BAKER BUILDING CERTIFICATION
clayton@bakerbuildingcert.com.au
m: 0448 377 172 a: Po Box 1083, Tolga 4882

14th January 2025

Douglas Shire Regional Council
PO Box 359
CAIRNS Q 4870

Attention: Planning Section

Dear Sir/Madam,

Re: Proposed dwelling additions at Lot 2 / SP 102166 - 490 Miallo Bamboo Creek Road MIALLO

Baker Building Certification has been engaged to assess an application for the proposed dwelling additions (ensuite and patio) on the abovementioned allotment. A preliminary assessment of the proposal has indicated that the proposed additions trigger assessment against the rural/rural res and flood and storm tide hazard overlay as outlined in the Douglas Shire Planning Scheme 2018.

Applicant: Francisco Building & Maintenancec/ Baker Building Certification.

6.2.10.3 Rural zone code

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
Setbacks		
PO1 Buildings are setback to maintain the rural character of the area and achieve separation from buildings on adjoining properties.	**AO1** Buildings are setback not less than: a) 40m from a state controlled road b) 25m from property boundary adjoining cape tribulation road c) 20m from the boundary of any other road d) 6m from a side and rear boundary	**Proposed** The side boundary encroachments will not affect the surrounding allotments as the proposed additions are adequately separated from the adjoining allotments which also have structures within the 6m side setback requirements, in effect the encroachments maintain the character of the area as the additions are further setback than other structures within the area. The location of the existing dwelling on the allotment has triggered the reduced setbacks.

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Flood overlay code: The existing dwelling did not flood during the floods in December 2022 and the proposed slab level will be maintained with the new additions. Additionally, the flood hazard overlay in other council planning schemes does not capture class 10a non habitable structures such as a patio, the QDC prevails which does not trigger assessment against to flood hazard overlay for non-habitable patios and the ensuite is less than 50% of the existing floor area, in effect permitted under the QDC MP3.5.

Recommendation

The proposed siting layout request generally appears to satisfy the performance criteria sought from Douglas Shire Planning Scheme; it could be considered acceptable to approve the siting layout request for the proposed additions at 490 Miallo Bamboo Creek Road.

Should you have any further queries please do not hesitate to contact the Officer involved Aaron Sweeney on 0437127724 or aaron@bakerbuildingcert.com.au

Yours faithfully.

Prepared by *Aaron Sweeney A1215391*

Baker Building Certification.

DA Form 2 – Building work details

Approved form (version 1.2 effective 7 February 2020) made under Section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving building work**.

For a development application involving **building work only**, use this form (*DA Form 2*) only. The DA Forms Guide provides advice about how to complete this form.

For a development application involving **building work associated and any other type of assessable development** (i.e. material change of use, operational work or reconfiguring a lot), use *DA Form 1 – Development application details* **and** parts 4 to 6 of this form (*DA Form 2*).

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: *All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).*

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) *(individual or company full name)*	JEREMY FRANCISCO
Contact name *(only applicable for companies)*	
Postal address *(PO Box or street address)*	P. O. BOX 844
Suburb	MOSSMAN
State	QLD
Postcode	4873
Country	AUSTRALIA
Contact number	0427450500
Email address *(non-mandatory)*	j.francisco@bigpond.com
Mobile number *(non-mandatory)*	
Fax number *(non-mandatory)*	
Applicant's reference number(s) *(if applicable)*	

PART 2 – LOCATION DETAILS

2) Location of the premises *(complete 2.1 and 2.2 if applicable)*

***Note**: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.*

2.1) Street address and lot on plan

☑ Street address **AND** lot on plan *(all lots must be listed)*, **or**

☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises *(appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).*

Unit No.	Street No.	Street Name and Type	Suburb

	490	MIALLO BAMBOO CREEK ROAD	MIALLO 4873
Postcode	Lot No.	Plan Type and Number *(e.g. RP, SP)*	Local Government Area(s)
4873	2	SP 102166	DOUGLAS SHIRE COUNCIL

2.2) Additional premises

☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application

☑ Not required

3) Are there any existing easements over the premises?

***Note**: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see the DA Forms Guide*

☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application

☑ No

PART 3 – FURTHER DETAILS

4) Is the application only for building work assessable against the building assessment provisions?

☑ Yes – proceed to 8)

☐ No

5) Identify the assessment manager(s) who will be assessing this development application

6) Has the local government agreed to apply a superseded planning scheme for this development application?

☐ Yes – a copy of the decision notice is attached to this development application

☐ The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached

☐ No

7) Information request under Part 3 of the DA Rules

☐ I agree to receive an information request if determined necessary for this development application

☐ I do not agree to accept an information request for this development application

***Note**: By not agreeing to accept an information request I, the applicant, acknowledge:*

- *that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties.*
- *Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.*

Further advice about information requests is contained in the DA Forms Guide.

8) Are there any associated development applications or current approvals?

☐ Yes – provide details below or include details in a schedule to this development application

☑ No

List of approval/development application	Reference	Date	Assessment manager
☐ Approval ☐ Development application			
☐ Approval ☐ Development application			

9) Has the portable long service leave levy been paid?

☐ Yes – a copy of the receipted QLeave form is attached to this development application ☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid ☑ Not applicable *(e.g. building and construction work is less than $150,000 excluding GST)*		
Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
$		

10) Is this development application in response to a show cause notice or required as a result of an enforcement notice?
☐ Yes – show cause or enforcement notice is attached ☑ No

11) Identify any of the following further legislative requirements that apply to any aspect of this development application			
☐ The proposed development is on a place entered in the **Queensland Heritage Register** or in a local government's **Local Heritage Register**. See the guidance provided at www.des.qld.gov.au about the requirements in relation to the development of a Queensland heritage place			
Name of the heritage place:		Place ID:	

PART 4 – REFERRAL DETAILS

12) Does this development application include any building work aspects that have any referral requirements?
☐ Yes – the *Referral checklist for building work* is attached to this development application ☑ No – proceed to Part 5

13) Has any referral agency provided a referral response for this development application?		
☐ Yes – referral response(s) received and listed below are attached to this development application ☐ No		
Referral requirement	Referral agency	Date referral response
Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application *(if applicable)*		

PART 5 – BUILDING WORK DETAILS

14) Owner's details	
☐ Tick if the applicant is also the owner and proceed to 15). Otherwise, provide the following information.	
Name(s) *(individual or company full name)*	JASMINE QUAID
Contact name *(applicable for companies)*	
Postal address *(P.O. Box or street address)*	490 MIALLO BAMBOO CREEK ROAD
Suburb	MIALLO
State	QLD
Postcode	4873
Country	AUSTRALIA .

Contact number	0417 099 422
Email address *(non-mandatory)*	j933yquaid@hotmail.com
Mobile number *(non-mandatory)*	
Fax number *(non-mandatory)*	

15) Builder's details	
☐ Tick if a builder has not yet been engaged to undertake the work and proceed to 16). Otherwise provide the following information.	
Name(s) *(individual or company full name)*	JEREMY FRANCISCO T/AS FRANCISCO BUILDING & MAINTENANCE
Contact name *(applicable for companies)*	
QBCC licence or owner – builder number	1073196
Postal address *(P.O. Box or street address)*	P.O. Box 844
Suburb	MOSSMAN
State	QLD
Postcode	4873
Contact number	0427450500
Email address *(non-mandatory)*	j.francisco@bigpond.com
Mobile number *(non-mandatory)*	
Fax number *(non-mandatory)*	

16) Provide details about the proposed building work			
What type of approval is being sought?			
☑ Development permit ☐ Preliminary approval			
b) What is the level of assessment?			
☑ Code assessment ☐ Impact assessment *(requires public notification)*			
c) Nature of the proposed building work (tick all applicable boxes)			
☐ New building or structure ☐ Change of building classification *(involving building work)* ☐ Demolition		☑ Repairs, alterations or additions ☐ Swimming pool and/or pool fence ☐ Relocation or removal	
d) Provide a description of the work below or in an attached schedule.			
VERANDA EXTENSION & BATHROOM			
e) Proposed construction materials			
External walls	☐ Double brick ☐ Brick veneer ☐ Stone/concrete	☑ Steel ☑ Timber ☐ Fibre cement	☐ Curtain glass ☐ Aluminium ☐ Other
Frame	☑ Timber ☐ Other	☑ Steel	☐ Aluminium
Floor	☑ Concrete	☐ Timber	☐ Other
Roof covering	☐ Slate/concrete ☐ Aluminium	☐ Tiles ☑ Steel	☐ Fibre cement ☐ Other
f) Existing building use/classification? *(if applicable)*			
g) New building use/classification? *(if applicable)*			
h) Relevant plans			

Note: *Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*

☑ Relevant plans of the proposed works are attached to the development application

17) What is the monetary value of the proposed building work?

$ 90,000.00

18) Has Queensland Home Warranty Scheme Insurance been paid?

