

	ELEMENT CONCRETE QUALITY	STRENGTH f'c	MAX SIZE AGG. mm	SLUMP mm	CEMENT TYPE	ADMIXTURE
ı	SUSPENDED SLAB	40	20	80	GP	-
ı						
ı						

EXPOSURE CLASSIFICATION:

A1 INTERNAL **B2 EXTERNAL**

FIRE RATING:

LIVE LOADS:

RESIDENTIAL FRL 90/90/90

1.5 kPa GENERAL 2.0 kPa BALCONIES 4.0 kPa COMMON AREA

SUPERIMPOSED DEAD LOAD:

2.0 kPa PLANTER

1.5 kPa GENERAL 2.0 kPa BALCONIES 1.5 kPa COMMON AREA 6.0 kPa PLANTER

SERVICEABILITY:

TOTAL LONG TERM SLAB DEFLECTION - SPAN/250 INCREMENTAL SLAB DEFLECTION - SPAN/500

LEGEND:

DENOTES CONCRETE ELEMENT OVER DENOTES CORE FILLED BLOCK WALL OVER

DENOTES AFS REDIWALL OVER

DENOTES LOAD BEARING CONCRETE ELEMENT UNDER DENOTES SLAB PENETRATION

DENOTES SLAB PENETRATION ZONE

??? DENOTES MINIMUM SLAB THICKNESS, UNO XXX DENOTES SLAB STEP DEPTH

DENOTES 50mm WET AREA SETDOWN

NOTE:

NON LOAD BEARING WALLS TO BE LIGHT WEIGHT CONSTRUCTION

NOTES:

REFER TO HYDRALIC DRAWING FOR OUTFLOW REQUESTS TO ROOF AREAS. REFER ARCHITECT FOR FALLS

MISCELLANEOUS NOTES:

- REFER TO DRAWING S0.001 FOR GENERAL NOTES. PROVIDE STAINLESS STEEL GUTTERS AND DRIP GROOVES TO SLABS EXPOSED TO WEATHER AT ALL CONSTRUCTION AND MOVEMENT JOINTS & POUR BREAKS TO HYDRAULIC ENGINEERS DETAILS
- ALL DRIP GROOVES TO EXPOSED SLAB EDGES TO ARCHITECTS DETAIL.
- FOR ADDITIONAL NON-STRUCTURAL BLOCK WALL LOCATIONS REFER TO ARCHITECTS DRAWINGS. PT CONTRACTOR TO ALLOW FOR ADDITIONAL LOADS IN THEIR FLOOR SLAB DESIGN.
- REFER TO ARCHITECTS DRAWINGS FOR FALL DETAILS ALL HOBS AND WET AREAS ARE SHOWN INDICATIVE ONLY. REFER TO ARCHITECTS DETAILS AND SPECIFICATIONS.

SLAB CAST IN CONDUIT NOTES:

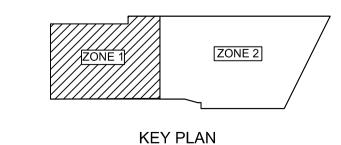
- CAST-IN CONDUITS NOT TO BE PLACED WITHIN 1200 RADIUS OF EACH CORNER OF THE CORES WHERE NO DROP PANELS AND
- NOT WITHIN 1000 RADIUS OF ANY COLUMN. REINFORCEMENT AND POST-TENSIONING SHALL TAKE PRIORITY OVER CAST-IN CONDUITS AND OTHER NON-STRUCTURAL CAST-INS. IF CLASHES OCCUR CONDUITS TO BE RELOCATED TO APPROVAL OF ENGINEER. ELSE LOCATED UNDER SLAB.
- ELECTRICAL CONDUITS TO BE LAID WITH MINIMUM OF 75 CLEARANCE BETWEEN SINGLE CONDUITS. MINIMUM 300 CLEARANCE BETWEEN 50 DIA. HYDRAULIC CONDUITS.
- CONDUIT CROSS OVERS SHALL BE AVOIDED WHEREVER POSSIBLE.
- ANCHORAGES. CONDUITS TO TURN UP OUT OF SLAB AT RIGHT ANGLES.

CAST-IN CONDUITS NOT TO BE LOCATED NEAR POST-TENSIONING

NOTE:

WALLS DENOTED AS 200 RC TO BE INSITU CONCRETE WALLS, 200 THICK WITH N16-200 EACH WAY IN EACH FACE AS PER DETAILS ON S3.001 WITH MIN 40MPa CONCRETE.

WALLS DENOTED AS 200 AFS TO BE 200 THICK AFS WALLS WITH N16-200 EACH FACE VERTICAL AND N12-200 EACH FACE HORIZONTAL AS PER DETAILS ON DRAWING S3.021 WITH MIN 40 MPa CONCRETE WALLS DENOTED AS 200AFS RW CAN BE REDIWALL AS PER THE FIRE ENGINEERING REPORT PREPARED BY INNOVA REPORT NUMBER 21618-R01 REV 2



ISSUED FOR CONSTRUCTION

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO

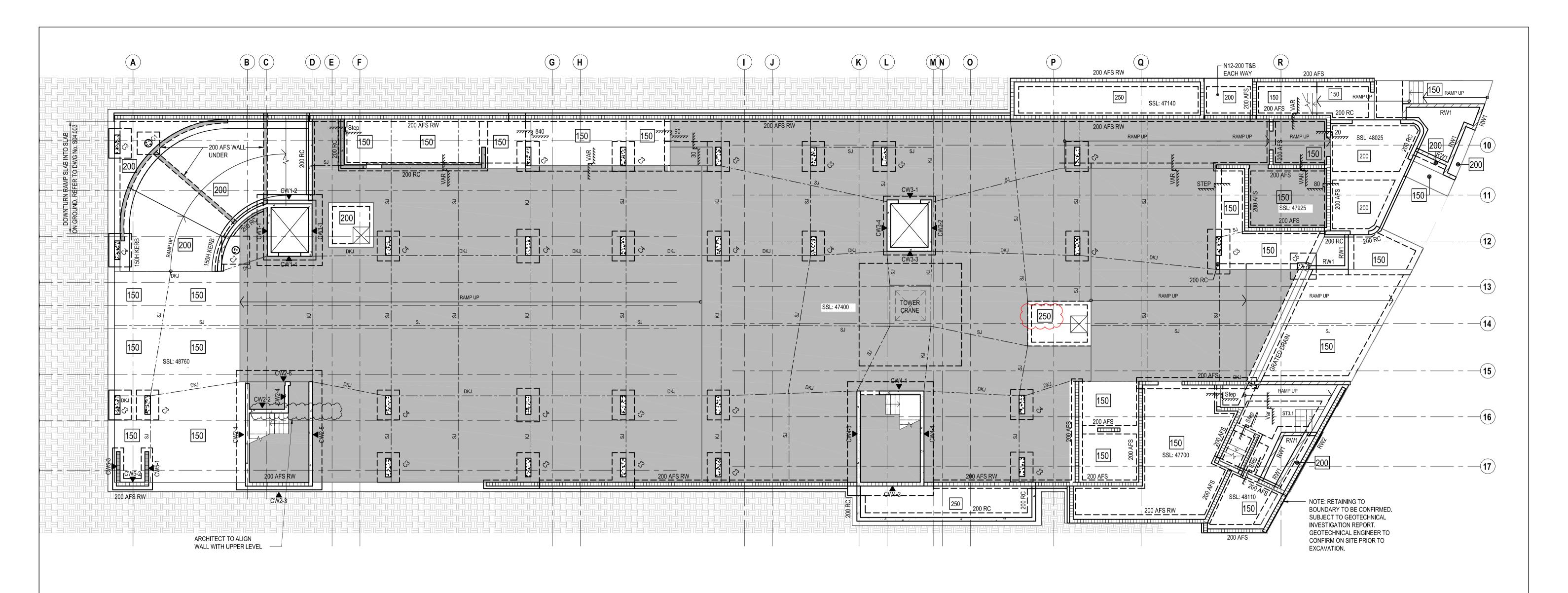
ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.

3 12.02.24 WALL TYPES UPDATED 2 01.05.23 ISSUED FOR CONSTRUCTION COPYRIGHT All rights reserved. 1 24.04.23 ISSUED FOR CONSTRUCTION These drawings, plans and specifications and the E 18.01.23 ISSUED FOR APPROVAL copyright are the property of ABC Consultants and must not be used, reproduced or copied wholly or in part D 22.12.22 ISSUED FOR APPROVAL without the written permission of ABC Consultants. REV DATE REVISION DESCRIPTION



PROJECT:

MICRONEST FAIRLIGHT	JOB NUMBER: 18063	DRG NUMBER: \$5.011		
MICRONEST FAIRLIGHT 5-197 SYDNEY ROAD, FAIRLIGHT, NSW ROFILE PLAN - ZONE 1	DESIGNED BY:	DATE: December.2020		
	DRAWN BY:	SCALE:	SIZE:	REV:
ROFILE PLAN - ZONE 1	PD	1:100 @ A1	SIZE: F	3



ELEMENT STRENGTH | MAX SIZE | SLUMP CEMENT **ADMIXTURE** AGG. mm CONCRETE QUALITY SLAB ON GROUND 40 20 80 GP

DENOTES 120mm THICK SLAB ON GROUND. SL92 FABRIC TOP (30 COVER) ON 'FORTECON STANDARD' LAPPED & TAPED ON 50mm MIN. COMPACTED FINE CRUSHED ROCK. SLAB TO BE CAST OVER FREE DRAINAGE LAYER WHICH INCORPORATES AG-LINES TO HYDRAULLIC ENGINEERS DETAILS TO PREVENT WATER INGRESS. ALLOW FOR SAW CUT JOINTS AT 3m CENTRES AND CONTROL JOINTS AT 15m CENTRES, TYPICAL.

REFER TO TABLE BELOW FOR CONCRETE COVERS.

PROVIDE DAMPPROOF MEMBRANE TO ALL SLABS.

SLAB ON GROUND NOTES:

NOTES TO BE READ IN CONJUNCTION WITH PLANS AND TYPICAL DETAILS.

150 150 THICK SLAB - SL82 MESH TOP AND BOTTOM.

200 THICK SLAB - SL81 MESH TOP AND BOTTOM. 200

REINFORCEMENT COVERS				
SLAB ON GROUND		INTERIOR	EXTERIOR	
SLAB	TOP	20mm	45mm	
	воттом	30mm	30mm	
	SIDES	45mm	45mm	

LEGEND:

DENOTES CONCRETE ELEMENT OVER

DENOTES AFS REDIWALL OVER

DENOTES SLAB PENETRATION

DENOTES SLAB PENETRATION ZONE DENOTES MINIMUM SLAB THICKNESS, UNO

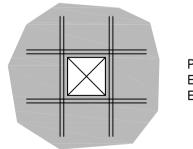
XXX DENOTES SLAB STEP DEPTH

DENOTES COLUMN TYPE NUMBER DENOTES COLUMN NUMBER TAG

TYPICAL SLAB TRIMMER DETAILS:

INNOVA REPORT NUMBER 21618-R01 REV 2

AS PER DETAILS ON S3.001 WITH MIN 40MPa CONCRETE.



SLAB PENETRATION TRIMMER

SLAB RE-ENTRANT CORNER TRIMMER

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PROVIDE 2N12 BARS TOP EXTEND 600 MIN. PAST EACH EDGE OF THE PENETRATION.

2N12-1200 LONG (75 SPACING)

TOP REINFORCEMENT.

CORNERS, TIED TO UNDERSIDE OF

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EACH FACE HORIZONTAL AS PER DETAILS ON DRAWING S3.021 WITH MIN 40 MPa CONCRETE

WALLS DENOTED AS 200 RC TO BE INSITU CONCRETE WALLS, 200 THICK WITH N16-200 EACH WAY IN EACH FACE

WALLS DENOTED AS 200 AFS TO BE 200 THICK AFS WALLS WITH N16-200 EACH FACE VERTICAL AND N12-200

WALLS DENOTED AS 200AFS RW CAN BE REDIWALL AS PER THE FIRE ENGINEERING REPORT PREPARED BY

1N12 L-BARS TOP IN CORNER OF SLAB, 1000 LEGS.

SLAB CORNER TRIMMER TRIMMERS BARS AT ALL RE-ENTRANT

2N16 DIAGONAL TRIMMER BARS AT COLUMN CORNERS NOT ADJACENT SLAB CONTROL JOINTS

COLUMN TRIMMER

MISCELLANEOUS NOTES:

REFER TO DRAWING S0.001 FOR GENERAL NOTES.

NOTE:

NON LOAD BEARING WALLS TO BE LIGHT WEIGHT CONSTRUCTION

FALLS AND STRIP DRAINS ETC TO BE IN ACCORDANCE WITH HYDRALLIC CONSULTANTS DETAILS.

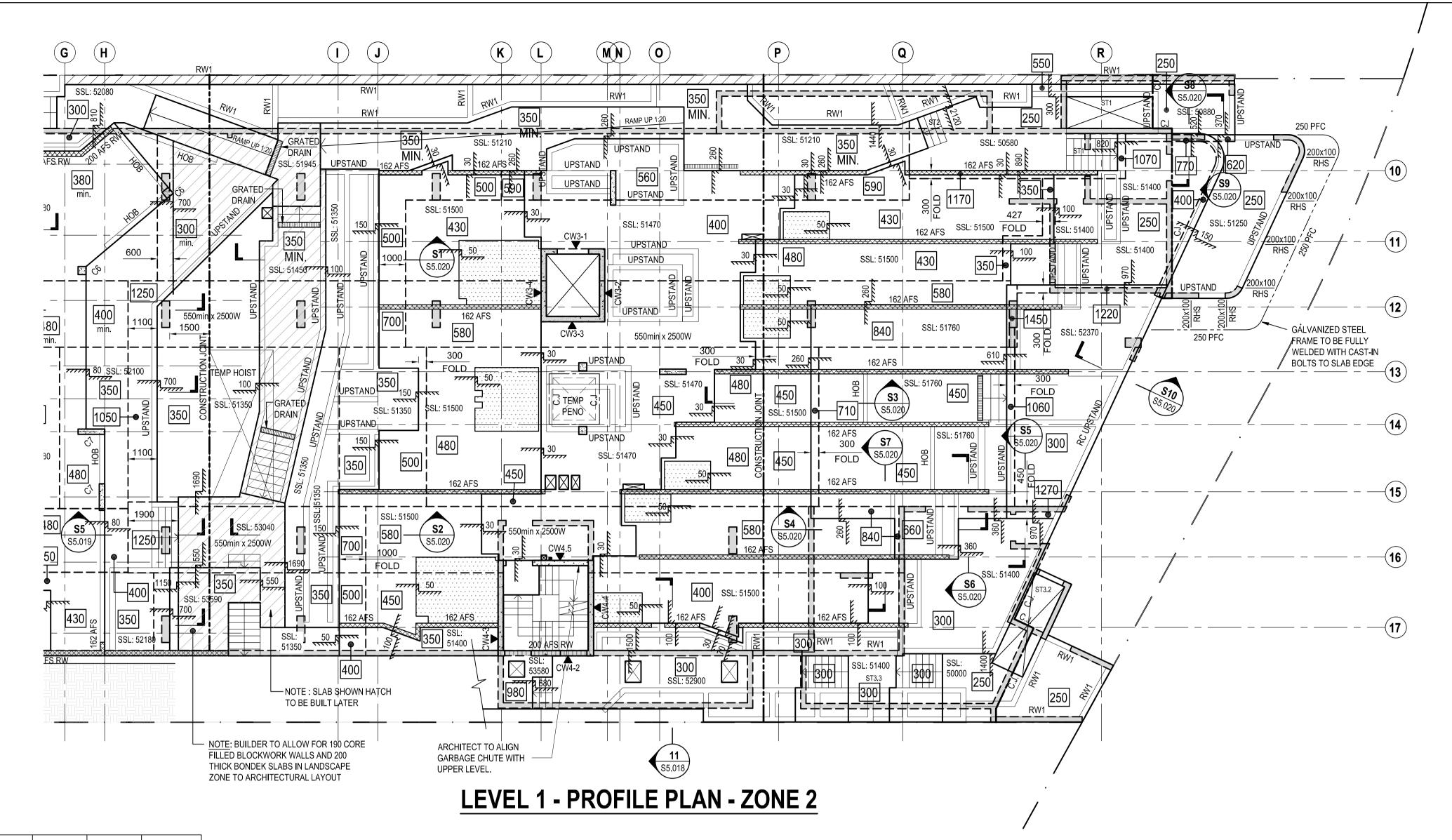
NORTH RYDE BC NSW 1670

ISSUED FOR

SSUED FOR CONSTRUCTION	4	12.02.24	WALL TYPES UPDATED	PS
330ED FOR CONSTRUCTION	3	01.05.23	OSD TANK SLAB THICKNESS REVISED	PS
	2	25.01.23	REVISED AS CLOUDED	PS
	1	19.12.22	ISSUED FOR CONSTRUCTION	DB
NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO	С	11.02.22	ISSUED FOR CC2	MP
ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.	REV	DATE	REVISION DESCRIPTION	BY



MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$4.002		
	DESIGNED BY:	DATE: December.2020		
TITLE:	DRAWN BY:	SCALE:	SIZE:	REV
LEVEL 0 PROFILE PLAN	PD	1:100 @ A1	A1	



ELEMENT CONCRETE QUALITY	STRENGTH f'c	MAX SIZE AGG. mm	SLUMP mm	CEMENT TYPE	ADMIXTURE
SUSPENDED SLAB	40	20	80	GP	-

EXPOSURE CLASSIFICATION:

A1 INTERNAL B2 EXTERNAL

RE:

LIVE LOADS:

FIRE RATING:

RESIDENTIAL FRL 90/90/90

4.0 kPa COMMON AREA 2.0 kPa PLANTER

1.5 kPa GENERAL 2.0 kPa BALCONIES

SUPERIMPOSED DEAD LOAD:

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SERVICEABILITY:

TOTAL LONG TERM SLAB DEFLECTION - SPAN/250 INCREMENTAL SLAB DEFLECTION - SPAN/500

LEGEND:

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DENOTES SLAB PENETRATION

DENOTES SLAB PENETRATION ZONE

PROTES MINIMUM SLAB THICKNESS, UNO

XXX DENOTES MINIMOM SLAB THICKNESS

DENOTES SLAB STEP DEPTH

DENOTES 50mm WET AREA SETDOWN

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- 5. CAST-IN CONDUITS NOT TO BE LOCATED NEAR POST-TENSIONING ANCHORAGES.
- 6. CONDUITS TO TURN UP OUT OF SLAB AT RIGHT ANGLES.

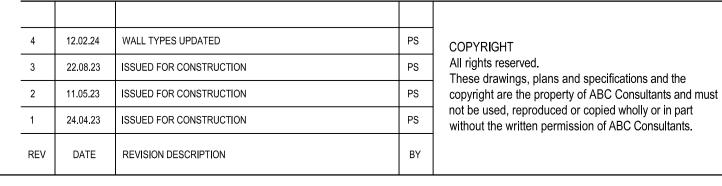
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WALLS DENOTED AS 200 RC TO BE INSITU CONCRETE WALLS, 200 THICK WITH N16-200 EACH WAY IN EACH FACE AS PER DETAILS ON S3.001 WITH MIN 40MPa CONCRETE.

WALLS DENOTED AS 200 AFS TO BE 200 THICK AFS WALLS WITH N16-200 EACH FACE VERTICAL AND N12-200 EACH FACE HORIZONTAL AS PER DETAILS ON DRAWING S3.021 WITH MIN 40 MPa CONCRETE WALLS DENOTED AS 200AFS RW CAN BE REDIWALL AS PER THE FIRE ENGINEERING REPORT PREPARED BY INNOVA REPORT NUMBER 21618-R01 REV 2

ISSUED FOR CONSTRUCTION

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.



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JLTANTS	PROJECT: MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$5.015		
engineers		DESIGNED BY:	DATE:		
71gi110013	TITLE:	AM	February.2023		1
Postal Address PO Box 77		DRAWN BY:	SCALE:	SIZE:	
NORTH RYDE BC NSW 1670	LEVEL 1 PROFILE PLAN - ZONE 2	PD	1:100 @ A1	A1	l

GENERAL

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AND SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT, ANY DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH ANY RELATEDWORKS, CONSTRUCTION FROM THESE DRAWINGS, AND THEIR ASSOCIATED CONSULTANTS DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT STANDARDS AUSTRALIA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE
- ALL SET OUT DIMENSIONS SHALL BE OBTAINED FROM ARCHITECT'S AND ENGINEER'S DETAILS, ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER FOR DECISION BEFORE PROCEEDING WITH RELATED WORK.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER/SUBCONTRACTOR TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- UNLESS NOTED OTHERWISE LEVELS ARE IN METRES AND DIMENSIONS ARE IN MILLIMETRES.
- DURING CONSTRUCTION A MINIMUM OF ONE (1) ADDITIONAL FLOOR SHALL REMAIN FULLY BACKPROPPED BELOW THE DECK BEING FORMED WITH A SECOND FLOOR TO BE A MINIMUM OF 50% BACKPROPPED AT ALL TIMES. AT NO TIME SHALL CONCRETE BE POURED UNLESS THE FLOOR BELOW IS FULLY BACKPROPPED. REFER TO DIAGRAM ON THIS DRAWING FOR
- ANY SUBSTITUTION OF MATERIALS SHALL BE APPROVED BY THE ENGINEER AND INCLUDED IN ANY TENDER.
- THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANTSTANDARDS AUSTRALIA CODES AND LOCAL GOVERNMENT ORDINANCES FOR THE FOLLOWING LOADINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR PROPOSED FLOOR USAGE, REFER TO DRAWINGS FOR LIVE LOADS AND SUPERIMPOSED DEADLOADS.
- THE CONSULTING ENGINEER HAS DESIGNED THE PERMANENT STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, IMPLEMENTATION AND CERTIFICATION OF ALL TEMPORARY WORKS, PROPPING, NEEDLING, FALSE WORK, BRACING, BACK-PROPPING, AND SO FORTH, NECESSARY TO COMPLETE THE WORK.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. THE CONTRACTOR SHALL ALLOW TO ENGAGE A CHARTERED (NPER-3) ENGINEER TO DESIGN, INSPECT THE TEMPORARY WORKS AND VERIFY THE TEMPORARY STABILITY OF THE STRUCTURE.
- WHERE ADDITIONAL CONSTRUCTION LOADS SUCH AS TEMPORARY SHORING, MOBILE CRANES ETC, ARE TO BE IMPOSED ON THE STRUCTURE, THE CONTRACTOR SHALL SUBMIT FULL DETAILS OF THE PROPOSED TEMPORARY SUPPORTS TO THE
- G12 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS. EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. REFER TO THE SPECIFICATION REPORT BY ABC CONSULTANTS FOR

HEALTH AND SAFETY

- THE OBLIGATION OF ABC CONSULTANTS PTY LTD, AS THE DESIGN ENGINEER IS LIMITED TO ENSURING THAT THOSE PARTS OF THE STRUCTURE THAT ARE TO BE USED AS A WORKPLACE ARE AS FAR AS REASONABLY PRACTICABLE DESIGNED TO BE SAFE AND WITHOUT RISKS TO THE HEALTH OF THOSE PERSONS USING THE STRUCTURE AS A WORKPLACE FOR THE PURPOSE FOR WHICH IT WAS DESIGNED IN ACCORDANCE WITH SECTION 22 OF THE NSW WORK HEALTH AND SAFETY ACT
- H2 ABC IS NOT RESPONSIBLE FOR THE OCCUPATIONAL HEALTH AND SAFETY OF PERSONS AT THE SITE AS THOSE OBLIGATIONS RESIDE WITH THE CONTRACTORS AND/OR SUB CONTRACTORS THAT OCCUPY OR HAVE CONTROL OF THE SITE IN ACCORDANCE WITH APPLICABLE OCCUPATIONAL HEALTH AND SAFETY LEGISLATION, CODES OF PRACTICE, GUIDANCE NOTES, AUSTRALIAN STANDARDS AND OTHER RELEVANT DOCUMENTATION.
- H3 ANY ADVICE OR GUIDANCE CONCERNING OCCUPATIONAL HEALTH AND SAFETY ISSUES ARISING AT THE SITE SHOULD BE DIRECTED TO THE HEALTH AND SAFETY EXECUTIVE OR OFFICER NOMINATED FOR THE PROJECT.

DESIGN CRITERIA - SAND

SITE SOIL CLASSIFICATION: CLASS B ROCK SITE WIND CLASSIFICATION: Region N3 (Terrain Category TC2) CONSTRUCTION TYPE: CONCRETE FRAMED

FOUNDATIONS

- REFER TO THE NOTES ON THE FOUNDATION DRAWING FOR MINIMUM ALLOWABLE BEARING CAPACITY. THE FOUNDATION MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER FOR THIS BEARING CAPACITY BEFORE PLACING MEMBRANE. REINFORCEMENT OR CONCRETE.
- REFER TO GEOTECHNICAL REPORT PREPARED BY: GEOTECH NAME: JK GEOTECHNICS GEOTECH PROJECT NO: 33708PNRP **GEOTECH REPORT DATE: 29 JANUARY 2021**
- ANY ADDITIONAL INVESTIGATION REQUIRED BY THE CONTRACTOR SHALL BE AT THE CONTRACTORS OWN EXPENSE.
- FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS/COLUMNS UNLESS NOTED OTHERWISE.
- DO NOT EXCEED A RISE OF 1 IN A RUN OF 2 FOR THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR
- DO NOT BACKFILL RETAINING WALLS (OTHER THAN CANTILEVER WALLS) UNTIL FLOOR CONSTRUCTION AT TOP AND BOTTOM IS COMPLETED. ENSURE FREE DRAINING BACKFILL AND DRAINAGE IS IN PLACE.
- FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE, REFER TO DRAWINGS FOR BACKFILL REQUIREMENTS

SHOTCRETE

- DEFINITIONS, SHOTCRETE IS SPRAYED CONCRETE WITH MAXIMUM CONCRETE AGGREGATE SIZE OF 10MM. PROJECTED AT HIGH VELOCITY INTO FORM TO PRODUCE A DENSE HOMOGENOUS MASS.
- SH2 MIX DESIGN. MIX IN ACCORDANCE WITH AS 1379 TO THE SUPERVISING ENGINEERS APPROVAL. ALL CONSTITUENTS SHALL BE UNIFORMLY DISPERSED THROUGHOUT THE MIX. UNLESS NOTED OTHERWISE FINAL SET OF THE CEMENT / ADMIXTURE PASTE SHALL BE NO LONGER THAN 12 MINUTES. WITH 24 HOURS STRENGTH OF CONCRETE BEING 10 MPA. UNLESS NOTED OTHERWISE THE 28 DAY COMPRESSIVE STRENGTH
- SH3 APPLICATORS. ALL OPERATORS SHALL BE COMPETENT IN SUCH WORK AND THE CONTRACTOR IS TO DEMONSTRATE THAT ALL THE EQUIPMENT IS OPERATIONAL AND ALL OPERATORS ARE EXPERIENCED.
- SH4 EXCAVATION PREPARATION. THE SURFACE TO BE SPRAYED SHALL BE TRIMMED / COMPACTED / GRADED AS REQUIRED BY THE TOLERANCES REFLECTED ON THE DOCUMENTS, AND DAMP BEFORE THE APPLICATION OF SPRAYED CONCRETE. PREVENT INGRESS OF TRIMMED OR UNSHORED MATERIAL, EXCESSIVE WATER ETC. BY THE PROVISION OF THE LOST FORMWORK, POLYTHENE SHEETS ETC AT THE CONTRACTORS EXPENSE.
- SH5 REINFORCEMENT: THE REINFORCEMENT INDICATED ON THE DOCUMENTS IS TO BE PLACED AND SECURED ACCURATELY TO THE SPECIFIED COVERS.
- SHOTCRETE PLACING. DO NOT SPRAY CONCRETE AT LESS THAN 5° C. PROTECT FRESHLY SPRAYED CONCRETE FROM RAIN, WATER OR WIND UNTIL THE SURFACE IS SUFFICIENTLY HARD ENOUGH TO PREVENT DAMAGE. SPRAY TO SET THICKNESSES AS INDICATED ON THE DOCUMENTS. INSTALL THICKNESS MARKERS TO ENSURE CORRECT CONCRETE THICKNESS. MAXIMUM DEVIATION FROM A 1000MM STRAIGHT EDGE SHALL BE 5MM. PROVIDE FULL RECORDS OF ALL MATERIALS USED IN THE SPRAYED CONCRETE AND PROVIDE CONCRETE TEST RESULTS IN ACCORDANCE WITH SPECIFICATION. JOINTS WITHIN THE CONCRETE SHALL BE TO THE APPROVAL OF THE ENGINEER, AND WILL GENERALLY BE TRIMMED AT AN ANGLE OF 30° TO THE HORIZONTAL IN AN APPROVED POSITION.
- **SH7** CONDUCT SITE TESTING OF SHOTCRETE IN ACCORDANCE WITH NOTE RC2.
- ALL SHOTCRETE TO BE INSTALLED IN ACCORDANCE WITH RECOMMENDED PRACTICE NOTES FOR SPRAYED CONCRETE AS PUBLISHED BY THE CONCRETE INSTITUTE OF AUSTRALIA.

REINFORCED CONCRETE

- RC1 READYMIX CONCRETE SUPPLY SHALL COMPLY WITH AS 1379.
- RC2 MINIMUM CONCRETE QUALITY NOTED ON RELEVANT DRAWINGS, ALL THE REQUIREMENTS OF THE ACSE CONCRETE SPECIFICATION DOCUMENT 1 (LATEST EDITION) SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS

SAMPLE, TEST, AND ASSESS TO AS 1379. ALL TESTING TO BE CONDUCTED BY A NATA REGISTERED LABORATORY. THE MINIMUM FREQUENCY OF SAMPLING OF THE CONCRETE AT EACH STAGE SHALL BE IN ACCORDANCE WITH THE

NO OF BATCHES SUPPLIED: No. of samples taken: 6 TO 10 11 TO 30 FOR EACH ADDITIONAL 10 BATCHES

A SAMPLE SHALL CONSIST OF FOUR CYLINDERS, TWO OF WHICH SHALL BE TESTED AT 28 DAYS, ONE AT 7 DAYS AND ONE AT 4 DAYS. IF THE CONTRACTOR REQUIRES EARLY STRENGTH RESULTS, ADDITIONAL CYLINDERS SHALL BE TAKEN IN THE SAMPLE AS REQUIRED AND AT THE COST OF THE CONTRACTOR.

OTHER QUALITY PARAMETERS SAMPLE: TEST AND ASSESS TO AS 1379 SECTION 5.

SLUMP: TEST NOT LESS THAN ONE SAMPLE FOR EACH BATCH BEFORE PLACING CONCRETE FROM THAT BATCH IN THE WORK. TAKE THE SAMPLES AT THE POINT OF DISCHARGE ON SITE. DRYING SHRINKAGE: THE MAXIMUM TOTAL DRYING SHRINKAGE LIMIT FOR THE CONCRETE SHALL BE AN AVERAGE OF 0.070% AT 56 DAYS AND NO SINGLE RESULT SHALL EXCEED 0.075%. MEASUREMENT SHALL BE IN ACCORDANCE WITH AS1012 PART 13 AND BE CONDUCTED BY A NATA REGISTERED LABORATORY.

- RC3 NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.
- RC4 DEPTH OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESSES. SLABS AND BEAMS SHALL BE CAST TOGETHER
- RC5 CONCRETE SIZES DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.

REJECTION: REMOVE THE CONCRETE FROM THE SITE.

