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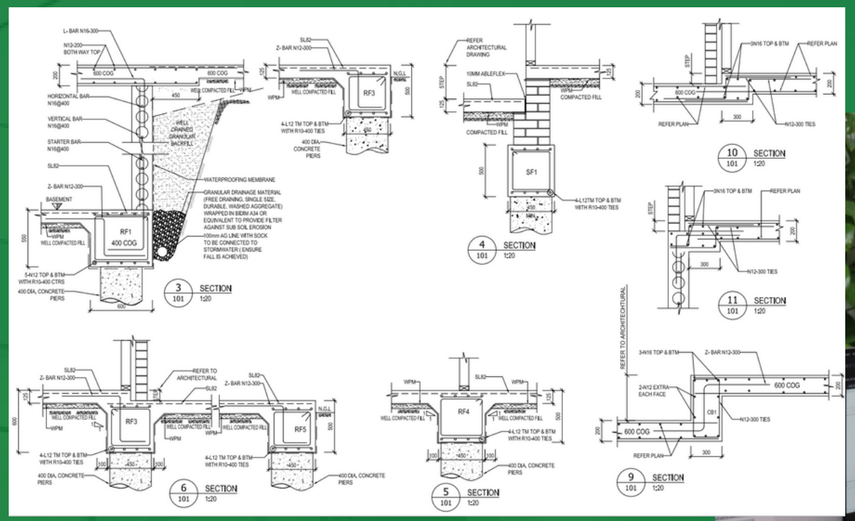
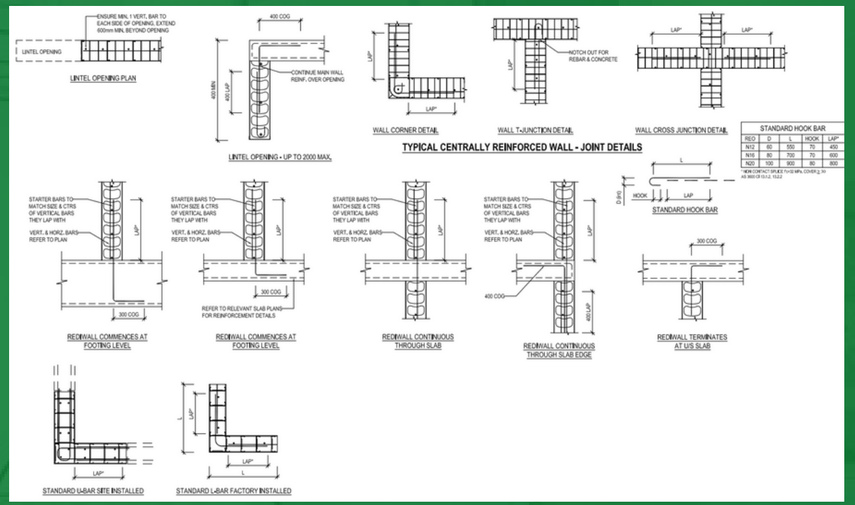
Structural Drafting





Looking to expand your technical team but facing labor shortages in the current market?

We help businesses grow by providing access to our resources of skilled engineers and technicians familiar with the Australian building industry.

Australian businesses that require offshore support

Vietnamese engineers (employed by UTO)

CSR

afs

hebel®

A RANGE OF
AUSSIE STEEL FABRICATORS AND STEEL DETAILERS
THAT WE CAN'T DISCLOSE HERE

CEMINTEL®

GYPROCK®

DINCEL
STRUCTURAL WALLING

FKG GROUP

Structural drafting

- Highly experienced in both Residential and Commercial
- Follow your company’s standards in drafting details and keep track of documents
- Coordinate drafting for designs with Project Engineers and assist them when needed
- AutoCAD, Revit, and FEM softwares

