

SITE INSPECTION AND CLASSIFICATION REPORT

Site Details

CLIENT:	IQ CONSTRUCTION	CLIENTS JOB NO:	
OWNER:		JOB NO:	25-2340
LOT/HOUSE NO:	LOT 977	DATE:	10/12/2025
STREET:	NANCARROW WAY	INSPECTION DATE:	26/11/2025
LOCATION:	RAVENSWOOD		

Site Classification

VEGETATION:	Grass; Weeds
TOPSOIL/ROOTS:	No
ROOTMAT:	No
STUMPS:	No
RUBBISH:	Minor

SITE CLASSIFICATION:	Class A <i>in accordance with AS2870</i>
SAND PAD:	No sand pad required
FOOTING DETAIL:	A1

DURABILITY CLASS.:	R1 <i>in accordance with AS3700 & AS2699</i>
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Site Description

SITE DESCRIPTION:	Flat, Sandy
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Soil Profile and Bore Hole Log

BORE HOLE 1: B1

0 - 2500mm: SAND; Light Grey; Medium Grained; Well Graded; None; Medium Density; Dry

BORE HOLE 2: B2

0 - 2500mm: SAND; Light Grey; Medium Grained; Well Graded; None; Medium Density; Dry

BORE HOLE 3: B3

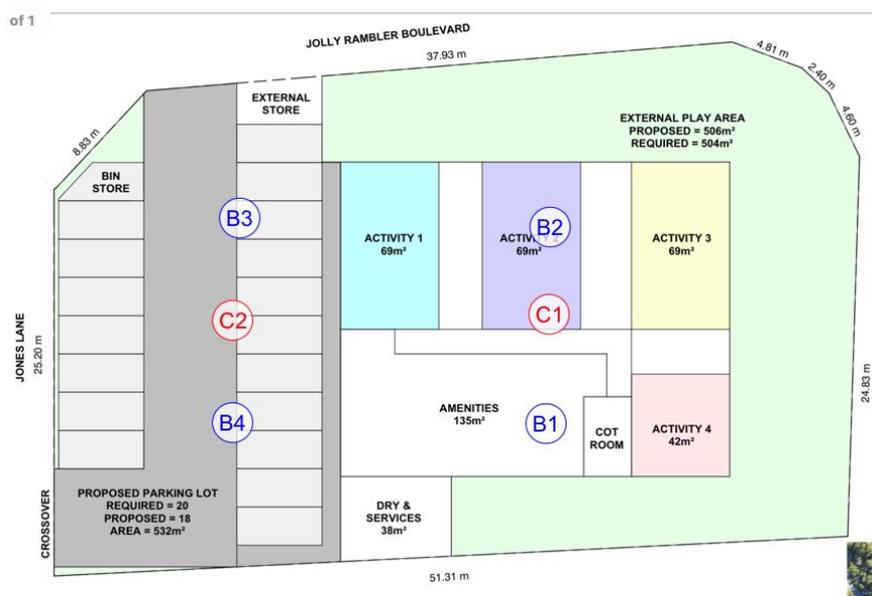
0 - 2500mm: SAND; Light Grey; Medium Grained; Well Graded; None; Medium Density; Dry

BORE HOLE 4: B4

0 - 2500mm: SAND; Light Grey; Medium Grained; Well Graded; None; Medium Density; Dry

Borehole Notes

- Bore Holes are numbered as such (unless otherwise noted):
1 - Front Left of Site, 2 - Rear Left of Site, 3 - Rear Right of Site, 4 - Front Right of Site.
- Where only one Bore Hole is taken, it is located at the centre of the site/building envelope.
- Bore Holes reveal the soil profile at the bore hole location only and are assumed to be consistent across the site. Should excavation reveal otherwise, contact this office for further advice.



Compaction Results

COMPACTION 1:	C1	COMPACTION 2:	C2
	150 - 450mm: 8		150 - 450mm: 7
	450 - 750mm: 10		450 - 750mm: 9
	750 - 1050mm: 12		750 - 1050mm: 11

Compaction Notes

1. Tested with a Perth Sands Penetrometer (PSP). Flat ended rod of 16 ϕ driven with a 9kg mass dropped 600mm) in accordance with as 1289.6.3.3
2. This is an indication of the in-situ compaction at time of inspection and is intended to act as a guide when determining the extent of earthworks and preparation required for the site. A formal compaction certificate is to be obtained prior to pouring any concrete or commencing any construction.
3. Compaction testing will be carried out to a depth of 1050mm or prior refusal.
VH Very Hard: Penetration Resistance (Np) results which exceed 15 blows.
R Refusal: This is when the shaft of the penetrometer encounters a material which cannot be penetrated such as gravel, limestone or building rubble.