- RC6 NO HOLES, CHASES OR EMBEDMENT'S OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE PROJECT ENGINEERS APPROVAL.
- RC7 CONCRETE SHALL BE KEPT FREE OF SUPPORTING MASONRY WITH A PRE-GREASED GALVANISED STEEL SLIP JOINT, VERTICAL FACES SHALL BE SEPARATED BY 10MM JOINTEX (OR EQUAL).
- RC8 CONSTRUCTION JOINTS SHALL BE LOCATED TO THE SATISFACTION OF THE PROJECT ENGINEER. THE BUILDER SHALL ALLOW FOR ALL NECESSARY CONSTRUCTION JOINTS.
- CONDUITS AND PIPES WHEN CAST IN SLABS OR WALLS ARE TO BE PLACED BETWEEN THE REINFORCEMENT LAYERS. WHERE THERE IS ONLY ONE LAYER OF REINFORCEMENT, PROVIDE 50MM COVER TO CONDUIT MINIMUM.
- RC10 PROVIDE UPWARD CAMBER TO FORMWORK OF REINFORCED CONCRETE CANTILEVERS OF L/200 WHERE L IS THE PROJECTION BEYOND COLUMN OR WALL FACE, AND TO FORMWORK OF SLABS WHERE NOTED ON PLANS. MAINTAIN SLAB AND BEAM DEPTHS AS SHOWN. PROVIDE 0MM PRECUMBER TO POST TENSIONED SLABS U.N.O. ON PLANS.
- RC11 THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
- RC12 SLABS AND BEAMS SHALL BE CONSTRUCTED TO BEAR ONLY ON THE BEAMS, COLUMNS, WALLS ETC. SHOWN ON THE DRAWINGS, ALL OTHER BUILDING ELEMENTS SHALL BE KEPT 12MM MINIMUM CLEAR FROM SOFFITS OF STRUCTURE.
- RC13 CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED. (REFER MANUFACTURERS SPECIFICATION), POLYTHENE SHEETING OR WET HESSIAN MAY BE USED TO RETAIN MOISTURE WHERE PROTECTED FROM WIND AND TRAFFIC.
- RC14 CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. NO BRICKWORK OR PARTITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL ALL PROPPING IS REMOVED AND THE SLAB HAS ABSORBED ITS DEAD LOAD DEFLECTION.

- P1 REFER TO GEOTECHNICAL REPORT AS SPECIFIED IN FOUNDATION NOTE F2 ON THIS DRAWING.
- CLASS OF ROCK SHALL BE AS DEFINED IN THE GEOTECHNICAL REPORT. THE CLASS OF ROCK LEVELS FOR DETERMINING PILE TOE LEVELS SHALL BE AGREED IN WRITING WITH THE ENGAGED GEOTECHNICAL ENGINEER PRIOR TO COMMENCEMENT OF DRILLING
- THE TENDER IS TO BE BASED ON CONDITIONS AS FOUND ON SITE. CHANGES IN CONDITIONS, OR OBSTRUCTIONS WILL NOT FORM A BASIS FOR A VARIATION.
- P4 ALL PILES ARE TO BE INSTALLED BY THE CONTRACTOR TO AS2159-1995 PILING DESIGN AND INSTALLATIONS CODE AND ANY OTHER RELEVANT CODES.
- PILES SHALL BE PLACED TO A PLAN TOLERANCE OF 50MM MAXIMUM AT ANY POINT ALONG THEIR LENGTH, AND A GAP BETWEEN PILES ALONG THEIR LENGTH OF 10MM, IF ANY PILES ARE INSTALLED OUT OF TOLERANCE THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR THE DESIGN AND INSTALLATION COSTS OF ADDITIONAL PILES OR RECTIFYING ELEMENTS OR THE COMPLETE REMOVAL AND REPLACEMENT OF THE PILES AS INSTRUCTED BY THE
- CONTRACTOR SHALL PROVIDE FOR ALL SURVEYING REQUIREMENTS TO CONSTRUCT PILING. THIS INCLUDES, BUT IS NOT LIMITED TO SETTING OUT PILES, BEFORE AND DURING DRILLING AND FOR THE PROVISION OF AS-BUILT SURVEY.
- AT THE COMPLETION OF PILING, THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY AND CERTIFICATION THAT ALL PILES ARE WITHIN SPECIFIED TOLERANCES.
- THE CONTRACTOR IS TO MAKE THEMSELVES FAMILIAR WITH THE SITE AND TO ASSESS THE LIKELY ISSUES ASSOCIATED WITH NOISE, VIBRATION, GROUNDWATER, TRAFFICABILITY AND ANY OTHER ISSUES WHICH MAY REQUIRE
- ALL PILES ARE TO BE CUT DOWN TO LEVEL SUCH THAT THEY PROTRUDE 50MM INTO THE BASE OF CAPPING BEAMS AND REINFORCEMENT PROTRUDES IN CAPPING BEAMS AS SHOWN ON DETAILS. THE PILING CONTRACTOR SHALL PROGRESSIVELY REMOVE AND DISPOSE OF ANY SOIL IF ANY FROM THE WORK AREAS. THIS INCLUDES GROUT/CONCRETE SPILLAGE IF ANY. THE PILING CONTRACTOR SHALL ALLOW FOR THE SUPPLY OF ALL EQUIPMENT SUCH AS TRUCKS AND LOADERS AND ANY APPROVALS FOR DISPOSAL AS REQUIRED.
- P10 BUILDER IS ADVISED TO UNDERTAKE A DIAL BEFORE YOU DIG SEARCH PRIOR TO ANY PILING OR FOUNDATION WORKS.



- A CONSTRUCTION PROGRAM WILL BE PROVIDED WITH THE TENDER DOCUMENTATION TO THE CONTRACTOR. THE CONTRACTOR IS TO PROVIDE A CRITIQUE OF THE PROGRAM WITH THE TENDER SUBMISSION.
- TESTING AS REQUIRED FOR CERTIFICATION OF THE AUSTRALIAN STANDARDS SHALL BE PROVIDED BY THE CONTRACTOR.
 - EST GROUT IN ACCORDANCE WITH AS2159 CLAUSE 7.5.6.2 AND NOTE RC2. MIN 28 DAY STRENGTH F'C = 40MP a

TEST 10% OF PILES IN ACCORDANCE WITH AS2159 CLAUSE 8.5. LOCATION OF TEST PILES TO BE CONFIRMED BY STRUCTURAL ENGINEER.

P13 REFER TO ARCHITECTURAL DRAWINGS FOR ALL REDUCED LEVELS.

2 21.05.24 AS BUILT DRAWING

P14 PLACE REINFORCEMENT IN PILES IN ACCORDANCE WITH AS3600 AND NOTES R1 TO R14.

REINFORCEMENT

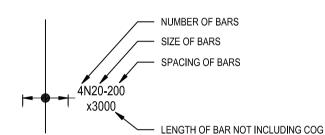
R1 COVER TO REINFORCEMENT (IN MM) AND CONCRETE GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE: THE COVER SHALL NOT BE LESS THAN THE BAR DIAMETER AND:

ELEMENT	FORMED AND INTERNAL	FORMED AND EXPOSED TO WEATHER	NOT FORMED, CAST AGAINST GROUND **	
	CI	ASSIFICATION B2		
FOOTINGS, PILE CAPS	-	65	75	
COLUMNS, PEDESTALS	40	55	75	
SLABS, BAND BEAMS	35	45	60	
BEAMS	30	45	60	
WALLS: HORIZONTAL BARS VERTICAL BARS	35 45	45 55	60 60	

** IF THE ELEMENT IS CAST ON DAMPPROOF MEMBRANE, DECREASE THE COVER BY 10MM.

- (i) COVER IS THE CLEAR DISTANCE BETWEEN ANY REINFORCING (INCLUDING FITMENTS) AND THE FACE OF THE STRUCTURAL ELEMENTS.
- (ii) FOR ALL EXTERNAL SURFACES, PROVIDE FULLY PLASTIC BAG CHAIRS. TIE WIRES SHALL NOT BE NAILED TO THE FORMS, REINFORCING BARS SHALL NOT BE USED TO KEEP FORMS APART AND A THROUGH TIE SYSTEM SHALL BE USED TO TIE FORMS
- (iii) PROVIDE AN APPROVED VAPOR BARRIER FOR SLABS, BEAMS AND THICKENING CAST AGAINST THE GROUND.
- (iv) THE COVERS SHALL BE MAINTAINED USING APPROVED BAR CHAIRS. BAR CHAIRS SUPPORTING MESH SHALL BE AT 800 X 800MM MAXIMUM CENTRES. BAR CHAIRS SUPPORTING BARS SHALL BE AT 60 BAR DIAMETER OR 1500 MAXIMUM CENTRES WHICHEVER IS THE LESSER. BAR CHAIRS SHALL BE PROVIDED ALONG THE EDGES OF ALL CONSTRUCTION JOINTS. STOP ENDS SHALL NOT BE USED TO MAINTAIN THE COVERS.
- (v) EXTERNAL ELEMENTS ARE THOSE EXPOSED TO WEATHER, RAIN AND WATER PENETRATION AND ARE CLASSIFIED B2 UNLESS NOTED OTHERWISE.
- R2 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT MORE THAN 1 METRE CENTRE BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS. IN EXPOSURE CONDITIONS GREATER THAN B1 USE ONLY PLASTIC CHAIRS.
- THE ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION.
- R4 REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION. SPLICES TO REINFORCEMENT SHALL BE MADE ONLY AT THE LOCATIONS SHOWN, OR OTHERWISE APPROVED BY THE PROJECT ENGINEER.

Y - DENOTES GRADE 410 Y BARS TO AS 1302 GRADE Y N - DENOTES GRADE 500 N BARS TO AS 1302 R - DENOTES GRADE 230 R HOT ROLLED PLAIN BARS TO AS 1302 F - DENOTES GRADE 450 F HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304 W - DENOTES GRADE 450 W HARD-DRAWN PLAIN WIRE TO AS 1303



S - DENOTES GRADE 230 S HOT ROLLED DEFORMED BARS TO AS 1302

THE FIGURES FOLLOWING THE SYMBOL "F" IS THE REFERENCE NO. FOR FABRIC TO AS 1304. REINFORCEMENT NOTATION

- T DENOTES TOP REINFORCEMENT **B** - DENOTES BOTTOM REINFORCEMENT. **NF** - DENOTES NEAR FACE.
- FF DENOTES FAR FACE. EF - DENOTES EACH FACE.

REINFORCEMENT SYMBOLS:

- SLAB REINFORCEMENT SHALL EXTEND MINIMUM 65MM ONTO MASONRY SUPPORT WALLS AND MINIMUM 50 PERCENT OF BOTTOM REINFORCEMENT TO BE COGGED, TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS. TERMINATE ALL TOP BARS WITH STANDARD COGS AT FORM EDGES
- R7 SITE BENDING OF DEFORMED REINFORCING BARS SHALL BE DONE WITHOUT HEATING USING MECHANICAL BENDING
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE PROJECT ENGINEER.
- JOGGLES TO BARS SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS.
- DISTRIBUTION REINFORCEMENT AND TYING STEEL SHALL BE N12-400 MINIMUM FOR CONVENTIONAL SLABS, OR N12-1000 MINIMUM FOR POST TENSIONED SLABS WHERE NECESSARY UNLESS NOTED OTHERWISE ON PLAN, LAP WITH
- REINFORCEMENT CROSSING PENETRATIONS SHALL BE DISPLACED AS NECESSARY, NO REINFORCEMENT SHALL BE CUT WITHOUT THE PRIOR WRITTEN APPROVAL OF THE PROJECT ENGINEER.
- CURING OF THE CONCRETE ELEMENTS SHALL BE STARTED AS SOON AS THE CONCRETE HAS HARDENED AND SHALL COMPLY WITH THE SPECIFICATIONS.
- R13 PROVIDE A 25MM X 25MM CHAMFER TO ALL CORBELS, UNLESS OTHERWISE INDICATED ON THE DRAWING. ENSURE THAT POLYSTYRENE IS PLACED AROUND THE BEARING, SO THAT THE CONCRETE SURFACES ARE NOT IN CONTACT. SUBMIT CONFIRMATION OF THE SPECIFICATIONS OF ALL BEARING MATERIALS TO THE ENGINEER.
- R14 ENSURE ALL MOVEMENT JOINTS ARE INSTALLED WITH THE SPECIFIED ARCHITECTURAL FINISH, INCLUDING SEALANT, FILLERS, EXPANSION MATERIALS AND REBATES AS REQUIRED.
- R15 CONCRETE SLABS THAT FORM ROOFS TO LIVING AREAS AND BASEMENTS ARE TO HAVE A MAXIMUM CONCRETE SHRINKAGE STRAIN OF 650 X 10 -6AND WATERPROOFING ADDITIVE TO ARCHITECTS DETAILS.

UNLESS NOTED OTHERWISE, LAP BARS AS TABULATED BELOW:

R16 UNLESS NOTED OTHERWISE, LAP BARS AS TABULATED BELOW:

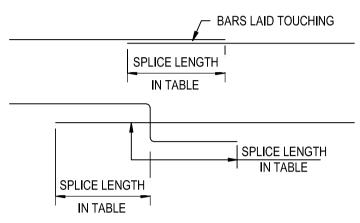
TYPICAL SPLICE LENGTH SCHEDULE						
BAR SIZE	MINIMUM TENSION S	MINIMUM TENSION SPLICE LENGTH (mm)				
DAR SIZE	<300mm CONCRETE CAST BELOW IT	>300mm CONCRETE CAST BELOW IT	SPLICE LENGTH (mm)			
N10	500	650	400			
N12	500	650	500			
N16	700	950	650			
N20	950	1250	800			
N24	1250	1600	1000			
N28	1500	1950	1150			
N32	1800	2300	1300			
N36	2100	2700	1450			

TENSION LAPS <u>MUST</u> BE USED EVERYWHERE UNLESS SPECIFICALLY NOTED OTHERWISE ON PLAN.

SPLICE LENGTHS PROVIDED BASE ON F'C = 32MP a.

FOR BUNDLED BARS BASE LENGTH ON LARGEST BAR. 3 BARS BUNDLED, INCREASE BY 20% 4 BARS BUNDLED, INCREASE BY 33%

LAPPED SPLICES FOR BARS IN TENSION SLABS & WALLS SHALL BE AS FOLLOWS:



R17 CONCRETE SLAB THAT FORMS ROOFS TO LIVING AREAS & BASEMENTS ARE TO HAVE A MAXIMUM SHRINKAGE STRAIN OF 650 x10 -6 AND WATERPROOFED TO ARCH DETAILS.

MASONRY

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3700.
- ALL BLOCKWORK WALLS SHALL BE CONSTRUCTED IN GRADE 16 BLOCKS (15 MPA) ACCORDING TO AS/NZ 4455. ALL BRICKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 30 MPA ACCORDING TO AS/NZ 4455. THE MAXIMUM UNRESTRAINED FIVE YEAR EXPANSION OF BRICKS SHALL BE IN ACCORDANCE WITH NATA TEST B01.
- ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.
- NON LOADBEARING WALLS SHALL BE SEPARATED FROM CONCRETE ABOVE BY 12MM THICK CLOSE CELL POLYETHYLENE STRIPS.
- NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
- MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE SUPERINTENDENT.
- MORTAR SHALL BE FULL BED AND UNLESS NOTED OTHERWISE, THE NOMINAL PROPORTIONS BY VOLUME SHALL BE AS FOLLOWS:

EXPOSURE CLASSIFICATION	PORTLAND CEMENT (GP)	BLENDED CEMENT (GB)	BUILDING LIME	SAND
M3	1	0	1	5
	0	1	1	4
M4	1	0	0.5	4.5
	0	1	0.25	2.25

M3 - DENOTES AREAS WITH MODERATE EXPOSURE GREATER THAN 1KM FROM SURF COASTAL AREAS M4 - DENOTES AREAS WITH EXTREME EXPOSURE WITH 1KM FROM A SURF COAST OR AN INDUSTRY WHERE CHEMICAL POLLUTANTS ARE PRODUCED.

