Document Transmittal

HHC ENGINEERS

20260029	PROPOSED ADDITIONS AND ALTERATIONS 24 ALBATROSS ROAD, BERKLEY VALE, NSW 2261

DATE OF ISSUE

Day	10	11								
Month	02	02								
Year	26	26								
Initials	S.H.	S.H.								

DISTRIBUTION LIST

Company	**Attention**	**Format: P -** pdf **D -** dwg **R -** rvt **E -** pdf / dwg / rvt									
IMK STUDIO		P	P								

REASON FOR ISSUE

P - PRELIMINARY I - INFORMATION Co - CO-ORDINATION T - TENDER CC - CONSTRUCTION CERTIFICATE C - CONSTRUCTION	P	CDC								

METHOD OF ISSUE

E - EMAIL U - UPLOADED TO CLOUD	E	E								

DOCUMENTATION LIST

Drawing Title	**Dwg. No.**	**Revision**								
GENERAL NOTES	S0000	A	B							
GROUND FLOOR SLAB PLAN AND DETAILS	S0200	A	B							
LEVEL 1 TIMBER FRAMING PLAN AND DETAILS	S0300	A	B							
TIMBER BRACING DETAILS	S0310	A	B							

PROPOSED ADDITIONS AND ALTERATIONS

24 ALBATROSS ROAD, BERKELEY VALE, NSW 2261

GENERAL

G1. STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION, ARCHITECTURAL, CIVIL & RELEVANT ENGINEERING SERVICES DOCUMENTS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED.

G2. ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE. ENGINEERS DRAWINGS MUST NOT BE SCALED.

G3. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION & NO PART SHALL BE OVERSTRESSED.

G4. ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.

G5. UNLESS OTHERWISE NOTED ALL LEVELS ARE IN METRES & ALL DIMENSIONS ARE IN MILLIMETRES.

G6. U.N.O. DENOTES UNLESS NOTED OTHERWISE.

G7. THESE DRAWINGS ARE SIGNED SUBJECT TO A CERTIFICATE OF INSPECTION BEING ISSUED BY THIS OFFICE. ALL REINFORCEMENT SHALL BE INSPECTED BY THIS OFFICE PRIOR TO PLACING CONCRETE.

G8. BRITTLE FLOOR COVERING SUCH AS CERAMIC TILES SHOULD BE LAID USING AN APPROVED FLEXIBLE ADHESIVE SYSTEM TO CONTROL THE EFFECT OF SHRINKAGE CRACKING. A MINIMUM PERIOD OF THREE MONTHS DRYING OF THE CONCRETE IS USUALLY REQUIRED BEFORE THE PLACEMENT OF BRITTLE FLOOR COVERINGS.

G9. SUBTERRANEAN TERMITE PROTECTION IS TO BE PROVIDED IN ACCORDANCE WITH AS 3660.1 WITH ALL JOINTS ADEQUATELY LAPPED AND TAPED AT PENETRATIONS.

FOOTINGS

F1 REQUIRED MINIMUM SAFE ALLOWABLE BEARING CAPACITY OF MATERIAL SHALL BE 150 kPa FOR SHALLOW FOOTINGS; TO BE CONFIRMED BY GEOTECHNICAL ENGINEER.

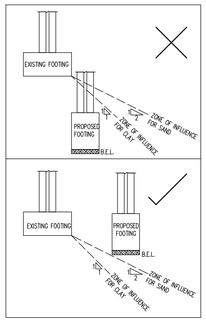
F2 THIS SITE HAS BEEN ASSUMED TO BE CLASSIFIED AS CLASS 'M' IN ACCORDANCE WITH AS2870. WE STRONGLY RECOMMENDED THAT A GEOTECHNICAL SITE CLASSIFICATION REPORT IS CONDUCTED FOR THIS PROJECT IN ORDER TO PROVIDE A SUITABLE FOOTING DESIGN.

F3 EXCAVATION SHALL CONTINUE UNTIL THE REQUIRED ALLOWABLE BEARING CAPACITY IS FOUND. THE OVER-EXCAVATION SHALL BE BACK-FILLED WITH A MASS CONCRETE MIX TO THE APPROVAL OF THE ENGINEER.

F4 ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH SUPPORTING FOOTING UNLESS NOTED OTHERWISE.

F5 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXCAVATIONS IN A STABLE CONDITION WITHOUT AFFECTING ADJACENT PROPERTIES OR SERVICES. WHERE REQUIRED, TEMPORARY SHORING SHALL BE PROVIDED TO THE SIDES OF FOOTING EXCAVATIONS.

F6 WHEN EXCAVATING ADJACENT TO AN EXISTING FOOTING, ENSURE NOT TO UNDERMINE IT AT ALL TIMES. THE BULK EXCAVATION LEVEL (B.E.L.) SHALL NOT BE BELOW THE INVERT LEVEL OF THE EXISTING FOOTING, NOR WITHIN THE ZONE OF INFLUENCE OF THE EXISTING FOOTING. IF THIS CAN NOT BE ACHIEVED, DO NOT PROCEED WITH THE FOOTING WORKS AND CONTACT HHC ENGINEERS FOR INSTRUCTIONS. SHORING OR UNDER-PINING MAY BE REQUIRED.



DRAWING MEASUREMENTS NOTE:
DO NOT TAKE MEASUREMENTS FROM STRUCTURAL DRAWINGS FOR SITE BUILDING SETTING OUT. USE ARCHITECTURAL SETOUT PLAN FOR BUILDING SETTING OUT.

SUBGRADE PREPARATION

SP1. THE SITE SHALL BE EXCAVATED TO THE LEVELS SHOWN ON THE RELEVANT DRAWINGS.

SP2. ALL TOPSOIL, ORGANIC AND DELETERIOUS MATERIAL IS TO BE STRIPPED FROM THE BUILDING SITE.

SP3. SELECTED FILLINGS/HARD-CORE ETC. & SAND BLINDING UNDER SLABS SHOWN ON DRAWINGS SHALL BE PLACED IN LOOSE LAYERS NOT EXCEEDING 150mm & COMPACTED TO 98% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1 (DENOTED AS STRUCTURAL FILLING).

SP4. ALL STRUCTURAL FILL TO BE APPROVED BY THE ENGINEER.

SP5. THE OWNERS ATTENTION SHOULD BE DRAWN TO APPENDIX B OF AS 2870 "PERFORMANCE REQUIREMENTS AND FOUNDATION MAINTENANCE" ON COMPLETION OF THE JOB.

