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS UNO
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O. ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O. ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S8. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S9. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S10. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S11. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND THE CONTRACT DOCUMENT. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ).

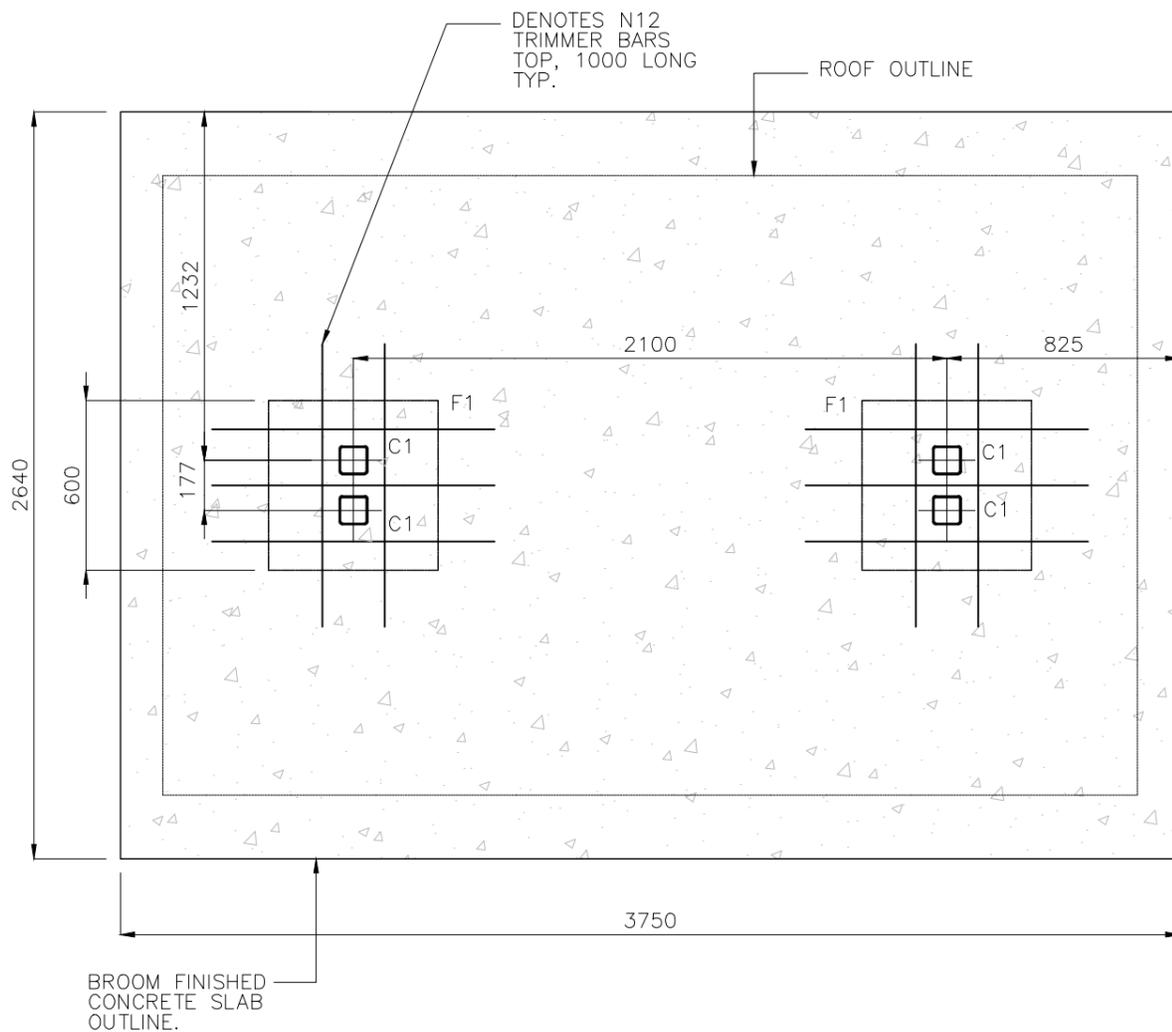
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION			
Ingo Condric	2015.06.04	15:29:02+10'00'	
prof ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
C.Wood			
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			

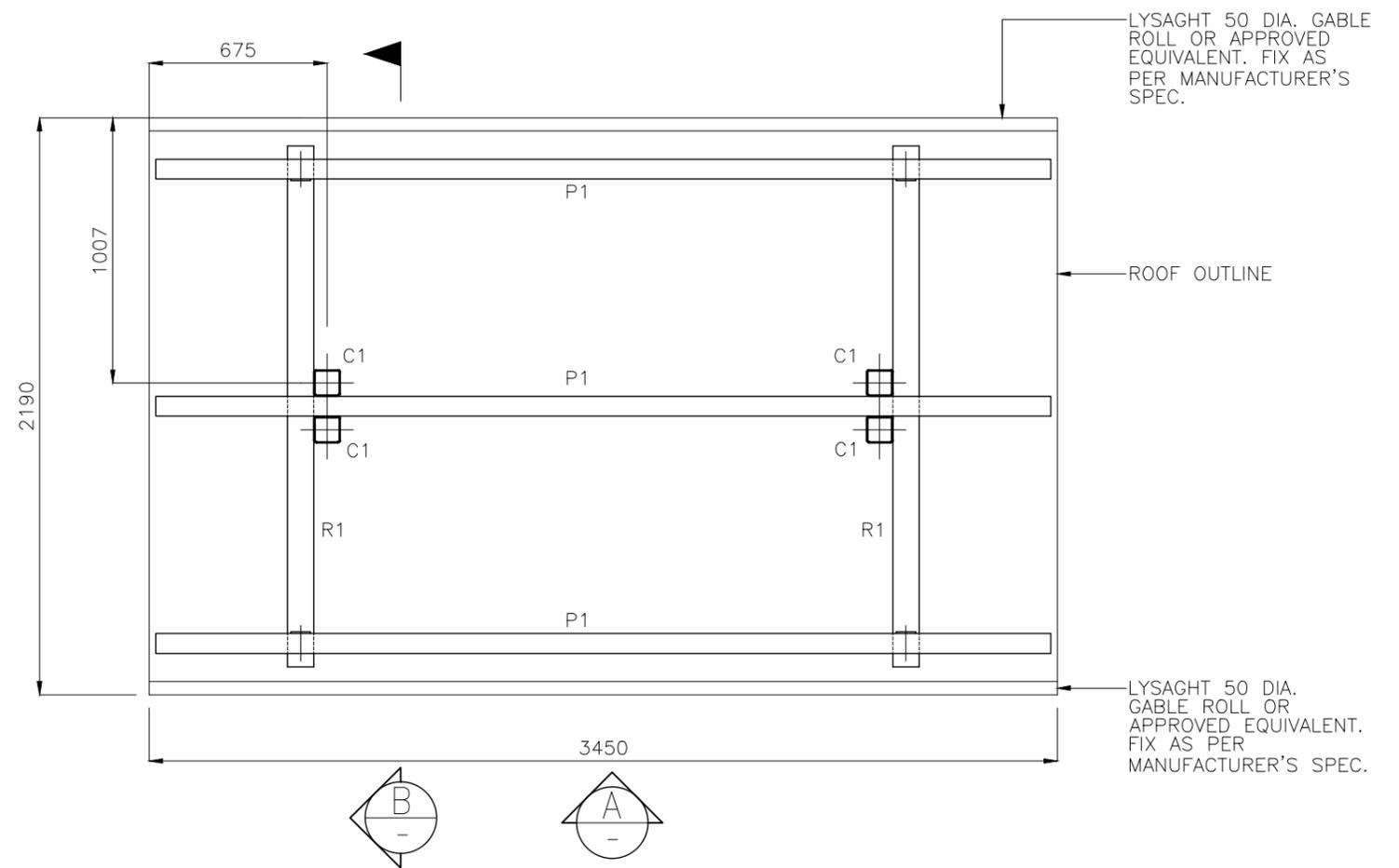
DESIGN	CPO - P&D	DATE	NOV '14
DRAWN	CPO - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10146 (B) Sign shelter - Natural area - General notes - Sheet 1 of 3.dwg		
ASSOCIATED PLANS	BSD-10146-Sheets 2 & 3		



STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
D. Bateup RPEQ 13095 2014.11.26 16:22:17+10'00'	Zhuangzhi Hu RPEQ 13885 2014.11.26 16:30:14+10'00'	Bala Balakumar RPEQ 3963 2014.11.27 08:39:52+10'00'
BRISBANE CITY COUNCIL STANDARD DRAWING		
SIGN SHELTER – NATURAL AREA GENERAL NOTES SHEET 1 OF 3		SCALE N.T.S DWG No BSD-10146 ORIGINAL SIZE A3 REVISION B



SLAB AND FOOTING PLAN
SCALE 1:25



ROOF FRAMING PLAN
SCALE 1:25

MEMBER SCHEDULE	
MARK	MEMBER
B1	150 x 100 x 10 UA BEAM
C1	100 x 4 SHS COLUMN
H1	150 x 75 F17 HWD HEADER
P1	150 x 75 F17 HWD PURLIN
R1	152 x 76 x 5 RHS RAFTER

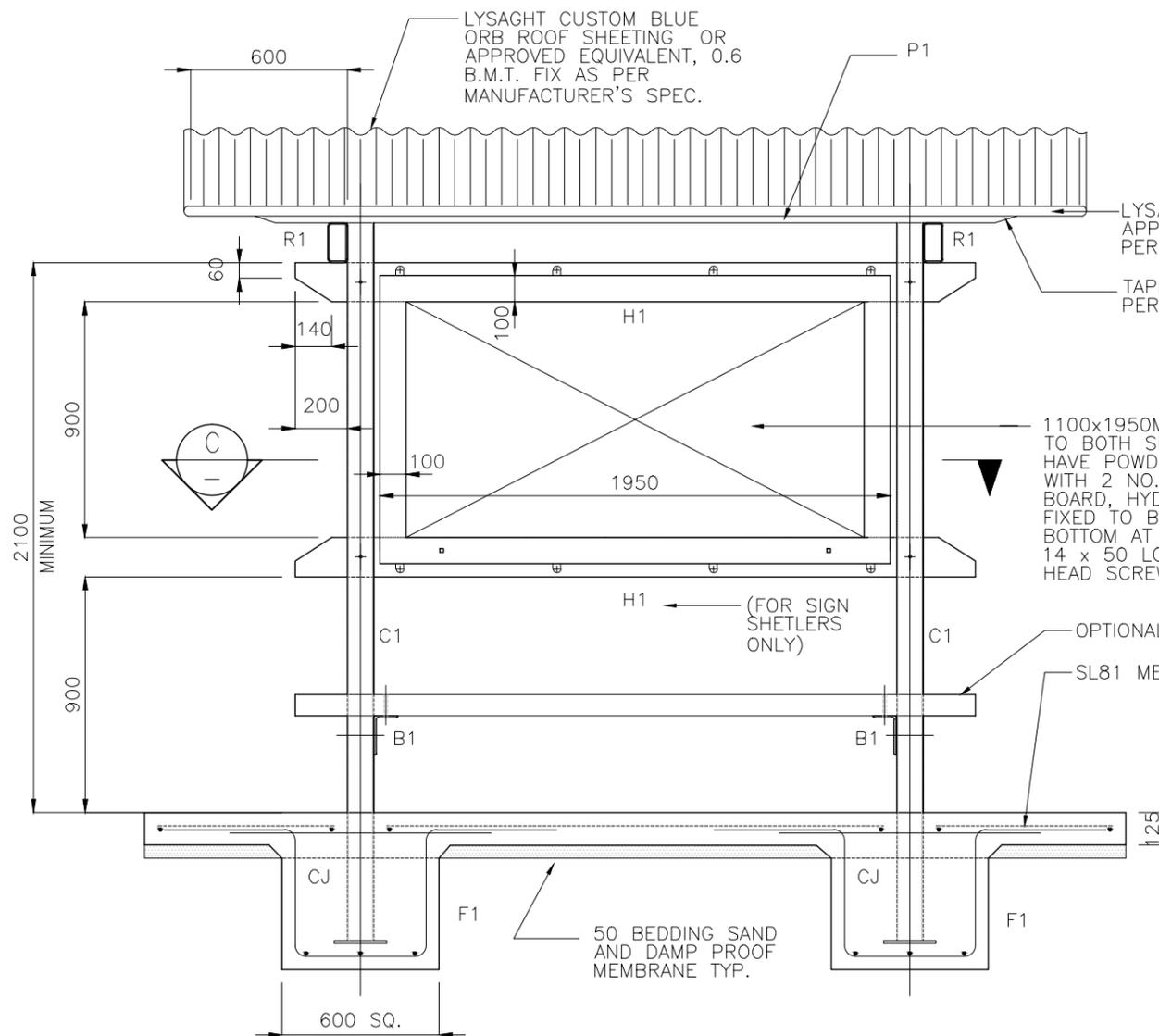
NOTES

- REFER TO:
- BSD-10146-SIGN SHELTER-NATURAL AREA-SHEET 1 OF 3-GENERAL NOTES
 - BSD-10146-SIGN SHELTER-NATURAL AREA-SHEET 3 OF 3-ELEVATION AND SECTION

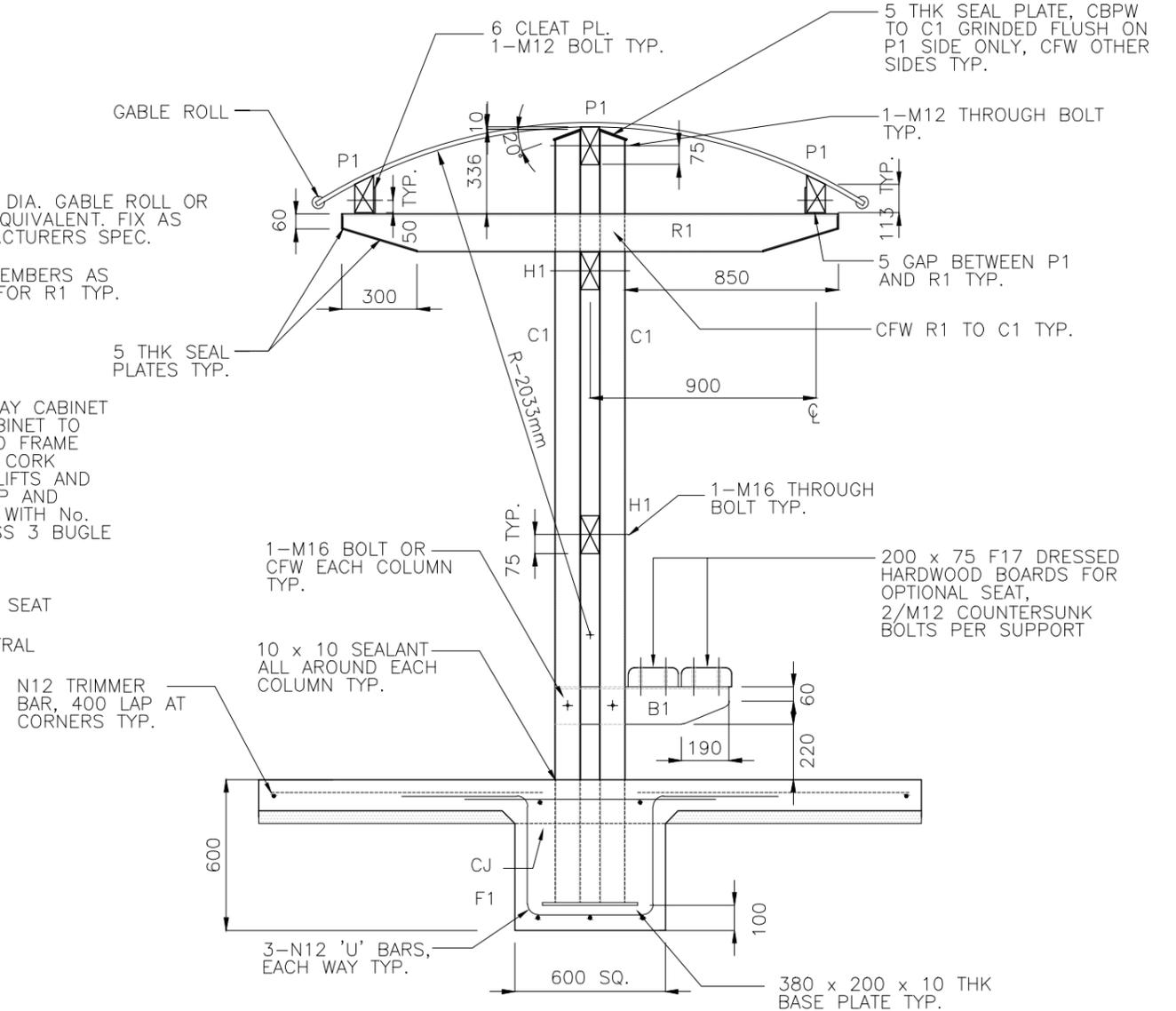
STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
D. Bateup RPEQ 13095 2014.11.26 16:17:40+10'00'	Zhuangzhi Hu RPEQ 13885 2014.11.26 16:30:37+10'00'	Bala Balakumar RPEQ 3963 2014.11.27 08:40:27+10'00'
BRISBANE CITY COUNCIL STANDARD DRAWING		
SIGN SHELTER NATURAL AREA - PLAN SHEET 2 OF 3		SCALE 1:25 DWG No. BSD-10146 ORIGINAL SIZE A3 REVISION B

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	DRAWING AUTHORIZED FOR PUBLICATION	DESIGN	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16	Ingo Condric 2015.06.04 15:29:38+10'00'	CP0 - P&D	NOV '14	CP0 - P&D	NOV '14	BI - FSG - AS	NOV '14	BSD-10146 (B) Sign shelter - Natural area - Plan - Sheet 2 of 3.dwg	BSD-10146-Sheets 1 & 3
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14	for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED C.Wood SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE								





ELEVATION - VIEW A
SCALE 1:25



SECTION B
SCALE 1:25



OPTIONAL SEAT - SECTION C-C
SCALE 1:25

NOTES

- REFER TO:
 - BSD-10146-SIGN SHELTER-NATURAL AREA-SHEET 1 OF 3-GENERAL NOTES
 - BSD-10146-SIGN SHELTER-NATURAL AREA-SHEET 2 OF 3-PLAN

STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
D. Bateup RPEQ 13095 2014.11.26 16:18:09+10'00'	Zhuangzhi Hu RPEQ 13885 2014.11.26 16:31:07+10'00'	Bala Balakumar RPEQ 3963 2014.11.27 08:41:00+10'00'

BRISBANE CITY COUNCIL STANDARD DRAWING

SIGN SHELTER - NATURAL AREA ELEVATION AND SECTION SHEET 3 OF 3		SCALE 1:25
DWG No. BSD-10146		ORIGINAL SIZE A3
		REVISION B

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION
 Inga Condric
 2015.06.04 15:30:19+10'00'
 for ASSET ENGINEERING MANAGER
 STRATEGIC ASSET MANAGEMENT
 DESIGN APPROVED
 C. Wood
 SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
 ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CP0 - P&D	DATE	NOV '14
DRAWN	CP0 - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10146 (B) Sign shelter - Natural area - Section and elevation - Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10146-Sheets 1 & 2		



GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
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 ULTIMATE WIND SPEED = 54.0 m/s
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TERRAIN CATEGORY 1.5 CORRESPONDS TO AN ENVIRONMENT WITH OPEN WATER SURFACES, SUBJECTED TO SHOALING WAVES AT SERVICEABILITY AND ULTIMATE WIND SPEEDS IN ALL WIND REGIONS.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
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CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O. ELEMENT:
- | | | |
|-------------------------------|----|-------------------|
| F'C (MPa) REINFORCEMENT COVER | | |
| PIERS | 32 | 75 |
| SLAB | 32 | CENTRALLY PLACED. |
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- | | |
|---------------------|-----|
| BAR LAP LENGTH (mm) | |
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS: R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
 N DEFORMED BAR GRADE D500N TO AS 4671.
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
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TIMBER NOTES:

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- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH:
 AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS UNO
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O.
 ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O.
 ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S8. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S9. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S10. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S11. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND THE CONTRACT DOCUMENT. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ).

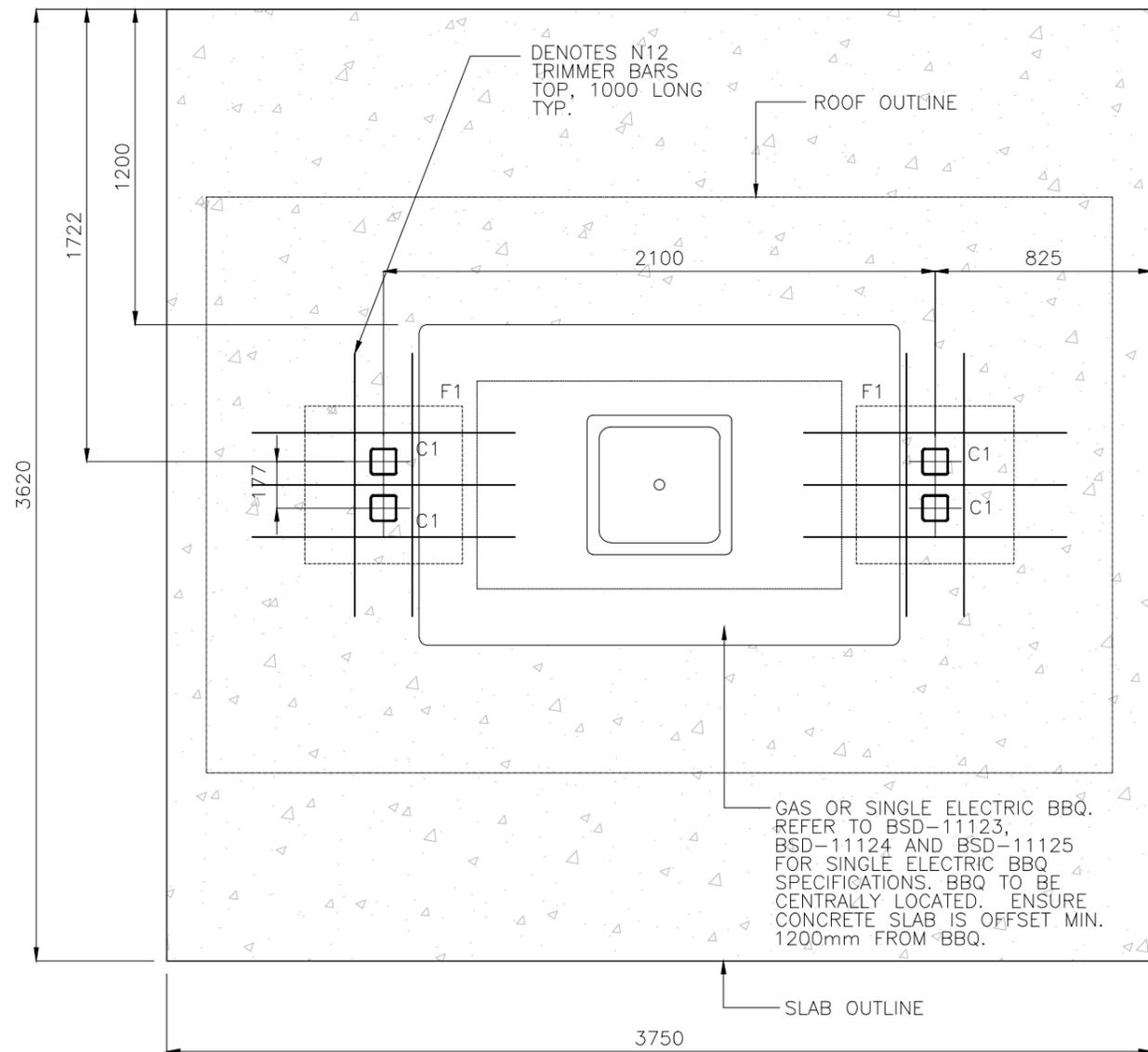
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B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

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for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
C.Wood			
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			

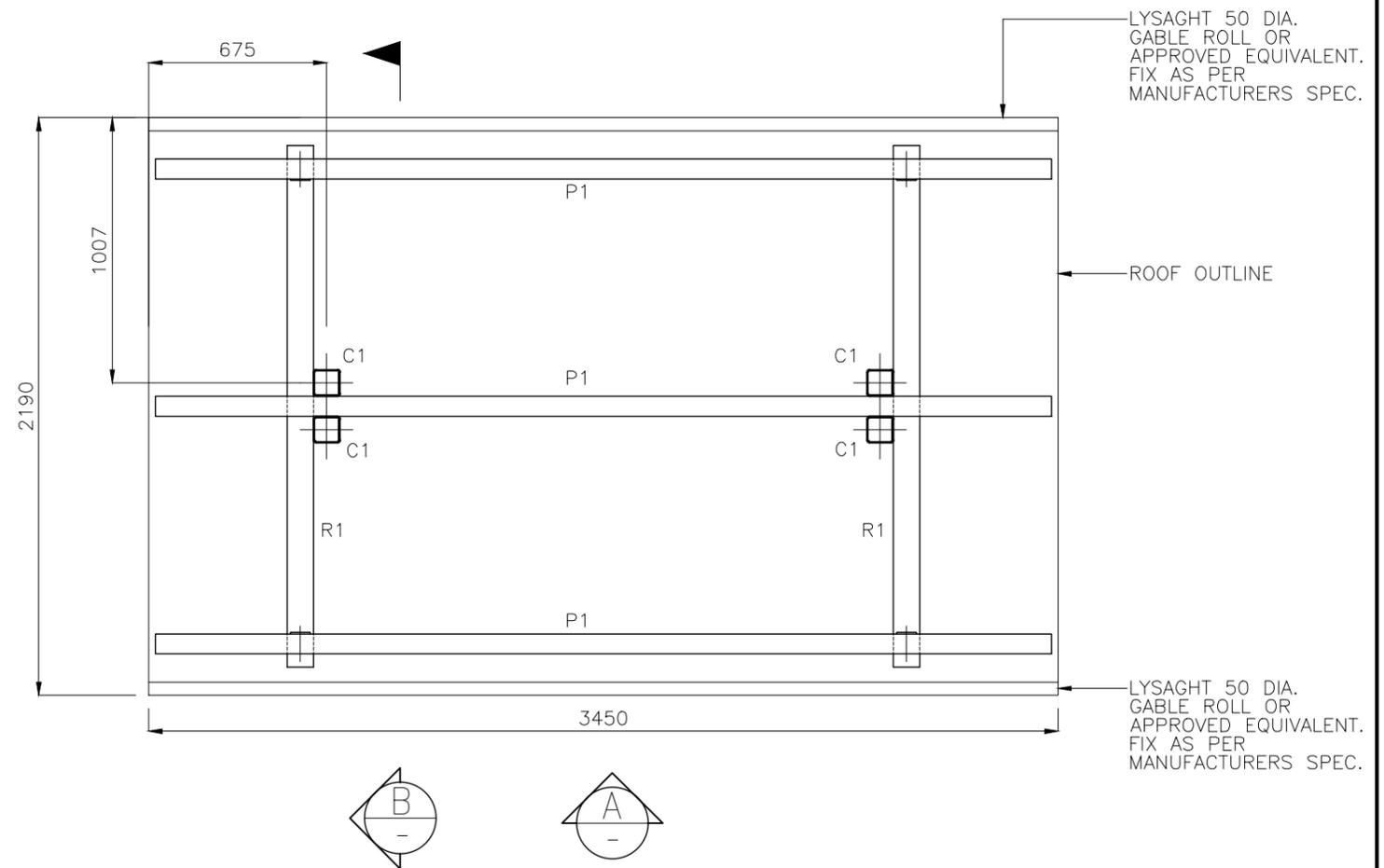
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CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10147 (B) Barbeque shelter - Natural area - General notes - Sheet 1 of 3.dwg		
ASSOCIATED PLANS	BSD-10147-Sheets 2 & 3		



STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
D. Bateup RPEQ 13095 2014.11.26 16:20:09+10'00'	Zhuangzhi Hu RPEQ 13885 2014.11.26 16:31:30+10'00'	Bala Balakumar RPEQ 3963 2014.11.27 08:41:29+10'00'
BRISBANE CITY COUNCIL STANDARD DRAWING		
BARBEQUE SHELTER NATURAL AREA – GENERAL NOTES SHEET 1 OF 3		SCALE N.T.S DWG No. BSD-10147 ORIGINAL SIZE A3 REVISION B



SLAB AND FOOTING
PLAN
SCALE 1:50



ROOF FRAMING PLAN
SCALE 1:50

MEMBER SCHEDULE	
MARK	MEMBER
C1	100 x 4 SHS COLUMN
H1	150 x 75 F17 HWD HEADER
P1	150 x 75 F17 HWD PURLIN
R1	152 x 76 x 5 RHS RAFTER

NOTES

- REFER TO:
- BSD-10147-BARBEQUE SHELTER-NATURAL AREA-SHEET 1 OF 3-GENERAL NOTES
 - BSD-10147-BARBEQUE SHELTER-NATURAL AREA-SHEET 3 OF 3-ELEVATION AND SECTION

STRUCTURAL DESIGN CERTIFICATION		
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BRISBANE CITY COUNCIL STANDARD DRAWING		
BARBEQUE SHELTER - NATURAL AREA - PLAN SHEET 2 OF 3		SCALE AS SHOWN DWG No. BSD-10147 ORIGINAL SIZE A3 REVISION B

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

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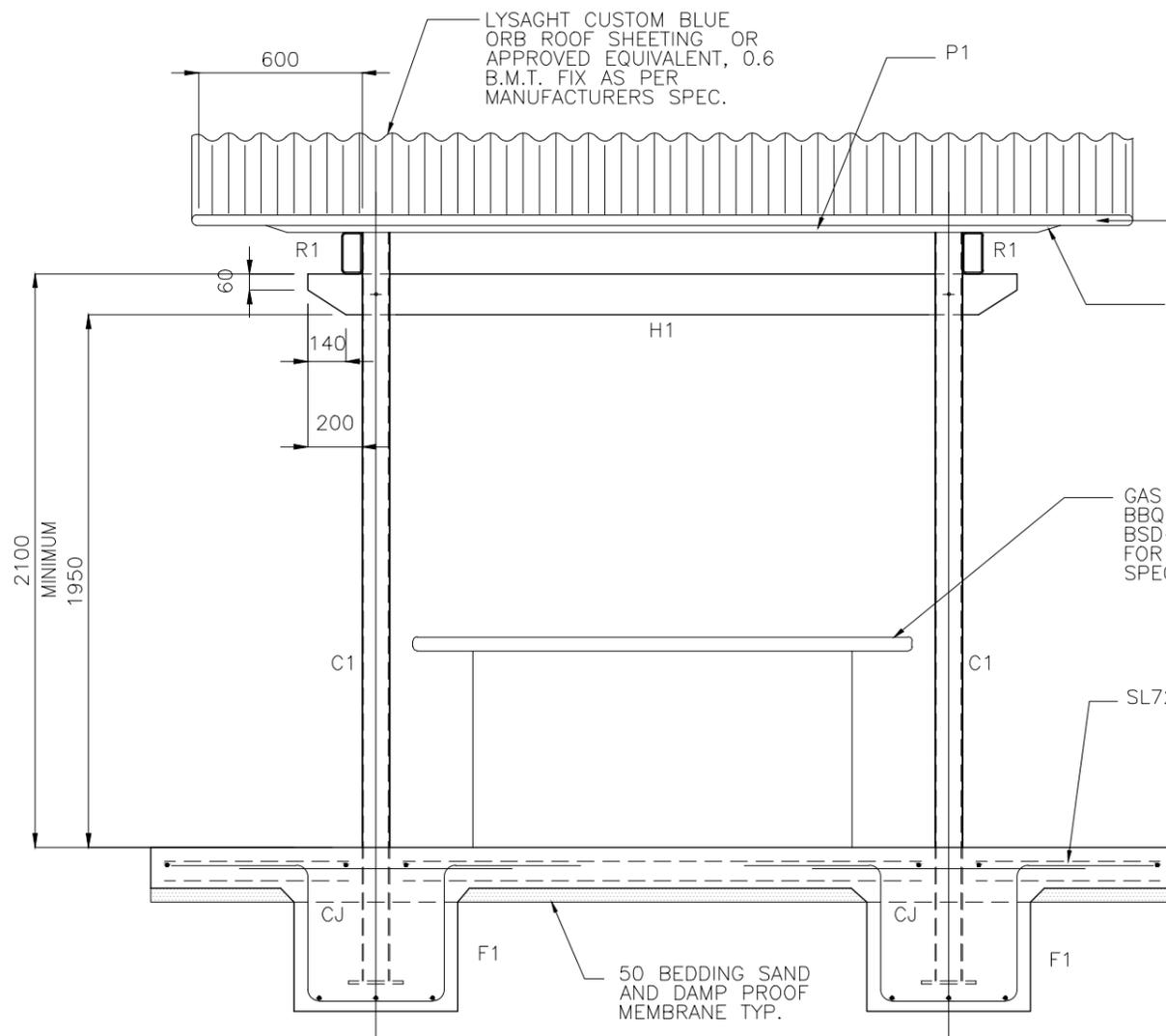
prof ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT

DESIGN APPROVED

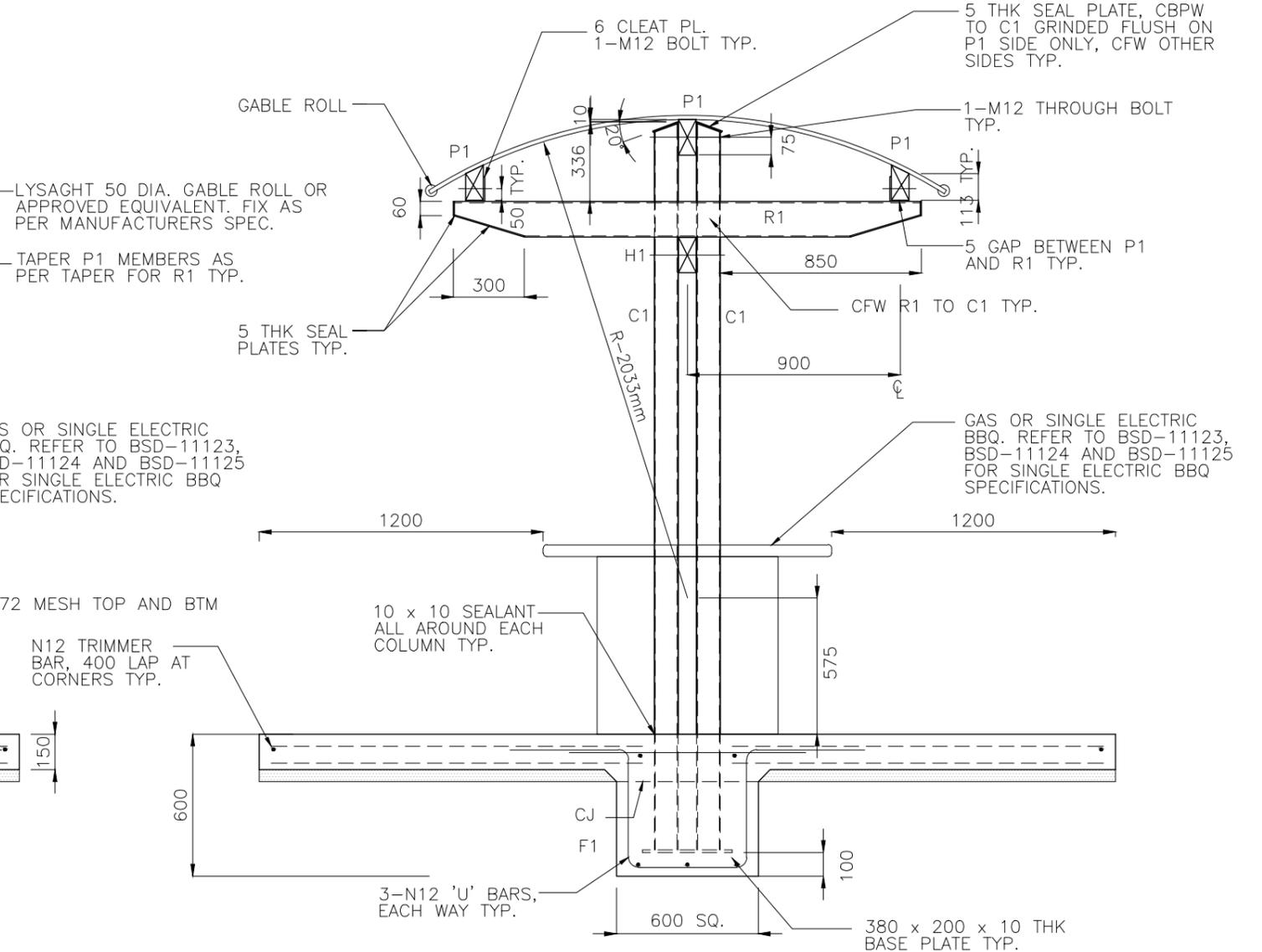
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CP0 - P&D	DATE	NOV '14
DRAWN	CP0 - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10147 (B) Barbeque shelter - Natural area - Plan - Sheet 2 of 3.dwg		
ASSOCIATED PLANS	BSD-10147-Sheets 1 & 3		





ELEVATION A
SCALE 1:25



SECTION B
SCALE 1:25

NOTES

- REFER TO:
- BSD-10147-BARBEQUE SHELTER-NATURAL AREA-SHEET 1 OF 3-GENERAL NOTES
 - BSD-10147-BARBEQUE SHELTER-NATURAL AREA-SHEET 2 OF 3-PLAN

STRUCTURAL DESIGN CERTIFICATION		
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BRISBANE CITY COUNCIL STANDARD DRAWING		
BARBEQUE SHELTER - NATURAL AREA - ELEVATION AND SECTION		SCALE AS SHOWN
SHEET 3 OF 3		DWG No. BSD-10147
ORIGINAL SIZE	REVISION	
A3	B	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	NOV '14	NOV '14	NOV '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CP0 - P&D	DATE	NOV '14
DRAWN	CP0 - P&D	DATE	NOV '14
CHECKED	BI - FSG - AS	DATE	NOV '14
DRAWING FILENAME	BSD-10147 (B) Barbeque shelter - Natural area - Elevation and section - Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10147-Sheets 1 & 2		



GENERAL NOTES & SPECIFICATION

- G1. ENSURE BASKETBALL COURTS ARE LOCATED AND LANDSCAPED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN, AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- G2. AUSTRALIAN STANDARDS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE REFERENCED AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY SPECIFICATIONS AND/OR DRAWINGS.
- G3. MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, ENVIRONMENTALLY FRIENDLY COMPOSITE MATERIALS, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS AND PRACTICALITY, WHERE POSSIBLE, MATERIALS ARE TO BE LOCALLY MADE OR SOURCED RATHER THAN IMPORTED FROM OVERSEAS UNLESS SPECIFIED OTHERWISE.
- G4. COURT TO BE SET OUT TO ENSURE WATER DOES NOT POND ON SURFACE.
- G5. THIS IS A SCALED VERSION OF A FULL COURT. FULL COURT DIMENSIONS (PLAYING SURFACE ONLY) ARE 28 mx15 m.
- G6. A MINIMUM 2m SAFETY CLEARANCE, FREE FROM OBSTACLES INCLUDING TREES, POLES, ETC. REQUIRED ALONG BOTH SIDES OF THE COURT.
- G7. COURT LINE MARKING TO BE 50 mm WIDTH, WHITE COMPLETED IN SUITABLE SLIP RESISTANT MATERIAL. MATERIAL FOR LINE MARKING SHALL BE APPLIED AT A MAXIMUM THICKNESS OF 500µm.
- G8. ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISH FLUSH WITH PLAYING SURFACE.
- G9. ENSURE PARK ELEMENTS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- G10. REFER BSD-10212 FOR TOPSOIL AND TURFING NOTES.
- G11. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

CONCRETE WORKS

- C1. ALL WORKMANSHIP & MATERIALS SHALL COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS IN PARTICULAR AS 3600, AND ANY REQUIREMENTS OF THE LANDSCAPE ARCHITECT.
- C2. SLAB TO BE 125mm THICK N25 GRADE CONCRETE. CONCRETE SHALL BE NORMAL CLASS CONCRETE UNLESS DIRECTED OTHERWISE. N25 SHALL MEAN NORMAL CLASS CONCRETE WITH A 28 DAY CHARACTERISTIC STRENGTH OF 25MPA. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE SITE SUPERINTENDENT FOR APPROVAL FIVE (5) DAYS PRIOR TO ORDERING.
- C3. ALL CEMENT TO BE TYPE GP OR GB TO AS 3972 UNLESS SPECIFIED OTHERWISE.
- C4. SUPPLY AND LAY SL82 MESH SUPPORTED BY 60mm BAR CHAIRS. MESH TO OVERLAP 200mm.
- C5. HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C6. ENSURE EVEN GRADE FALLS MIN. 1:50 TO PAVEMENT FINISHED SURFACE.
- C7. POLE FOOTING MINIMUM 400 x 400 x 800 mm BELOW SLAB. REFER MANUFACTURERS SPECIFICATION.
- C8. OPTIONAL COURT PAVEMENT FINISH (WHERE SPECIFIED) TO BE SYNTHETIC PAVEMENT SURFACE APPLIED AS PER MANUFACTURERS SPECIFICATION. COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC PAINT COLOURS.
- C9. PROVIDE SAWN JOINTS (SJ) AT 5.5M CENTRES (MAX.) IN EACH DIRECTION AS PER BSD-5206.

EQUIPMENT & FIXTURES NOTES

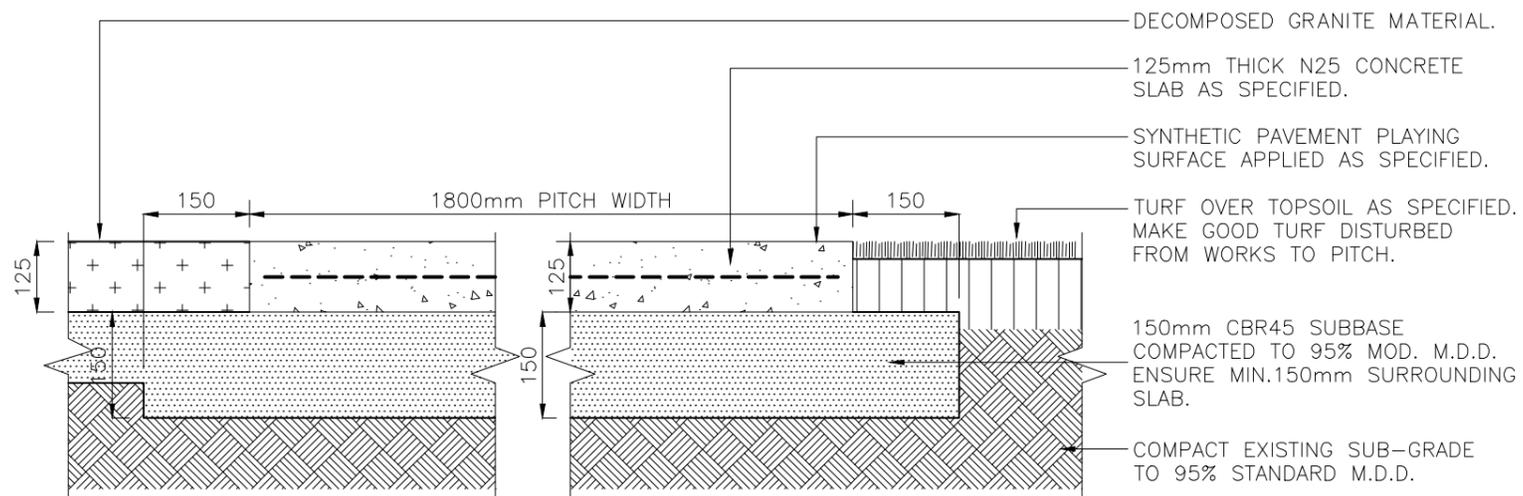
- E1. SUPPLY AND INSTALL HOOP, BACKBOARD AND POST IN ACCORDANCE WITH QLD. BASKETBALL INCORPORATED REQUIREMENTS AND ISSUE STRUCTURAL ENGINEER'S CERTIFICATION UPON COMPLETION.
- E2. ALL PROPRIETARY FIXINGS SHALL BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
- E3. FOR BASKETBALL HOOP, POST AND POST SLEEVE. SUPPLIER TO BE APPROVED BY COUNCIL REPRESENTATIVE PRIOR TO INSTALLATION. REFER UMS 711 FOR CONTACT DETAILS.
- E4. SLEEVE TO BE INSTALLED TO SUIT POST SIZE FOR EASY REMOVAL AND INSPECTION.
- E5. THE BASKETBALL HOOP WILL BE FREE OF NET HOOKS TO REDUCE THE POSSIBILITY OF ENTRAPMENT OF FINGERS OR JEWELLERY. ATTACHMENTS FOR OTHER SPORTS ARE NOT TO BE ADDED TO THE REAR OF THE BASKETBALL POSTS.
- E6. THE BACKING BOARD IS TO BE FIBREGLASS AND IS TO HAVE ROUNDED CORNERS AND BE FREE OF SHARP EDGES.
- E7. BOLT ENDS OF THE BACKBOARD MOUNTING PLATE ARE TO BE CUT OFF FLUSH TO REDUCE THE POSSIBILITY OF LACERATION INJURIES. TAMPER PROOF BOLTS AND NUTS ARE TO BE USED FOR ATTACHING ALL FIXTURES AND FITTINGS.
- E8. SECURE THE POST TO THE SLEEVE USING STAINLESS STEEL TAMPER PROOF BOLTS AND NUTS, ENSURING THE POST IS AT THE CORRECT ALIGNMENT TO THE COURT. CUT OFF EXCESS BOLT THREADS.
- E9. POWDER COAT POST, STAYS AND HOOP, OR OTHER FINISH AS SPECIFIED. UNLESS OTHERWISE SPECIFIED, HOOP, POSTS AND STAYS TO BE POWDER COATED. REFER BSD-10003 FOR SPECIFIC COLOUR.

SITE NOTES

- S1. DURING CONSTRUCTION THE CONTRACTOR SHALL ENSURE THAT ALL STRUCTURES AND FOOTINGS ARE MAINTAINED IN A SAFE AND STABLE CONDITION. WORKPLACE HEALTH AND SAFETY REGULATION MUST BE ADHERED TO ON ALL SITES, AT ALL TIMES.
- S2. SITE TO BE LEFT TIDY & ALL EXCESS FILL/MATERIAL IS TO BE REMOVED BY THE CONTRACTOR OR AS DIRECTED BY SUPERINTENDENT.
- S3. CONTRACTOR MUST NOTIFY COUNCIL OFFICER IN CHARGE 48 HOURS PRIOR TO COMMENCEMENT OF WORK ON SITE, TO INSPECT THE CONCRETE POUR AND FINAL INSPECTION.
- S4. WHERE APPLICABLE - INCORPORATE SITE FURNITURE TO PERIMETER OF COURT. MAINTAIN A MINIMUM OF 2m TURF CLEAR ZONE TO PERIMETER OF COURT. NO TREES OR FURNITURE TO BE INSTALLED IN THIS CLEAR ZONE. ENSURE PARK ELEMENTS ARE LOCATED IN ACCORDANCE WITH LANDSCAPE PLAN & SUBDIVISION AND DEVELOPMENT GUIDELINES.

REFER TO BSD-10211 - SHEET 2 OF 2 FOR BASKET BALL COURT DETAILS

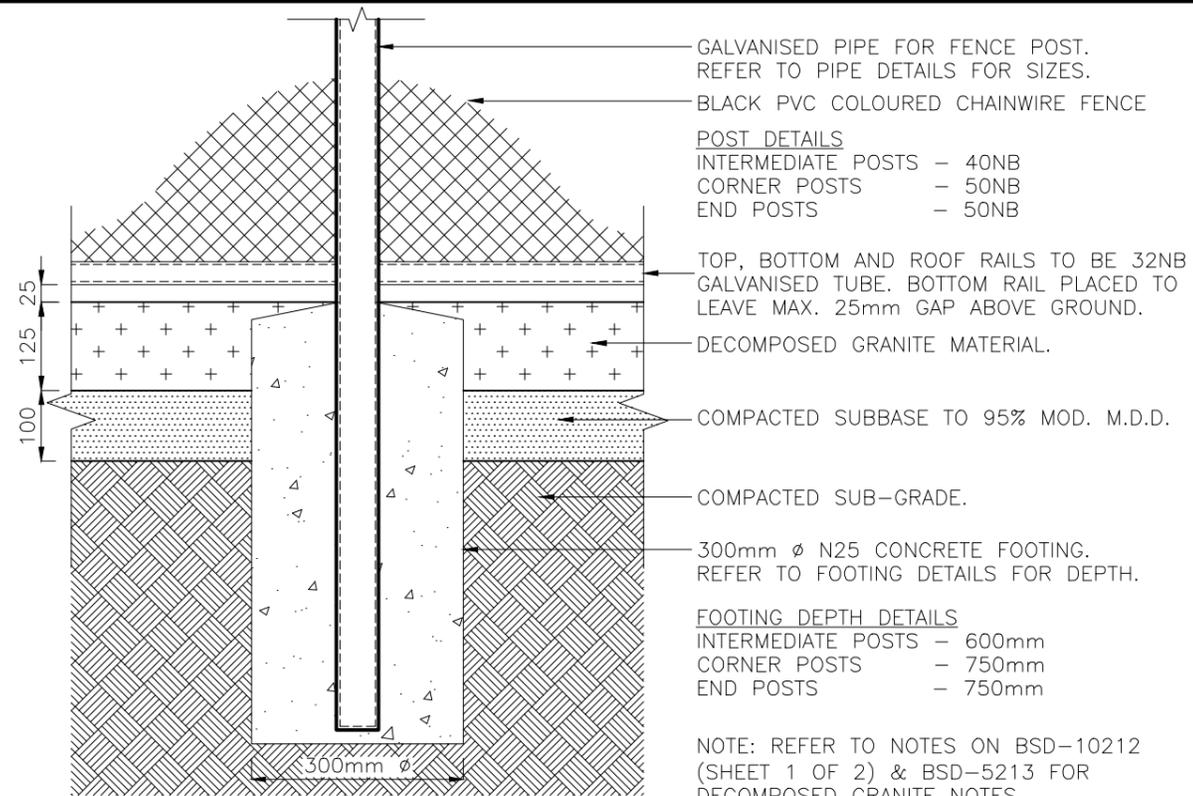
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				DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04 CLIENT POSITION PRICIPAL PROGRAM OFFICER PARKS				DRAWN	CPO - P&D	DATE	OCT '13				SCALE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16					CHECKED		DATE		OCT '13	BASKETBALL HALFCOURT GENERAL NOTES	
A	ORIGINAL ISSUE	OCT '13	OCT '13	OCT '13					DRAWING FILENAME	BSD-10211 (B) Basketball halfcourt - General notes - Sheet 1 of 2.dwg			BSD-10211		
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE					ASSOCIATED PLANS	SUPERSEDES NOTES ON UMS-783 & 784		ORIGINAL SIZE	REVISION	A3	B



DECO EDGE OPTION TURF EDGE OPTION

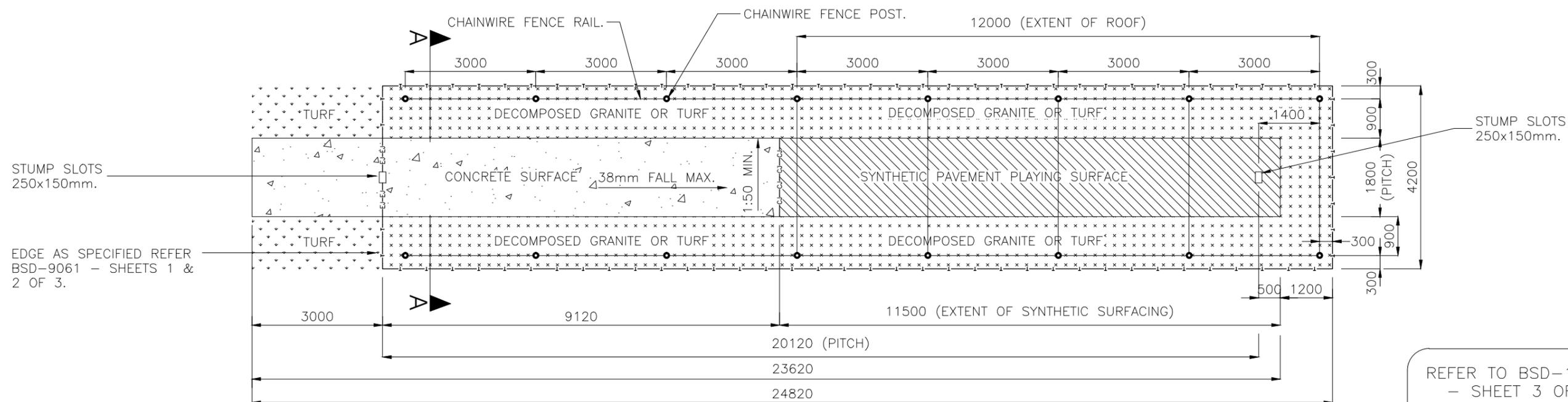
CONCRETE SLAB – SECTION A-A

SCALE 1:10



POST FOOTING

SCALE 1:10



CONCRETE SLAB – PLAN

SCALE 1:100

REFER TO BSD-10212
- SHEET 3 OF 3
FOR CRICKET NET NOTES
& SPECIFICATIONS

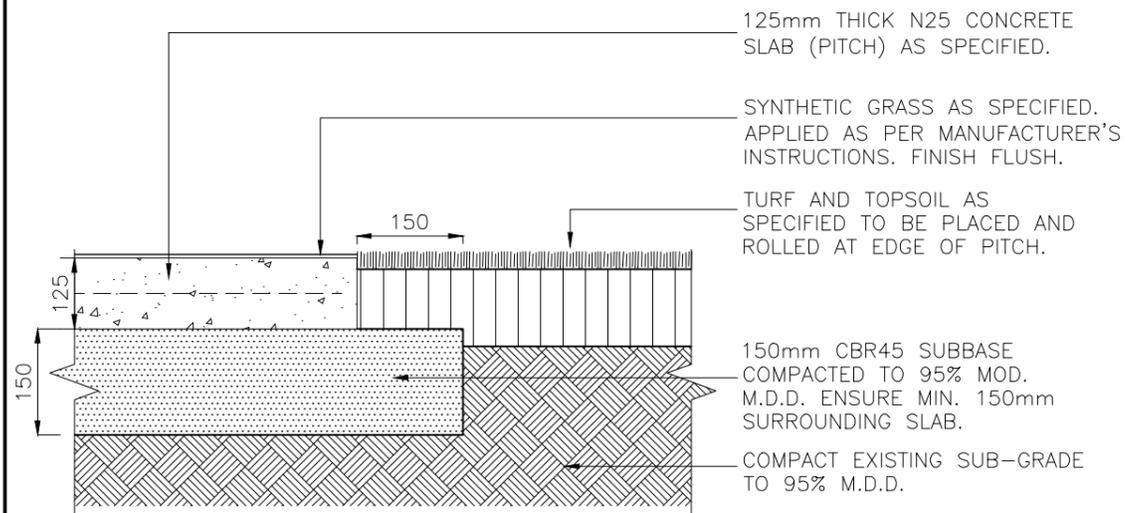
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B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14

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PRICIPAL PROGRAM OFFICER PARKS				CHECKED	UMD - E&P & IMB	DATE	OCT '13
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				ASSOCIATED PLANS	SUPERSEDES UMS-785		

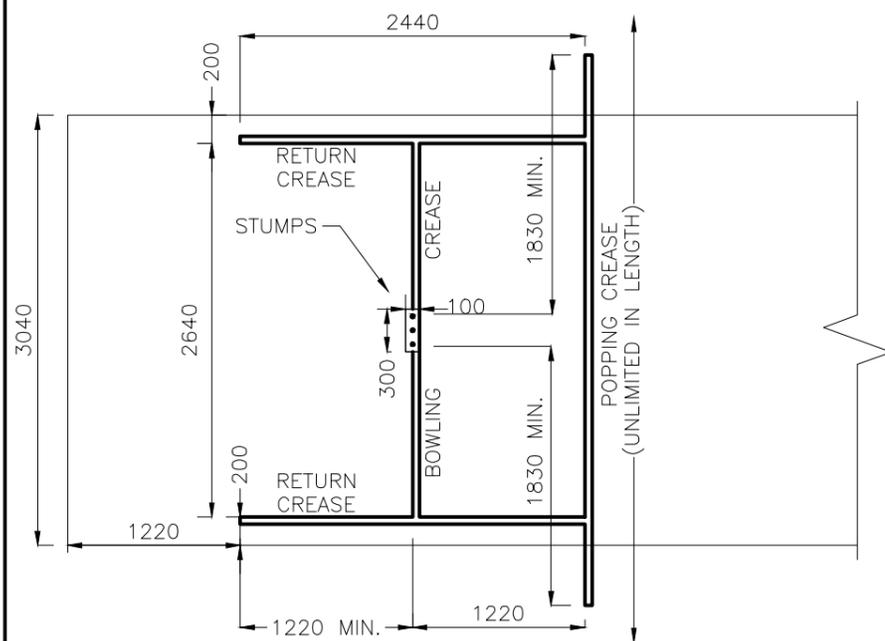


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SCALE AS SHOWN	
DWG No. BSD-10212	
ORIGINAL SIZE A3	REVISION B

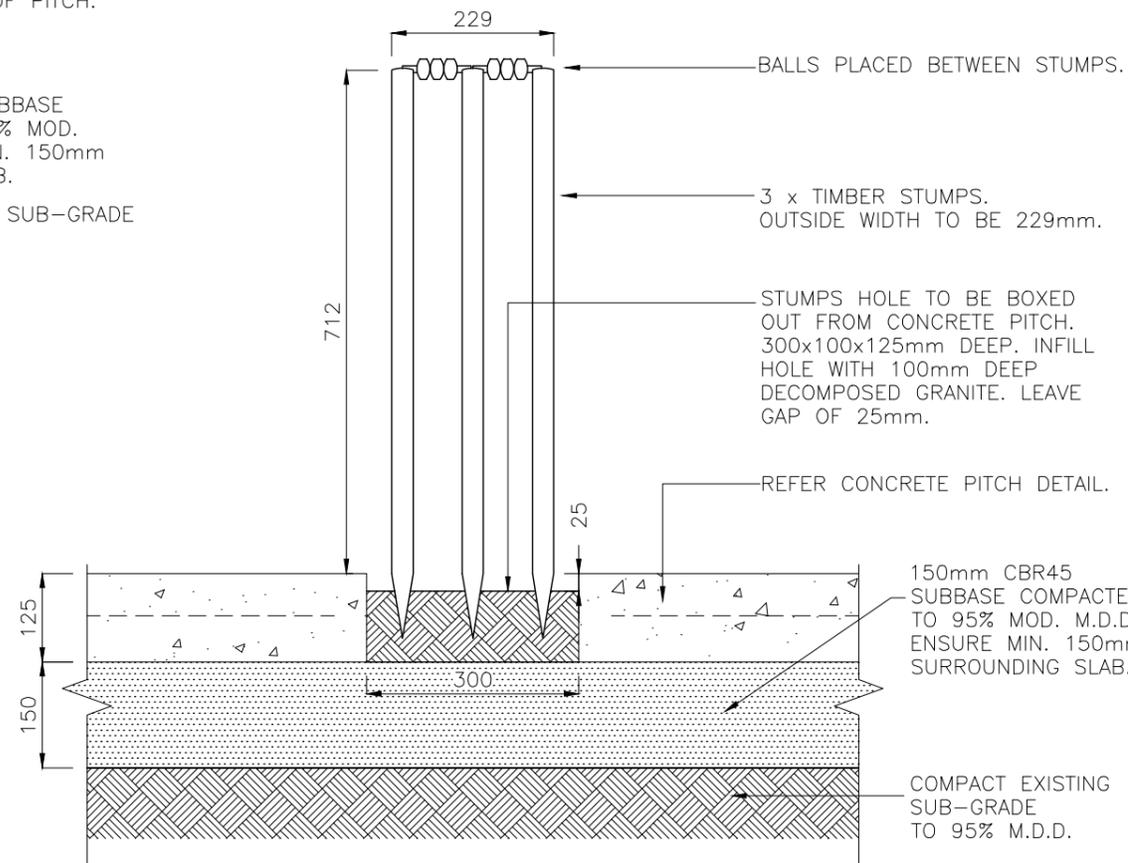
**CRICKET PRACTICE NET
PLANS AND SECTIONS
SHEET 1 OF 3**



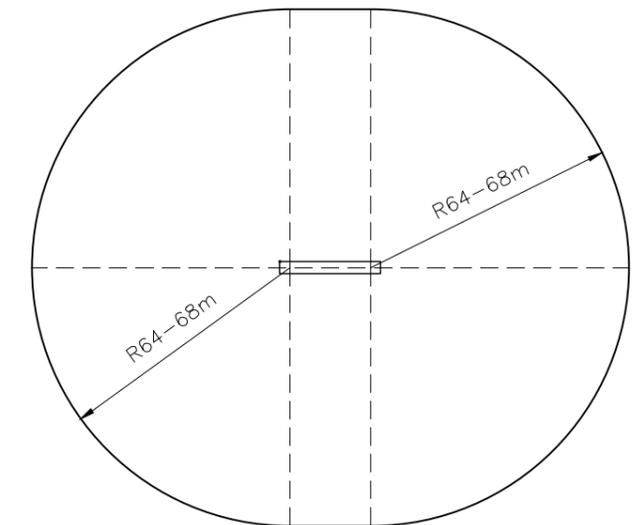
CRICKET SLAB (PITCH) – SECTION
SCALE 1:10



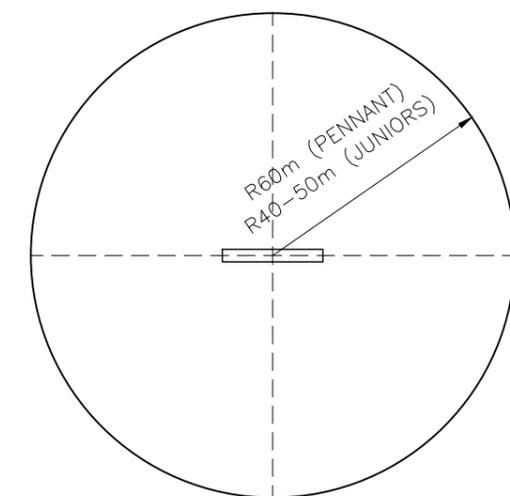
BOWLING CREASE – PLAN
SCALE 1:50



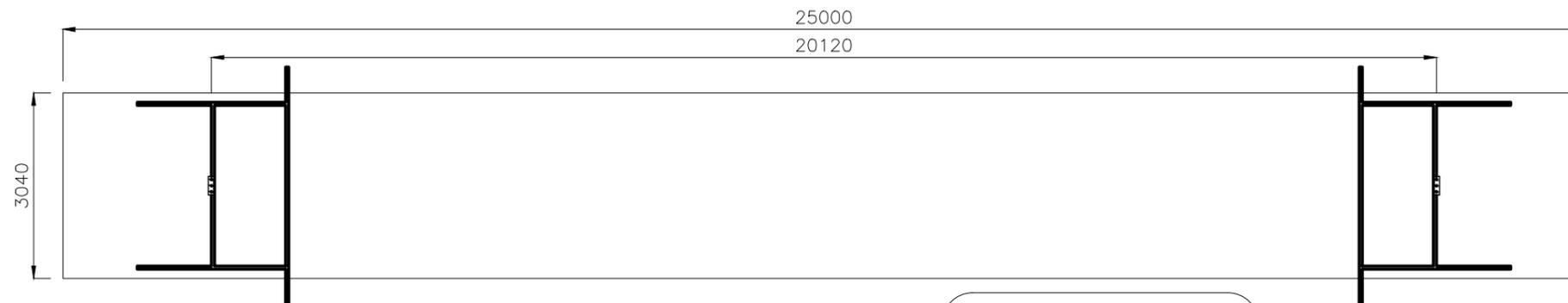
STUMPS – DETAIL
SCALE 1:10



INTERNATIONAL SIZE FIELD (PREFERRED)



PENNANT AND JUNIOR GROUNDS
FIELD LAYOUT – PLANS
SCALE 1:200



PITCH – PLAN
SCALE 1:100

REFER TO BSD-10212
– SHEET 3 OF 3
FOR CRICKET PITCH
SPECIFICATIONS

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14

DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04 MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q: 2546				DESIGN	Std Dwg's WG	DATE	OCT '13
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PRICIPAL PROGRAM OFFICER PARKS				CHECKED	UMD - E&P & IMB	DATE	OCT '13
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				ASSOCIATED PLANS	SUPERSEDES UMS-786		



BRISBANE CITY COUNCIL STANDARD DRAWING	
SCALE AS SHOWN	
CRICKET PITCH PLANS AND SECTIONS SHEET 2 OF 3	
ORIGINAL SIZE A3	REVISION B

GENERAL NOTES AND SPECIFICATION

- ALL PROPRIETARY FIXINGS SHALL BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
- DURING CONSTRUCTION THE CONTRACTOR SHALL ENSURE THAT ALL STRUCTURES AND FOOTINGS ARE MAINTAINED IN A SAFE AND STABLE CONDITION. WORKPLACE HEALTH AND SAFETY REGULATION MUST BE ADHERED TO ON ALL SITES.
- SITE TO BE LEFT TIDY & ALL EXCESS FILL/MATERIAL IS TO BE REMOVED BY THE CONTRACTOR OR AS DIRECTED BY SUPERINTENDENT.
- CONTRACTOR MUST NOTIFY COUNCIL OFFICER IN CHARGE 48 HOURS PRIOR TO COMMENCEMENT OF WORK ON SITE, TO INSPECT THE CONCRETE POUR AND FINAL INSPECTION.
- WHERE APPLICABLE - INCORPORATE SITE FURNITURE TO PERIMETER OF FIELD. ENSURE PARK ELEMENTS ARE LOCATED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN, AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS AND PRACTICALITY. MATERIALS ARE TO BE LOCALLY SOURCED.
- AUSTRALIAN STANDARDS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE REFERENCED AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY SPECIFICATIONS AND/OR DRAWINGS. ENSURE FENCE & POSTS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC CORPORATE COLOUR PALETTE (& AS 2700 EQUIVALENT).
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

PITCH SPECIFICATION

- BOWLERS' RUN-UP TO HAVE A MAXIMUM LONGITUDINAL GRADE OF 1:25 FOR A MINIMUM LENGTH OF 5m BEFORE THE PITCH. BOWLERS' RUN UP REQUIRES COMPACTION OF SUB-GRADE TO 100% STANDARD M.D.D.
- ENSURE TURF FINISHES FLUSH WITH CONCRETE PITCH ONCE MOWN AND ROLLED BY TURF ROLLER.
- FOR SURFACE ON PITCH, REFER TO BSD-10212 (SHEETS 1 & 2) FOR DETAILS.
- THE PITCH IS 20.12m LONG BETWEEN CENTRE LINE OF STUMPS, AND 1.520m WIDE EACH SIDE OF THE CENTRE STUMP. FOR JUNIORS PITCH LENGTH MAY BE 19.20m OR 18.30m LONG.
- INTERNATIONAL FIELD: 64m TO 68.m RADIUS (REQUIRING AN AREA OF 1.5ha APPROXIMATELY.) PENNANT FIELD: 60m RADIUS FROM CENTRE OF PITCH.
- JUNIOR FIELD: 40m TO 50m RADIUS.
- FIELD TO FALL AWAY FROM PITCH IN ALL DIRECTIONS AT GRADE OF 1V:100H TO PREVENT SOFT SPOTS NEAR PITCH.