☑ Yes – provide details below
☐ No

Amount paid	Date paid (dd/mm/yy)	Reference number
$ 828.50	16/12/24	014882675

PART 6 – CHECKLIST AND APPLICANT DECLARATION

19) Development application checklist

The relevant parts of *Form 2 – Building work details* have been completed	☑ Yes
This development application includes a material change of use, reconfiguring a lot or operational work and is accompanied by a completed *Form 1 – Development application details*	☐ Yes ☑ Not applicable
Relevant plans of the development are attached to this development application ***Note**: Relevant plans are required to be submitted for all aspects of this development application. For furthe information, see DA Forms Guide: Relevant plans.*	☑ Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued *(see 9)*	☐ Yes ☑ Not applicable

20) Applicant declaration

☑ By making this development application, I declare that all information in this development application is true and correct

☑ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

***Note**: It is unlawful to intentionally provide false or misleading information.*

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application.
All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.
Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002.*

PART 7 – FOR COMPLETION BY THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received: _____ Reference numbers: _____

For completion by the building certifier		
Classification(s) of approved building work		
Name	QBCC Certification Licence number	QBCC Insurance receipt number

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

Additional information required by the local government			
Confirm proposed construction materials:			
External walls	☐ Double brick ☐ Brick veneer ☐ Stone/concrete	☐ Steel ☐ Timber ☐ Fibre cement	☐ Curtain glass ☐ Aluminium ☐ Other
Frame	☐ Timber ☐ Other	☐ Steel	☐ Aluminium
Floor	☐ Concrete	☐ Timber	☐ Other
Roof covering	☐ Slate/concrete ☐ Aluminium	☐ Tiles ☐ Steel	☐ Fibre cement ☐ Other

QLeave notification and payment *Note: For completion by assessment manager if applicable*			
Description of the work			
QLeave project number			
Amount paid ($)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

Additional building details required for the Australian Bureau of Statistics			
Existing building use/classification? *(if applicable)*			
New building use/classification?			
Site area *(m^2)*		Floor area *(m^2)*	

GENERAL

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
2. THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR STRUCTURAL ENGINEERING PURPOSES ONLY. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE STRUCTURAL DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
   IF IN DOUBT - ASK.
3. CONSTRUCTION FROM THESE DRAWINGS AND ASSOCIATED CONSULTANTS' DRAWINGS SHALL NOT COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES AND THE NCC EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
5. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. ENGINEERS' DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
6. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
7. UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.

DESIGN CRITERIA

1. THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND LOCAL GOVERNMENT ORDINANCES FOR THE FOLLOWING DESIGN CRITERIA :

DESIGN LOADS		
AREA	LIVE LOAD	SUPERIMPOSED DEAD LOAD
GENERAL	1.5 kPa	NIL
ROOF	0.25 kPa	NIL

2. WIND
   WIND LOADS ARE IN ACCORDANCE WITH AS1170.2 AS FOLLOWS:
   DESIGN WIND VELOCITY (V_{des}) ..... 61 m/s
   REGION C
   WIND CLASSIFICATION C2
   TERRAIN CATERGORY 2.5
   BCA STRUCTURE IMPORTANCE LEVEL 2
3. CONCRETE ELEMENTS HAVE BEEN DESIGNED FOR THE FOLLOWING DURABILITY EXPOSURE TO AS 3600 (B1 EXPOSURE U.N.O.)
   EXTERNAL B1
   FOOTINGS B1
4. FOOTINGS
   ASSUMED 100 kPa ALLOWABLE BEARING PRESSURE AND 25 kPa SKIN FRICTION.
   CONTRACTOR SHALL CONFIRM ON SITE.

SAFETY IN DESIGN

1. CONSTRUCTION WORK UNDERTAKEN BY THE BUILDER/CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE WORK PLACE HEALTH AND SAFETY ACT.
2. CONSTRUCTION ACTIVITY CAN BE HAZARDOUS. POTENTIAL SAFETY HAZARDS CONSIDERED BY THE DESIGNERS TO HAVE A HIGHER RISK THAN NORMAL CONSTRUCTION ACTIVITY ARE IDENTIFIED WITH APPROPRIATE NOTES ON THESE DRAWINGS. IT SHOULD BE NOTED THAT DESIGNERS HAVE A LOWER LEVEL OF UNDERSTANDING OF THE RISKS INVOLVED IN CONSTRUCTION COMPARED TO THAT OF A COMPETENT CONTRACTOR. IT IS THEREFORE ESSENTIAL THAT AN ADEQUATE SAFETY PLAN IS PREPARED BY THE CONTRACTOR FOR THE WORKS. SAFETY PLANS ARE TO BE PREPARED IN COMPLIANCE WITH THE STATUTORY REQUIREMENTS. THE DESIGNERS MAY NOT BE AWARE OF ALL SAFETY RISKS AND HAZARDS INVOLVED IN THIS PROJECT AND THE ABSENCE OF COMMENT DOES NOT IMPLY THAT THERE ARE ONLY LOW LEVEL RISKS OR HAZARDS INVOLVED IN THIS PROJECT. APPROPRIATE WORK METHOD STATEMENTS ARE TO BE PREPARED FOR ANY HIGH RISK ACTIVITY BY THE CONTRACTOR. THE DESIGNERS ARE AVAILABLE TO BE CONSULTED WHEN REQUIRED CONCERNING THEIR AREA OF CONTROL WITH REGARD TO SAFETY PLANS.
3. PRIOR TO FABRICATION OF STEELWORK THE CONTRACTOR SHALL AGREE WITH THE ENGINEER ON AREAS OF RISK WHICH HAVE BEEN ADDRESSED BY THE DESIGN WHERE POSSIBLE AND AGREE ON SUITABLE CONSTRUCTION PROCEDURES WHERE AREAS OF RISK STILL EXIST.
4. PRIOR TO ANY FABRICATION THE CONTRACTOR SHALL HAVE COMPLETED A RISK ASSESSMENT OF ALL CONSTRUCTION PROCEDURES AND ENSURED THAT WHERE POSSIBLE, ALL RISKS HAVE BEEN ELIMINATED AND WHERE NOT POSSIBLE THEIR SAFETY PLAN HAS ADDRESSED THOSE ISSUES AND IT HAS BEEN FORMULATED AND DOCUMENTED FOR STRICT ADHERENCE DURING THE CONSTRUCTION WORKS.
5. PRIOR TO THE USE OF THE PROJECT AS DESIGNED, THE OWNER SHALL HAVE COMPLETED A RISK ASSESSMENT OF ALL WORK PRACTICES AND ENSURED THAT WHERE POSSIBLE ALL RISKS HAVE BEEN ELIMINATED AND WHERE NOT POSSIBLE THEIR SAFETY PLAN HAS ADDRESSED THOSE ISSUES AND IT HAS BEEN FORMULATED AND DOCUMENTED FOR STRICT ADHERENCE AFTER COMMISSIONING.

FOOTING NOTES

1. THE BUILDER SHALL ALLOW TO ENGAGE AN APPROVED GEOTECHNICAL ENGINEER IN ACCORDANCE WITH THE EARTHWORKS AND THE BORED PIER SECTIONS OF THE SPECIFICATIONS TO CARRY OUT ALL INSPECTIONS AND TESTING TO CERTIFY THAT THE FOUNDING MATERIAL FOR HIGH LEVEL FOOTINGS AND OR THE CAPACITY OF BORED PIERS COMPLIES WITH THAT NOMINATED IN THE DOCUMENTATION. THE CERTIFICATION IS TO BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND.
2. THE SLAB HAS BEEN DESIGNED AS A 'M' SITE CLASSIFICATION IN ACCORDANCE WITH AS2870. THE ENGINEER SHALL BE CONTACTED IF THE SITE CONDITIONS VARY.
3. AN ALLOWABLE BEARING PRESSURE FOR HIGH LEVEL FOOTINGS OF 100 KPa HAS BEEN ASSUMED IN THE DESIGN OF THE FOOTINGS. FOR BORED PIERS AN ULTIMATE END BEARING PRESSURE OF 100 kPa AND SKIN FRICTION OF 25 kPa HAS BEEN ASSUMED IN THE DESIGN OF THE FOOTINGS.
4. WHERE REQUIRED FOUNDING MATERIAL IS DEEPER THAN THE UNDERSIDE OF THE HIGH LEVEL FOOTINGS AS DETAILED ALLOW TO BACKFILL ADDITIONAL EXCAVATION WITH N20 CONCRETE.
5. WHERE EXCAVATION WORK IS TO BE CARRIED OUT ADJACENT TO EXISTING FOOTINGS THE EXACT LEVEL OF THE UNDERSIDE OF THE FOOTINGS SHALL BE DETERMINED BY TEST PITS PRIOR TO EXCAVATION. UNDERPINNING SHALL BE CARRIED OUT AS DETAILED OR REQUIRED BY THE STRUCTURAL ENGINEER
6. ALL FOOTING EXCAVATIONS SHALL BE FORMED AS NECESSARY WHEN EXCAVATED FACE IS NOT STABLE, DEWATERED AND CLEANED OF LOOSE AND SOFT MATERIAL PRIOR TO PLACING CONCRETE.
7. ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH SUPPORTING FOOTINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

CONCRETE

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH CURRENT EDITIONS OF AS 1379, AS 3600 AND AS3610 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. REFER ALSO TO INSITU CONCRETE, FORMWORK AND REINFORCEMENT SECTION OF THE SPECIFICATIONS.
2. CONCRETE STRENGTH GRADE FOR PARTICULAR ELEMENTS SHALL BE AS NOTED ON THE DRAWINGS.
3. SIZE OF ELEMENTS IS EXCLUSIVE OF APPLIED FINISHES. BEAMS DEPTHS INCLUDE SLAB THICKNESS AND ARE THE FIRST DIMENSION SPECIFIED, FOLLOWED BY WIDTH. UNLESS NOTED OTHERWISE ALL FORMED EDGES AND CORNERS OF CONCRETE MEMBERS SHALL HAVE 20mm CHAMFERS.
4. CONSTRUCTION JOINTS SHALL BE MADE ONLY AT APPROVED LOCATIONS, AND, IN BEAMS AND SLABS SHALL BE CONSTRUCTED WITH A SHEAR KEY TO ENGINEER'S DETAIL U.N.O. SURFACES OF CONCRETE AT ALL JOINTS SHALL BE THOROUGHLY MECHANICALLY SCABBLED, FULLY EXPOSING THE AGGREGATE MIX, UNLESS OTHERWISE NOTED.
5. ALL REINFORCEMENT SHALL BE TO AS/NZS 4671 AND REINFORCEMENT GRADE IS DESIGNATED AS FOLLOWS:
   R: PLAIN ROUND BAR, GRADE 250
   N: DEFORMED BAR, GRADE 500
   SL/RL: WIRE REINFORCING FABRIC GRADE 500
6. REINFORCEMENT SHALL BE BENT COLD IN ACCORDANCE WITH AS3600 EXCEPT WHERE APPROVED BY THE STRUCTURAL ENGINEER. NO REBENDING SHALL BE PERMITTED.
7. DO NOT CUT REINFORCEMENT ON SITE TO CLEAR PENETRATIONS. DISPLACE REINFORCEMENT SLIGHTLY AS NECESSARY TO CLEAR BLOCKOUTS.
8. CONCRETE COVER AND LAPS TO REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS.
9. APPLY EVAPORATION RETARDER AND CURE ALL CONCRETE IN ACCORDANCE WITH THE CONCRETE SPECIFICATIONS.
10. FORMWORK SHALL REMAIN UNDISTURBED FOR THE MINIMUM STRIPPING TIMES SPECIFIED IN AS3610, UNLESS OTHERWISE APPROVED.