- REFER TO AS3700 FOR FURTHER DETAIL GROUT USED TO FILL CAVITIES AND CORES IN REINFORCED MASONRY SHALL HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OF 32 MPA AND A SLUMP OF 225MM (+/-25MM) MAXIMUM AGGREGATE SIZE OF 10MM ROUNDED GRAVEL. NOMINAL PROPORTIONS SHALL BE 1:0.3:3:2 OF CEMENT, LIME, SAND, AGGREGATE AND WITH A MINIMUM CEMENT CONTENT OF 300 KG/CM. PROVIDE CLEAN OUT HOLES AT BASE OF PILASTERS AND EVERY CORE OF REINFORCED
- HORIZONTAL JOINT REINFORCEMENT SHALL BE PROVIDED AT MAX, 600 VERTICAL SPACING FOR ALL CONCRETE BLOCKWORK, CONCRETE BRICKWORK, AND CALCIUM SILICATE BRICKWORK.
- M10 FULLY BED FACE SHELLS AND CROSS WEBS IN HOLLOW BLOCK WALLS.
- M11 HOLLOW BLOCKWORK OPENINGS GREATER THAN 600MM VERTICALLY OR HORIZONTALLY SHALL BE TRIMMED AT THE SIDES AND BOTTOM BY FILLING ONE CORE AND REINFORCE WITH 1N12 EXTENDING 600MM PAST OPENING. THE TOP OF THE OPENING SHALL HAVE A REINFORCED LINTEL BEAM, ARCH BAR OR STEEL ANGLE SUPPORT AS REQUIRED.
- M12 ALL TIES AND REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 50MM TO EXTERNAL FACE OF MASONRY.
- M13 ALL WALLS SHALL BE TIED OR BONDED AT THEIR INTERSECTIONS.

WALLS, UNLESS NOTED OTHERWISE.

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- M14 NO CAVITY OR CORE SHALL BE FILLED TO A HEIGHT GREATER THAN 1200MM WITHOUT SUITABLE SHORING.
- M15 ALL MASONRY WALLS AND PIERS SUPPORTING SLABS AND BEAMS SHALL HAVE A PRE-GREASED GALVANISED STEEL SLIP JOINT BETWEEN CONCRETE SOFFIT AND THE TOP OF THE MASONRY ELEMENT UNLESS NOTED OTHERWISE.

M16 PROVIDE VERTICAL CONTROL JOINTS AT 10M . MAX. CENTRES, AND 5M MAX. FROM CORNERS IN ALL MASONRY

- M17 BACKFILL TO RETAINING WALLS TO BE FREE DRAINING GRANULAR MATERIAL UNLESS NOTED OTHERWISE. PROVIDE
- M18 DO NOT CONSTRUCT MASONRY WALLS ON SUSPENDED CONCRETE SLABS UNTIL SLAB HAS BEEN STRIPPED AND DE-
- M20 ALL CAVITY CONSTRUCTION TO HAVE 316 GRADE STAINLESS STEEL WALL TIES INSTALLED AS PER CLAUSE 3.4 IN AS 3700. REFER PROJECT SPECIFICATION AND LOCAL AUTHORITIES REQUIREMENTS. REFER NOTE G2.

M21 GENERIC JOINT DETAILS ARE INDICATED ON THESE DRAWINGS FOR INFORMATION, BUT IT IS THE ARCHITECT'S

- RESPONSIBILITY TO IDENTIFY JOINT LOCATIONS AND TYPES WHERE APPROPRIATE ON ARCHITECTURAL DRAWINGS, AND TO PROVIDE DETAILS OF NON-STANDARD ELEMENTS TO ACCOMMODATE ANTICIPATED MOVEMENTS.
- M22 OBSERVATION OF CONSTRUCTION OF NON-LOAD BEARING MASONRY WALLS/PARTITIONS AND OTHER NON-LOAD BEARING ELEMENTS IS NOT INCLUDED IN THE STRUCTURAL ENGINEER'S SCOPE OF WORKS.

GENERALLY, ON SUSPENDED SLABS AND SLABS ON GROUND, BLOCKS SHALL BE STACKED ONE PALLET HIGH (MAXIMUM PALLET MASS 1300KG) WITH 1200MM CLEARANCE BETWEEN ADJACENT PALLETS ON ALL SIDES. THE WEIGHT OF STACKED BLOCKS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE FLOOR. REFER EXCEED THE DESIGN LIVE LOAD FOR THE FLOOR, REFER PLANS FOR DESIGN LOADS.

AS BUILT DRAWING

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.

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PROJECT: MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: S0.001		
100 101 GTBNET NGAB, TAMEIGITI, NGW	DESIGNED BY:	DATE:		
TITLE:	AW	December.2020		
GENERAL CONSTRUCTION NOTES	DRAWN BY:	SCALE:	SIZE:	REV:
SHEET 1	PD	1:1 @ A1	A1	2

STRUCTURAL STEEL

- SS1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 EXCEPT WHERE VARIED BY THE
- \$\$2 UNLESS NOTED OTHERWISE, ALL STEEL SHALL BE IN ACCORDANCE WITH AS 3678 GRADE 250 OR AS 3679 GRADE 300, OR AS 1163 GRADE 350 AS APPROPRIATE.
- THREE (3) COPIES OR 1 TRANSPARENCY OF WORKSHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. FABRICATION SHALL NOT COMMENCE WITHOUT ENGINEERS APPROVAL OF WORKSHOP DRAWINGS, ALL DIMENSIONS AND SETOUTS TO BE OBTAINED FROM THE ARCHITECTS DRAWINGS WHERE NOT INDICATED ON THE STRUCTURAL DRAWINGS.
- THE BOLTING PROCEDURE IS DESIGNATED AS FOLLOWS: 4.6/S COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111 -SNUG TIGHTENED 8.8/S HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS 1252 - SNUG TIGHTENED 8.8/TB HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS A BEARING TYPE JOINT 8.8/TF HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS A FRICTION TYPE JOINT WITH FACING SURFACES LEFT UNCOATED
- SS5 UNLESS NOTED OTHERWISE ALL FILLET WELDS SHALL BE 6MM CONTINUOUS CATEGORY SP USING E41XX ELECTRODES, ALL BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS SP TO AS 1554.1. ALL GUSSET PLATES SHALL BE 12 mm THICK, ALL BOLTS SHALL BE M20 8.8/S IN 22 mm DIAMETER HOLES, MINIMUM 2 BOLTS TO EACH CONNECTION, ALL WASHERS AND BOLTS SHALL BE GALVANISED.
- FABRICATION SHALL COMPLY WITH AS 4100 SECTION 14, ERECTION SHALL COMPLY WITH AS 4100 SECTION 15. /TB AND /TF BOLTS TO BE INSTALLED IN ACCORDANCE WITH AS 4100 - SECTION 15, USING EITHER THE PART-TURN METHOD OR THE DIRECT-TENSION INDICATOR METHOD.
- SS7 WHERE CONNECTION FORCES (IN KILONEWTONS) ARE SHOWN ON THE DRAWINGS, CONNECTIONS SHALL BE PROVIDED TO TRANSMIT THESE FORCES. CONNECTIONS SHALL PROVIDE FOR A MINIMUM FORCE OF 25 KN.
- STEELWORK INTENDING TO BE CONCRETE ENCASED SHALL BE UNPAINTED. ENCASING CONCRETE TO BE GRADE N25 PROVIDING COVER ADEQUATE TO SUIT FIRE RATING OR EXPOSURE CONDITIONS, CONCRETE ENCASEMENT SHALL BE CENTRALLY REINFORCED WITH 5MM WIRE TO AS 1303 OR 6MM STRUCTURAL GRADE BARS TO AS 1302 AT
- SS9 ALL STEELWORK BELOW GROUND SHALL BE ENCASED BY 75MM OF CONCRETE, STEEL WRAPPED WITH FGW41 PLACED 25 MM CLEAR OF STEEL, PROVIDE 50 MM MINIMUM ENCASING.
- \$\$10 STEELWORK NOT TO BE CONCRETE ENCASED SHALL BE GIVEN ONE SHOP COAT OF AN APPROVED PRIMER UNLESS NOTED OTHERWISE, FACES OF FRICTION GRIP CONNECTIONS SHALL NOT BE PAINTED. REFER TO ARCHITECTURAL SPECIFICATIONS FOR COATINGS SCHEDULE.
- SS11 THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND IMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED IN THE DRAWINGS.
- SS12 UNLESS NOTED OTHERWISE CAMBER SHALL BE PROVIDED TO ALL ROOF BEAMS, TRUSSES, PORTALS ETC. AT 5 MM PER 2000MM OF SPAN. NO MEMBER SHALL BE ERECTED WITH NEGATIVE CAMBER.
- SS13 PROVIDE SEAL PLATES TO THE PLATES TO THE ENDS OF ALL HOLLOW SECTIONS, WITH "BREATHER' HOLES IF MEMBERS TO BE HOT DIP GALVANISED.
- SS14 ALL STEELWORK SHALL BE SECURELY TEMPORARILY BRACED BY THE ERECTOR AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION, DESIGN OF ALL TEMPORARY BRACING IS THE RESPONSIBILITY OF THE ERECTOR. SPECIFIC DESIGN DETAILS ARE TO BE FORWARDED ONTO THE PROJECT ENGINEER UPON REQUEST. ALL BOLTS SHALL BE OF SUCH LENGTH THAT AT LEAST ONE FULL THREAD IS EXPOSED BEYOND THE NUT AFTER THE NUT HAS
- SS15 ALL BOLTS SHALL BE OF SUCH LENGTH THAT AT LEAST ONE FULL THREAD IS EXPOSED BEYOND THE NUT, AFTER THE NUT HAS BEEN TIGHTENED.
- \$\$16 MINIMUM ONE WASHER SHALL BE USED UNDER THE NUT IN ALL SITUATIONS, IF TIGHTENING IS CARRIED OUT AT THE HEAD, AND ADDITIONAL WASHER IS TO BE USED UNDER THE HEAD. FOR SLOTTED HOLES USE HARDENED WASHER UNDER THE NUT AND BOLT HEAD.
- \$\$17 UNLESS NOTED OTHERWISE ALL MATERIAL TO BE: GRADE 250-HOT ROLLED PLATES, FLATS, ANGLES (100 X 100 OR 125 X 75 AND SMALLER) GRADE 300-ALL WB'S AND WC'S GRADE 300 PLUS-ALL UB'S, UC'S, PFC'S AND LARGER ANGLES. GRADE 350-ALL RHS'S, AND CHS'S.
- \$\$18 ALL GALVANISING OF STRUCTURAL STEELWORK TO AS 1650. THE CONTINUOUS AVERAGE ZINC COATING MASS TO BE 600 G/M² (550 G/M² MINIMUM)
- \$\$19 THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL WORK SHALL BE SUPERVISED BY A QUALIFIED ENGINEER, EXPERIENCED IN SUCH SUPERVISION, TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET.
- \$\$20 SURFACE FINISHES FOR ALL STRUCTURAL STEELWORK TO BE IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATION.

- FW1 THE DESIGN CERTIFICATION. CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND FALSE WORK SHALL BE THE RESPONSIBILITY OF THE BUILDER/SUBCONTRACTOR, UNLESS SPECIFIC DESIGN REQUIREMENTS ARE SHOWN ON
- FW2 FORMWORK DESIGN. CONSTRUCTION TOLERANCES AND STRIPPING TIMES SHALL COMPLY WITH AS 3610 AND AS 3600 UNLESS OTHERWISE APPROVED BY THE PROJECT STRUCTURAL ENGINEER.
- DURING CONSTRUCTION, SUPPORT PROPPING WILL BE REQUIRED WHERE LOADS FROM STACKED MATERIALS, FORMWORK AND OTHER SUPPORTED SLABS INDUCE LOADS IN A SLAB OR BEAM WHICH EXCEED THE DESIGN LOAD FOR STRENGTH OR SERVICEABILITY AT THAT AGE, ONCE THE NOMINATED 28 DAY STRENGTH HAS BEEN ATTAINED. THESE LOADS SHALL NOT EXCEED THE DESIGN SUPERIMPOSED LOADS SET OUT IN THE GENERAL NOTES.
- FW4 STRIPPING OF FORMWORK AND BACKPROPPING DETAILS SHALL BE IN ACCORDANCE WITH AS 3600 CLAUSE 17.6, AND SHALL BE CARRIED OUT BY A SUITABLY QUALIFIED AND EXPERIENCED PERSON, REFER TO THE PROJECT ENGINEER FOR ANY SPECIFIC REQUIREMENTS WHICH MAY BE SPECIFIED. REFER TO NOTE G6.
- FW5 THE FORMWORK SHALL NOT BE DESIGNED TO RELY ON RESTRAINT OR SUPPORT FROM THE PERMANENT STRUCTURE WITHOUT PRIOR APPROVAL FROM THE PROJECT STRUCTURAL ENGINEER.
- FW6 THE FORMWORK SHALL BE DESIGNED TO ACCOMMODATE MOVEMENTS AND LOAD REDISTRIBUTION DUE TO POST
- FW7 CONCRETE FORMED SURFACES SHALL HAVE FINISHES IN ACCORDANCE WITH AS 3610, AS SPECIFIED BY THE
- FW8 DO NOT PLACE PERMANENT LOADS, INCLUDING MASONRY WALLS AND THE LIKE, ON THE CONCRETE STRUCTURE UNTIL AFTER THE FORMWORK AND BACKPROPPING HAS BEEN REMOVED. REFER TO NOTE RC15.
- FW9 DESIGN INFORMATION CONCERNING THE FOUNDATION FORMWORK SHALL BE DETERMINED FROM THE CONDITIONS EXISTING ONSITE AT THE TIME OF CONSTRUCTION. ALSO REFER GEOTECHNICAL REPORT WHERE AVAILABLE FOR
- FW10 REFER TO ARCHITECTS DRAWINGS FOR TEST PANEL DETAILS, REINFORCEMENT FOR TEST PANELS SHALL BE SIMILAR TO THAT IN THE PERMANENT STRUCTURE BEING REPRESENTED.
- FW11 FORMWORK AND SCAFFOLDING SHALL BE EXTENDED BEYOND TENDON ANCHORAGE POINT TO PROVIDE SPACE FOR STRESSING OPERATIONS WHERE REQUIRED. SAFETY HOARDING FOR STRESSING SHALL BE PROVIDED AS NECESSARY
- FW12 PROVIDE INDEPENDENT THIRD PARTY CERTIFICATION OF ADEQUACY OF ALL FORMWORK PRIOR TO POURING ANY CONCRETE. CERTIFICATION SHALL BE BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER REGISTERED ON THE NATIONAL PROFESSIONAL ENGINEERS REGISTER.
- FW13 THE CONTRACTOR SHALL DEVELOP A WRITTEN CONSTRUCTION PROCEDURE FOR THE PLACING OF CONCRETE IN TALL MEMBERS. THIS MAY REQUIRE THE PROVISION OF INSPECTION AND POURING OPENINGS IN FORMWORK, OR CONSTRUCTION JOINTS AT LOCATIONS APPROVED BY THE ARCHITECT. THE CONSTRUCTION PROCEDURE SHALL BE SUBMITTED TO THE ENGINEER FOR ACCEPTANCE WITH RESPECT TO COMPLIANCE WITH THE DESIGN INTENT.FW14ALL SLABS, BEAMS, COLUMNS, WALLS ETC HAVE BEEN DESIGNED FOR THEIR FINAL DESIGN LOADS WHEN ACTING AS A PART OF A TOTAL STRUCTURE, PROPPING AND TEMPORARY SUPPORTS THAT MAY BE REQUIRED TO MAINTAIN THE TEMPORARY STRUCTURAL ADEQUACY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

POST-TENSIONING DESIGN, INSTALLATION AND CERTIFICATION

- PD1 SCOPE OF WORKS. THE SCOPE OF WORKS SHALL CONSIST OF THE DESIGN, INSTALLATION AND CERTIFICATION OF THE POST-TENSIONED PRESTRESSING AND THE NON-TENSIONED REINFORCEMENT. FOR THE FLOOR SLABS SHOWN THE POST-TENSIONED PRESTRESSING AND THE NON-TENSIONED REINFORCEMENT SHALL EXTEND FOR THE FULL PLAN AREA, INCLUDING ALL STRUCTURAL HOBS, FOLDS, SETDOWNS FORMING PART OF THE FLOOR SLAB OTHER THAN AREAS DENOTED AS DESIGNED BY ABC CONSULTANTS. IT IS THE SUB-CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE POST-TENSIONED PRESTRESSING AND THE NON-TENSIONED REINFORCEMENT IS DESIGNED. INSTALLED AND CERTIFIED IN ACCORDANCE WITH THESE NOTES AND THE REQUIREMENTS OF AS3600 AND AS1170. THE NON-TENSIONED REINFORCEMENT INCLUDES ANCHORAGE ZONE BURSTING/SPALLING REINFORCEMENT, THE REINFORCEMENT OF ANY SLAB AREAS NOT INCLUDED IN THE PRESTRESSED AREAS AND, ANY ADDITIONAL REINFORCEMENT USED TO COMPLIMENT THE PRESTRESS IN THE SLABS.
- PD2 COLUMN STIFFNESS. CONTRIBUTION OF THE COLUMNS IN THE FLOOR SLAB DESIGN SHALL NOT BE PERMITTED.