Recommendations

1. All earthworks shall be in accordance with AS3798 "Guidelines on Earthworks for Commercial and Residential Developments" and shall include but not be limited to:
 - Strip building area and perimeter apron of organic material and rubbish.
 - Grub out any trees/stumps and back fill with clean compacted sand free of any voids.
 - Remove any deleterious material such as rock or clay from the building area or apron.
 - Notify Engineer if any anomalies or unusual features are encountered during the works.
 - Cut and/or fill site to form up pad with clean compacted sand to the required level.
 - Refer to structural drawings for compaction requirements.
 - Construct footings and slab as per the structural footing details.
2. This office must be notified of any existing geotechnical or site classification reports for this site as these may take precedence over this report. Contact this office should an existing report be available.
3. The footing detail recommended requires ongoing maintenance of the site to ensure its structural performance. Refer to CSIRO publication 10-91 "Guide to Home Owners on Foundation Maintenance and Footing Performance" for details.
4. These recommendations and footing details provided are based on performance as defined in AS2870. Minor foundation movement is to be expected which can result in cracking relating to damage category 2. This is deemed to be non-structural cracking.
5. The soil and wind classification contained in this report is applicable for single and two storey residential applications only.
6. For sites not classified as Class A (Sand), an inspection of the cut base is recommended prior to installation of sand pad. Requirements for WPM and sub-soil drainage will be advised at this time.
7. The footing details provided are not for construction and are only for preliminary costing advice. Final footing design may change as it is to take into account additional factors such as loading and geometry.

Certification



SIGNED: Josh Mikolajczyk
Structural Engineer - BEng (Hons) MIE Aust

DATE: Wednesday, 10 December 2025

GENERAL NOTES

- ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES SHALL BE REPORTED PRIOR TO FABRICATION AND CONSTRUCTION. CHECK ALL DIMENSIONS ON SITE. REPORT ALL DISCREPANCIES.
- DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
- ALL STANDARDS REFERENCED SHALL BE AS PER THE CURRENT 'NCC'.
- DIMENSIONS ON THE STRUCTURAL DRAWINGS ARE EXCLUSIVE OF FINISHES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION METHOD AND MAINTENANCE OF SAFETY DURING THE CONSTRUCTION. SHOULD ANY ELEMENT PRESENT ITSELF TO BE DIFFICULT WITH RESPECT TO CONSTRUCTABILITY OR SAFETY, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO ALLOW FOR DIRECTION TO BE GIVEN PRIOR TO PROCEEDING WITH WORKS.
- ALL WORKS TO CONFORM TO THE NATIONAL CONSTRUCTION CODE "NCC".
- THE STRUCTURE HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE RELEVANT CODE/STANDARD PROVISIONS FOR THE STRUCTURE IN ITS SERVICE CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE & ADJACENT STRUCTURES DURING THE CONSTRUCTION PROCESS AND IS RESPONSIBLE TO ENSURE THAT NO STRUCTURAL ELEMENT IS IN ANY WAY OVERSTRESSED DURING THE CONSTRUCTION PROCESS. ANY TEMPORARY BRACING/SUPPORT WHICH IS REQUIRED IS TO BE DESIGNED AND INSTALLED BY APPROPRIATE SUB-CONTRACTORS.
- THIS OFFICE DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE DESIGN, NOMINATION, SPECIFICATION OR INSTALLATION OF ANY TEMPORARY RETAINING OR UNDERPINNING WORKS INCLUDING BUT NOT LIMITED TO GROUT INJECTION, SHORING OR SHEET PILING AS THIS IS CARRIED OUT BY SPECIALIST CONSULTANTS AND SUBCONTRACTORS.
- CONTRACTOR SHALL ENSURE THAT THE STRUCTURE AND ADJACENT STRUCTURES ARE NOT UNDERMINED OR SURCHARGED.
- ALL WORKS INCLUDING FOOTINGS ARE TO BE CONSTRUCTED WHOLLY WITHIN THE PROPERTY BOUNDARY AND ARE IN NO WAY TO ENCROACH ON NAY NEIGHBORING SITES
- WATERPROOFING OF STRUCTURAL ELEMENTS AS REQUIRED IS TO BE DESIGNED, NOMINATED, SPECIFIED & INSTALLED BY SPECIALIST SUBCONTRACTORS OR THE BUILDER. THIS OFFICE ACCEPTS NO RESPONSIBILITY FOR THE WATERPROOFING OF STRUCTURES.
- THE DESIGN, NOMINATION & SPECIFICATION OF SITE DRAINAGE IS THE RESPONSIBILITY OF THE BUILDER OR SPECIALIST SUB CONSULTANTS.
- ALL CONSTRUCTION SHALL BE UNDERTAKEN BY COMPETENT AND SUITABLY QUALIFIED PERSONS.
- UNLESS DRAWINGS ARE ISSUED "REV 0 - ISSUED FOR CONSTRUCTION" THEY ARE NOT TO BE USED FOR CONSTRUCTION AND ARE FOR ADVICE AND REVIEW ONLY.

