GENERAL

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.
- G2 MATERIALS AND WORKMANSHIP ON DURING ALL WORKS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, BCA AND ANY OTHER BUILDING REGULATIONS AND REQUIREMENTS OF STATUTORY AUTHORITIES.
- G3 ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE (UNO). FOR ALL DIMENSIONS AND LEVELS REFER TO ARCHITECTURAL DRAWINGS.
- G4 DURING THE COURSE OF CONSTRUCTION, ALL CONTRACTORS SHALL BE FULLY RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A ADEQUATE AND STABLE CONDITION AND ENSURING ALL CONSTRUCTION ACTIVITIES ARE NOT OVER STRESSED.
- G5 DESIGN LIVE LOAD LOADINGS ARE IN ACCORDANCE WITH AS/NZS 1170-2002 AS FOLLOWS:

- ROOF 0.25 kPa - BALCON 2.5 - 3 kPa - FLOOR 1.5 - 2 kPa

FOUNDATION (SOIL)

- F1 SITE CONDITIONS ARE ASSUMED UNLESS GEOTECHNICAL REPORT BY A PROFESSIONAL IS PROVIDED. SITE CLASSIFICATION ASSUMPTION: M (MODERATLY REACTIVE SOIL).
- F2 ALL FOOTINGS SHALL BE FOUNDED ON MINIMUM 300 kPa (INTO THE CLAY) UNO. ALL FOOTINGS MUST BE UNIFORM THROUGHOUT, OTHERWISE CONSULT ENGINEER.
- F3 THE ALLOWABLE BEARING CAPACITY SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER, OTHERWISE FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 150 kPa.
- F4 BEFORE ANY REINFORCEMENT IS LAID WITHIN FOOTINGS, A GEOTECHNICAL ENGINEER MUST VERIFY SOIL CONDITIONS AND APPROVED ABOVE SITE CLASSIFICATIONS.
- F5 ALL FOOTINGS MUST BE PLACED CENTRALLY UNDER ALL COLUMNS AND WALLS (UNO).
- F6 IF SOIL IS DISRUPTED, THE BOTTOM OF THE EXCAVATIONS SHALL BE COMPACTED TO A RELATIVE DRY DENSITY OF 100% AS DETERMINED IN ACCORDANCE WITH AS 1289.5.4.1-2007 AND AS 1289.5.1.1-2003
- F7 FOOTING CONNECTION NEXT TO EXISTING STRUCTURES IS ASSUMED UNLESS A FULL INVESTIGATION IS CARRIED OUT. IT IS THE BUILDER/CLIENT RESPONSIBILITY TO INFORM THE ENGINEER IF THE EXISTING STRUCTURE INADEQUATE OR INDIFFERENT TO THE STRUCTURAL PLANS

REINFORCED AND NON CONCRETE BORED PILES

- THE BORED PILES CONSISTS PART OF THE SCHEDULED LOADS WITH ALLOWABLE SOCKET SKIN FRICTION AND END BEARING CAPACITY AS INDICATED IN THE REPORT. THE DEPTHS AND LENGTHS INDICATED ON THE STRUCTURAL PLANS AND NOMINATED IN THE SCHEDULE ARE INDICATIVE ONLY. DEPTHS AND SPACING OF BORED PIERS VARY DEPENDING ON SITE CLASSIFICATION.
- IF SANDY MATERIAL IS FOUND THROUGHOUT THE SITE GREATER THEN 2000mm SCREW PIERS MAY BE REQUIRED. DESIGN LOAD FOR EACH
- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 2159
- THE BORED PILES SHALL BE LOCATED CONCENTRIC WITH THE COLUMNS AND WALLS (UNO).
- DRILL AND INSTALL THE BORED PILES IN THE LOCATIONS SHOWN ON THE DRAWINGS AND THE ABOVE REQUIREMENTS.
- B6 ALL PIERS GREATER THEN 2 METERS OR MORE THEN 1 METER OF FILL MUST BE REINFORCED WITH 5N16 WITH R10-300 CTS HELICAL TIES.

400

ROCK THROUGHOUT WITH A MINIMUM SAFE END BEARING OF 600 kPa.

STRUCTURAL TIMBER

- MATERIALS AND WORKMANSHIP SHALL COMPLY WITH AS1720.1 AND AS1720.2, TIMBER ENGINEERING CODE AS1684, OTHER RELEVANT TIMBER FRAMING CODES AND BCA VOLUME 2 SECTIONS 3.4 & 3.5
- ALL TIMBER USED SHALL HAVE BEEN STRESS GRADED BY VISUAL OR MECHANICAL MEANS IN ACCORDANCE WITH THE APPROPRIATE AUSTRALIAN STANDARDS.
- T3 HOLES FOR BOLTS, UNO, SHALL BE DETERMINED AS FOLLOWS: BOLT DIAMETER: =15mm OR < - 2mm OVERSIZE BOLT DIAMETER: =16mm OR > - 3mm OVERSIZE
- SOFTWOOD TO BE MINIMUM GRADE F7 UNO. HARDWOOD TO BE
- EDGE DISTANCES FOR FASTENERS IN TIMBER (FROM ENDS AND SIDES) SHALL BE IN ACCORDANCE WITH AS1720.1 UNO
- WALL BRACING TO STUD WALLS IN ACCORDANCE WITH AS1684 IS O **OBTAIN ENGINEER APPROVAL**
- ALL ROOF HOLD DOWN CONNECTORS FOR WIND UPLIFT IN ACCORDANCE WITH AS1684
- ALL BOLTS IN TIMBER CONSTRUCTION SHALL BE MINIMUM M12
- ALL TRUSS AND CONVENTIONAL ROOFING TO BE MADE GOOD BY LICENSED CARPENTER TO AS1684.

STRUCTURAL MASONRY

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3700
- AND OTHER RELEVANT CODES.
- NON-LOAD BEARING WALLS SHALL BE SEPARATED FROM STRUCTURAL ELEMENT ABOVE BY MINIMUM 25mm GAP. PROVIDE JOINT FILLER TO ARCHITECTS DETAILS.
- PROVIDE VERTICAL CONTROL JOINTS AT 8 METERS MAXIMUM CENTERS AND 4 METERS MAXIMUM FROM CORNER MASONRY WALLS, EXISTING AND NEW BRICK WORK
- NO PENETRATIONS OR RECESSES ARE TO FOUND THROUGH A LOAD BEARING STRUCTURE WITHOUT ENGINEER APPROVAL.
- ALL INTERSECTIONS THAT DON'T HAVE A CONTROL JOINT SHALL BE OF BONDED CONSTRUCTION OR TIED WITH HEAVY DUTY TIES AT 400mm MAXIMUM VERTICAL CENTERS.
- RETAINING WALLS TO CONSIST OF GRANULAR MATERIAL BACKFILL (300mm WIDE STRIP) UNO. REFER TO ARCHITECT FOR WATERPROOFING DETAILS.
- SUSPENDED SLABS MUST ACHIEVE MINIMUM 80% OF ITS DESIGN STRENGTH AND ALL FORMWORK PROPS ARE REMOVED BEFORE ANY BRICK OR BLOCK WORK IS CONSTRUCTED ON TOP
- M8 IDENTIFYING NON-LOAD BEARING MASONRY WALLS/PARTITIONS AND OTHER NON-LOAD BEARING ELEMENTS IS NOT INCLUDED IN
- THE STRUCTURAL ENGINEER'S SCOPE OF WORKS.
 CONCRETE BLOCKS SHALL BE GRADE 12 UNITS CONFORMING TO AS 2733
- M10 ALL MORTAR SHALL BE PREPARED AND COMPOSED OF RATIO 1:1:6 (CEMENT:LIME:SAND) AND COMPLY TO
- M11 ALL BLOCK WORK TO HAVE MAXIMUM 120mm SLUMP, 20mm MAX. AGGREGATE SIZE AND MINIMUM 40mPa.

CLAY (300 kPa)

CLAY (300 kPa)

VERY STIFF

M12 ALL REINFORCEMENT IS INDICATED ON STRUCTURAL PLANS AND HAVE A MINIMUM OF 50mm COVER UNO.