THE SUB-CONTRACTOR MUST SUBMIT ONE COPY OF THE TENDON AND REINFORCEMENT LAYOUT PLANS. FOR APPROVAL AT LEAST 3 WEEKS PRIOR TO THE COMMENCEMENT OF ANY INSTALLATION WORK. IF REQUIRED BY THE STRUCTURAL ENGINEER. THE POST-TENSIONING CONTRACTOR SHALL SUBMIT SUPPORTING DESIGN CALCULATIONS THESE PLANS MUST SHOW EACH TENDON LOCATION AND SIZE. THE DRAPE POINTS AND, ANY NON-TENSIONED REINFORCEMENT, NO INSTALLATION WORK MAY COMMENCE UNTIL THE APPROVED LAYOUT PLAN INCORPORATING ANY ARCHITECTURAL REQUIREMENTS IS RETURNED TO THE SUB-CONTRACTOR, THIS APPROVAL PERIOD WILL NORMALLY TAKE 7 DAYS.

A CPENG STRUCTURAL ENGINEER (WITH NPER) SHALL CERTIFY ALL STRUCTURAL ELEMENTS WITHIN THE POST-TENSIONED SCOPE OF WORKS, THE CERTIFICATION MUST STATE THAT THESE FLEMENTS ARE STRUCTURALLY ADEQUATE TO RESIST THE DESIGN LOADS IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN STANDARDS, THE CERTIFYING ENGINEER SHALL MAINTAIN PROFESSIONAL INDEMNITY INSURANCE TO A VALUE DETERMINED BY THE

CONSTRUCTION

- A CPENG STRUCTURAL ENGINEER (WITH NPER) SHALL CERTIFY THAT THE PRESTRESSING AND REINFORCEMENT AS INSTALLED IN THE POST-TENSIONED WORKS, COMPLIES WITH THE APPROVED CONSTRUCTION DESIGN PLAN AND. IN PARTICULAR, THAT ALL TENDONS AND REINFORCEMENT WAS ACCURATELY POSITIONED WITH THE CORRECT COVER AND THAT ALL TENDONS HAVE BEEN CORRECTLY STRESSED AND GROUTED. THE CERTIFYING ENGINEER SHALL MAINTAIN PROFESSIONAL INDEMNITY INSURANCE TO A VALUE DETERMINED BY THE BUILDER.
- PD6 ALL ANCHORAGE RECESSES AND ANY PANS (USED TO ACCESS INTERNAL LIVE ANCHORAGES) MUST BE FILLED WITH 30 MPA GROUT, FINISHED TO A SMOOTH AND LEVEL SURFACE. THE CONTRACTOR IS TO ALLOW FOR THE DRILLING OF EDGE BOARDS TO ALLOW FOR THE FIXING OF ANCHORS.
- PD7 ALL STAPLES ARE TO BE REMOVED FROM ALL AREAS.
- WHERE SLAB THICKNESS EXCEEDS 270MM THE SUBCONTRACTOR SHALL ALLOW FOR SL72 MESH TOP AND HEAVY PD8 DUTY BAR CHAIRS

- PD9 ALL HORIZONTAL SLABS, BEAMS, FOLDS, TRANSFER BEAM ELEMENTS BETWEEN LEVELS B1 AND ROOF INCLUDING LIFT LOBBY SLABS, STAIR LANDINGS, PLANTROOMS, ROOFS, MEZZANINES ETC.
- THE SUBCONTRACTOR IS RESPONSIBLE FOR DETAILING ALL POST-TENSIONED SLABS/BEAMS TO RESIST THE PD10 EFFECTS OF ANY RESTRAINT THAT MAY OCCUR FROM SURROUNDING WALLS, MULTIPLE LIFT CORES, GROUND WORKS, UNBALANCED P/A STRESSES ETC THAT MAY LEAD TO CONCRETE ELEMENTS BOTH HORIZONTALLY AND VERTICALLY CRACKING, SUBCONTRACTOR TO SUPPLY REINFORCEMENT WHERE REQUIRED AND CONSTRUCT SLAB USING APPROPRIATE STAGING METHODS AND/OR DETAILING TO ACCOUNT FOR ABOVE EFFECTS.
- THE POST-TENSIONING CONTRACTOR IS TO REFER TO THE STRUCTURAL DESIGN BRIEF AND LOADING DRAWINGS PD11 FOR THE DESIGN CRITERIA FOR THE PROJECT, REFERENCE TO BOTH, INCLUDING REVISION NUMBERS, ARE TO BE LOCATED ON THE POST-TENSIONING CONCRETE LAYOUT DRAWINGS.

	MINIMUM CONCRETE MODULUS OF ELASTICITY				
CONCRETE STRENGTH, F'c MODULUS OF ELASTICITY, Ec (MPa)					
	90 MPa AT 56 DAYS	44,130			
	75 MPa AT 56 DAYS	41,595			
	65 MPa AT 28 DAYS	39,540			
	50 MPa AT 28 DAYS	35,750			
	40 MPa AT 28 DAYS	31,975			
	32 MPa AT 28 DAYS	28,600			

SLAB ON GRADE

SOG1 ALL RE-ENTRANT CORNERS AT PENETRATIONS FOR SUMPS, PITS, COLUMN BLOCKOUTS AND THE LIKE, TO HAVE TRIMMER BARS PLACE AT 45 DEGREES TO CORNER OR IN EACH DIRECTION AT CORNERS UNLESS NOTED IN A DIFFERENT ARRANGEMENT ON PLAN.

TRIMMER BARS IN SLAB:



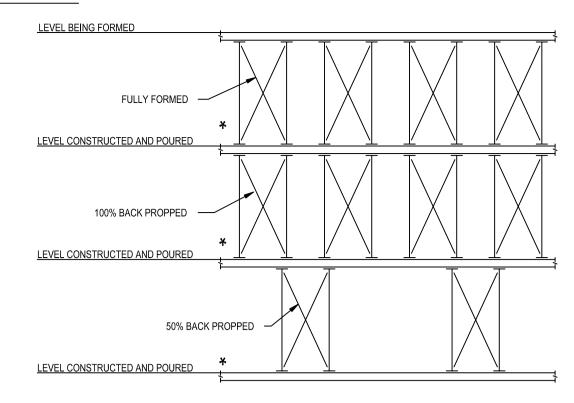
REFER NOTES ON SLAB ON GROUND DRAWING. PLACED ON CENTRE OF INCOMING JOINT

TRIMMER BARS TO BE TIED TO U/S OF SLAB MESH.

PROVIDE SUB-FLOOR DRAINAGE TO HYDRAULIC ENGINEERS DETAILS.

PRIOR TO PLACEMENT OF SLAB, SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1,1' OF AS 1289 FOR THE TOP 300 mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH SITE WON MATERIAL TO THE ENGINEERS APPROVAL.

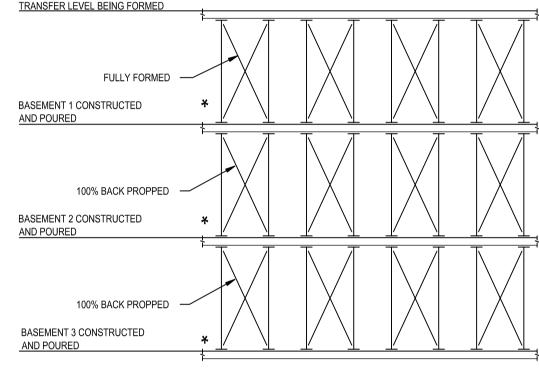
PROPPING



TYPICAL BACK PROPPING SEQUENCE ABOVE CONCRETE TRANSFER SLAB

NOTE: * DENOTES LEVELS THAT HAVE BEEN STRESSED, APPROVED BY ABC CONSULTANTS AND GROUTED. DECKS THAT ARE NOT STRESSED AND GROUTED ARE NOT TO HAVE ANY

> THE SEQUENCE ABOVE IS FOR GENERAL AREAS AND DOES NOT INCLUDE AREAS WHICH CANTILEVER. REFER TO PLANS FOR ADDITIONAL PROPPING REQUIREMENTS IN CANTILEVERED AREAS, OR OTHER AREAS WITH HIGH CONCENTRATIONS OF LOAD. ALL PROPPING TO FORMWORK ENGINEERS DESIGN AND CERTIFICATION.



TYPICAL BACK PROPPING SEQUENCE **BELOW CONCRETE TRANSFER SLAB**

NOTE: * DENOTES LEVELS THAT HAVE BEEN STRESSED, APPROVED BY ABC CONSULTANTS AND GROUTED, DECKS THAT ARE NOT STRESSED AND GROUTED ARE NOT TO HAVE ANY PROPS REMOVED. THIS INDICATIVE ADVICE IS FOR TRANSFER SLABS LESS THAN 300mm THICK. ALL PROPPING TO FORMWORK ENGINEERS DESIGN AND CALCULATIONS.

STRUCTURAL TIMBER

- T1 ALL TIMBER DESIGN, CONSTRUCTION AND MATERIAL TO BE TO AS 1720.1 AND AS 1720.2 UNLESS NOTED OTHERWISE.
- AS 1684 SHALL BE APPLIED TO DOMESTIC CONSTRUCTION.
- ALL TIMBER USED SHALL HAVE BEEN STRESS GRADED BY VISUAL OR MECHANICAL MEANS IN ACCORDANCE WITH THE APPROPRIATE AUSTRALIAN STANDARDS.
- T4 SOFTWOOD TO BE MINIMUM GRADE F7, HARDWOOD TO BE MINIMUM GRADE F14 UNLESS NOTED OTHERWISE.
- EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY AS PER AS1702.2 OR IMPREGNATED PINE GRADE F7. PRESSURE TREATED TO AS 1604 AND RE-DRIED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. SUPPLY SUPPORTING DOCUMENTATION FOR PRESERVATIVE TREATMENT. AS1702.2
- TIMBER TRUSSES TO BE PRECAMBERED AN AMOUNT EQUAL TO DEAD LOAD DEFLECTION, THREE (3) COPIES OF SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL CLEARLY SHOWING THE DESIGN LOADS ON THE ROOF AND CEILING AND TRUSS NODE POINT LOADS AND PRECAMBER, DRAWINGS SHALL BE SUBMITTED MINIMUM 14 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. FABRICATION SHALL NOT COMMENCE UNLESS PERMISSION TO DO SO HAS BEEN GIVEN, DESIGN OF TRUSSES SHALL ONLY BE DONE BY A QUALIFIED STRUCTURAL ENGINEER EXPERIENCED IN TIMBER DESIGN.
- ALL BOLTS IN TIMBER CONSTRUCTION TO BE MINIMUM M16 UNLESS NOTED OTHERWISE. BOLT HOLES TO BE DRILLED EXACT SIZE, WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES THE BOLT DIAMETER, EDGE DISTANCES FOR FASTENERS IN TIMBER (FROM ENDS AND SIDES) SHALL BE IN ACCORDANCE WITH AS 1720.
- SHANK AND THREAD OF BOLTS SHALL BE THOROUGHLY COATED WITH A HEAVY WATERPROOF GREASE BEFORE INSERTING INTO THE TIMBER.
- SPECIALISED TIMBER FASTENERS SUCH AS GANG-NAIL PLATES, TRIP-L-GRIP ETC. SHALL BE OF PROVEN TYPE AND SHALL HAVE HAD WORKING LOADS DETERMINED IN ACCORDANCE WITH THE PROCEDURE SPECIFIED IN AS 1849.
- ALL TIMBER JOINTS AND NOTCHES ARE TO BE 100MM MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
- TIMBER DIMENSIONS ON THE FINISHED WIDTH AND THICKNESS TO BE: SEASONED SOFTWOOD +5 MM, -0MM UNSEASONED SOFTWOOD >F7 +3MM, -3MM ≤ F7+2MM, -4MM SEASONED HARDWOOD +2MM, -0MM UNSEASONED HARDWOOD +3MM, -3MM (SEE ALSO CLAUSE 1.6.2 IN AS 2082)
- T12 AT THE PRACTICAL COMPLETION OF THE CONTRACT, AND AGAIN AT THE END OF THE MAINTENANCE PERIOD AND IF NECESSARY DURING THAT PERIOD, THE CONTRACTOR SHALL RE-TIGHTEN ALL BOLTS TO APPROVAL. BOLTS THAT WILL BE INACCESSIBLE AFTER COMPLETION OF THE PROJECT, SHALL BE RE-TIGHTENED, IMMEDIATELY PRIOR TO
- T13 SURFACE FINISHES FOR ALL STRUCTURAL TIMBER SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL

PRECAST CONCRETE

- THE DIMENSIONS, LOCATIONS AND PROFILES OF THE PRECAST ELEMENTS, SHALL BE OBTAINED FROM THE RELEVANT ARCHITECTURAL DRAWINGS.
- THE MINIMUM ELEMENT THICKNESS SHALL BE 150MM STRUCTURAL, UNLESS NOTED OTHERWISE. THE DIMENSIONS ARE THE FINAL STRUCTURAL SIZES. ADDITIONAL CONCRETE MUST BE PROVIDED TO ALLOW FOR LOSS OF STRUCTURAL THICKNESS DUE TO ARCHITECTURAL REBATES AND SURFACE TREATMENT.
- THE MINIMUM CONCRETE STRENGTH SHALL BE F'C = 40 MPA, NORMAL WEIGHT, WITH A MINIMUM CEMENT CONTENT OF 330 KG/M3. UNLESS NOTED OTHERWISE. THE PRECAST CONTRACTOR SHALL SUBMIT THE

PROPOSED MIX DESIGN FOR REVIEW BY THE ENGINEER. REFER TO THE CONCRETE NOTES.