Structural Toolkit

AUTODESK® REVIT® Structures

ClearCalcs

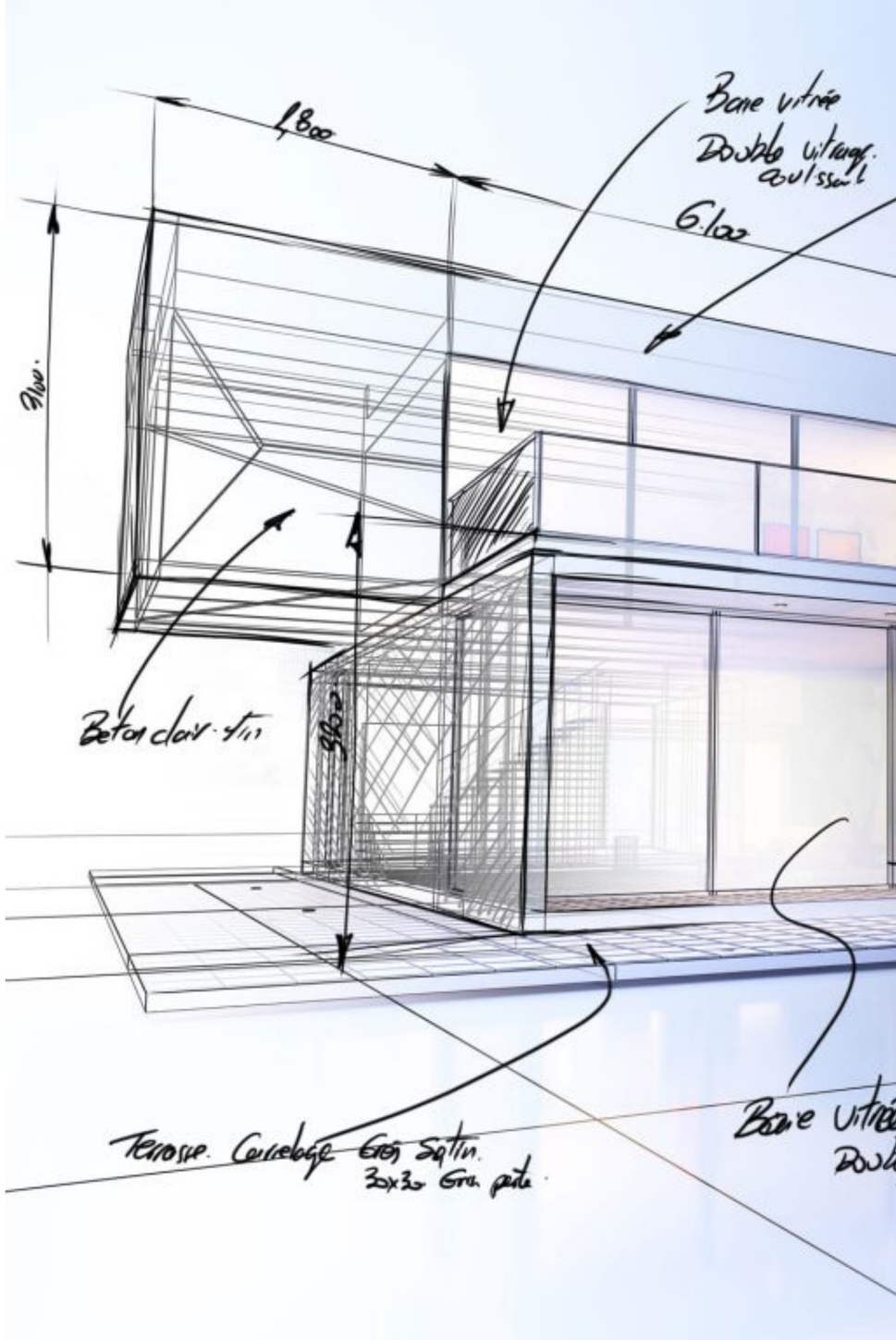
ROBOT STRUCTURAL ANALYSIS PROFESSIONAL

ETABS®

SAP2000®

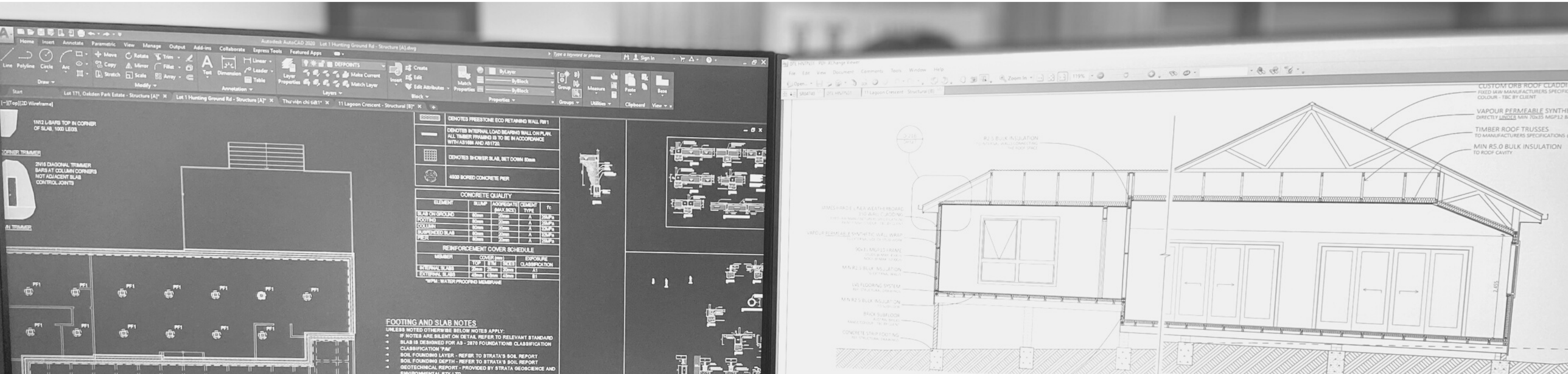
INDUCTA

SPACE GASS