ACCORDANCE WITH AS 3600-2009. ALL FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS 3610-1995

C2 NO PENETRATION, CHASES OR EMBEDMENTS THAT INTERFERES WITH THE INTEGRITY OF THE STRUCTURE SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT ENGINEER'S APPROVAL

C1 ALL WORKS AND CONCRETE SHALL BE IN

CONCRETE

C3 MINIMUM COVER TO REINFORCEMENT ARE AS FOLLOWS

Element	Cover (mm)
Footings	50
External ground slab	40
Internal ground slab (top)	30
Internal ground slab (btm)	40

- C4 ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD THE CONCRETE DURING A POUR.
- CONSTRUCTION JOINTS SHALL BE PROPERLY IMPLEMENTED AND LOCATED TO THE SATISFACTION OF THE ENGINEER. BUILDER SHALL CONFIRM WITH ENGINEER.
- C6 APPLIED FINISHES ARE NOT INCLUDED FOR THICKNESS OF CONCRETE ELEMENTS NOMINATED IN STRUCTURAL DRAWINGS.
- C7 DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB
- C8 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED BASED ON THE ENGINEER APPROVAL
- C9 HOOKS AND COGS SHALL COMPLY WITH AS3600 UNO. BARS SHALL NOT BE HEATED ABOVE 400 DEGREES CELSIUS WITHOUT THE ENGINEER'S WRITTEN APPROVAL. THERMAL CRAYONS SHALL BE USED TO ENSURE COMPLIANCE WITH THIS TEMPERATURE LIMIT
- C10 ONCE CONCRETE HAS BEEN POURED. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING THE CONCRETE SURFACE CONTINUOUSLY WET FOR A PERIOD OF MINIMUM 3 DAYS, PREVENTING LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. ALL CURING COMPOUNDS MUST COMPLY WITH AS 3799.
- C11 ALL CONCRETE SUPPLY AND TESTING OF CONCRETE MUST COMPLY WITH AS3600, AS1012 AND AS1079. ALL SAMPLES (BATCHES) TO BE DELIVERED TO SITE FOR SLUMP LESS THEM 85mm. ALL SAMPLES TO BE IN ACCORDANCE WITH AS1012 FOR COMPRESSIVE STRENGTH AT 7 DAYS AND 28 DAYS IN A LABORATORY. A FORMAL CERTIFICATES MUST BE SENT FOR STRUCTURAL ENGINEER APPROVAL.
- C12 ALL FORM WORK SHALL COMPLY TO AS3610-1995. NO MASONRY OR PARTITION WALLS ARE TO BE BUILT ON ANY SUSPENDED SLABS UNTIL ALL PROPS ARE SAFELY REMOVED AND THE SLAB HAS HAD 28 DAYS OF CURING UNO AND TAKEN ITS SHORT TERM DEAD LOAD
- C13 CONDUITS, PIPES, ETC. SHALL ONLY BE LOCATED IN THE MIDDLE THIRD OF THE SLAB DEPTH. ALL PIPES OR CONDUITS SHALL NOT BE IMPLEMENTED WITHIN THE COVER TO REINFORCEMENT.
- C14 ALL CONCRETE PENETRATIONS GREATER THEN 150mm OR ANY PIPING GREATER THEN 40mm WITHIN THE SLAB MUST BE APPROVED BY A STRUCTURAL ENGINEER.
- C15 CONCRETE QUALITY SHOWN BELOW (UNO)

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE	f'c AT 28	
LLLIVILIAI	SLUWIF	(MAX. SIZE)	DAYS	
SUSPENDED SLAB	80mm	20mm	32 MPa	
SLAB ON GROUND	80mm	20mm	25 MPa	
FOOTINGS	80mm	20mm	25 MPa	
COLUMNS	80mm	20mm	32 MPa	

CONC				
ELEMENT	CC	VER (m	EXPOSURE	
ELEMENT	TOP	втм	SIDES	CLASS. (AS3600)
SUSPENDED INTERNAL SLAB	30 mm	30 mm	30 mm	A1
SUSPENDED EXTERNAL SLAB	40 mm	40 mm	40 mm	B1
INTERNAL SLAB	20 mm	20 mm	20 mm	A1
EXTERNAL SLAB	40 mm	40 mm	40 mm	A2
FOOTINGS	40 mm	65 mm	65 mm	A1
COLUMNS	50 mm	50 mm	50 mm	A1

STRUCTURAL STEELWORK

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 4100 AND ALL OTHER RELEVANT DOCUMENTS.
- ALL EXTERNAL AND EXPOSED STRUCTURAL STEEL MUST BE HOT DIPPED GALVANIZED.
- ALL STEEL SHALL BE IN ACCORDANCE WITH AS 3678 GRADE 250,
- OR AS 3679 GRADE 300 PLUS, OR AS 1163 GRADE C350 UNO. UNLESS OTHERWISE NOTED: WELDS TO BE 6mm CONTINUOUS FILLETS LAID DOWN WITH APPROVED COVERED ELECTRODES. ALL WELDS SHALL BE CATEGORY SP UNO. WELDS SHALL CONFORM TO AS/NZS 1554 AND TO AS/NZS 1553. GUSSET PLATES TO BE 10mm THICK. BOLTS TO BE M20-8.8/S IN 22mm DIAMETER HOLES. PROVIDE A MINIMUM OF TWO BOLTS PER CONNECTION.
- FABRICATOR SHALL PROVIDE ALL FIXINGS FOR ARCHITECTURAL ELEMENTS ETC. THIS IS NOT WEAKEN ANY STRUCTURAL
- CAMBER BEAMS SHALL BE ASSESSED AND DESIGN BY AN ENGINEER BEFORE ANY DESIGN IS CARRIED OUT.
- SHOP DRAWINGS BY STEEL FABRICATORS ARE NOT TO USE STRUCTURAL DRAWINGS FOR SET OUTS AND DIMENSIONS. THIS IS TO BE OBTAINED BY ARCHITECTURAL DRAWINGS AND A FULL REVIEW OF SHOP DRAWINGS BY ENGINEER MUST COMMENCE FOR ANY APPROVAL
- ALL BOLT CATEGORIES ARE SET AS FOLLOWS:
- 4.6/S COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS/NZS 1111 (SNUG-TIGHT

CONDITION)

8.8/S - HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8 AS/NZS 1252 (SNUG-TIGHT CONDITION) TO

8.8/TF HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8 AS/NZS 1252 (FULLY TENSIONED TO AS 151

FRICTION JOINT) 8.8/TB HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8

AS/NZS 1252 (FULLY TENSIONED TO AS 1511, BEARING JOINT

- TF AND TB HIGH STRENGTH SHALL BE INSTALLED USING APPROVED LOAD INDICTOR WASHERS
- ALL CONCRETE ENCASED STEEL WORK SHALL BE WRAPPED WITH SL41 FABRIC. MINIMUM OF 50mm COVER SHALL BE APPLIED UNO.
- ALL STRUCTURAL BOLTS EMBEDDED INTO ADEQUATE BRICK WORK SHALL FINISH MAX, AND MIN. 2/3 OF WALL
- FABRICATION AND ERECTION SHALL COMPLY TO AS 4100 THE ENDS OF TUBULAR MEMBERS SHALL BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELDED
- UNLESS NOTED OTHERWISE. STRUCTURAL STEEL MEMBERS THAT ARE REQUIRED TO BE TWISTED, BENT OR ROLLED, THE SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROCEDURES REQUIRED TO ACHIEVE THE
- REQUIRED OUTCOME WITHOUT ANY DISTORTION OF THE MEMBERS.
- ALL STRUCTURAL STEEL MEMBERS SHALL BE PROVIDED IN ONE LENGTH UNO.
- STEEL WORK NOT ENCASED SHALL HAVE THE FOLLOWING A1/A2 - CLASS 1 POWER MECHANICAL CLEAN. 1 COAT ALKYD

PRIMER (ZINC PHOSPHATE) B1 - ABRASIVE BLAST TO AS1627 CLASS 2.5 1 COAT INORGANIC ZINC SILICATE

B2 - HOT DIPPED GALVANISED TO AS4680

SLAB ON GROUND

nwilcox

ALL CONCRETE WORK TO COMPLY WITH AS 3600 CONCRETE CODE, AS2870 AND BCA SECTIONS 3.1, 3.2 AND 3.3 AND THE CONCRETE NOTES ON THE STRUCTURAL PLANS... REMOVE ANY TOP SOILS AND VEGETATION INCLUDING ROOTS AND ANY OTHER UNNECESSARY ORGANIC MATTER OF MINIMUM 150mm AND REPLACED WITH APPROVED GRANULAR FILLING COMPACTED TO 98 OF STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1. APPROXIMATELY COMPACTED DOWN AND COMPACTED SAND IS USED AS A LEVEL THE PROPOSED SLAB SITE CLASSIFICATION T UMED CLASS M UNLESS A GEOTECHNICAL REPO ACCURATE

ING MEME

ACED OVER SAND

MR. MATTHEW LUKE HINDI DIRECTOR B.Eng Dip Eng Prac MIEAust NER

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TYPF

REINFORCED CONCRETE PIERS

5N16 + R10-300 HELICAL TIES

CONCRETE BORED PIERS

ELITE **AUSTRALIAN ENGINEERING** STRUCTURAL STORMWATER REMEDIAL CIVIL

GRENERAL GROUND PIER NOTES (UNLESS NOTED OTHERWISE)

