

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL DRAWINGS & RELEVANT SPECIFICATIONS. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT/ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
2. THESE DRAWINGS SHALL NOT BE SCALED TO OBTAIN DIMENSIONS. SETTING OUT DIMENSIONS SHALL BE VARIED BY THE BUILDER.
3. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODES & BY-LAWS & ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.

1. ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH AS 3600.
2. CONCRETE QUALITY SHALL BE AS TABULATED & SHALL BE VERIFIED BY TEST:

ELEMENT	SLUMP	MAX. SIZE AGGEGATE	MIN. COMPRESSIVE STRENGTH	CEMNT TYPE
FOOTING	80mm	20mm	-	A
SLAB ON GROUND	80mm	20mm	25MPa	A
SLAB (SUSPENDED)	80mm	20mm	-	A
BEAMS	80mm	20mm	-	A
COLUMNS	80mm	20mm	-	A
PIERS	80mm	20mm	25MPa	A

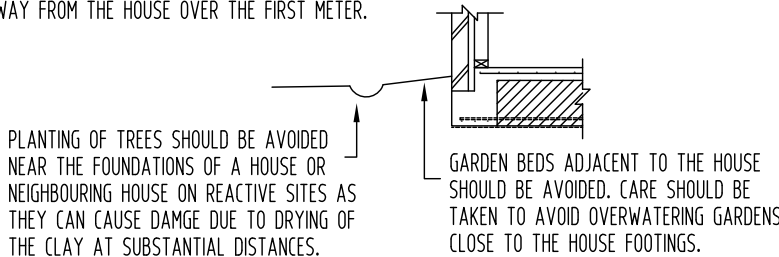
- | | |
|----------------|----------------------------|
| SLAB INTERNAL | 20mm TOP & BOTTOM |
| SLAB EXTERNAL | 30mm TOP & BOTTOM |
| FOOTINGS | 65mm |
| BEAMS INTERNAL | 30mm TOP & BOTTOM |
| SLAB ON GROUND | 20mm TOP & BOTTOM |
| INTERNAL | 20mm TOP & BOTTOM |
| EXTERNAL | 30mm TOP & BOTTOM |
| PERIMETER BEAM | 50mm IN ACID SULPHATE SOIL |

4. CONCRETE SURFACE SHALL BE CURED FOR A MINIMUM PERIOD OF 7 DAYS COMMENCING IMMEDIATELY AFTER INITIAL SET. WHERE CURING COMPOUNDS ARE USED THEY MUST BE APPLIED WITH 2HRS OF FINISHING CONCRETE OR REFER WALLS & COLUMNS STRAIGHT AFTER OF FORMWORK.
5. ALL CONCRETE SHALL BE COMPACTED AT TIME OF PLACING USING A HIGH FREQUENCY MECHANICAL VIBRATOR.
6. CONSTRUCTION JOINTS WHERE NOT SHOWN ON THE DRAWINGS SHALL BE TO THE APPROVAL OF THE ENGINEER.
7. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

1. WATER MUST NOT BE ADDED TO CONCRETE ON SITE AS EXCESSIVELY WET CONCRETE IS ONE OF THE MAIN CAUSES OF SHRINKAGE CRACKING.
2. ENSURE MAX. 20mm TOP COVER TO FABRIC REINFORCEMENT IN ORDER MINIMISE SHRINKAGE CRACKS.
3. SHRINKAGE CRACKING IS ALMOST INEVITABLE & DOES NOT REPRESENT FAILURE HOWEVER, IS OF CONCERN UNDER BRITTLE FLOOR COVERINGS. DAMAGE MAY BE REDUCED BY USING FLEXIBLE MORTARS & GLUES FOR FIXING TILES & FIXING OPERATION MUST BE DELAYED AS LATE AS POSSIBLE.

