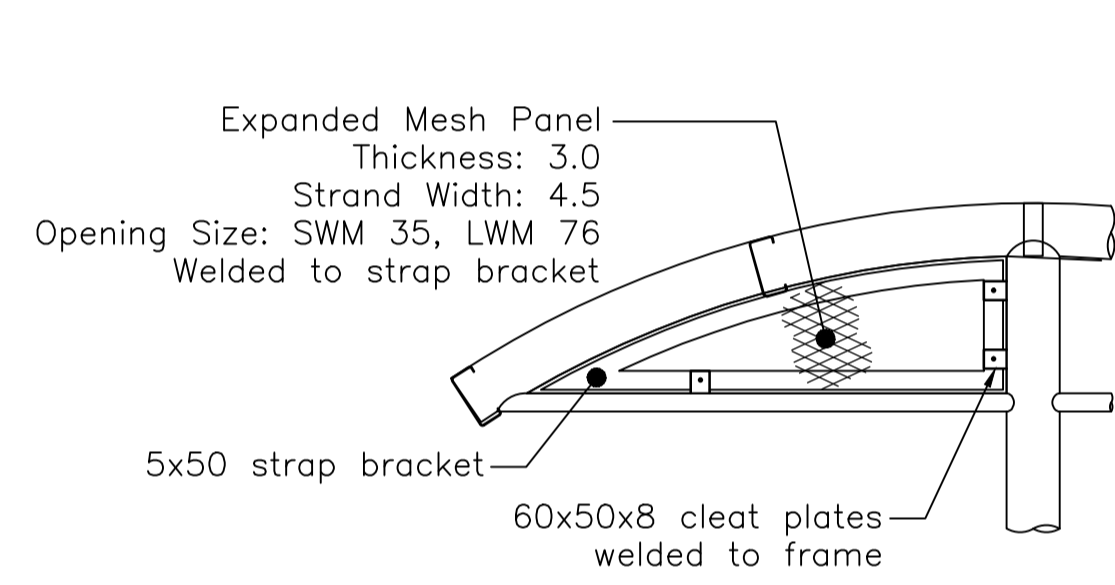
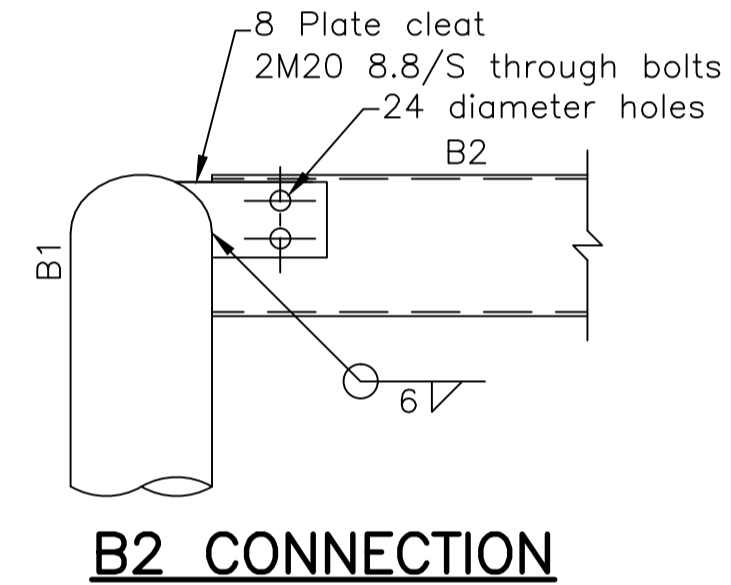