25

NOTE: IF PIERS NOT NOMINATED TO BE REINFORCED ON PLAN USE TABLE ABOVE. ALL PIERS MUST BE LOCATED AT EVERY CORNER JUNCTION. ALL PIERS MUST BE UNIFORM AND STABLE THROUGHOUT, IF ROCK IS PRESENT ALL PIERS ARE TO BE FOUNDED ON

DIAMETER Ø f'c=MPa (UNO) SPACING (mm) MIN, BEARING

1800

DESCRIPTION DESIGNED APPROVED DATE A ISSUED FOR C.C. M.H. M.H. 13.05.2024

DEPTH

MAX. 2000mm OR

1000mm OF FILL

>1000mm OF FILL

OR CLASS P SITE

> 2000mm OR

SANTOLO BUILDING DESIGN

43 ORWELL STREET, **BLACKTOWN**

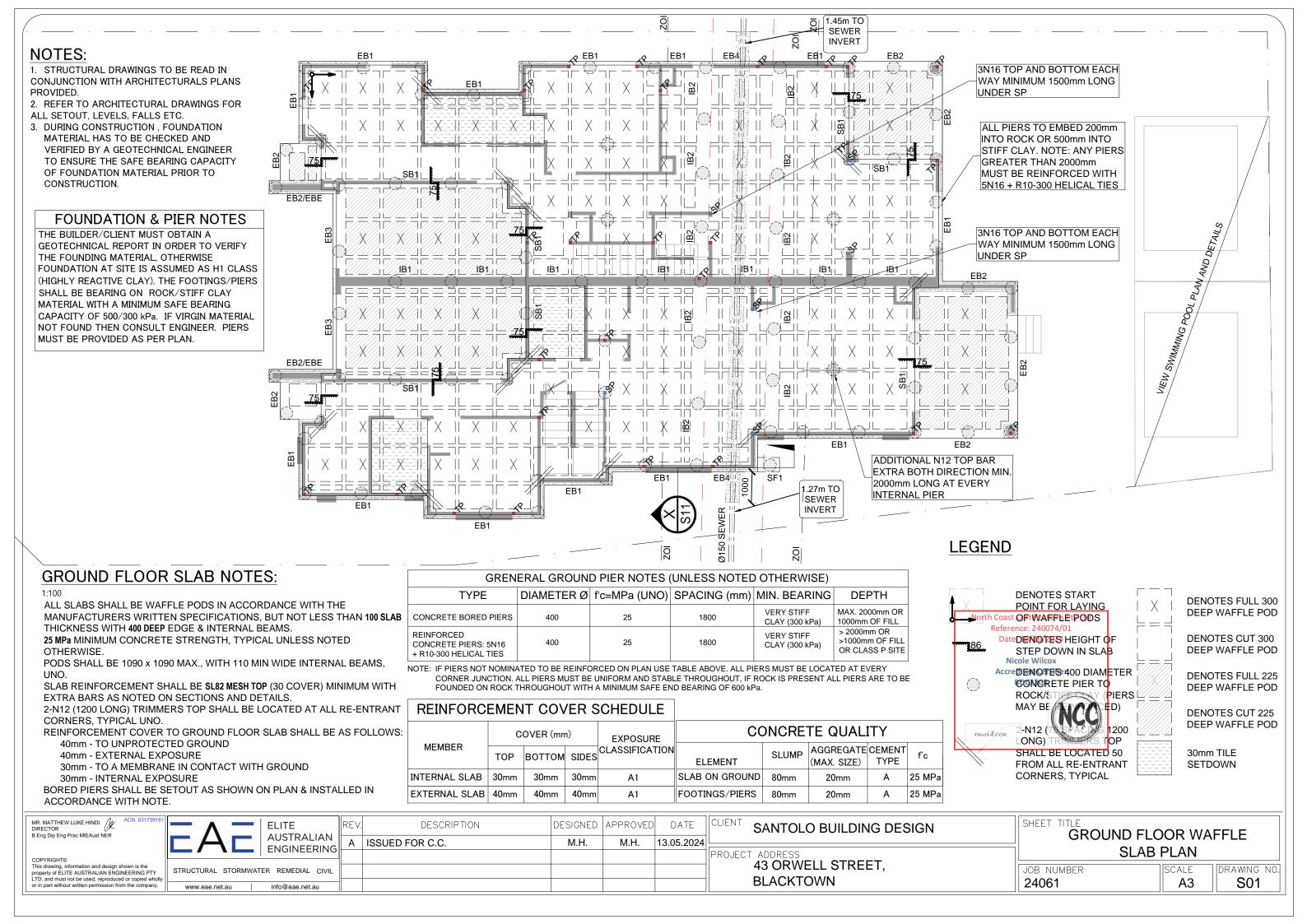
SHEET TITLE

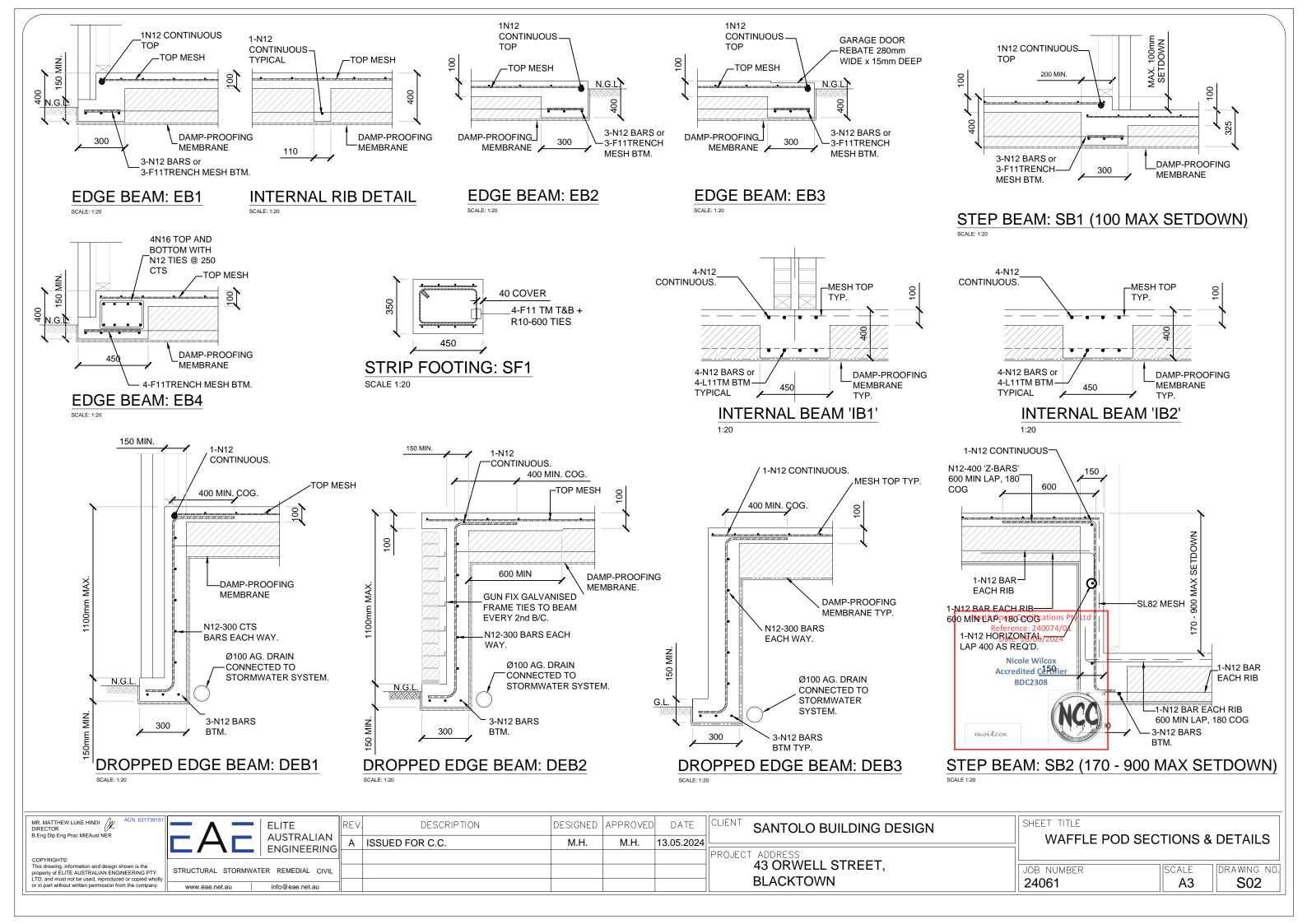
COVER NOTES

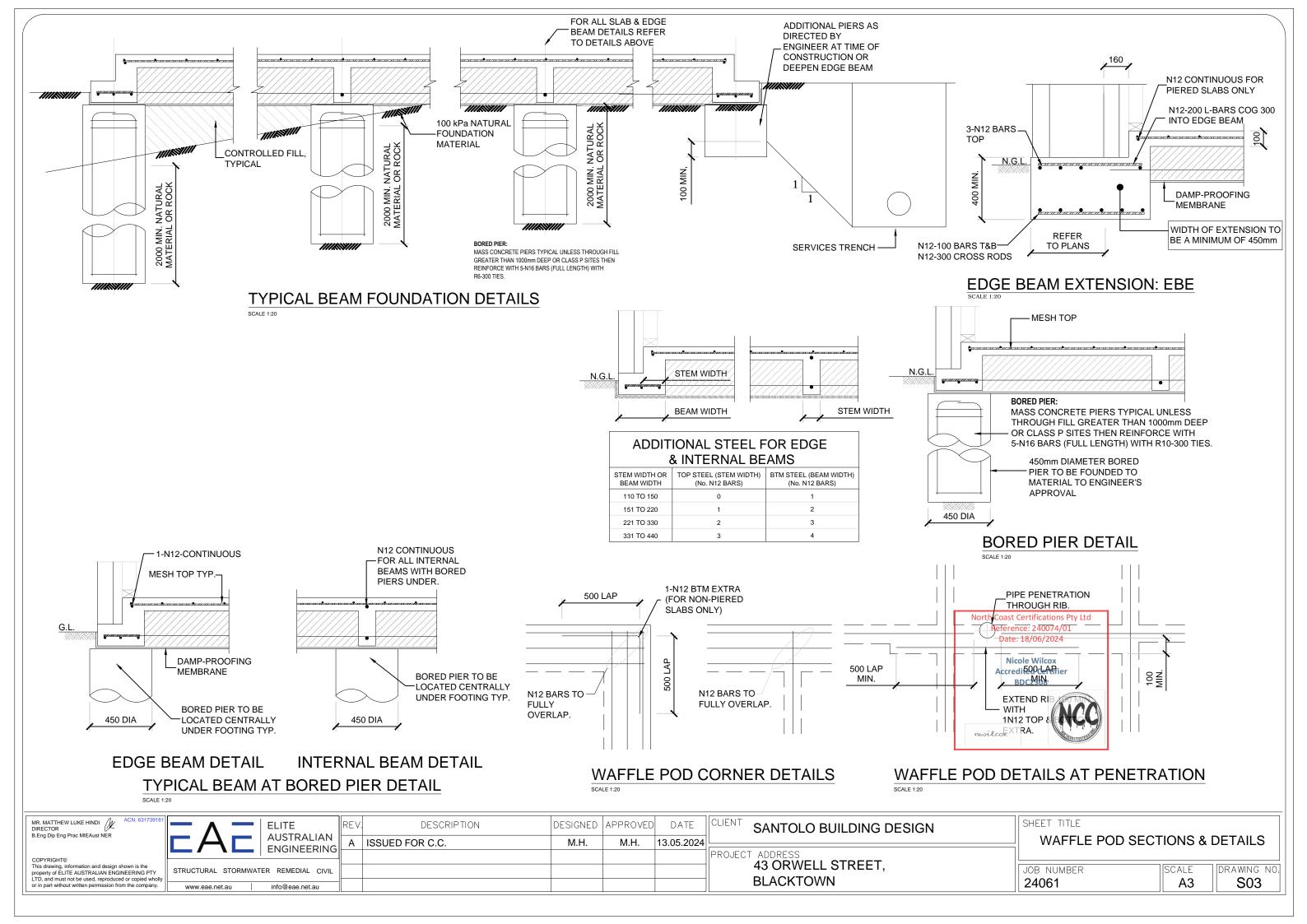
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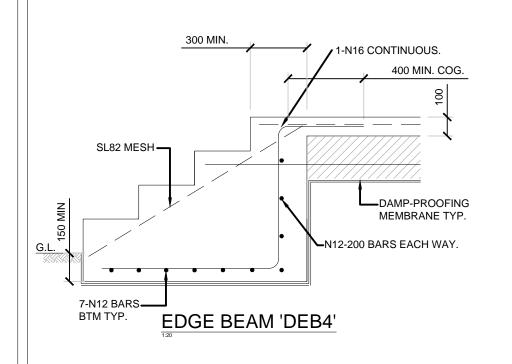
SCALE А3

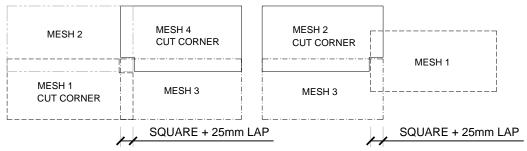
DRAWING NO. S00







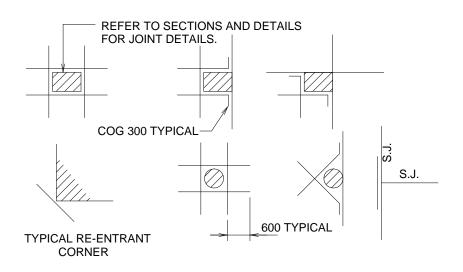




MESH IN SLAB ON GROUND LAPPING DETAIL