TABLE 1 - CONCRETE QUALITY			
ELEMENT	STRENGTH GRADE	SLUMP (mm)	MAX. AGGREGATE SIZE (mm)
BORED PIERS	N25	80 ± 15	20
FOOTINGS	N25	80 ± 15	20
SLAB ON GROUND	N25	80 ± 15	20
SUSPENDED SLAB	N32	80 ± 15	20
BLINDING	N7	80 ± 15	

TABLE 2 - CLEAR COVER TO REINFORCEMENT. (UNO)			
ELEMENT	TOP (mm)	BOTTOM (mm)	SIDE (mm)
BORED PIERS	70	100	70
FOOTINGS	50	50	50
INT SLAB ON GROUND	30	50	50
EXT SLAB ON GROUND	40	50	50
INT SUSPENDED SLAB			
EXT SUSPENDED SLAB			

REINFORCEMENT

1. ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671 UNLESS NOTED OTHERWISE. IT SHALL BE CUT AND BENT IN ACCORDANCE WITH AS3600. ACCEPTABLE MANUFACTURERS AND PROCESSORS OF STEEL REINFORCEMENT MUST HOLD A VALID CERTIFICATE OF APPROVAL, ISSUED BY THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING STEELS (ACRS), OR TO SUCH AN EQUIVALENT CERTIFICATION SYSTEM AS MAY BE APPROVED IN WRITING BY THE SPECIFIER. EVIDENCE OF COMPLIANCE WITH THIS CLAUSE MUST BE OBTAINED WHEN CONTRACT BIDS ARE RECEIVED. ALL MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.
   THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L ,TM IS THE REFERENCE NUMBER FOR FABRIC TO AS4671.
2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
   REINFORCEMENT ABBREVIATIONS:

EF	.....	EACH FACE	T OR TOP	.....	TOP
NF	.....	NEAR FACE	B OR BTM	.....	BOTTOM
FF	.....	FAR FACE	HORIZ	.....	HORIZONTAL
EW	.....	EACH WAY	VERT	.....	VERTICAL

3. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS SHOWN IN THE TABLE BELOW.

TABLE 6 - LAP SCHEDULE			
BAR DIA.	LENGTH (mm)	BAR DIA.	LENGTH (mm)
R6	300	N20	800
R10	400	N24	1000
N12	500	N28	1800
N16	600	N32	2200

4. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER. WHERE APPROVED, WELDING MUST COMPLY WITH AS1554.3 STANDARD STEEL WELDING, PART 3 : WELDING OF REINFORCING STEEL. NO WELDING IS ALLOWED WITHIN 120mm OF BENDS.
5. FABRIC SHALL BE LAPPED TWO TRANSVERSE WIRES PLUS 25mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.
6. WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-300 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400 mm UNLESS NOTED
7. JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.
8 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR CONCRETE CHAIRS.
9 SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA. REINFORCEMENT SHALL NOT BE REBENT WITHOUT APPROVAL OF THE SUPERINTENDENT.
10 THE STRUCTURAL ENGINEER SHALL BE GIVEN 48 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FROM THE STRUCTURAL ENGINEER.

STRUCTURAL STEELWORK

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH CURRENT EDITIONS OF AS4100, AS/NZS 1554 - 1 AND 2 AND AS4600 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. REFER ALSO TO THE STRUCTURAL STEELWORK SECTION OF THE SPECIFICATIONS.
2. ALL STEEL SHALL COMPLY WITH THE FOLLOWING U.N.O. :
   - WELDED SECTION - GRADE 300 TO AS/NZS 3678.2
   - ROLLED SECTION - GRADE 300 TO AS/NZS 3679.2
   - SHS AND RHS - GRADE 350/GRADE 450 TO AS 1163
   - CHS - GRADE 250/GRADE 350 TO AS 1163
   - FLAT PLATE - GRADE 300 TO AS/NZS 3679.2
   - STANDARD PLATE - GRADE 250 TO AS/NZS 367
3. THE CONTRACTOR SHALL UNLESS SPECIFIED ELSEWHERE:
   (a) PROVIDE AND EMPLOY ANY ADDITIONAL TEMPORARY BRACING ETC. NECESSARY TO ADEQUATELY HOLD STEELWORK IN POSITION DURING CONSTRUCTION. CARRY OUT ERECTION OF STEELWORK IN ACCORDANCE WITH AS3828 GUIDELINES FOR THE ERECTION OF BUILDING STEELWORK.
   (b) PROVIDE ALL PACKS, CLEATS, BOLTS (INCL. H.D. BOLTS) ETC. REQUIRED FOR TEMPORARY AND PERMANENT ERECTION OF STEELWORK AND FOR ATTACHMENT OF TIMBER AND MISCELLANEOUS FRAMING.
   (c) ALL PURLINS AND GIRTS SHOWN ON DRAWINGS ARE FOR DIAGRAMMATICAL PURPOSES ONLY. THE CONTRACTOR SHALL ALLOW FOR ANY ADDITIONAL PURLINS / GIRTS AS REQUIRED TO SUIT OPENINGS, PENETRATIONS, EDGES OF ROOF SHEET, etc.
4. ALL STRUCTURAL STEELWORK TO BE HOT DIP GALVANISED. UNLESS NOTED OTHERWISE.
5. PROPRIETARY ITEMS (E.G. PURLINS, ROOF/WALL SHEETING, BOLTS ETC.) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. FOR LAPPED PURLINS/GIRTS USE M12 4.6/S PURLIN BOLTS AND FOR UNLAPPED PURLINS/GIRTS USE M12 4.6/S SHOULDERED PURLIN BOLTS. SHOULDERED PURLIN BOLT HEAD TO BE AGAINST COLD FORMED SECTION. ALL PURLIN/GIRT BOLTS SHALL HAVE INTEGRAL WASHERS.
6. MINIMUM WELDING REQUIREMENTS IF NOT OTHERWISE SPECIFIED SHALL BE AS FOLLOWS:-
   - ALL WELDS CATEGORY S.P 6mm CONTINUOUS FILLET WELDS, OR WHERE NOTED, COMPLETE PENETRATION BUTT WELDS (C.P.B.W.) USING E48XX ELECTRODES WITH CATEGORY S.P. INSPECTION WITH ALL WELDS 100% VISUALLY SCANNED, ALL TO AS/NZS 1554.1 UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE PERFORMED BY A QUALIFIED WELDER IN ACCORDANCE WITH AS/NZS 1554.1.
7. EXTENT OF WELD INSPECTION/TESTING TO BE:
   VISUAL SCANNING : 100% OF WELDS
   VISUAL EXAMINATION: 100% OF BUTT WELDS IN TENSION MEMBERS AND 50% OF OTHER WELDS.
   RADIOGRAPHIC OR ULTRASONIC: 10% OF BUTT WELDS IN TENSION MEMBERS AND 5% OF OTHER WELDS.
   GRIND WELDS SMOOTH AND FLUSH WITH PARENT METAL WHERE NOMIMATED ON DRAWINGS.
   GRIND ONLY IN LONGITUDINAL DIRECTION OF MEMBER. WELDS TO BE INSPECTED BY INDEPENDENT NATA ACCREDITED QUALIFIED WELDING INSPECTOR TO AS2214. PROVIDE WELDING INSPECTORS REPORT TO SUPERINTENDENT.
8. SITE WELDS WHERE NOTED IN THE DOCUMENTATION SHALL BE THOROUGHLY WIRE BRUSHED CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATION.
9. ALL BOLTS, NUTS AND WASHERS, INCLUDING HOLD DOWN BOLTS, CAST-IN FERRULES, CAST-IN PLATES AND MASONRY ANCHORS ARE TO BE HOT DIP GALVANIZED U.N.O. ALL GALVANIZED COMPONENTS TO BE CAST INTO CONCRETE MUST BE PASSIVATED. UNLESS NOTED OTHERWISE STEEL TO STEEL CONNECTIONS ARE M20 8.8/S AND HOLD DOWN BOLTS ARE M20 4.6/S.
10. BOLT TYPES SHALL BE AS FOLLOWS:-
    * 4.6/S -COMMERCIAL BOLTS TO AS1111 AND AS1112, SNUG TIGHTENED
    * 8.8/S -HIGH STRENGTH STRUCTURAL BOLTS TO AS/NZS 1252, SNUG TIGHTENED ONLY.
    USE BOLTS WITH THREADS IN COMPLIANCE WITH AS1275.
    USE BOLT LENGTHS SO THAT PROJECTION BEYOND NUT IS AT LEAST TWO (2) THREADS, AND NOT MORE THAN 10 mm.
11. ALL STRUCTURAL STEEL FIXING DETAILS ARE TO BE BASED ON AISC STANDARDIZED STRUCTURAL CONNECTIONS U.N.O
12. ALL PLATES ARE TO BE 10mm THICK UNO. ALL PLATES TO BE FROM STANDARD SQUARE EDGE FLATS U.N.O.
13. THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGNS ARE MET. ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP. BEAMS AND TRUSSES OVER 6m SHALL BE PRECAMBERED 1 IN 500 UNLESS NOTED OTHERWISE. ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.
14. THE CONTACT SURFACES FOR HIGH STRENGTH FULLY TENSIONED BOLTED CONNECTIONS SHALL BE CLEAN "AS ROLLED" AND NOT PAINTED. FULLY TENSION BOLTS BY THE "PART TURN METHOD OF TIGHTENING", OR BY LOAD INDICATING WASHERS.
15. GROUT TO BASE PLATES: A SPACE FOR 40mm OF 2:1 SAND:CEMENT MORTAR OF DAMP EARTH CONSISTENCY RAMMED FOR COMPACTION. ALTERNATIVELY USE NON-SHRINK GROUT APPLIED TO MANUFACTURER'S SPECIFICATIONS.
16. COATING REPAIRS: REINSTATE COATING TO DAMAGED AREAS TO PROTECTIVE COATINGS SPECIFICATION. FIELD WELD REPAIRS: DO NOT WELD THROUGH EXISTING GALVANISING OR COATINGS. REMOVE WELD SPLATTER, RESIDUAL FLUX etc BY CHIPPING, GRINDING OR ABRASIVE BLAST CLEANING. GRIND FLUSH ROUGH WELD BEADS. PREPARE SURFACE FOR PAINTING AS PER COATING SPECIFICATION. REMOVE RUST, LOOSE AND BURNT PAINT AND SUFFICIENT SOUND COATING SO PAINT EDGE IS FEATHERED AND SMOOTH. STRIPE COAT ALL WELDS, EDGES AND ROUGH SURFACES USING A BRUSH. REINSTATE COATING AS PER PROTECTIVE COATINGS SPECIFICATION.
17. REPAIR DAMAGE TO GALVANIZED COATING TO AS/NZS 4680 SECTION 8 REPAIR AFTER GALVANIZING. USE ORGANIC TWO-PACK ZINC RICH EPOXY COATING COMPLYING WITH AS/NZS 3750.9 APPLIED IN TWO COATS EACH 50 MICRON, MINIMUM TOTAL DRY FILM THICKNESS 100 MICRONS. DO NOT USE SPRAY CANS OF 'COLD GALV' OR ZINC ALLOY SOLDER 'STICKS'. SURFACE PREPARATION OF EXPOSED BARE STEEL TO BE ABRASIVE BLAST CLEANED TO AS 1627.4, CLASS 2½ (PREFERRED) OR POWER TOOL CLEANED TO AS 1627.2 CLASS ST 3. LIGHTLY SWEEP BLAST GALVANIZED SURFACES.
18. PROTECTIVE COATINGS ARE TO BE SHOP APPLIED AND CURED IN WORKSHOP IN ACCORDANCE WITH MANUFACTURER S RECOMMENDATIONS UNLESS APPROVED OTHERWISE IN WRITING BY SUPERINTENDENT. PROTECTIVE COATINGS ARE TO BE SMOOTH, UNIFORM AND WITHOUT RUNS, BEADS, PINHOLES, SURFACE CRAZING OR OTHER IMPERFECTIONS.
19. UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATION, SURFACE TREATMENT OF EXPOSED STEELWORK FOR ATMOSPHERIC CORROSION PROTECTION TO BE PUR5. APPLY PROTECTIVE COATINGS AS PER SYSTEM/SYSTEMS PUR5 OF AS/NZS2312 TABLE 6.3 IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. REPORT QA RECORDS IN A FORMAT SIMILAR TO AS3894 PARTS 10 TO 14. NON-SPECIFIED COLOURS WILL BE SELECTED BY THE SUPERINTENDENT.
20. DISSIMILAR METALS TO BE SEPERATED WITH INERT MATERIAL.