Our process

1 RECEIVE REQUEST → 2 DESIGNING & DRAFTING → 3 CHECKING & REVISING → 4 FINALIZING



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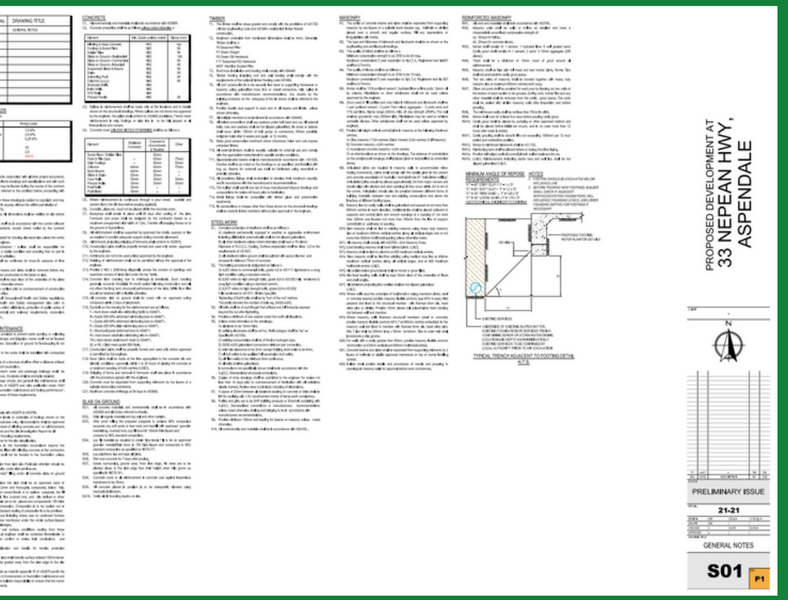
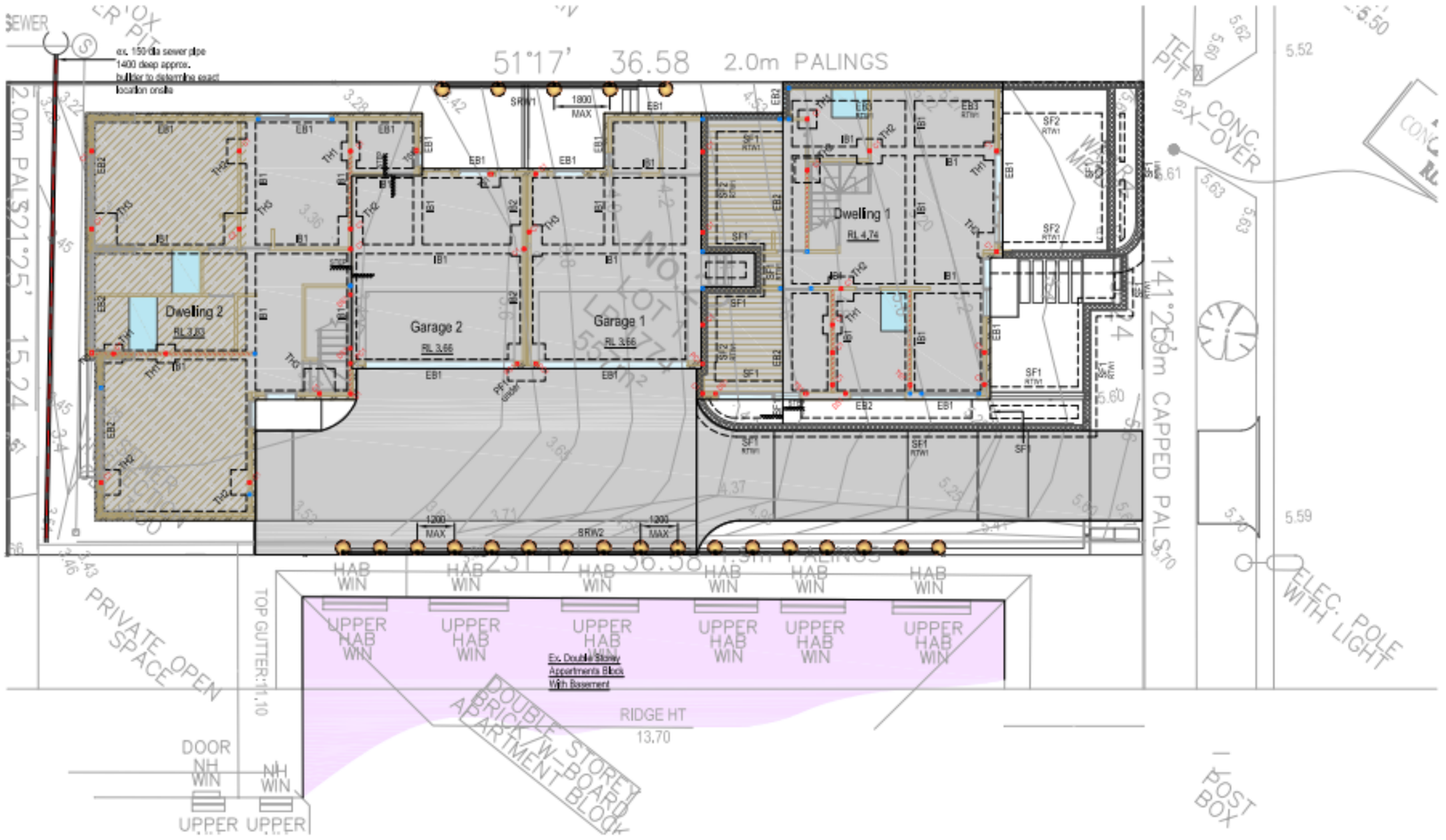


