SPECIFICATION-OF-INTENT

ISSUED FOR
DEVELOPMENT APPROVAL
COMPRISING OF
PROVISIONAL DEVELOPMENT PLAN CONSENT
PROVISIONAL BUILDING RULES CONSENT

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DRAWING INDEX & DOCUMENT STATUS

DRAWING NUMBER	TITLE	REV
1934/G01	GENERAL NOTES (1)	A
1934/G02	GENERAL NOTES (2)	A
1934/S01	SITE PLAN	A
1934/S02	FOOTING LAYOUT	A
1934/S03	HOUSE STRENGTHENING	A
1934/S04	FRAMING PLAN	A
1934/S05	ELEVATIONS (1)	A
1934/SD01	SECTION	A
1934/SD02	DETAILS (1)	A
1934/SD03	HOUSE CONNECTION	A

Example No - 1934

October 2006

for

Proposed Canopy
Gawler

EXAMPLE

GENERAL

1. The builder shall ensure that the process of construction is supervised by an appropriately qualified person.
2. The Building Code of Australia (BCA) is adopted as the primary reference specification for objective, function and performance.
3. The South Australian Housing Code (SAHC) is adopted as a specification of acceptable product and process unless noted otherwise.
4. The project specific specification–of–intent comprises of the documents listed on the cover sheet.
5. This project specification takes precedence over the BCA and the SAHC unless the BCA imposes higher levels of performance.
6. The scope of the SAHC is extended to the BCA class of the current building project subject to:
   a) The SAHC shall not be used for the sizing of Structural members
7. All materials and workmanship shall be in accordance with the latest editions of the relevant Australian codes unless noted otherwise (uno).
8. The structural drawings shall be read in conjunction with these Construction Notes and associated drawings, and with such other written instructions as may be issued by the Engineer, during the course of construction.
9. All dimensions in millimetres(mm) unless noted otherwise.
10. The Contractor shall verify setting out dimensions shown on the drawings by measurement on site.
11. The structure has been designed to meet the requirements of the Code or Standard relevant to the facility in its in–service condition. During construction and prior to hand–over the Contractor shall, at all time, ensure that the structure is protected from over–stressing and instability due to any causes whatsoever.
12. Details of component parts of each structure are typical only. Where items are not detailed the contractor or fabricator shall use similar methods to those shown on the drawings.
13. The contractor shall provide all cleats and holes for fixing to steel, timber and other components as required by the engineering and architectural drawings whether or not shown.
14. All beams shall be fabricated and installed with natural camber up.
15. The quality characteristics of all materials and components used shall be verifiable against this specification upon request.

BASIS OF DESIGN

1. Structure Importance Level : 2 (Normal)
2. Design wind Class : N2 (AS4055)
3. Design live loading : Roof = 0.25 kPa
4. A maximum allowable bearing pressure of 100kPa has been assumed.
5. Footings shall be placed centrally under walls and columns uno.
6. All variations from the design specification to be referred to the design engineer for approval before proceding.

STRUCTURAL CONCRETE

1. Concrete quality shall be as tabulated, and verifiable

Concrete Element	Exposure Class'n	Class/ Grade	Slump mm	Aggregate Size mm	Cement Type
Footing Piers & Pads	A2	N20	80	20	GP

STRUCTURAL STEELWORK

1. All shop and field welds shall be classification General–Purpose (GP) uno.
2. Continuous fillet weld (CFW) shall be as specified on details.
3. Butt welds shall be complete penetration(CPBW) type.
4. Bolt designation: 4.6/S refer to commercial bolts grade 4.6, tightened using a standard wrench to a snug–tight condition.
5. All bolts shall be 4.6/S uno.
6. Bolts in slotted holes shall be "finger tight" and supplied with lock nuts.
7. Seal weld a 3mm plate to the ends of all hollow sections uno.
8. All damage to protective coatings as a result of transport, welding or other building operations shall be repaired in accordance with relevant codes as approved.
9. Welds to cold–formed sections shall be continuous fillet M.I.G. welds of a size equal to the thinnest section of the material joined, wire brushed and coated with zinc silicate paint.
10. Surface treatment and coating:

Element	Surface Treatment	Treatment or Coating
All steel fitments inc–luding Hold Down Bolts, Nuts & Washers, Cast–in steel items, external steelwork walkways & Hand–railing	. . Chemical Treatment . . .	. . Hot Dip Galvanising . . .
All other steelwork . . .	Grit blast to near white metal finish . .	Inorganic Zinc Silicate with average thickness 85 microns .

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U.N.O : unless noted otherwise.

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PROPOSED CANOPY
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Gawler
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GENERAL NOTES(1)

DRAWN	LJS/SCH
DESIGNED	SCH
CHECKED	
SCALE	as shown — DO NOT SCALE

SIZE	DRAWING NUMBER	REVISION
A4	1934/G01	A

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ATTACHMENT OF CANOPY TO EXISTING STRUCTURE

1. Beams not to overhang connection brackets, unless beams and house structure designed to suit.
2. Canopy Dimension to be a whole number multiple of the rafter spacing.
3. Extenda Brackets: Brackets to be fastened to rafter directly above house wall framing, else rafter stiffening to be provided.
4. Long Pergola brackets: Brackets not to extend beyond house fascia more than 150mm.
5. Joist hangers: Fascia to rafter connection to be strengthened using Pryda Fascia support bracket.
6. Fabricated brackets as detailed to achieve full support of canopy at beam ends, and house corners.
7. Posts to be provided at hip corners unless noted otherwise.