DATE 13.05.2024

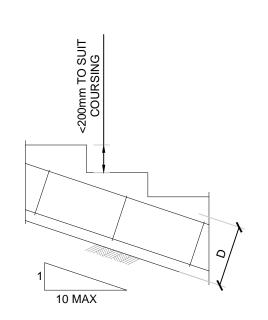
ALL MESH LAPS TO COMPLY WITH CONSTRUCTION NOTES



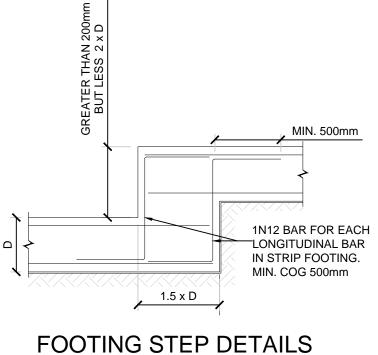
SLAB ON GROUND - ALL TRIMMERS TO BE 2N12 TOP U.N.O.

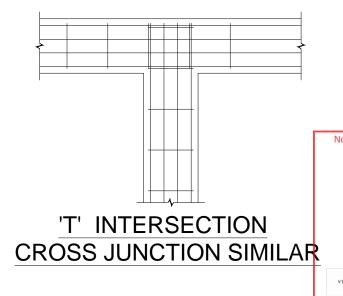
SLAB ON GROUND TRIMMER DETAILS

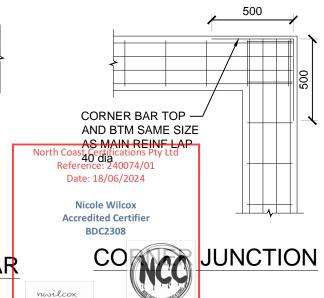
AT ALL COLUMNS, WALLS, PITS, FLOOR WASTES, ETC THAT CAUSE A PENETRATION THROUGH THE SLAB.









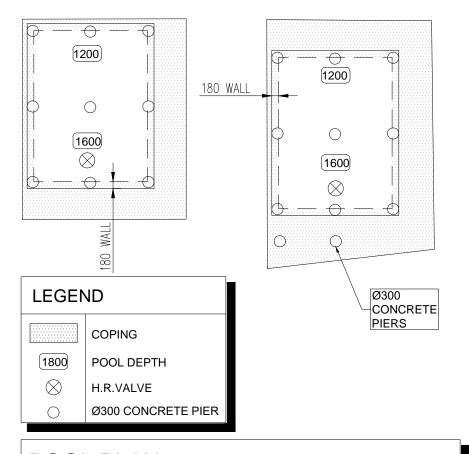


	MR. MATTHEW LUKE HINDI ACN. 631739181 DIRECTOR	$- \wedge -$		REV.	DESCRIPTION	DESIGNED	APPROVED
B.Eng Dip Eng Prac MIEAust NER	$\Box A \Box$	AUSTRALIAN ENGINEERING	Α	ISSUED FOR C.C.	M.H.	M.H.	
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SANTOLO	BUILDING DESIGN	
PROJECT ADDRESS	LOTDEET	
43 ORWEL BLACKTOV	·	

SHEET	TITLE
	SLAB & FOOTING DETAILS

JOB NUMBER	SCALE	DRAWING NO
24061	A3	S04



POOL PLAN

SCALE: 1:50 NOTES:

- 1. DESIGN SUITABLE FOR CLASS M SITE CLASSIFIED UNDER AS2870-1996
- SUPPORTING FOUNDATION MATERIAL TO BE A MINIMUM STIFF CLAY or SAND OF UNIFORM MOISTURE CONTENT WITH SAFE BEARING CAPACITY OF 300 kPa. (POOL BASE TO BE FOUND INTO VIRGIN MATERIAL.)
- IF POOL IS TO BE FOUND IN 'H' CLASS MATERIAL, DROPPERS ARE TO BE PROVIDED RIGHT AROUND POOL.
- 4. TYPICAL WALL & FLOOR REINFORCEMENT TO BE \$12-300 IN EACH DIRECTION. WHERE POOL WALL EXTENDS MORE THAN 600mm ABOVE UNDISTURBED SUBSOIL (300Kpa MATERIAL) AND/OR WHERE DEPTH OF EXCAVATION IN OTHER THAN ROCK EXCEEDS MORE THAN 1500mm, PROVIDE ADDITIONAL DROPPERS (\$12-300 VERTICAL TO BE 450mm FROM TOP OF WALL & 1200mm INTO BASE OF POOL.)
- 5. PROVIDE AN EXPANSION JOINT BETWEEN THE SWIMMING POOL STRUCTURE AND ANY OTHER STRUCTURE SUCH AS CONCRETE WALKWAYS, FOOTING, ETC

CONCRETE QUALITY FOR POOLS			
LOCATION	f'c		
STANDARD IN GROUND	32 MPa		
IN GROUND - WITHIN ONE KILOMETRE OF SEA	32 MPa		
MORE THAT 400mm OUT OF GROUND	32 MPa		
MORE THAT 400mm OUT OF GROUND - WITHIN ONE KILOMETRE OF SEA	40 MPa		
SALINE: LESS THAN 16 dS/M (ECe)	32 MPa		
SALINE: MORE THAN 16 dS/M (ECe)	40 MPa		

GENERAL

- 1. DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURALS (SETOUT, LEVELS, FALLS ETC.).
- WRITTEN DIMENSIONS TO BE TAKEN IN REFERENCE TO SCALE.
- 3. SKIMMER TO BE POSITIONED BY BUILDER.
- 4. STEP & FILTER LOCATION TO BE DISCUSSED WITH CLIENTS DURING CONSTRUCTION
- PLUMBING IS TO BE IN ACCORDANCE WITH WRITTEN RECOMMENDATIONS OF FILTER MANUFACTURER.
- THIS DRAWING IS A STANDARD SPECIFICATION: ITEMS SHOWN ARE INCLUDED ONLY WHEN INDICATED IN CONTRACT.
- 7. PLANS ARE ONLY APPROVED WHEN BEARING AN ORIGINAL SIGNATURE OF THE ENGINEER.
- POOL SETOUT ONSITE TO BE CONFIRMED WITH OWNER BEFORE COMMENCING TO DIG.
- POOL FENCE AS PER APPROVAL DOCUMENTS TO BE 1200 HIGH CHILD SAFETY POOL FENCE AND SELF (LATCHING) CLOSING GATE TO AS1926-86 BY OTHERS (NOTE: POOL FENCING IS OWNER'S RESPONSIBILITY.)

CONCRETE AND REINFORCEMENT NOTES

- CONCRETE TO HAVE A MINIMUM DESIGN STRENGTH OF F'C = 25 MPA AT 28 DAYS (32MPA WHERE WITHIN ONE KILOMETRE OF SEA OR OUT OF GROUND) USING 10mm MAXIMUM AGGREGATE SIZE (POOL MIX) SLUMP 75MM. ADDITIVES NOT PERMITTED WITHOUT APPROVAL. UPON COMPLETION OF CONCRETING THE HYDROSTATIC VALVE IS TO BE CHECKED TO ENSURE EFFECTIVE AND SUFFICIENT OPERATION
- 2. CONCRETE TO BE CURED BY HOSING TWICE DAILY FOR SEVEN DAYS SEEK ADDITIONAL ADVICE FOR SITES NOT CONNECTED TO TOWN WATER SUPPLY
- 3. REINFORCEMENT TO BE STRUCTURAL GRADE 250 DEFORMED BAR TO AS1302 LAPPED 450MM AS REQUIRED, TIED SECURELY WITH 1.2MM ANNEALED WIRE AND SHALL BE SUPPORTED ON APPROVED TYPE BAR CHAIRS AT 900MM CENTRES BOTH WAYS
- 4. ALTERNATIVE REINFORCEMENT TO BE TEMCORE BARS IN ACCORDANCE WITH AS 1302 410 Y
- 5. SPLICES IN BOND BEAM BARS SHALL BE STAGGERED
- 6. WATER FACE REINFORCEMENT TO HAVE 65MM CONCRETE COVER REAR FACE REINFORCEMENT HAVE 50MM COVER FROM REAR REAR FACE IF FORMED AND 65MM COVER IS SPRAYED AGAINST GROUND

POOL DESIGN

- 1. WALKWAYS ARE NOT DESIGNED TO SUPPORT MASONRY WALLS UNLESS OTHERWISE NOTED
- 2. DESIGN LIVE LOAD FOR WALKWAYS AND CONCOURSES 3 KPA
- 3. GEOTECHNICAL ENGINEER TO VERIFY THE SAFE BEARING CAPACITY OF FOUNDATION MATERIAL PRIOR TO CONSTRUCTION.
- 4. NOTE POOL IS NOT DESIGNED FOR DIVING.
- DESIGN COMPLIES WITH RELEVANT SECTIONS OF AS3600 AND AS2783 ISSUE 1992 FOR PNEUMATICALLY APPLIED CONCRETE FOR USE IN REINFORCED SWIMMING POOLS.
- . NO ALLOWANCE HAS BEEN MADE FOR SURCHARGE LOADING FROM ANY STRUCTURE, UNLESS INDICATED ON PLAN.

CONSTRUCTION NOTES

- WHERE IT IS CONSIDERED THAT GROUND WATER CAN BUILD UP TO A LEVEL 500MM ABOVE THE FLOOR OF
 THE EXCAVATION ADEQUATE DRAINAGE SHALL BE PROVIDED UNDER THE POOL FLOOR
- PVC PLUMBING PIPES TO BE 50MM FROM STEEL REINFORCEMENT, OR IF TIED TO STEEL REINFORCEMENT TO BE FULLY ENCASED WITH AT LEAST 50MM CONCRETE COVER.
- 3. CONCRETE SIZES SHOWN ARE EXCLUSIVE OF RENDER OR OTHER INTERNAL FINISH AND SHALL NOT BE VARIED OR PENETRATED BY HOLES UNLESS SHOWN ON PLAN OR APPROVED BY ENGINEER.
- PROVIDE 10MM CONTROL JOINTS AT MAXIMUM 3500MM CENTRES AND AT ALL POINTS OF CONTRA-CURVATURE IN PLAN VIEW OF WALKWAY FINISH. PROVIDE 10MM CONTROL AT JUNCTION OF ANY

- ADDITIONAL PAVING TO POOL STRUCTURE AND/OR POOL FINISHES
- . TILE PAVEMENTS IN POOL AREA TO BE LAID IN ACCORDANCE WITH AS3958-1 AND AS3958-2.
- PROVIDE 10MM EXPANSION JOINT MATERIAL BETWEEN POOL CONCRETE AND ALL EXISTING RIGID STRUCTURES ON THE SITE INCLUDING BRICK WALLS OF HOUSE, DRIVEWAY SLAB ETC.
- WHERE POOL WALKWAY/COPING LEVEL IS IN PART BELOW ADJOINING GROUND LEVEL, PROVIDE SURFACE CATCH DRAINS AND/OR SUB-SURFACE DRAINS TO DIVERT STORMWATER AND/OR GROUND WATER AWAY FROM POOL

NOTIFY ENGINEER

- 1. STRUCTURAL ENGINEER TO BE NOTIFIED TO INSPECT STEEL PLACEMENT 48 HRS PRIOR TO CONCRETE PLACEMENT. (FEE APPLICABLE AT TIME OF INSPECTION)
- ENGINEER TO BE ADVISED IF EXCAVATION IS IN FILL OR IF EXCESSIVE GROUND WATER IS ENCOUNTER.
- POOL WALLS NOT TO PROJECT MORE THAN 600MM OUT OF GROUND SUPPORTING MATERIAL (AT LEAST 200KPA MATERIAL) OR SEEK ENGINEERING ADVICE.
- 4. IF POOL IN ZONE OF INFLUENCE OF EXISTING STRUCTURE, UNDERPINNING OF MAYBE REQUIRED, ENGINEER TO CONFIRM ON SITE