Sample work

GF Footing and Slab Plan



GROUND FLOOR FOOTING AND SLAB PLAN

SCALE 1 : 100

LEGEND

- DENOTES STEEL COLUMNS OVER. REFER FRAMING MEMBER SCHEDULE.
- DENOTES TS1 or DS1 OVER. REFER FRAMING MEMBER SCHEDULE.
- DENOTES 2 No 90 x 45 MGP10 DOUBLE STUDS. REFER STRUCTURAL FRAMING NOTES.
- DENOTES LIGHTWEIGHT LOAD BEARING WALLS OVER.
- DENOTES TYPE S WALL BRACING (METAL TENSION STRAP BRACING) REFER TO DETAIL.
- DENOTES TYPE P WALL BRACING (PLY BRACING) REFER TO DETAIL.
- PT300 DENOTES 300mm WIDE POWERTRUSS BRACING TRUSS TO MANUFACTURER'S DESIGN & SPECIFICATIONS POWER TRUSS TO BE WELDED TO STEEL COLUMN AT TOP, MIDDLE & BOTTOM FOR A LENGTH OF 150mm

	SLEEPER RETAINING WALL SCHEDULE				
600mm MAX TYPICAL	SRW1	600 MAX. RETAINING WALL	100 VC 18 AT 1800 MAX. CFS.	200 x 100 FS KDTP	450 DIA. BORED PIERS 800 DEEP.
1200mm MAX TYPICAL	SRW2	1200 MAX. RETAINING WALL	100 VC 18 AT 1200 MAX. CFS. REFER TO SEQUENCE NOTES	200 x 100 FS KDTP	450 DIA. BORED PIERS 1.5 x RETAINING HEIGHT.
	RETAINING BLOCK WALL SCHEDULE				
	RTW1	190mm THICK RETAINING BLOCK - 1200 MAX. RETAINING. N16-400 CTS. VERT & HORIZ. BARS. N16-200 CTS. STARTER. BARS. LAP 600, 400 COG INTO FOOTING.			