SP6. EXCAVATION SHALL NOT EXTEND BELOW A LINE DIPPING AT 45° FOR CLAY AND 30° FOR SAND AND AWAY FROM THE NEAREST UNDERSIDE CORNER OF ANY EXISTING FOOTINGS.

SP7. FILL MATERIAL BENEATH SLAB IS TO BE COMPACTED IN ACCORDANCE WITH AS 2870 & THE GEOTECHNICAL REPORT.

SP8. THE SLAB IS TO BE ENTIRELY UNDERLAID WITH A 0.2mm POLYETHYLENE VAPOUR BARRIER WITH ALL JOINTS ADEQUATELY LAPPED AND TAPED AT PENETRATIONS. U.N.O.

BRICKWORK AND BLOCKWORK

B1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SAA MASONRY CODE, AS3700 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

B2. ALL LOAD BEARING BRICKS SHALL BE LAID FROGS UP EXCEPT FOR THE TOP COURSE,WHICH SHALL BE LAID FROGS DOWN. WHEN SUPPORTING A CONCRETE SLAB OR BEAM BRICKWORK SHALL HAVE A LAYER OF MORTAR PLACED ON THE TOP AND TROWELLED SMOOTH, THE TOP 2 COURSES OF BRICKS SHALL BE LAID WITH REINFORCEMENT IN THE JOINTS.

B3. WHERE WALLS ARE NON LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPARATED FROM THE CONCRETE BY 20mm THICK 'CANEITE' OR EXPANDED POLYSTYRENE U.N.O.

B4. NO HOLES OR CHASES SHALL BE CUT IN LOAD BEARING BRICKWORK OR BLOCKWORK WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

B5. ALL CONCRETE BLOCK WALLS SHALL BE BUILT TO A GAUGE CONCRETE BLOCK SUCH THAT BLOCK-PLANS-JOINT DIMENSIONS ARE MULTIPLES OF 100mm USING STRETCHER BOND UNLESS SPECIFIED OTHERWISE.

B6. CONCRETE BLOCKS SHALL BE GRADE 12 UNITS CONFORMING TO AS2733.

B7. MORTAR SHALL BE FRESHLY PREPARED AND COMPOSED OF CEMENT: LIME:SAND IN THE RATIO OF 1:1:6 AND SHALL CONFORM TO AS3700.

B8. CORES TO BE FILLED WHERE REQUIRED WITH CONCRETE OF STRENGTH f'c = 20 MPa, 10mm MAX. AGGREGATE SIZE AND A MAX. SLUMP OF 230mm, IN LIFTS NOT MORE THAN 1200 mm HIGH. U.N.O.

B9. CLEAN OUT OPENINGS ARE REQUIRED AT THE BASE OF ALL REINFORCED WALLS AND ABOVE HORIZONTAL CONSTRUCTION JOINTS.

B10. REINFORCEMENT SHALL BE POSITIONED AS SHOWN AND HAVE A MINIMUM CONCRETE COVER OF 20mm U.N.O.

B11. JOINT REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS3700.

B12. VERTICAL CONTROL JOINTS IN BLOCK RETAINING WALLS AND BLOCK WALLS TO BE SPACED AS SHOWN OR AT 6000mm MAX. APART. VERTICAL CONTROL JOINTS IN BRICKWORK TO BE SPACED AT 5000mm MAX. APART. U.N.O.

B13. A 300mm WIDE STRIP OF COARSE GRAINED MATERIAL IS TO BE PLACED BEHIND ALL RETAINING WALLS.

B14. BRICK TIES TO COMPLY WITH AS3700 AND BE OF STAINLESS STEEL DUE TO REQUIRED EXPOSURE.

B15. BED JOINT REINFORCEMENT M.E.T. GALVANISED MASONRY REINFORCEMENT (SUPPLIED BY DUNSTONE MAZE OR EQUAL) AT EVERY THIRD BED JOINT.

B16. CLAY MASONRY BRICKS ARE OF SOLID TYPE AND HAVE A UNCONFINED COMPRESSIVE STRENGTH f'uc=20 MPa, SOLID TYPE. U.N.O.

IMPORTANT

ALL PROVIDED NOTES AND INSTRUCTIONS ON THIS SHEET ARE NOT NECESSARILY PROJECT SPECIFIC.
APPLICABLE NOTES AND INSTRUCTIONS TO BE ADOPTED ACCORDINGLY.

CONCRETE

C1. ALL CONCRETE, CONCRETE WORK AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE SPECIFICATION.

C2. REFER TO INDIVIDUAL CONCRETE DRAWINGS FOR CONCRETE QUALITY.

C3. ALL REINFORCEMENT TO BE AS FOLLOWS:

SYMBOL	TYPE
R	STRUCTURAL GRADE PLAIN BARS TO AS/NZS 4671 (250 MPa)
SL, RL	FABRIC MESH TO AS/NZS 4671 (500 MPa)
N	HOT ROLLED DEFORMED BARS TO AS/NZS 4671 (500 MPa)

NOTE: THE NUMBER FOLLOWING R OR N INDICATES THE BAR DIAMETER IN MILLIMETRES.

C4. CLEAR COVER TO REINFORCEMENT (INCLUDING FITMENTS) SHALL BE AS FOLLOWS U.N.O. WHERE NOT SPECIFICALLY DESIGNATED COVER IS TO BE IN ACCORDANCE WITH AS3600.

CONCRETE	CAST AGAINST FORMWORK	CAST AGAINST GROUND		
CHARACTERISTIC STRENGTH f'c	NOT EXPOSED TO WATER *	EXPOSED TO WATER OR WEATHER	PROTECTED BY WATERPROOF MEMBRANE	NOT PROTECTED BY WATERPROOF MEMBRANE
20	20	–	60	70
25	20	60	40	50
32	20	40	35	45
40	20	30	30	40
50	20	25	30	40

* ADD EXTRA 20mm COVER FOR COLUMNS (U.N.O.)

C5. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF ANY APPLIED FINISHES.

C6. BEAM DEPTHS ARE NOTED FIRST AND INCLUDE THE THICKNES OF THE SLAB IF ANY.

C7. CONSTRUCTION JOINTS WHERE NOT SHOWN ON THE DRAWINGS SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.