1. FOOTING HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 250 KPa
FOUNDATION MATERIAL SHALL BE APPROVED FOR THIS PRESSURE BEFORE PLACING CONCRETE FOOTING.
2. FOOTING SHALL BE PLACED CENTRALLY UNDER WALLS & COLUMNS UNLESS OTHERWISE NOTED.
3. SITE IS TO BE STRIPPED OF ALL ORGANIC MATTER & ASSOCIATED TOP SOIL.
4. FILL USED IN THE CONSTRUCTION OF SLAB ON GROUND SHALL CONSISTS OF A CONTROLLED FILL OR ROLLED FILL IN ACCORDANCE WITH AS 2870.
 - A. ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR, ROLLED FILL SHALL NOT EXCEED 600mm COMPACTED IN LAYERS NOT MORE THAN 300mm FOR SAND MATERIAL OR 400mm COMPACTED IN LAYERS.
 - B. CONTROLLED FILL CONSISTS OF WELL GRADED SAND FILL UP TO 800mm DEEP, WELL COMPACTED IN NOT MORE THAN 200mm LAYERS BY VIBRATION PLATE OR VIBRATING ROLLED, NO SAND FILL UP TO 400mm DEEP WELL COMPACTED IN NOT MORE THAN 150 LAYERS BY A MECHANICAL ROLLER, CLAY FILL SHOULD BE MOIST DURING COMPACTING.

1. THE SITE SHALL BE GRADED OR DRAINED SO THAT WATER CONNOTE POND AGAINST OR NEAR THE HOUSE. THE GROUND IMMEDIATELY ADJACENT TO THE HOUSE SHALL BE GRADED TO A UNIFORM FALL OF 50mm MIN. AWAY FROM THE HOUSE OVER THE FIRST METER.



2. A MORE EXTENSIVE DISCUSSION OF THIS MATERIAL IS CONTAINED IN THE CSIRO PAMPHLET 'GUIDE TO HOME OWNERS ON FOUNDATION AND MAINTENANCE & FOOTING PERFORMANCE' & ITS RECOMMENDATIONS SHOULD BE FOLLOWED.
3. THE OWNERS ATTENTION IS DRAWN TO APPENDIX B OF AS 2870-2011 PERFORMANCE REQUIREMENTS & FOUNDATION MAINTENANCE.

1. ALL BRICKS SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 20MPa.
2. BRICKWORK MORTAR MIX SHALL BE 1:1:6 OR 1:0.5:4.5
3. BRICKWORK SURFACES SUPPORTING CONCRETE SHALL BE TROWELLED SMOOTH & COVERED WITH 0.65mm ALUMINIUM CORE BITUMINOUS STRIP OR EQUIVALENT TO PREVENT BONDING OF CONCRETE TO BRICKWORK.
4. FOR VERTICAL ARTICULATION JOINT NOTES REFER TO SHEET '2'

<u>WIND/WALL TIE CLASSIFICATION</u>				
WIND		WALL TIE	HORIZONTAL SPACING	VERTICAL SPACING
CLASS	(Vp)			
N1	W28N1	LIGHT DUTY	600	600
N2	W33N2	MEDIUM DUTY	600	600
N3	W41N3	MEDIUM DUTY	600	430 (5 COURSES)
WALL TIE SPACINGS AROUND OPENINGS 300 CTS. EACH WAY (Vp = PERMISSABLE STRESS METHOD)				

DURABILITY CLASSIFICATION				
CATEGORY (DURABILITY)	WALL TIES AS 3700	GRADE OF BRICKS AS/NZS 4456.10	MORTAR AS 3700	STRUCTURAL STEEL (SURFACE FINISH)
SEVERE MARINE	R4 (STAINLESS OR POLYMER)	EXPOSURE	M4 (1:4)	GALVANISED (GZLP) (600g PER SQUARE METRE)
MARINE	R3	GENERAL PURPOSE	M3 (1:5)	AS/ANZ 2312/2002
EXTERIOR	R2	GENERAL PURPOSE	M2 (1:2.8)	AS/ANZ 2312/2002