GEOTECHNICAL NOTE

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SITE INVESTIGATION REPORT

THIS SITE HAS BEEN CLASSIFIED "CLASS A" IN ACCORDANCE WITH GEOTECHNICAL REPORT No. 21867 PREPARED BY ALLEY KARLOVIC SOIL ENGINEERING, DATED 20 / 11 / 2021.

ALL EDGE AND INTERNAL SLAB BEAMS AND SLAB THICKENINGS ARE TO BE FOUNDED AT LEAST 100mm INTO THE NATURALLY OCCURRING MEDIUM DENSE SAND WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100kPa.

ALL STRIP FOOTINGS AND PAD FOOTINGS ARE TO BE FOUNDED AT LEAST 100mm INTO THE NATURALLY OCCURRING MEDIUM DENSE SAND WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100kPa.

SOLE RELIANCE HAS BEEN PLACED ON THIS REPORT

FOOTING SCHEDULE (F'c = 25MPa)

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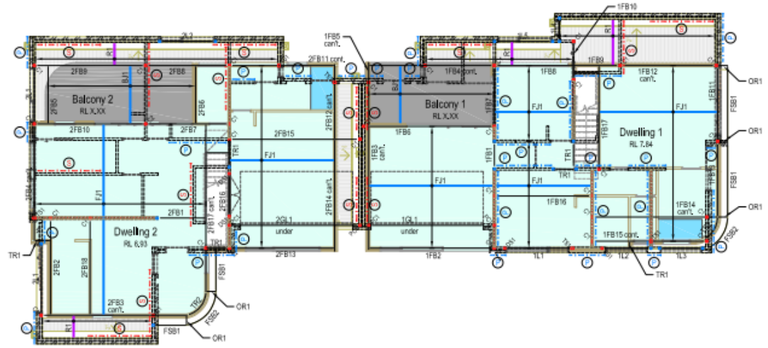
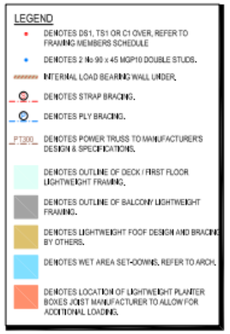
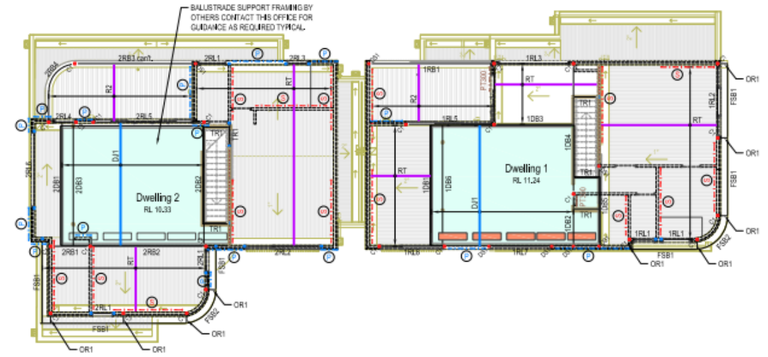
Sample work
Framing Plans