C8. FORMS SHALL BE CHAMFERED FOR RE-ENTRANT ANGLES AND FILLETED FOR CORNERS. WHERE THESE WILL BE EXPOSED TO VIEW IN THE COMPLETED PROJECT THE FACE OF THE BEVEL IN EACH CASE SHALL BE 25mm WIDE U.N.O.

C9. NO HOLES, CHASES OR EMBEDMENTS OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

C10. DISTRUBUTION BARS TO MAIN REINFORCEMENT IN SLABS SHALL BE N12 AT 250mm CENTRES U.N.O.

C11. NO REINFORCEMENT SPLICES SHALL BE MADE IN POSITIONS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

C12. MINIMUM LAP FOR FABRICS SHALL BE TWO TRANSVERSE WIRES PLUS 25mm. MINIMUM LAP LENGTHS FOR DEFORMED BARS INCLUDING DISTRIBUTION REINFORCEMENT SHALL BE AS FOLLOWS U.N.O.:

BAR TYPE AND SIZE	VERTICAL BARS	HORIZONTAL BARS		90° COG LENGTH *	135° or 180° COG LENGTH *
		MORE THAN 300mm OF CONCRETE BELOW BAR	OTHER LOCATIONS		
12	450	550	450	170	70
16	700	800	700	200	70
20	1000	1250	1000	250	80
24	1200	1500	1200	300	95
28	1400	1750	1400	350	115
32	1550	1900	1550	400	130
36	1700	2150	1700	450	145

* COG LENGTH MEASURED FROM END OF BEND.

C13. WELDING OF REINFORCEMENT IS NOT PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER.

C14. CLOSED FITMENTS U.N.O. SHALL HAVE CORNER SPLICES THUS: 

C15. TOP AND BOTTOM REINFORCEMENT IN:
INTERNAL SLABS SHALL BE SUPPORTED ON APPROVED PLASTIC TIPPED CHAIRS,
EXTERNAL SLABS SHALL BE SUPPORTED ON APPROVED FULL PLASTIC CHAIRS ONLY,
IN BOTH DIRECTIONS AT MAXIMUM CENTRES OF 600mm FOR 10mm DIAMETER BARS, 900mm FOR 12mm AND 16mm DIAMETER BARS, 1200mm FOR 20mm DIAMETER BARS AND 750mm FOR FABRIC MESH.

C16. ALL FORMWORK AND BACKPROPPING UNDER SUSPENDED CONCRETE WORK SHALL BE REMOVED IN ACCORDANCE WITH TYPICAL BACKPROPPING NOTES (ON THE FOLLOWING GENERAL NOTES SHEET) BEFORE ANY BRICKWORK OR BLOCKWORK IS BUILT ABOVE.

C17. THE MINIMUM CLEAR SPACING BETWEEN CONDUITS, CABLES, PIPES AND BARS SHALL BE AS REQUIRED BY AS3600 BUT NOT LESS THAN THREE DIAMETERS HORIZONTALLY FOR HORIZONTAL CONDUITS ETC. IN SLABS WALLS, AND FOOTINGS AND NOT LESS THAN ONE DIAMETER FOR ALL OTHER CONDUITS ETC.

C18. TYPICAL REINFORCEMENT NOTATION: 23N24-200.2
23 DENOTES NUMBER OF BARS REQUIRED
N DENOTES GRADE OF REINFORCEMENT
24 DENOTES BAR DIAMETER IN MILLIMETRES
200 DENOTES BAR SPACING IN MILLIMETRES
.2 DENOTES SECOND LAYER OF REINFORCEMENT LAID
TYPICAL ABBREVIATIONS:
BTM DENOTES BARS IN BOTTOM
ALT DENOTES BARS ALTERNATING
STAG. DENOTES BARS STAGGERED
N.F. DENOTES BARS IN NEAR FACE
F.F. DENOTES BARS IN FAR FACE
E.F. DENOTES BARS IN EACH FACE
N.S.O.P. DENOTES NOT SHOWN ON PLAN
N.S.O.E. DENOTES NOT SHOWN ON ELEVATION

C19. CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY 'HERCUSLIP COMPOSITE (HSC)' SLIDING JOINT OR EQUIVALENT U.N.O.

C20. VERTICAL FACES OF CONCRETE SHALL BE SEPERATED BY 12mm THICK 'CANEITE' OR EXPANDING CORK U.N.O.

C21. PLACING OF REINFORCEMENT SHALL BE CO-ORDINATED TO SUIT PLACING OF PRESTRESSING TENDONS.

TIMBER

T1. ALL TIMBER DESIGN AND CONSTRUCTION TO BE AS1720 U.N.O.

T2. AS1684 IS RELEVANT TO DOMESTIC CONSTRUCTION IN SHELTERED LOCATIONS.

T3. SOFTWOOD MINIMUM GRADE F7 U.N.O. HARDWOOD MINIMUM GRADE F11 U.N.O.

T4. EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS I OR II OR IMPREGNATED GRADE F7. PRESSURE TREATED TO AS1684 AND RE-DRILLED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. PROVIDE DOCUMENTATION.

T5. ALL BOLTS IN TIMBER CONSTRUCTION TO BE MIN. M16 U.N.O. BOLT HOLES TO BE DRILLED EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES BOLT DIAMETER.

T6. FINISHED TIMBER SIZES:

SEASONED SOFTWOOD	+5,-0mm
UNSEASONED SOFTWOOD	+3,-3mm
SEASONED HARDWOOD	+2,-0mm
UNSEASONED HARDWOOD	-3,-3mm

(SEE ALSO CLAUSE 1.6.2 IN AS2082)

T7. ALL TIMBER JOINTS AND NOTCHES TO BE 100mm MINIMUM FROM LOOSE KNOTS. SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.

T8. BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m.
FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m PROVIDE ONE ROW OF BLOCKING MID-SPAN.
FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS.
FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS, BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTRES. (REFER TO AS1684)

DWG. NO.	DRAWING REGISTER (STRUCTURAL)
S0000	GENERAL NOTES
S0200	GROUND FLOOR SLAB PLAN AND DETAILS.
S0300	LEVEL 1 TIMBER FRAMING PLAN AND DETAILS.
S0310	TIMBER BRACING DETAILS.