FOOTINGS

- COMPACT ALL GRADES BELOW FOOTINGS AND SLAB ON GROUND TO ACHIEVE A MINIMUM PERTH SAND PENETROMETER (PSP) READING IN ACCORDANCE WITH AS1289.6.3.3 OF:
 - SINGLE STOREY: 6 BLOWS PER 300mm
 - MULTI STOREY: 7 BLOWS PER 300mm
- ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
- THE FOOTING DETAIL RECOMMENDED REQUIRES ONGOING MAINTENANCE OF THE SITE TO ENSURE ITS STRUCTURAL PERFORMANCE. REFER TO CSIRO PUBLICATION 10-91 "GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE" FOR DETAILS. THESE RECOMMENDATIONS AND FOOTING DETAILS PROVIDED ARE BASED ON PERFORMANCE AS DEFINED IN AS2870. MINOR FOUNDATION MOVEMENT IS TO BE EXPECTED WHICH CAN RESULT IN CRACKING RELATING TO DAMAGE CATEGORY '2'. THIS IS DEEMED TO BE NON-STRUCTURAL CRACKING.
- ALL SAND SHALL BE CLEAN WELL GRADED SAND AND SHALL BE COMPACTED IN 300mm LAYERS. ALL SAND FILL SHALL BE CLEAN, FREE DRAINING, WELL GRADED SAND WITH NO MORE THAN 5% PASSING A 75 µm SIEVE. WHERE ENGINEER CONTROLLED FILL IS REQUIRED, THE SAND IS TO BE COMPACTED IN LAYERS OF 300mm TO ACHIEVE AT LEAST 7 PSP BLOWS FROM 150mm-450mm, 7 PSP BLOWS FROM 450mm-750mm AND 8PSP BLOWS FROM 750mm-1050mm.
- POUR LOWER LEVEL FOOTINGS FIRST. DIFFERENCE IN FOUNDING LEVEL OF ADJACENT FOOTINGS SHALL NOT EXCEED HALF OF THE CLEAR DISTANCE BETWEEN THEM.
- STEP FOOTINGS 514 (MAX) TO SUIT SITE LEVELS U.N.O.
- ALL FOOTINGS AND GROUND SLABS ARE TO BE BUILT IN ACCORDANCE WITH
 - AS2870 - RESIDENTIAL SLABS AND FOOTINGS
 - AS3798 - GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
- WHERE SERVICE PIPES PASS THROUGH THE FOOTINGS, SPECIFIED TOTAL THICKNESS OF ALL CONCRETE IS ALWAYS TO BE MAINTAINED. FOR CLASS 'M' & 'H1' SITES, PROVIDE A CLOSED CELL POLYETHYLENE PACKING OF AT LEAST 20mm AROUND ALL SERVICES PASSING THROUGH CONCRETE. FOR CLASS 'H2' & 'E' SITES PROVIDE A CLOSED CELL POLYETHYLENE PACKING OF AT LEAST 40mm AROUND ALL SERVICES PASSING THROUGH CONCRETE. VERTICAL PENETRATIONS DO NOT REQUIRE LAGGING.

MASONRY

- BRICKWORK SHALL COMPLY WITH AS3700 & AS4773.
- LOAD BEARING BRICKWORK SUPPORTING SUSPENDED FLOORS TO HAVE A MINIMUM UNCONFINED CHARACTERISTIC STRENGTH f_{uc}: 12MPa.
- MORTAR TO BE M3. USE M4 WHEN LOCATED WITHIN 1km OF THE OCEAN OR WHEN IN DPC (DAMP PROOF COURSE).
- MASONRY ABUTTING STEEL OR CONCRETE SHALL BE RESTRAINED USING 32 x 1.2mm STEEL STRAPS 300 LONG POWER FIXED AT THE LESSER OF EVERY 4TH COURSE OR 600mm VERTICALLY. ALTERNATIVELY, PROVIDE R6 RODS CRIMPED AND WELDED AT 300 CRS TO BOTH SIDES OF STEELWORK. PROVIDE BRICK TIES AS PER NOTE 5.
- APPROVED WALL TIES ARE TO COMPLY WITH AS3700, AS/NZS2699.1 & AS4773.1
- ALL EXPANSION JOINTS TO BE PROVIDED IN ACCORDANCE WITH AS3700. PROVIDE 15mm WIDE VERTICAL EXPANSION JOINT TO THE EXTERNAL LEAF OF CLAY MASONRY WALLS GREATER THAN 12m LONG OR 10m LONG FOR PARAPET WALLS. USE EXPANSION BRICK TIES ACROSS THE JOINT INSTALLED EVERY 4TH COURSE VERTICALLY. FILL JOINT WITH FLEXIBLE FILLER.
- LOAD BEARING BRICKWORK SHALL NOT BE HORIZONTALLY OR DIAGONALLY CHASED OR CUT WITHOUT PRIOR APPROVAL OF THE ENGINEER.

- U.N.O ALL BEDJOINTS & PERPENDS SHALL BE 10mm WIDE.
- ALL JOINTS SHALL BE FULLY FILLED.