1. ALL REINFORCING BARS SHALL COMPLY WITH AS 4671.1. ALL FABRIC SHALL COMPLY WITH AS 4671.7 & SHALL BE SUPPLIED IN FLAT SHEETS.
2. SYMBOLS:

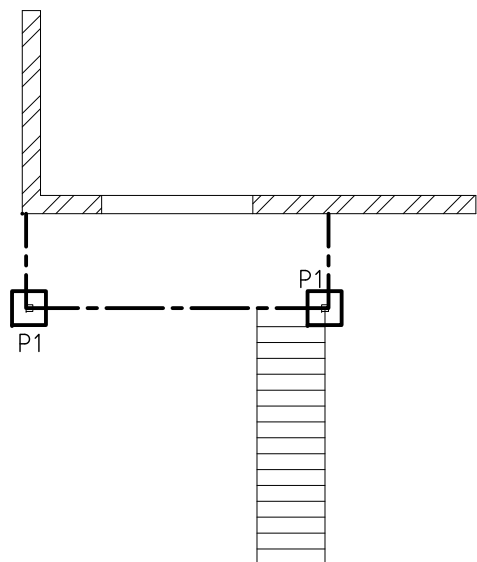
R	-----	GRADE R250 ROUND BARS.
N	-----	GRADE D500 HIGH STRENGTH DEFORMED BARS.
SL	-----	FABRIC OF WELDED HARD DRAWN WIRE.
TM	-----	TRENCH MESH.
3. MINIMUM END & SIDE LAP FOR REINFORCEMENT SHALL BE:

•	SL72 & SL82	-----	300mm
•	SL92, SL11TM, SL1D2 & N12	--	400mm
•	N20	-----	600mm
4. ALL REINFORCEMENT SHALL BE SUPPORTED ON PLASTIC TIPPED STEEL CHAIRS AT 900mm CRS. MAX. EXCEPT SL81 AT 600mm CRS. MAX.
5. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS

1. A PHYSICAL OR CHEMICAL BARRIER IN ACCORDANCE WITH AS 3660, 1-2000 IS TO BE INSTALLED.
2. ALL CONCRETE TO BE MECHANICALLY VIBRATED DURING POUR.
3. 75mm CLEAR SMOOTH CONCRETE TO BE EXPOSED AROUND ENTIRE PERIMETER OF SLAB.
4. CRUSHED GRANITE OR STAINLESS STEEL MESH TO BE USED AROUND ALL PIPE PENETRATIONS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. INSPECTIONS OF THE RESIDENCE & IMMEDIATE SUROUNDS TO BE CARRIED OUT BY A QUALIFIED PEST EXPERT ON AN ANNUAL BASIS.
6. ANY FUTURE CRACKING OCCURING IN THE SLAB IS TO BE ASSESSED BY A QUALIFIED PEST EXPERT & WHERE DIRECTED BE SEALED BY EPOXY INJECTION.
7. SITE MAINTENANCE IS THE RESPONSIBILITY OF THE HOME OWNER. ALL RECOMMENDATIONS OUTLINED BY THE C.S.I.R.O. IN SHEET 10-19 TO BE CARRIED OUT.

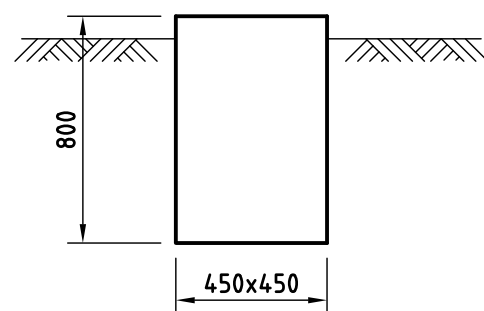
			COMMENCE CONSTRUCTION PTY LTD CONSULTING STRUCTURAL ENGINEERS 46 Kingsgrove Road, Belmore, NSW 2192 Po Box: 488 Belmore, 2192 Mob: 0406915558 Ph: 02 9591 5848 Email: bdoumit@commenceconstruction.com.au	CLIENT: MR & MRS RICHMOND CLIENT REF: A2 - 4552	TITLE: GENERAL NOTES			
				PROJECT: 86 EPPING DRIVE, FRENCHS FOREST, NSW	SCALES AS SHOWN	DESIGNED B.D.	DRAFTED E.W.	APPROVED B.D.
A	CONNECTION DETAILS ADDED FOR STAIR	21.12.15						
-	ISSUED FOR CONSTRUCTION	19.12.15						
REVISION	AMENDMENT	ISSUE DATE						