File Path:

Plot Date:

HHC ENGINEERS
A Suite 202/16 Railway Parade | Burwood NSW 2134
P +61 2 9166 8700 W www.hhceng.com.au

Client: PABA RE
M 0430 392 916
Unit 2, 71 Prince William Drive
Seven Hills NSW 2147

Architect: IMK STUDIO

100mm at A1

Project: PROPOSED ADDITIONS AND ALTERATIONS
24 ALBATROSS ROAD, BERKELEY VALE, NSW 2261

Drawing Title: GENERAL NOTES

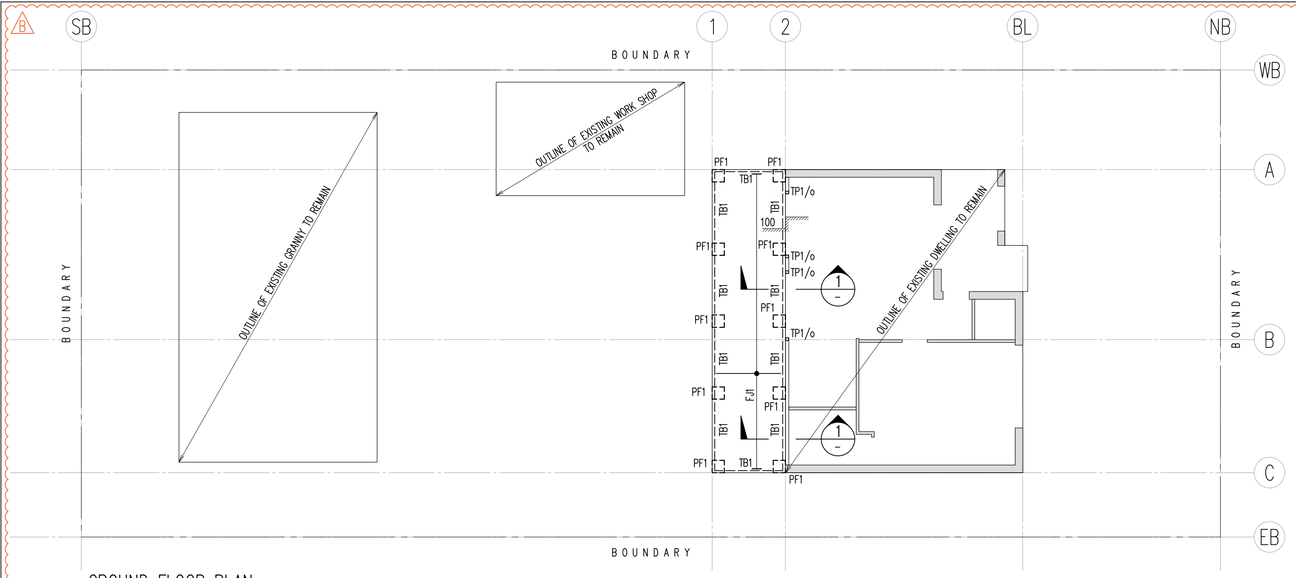
Rev	Description	Eng	Draft	Date
A	ISSUED FOR CDC	S.H.	A.C.	11.02.26
A	PRELIMINARY ISSUE	S.H.	A.C.	10.02.26

Scale at A1	Technician	Engineer	Approved
1:100	-	A.C.	S.H.

ISSUED FOR CDC

Project Number	Drawing Number	Revision
20260029	S0000	B

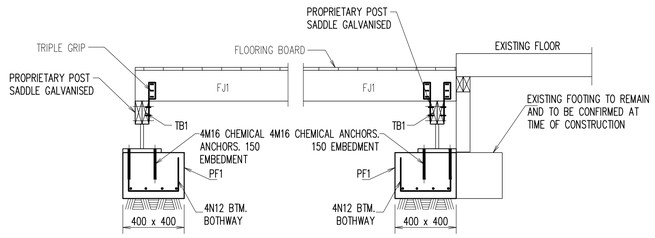
DRAWING TO BE PRINTED IN COLOUR



GROUND FLOOR PLAN

SCALE: 1:100

NOTES:
1. ALL FALLS AND LEVELS TO ARCHITECTS DETAILS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR LEVELS, STEPS AND FOLDS.
3. TP1/o DENOTES TIMBER POST 1 OVER. REFER TIMBER MEMBERS SCHEDULE ON S0300.



SECTION 1 / – SCALE 1:20

TIMBER MEMBER SCHEDULE

MARK	DESCRIPTION	SIZE	COMMENT
TB1	TIMBER BEAM	2x170x45 HYSPAN LVL	DESIGNED AS CONTINUOUS BEAM SUPPORTED AS SHOWN ON PLAN
FJ1	FLOOR JOIST	170x45 Hyjoist AT 450 MAX CENTERS	DESIGNED AS SINGLE SPAN MAX LENGTH = 2.4m SUPPORTED AT EACH END AS SHOWN ON PLAN

IMPORTANT

UPON EVERY CONCRETE POUR, TEST RESULTS MUST BE PROVIDED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. FINAL ADEQUACY CERTIFICATE WILL NOT BE ISSUED IF TEST RESULTS HAVE NOT BEEN PROVIDED, NOR MEET THE REQUIREMENTS OR APPROVED BY STRUCTURAL ENGINEER.

NOTE:

THE EXISTING TIMBER FRAMING STRUCTURE MUST BE INSPECTED BY A QUALIFIED CARPENTER/BUILDER PRIOR TO ANY WORK TO IDENTIFY ANY TERMITE DAMAGE OR DECAY. ADDITIONALLY, DUE TO THE EXISTING INTERNAL FLOORING AND EXTERNAL OVERGROWN VEGETATION, CERTAIN ELEMENTS LIKE FOOTINGS AND WALL SUPPORTS MAY NOT HAVE BEEN FULLY INSPECTABLE. IT IS THE BUILDER'S RESPONSIBILITY TO ENGAGE A GEOTECHNICAL ENGINEER TO VERIFY THE SOILS BEARING CAPACITY AND CONFIRM THE ADEQUACY OF CONNECTIONS BETWEEN THE EXISTING TIMBER OR BRICK WALLS AND THE FOOTINGS. IF ANY INADEQUACIES ARE FOUND, THE BUILDER MUST CONTACT THE STRUCTURAL ENGINEER TO SEEK FURTHER INSTRUCTION AND UPDATE THE DRAWINGS ACCORDINGLY.