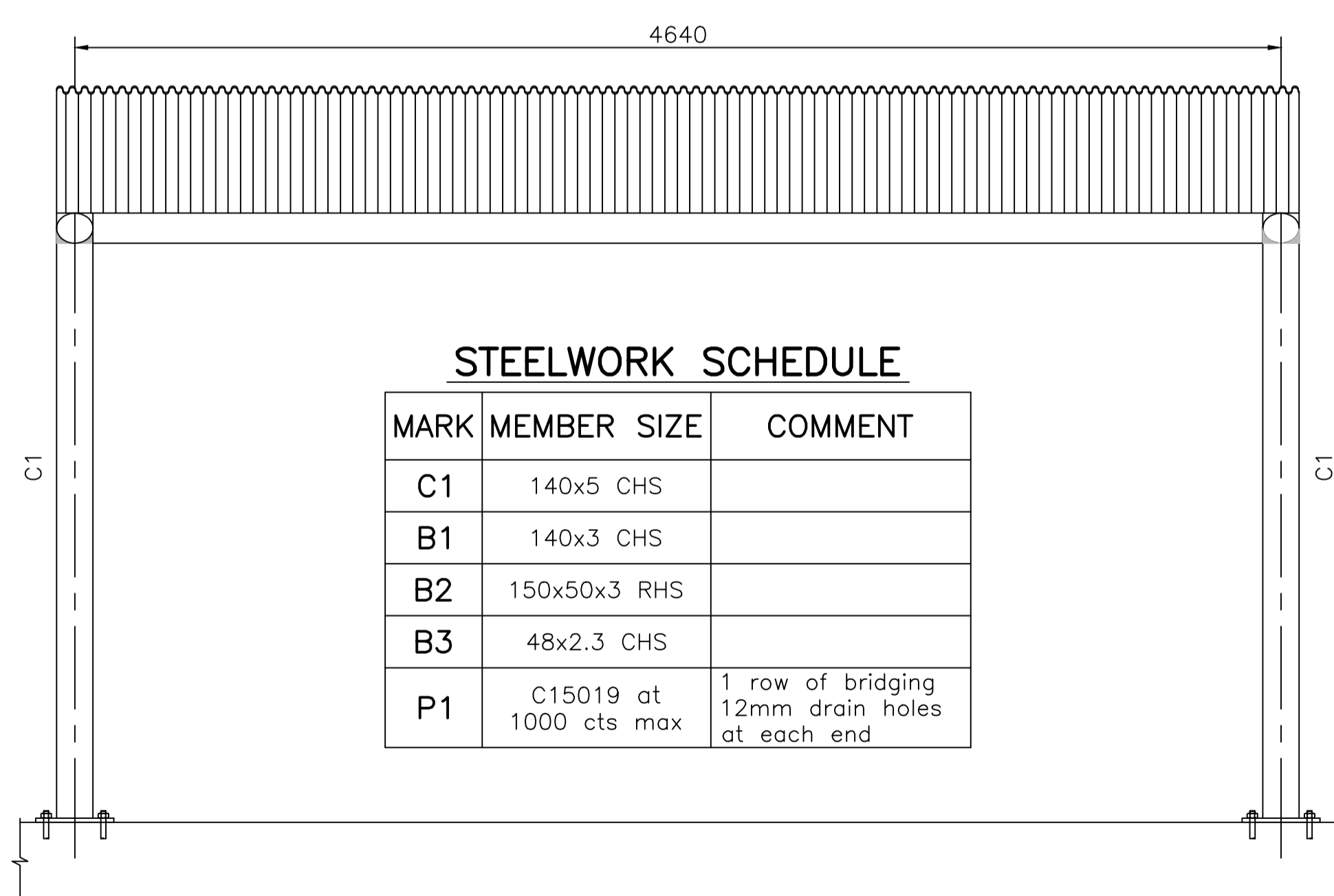
ROOF DETAILS



MESH PANEL DETAILS



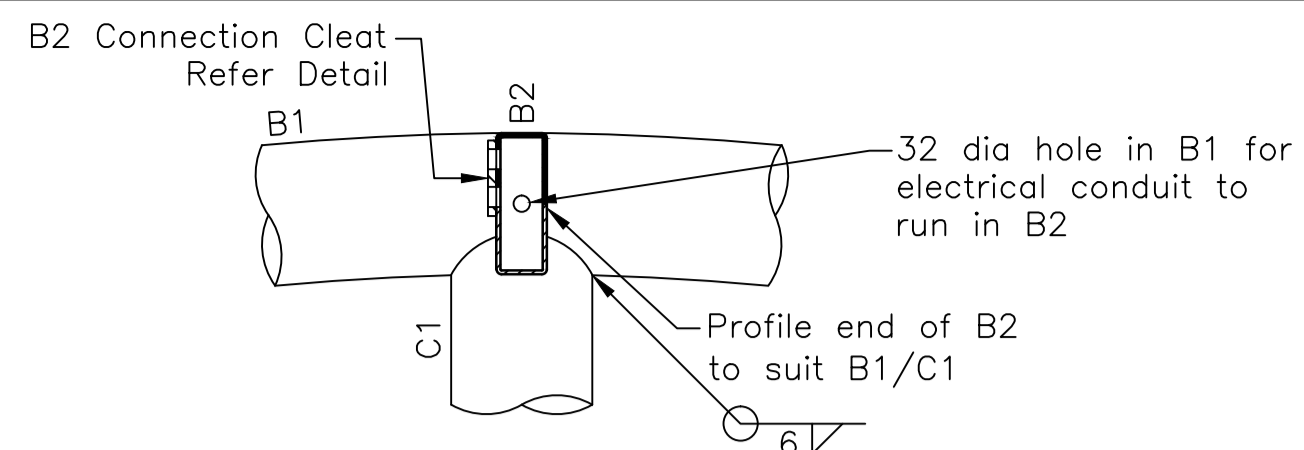
B2 CONNECTION CLEAT DETAIL



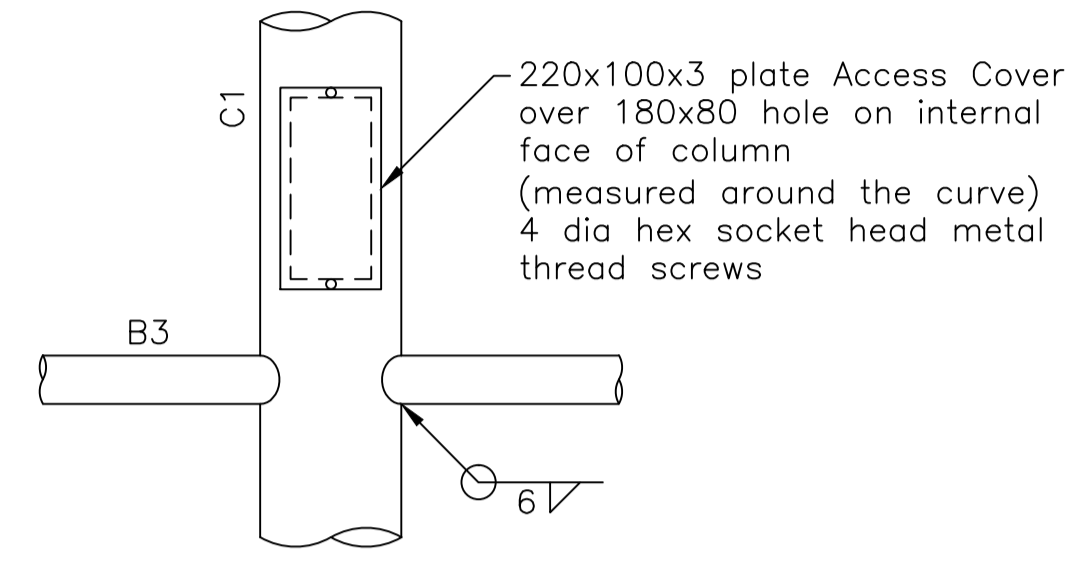
STEELWORK SCHEDULE

MARK	MEMBER SIZE	COMMENT
C1	140x5 CHS	
B1	140x3 CHS	
B2	150x50x3 RHS	
B3	48x2.3 CHS	
P1	C15019 at 1000 cts max	1 row of bridging 12mm drain holes at each end