TIMBER

1. ALL TIMBER DESIGN, MATERIAL AND CONSTRUCTION SHALL BE TO AS 1720.1 AND AS1720.2.
2. SOFTWOOD TO BE MINIMUM STRESS GRADE MPG12, J4 JOINT GROUP UNO. HARDWOOD TO BE MINIMUM GRADE F14 UNLESS NOTED OTHERWISE. SUBMIT SUPPLIERS CERTIFICATE AS TO STRESS GRADE OF TIMBER MEMBERS. ALL TIMBER SHALL BE BRANDED.
3. EXTERNAL TIMBER SHALL BE EITHER SEASONED HARDWOOD WITH DURABILITY CLASS I OR II, JOINT CLASS JD2 OR JD3 TO AS 1720.2 OR IMPREGNATED PINE GRADE F7, PRESSURE TREATED MINIMUM H3 TREATMENT UNLESS SPECIFIED OTHERWISE, TO AS 1604 AND RE-DRIED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. SUPPLY SUPPORTING DOCUMENTATION FOR PRESERVATIVE TREATMENT.
4. ALL BOLTS IN TIMBER CONSTRUCTION SHALL BE MINIMUM M16 UNLESS NOTED AND SHALL BE GALVANISED. BOLTS SHALL BE RETIGHTENED AT THE END OF THE MAINTAINANCE PERIOD. BOLT HOLES SHALL BE DRILLED NO MORE THAN 1 mm OVERSIZE.
   FLAT WASHERS ARE TO BE USED ANYWHERE THE HEAD OF A BOLT OR COACH SCREW, A NUT, OR SPRING WASHER WOULD OTHERWISE BEAR ON A TIMBER ELEMENT. FLAT WASHERS ARE NOT REQUIRED WHERE THE HEAD OR NUT BEARS ON A STEEL PLATE. UNLESS NOTED OTHERWISE, FLAT WASHERS BEARING AGAINST TIMBER SHALL HAVE THE FOLLOWING MINIMUM OUTSIDE DIAMETER

WASHERS				
NOMINAL FASTENER SIZE	M8	M16	M20	M24
NOMINAL OUTSIDE DIAMETER	36mm	55mm	65mm	75mm

   SPRING WASHERS SHALL BE STANDARD HELICAL SPRING-LOCK WASHERS. SPRING WASHERS ARE TO BE INSTALLED UNDER THE NUT ON ALL BOLTS CONNECTING TIMBER ELEMENTS.
5. TIMBER DIMENSIONS SHALL BE NOT LESS THAN:

TIMBER DIMENSIONS TOLERANCES	
SEASONED SOFTWOOD	+5mm , -0mm
UNSEASONED SOFTWOOD	< F7 +3mm , -3mm
UNSEASONED SOFTWOOD	> F7 +2mm , -4mm
SEASONED HARDWOOD	+2mm , -0mm
UNSEASONED HARDWOOD	+3mm , -3mm
SEE ALSO CLAUSE 1.6.2 IN AS 2082	

6. ALL TIMBER JOINTS AND NOTCHES ARE TO BE 100mm MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS. ALL TRUSSES AND RAFTERS SHALL BE FIXED TO TOP PLATE WITH METAL PLATE CONNECTORS.
7. FIELD-CUT SURFACES ARE TO BE TREATED TO REFUSAL / SATURATION WITH COPPER NAPHTHENATE PRESERVATIVE, END GRAIN IS TO BE COATED WITH ANCHOR SEAL PARAFFIN SEALANT. TREAT BEAMS AS SOON AS POSSIBLE AFTER CUTTING. ENSURE CUTS ARE CLEAN AND FREE OF SAWDUST OR DEBRIS PRIOR TO TREATING.
8. BRACE WALLS TO HAVE MINIMUM J4 OR JD4 JOINT STRENGTH.

CHEMICAL ANCHOR NOTES

1. ALL CHEMICAL/EPOXY FIXED ANCHORS SHALL BE RAMSET CHEMSET INJECTION 801 SERIES EPOXY ANCHORS U.N.O
2. ALL ANCHOR STUDS SHALL BE FULLY THREADED GALVANISED STEEL STUDS U.N.O
3. ALL ANCHORS SHALL BE SUPPLIED AND INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
4. WHERE CHEMICAL ANCHORS ARE TO BE USED, THE REINFORCEMENT SHALL BE REPOSITIONED LOCALLY SO AS TO AVOID CLASHES WITH THE ANCHOR INSTALLATION.
5. ALL ANCHOR INSTALLATIONS SHALL CONFORM TO THE FOLLOWING MINIMUM DISTANCES U.N.O

ANCHOR DISTANCES	STUD SIZE				
	M10	M12	M16	M20	M24
MINIMUM EMBEDMENT (mm)	90	110	125	150	160
MINIMUM EDGE DISTANCE (mm)	40	50	60	80	95

LEGEND

- 200 ..... DENOTES MINIMUM CONCRETE SLAB THICKNESS.
- C25/30 ..... CONCRETE COLUMN OVER.
- C25/30 ..... CONCRETE WALL OVER.
- LOAD BEARING BLOCKWORK WALL OVER.
- NON LOAD BEARING BLOCKWORK WALL OVER.
- BRICKWORK WALL OVER.
- EXISTING COLUMN OR WALL.
- LOAD BEARING ELEMENT UNDER.
- ZZZ ..... DEMOLITION WORKS. (REFER ARCHITECT DWGS)
- DENOTES TOP OF SLAB PROFILE STEP.
- DENOTES 2-N12 TRIMMER BARS x1200 LONG. TIED TO U/S OF MESH AT ALL SLAB RE-ENTRANT CORNERS.
- DENOTES WET AREA SLAB SETDOWN. REFER ARCHITECT DWGS.
- DENOTES STEEL CAST-IN FIXING. REFER TO TYPICAL STRUCTURAL STEELWORK DRAWING FOR DETAIL.