NETS SPECIFICATION

- INDIVIDUAL PITCHES TO BE POURED FIRST. INSTALL BLACK POWDER COATED FENCE POSTS AFTER INSTALLATION OF PITCH.
- FENCE TO BE 3000mm HIGH BLACK PVC COATED MESH WITH BLACK POWDER COATED TOP AND BOTTOM RAILS.
- ROOF TO BE BLACK PVC COATED MESH EXTENDING 12m FROM BACK FENCE, ALONG WITH UPRIGHT POSTS AND CROSS SUPPORTS AT 3000mm CENTRES.
- BOTTOM RAIL TO LEAVE A GAP NO MORE THAN 25mm ABOVE FINISHED CONCRETE SURFACE.

TOPSOIL & TURFING NOTES

- PREPARATION - REMOVE ANY EXISTING TURF, WEEDS, RUBBISH STONES OR DEBRIS FROM AREA TO BE TURFED. CULTIVATE EXISTING SUB-GRADE TO 100mm DEPTH.
- TOPSOIL - ALL TOPSOIL SHALL COMPLY WITH AS 4419 'SOILS FOR LANDSCAPING AND GARDEN USE'. TOPSOIL SHALL BE AN ORGANIC SOIL WITH MAX. 30% SCREENED COMPOSTED ORGANIC MATTER, HYDRAULIC CONDUCTIVITY 15-30 cm/hr. pH RANGE TO BE 5-6.5. AFTER APPROVAL OF THE PROPOSED TOPSOIL, DEPOSIT AND SPREAD TOPSOIL TO ACHIEVE 100mm THICKNESS TO ALL DISTURBED AREAS FOR TURFING AFTER SLAB CONSTRUCTION.
- TURFING - 100% CYNODON DACTYLON CV. 'GREENSLEES PARK' UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. TURF SHALL BE 'A' GRADE, TYPICAL OF THE SPECIES, FREE FROM ALL PESTS, DISEASES, WEEDS AND OTHER PLANT MATTER. TURF SHALL BE GUARANTEED FREE FROM NUT GRASS, CYPERUS ROTUNDUS. TURF SHALL BE CUT TO A MINIMUM 25mm THICK IN LONG 300mm WIDE STRIPS.
- LAYING - LAY PIECES OF TURF IN STRAIGHT LINES RUNNING PERPENDICULAR TO THE SLOPE, WITH CROSS-JOINTS STAGGERED, AND CLOSE BUTTING. LAY TURF WITH AN EVEN GRADIENT, FREE FROM LUMPS AND DEPRESSIONS AND NOT ABLE TO POND WATER. ENSURE THAT NEW TURF FINISHES FLUSH WITH EXISTING TURF. TAMP DOWN WELL AND FILL ALL JOINTS WITH TOP DRESSING. TOP DRESSING IS TO BE PIT SAND TO COMPLY WITH AS 4419. SPREAD SAND EVENLY OVER SURFACE OF GRASS IN LAYERS OF NOT MORE THAN 10mm. DO NOT BURY GRASS.
- TOP DRESSING - WHEN TURFED AREAS HAVE BECOME ESTABLISHED AND IMMEDIATELY AFTER THE FIRST CUT, TOP DRESS TURF WITH 10mm LAYER OF PIT SAND. DO NOT TOP DRESS DURING WINTER MONTHS UNLESS DIRECTED BY SUPERINTENDENT.
- PROTECTION - ALL TURF SHALL BE TEMPORARILY PROTECTED FROM TRAMPLING BY THE ERECTION OF BARRIERS DURING THE PLANT ESTABLISHMENT PERIOD.

CONCRETE WORKS

- ALL WORKMANSHIP & MATERIALS SHALL COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS IN PARTICULAR AS 3600, AND ANY REQUIREMENTS OF THE LANDSCAPE ARCHITECT.
- PITCH SLAB TO BE 125mm THICK N25 GRADE CONCRETE. CONCRETE SHALL BE NORMAL CLASS CONCRETE UNLESS DIRECTED OTHERWISE. N25 SHALL MEAN NORMAL CLASS CONCRETE WITH A 28 DAY CHARACTERISTIC STRENGTH OF 25MPa. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE SITE SUPERINTENDENT FOR APPROVAL FIVE (5) DAYS PRIOR TO ORDERING.
- SL82 MESH SUPPORTED BY 60mm BAR CHAIRS. MESH TO OVERLAP 200mm. ENSURE MIN. TOP COVER 50mm.
- HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS4671.
- REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN POSITION.
- ALL CONCRETE SHALL BE PLACED USING A MECHANICAL VIBRATION PROCESS.
- ALL CEMENT TO BE TYPE GP OR GB TO AS 3972 UNLESS SPECIFIED OTHERWISE.
- ENSURE EVEN GRADE FALLS MIN. 1:50 TO FINISHED PITCH SURFACE.
- CONCRETE PITCH SURFACE TO BE 'WOOD FLOAT' FINISH EXCEPT FOR 'TRANSVERSE BROOM FINISH' APPLIED TO RUN-UPS UP TO BOWLING CREASE.
- CONCRETE PITCH MUST BE FLUSH WITH ADJACENT GRASS SURFACES.
- PITCHES TO HAVE MAX. 38mm LONGITUDINAL FALL AND MIN. 1:50 CROSSFALL.
- CONTRACTION JOINTS (CJ) AS LOCATED. JOINT TO BE SAW CUT 6mm WIDE x 40mm DEEP WITHIN 4-12 HRS OF PLACEMENT. PLACE MESH CENTRALLY OVER JOINT & CUT EVERY SECOND BAR OVER JOINT.
- EXPANSION JOINTS (EJ) AS LOCATED. DOWEL TO BE 6mm 'DANLEY DIAMOND' DOWEL AND SLEEVE AT 600mm CENTRES. JOINT TO BE FULL DEPTH 10mm THICK CLOSED CELL CROSS-LINKED POLYETHYLENE FOAM (85-150KG/m³). SEAL SURFACE OF JOINT WITH 10mm DEEP POLYETHYLENE SEALANT ('SIKAFLEX 1A SILICON' OR APPROVED EQUIVALENT) FOR FLUSH FINISH.

FIXTURES/FITTING/METAL WORK

- ALL FIXTURES/FITTINGS UNLESS SPECIFIED ARE TO BE HOT DIPPED GALVANISED.
- ALL WELDS TO BE CONTINUOUS, GROUND OFF SMOOTH & FLUSH. GRIND SMOOTH EDGES & WELDS PRIOR TO H.D.G. OR APPLIED FINISHES. METAL WORK WITHIN FOOTINGS TO BE COAL TAR EPOXIED. ENSURE POST IS CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.

REFER TO BSD-10212 - SHEETS 1 & 2
OF 3 FOR CRICKET PRACTICE
NET & PITCH DETAILS

					<small>DRAWING AUTHORISED FOR PUBLICATION</small> <small>PAUL COTTON SIGNATURE ON ORIGINAL DATED</small> <small>03/09/04</small> <small>MANAGER INFRASTRUCTURE MANAGEMENT</small> <small>R.P.E.Q: 2546</small>	DESIGN	Std Dwgs WG	DATE	OCT '13		BRISBANE CITY COUNCIL STANDARD DRAWING		
					<small>DESIGN APPROVED</small> <small>LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL</small> <small>DATED 31/08/04</small>	DRAWN	CPO - P&D	DATE	OCT '13		SCALE	AS SHOWN	
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16		CHECKED	UMD - E&P & IMB	DATE	OCT '13		DWG No.	BSD-10212	
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14		DRAWING FILENAME	BSD-10212 (B) Cricket pitch and nets - Notes and specifications - Sheet 3 of 3.dwg				ORIGINAL SIZE	REVISION	
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	PRICIPAL PROGRAM OFFICER PARKS	ASSOCIATED PLANS	SUPERSEDES UMS-787			A3	B		
										CRICKET PRACTICE NET NOTES AND SPECIFICATIONS SHEET 3 OF 3			

GENERAL NOTES & SPECIFICATIONS

- ENSURE TENNIS REBOUND WALL IS LOCATED IN ACCORDANCE WITH THE PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISHES FLUSH WITH PLAYING SURFACE.
- ENSURE PARK ELEMENTS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL SPECIFICATIONS AND WITH APPROVED WRITTEN INSTRUCTIONS AS ISSUED.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
- STRUCTURAL CERTIFICATION REQUIRED BY RPEQ. STRUCTURAL ENGINEER.
- AUSTRALIAN STANDARDS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE REFERENCED AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY SPECIFICATIONS AND/OR DRAWINGS.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, ENVIRONMENTALLY FRIENDLY COMPOSITE MATERIALS, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS AND PRACTICALITY, WHERE POSSIBLE, MATERIALS ARE TO BE LOCALLY MADE OR SOURCED RATHER THAN IMPORTED FROM OVERSEAS UNLESS SPECIFIED OTHERWISE.
- COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC CORPORATE COLOUR PALETTE (& AS 2700 EQUIVALENT).
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

CONCRETE WORK NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.
- REINFORCEMENT SYMBOLS:
 - R = STRUCTURAL PLAIN ROUND GRADE 250R TO AS4671.N = DEFORMED BAR GRADE D500N TO AS 4671.
 - SL = HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- AT A MINIMUM ALL CONCRETE TO BE GRADE N32. CONCRETE SHALL BE NORMAL CLASS CONCRETE UNLESS DIRECTED OTHERWISE. N32 SHALL MEAN NORMAL CLASS CONCRETE WITH A 28 DAY CHARACTERISTIC STRENGTH OF 32MPa. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE SITE SUPERINTENDENT FOR APPROVAL FIVE (5) DAYS PRIOR TO ORDERING.
- SLUMP SHALL BE 80mm. AGGREGATE SHALL BE 20mm.
- MINIMUM CLEAR COVER TO REINFORCEMENT IS AS SHOWN ON DRAWINGS.
- ALL EXPOSED CONCRETE SURFACES SHALL BE CURED USING TWO COATS OF PVA CURING COMPOUND IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THE FIRST COAT SHALL BE APPLIED IMMEDIATELY AFTER THE CONCRETE HAS HARDENED. THE SECOND COAT SHALL BE APPLIED AS SOON AS FIRST COAT HAS DRIED.

MASONRY WORK NOTES

- ALL CONCRETE BLOCKWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS 3700, "SAA MASONRY CODE".
- BLOCKS SHALL BE STANDARD "H" TYPE HOLLOW "200" SERIES BLOCKS, HAVING A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF 15MPa, U.N.O.
- GROUT FOR FILLING BLOCKWORK SHALL HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF 20MPa AND A SLUMP OF 230mm.
- MAXIMUM AGGREGATE SIZE SHALL BE 10mm.
- MORTAR FOR BLOCKWORK SHALL BE CLASSIFICATION M3 IN ACCORDANCE WITH AS 3700 (PROPORTIONS C1:L1:S6 TO C1:L0:S5). THE USE OF METHYL CALLULOSE WATER THICKENERS IF REQUIRED, SHALL BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. RETARD MORTAR SHALL BE USED ONLY WITHIN THE PERIOD OF RETARDATION GUARANTEED BY THE MANUFACTURER.
- PROVIDE CLEAN OUT BLOCKS TO ALL GROUTED CORES. CLEAN OUT MORTAR DROPPINGS AND ALL FOREIGN MATERIAL BY END OF EACH DAY'S WORK.

FOUNDATION WORK NOTES

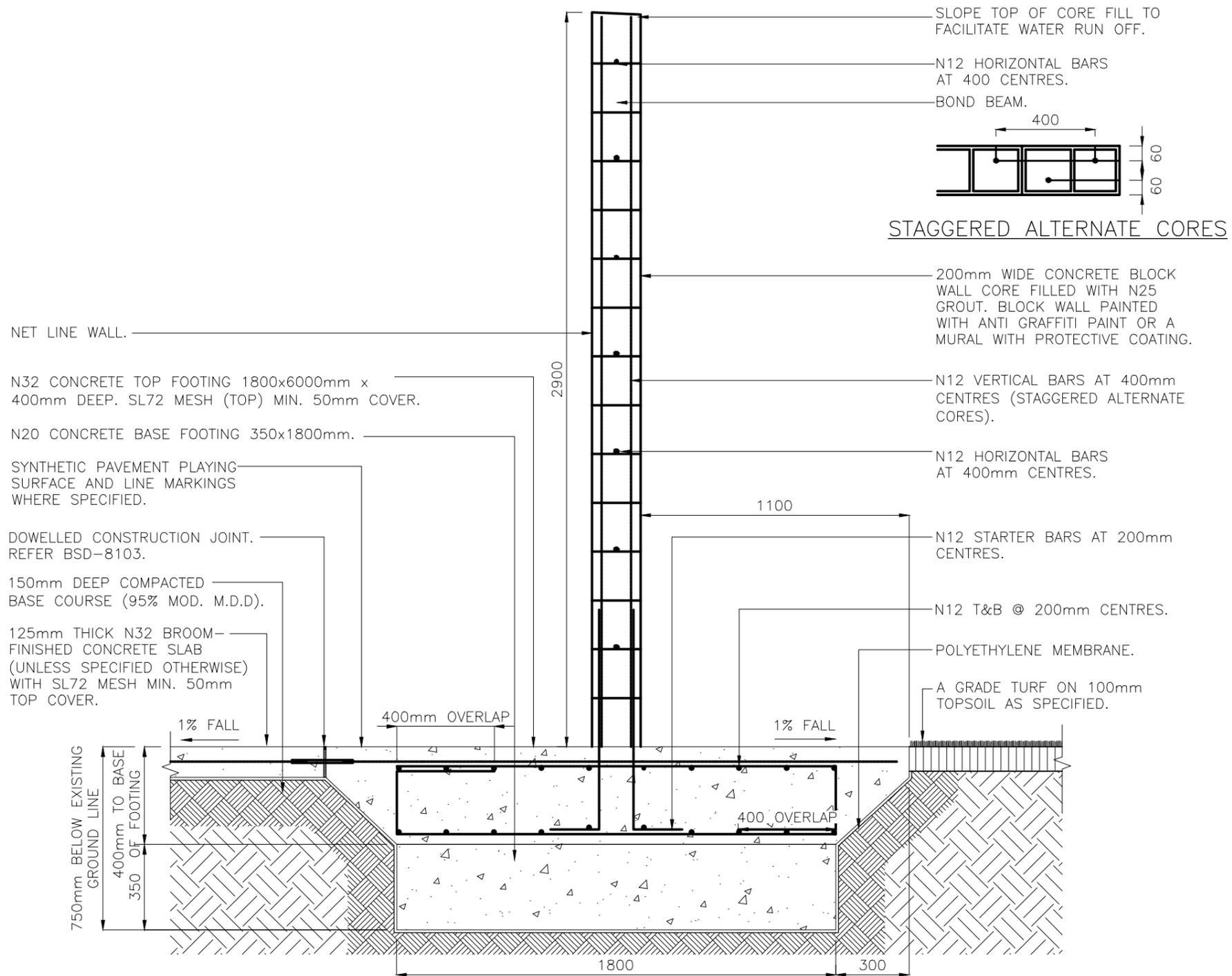
- FOOTINGS HAVE BEEN DESIGNED FOR A SAFE BEARING PRESSURE OF 50kPa FOUNDED ON UNDISTURBED RESIDUAL SOIL. FOUNDATION DESIGN MATERIAL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.

REFER TO BSD-10218 - SHEETS 2 OF 3 & SHEET 3 OF 3 FOR ASSOCIATED DETAILS AND SPECIFICATION NOTES

					DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04 MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q. 2546	DESIGN	Std Dwgs WG	DATE	OCT '13		BRISBANE CITY COUNCIL STANDARD DRAWING	
					DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04	DRAWN	CPO - P&D	DATE	OCT '13		SCALE AS SHOWN	
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16		CHECKED	UMD - E&P & IMB	DATE	OCT '13		DWG No. BSD-10218	
MB	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14		DRAWING FILENAME	BSD-10218 (B) Tennis rebound wall - General notes - Sheet 1 of 3.dwg				ORIGINAL SIZE A3	
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	PRICIPAL PROGRAM OFFICER PARKS	ASSOCIATED PLANS	SUPERSEDES NOTES ON UMS -781 & 782				REVISION B	

**TENNIS REBOUND WALL
GENERAL NOTES
SHEET 1 OF 3**

REFER TO BSD-10218 - SHEET 1 OF 3 & SHEET 3 OF 3 FOR ADDITIONAL DETAILS AND SPECIFICATION NOTES



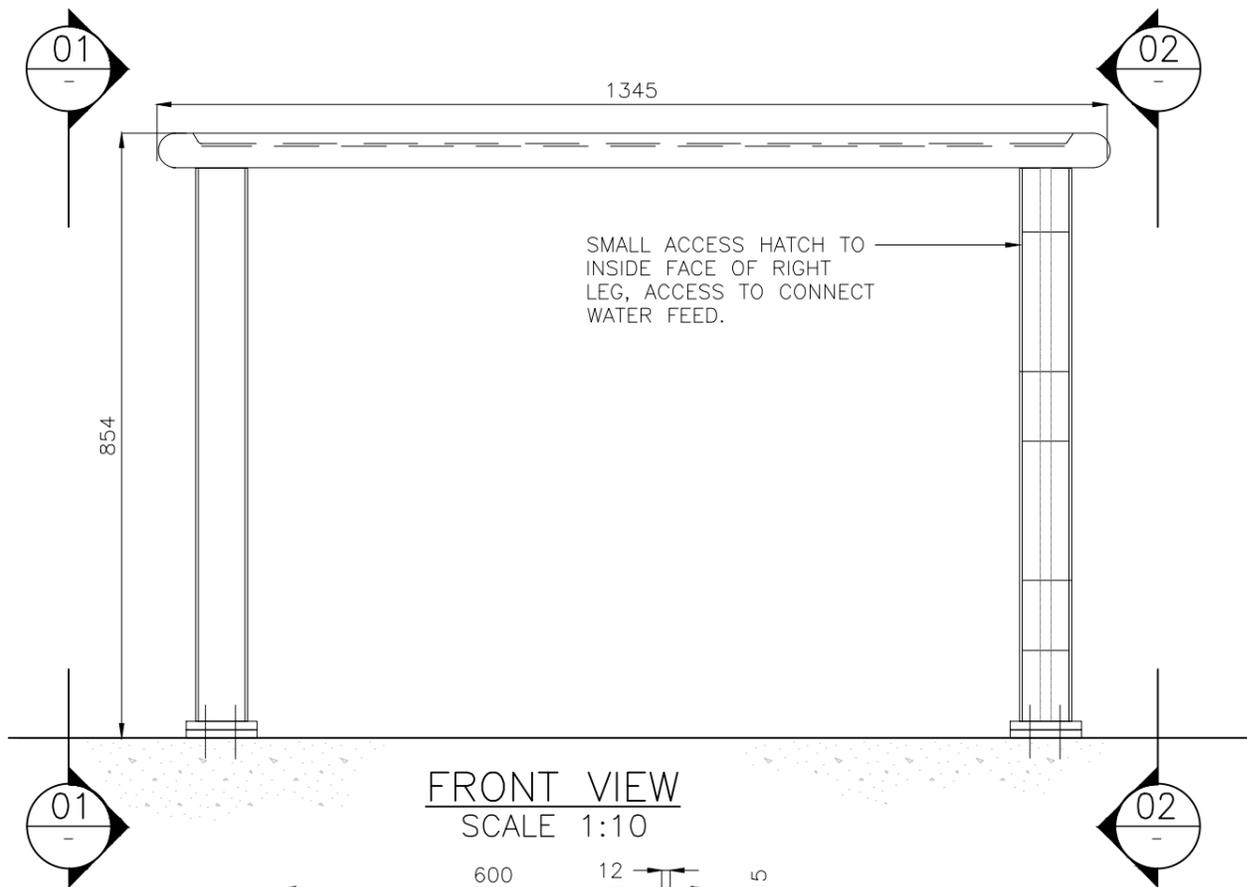
TENNIS REBOUND WALL - SECTION

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

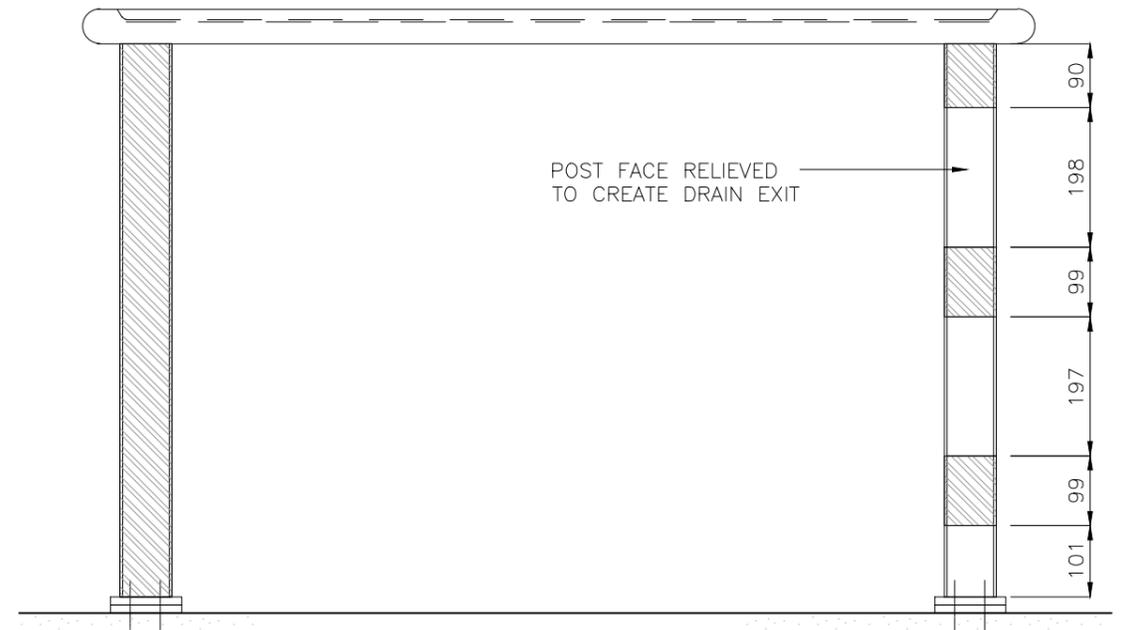
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DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04				DRAWN	CPO - P&D	DATE	OCT '13
PRICIPAL PROGRAM OFFICER PARKS				CHECKED	UMD - E&P & IMB	DATE	OCT '13
				DRAWING FILENAME	BSD-10218 (B) Tennis rebound wall - Section - Sheet 3 of 3.dwg		
				ASSOCIATED PLANS	SUPERSEDES NOTES ON UMS -781 & 782		



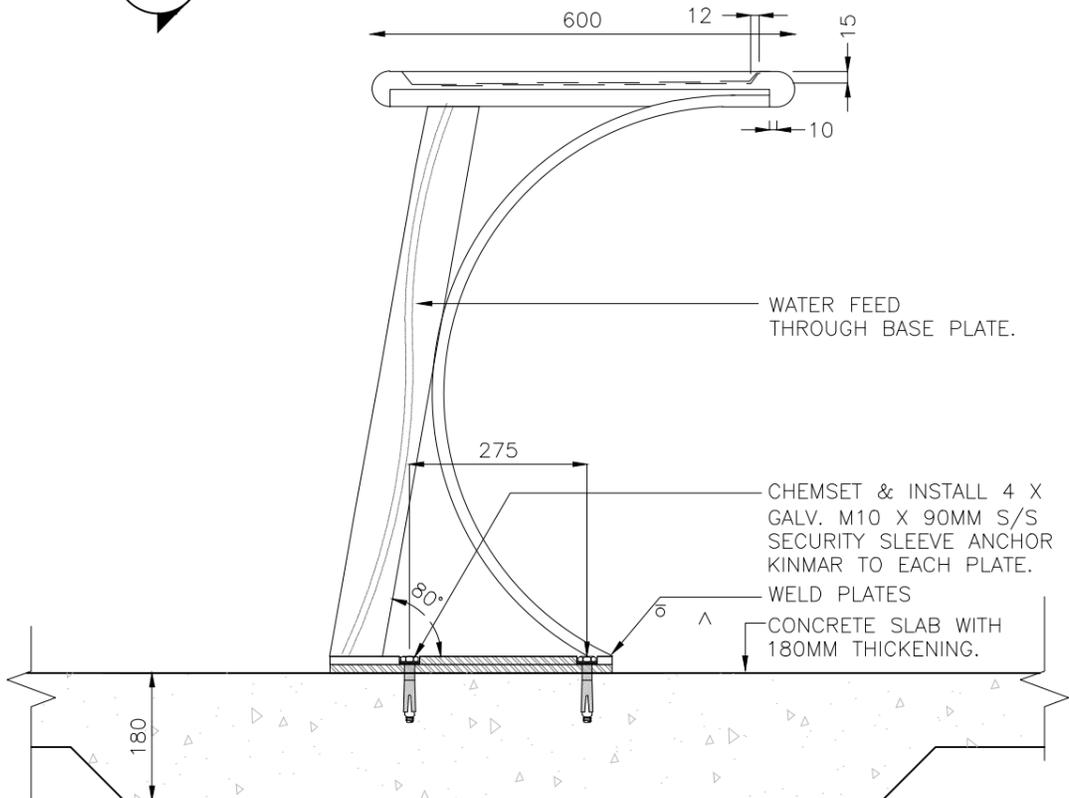
BRISBANE CITY COUNCIL STANDARD DRAWING		SCALE	1:20
TENNIS REBOUND WALL SECTION		DWG No.	BSD-10218
SHEET 3 OF 3		ORIGINAL SIZE	A3
		REVISION	B



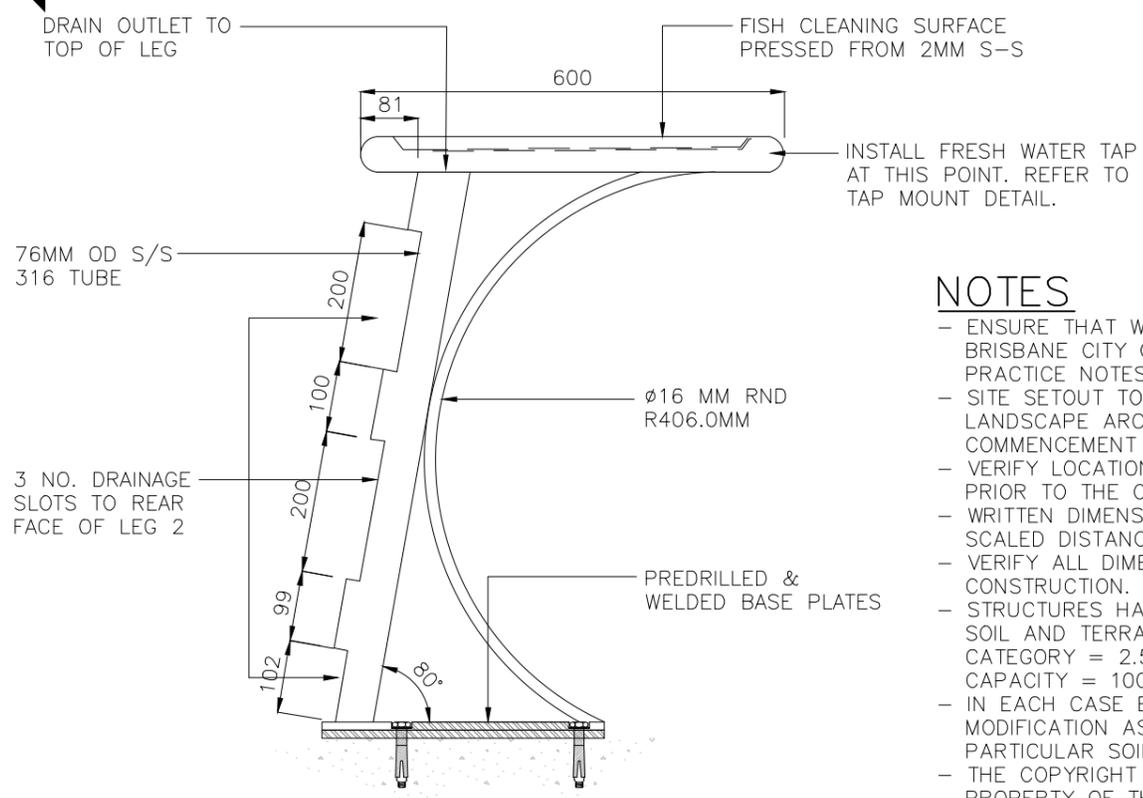
FRONT VIEW
SCALE 1:10



REAR VIEW
SCALE 1:10



SECTION 01
SCALE 1:10



SECTION 02
SCALE 1:10

NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED FOR STANDARD SOIL AND TERRAIN CATEGORY CONDITIONS. TERRAIN CATEGORY = 2.5 AND MINIMUM ALLOWABLE BEARING CAPACITY = 100KPA.
- IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
- THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.
- REFER TO B.05 FOR GENERAL STRUCTURAL NOTES.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
 Inga Condric
 2019.06.04 15:33:05+10'00'
 for ASSET ENGINEERING MANAGER
 STRATEGIC ASSET MANAGEMENT
 DESIGN APPROVED
 C.Wood
 SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
 ASSET SERVICES/BRISBANE INFRASTRUCTURE

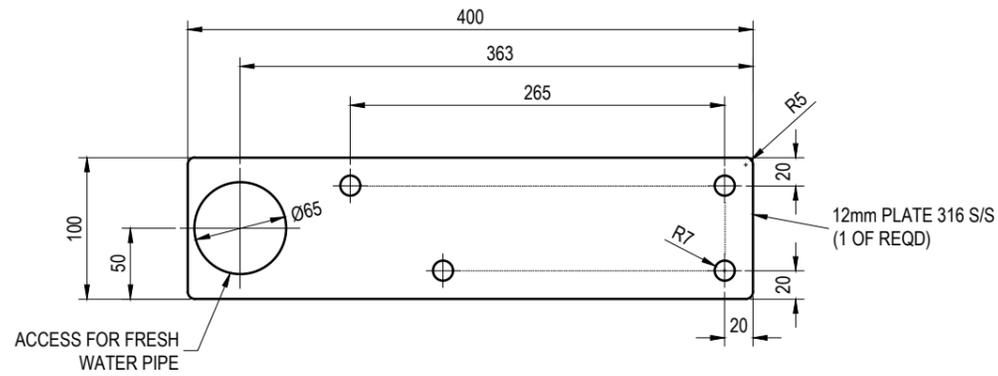
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DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10262 (B) Fish cleaning table - Notes and elevations - Sheet 1 of 2.dwg		
ASSOCIATED PLANS	BSD-10262-Sheet 2		



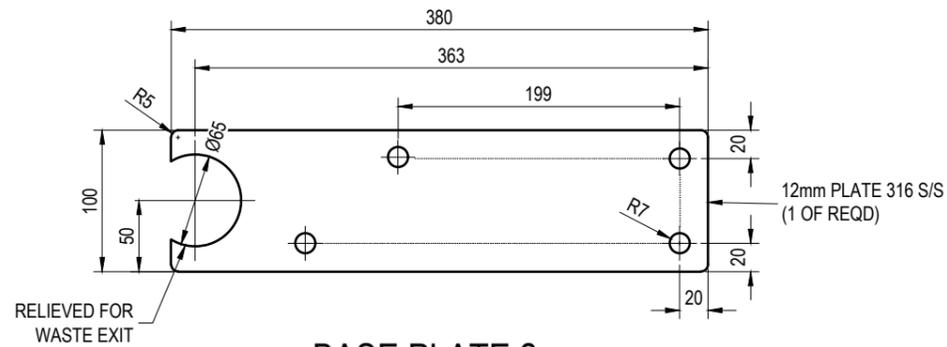
BRISBANE CITY COUNCIL STANDARD DRAWING

FISH CLEANING TABLE – NOTES AND ELEVATIONS SHEET 1 OF 2

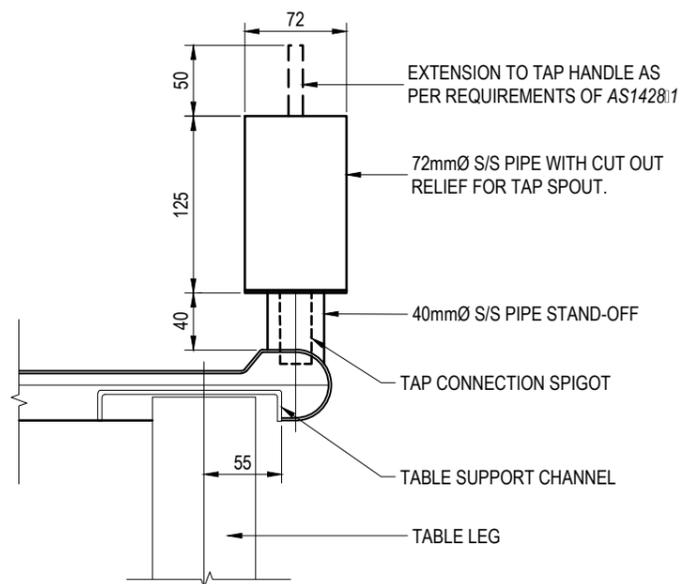
SCALE	AS SHOWN
DWG No.	BSD-10262
ORIGINAL SIZE	A3
REVISION	B



BASE PLATE 1
SCALE 1:5



BASE PLATE 2
SCALE 1:5



TAP MOUNT DETAIL
SCALE 1:5

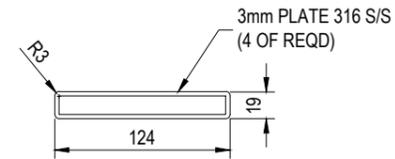


TABLE SUPPORT CHANNEL - END CAP
SCALE 1:5

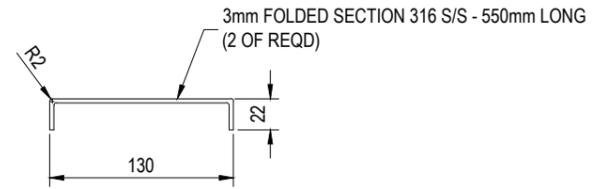
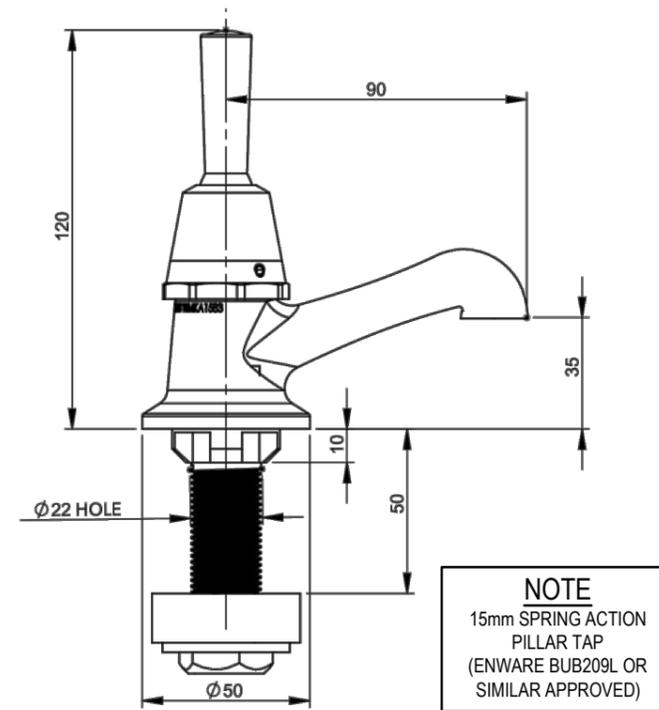


TABLE SUPPORT CHANNEL
SCALE 1:5



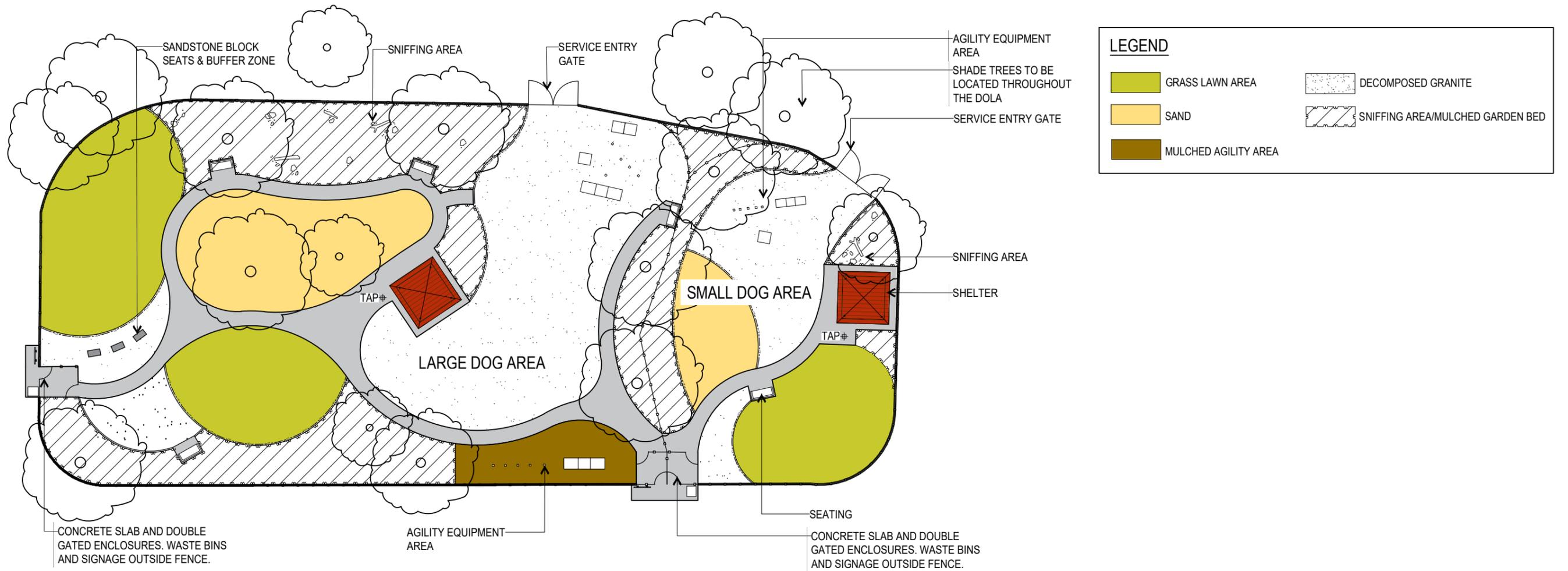
TAP DIMENSIONS
(EXAMPLE: ENWARE - MODEL BUB209L)
SCALE 1:2.5

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Details and Dimensions Corrected, DDA Compliance for Tap Added	DEC '18	APR '19	APR '19
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10262 (C) Fish cleaning table - Details - Sheet 2 of 2.dwg		
ASSOCIATED PLANS	BSD-10262-Sheet 1		



BRISBANE CITY COUNCIL STANDARD DRAWING	
FISH CLEANING TABLE DETAILS SHEET 2 OF 2	
SCALE	AS SHOWN
DWG No.	BSD-10262
ORIGINAL SIZE	A3
REVISION	C



DOG OFF LEASH AREAS (DOLA) - PLAN
 PLAN INDICATIVE OF LAYOUT ONLY. DESIGN TO BE SITE SPECIFIC & RESPONSIVE.

DOG OFF LEASH AREAS (DOLAS) - DESIGN ELEMENTS
ACTIVITY ZONES

- AZ1. CREATE ZONES IN BOTH THE LARGE AND SMALL DOG AREAS.
- AZ2. CREATE A GRASS LAWN AREA FOR QUIET, OR REST SPACE. MAXIMUM 30% OF THE DOLA AREA USING TIFF TUFF TURF OR SIMILAR. LOCATE GRASS AREAS AWAY FROM EXISTING OR FUTURE SHADE TREES.
- AZ3. CREATE AN AGILITY ZONE/ZONES WITH A JUMP, TUNNEL, RAMP AND WEAVING POLES OR SIMILAR, IN BOTH LARGE & SMALL DOG ENCLOSURES. THESE ZONES SHOULD BE CHARACTERISED BY DECO AND SHOULD MAKE UP MAXIMUM 30% OF THE DOLA AREA.
- AZ4. CREATE SNIFFING ZONES WITH MULCHED GARDEN BEDS, BOULDERS, LOGS AND STRAPPY PLANTING. SNIFFING ZONES SHOULD MAKE UP MAXIMUM 20% OF THE DOLA AREA.

- AZ5. CREATE A SANDPIT FOR DIGGING. LOCATION OF THE SANDPIT CAN BE USED AS A BUFFER TO REDUCE THE ABILITY OF DOGS TO GET UP TO SPEED ACROSS THE PARK. SANDPIT ZONES SHOULD MAKE UP APPROXIMATELY 10% OF THE DOLA AREA.
- AZ6. DESIGN ACTIVITY ZONES WITH INTERNAL DOLA BUFFERING (SANDPIT/SEATING/MOUNDING) OR VEGETATION BETWEEN THEM. INTERNAL BUFFERS ARE TO REDUCE LONG HIGH SPEED RUNS AND MODIFY DOG BEHAVIOUR. HUMANS MUST BE ABLE TO SEE OVER MOUNDS AND VEGETATION TO MAINTAIN SUPERVISION OF THEIR DOGS.
- AZ7. DESIGN TURF AREAS FOR EASY MOWING MAINTENANCE.
- AZ8. CONCRETE PATHWAYS ARE TO BE USED AS CONNECTIONS AND DEMARCATION BETWEEN ZONES. CONCRETE EDGES SHOULD BE USED AS BORDERS BETWEEN ZONES WHERE PATHWAYS DON'T OCCUR (REFER TO BSD 9061).

EXTERNAL DOLA BUFFERING

- BU1. PROVIDE ADEQUATE LANDSCAPE BUFFERING TO ADJACENT ACTIVITY AREAS, NODES OR RESIDENTIAL PROPERTIES, USING A COMBINATION OF LANDFORM, MOUNDING AND PLANTING TO CREATE BUFFERS OUTSIDE OF THE DOLA FENCE.
- BU2. ENSURE CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) PRINCIPLES ARE USED IN DESIGN. ENSURE HUMANS CAN SEE OVER BUFFERS FOR PASSIVE SURVEILLANCE.

ACCESSIBILITY

- AC1. REFER TO THE BRISBANE ACCESS AND INCLUSION PLAN 2012-2017 FOR FURTHER INFORMATION WHEN PLANNING AND DESIGNING THE BUILT ENVIRONMENT TO REASONABLY CONSIDER ACCESS AND INCLUSION FOR ALL WHERE APPROPRIATE.
- AC2. PATHWAYS TO COMPLY WITH AS1428.

THE FITNESS FOR PURPOSE OF THIS STANDARD DRAWING FOR A SPECIFIC PROJECT SHALL BE ASSESSED AND ACCEPTED BY A SUITABLY QUALIFIED REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).

	BRISBANE CITY COUNCIL STANDARD DRAWING		PUBLISH DATE March 2021	
	DOG OFF LEASH AREAS GENERAL ARRANGEMENT & LAYOUT SHEET 1 OF 2		SCALE NOT TO SCALE	
			DRAWING NUMBER BSD-10281	
			ORIGINAL SIZE A3	REVISION B

INFRASTRUCTURE SPECIFICATIONS

FENCE AND GATES

- FG1. LOCATE FENCE AS PER LANDSCAPE PLAN FOR DOLA.
- FG2. PROVIDE A 1200MM HIGH CHAIN WIRE FENCE AS PER BSD-7007. UTILISE FENCE PANELS TO CREATE CURVED EDGES.
- FG3. ENSURE FENCING FOLLOWS LANDFORM PROFILES RESHAPING GROUND WHERE NECESSARY TO MINIMISE FENCE PANEL STEPPING.
- FG4. PROVIDE TWO DOUBLE GATED ENCLOSURES TO LARGE DOG AREA AND ONE DOUBLE GATED ENCLOSURE TO SMALL DOG AREA. REFER TO BSD-7032, SHEET 1 AND 2.
- FG5. IF CONFIGURATION ALLOWS UTILISE THE SAME CONCRETE PAD FOR SMALL DOG AND LARGE DOG ENTRY GATES.
- FG6. PROVIDE CONCRETE SLAB TO BASE OF GATED ENTRY AND EXTEND CONCRETE SLAB BY 2 METRES (MINIMUM) FROM BOTH ENTRY GATES INTO AND OUT OF THE DOLA.
- FG7. WHERE POSSIBLE INSTALL DECOMPOSED GRANITE FROM EDGE OF THE INTERNAL ENTRY CONCRETE SLAB, TO BUFFER THIS HIGH USE ZONE FROM THE REST OF THE DOLA.
- FG8. ENSURE THE GATE LATCH IS SUITABLE FOR PEOPLE WITH SPECIAL NEEDS. REFER TO BSD - 7032.
- FG9. PROVIDE A 4 METRE WIDE SERVICE ENTRY FOR EACH LARGE AND SMALL DOG AREAS CONSISTING OF A DOUBLE GATE FOR MAINTENANCE/ EMERGENCY VEHICLES. REFER TO BSD-7032.

INTERNAL PATHWAYS

- PW1. CREATE INTERNAL CONCRETE OR DECOMPOSED GRANITE PATHWAYS WITH CONCRETE EDGING, THAT MEANDER THROUGH THE DOLA AND HELP PROMOTE MOVEMENT. THE PATHS ARE TO DEFINE THE DIFFERENT ACTIVITY ZONES. PATHS CONNECT SEATING NODES AND BOTH ENTRIES IN THE LARGE DOG AREA, AND THE ENTRY NODE AND SEATING AREAS IN THE SMALL DOG AREA.
- PW2. PATHWAYS ARE MINIMUM 1.2 METRES WIDE TO MEET ACCESS AND MOBILITY DESIGN STANDARDS, AS1428.

PLANTING

- P1. GARDEN BEDS ARE TO FLOW FROM INTERNAL DOLA AREAS TO OUTSIDE THE DOLA FENCE AS BUFFERING AND AMENITY WHERE SPACE ALLOWS.
- P2. ENSURE PLANTS ARE NON TOXIC AND INCORPORATE SHADE TREES INSIDE THE DOLA AND OUTSIDE ADJACENT TO THE NORTHERN DOLA FENCE.
- P3. SHADE TREES SPECIES SELECTION SHOULD FIRSTLY REFLECT THE PLANT PALETTE ALREADY PRESENT IN THE PARK (EXCLUDING EXISTING WEED SPECIES).
- P4. NEW TREES PLANTED IN THE DOLA TO HAVE TREE GUARDS TO PREVENT MARKING.

MULCH

- MU1. INSTALL 'TAKURA ENGINEERED MULCH' OR SIMILAR, TO GARDEN BEDS AND ONE AGILITY AREA TO A DEPTH OF 150MM.

SAND

- SA1. INSTALL WASHED RIVER SAND TO DIGGING AREA TO A MINIMUM DEPTH OF 300MM.

SEATING NODES

- SN1. INSTALL SEATING IN SHELTERS AND THROUGHOUT DOLA, UTILISING SHADE FROM TREES OR SHELTER.
- SN2. ENSURE FURNITURE IS NOT TO BE CONSTRUCTED WITH SLATS TO PREVENT PAW ENTRAPMENT, OR WITH A GAP BETWEEN SEAT AND BACK. SELECT ALUMINIUM EXTRUDED FURNITURE WITH NO GAPS OVER 10MM BETWEEN LENGTHS.
- SN3. LOCATE BENCH SEATS STRATEGICALLY TO PREVENT DOGS HAVING LONG UNOBSTRUCTED RUNS TO REDUCE 'SHOULDER BARGING' BEHAVIOUR.

SHELTERS

- SH1. FOR SITES LACKING SHADE A STANDARD PARK SHELTER CAN BE INCORPORATED. REFER TO BSD-10131. NOTE THAT SHELTER POSTS FOR DOLAS MUST BE ALUMINIUM TO ELIMINATE RUSTING OF STANDARD STEEL POSTS DUE TO DOG MARKINGS.

WASTE BINS & DOG WASTE BAG DISPENSERS

- WB1. LOCATE ONE WASTE BIN AND ONE BAG DISPENSER ON THE CONCRETE SLAB OUTSIDE EACH ENTRY POINT.
- WB2. DOG WASTE BAG DISPENSER TO BE INSTALLED ON FENCE NEXT TO DOLA ENTRANCE. BSD CURRENTLY UNDERGOING CREATION, PLEASE CONTACT WASTE AND RESOURCE RECOVERY SERVICES (WARRS).
- WB3. BIN TYPE 240L 'GUARDIAN' POLE WASTE BIN. BSD CURRENTLY UNDERGOING CREATION, PLEASE CONTACT WASTE AND RESOURCE RECOVERY SERVICES (WARRS).

SIGNAGE

- SG1. LOCATE SIGNAGE OUTSIDE DOLA ENTRY POINTS AND ALONG FENCE IF POSSIBLE TO REDUCE VISUAL IMPACT.
- SG2. REFER TO BSD-10508 AND BCC'S PARK SIGNAGE MANUAL - DOG OFF LEASH AREA SIGNS.

LIGHTING

- LT1. IF LIGHTING IS REQUIRED, LIGHTING OF DOLAS MUST CONSIDER TIMING DEVICES TO MINIMISE IMPACT ON LOCAL RESIDENCES.

DRAINAGE

- DR1. ENSURE RETICULATION TRENCHES AVOID TREE ROOT DAMAGE & ALIGNMENT TO BE APPROVED BY ARBORIST.

DOG OFF LEASH AREAS (DOLAS) SITING NOTES FOR NEW INSTALLATIONS

CONSULTATION

- CN1. CONSULT WITH LANDSCAPE ARCHITECT FOR THE PREPARATION OF A PLAN OF NEW DOLA AND SITING DOLA WITHIN THE PARK.

PARK TYPE

- PT1. LOCATE DOLA IN BCC METROPOLITAN, DISTRICT OR LOCAL PARKS OVER 10,000m².
- PT2. LOCATE DOLA IN A PARK WITH CLASSIFICATION OF GENERAL RECREATION PARK OR CORRIDOR PARK (NOT NEAR WATERWAY).
- PT3. DO NOT INSTALL DOLA IN NATURAL AREA PARKS, HERITAGE PARKS, OR SPORTS PARKS THAT HAVE LESS THAN 3000 SQUARE METRES OF SPACE OUTSIDE FIELDS AND CLUB ROOMS.
- PT4. DOLA SHOULD BE SETBACK FROM OR HAVE SPACE AVAILABLE TO BUFFER CONFLICTING ACTIVITIES INCLUDING PLAYGROUNDS, PICNIC NODES, BIKEWAYS, BIKE TRACKS AND BALL GAME AREAS.

SITE QUALITIES

- SQ1. OVERALL SITE IS FLAT, SOME MOUNDS OR RAISED AREAS PREFERRED, BUT CAN BE DEVELOPED AS PER THE LANDSCAPE PLAN.
- SQ2. IDEALLY THE DOLA IS NOT TO BE LOCATED WITHIN A FLOOD ZONE. IF ONLY AVAILABLE PARK SPACE FOR A NEW DOLA IS IN THE FLOOD ZONE THEN IT MUST ONLY BE PARTIALLY OR TOTALLY UNFENCED.
- SQ3. SITE IS TO BE WELL DRAINED WITH A MINIMUM CROSS FALL OF 1:100.
- SQ4. PERMEABLE SOILS ARE PREFERRED.

SIZE AND CONFIGURATION

- SC1. MINIMUM SIZE OF DOLA IS 3000 SQUARE METRES AND SHOULD INCLUDE LARGE AND SMALL DOG ENCLOSURES.
- SC2. DESIGN FENCES WITH CURVED ALIGNMENTS TO AVOID CORNERS WHICH CAN ENCOURAGE BULLYING DOG BEHAVIOUR.

EXISTING INFRASTRUCTURE

- EX1. UTILISE EXISTING PATHWAYS/LOCAL TRAIL NETWORKS FOR CONNECTIONS TO THE DOLA.
- EX2. UTILISE PROXIMITY TO, OR ALLOW FOR FUTURE CONSTRUCTION OF OFF STREET CAR PARKING NEAR TO DOLA SITE.

LOCATION WITHIN PARK

- LP1. ENSURE DOLA LOCATION MINIMISES THE IMPACT ON USE OF PARK OPEN SPACE.
- LP2. UTILISE EDGES OR CORNER OF PARKS RATHER THAN CENTRAL GRASS AREAS TO SITE DOLA. DO NOT UTILISE ENTIRE LENGTH OF PARK BOUNDARY AS THIS WILL REDUCE GENERAL PARK ACCESS.
- LP3. DOLA MUST BE HIGHLY VISIBLE FROM SURROUNDING AREAS AND INCORPORATE THE PRINCIPLES OF CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED).

SHADE TREES

- ST1. UTILISE EXISTING SHADE TREES ON SITE.
- ST2. PLANT NEW TREES BOTH INTERNALLY AND EXTERNALLY TO THE DOLA TO ACHIEVE A MINIMUM SHADE COVER OF 30%.
- ST3. REFER TO LANDSCAPE PLAN FOR INDICATIVE LAYOUT.
- ST4. AVOID PLANTING TREES TO THE NORTH OF LAWN AREAS.

ACCESSIBILITY

- AC1. PROVIDE A CONTINUOUS DDA COMPLIANT PATH TO THE DOLA FROM A CAR PARK OR ADJOINING ROAD AND PARK FACILITIES.

THE FITNESS FOR PURPOSE OF THIS STANDARD DRAWING FOR A SPECIFIC PROJECT SHALL BE ASSESSED AND ACCEPTED BY A SUITABLY QUALIFIED REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).

	BRISBANE CITY COUNCIL STANDARD DRAWING		PUBLISH DATE March 2021
	DOG OFF LEASH AREAS GENERAL ARRANGEMENT & LAYOUT SHEET 2 OF 2		SCALE NOT TO SCALE
			DRAWING NUMBER BSD-10281
	ORIGINAL SIZE A3	REVISION B	

GENERAL NOTES & SPECIFICATIONS

- ENSURE TAPS ARE LOCATED IN ACCORDANCE WITH THE PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- ENSURE MOWN HEIGHT OF GRASS (TURF) FINISHES FLUSH WITH PAVEMENT AREA. ENSURE GARDEN AREAS (MULCH) FINISH 25mm BELOW ADJACENT F.S.L's OF PAVEMENT AREA.
- AUSTRALIAN STANDARDS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE REFERENCED AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY SPECIFICATIONS AND/OR DRAWINGS.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, ENVIRONMENTALLY FRIENDLY COMPOSITE MATERIALS, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS AND PRACTICALITY. WHERE POSSIBLE, MATERIALS ARE TO BE LOCALLY MADE OR SOURCED RATHER THAN IMPORTED FROM OVERSEAS UNLESS SPECIFIED OTHERWISE.
- ENSURE TAPS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- COLOUR SELECTION IN ACCORDANCE WITH STANDARD BCC CORPORATE COLOUR PALETTE (& AS 2700 EQUIVALENT). IF NO COLOUR SPECIFIED, POST TO BE BCC GREEN 1.
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

TIMBER WORK NOTES

- TIMBER SHOULD BE SOURCED FROM LEGAL AND SUSTAINABLE SOURCES. TIMBERS ARE CONSIDERED ACCEPTABLE WHERE THERE IS A HIGH DEGREE OF CERTAINTY THAT THEY ARE FROM FORESTS, EITHER NATIVE OR PLANTATION, THAT ARE LEGALLY HARVESTED AND SUSTAINABLY MANAGED. THE CONTRACTOR IS TO SUBMIT EVIDENCE THAT THE TIMBER HAS BEEN OBTAINED FROM A LEGAL AND SUSTAINABLE SOURCE.
- ALL TIMBER TO BE ACQ PRESSURE TREATED OR TANALITH E (COPPER AZOL) TO AS 1608 TREATED ROUGH SAWN APPEARANCE GRADE HARDWOOD OF ONE SPECIES.
- ALL EXPOSED EDGES TO RECEIVE MIN. 5mm WIDE ARRIS.
- PRIOR TO INSTALLATION, ALL CUTS, EDGES, JOINTS TO RECEIVE LIBERAL COATINGS WITH AN APPROVED TIMBER PRESERVATIVE.
- ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS 1604 AND HAVE A DURABILITY CLASS 1 OR 2 TO AS 5604.
- ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
- TIMBER PRESERVATIVES - WHERE NO FINISH SPECIFIED, ALL TIMBER TO RECEIVE 3 No COATS OF CLEAR APPROVED TIMBER PRESERVATIVE SUCH AS COPPER NAPHTHENATE OIL (FOR ABOVE GROUND USE) AND COPPER NAPHTHENATE EMULSION (FOR BELOW GROUND USE) - COAT ENTIRE BOLLARD PRIOR TO PLACING.
- COLOUR SELECTION WHERE APPLICABLE IN ACCORDANCE WITH STANDARD CORPORATE COLOUR PALETTE. COAT ENTIRE BOLLARD PRIOR TO PLACING.

RECYCLED PLASTIC NOTES

- SECTIONS TO BE FORMED FROM A SINGLE, CONTINUOUSLY EXTRUDED PIECE. MATERIAL TO BE UV STABILISED.
- POROSITY TO A MAXIMUM OF 15% OF CROSS SECTION.
- MAXIMUM VOID LENGTH 10% OF LARGEST CROSS SECTION.
- SURFACE FINISH TO BE SMOOTH AND FREE OF ANY MAJOR VOIDS OR VISIBLE DEFECTS.
- SIZE IS INDICATIVE - VARIANCE NOT TO EXCEED APPROXIMATELY 1.5%.
- COLOUR TO BE CHOSEN FROM AVAILABLE SUPPLIER COLOURS, TYPICALLY GREEN, BLACK, GREY OR BLUE.
- MATERIAL TO HAVE FLAMMABILITY TESTING TO AS ISO TO AS/ISO 9239 AND/OR FIRE HAZARD RATING TO AS/NZS 1530.
- DEMONSTRATED CHEMICAL RESISTANCE.

CONCRETE WORK NOTES

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- AT A MINIMUM ALL CONCRETE TO BE GRADE N25. CONCRETE SHALL BE NORMAL CLASS CONCRETE UNLESS DIRECTED OTHERWISE. N25 SHALL MEAN NORMAL CLASS CONCRETE WITH A 28 DAY CHARACTERISTIC STRENGTH OF 25MPa. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE SITE SUPERINTENDENT FOR APPROVAL FIVE (5) DAYS PRIOR TO ORDERING.
- ALL CEMENT TO BE TYPE GP OR GB TO AS 3972 UNLESS SPECIFIED OTHERWISE.
- NORMAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL AND WATER PRIOR TO PLACING CONCRETE.
- 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.

PLUMBING & DRAINAGE WORK NOTES

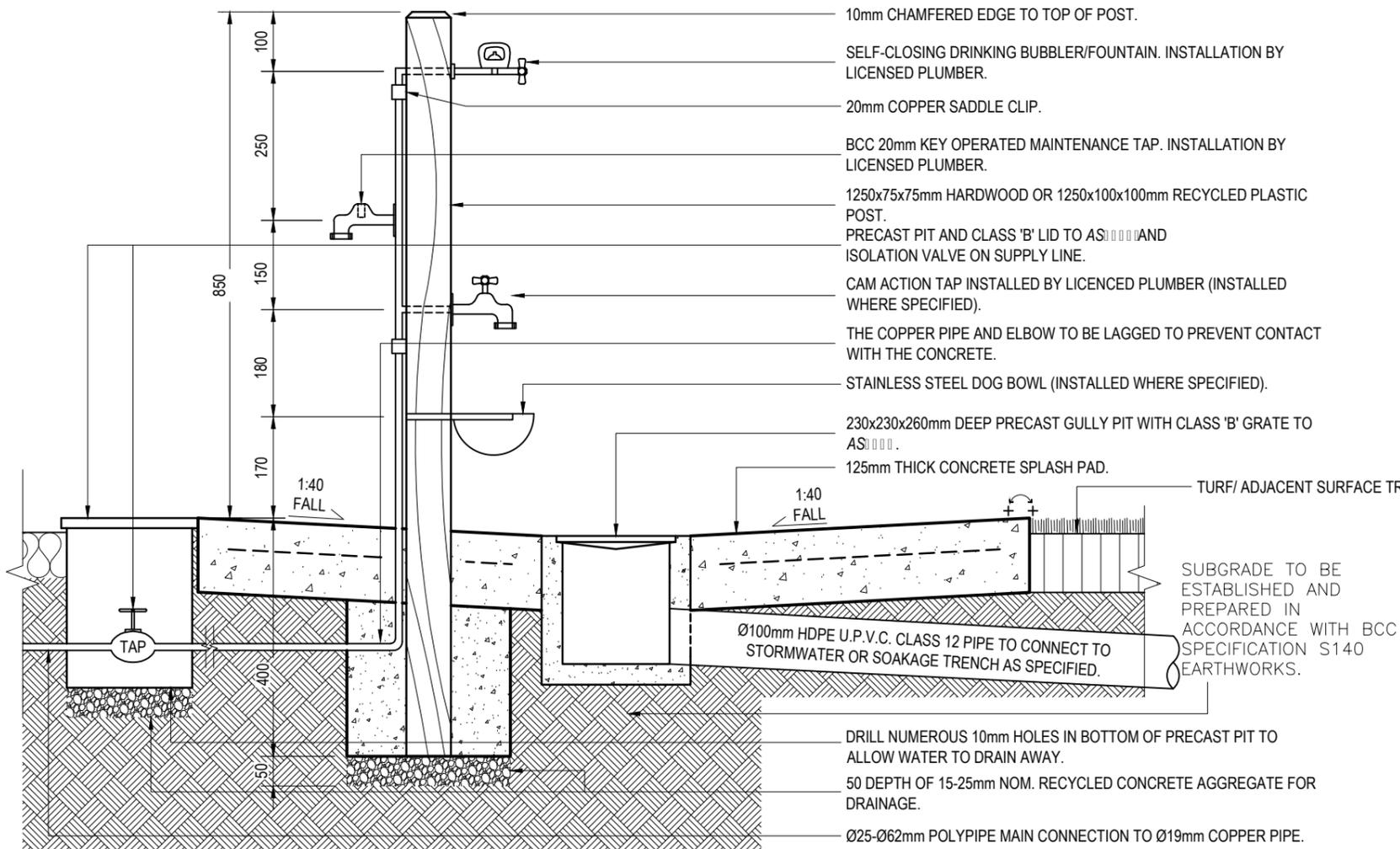
- IMPORTED PIPES AND FITTINGS ARE NOT TO BE USED UNLESS COMPLIANT UNDER AUSTRALIAN STANDARDS. PVC PLUMBING FITTINGS MUST BE WATERMARK CERTIFIED AUSTRALIAN STANDARDS AND ARE BEST ENVIRONMENTAL PRACTICE PVC.
- A LICENSED PLUMBER IS THE PERSON RESPONSIBLE FOR UNDERTAKING OR SUPERVISING THE WORK AS DEFINED UNDER THE PLUMBING AND DRAINAGE ACT 2002.