CONNECTION BRACKETS	
BRACKET TYPE	DESCRIPTION
Type–1	Long Pergola Brackets: (UFB or similar) (Ex. 50x5 FL G300 Steel, 4M10 bolts to house rafter, 4M10 bolts to canopy fascia)
Type–2	Fabricated bracket: (Ex. 50x50x2 SHS C450LO + 50x5 FL end plates bolted to fascia beam with 2M10 bolts.)

STRENGTHENING OF EXISTING STRUCTURE

1. Minimum house structure:
   a) Rafters : 120x35 F5 not notched more than 40mm (Not greater than 600 c/c for tiled roof, not greater than 1200 c/c for sheet roof)
   b) Hip Rafters 170x45 F5
   c) Fascia : 190 x 19
2. Rafter Stiffener to all rafters supporting connection brackets. Minimum length of stiffener as specified or full length of rafter, which ever is the lesser. Timber stiffeners fixed to rafters with 2/ ø3.06 x 75 long nails at 150 centres. Rafter Backspan support connection to be strengthened with 1/30x0.8 steel strap AS1684.2–1999 Table 9.22, detail (b) unless bolted connection present. Steel stiffeners fastened with M10 bolts at 200 c/c.
3. Tie–downs to be provided to all rafters supporting connection brackets, exceptions as noted.
4. Multiple rafters per tie–down – NOT applicable except as noted for lintels over openings.
5. Canopies not to be attached to light weight timber framed construction. Additional posts and piers to be provided adjacent to house.
6. Fascia Ledger plates to be bolted to house gable end walls only, using M10 dynabolts at 600 c/c, staggered vertically. Minimum of 2m rise of brick gable end above canopy fascia at location of house ridge, else tie fascia plate to bottom of wall using ø10 steel rods at 2.4m centres.
7. For openings install z–section Prydabeams. Beam to extend to first stud each side of opening, fasten to manufacturers instructions. Install Type–4 tie–downs to each end of lintel, anchor point to be centre of 1.2m width of brickwork. Ensure 3.6m width of brickwork between adjacent openings. Each rafter to be attached to lintel using Type–1 tiedowns.

LINTELS	
Prydabeam	APPLICATION
PB1.4	–– NA ––
PB2.0	–– NA ––

TIE–DOWN TYPE	DESCRIPTION
Type–1	1/30x0.8 steelstrap over rafter, 1M10 bolt each end to added structure.(eg. over battens, lintels)
Type–2	1/30x0.8 steel strap looped around ø10 rod epoxy doweled to brickwork; minimum of 1.2m wide x 12 courses high of brickwork above anchor point. Strap fastened to rafter with 4/ø2.8 nails each end.
Type–3	Duragal angle 30x30x2.5 CA, 1M10 bolt top to rafter, bottom anchored with ø10 rod epoxy doweled above 2nd course of brickwork from bottom of wall ; , minimum of 1.2m wide x fullheight brickwork above anchor point free from openings.
Type–4	M10 threaded steel rod, welded to 40x40x2 SHS C350LO tube at lower end. Tube sealed each end with 5 PL end plates. Bottom anchored with ø10 rod epoxy doweled above 2nd course of brickwork from bottom of wall, minimum of 1.2m wide x fullheight brickwork above anchor point free from openings. Top bolted through bottom flange of added steel z–lintels, or through leg of angles, or through over batten as required.
Type–5	M10 threaded steel rod, with 50 x 5 FL x 75 long each end. End cleats welded with 25mm x 3 Continuous Fillet Weld(cfw). Top bolted through rafter 1M10 bolt, bottom anchored into concrete footing beam using 1M10 dynabolt, min. 38mm embedment. Anchor point to be 100mm clear of all concrete edges.

8. If inadequate brickwork to anchor tie–downs then substitute with Type–5 tiedowns brought down external face of brick work and anchored into footing beam. footing beam to be 600mm deep or greater. Footing Beam 300mm deep acceptable if 900mm height of brick present along the entire length of wall.
9. If inadequate brickwork to anchor tie–downs and it is not desirable to have tie–downs visible on the external face of the brickwork, then proprietary tie–down devices such as Abel Tie–Downs may be installed either in the wall cavity or through the timber framing of the wall, inaccordance with manufacturers specifications.
10. If neither adequate brickwork or footing beam to anchor into, then canopy is NOT to be attached to the house, and additional posts and piers are to be provided.