ABBREVIATIONS

- #(u) ..... MEMBER UNDER
- #(o) ..... MEMBER OVER.
- #(c) ..... MEMBER CONTINUOUS.
- BW# ..... LOAD BEARING BLOCKWORK WALL TYPE.
- BL# ..... BLOCKWORK LINTEL TYPE.
- BWP# ..... BLOCKWORK PIER TYPE.
- LBW ..... LOAD BEARING STUD FRAMED WALL.
- TR ..... STANDARD TIMBER TRUSS.
- GT ..... GIRDER TRUSS.
- HT ..... HIP TRUSS.
- STF ..... STRUCTURAL FASCIA.
- FB ..... FLYBRACE.
- BR ..... PROPRIETARY BRIDGING.
- SP ..... MEMBER SPLICE LOCATION.

Rev.	Date	Description	Des.	Verif.	Appd.
A	12.12.24	ISSUED FOR CONSTRUCTION	ML	ML	ML

CERTIFICATION

M. LANCINI RPEQ 18786

MAL Engineers

		Date
Drawn	NB	4.12.24
Checked	ML	4.12.24
Designed	ML	4.12.24
Verified	ML	4.12.24
Approved	M. LANCINI	12.12.24

Client: JASMINE QUAID

Project: PROPOSED EXTENSION
490 MIALLO, BAMBOO CREEK ROAD

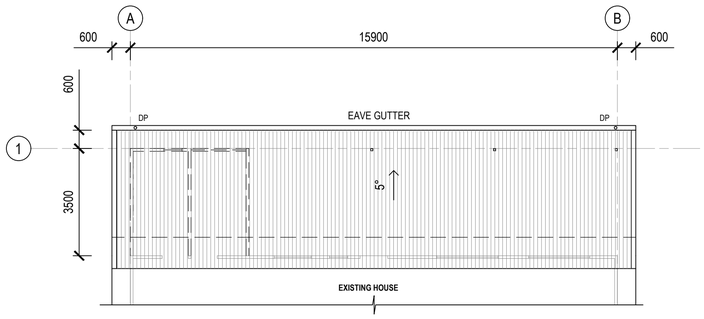
Title: GENERAL CONSTRUCTION NOTES

Status: FOR CONSTRUCTION

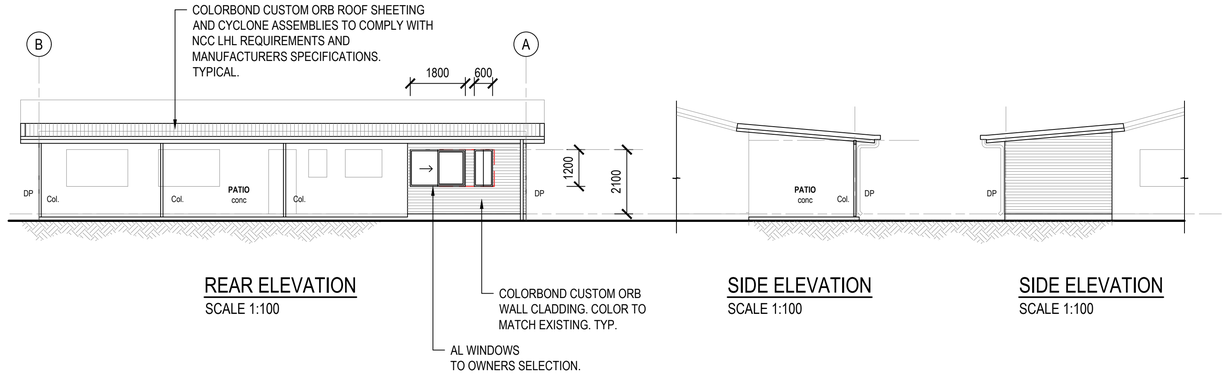
Datum		Scale	Size
AHD		AS SHOWN	A1

Drawing Number: Q24530-ST-01

Revision: A



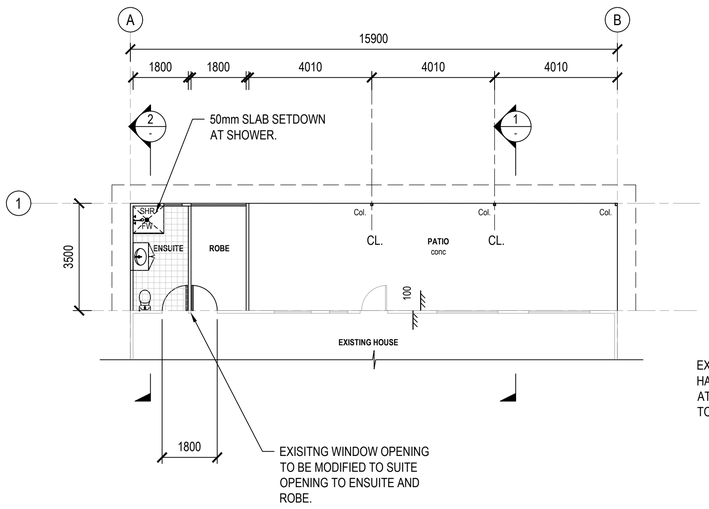
ROOF PLAN
SCALE 1:100



REAR ELEVATION
SCALE 1:100

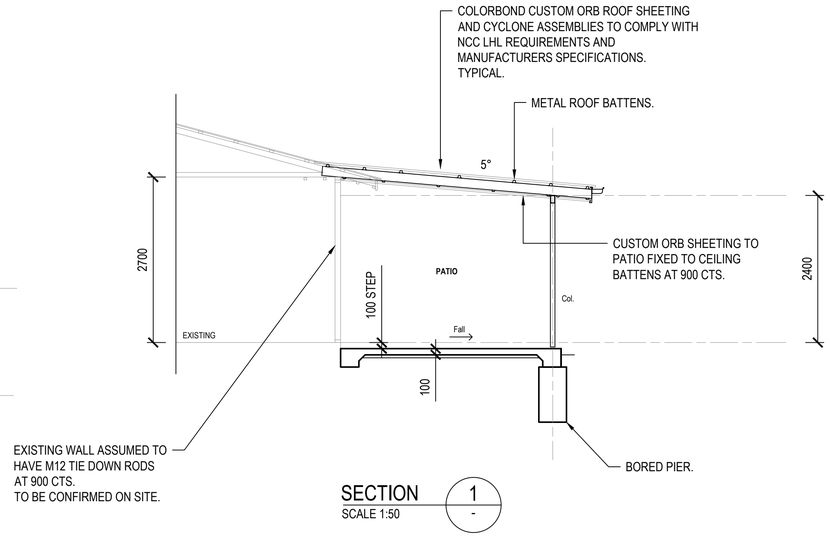
SIDE ELEVATION
SCALE 1:100

SIDE ELEVATION
SCALE 1:100

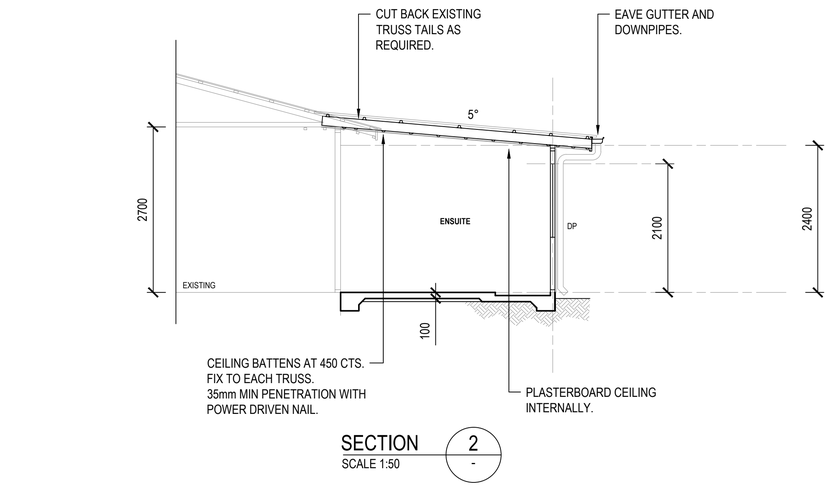


FLOOR PLAN
SCALE 1:100

NOTE
ALL DIMENSIONS SHALL BE CONFIRMED ON SITE BY BUILDER PRIOR TO ANY PROCUREMENT OF ANY MATERIALS



SECTION 1
SCALE 1:50



SECTION 2
SCALE 1:50

SITE PLAN
SCALE 1:200 APPROX

0 1000 2000 3000 4000 5000mm
SCALE 1:50 @A1

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
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MAL Engineers

Drawn	NB	Date 4.12.24
Checked	ML	Date 4.12.24
Designed	ML	Date 4.12.24
Verified	ML	Date 4.12.24
Approved	M. LANCINI	12.12.24