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-	ISSUED FOR CONSTRUCTION	19.12.15			JOB NO:		DATE:	SHEET NO:
REVISION	AMENDMENT	ISSUE DATE			15-093		19.12.15	2



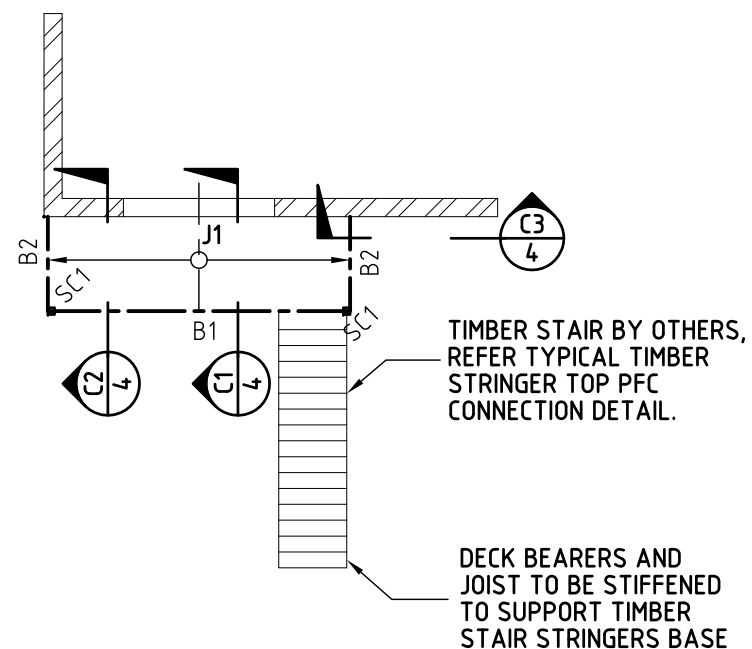
GROUND FLOOR NEW FOOTING

SCALE 1:100



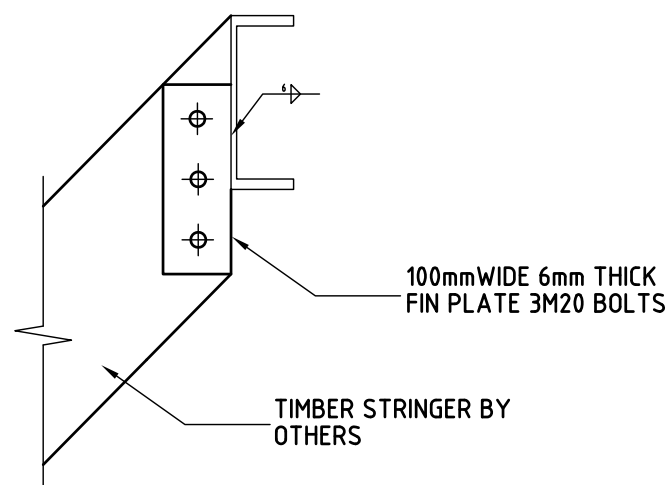
ISOLATED PAD DETAIL 'P1'