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PROPOSED CANOPY
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Gawler
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GENERAL NOTES(2)

DRAWN	LJS/SCH
DESIGNED	SCH
CHECKED	
SCALE	as shown — DO NOT SCALE

SIZE	DRAWING NUMBER	REVISION
A4	1934/G02	A

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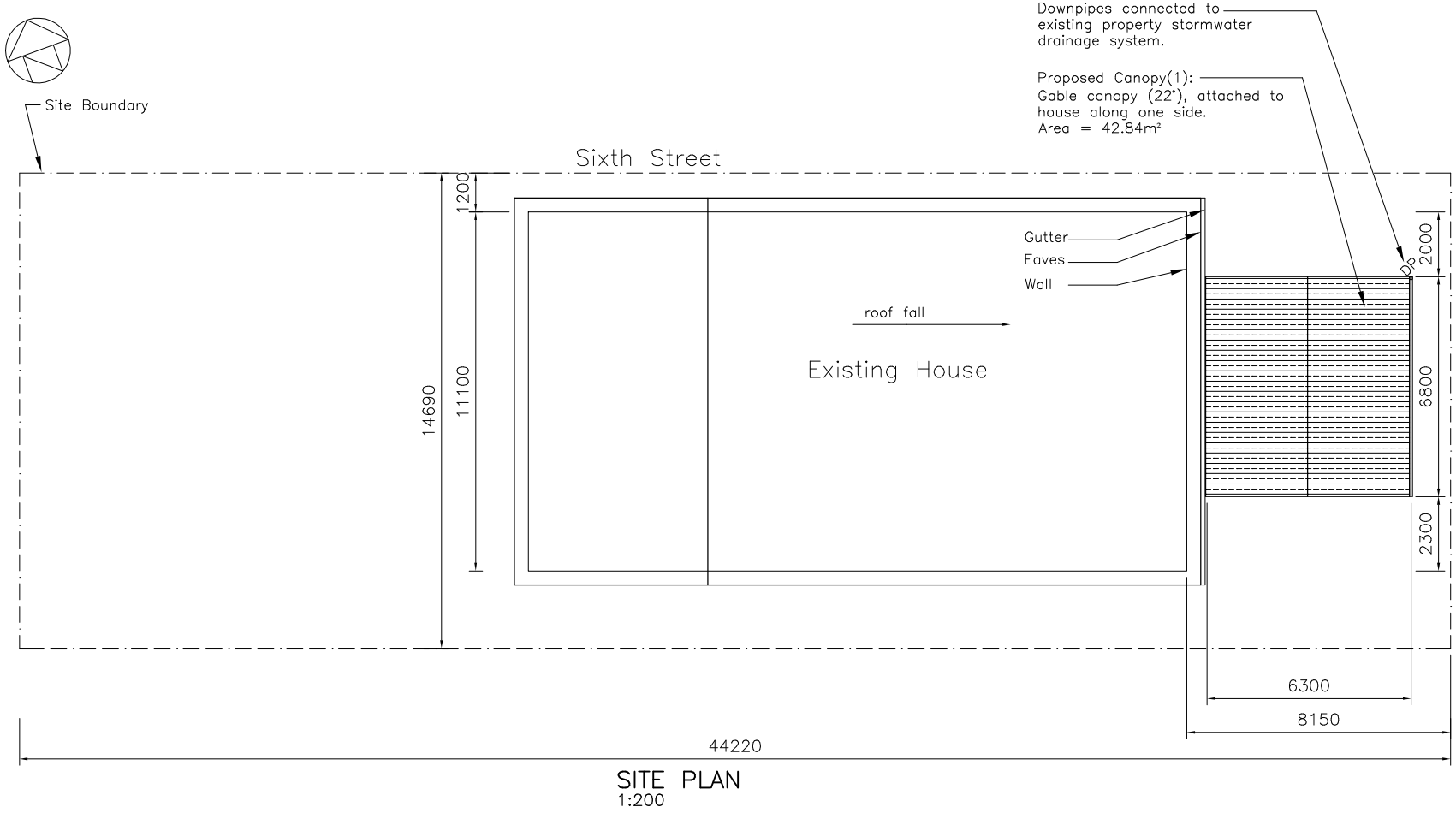

SITE PLAN
1:200

EXAMPLE

SPECIFICATION–OF–INTENT

Eaves width from face of brick to face of house fascia 430mm.

Provide gutters to lower edge of each roof plane, and one down pipe at one end of each gutter. Down pipes to be connected to existing stormwater drainage system.

Cladding: Profiled Steel sheeting with permissble end spans of 1700mm or greater.

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SITE PLAN

DRAWN	LJS/SCH
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CHECKED	
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SIZE	DRAWING NUMBER	REVISION
A4	1934/S01	A