FORMWORK

- ALL FORMWORK SHALL COMPLY WITH AS3610
- FORMWORK STRIPPING TIMES (MINIMUM DAYS)
 - WALLS AND COLUMNS - 3 DAYS
 - BEAMS, SLABS & STAIRS - 10 DAYS
- IMMEDIATELY AFTER STRIPPING, PROGRESSIVELY BACK PROP SLAB AND BEAMS. PLACE PROPS AT 1/4 POINTS OF BEAM SPANS, AND AT 2.4m CRS FOR SLAB.
- DE-PROP WHEN SLAB IS 28 DAYS OLD. THIS CAN BE REDUCED TO 21 DAYS PROVIDED f_c IS REACHED (TESTED IN ACCORDANCE WITH AS1012.9).
- BETWEEN 10 & 21 DAYS, WHILE PROPPED, CONSTRUCTION MATERIALS MAYBE LOADED ON TOP OF SLAB AT THE LOCATIONS OVER WALLS OR PROPS BELOW.
 - CONSTRUCTION OF WALLS OVER SHALL ONLY COMMENCE ONCE SLAB IS FULLY DE-PROPPED.
- ALL FORMWORK TO COMPLY WITH AS3610. THE DESIGN CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF FORMWORK AND FORMWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT STANDARDS.

CONCRETE

- ALL CONCRETE SHALL BE IN ACCORDANCE WITH AS3600
- CONCRETE QUALITY; REFER TO TABLE

ELEMENT	GRADE OF CONCRETE f _c (MPa)	MAX. AGGREGATE SIZE (mm)	SLUMP (mm)
FOOTINGS	N20	20	80
SLAB ON GROUND - INTERNAL	N20	20	80
SUSPENDED SLAB - INTERNAL	N32	20	80
SUSPENDED SLAB - EXTERNAL	N40	20	80
COLUMNS	N40	14	80

- INTERNAL - PROTECTED FROM WEATHER, CONTAINED WITHIN THE MAIN BUILDING BY WALLS & ROOF ETC.
 - EXTERNAL - EXPOSED/OPEN TO WEATHER EG: UNDERSIDE OF EXTERNAL CANTILEVER, BALCONY SLABS, SLAB OVER ALFRESCO AREAS ETC.
- ALL CEMENT SHALL CONFORM TO AS 3972, ALL CEMENT TO BE USED GENERAL PURPOSE CEMENT "TYPE GP". BLENDED CEMENTS "TYPE GB" SHALL NOT BE USED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
 - BUILD ALL FORMWORK FROM ARCHITECTURAL DRAWINGS. CONFIRM ANY CAST-IN ITEMS SUCH AS BOLTS, ANGLES, TIES, FLASHING, PLUMBING AND ELECTRICAL FITTINGS ETC.
 - ALL CONCRETE SHALL BE VIBRATED BY AN APPROVED IMMERSION TYPE VIBRATOR. THE FINISHED CONCRETE SHALL COMPLETELY FILL THE FORMWORK, ENCASE ALL REINFORCEMENT AND ENSURE SEGREGATION OF THE CONCRETE DOES NOT OCCUR. POUR BEAMS AND SLABS MONOLITHICALLY.
 - CONSTRUCTION JOINT LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
 - CAST-IN CONDUITS SHALL HAVE A MINIMUM 25mm CONCRETE COVER AND SHALL BE PLACED BETWEEN, NOT OUTSIDE, THE LAYERS OF REINFORCEMENT.
 - WHERE CONCRETE BEARS ON BRICKWORK, PROVIDE TWO LAYERS OF APPROVED BOND BREAKER BETWEEN WALLS AND SUSPENDED SLAB (ALSO APPLICABLE TO WALLS OVER SUSPENDED SLAB) U.N.O.
 - ALL CONCRETE SHALL BE MOIST CURED FOR 7 DAYS BY EITHER:
 - CONTINUOUS WATER PONDING
 - WET HESSIAN
 - APPROVED CURING MEMBRANE
 - CURING COMPOUNDS ARE PERMITTED, PROVIDED THAT THEY COMPLY WITH AS3799 AND DO NOT EFFECT THE FLOOR FINISHES. THE USE OF PVA BASED COMPOUNDS IS NOT RECOMMENDED.
 - ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE POURING CONCRETE.
 - ADMIXTURES SHALL NOT BE USED WITHOUT WRITTEN APPROVAL FROM THE DESIGN ENGINEER.
 - UNLESS STATED ON THE ATTACHED PLANS, IT IS ASSUMED THAT POLISHED, HONED OR EXPOSED FINISHES WILL NOT BE USED TO CONCRETE SURFACES. REFER TO THIS OFFICE FOR FURTHER ADVICE IF USING ANY OF THE FINISHES STATED ABOVE.