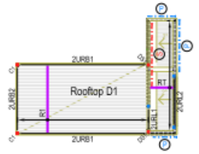
FIRST FLOOR FRAMING PLAN

SCALE 1 : 100



DECK / ROOF FRAMING PLAN

SCALE 1 : 100



UPPER ROOF FRAMING PLAN

SCALE 1 : 100

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Technical
Outsource

Sample work
Schedules

FIRST FLOOR FRAMING MEMBER SCHEDULE

MARK	SIZE	REMARKS
FIRST FLOOR - UNIT 1		
1FB1	2 - 190 x 45 MGP10	FLOOR BEAM
1FB2	300 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB3	300 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB4	2 - 240 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
1FB5	2 - 240 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
1FB6	300 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB7	200 PFC 75 - Gr.300PLUS	FLOOR BEAM
1FB8	2 - 290 x 45 MGP10	FLOOR BEAM
1FB9	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB10	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB11	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
1FB12	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB13	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
1FB14	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
1FB15	200 UB 22.3 - Gr.300PLUS	FLOOR BEAM
1FB16	200 UB 22.3 - Gr.300PLUS	FLOOR BEAM
1FB17	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
FIRST FLOOR - UNIT 2		
2FB1	2 - 240 x 45 MGP10	FLOOR BEAM
2FB2	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
2FB3	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
2FB4	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
2FB5	2 - 240 x 45 MGP10	FLOOR BEAM
2FB6	2 - 290 x 45 MGP10	FLOOR BEAM
2FB7	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
2FB8	200 PFC 75 - Gr.300PLUS	FLOOR BEAM
2FB9	200 UB 22.3 - Gr.300PLUS	FLOOR BEAM
2FB10	250 UC 72.9 - Gr.350	FLOOR BEAM
2FB11	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
2FB12	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	FLOOR BEAM
2FB13	200 PFC 75 - Gr.300PLUS	FLOOR BEAM
2FB14	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
2FB15	200 UC 46.2 - Gr.350	FLOOR BEAM
2FB16	2 - 240 x 45 MGP10	FLOOR BEAM
2FB17	250 PFC 90 - Gr.300PLUS	FLOOR BEAM
2FB18	250 PFC 90 - Gr.300PLUS	FLOOR BEAM

DECK / ROOF AND UPPER ROOF FRAMING MEMBER SCHEDULE

MARK	SIZE	REMARKS
DECK / ROOF FLOOR - UNIT 1		
1DB1	250 PFC 90 - Gr.300PLUS	DECK BEAM
1DB2	2 - 240 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	DECK BEAM
1DB3	200 PFC 75 - Gr.300PLUS	DECK BEAM
1DB4	250 PFC 90 - Gr.300PLUS	DECK BEAM
1DB5	200 PFC 75 - Gr.300PLUS	DECK BEAM
1DB6	200 UB 22.3 - Gr.300PLUS	DECK BEAM
1RB1	2 - 290 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	ROOF BEAM
1URB1	200 PFC 75 - Gr.300PLUS	UPPER ROOF BEAM
1URB2	2 - 290 x 45 F17 SEASONED, RADIATA PINE	UPPER ROOF BEAM
1L1	2 - 290 x 45 F17 SEASONED, RADIATA PINE	LINTEL
1L2	2 - 240 x 45 MGP10	LINTEL
1L3	240 x 45 MGP10	LINTEL
1L4	140 x 45 MGP10	LINTEL
1L5	240 x 45 MGP10	LINTEL
1GL1	250 PFC 90 - Gr.300PLUS	GARAGE LINTEL
1RL1	140 x 45 MGP10	ROOF LINTEL
1RL2	2 - 240 x 45 MGP10	ROOF LINTEL
1RL3	2 - 240 x 45 MGP10	ROOF LINTEL
1RL4	200 PFC 75 - Gr.300PLUS	ROOF LINTEL
1RL5	250 PFC 90 - Gr.300PLUS	ROOF LINTEL
1RL6	250 PFC 90 - Gr.300PLUS	ROOF LINTEL
1RL7	2 - 290 x 45 F17 SEASONED, RADIATA PINE	ROOF LINTEL
1URL1	140 x 45 MGP10	UPPER ROOF LINTEL
1URL2	190 x 45 MGP10	UPPER ROOF LINTEL
DECK / ROOF FLOOR - UNIT 2		
2DB1	250 PFC 90 - Gr.300PLUS	DECK BEAM
2DB2	250 PFC 90 - Gr.300PLUS	DECK BEAM
2DB3	200 UB 22.3 - Gr.300PLUS	DECK BEAM
2RB1	250 PFC 90 - Gr.300PLUS	ROOF BEAM
2RB2	250 PFC 90 - Gr.300PLUS	ROOF BEAM
2RB3	2 - 240 x 45 F17 SEASONED, MIXED SA/NSW HARDWOOD	ROOF BEAM
2RB4	200 PFC 75 - Gr.300PLUS	ROOF BEAM
2URB1	200 PFC 75 - Gr.300PLUS	UPPER ROOF BEAM
2URB2	2 - 290 x 45 F17 SEASONED, RADIATA PINE	UPPER ROOF BEAM
2L1	2 - 240 x 45 MGP10	LINTEL
2L2	2 - 240 x 45 MGP10	LINTEL
2GL1	380 PFC 100 - Gr.300PLUS	GARAGE LINTEL
2RL1	140 x 45 MGP10	ROOF LINTEL
2RL2	2 - 240 x 45 MGP10	ROOF LINTEL
2RL3	2 - 140 x 45 MGP10	ROOF LINTEL
2RL4	200 PFC 75 - Gr.300PLUS	ROOF LINTEL
2RL5	250 PFC 90 - Gr.300PLUS	ROOF LINTEL
2RL6	2 - 240 x 45 MGP10	ROOF LINTEL
2URL1	140 x 45 MGP10	UPPER ROOF LINTEL
2URL2	190 x 45 MGP10	UPPER ROOF LINTEL