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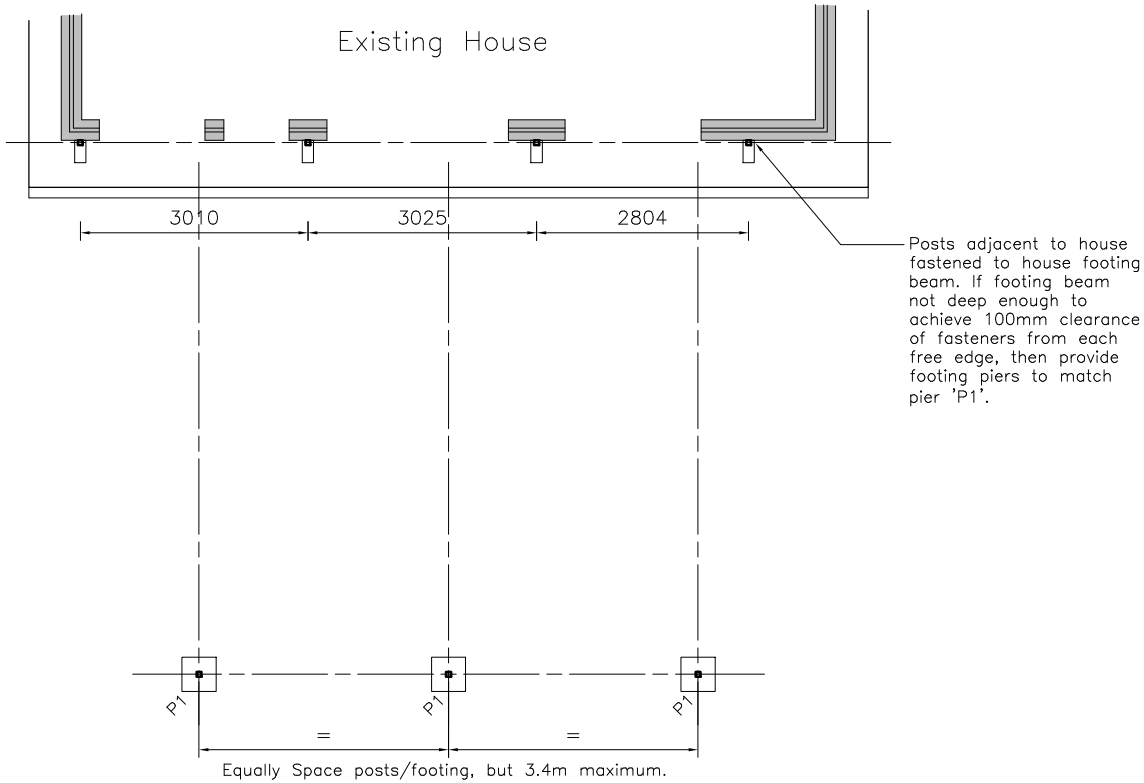

CONCRETE FOOTING SCHEDULE
P1 : 450SQ x 600 DEEP

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FOOTING LAYOUT

DRAWN	LJS/SCH
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CHECKED	
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SIZE	DRAWING NUMBER	REVISION
A4	1934/S02	A

FOOTING LAYOUT
1:100

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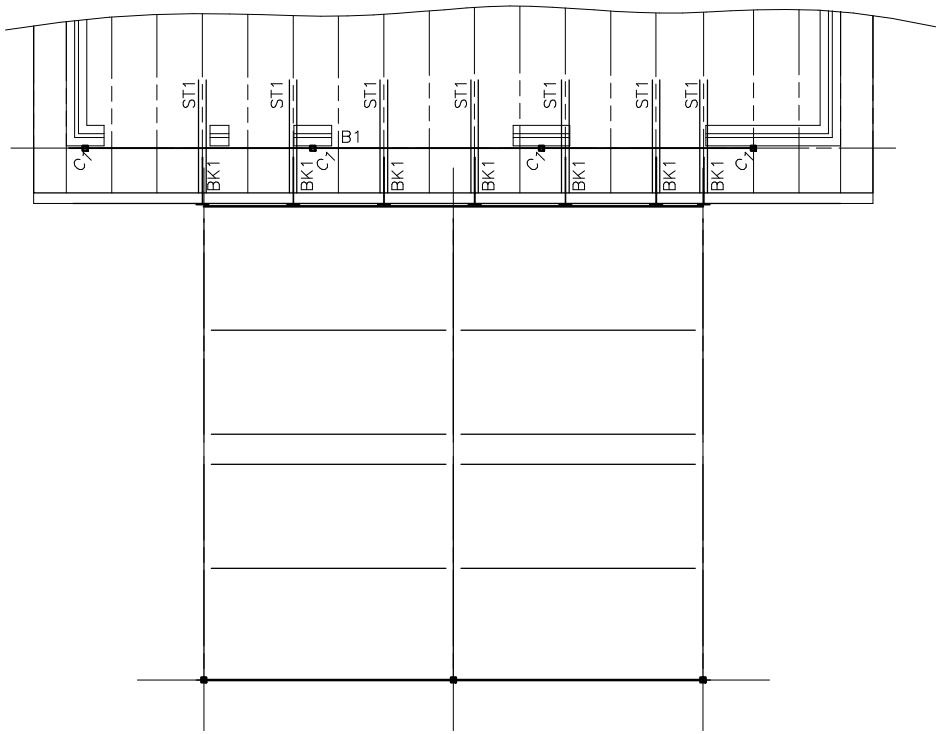
SCHEDULE OF MATERIALS

MEMBER	MARK	SIZE	DWG
BRACKETS	BK1	TYPE–1	G02
STIFFENERS	ST1	1/ C75–10 : C550/Z350	--
POSTS	C1	Refer S04	--
LINTELS	B1	C150–19 : : C450/Z350	--

WARNING: Minimum Sizes for House Frame:
Rafters : 120 x 35 F5, not notched more than 40mm
Fascia : 190 x 19
House Footings: Minimum, 500 deep from top of slab, and 300 wide.

FOR FURTHER INFORMATION REFER TO DRAWING G02.



NB: All house rafters which are attached to the canopy structure are to be fastened (tied–down) to the beam 'B1', refer to drawing 'SD03'.