FIXTURES/FITTINGS & METAL WORK NOTES

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS 1554.
- ALL METAL FINISHES TO BE IN ACCORDANCE WITH AS 4506.
- ALL FIXTURES/FITTINGS UNLESS SPECIFIED ARE TO BE HOT DIPPED GALVANISED UNLESS IN VICINITY OF SALTWATER/SPRAY, ENSURE ALL FASTENERS SHALL BE STAINLESS STEEL. PLASTIC SEPARATORS SHALL BE PROVIDED TO AVOID CONTACT BETWEEN DISSIMILAR MATERIALS. STAINLESS STEEL GRADE 316 TO BE USED. WHERE POSSIBLE ALL FIXINGS TO BE TAMPER/VANDAL PROOF TO MINIMISE DAMAGE OR THEFT.
- ALL WELDS TO BE CONTINUOUS FILLET WELDS, GROUND OFF SMOOTH & FLUSH IN ACCORDANCE WITH AS 1554. GRIND SMOOTH EDGES & WELDS PRIOR TO H.D.G. OR APPLIED FINISHES.

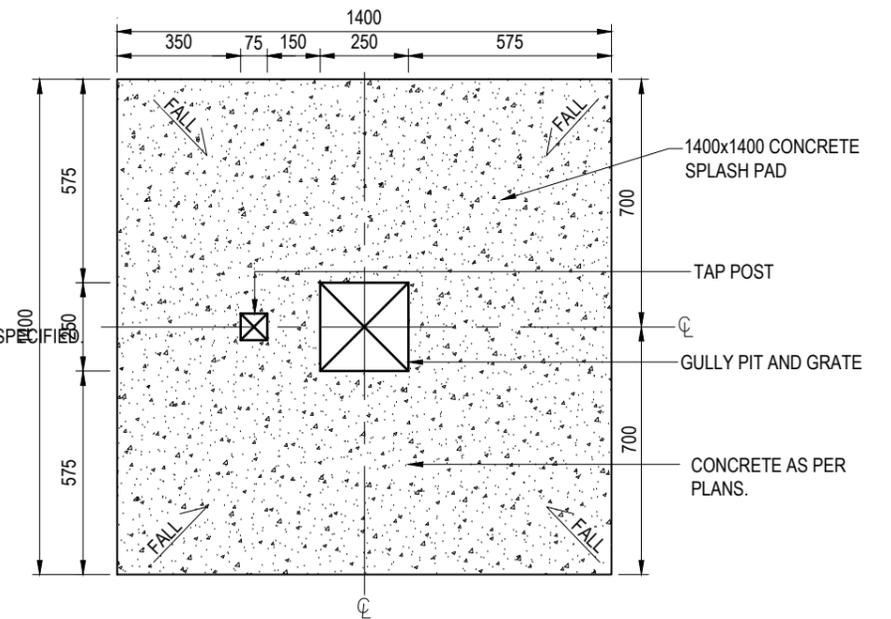
REFER TO BSD-10306
& BSD-10307 FOR
ASSOCIATED DETAILS

					DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04 MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.O: 2546				DESIGN	Std Dwgs WG	DATE	OCT '13	BRISBANE CITY COUNCIL STANDARD DRAWING TAPS GENERAL NOTES			SCALE AS SHOWN	
					DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04				DRAWN	CPD - P&D	DATE	OCT '13				DWG No. BSD-10305	
					PRICIPAL PROGRAM OFFICER PARKS				CHECKED	UMD - E&P & IMB	DATE	OCT '13	ORIGINAL SIZE A3		REVISION A		
A	Drawing Converted From UMS Series April 2014			APR '14	APR '14	APR '14											
ISSUE	AMENDMENT			DRAWN DATE	CHK'D DATE	APPR'D DATE	DRAWING FILENAME BSD-10305 (A) Taps - general notes.dwg								ASSOCIATED PLANS SUPERSEDES UMS-714		



WATER TAP AND BUBBLER WITH DOG BOWL - SECTION

SCALE: 1:10



SPLASH PAD - PLAN

SCALE: 1:20

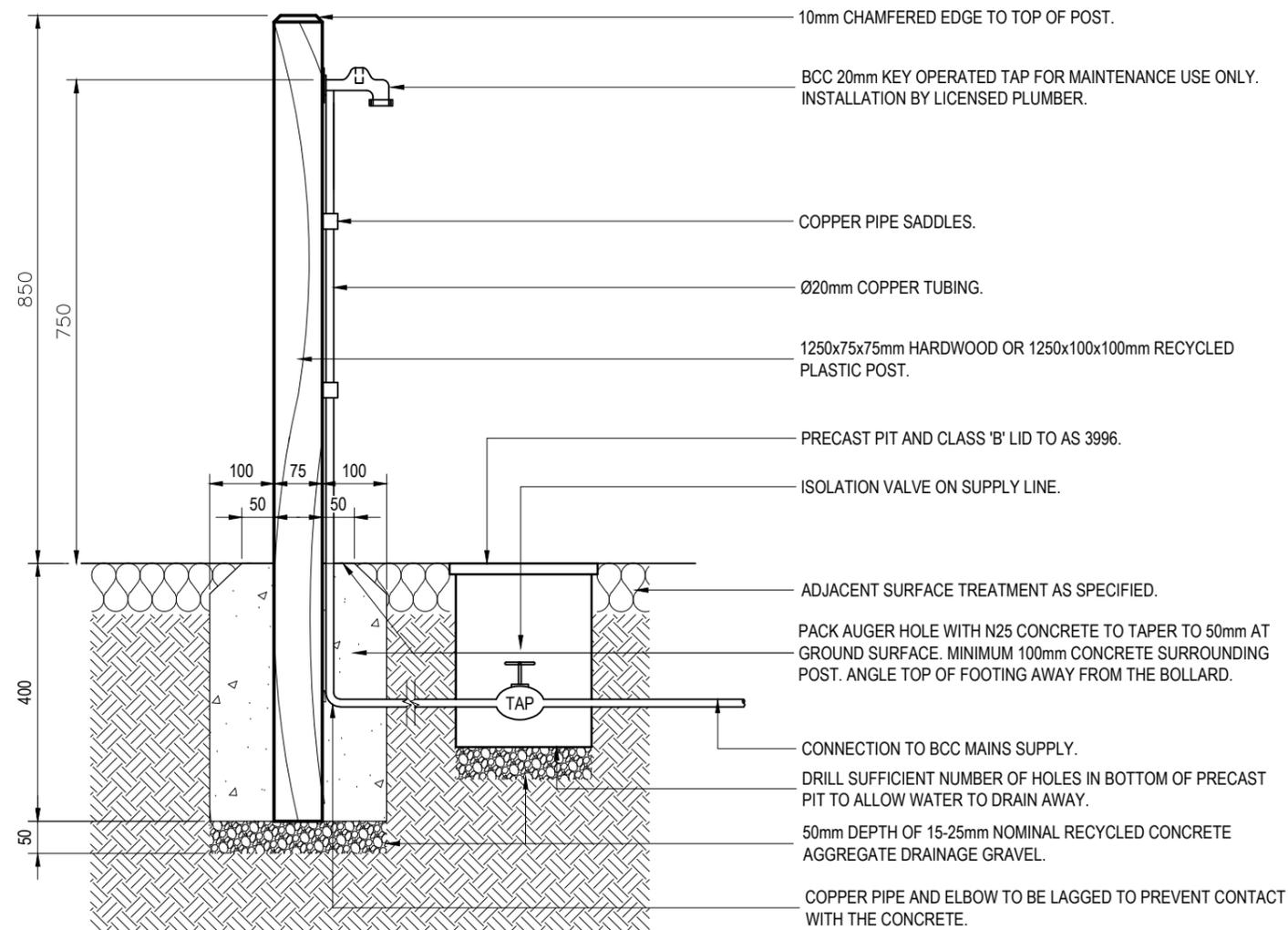
REFER TO BSD-10305 FOR ADDITIONAL SPECIFICATION NOTES

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Reference to Superseded Drawing (BSD-10003) Removed from Section Detail	JAN '19	APR '19	APR '19
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	Std Dwg WG	DATE	OCT '13
DRAWN	CPD - P&D	DATE	OCT '13
CHECKED	UMD - E&P & IMB	DATE	OCT '13
DRAWING FILENAME	BSD-10306 (B) Taps - Water tap and bubbler with dog bowl.dwg		
ASSOCIATED PLANS	SUPERSEDES UMS-714		



BRISBANE CITY COUNCIL STANDARD DRAWING	
TAPS WATER TAP AND BUBBLER WITH DOG BOWL	
SCALE	AS SHOWN
DWG No.	BSD-10306
ORIGINAL SIZE	A3
REVISION	B



MAINTENANCE TAP - SECTION

REFER TO BSD-10305 FOR
ADDITIONAL SPECIFICATION
NOTES

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Reference to Superseded Drawing (BSD-10003) Removed from Section Detail	JAN '19	APR '19	APR '19
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14

DRAWING AUTHORISED FOR PUBLICATION
PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04
MANAGER INFRASTRUCTURE MANAGEMENT
R.P.E.O: 2546

DESIGN APPROVED
LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04

PRICIPAL PROGRAM OFFICER PARKS

DESIGN	Std Dwgs WG	DATE	OCT '13
DRAWN	CPD - P&D	DATE	OCT '13
CHECKED	UMD - E&P & IMB	DATE	OCT '13
DRAWING FILENAME	BSD-10307 (B) Taps - Maintenance.dwg		
ASSOCIATED PLANS	SUPERSEDES UMS-713		



BRISBANE CITY COUNCIL STANDARD DRAWING	
TAPS MAINTENANCE	
SCALE	1:10
DWG No.	BSD-10307
ORIGINAL SIZE	A3
REVISION	B

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: – AS 1684.2(2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION AS 1720.1(2010) TIMBER STRUCTURES AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS AS 3600 CONCRETE STRUCTURES AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.)
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF BUSHFIRE WATER SUPPLY SHELTER INCLUDED IN DRAWING SHEETS 1 TO 3.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 2.5
 ULTIMATE DESIGN WIND SPEED = 54.0 m/s
 DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE
 LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF THE SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCT CLASS 1 MATERIAL.
- F5 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F6 SLABS ON GROUND SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER’S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LAYER OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O

ELEMENT:	F’C (MPa)	REINFORCEMENT COVER
PIERS	25	75 MIN.
SLAB	25	50 MIN.
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.

BAR	LAP LENGTH (mm)
N12	500
N16	650
MESH	350
- C7 REINFORCEMENT SYMBOLS:
 - R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
 - N DEFORMED BAR GRADE D500N TO AS 4671.
 - SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR’S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR’S PROFESSIONAL ENGINEER (RPEQ)

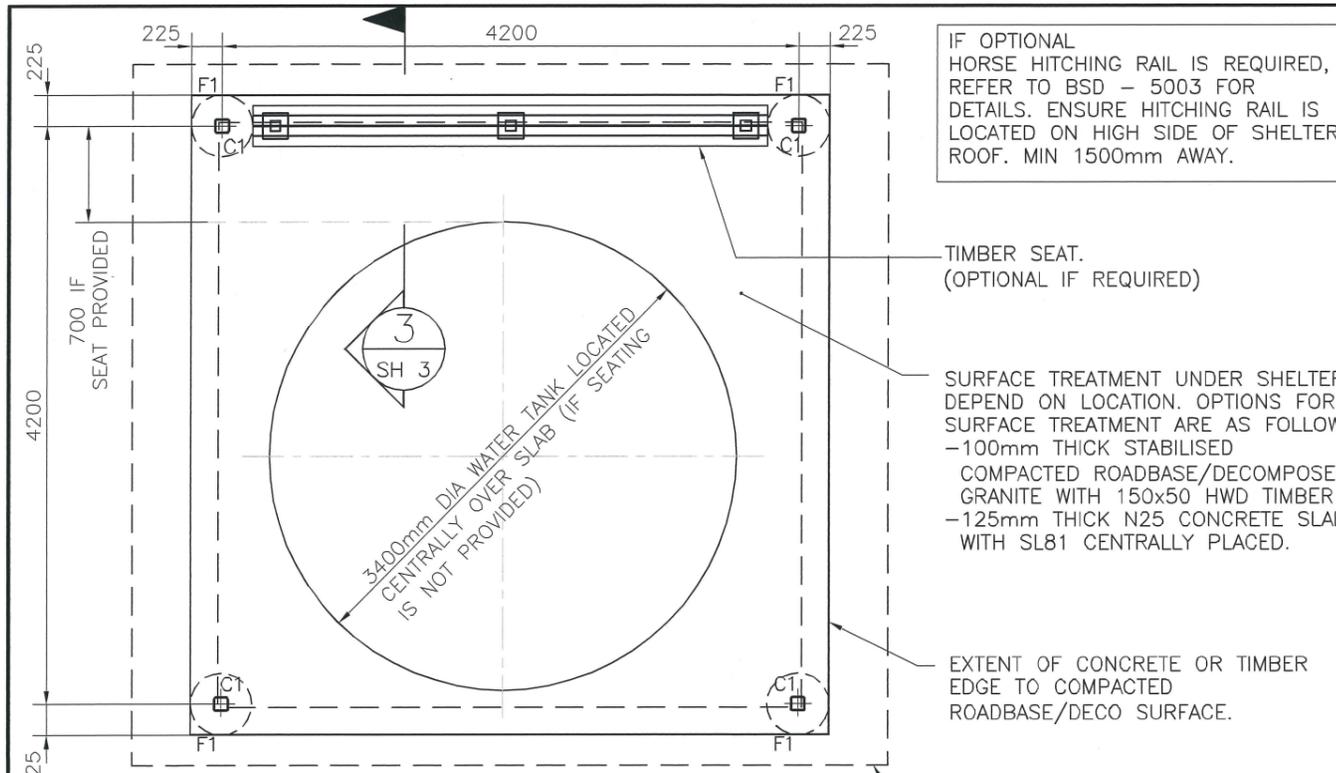
STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O. AS 3679 GRADE 300 FOR HOT ROLLED SECTIONS.
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O. ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O. ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER’S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S8. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER’S RECOMMENDATIONS.
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

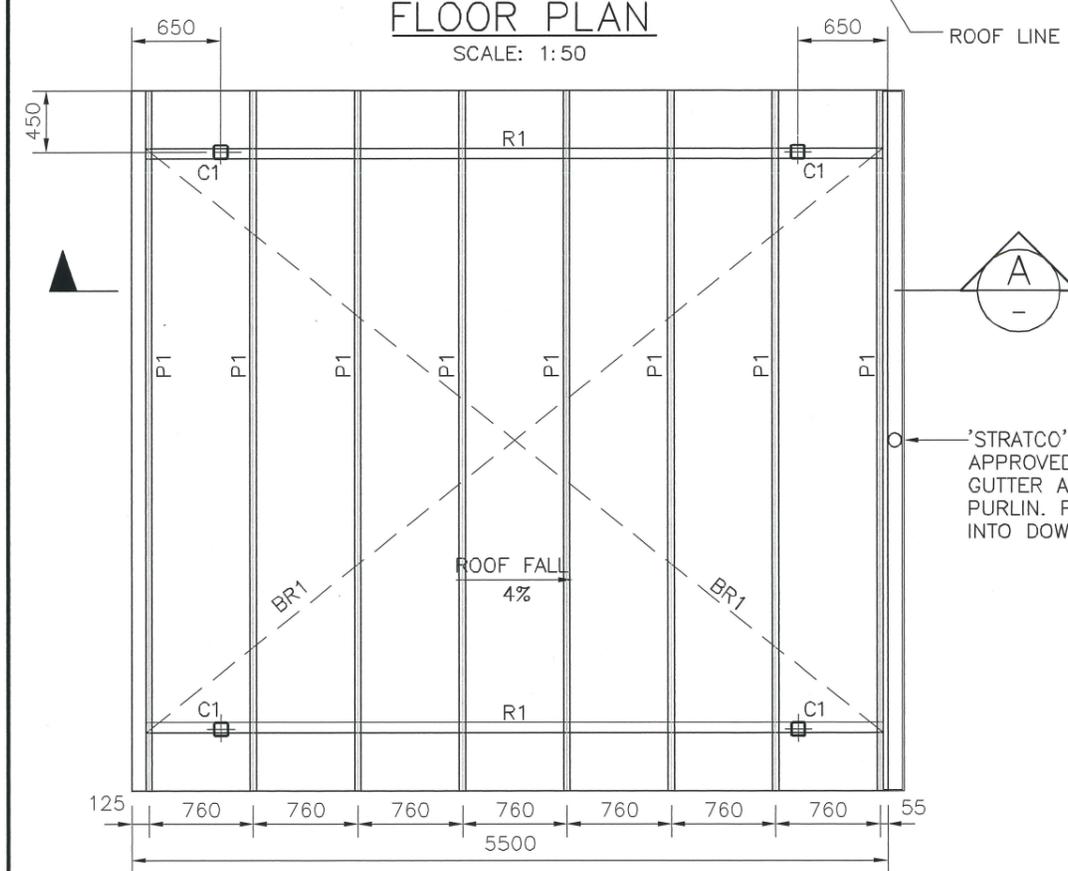
STRUCTURAL DESIGN CERTIFICATION			
DESIGN <i>R.Hu</i>	Lenita Mendis RPEQ:8950 2014.12.10 16:32:39 +10'00'	DESIGN CHECK R.Hu (RPEQ No 13885)	AUTHORISED FOR ISSUE <i>R.Hu</i> Bala Balakumar, RPEQ:3963 2014.12.11 08:59:56 +10'00'
BRISBANE CITY COUNCIL STANDARD DRAWING			
BUSHFIRE WATER SUPPLY SHELTER TYPE 1 – NATURAL AREA – SHEET 1 OF 3 – NOTES			SCALE AS SHOWN DWG No. BSD-10351 ORIGINAL SIZE A3 REVISION A

DRAWING AUTHORISED FOR PUBLICATION				
DESIGN	CPO – P&D	DATE	DEC '14	
DRAWN	CPO – P&D	DATE	DEC '14	
CHECKED	BI - FSG - AS	DATE	DEC '14	
DRAWING FILENAME	BSD-10351-Sheet 1 of 3.dwg			
ASSOCIATED PLANS	BSD-10351-Sheets 2 & 3			
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED <i>L. Wood</i> SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE				
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

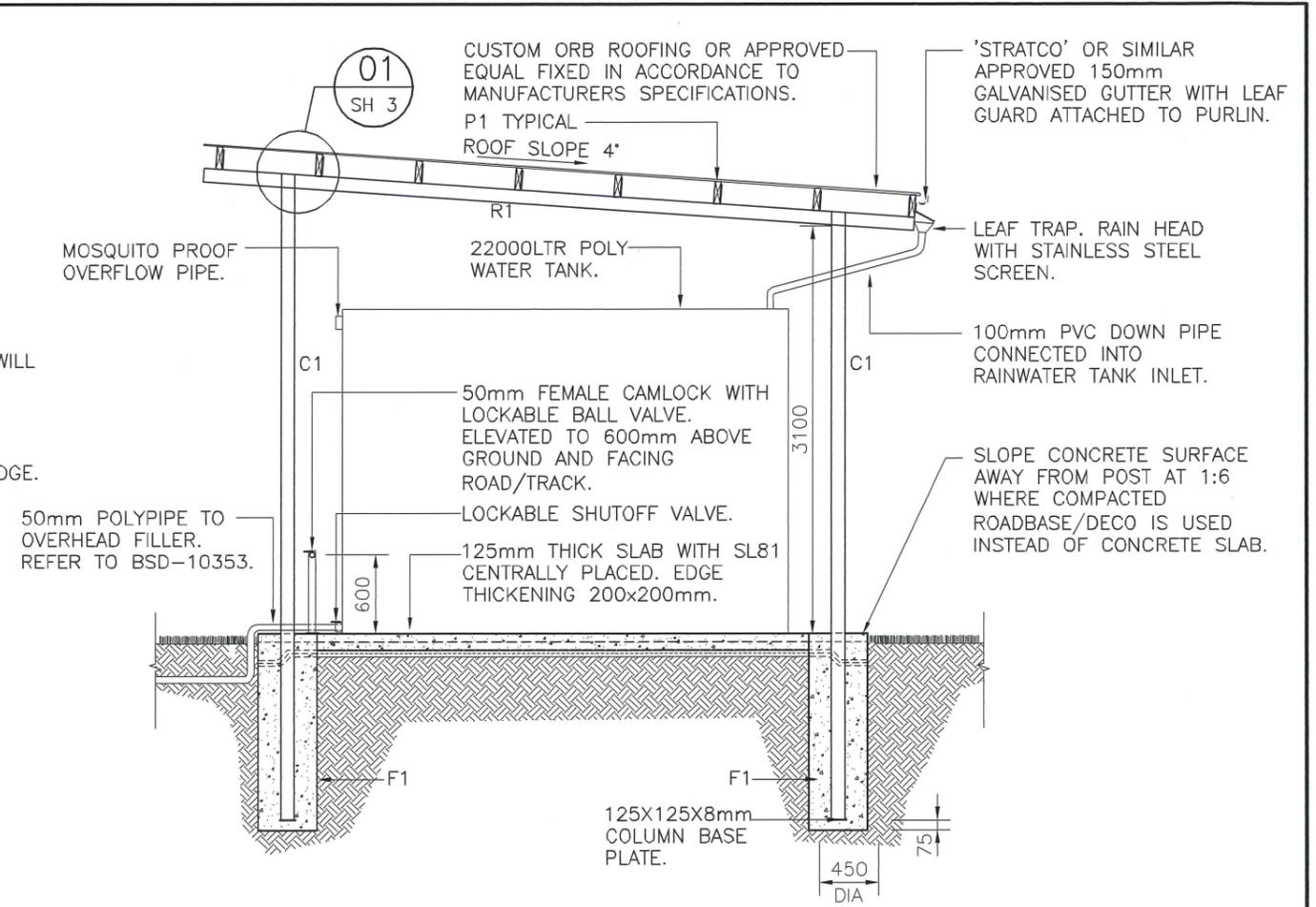




FLOOR PLAN
SCALE: 1:50



ROOF PLAN
SCALE: 1:50



SECTION A
SCALE 1:50

MEMBER SCHEDULE			
MARK	MEMBER	DESCRIPTION	COMMENTS
C1	100x5 SHS	POST	
R1	100x5 SHS	RAFTER	FIXED TO POST WITH 2xM16 BOLTS. 5mm END CAPS
P1	170x45 MGP12 SEASONED TIMBER	PURLIN	FIXED TO RAFTER WITH 2x M12 BOLTS.
BR1	30x1.0 GALVANISED STEEL STRAP BRACE	STRAP BRACING TO TOP OF PURLINS	5/3.15ø x 35mm NAILS AT EACH END OF STRAPPING FIXED TO SIDES OF EDGE PURLINS AND ONE NAIL TO TOP OF EACH PURLIN.
F1	450øx1500 DEEP	PIER FOOTING	N25 CONCRETE.

STRUCTURAL DESIGN CERTIFICATION

DESIGN	Lenita Mendis RPEQ:8950 2014.12.10 16:33:16 +10'00'	DESIGN CHECK	R.Hu (RPEQ No 13885)	AUTHORISED FOR ISSUE	Bala Balakumar, RPEQ:3963 2014.12.11 09:00:38 +10'00'
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BRISBANE CITY COUNCIL STANDARD DRAWING

BUSHFIRE WATER SUPPLY SHELTER TYPE 1 – NATURAL AREA – SHEET 2 OF 3 – PLAN

SCALE AS SHOWN
DWS No. BSD-10351
ORIGINAL SIZE A3 REVISION A

A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION

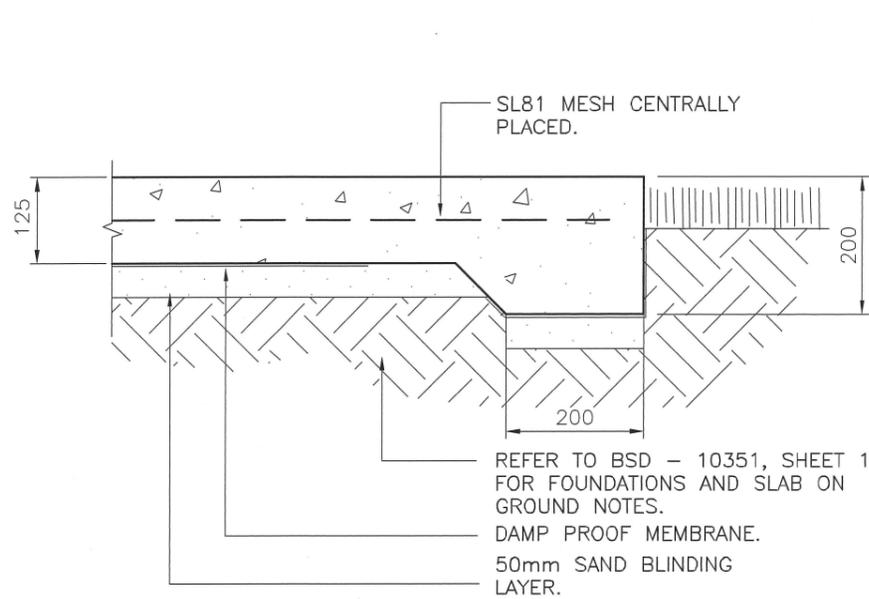
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED

L. Wood

SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

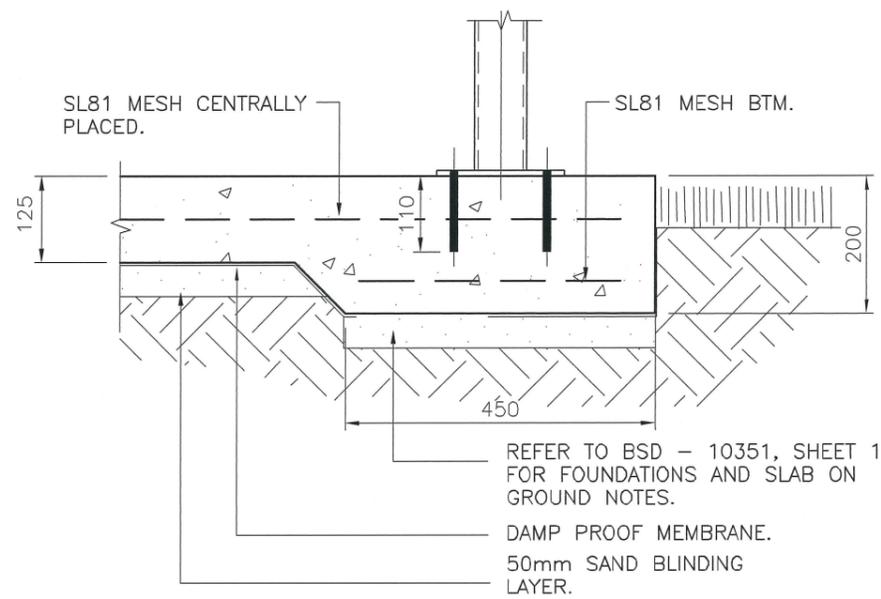
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DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10351-Sheet 2 of 3.dwg		
ASSOCIATED PLANS	BSD-10351-Sheets 1 & 3		





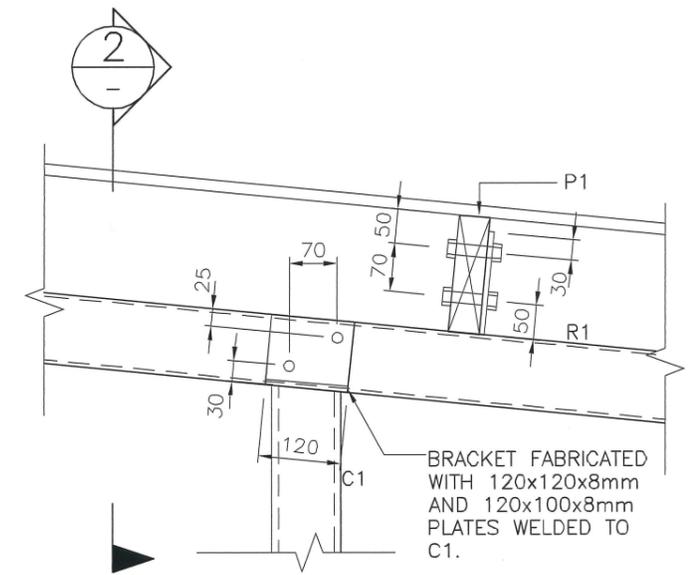
TYPICAL SLAB EDGE THICKENING DETAIL

SCALE: 1:10

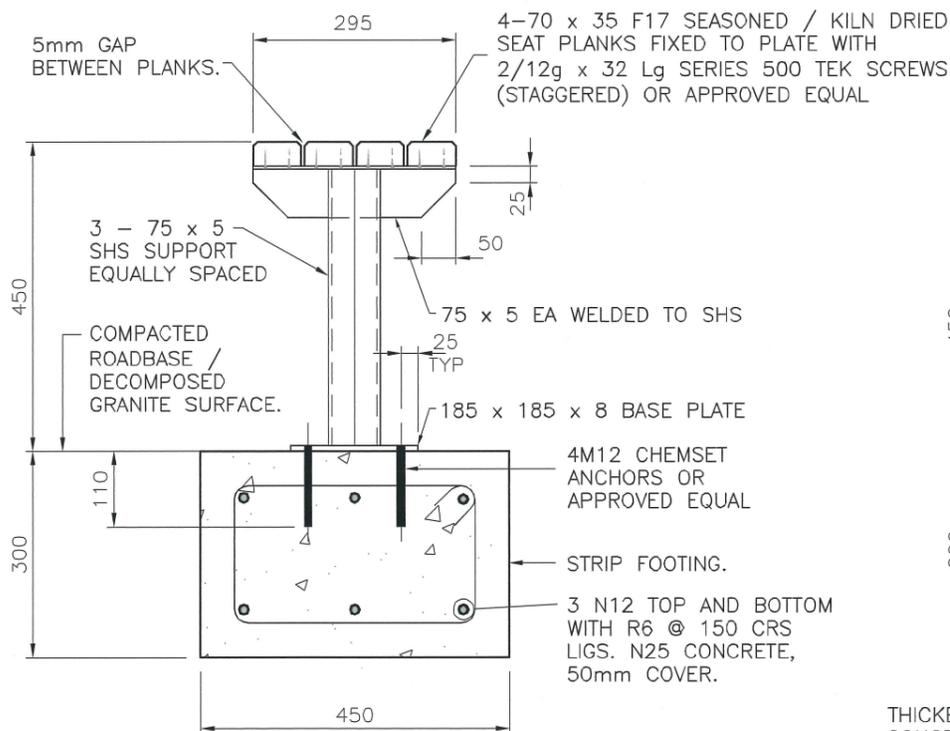


SLAB EDGE THICKENING DETAIL WHERE SEAT IS TO BE INSTALLED ON CONCRETE SLAB

SECTION 3
SCALE 1:10 SH 2

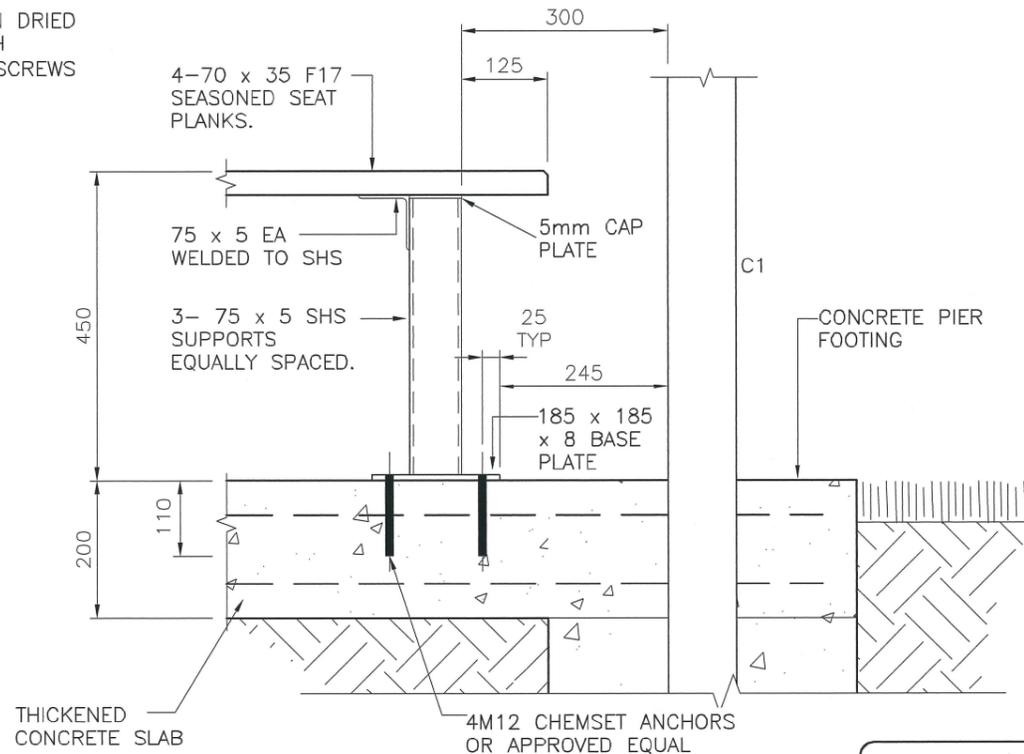


DETAIL 1
SCALE 1:10 SH 2



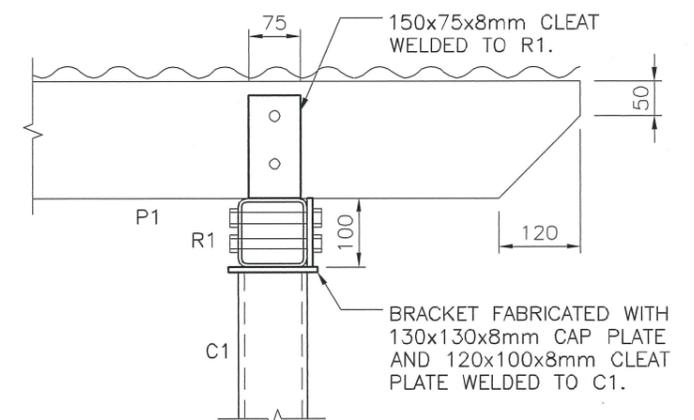
SEATING WHERE ON COMPACTED ROADBASE/DECOMPOSED GRANITE

SCALE: 1:10



SEATING ON CONCRETE SLAB

SCALE: 1:10



SECTION 2
SCALE 1:10

STRUCTURAL DESIGN CERTIFICATION

DESIGN <i>R.Hu</i>	Lenita Mendis RPEQ:8950 2014.12.10 16:33:44 +10'00'	DESIGN CHECK R.Hu (RPEQ No 13885)	AUTHORISED FOR ISSUE <i>R.Hu</i> Bala Balakumar, RPEQ:3963 2014.12.11 09:01:17 +10'00'
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BRISBANE CITY COUNCIL STANDARD DRAWING		SCALE AS SHOWN
BUSHFIRE WATER SUPPLY SHELTER TYPE 1 - NATURAL AREA - SHEET 3 OF 3 - DETAILS		DWG No. BSD-10351
ORIGINAL SIZE A3	REVISION A	

DRAWING AUTHORISED FOR PUBLICATION			
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED <i>L. Wood</i>			
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10351-Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10351-Sheets 1 & 2		
A	ORIGINAL ISSUE	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE
		DEC '14	APP'R'D DATE



GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
AS 1684.2(2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
AS 1720.1(2010) TIMBER STRUCTURES
AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS
AS 3600 CONCRETE STRUCTURES
AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.)
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF BUSHFIRE WATER SUPPLY SHELTER INCLUDED IN DRAWING SHEETS 1 TO 3.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 2.5
ULTIMATE DESIGN WIND SPEED = 54.0 m/s
DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE
LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF THE SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCT CLASS 1 MATERIAL.
- F5 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F6 SLABS ON GROUND SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LAYER OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O
- | ELEMENT: | F'C (MPa) | REINFORCEMENT COVER |
|----------|-----------|---------------------|
| PIERS | 25 | 75 MIN. |
| SLAB | 25 | 50 MIN. |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR | LAP LENGTH (mm) |
|------|-----------------|
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS:
R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
N DEFORMED BAR GRADE D500N TO AS 4671.
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ)

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O.
AS 3679 GRADE 300 FOR HOT ROLLED SECTIONS.
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O.
ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O.
ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S8. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

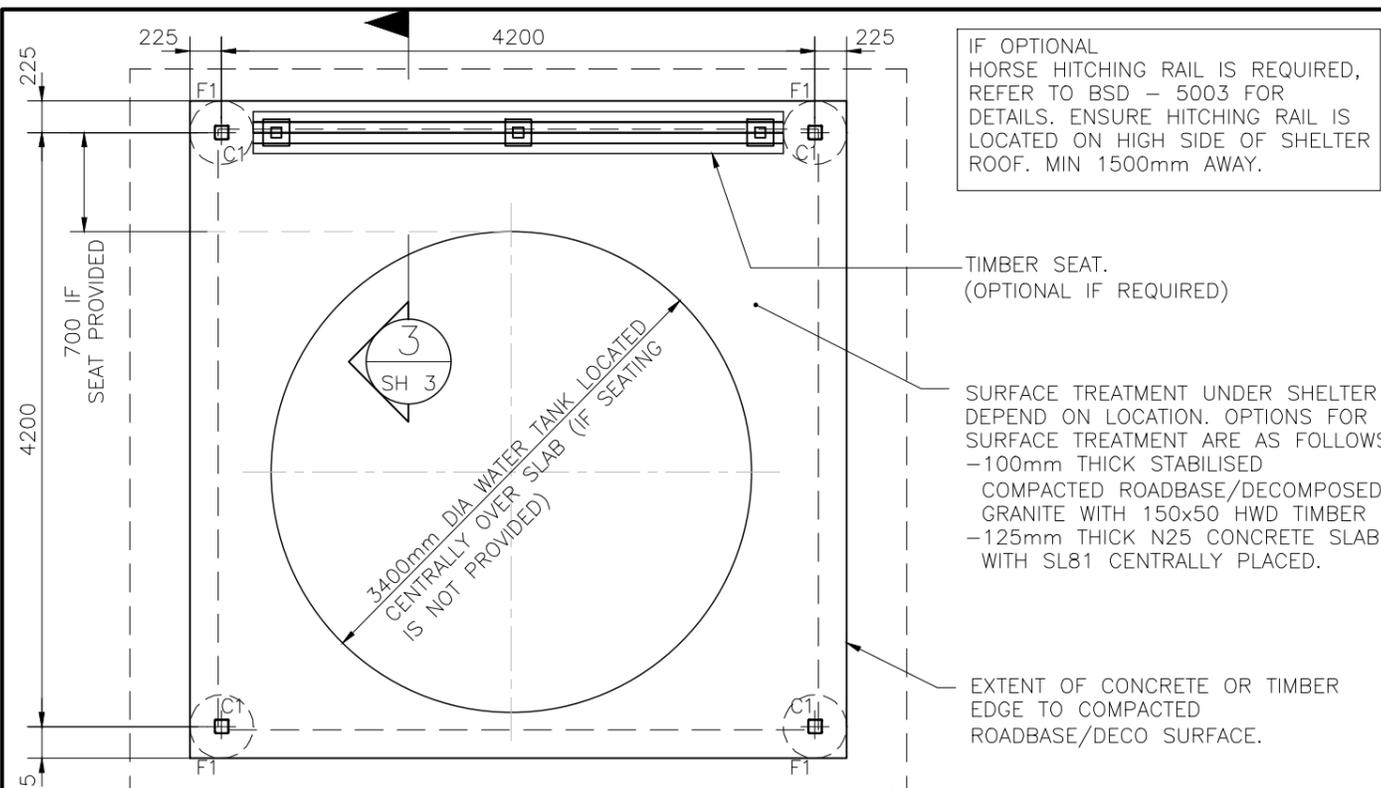
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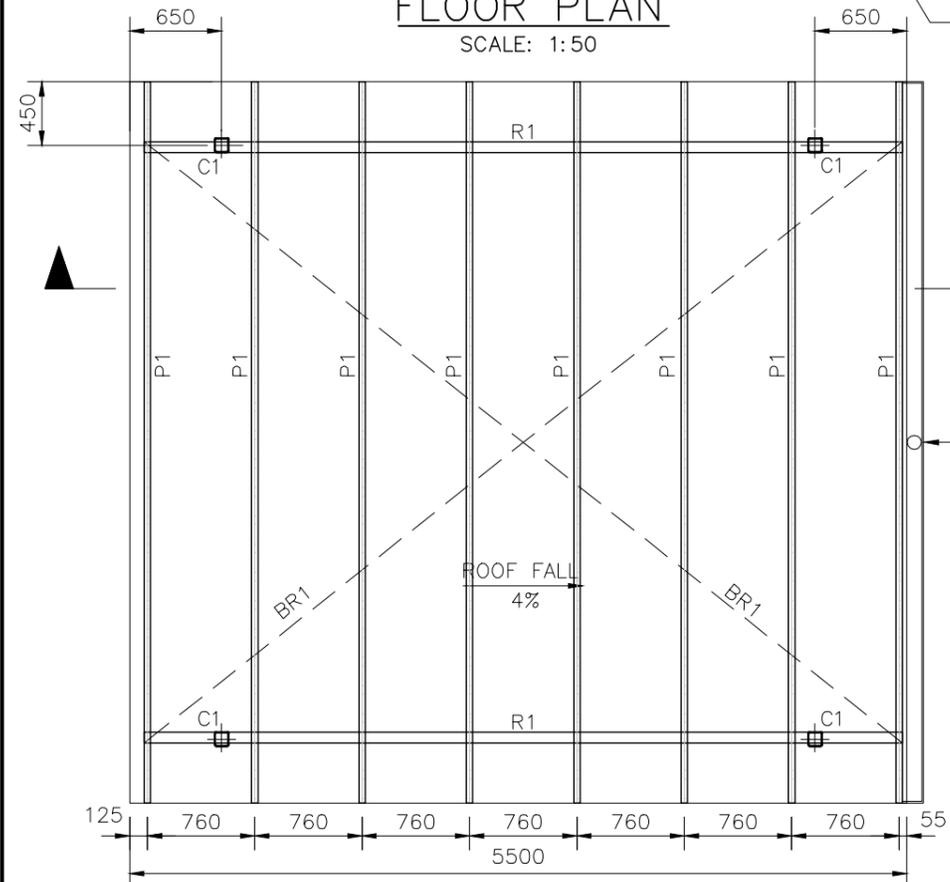
BRISBANE CITY COUNCIL STANDARD DRAWING

SCALE AS SHOWN	
DWG No. BSD-10351	
ORIGINAL SIZE A3	REVISION B

DRAWING AUTHORISED FOR PUBLICATION				DESIGN	CPO - P&D	DATE	DEC '14
Inga Condric 2015.06.15 07:05:10+10'00'				DRAWN	CPO - P&D	DATE	DEC '14
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				CHECKED	BI - FSG - AS	DATE	DEC '14
DESIGN APPROVED				DRAWING FILENAME	BSD-10351 (B) Bushfire water supply shelter type 1 - Natural area - Notes - Sheet 1 of 3.dwg		
C.Wood				ASSOCIATED PLANS	BSD-10351-Sheets 2 & 3		
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE							
B	Drawing Title Amended	FEB '16	JUL '16				
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14			
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE			



FLOOR PLAN
SCALE: 1:50



ROOF PLAN
SCALE: 1:50

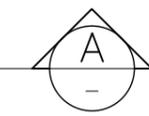
IF OPTIONAL HORSE HITCHING RAIL IS REQUIRED, REFER TO BSD - 5003 FOR DETAILS. ENSURE HITCHING RAIL IS LOCATED ON HIGH SIDE OF SHELTER ROOF. MIN 1500mm AWAY.

TIMBER SEAT. (OPTIONAL IF REQUIRED)

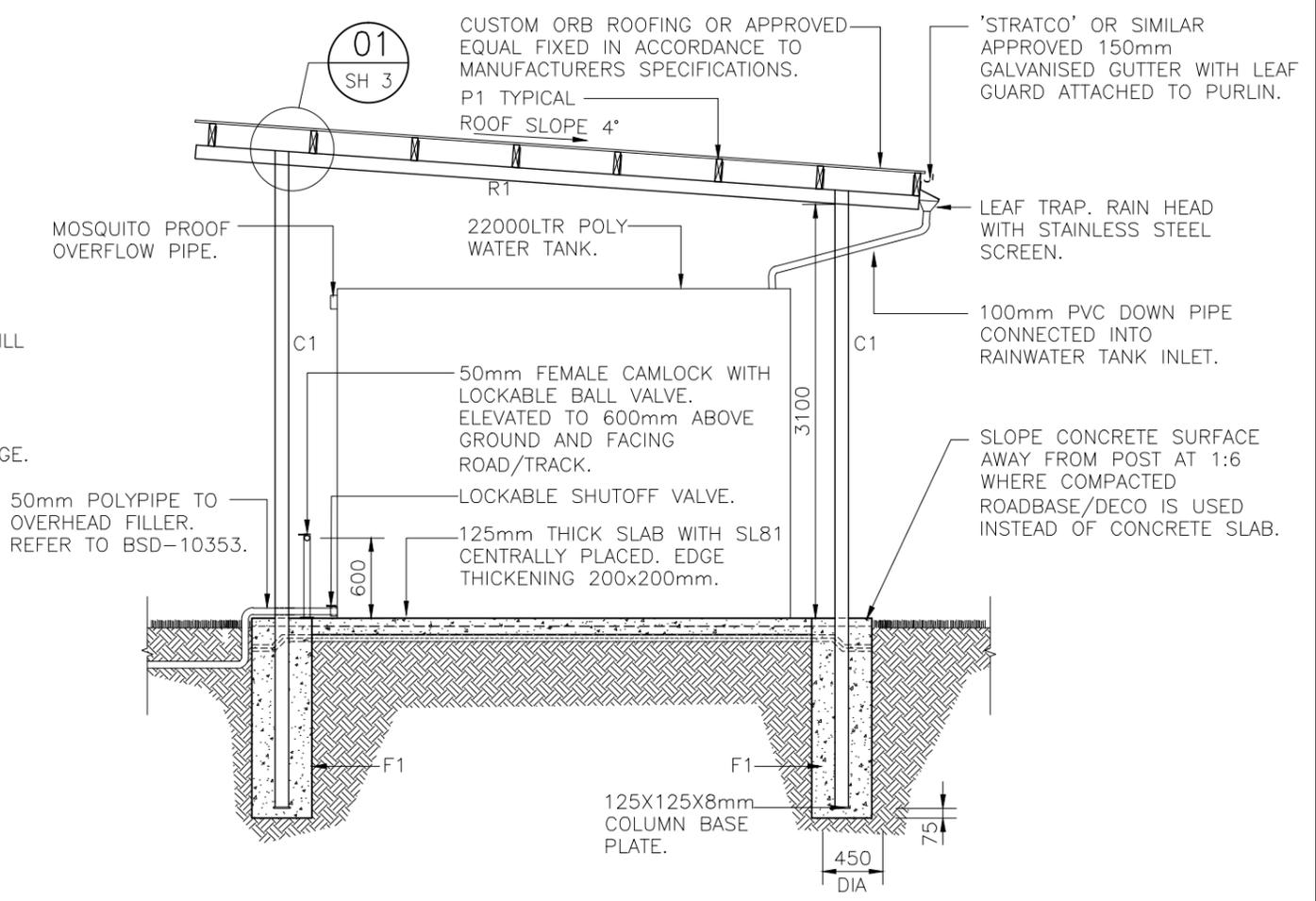
SURFACE TREATMENT UNDER SHELTER WILL DEPEND ON LOCATION. OPTIONS FOR SURFACE TREATMENT ARE AS FOLLOWS:
-100mm THICK STABILISED COMPACTED ROADBASE/DECOMPOSED GRANITE WITH 150x50 HWD TIMBER EDGE.
-125mm THICK N25 CONCRETE SLAB WITH SL81 CENTRALLY PLACED.

EXTENT OF CONCRETE OR TIMBER EDGE TO COMPACTED ROADBASE/DECO SURFACE.

ROOF LINE



'STRATCO' OR SIMILAR APPROVED 150 METAL GUTTER ATTACHED TO PURLIN. FALL TO CENTRE INTO DOWNPIPE.



SECTION A
SCALE 1:50

MEMBER SCHEDULE			
MARK	MEMBER	DESCRIPTION	COMMENTS
C1	100x5 SHS	POST	
R1	100x5 SHS	RAFTER	FIXED TO POST WITH 2xM16 BOLTS. 5mm END CAPS
P1	170x45 MGP12 SEASONED TIMBER	PURLIN	FIXED TO RAFTER WITH 2x M12 BOLTS.
BR1	30x1.0 GALVANISED STEEL STRAP BRACE	STRAP BRACING TO TOP OF PURLINS	5/3.15ø x 35mm NAILS AT EACH END OF STRAPPING FIXED TO SIDES OF EDGE PURLINS AND ONE NAIL TO TOP OF EACH PURLIN.
F1	450øx1500 DEEP	PIER FOOTING	N25 CONCRETE.

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BRISBANE CITY COUNCIL STANDARD DRAWING

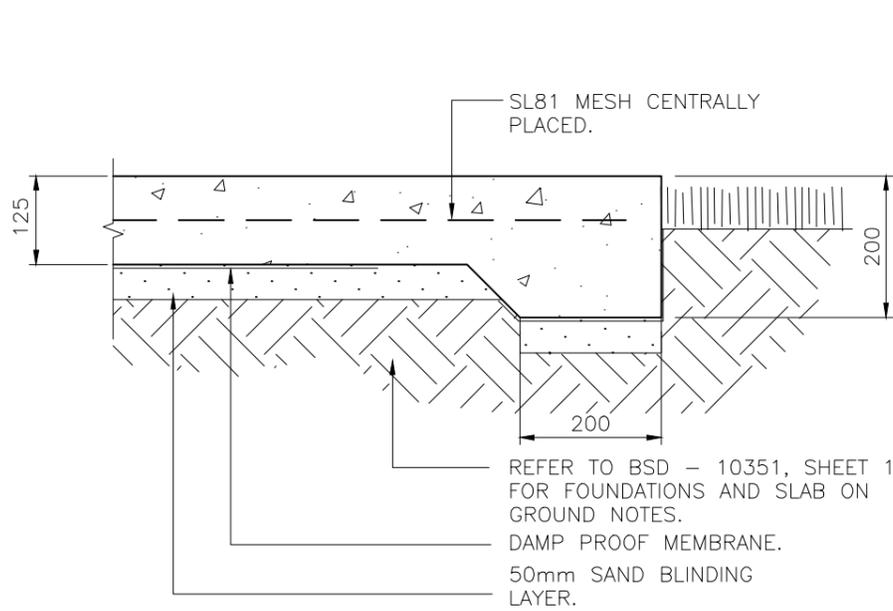
SCALE AS SHOWN	
DWG No. BSD-10351	
ORIGINAL SIZE A3	REVISION B

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION Inga Condric 2015.06.15 07:06:38+10'00' for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED C.Wood SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE				DESIGN	CPO - P&D	DATE	DEC '14
				DRAWN	CPO - P&D	DATE	DEC '14
				CHECKED	BI - FSG - AS	DATE	DEC '14
				DRAWING FILENAME	BSD-10351 (B) Bushfire water supply shelter type 1 - Natural area - Plan - Sheet 2 of 3.dwg		
				ASSOCIATED PLANS	BSD-10351-Sheets 1 & 3		

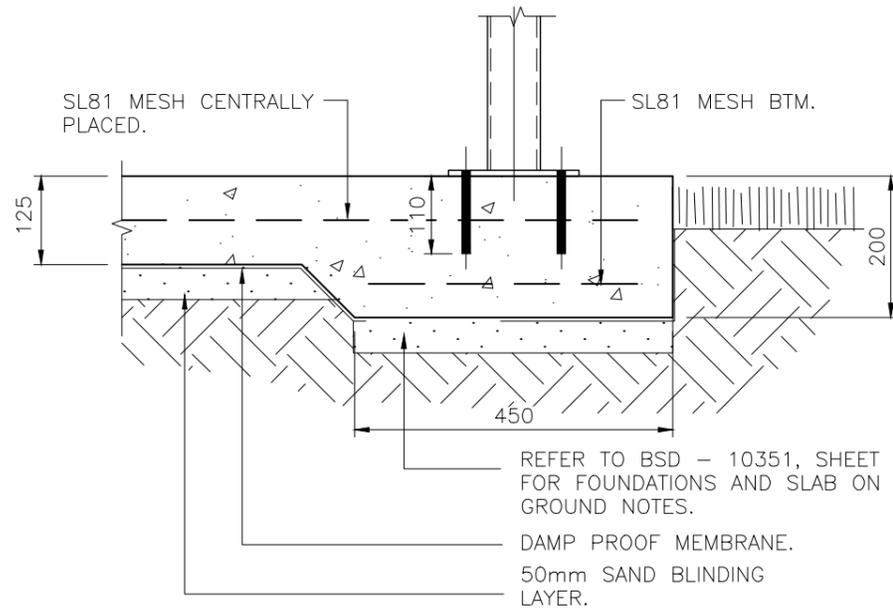


**BUSHFIRE WATER SUPPLY
SHELTER TYPE 1 - NATURAL AREA
PLAN - SHEET 2 OF 3**



TYPICAL SLAB EDGE THICKENING DETAIL

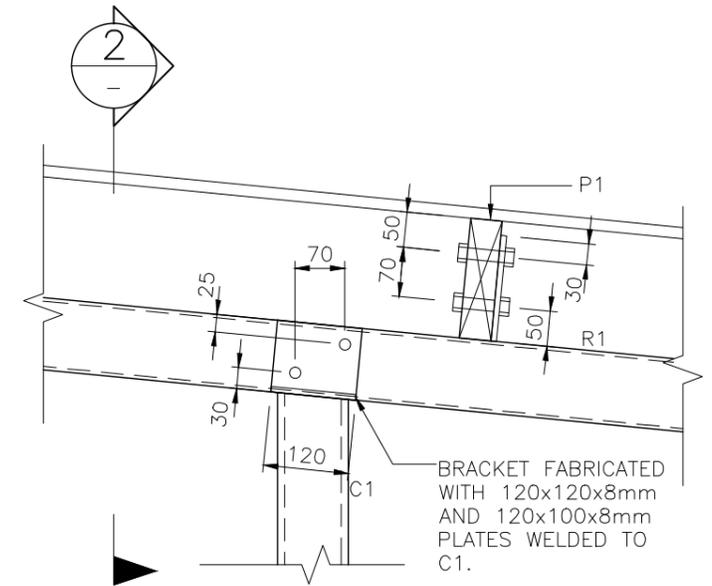
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SLAB EDGE THICKENING DETAIL WHERE SEAT IS TO BE INSTALLED ON CONCRETE SLAB

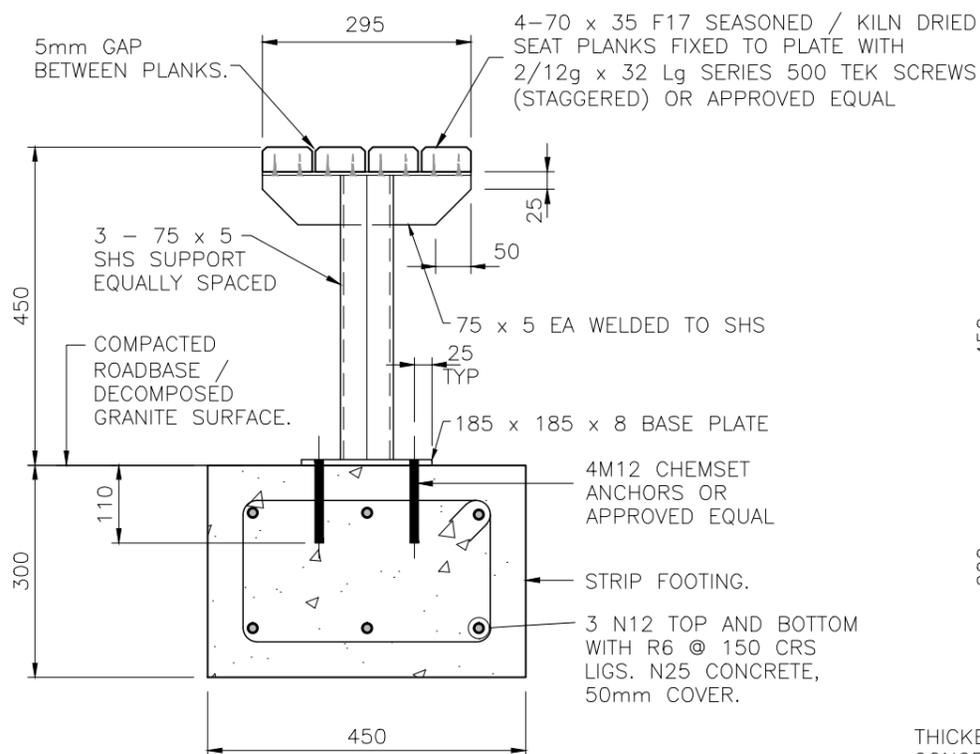
SECTION 3

SCALE 1:10



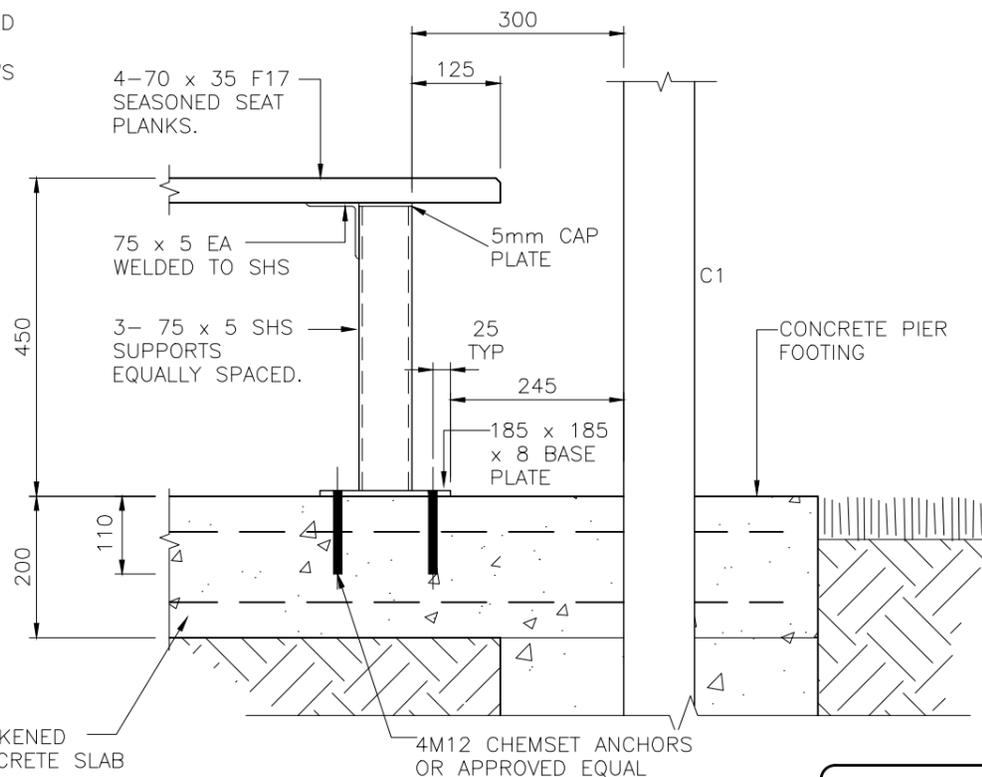
DETAIL 1

SCALE 1:10



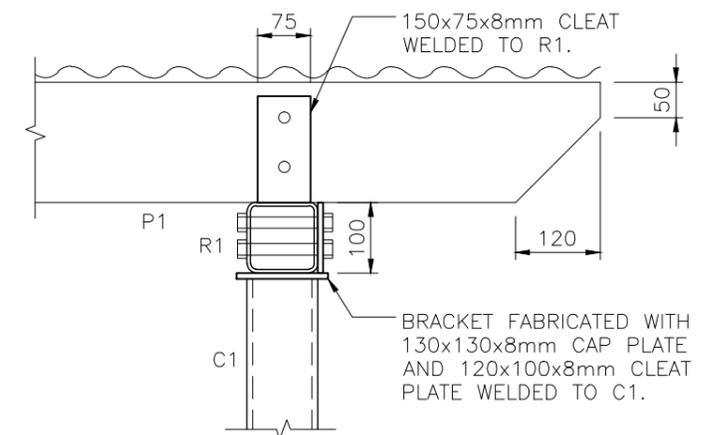
SEATING WHERE ON COMPACTED ROADBASE/DECOMPOSED GRANITE

SCALE: 1:10



SEATING ON CONCRETE SLAB

SCALE: 1:10



SECTION 2

SCALE 1:10



STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
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BRISBANE CITY COUNCIL STANDARD DRAWING

SCALE AS SHOWN	
DWG No. BSD-10351	
ORIGINAL SIZE A3	REVISION B

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
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A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
Inga Condric 2015.06.15 07:07:47+10'00'			
Senior Engineering Manager STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
C.Wood SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10351(B) Bushfire water supply shelter type 1 - Natural area - Details - Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10351-Sheets 1 & 2		



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AS 1720.1(2010) TIMBER STRUCTURES
AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS
AS 3600 CONCRETE STRUCTURES
AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.)
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF BUSHFIRE WATER SUPPLY SHELTER INCLUDED IN DRAWING SHEETS 1 TO 3.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 2.5
ULTIMATE DESIGN WIND SPEED = 54.0 m/s
DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE
LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN - NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF THE SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL - BCC SPECIFICATION S300 QUARRY PRODUCT CLASS 1 MATERIAL.
- F5 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F6 SLABS ON GROUND SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LAYER OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O
- | ELEMENT: | F'C (MPa) | REINFORCEMENT COVER |
|----------|-----------|---------------------|
| PIERS | 25 | 75 MIN. |
| SLAB | 25 | 50 MIN. |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR | LAP LENGTH (mm) |
|------|-----------------|
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS:
R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
N DEFORMED BAR GRADE D500N TO AS 4671.
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ)

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH:
AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O.
AS 3679 GRADE 300 FOR HOT ROLLED SECTIONS.
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O.
ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O.
ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS - COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S8. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

STRUCTURAL DESIGN CERTIFICATION

DESIGN	Lenita Mendis RPEQ:8950 2014.12.10 16:34:11 +10'00'	DESIGN CHECK	R.Hu (RPEQ No 13885)	AUTHORISED FOR ISSUE	Bala Balakumar, RPEQ:3963 2014.12.11 09:02:07 +10'00'
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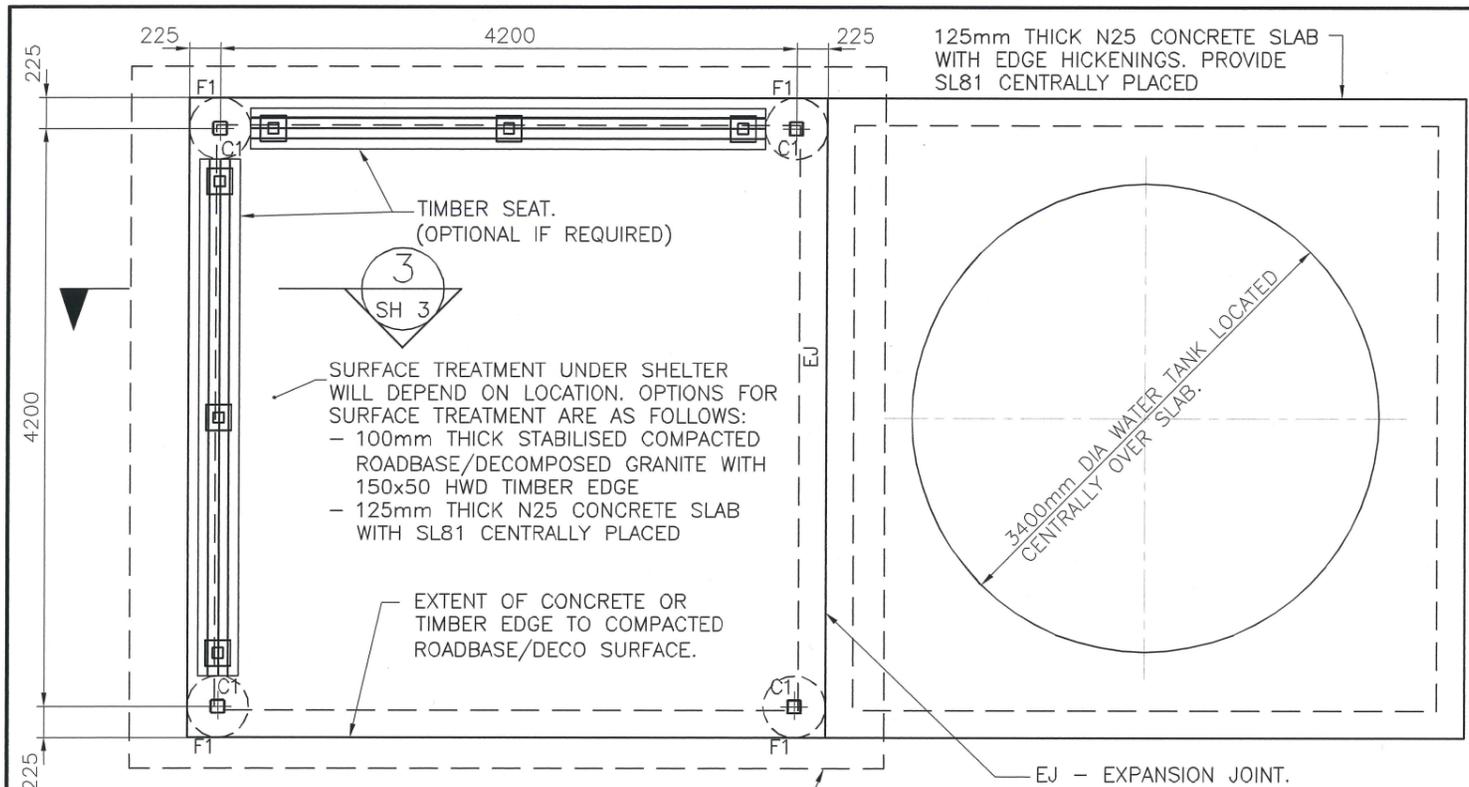
BRISBANE CITY COUNCIL STANDARD DRAWING

BUSHFIRE WATER SUPPLY
SHELTER TYPE 2 - NATURAL AREA -
SHEET 1 OF 3 - NOTES

SCALE	AS SHOWN
DWG No.	BSD-10352
ORIGINAL SIZE	A3
REVISION	A

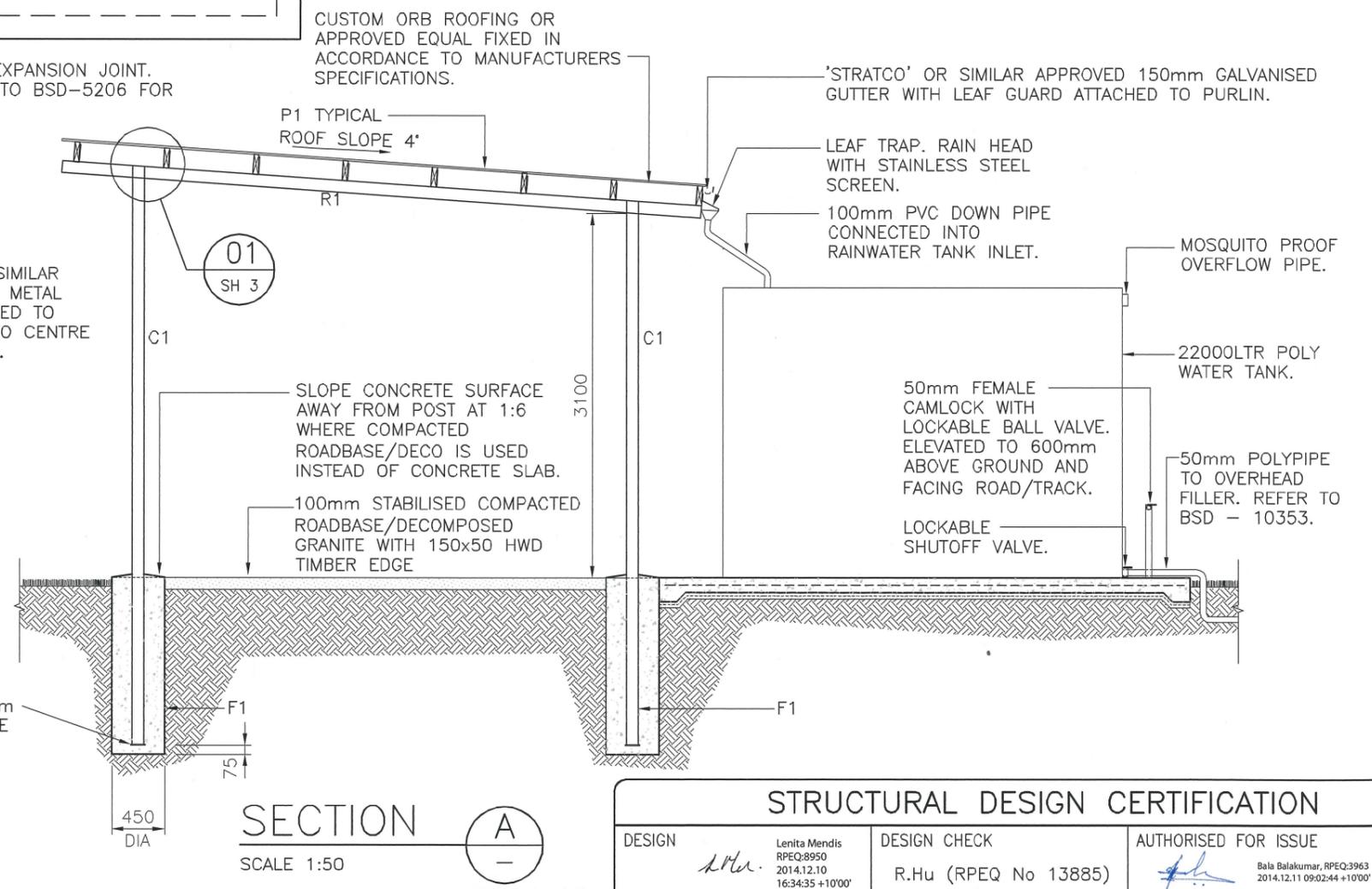
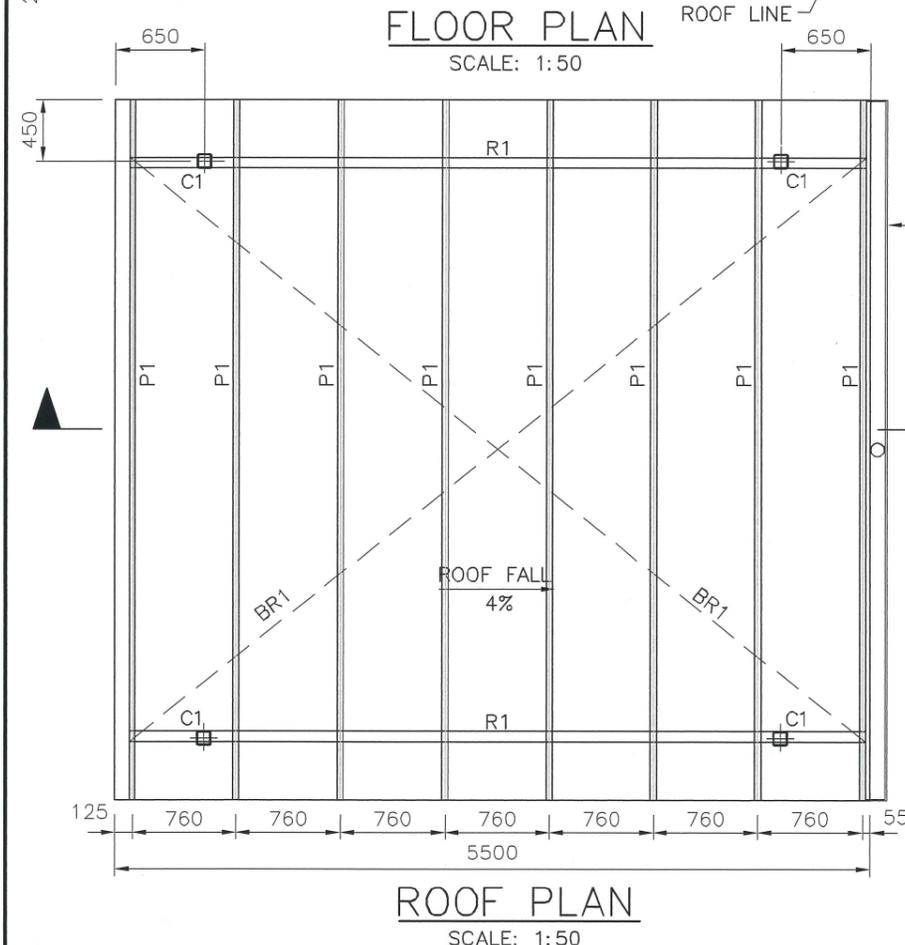
DRAWING AUTHORISED FOR PUBLICATION				DESIGN	CPO - P&D	DATE	DEC '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				DRAWN	CPO - P&D	DATE	DEC '14
DESIGN APPROVED				CHECKED	BI - FSG - AS	DATE	DEC '14
A	ORIGINAL ISSUE	DEC '14	DEC '14	DRAWING FILENAME	BSD-10352-Sheet 1 of 3.dwg		
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	ASSOCIATED PLANS	BSD-10352-Sheets 2 & 3		





MEMBER SCHEDULE			
MARK	MEMBER	DESCRIPTION	COMMENTS
C1	100x5 SHS	POST	
R1	100x5 SHS	RAFTER	FIXED TO POST WITH 2xM16 BOLTS. 5mm END CAPS
P1	170x45 MGP12 SEASONED TIMBER	PURLIN	FIXED TO RAFTER WITH 2x M12 BOLTS.
BR1	30x1.0 GALVANISED STEEL STRAP BRACE	STRAP BRACING TO TOP OF PURLINS	5/3.15ø x 35mm NAILS AT EACH END OF STRAPPING FIXED TO SIDES OF EDGE PURLINS AND ONE NAIL TO TOP OF EACH PURLIN.
F1	450øx1500 DEEP	PIER FOOTING	N25 CONCRETE.