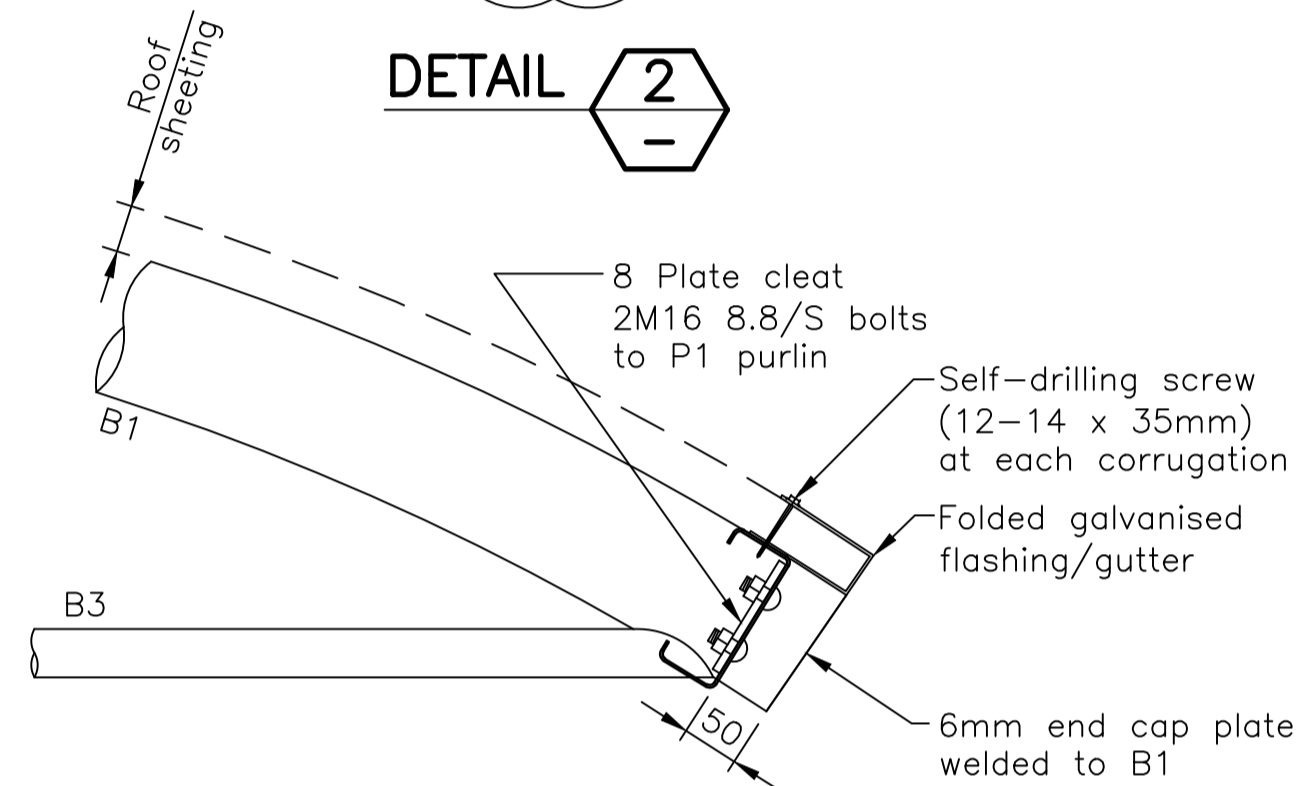
FRONT ELEVATION



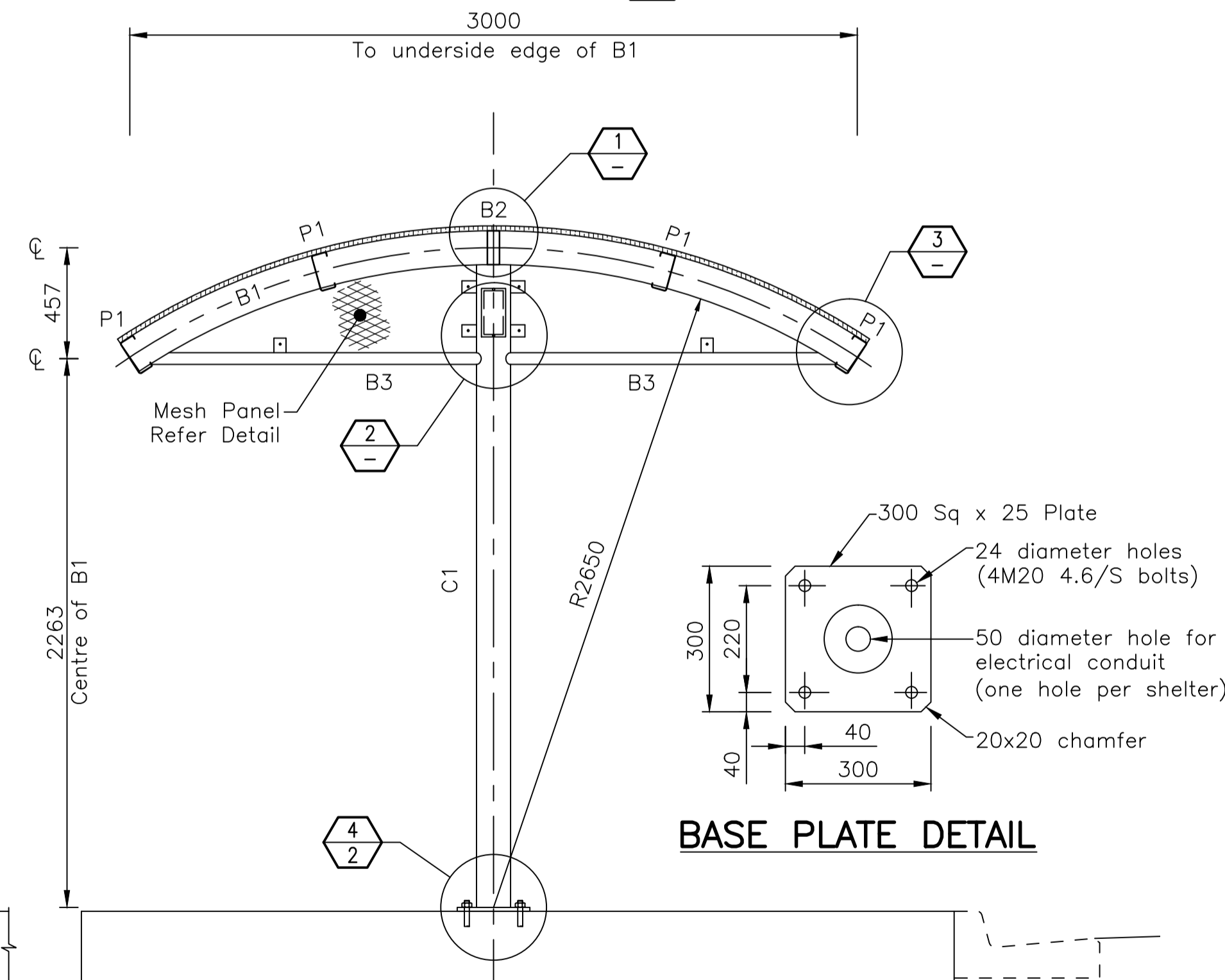
DETAIL 1



DETAIL 2



DETAIL 3



BASE PLATE DETAIL

SIDE ELEVATION

For Concrete slab and joint details Refer TCC standard drawing SD-510

NOTES

GENERAL

- All dimensions are in millimetres, unless noted otherwise.
- Do not scale these drawings. Use figured dimensions.
- The contractor shall check, verify on site and be responsible for the correctness of all dimensions shown on the drawings and discrepancies shall be reported immediately to the Superintendent before any work proceeds.
- These drawings shall be read in conjunction with all other drawings and specifications and with such other written instructions as may be issued during the course of construction. All discrepancies shall be reported immediately for decision before proceeding with the project.
- All workmanship and materials shall be in accordance with the requirements of the Townsville City Council Design Specifications and Construction Standards, Standards Australia Codes and the by-laws and ordinances of the relevant authorities.
- During construction any structure and neighbouring structures shall be maintained in a stable condition, ensuring no parts are overstressed.
- It is the contractors responsibility to ensure that the project is carried out in accordance with the drawings and specifications.

SHELTER

- Design wind loadings are in accordance with AS1170.2 for:
 - Region : C
 - Regional 3 second gust wind speed Vr : 69m/s
 - Terrain category : 2
 - Shielding multiplier Ms : 1
 - Topographic multiplier Mt : 1
 - Annual probability of exceedance 1/R: 1/500
- 2 Pack Epoxy paint to be Colorbond Colours:
 - Portal frame and purlins: Classic Cream
 - Expanded Mesh panel and frame: Red Oak
 - Roof flashing gutter: Cottage Green