Client: JASMINE QUAID

Project: PROPOSED EXTENSION
490 MIALLO, BAMBOO CREEK ROAD

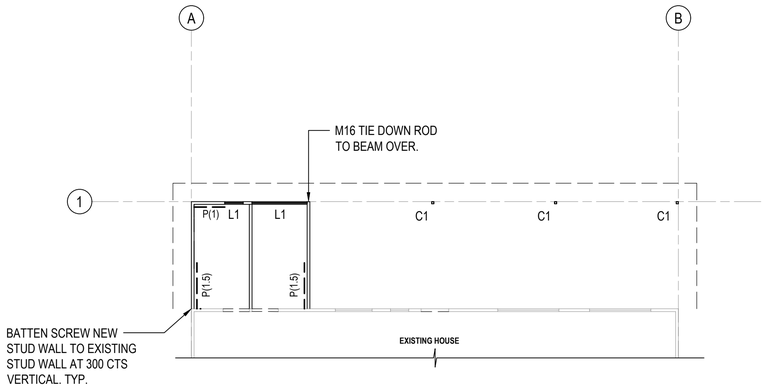
Title: PLANS AND ELEVATIONS

Status: FOR CONSTRUCTION

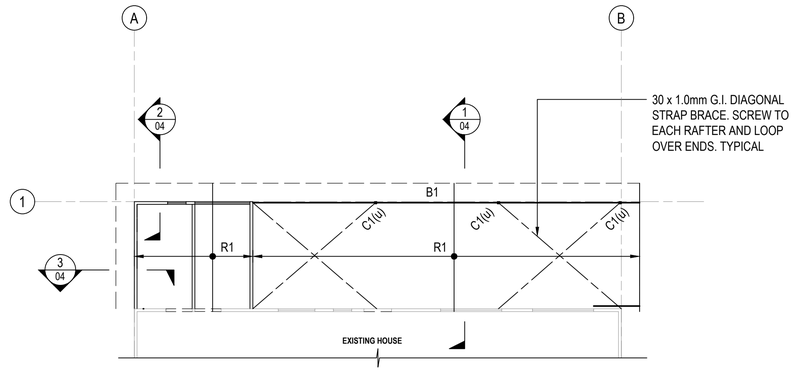
Datum		Scale	Size
AHD		AS SHOWN	A1

Drawing Number: Q24530-ST-02

Revision: A



WALL PLAN
SCALE 1:100



ROOF FRAMING PLAN
SCALE 1:100

WALL BRACING SCHEDULE AND NOTES

P(x) PLYWOOD BRACING (6.4 kN/m RATING) FIXED IN ACCORDANCE WITH AS1684.2 TABLE 8.18(h).
(x) DENOTES LENGTH OF PLY BRACING. REFER DRAWING ST-05.
..... WALLS SHORTER THAN 900mm TO HAVE M12 TIE DOWN RODS EACH END.
..... CEILING DIAPHRAGM ACTION IS REQUIRED TO DISTRIBUTE LOADS TO BRACING WALLS.

FRAMING LEGEND

C1 ..... 75 x 4 SHS COLUMN.
B1 ..... 125 x 75 x 4 RHS BEAM.
R1 ..... 150 x 45 LVL RAFTER AT 900 CTS MAX.
L1 ..... 95 x 45 LVL or 150 x 45 LVL LINTEL.

SLAB AND FOOTING PLAN
SCALE 1:100

..... FOOTING DESIGN BASED ON ASSUMED STIFF CLAY/DENSE SAND WITH 100 kPa ALLOWABLE BEARING PRESSURE AND 25 kPa ALLOWABLE SKIN FRICTION ON SITE, AND CLASS 'M' SITE. SOIL CONDITIONS TO BE COMFIRED ON SITE PRIOR TO CONSTRUCTION.
..... 100mm MINIMUM THICK SLAB ON GROUND. (UNO)
..... 1 LAYER SL82 MESH TOP THROUGHOUT. 350mm LAP MINIMUM. 0.2mm THK POLYETHYLENE MEMBRANE WITH TAPED JOINTS ON 50mm THK COMPACTED SAND BEDDING UNDER SLAB ON GROUND.
..... N12 TRIMMER CONTINUOUS TOP UNDER SLAB REINFORCEMENT TO ALL SLAB EDGES. LAP 600 MINIMUM.

SLAB LEGEND

BP1 ..... 450 DIA. x 700 DEEP MIN. BORED PIER.
EB1 ..... 300 WIDE x 400 DEEP SLAB EDGE BEAM.
IB1 ..... 300 WIDE x 400 DEEP SLAB EDGE BEAM.

0 1000 2000 3000 4000 5000mm
SCALE 1:50 @A1

0 1000 2000 4000 6000 8000 10000mm
SCALE 1:100 @A1

Rev.	Date	Description	Des.	Verif.	Appd.
A	12.12.24	ISSUED FOR CONSTRUCTION	ML	ML	ML

MAL Engineers

Drawn	NB	Date 4.12.24
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Designed	ML	Date 4.12.24
Verified	ML	Date 4.12.24
Approved	M. LANCINI	12.12.24

Client JASMINE QUAID

Project PROPOSED EXTENSION
490 MIALLO, BAMBOO CREEK ROAD

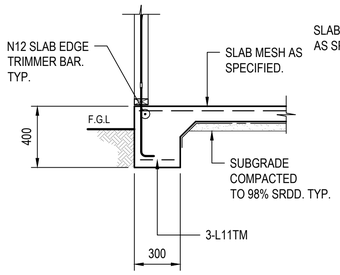
Title GROUND SLAB, WALL AND ROOF FRAMING PLANS

Status FOR CONSTRUCTION

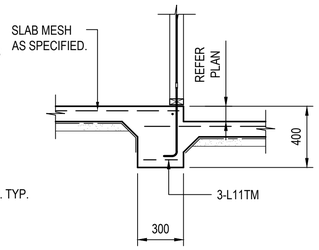
Datum	Scale	Size
AHD	AS SHOWN	A1

Drawing Number Q24530-ST-03

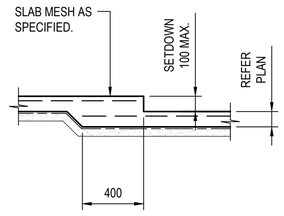
Revision A



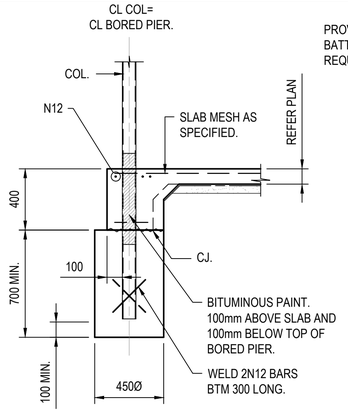
TYPICAL EDGE BEAM (EB1)
1:20

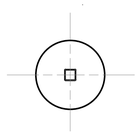


TYPICAL INTERNAL BEAM (IB) AT SLAB STEP
1:20

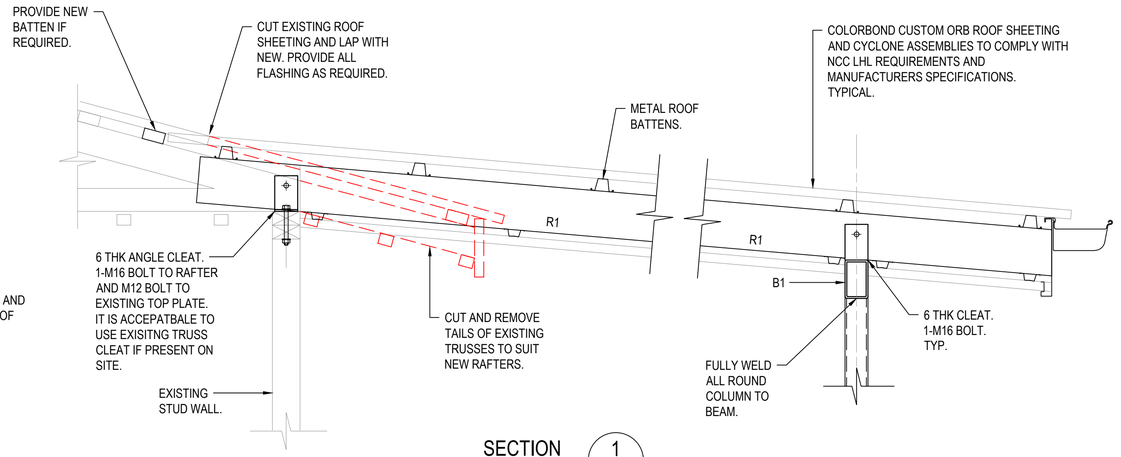


TYPICAL STEP TOP OF SLAB
1:20

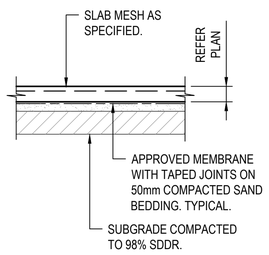




TYPICAL EB1 / BP1 DETAIL
1:20



SECTION 1 / 03
SCALE 1:10



TYPICAL SLAB ON GRADE DETAIL
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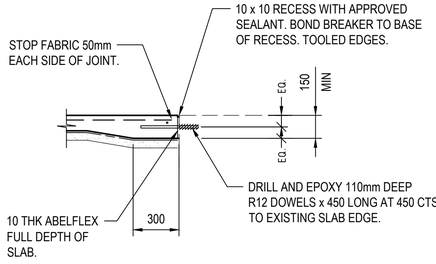
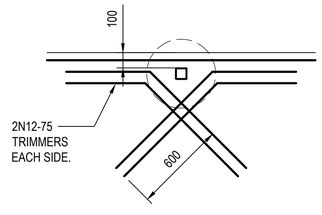
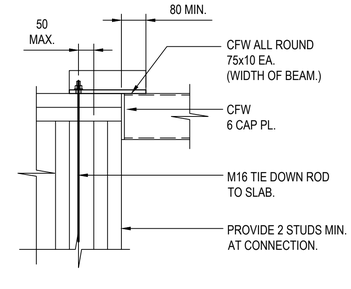