IF OPTIONAL HORSE HITCHING RAIL IS REQUIRED, REFER TO BSD - 5003 FOR DETAILS. ENSURE HITCHING RAIL IS LOCATED ON HIGH SIDE OF SHELTER ROOF. MIN 1500mm AWAY.



STRUCTURAL DESIGN CERTIFICATION		
DESIGN	Lenita Mendis RPEQ:8950 2014.12.10 16:34:35 +10'00'	DESIGN CHECK
	R.Hu (RPEQ No 13885)	AUTHORISED FOR ISSUE
		Bala Balakumar, RPEQ:3963 2014.12.11 09:02:44 +10'00'

ISSUE	AMENDMENT	DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10352-Sheet 2 of 3.dwg		
ASSOCIATED PLANS	BSD-10352-Sheets 1 & 3		



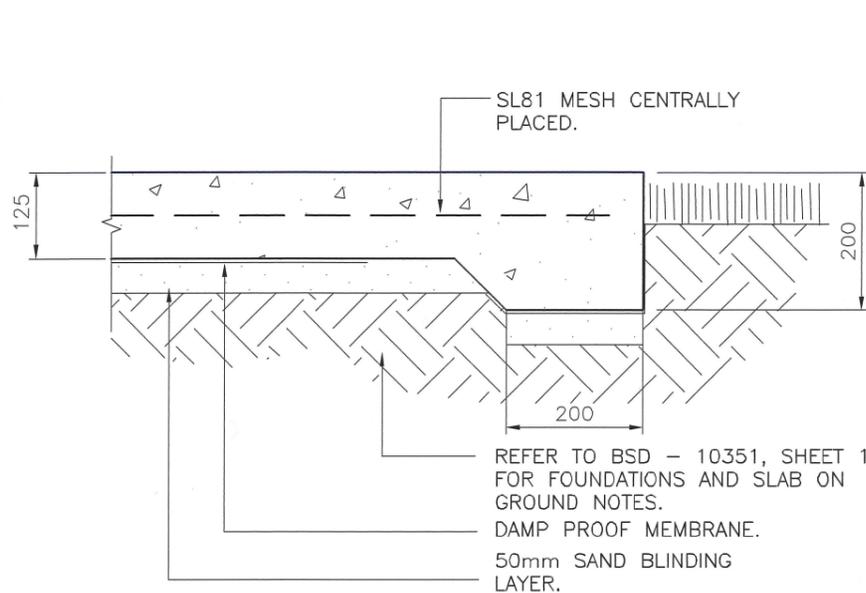
BRISBANE CITY COUNCIL STANDARD DRAWING

BUSHFIRE WATER SUPPLY SHELTER TYPE 2 - NATURAL AREA - SHEET 2 OF 3 - PLAN

SCALE AS SHOWN

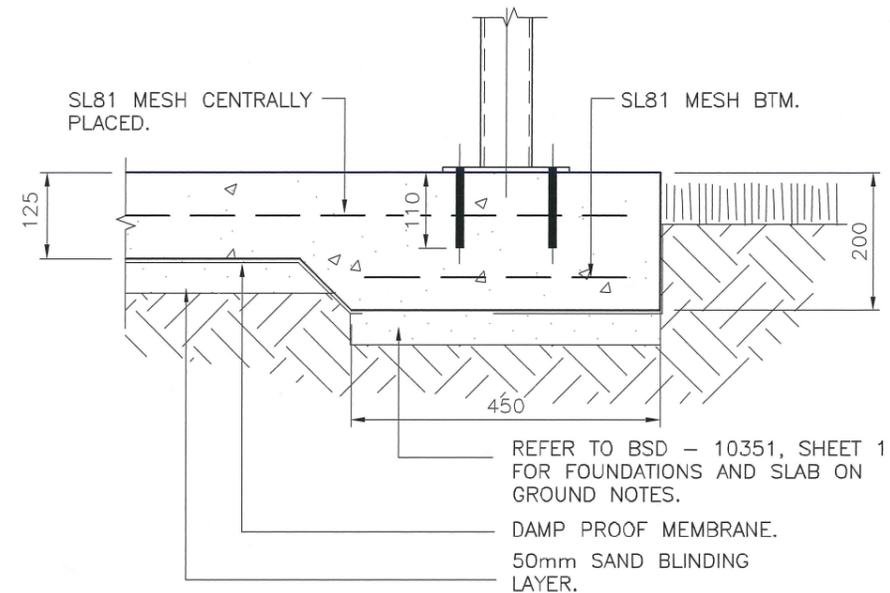
DWG No. **BSD-10352**

ORIGINAL SIZE A3 REVISION A



REFER TO BSD - 10351, SHEET 1 FOR FOUNDATIONS AND SLAB ON GROUND NOTES.
DAMP PROOF MEMBRANE.
50mm SAND BLINDING LAYER.

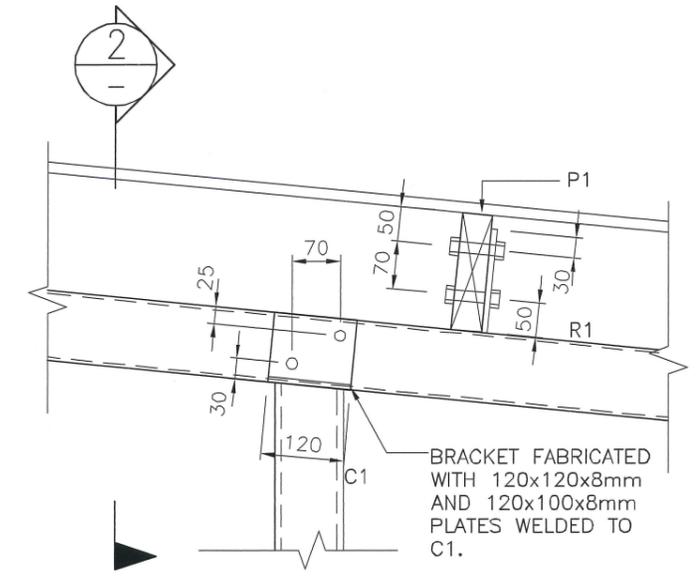
TYPICAL SLAB EDGE THICKENING DETAIL
SCALE: 1:10



REFER TO BSD - 10351, SHEET 1 FOR FOUNDATIONS AND SLAB ON GROUND NOTES.
DAMP PROOF MEMBRANE.
50mm SAND BLINDING LAYER.

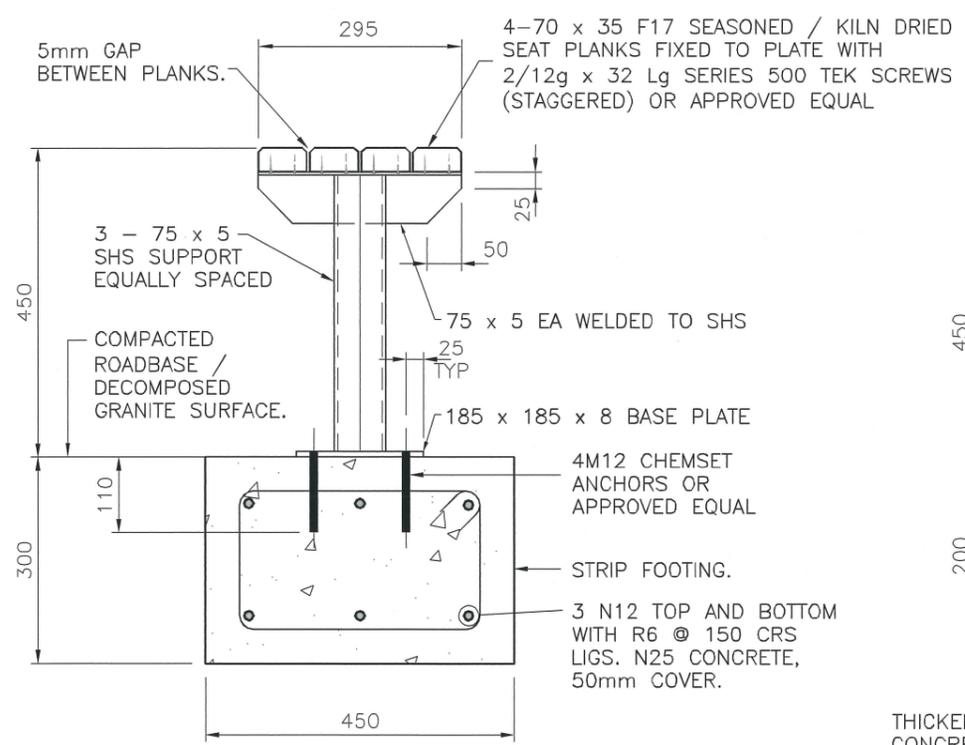
SLAB EDGE THICKENING DETAIL WHERE SEAT IS TO BE INSTALLED ON CONCRETE SLAB

SECTION 3
SCALE 1:10
SH 2



BRACKET FABRICATED WITH 120x120x8mm AND 120x100x8mm PLATES WELDED TO C1.

DETAIL 1
SCALE 1:10
SH 2

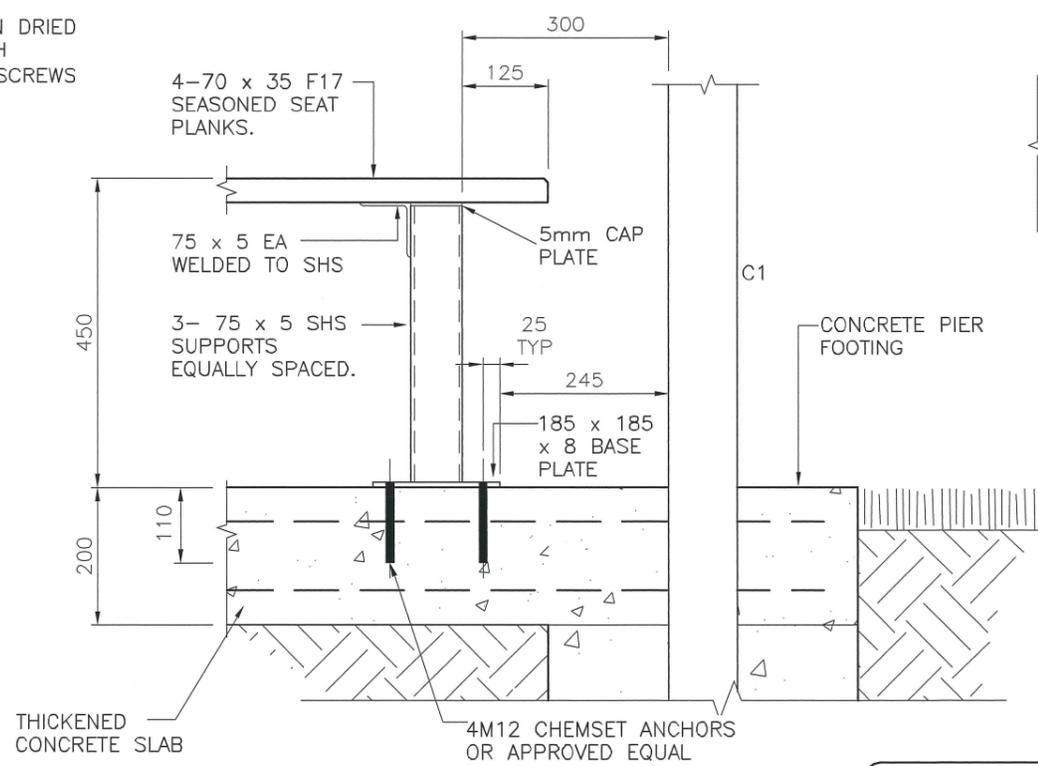


4-70 x 35 F17 SEASONED / KILN DRIED SEAT PLANKS FIXED TO PLATE WITH 2/12g x 32 Lg SERIES 500 TEK SCREWS (STAGGERED) OR APPROVED EQUAL

4M12 CHEMSET ANCHORS OR APPROVED EQUAL

3 N12 TOP AND BOTTOM WITH R6 @ 150 CRS LIGS. N25 CONCRETE, 50mm COVER.

SEATING WHERE ON COMPACTED ROADBASE/DECOMPOSED GRANITE
SCALE: 1:10



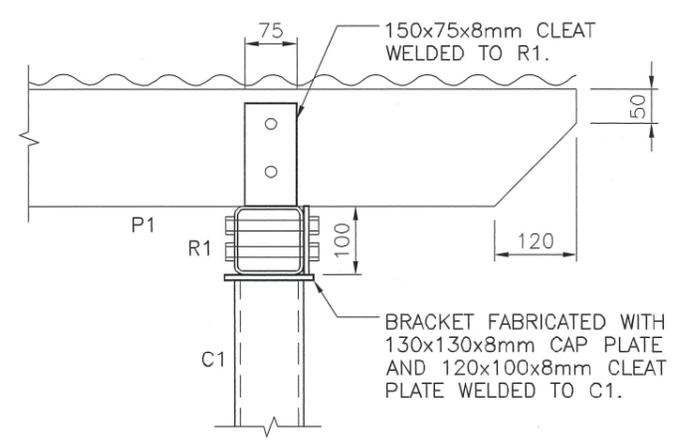
4-70 x 35 F17 SEASONED SEAT PLANKS.

75 x 5 EA WELDED TO SHS
3- 75 x 5 SHS SUPPORTS EQUALLY SPACED.

5mm CAP PLATE

4M12 CHEMSET ANCHORS OR APPROVED EQUAL

SEATING ON CONCRETE SLAB
SCALE: 1:10



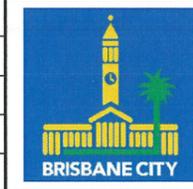
BRACKET FABRICATED WITH 130x130x8mm CAP PLATE AND 120x100x8mm CLEAT PLATE WELDED TO C1.

SECTION 2
SCALE 1:10

STRUCTURAL DESIGN CERTIFICATION			
DESIGN	Lenita Mendis RPEQ:8950 2014.12.10 1635:00 +10'00'	DESIGN CHECK	R.Hu (RPEQ No 13885)
AUTHORISED FOR ISSUE		Bala Balakumar, RPEQ:3963 2014.12.11 09:03:25 +10'00'	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10352-Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10352-Sheets 1 & 2		



BRISBANE CITY COUNCIL STANDARD DRAWING	
BUSHFIRE WATER SUPPLY SHELTER TYPE 2 - NATURAL AREA - SHEET 3 OF 3 - DETAILS	SCALE AS SHOWN DWG No. BSD-10352 ORIGINAL SIZE A3 REVISION A

GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –
AS 1684.2(2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION
AS 1720.1(2010) TIMBER STRUCTURES
AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS
AS 3600 CONCRETE STRUCTURES
AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.)
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF BUSHFIRE WATER SUPPLY SHELTER INCLUDED IN DRAWING SHEETS 1 TO 3.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.

DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 2.5
ULTIMATE DESIGN WIND SPEED = 54.0 m/s
DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE
LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF THE SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCT CLASS 1 MATERIAL.
- F5 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F6 SLABS ON GROUND SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LAYER OF FILL. EVERY TEST MUST PASS.

TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O
- | | ELEMENT: | F'C (MPa) | REINFORCEMENT COVER |
|--|----------|-----------|---------------------|
| | PIERS | 25 | 75 MIN. |
| | SLAB | 25 | 50 MIN. |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR | LAP LENGTH (mm) |
|------|-----------------|
| N12 | 500 |
| N16 | 650 |
| MESH | 350 |
- C7 REINFORCEMENT SYMBOLS:
R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.
N DEFORMED BAR GRADE D500N TO AS 4671.
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ)

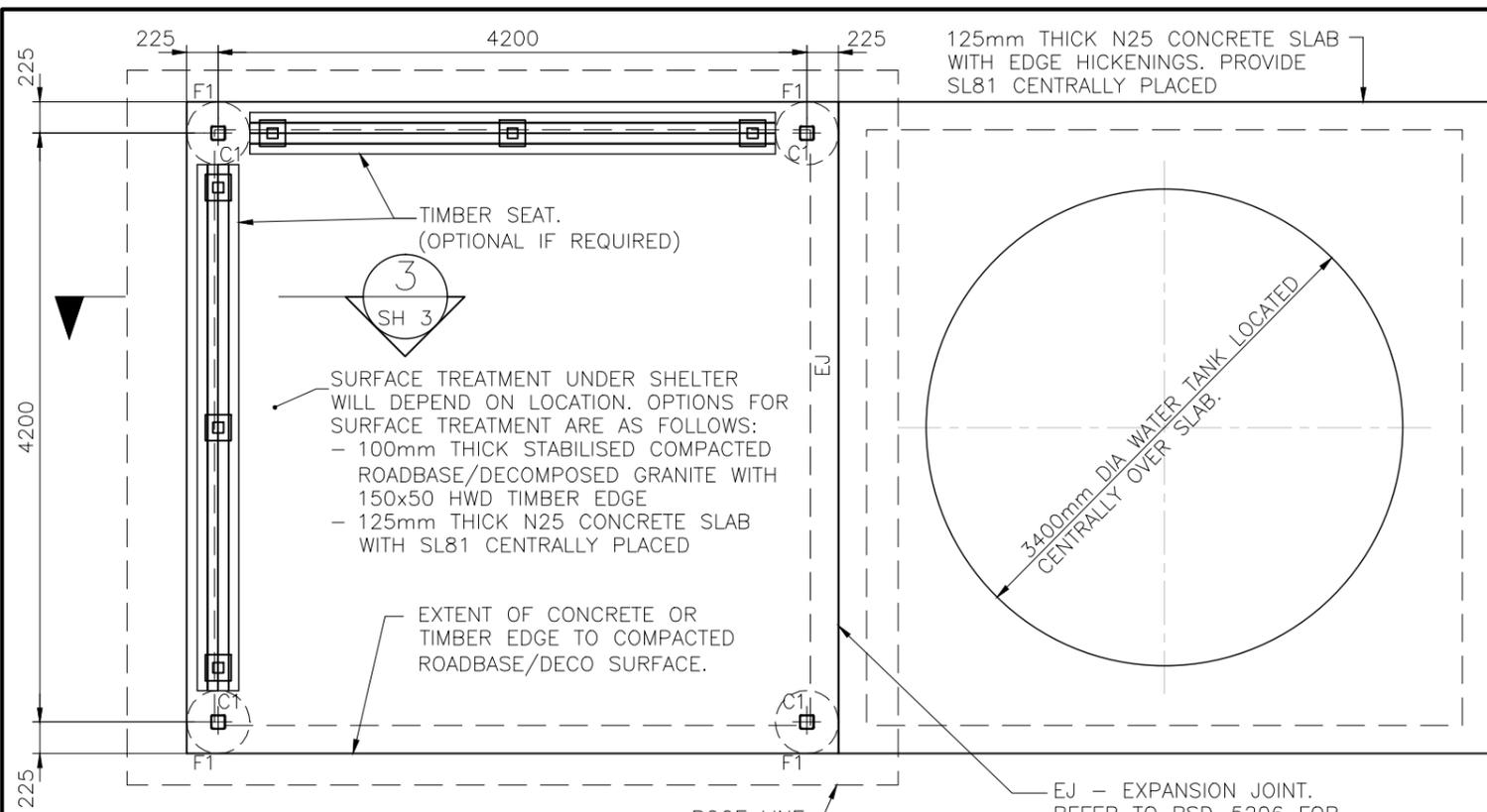
STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O.
AS 3679 GRADE 300 FOR HOT ROLLED SECTIONS.
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O.
ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O.
ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S8. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

STRUCTURAL DESIGN CERTIFICATION			
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE	
Lenita Mendis RPEQ:8950 2014.12.10 16:34:11+10'00'	R.Hu (RPEQ No 13885)	Bala Balakumar RPEQ 3963 2014.12.11 09:02:07+10'00'	
BRISBANE CITY COUNCIL STANDARD DRAWING			
BUSHFIRE WATER SUPPLY SHELTER TYPE 2 – NATURAL AREA NOTES – SHEET 1 OF 3		SCALE AS SHOWN	
		DWG No. BSD-10352	
		ORIGINAL SIZE A3	REVISION B

DRAWING AUTHORISED FOR PUBLICATION				
Inga Condric 2015.06.15 07:08:53+10'00'				
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				
DESIGN APPROVED				
C.Wood				
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE				
DESIGN	CPO - P&D	DATE	DEC '14	
DRAWN	CPO - P&D	DATE	DEC '14	
CHECKED	BI - FSG - AS	DATE	DEC '14	
DRAWING FILENAME	BSD-10352 (B) Bushfire water supply shelter type 2 - Natural area - Notes - Sheet 1 of 3.dwg			
ASSOCIATED PLANS	BSD-10352-Sheets 2 & 3			
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

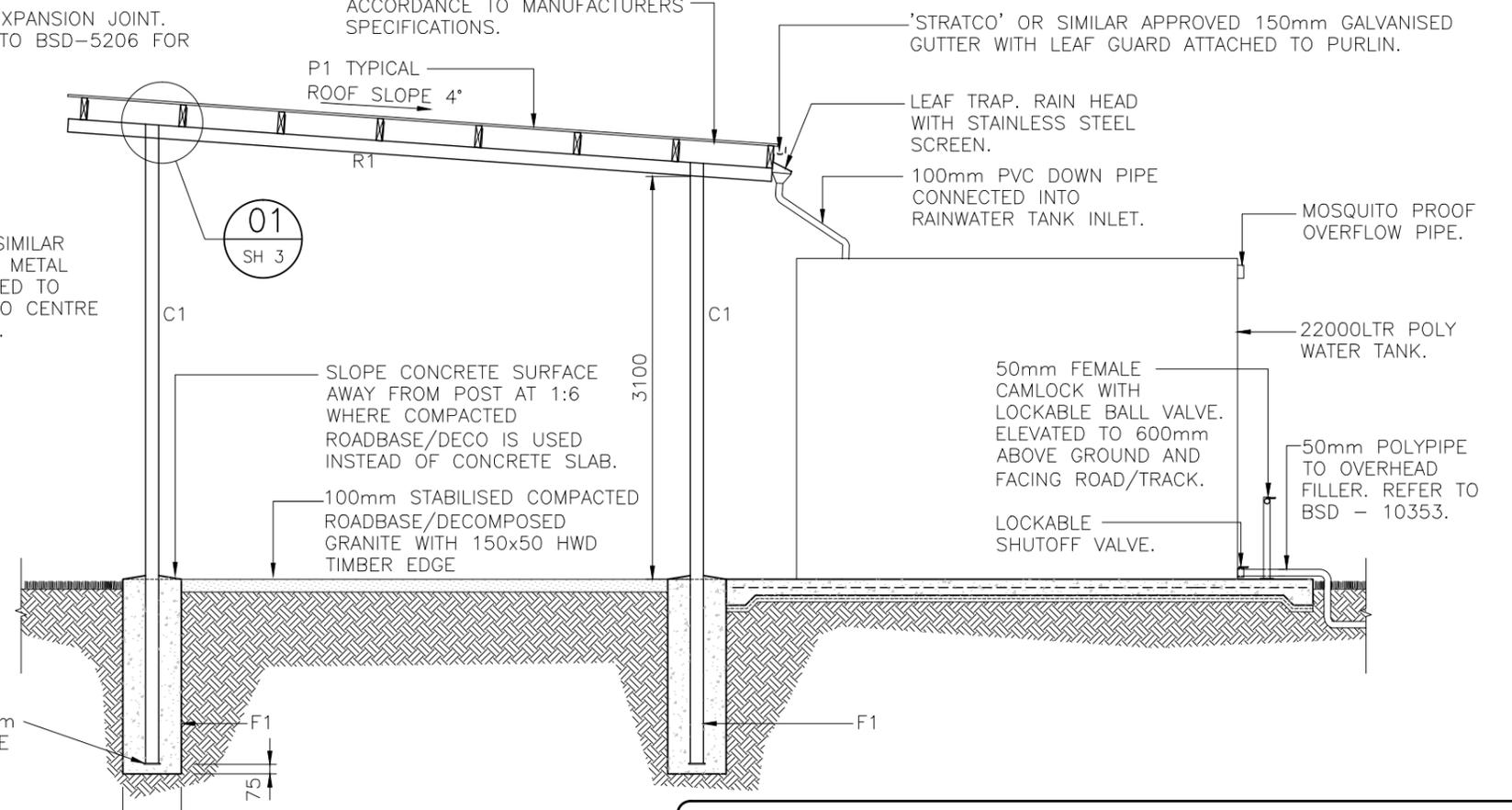
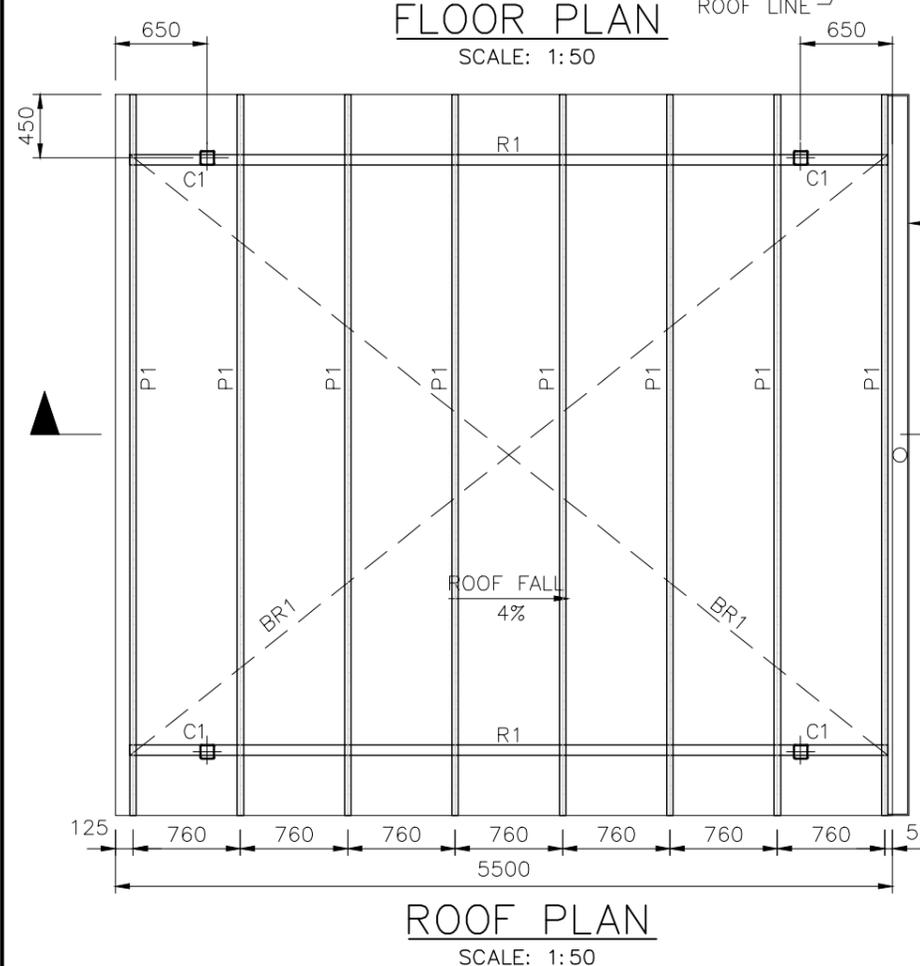




MEMBER SCHEDULE			
MARK	MEMBER	DESCRIPTION	COMMENTS
C1	100x5 SHS	POST	
R1	100x5 SHS	RAFTER	FIXED TO POST WITH 2xM16 BOLTS. 5mm END CAPS
P1	170x45 MGP12 SEASONED TIMBER	PURLIN	FIXED TO RAFTER WITH 2x M12 BOLTS.
BR1	30x1.0 GALVANISED STEEL STRAP BRACE	STRAP BRACING TO TOP OF PURLINS	5/3.15Ø x 35mm NAILS AT EACH END OF STRAPPING FIXED TO SIDES OF PURLINS AND ONE NAIL TO TOP OF EACH PURLIN.
F1	450Øx1500 DEEP	PIER FOOTING	N25 CONCRETE.

IF OPTIONAL HORSE HITCHING RAIL IS REQUIRED, REFER TO BSD - 5003 FOR DETAILS. ENSURE HITCHING RAIL IS LOCATED ON HIGH SIDE OF SHELTER ROOF. MIN 1500mm AWAY.

CUSTOM ORB ROOFING OR APPROVED EQUAL FIXED IN ACCORDANCE TO MANUFACTURERS SPECIFICATIONS.



STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Lenita Mendis RPEQ:8950 2014.12.10 16:34:35+10'00'	R.Hu (RPEQ No 13885)	Bala Balakumar RPEQ 3963 2014.12.11 09:02:44+10'00'

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
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A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

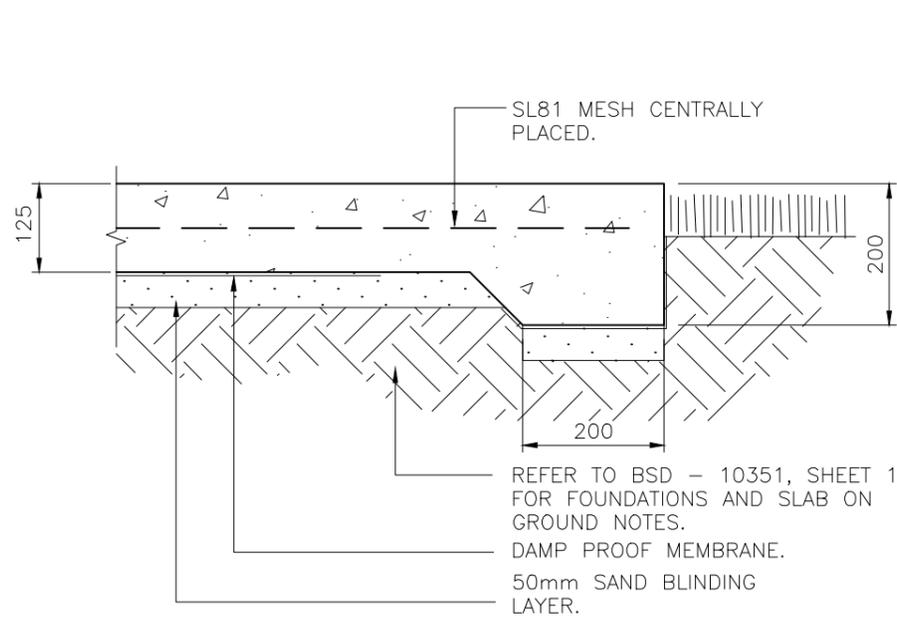
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DESIGN APPROVED			
C.Wood SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10352 (B) Bushfire water supply shelter type 2 - Natural area - Plan - Sheet 2 of 3.dwg		
ASSOCIATED PLANS	BSD-10352-Sheets 1 & 3		



BRISBANE CITY COUNCIL STANDARD DRAWING

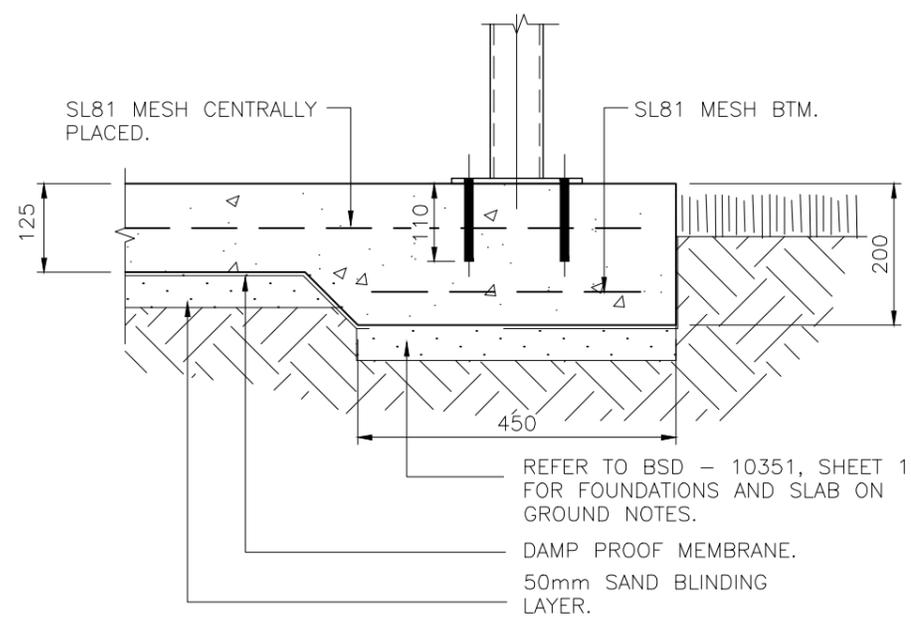
BUSHFIRE WATER SUPPLY SHELTER TYPE 2 - NATURAL AREA PLAN - SHEET 2 OF 3

SCALE: AS SHOWN
DWG No. **BSD-10352**
ORIGINAL SIZE: A3 REVISION: B



TYPICAL SLAB EDGE THICKENING DETAIL

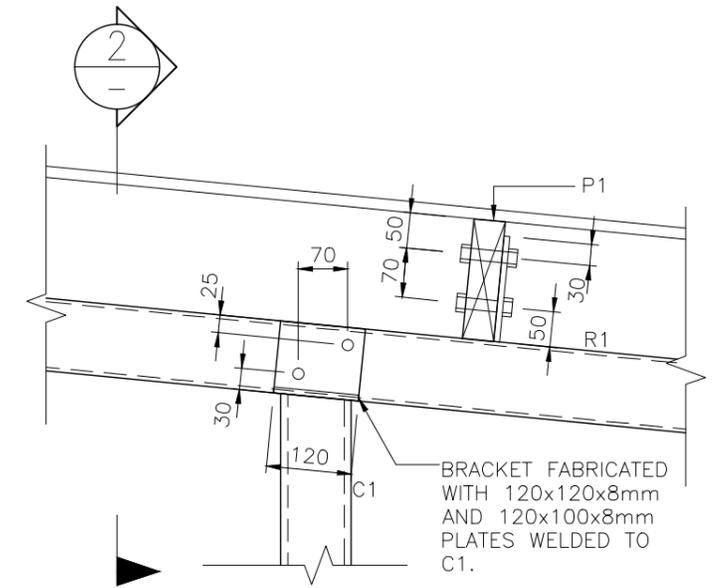
SCALE: 1:10



SLAB EDGE THICKENING DETAIL WHERE SEAT IS TO BE INSTALLED ON CONCRETE SLAB

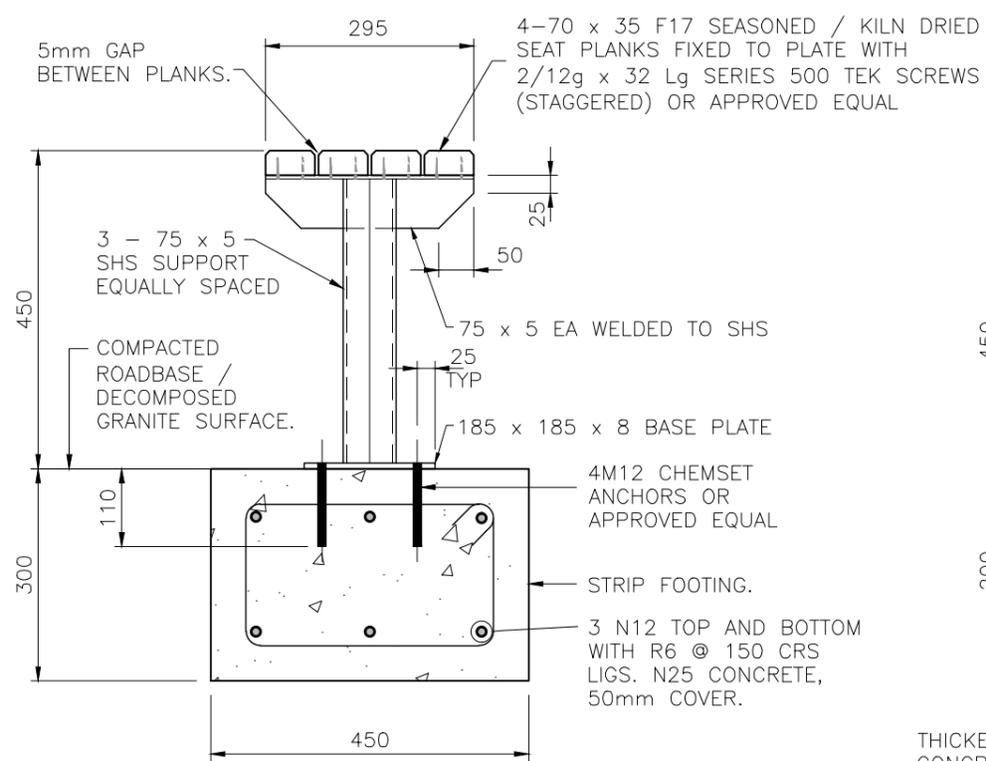
SECTION 3

SCALE 1:10



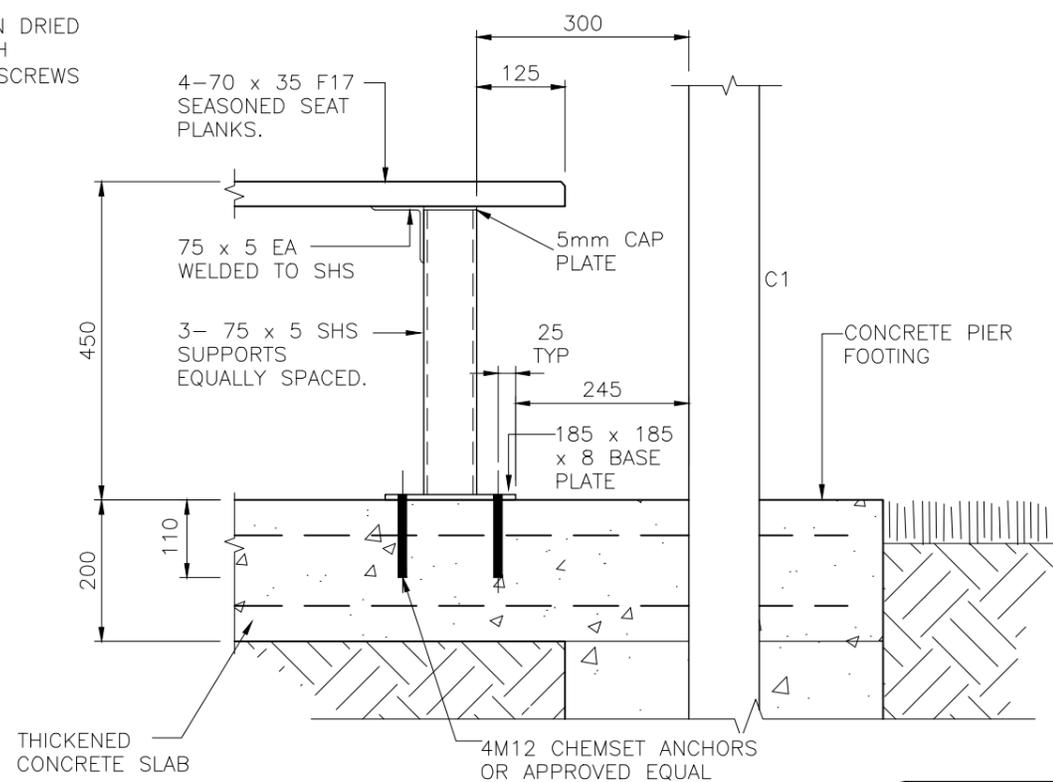
DETAIL

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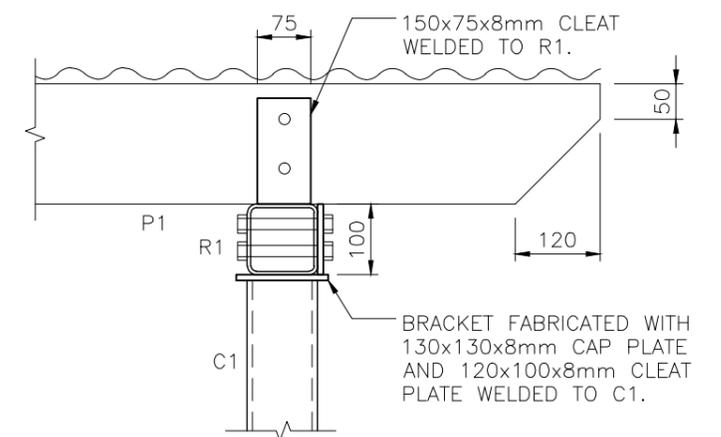
SEATING WHERE ON COMPACTED ROADBASE/DECOMPOSED GRANITE

SCALE: 1:10



SEATING ON CONCRETE SLAB

SCALE: 1:10



SECTION

SCALE 1:10



STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Lenita Mendis RPEQ:8950 2014.12.10 16:35:00+10'00'	R.Hu (RPEQ No 13885)	Bala Balakumar RPEQ 3963 2014.12.11 09:03:25+10'00'

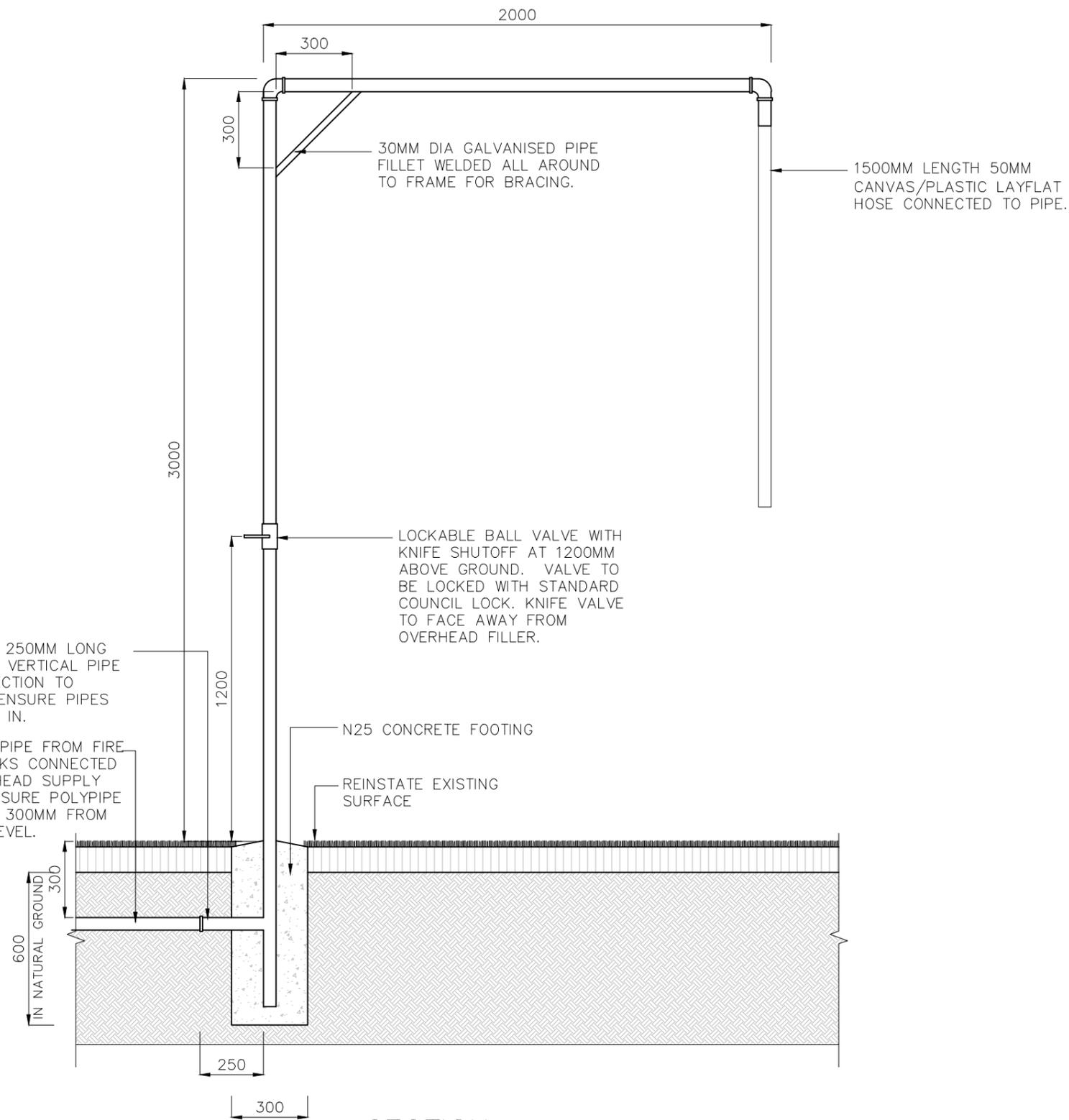
BRISBANE CITY COUNCIL STANDARD DRAWING

SCALE AS SHOWN	
DWG No. BSD-10352	
ORIGINAL SIZE	REVISION
A3	B

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION			
Inga Condric 2015.06.15 07:11:55+10'00'			
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED			
C.Wood SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10352 (B) Bushfire water supply shelter type 2 - Natural area - Details - Sheet 3 of 3.dwg		
ASSOCIATED PLANS	BSD-10352-Sheets 1 & 2		





SECTION
SCALE: 1:20

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
- IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
- THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.
- DIMENSIONS IN MILLIMETRES (UNO).

FITTINGS/FINISHES

1. WHERE STANDARD IS FOR USE IN A NON-MARINE ENVIRONMENT (UP TO 1KM FROM THE FORESHORE), THE FOLLOWING PROTECTION TREATMENT IS REQUIRED:
 - HOT DIP GALVANISING: FERROUS OPEN SECTIONS TO AS4791;
 - FERROUS HOLLOW SECTIONS TO AS4792.
2. WHERE STANDARD IS REQUIRED FOR USE WITHIN MARINE ENVIRONMENT, THE FOLLOWING PROTECTION TREATMENT IS REQUIRED:
 - STEELWORK HOT DIP GALVANISING: 85 MICRONS (600G/M²) MIN;
 - SWEEP ABRASIVE BLAST;
 - STEELWORK FIRST COAT: EPOXY PRIMER 75 MICRONS MIN;
 - STEELWORK SECOND COAT: TWO PACK ACRYLIC OR POLYURETHANE GLOSS 75 MICRONS MIN;
3. PAINT SYSTEMS TO BE IN ACCORDANCE WITH AS2312 AND IS DESIGNATED HDG600P6 AND HDG600P
4. ALL POSTS TO BE 50 NB GALVANISED STEEL TUBE TO AS/NZ1163.
5. ALL JOINTS TO BE FULLY WELDED. WELDS TO BE 5 THICK C.F.W (CONTINUOUS FILLET WELDS) TO AS554.1 WITH COLD GALVANISING TREATMENT TO COMPLETED WELDS.
6. PREFERRED COLD GALVANISING TREATMENT FOR IN-SITU WELDS, CUT ENDS OR OTHER BARE STEEL IS TO APPLY 2 COATS OF INORGANIC ZINC PRIMER APPLIED BY BRUSH.

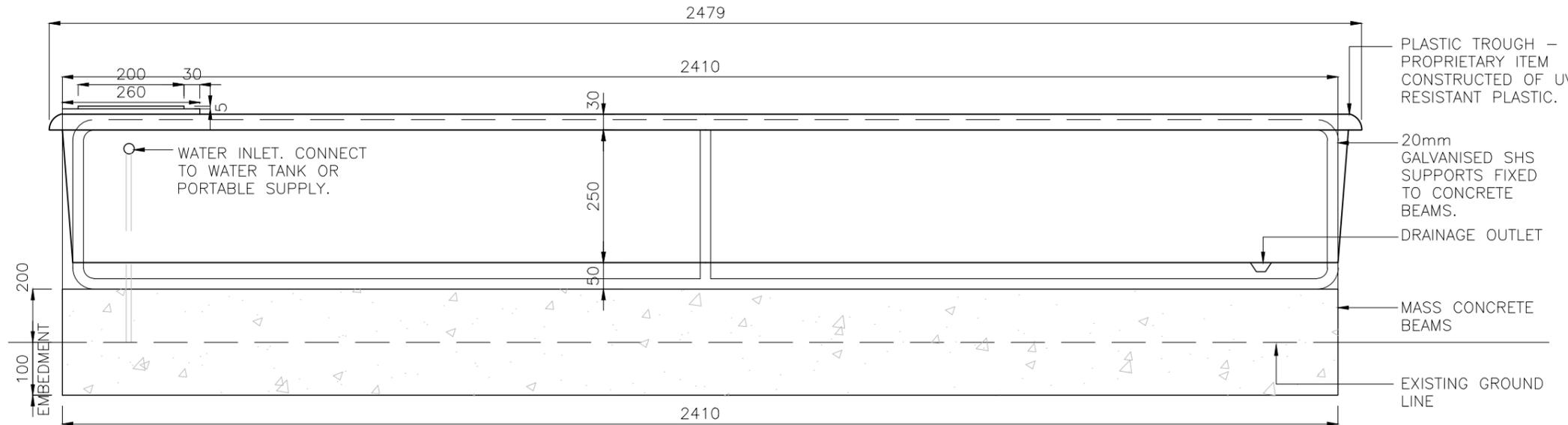
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
 Ingo Condric
 2015.06.04 15:32:25+10'00'
 prof ASSET ENGINEERING MANAGER
 STRATEGIC ASSET MANAGEMENT
 DESIGN APPROVED
 C.Wood
 SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
 ASSET SERVICES/BRISBANE INFRASTRUCTURE

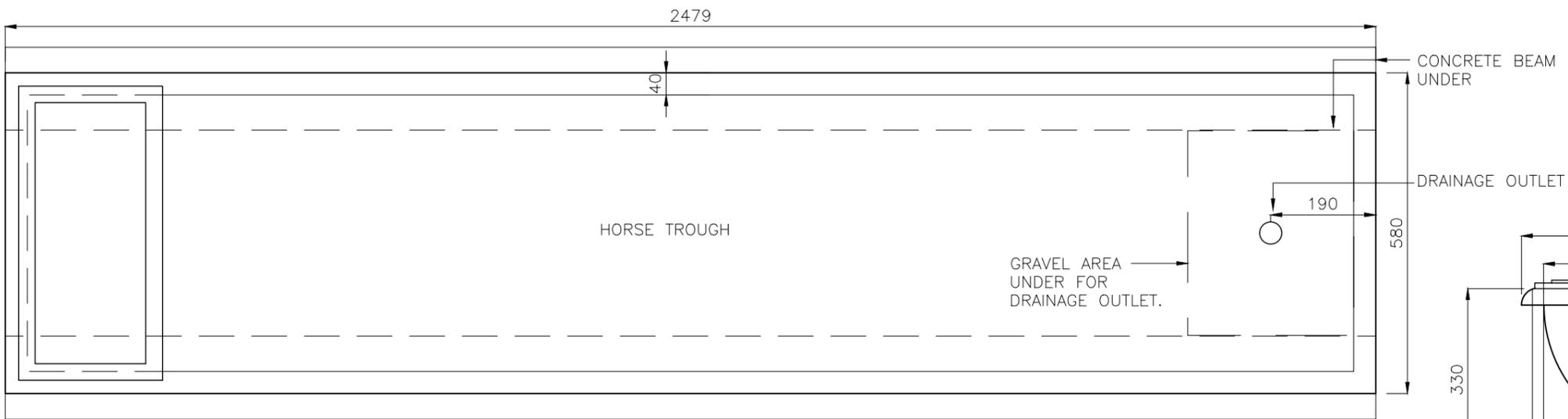
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CPO - P&D	DEC '14
DRAWN	DATE
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CHECKED	DATE
BI - FSG - AS	DEC '14
DRAWING FILENAME	BSD-10353 (A) Bushfire water supply shelter - Natural area - Overhead filler.dwg
ASSOCIATED PLANS	



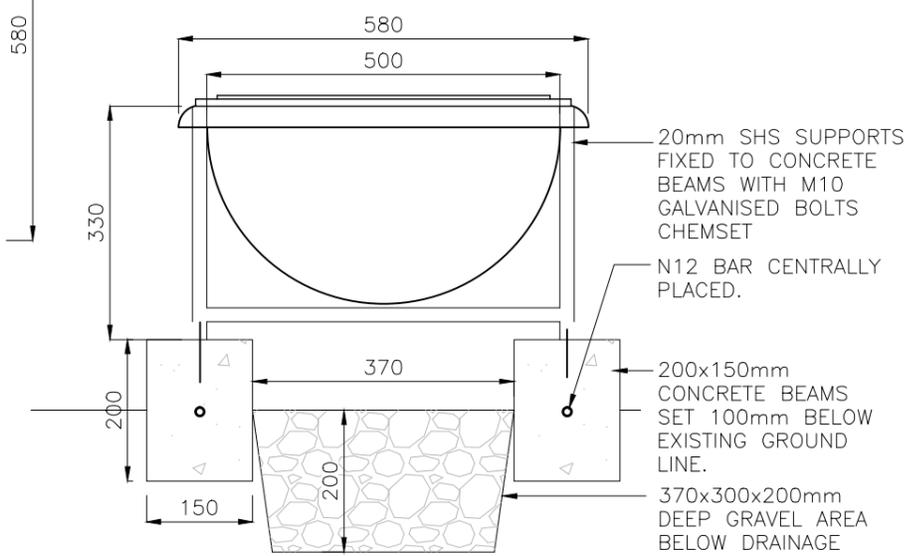
BRISBANE CITY COUNCIL STANDARD DRAWING	
BUSHFIRE WATER SUPPLY SHELTER NATURAL AREA OVERHEAD FILLER	
SCALE AS SHOWN	DWG No. BSD-10353
ORIGINAL SIZE A3	REVISION A



SIDE ELEVATION
SCALE: 1:10



PLAN
SCALE: 1:10



END ELEVATION
SCALE: 1:10

- NOTES**
- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
 - SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
 - VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
 - WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
 - VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
 - STRUCTURES HAVE BEEN DESIGNED FOR STANDARD SOIL AND TERRAIN CATEGORY CONDITIONS. TERRAIN CATEGORY = 2.5 AND MINIMUM ALLOWABLE BEARING CAPACITY = 100KPA.
 - IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
 - THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.
 - REFER TO B.05 FOR GENERAL STRUCTURAL NOTES.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10360 (A) Horse trough - Natural area - Plan and notes.dwg		
ASSOCIATED PLANS			



BRISBANE CITY COUNCIL STANDARD DRAWING

HORSE TROUGH NATURAL AREA PLAN AND NOTES

SCALE: AS SHOWN

DWG No. **BSD-10360**

ORIGINAL SIZE: A3 REVISION: A

SITING NOTES

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.

USUALLY SITED IN LOCAL AND DISTRICT INFORMAL USE PARKS AND LESS COMMONLY IN SPORTS PARKS. AVOID SMALL "POCKET PARKS".

AVOID NOISE, AIR POLLUTION AND CONSIDER CLIMATE E.G. WIND. SHADE.

CONSIDER AMENITY OF LOCAL RESIDENTS AND PROVIDE GOOD ACCESSIBILITY TO THE PLAYGROUND.

MAXIMISE OPPORTUNITIES FOR CASUAL SURVEILLANCE FROM ACTIVITY SPACES, CAR PARKS, SEATING, PARK NEIGHBOURS AND/OR SURROUNDING STREETS.

PROVIDE PLAY EXPERIENCES TO COMPLEMENT AND ENHANCE OTHER RECREATION OPPORTUNITIES IN A PARK.

SETBACK PLAYGROUND FROM MAJOR ROADS, DRAINS, COMMUTER BIKEWAYS ETC. OR CONSTRUCT SAFETY FENCING TO MANAGE THE RISK.

PROVIDE FOR CHILDREN WITH SPECIAL NEEDS WHERE POSSIBLE.

WATER PLAY ELEMENTS ARE NOT NORMALLY INCLUDED IN LOCAL PLAYGROUNDS. IF PROVIDED, WATER PLAY TO CONSIDER SAFETY AND SUSTAINABLE WATER USE.

PROVIDE PLAY ELEMENTS IN NODES, CLUSTERED ACCORDING TO AGE GROUP.

CHECK ADJACENT PARKS TO DETERMINE WHAT AGE GROUP EXISTING PLAYGROUNDS ARE FOCUSED AT, AND DESIGN FOR A DIFFERENT GROUP.