- CALCIUM CHLORIDE AND OTHER ADMIXTURES WILL NOT BE PERMITTED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER AND THEN ONLY IF THEY ARE WITHIN THE RESTRICTIONS OF AS3600 CLAUSE 4.9.
- ACID ETCHING AND OTHER SURFACE TREATMENTS ARE TO BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL WITH THE APPROPRIATE METHODS OF APPLICATION. THE MANUFACTURER SHALL OBTAIN THE SPECIFIED FINISH IN ACCORDANCE WITH THE SPECIFICATIONS AND TO THE ARCHITECT'S APPROVAL.
- THE COVER TO THE REINFORCEMENT SHALL BE: 35MM TO THE EXTERNAL FACE 25MM TO THE INTERNAL FACE
 - THE MINIMUM COVER TO THE VERTICAL BARS SHALL BE 40MM. THE TOLERANCE SHALL BE -0, +5 MM.
- THE REINFORCEMENT IN THE PRECAST ELEMENTS SHALL BE AS DETAILED. FABRIC SHALL BE ONE SHEET WHERE POSSIBLE. IF LAPPING IS REQUIRED IT SHALL BE IN ACCORDANCE WITH AS 3600 CLAUSE 13.2.4. THE SPLICES SHALL NOT OCCUR WITHIN 2000MM OF THE MID SPAN OF THE PRECAST ELEMENT. WHERE TWO LAYERS OF MESH ARE USED, THE SPLICES SHALL BE STAGGERED BY 1000 MM UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL CAST-IN PLATES, CONNECTION MEMBERS, AND FIXINGS ARE TO BE HOT DIPPED GALVANISED TO AS 1650. OR STAINLESS STEEL. REFER TO DETAILS. PROJECTING REINFORCEMENT FROM PRECAST ELEMENTS FORMING JOINTS IN EXPOSED FINAL CONDITIONS. SHALL BE GALVANISED.
- THE PRECAST CONTRACTOR SHALL SUPPLY AND FIT GALVANISED LIFTING AND ERECTION FERRULES AS REQUIRED TO SUIT THE CALCULATED REQUIREMENTS. THESE FERRULES SHALL NOT BE LOCATED ON EXTERNAL EXPOSED FACES AND AFTER USE SHALL BE PROTECTED TO AVOID CORROSION AND STAINING. ARCHITECTURAL FIXING FERRULES SHALL BE LOCATED TO SUIT THE ARCHITECTURAL DETAILS.
- PC10 THE FORMWORK SHALL BE CLEAN AND RIGID ENOUGH TO RESIST THE EFFECTS OF VIBRATION AND MEET THE SURFACE FINISH CLASS REQUIRED. THE FINISH AND COLOUR CONTROL SHALL MEET THE ARCHITECT'S
- PC11 CONSTRUCTION JOINTS IN PRECAST ELEMENTS ARE NOT PERMITTED. ALL CORBELS TO THE PRECAST ELEMENTS ARE TO BE POURED MONOLITHICALLY WITH THE PANEL. ALL FACES IN CONTACT WITH CAST-INSITU CONCRETE SHALL HAVE ROUGHENED SURFACES TO A DEPTH OF 5MM.
- THE PRECAST ELEMENTS HAVE BEEN DESIGNED FOR THE IN-SERVICE CONDITIONS (I.E. THE LOADS THE ELEMENTS ARE SUBJECTED TO AFTER ERECTION ON SITE). THE CONTRACTOR MUST ASSESS WHETHER ANY ADDITIONAL REINFORCEMENT IS REQUIRED TO SUIT THE PROPOSED METHOD OF HANDLING, TRANSPORTATION AND ERECTION. ANY ADDITIONAL MATERIAL COSTS WILL BE BORNE BY THE PRECAST CONTRACTOR.
- PC13 IT IS THE RESPONSIBILITY OF THE PRECAST CONTRACTOR TO DESIGN ALL ELEMENTS FOR THE STRIPPING. LIFTING, STORAGE, TRANSPORTATION AND ERECTION STAGES, THE CONCRETE STRESSES DURING THESE STAGES SHALL NOT CAUSE CRACKING. STACKING SHALL NOT CAUSE WARPING GREATER THAN THE CODE LIMITS. THE CONTRACTOR SHALL SUBMIT DETAILS AND COMPUTATIONS PERFORMED BY A QUALIFIED (NPER-3) ENGINEER EXPERIENCED IN PRECAST CONCRETE TO THE ENGINEER FOR REVIEW. THE LOCATION AND SIZES OF THE INSERTS WITH TESTS PROVING THE INSERT'S CAPACITY SHALL BE INCLUDED.
- PC14 THE PRECAST CONTRACTOR SHALL PROVIDE FULLY DETAILED SHOP DRAWINGS OF ALL PRECAST ELEMENTS SHOWING INSERTS, FIXINGS, DRAWINGS OF ALL PRECAST ELEMENTS SHOWING INSERTS, FIXINGS, PRECAST CONTRACTOR AND BUILDER SHALL COORDINATE ADDITIONAL FERRULE LOCATIONS FOR TEMPORARY BRACING OF THE PRECAST ELEMENTS DURING CONSTRUCTION AND ANY OTHER FIXINGS, INSERTS AND OPENINGS REQUIRED BY OTHER TRADES.
- PC15 THE CONCRETE STRENGTH AT STRIPPING FROM THE MOULDS SHALL BE DETERMINED BY THE CONTRACTOR BUT SHALL NOT BE LESS THAN F'C = 25 MPA THE PROPOSED CURING METHODS SHALL BE SUBMITTED FOR APPROVAL. THE CURING MUST BE EQUIVALENT TO KEEPING WET FOR SEVEN DAYS.
- PC16 SHEAR STUD CONNECTORS SHALL CONFORM WITH AS 2327. WELDING OF THE STUDS SHALL BE IN ACCORDANCE WITH AS1554. THE SHEAR STUDS ARE TO BE DRAWN FROM COLD DRAWN STOCK TO AS 1443 GRADES 1010 TO 1020 WITH A MINIMUM TENSILE STRENGTH AFTER MANUFACTURE OF 410 MPA.
- PC17 PACKERS SHALL BE NON FERROUS AND SHALL BE PROVIDED WITH 50MM MINIMUM COVER EXTERNALLY OR WHERE IN VIEW.
- PC18 ALL GAPS BETWEEN PRECAST ELEMENTS SHALL BE PROPERLY SEALED PRIOR TO GROUTING THE JOINTS. TO STOP THE GROUT FILLING THE REQUIRED GAPS BETWEEN THE PRECAST AND THE STRUCTURE AND TO AVOID SPOILING THE FACE OF THE PRECAST.
- PC19 GROUTING OF DOWELS AND JOINTS SHALL BE DONE WITH A WATERPROOF PRE-PACKED CEMENT-BASED PRODUCT, WHICH SHALL BE MIXED WITH WATER ON SITE TO THE RECOMMENDED CONSISTENCY, THE COMPRESSIVE STRENGTH OF GROUT MUST EXCEED 40 MPA AT 7 DAYS AND 60 MPA AT 28 DAYS, BUT NOT LESS THAN THE CONCRETE STRENGTH OF THE PANEL. THE PRODUCT SHALL BE STORED, HANDLED AND PLACED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE THE PRECAST ELEMENTS CARRY MORE THAN SEVEN STORIES. MAKE A PROTOTYPE OF THE JOINT USING THE PROPOSED METHOD OF CONSTRUCTION, POUR THE JOINT AND SPLIT THE JOINT AFTER THREE DAYS SO THAT THE GROUTED JOINT CAN BE INVESTIGATED. THE DOWEL BAR NEED NOT BE USED.
- PC20 WHERE SITE WELDING OF METAL FIXINGS IS REQUIRED IN EXPOSED AREAS, DEGREASE THE WELDED AREAS, CHIP OR GRIND OFF THE WELD SPATTER, GRIND THE WELD AREA DOWN AND COAT WITH AN APPROVED ZINC RICH PAINT TO THE MANUFACTURE'S RECOMMENDATIONS.
- PC21 PROVIDE FIRE RATING TO ALL PRECAST CONNECTIONS TO THE APPROVAL OF THE BUILDING SURVEYOR AND
- PC22 FOR DETAILS OF FIRE BARRIERS AND WEATHERPROOFING OF JOINTS, REFER ARCHITECTURAL DRAWINGS. PC23 CLIP ON PRECAST ELEMENTS SHALL NOT BE ERECTED UNTIL ALL PROPS ARE REMOVED FROM THE
- PC24 NO HOLES SHALL BE CORED AND NO INSERTS SHALL BE "SHOT" OR DRILLED INTO THE PRECAST ELEMENTS WITHOUT THE ENGINEER'S APPROVAL.

PC25 THE CONTRACTOR SHALL SUBMIT WRITTEN EVIDENCE OF DETAILED INSPECTION OF GROUTED JOINTS TO

SUPPORTING FLOOR STRUCTURE.

ALL LOAD-BEARING PRECAST CONCRETE ELEMENTS.

AS BUILT DRAWING

NOTE: DO NOT SCALE OFF DRAWINGS, REFER TO

ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.

21.05.24 AS BUILT DRAWING 03.02.23 ISSUED FOR CONSTRUCTION B 11.02.22 ISSUED FOR CC2 12.02.21 ISSUED FOR TENDER 18.12.20 ISSUED FOR APPROVAL ____ DATE REVISION DESCRIPTION

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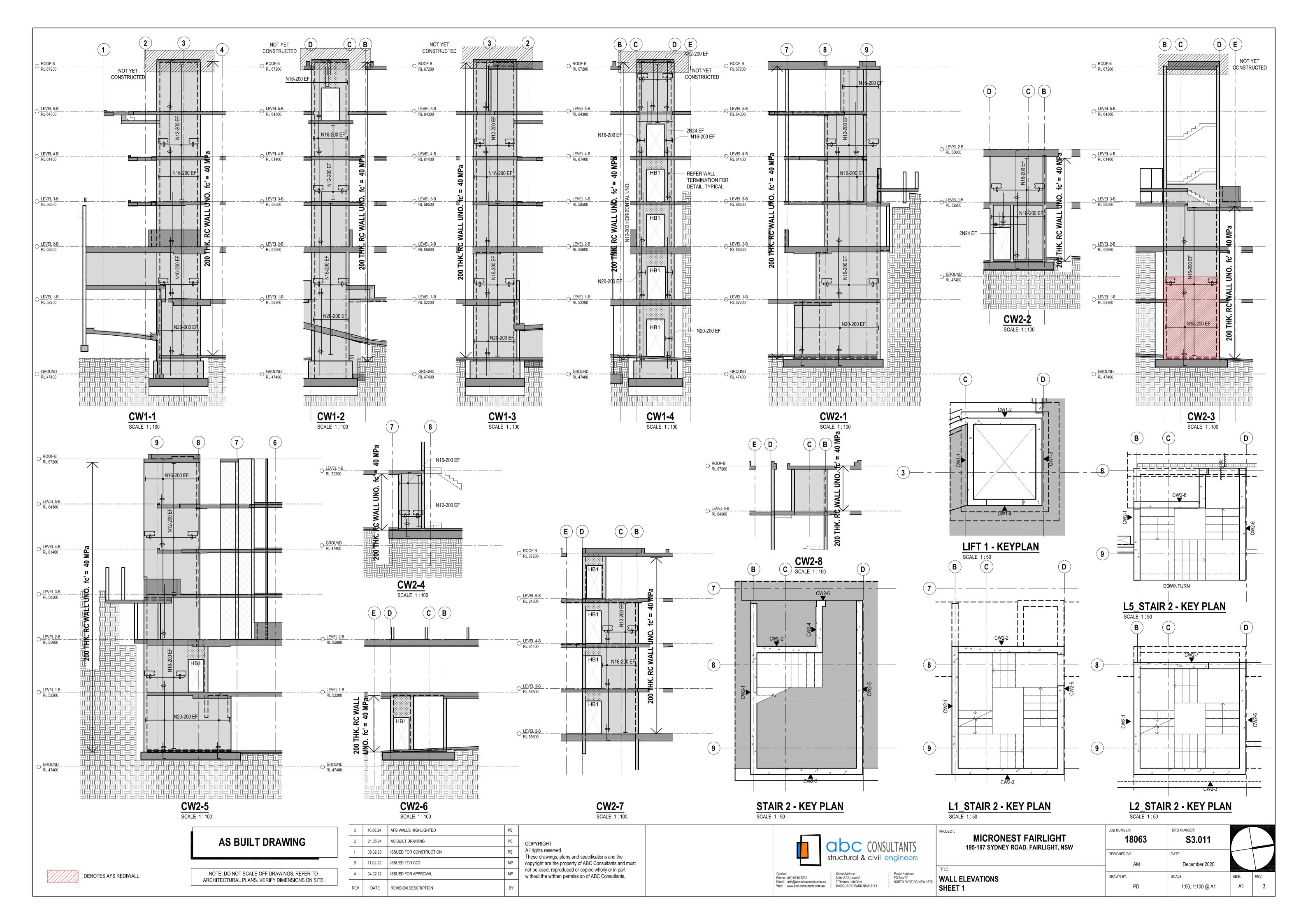