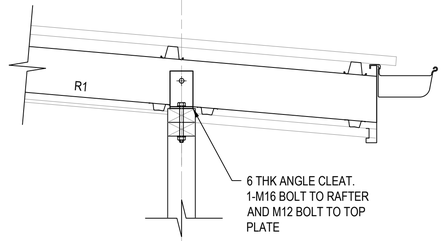
TYPICAL DOWELLED JOINT (DJ) AT EXISTING SLAB
1:20



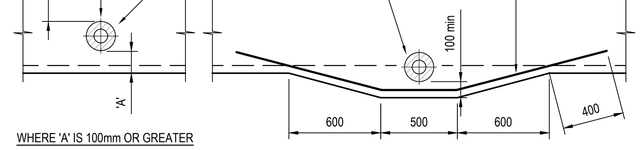
TYPICAL TRIMMER BAR DETAIL AT COLUMNS
1:20



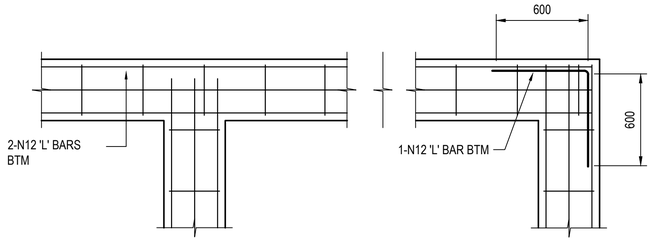
TYPICAL STEEL ROOF BEAM TO STUD WALL DETAIL
1:10



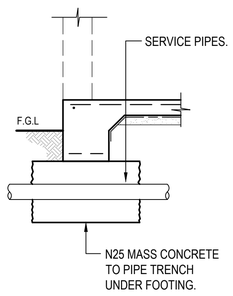
SECTION 2 / 03
SCALE 1:10



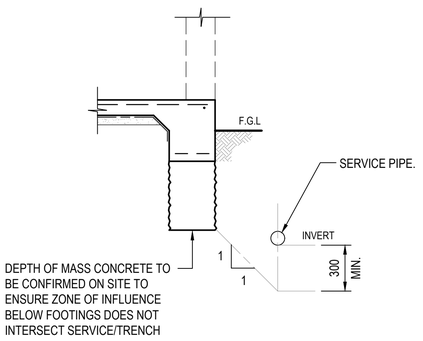
PENETRATION DETAIL FOR PIPE PASSING THROUGH LOWER THIRD OF STRIP FOOTING OR SLAB RIB



TYPICAL EDGE BEAM INTERSECTION DETAILS

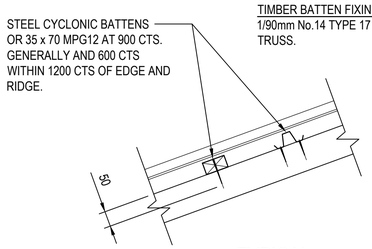


TYPICAL PIPE UNDER FOOTING DETAIL
1:20



TYPICAL SERVICE PIPE DETAIL ADJACENT FOOTING
1:20

STEEL BATTEN FIXING
2-50mm No.14 TYPE 17 SCREWS FIXED TO EACH ROOF TRUSS OR ROOF BEAM AND INSTALL AS PER MANUF. REQUIREMENT AND SPECIFICATIONS.
TIMBER BATTEN FIXING
1/90mm No.14 TYPE 17 BATTEN SCREW EACH TRUSS.



TYPICAL BATTEN FIXING DETAIL
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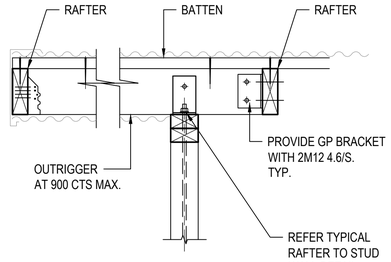


TYPICAL OUTRIGGER DETAIL

SECTION 3 / 03
SCALE 1:10

0 500 1000 1500 2000mm
SCALE 1:20 @A1

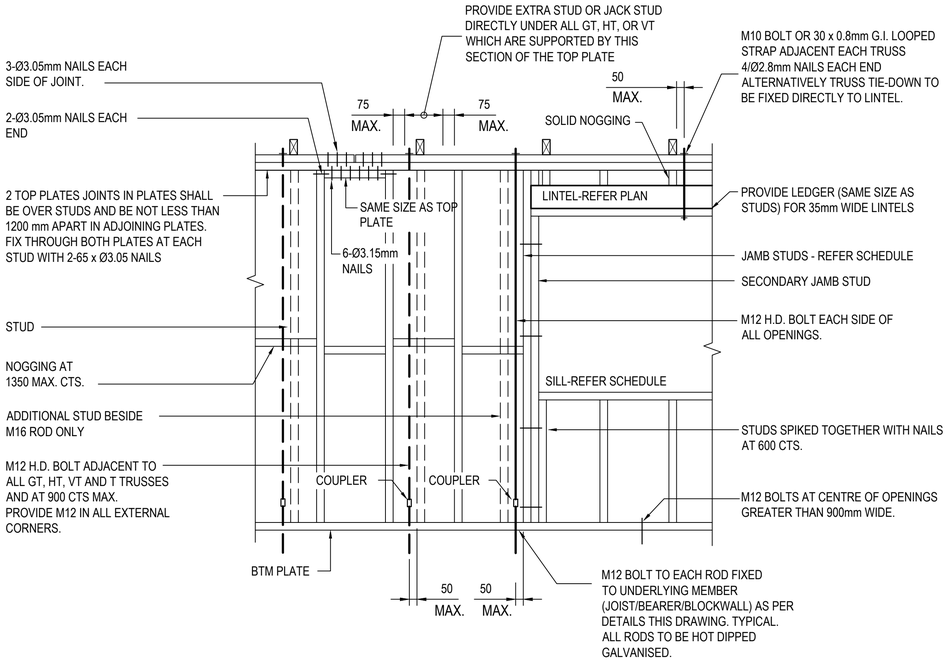
Rev.	Date	Description	Des.	Verif.	Appd.
A	12.12.24	ISSUED FOR CONSTRUCTION	ML	ML	ML

CERTIFICATION
M. LANCINI RPEQ 18786

MAL Engineers

Drawn	NB	Date	4.12.24
Checked	ML	Date	4.12.24
Designed	ML	Date	4.12.24
Verified	ML	Date	4.12.24
Approved	M. LANCINI	Date	12.12.24

Client: JASMINE QUAID
Project: PROPOSED EXTENSION, 490 MIALLO, BAMBOO CREEK ROAD
Title: SLAB AND FOOTING DETAILS
Status: FOR CONSTRUCTION
Datum: AHD | Scale: AS SHOWN | Size: A1
Drawing Number: Q24530-ST-04 | Revision: A



TYPICAL LOAD-BEARING TIMBER WALL FRAME U.N.O

NTS

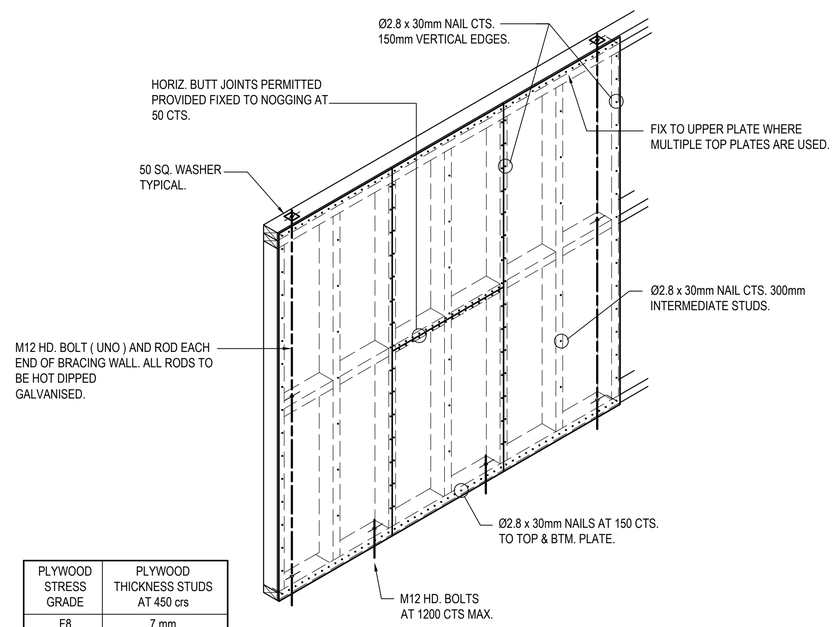
TIMBER WALL FRAMING SCHEDULE - CYCLONIC AREA		
EXTERNAL LOAD BEARING WALLS (LBW) - MGP12 UNO.		
MEMBER	SIZE	FIXING & TIE-DOWN
TOP PLATE	2/35 x 90	SPACING OF TIE-DOWN FIXINGS: M12 4.6/S CYCLONE ROD / HOLD DOWN BOLT TO BE AT 900 MAX. CTS
STUDS		
< 2700	35 x 90 AT 450 CTS	
2700 UPTO 3000	45 x 90 AT 450 CTS	
3000 UPTO 3300	45 x 90 AT 300 CTS	
3300 UPTO 4000	2/45 x 90 AT 300 CTS	
BTM PLATE	35 x 90	
NOGGINS	35 x 90 AT 1350 MAX CTS	
SILLS	SEE SILL SCHEDULE	
INTERNAL NON LOAD BEARING WALLS (NLBW) - MGP10 UNO.		
MEMBER	SIZE	FIXING & TIE-DOWN
TOP PLATE	35 x 70	FIX BTM PLATES TO FLOOR STRUCTURE WITH M12 4.6/S AT ENDS OF WALL, EACH END OF LINTEL AND INTERMEDIATE AT 1200 MAX. CTS
STUDS		
< 2700	35 x 70 AT 450 CTS	
2700 UPTO 3600	2/35 x 70 AT 450 CTS or 1/35 x 90 AT 450 CTS	
3600 UPTO 4200	2/35 x 90 AT 450 CTS	
BTM PLATE	35 x 90	
NOGGINS	35 x 90 AT 1350 MAX CTS	
WALL STUDS, TOP AND BTM PLATES SHALL NOT BE NOTCHED OR TRENCHED. WALL FRAMING TO BE SEASONED AND L.O.S.P. TREATED. RIBBON TOP PLATE SPLICES TO BE STAGGERED.		