SCALE 1:20



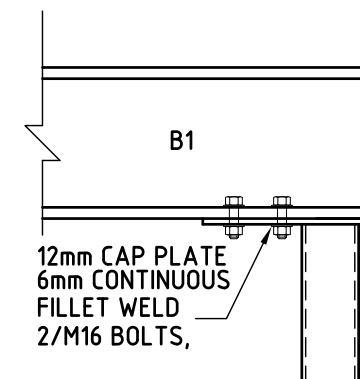
BALCONY STEEL BEAM LAYOUT

SCALE 1:100



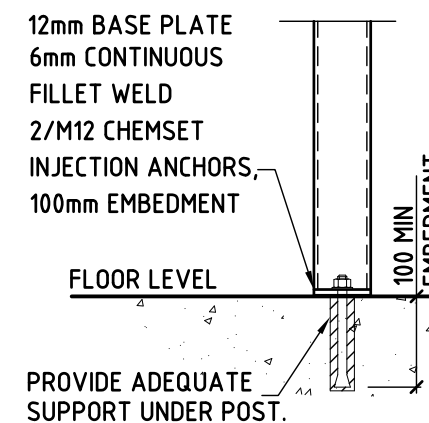
TYPICAL STRINGER AND PFC CONNECTION

SCALE 1:10



SC1 CAP PLATE DETAIL

SCALE 1:10



SC1 BASE PLATE DETAIL

SCALE 1:10

NOTE:
ANY CHANGE IN FLOOR JOIST DIRECTION OTHER THAN DIRECTION SHOWN ON THIS DRAWING TO BE CONFIRMED BY
ENGINEER AS DESIGN LOADS OF FLOOR BEAMS CHANGE AND SIZE OF BEAM WILL NEED TO BE RE-CHECKED.

STEEL BEAM & POST SCHEDULE		
MARK	DESIGNATION	COMMENTS
BEAMS		
B1	230PFC	
B2	230PFC	
POSTS		
SC1	CHS 100x4	REFER POST DETAIL TYPICAL
JOISTS		
J1	200x45 F7 H3 TREATED JOIST	@ 450mm CENTRES

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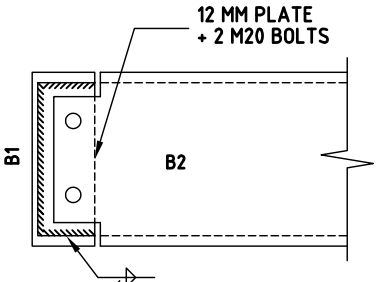
CLIENT:	MR & MRS RICHMOND
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CLIENT REF: A2 - 4552

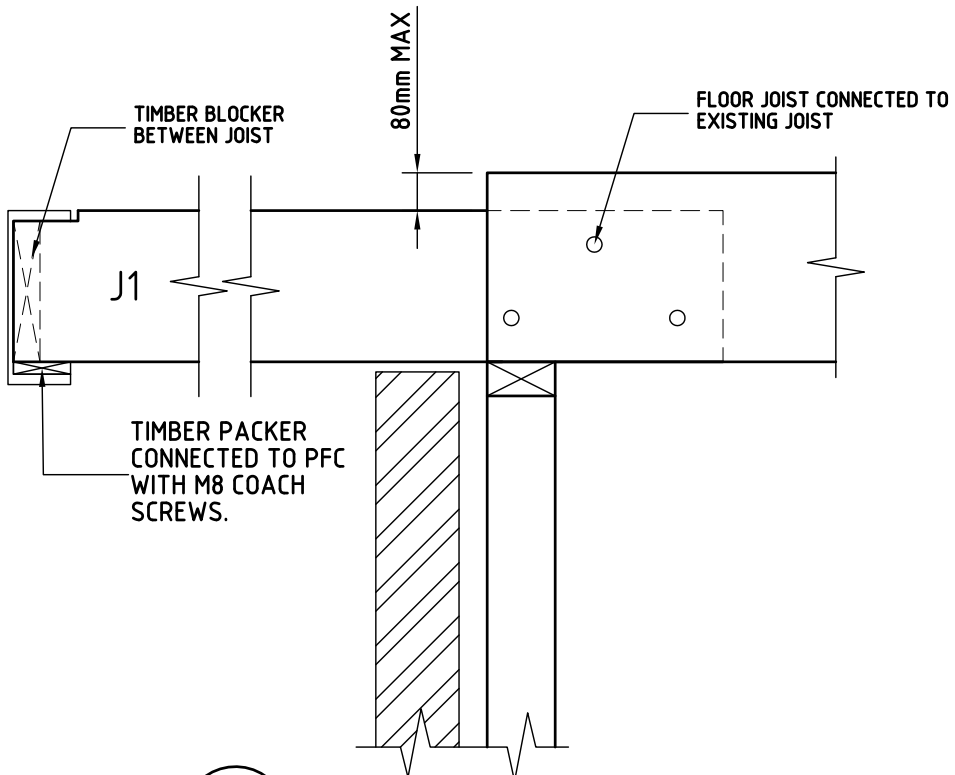
PROJECT: 86 EPPING DRIVE,
FRENCHS FOREST, NSW