STRUCTURAL STEEL

- STEELWORK SHALL COMPLY WITH AS4100.
- ALL HOLLOW SECTIONS SHALL BE FULLY SEALED USING 3mm SEAL PLATES.
- DRY PACK BENEATH ALL BASE PLATES USING 2:1 SAND/CEMENT STIFF MORTAR.
- WELDING SHALL COMPLY WITH AS/NZS1554 AND SHALL HAVE A MINIMUM WELD CATEGORY OF GENERAL PURPOSE (GP). USE E48XX OR W50X WELDING CONSUMABLES U.N.O.
- U.N.O USE 6mm CONTINUOUS FILLET WELD AT ALL WELDED JOINTS. FULL STRENGTH BUTT WELD (F.S.B.W) TO BE GP WELDED CATEGORY U.N.O.
- ALL SITE WELDING TO BE PERFORMED BY QUALIFIED PERSONS.
- TOUCH UP ALL SITE WELDS WITH 2 COATS OF 'COLD GALV' ZINC RICH PAINT.
- ALL SURFACE TREATMENT OF STRUCTURAL STEEL SHALL COMPLY WITH AS/NZS2312 AND THE NATIONAL CONSTRUCTION CODE - "PROTECTIVE COATINGS". ALL STEEL BUILT INTO MASONRY SHALL ALSO COMPLY WITH AS/NZS2699.
- ALL STEELWORK IN CONTACT WITH GROUND TO BE SUITABLY TREATED IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE & CORROSIONS SPECIALISTS RECOMMENDATIONS. CONTACT THIS OFFICE FOR FURTHER ADVICE.
- MINIMUM GRADE OF STEEL SHALL BE:
 - STRUCTURAL STEEL - GRADE 300 IN ACCORDANCE WITH AS/NZS3679
 - HOLLOW SECTIONS - CHS TO COMPLY WITH AS/NZS 1163-C250L0/C350L0 - RHS/SHS TO COMPLY WITH AS/NZS1163-C450L0
 - PLATE - GRADE 300 IN ACCORDANCE WITH AS/NZS3678
 - FLAT BAR - GRADE 250 IN ACCORDANCE WITH AS/NZS3679
- PROVIDE MINIMUM 200 CFW (CONTINUOUS FILLET WELD), TO BOTH SIDES OF WEB OF T-BAR AT BOTH ENDS.
- UNLESS SPECIFIED OTHERWISE, LINTELS & SHELF LINTELS TO COMPLY WITH AS4100, AS3700, AS4773, AS/NZS2699.3 AND THE NATIONAL CONSTRUCTION CODE.

- UNLESS NOTED OTHERWISE LINTELS BELOW SUSPENDED FLOORS SHALL BE SCHEDULED AS NOMINATED BELOW.

MEMBER	MAX SPAN (mm)	MIN. END BEARING (mm)
100 x 75 x 8.0 UA	1500	150
125 x 75 x 8.0 UA	2000	150
150 x 90 x 8.0 UA	2500	230
150 x 100 x 10 UA	3000	230

- BRICKWORK MUST NOT OVERHANG LINTEL BY MORE THAN 25mm.

TIMBER

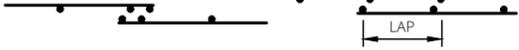
- TIMBER SHALL BE IN ACCORDANCE WITH:
 - AS1684 & AS1720
 - NATIONAL CONSTRUCTION CODE
- ALL STRUTTING BEAMS ARE TO BE LATERALLY RESTRAINED AT POINT OF LOADING AND AT ENDS TO AS1684.
- U.N.O ALL LVL BEAMS ARE ASSUMED TO BE WESBEAM, TILLINGS SMARTFRAME LVL15, HYSYPAN OR EQUIVALENT.
- U.N.O MINIMUM GRADE OF KAPUR GLULAM IS TO BE GL17.
- ALL TIMBER TO CONFORM TO THE REQUIRED HAZARD CLASS IN ACCORDANCE WITH AS1684.
- MINIMUM STRESS GRADES ON TIMBER U.N.O:

TIMBER	GRADE	JOINT GRADE
SOFTWOOD	MGF10	JD5
HARDWOOD	F14	J3

- THE BUILDER/OWNER IS RESPONSIBLE FOR ENSURING ALL EXTERNAL TIMBER IS REGULARLY INSPECTED AND APPROPRIATELY MAINTAINED OVER ITS LIFE BY SUITABLY QUALIFIED PERSONS.
- TERMITE TREATMENT IN ACCORDANCE WITH AS3660.
- ALL PROPRIETARY CONNECTORS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

REINFORCEMENT

- SYMBOLS DENOTED IN DRAWINGS FOR GRADE AND STRENGTH OF REINFORCEMENT
 - SL & RL - GRADE 500 WELDED WIRE REINFORCING MESH TO AS/NZS4671.
 - L - GRADE 500 STEEL REINFORCING WIRE TO AS/NZS4671.
 - N - GRADE 500 HOT ROLLED DEFORMED REINFORCING BAR TO AS/NZS4671
 - R - GRADE 250 R PLAIN BAR TO AS/NZS4671.
 - W - GRADE 500 L COLD DRAWN ROUND WIRE TO AS/NZS4671.
- SPLICE REINFORCEMENT IN ACCORDANCE WITH AS3600.
 - MESH SHALL BE LAPPED SO THAT THE TWO OUTERMOST MAIN WIRES OF ONE SHEET OVERLAP THE TWO MOST OUTERMOST MAIN WIRES OF THE OTHER SHEET.