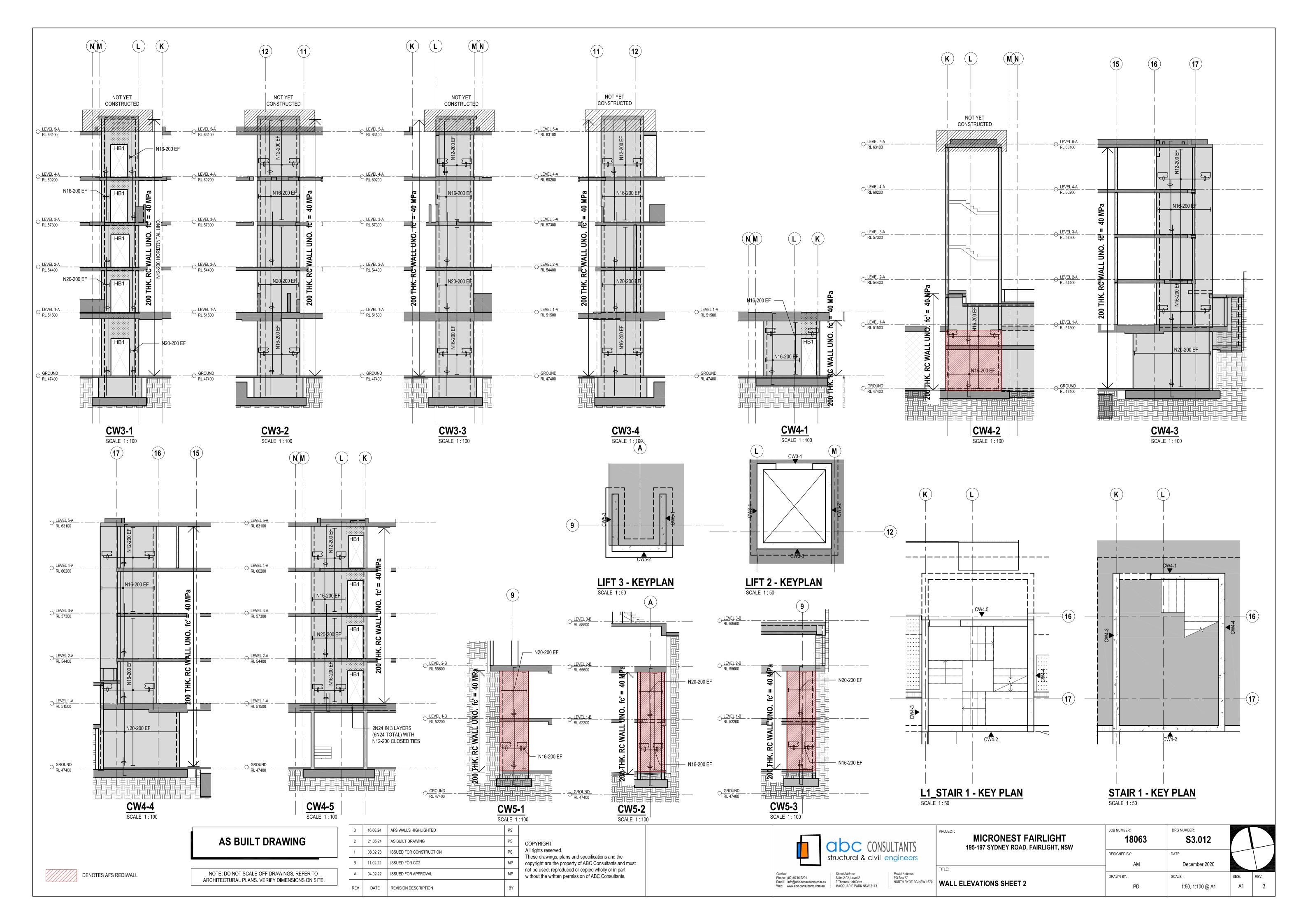
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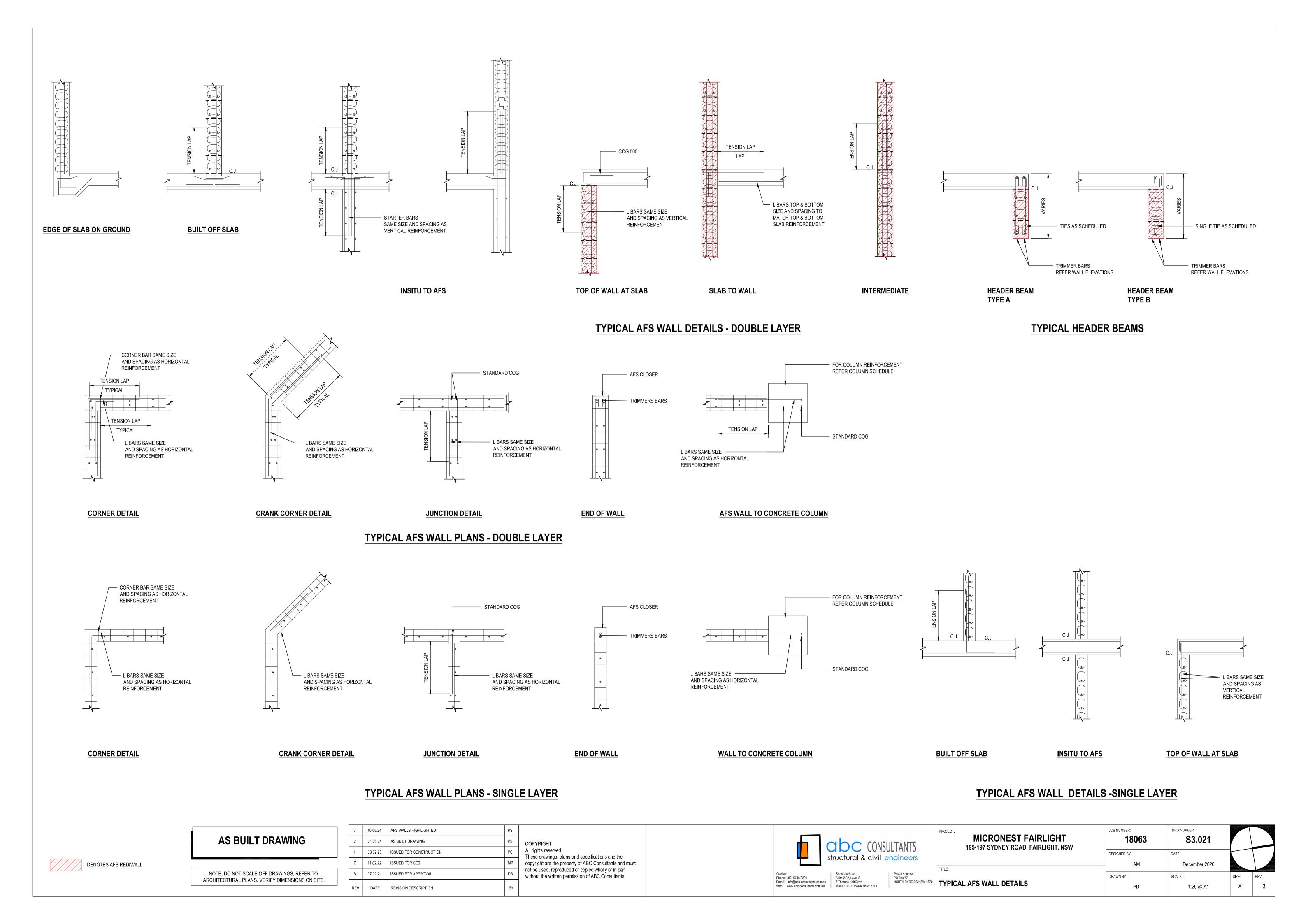
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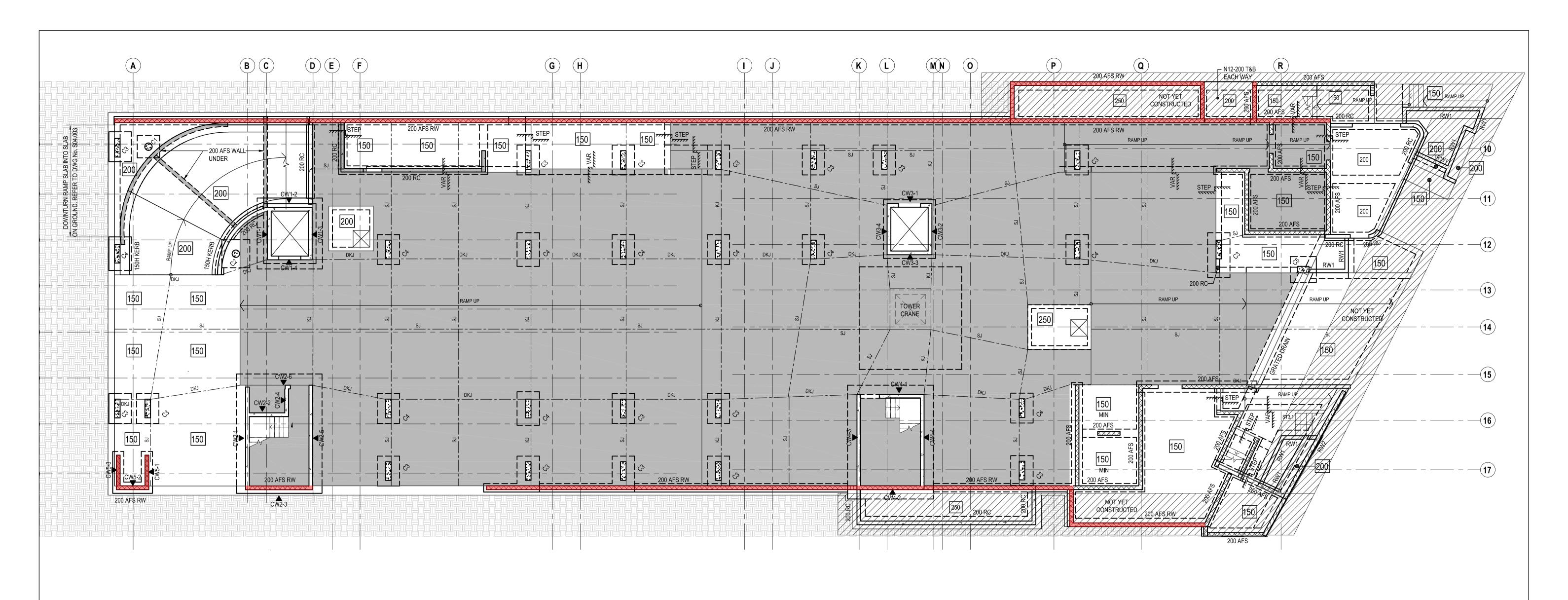
GENEF PO Box 77

MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$0.002	
	DESIGNED BY:	DATE:	
	. AM	December.2020	
RAL CONSTRUCTION NOTES	DRAWN BY:	SCALE:	SIZE:
T 2	PD	1:1 @ A1	A1









ELEMENT STRENGTH | MAX SIZE SLUMP CEMENT **ADMIXTURE** AGG. mm CONCRETE QUALITY SLAB ON GROUND 40 20 80 GP

WALLS DENOTED AS 200 RC TO BE INSITU CONCRETE WALLS, 200 THICK WITH N16-200 EACH WAY IN EACH FACE AS PER DETAILS ON \$3,001 WITH MIN 40MPa CONCRETE.

WALLS DENOTED AS 200 AFS TO BE 200 THICK AFS WALLS WITH N16-200 EACH FACE VERTICAL AND N12-200 EACH FACE HORIZONTAL AS PER DETAILS ON DRAWING S3.021 WITH MIN 40 MPa CONCRETE WALLS DENOTED AS 200AFS RW ARE REDIWALL CONSTRUCTION AS PER THE FIRE STRATEGY REPORT PREPARED BY INNOVA REPORT NUMBER 21618-R02 ISSUE NO. 3 DATED 15 JULY 2024 DENOTED AS ON PLAN

NON LOAD BEARING WALLS TO BE LIGHT WEIGHT CONSTRUCTION

FALLS AND STRIP DRAINS ETC TO BE IN ACCORDANCE WITH HYDRALLIC CONSULTANTS DETAILS.

SLAB ON GROUND NOTES:

DENOTES 120mm THICK SLAB ON GROUND. SL92 FABRIC TOP (30 COVER) ON 'FORTECON STANDARD' LAPPED & TAPED ON 50mm MIN. COMPACTED FINE CRUSHED ROCK. SLAB TO BE CAST OVER FREE DRAINAGE LAYER WHICH INCORPORATES AG-LINES TO HYDRAULLIC ENGINEERS DETAILS TO PREVENT WATER INGRESS. ALLOW FOR SAW CUT JOINTS AT 3m CENTRES AND CONTROL JOINTS AT 15m CENTRES, TYPICAL.

REFER TO TABLE BELOW FOR CONCRETE COVERS.

PROVIDE DAMPPROOF MEMBRANE TO ALL SLABS.

NOTES TO BE READ IN CONJUNCTION WITH PLANS AND TYPICAL DETAILS.

150 150 THICK SLAB - SL82 MESH TOP AND BOTTOM.

200 THICK SLAB - SL81 MESH TOP AND BOTTOM. 200

REINFORCEMENT COVERS			
SLAB ON GROUND		INTERIOR	EXTERIOR
SLAB	TOP	20mm	45mm
	воттом	30mm	30mm
	SIDES	45mm	45mm

SLAB DESIGN NOTES

EXPOSURE CLASSIFICATION:

A1 INTERNAL

B2 EXTERNAL

FIRE RATING: CARPARK FRL 120/120/120

LIVE LOADS:

2.5 kPa GENERAL

SUPERIMPOSED DEAD LOAD:

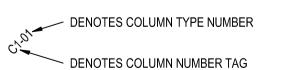
1.5 kPa GENERAL 2.0 kPa BALCONIES

SERVICEABILITY:

TOTAL LONG TERM SLAB DEFLECTION - SPAN/250 INCREMENTAL SLAB DEFLECTION - SPAN/500

LEGEND:

DENOTES CONCRETE ELEMENT OVER DENOTES AFS WALL OVER DENOTES SLAB PENETRATION DENOTES SLAB PENETRATION ZONE ĽΊ DENOTES MINIMUM SLAB THICKNESS, UNO XXX DENOTES SLAB STEP DEPTH



TYPICAL SLAB TRIMMER DETAILS: PROVIDE 2N12 BARS TOP EXTEND 600 MIN. PAST EACH EDGE OF THE PENETRATION.

SLAB PENETRATION TRIMMER

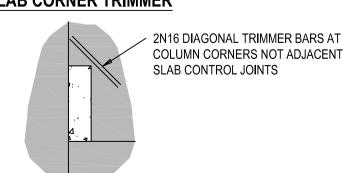


2N12-1200 LONG (75 SPACING) TRIMMERS BARS AT ALL RE-ENTRANT CORNERS, TIED TO UNDERSIDE OF TOP REINFORCEMENT.

SLAB RE-ENTRANT CORNER TRIMMER

1N12 L-BARS TOP IN CORNER OF SLAB, 1000 LEGS.

SLAB CORNER TRIMMER



NOTES:

DRAWINGS.

REFER TO HYDRALIC DRAWING FOR OUTFLOW REQUESTS TO ROOF AREAS. REFER ARCHITECT FOR FALLS

AS BUILT DOCUMENTATION DOES NOT INCLUDE ANY RECTIFICATION ITEMS

THAT NEEDS TO BE ADDRESSED.

AS BUILT DRAWINGS DO NOT INCLUDE HOBS AND UPSTANDS TO THE SLABS WHICH MAY NOT HAVE BEEN CONSTRUCTED AT THE TIME OF PREPARING THIS AS BUILT

DRAWING. ALL FALLS AND RL'S TO BE AS PER THE ARCHITECTURAL DOCUMENTATION. PENETRATIONS LESS THEN 100mm ARE NOT DOCUMENTED ON THESE DRAWINGS AND ARE TO BE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND SERVICE

REFER TO DRAWING S0.001 FOR GENERAL NOTES.

AS BUILT DRAWING

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.

7	16.08.24	AFS WALLS HIGHLIGHTED	PS	
6	21.05.24	AS BUILT DRAWING	PS	COPYRIGHT
5	15.02.24	WALL TYPES UPDATED	PS	All rights reserved. These drawings, plans and specifications and the
4	12.02.24	WALL TYPES UPDATED	PS	copyright are the property of ABC Consultants and must
3	01.05.23	OSD TANK SLAB THICKNESS REVISED	PS	not be used, reproduced or copied wholly or in part without the written permission of ABC Consultants.
REV	DATE	REVISION DESCRIPTION	BY	

structural & civil enginee

COLUMN TRIMMER

 Contact
 Street Address

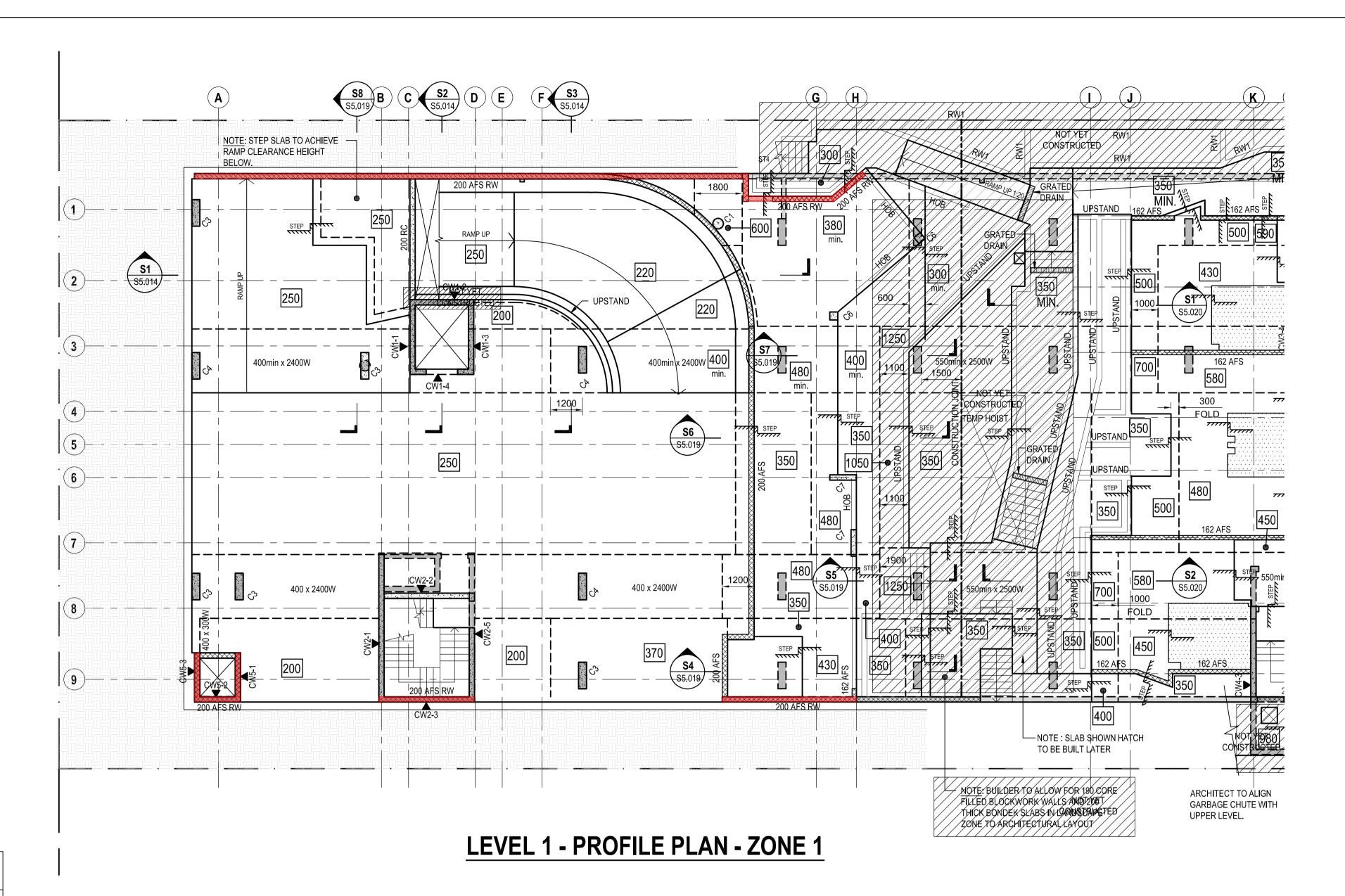
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 MACQUARIE PARK NSW 2113
 NORTH RYDE BC NSW 1670 | LEVEL 0 PROFILE PLAN

	MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NS
TITLE:	
	TITLE:

AIRLIGHT FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$4.002		
, ,	DESIGNED BY:	DATE:		
	. AM	December.2020		
	DRAWN BY:	SCALE:	SIZE:	REV:
	PD	1:100 @ A1	A1	7



ELEMENT CONCRETE QUALITY	STRENGTH f'c	MAX SIZE AGG. mm	SLUMP mm	CEMENT TYPE	ADMIXTURE
SUSPENDED SLAB	40	20	80	GP	-

EXPOSURE CLASSIFICATION:

A1 INTERNAL B2 EXTERNAL

FIRE RATING: CARPARK FRL 120/120/120

RESIDENTIAL FRL 90/90/90

1.5 kPa

LIVE LOADS:

1.5 kPa GENERAL 2.0 kPa BALCONIES 4.0 kPa COMMON AREA 2.0 kPa PLANTER

SUPERIMPOSED DEAD LOAD:

1.5 kPa GENERAL 2.0 kPa BALCONIES 1.5 kPa COMMON AREA 6.0 kPa PLANTER

SERVICEABILITY:

TOTAL LONG TERM SLAB DEFLECTION - SPAN/250 INCREMENTAL SLAB DEFLECTION - SPAN/500

NON LOAD BEARING WALLS TO BE LIGHT WEIGHT CONSTRUCTION

LEGEND:

DENOTES CONCRETE ELEMENT OVER

DENOTES CORE FILLED BLOCK WALL OVER

DENOTES AFS WALL OVER

DENOTES LOAD BEARING CONCRETE ELEMENT UNDER

DENOTES SLAB PENETRATION

DENOTES SLAB PENETRATION ZONE

??? DENOTES MINIMUM SLAB THICKNESS, UNO
XXX DENOTES SLAB STEP DEPTH

NOTES:

REFER TO HYDRALIC DRAWING FOR OUTFLOW REQUESTS TO ROOF AREAS. REFER ARCHITECT FOR FALLS

DENOTES 50mm WET AREA SETDOWN

AS BUILT DOCUMENTATION DOES NOT INCLUDE ANY RECTIFICATION ITEMS
THAT NEEDS TO BE ADDRESSED.
AS BUILT DRAWINGS DO NOT INCLUDE HORS AND LIBSTANDS TO THE SLABS W

AS BUILT DRAWINGS DO NOT INCLUDE HOBS AND UPSTANDS TO THE SLABS WHICH MAY NOT HAVE BEEN CONSTRUCTED AT THE TIME OF PREPARING THIS AS BUILT DRAWING.