HOUSE FRAME STRENGTHENING & ATTACHMENT POINTS
1:100

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⊗ TIE–DOWNS

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HOUSE STRENGTHENING

DRAWN	LJS/SCH
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SIZE	DRAWING NUMBER	REVISION
A4	1934/S03	A

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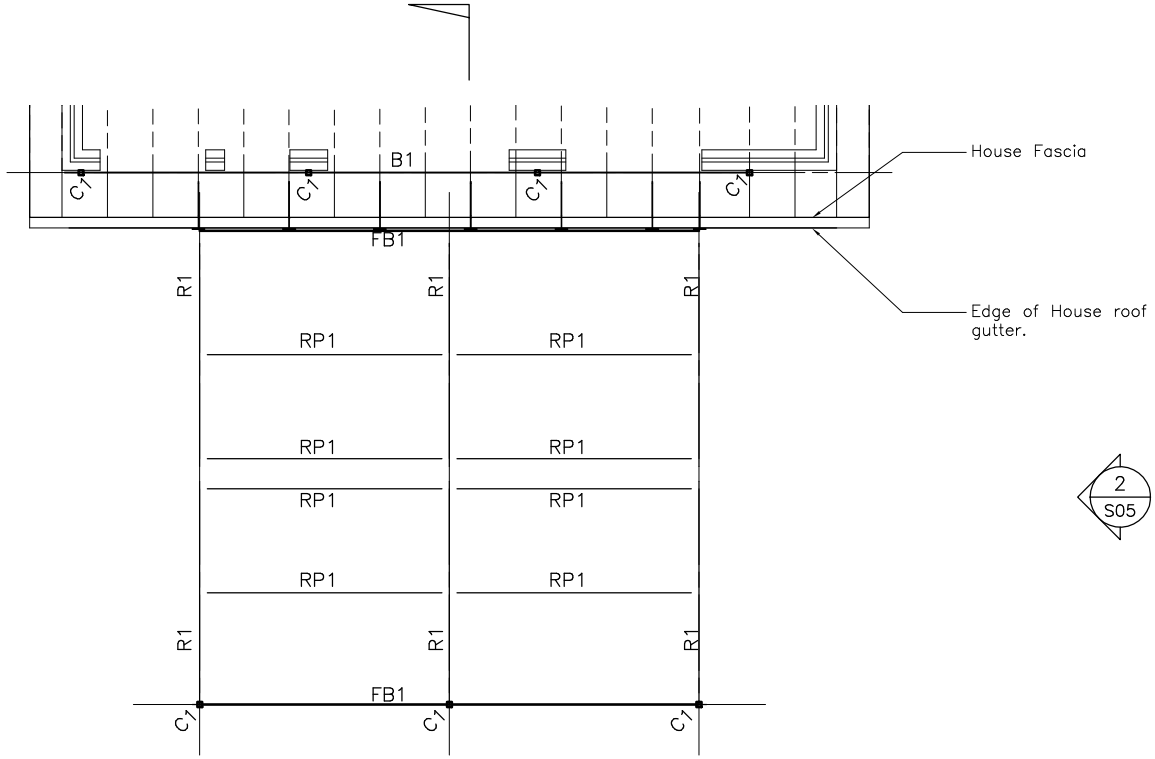
SCHEDULE OF MATERIALS

MEMBER	MARK	SIZE : MATERIAL	DWG
COLUMNS	C1	65x65x2.5 SHS : C350LO	--
FASCIAS	FB1	C150-19 : : C450/Z350	--
BEAMS	B1	Refer Dwg S03	--
RAFTERS	R1	C150-19 : C450/Z350	--
PURLINS	RP1	C150-15 : : C450/Z350	--

WARNING: Roof Cladding Shall NOT be attached to frame until house strenthening to drawing S03 has been installed. Refer to S03 for attachment points.



FRAMING PLAN
1:100

EXAMPLE

SPECIFICATION-OF-INTENT

NB: The roof purlins are required for lateral/torsional restraint of the rafters aswell as support of the cladding.

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FRAMING PLAN

DRAWN	LJS/SCH
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CHECKED	
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SIZE	DRAWING NUMBER	REVISION
A4	1934/S04	A