STRUCTURAL STEELWORK

- All structural steelwork to be in accordance with AS4100, AS/NZS4600, AS/NZS1554 and AS3828.
- All steel to be:
 - Grade 300 plus for hot rolled sections
 - Grade 300 plus for welded sections (WB, WC)
 - Grade 300 plus for merchant bar (round, square and flat)
 - Grade 250 for plates
 - Grade C350 for RHS, SHS and CHS.
- Commercial grade bolts to be in accordance with AS/NZS1111 and AS4100. High strength structural bolts to be in accordance with AS/NZS1252 and AS4100. Welds to be in accordance with AS/NZS1554 and welding electrodes to AS/NZS4857. The inspection/testing of welds to be in accordance with the structural steel specification.
- All details, gauge lines etc. where not specifically shown are to be in accordance with AISC design capacity tables for structural steel and AISC standardised structural connections.
- All welds to be Category SP and to be 6mm continuous fillet from E48XX electrodes, unless noted otherwise.
- All bolts to be M20 and to grade 8.8/S unless noted otherwise.
- All cleats and gussets to be 8mm plate unless noted otherwise.
- For welds and bolts other than as noted above, the following is used:
 - Welds – symbols in accordance with AS1101.3
 - Bolts – designated by the number, diameter, grade and tightening procedure. e.g.
 - 4M16 4.6/S denotes 4 no. M16 commercial grade bolts, snug tight
 - 6M20 8.8/TF denotes 6 no. M20 high strength structural bolts fully tensioned in a no slip joint
 - 6M24 8.8/TB denotes 6 no. M24 high strength structural bolts fully tensioned in a bearing joint (some slip allowed).
- Structural steelwork to have the following surface treatment in accordance with AS/NZS2312 and the specification:

ELEMENT	SURFACE CLEANING	PRIME COAT	TOP COATS
Frame	Blast clean Sa 2.5	Hot dip galvanised to AS 1658	Powder coat colour to Architects specifications
Frame (Alternative)	Blast clean Sa 2.5	75 microns zincanode 304 by Dulux or equivalent 125 microns duremax GPE by Dulux or equivalent	50 microns luxathane R (colour to architects specifications)
Purlins		G450 (minimum zinc coating 450g/m ²)	

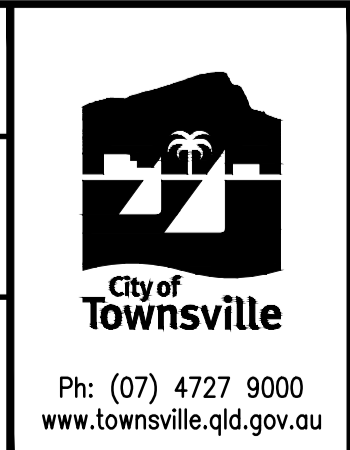
- Members to be encased in concrete or fire sprayed must not be painted.
- The ends of all tubular members to be sealed with nominal thickness plates and continuous fillet welded.
- All hot dip galvanised members to be provided with vent and drainage holes in accordance with the galvanisers recommendations.
- Where members shown on the structural or architectural drawings are required to be curved, bent or rolled the contractor shall be responsible for the methods required to achieve the required shapes without localised distortion of the members.
- The contractor shall provide and leave in place, until permanent bracing elements are constructed, such temporary bracing as is necessary to stabilise the structure during erection.
- The purlin and girt design has been based on Lysaght steel purlins. Alternative purlins of equal or greater load capacity may be substituted only on written approval from the superintendent.
- Purlin and girt bolts and bridging shall be in accordance with the manufacturers details.

No.	DATE	DESCRIPTION	AP'D
C	29/4/2015	SYMBOLS AND AUSTRALIAN STANDARD REFERENCES	
B	15/07/2011	NOTES AMENDED, REMOVED SEAT DETAIL	
A	13/09/2009	ORIGINAL ISSUE	
REVISIONS			

NOTES :
 REFERENCE DRAWINGS
 SD-510 – REGIONAL BUS SHELTER CONSTRUCTION DETAILS SHEET 2 OF 2
 SD-520 – REGIONAL BUS STOP URBAN LOCATION LAYOUT DETAILS-TYPE 3 AND 4
 SD-535 – J POLE, TIMETABLE DISPLAY CASE, RUBBISH BIN AND SLEEVE INSTALLATION DETAILS

Full Size A1
 Not to scale

DRAWN: DESIGN OFFICE
 CHECKED: WJP
 Design Engineer Approved: Original signed by J EL-KHOURI
 Date: 30/4/2015
 Manager Approved: Original signed by M WILKINSON
 Date: 5/5/2015



REGIONAL BUS SHELTER FRAMING DETAILS
 SHEET 1 OF 2

STANDARD DRAWING TRANSPORT
 SD-505 C