NOTE:

1. THE EXISTING FOOTINGS MAY NEED TO BE UNDERPINNED AND ARE TO BE INSPECTED PRIOR TO COMMENCEMENT OF ANY NEW WORK. BUILDER SHALL CONSULT WITH A GEOTECHNICAL ENGINEER TO CONFIRM THAT ALL EXISTING FOOTINGS ARE TO BE FOUNDED ON THE SAFE ALLOWABLE BEARING CAPACITY REQUIRED.
2. GEOTECHNICAL ENGINEER TO CONFIRM THE SAFE ALLOWABLE BEARING CAPACITY OF THE EXISTING FOOTING AS UNDERPINNING MAY BE REQUIRED. BUILDER SHALL ADVISE STRUCTURAL ENGINEER FROM THIS OFFICE AND SEEK FURTHER INSTRUCTION.
3. BUILDER SHALL PROVIDE ADEQUATE BRACING/TEMPORARY SUPPORT TO ANY TO THE EXISTING ELEMENT THAT NEEDS TO BE RETAINED.
4. PRIOR TO THE REMOVAL OF ANY LOAD BEARING WALLS, CONTACT STRUCTURAL ENGINEER TO ATTEND THE SITE AND CONDUCT AN INSPECTION, IN ORDER TO DETERMINE IF ANY TIMBER/STEEL BEAM IS REQUIRED TO SUPPORT THE ELEMENTS ABOVE.

NOTE:

1. BUILDER TO PROVIDE TREATMENT FOR THE PROTECTION OF THE BUILDING FROM SUBTERRANEAN TERMITES IN ACCORDANCE WITH AS3660.
2. ALL TIMBER FLOOR/WALL/ROOF FRAMING AND CONNECTIONS BY ASSOCIATED CONTRACTORS, IN ACCORDANCE WITH RELEVANT SECTIONS OF AS1684 AND MANUFACTURE'S SPAN TABLES AND SPECIFICATIONS. AND TO BE APPROVED AND CERTIFIED BY ENGINEER.
3. ALL (TIMBER BEAMS) TO BE SUPPORTED ON TRIPLE STUDS WITH DOUBLE NOGGINGS EITHER SIDE. ALTERNATIVELY, 90X90 HARDWOOD POST MAY BE USED.
4. REFER TO PLAN FOR THE ASSUMED DIRECTION OF THE FLOOR JOISTS/ROOF RAFTERS, WHICH WERE USED AT THE TIME OF THE DESIGN. IF STEEL & TIMBER LAYOUT PREFERENCE, DO NOT CORRELATE WITH FRAMING LAYOUT SHOWN ON PLAN, CONTACT STRUCTURAL ENGINEER FOR AN UPDATED DESIGN.
5. TIMBER/STEEL STAIRCASE TO MANUFACTURE SPECIFICATIONS AND NCC (BCA) REQUIREMENTS

NOTE:

ALL EXPOSED TIMBER ELEMENTS ABOVE GROUND, TO BE H3 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND, TO BE H4 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND SUBJECTED TO FRESH WATER, TO BE H5 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND SUBJECTED TO SEA WATER, TO BE H6 TREATED

NOTE:

1. BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m.
2. FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m PROVIDE ONE ROW OF BLOCKING MID-SPAN.
3. FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS.
4. FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS, BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTRES.(REFER TO AS1684)

LEGEND :

- DENOTES EXISTING WALL OVER
- DENOTES STEP ON SLAB
- DENOTES TIMBER WALL OVER

FOR STRUCTURAL NOTES REFER TO DRAWING S0000

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
3. **DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.**

REINFORCEMENT COVER SCHEDULE

ELEMENT	COVER (mm)			EXPOSURE CLASSIFICATION
	TOP	BOTTOM	SIDES	
FOOTINGS	50mm	50mm	50mm	A2

CONCRETE QUALITY

ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f'c
FOOTINGS	80mm	20mm	GP	25MPa

NOTE:

1. ALL FOOTINGS TO BE FOUNDED ON 150 kPa MINIMUM SAFE ALLOWABLE BEARING CAPACITY AND TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO COMMENCEMENT OF ANY FOOTINGS.
2. IF GROUND CONDITIONS CHANGE DURING EXCAVATION. PLEASE NOTIFY ENGINEER, AND SEEK FURTHER INSTRUCTIONS.
3. ALL FILLS AND SOILS UNDER FOOTING TO BE COMPACTED IN LAYERS AS PER AS2870 AND AS3798.
4. ENGINEER TO BE ADVISED IF ACID SULPHATE SOILS ARE PRESENT. IN THE EVENT THAT ACID SULPHATE SOILS ARE PRESENT, THE BUILDER IS STRONGLY ADVISED TO ENSURE PROTECTIVE MEASURES ARE TAKEN TO MINIMISE THE EFFECT OF AN ACID SULPHATE ATTACK ON THE FOOTING STRUCTURAL ELEMENTS.
5. FOOTING REDESIGN MAYBE NEEDED, BASED ON PEC-OUT REPORT.
6. ACID SULPHATE SOILS (ASS) & SALINITY REQUIREMENTS HAVE NOT BEEN CONSIDERED IN THIS DESIGN.

NOTE:

- BUILDER/CONTRACTOR MUST PROVIDE CERTIFICATION TO THE STRUCTURAL ENGINEER FOR EACH LEVEL, PRIOR TO LOADING THE WALLS/COLUMNS WITH THE NEXT FLOOR/ROOF.
- IT IS IMPORTANT TO NOTE THAT VOIDS/CAVITIES CAN CAUSE FAILURE IN STRUCTURAL ADEQUACY, FIRE, ACOUSTIC AND CORROSION

NOTE:

BUILDER TO PROVIDE ADEQUATE PHYSICAL OR CHEMICAL BARRIER IN ACCORDANCE WITH AS3660.

NOTE:

CLIENT/BUILDER/OWNER TO CONFIRM BCA COMPLIANCE FOR ALL PROPOSED STRUCTURAL ELEMENTS, MATERIALS AND FINISHES.

DIAL BEFORE YOU DIG www.1100.com.au

BUILDER TO DETERMINE THE EXACT LOCATIONS OF EXISTING SERVICES PRIOR TO THE START OF ANY CONSTRUCTION WORK. BUILDER TO CONTACT 'DIAL BEFORE YOU DIG' AND THE AUTHORITIES CONCERNED TO CONFIRM THE ACTUAL LOCATIONS OF EXISTING SERVICES. IN THE EVENT THAT ANY OF THE SERVICES MIGHT BE AFFECTED BY STRUCTURAL WORK, STRUCTURAL ENGINEER IS TO BE NOTIFIED AND CONSULTED IMMEDIATELY TO REVIEW THE STRUCTURAL DETAILS AFFECTING THE SERVICES.