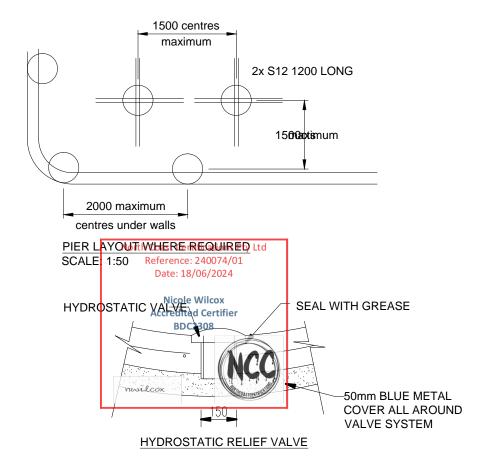
PIERING NOTES (IF REQUIRED):

PIERS REQUIRED IF

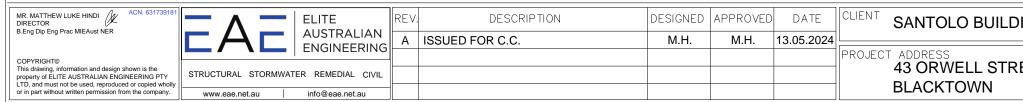
- POOL FOUND IN INADEQUATE STRATA or NON-VIRGIN MATERIAL (IE. FILL)
- BASE OF POOL FOUND IN STRATA THAT REVEALS DISSIMILAR MATERIAL (POOL TO HAVE EVEN BEARING THROUGHOUT)

TYPE OF PIERS TO BE USED WHERE REQUIRED:

- 300¢ PIERS TO ROCK,
- 450¢ PIERS TO STIFF CLAY OF 300Kpg BEARING CAPACITY,
- 600¢ PIERS TO NATURAL GROUND OF 200Kpg BEARING CAPACITY
- PIER DEEPER THAN 1500mm or OUT OF GROUND, TO BE REINFORCED WITH 6N12 VERTICAL + R10-300 TIES



SHEET TITLE

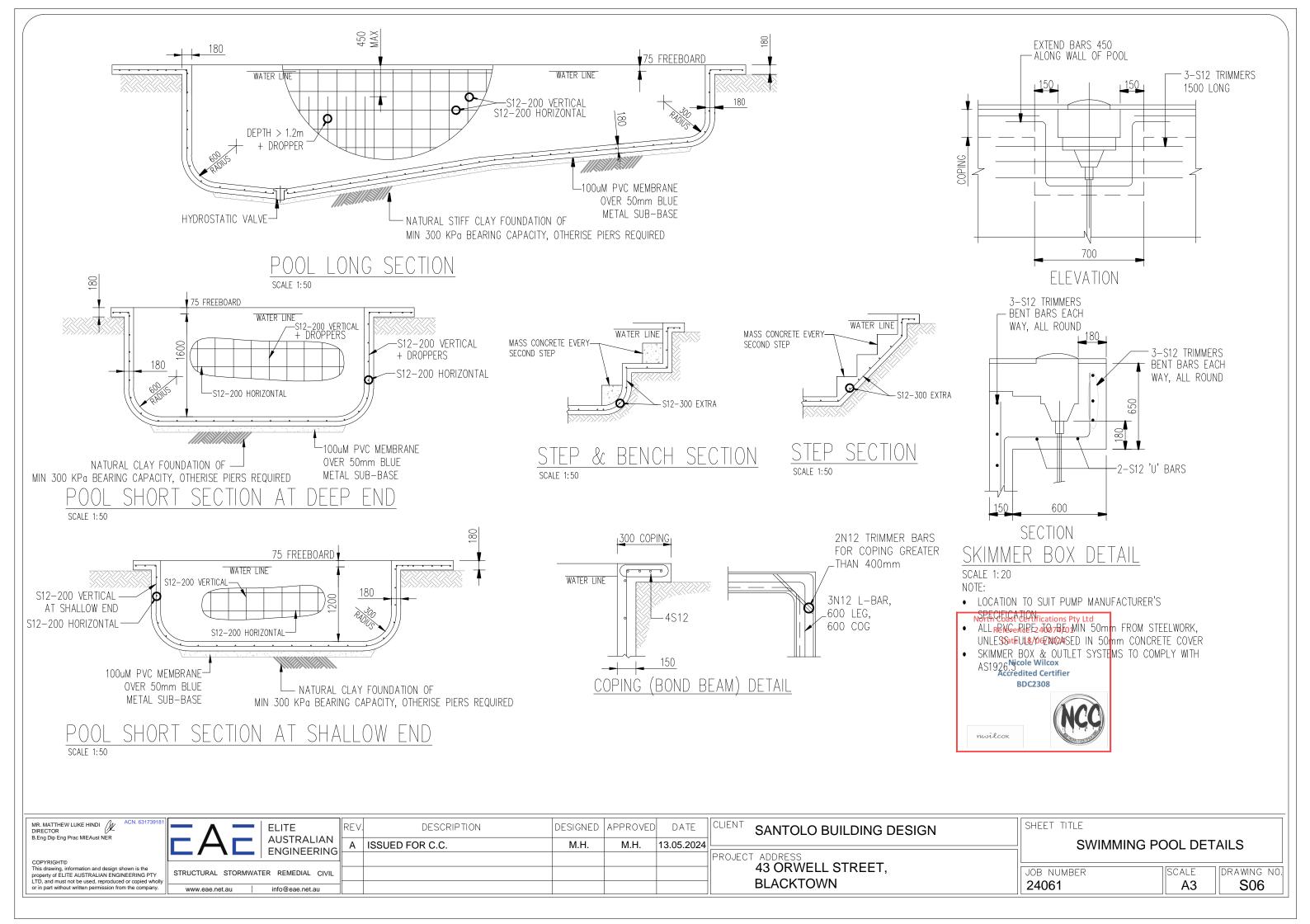


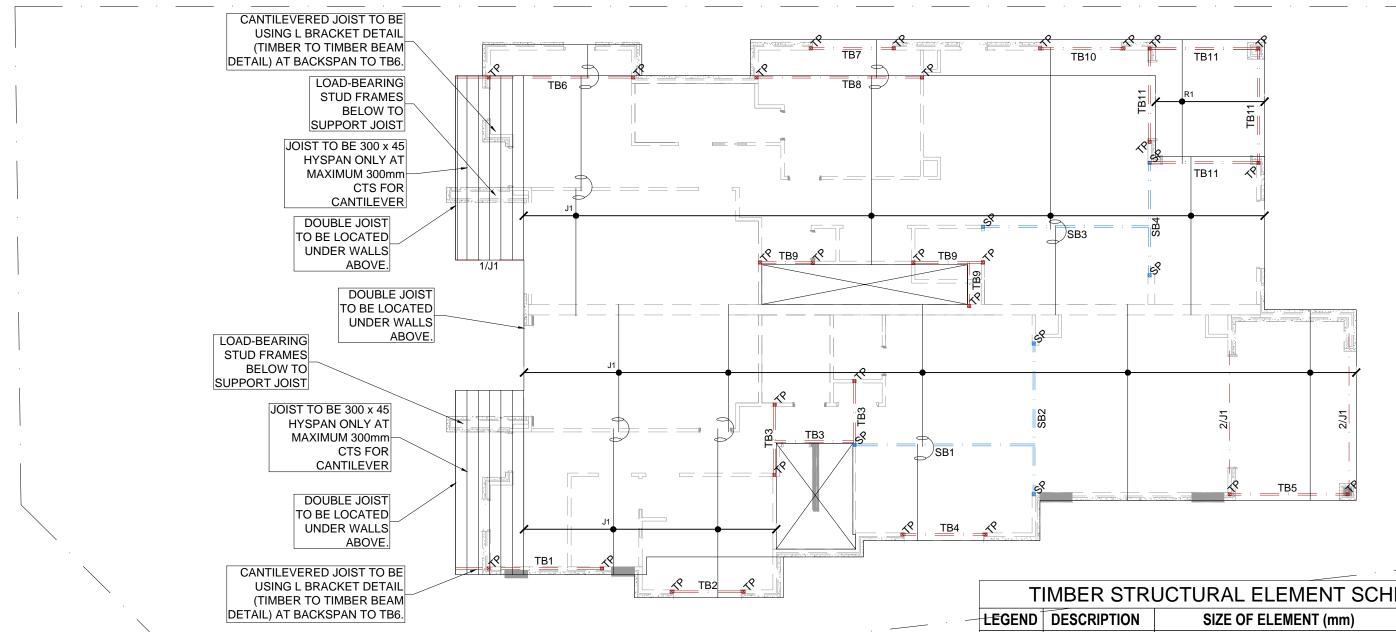
SANTOLO BUILDING DESIGN

OJECT ADDRESS
43 ORWELL STREET,

SWIMMING POOL PLAN

JOB NUMBER SCALE DRAWING NO. A3 S05





FIRST FLOOR FRAMING PLAN

1.100

STEEL AND TIMBER FRAMING NOTES:

- ALL EXPOSED STEEL BEAMS MUST BE PRESSURE GALVANIZED (AS4100).
- IF ANY DETAILS AND/OR SECTIONS ARE NOT GIVEN ON PLAN, BUILDER MUST CONFIRM WITH ENGINEER DURING CONSTRUCTION.
- ALL STEEL FRAMING TO BE IN ACCORDANCE TO AS4100
- ALL EXPOSED TIMBER TO BE PRESSURE TREATED ACCORDING TO AS1684
- CARPENTERS MUST BUILD ROOF STRUCTURE IN ACCORDANCE TO AS1684
- ALL STEEL & TIMBER BEAMS MUST HAVE A MINIMUM BEARING OF 250mm UNO.