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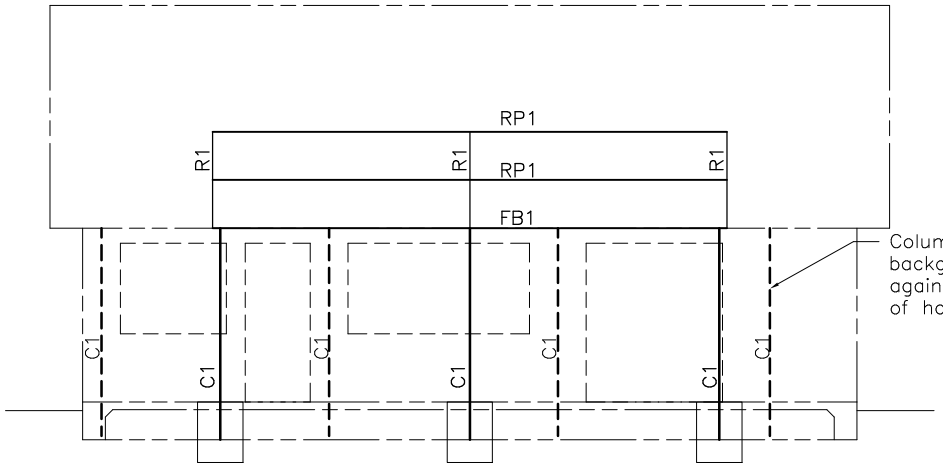
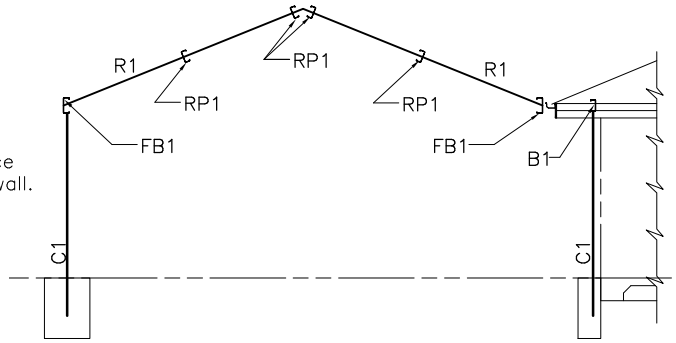
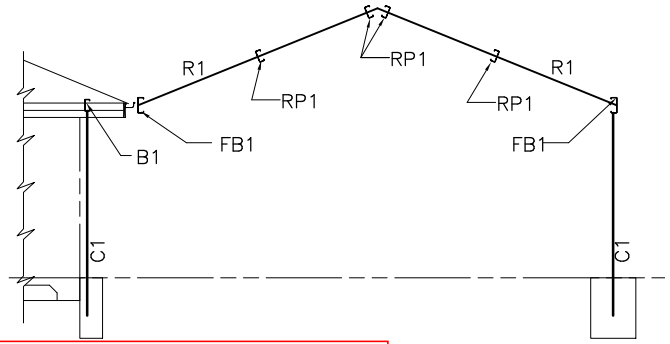


ELEVATION 1/S04 1:100



ELEVATION 2/S04 1:100



ELEVATION 3/S04 1:100

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ELEVATIONS (1)

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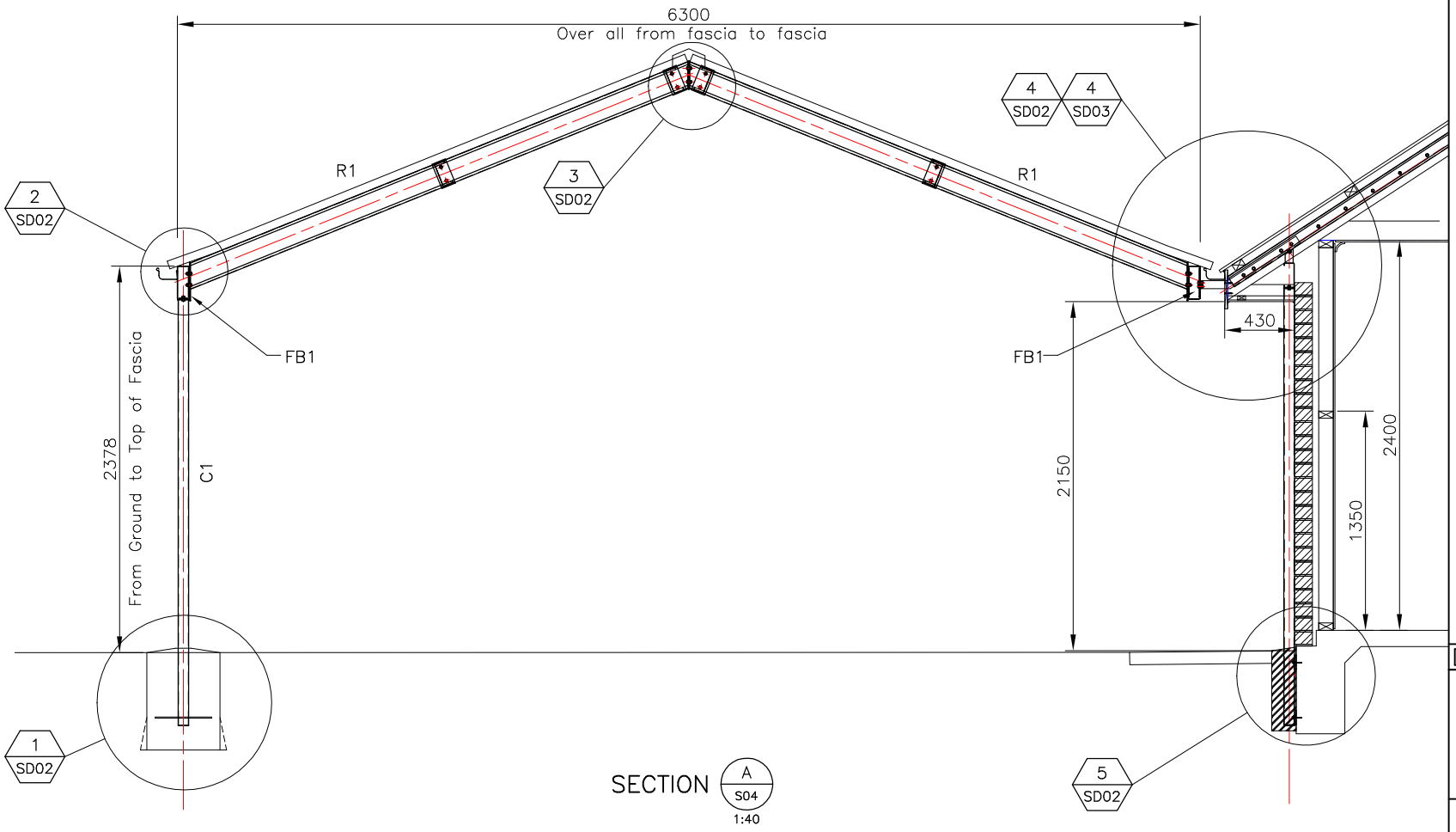
SIZE	DRAWING NUMBER	REVISION
A4	1934/S05	A