COMBINE LANDSCAPING WITH CONSTRUCTED PLAY ELEMENTS E.G. MOUNDING, PLANTING, ETC.

MIN. 2500mm CIRCULATION SPACE AROUND PERIMETER OF PLAYGROUND

PLAY EQUIPMENT TO PROVIDE FOR A RANGE OF DEVELOPMENT SKILLS FROM TODDLER TO PRIMARY SCHOOL AGE. THE AGE RANGES CAN BE CHANGED WHERE DEMOGRAPHICS INDICATE OTHER NEEDS.

UNDERSURFACING AND WEARMATS TO COMPLY WITH INFRASTRUCTURE GUIDELINES PARKS CHAPTER 8.

INCORPORATE NATURAL SHADE OF TREES

INCORPORATE REQUIREMENTS OF AUSTRALIAN STANDARDS AND BCC STANDARDS FOR PLAYGROUNDS E.G. FALL ZONES, UNDERSURFACING, EQUIPMENT.

INCORPORATE ASSOCIATED FACILITIES - AT LEAST 2 SEATS, BUBBLER AND OTHER PARK FURNITURE AS NEEDED.

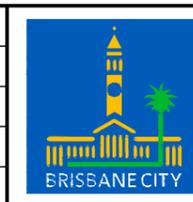
PLAYGROUND SITING - PLAN

NOT TO SCALE

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	Drawing Converted from UMS Series April 2014	APR '14	APR '14	APR '14

DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/14			
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04			
PRICIPAL PROGRAM OFFICER PARKS			

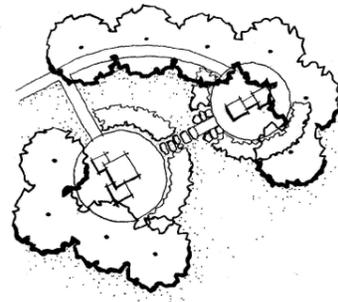
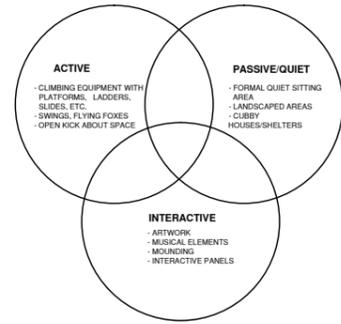
DESIGN	Std Dwgs WG	DATE	OCT '13
DRAWN	CPO - P&D	DATE	OCT '13
CHECKED	UMD_E&P & IMB	DATE	OCT '13
DRAWING FILENAME	BSD-10401 (B) Local playgrounds - Siting plan.dwg		
ASSOCIATED PLANS	SUPERSEDES UMS-753		



BRISBANE CITY COUNCIL STANDARD DRAWING	
LOCAL PLAYGROUNDS SITING PLAN	
SCALE	NOT TO SCALE
DWG No.	BSD-10401
ORIGINAL SIZE	A3
REVISION	B

DESIGN PRINCIPLES

THE FOLLOWING DESIGN PRINCIPLES SHOULD BE FOLLOWED:



1 PROVIDE A VARIETY OF ELEMENTS TO ACCOMMODATE A NUMBER OF PLAY FORMS (ACTIVE TO FOCUSED), AND A WIDE RANGE OF DEVELOPMENT SKILLS

2 PROVIDE LINKAGES BETWEEN THE ELEMENTS AND FLOW THROUGH AND AROUND THEM TO INCREASE OPTIONS FOR USE.

3 ENSURE THAT EACH ELEMENT CAN BE USED IN SEVERAL WAYS, ALTERING AS THE SKILL LEVEL DEVELOPS
E.G. FISH AT OCTOPUS GARDEN, COLMSLIE BEACH RESERVE

4 ENSURE SAFETY WITHOUT SACRIFICING PLAY (COMPLY WITH AUSTRALIAN STANDARDS, PROVIDE SHADE)
E.G. CLIMBING NET & UNDERSURFACING AREA AT ROCKS RIVERSIDE PARK.



5 INCORPORATE ART TO COMBINE IMAGINATIVE AND PHYSICAL PLAY
E.G. ARTWORK & PLAY MOUNDS AT EINBUNPIN PARK.

6 PROVIDE SHAPES, VARIED TEXTURAL SURFACES, COLOUR AND PLANTING TO ADD LAYERS OF SENSORY DETAIL AND AN EXCITING COMPLEXITY.
E.G. CORRUGATED FORMED PATHWAY AT ORLEIGH PARK.

7 ENSURE STRONG TIES WITH THE LOCAL COMMUNITY THROUGH INTEGRATION IN THE CONCEPT, IMPLEMENTATION OF PLAYGROUND OR REFERENCING TO HISTORY.
E.G. RAVEN STREET RESERVE PLAYGROUND REFLECTING THE NATURAL ENVIRONMENT CHARACTER OF THE SITE.

8 ACHIEVE A BALANCE BETWEEN PARENTAL SUPERVISION AND INDEPENDENT PLAY.
E.G. INFORMAL PICNIC AREAS INTEGRATED TO PLAY SPACES ALLOW FOR SUPERVISION & SAFE INDEPENDENT PLAY OPPORTUNITIES.

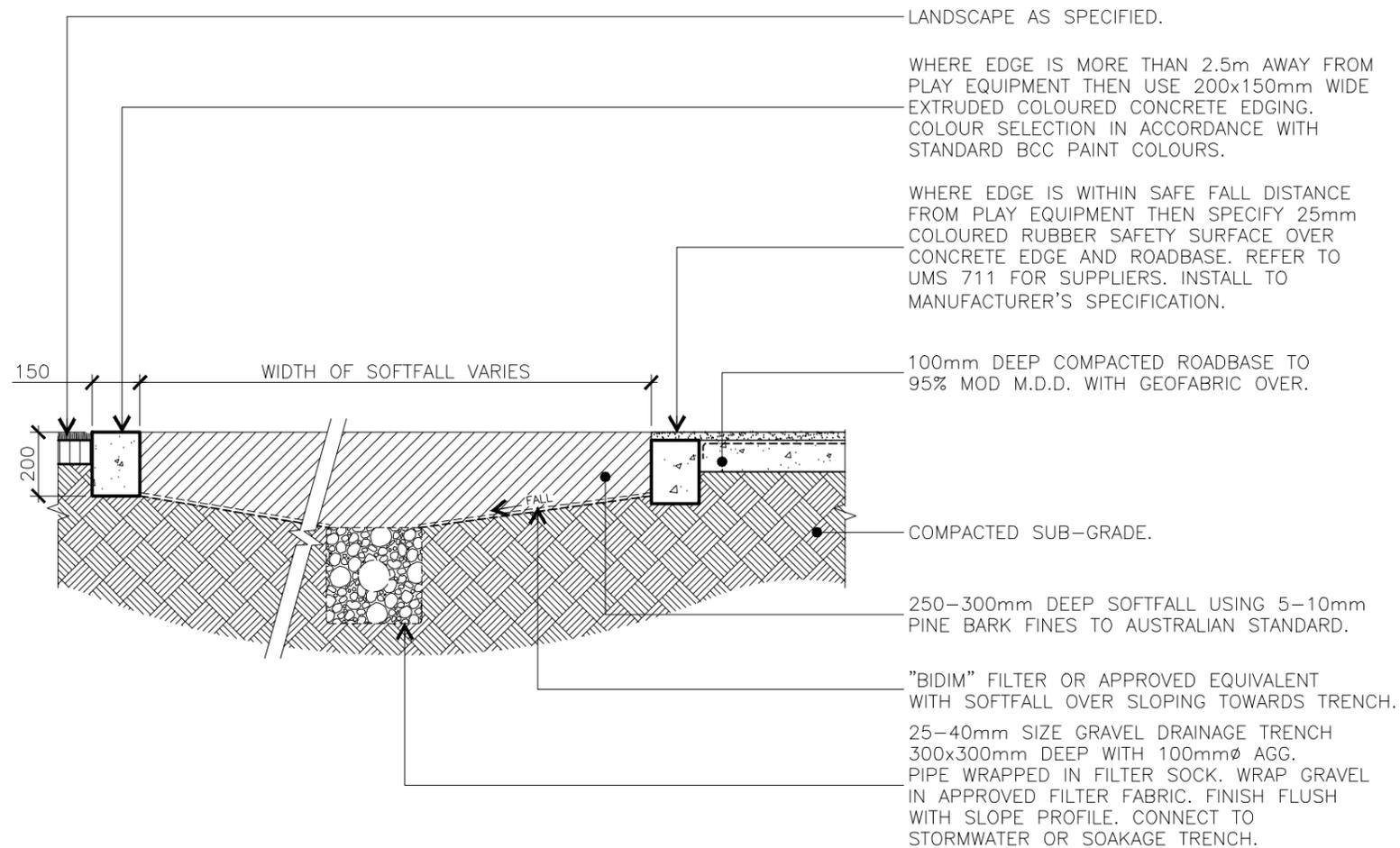


9 ENSURE SPATIAL DIVERSITY TO ACCOMMODATE CHILDREN PLAYING ALONE, AND IN SMALL, LARGE AND FAMILY GROUPS.
E.G. ARTISTIC CUBBY HOUSE AT ORLEIGH PARK

PLAY DESIGN FOR AGE GROUPS

Age group	Type of play features
0-5 years	<ul style="list-style-type: none"> • Low platform structures • Soft surfaced structures with low height platforms to ground or over water. E.g. Ladder structures, bridges, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Climbing structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Soft surfaced structures with low height platforms. E.g. Toddler platforms, etc. • Enclosed structures with low height platforms. E.g. Toddler platforms, etc. • Enclosed structures with low height platforms. E.g. Toddler platforms, etc. • Enclosed structures with low height platforms. E.g. Toddler platforms, etc.
6-11 years	<ul style="list-style-type: none"> • Medium height structures • Ladder structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Platform structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Climbing structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc.
12-17 years	<ul style="list-style-type: none"> • High height structures • Net structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Platform structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc.
Adults	<ul style="list-style-type: none"> • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc. • Enclosed structures with low height platforms. E.g. Ladder structures, tunnels, etc.

				DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04				DESIGN	Std Dwgs WG	DATE	OCT '13		BRISBANE CITY COUNCIL STANDARD DRAWING PLAYGROUND DESIGN PRINCIPALS		SCALE NOT TO SCALE		
				MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q. 2546				DRAWN	CPD - P&D	DATE	OCT '13				DWG No.	BSD-10402	
				DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04				CHECKED	UMD - E&P & IMP	DATE	OCT '13				ORIGINAL SIZE	A3	
				PRINCIPAL PROGRAM OFFICER PARKS				DRAWING FILENAME	BSD-10402 (B) Playground design principals.dwg						REVISION	B	
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE				ASSOCIATED PLANS	SUPERSEDES UMS-754								



PLAYGROUND SOFTFALL – SECTION

GENERAL NOTES

- ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISHES FLUSH WITH EDGE.
- ENSURE GARDEN AREAS (MULCH) FINISH 25mm BELOW ADJACENT F.S.L's OF EDGE.
- ENSURE EVEN GRADE FALLS MIN. 1:50 TO RUBBER SAFETY SURFACE. F.S.L's OF RUBBER SAFETY SURFACE TO FINISH FLUSH WITH SOFTFALL.
- ENSURE PLAYGROUNDS ARE LOCATED IN ACCORDANCE WITH AUSTRALIAN STANDARDS, DETAILED LANDSCAPE PLAN, AND SUBDIVISION AND DEVELOPMENT GUIDELINES.
- ENSURE PARK ELEMENTS ARE CLEANED OF CONCRETE SLURRY OR SPRAY WHEN INSTALLED TO PREVENT STAINING OR DAMAGE TO APPLIED FINISHES.
- COLOUR SELECTION FOR RUBBER SAFETY SURFACES AS SPECIFIED.
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).

CONCRETE WORKS

- ALL CONCRETE TO BE MINIMUM GRADE N25.
- ALL MACHINE PLACED (EXTRUDED) CONCRETE TO BE GRADE S32. INSTALL CONTRACTION JOINTS AT 4m INTERVALS BY FORMING GROOVES 40mm DEEP BY 6mm WIDE TO ALL EXPOSED SURFACES NORMAL TO THE ALIGNMENT OF THE KERB.

					DRAWING AUTHORISED FOR PUBLICATION PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04				DESIGN	Std Dwgs WG	DATE	OCT '13	BRISBANE CITY COUNCIL STANDARD DRAWING	
					MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q.: 2546				DRAWN	CPO - P&D	DATE	OCT '13		
					DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04				CHECKED	UMD - E&P & IMB	DATE	OCT '13	PLAYGROUND UNDERSURFACING	
					PRINCIPAL PROGRAM OFFICER PARKS				DRAWING FILENAME	BSD-10420 (B) Playground undersurfacing.dwg				
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16				ASSOCIATED PLANS	SUPERSEDES UMS-755			ORIGINAL SIZE	A3	
A	Drawing Converted from UMS Series April 2014	APR '14	APR '14	APR '14								REVISION	B	
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE										



GENERAL NOTES

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
- G2 ALL DIMENSIONS AND EXISTING CONDITIONS TO BE CHECKED BEFORE COMMENCING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G3 ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE APPROPRIATE AND CURRENT AUSTRALIAN STANDARDS.
- G4 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BEFORE CONSTRUCTION COMMENCES.
- G7 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
- G8 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G9 ALL TEMPORARY WORKS ARE TO BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. ALL TEMPORARY WORKS ARE TO BE REMOVED AT THE END OF THE PROJECT WITH GROUND MADE GOOD, ALL AT THE CONTRACTOR'S EXPENSE.
- G10 SAFETY PRECAUTIONS SHALL BE TAKEN TO AVOID INJURY TO PEOPLE. THE UNATTENDED FOOTING HOLES SHALL BE COVERED OR FENCED OFF AT ALL TIMES.

DESIGN DATA

WIND LOAD:
REGIONAL WIND SPEED: Ultimate $V_{500}=57\text{m/s}$
Serviceability $V_{25}=39\text{m/s}$

WIND REGION: B
TERRAIN CATEGORY: 1.5
SHIELDING MULTIPLIER (M_s): 1.0
TOPOGRAPHIC MULTIPLIER (M_t): 1.0

FOOTING NOTES

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED MATERIAL OF MINIMUM ALLOWABLE BEARING CAPACITY OF 100 kPa. BEFORE CONSTRUCTION COMMENCES, THE ALLOWABLE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER (RPEQ). IF SITE CONDITION IS DIFFERENT CONSULT A STRUCTURAL ENGINEER.
- F2 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL, CLAY SEAMS, WATER ETC PRIOR TO CONCRETING.

CONCRETE NOTES

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600.
- C2. ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3. ALL CEMENT SHALL BE TYPE GP OR GB TO AS3972 UNLESS OTHERWISE SPECIFIED.
- C4. ADMIXTURES SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE SUPERINTENDENT.
- C5. NOMINAL AGGREGATE SIZE TO BE 20mm. SLUMP TO BE NOT GREATER THAN 80mm.
- C6. CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O.

ELEMENT	CONCRETE GRADE	REINFORCEMENT COVER
BLINDING LAYER	15	–
MASS CONCRETE	15	–
BORED PIERS	25	50

- C7. ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.

BAR	LENGTH	BAR	LENGTH
N12	500	N28	500
N16	650	N32	650
N20	800	N36	800
N24	1050	FABRIC	1050

- C8. REINFORCEMENT SYMBOLS:

R STRUCTURAL PLAIN ROUND GRADE 250R TO AS4671.
N DEFORMED BAR GRADE D500N TO AS4671.
L COLD ROLLED DEFORMED BAR GRADE D500L TO AS4671.
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS4671.

- C9. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C10. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C11. ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C12. FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610. REFER TO THE SPECIFICATION FOR CLASSES OF SURFACE FINISHES.

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS5100.6, AS4100 & AS/NZS1554 AS APPROPRIATE.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH:
AS/NZS3679 GRADE 300 FOR HOT ROLLED SECTIONS
AS1163 GRADE C350LO FOR RECTANGULAR HOLLOW SECTIONS
AS1163 GRADE C350LO FOR CIRCULAR HOLLOW SECTIONS
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS/NZS1252 U.N.O.
ALL BOLTS TO BE M20 8.8/S TO AS/NZS 1252 U.N.O.
ALL BOLTS TO BE HOT DIP GALVANISED AS1214
ALL THREADS TO BE TREATED WITH 'LOC-TITE' TO RENDER TAMPER AND VIBRATION PROOF.
- S4. THE CONTRACTOR SHALL SUBMIT RPEQ CERTIFICATION CONFIRMING THE FOLLOWING TOGETHER WITH THE RELEVANT MILL AND TEST CERTIFICATES TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCING FABRICATION.
 - THAT THE STRUCTURAL STEEL PRODUCTS SUPPLIED ARE FROM EITHER AN AUSTRALIAN OR OVERSEAS ACRS CERTIFIED MANUFACTURER. REFER www.steelcertification.com FOR CURRENT CERTIFICATE HOLDERS. ACRS REFERS TO "AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS".
 - THAT WHERE STRUCTURAL STEEL PRODUCTS ARE SOURCED FROM OVERSEAS FOR THIS PROJECT THE CERTIFYING ENGINEER HAS REVIEWED THE MILL AND TEST CERTIFICATES FROM THE SUPPLIERS OF THE STEEL PRODUCTS AND CONFIRMS THAT THEY COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS IN RELATION TO MATERIAL COMPOSITION AND STRENGTH.
 - THAT ALL BOLTS USED SHALL COMPLY WITH AS1252 AND THE CURRENT REQUIREMENTS OF THE AUSTRALIAN STEEL INSTITUTE ASI TECHNICAL NOTE TN001 VERSION 3.
- S5. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 300 U.N.O.
- S6. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH 5mm THICK PLATES AND CONTINUOUS FILLED WELDED U.N.O.
- S7. WHERE MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE BENT, CURVED OR ROLLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS REQUIRED TO ACHIEVE THE REQUIRED SHAPES WITHOUT LOCALISED DISTORTION OF THE MEMBERS.
- S8. BEFORE FABRICATION HAS COMMENCED, THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE SHOP DRAWINGS TO THE SUPERINTENDENT FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.
- S9. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS1554. GRIND ALL CORNERS & WELDS SMOOTH.
A RPEQ CERTIFICATION CONFIRMING THAT ALL WELDING WORKS HAVE BEEN INSPECTED AND CERTIFIED AS COMPLYING WITH AS1554 BY A QUALIFIED WELDING INSPECTOR APPOINTED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO THE STEELWORK BEING GALVANISED.
- S10. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS2312 HDG600 SPECIFICATION. CORROSION PROTECTION COATING TO SURFACE PREPARATION OF SUBSTRATE MATERIAL IS CLASS 2½ TO AS1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS4680.
- S11. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S12. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S13. ANY POST GALVANISING DAMAGED TO BE MADE GOOD WITH A HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION AS PER PAINT MANUFACTURER'S RECOMMENDATIONS.

STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2015.03.19 14:00:02 +10'00'	Lenita MendisRPEQ 8950 2015.03.20 09:05:32 +10'00'	Bala Balakumar RPEQ 3963 2015.03.20 14:01:01+10'00'

BRISBANE CITY COUNCIL STANDARD DRAWING	
<p>PARK SIGNAGE GENERAL STRUCTURAL NOTES SHEET 1 OF 2</p>	<p>SCALE</p> <p>DWG No. BSD-10501</p> <p>ORIGINAL SIZE A3 REVISION A</p>

DRAWING AUTHORISED FOR PUBLICATION				
DESIGN	CPO - P&D	DATE	MAR '15	
DRAWN	CPO - P&D	DATE	MAR '15	
CHECKED	CPS - NEWS	DATE	MAR '15	
DRAWING FILENAME	BSD-10501 (A) Park Signage - General Structural Notes - Sheet 1 of 2.dwg			
ASSOCIATED PLANS	BSD-10501 SHEET 2.dwg			
<p>DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014</p> <p>SENIOR CO-ORDINATOR PARKS</p>				

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15



SAFETY IN CONSTRUCTION NOTES

- THE CONTRACTOR SHALL BE EXPERIENCED AND COMPETENT TO CARRY OUT THE PROPOSED WORKS IN ACCORDANCE WITH ALL APPLICABLE CURRENT CONSTRUCTION INDUSTRY CODES OF PRACTICE, AUSTRALIAN STANDARDS AND WORKPLACE HEALTH AND SAFETY REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MITIGATING THE RISKS RELATING TO THE CONSTRUCTION OPERATIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING;
 - ALL DEMOLITION WORKS
 - ALL TEMPORARY WORKS
 - MAINTAINING A SAFE WORKPLACE BY PROVIDING SAFE ACCESS TO ALL WORK AREAS AND THE USE OF APPROPRIATE PROTECTIVE EQUIPMENT
 - LIFTING OF MATERIALS
 - PROVIDING STABLE PLATFORMS FOR CRANES, PILING RIGS AND OTHER CONSTRUCTION MACHINERY
 - EXCAVATIONS
 - NOISE, DUST, VAPOUR, WASTE AND VIBRATION CONTROL
 - PROTECTION OF AND PROTECTION FROM EXISTING OVERHEAD AND UNDERGROUND SERVICES
 - CONTACT QLD DIAL BEFORE YOU DIG (DBYD) FOR ALL UNDERGROUND SERVICES
 - PROTECTION OF NEIGHBOURING PROPERTIES/ADJACENT EXISTING STRUCTURES
 - ENVIRONMENTAL PROTECTION AND MANAGEMENT
 - MANAGEMENT OF CONTAMINATED/HAZARDOUS MATERIALS
 - TRAFFIC AND PEDESTRIAN MANAGEMENT
 - SITE LIGHTING AND SECURITY
- ALL TEMPORARY WORKS, LIFTING OPERATIONS, EXCAVATIONS AND PLATFORMS FOR CONSTRUCTION MACHINERY SHALL BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER (RPEQ) EXPERIENCED IN THE RELEVANT FIELDS.

INSPECTIONS AND CERTIFICATION NOTES

- ARRANGE & PAY ALL COSTS FOR A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER AND A GEOTECHNICAL ENGINEER (RPEQ) TO INSPECT AND CERTIFY ALL CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT.
- THE CONSTRUCTION CERTIFICATE SHALL STATE THAT ALL CONSTRUCTION WORKS HAVE BEEN CARRIED OUT AS PER THE MOST CURRENT ISSUE OF THE CONTRACT DOCUMENTS AND SITE INSTRUCTIONS/VARIATION ORDERS ISSUED DURING CONSTRUCTION BY CITY PROJECTS OFFICE.

STRUCTURAL DESIGN CERTIFICATION										
DESIGN			DESIGN CHECK			AUTHORISED FOR ISSUE				
Zhuangzhi Hu RPEQ 13885 2015.03.19 13:59:36+10'00'			Lenita MendisRPEQ 8950 2015.03.20 09:06:08 +10'00'			Bala Balakumar RPEQ 3963 2015.03.20 14:00:30+10'00'				
BRISBANE CITY COUNCIL STANDARD DRAWING										
PARK SIGNAGE GENERAL STRUCTURAL NOTES SHEET 2 OF 2						SCALE DWG No. BSD-10501 ORIGINAL SIZE A3 REVISION A				
DRAWING AUTHORIZED FOR PUBLICATION		DESIGN	CPO - P&D	DATE	MAR '15		DRAWING FILENAME			BSD-10501 (A) Park Signage - General Structural Notes - Sheet 2 of 2.dwg
Inga Condric 2015.06.04 15:35:11+10'00' for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT		DRAWN	CPO - P&D	DATE	MAR '15		ASSOCIATED PLANS			BSD-10501 SHEET 1.dwg
DESIGN APPROVED		CHECKED	CPS - NEWS	DATE	MAR '15		DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014			
A Drawing Converted From UMS Series March 2015		DRAWN DATE	MAR '15	CHK'D DATE	MAR '15		SENIOR CO-ORDINATOR PARKS			
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE						

GENERAL SIGN NOTES

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10503 FOR GRAPHIC NOTES
- REFER TO BSD - 10504 FOR STANDARD SIZES AND EXAMPLE LAYOUTS.
- REFER TO BSD - 10506 FOR ORDINANCE SIGNAGE DETAILS.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.

SIGNAGE PANEL:

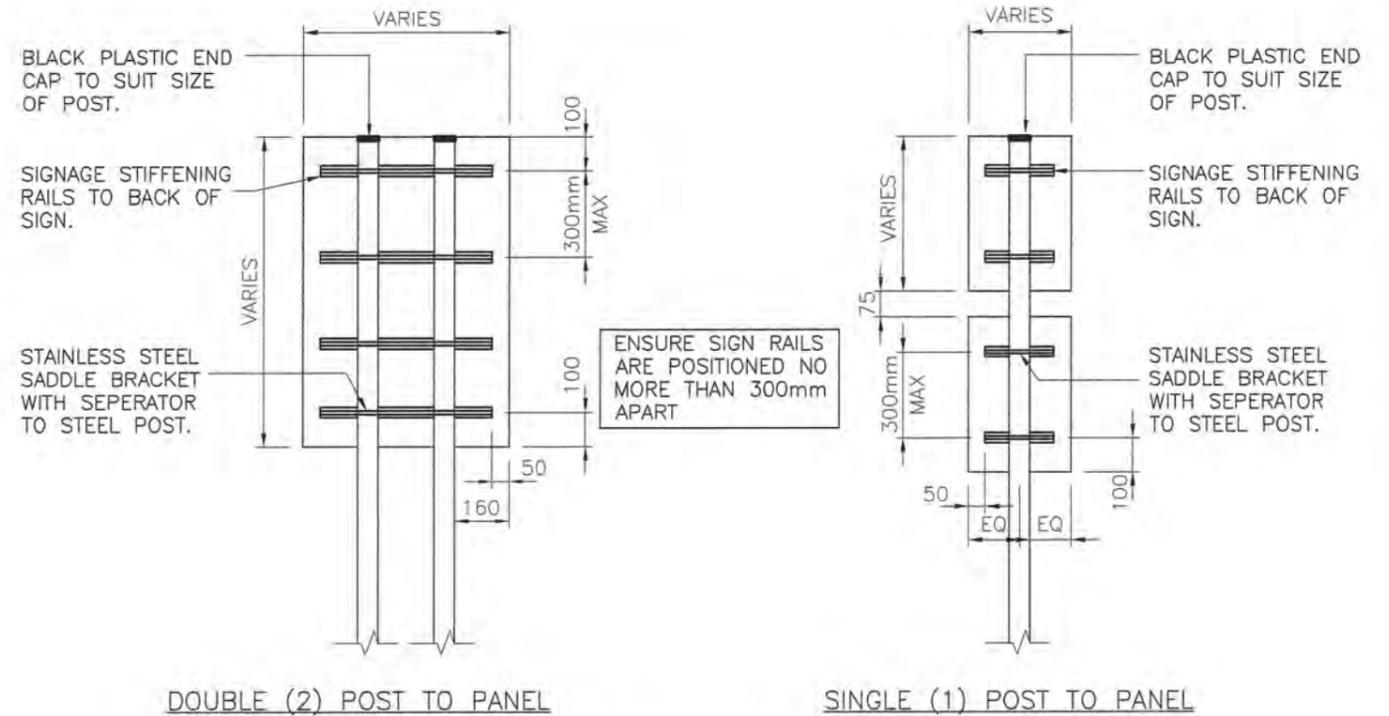
- PANELS TO BE 16 GAUGE, 1.6mm THICK ALUMINIUM SHEETING.
- CORNERS OF PANEL TO HAVE 5mm RADIUS WITH ALL CORNERS / EDGES TO BE FREE OF BURRS.
- ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PANEL.
- REFER TO BSD - 10503 AND BSD - 10504 FOR SIZES OF SIGN PANELS, TYPICAL LAYOUTS AND GRAPHIC NOTES.

SIGNAGE STIFFENING RAILS:

- REFER TO DEPARTMENT OF TRANSPORT AND MAIN ROADS DRAWING 1369 FOR DETAILS OF SIGN RAIL EXTRUSIONS.
- SIGN RAIL TO BE 44mm WIDE X 40mm DEEP AND 3mm THICK. (TYPE 2A AS PER TRANSPORT AND MAIN ROADS DRAWING 1369).
- SIGN RAIL TO BE POP RIVETED TO SIGN USING 'HENHUB' SELF PIERCING RIVETING SYSTEM OR SIMILAR APPROVED, AT A SPACING BETWEEN 250-300mm APART DEPENDING ON BEST PLACEMENT IN RELATION TO SIGN DESIGN / PANEL COMBINATIONS.
- SIGN RAILS ARE TO BE TYPICALLY POSITIONED 100mm IN FROM TOP AND BOTTOM EDGE OF SIGN AND 50mm FROM SIDE EDGES OF SIGN. IN SOME CASES THIS IS TO VARY TO ENSURE SIGN TEXT AND GRAPHICS ARE UNOBSTRUCTED BY FIXING HOLES.

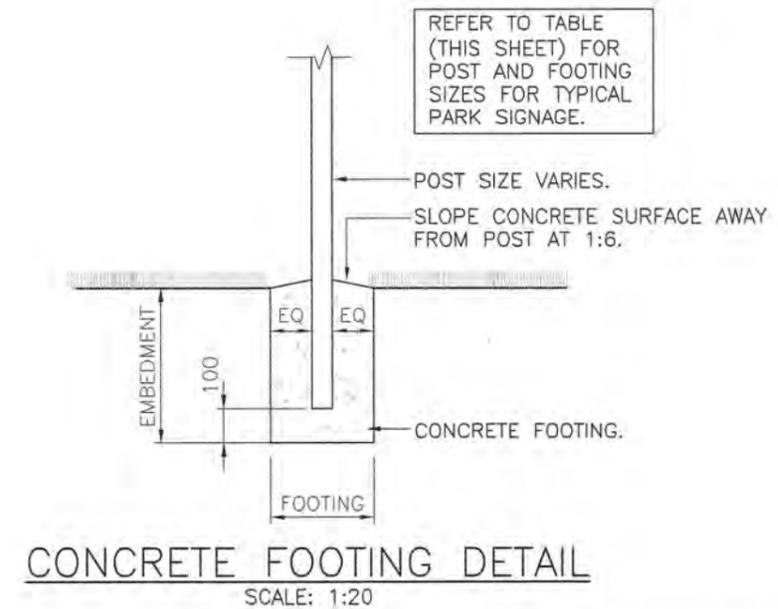
SIGNAGE POSTS:

- SIGNS ARE TO BE ATTACHED TO POSTS USING STANDARD (API BRAND OR APPROVED SIMILAR) SADDLE BRACKETS TO SUIT SIZE OF POST. SADDLE BRACKETS TO BE STAINLESS STEEL WITH STAINLESS STEEL NUTS AND BOLTS.
- BLACK PLASTIC CAPS TO BE INSTALLED TO END OF POSTS. END CAPS TO SUIT POST SIZE AS SPECIFIED.



FIXING DETAILS

SCALE: 1:20



TYPICAL POST, FOOTING AND EMBEDMENT SIZES FOR STANDARD SIGNS SHOWN ON BSD - 10504				
SIGNAGE PANEL SIZES HEIGHT x WIDTH	NUMBER OF POST	TERRAIN CATEGORY = 1.5 and ABOVE		
		POST (STEEL) DIAMETER x THICKNESS	FOOTING	EMBEDMENT
900x1200	2	76.1x3.2 CHS	300 Dia (2 FOOTINGS)	800
1200x900				
600x900 (MAX 2 600x900 PANELS)				
900x600	2	60.3x2.9 CHS	450 Dia	900
400x600 x2 Panels				
600x400 x2 Panels	1	76.1x3.2 CHS	300 Dia	800
400x600				
450x300 (WITH MAX 3 OPTIONAL 200x300 PANELS)				
300x450 x3 Panels				
200x300	1	60.3x2.9 CHS	300 Dia	700
450x300 x2 Panels				
300x200 x3 Panels				

STRUCTURAL DESIGN CERTIFICATION		
DESIGN <i>Zhuangzhi Hu</i> Zhuangzhi Hu RPEQ:13885 2015.03.20 11:40:17 +10'00'	DESIGN CHECK <i>Lerita Mendis</i> Lerita Mendis RPEQ:8950 2015.03.20 12:09:42 +10'00'	AUTHORISED FOR ISSUE <i>[Signature]</i> Bala Balakumar, RPEQ:3963 2015.03.20 14:01:31 +10'00'

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10502.dwg		
ASSOCIATED PLANS	SUPERSEDES UMS-775		

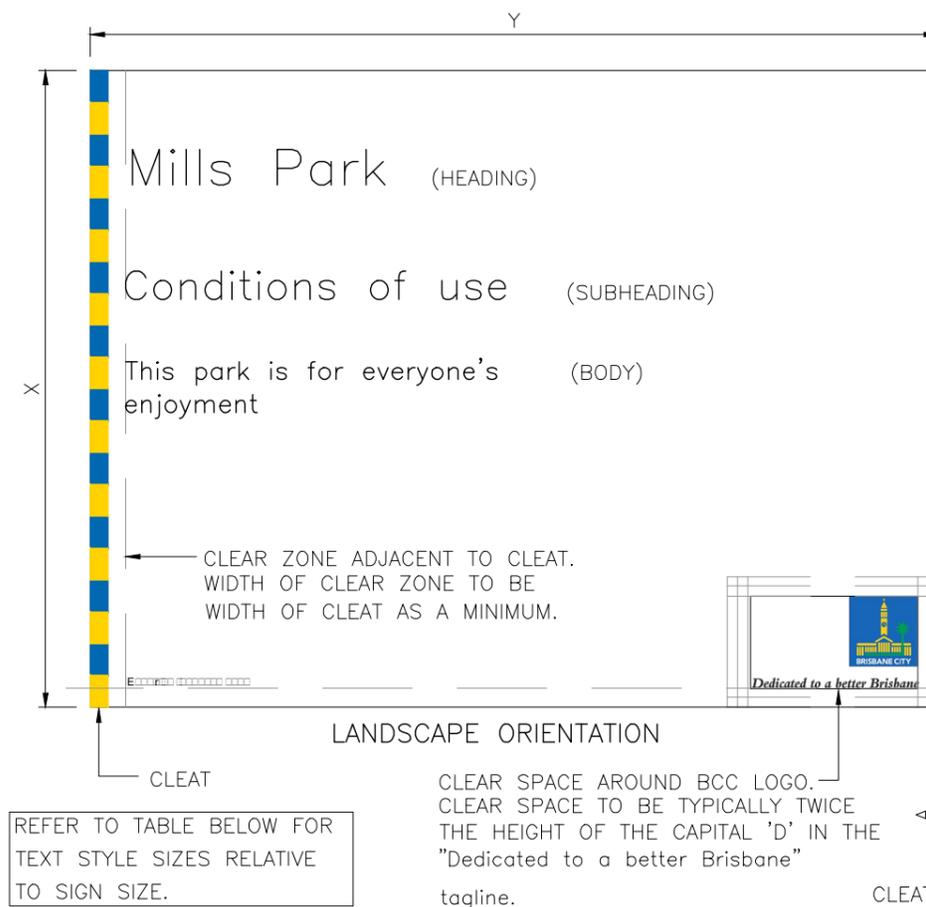


BRISBANE CITY COUNCIL STANDARD DRAWING	
SCALE	1:20
DWG No.	BSD-10502
ORIGINAL SIZE	A3
REVISION	A

PARK SIGNAGE - TYPICAL INSTALLATION DETAILS AND NOTES



PORTRAIT ORIENTATION



TYPICAL GRAPHIC LAYOUT

GENERAL GRAPHIC NOTES FOR SIGNAGE

- REFER TO BSD - 10502 FOR TYPICAL INSTALLATION DETAILS AND NOTES.
- REFER TO BSD - 10504 FOR STANDARD SIZES AND EXAMPLE LAYOUTS FOR PANEL TYPES AND COMBINATIONS.

PANEL:

- PANEL COLOUR: 7 YEAR CAST VINYL BLUE (PMS 293 BLUE) U.N.O.

BCC LOGO AND CLEAT:

- BCC TAGLINE "Dedicated to a better Brisbane" TEXT FONT: Bembo Italic.
- BCC LOGO AND TAGLINE TO BE SCALED AS SHOWN IN THE TABLE BELOW. ENSURE CORRECT LOGO IS USED, PERMISSION FOR USE GRANTED BY CORPORATE COMMUNICATION, BRISBANE CITY COUNCIL.
- (BCC LOGO TO BE FULL COLOUR WITH 5mm WHITE BORDER AND NON-REFLECTIVE).
- BCC CLEAT SIZE AS PER BELOW TABLE.
- BCC CLEAT COLOUR TO COMMENCE ON BLUE UNIT AT TOP OF THE PANEL AND FINISH WITH A WHOLE CLEAT UNIT AT THE BOTTOM OF THE PANEL. CLEAT YELLOW TO BE 7 YEAR CAST VINYL YELLOW (PMS 116 YELLOW).
- BCC WEBSITE - www.brisbane.qld.gov.au. TO BE POSITIONED UNDER BCC CONTACT NUMBER ONLY WHEN SIGN CONVEYS INFORMATION THAT IS SPECIFICALLY REFERRED TO ON BRISBANE CITY COUNCIL WEBSITE.

TEXT FONT TYPE AND SIZE:

- TEXT FONT: AVENIR MEDIUM.
- TEXT SIZES AS PER BELOW TABLE (U.N.O)
- FONT COLOUR (FOR MAIN TEXT FONT AND TAGLINE TEXT FONT): 7 YEAR CAST VINYL WHITE WHERE PANEL COLOUR IS PMS 293 BLUE.
- TEXT SIZES LISTED BELOW ARE TO BE USED AS A GUIDE ONLY.

STANDARD PARK ORDINANCE SIGNAGE - GRAPHIC STANDARDS

- PICTOGRAM IMAGES TO BE SOURCED VIA CITY PROJECTS OFFICE/CORPORATE COMMUNICATIONS - BRISBANE CITY COUNCIL.

OTHER COLOURS (WHERE APPLICABLE):

- BLUE - PMS 293 BLUE
- GREEN - PMS 355 GREEN
- YELLOW - PMS 116 YELLOW
- RED - PMS 485 RED
- COLOURS NOT LISTED ABOVE ARE TO BE APPROVED PRIOR TO MANUFACTURE.
- OTHER COLOURS MAY BE APPLICABLE WITH PRIOR APPROVAL.

COLOUR LOGOS - POSITIVE AND REVERSE VERSIONS

<p>COLOUR POSITIVE:</p>	<p>NOTE THE BACKGROUND REPRESENTS THE LIGHT COLOUR OF ARTWORK</p>
<p>COLOUR REVERSE:</p>	<p>NOTE THE BACKGROUND REPRESENTS THE DARK COLOUR OF ARTWORK</p>

NOTE:

COUNCIL'S POSITIVE LOGO IS USED ON WHITE OR LIGHT BACKGROUND COLOURS. THE POSITIVE LOGO DOES NOT HAVE A KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN BLACK LETTERING. THE REVERSE LOGO IS USED WHEN THE LOGO NEEDS TO BE VISIBLE ON A BLACK, DARK BLUE OR OTHER DARK COLOUR BACKGROUND. THE REVERSE LOGO FEATURES A WHITE KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN WHITE LETTERING. TO ENSURE THE REVERSE LOGO IS CORRECT, ALWAYS APPLY A REVERSE LOGO FILE AVAILABLE FROM CORPORATE COMMUNICATION TO ARTWORK WITH A DARK BACKGROUND. THE REVERSE LOGO SHOULD NOT BE "CONSTRUCTED" FROM THE POSITIVE LOGO BY CHANGING A KEYLINE OR LETTERING COLOURS.

ALTERNATIVE TEXT SIZES

SIGN CATEGORY DESCRIPTIONS	TEXT RANGE
INTERPRETIVE, MINOR INFORMATION SIGNS	10mm MIN. 15-25mm PREFERRED. HEADINGS 25-45mm
LARGE HEADINGS, WARNING SIGNS, MINOR IDENTIFICATION NAMES	50mm-100mm
PARK NAMES, MAJOR INFORMATION	130mm-150mm

NOTE:

- ALTERNATIVE TEXT SIZES ARE TO BE READ IN CONJUNCTION WITH STANDARD TEXT SIZES SHOWN IN PANEL TYPE GRAPHIC DETAILS TABLE.

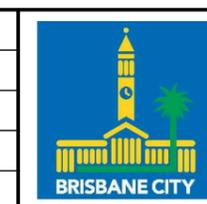
PANEL TYPE GRAPHIC DETAILS

PANEL ORIENTATION	PANEL SIZE		CLEAT UNIT SIZE		LOGO HEIGHT INCLUDING TAGLINE	CLEAR SPACE AROUND LOGO/OFFSET FROM EDGE OF PANEL	TYPICAL GENERAL TEXT OFFSET FROM EDGE OF PANEL	HEADING TEXT SIZE	SUB HEADING TEXT SIZE	BODY TEXT SIZE
	X	Y	A	B						
LANDSCAPE	900	1200	45	25	130	30	40	75	42	30
PORTRAIT	1200	900	43	25	130	30	40	75	42	30
PORTRAIT	900	600	25	15	100	20	30	50	26	20
LANDSCAPE	600	900	25	15	100	20	30	50	26	20
LANDSCAPE	400	600	20	10	60	13	20	30	20	18
PORTRAIT	600	400	20	10	60	13	20	30	20	18
PORTRAIT	450	300	15	9	40	9	18	22	16	14
LANDSCAPE	300	450	15	9	40	9	18	22	16	14
LANDSCAPE	200	300	10	6	30	7	12	15	10	9
PORTRAIT	300	200	10	6	30	7	12	15	10	9

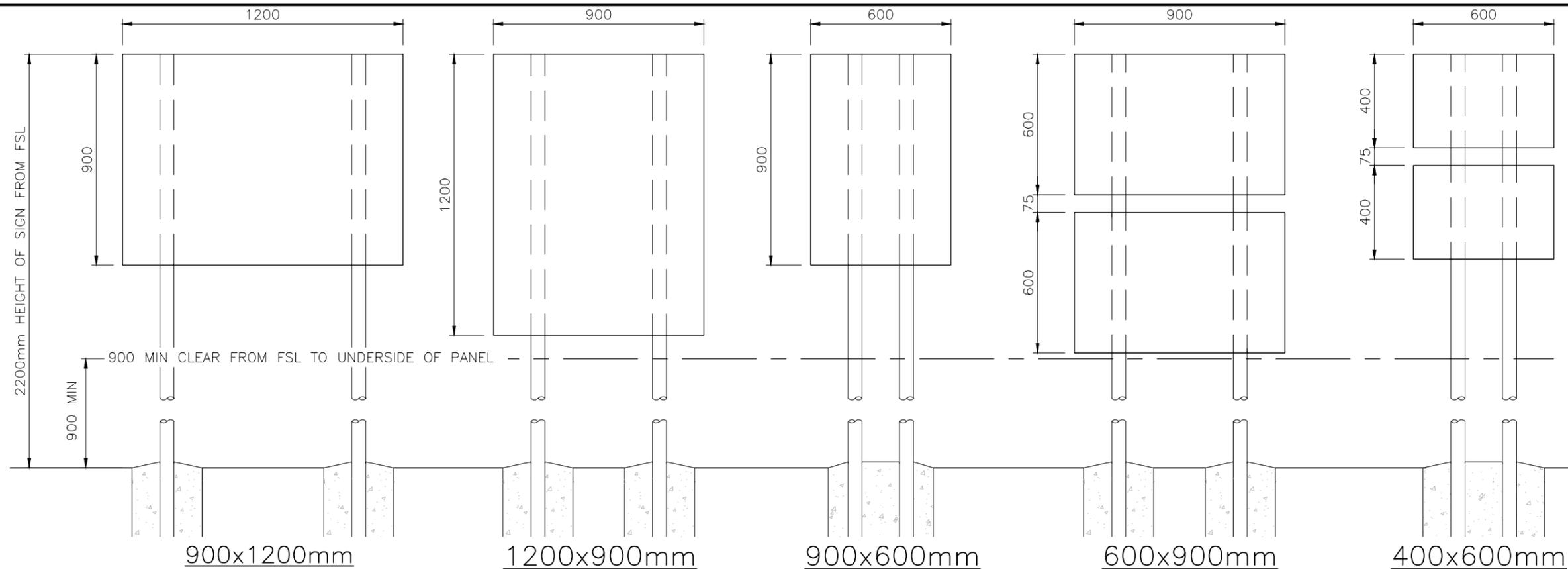
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION			
Ingo Condric	2015.08.04 15:38:25+10'00'	for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT	
DESIGN APPROVED			
DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014			
SENIOR CO-ORDINATOR PARKS			

DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10503 (A) Park Signage - Graphic Notes.dwg		
ASSOCIATED PLANS			



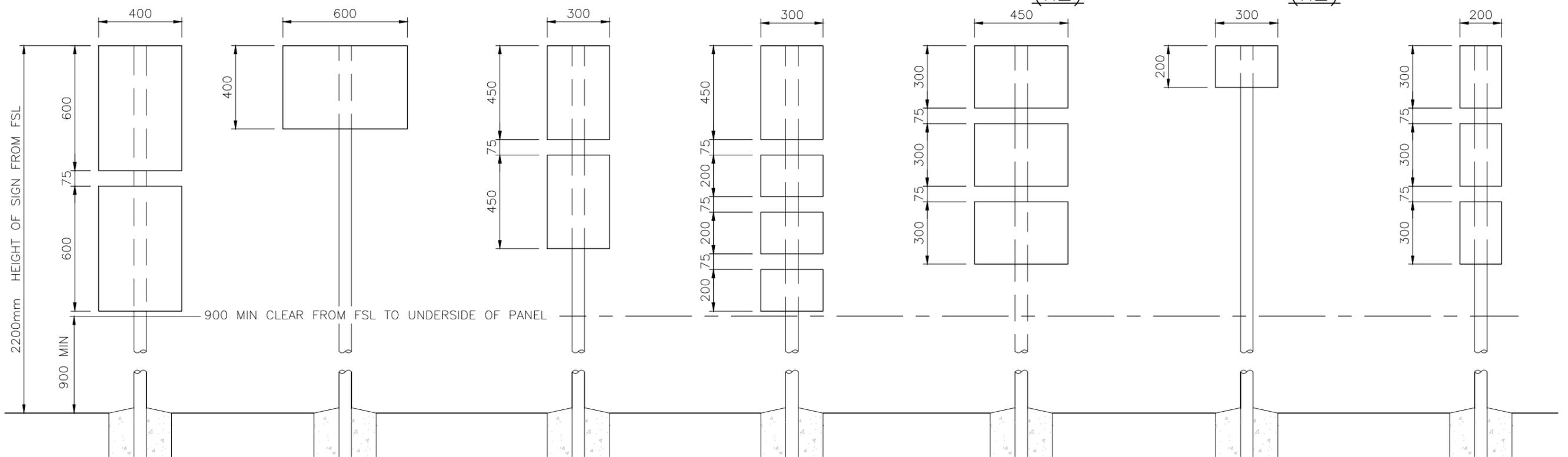
BRISBANE CITY COUNCIL STANDARD DRAWING	
PARK SIGNAGE GRAPHIC NOTES	
SCALE	DWG No.
	BSD-10503
ORIGINAL SIZE	REVISION
A3	A



900x1200mm 1200x900mm 900x600mm 600x900mm (x2) 400x600mm (x2)

GENERAL NOTES

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10502 FOR POST, FOOTING EMBEDMENT AND INSTALLATION DETAILS FOR EACH SIGN COMBINATION.
- REFER TO BSD - 10503 FOR GRAPHIC REQUIREMENTS FOR EACH PANEL TYPE.



600x400mm (x2) 400x600mm 450x300mm (x2) 450x300mm with max 3 optional 200x300mm panels 300x450mm (x3) 200x300mm 300x200mm (x3)

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION
 Inga Condric
 2015.06.04 15:44:19+10'00"
 For ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT
 DESIGN APPROVED
 DANNY VAN DER WALLE SIGNATURE ON ORIGINAL
 APRIL 2014
 SENIOR CO-ORDINATOR PARKS

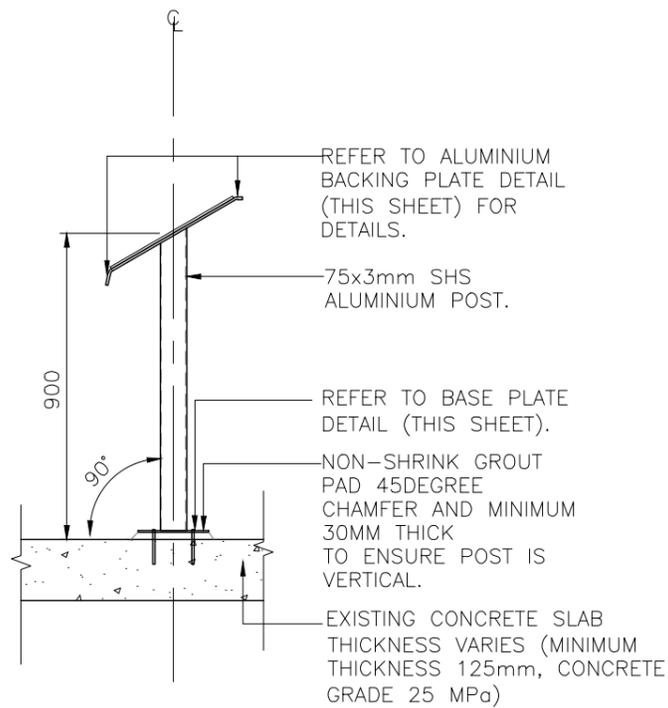
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10504 (A) Park Signage - Standard Sizes and Example Layouts.dwg		
ASSOCIATED PLANS			



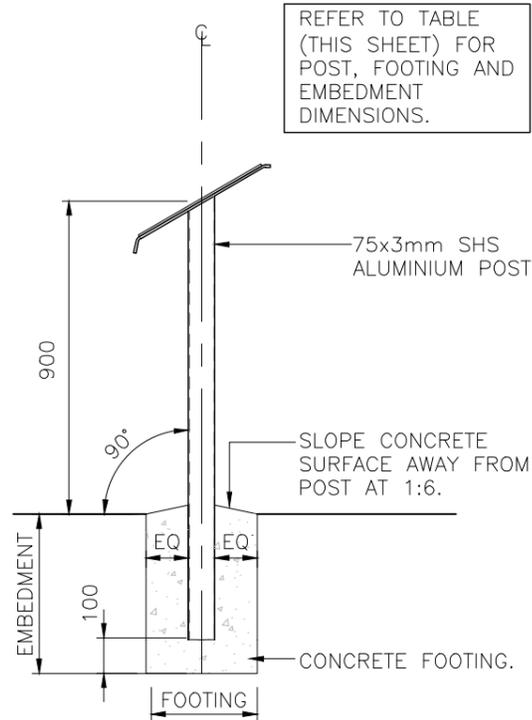
BRISBANE CITY COUNCIL STANDARD DRAWING

PARK SIGNAGE STANDARD SIZES AND EXAMPLE LAYOUTS

SCALE 1:20
 DWG No. **BSD-10504**
 ORIGINAL SIZE A3 REVISION A



INTERPRETIVE SIGN IN EXISTING CONCRETE
SIDE ELEVATION
 SCALE: 1:20



INTERPRETIVE SIGN IN NEW CONCRETE FOOTING
- SIDE ELEVATION
 SCALE: 1:20

GENERAL SIGN NOTES

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL CONCRETE NOTES.
- REFER TO BSD - 10503 FOR GRAPHIC NOTES.
- ALL FRAMING SECTIONS TO BE GRADE 6060 T5 ALUMINIUM UNLESS NOTED OTHERWISE.
- ALL PLATES TO BE GRADE 5083-H321 ALUMINIUM UNO.
- ALL BOLTS TO BE STAINLESS STEEL GR 316 UNO. PROVIDE APPROVED ISOLATION WASHERS TO ALUMINIUM FRAME.
- ALL WELDS ARE CATEGORY B 4mm CONTINUOUS FILLET WELD TO AS1665.

SIGNAGE PANEL:

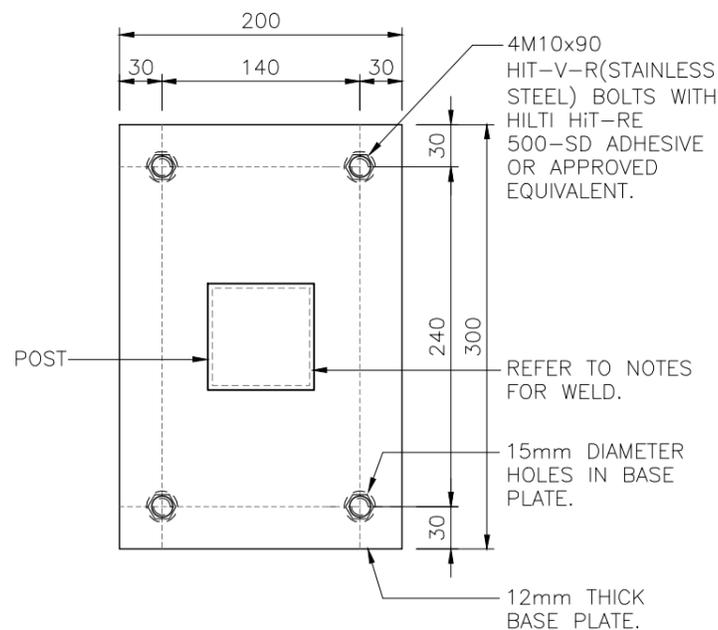
- PANEL TO BE 400mm HIGH x 600mm WIDE, 16 GAUGE, 3mm THICK ALUMINIUM SHEETING.
- CORNERS OF PANEL TO HAVE 5mm RADIUS WITH ALL CORNERS / EDGES TO BE FREE OF BURRS.
- ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PANEL.
- FIX SIGNAGE PANEL TO BACKING PLATE USING SIKAFLEX-221 OR APPROVED EQUAL AS PER MANUFACTURERS SPECIFICATIONS.

SIGNAGE POSTS:

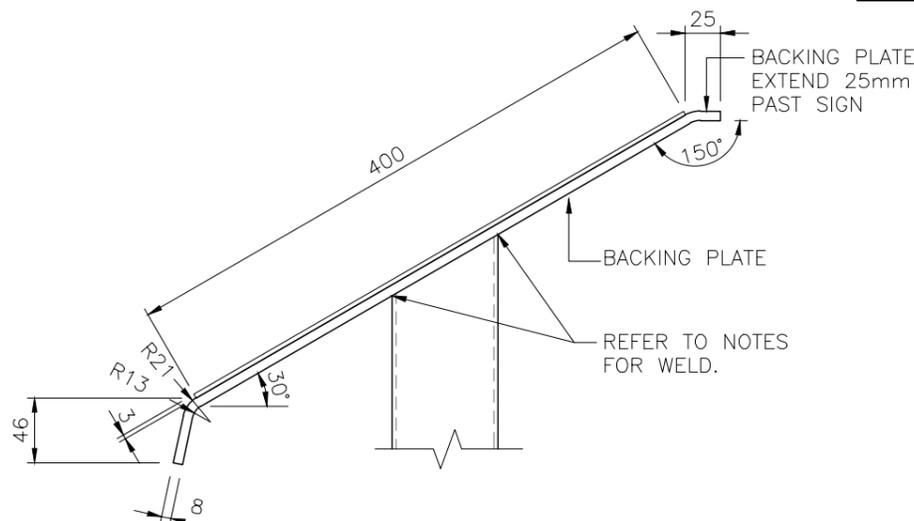
- 75x3mm SHS ALUMINIUM POST.

DESIGN DATA

- DESIGN STANDARD: AS1664.1, AS1170, AS1665
- LIVE LOAD: MAX. 1.5kN CONCENTRATED (LATERAL) LOAD
- WIND LOAD:
 - REGIONAL WIND SPEED: Ultimate V500=57m/s
 - Serviceability V25=39m/s
 - WIND REGION: B
 - TERRAIN CATEGORY: 1.5
 - SHIELDING MULTIPLIER (Ms): 1.0
 - TOPOGRAPHIC MULTIPLIER (Mt): 1.0

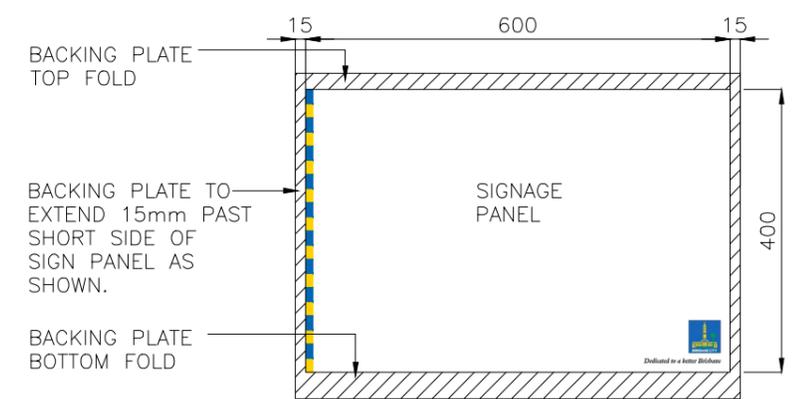


BASE PLATE DETAIL - PLAN
 SCALE: 1:5



ALUMINIUM BACKING PLATE DETAIL
 SCALE: 1:5

POST, FOOTING AND EMBEDMENT DETAILS					
SIGN NAME	PANEL SIZE	NUMBER OF POST	TERRAIN CATEGORY = 1.5 AND ABOVE		
			POST	FOOTING	EMBEDMENT
INTERPRETIVE SIGN	400x600	1	75x3mm SHS ALUMINIUM	300 DIA	600



SIGNAGE PANEL TO BACKING PLATE - PLAN
 SCALE: 1:10

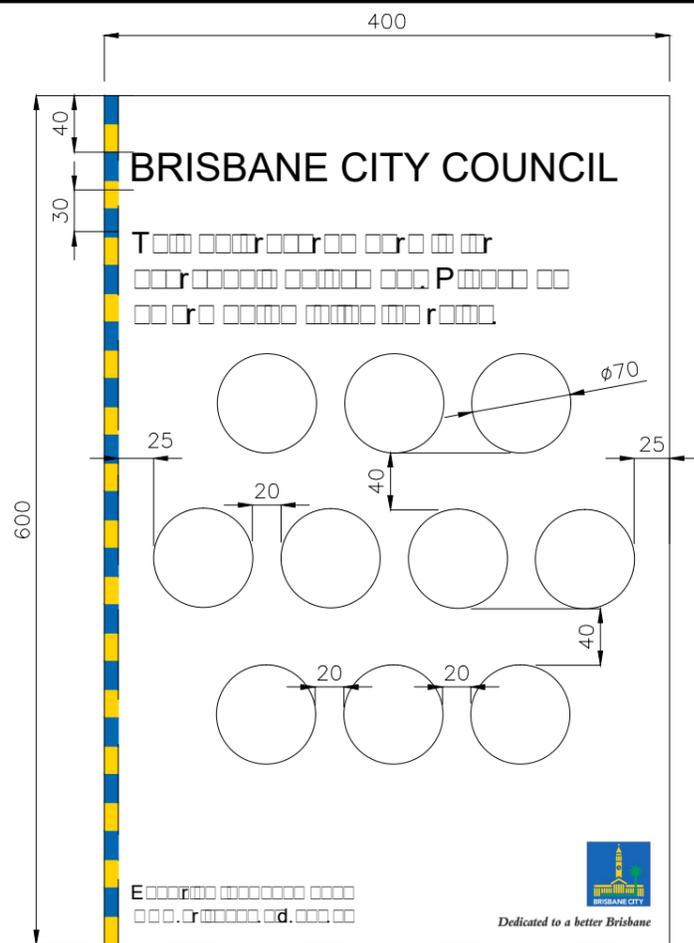
STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE

BRISBANE CITY COUNCIL STANDARD DRAWING		
PARK PODIUM INTERPRETIVE SIGNAGE		SCALE: 1:20 DWG No. BSD-10505
ORIGINAL SIZE: A3	REVISION: A	

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10505 (A) Park Podium Interpretive Signage.dwg		
ASSOCIATED PLANS			





ORDINANCE SIGN PANEL SETOUT



NATURAL AREA ORDINANCE SIGN STANDARD PICTOGRAM SETOUT



PARK ORDINANCE SIGN STANDARD PICTOGRAM LAYOUT



1 ADDITIONAL PICTOGRAM OPTION



2 ADDITIONAL PICTOGRAMS OPTION (MAXIMUM)



PROHIBITED TO PERMITTED OPTION

GENERAL NOTES: STANDARD PARK ORDINANCE SIGNAGE:

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 FOR STRUCTURAL NOTES (SHEETS 1 AND 2)
- REFER TO BSD - 10502 FOR TYPICAL PARK SIGNAGE INSTALLATION DETAILS
- REFER TO BSD - 10503 FOR GRAPHIC NOTES

THERE ARE TWO SUITES OF SIGNS WHICH ARE USED FOR PARK ORDINANCE SIGNAGE AS FOLLOWS:

- PARK ORDINANCE SIGNAGE
- NATURAL AREA ORDINANCE SIGNAGE

STANDARD ORDINANCE SIGNS USE THE 10 SPECIFIC PICTOGRAMS AS SHOWN ON THE STANDARD PICTOGRAM SETOUT DRAWINGS ABOVE. SIGNS WITH 11 OR 12 PICTOGRAMS ARE OPTIONAL WHERE 1 OR 2 ADDITIONAL PICTOGRAMS ARE REQUIRED. REFER TO BSD - 10507 FOR PARK PICTOGRAM SUITE.

				DRAWING AUTHORISED FOR PUBLICATION				DESIGN CPO - P&D DATE MAR '15		DATE MAR '15		BRISBANE CITY COUNCIL STANDARD DRAWING	
				Inga Condric 2015.06.04 15:45:43+10'00" for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED									
				DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				CHECKED CPS - NEWS DATE MAR '15		PARK SIGNAGE ORDINANCE		ORIGINAL SIZE A3 REVISION A	
A Drawing Converted From UMS Series March 2015				MAR '15				DRAWING FILENAME BSD-10506 (A) Park signage - Ordinance.dwg					
ISSUE				AMENDMENT				ASSOCIATED PLANS SUPERSEDES UMS-776					

GENERAL NOTES: PARK PICTOGRAM SIGNAGE:

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.)
- REFER TO BSD - 10503 FOR GRAPHIC NOTES.
- REFER BSD - 1003 FOR BCC CORPORATE COLOUR PALETTE DETAILS.
- PICTOGRAMS WILL BE PROVIDED DIGITALLY AND MUST BE SCALED PROPORTIONALLY.
- ONLY PICTOGRAMS SHOWN ON THIS SHEET ARE TO BE USED. FOR NON-STANDARD PICTOGRAMS, CONTACT CITY PROJECTS OFFICE/CORPORATE COMMUNICATIONS BRISBANE CITY COUNCIL FOR APPROVAL.

PARK PICTOGRAMS – ACTIVITIES



PARK PICTOGRAM – FACILITIES



ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION
 Inga Condric
 2015.06.04 15:46:39+10'00"
 for ASSET ENGINEERING MANAGER STRATEGIC
 ASSET MANAGEMENT
 DESIGN APPROVED
 DANNY VAN DER WALLE SIGNATURE ON ORIGINAL
 APRIL 2014
 SENIOR CO-ORDINATOR PARKS

DESIGN	DATE
CPO - P&D	MAR '15
DRAWN	DATE
CPO - P&D	MAR '15
CHECKED	DATE
CPS - NEWS	MAR '15
DRAWING FILENAME	BSD-10507 (A) Park signage pictogram suite - Sheet 1 of 2.dwg
ASSOCIATED PLANS	SUPERSEDES UMS-774



BRISBANE CITY COUNCIL STANDARD DRAWING	
PARK SIGNAGE PICTOGRAM SUITE SHEET 1 OF 2	
SCALE	ORIGINAL SIZE
	A3
REVISION	A
BSD-10507	

GENERAL NOTES: PARK PICTOGRAM SIGNAGE:

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.)
- REFER TO BSD - 10503 FOR GRAPHIC NOTES.
- REFER BSD - 1003 FOR BCC CORPORATE COLOUR PALETTE DETAILS.
- PICTOGRAMS WILL BE PROVIDED DIGITALLY AND MUST BE SCALED PROPORTIONALLY.
- ONLY PICTOGRAMS SHOWN ON THIS SHEET ARE TO BE USED. FOR NON-STANDARD PICTOGRAMS, CONTACT CITY PROJECTS OFFICE/CORPORATE COMMUNICATIONS BRISBANE CITY COUNCIL FOR APPROVAL.