STEEL STRUCTURAL ELEMENT SCHEDULE					
LEGEND	DESCRIPTION	SIZE OF ELEMENT (mm)	NOTES		
SP	STEEL POST	89 x 89 x 6 SHS	-		
SB1	STEEL BEAM	250 UB 31.4	-		
SB2	STEEL BEAM	250 PFC	-		
SB3	STEEL BEAM	250 UB 31.4	-		
SB4	STEEL BEAM	250 PFC	-		

TIMBER STRUCTURAL ELEMENT SCHEDULE						
LEGEND	DESCRIPTION	SIZE OF ELEMENT (mm)	NOTES			
TP	TIMBER POST	90 x 90 HARDWOOD	-			
TB1	TIMBER BEAM	2/300 x 45 HYSPAN	-			
TB2	TIMBER BEAM	2/140 x 45 HYSPAN	-			
TB3	TIMBER BEAM N	orth Co29t XA51HZYSRANy Ltd	-			
TB4	TIMBER BEAM	Referes: 45997/591 Date: 18,067/024	-			
TB5	TIMBER BEAM	2/240 x 45 HYSPAN	-			
TB6	TIMBER BEAM	Nicole Wilcox 2/3QQixe45.HYSPAN	-			
TB7	TIMBER BEAM	2/140 x 45 HYSPAN	-			
TB8	TIMBER BEAM	2/300 x 63 H	-			
TB9	TIMBER BEAM	2/140 x 45 H	-			
TB10	TIMBER BEAM	2/170 x 45 HYS	-			
TB11	TIMBER BEAM	2/240 x 45 HYSPAN	-			
J1	TIMBER JOIST	240 x 63 HYSPAN @ 450 CTS	-			
R1	TIMBER RAFTER	140 x 45 HYSPAN @ 600 CTS	-			

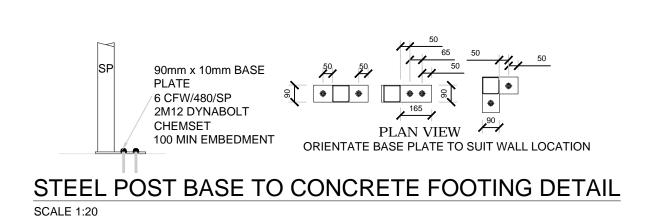
MR. MATTHEW LUKE HINDI DIRECTOR B. Eng Dip Eng Prac MIEAust	MER.	ACN. 63173918
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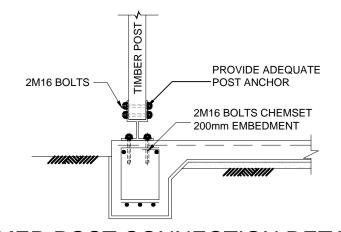
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	CLIENT	SANTOLO BUILDING DESIGN
	PROJEC ⁻	T ADDRESS 43 ORWELL STREET,
1		BLACKTOWN

FIRST FLOOR FRAMING PLAN

JOB NUMBER SCALE DRAWING NO. A3 S07

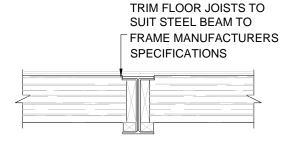




TIMER POST CONNECTION DETAIL

SCALE 1:20

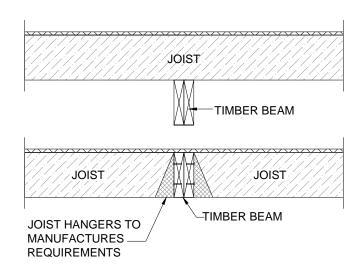


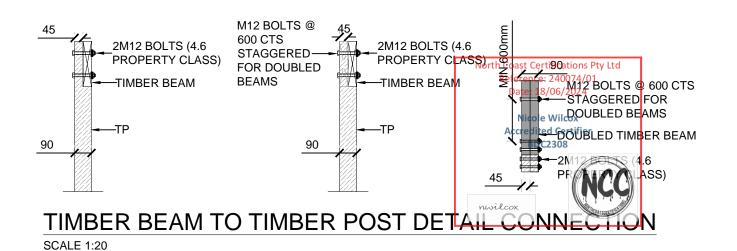


TIMER BEAM TO TIMBER BEAM CONNECTION

SCALE 1:20

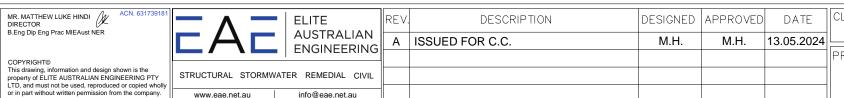
TYPICAL JOIST TO STEEL BEAM CONNECTION DETAIL





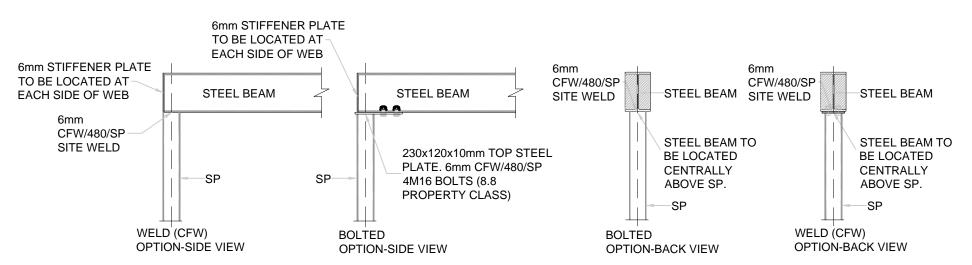
TYPICAL JOIST TO BEAM DETAIL

SCALE 1:20



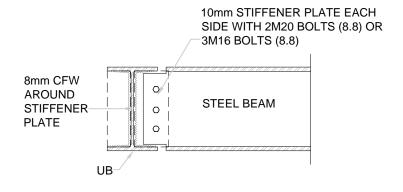
SANTOLO BUILDING DESIGN	SHEET TITLE		
ROJECT ADDRESS	FIRST FL		
43 ORWELL STREET, BLACKTOWN	JOB NUMBER 24061		

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NUMBER 061	SCALE A3	DRAWING NO. S08
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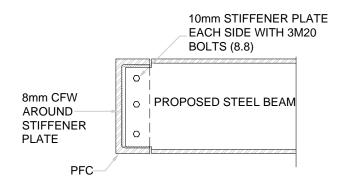
STEEL BEAM TO STEEL POST DETAIL CONNECTION