HHC ENGINEERS
A Suite 202/16 Railway Parade | Burwood NSW 2134
P +61 2 9166 8700 W www.hhceng.com.au

Client: PABA RE
M 0430 392 916
Unit 2, 71 Prince William Drive
Seven Hills NSW 2147

Architect: IMK STUDIO

100mm at A1

Project: PROPOSED ADDITIONS AND ALTERATIONS
24 ALBATROSS ROAD, BERKELEY VALE, NSW 2261

Drawing Title: GROUND FLOOR SLAB PLAN AND DETAILS

Rev	Description	Eng	Draft	Date
A	ISSUED FOR CDC	S.H.	A.C.	11.02.26
A	PRELIMINARY ISSUE	S.H.	A.C.	10.02.26

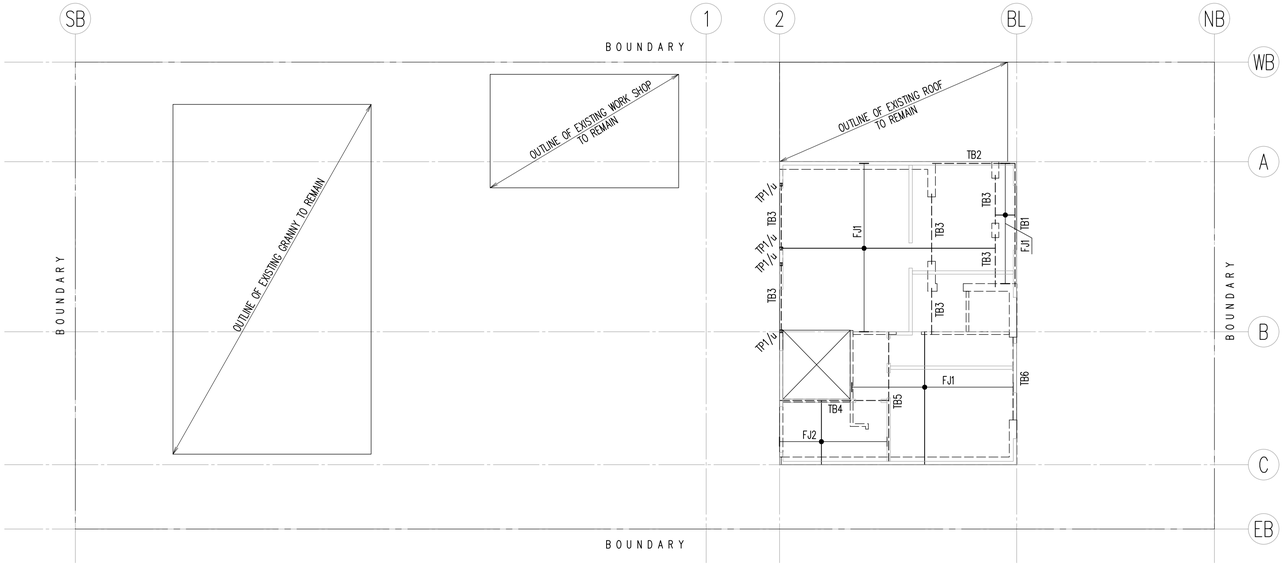
Scale at A1	Technician	Engineer	Approved
1:100	-	A.C.	S.H.

ISSUED FOR CDC

Project Number	Drawing Number	Revision
20260029	S0200	B

File Path:
Plot Date:

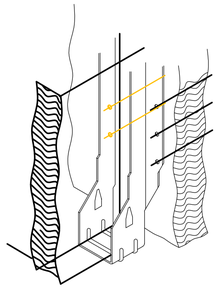
DRAWING TO BE PRINTED IN COLOUR



LEVEL 1 TIMBER FRAMING PLAN

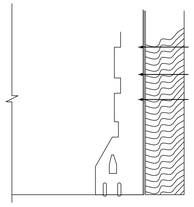
SCALE 1:100

NOTES:
1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
3. TP1/u DENOTES TIMBER POST 1 UNDER. REFER TO TIMBER MEMBER SCHEDULE.



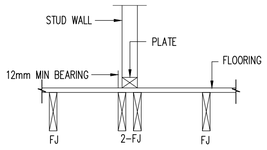
TYPICAL JOIST HANGER DETAIL (3D)

SCALE 1:10



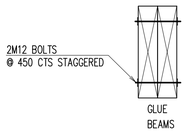
TYPICAL JOIST HANGER DETAIL (SIDE)

SCALE 1:10



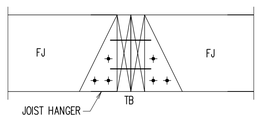
TYPICAL SECTION THRU LOAD BEARING WALL

SCALE 1:10



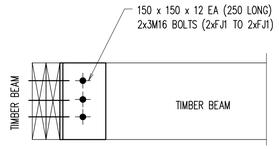
TYPICAL CONNECTION OF DOUBLE BEAMS

SCALE 1:10



TYPICAL FLOOR JOIST TO TIMBER BEAM CONNECTION

SCALE 1:10



TYPICAL TIMBER BEAM TO TIMBER BEAM DETAIL

SCALE 1:10

LEGEND :

- DENOTES TIMBER WALL UNDER
- DENOTES TIMBER WALL OVER
- DENOTES FLOOR VOID/PENETRATION

FOR STRUCTURAL NOTES REFER TO DRAWING S0000

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS.
3. **DO NOT SCALE ANY DIMENSIONS FROM STRUCTURAL DRAWINGS FOR SETTING OUT PURPOSES.**