SECTION A S04 1:40

EXAMPLE

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SECTION

DRAWN	SCH
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SIZE	DRAWING NUMBER	REVISION
A4	1934/SD01	A

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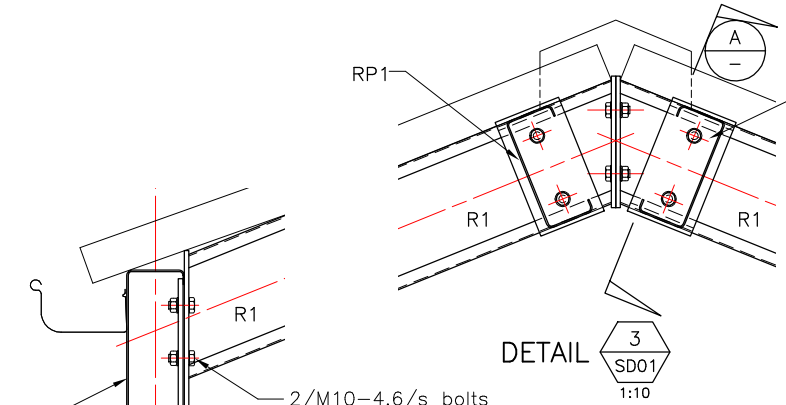
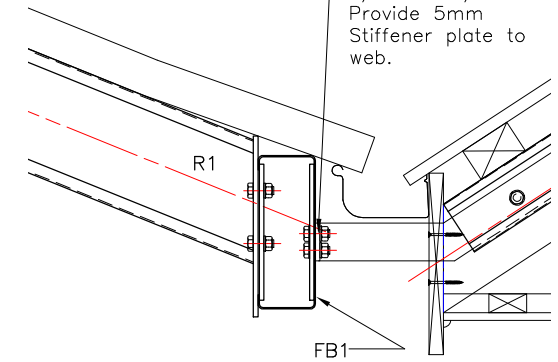
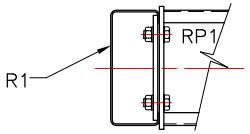
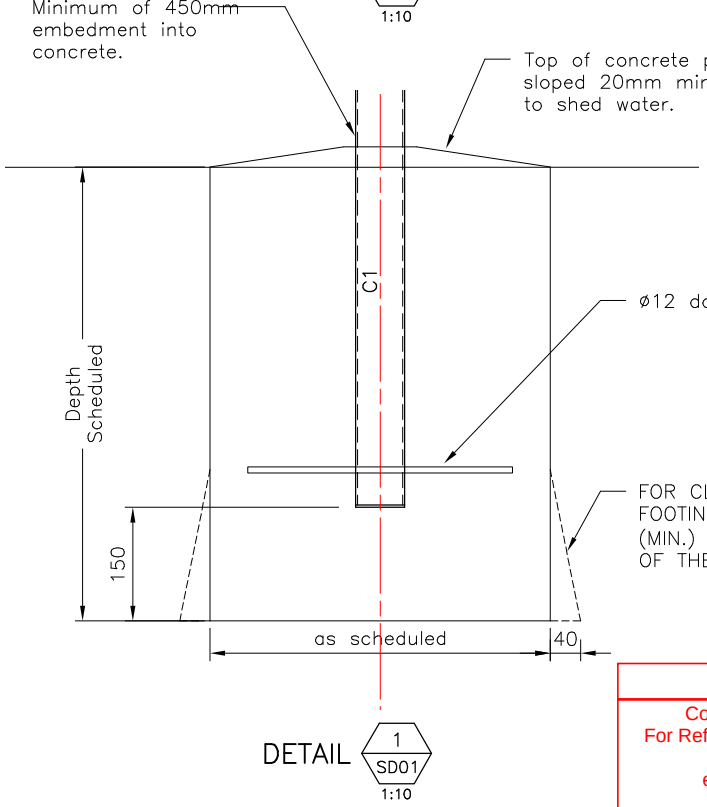
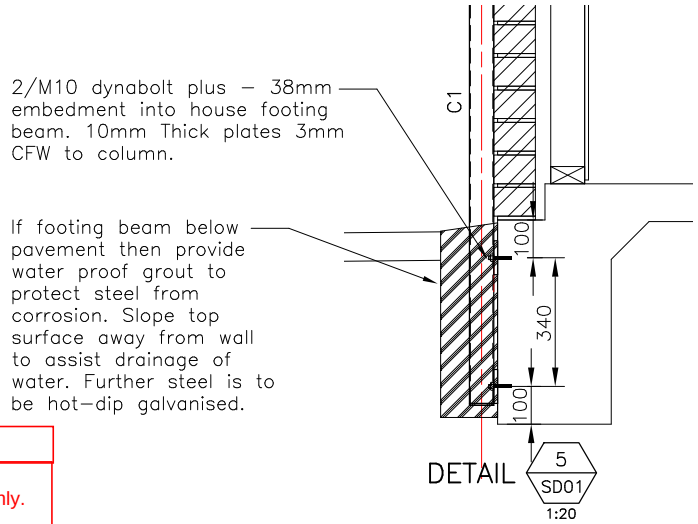