JAMB STUD SCHEDULE	
OPENING WIDTH	No. OF STUDS
0 - 1200	1
1200 - 2400	2
< 3300	3
3300 AND ABOVE	4

NOTE: THE No. OF STUDS INCLUDES THE SECONDARY JAMB STUD.

WINDOW SILL SCHEDULE	
OPENING WIDTH	SILL MEMBER
< 1500	SAME AS COMMON STUD
1800	90x35 MGP12
2100	90x35 MGP12
2400	90x35 MGP12
2700	90x45 MGP12
3000	2/ 90x35 MGP12
3300	2/ 90x35 MGP12
3600	3/ 90x35 MGP12

NOTE: USE 70 or 90mm TO MATCH NOMINAL STUD SIZE.



PLYWOOD STRESS GRADE	PLYWOOD THICKNESS STUDS AT 450 crs
F8	7 mm
F11	6 mm
F14	4 mm
F27	4 mm

PLYWOOD TO COMFORM WITH THE PAA/JAS-ANZ 'TESTED STRUCTURAL' PRODUCT CERTIFICATION SYSTEM AND BE BRANDED ACCORDINGLY COMPLYING WITH AS/NZS 2269. PLYWOOD TO BE TREATED TO H2 LEVEL.

2700 MAX HIGH WALL

TYPICAL PLYWOOD BRACING WALL

1. RACKING CAPACITY 6.4 kN/m (ULT.) REFER PLAN FOR LENGTH OF BRACING WALL.
2. AT INTER TENANCY WALLS VILLABOARD 9mm THICK IS TO BE USED INSTEAD OF PLYWOOD. BRACING IS TO BE TAKEN DOWN TO SLAB OR BLOCKWORK.

0 500 1000 1500 2000mm

SCALE 1:20 @A1

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Verified	ML	4.12.24
Approved	M. LANCINI	12.12.24

Client: JASMINE QUAID

Project: PROPOSED EXTENSION
490 MIALLO, BAMBOO CREEK ROAD

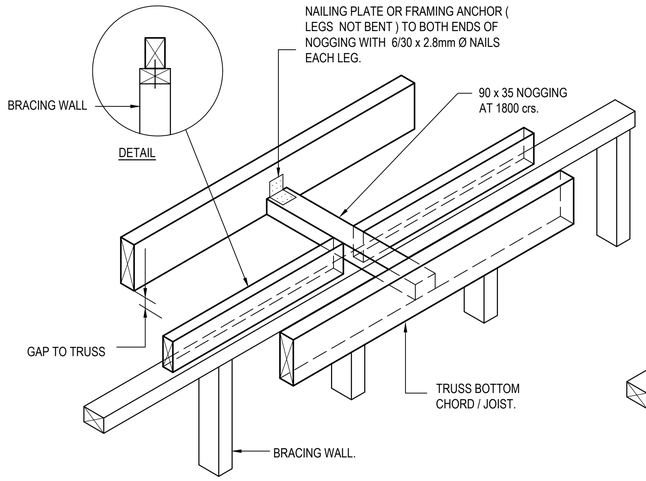
Title: STUD WALL FRAMING DETAILS

Status: FOR CONSTRUCTION

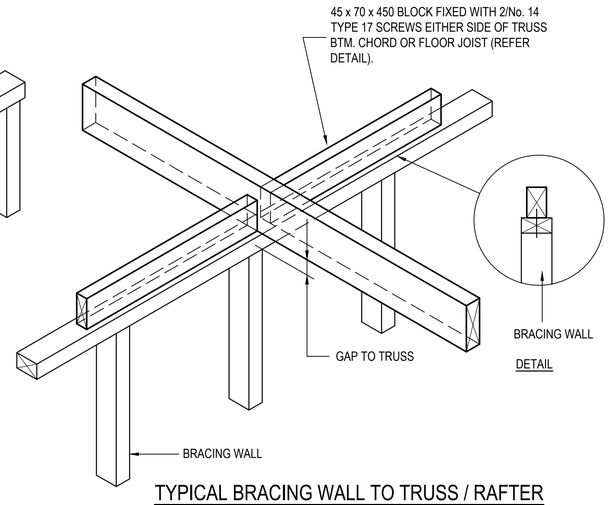
Datum		Scale	Size
AHD		AS SHOWN	A1

Drawing Number: Q24530-ST-05

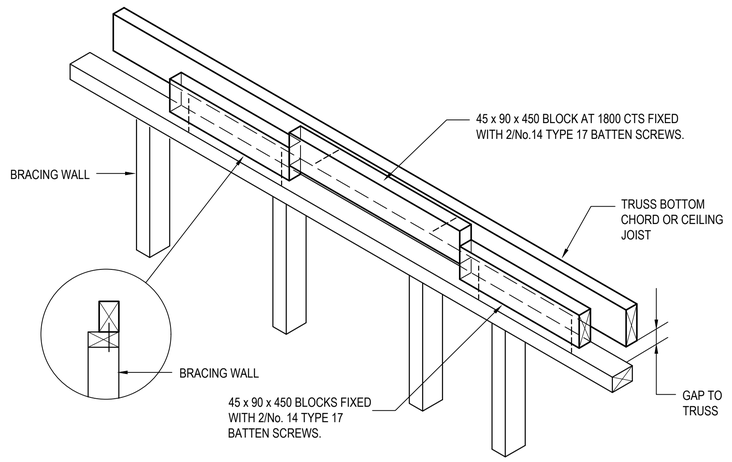
Revision: A



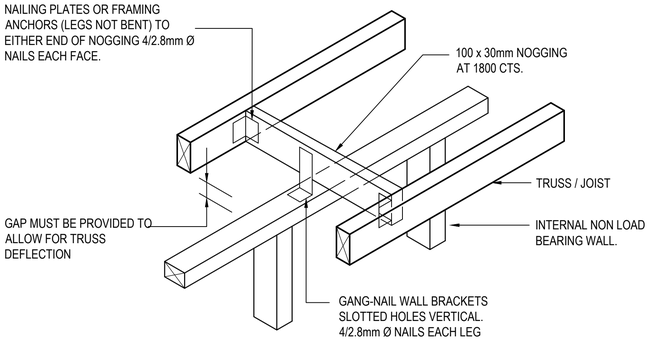
TYPICAL BRACING WALL TO TRUSS / RAFTER CONNECTION . PARALLEL TO TRUSS OR RFATER



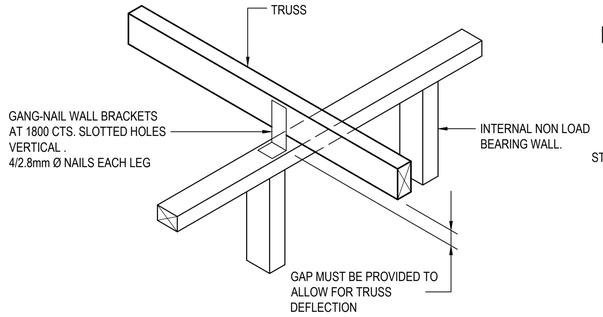
TYPICAL BRACING WALL TO TRUSS / RAFTER PERPENDICULAR TO TRUSS / RAFTER FIX EVERY 2nd TRUSS OR RAFTER.



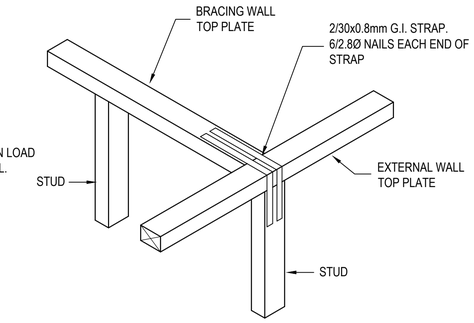
TYPICAL BRACING WALL TO TRUSS / RAFTER ADJACENT TO TRUSS OR RAFTER.



TYPICAL NON LOAD BEARING WALL PARALLEL TO TRUSS OR RAFTER



TYPICAL NON LOAD BEARING WALL PERPENDICULAR TO TRUSSES



TYPICAL BRACING WALL TO EXTERNAL WALL CONNECTION

0 500 1000 1500 2000mm

SCALE 1:20 @A1

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Client: JASMINE QUAID

Project: PROPOSED EXTENSION
490 MIALLO, BAMBOO CREEK ROAD

Title: BRACING WALL CONNECTION DETAILS

Status: FOR CONSTRUCTION

Datum	Scale	Size
AHD	AS SHOWN	A1

Drawing Number: Q24530-ST-05

Revision: A