PARK PICTOGRAMS - ORDINANCE



PARK PICTOGRAMS - ENVIRONMENTAL



					DRAWING AUTHORISED FOR PUBLICATION				DESIGN		CPO - P&D		DATE		MAR '15			BRISBANE CITY COUNCIL STANDARD DRAWING									
					Inga Condric 2015.06.04 15:47:32+10'00" for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED				DRAWN		CPO - P&D		DATE		MAR '15			SCALE									
					DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				CHECKED		CPS - NEWS		DATE		MAR '15			DWG No. BSD-10507									
A Drawing Converted From UMS Series March 2015					MAR '15		MAR '15		MAR '15		DRAWING FILENAME		BSD-10507 (A) Park signage pictogram suite - Sheet 2 of 2.dwg						ORIGINAL SIZE A3								
ISSUE					AMENDMENT					DRAWN DATE		CHK'D DATE		APPR'D DATE		ASSOCIATED PLANS		SUPERSEDES UMS-774						REVISION A			

GENERAL SIGN NOTES

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10506 FOR ORDINANCE SIGNAGE DETAILS.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10508 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
- REFER TO BSD - 10508 (SHEET 3 OF 4) FOR EXAMPLE LAYOUTS.
- REFER TO BSD - 10508 (SHEET 4 OF 4) FOR DETAILED DIMENSIONS FOR DOG OFF-LEASH SIGNS 1 AND 2.

SIGNAGE PANEL:

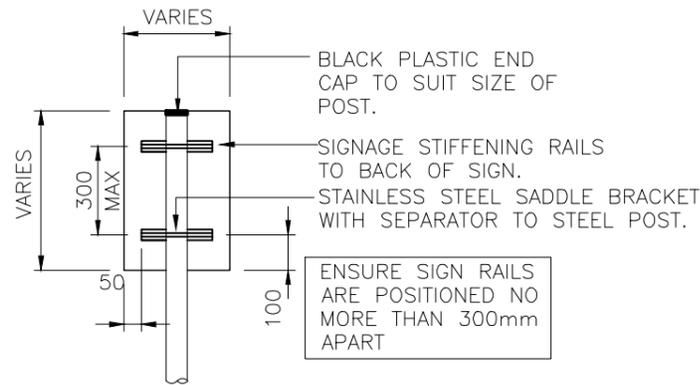
- PANELS TO BE 16 GAUGE, 1.6mm THICK ALUMINIUM SHEETING.
- CORNERS OF PANEL TO HAVE 5mm RADIUS WITH ALL CORNERS / EDGES TO BE FREE OF BURRS.
- ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PANEL.

SIGNAGE STIFFENING RAILS:

- REFER TO DEPARTMENT OF TRANSPORT AND MAIN ROADS DRAWING 1369 FOR DETAILS OF SIGN RAIL EXTRUSIONS.
- SIGN RAIL TO BE 44mm WIDE X 40mm DEEP AND 3mm THICK. (TYPE 2A AS PER TRANSPORT AND MAIN ROADS DRAWING 1369).
- SIGN RAIL TO BE POP RIVETED TO SIGN USING 'HENHUB' SELF PIERCING RIVETING SYSTEM OR SIMILAR APPROVED, AT A SPACING BETWEEN 250-300mm APART DEPENDING ON BEST PLACEMENT IN RELATION TO SIGN DESIGN / PANEL COMBINATIONS.
- SIGN RAILS ARE TO BE TYPICALLY POSITIONED 100mm IN FROM TOP AND BOTTOM EDGE OF SIGN AND 50mm FROM SIDE EDGES OF SIGN. IN SOME CASES THIS IS TO VARY TO ENSURE SIGN TEXT AND GRAPHICS ARE UNOBSTRUCTED BY FIXING HOLES.

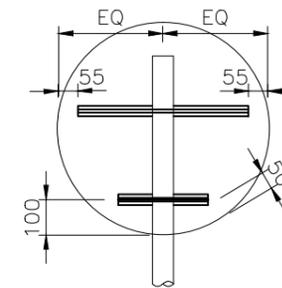
SIGNAGE POSTS:

- SIGNS ARE TO BE ATTACHED TO POSTS USING STANDARD (API BRAND OR APPROVED SIMILAR) SADDLE BRACKETS TO SUIT SIZE OF POST. SADDLE BRACKETS TO BE STAINLESS STEEL WITH STAINLESS STEEL NUTS AND BOLTS.
- BLACK PLASTIC CAPS TO BE INSTALLED TO END OF POSTS. END CAPS TO SUIT POST SIZE AS SPECIFIED.



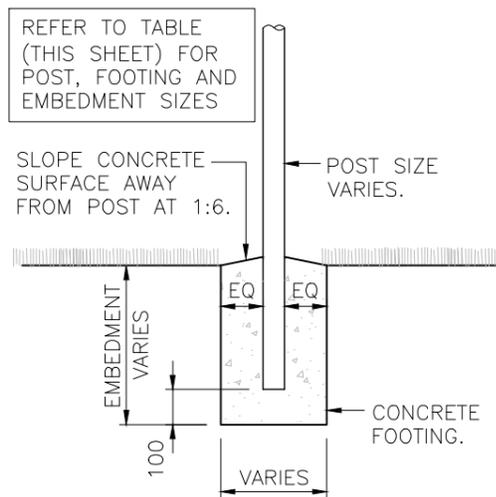
SINGLE (1) POST TO PANEL C FIXING DETAIL

SCALE: 1:20



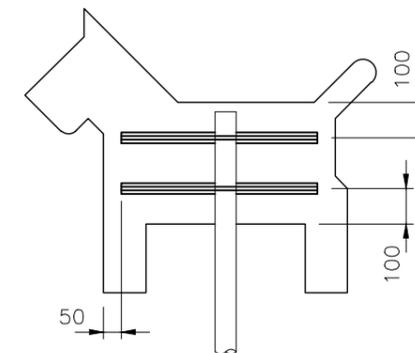
TYPICAL PANEL D FIXING DETAIL

SCALE: 1:20



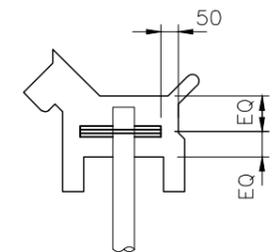
CONCRETE FOOTING DETAIL

SCALE: 1:20



TYPICAL PANEL A FIXING DETAIL

SCALE: 1:20



TYPICAL PANEL B FIXING DETAIL

SCALE: 1:20

POST, FOOTING AND EMBEDMENT DETAILS

SIGN NAME (REFER TO SHEETS 2 & 3)	NUMBER OF POST	TERRAIN CATEGORY = 1.5 AND ABOVE		
		POST (STEEL) DIAMETER x THICKNESS	FOOTING	EMBEDMENT
DOG OFF-LEASH SIGN - 1	1	114.3x3.6 CHS	300 Dia	1000
DOG OFF-LEASH SIGN - 2	1	76.1x3.2 CHS	300 Dia	700
PLAYGROUND NODE SIGN	1	76.1x3.2 CHS	300 Dia	700

STRUCTURAL DESIGN CERTIFICATION

DESIGN Zhuangzhi Hu RPEQ 13885 2015.03.23 08:41:04 +10'00'	DESIGN CHECK Lenita MendisRPEQ 8950 2015.03.23 08:46:25 +10'00'	AUTHORISED FOR ISSUE Bala Balakumar RPEQ 3963 2015.03.23 11:47:41+10'00'
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BRISBANE CITY COUNCIL STANDARD DRAWING

SCALE 1:20	
DWG No. BSD-10508	
ORIGINAL SIZE A3	REVISION A

A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION Inga Condric 2015.08.04 15:48:38+10'00' for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014 SENIOR CO-ORDINATOR PARKS				DESIGN CPO - P&D DATE MAR '15	DATE MAR '15
DRAWING FILENAME BSD-10508 (A) Park Node Signage - General Notes - Sheet 1 of 4.dwg				CHECKED CPS - NEWS DATE MAR '15	DATE MAR '15
ASSOCIATED PLANS BSD-10508 SHEETS 2, 3 & 4.dwg					



**PARK NODE SIGNAGE
GENERAL NOTES
SHEET 1 OF 4**

GENERAL GRAPHIC NOTES FOR SIGNAGE

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10506 FOR ORDINANCE SIGNAGE DETAILS.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10508 (SHEET 1 OF 4) FOR POST, FOOTING AND EMBEDMENT DETAILS.
- REFER TO BSD - 10508 (SHEET 3 OF 4) FOR EXAMPLE LAYOUTS.
- REFER TO BSD - 10508 (SHEET 4 OF 4) FOR DETAILED DIMENSIONS FOR DOG OFF-LEASH SIGNS 1 AND 2.

PANEL:

- PANEL COLOUR: 7 YEAR CAST VINYL BLUE (PMS 293 BLUE) U.N.O.

BCC LOGO AND CLEAT:

- BCC TAGLINE "Dedicated to a better Brisbane" TEXT FONT: Bembo Italic.
- BCC LOGO AND TAGLINE TO BE SCALED AS SHOWN IN THE TABLE BELOW. ENSURE CORRECT LOGO IS USED, PERMISSION FOR USE GRANTED BY CORPORATE COMMUNICATION, BRISBANE CITY COUNCIL.
- (BCC LOGO TO BE FULL COLOUR WITH 5mm WHITE BORDER AND NON-REFLECTIVE).
- BCC CLEAT SIZE AS PER BELOW TABLE.
- BCC CLEAT COLOUR TO COMMENCE ON BLUE UNIT AT TOP OF THE PANEL AND FINISH WITH A WHOLE CLEAT UNIT AT THE BOTTOM OF THE PANEL.
- CLEAT YELLOW TO BE 7 YEAR CAST VINYL YELLOW (PMS 116 YELLOW).
- BCC WEBSITE - www.brisbane.qld.gov.au. TO BE POSITIONED UNDER BCC CONTACT NUMBER ONLY WHEN SIGN CONVEYS INFORMATION THAT IS SPECIFICALLY REFERRED TO ON BRISBANE CITY COUNCIL WEBSITE.

TEXT FONT TYPE AND SIZE:

- TEXT FONT: AVENIR MEDIUM.
- TEXT SIZES AS PER BELOW TABLE (U.N.O)
- FONT COLOUR (FOR MAIN TEXT FONT AND TAGLINE TEXT FONT): 7 YEAR CAST VINYL WHITE WHERE PANEL COLOUR IS PMS 293 BLUE.
- TEXT SIZES LISTED BELOW ARE TO BE USED AS A GUIDE ONLY.

STANDARD PARK ORDINANCE SIGNAGE - GRAPHIC STANDARDS

- PICTOGRAM IMAGES TO BE SOURCED VIA CITY PROJECTS OFFICE/CORPORATE COMMUNICATIONS - BRISBANE CITY COUNCIL.

OTHER COLOURS (WHERE APPLICABLE):

- BLUE - PMS 293 BLUE
- GREEN - PMS 355 GREEN
- YELLOW - PMS 116 YELLOW
- RED - PMS 485 RED
- COLOURS NOT LISTED ABOVE ARE TO BE APPROVED PRIOR TO MANUFACTURE.
- OTHER COLOURS MAY BE APPLICABLE WITH PRIOR APPROVAL.

ALTERNATIVE TEXT SIZES	
SIGN CATEGORY DESCRIPTIONS	TEXT RANGE
INTERPRETIVE, MINOR INFORMATION SIGNS	10mm MIN. 15-25mm PREFERRED. HEADINGS 25-45mm
LARGE HEADINGS, WARNING SIGNS, MINOR IDENTIFICATION NAMES	50mm-100mm
PARK NAMES, MAJOR INFORMATION	130mm-150mm

NOTE:
ALTERNATIVE TEXT SIZES ARE TO BE READ IN CONJUNCTION WITH STANDARD TEXT SIZES SHOWN IN PANEL TYPE GRAPHIC DETAILS TABLE.

SIGN PANEL GRAPHIC DETAILS

SIGNAGE/PANEL TYPE (REFER TO SHEETS 2 & 3)	CLEAT UNIT SIZE (H X W)		LOGO HEIGHT INCLUDING TAGLINE	CLEAR SPACE AROUND LOGO/OFFSET FROM EDGE OF PANEL (MIN)	TEXT OFFSET FROM EDGE OF PANEL	HEADING TEXT SIZE	SUB HEADING TEXT SIZE	BODY TEXT SIZE
DOG OFF-LEASH SIGN - 1 (PANEL A)	N/A		120	25	35	50	26	20
DOG OFF-LEASH SIGN - 2 (PANEL B)	N/A		58	20	35	30	20	18
DOG OFF-LEASH SIGN - 1/2 (PANEL C)	20	10	60	13	20	30	20	18
PLAYGROUND NODE SIGN - (PANEL D)	45	25	74	20	42	140	N/A	N/A

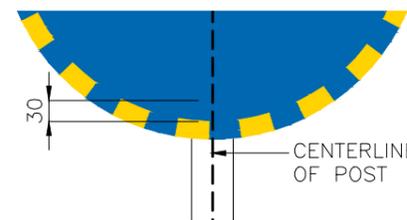
COLOUR LOGOS - POSITIVE AND REVERSE VERSIONS

<p>COLOUR POSITIVE:</p> 	<p>NOTE THE BACKGROUND REPRESENTS THE LIGHT COLOUR OF ARTWORK</p>
<p>COLOUR REVERSE:</p> 	<p>NOTE THE BACKGROUND REPRESENTS THE DARK COLOUR OF ARTWORK</p>

NOTE:

COUNCIL'S POSITIVE LOGO IS USED ON WHITE OR LIGHT BACKGROUND COLOURS. THE POSITIVE LOGO DOES NOT HAVE A KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN BLACK LETTERING. THE REVERSE LOGO IS USED WHEN THE LOGO NEEDS TO BE VISIBLE ON A BLACK, DARK BLUE OR OTHER DARK COLOUR BACKGROUND. THE REVERSE LOGO FEATURES A WHITE KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN WHITE LETTERING. TO ENSURE THE REVERSE LOGO IS CORRECT, ALWAYS APPLY A REVERSE LOGO FILE AVAILABLE FROM CORPORATE COMMUNICATION TO ARTWORK WITH A DARK BACKGROUND. THE REVERSE LOGO SHOULD NOT BE "CONSTRUCTED" FROM THE POSITIVE LOGO BY CHANGING A KEYLINE OR LETTERING COLOURS.

IMAGE LOGO
ACCESS DENIED
FOR REINER - NOT
LOADING



PLAYGROUND NODE SIGN -
LOGO LOCATION DETAIL



PORTRAIT ORIENTATION
CLEAT (SIZE AS PER TABLE)
REFER TO TABLE BELOW FOR TEXT STYLE SIZES RELATIVE TO SIGN SIZE.
CLEAT UNIT DETAIL

TYPICAL GRAPHIC LAYOUT

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

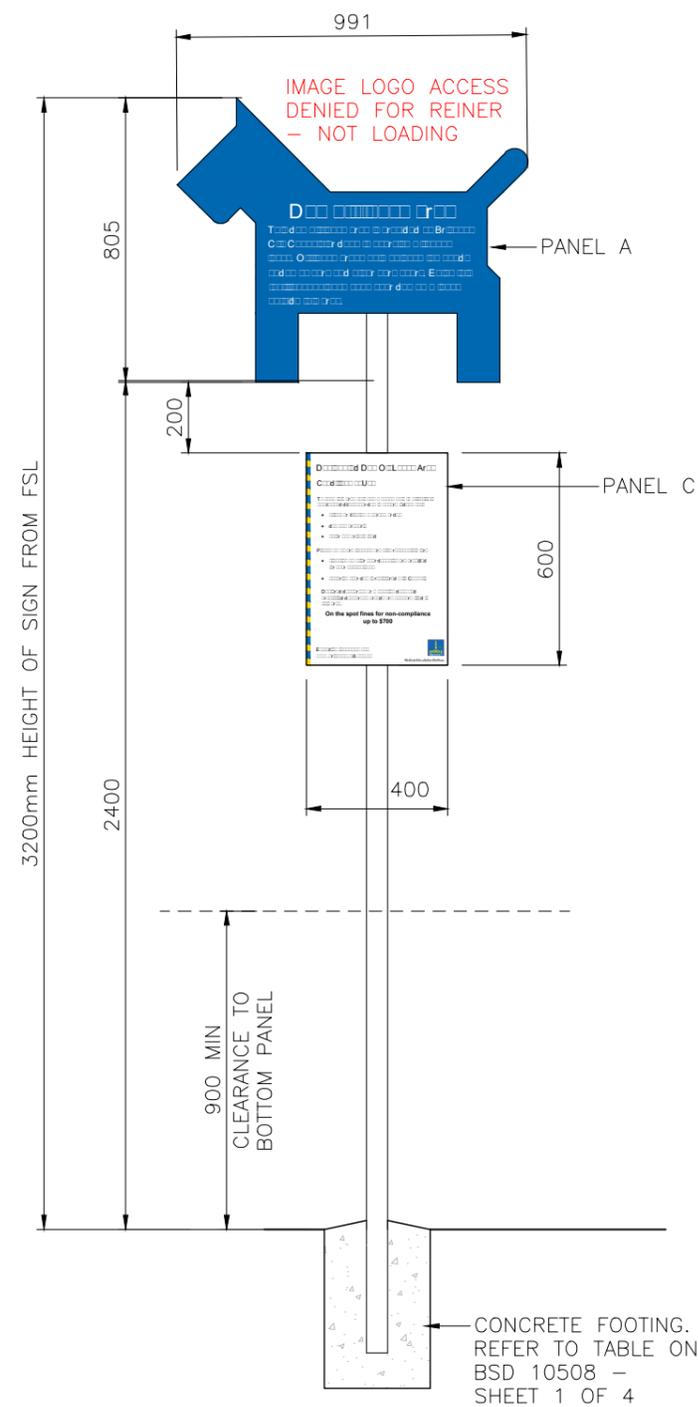
DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10508 (A) Park Node Signage - Graphic Notes - Sheet 2 of 4.dwg		
ASSOCIATED PLANS	BSD-10508 SHEETS 1, 3 & 4.dwg		



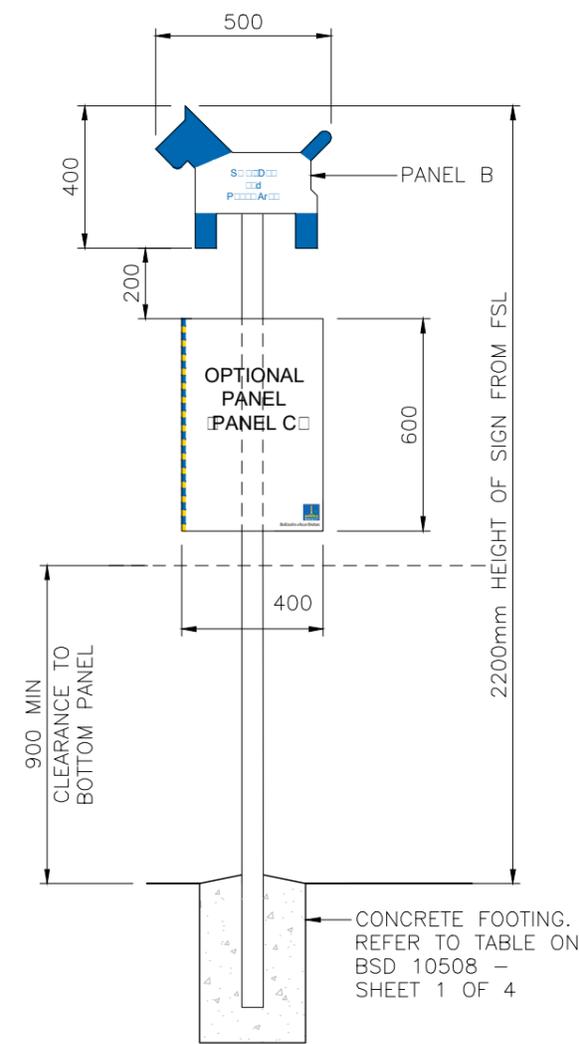
BRISBANE CITY COUNCIL STANDARD DRAWING	
PARK NODE SIGNAGE GRAPHIC NOTES SHEET 2 OF 4	
SCALE	1:20
DWG No.	BSD-10508
ORIGINAL SIZE	A3
REVISION	A

GENERAL SIGN NOTES

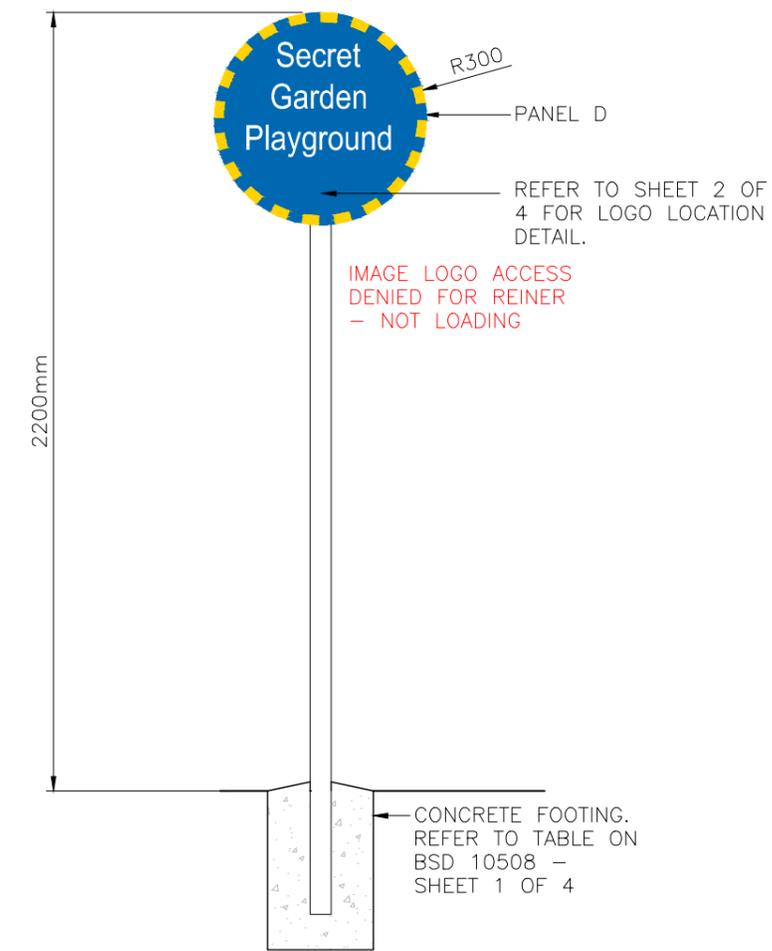
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10506 FOR ORDINANCE SIGNAGE DETAILS.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10508 (SHEET 1 OF 4) FOR POST, FOOTING AND EMBEDMENT DETAILS.
- REFER TO BSD - 10508 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
- REFER TO BSD - 10508 (SHEET 4 OF 4) FOR DETAILED DIMENSIONS FOR DOG OFF-LEASH SIGNS 1 AND 2.



DOG OFF LEASH SIGN - 1
SCALE: 1:20



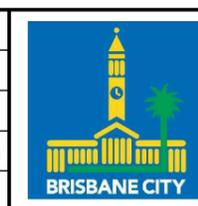
DOG OFF LEASH SIGN - 2
SCALE: 1:20



PLAYGROUND NODE SIGN
SCALE: 1:20

A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION			
Ingo Condric 2015.06.04 15:49:51+10'00'			
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT			
DESIGN APPROVED			
DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014			
SENIOR CO-ORDINATOR PARKS			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10508 (A) Park Node Signage - Example Layouts - Sheet 3 of 4.dwg		
ASSOCIATED PLANS	BSD-10508 SHEETS 1, 2 & 4.dwg		

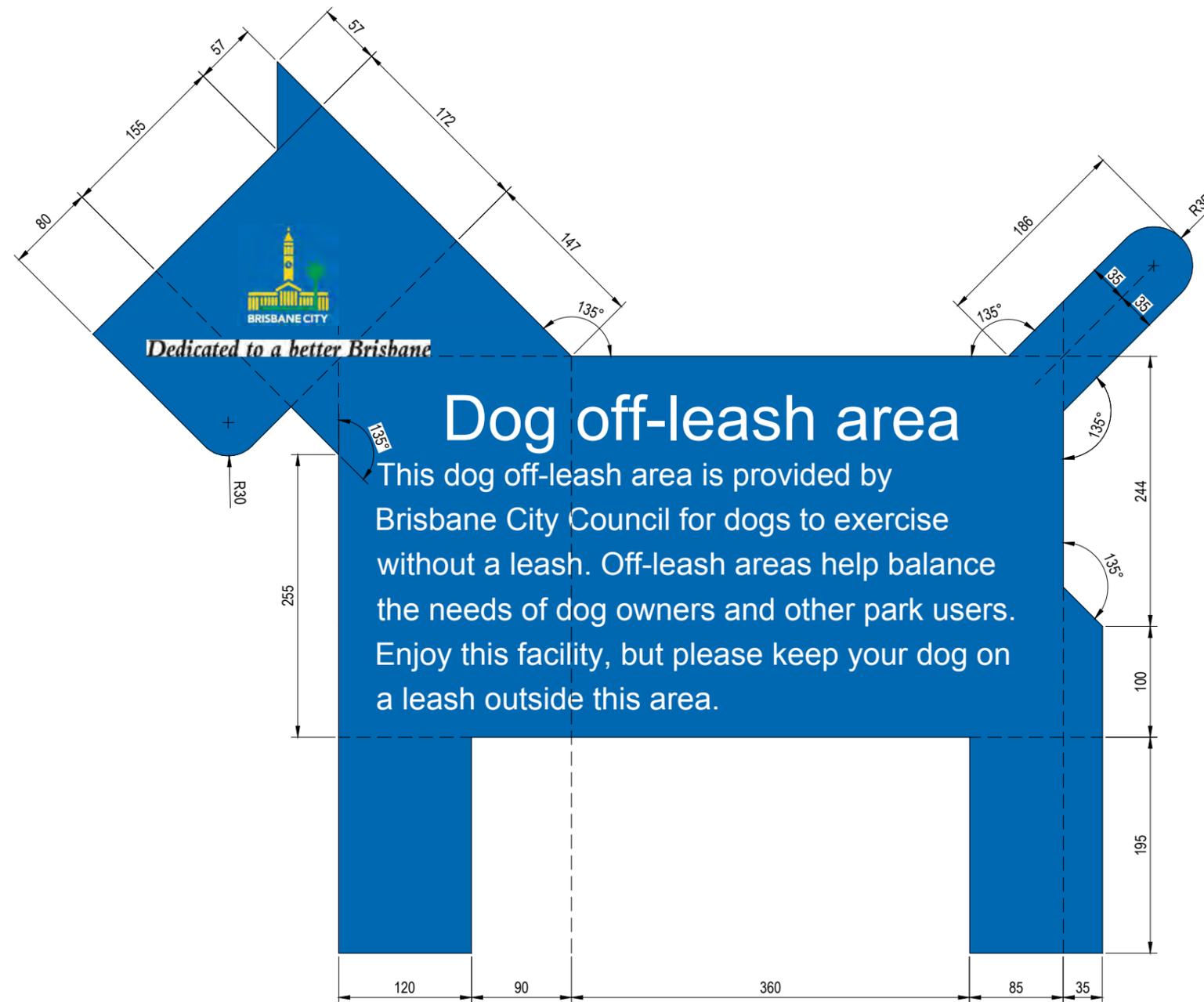


BRISBANE CITY COUNCIL STANDARD DRAWING	
SCALE AS SHOWN	
DWC No. BSD-10508	
ORIGINAL SIZE A3	REVISION A

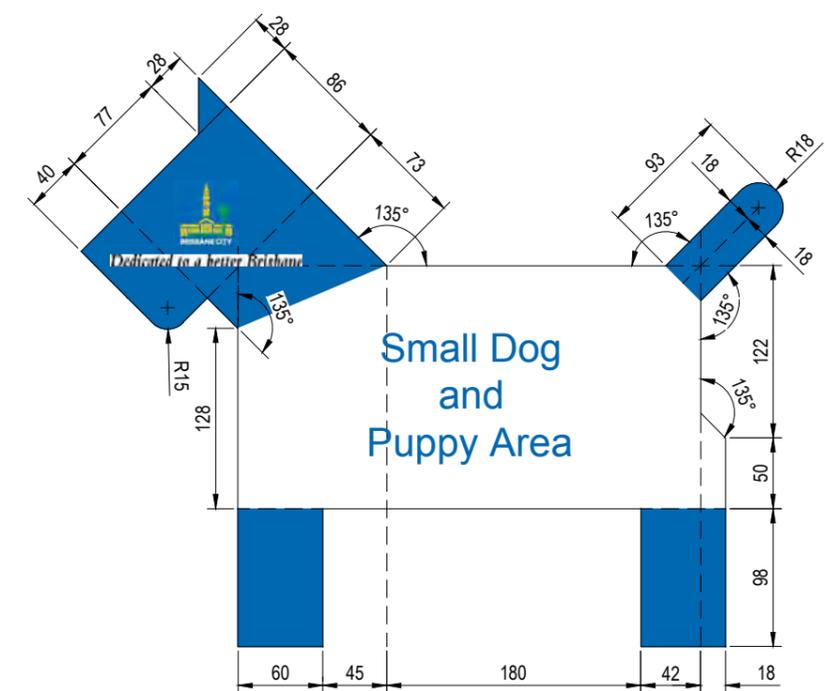
**PARK NODE SIGNAGE
EXAMPLE LAYOUTS
SHEET 3 OF 4**

GENERAL SIGN NOTES

1. ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
2. REFER TO BSD-10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
3. REFER TO BSD-10506 FOR ORDINANCE SIGNAGE DETAILS.
4. REFER TO BSD-10507 FOR PICTOGRAM SUITE DETAILS.
5. REFER TO BSD-10508 (SHEET 1 OF 4) FOR POST, FOOTING AND EMBEDMENT DETAILS.
6. REFER TO BSD-10508 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
7. REFER TO BSD-10508 (SHEET 3 OF 4) FOR EXAMPLE LAYOUTS



DOG OFF-LEASH SIGN - 1
PANEL A DETAIL
 SCALE: 1:5



DOG OFF-LEASH SIGN - 2
PANEL B DETAIL
 SCALE: 1:5

					DRAWING AUTHORISED FOR PUBLICATION					BRISBANE CITY COUNCIL STANDARD DRAWING				
					Inga Condric 2015.06.04 15:50:29+10'00'					DESIGN		CPO - P&D	DATE	MAR '15
					FOR ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT					DRAWN		CPO - P&D	DATE	MAR '15
					DESIGN APPROVED					CHECKED		CPS - NEWS	DATE	MAR '15
					DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				DRAWING FILENAME		BSD-10508 (B) Park Node Signage - Dog Off Leash Sign Detail - Sheet 4 of 4.dwg			
					SENIOR CO-ORDINATOR PARKS				ASSOCIATED PLANS		BSD-10508 SHEETS 1, 2 & 3.dwg			
B	Council Logo Shown on Signs (Previously Omitted)	JAN '19	APR '19	APR '19										
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15										
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	PARK NODE SIGNAGE		DOG OFF LEASH SIGN DETAIL		SHEET 4 OF 4		SCALE 1:5			
											DWG No. BSD-10508			
											ORIGINAL SIZE A3			
											REVISION B			

GENERAL SIGN NOTES

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10509 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
- REFER TO BSD - 10509 (SHEET 3 OF 4) FOR GRAPHIC SETOUT DETAILS.
- REFER TO BSD - 10509 (SHEET 4 OF 4) FOR DIRECTIONAL SIGNAGE TYPICAL LAYOUTS.

SIGNAGE PANELS C AND D:

- PANELS TO BE 16 GAUGE, 1.6mm THICK ALUMINIUM SHEETING.
- CORNERS OF PANEL TO HAVE 5mm RADIUS WITH ALL CORNERS / EDGES TO BE FREE OF BURRS.
- ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PANEL.

SIGNAGE STIFFENING RAILS:

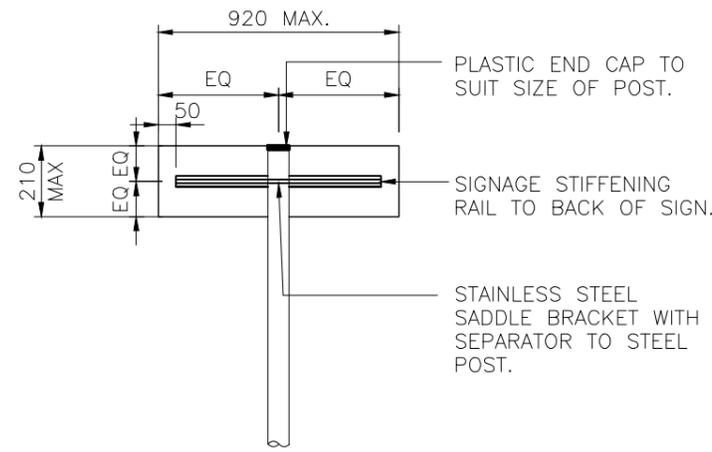
- REFER TO DEPARTMENT OF TRANSPORT AND MAIN ROADS DRAWING 1369 FOR DETAILS OF SIGN RAIL EXTRUSIONS.
- SIGN RAIL TO BE 44mm WIDE X 40mm DEEP AND 3mm THICK. (TYPE 2A AS PER TRANSPORT AND MAIN ROADS DRAWING 1369).
- SIGN RAIL TO BE POP RIVETED TO SIGN USING 'HENHUB' SELF PIERCING RIVETING SYSTEM OR SIMILAR APPROVED. AT A SPACING BETWEEN 250-300mm APART DEPENDING ON BEST PLACEMENT IN RELATION TO SIGN DESIGN / PANEL COMBINATIONS.
- SIGN RAILS ARE TO BE TYPICALLY POSITIONED 100mm IN FROM TOP AND BOTTOM EDGE OF SIGN AND 50mm FROM SIDE EDGES OF SIGN. IN SOME CASES THIS IS TO VARY TO ENSURE SIGN TEXT AND GRAPHICS ARE UNOBSTRUCTED BY FIXING HOLES.

SIGNAGE POSTS:

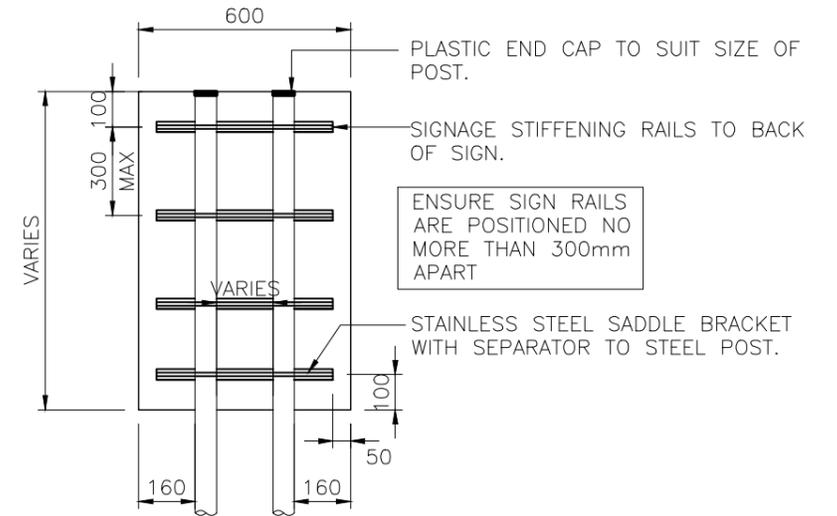
- POSTS ARE TO BE POSITIONED 160mm (UNLESS OTHERWISE SHOWN) FROM EDGE OF PANEL OR PLACED CENTRALLY ON SIGN.
- SIGNS ARE TO BE ATTACHED TO POSTS USING STANDARD (API BRAND) SADDLE BRACKETS TO SUIT SIZE OF POST. SADDLE BRACKETS TO BE STAINLESS STEEL WITH STAINLESS STEEL NUTS AND BOLTS.
- BLACK PLASTIC CAPS TO BE INSTALLED TO END OF POSTS. END CAPS TO SUIT POST SIZE AS SPECIFIED.

SIGNAGE PANELS A AND B:

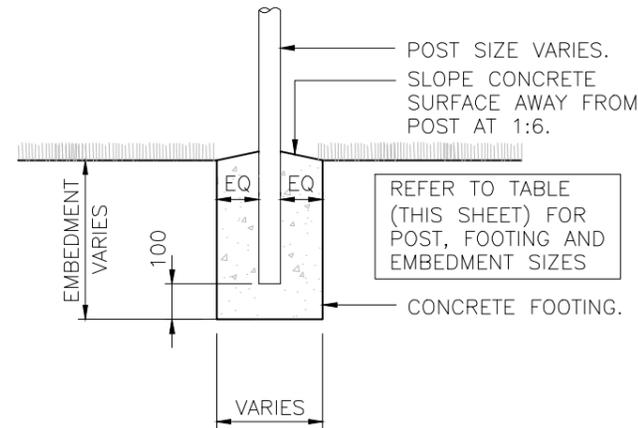
- REFER TO BSD-3102 FOR FIXING DETAILS FOR OPTIONS 1 AND 2 (AS SHOWN ON SHEET 4 OF 4).



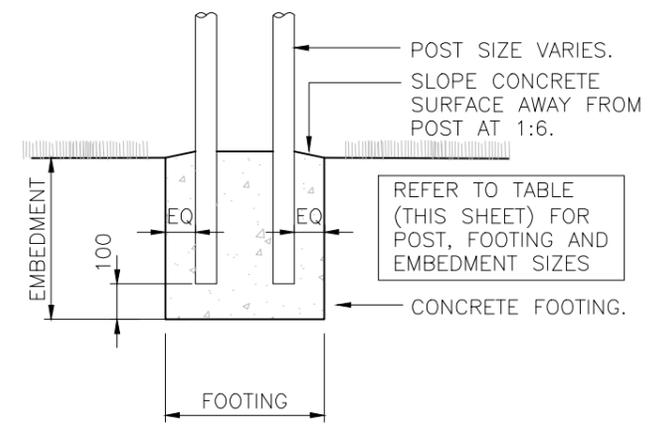
**SINGLE (1) POST TO PANEL B
OPTION 3 FIXING DETAIL ONLY**
SCALE: 1:20



**DOUBLE (2) POST TO PANELS C & D
FIXING DETAIL**
SCALE: 1:20



**CONCRETE FOOTING DETAIL
SINGLE POST**
SCALE: 1:20



**CONCRETE FOOTING DETAIL
DOUBLE POST**
SCALE: 1:20

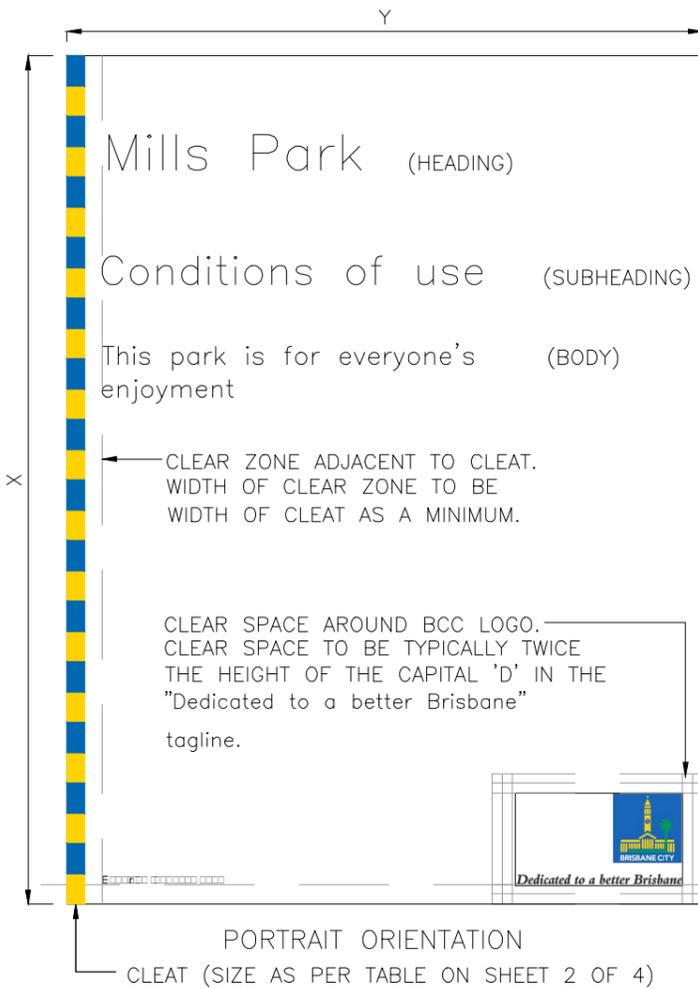
POST, FOOTING AND EMBEDMENT DETAILS				
SIGN NAME (REFER TO SHEET 3)	NUMBER OF POST	TERRAIN CATEGORY = 1.5 AND ABOVE		
		POST (STEEL) DIAMETER x THICKNESS	FOOTING	EMBEDMENT
DIRECTIONAL SIGN - OPTION 1	1	114.3x3.2 CHS	300 Dia	900
DIRECTIONAL SIGN - OPTION 2 AND 3	1	88.9x3.2 CHS	300 Dia	800
DIRECTIONAL PARK MAP SIGN	2	60.3x2.9 CHS	450 Dia	1000

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2015.03.20 11:45:20 +10'00'	Lenita MendisRPEQ 8950 2015.03.20 12:10:59 +10'00'	Bala Balakumar RPEQ 3963 2015.03.20 14:03:10+10'00'
BRISBANE CITY COUNCIL STANDARD DRAWING		
PARK DIRECTIONAL SIGNAGE TYPICAL INSTALLATION DETAILS SHEET 1 OF 4		SCALE: AS SHOWN DWG No. BSD-10509 ORIGINAL SIZE: A3 REVISION: A

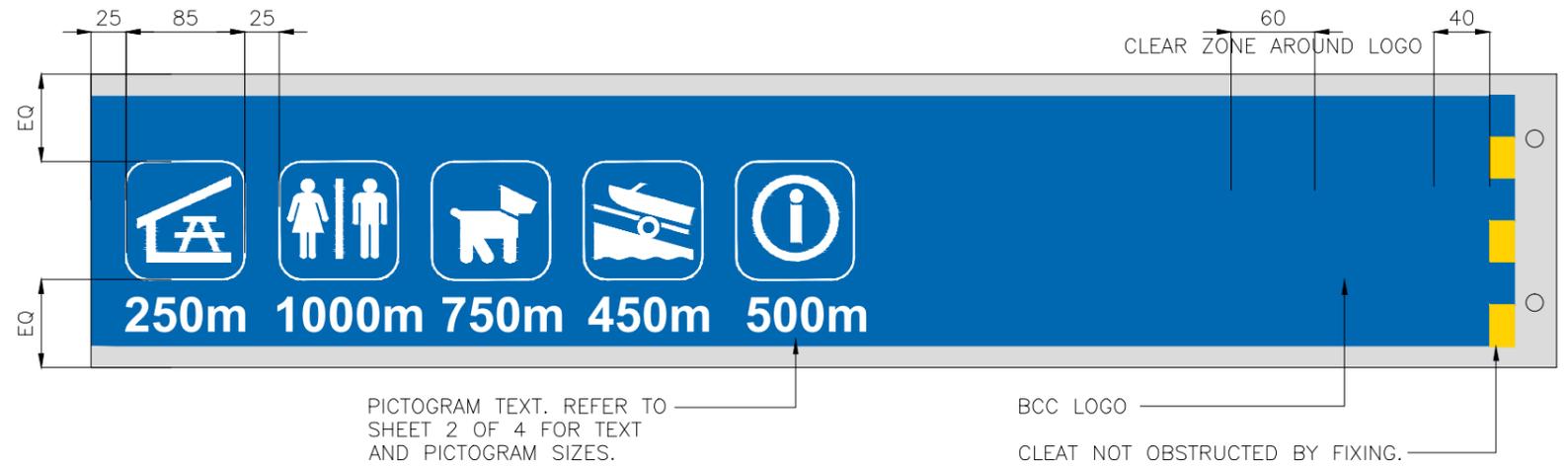
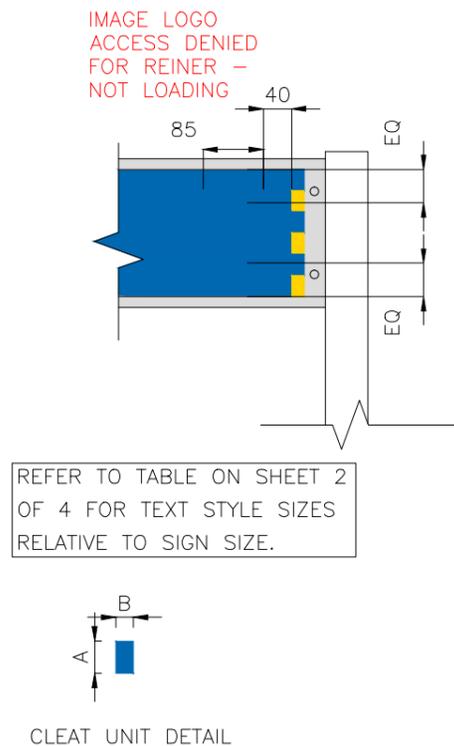
DRAWING AUTHORISED FOR PUBLICATION				DESIGN	CPO - P&D	DATE	MAR '15
Inga Condric 2015.08.04 15:51:03+10'00'				DRAWN	CPO - P&D	DATE	MAR '15
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				CHECKED	CPS - NEWS	DATE	MAR '15
DESIGN APPROVED				DRAWING FILENAME	BSD-10509 (A) Park Directional Signage - Typical Installation Details - Sheet 1 of 4.dwg		
DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				ASSOCIATED PLANS	BSD-10509 SHEETS 2, 3 & 4.dwg		
SENIOR CO-ORDINATOR PARKS							
A	Drawing Converted From UMS Series March 2015		MAR '15				
ISSUE	AMENDMENT		DRAWN DATE	CHK'D DATE	APPR'D DATE		

GENERAL SIGN NOTES

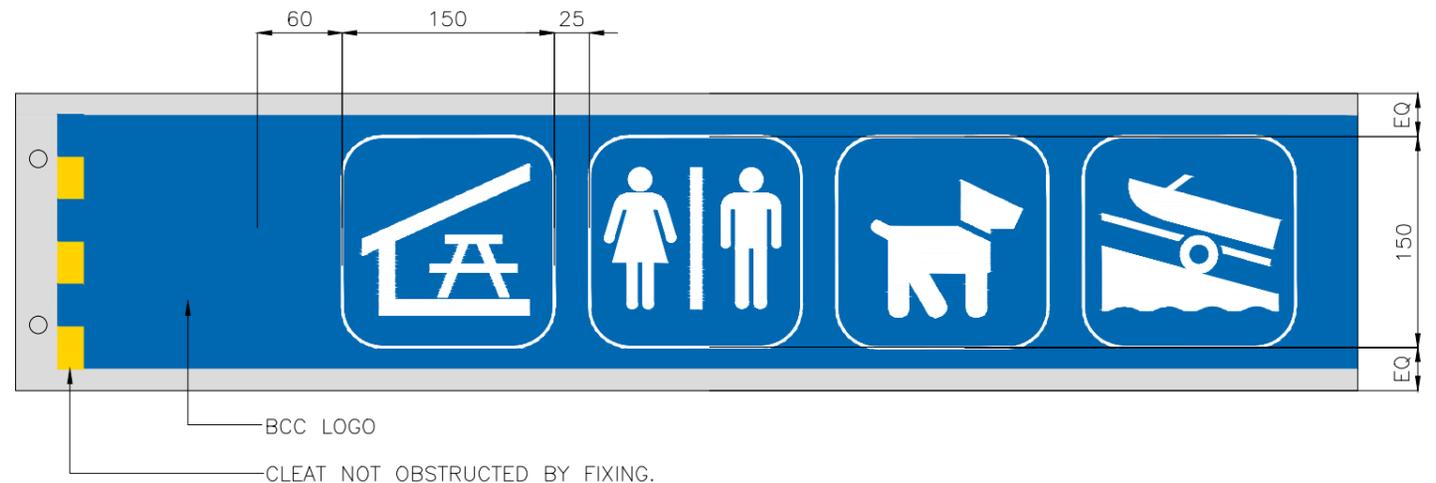
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10506 FOR ORDINANCE SIGNAGE DETAILS.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10509 (SHEET 1 OF 4) FOR INSTALLATION NOTES AND DETAILS.
- REFER TO BSD - 10509 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
- REFER TO BSD - 10509 (SHEET 4 OF 4) FOR DIRECTIONAL SIGNAGE TYPICAL LAYOUTS.



TYPICAL GRAPHIC LAYOUT



TYPICAL GRAPHIC LAYOUT - PANEL A



TYPICAL GRAPHIC LAYOUT - PANEL B

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

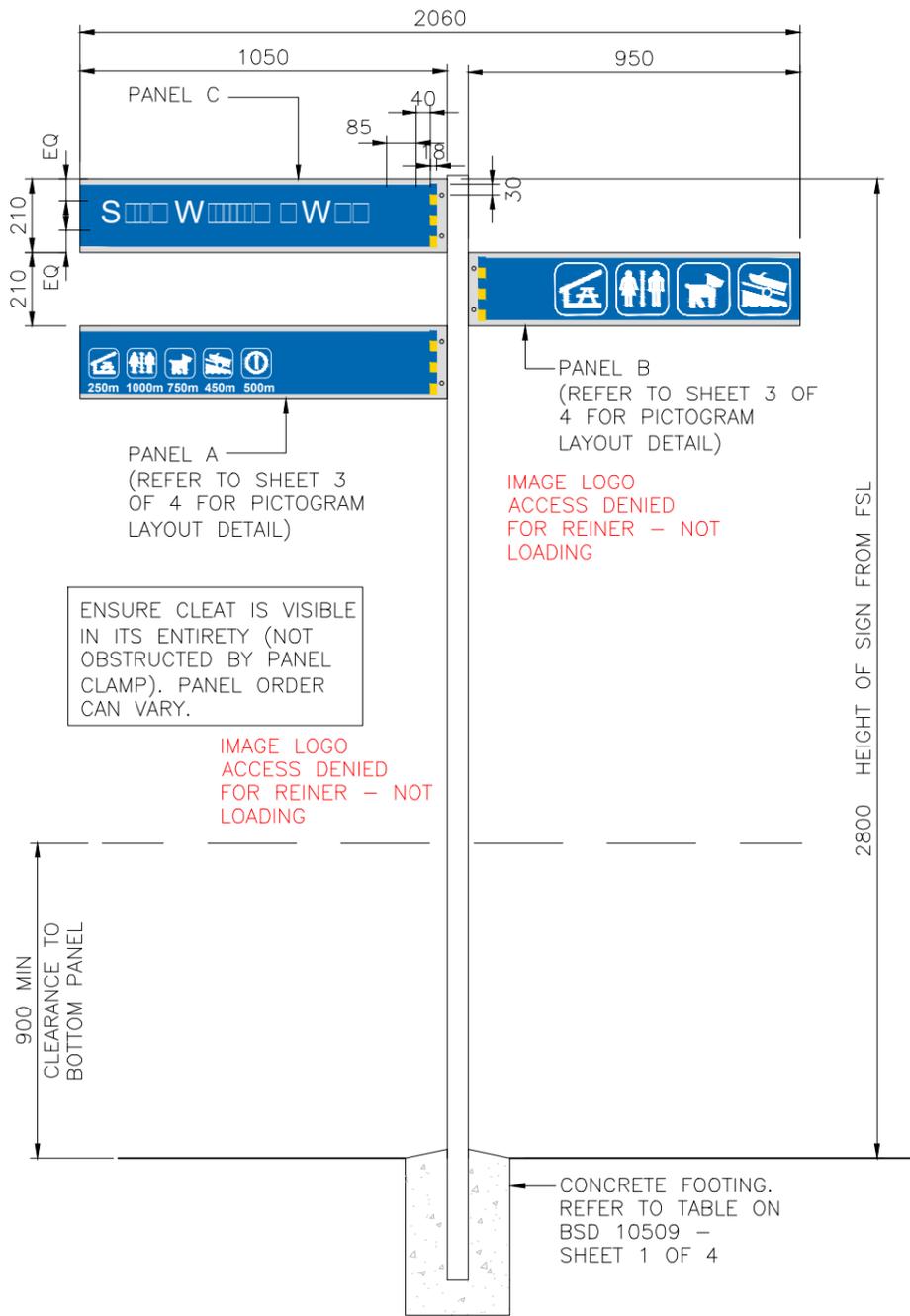
DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	FEB '14
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10509 (A) Park Directional Signage - Graphic Setout Details - Sheet 3 of 4.dwg		
ASSOCIATED PLANS	BSD-10509 SHEETS 1, 2 & 4.dwg		



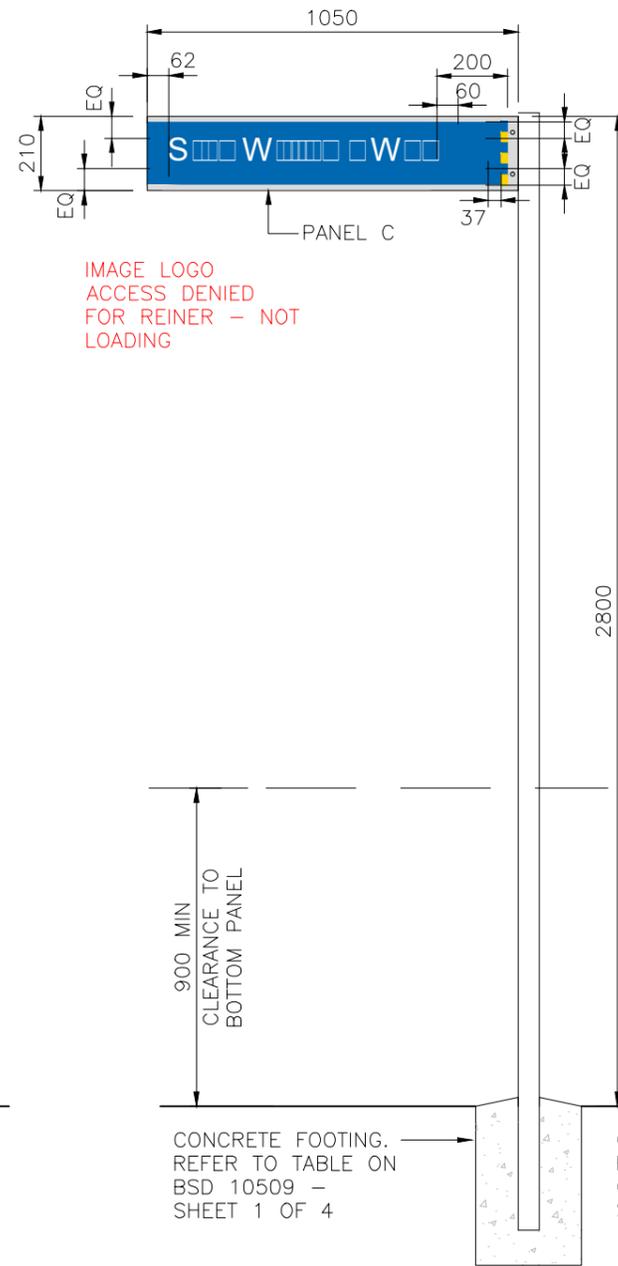
BRISBANE CITY COUNCIL STANDARD DRAWING	
PARK DIRECTIONAL SIGNAGE GRAPHIC SETOUT DETAILS SHEET 3 OF 4	
SCALE	A3
DWG No.	BSD-10509
ORIGINAL SIZE	A

GENERAL SIGN NOTES

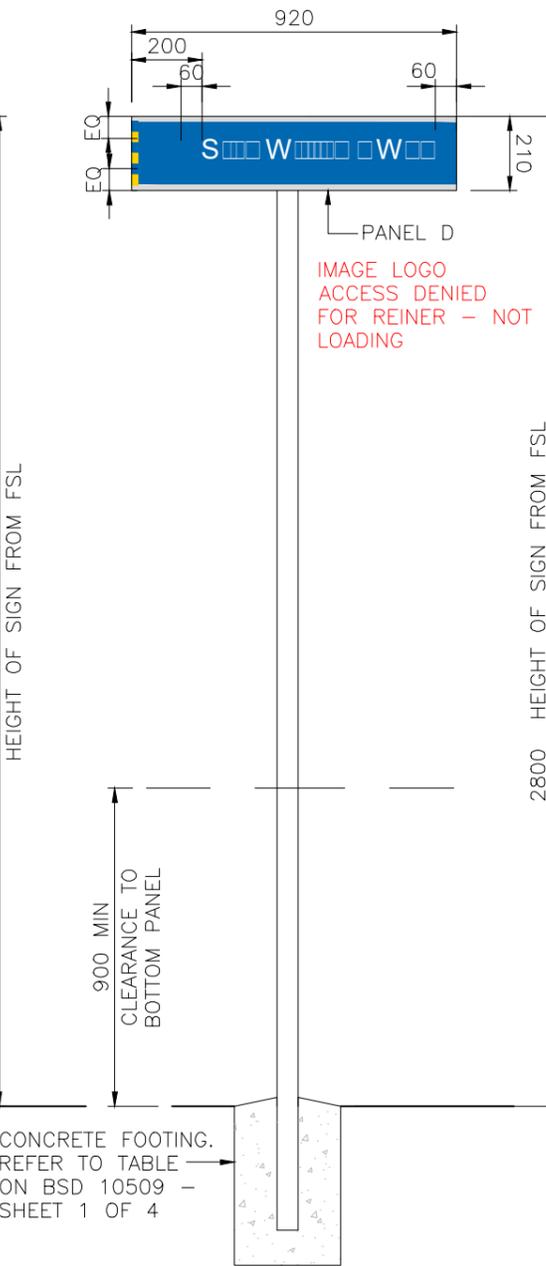
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10501 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10509 (SHEET 1 OF 4) FOR INSTALLATION NOTES AND DETAILS.
- REFER TO BSD - 10509 (SHEET 2 OF 4) FOR GRAPHIC NOTES.
- REFER TO BSD - 10509 (SHEET 3 OF 4) FOR GRAPHIC SETOUT DETAILS.



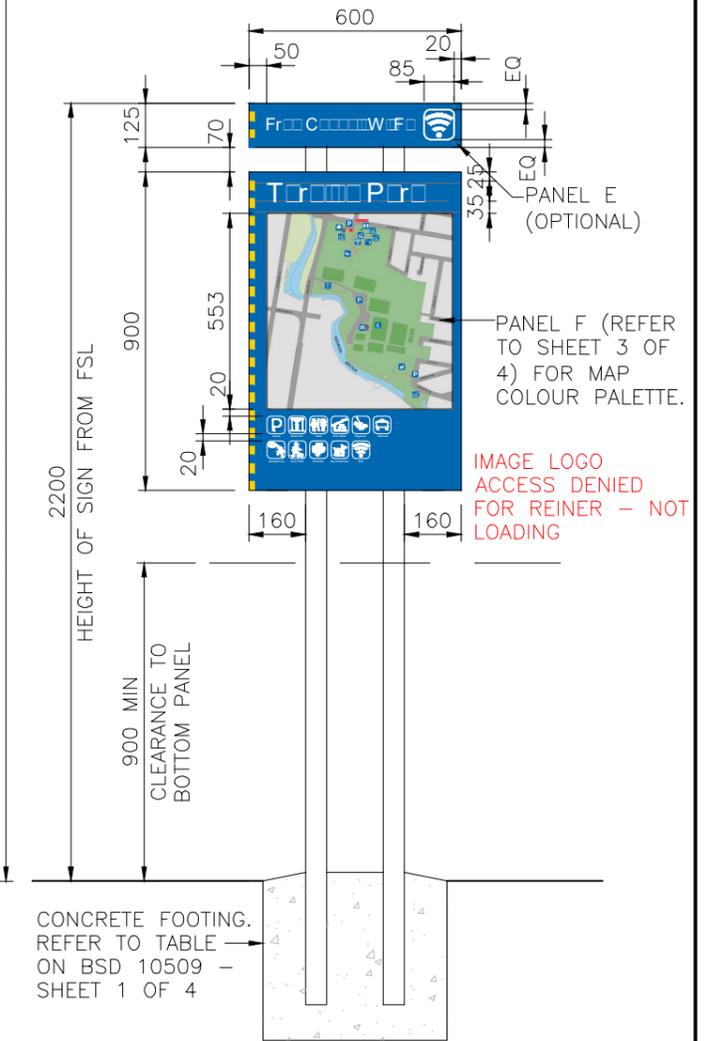
OPTION 1



OPTION 2



OPTION 3
(DIRECTIONAL/NODE)



DIRECTIONAL PARK MAP SIGN

SCALE: 1:20

DIRECTIONAL SIGNS SCALE: 1:20

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10509 (A) Park Directional Signage - Typical Layouts - Sheet 4 of 4.dwg		
ASSOCIATED PLANS	BSD-10509 SHEETS 1, 2 & 3.dwg		



BRISBANE CITY COUNCIL STANDARD DRAWING	
PARK DIRECTIONAL SIGNAGE TYPICAL LAYOUTS SHEET 4 OF 4	
SCALE	1:20
DWG No.	BSD-10509
ORIGINAL SIZE	A3
REVISION	A

GENERAL SIGN NOTES

SIGNAGE PANEL:

- PANELS TO BE 16 GAUGE, 1.6mm THICK ALUMINIUM SHEETING.
- CORNERS OF PANEL TO HAVE 5mm RADIUS WITH ALL CORNERS/EDGES TO BE FREE OF BURRS.
- ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PANEL.
- REFER TO BSD - 10510 - SHEET 5 OF 6 AND SHEET 6 OF 6 FOR SIZES OF SIGN PANELS, POSSIBLE LAYOUTS AND GRAPHIC NOTES.

SIGNAGE STIFFENING RAILS:

- REFER TO DEPARTMENT OF TRANSPORT AND MAIN ROADS DRAWING 1369 FOR DETAILS OF SIGN RAIL EXTRUSIONS.
- SIGN RAIL TO BE 44mm WIDE X 40mm DEEP AND 3mm THICK. (TYPE 2A AS PER TRANSPORT AND MAIN ROADS DRAWING 1369).
- SIGN RAIL TO BE POP RIVETED TO SIGN USING 'HENHUB' SELF PIERCING RIVETING SYSTEM OR SIMILAR APPROVED. AT A SPACING BETWEEN 250-300mm APART DEPENDING ON BEST PLACEMENT IN RELATION TO SIGN DESIGN / PANEL COMBINATIONS.
- SIGN RAILS ARE TO BE TYPICALLY POSITIONED 100mm IN FROM TOP AND BOTTOM EDGE OF SIGN AND 50mm FROM SIDE EDGES OF SIGN. IN SOME CASES THIS IS TO VARY TO ENSURE SIGN TEXT AND GRAPHICS ARE UNOBSTRUCTED BY FIXING HOLES.

SIGNAGE POSTS:

- SIGNS ARE TO BE ATTACHED TO POSTS USING STANDARD (API BRAND OR APPROVED SIMILAR) SADDLE BRACKETS TO SUIT SIZE OF POST. SADDLE BRACKETS TO BE STAINLESS STEEL WITH STAINLESS STEEL NUTS AND BOLTS.
- BLACK PLASTIC CAPS TO BE INSTALLED TO END OF POSTS. END CAPS TO SUIT POST SIZE AS SPECIFIED.

GENERAL NOTES

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
- G2 ALL DIMENSIONS AND EXISTING CONDITIONS TO BE CHECKED BEFORE COMMENCING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G3 ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE APPROPRIATE AND CURRENT AUSTRALIAN STANDARDS.
- G4 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BEFORE CONSTRUCTION COMMENCES.
- G7 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
- G8 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G9 ALL TEMPORARY WORKS ARE TO BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. ALL TEMPORARY WORKS ARE TO BE REMOVED AT THE END OF THE PROJECT WITH GROUND MADE GOOD, ALL AT THE CONTRACTOR'S EXPENSE.
- G10 SAFETY PRECAUTIONS SHALL BE TAKEN TO AVOID INJURY TO PEOPLE. THE UNATTENDED FOOTING HOLES SHALL BE COVERED OR FENCED OFF AT ALL TIMES.

DESIGN DATA

WIND LOAD:

REGIONAL WIND SPEED : Ultimate $V_{500}=57\text{m/s}$
 : Serviceability $V_{25}=39\text{m/s}$
 WIND REGION : B
 TERRAIN CATEGORY : 1.5
 SHIELDING MULTIPLIER (Ms) : 1.0
 TOPOGRAPHIC MULTIPLIER (Mt) : 1.0

FOOTING NOTES

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED MATERIAL OF MINIMUM ALLOWABLE BEARING CAPACITY OF 100 kPa. BEFORE CONSTRUCTION COMMENCES, THE ALLOWABLE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER (RPEQ). IF SITE CONDITION IS DIFFERENT CONSULT A STRUCTURAL ENGINEER.
- F2 THE BOTTOMS OF ALL FOOTINGS ARE TO BE CLEANED OF ALL LOOSE MATERIAL, CLAY SEAMS, WATER ETC PRIOR TO CONCRETING.

CONCRETE NOTES

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600
- C2. ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3. ALL CEMENT SHALL BE TYPE GP OR GB TO AS3972 UNLESS OTHERWISE SPECIFIED.
- C4. ADMIXTURES SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE SUPERINTENDENT.
- C5. NOMINAL AGGREGATE SIZE TO BE 20mm SLUMP TO BE NOT GREATER THAN 80mm
- C6. CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O.

ELEMENT	CONCRETE GRADE	REINFORCEMENT COVER
BLINDING LAYER	15	-
MASS CONCRETE	15	-
BORED PIERS	25	50

- C7. ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.