TITLE:	FOOTING AND STEEL LAYOUT
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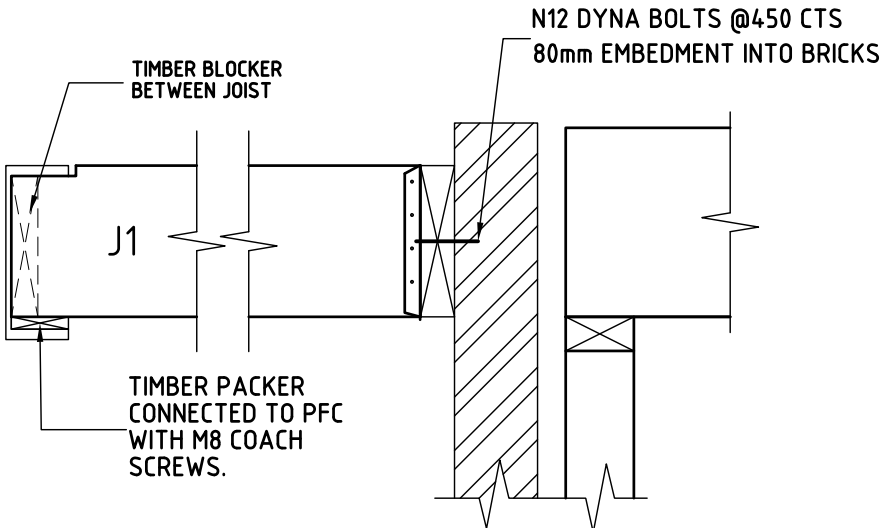
SCALES	DESIGNED	DRAFTED	APPROVED
AS SHOWN	B.D.	E.W.	B.D.
JOB NO:	DATE:	SHEET NO:	
15-093	19.12.15	3	



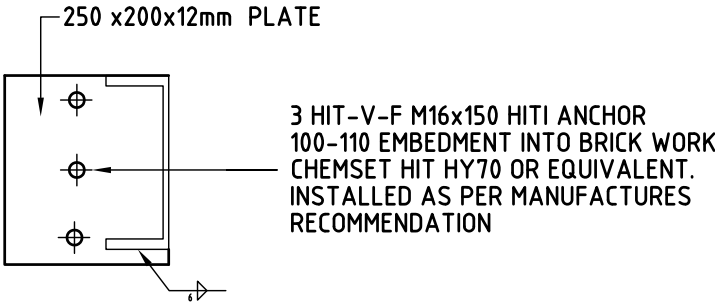
B1 AND B2 CONNECTION DETAIL
SCALE 1:10



SECTION 1
SCALE 1:10



SECTION 2
SCALE 1:10



SECTION 3
SCALE 1:10

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		JOB NO: 15-093		DATE: 19.12.15	SHEET NO: 4