ALL FALLS AND RL'S TO BE AS PER THE ARCHITECTURAL DOCUMENTATION.
PENETRATIONS LESS THEN 100mm ARE NOT DOCUMENTED ON THESE DRAWINGS
AND ARE TO BE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND SERVICE DRAWINGS.

MISCELLANEOUS NOTES:

DETAILS

- REFER TO DRAWING S0.001 FOR GENERAL NOTES.
 PROVIDE STAINLESS STEEL GUTTERS AND DRIP GROOVES TO SLABS EXPOSED TO WEATHER AT ALL CONSTRUCTION AND MOVEMENT JOINTS & POUR BREAKS TO HYDRAULIC ENGINEERS
- 3. ALL DRIP GROOVES TO EXPOSED SLAB EDGES TO ARCHITECTS DETAIL.
- 4. FOR ADDITIONAL NON-STRUCTURAL BLOCK WALL LOCATIONS REFER TO ARCHITECTS DRAWINGS. PT CONTRACTOR TO ALLOW FOR ADDITIONAL LOADS IN THEIR FLOOR SLAB DESIGN.
- REFER TO ARCHITECTS DRAWINGS FOR FALL DETAILS
 ALL HOBS AND WET AREAS ARE SHOWN INDICATIVE ONLY. REFER TO ARCHITECTS DETAILS AND SPECIFICATIONS.

SLAB CAST IN CONDUIT NOTES:

- 1. CAST-IN CONDUITS NOT TO BE PLACED WITHIN 1200 RADIUS OF EACH CORNER OF THE CORES WHERE NO DROP PANELS AND NOT WITHIN 1000 RADIUS OF ANY COLUMN.
- 2. REINFORCEMENT AND POST-TENSIONING SHALL TAKE PRIORITY
 OVER CAST-IN CONDUITS AND OTHER NON-STRUCTURAL CASTINS. IF CLASHES OCCUR CONDUITS TO BE RELOCATED TO
 APPROVAL OF ENGINEER. ELSE LOCATED UNDER SLAB.
- 3. ELECTRICAL CONDUITS TO BE LAID WITH MINIMUM OF 75 CLEARANCE BETWEEN SINGLE CONDUITS. MINIMUM 300 CLEARANCE BETWEEN 50 DIA. HYDRAULIC CONDUITS.
- 4. CONDUIT CROSS OVERS SHALL BE AVOIDED WHEREVER POSSIBLE.
- ANCHORAGES.

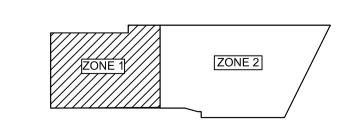
 6. CONDUITS TO TURN UP OUT OF SLAB AT RIGHT ANGLES.

CAST-IN CONDUITS NOT TO BE LOCATED NEAR POST-TENSIONING

NOTE:

WALLS DENOTED AS 200 RC TO BE INSITU CONCRETE WALLS, 200 THICK WITH N16-200 EACH WAY IN EACH FACE AS PER DETAILS ON S3.001 WITH MIN 40MPa CONCRETE.

WALLS DENOTED AS 200 AFS TO BE 200 THICK AFS WALLS WITH N16-200 EACH FACE VERTICAL AND N12-200 EACH FACE HORIZONTAL AS PER DETAILS ON DRAWING S3.021 WITH MIN 40 MPa CONCRETE WALLS DENOTED AS 200AFS RW ARE REDIWALL CONSTRUCTION AS PER THE FIRE STRATEGY REPORT PREPARED BY INNOVA REPORT NUMBER 21618-R02 ISSUE NO. 3 DATED 15 JULY 2024 DENOTED AS 7000 ON PLAN



KEY PLAN

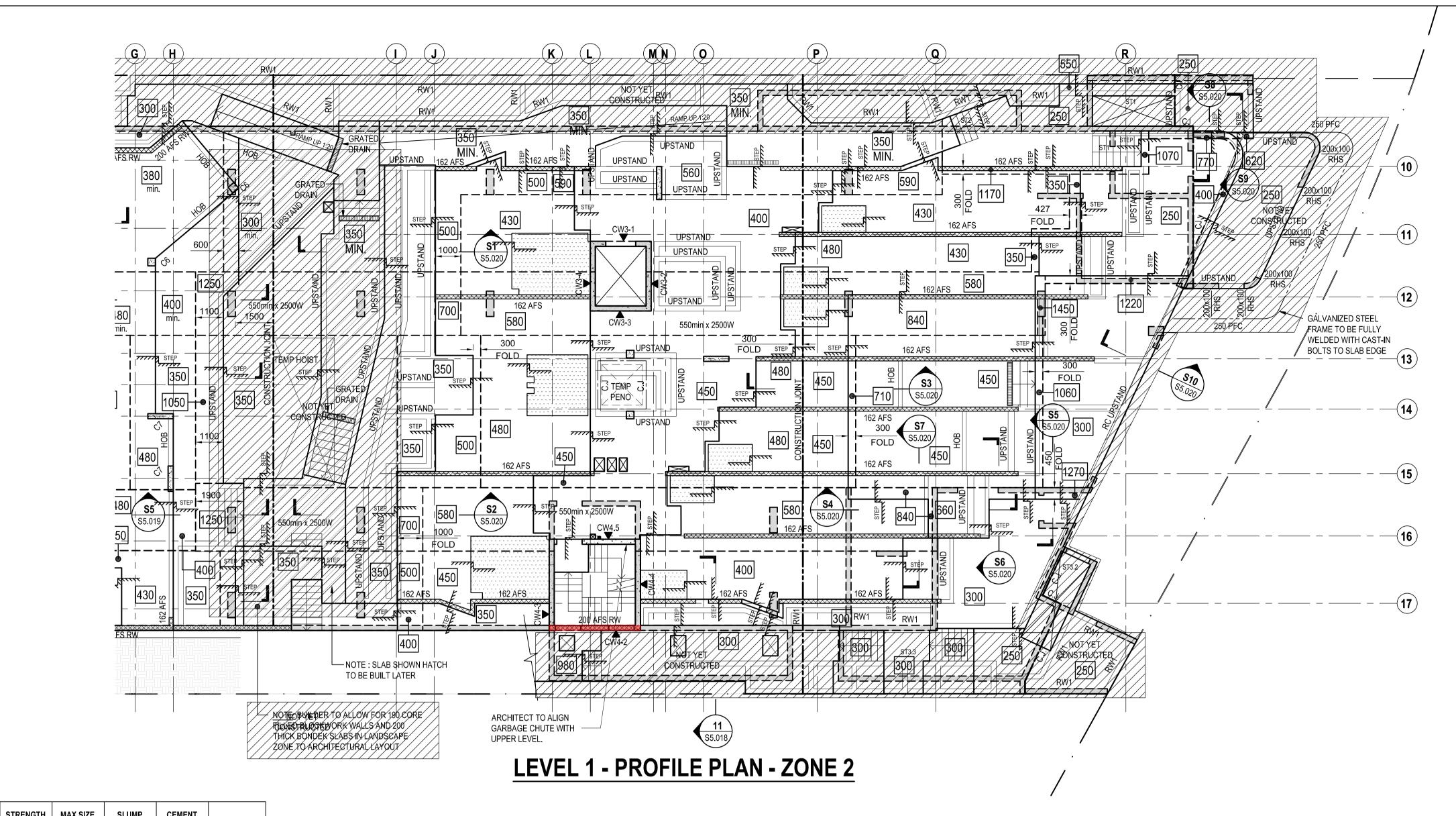
AS BUILT DRAWING

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE.

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REV	DATE	REVISION DESCRIPTION	BY	



JLTANTS	PROJECT: MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$5.011		
engineers	, , , , , , , , , , , , , , , , , , , ,	DESIGNED BY:	DATE: December.2020		
Postal Address PO Box 77	TITLE:	DRAWN BY:	SCALE:	SIZE:	REV:
NORTH RYDE BC NSW 1670	LEVEL 1 PROFILE PLAN - ZONE 1	PD	1:100 @ A1	A1	6



ELEMENT CONCRETE QUALITY	STRENGTH f'c	MAX SIZE AGG. mm	SLUMP mm	CEMENT TYPE	ADMIXTURE
SUSPENDED SLAB	40	20	80	GP	-

EXPOSURE CLASSIFICATION:

A1 INTERNAL **B2 EXTERNAL**

FIRE RATING:

CARPARK FRL 120/120/120 RESIDENTIAL FRL 90/90/90

LIVE LOADS:

1.5 kPa GENERAL 2.0 kPa BALCONIES 4.0 kPa COMMON AREA

2.0 kPa PLANTER

SUPERIMPOSED DEAD LOAD:

1.5 kPa GENERAL 2.0 kPa BALCONIES 1.5 kPa COMMON AREA 6.0 kPa PLANTER

SERVICEABILITY:

TOTAL LONG TERM SLAB DEFLECTION - SPAN/250 INCREMENTAL SLAB DEFLECTION - SPAN/500

NOTE: NON LOAD BEARING WALLS TO BE LIGHT WEIGHT CONSTRUCTION

LEGEND:

DENOTES CONCRETE ELEMENT OVER

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AS BUILT DRAWING

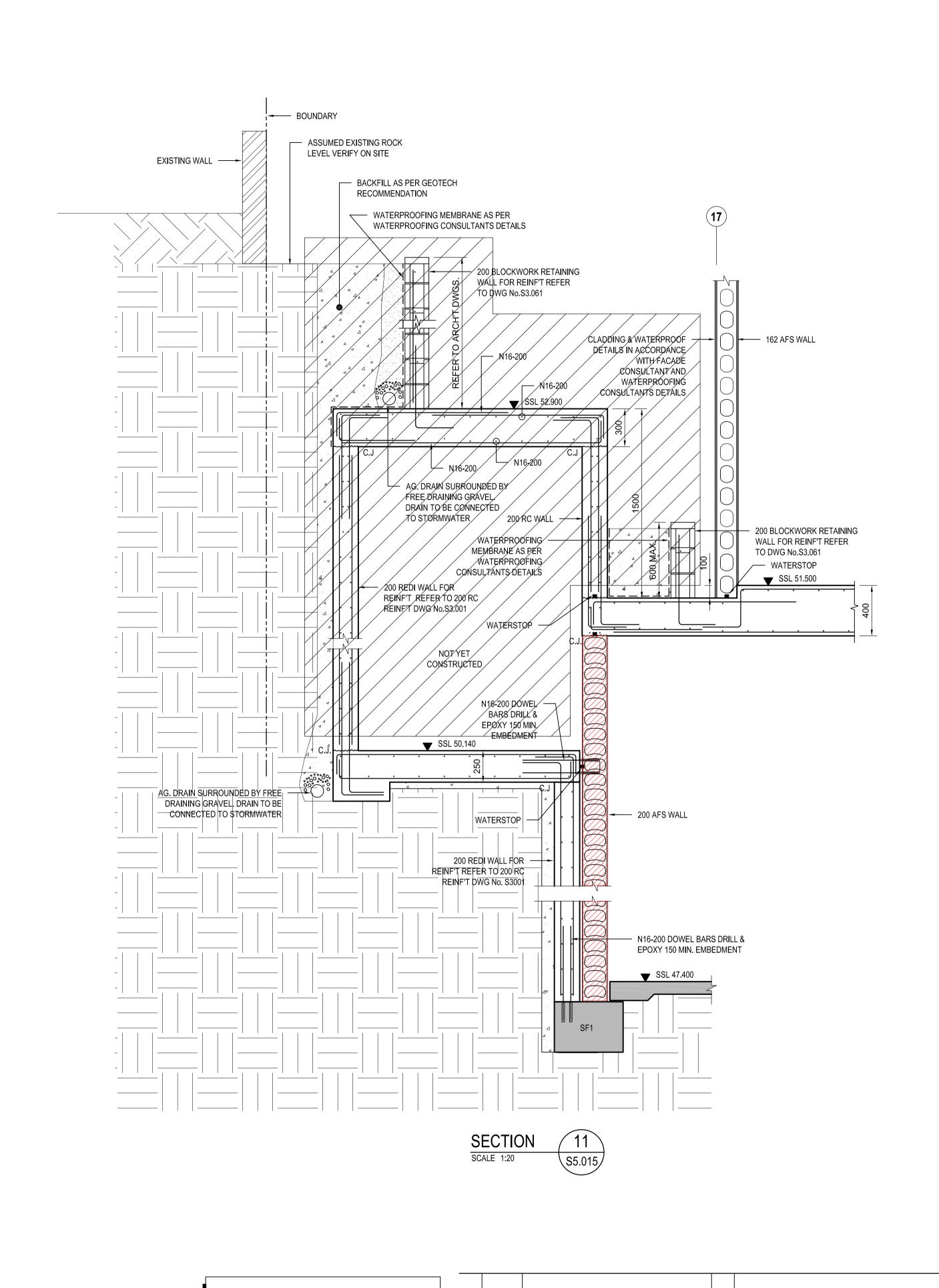
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structural & civil engineers

Contact Phone: (02) 9746 9201 Email: info@abc-consultants.com.au Web: www.abc-consultants.com.au	Street Address Suite 2.02, Level 2 3 Thomas Holt Drive MACQUARIE PARK NSW 2113	Postal Address PO Box 77 NORTH RYDE BC NSW 1670

	MICRONEST FAIRLIGHT 195-197 SYDNEY ROAD, FAIRLIGHT, NSW	JOB NUMBER: 18063	DRG NUMBER: \$5.015	
		DESIGNED BY:	DATE:	
		AM	February.2023	
	TITLE:	DRAWN BY:	SCALE:	SIZE:
)	LEVEL 1 PROFILE PLAN - ZONE 2	PD	1:100 @ A1	A1



AS BUILT DRAWING

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DENOTES AFS REDIWALL

 4
 16.08.24
 AFS WALLS HIGHLIGHTED
 PS

 3
 21.05.24
 AS BUILT DRAWING
 PS

 2
 22.08.23
 ISSUED FOR CONSTRUCTION
 PS

 1
 27.07.23
 ISSUED FOR CONSTRUCTION
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 DATE
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	DESIGNED BY:	DATE:	
	. AM	February 2023	
	DRAWN BY:	SCALE:	
_ 1 DETAILS - ZONE 2. SHEET 2	PS	1:20 @ A1	