TIMBER MEMBER SCHEDULE

MARK	DESCRIPTION	SIZE	COMMENT
TP1	TIMBER POST	90x90 – HARDWOOD	TRIPLE STUDS WITH DOUBLE NOGGINS EITHER SIDE CAN ALTERNATIVELY BE USED
TB1	TIMBER BEAM	2x300x45 HYSPAN LVL	DESIGNED AS SINGLE SPAN MAX LENGTH = 4.0m SUPPORTED AT EACH END AS SHOWN ON PLAN
TB2	TIMBER BEAM	2x300x45 HYSPAN LVL	DESIGNED AS CANTILEVER MAX LENGTH = 2.8m MAX CANTILEVER = 0.6m SUPPORTED AS SHOWN ON PLAN
TB3	TIMBER BEAM	2x300x45 HYSPAN LVL	DESIGNED AS SINGLE SPAN MAX LENGTH = 2.3m SUPPORTED AT EACH END AS SHOWN ON PLAN
TB4	TIMBER BEAM	2x300x45 HYSPAN LVL	DESIGNED AS SINGLE SPAN MAX LENGTH = 3.6m SUPPORTED AT EACH END AS SHOWN ON PLAN
TB5	TIMBER BEAM	2x300x63 HYSPAN LVL	DESIGNED AS SINGLE SPAN MAX LENGTH = 4.3m SUPPORTED AT EACH END AS SHOWN ON PLAN
TB6	TIMBER BEAM	2x300x45 HYSPAN LVL	DESIGNED AS SINGLE SPAN MAX LENGTH = 2.7m SUPPORTED AT EACH END AS SHOWN ON PLAN
FJ1	FLOOR JOIST	300x45 Hyjoist AT 450 MAX CENTERS	DESIGNED AS SINGLE SPAN MAX LENGTH = 4.8m SUPPORTED AT EACH END AS SHOWN ON PLAN
FJ2	FLOOR JOIST	240x45 Hyjoist AT 450 MAX CENTERS	DESIGNED AS SINGLE SPAN MAX LENGTH = 2.1m SUPPORTED AT EACH END AS SHOWN ON PLAN

NOTE:

1. BUILDER TO PROVIDE TREATMENT FOR THE PROTECTION OF THE BUILDING FROM SUBTERRANEAN TERMITES IN ACCORDANCE WITH AS3660.
2. ALL TIMBER FLOOR/WALL/ROOF FRAMING AND CONNECTIONS BY ASSOCIATED CONTRACTORS, IN ACCORDANCE WITH RELEVANT SECTIONS OF AS1684 AND MANUFACTURE'S SPAN TABLES AND SPECIFICATIONS. AND TO BE APPROVED AND CERTIFIED BY ENGINEER.
3. ALL (TIMBER BEAMS) TO BE SUPPORTED ON TRIPLE STUDS WITH DOUBLE NOGGINGS EITHER SIDE. ALTERNATIVELY, 90X90 HARDWOOD POST MAY BE USED.
4. REFER TO PLAN FOR THE ASSUMED DIRECTION OF THE FLOOR JOISTS/ROOF RAFTERS, WHICH WERE USED AT THE TIME OF THE DESIGN. IF STEEL & TIMBER LAYOUT PREFERENCE, DO NOT CORRELATE WITH FRAMING LAYOUT SHOWN ON PLAN, CONTACT STRUCTURAL ENGINEER FOR AN UPDATED DESIGN.
5. TIMBER/STEEL STAIRCASE TO MANUFACTURE SPECIFICATIONS AND NCC (BCA) REQUIREMENTS

NOTE:

ALL EXPOSED TIMBER ELEMENTS ABOVE GROUND, TO BE H3 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND, TO BE H4 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND SUBJECTED TO FRESH WATER, TO BE H5 TREATED.
ALL TIMBER ELEMENTS IN OR ON THE GROUND SUBJECTED TO SEA WATER, TO BE H6 TREATED

NOTE:

1. BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m.
2. FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m PROVIDE ONE ROW OF BLOCKING MID-SPAN.
3. FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS.
4. FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS, BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTRES.(REFER TO AS1684)

File Path:

Plot Date:

HHC ENGINEERS
A Suite 202/16 Railway Parade | Burwood NSW 2134
P +61 2 9166 8700 W www.hhceng.com.au

Client: PABA RE
M 0430 392 916
Unit 2, 71 Prince William Drive
Seven Hills NSW 2147

Architect: IMK STUDIO

100mm at A1

Project
PROPOSED ADDITIONS AND ALTERATIONS
24 ALBATROSS ROAD, BERKELEY VALE, NSW 2261

Drawing Title
LEVEL 1 TIMBER FRAMING PLAN

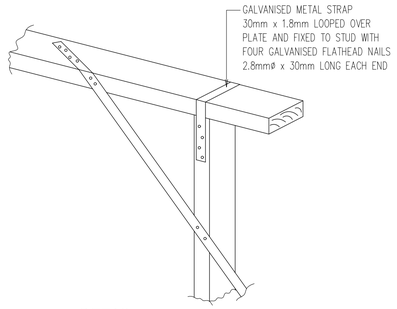
Rev	Description	Eng	Draft	Date
A	ISSUED FOR CDC	S.H.	A.C.	11.02.26
A	PRELIMINARY ISSUE	S.H.	A.C.	10.02.26

Scale at A1	Technician	Engineer	Approved
1:100	-	A.C.	S.H.

ISSUED FOR CDC

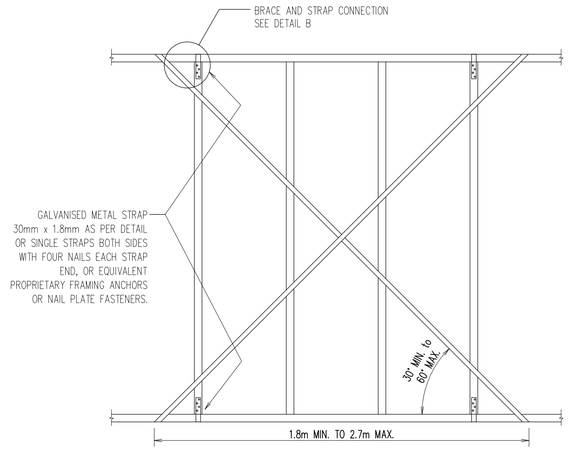
Project Number	Drawing Number	Revision
20260029	S0300	B