BAR	LENGTH	BAR	LENGTH
N12	500	N28	500
N16	650	N32	650
N20	800	N36	800
N24	1050	FABRIC	1050

- C8. REINFORCEMENT SYMBOLS:

R STRUCTURAL PLAIN ROUND GRADE 250R TO AS4671.
 N DEFORMED BAR GRADE D500N TO AS4671.
 L COLD ROLLED DEFORMED BAR GRADE D500L TO AS4671.
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS4671.

- C9. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C10. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C11. ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C12. FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS 3610. REFER TO THE SPECIFICATION FOR CLASSES OF SURFACE FINISHES.

STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2015.03.20 11:45:46+10'00'	Lenita MendisRPEQ 8950 2015.03.20 12:12:03 +10'00'	Bala Balakumar RPEQ 3963 2015.03.20 14:03:47+10'00'

BRISBANE CITY COUNCIL STANDARD DRAWING

**PARK NAME SIGNAGE
GENERAL STRUCTURAL NOTES
SHEET 1 OF 6**

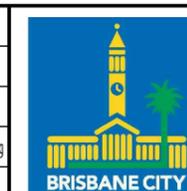
SCALE 1:20

DWG No. **BSD-10510**

ORIGINAL SIZE A3 REVISION A

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10510 (A) Park Name Signage - General Structural Notes - Sheet 1 of 6.dwg		
ASSOCIATED PLANS	BSD-10510 SHEETS 2, 3, 4, 5 & 6.dwg		



DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014
 SENIOR CO-ORDINATOR PARKS

STEELWORK NOTES

- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS5100.6, AS4100 & AS/NZS1554 AS APPROPRIATE.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH:
AS/NZS3679 GRADE 300 FOR HOT ROLLED SECTIONS
AS1163 GRADE C350LO FOR RECTANGULAR HOLLOW SECTIONS
AS1163 GRADE C350LO FOR CIRCULAR HOLLOW SECTIONS
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS/NZS1252 U.N.O.
ALL BOLTS TO BE M20 8.8/S TO AS/NZS 1252 U.N.O.
ALL BOLTS TO BE HOT DIP GALVANISED AS1214
ALL THREADS TO BE TREATED WITH 'LOC-TITE' TO RENDER TAMPER AND VIBRATION PROOF.
- S4. THE CONTRACTOR SHALL SUBMIT RPEQ CERTIFICATION CONFIRMING THE FOLLOWING TOGETHER WITH THE RELEVANT MILL AND TEST CERTIFICATES TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCING FABRICATION.
 - THAT THE STRUCTURAL STEEL PRODUCTS SUPPLIED ARE FROM EITHER AN AUSTRALIAN OR OVERSEAS ACRS CERTIFIED MANUFACTURER. REFER www.steelcertification.com FOR CURRENT CERTIFICATE HOLDERS. ACRS REFERS TO "AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS".
 - THAT WHERE STRUCTURAL STEEL PRODUCTS ARE SOURCED FROM OVERSEAS FOR THIS PROJECT THE CERTIFYING ENGINEER HAS REVIEWED THE MILL AND TEST CERTIFICATES FROM THE SUPPLIERS OF THE STEEL PRODUCTS AND CONFIRMS THAT THEY COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS IN RELATION TO MATERIAL COMPOSITION AND STRENGTH.
 - THAT ALL BOLTS USED SHALL COMPLY WITH AS1252 AND THE CURRENT REQUIREMENTS OF THE AUSTRALIAN STEEL INSTITUTE ASI TECHNICAL NOTE TN001 VERSION 3.
- S5. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 300 U.N.O.
- S6. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH 5mm THICK PLATES AND CONTINUOUS FILLED WELDED U.N.O.
- S7. WHERE MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE BENT, CURVED OR ROLLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS REQUIRED TO ACHIEVE THE REQUIRED SHAPES WITHOUT LOCALISED DISTORTION OF THE MEMBERS.
- S8. BEFORE FABRICATION HAS COMMENCED, THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE SHOP DRAWINGS TO THE SUPERINTENDENT FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.
- S9. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS1554. GRIND ALL CORNERS & WELDS SMOOTH.
A RPEQ CERTIFICATION CONFIRMING THAT ALL WELDING WORKS HAVE BEEN INSPECTED AND CERTIFIED AS COMPLYING WITH AS1554 BY A QUALIFIED WELDING INSPECTOR APPOINTED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO THE STEELWORK BEING GALVANISED.
- S10. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS2312 HDG600 SPECIFICATION. CORROSION PROTECTION COATING TO SURFACE PREPARATION OF SUBSTRATE MATERIAL IS CLASS 2½ TO AS1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS4680.
- S11. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S12. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- S13. ANY POST GALVANISING DAMAGED TO BE MADE GOOD WITH A HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION AS PER PAINT MANUFACTURER'S RECOMMENDATIONS.

SAFETY IN CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE EXPERIENCED AND COMPETENT TO CARRY OUT THE PROPOSED WORKS IN ACCORDANCE WITH ALL APPLICABLE CURRENT CONSTRUCTION INDUSTRY CODES OF PRACTICE, AUSTRALIAN STANDARDS AND WORKPLACE HEALTH AND SAFETY REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MITIGATING THE RISKS RELATING TO THE CONSTRUCTION OPERATIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING;
 - ALL DEMOLITION WORKS
 - ALL TEMPORARY WORKS
 - MAINTAINING A SAFE WORKPLACE BY PROVIDING SAFE ACCESS TO ALL WORK AREAS AND THE USE OF APPROPRIATE PROTECTIVE EQUIPMENT
 - LIFTING OF MATERIALS
 - PROVIDING STABLE PLATFORMS FOR CRANES, PILING RIGS AND OTHER CONSTRUCTION MACHINERY
 - EXCAVATIONS
 - NOISE, DUST, VAPOUR, WASTE AND VIBRATION CONTROL
 - PROTECTION OF AND PROTECTION FROM EXISTING OVERHEAD AND UNDERGROUND SERVICES
 - CONTACT QLD DIAL BEFORE YOU DIG (DBYD) FOR ALL UNDERGROUND SERVICES
 - PROTECTION OF NEIGHBOURING PROPERTIES/ADJACENT EXISTING STRUCTURES
 - ENVIRONMENTAL PROTECTION AND MANAGEMENT
 - MANAGEMENT OF CONTAMINATED/HAZARDOUS MATERIALS
 - TRAFFIC AND PEDESTRIAN MANAGEMENT
 - SITE LIGHTING AND SECURITY
2. ALL TEMPORARY WORKS, LIFTING OPERATIONS, EXCAVATIONS AND PLATFORMS FOR CONSTRUCTION MACHINERY SHALL BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER (RPEQ) EXPERIENCED IN THE RELEVANT FIELDS.

INSPECTIONS AND CERTIFICATION NOTES

1. ARRANGE & PAY ALL COSTS FOR A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER AND A GEOTECHNICAL ENGINEER (RPEQ) TO INSPECT AND CERTIFY ALL CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT.
2. THE CONSTRUCTION CERTIFICATE SHALL STATE THAT ALL CONSTRUCTION WORKS HAVE BEEN CARRIED OUT AS PER THE MOST CURRENT ISSUE OF THE CONTRACT DOCUMENTS AND SITE INSTRUCTIONS/VARIATION ORDERS ISSUED DURING CONSTRUCTION BY CITY PROJECTS OFFICE.

STRUCTURAL DESIGN CERTIFICATION									
DESIGN			DESIGN CHECK			AUTHORISED FOR ISSUE			
Zhuangzhi Hu RPEQ 13885 2015.03.19 14:02:26+10'00'			Lenita Mendis RPEQ 8950 2015.03.20 09:35:38+10'00'			Bala Balakumar RPEQ 3963 2015.03.20 14:04:21+10'00'			
BRISBANE CITY COUNCIL STANDARD DRAWING									
PARK NAME SIGNAGE GENERAL STRUCTURAL NOTES SHEET 2 OF 6						SCALE 1:20			
DWG No BSD-10510						REVISION A			
ORIGINAL SIZE A3						REVISION A			

DRAWING AUTHORISED FOR PUBLICATION					DESIGN	DATE	DATE	DATE
Inga Condric 2015.06.04 15:55:28+10'00'					CPO - P&D	MAR '15	MAR '15	MAR '15
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT					CPO - P&D	MAR '15	MAR '15	MAR '15
DESIGN APPROVED					CPS - NEWS	MAR '15	MAR '15	MAR '15
DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014					DRAWING FILENAME	BSD-10510_SHEET 2 of 6.dwg		
SENIOR CO-ORDINATOR PARKS					ASSOCIATED PLANS	BSD-10510 SHEETS 1, 3, 4, 5 & 6.dwg		

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15



GENERAL GRAPHIC NOTES FOR SIGNAGE

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10510 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10510 (SHEET 4 OF 6) FOR GRAPHIC SETOUT DETAILS.
- REFER TO BSD - 10510 (SHEET 5 OF 6) FOR PARK NAME SIGN - HORIZONTAL - STANDARD - INSTALLATION NOTES.
- REFER TO BSD - 10510 (SHEET 6 OF 6) FOR PARK NAME SIGN - VERTICAL - ALTERNATIVE - INSTALLATION NOTES.

PANEL:

- PANEL COLOUR: 7 YEAR CAST VINYL BLUE (PMS 293 BLUE) U.N.O.

BCC LOGO AND CLEAT:

- BCC TAGLINE "Dedicated to a better Brisbane" TEXT FONT: Bembo Italic.
- BCC LOGO AND TAGLINE TO BE SCALED AS SHOWN IN THE TABLE BELOW. ENSURE CORRECT LOGO IS USED, PERMISSION FOR USE GRANTED BY CORPORATE COMMUNICATION, BRISBANE CITY COUNCIL.
- (BCC LOGO TO BE FULL COLOUR WITH 5mm WHITE BORDER AND NON-REFLECTIVE).
- BCC CLEAT SIZE AS PER BELOW TABLE.
- BCC CLEAT COLOUR TO COMMENCE ON BLUE UNIT AT TOP OF THE PANEL AND FINISH WITH A WHOLE CLEAT UNIT AT THE BOTTOM OF THE PANEL. CLEAT YELLOW TO BE 7 YEAR CAST VINYL YELLOW (PMS 116 YELLOW).
- BCC WEBSITE - www.brisbane.qld.gov.au. TO BE POSITIONED UNDER BCC CONTACT NUMBER ONLY WHEN SIGN CONVEYS INFORMATION THAT IS SPECIFICALLY REFERRED TO ON BRISBANE CITY COUNCIL WEBSITE.

TEXT FONT TYPE AND SIZE:

- TEXT FONT: AVENIR MEDIUM.
- TEXT SIZES AS PER BELOW TABLE (U.N.O)
- FONT COLOUR (FOR MAIN TEXT FONT AND TAGLINE TEXT FONT): 7 YEAR CAST VINYL WHITE WHERE PANEL COLOUR IS PMS 293 BLUE.
- TEXT SIZES LISTED BELOW ARE TO BE USED AS A GUIDE ONLY.

STANDARD PARK ORDINANCE SIGNAGE - GRAPHIC STANDARDS

- PICTOGRAM IMAGES TO BE SOURCED VIA CITY PROJECTS OFFICE/CORPORATE COMMUNICATIONS - BRISBANE CITY COUNCIL.

OTHER COLOURS (WHERE APPLICABLE):

- BLUE - PMS 293 BLUE
- GREEN - PMS 355 GREEN
- YELLOW - PMS 116 YELLOW
- RED - PMS 485 RED
- COLOURS NOT LISTED ABOVE ARE TO BE APPROVED PRIOR TO MANUFACTURE.
- OTHER COLOURS MAY BE APPLICABLE WITH PRIOR APPROVAL.

SIGN PANEL GRAPHIC DETAILS FOR HORIZONTAL STANDARD SIGN (REFER SHEET 5 OF 6)

PANEL	CLEAT UNIT SIZE (H X W)		LOGO HEIGHT INCLUDING TAGLINE	CLEAR SPACE AROUND LOGO/OFFSET FROM EDGE OF PANEL	TEXT OFFSET FROM EDGE OF PANEL	HEADING TEXT SIZE	SUB HEADING TEXT SIZE	BODY TEXT SIZE	PICTOGRAM DIMENSIONS
A	40	24	196	41	124	160 (100 MIN)	N/A	N/A	N/A
B	40	24	N/A	N/A	124	N/A	N/A	N/A	150x150
C	40	24	N/A	N/A	124	N/A	45	30	N/A

SIGN PANEL GRAPHIC DETAILS FOR VERTICAL - ALTERNATIVE SIGN (REFER SHEET 6 OF 6)

SIGN TYPE	CLEAT UNIT SIZE (H X W)		LOGO HEIGHT INCLUDING TAGLINE	CLEAR SPACE AROUND LOGO/OFFSET FROM EDGE OF PANEL	TEXT OFFSET FROM EDGE OF PANEL	HEADING TEXT SIZE	SUB HEADING TEXT SIZE	BODY TEXT SIZE	PICTOGRAM DIMENSIONS
ALTERNATIVE 1	43	26	148	31	100 (PREFERRED) 30 MIN (AS SHOWN)	160 (100 MIN)	35	N/A	N/A
ALTERNATIVE 2	43	26	148	31	100 (PREFERRED) 30 MIN (AS SHOWN)	160 (100 MIN)	35	N/A	N/A
ALTERNATIVE 2 - PANEL B	43	26	N/A	N/A	N/A	N/A	N/A	N/A	150X150
ALTERNATIVE 3	43	26	148	31	100 (PREFERRED) 30 MIN (AS SHOWN)	160 (100 MIN)	35	N/A	150X150

					DRAWING AUTHORISED FOR PUBLICATION				DESIGN CPO - P&D DATE MAR '15			BRISBANE CITY COUNCIL STANDARD DRAWING		
					Inga Condric 2015.06.04 15:56:00+10'00' for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED									
					DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				CHECKED CPS - NEWS DATE MAR '15		SCALE 1:20		DWG No. BSD-10510	
					SENIOR CO-ORDINATOR PARKS				DRAWING FILENAME BSD-10510 (A) Park Name Signage - Graphic Notes - Sheet 3 of 6.dwg					
A	Drawing Converted From UMS Series March 2015				MAR '15	MAR '15	MAR '15						PARK NAME SIGNAGE GRAPHIC NOTES SHEET 3 OF 6	
ISSUE	AMENDMENT				DRAWN DATE	CHK'D DATE	APPR'D DATE							

GENERAL GRAPHIC NOTES FOR SIGNAGE

- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10510 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10510 (SHEET 3 OF 6) FOR GRAPHIC NOTES.
- REFER TO BSD - 10510 (SHEET 5 OF 6) FOR PARK NAME SIGN - HORIZONTAL - STANDARD - INSTALLATION NOTES.
- REFER TO BSD - 10510 (SHEET 6 OF 6) FOR PARK NAME SIGN - VERTICAL - ALTERNATIVE - INSTALLATION NOTES.

COLOUR LOGOS - POSITIVE AND REVERSE VERSIONS

COLOUR POSITIVE:



Dedicated to a better Brisbane

COLOUR REVERSE:



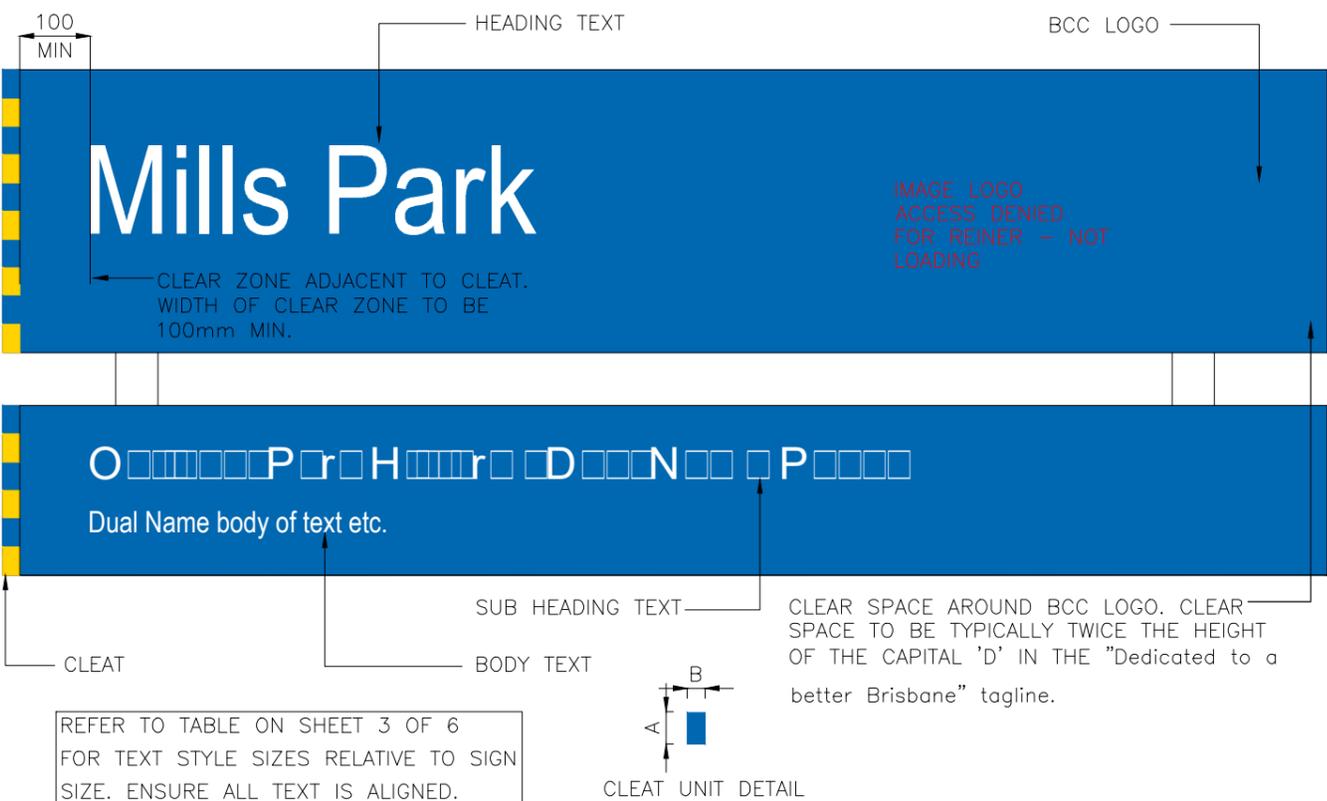
Dedicated to a better Brisbane

NOTE THE BACKGROUND REPRESENTS THE LIGHT COLOUR OF ARTWORK

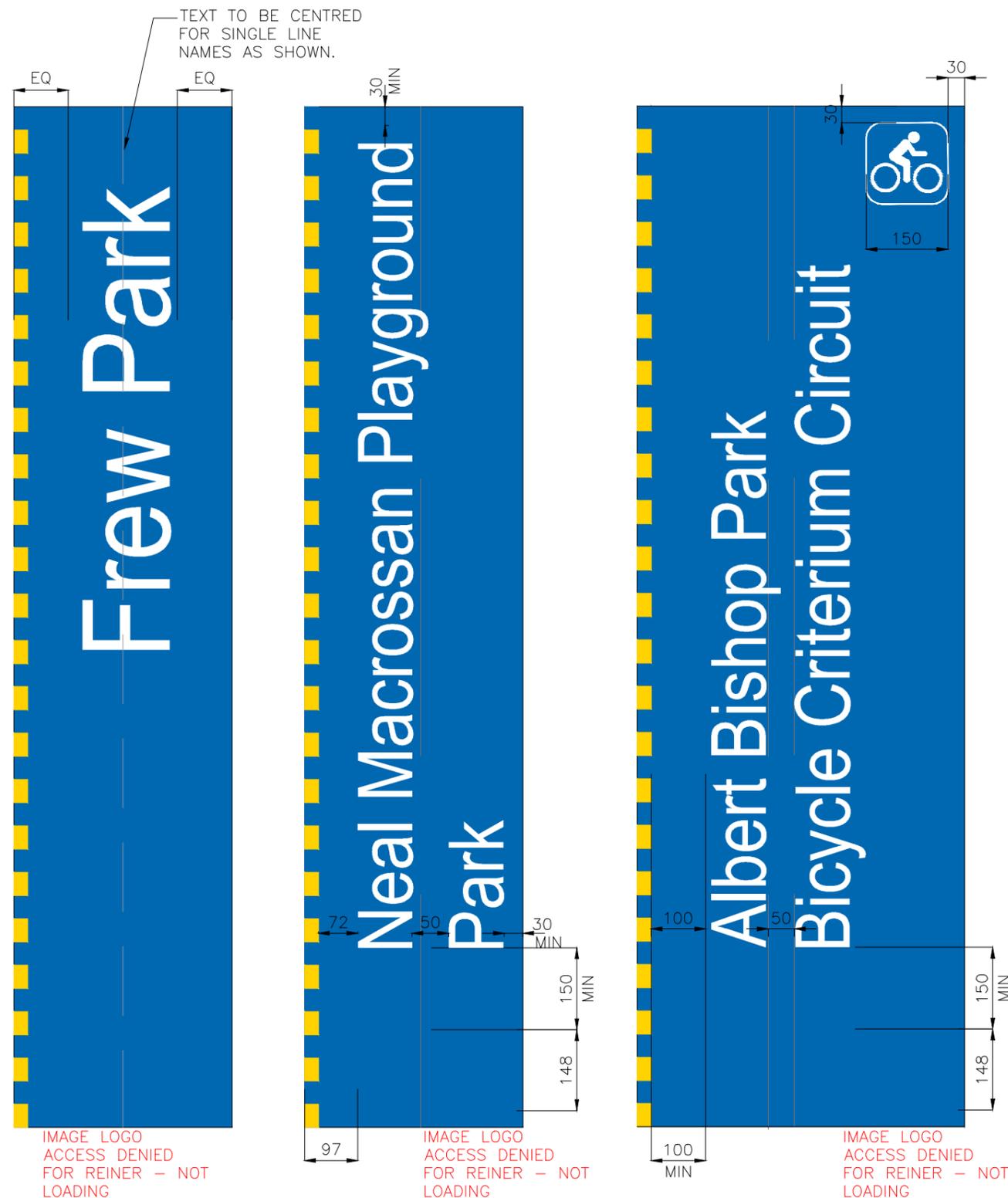
NOTE THE BACKGROUND REPRESENTS THE DARK COLOUR OF ARTWORK

NOTE:

COUNCIL'S POSITIVE LOGO IS USED ON WHITE OR LIGHT BACKGROUND COLOURS. THE POSITIVE LOGO DOES NOT HAVE A KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN BLACK LETTERING. THE REVERSE LOGO IS USED WHEN THE LOGO NEEDS TO BE VISIBLE ON A BLACK, DARK BLUE OR OTHER DARK COLOUR BACKGROUND. THE REVERSE LOGO FEATURES A WHITE KEYLINE AROUND THE CITY HALL SQUARE BLOCK AND THE TAGLINE APPEARS IN WHITE LETTERING. TO ENSURE THE REVERSE LOGO IS CORRECT, ALWAYS APPLY A REVERSE LOGO FILE AVAILABLE FROM CORPORATE COMMUNICATION TO ARTWORK WITH A DARK BACKGROUND. THE REVERSE LOGO SHOULD NOT BE "CONSTRUCTED" FROM THE POSITIVE LOGO BY CHANGING A KEYLINE OR LETTERING COLOURS.



TYPICAL GRAPHIC LAYOUT - PARK NAME SIGN - HORIZONTAL - STANDARD



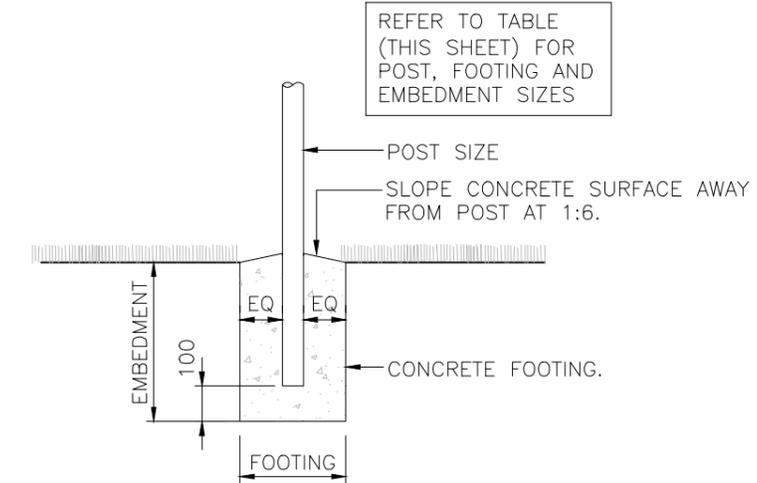
TYPICAL GRAPHIC LAYOUT - PARK NAME SIGN - VERTICAL - ALTERNATIVE

					DRAWING AUTHORISED FOR PUBLICATION				DESIGN		CPO - P&D		DATE		MAR '15		BRISBANE CITY COUNCIL STANDARD DRAWING			
					Inga Condric 2015.08.04 15:56:54+10'00' for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED				DRAWN		CPO - P&D		DATE		MAR '15					
					DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				CHECKED		CPS - NEWS		DATE		MAR '15		PARK NAME SIGNAGE GRAPHIC SETOUT DETAILS SHEET 4 OF 6			
					SENIOR CO-ORDINATOR PARKS				DRAWING FILENAME		BSD-10510 (A) Park Name Signage - Graphic Setout Details - Sheet 4 of 6.dwg									
A Drawing Converted From UMS Series March 2015					MAR '15		MAR '15		MAR '15		BRISBANE CITY		SCALE 1:20		DWG No. BSD-10510		ORIGINAL SIZE A3		REVISION A	
ISSUE					AMENDMENT		DRAWN DATE		CHK'D DATE											

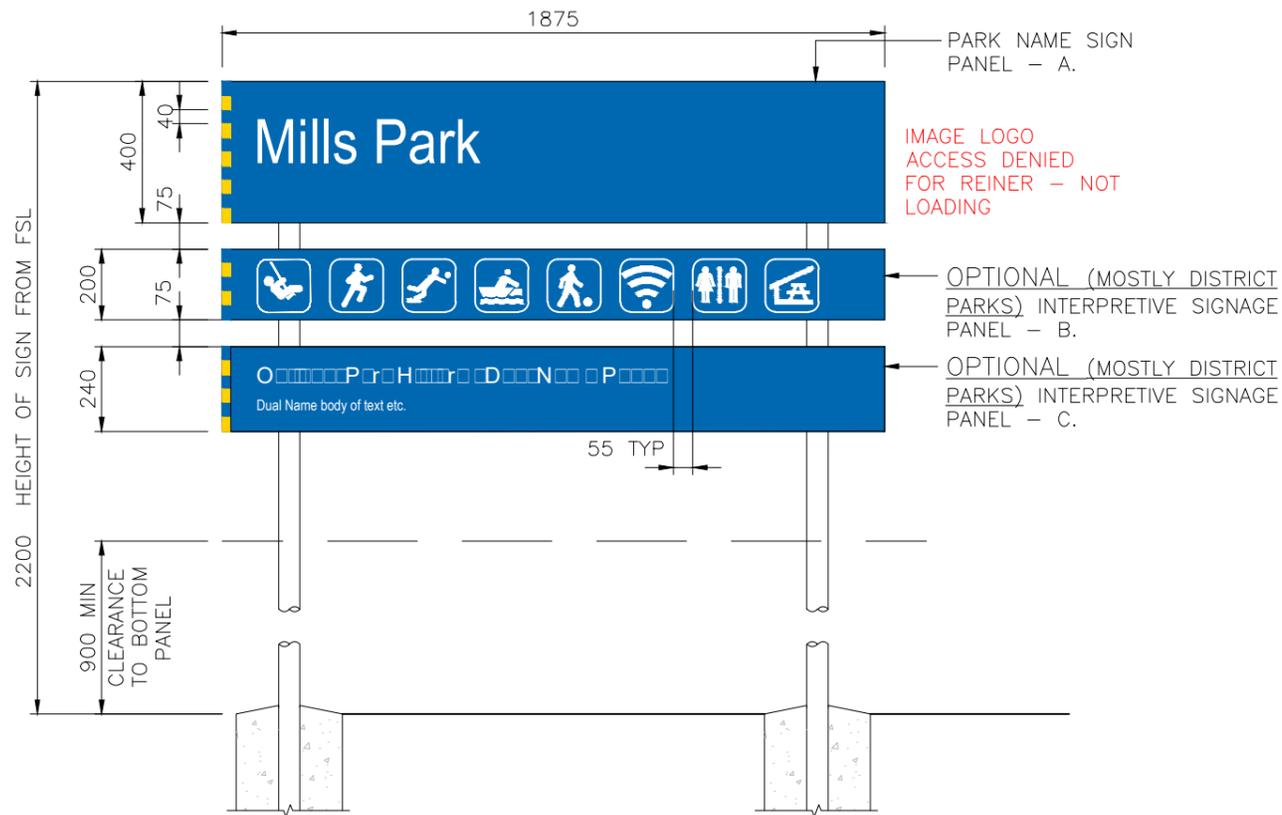
GENERAL GRAPHIC NOTES FOR SIGNAGE

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- REFER TO BSD - 10510 (SHEET 4 OF 6) GRAPHIC SETOUT DETAILS.
- REFER TO BSD - 10510 (SHEET 6 OF 6) FOR PARK NAME SIGN - VERTICAL - ALTERNATIVE - INSTALLATION NOTES.

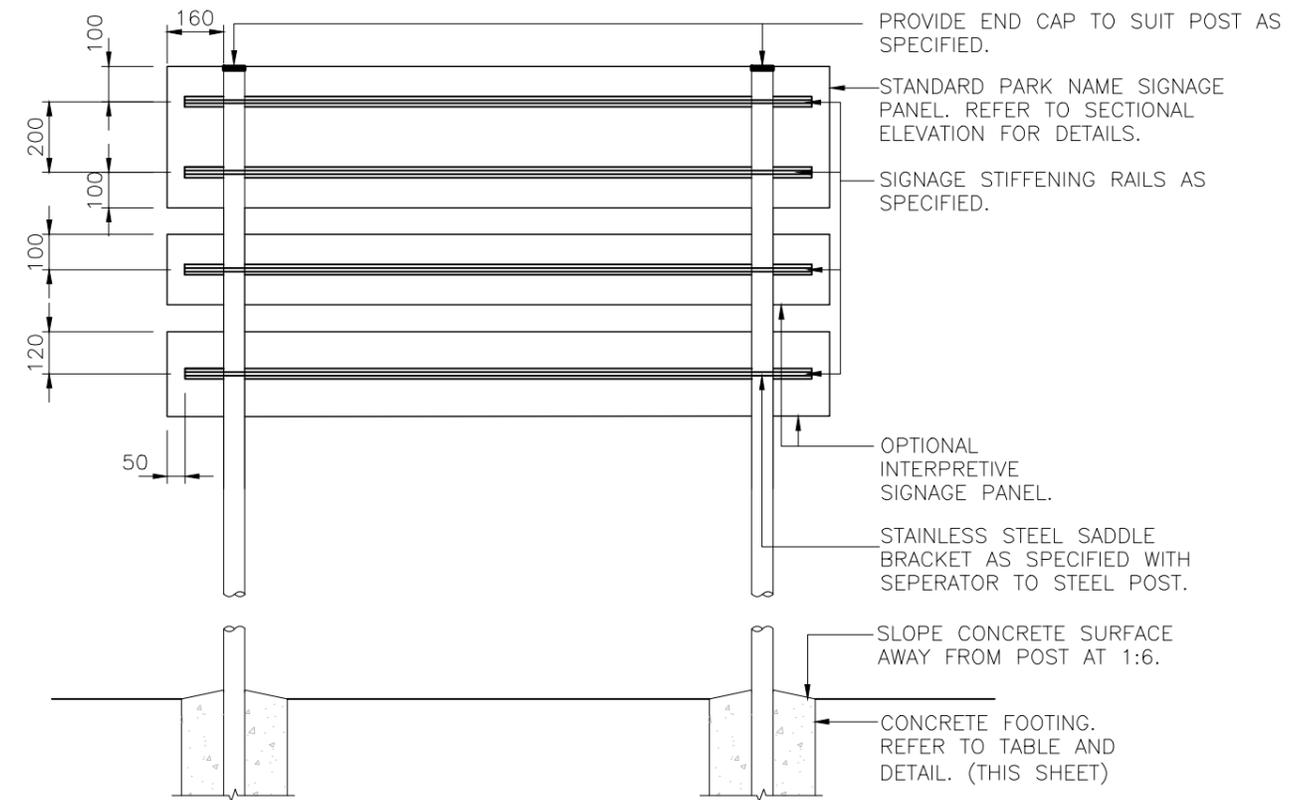
POST, FOOTING AND EMBEDMENT DETAILS			
NUMBER OF POST	TERRAIN CATEGORY = 1.5 AND ABOVE		
	POST (STEEL) DIAMETER x THICKNESS	FOOTING	EMBEDMENT
2	88.9x3.2 CHS	300 Dia	900



CONCRETE FOOTING DETAIL
SCALE: 1:20



SECTIONAL ELEVATION
SCALE: 1:20



SIGNAGE FIXING DETAIL
SCALE: 1:20

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2015.03.20 11:46:21+10'00'	Lenita MendisRPEQ 8950 2015.03.20 12:12:30 +10'00'	Bala Balakumar RPEQ 3963 2015.03.20 14:04:52+10'00'

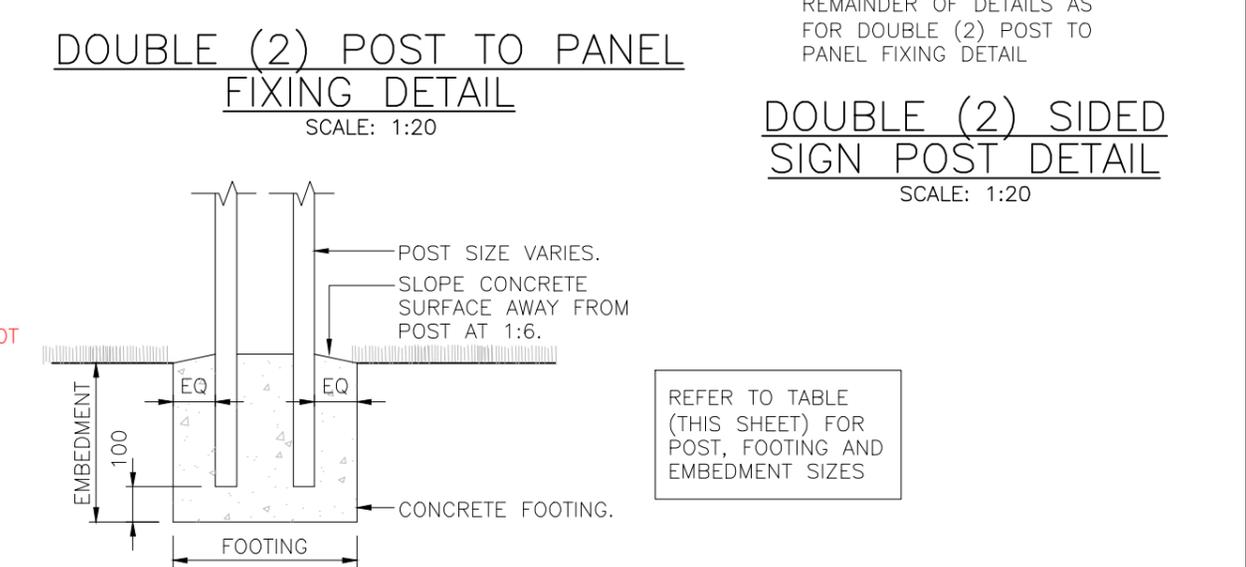
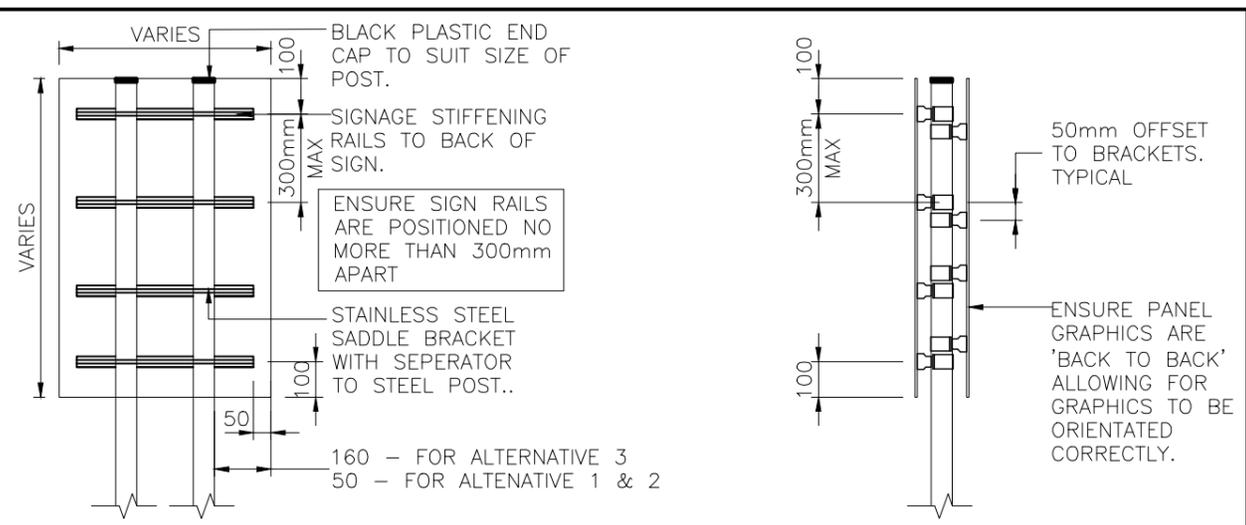
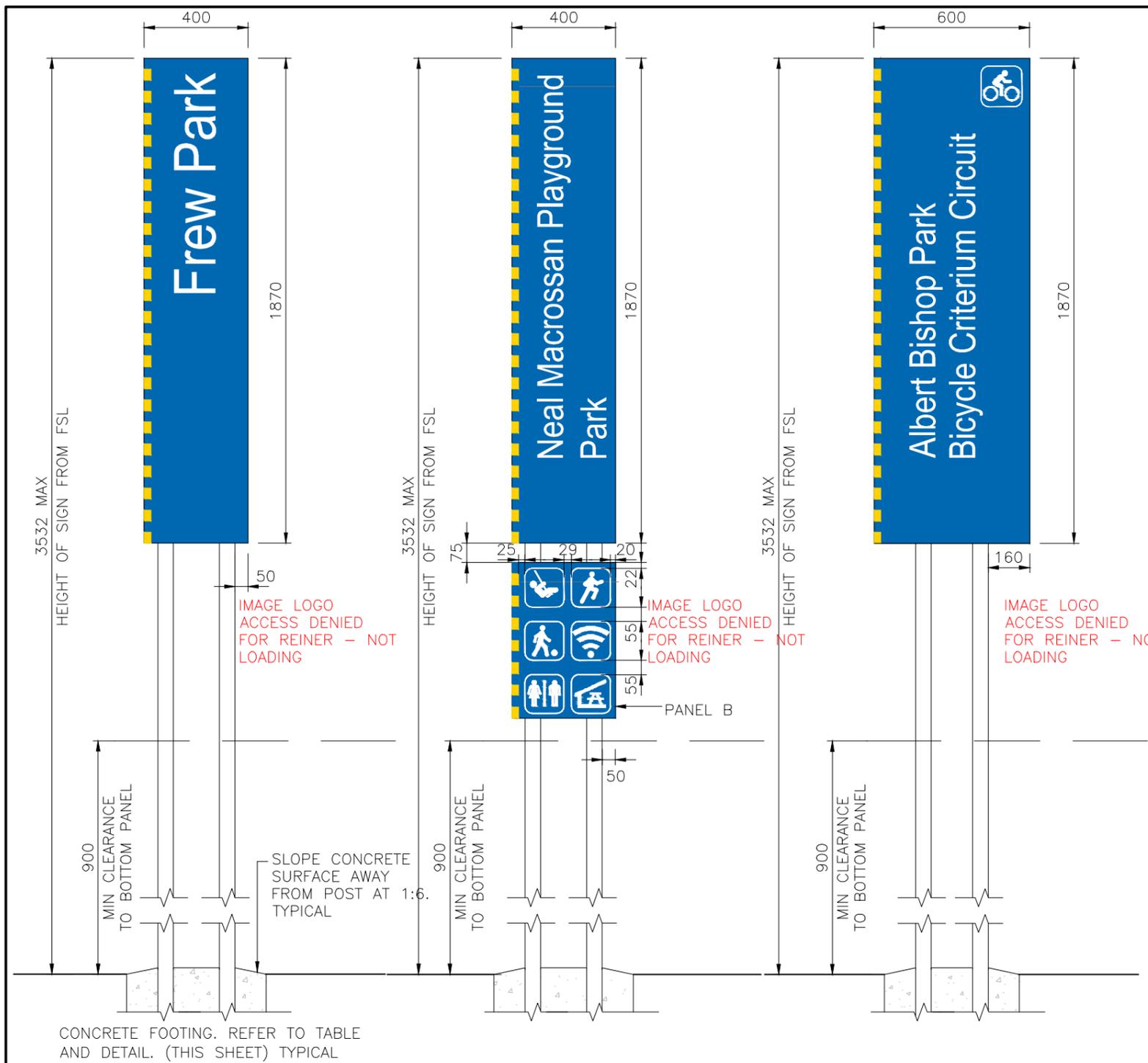
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15

DRAWING AUTHORISED FOR PUBLICATION			
DESIGN	CPO - P&D	DATE	MAR '15
DRAWN	CPO - P&D	DATE	MAR '15
CHECKED	CPS - NEWS	DATE	MAR '15
DRAWING FILENAME	BSD-10510 (A) Park Name Signage - Horizontal Standard - Sheet 5 of 6.dwg		
ASSOCIATED PLANS	BSD-10510 SHEETS 1, 2, 3, 4 & 6.dwg		



BRISBANE CITY COUNCIL STANDARD DRAWING	
SCALE	1:20
DWG No.	BSD-10510
ORIGINAL SIZE	A3
REVISION	A

**PARK NAME SIGNAGE
HORIZONTAL STANDARD
SHEET 5 OF 6**



DOUBLE (2) POST TO PANEL
FIXING DETAIL
SCALE: 1:20

DOUBLE (2) SIDED
SIGN POST DETAIL
SCALE: 1:20

CONCRETE FOOTING DETAIL -
DOUBLE POST
SCALE: 1:20

POST, FOOTING AND EMBEDMENT DETAILS				
SIGN TYPE	NUMBER OF POST	TERRAIN CATEGORY = 1.5 and above		
		POST (STEEL) DIAMETER x THICKNESS	FOOTING	EMBEDMENT
ALTERNATIVE 1	2	76.1x3.2 CHS	450 Dia	1000
ALTERNATIVE 2,3	2	88.9x3.2 CHS	450 Dia	1100

ALTERNATIVE 1 SCALE: 1:20

ALTERNATIVE 2 SCALE: 1:20

ALTERNATIVE 3 (SPECIFIC MAJOR PARK NODES ONLY) SCALE: 1:20

GENERAL GRAPHIC NOTES FOR SIGNAGE

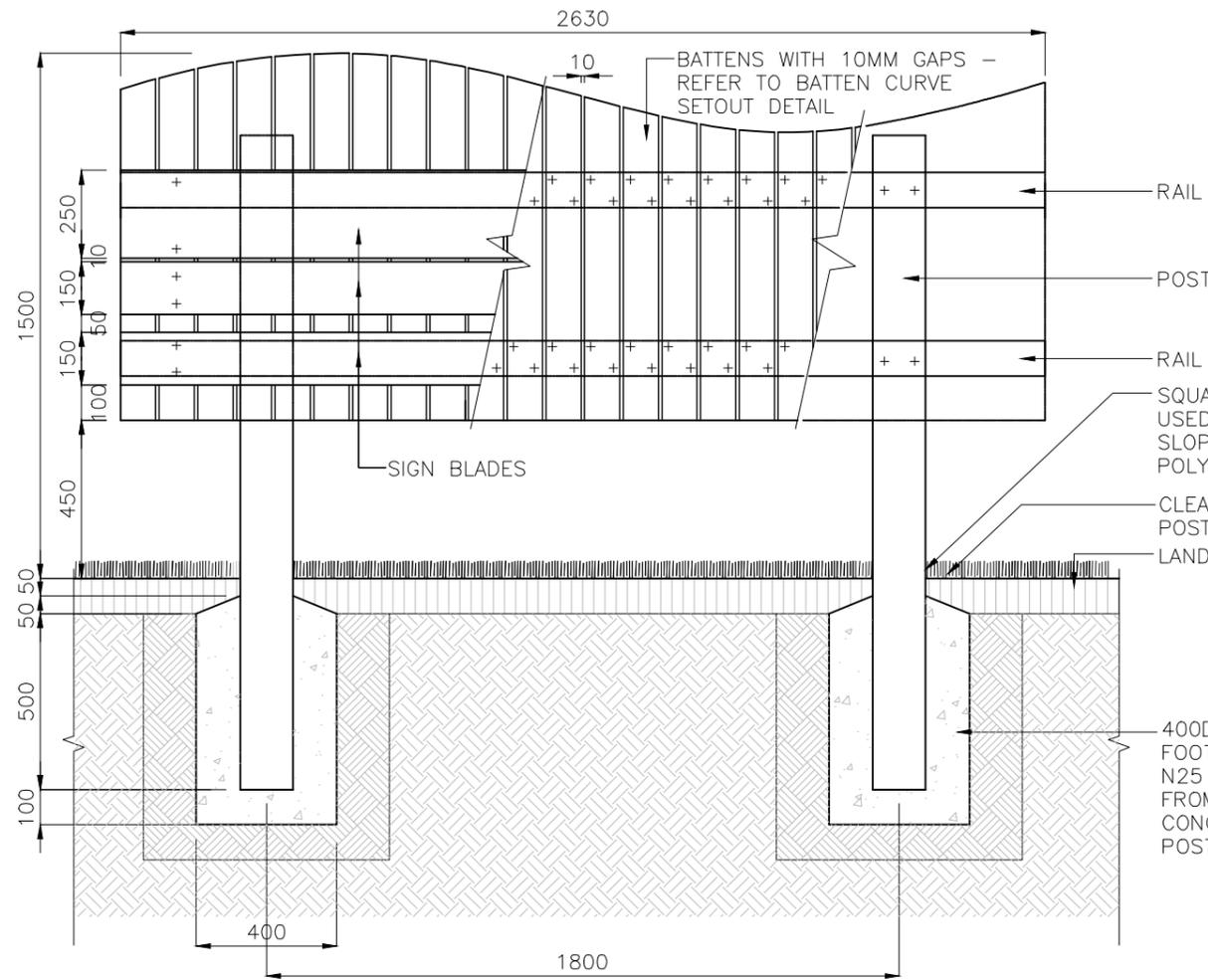
- ALL DIMENSIONS IN MILLIMETRES (U.N.O.).
- REFER TO BSD - 10507 FOR PICTOGRAM SUITE DETAILS.
- REFER TO BSD - 10510 (SHEETS 1 AND 2) FOR STRUCTURAL NOTES.
- REFER TO BSD - 10510 (SHEET 3 OF 6) FOR GRAPHIC NOTES.
- REFER TO BSD - 10510 (SHEET 4 OF 6) GRAPHIC SETOUT DETAILS.
- REFER TO BSD - 10510 (SHEET 5 OF 6) FOR PARK NAME SIGN - HORIZONTAL - STANDARD - INSTALLATION NOTES.

STRUCTURAL DESIGN CERTIFICATION		
DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi Hu RPEQ 13885 2015.03.20 11:46:45 +10'00'	Lenita MendisRPEQ 8950 2015.03.20 12:11:29 +10'00'	Bala Balakumar RPEQ 3963 2015.03.20 14:05:27+10'00'

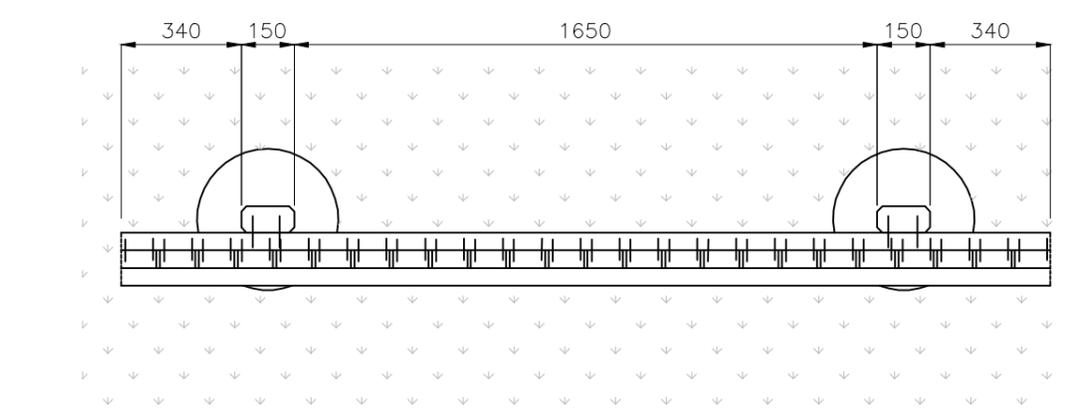
DRAWING AUTHORISED FOR PUBLICATION				
DESIGN	CPO - P&D	DATE	MAR '15	
DRAWN	CPO - P&D	DATE	MAR '15	
CHECKED	CPS - NEWS	DATE	MAR '15	
DRAWING FILENAME	BSD-10510 (A) Park Name Signage - Vertical Alternative - Sheet 6 of 6.dwg			
ASSOCIATED PLANS	BSD-10510 SHEETS 1, 2, 3, 4 & 5.dwg			
DANNY VAN DER WALLE SIGNATURE ON ORIGINAL APRIL 2014				
SENIOR CO-ORDINATOR PARKS				

BRISBANE CITY COUNCIL STANDARD DRAWING	
SCALE	1:20
DWG No.	BSD-10510
ORIGINAL SIZE	A3
REVISION	A

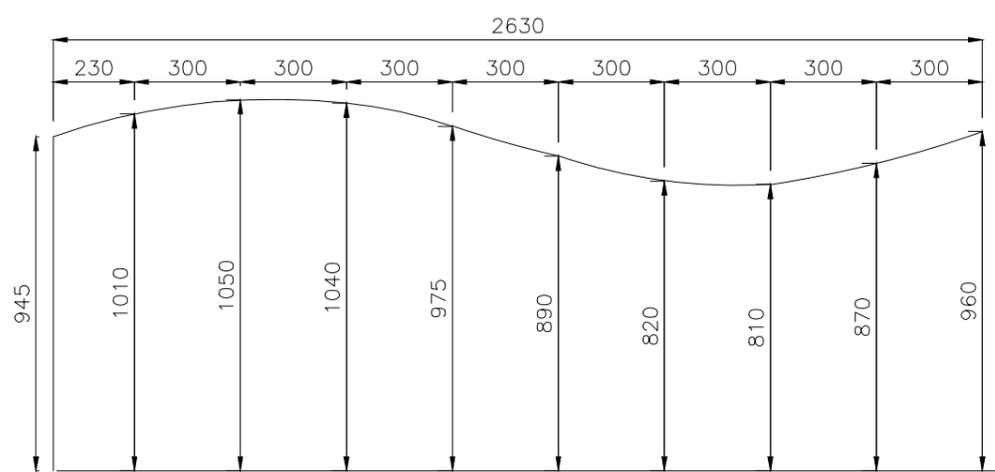
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series March 2015	MAR '15	MAR '15	MAR '15



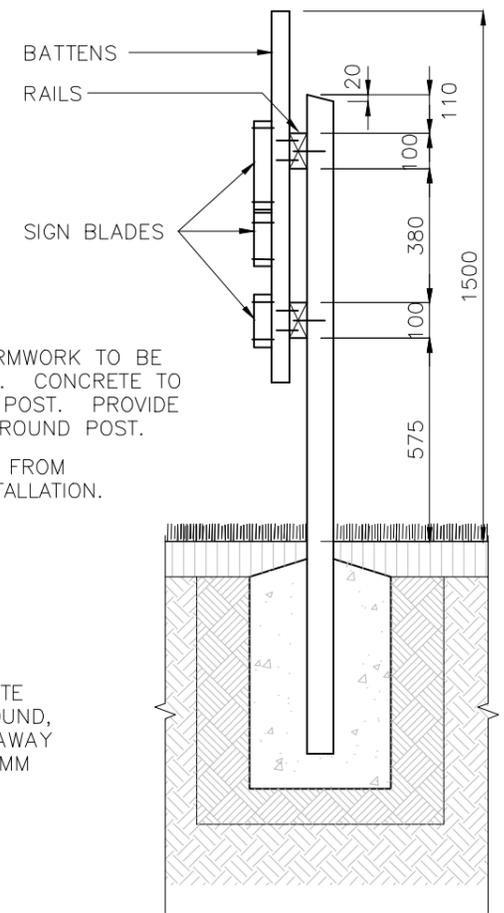
ELEVATION
SCALE 1:20



PLAN
SCALE 1:20



BATTEN CURVE SETOUT
SCALE 1:20



SECTION
SCALE 1:20

SQUARE OR CIRCULAR FORMWORK TO BE USED AT TOP OF FOOTING. CONCRETE TO SLOPE 50MM AWAY FROM POST. PROVIDE POLYURETHANE SEALANT AROUND POST.
CLEAN CONCRETE SLURRY FROM POST IMMEDIATELY AT INSTALLATION.
LANDSCAPE AS SPECIFIED.
400DIA X 600MM CONCRETE FOOTING IN NATURAL GROUND, N25 CONCRETE, SLOPED AWAY FROM POST. MINIMUM 100MM CONCRETE SURROUNDING POST.

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
- IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
- THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.
- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED.

TIMBER WORK

- ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES.
- ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003.
- ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
- ALL EXPOSED EDGES TO BE ARRISSED 4MM.
- POSTS TO BE 150X50MM
- RAILS TO BE 100X50MM
- BATTENS TO BE 100X38MM
- SIGN BLADES TO BE 1NO 250X50MM AND 2NO 150X50MM.

SIGN BLADES

SIGN BLADES TO BE ROUTED TIMBER TO SIZES SHOWN. REFER TO BSD-10511-DESCRIPTIVE SIGN-NATURAL AREA-SHEET 3 OF 3-NAME LAYOUT FOR ROUTING OF LETTERING.

FIXINGS

- ALL FIXINGS TO BE STAINLESS STEEL.
- RAILS - TO BE FIXED TO POSTS WITH M10 HEX HEAD BOLTS WITH MATCHING NUTS AND WASHERS, RECESSED ON FRONT, 2 NO. PER POINT OF FIXING.
- BATTENS - TO BE FIXED TO RAILS WITH BUGLE SCREWS, 2 NO. PER POINT OF FIXING.
- SIGN BLADES - TO BE FIXED TO BATTENS WITH M8 CUPHEAD BOLTS, NUTS AND WASHERS, 2 NO. PER POINT OF FIXING.

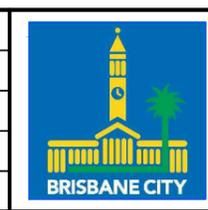
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR. SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.04 15:29:08+10'00'
for ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C. Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

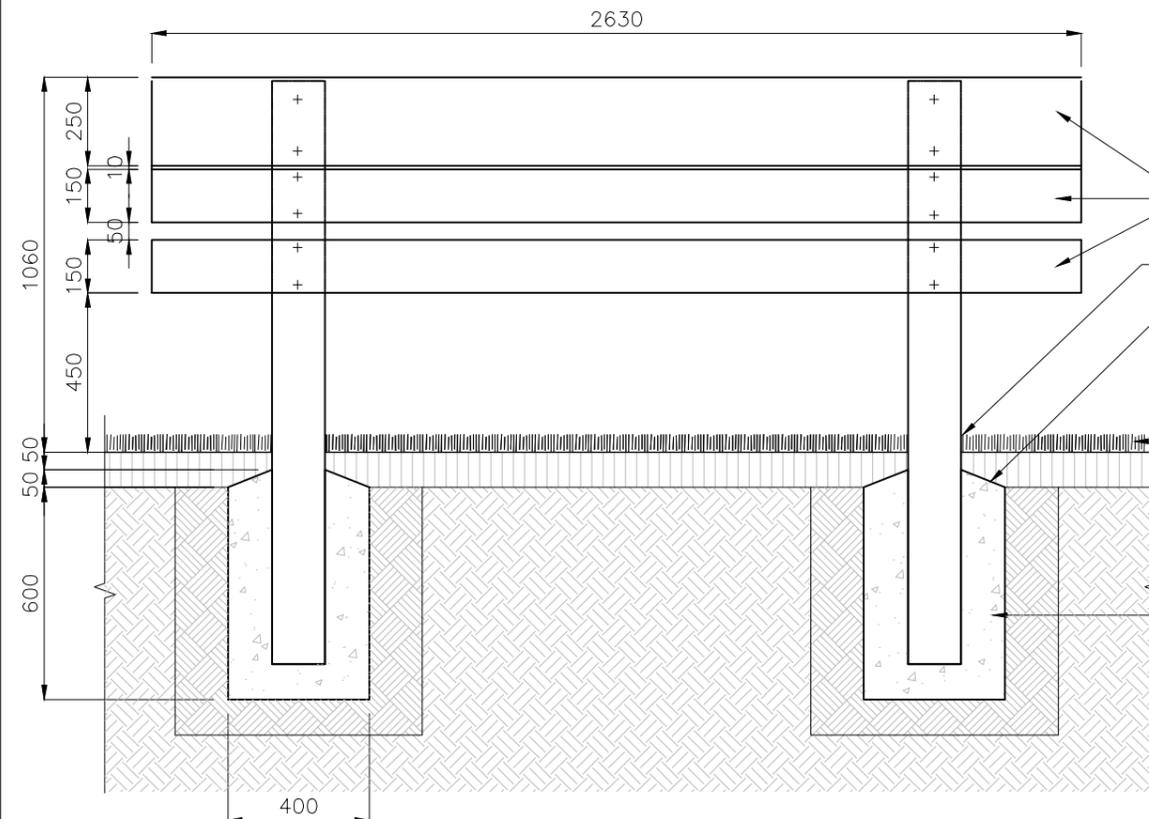
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10511(B) Descriptive sign - Natural area - Entry sign - Sheet 1 of 3.dwg		
ASSOCIATED PLANS	BSD-10511-Sheets 2 & 3		



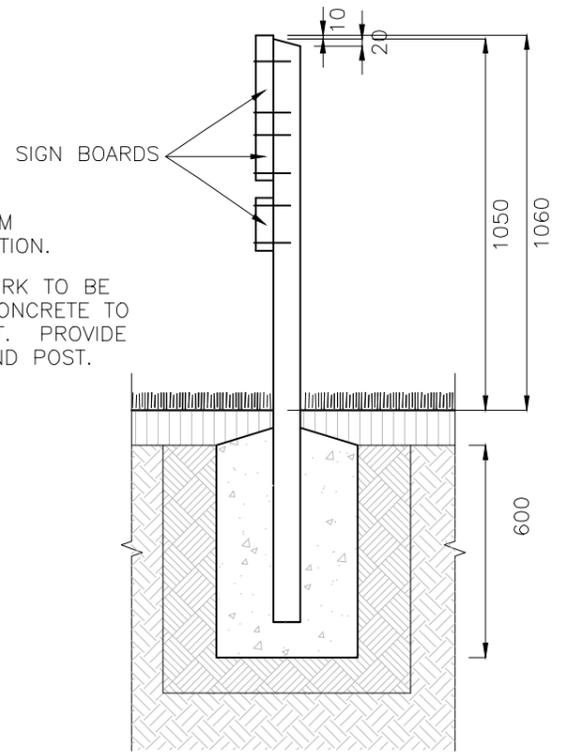
BRISBANE CITY COUNCIL STANDARD DRAWING

**DESCRIPTIVE SIGN
NATURAL AREA - ENTRY SIGN
SHEET 1 OF 3**

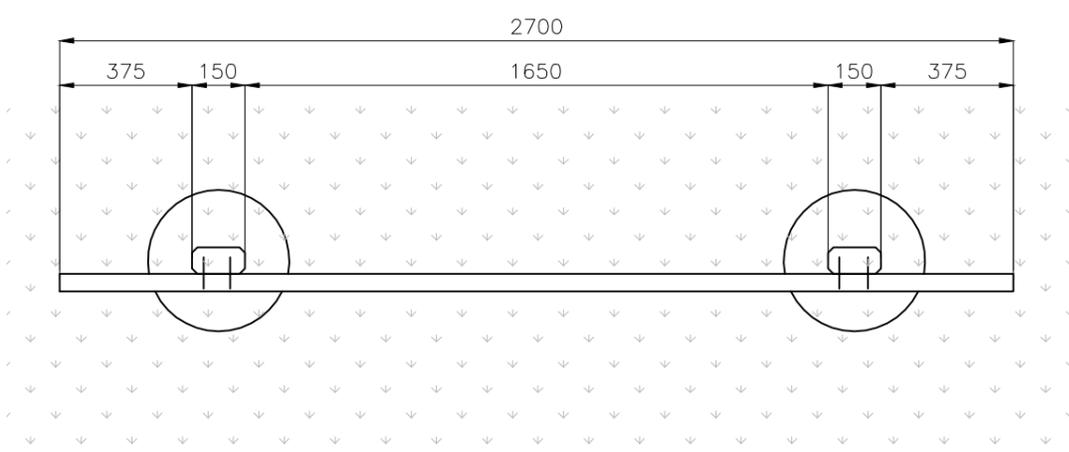
SCALE	AS SHOWN
DWG No.	BSD-10511
ORIGINAL SIZE	A3
REVISION	B



ELEVATION
SCALE 1: 20



SECTION
SCALE 1: 20



PLAN
SCALE 1: 20

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
- IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
- THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE BRISBANE CITY COUNCIL.
- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED

TIMBER WORK

- ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES.
- ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003.
- ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
- ALL EXPOSED EDGES TO BE ARRISSED 4MM.
- POSTS TO BE 150X50MM.
- SIGN BLADES TO BE 1NO. 250X50MM AND 2NO. 150X50MM

SIGN BLADES

SIGN BLADES TO BE ROUTED TIMBER TO SIZES SHOWN. REFER TO BSD-10511-DESCRIPTIVE SIGN-NATURAL AREA-SHEET 3 OF 3-NAME LAYOUT FOR ROUTING OF LETTERING.

FIXINGS

- ALL FIXINGS TO BE STAINLESS STEEL.
- SIGN BLADES - TO BE FIXED TO BATTENS WITH M8 CUPHEAD BOLTS, NUTS AND WASHERS, 2 NO. PER POINT OF FIXING.