COMMON MEMBER SCHEDULE

MARK	SIZE	REMARKS
DS1	2 No 90 x 45 F17 KDHW	DOUBLE STUDS
TS1	3 No 90 x 45 F17 KDHW	TRIPLE STUDS
C1	89 x 89 x 5.0 SHS	STEEL COLUMN
R1	LOUVRE RAFTERS TO MANUFACTURER'S SPEC. AND DESIGN OR 290 X 45 F7 KDTP AT 600 MAX. CTS.	
R2	LOUVRE RAFTERS TO MANUFACTURER'S SPEC. AND DESIGN OR 240 X 45 MGP10 AT 600 MAX. CTS.	
FJ1	360 DEEP POSISTRUTS AT 450 MAX. CTS. TO MANUFACTURER'S SPEC. AND DESIGN.(FLOOR JOIST)	
BJ1	240 X 45 MGP10 AT 450 MAX. CTS. (BALCONY JOIST)	
DJ1	360 DEEP POSISTRUTS AT 450 MAX. CTS. TO MANUFACTURER'S SPEC. AND DESIGN. (DECK JOIST)	
TR1	2/240 x 45 MGP10	STRIMMER BEAM
TR2	200 x 75 PFC CURVED	STRIMMER BEAM
OR1	150 x 75 PFC	OUTRIGGER BEAM
FSB1	15 x 75 PFC OR 240 x 45 MGP10	
FSB2	150 x 75 PFC CURVED	

GENERAL NOTES

ALL FIRE RATINGS AND ACOUSTIC RATINGS BETWEEN APARTMENTS AND / OR COMMUNAL SPACES TO BE IN ACCORDANCE WITH ARCHITECT'S SPECIFICATIONS.

WET AREAS AND FLOOR FINISHES TO BE STRICTLY IN ACCORDANCE WITH ARCHITECTURAL DOCUMENTATION. BUILDER TO ENSURE SET-DOWNS IN FLOOR JOISTS ACCOMMODATE REQUIRED FINAL LEVELS.

TEMPORARY STEEL PROPPING NOTE

ALL STRUCTURAL STEEL TO BE ADEQUATELY PROPPED AND TO REMAIN PROPPED UNTIL ALL BRACING ELEMENTS ARE FULLY INSTALLED. PROPS MAY ONLY BE REMOVED ONCE STRUCTURE HAS BEEN INSPECTED AND APPROVED BY ENGINEER AND OR BUILDING SURVEYOR.

MASONRY LINTEL SCHEDULE (U.N.O)

SPAN	LINTEL SPECIFICATION (ALL EXPOSED STEELWORK TO BE GALVANISED)	
<1200	90 x 90 x 6 EA LINTEL or 90 x 8 GALINTEL	110 END BEARING
1200-1500	90 x 90 x 8 EA LINTEL or 100 x 100 GALINTEL	110 END BEARING
1500-2000	100 x 100 x 8 EA LINTEL or 100 x 100 GALINTEL	110 END BEARING
2000-2500	150 x 90 x 8 UA LINTEL or 150 x 100 GALINTEL	230 END BEARING
2500-3000	150 x 100 x 10 UA LINTEL or 150 x 100 GALINTEL	230 END BEARING
3000-3600	150 x 100 x 10 GALINTEL	230 END BEARING