- THE SPLICE LENGTH OF BARS SHALL BE AS GIVEN IN THE FOLLOWING TABLE, EXCEPT WHERE OTHER DIMENSIONS ARE STATED ON THE ACTUAL DETAILS.
- BASIC TENSILE LAP LENGTH FOR GRADE 500N DEFORMED BARS (mm).

f _c (MPa)	EXP CLASS	BAR TYPE					
		N12	N16	N20	N24	N28	N32
≥ 32	≥ A1	500	750	1000	1250	1500	1750

- PROVIDE STANDARD HOOKS OR COGS TO BAR ENDS IN ACCORDANCE WITH AS3600.
- ALL REINFORCEMENT SHALL BE ADEQUATELY AND ACCURATELY TIED AND SUPPORTED ON PLASTIC, OR PLASTIC TIPPED CHAIRS. FULL PLASTIC CHAIRS ARE TO BE FOR EXTERNAL CONCRETE WHEN LOCATED WITHIN 1km OF THE COAST.
- THE FIRST CONCRETE BEAM LIGATURE SHALL BE POSITIONED NO MORE THAN 50mm FROM ANY ADJACENT SUPPORT FACE.
- THE FIRST CONCRETE COLUMN TIE SHALL BE PLACED NO MORE THAN 50mm FOR ANY ADJACENT SUPPORT FACE
- ALL REINFORCEMENT TO SLAB ON GROUND SHALL BE SUPPORTED BY PLASTIC BAR CHAIRS AT 800 CRS MAX.
- STEEL NOTATION
 - UT - UPPER TOP
 - UB - UPPER BOTTOM
 - LT - LOWER TOP
 - LB - LOWER BOTTOM
- REINFORCING SHALL NOT BE BENT OR HEATED ON SITE WITHOUT APPROVAL FROM THE DESIGN ENGINEER. INCLUDED LUGS TO CAST IN ELEMENTS.
- THE REINFORCEMENT SPECIFIED WILL ASSIST IN CONTROLLING CRACKING OF THE CONCRETE BUT WILL NOT PREVENT FROM IT OCCURRING.,
- U.N.O CLEAR COVER TO REINFORCEMENT SHALL BE:

ELEMENT	REQUIRED COVER (mm)	
	INTERNAL	EXTERNAL
FOOTINGS	65	65
GROUND SLAB (TOP COVER)	25	45
SUSPENDED SLAB	REFER TO SUSPENDED SLAB PLAN FOR COVER REQUIREMENTS	
CONCRETE BEAM	REFER TO SUSPENDED SLAB PLAN FOR COVER REQUIREMENTS	
COLUMN (CONCRETE & FRC)	40 TO FITMENTS	
FOR ENVIRONMENTAL CLASSIFICATION OF "SEVERE", FULL PLASTIC CHAIRS SHOULD BE USED FOR ALL EXTERNAL CONCRETE		
U.N.O REQUIRED COVER INCLUDES TOP, BOTTOM & SIDE COVER.		

ANCHORS & FIXINGS

- ALL MECHANICAL AND CHEMICAL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- THE FOLLOWING TABLE PROVIDES MINIMUM ANCHOR CAPACITY REQUIREMENTS FOR UNCRACKED SUBSTRATES:

MINIMUM WORKING LOAD ANCHOR CAPACITY		
BRICKWORK SUBSTRATE	SHEAR (kN)	TENSION (kN)
MEDIUM DUTY	2.5	2.5
CONCRETE SUBSTRATE	SHEAR (kN)	TENSION (kN)
MEDIUM DUTY	9	7
HEAVY DUTY	18	17

- MINIMUM CONNECTION FOR BEAMS U.N.O:
 - TIMBER TO TIMBER (LESS THAN 300 DEEP) - 6 PLATE CLEAT, 2-M12 BOLTS
 - TIMBER TO TIMBER (300 DEEP OR MORE) - 6 PLATE CLEAT, 3-M12 BOLTS
 - TIMBER TO STEEL - 6 PLATE CLEAT, 2-M12 BOLTS (LESS THAN 300 DEEP) 3-M12 BOLTS (300 DEEP OR MORE)
 - STEEL TO STEEL - 8 PLATE CLEAT, 2-M16 8.8/5 BOLTS
 - APPROVED PROPRIETARY BRACKET
- NOTE: FIXTURE INTO TIMBER MUST BE INTO FULL DEPTH TIMBER
- COACH SCREWS INTO RECEIVING MEMBER SHALL BE:
 - 35MM THICK MEMBER - 100 LONG SCREW
 - 45MM THICK MEMBER - 150 LONG SCREW
- EDGE DISTANCES FOR FASTENERS IN TIMBER (EDGE AND SIDES) SHALL BE IN ACCORDANCE WITH AS1684.