For more detail refer to SD03







NB: If footing beam not deep enough provide pier 'P1' to columns.

SPECIFICATION–OF–INTENT

WARNING: M10 threaded dynabolt is a 12mm diameter anchor.

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DETAILS (1)

DRAWN	SCH
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A4	1934/SD02	A

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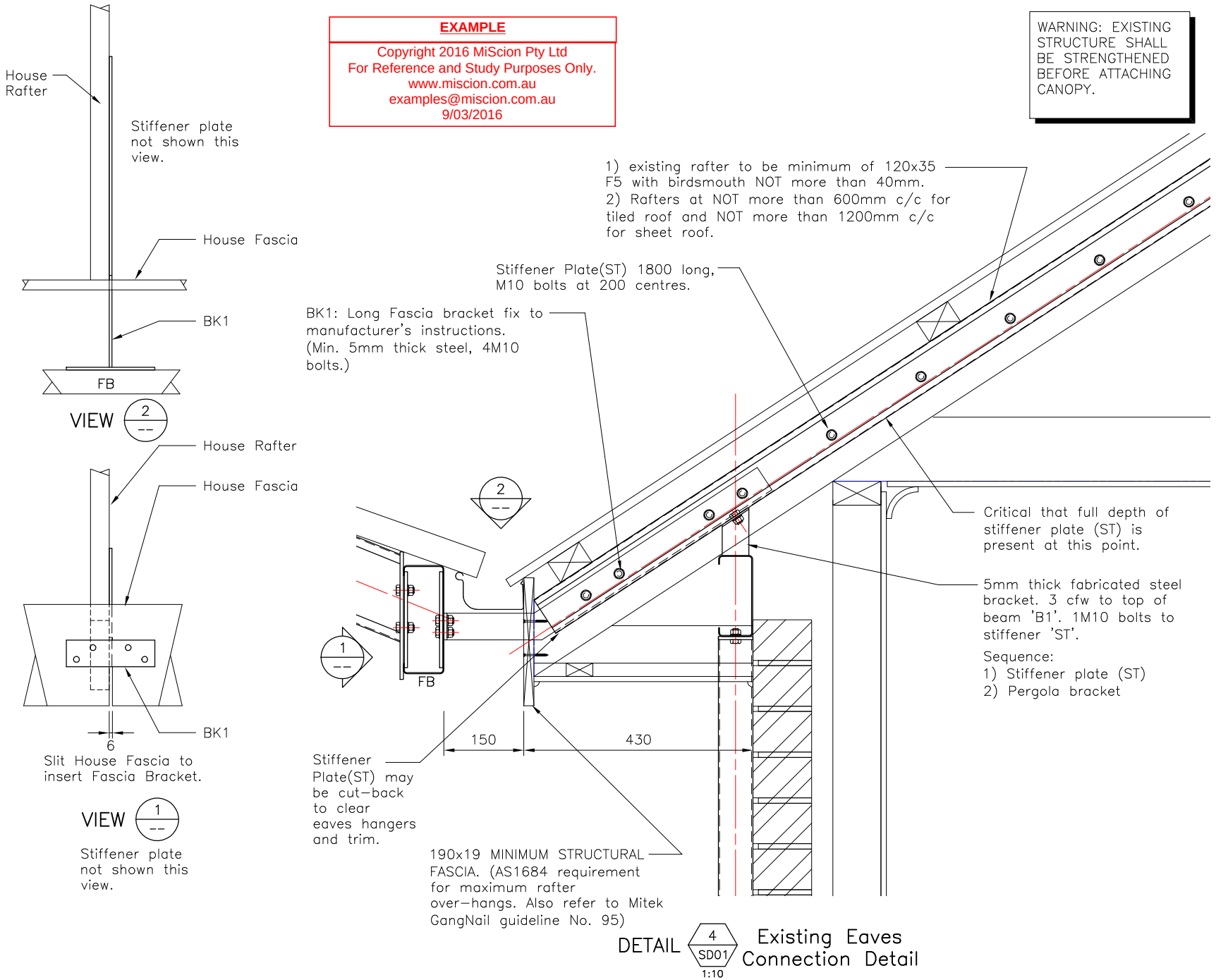
WARNING: EXISTING STRUCTURE SHALL BE STRENGTHENED BEFORE ATTACHING CANOPY.



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PROPOSED CANOPY
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HOUSE CONNECTION

DRAWN	SCH
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SIZE	DRAWING NUMBER	REVISION
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