DRAWING TO BE PRINTED IN COLOUR



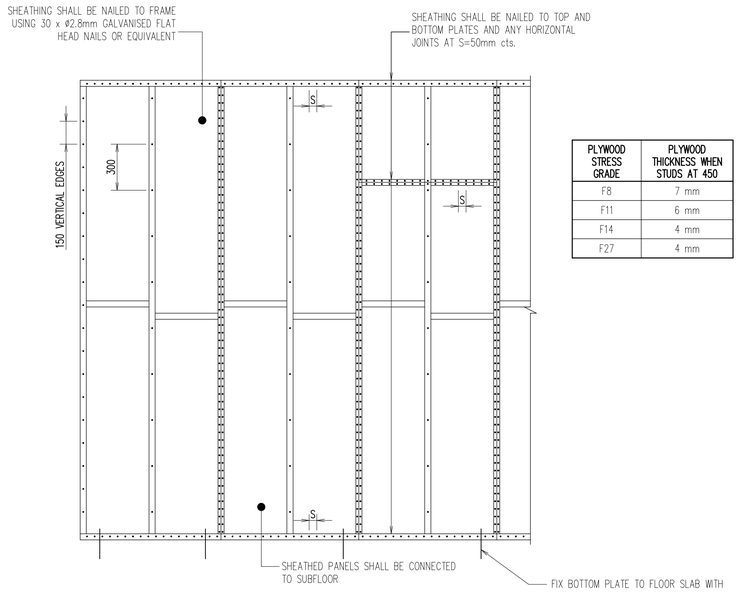
DETAIL B
SCALE 1:20

METAL TENSION STRAP BRACING
CORROSION PROTECTED FLAT METAL TENSION STRAPPING FIXED WITH TWO GALVANISED FLATHEAD NAILS 3.15mmø x 30mm LONG TO EACH END STUD AND THE FACE OF THE TOP AND BOTTOM PLATE AND FOUR GALVANISED FLATHEAD NAILS 3.15mmø x 30mm LONG TO THE STRAP RETURN OVER THE TOP PLATE AND UNDER THE BOTTOM PLATE.



NOTE: NOGGINGS HAVE BEEN OMITTED FOR CLARITY

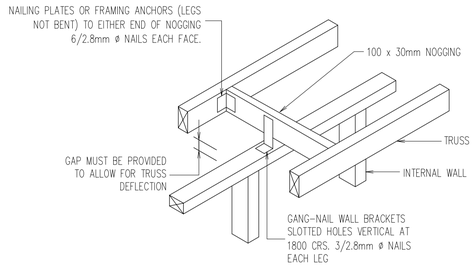
TYPICAL WALL BRACING DETAIL
SCALE 1:20
NOTE: IN ACCORDANCE WITH REQUIREMENTS OF AS1684 NATIONAL FRAMING CODE.



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

PLYWOOD BRACING DETAIL
SCALE 1:20

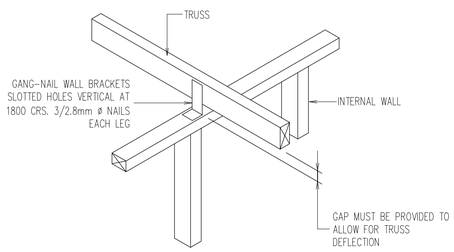
- PLYWOOD BRACING IN ACCORDANCE WITH TABLE 8.18(g) OF AS 1684.2
- ULTIMATE BRACING CAPACITY 6kN/m
- REFER TO PLAN FOR LOCATION AND LENGTH OF BRACING



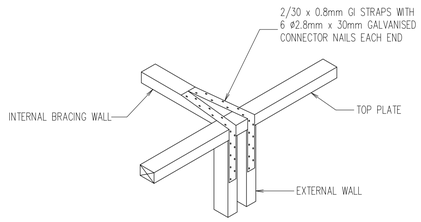
NOTE :

ALL BRACING TO COMPLY WITH RELEVANT SECTIONS OF AS1684 RESIDENTIAL TIMBER FRAMED CONSTRUCTION, FOR FURTHER INFORMATION REFER TO CLAUSE 8.3.6 OF PART 2 AS1684.2-1999

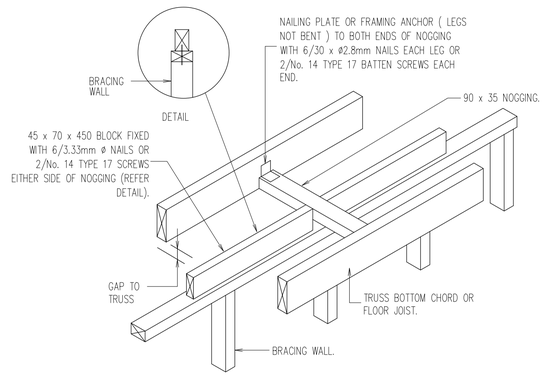
NON LOAD BEARING WALL PARALLEL TO TRUSSES
SCALE 1:20



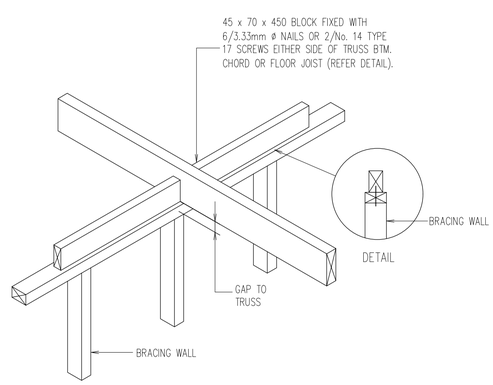
NON LOAD BEARING WALL PERPENDICULAR TO TRUSSES



INTERNAL BRACING WALL TO EXTERNAL WALL CONNECTION
SCALE 1:20



PARALLEL TO TRUSS



PERPENDICULAR TO TRUSS

TIMBER BRACING WALL TOP CONNECTION DETAIL
SCALE 1:20

HHC ENGINEERS
A Suite 202/16 Railway Parade | Burwood NSW 2134
P +61 2 9166 8700 W www.hhceng.com.au

Client: PABA RE
M 0430 392 916
Unit 2, 71 Prince William Drive
Seven Hills NSW 2147

Architect: IMK STUDIO

100mm at A1

Project
PROPOSED ADDITIONS AND ALTERATIONS
24 ALBATROSS ROAD, BERKELEY VALE, NSW 2261

Drawing Title
TIMBER BRACING DETAILS

Rev	Description	Eng	Draft	Date
A	ISSUED FOR CDC	S.H.	A.C.	11.02.26
A	PRELIMINARY ISSUE	S.H.	A.C.	10.02.26

Scale at A1	Technician	Engineer	Approved
1:100	-	A.C.	S.H.

ISSUED FOR CDC

Project Number	Drawing Number	Revision
20260029	S0310	B

File Path:
Plot Date:

DRAWING TO BE PRINTED IN COLOUR