MAINTENANCE

- ALL STRUCTURES ARE REQUIRED TO BE INSPECTED & MAINTAINED BY SUITABLY QUALIFIED PERSONS DURING THEIR LIFE TO ENSURE THEY REMAIN SERVICEABLE & FIT FOR USE. THIS INCLUDES BUT IS NOT LIMITED TO SITE DRAINAGE, SIGNS OF CORROSION, CRACKING, EXCESSIVE DEFLECTION OR ANY OTHER INDICATION OF STRUCTURAL DISTRESS.
- FOR 'S' SLIGHTLY REACTIVE SITES & GREATER, THE BUILDER / OWNER IS TO NOTIFY THE ENGINEER PRIOR TO PLANTING TREES OR SHRUBS WITHIN 2.5m OF THE BUILDING OR A DISTANCE EQUAL TO THE ANTICIPATED MAXIMUM HEIGHT OF THE TREE AS THIS WALL ALTER THE FOOTING DESIGN.



LALLI
CONSULTING ENGINEERS

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REV	ISSUE DATE	DRAWN	ENG.	CHECK	DESCRIPTION
0	10/12/25	S.H.	J.M.	M.L.	ISSUED FOR SITE REPORT ONLY (NOT CONSTRUCTION)

LOCATION

PROPOSED RESIDENCE

LOT 977 NANCARROW WAY,
RAVENSWOOD

CLIENT

IQ CONSTRUCTION

TITLE

GENERAL NOTES



JOB NO.

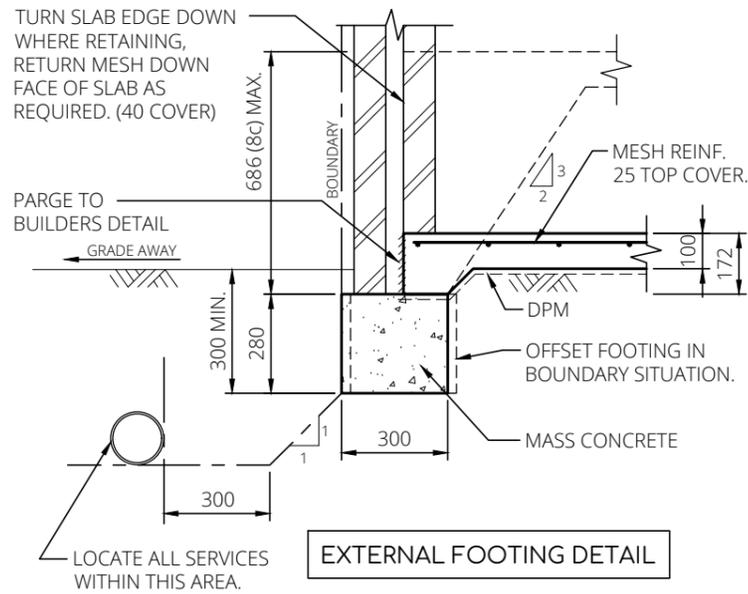
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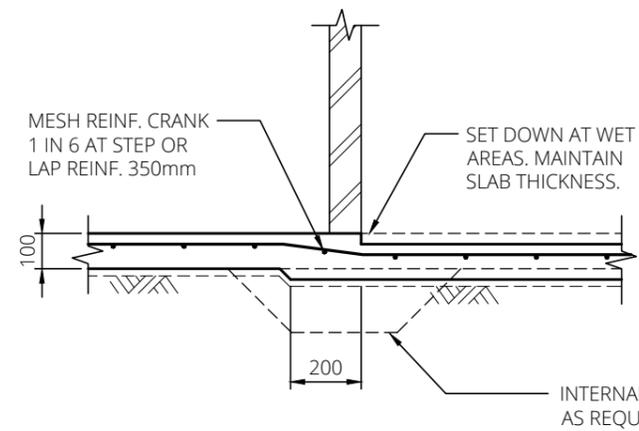
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FOOTING REF.

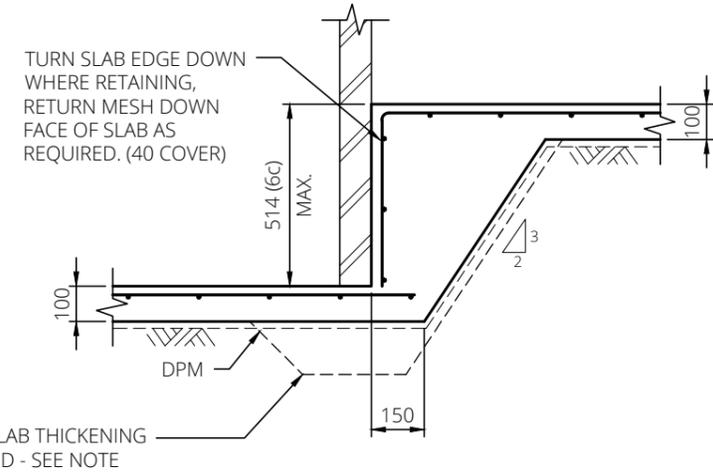
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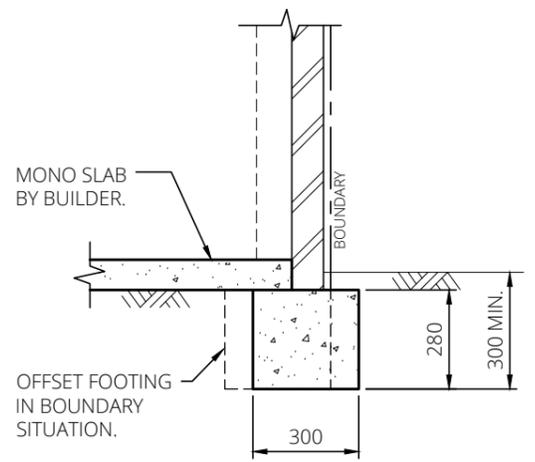
EXTERNAL FOOTING DETAIL