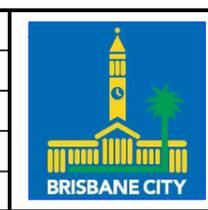
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR. SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.05 07:47:36+10'00'
of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10511(B) Descriptive sign - Natural area - Name sign - Sheet 2 of 3.dwg		
ASSOCIATED PLANS	BSD-10511-Sheets 1 & 3		



BRISBANE CITY COUNCIL STANDARD DRAWING

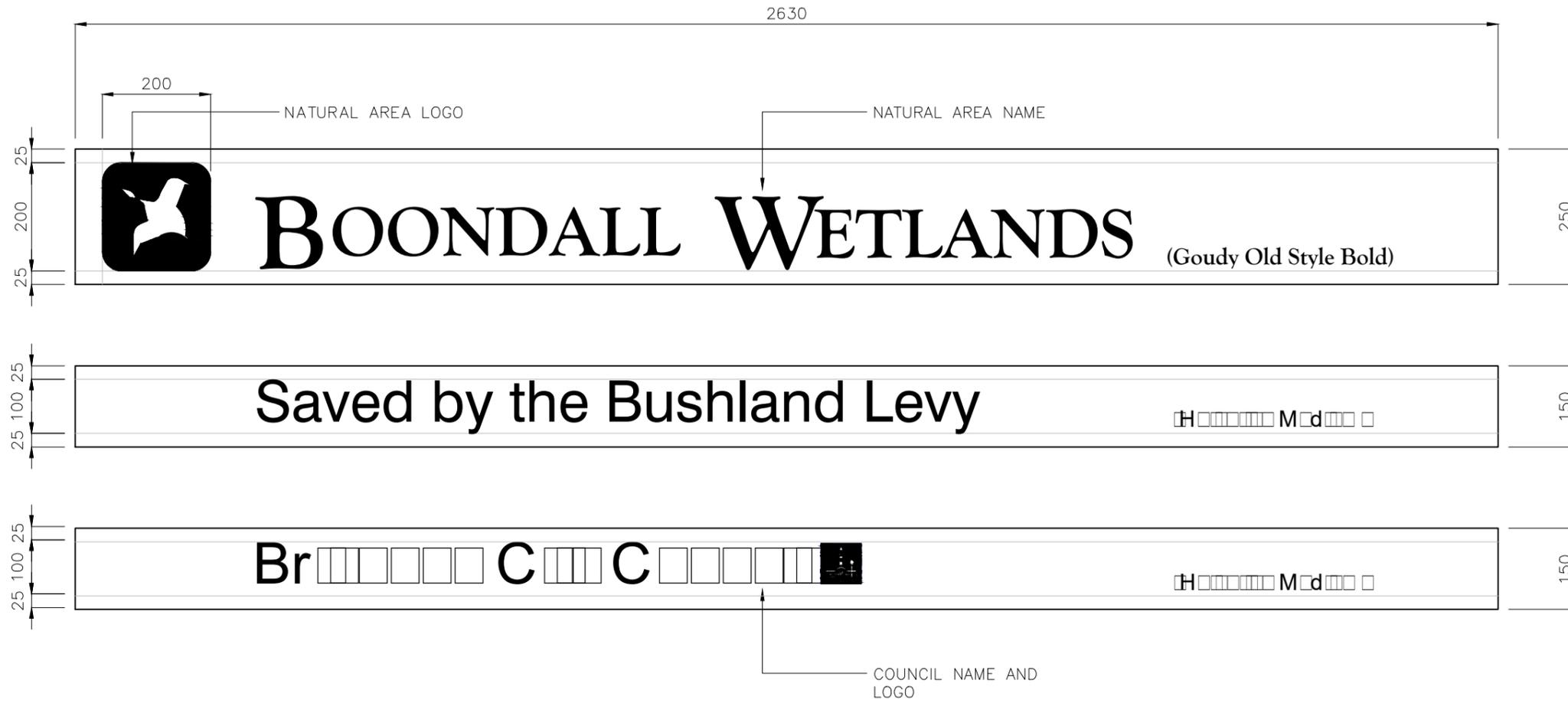
**DESCRIPTIVE SIGN
NATURAL AREA - NAME SIGN
SHEET 2 OF 3**

SCALE	AS SHOWN
DWG No.	BSD-10511
ORIGINAL SIZE	A3
REVISION	B

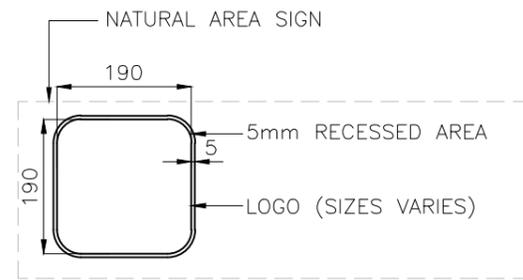
NOTES

FOR SPECIFICATIONS AND PLACEMENT OF SIGN BOARDS WITH NAME LAYOUT ON ENTRY SIGNS AND NAME SIGNS REFER TO:
 - BSD-10511-DESCRIPTIVE SIGN-NATURAL AREA-SHEET 1 OF 3-ENTRY SIGN
 - BSD-10511-DESCRIPTIVE SIGN-NATURAL AREA-SHEET 2 OF 3-NAME SIGN

NATURAL AREA LOGO AND BCC LOGO
 - NATURAL AREA LOGO METAL PLATE AND BCC LOGO METAL PLATE TO HAVE A 5MM WIDE RECESSED BORDER AROUND.

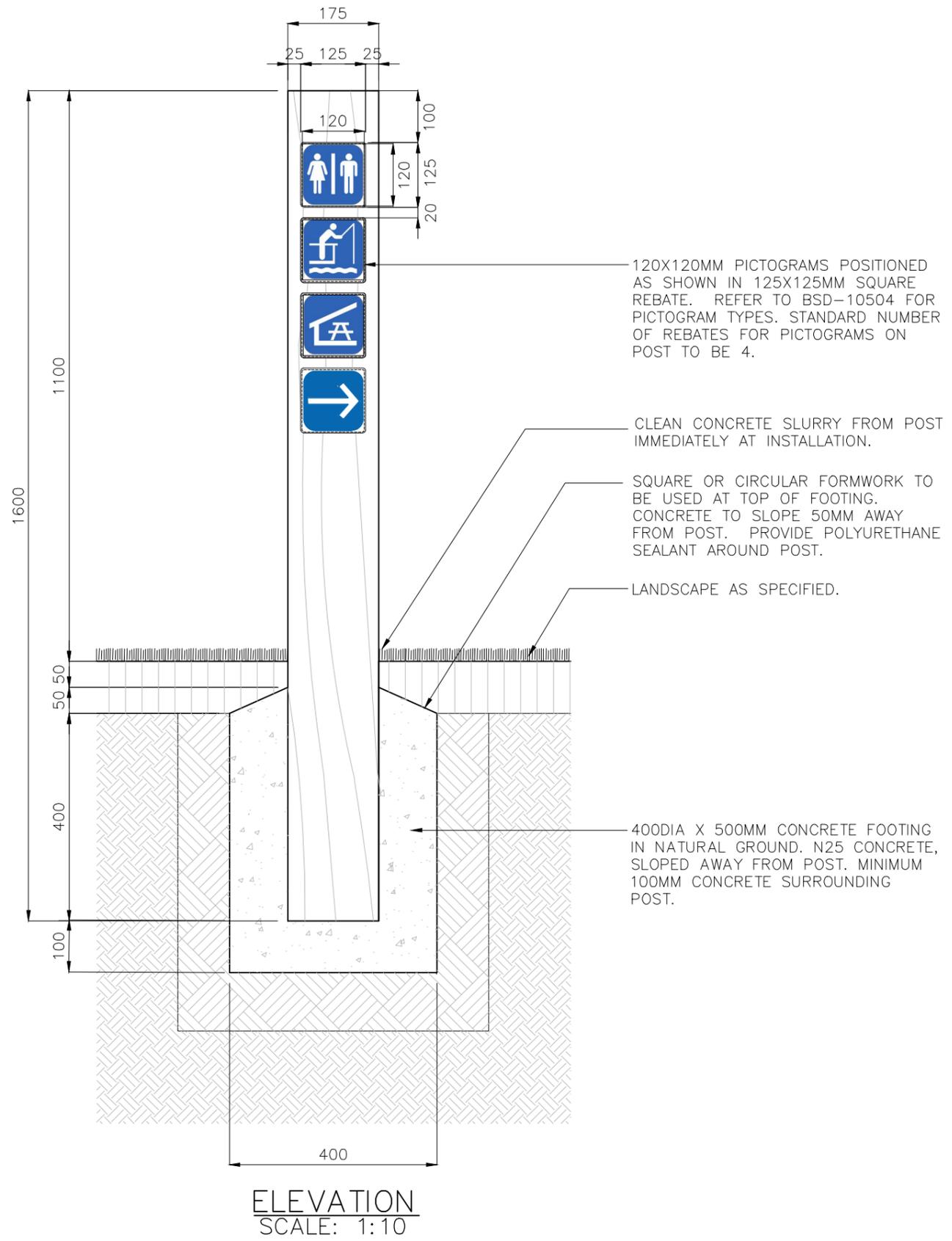


ELEVATION
SCALE 1:10

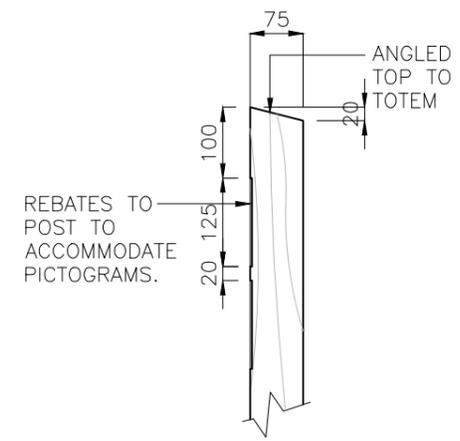


LOGO RECESS DETAIL
SCALE 1:10

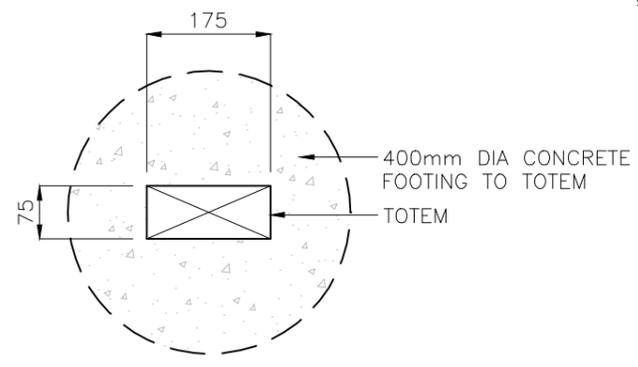
					DRAWING AUTHORISED FOR PUBLICATION				DESIGN		CPO - P&D		DATE		DEC '14			BRISBANE CITY COUNCIL STANDARD DRAWING			
					Inga Condric 2015_06_05_07:48:19+10'00'				DRAWN		CPO - P&D		DATE		DEC '14			SCALE AS SHOWN			
					r of ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				CHECKED		BI - FSG - AS		DATE		DEC '14			DWG No. BSD-10511			
					DESIGN APPROVED				DRAWING FILENAME		BSD-10511 (B) Descriptive sign - Natural area - Sign Layout - Sheet 3 of 3.dwg							ORIGINAL SIZE A3		REVISION B	
					C.Wood				ASSOCIATED PLANS		BSD-10511-Sheets 1 & 2							DESCRIPTIVE SIGN - NATURAL AREA - SIGN LAYOUT SHEET 3 OF 3			
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE																



ELEVATION
SCALE: 1:10



SECTION
SCALE: 1:20



PLAN
SCALE: 1:10

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
- IN EACH CASE ENGINEERING CERTIFICATION AND MODIFICATION AS NECESSARY WILL BE REQUIRED FOR PARTICULAR SOIL AND SITE CONDITIONS.
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- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED

TIMBER WORK

ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES
 ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003.
 ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
 ALL EXPOSED EDGES TO BE ARRISSED 4MM.
 POST TO BE 175X75MM WITH CHAMFERED TOP

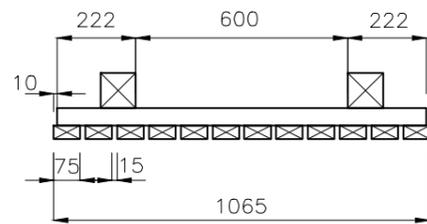
PICTOGRAMS

REFER TO BSD-10504-PARK SIGNAGE-PICTOGRAM SUITE FOR PICTOGRAMS TYPES.
 PICTOGRAM SIGNS TO BE 16 GAUGE, 1.6MM THICK ALUMINIUM PLATE.
 CORNERS OF SIGNS TO HAVE 5MM RADIUS WITH ALL CORNERS/EDGES TO BE FREE OF BURRS.
 ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF PICTOGRAM SIGN.

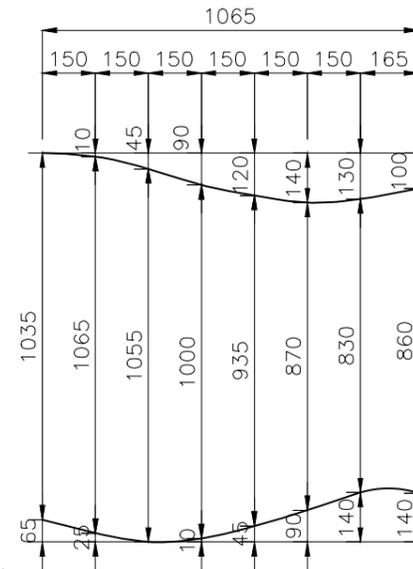
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR.
 COLOUR SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

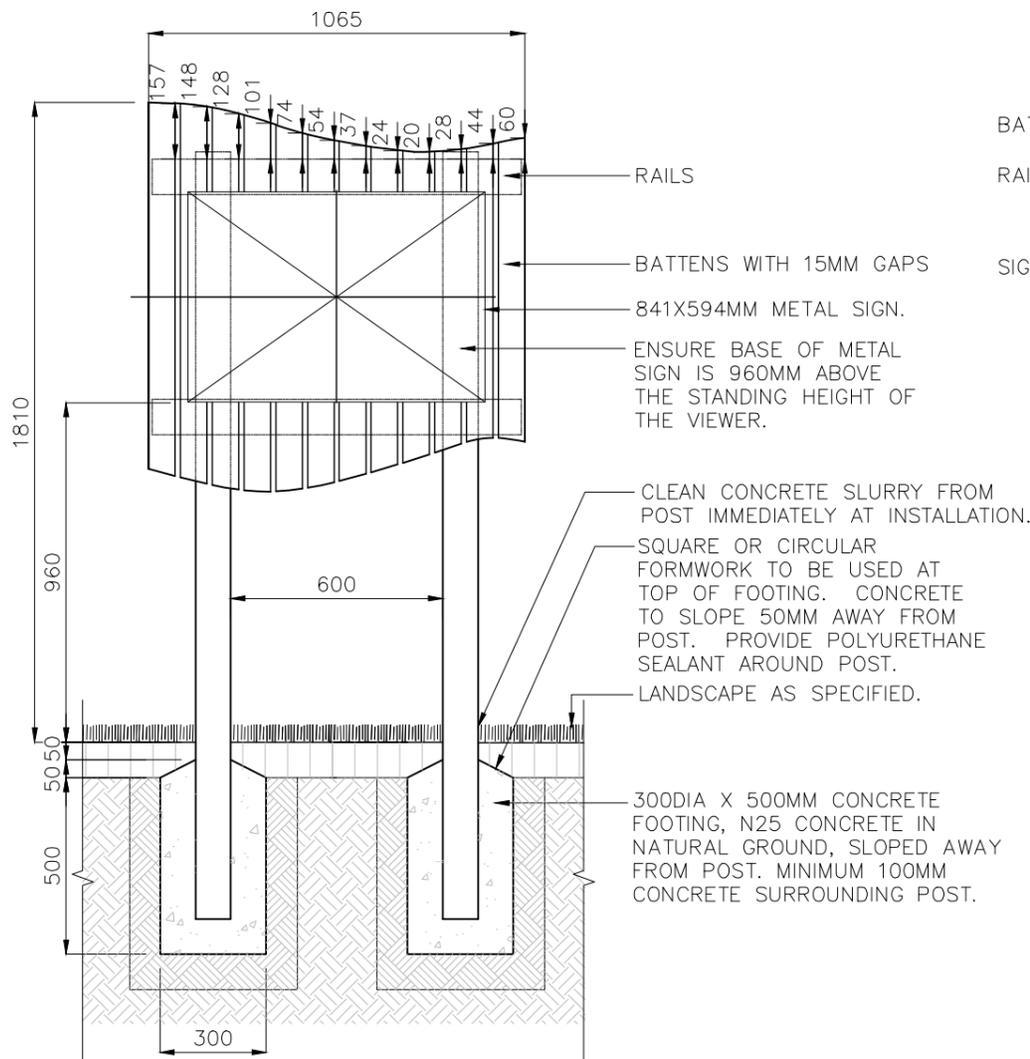
					DRAWING AUTHORISED FOR PUBLICATION				DESIGN		CPO - P&D		DATE		DEC '14			BRISBANE CITY COUNCIL STANDARD DRAWING			
					Inga Condric 2015.06.05 07:49:50+10'00'				DRAWN		CPO - P&D		DATE		DEC '14						
					r of ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED				CHECKED		BI - FSG - AS		DATE		DEC '14			DWG No. BSD-10514			
A ORIGINAL ISSUE					C.Wood				DRAWING FILENAME		BSD-10514 (A) Advisory sign - Natural area - Totem.dwg							ORIGINAL SIZE A3			
ISSUE	AMENDMENT				DRAWN DATE	CHK'D DATE	APPR'D DATE	SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE				ASSOCIATED PLANS						REVISION A			
ADVISORY SIGN NATURAL AREA TOTEM																					



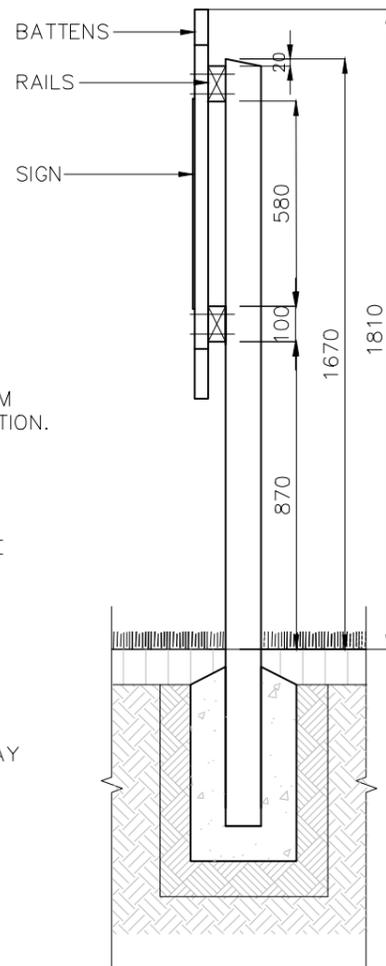
PLAN
SCALE 1:20



CURVE SETOUT
SCALE 1:20



FRONT ELEVATION
SCALE 1:20



END ELEVATION
SCALE 1:20

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
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- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED

TIMBER WORK

ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES.
ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003.
ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
ALL EXPOSED EDGES TO BE ARRISSED 4MM.
POSTS TO BE 100X100MM WITH CHAMFERED TOPS
RAILS TO BE 100X50MM
BATTENS TO BE 75X38MM

SIGN

SIGN BLADES TO BE 16 GAUGE, 1.6MM THICK ALUMINIUM IMAGED PLATE.
CORNERS OF SIGNS TO HAVE 5MM RADIUS WITH ALL CORNERS/EDGES TO BE FREE OF BURRS.
ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF SIGN.
CONTENT WILL BE SITE SPECIFIC AND DEPEND ON LOCATION AND INFORMATION NEEDED TO BE CONVEYED. REFER TO BSD-10503-PARK SIGNAGE-GRAPHIC NOTES FOR CLEAR AND BCC LOGO SPECIFICATIONS.

FIXINGS

ALL FIXINGS TO BE STAINLESS STEEL.
RAILS - TO BE FIXED TO POSTS WITH M10 HEX HEAD BOLTS WITH MATCHING NUTS AND WASHERS, RECESSED ON FRONT, 2 NO. PER POINT OF FIXING.
BATTENS - TO BE FIXED TO RAILS WITH BUGLE SCREWS, 2 NO. PER POINT OF FIXING.
METAL SIGN - TO BE FIXED TO BATTENS WITH TORX HEAD VANDAL RESISTANT SCREWS.

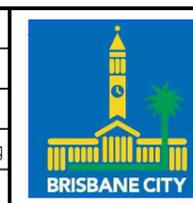
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR.
COLOUR SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.05 07:50:52+10'00'
ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C. Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

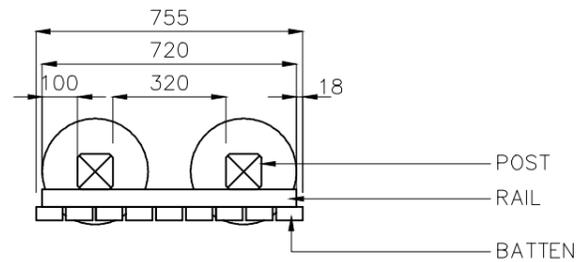
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10515 Advisory sign - Natural area - A1 size Track commencement - Sheet 1 of 2.dwg		
ASSOCIATED PLANS	BSD-10515-Sheet 2		



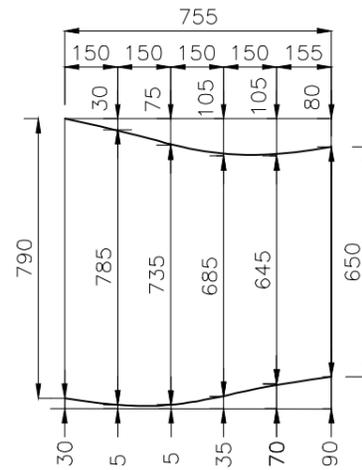
BRISBANE CITY COUNCIL STANDARD DRAWING

**ADVISORY SIGN - NATURAL AREA
A1 SIZE TRACK COMMENCEMENT
SHEET 1 OF 2**

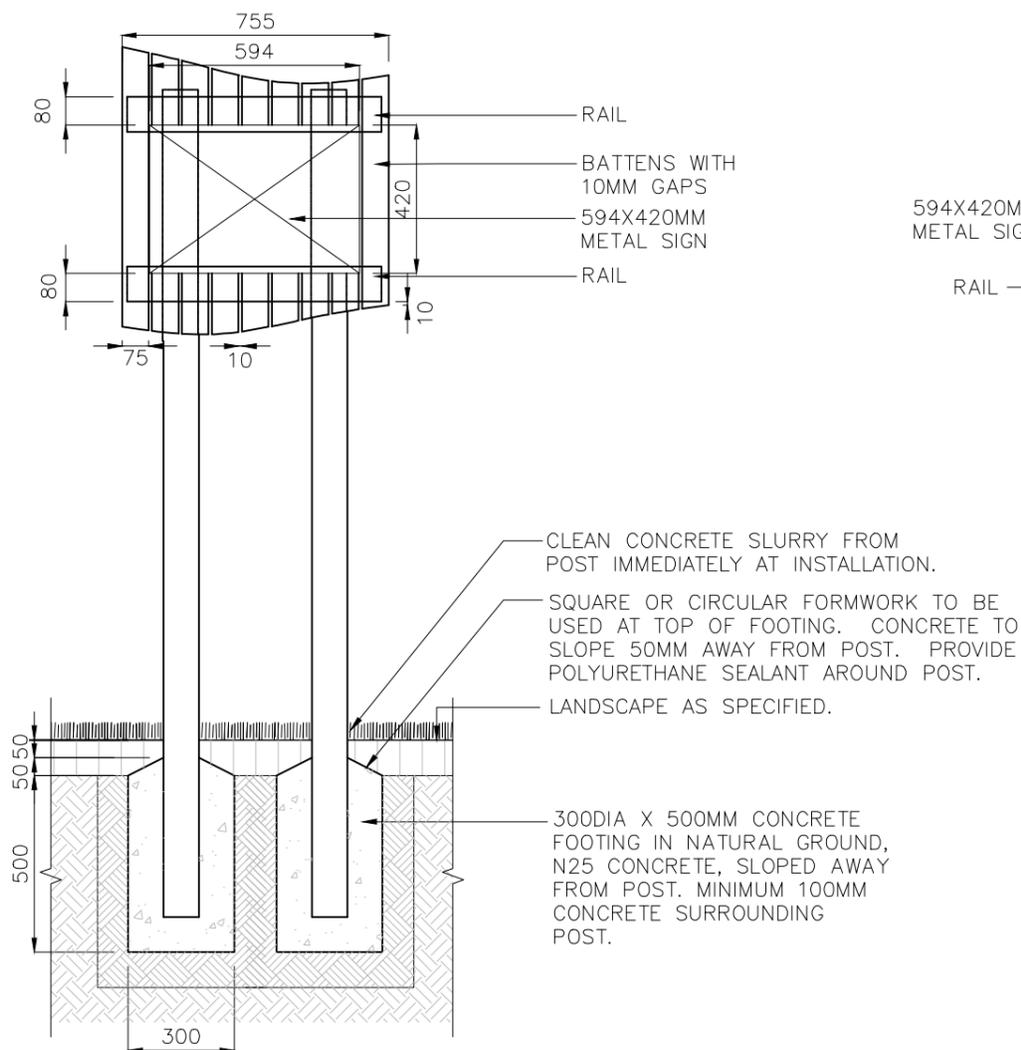
SCALE	AS SHOWN
DWG NO.	BSD-10515
ORIGINAL SIZE	A3
REVISION	B



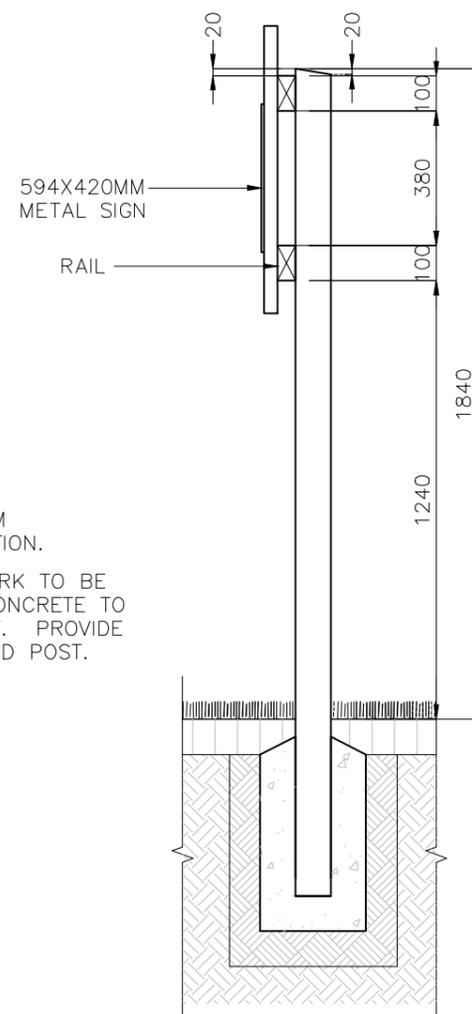
PLAN
SCALE 1:20



BATTEN CURVE SET OUT
SCALE 1:20



ELEVATION
SCALE 1:20



SECTION
SCALE 1:20

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
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- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED

TIMBER WORK

ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES.
ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003.
ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
ALL EXPOSED EDGES TO BE ARRISSED 4MM.
POSTS TO BE 100X100MM WITH CHAMFERED TOPS
RAILS TO BE 100X50MM
BATTENS TO BE 75X38MM

SIGN

SIGN BLADES TO BE 16 GAUGE, 1.6MM THICK ALUMINIUM IMAGED PLATE.
CORNERS OF SIGNS TO HAVE 5MM RADIUS WITH ALL CORNERS/EDGES TO BE FREE OF BURRS.
ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF SIGN.
CONTENT WILL BE SITE SPECIFIC AND DEPEND ON LOCATION AND INFORMATION NEEDED TO BE CONVEYED. REFER TO BSD-10503-PARK SIGNAGE-GRAPHIC NOTES FOR CLEAT AND BCC LOGO SPECIFICATIONS.

FIXINGS

ALL FIXINGS TO BE STAINLESS STEEL.
RAILS - TO BE FIXED TO POSTS WITH M10 HEX HEAD BOLTS WITH MATCHING NUTS AND WASHERS, RECESSED ON FRONT, 2 NO. PER POINT OF FIXING.
BATTENS - TO BE FIXED TO RAILS WITH BUGLE SCREWS, 2 NO. PER POINT OF FIXING.
METAL SIGN - TO BE FIXED TO BATTENS WITH TORX HEAD VANDAL RESISTANT SCREWS.

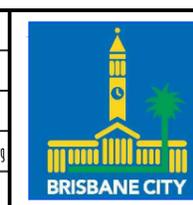
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR.
COLOUR SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

B	Drawing Title Amended	FEB '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric
2015.06.05 07:51:36+10'00'
f of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

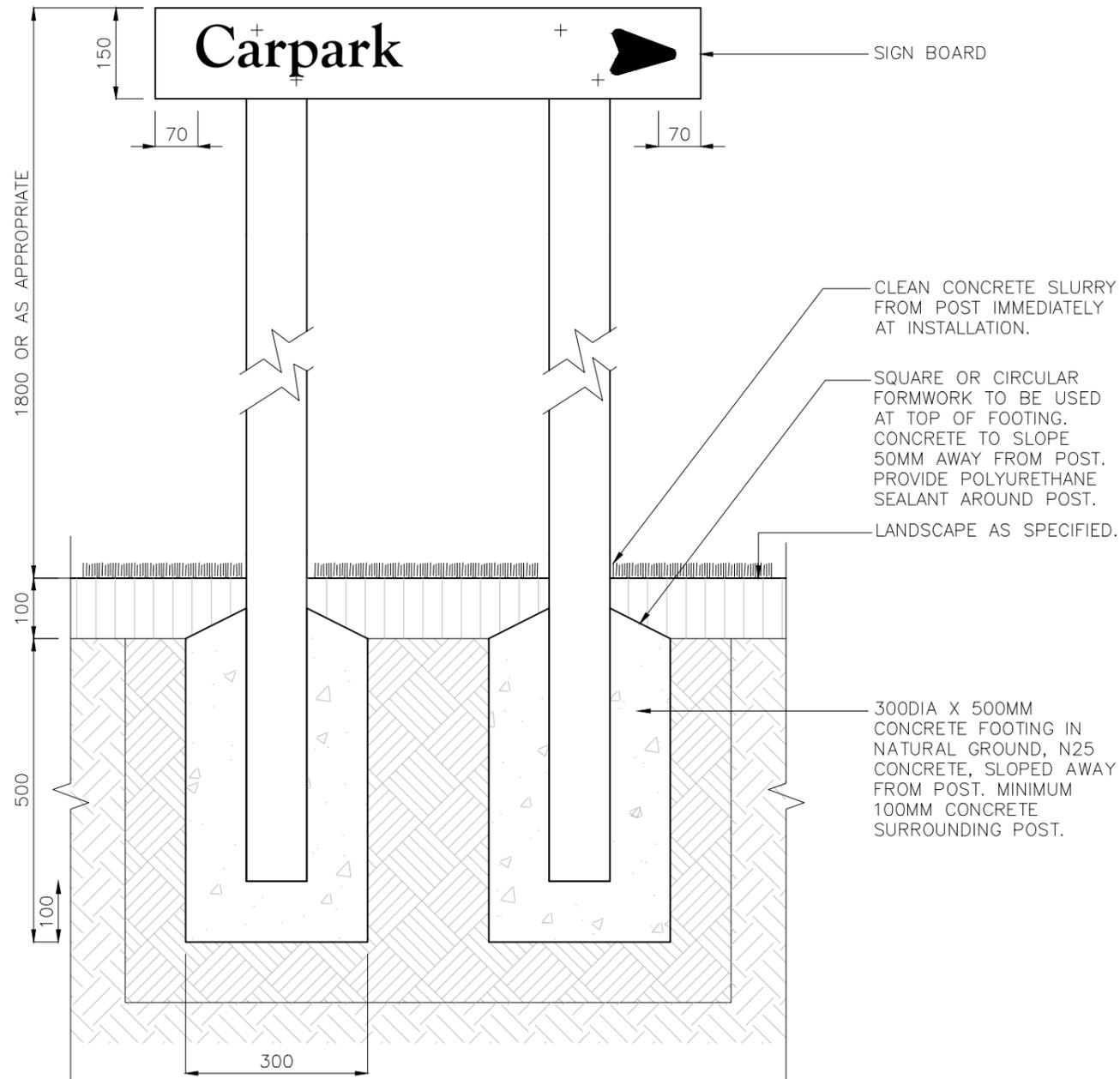
DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10515 Advisory sign - Natural area - A2 size Track commencement - Sheet 2 of 2.dwg		
ASSOCIATED PLANS	BSD-10515-Sheet 1		



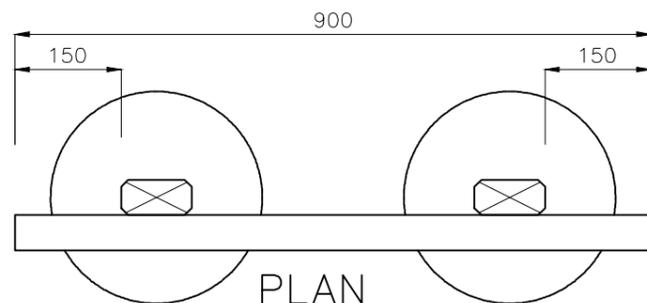
BRISBANE CITY COUNCIL STANDARD DRAWING

ADVISORY SIGN - NATURAL AREA
A2 SIZE TRACK COMMENCEMENT
SHEET 2 OF 2

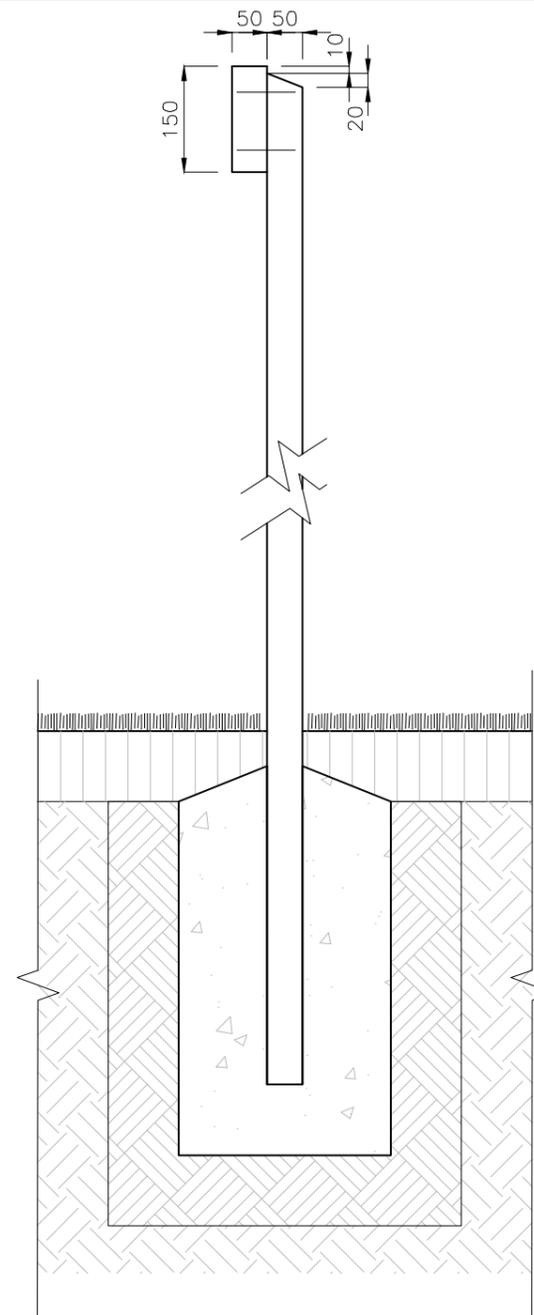
SCALE	AS SHOWN
DWG No.	BSD-10515
ORIGINAL SIZE	A3
REVISION	B



ELEVATION
SCALE 1:10



PLAN
SCALE 1:10



SECTION
SCALE 1:10

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
- SITE SETOUT TO BE VERIFIED BY SUPERINTENDENT OR LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS.
- VERIFY LOCATION OF ALL SERVICES AND EASEMENTS PRIOR TO THE COMMENCEMENT OF WORKS.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DISTANCES.
- VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.
- STRUCTURES HAVE BEEN DESIGNED ON THE ASSUMPTION THAT THE MINIMUM ALLOWABLE BEARING CAPACITY FOR SOIL IS 100KPA AND TERRAIN CATEGORY = 2.5.
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- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED. CONCRETE TO BE N25, MAX AGGREGATE SIZE 20MM, MAXIMUM SLUMP 80MM.

TIMBER WORK

ALL TIMBER TO BE ACQ TREATED ROUGH SAWN SELECT GRADE HARDWOOD OF A SINGLE SPECIES. ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS1604.1-2000 AND HAVE A DURABILITY CLASS 1 (IN GROUND) TO AS5604-2003. ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT. ALL EXPOSED EDGES TO BE ARRISSED 4MM. POSTS TO BE 100X50MM WITH CHAMFERED TOPS. SIGN BOARDS TO BE 150X50MM.

SIGN BOARDS

SIGN BOARDS TO BE ROUTED TIMBER TO SIZES SHOWN. REFER TO BSD-10511-DESCRIPTIVE SIGN-NATURAL AREA-SHEET 3 OF 3-NAME LAYOUT FOR ROUTING OF LETTERING.

FIXINGS

ALL FIXINGS TO BE STAINLESS STEEL. SIGN BOARDS - TO BE FIXED TO POSTS WITH 14 GAUGE CLASS 3 BATTEN SCREWS, RECESSED ON FRONT, 2 NO. PER POINT OF FIXING

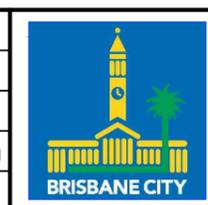
FINISHES

TIMBER TO BE PRIMED AND THEN FINISHED WITH MINIMUM 2 NO. COATS OF DULUX 'PINE NEEDLE' COLOUR. COLOUR SELECTION IN ACCORDANCE WITH THE NATURAL AREAS DESIGN MANUAL COLOUR SCHEDULE.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION
Inga Cendric
2015.06.05 07:52:51+10'00'
of ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
C.Wood
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT
ASSET SERVICES/BRISBANE INFRASTRUCTURE

DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10516 (A) Advisory sign - Natural area - Directional.dwg		
ASSOCIATED PLANS			



BRISBANE CITY COUNCIL STANDARD DRAWING

**ADVISORY SIGN
NATURAL AREA
DIRECTIONAL**

SCALE AS SHOWN
DWG NO. **BSD-10516**
ORIGINAL SIZE A3 REVISION A

GENERAL NOTES

- ENSURE THAT WORK IS IN ACCORDANCE WITH BRISBANE CITY COUNCIL ENVIRONMENTAL BEST PRACTICE NOTES.
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- DIMENSIONS IN MILLIMETRES (UNO).

FOOTINGS

AS DETAILED. CONCRETE TO BE N25, MAX AGGREGATE SIZE 20MM, MAX SLUMP 80MM.

SIGN

SIGN BACKING PLATE TO BE 5MM MS PLATE.
SIGN TO BE 16 GAUGE, 1.6MM THICK ALUMINIUM IMAGED PLATE.
CORNERS OF SIGNS TO HAVE 5MM RADIUS WITH ALL CORNERS/EDGES TO BE FREE OF BURRS.
ANTI-GRAFFITI CLEAR FILM OR SIMILAR PRODUCT TO FINISHED SURFACE OF SIGN.
CONTENT WILL BE SITE SPECIFIC AND DEPEND ON LOCATION AND INFORMATION NEEDED TO BE CONVEYED.
REFER TO BSD-10503-PARK SIGNAGE-GRAPHIC NOTES FOR CLEAT AND BCC LOGO SPECIFICATIONS.

FIXINGS

METAL SIGN - TO BE GLUED TO BACKING PLATE AND FIXED WITH RIVOTS.

FINISHES

WHERE STANDARD IS FOR USE IN A NON-MARINE ENVIRONMENT (UP TO 1KM FROM THE FORESHORE), THE FOLLOWING PROTECTION TREATMENT IS REQUIRED:

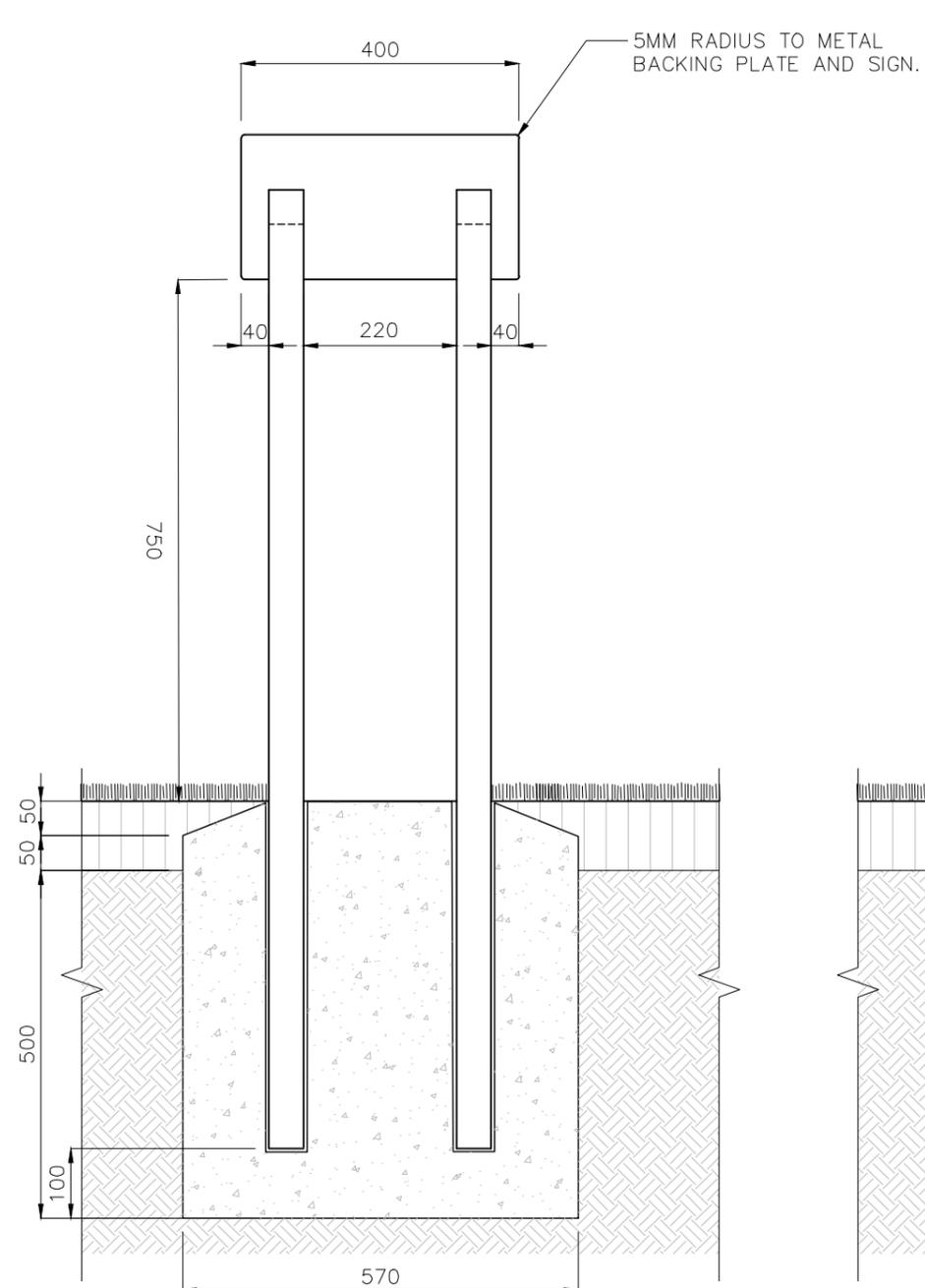
- HOT DIP GALVANISING: FERROUS OPEN SECTIONS TO AS4791;
- FERROUS HOLLOW SECTIONS TO AS4792.

WHERE STANDARD IS REQUIRED FOR USE WITHIN MARINE ENVIRONMENT, THE FOLLOWING PROTECTION TREATMENT IS REQUIRED:

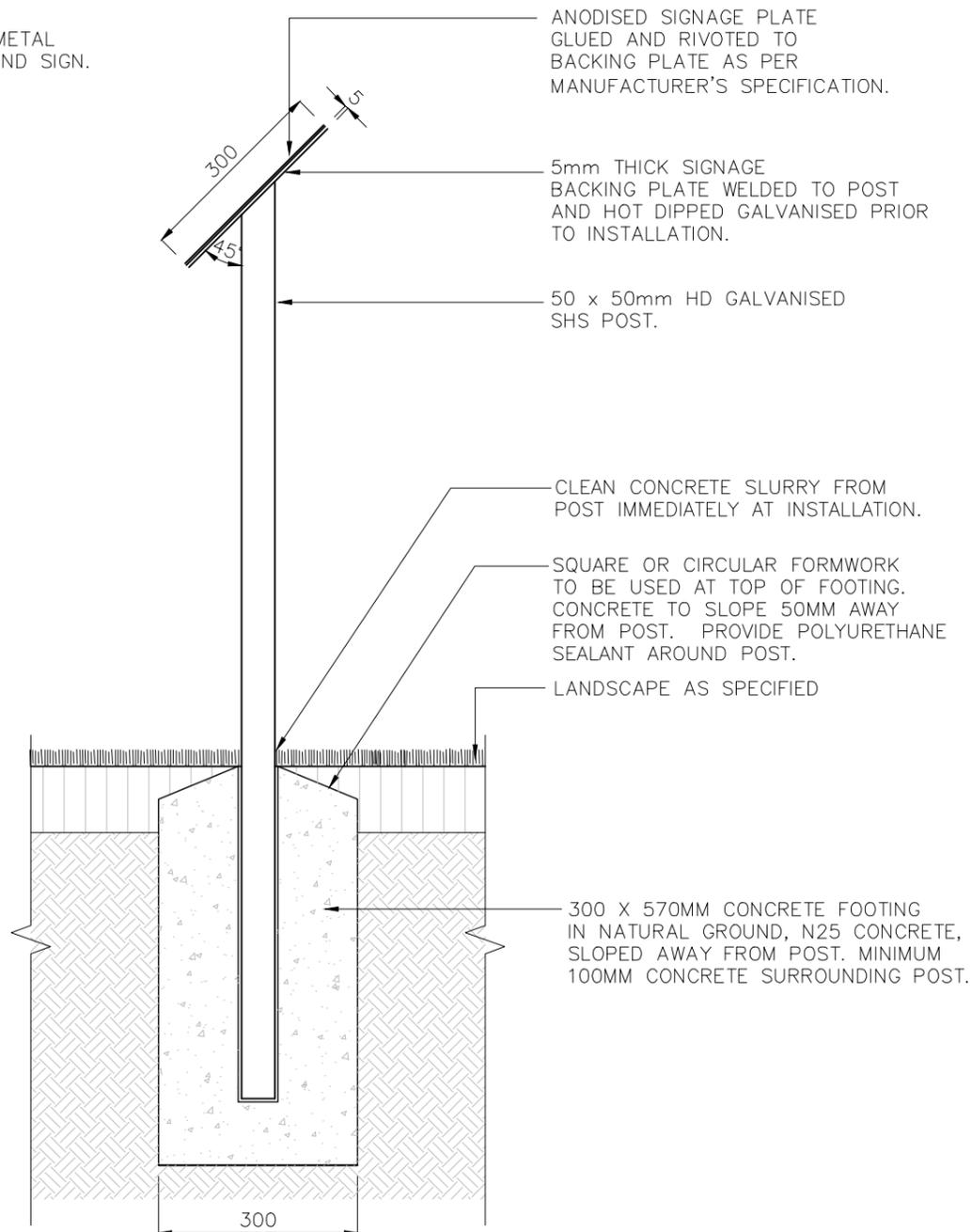
- STEELWORK HOT DIP GALVANISING: 85 MICRONS (600G/M²) MIN;
- SWEEP ABRASIVE BLAST;
- STEELWORK FIRST COAT: EPOXY PRIMER 75 MICRONS MIN;
- STEELWORK SECOND COAT: TWO PACK ACRYLIC OR POLYURETHANE GLOSS 75 MICRONS MIN.

PAINT SYSTEMS TO BE IN ACCORDANCE WITH AS2312 AND IS DESIGNATED HDG600P6 AND HDG600P.

ALL JOINTS TO BE FULLY WELDED. WELDS TO BE 5 THICK C.F.W (CONTINUOUS FILLET WELDS) TO AS554.1.



ELEVATION
SCALE 1:10



SECTION
SCALE 1:10

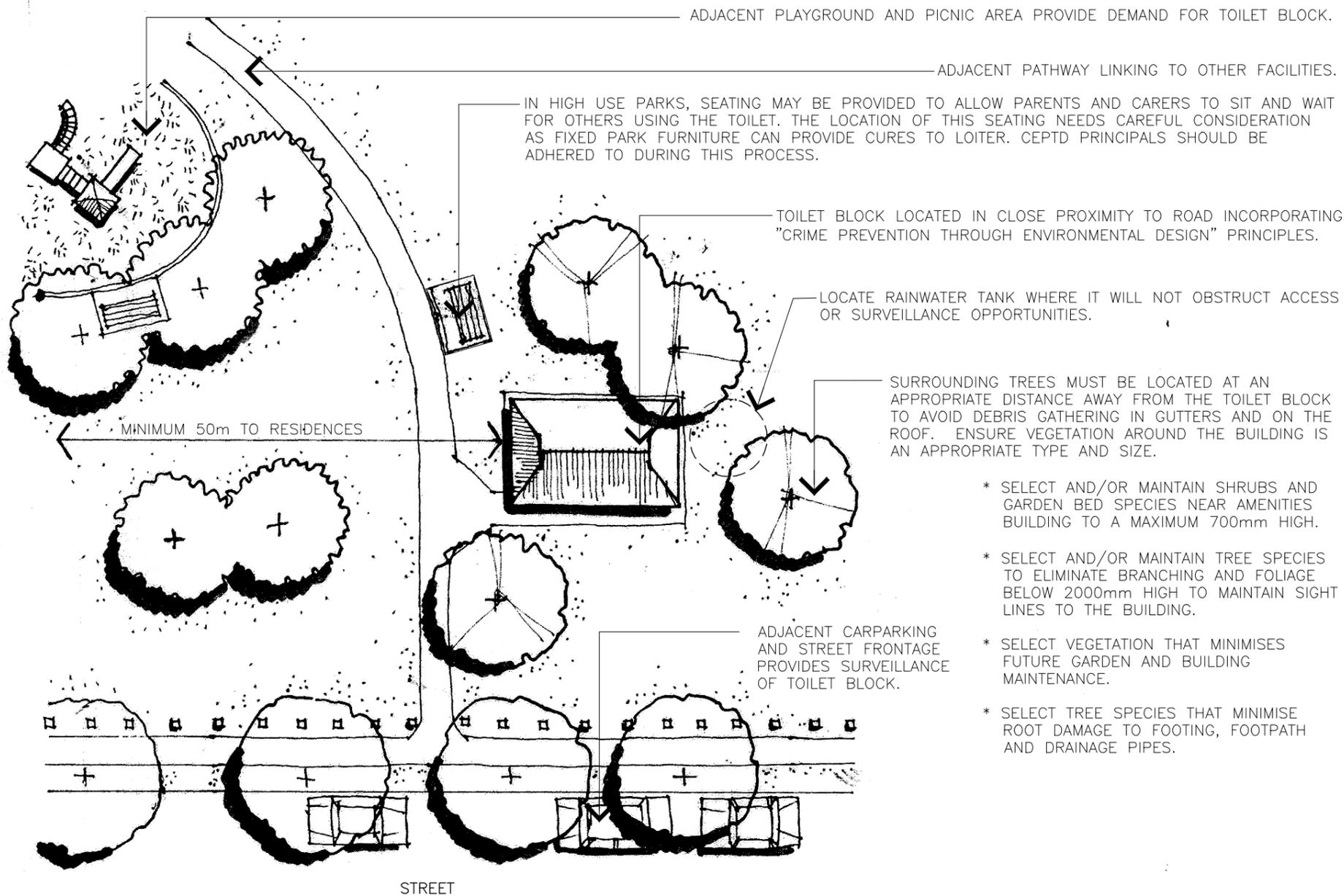
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14

DRAWING AUTHORISED FOR PUBLICATION			
Inga Candric	DESIGN	CPO - P&D	DATE DEC '14
2015.06.04 15:54:05+10'00'	DRAWN	CPO - P&D	DATE DEC '14
ASSET ENGINEERING MANAGER	CHECKED	BI - FSG - AS	DATE DEC '14
STRATEGIC ASSET MANAGEMENT	DRAWING FILENAME	BSD-10521 (A) Interpretive sign - Natural area - Trackside.dwg	
DESIGN APPROVED	ASSOCIATED PLANS		
C.Wood			
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT			
ASSET SERVICES/BRISBANE INFRASTRUCTURE			

DESIGN	CPO - P&D	DATE	DEC '14
DRAWN	CPO - P&D	DATE	DEC '14
CHECKED	BI - FSG - AS	DATE	DEC '14
DRAWING FILENAME	BSD-10521 (A) Interpretive sign - Natural area - Trackside.dwg		
ASSOCIATED PLANS			



BRISBANE CITY COUNCIL STANDARD DRAWING	
INTERPRETIVE SIGN NATURAL AREA TRACKSIDE	SCALE AS SHOWN
	DWG No. BSD-10521
	ORIGINAL SIZE A3 REVISION A



TOILET BLOCK – PLAN

GENERAL NOTES

- ENSURE PARK ELEMENTS ARE LOCATED AND CONSTRUCTED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS. MATERIALS ARE TO BE LOCALLY SOURCED.
- WHERE SPECIFIED – SITE FURNITURE IS TO BE INCORPORATED AS PART OF INTEGRATED PICNIC SETTING NODE. REFER BSD-10003 FOR SUPPLIERS.
- TO BE CONSTRUCTED IN DISTRICT AND METROPOLITAN 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 TRAVELLING MORE THAN 15 MINUTES FROM HOME TO VISIT THE PARK, AND WHERE THE ELDERLY, CHILDREN, TOURISTS AND VEHICLE BASED WORKERS COMPRISE A HIGH PROPORTION OF THE VISITORS.
- NOT PROVIDED WHERE ALTERNATIVE TOILET FACILITIES ARE AVAILABLE E.G. A 7 DAY A WEEK SHOPPING CENTRE NEARBY, A COMMUNITY BUILDING WITH TOILETS ETC.
- SITED MORE THAN 50m FROM NEAREST PRIVATE RESIDENCE OR SITED SO AS TO NOT CAUSE A NUISANCE TO NEIGHBOURS.
- REASONABLE PROXIMITY TO ONE OR MORE DEMAND SOURCES SUCH AS A CARPARK, PICNIC AREA, PLAYGROUND, BIKEWAY NETWORK, ETC.
- BUILT ON SUITABLE TERRAIN TO FACILITATE ACCESSIBILITY. CONTINUOUS ACCESSIBLE PATH OF TRAVEL FROM DEMAND SOURCES TO TOILET.
- CLOSE PROXIMITY TO A ROAD, GATE OR INTERNAL TRACK FOR SERVICING.
- FACING TOWARDS MOST ACTIVE SPACE.
- 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.
- NOT OBSTRUCTING LINKS BETWEEN VISITOR NODES AND PARK FACILITIES.
- UNOBTRUSIVE IN THE LANDSCAPE.
- EXTERNAL SHELTER PROVIDED E.G. VERANDAHS.
- TOILET BLOCK TO COMPLY WITH AUSTRALIAN STANDARDS AND COUNCIL REQUIREMENTS FOR ACCESS & MOBILITY (AS 1428).
- REFER TO BRISBANE CITY COUNCIL'S "PUBLIC TOILET DESIGN GUIDELINES"
- RAINWATER TANK TO BE INSTALLED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN, AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.

- * SELECT AND/OR MAINTAIN SHRUBS AND GARDEN BED SPECIES NEAR AMENITIES BUILDING TO A MAXIMUM 700mm HIGH.
- * SELECT AND/OR MAINTAIN TREE SPECIES TO ELIMINATE BRANCHING AND FOLIAGE BELOW 2000mm HIGH TO MAINTAIN SIGHT LINES TO THE BUILDING.
- * SELECT VEGETATION THAT MINIMISES FUTURE GARDEN AND BUILDING MAINTENANCE.
- * SELECT TREE SPECIES THAT MINIMISE ROOT DAMAGE TO FOOTING, FOOTPATH AND DRAINAGE PIPES.

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14

DRAWING AUTHORISED FOR PUBLICATION
 PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04
 MANAGER INFRASTRUCTURE MANAGEMENT
 R.P.E.O: 2546
 DESIGN APPROVED
 LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04
 PRICIPAL PROGRAM OFFICER PARKS

DESIGN	Std Dwgs WG	DATE	OCT '13
DRAWN	CPO - P&D	DATE	OCT '13
CHECKED	UMD - E&P & IMB	DATE	OCT '13
DRAWING FILENAME	BSD-10701 (A) Toilet block - siting plan.dwg		
ASSOCIATED PLANS	SUPERSEDES UMS-752		



BRISBANE CITY COUNCIL STANDARD DRAWING	
TOILET BLOCK SITING PLAN	SCALE 1:100
BSD-10701	
ORIGINAL SIZE A3	REVISION A

GENERAL NOTES

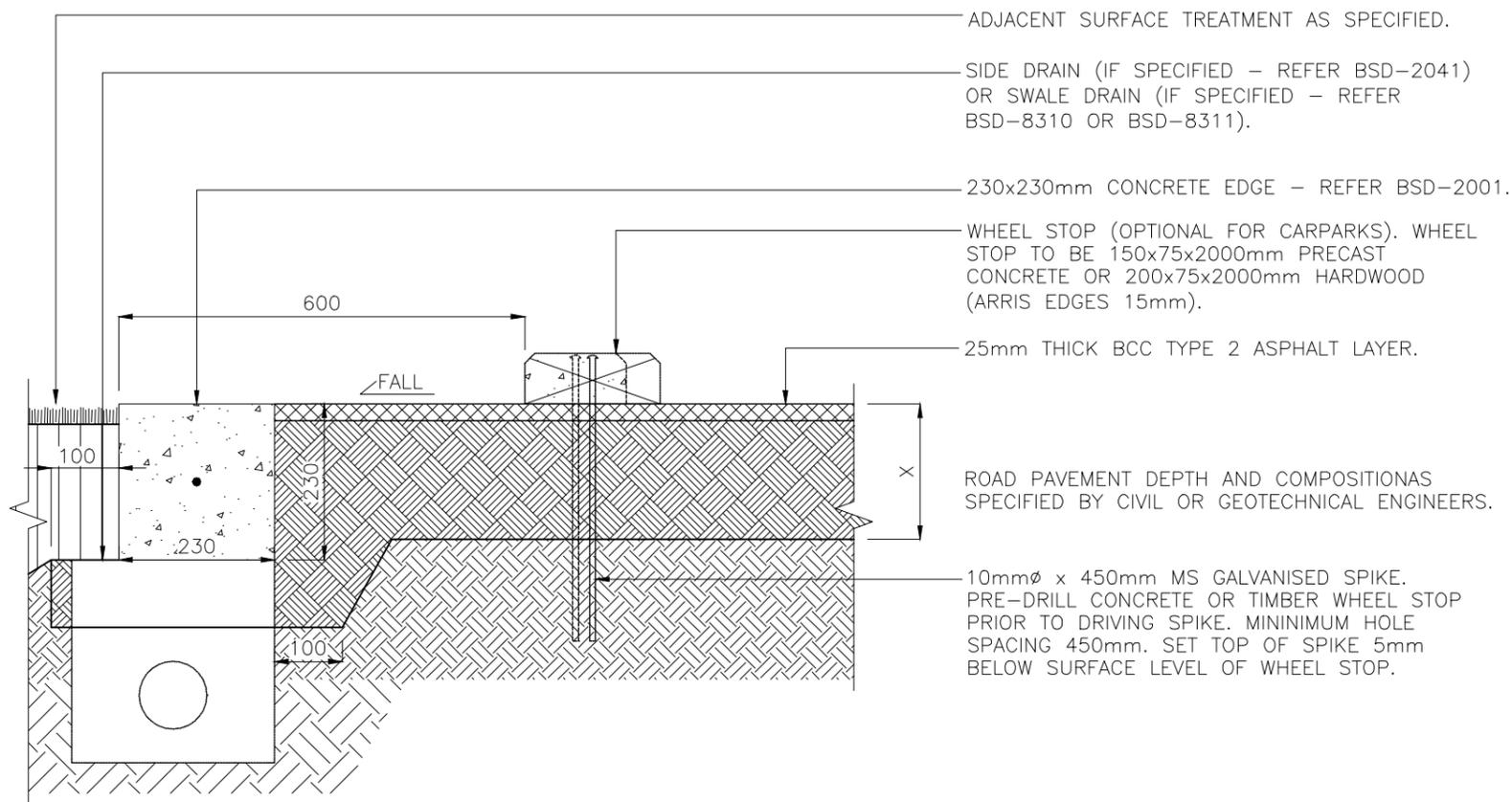
- ENSURE PARK ELEMENTS ARE LOCATED AND CONSTRUCTED IN ACCORDANCE WITH DETAILED LANDSCAPE PLAN AND PARKS CHAPTER OF INFRASTRUCTURE DESIGN PLANNING SCHEME POLICY.
- MATERIAL CHOICES ARE TO BE DETERMINED ON THE GROUNDS OF SUSTAINABILITY, LOW MAINTENANCE, VANDAL RESISTANCE, PRODUCT AVAILABILITY AND SUITABILITY TO THE CLIMATIC CONDITIONS. MATERIALS ARE TO BE LOCALLY SOURCED.
- ENSURE MOWN HEIGHT OF GRASS (TURF) AREAS FINISHES FLUSH WITH CONCRETE EDGE.
- ENSURE GARDEN AREAS (MULCH) FINISH 25mm BELOW ADJACENT F.S.L's OF CONCRETE EDGE.
- PAVEMENT SURFACE TO BE BCC TYPE 2 ASPHALT. REFER BCC "REFERENCE SPECIFICATIONS FOR CIVIL ENGINEERING WORKS" S130 - SUPPLY OF DENSE GRADED ASPHALT.
- AUSTRALIAN STANDARDS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE REFERENCED AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY SPECIFICATIONS AND/OR DRAWINGS.
- CARPARKS TO COMPLY WITH AUSTRALIAN STANDARDS AND COUNCIL REQUIREMENTS FOR ACCESS & MOBILITY (AS 1428).
- REFER TO THE BRISBANE ACCESS AND INCLUSION PLAN 2012-2017 FOR FURTHER INFORMATION WHEN PLANNING AND DESIGNING THE BUILT ENVIRONMENT TO REASONABLY CONSIDER ACCESS AND INCLUSION FOR ALL WHERE APPROPRIATE.
- ALL DIMENSION IN MILLIMETRES (U.N.O.).

CONCRETE WORKS

- ALL CONCRETE, JOINTS AND SLIP RESISTANCE REQUIREMENTS TO COMPLY WITH "REFERENCE SPECIFICATIONS FOR CIVIL ENGINEERING WORK" - S150 ROADWORKS; 5.0 CONCRETE KERBS AND CHANNELS.
- ALL EXTRUDED CONCRETE EDGING TO BE MINIMUM GRADE N32 WITH Y12 REINFORCING, MIN. TOP COVER OF 50mm. CONCRETE SHALL BE NORMAL CLASS CONCRETE UNLESS SPECIFIED OTHERWISE. N32 SHALL MEAN NORMAL CLASS CONCRETE WITH A 28 DAY CHARACTERISTIC STRENGTH OF 32MPa. CONCRETE MIX SHALL BE APPROVED BY THE SUPERINTENDENT PRIOR TO PLACING.
- MAXIMUM AGGREGATE SIZE 20mm, MINIMUM SLUMP 80mm.
- ALL CEMENT TO BE TYPE GP OR GB TO AS 3972 UNLESS SPECIFIED OTHERWISE.
- ALL FORMWORK SHALL BE IN ACCORDANCE WITH SAA FORMWORK CODE AS 3610.
- ALL ROADS/CARPARKS AREAS TO HAVE 1:50 MINIMUM CROSSFALL.

TIMBER WORK NOTES

- TIMBER SHOULD BE SOURCED FROM LEGAL AND SUSTAINABLE SOURCES. TIMBERS ARE CONSIDERED ACCEPTABLE WHERE THERE IS A HIGH DEGREE OF CERTAINTY THAT THEY ARE FROM FORESTS, EITHER NATIVE OR PLANTATION, THAT ARE LEGALLY HARVESTED AND SUSTAINABLY MANAGED. THE CONTRACTOR IS TO SUBMIT EVIDENCE THAT THE TIMBER HAS BEEN OBTAINED FROM A LEGAL AND SUSTAINABLE SOURCE.
- ALL TIMBER TO BE ACQ PRESSURE TREATED OR TANALITH E (COPPER AZOL) TO AS 1608 TREATED ROUGH SAWN APPEARANCE GRADE HARDWOOD OF ONE SPECIES.
- ALL EXPOSED EDGES TO RECEIVE MIN. 5mm WIDE ARRIS.
- PRIOR TO INSTALLATION, ALL CUTS, EDGES, JOINTS TO RECEIVE LIBERAL COATINGS WITH AN APPROVED TIMBER PRESERVATIVE.
- ALL TIMBER IN CONTACT WITH GROUND TO BE PRESERVATIVE TREATED TO HAZARD CLASS H5 TO AS 1604 AND HAVE A DURABILITY CLASS 1 OR 2 TO AS 5604.
- ALL TIMBER TO BE FREE OF KNOTS, SPLINTERS, CRACKS OR ANY MAJOR DEFECT.
- TIMBER PRESERVATIVES - WHERE NO FINISH SPECIFIED, ALL TIMBER TO RECEIVE 3 No COATS OF CLEAR APPROVED TIMBER PRESERVATIVE SUCH AS COPPER NAPHTHENATE OIL (FOR ABOVE GROUND USE) AND COPPER NAPHTHENATE EMULSION (FOR BELOW GROUND USE).



ASPHALT INTERNAL ROAD/CARPARK - SECTION

DRAWING AUTHORISED FOR PUBLICATION					DESIGN	Std Dwgs WG	DATE	OCT '13		BRISBANE CITY COUNCIL STANDARD DRAWING	
PAUL COTTON SIGNATURE ON ORIGINAL DATED 03/09/04					DRAWN	CPO - P&D	DATE	OCT '13		SCALE 1:10	
MANAGER INFRASTRUCTURE MANAGEMENT R.P.E.Q. 2546					CHECKED	UMD - E&P & IMB	DATE	OCT '13		DWG No. BSD-10740	
DESIGN APPROVED LAUREN TEMPLEMAN SIGNATURE ON ORIGINAL DATED 31/08/04					DRAWING FILENAME	BSD-10740 (B) Internal asphalt road_car park.dwg				ORIGINAL SIZE A3	
B	Drawing Title Amended, HWD Wheel Stop Length Amended	FEB '16	JUL '16	JUL '16	ASSOCIATED PLANS	SUPERSEDES UMS-748			REVISION B		
A	Drawing Converted From UMS Series April 2014	APR '14	APR '14	APR '14							
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	PRICIPAL PROGRAM OFFICER PARKS						