INTERNAL WALL / SLAB SET DOWN DETAIL



INTERNAL SLAB STEP DETAIL



GARAGE FOOTING DETAIL

INTERNAL SLAB THICKENING NOTE

- FOR WALLS UNDER 3700mm HIGH (43c) - NO INTERNAL SLAB THICKENING REQUIRED.
- FOR WALLS OVER 3700mm HIGH (43c) - PROVIDE 250mm DEEP x 300 WIDE MASS CONCRETE THICKENING TO THE FULL EXTENT OF WALL.

SLAB REINFORCEMENT

THESE DETAILS ARE SUITABLE FOR USE FOR A SINGLE STOREY RESIDENCE ON **CLASS A** SITE IN ACCORDANCE WITH AS2870

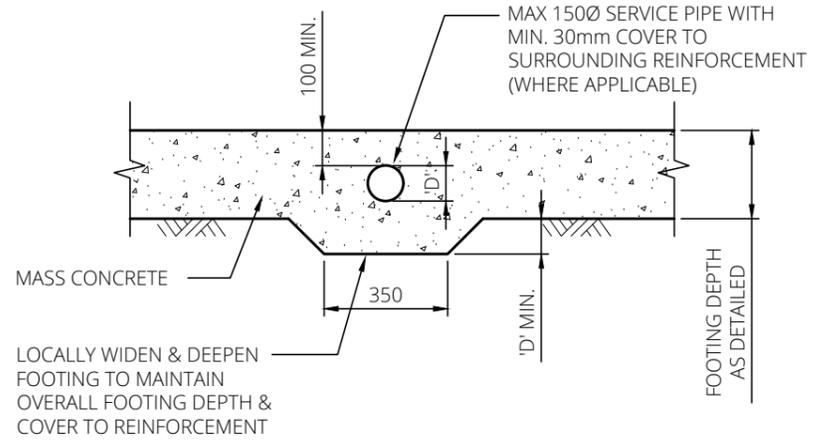
SLAB LENGTH UP TO:

- 22m - USE SL63 MESH
- 26m - USE SL62 MESH
- 30m - USE SL72 MESH
- 32m - USE SL82 MESH

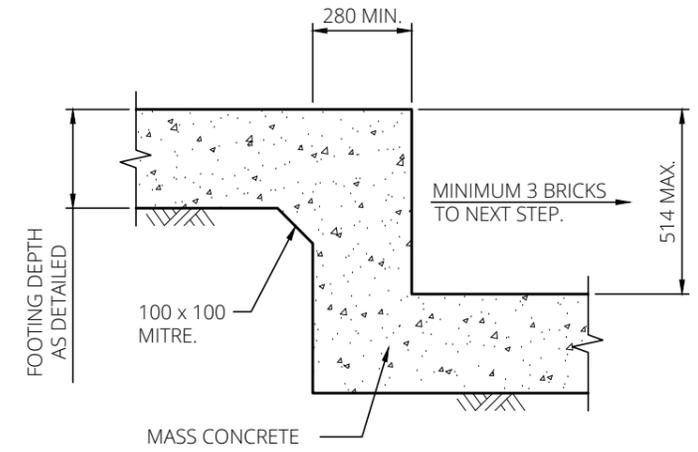
REFER BACK TO THIS OFFICE FOR SLAB SPANS GREATER THAN 32m AND ASPECT RATIOS GREATER THAN 3:1.

PROVIDE 3-N12 x 2000 LONG CENTRAL AT ALL RE-ENTRANT CORNERS.

THESE FOOTING DETAILS ARE TO BE READ IN CONJUNCTION WITH THE GENERAL NOTES.



SERVICES THROUGH FOOTING DETAIL



TYPICAL STEPPED FOOTING DETAIL

- REFER TO ARCH'L DWG'S FOR EXACT LOCATION AND EXTENT.
- STEP FOOTING TO SUIT FLOOR AND FINISHED GROUND LEVELS

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REV	ISSUE DATE	DRAWN	ENG.	CHECK	DESCRIPTION
0	10/12/25	S.H.	J.M.	M.L.	ISSUED FOR SITE REPORT ONLY (NOT CONSTRUCTION)

LOCATION

PROPOSED RESIDENCE
LOT 977 NANCARROW WAY,
RAVENSWOOD

CLIENT

IQ CONSTRUCTION

TITLE

FOOTING & GROUND SLAB
DETAILS

J. MIKOLAJCZYK
BEng MIEAust
Membership No. 2938131
The Institution of Engineers Australia

JOB NO.

25-2340

SCALE AT A3

1:20

FOOTING REF.

A1