SCALE 1:20



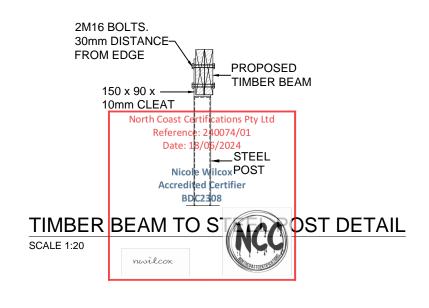
UB TO STEEL BEAM CONNECTION

SCALE 1:20

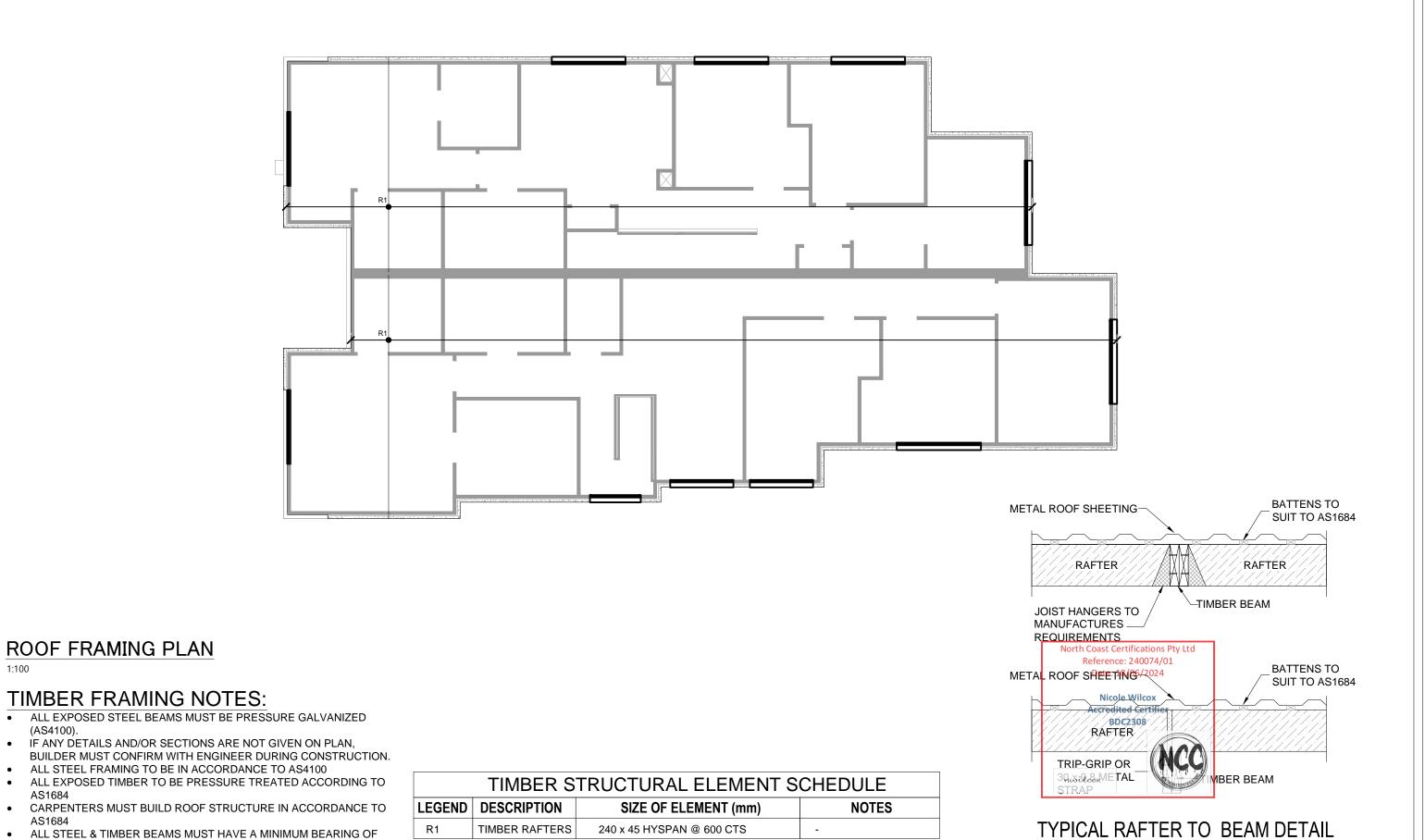


PFC TO STEEL BEAM CONNECTION

SCALE 1:20



MR. MATTHEW LUKE HINDI ACN. 631739181 DIRECTOR DESCRIPTION OF THE PROPERTY OF	$ \wedge$ $-$	ELITE	REV.	DESCRIPTION	DESIGNED	APPROVED	DATE	CLIENT SANTOLO BUILDING DESIGN	SHEET TITLE		
B.Eng Dip Eng Prac MIEAust NER		AUSTRALIAN ENGINEERING	Α	ISSUED FOR C.C.	M.H.	M.H.	13.05.2024	PROJECT ADDRESS	FIRST FLOOR DETAILS		
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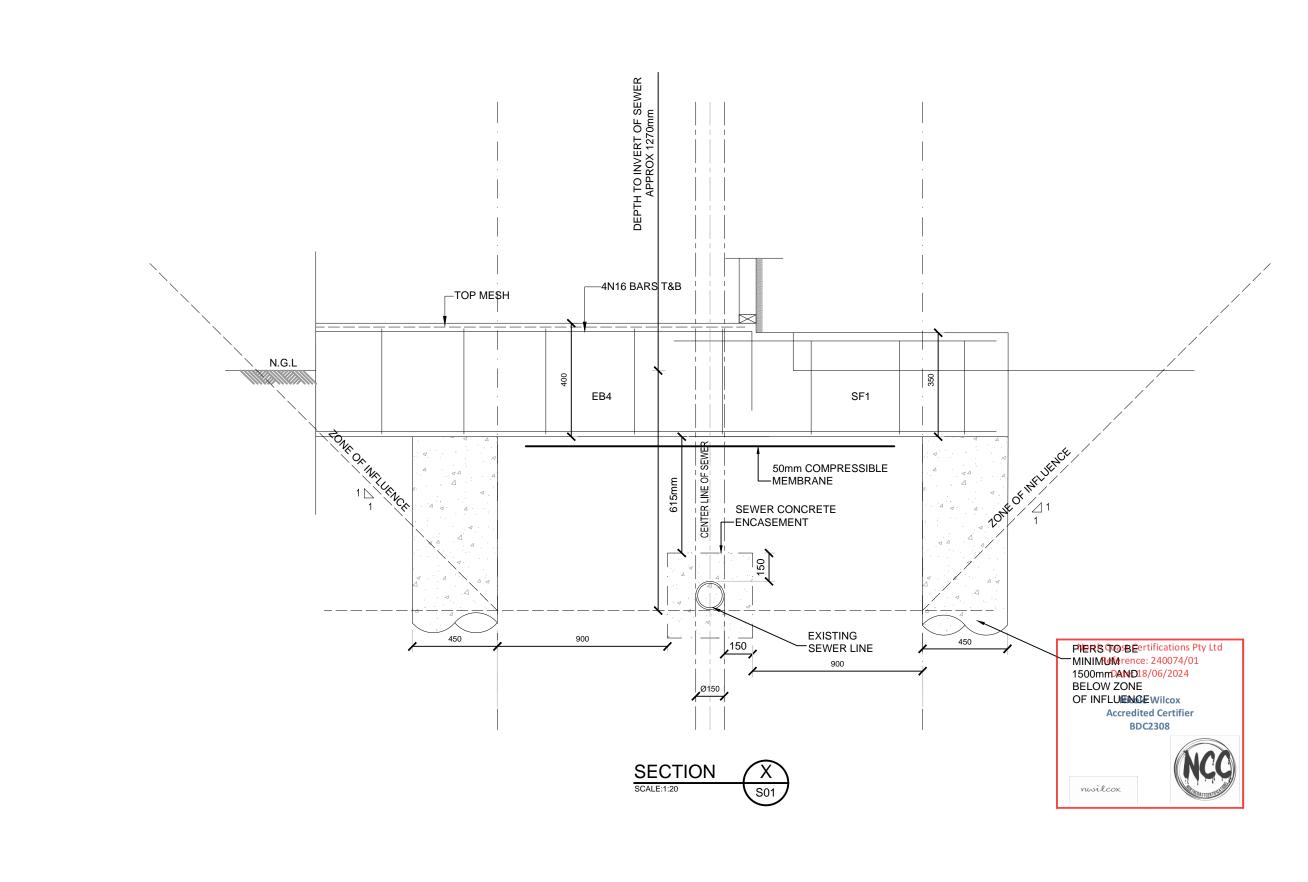
SCALE 1:20

	MR. MATTHEW LUKE HINDI ACN. 631739181 DIRECTOR	$ \wedge$ $-$	ELITE	REV.	DESCRIPTION	DESIGNED	APPROVED	DATE	CLIENT SANTOLO BUILDING DESIGN	SHEET TITLE		
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(AS4100).

AS1684

250mm UNO.



MR. MATTHEW LUKE HINDI DIRECTOR B.Eng Dip Eng Prac MIEAust NER CLIENT SHEET TITLE DESIGNED APPROVED DATE ELITE DESCRIPTION SANTOLO BUILDING DESIGN AUSTRALIAN SECTION X A ISSUED FOR C.C. M.H. M.H. 13.05.2024 **ENGINEERING** PROJECT ADDRESS
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Date: 12th June 2024

Our Reference: 24061.EAC1

STRUCTURAL DESIGN CERTIFICATE

PROJECT: NEW DEVELOPMENT

SITE ADDRESS: 43 ORWELL STREET BLACKTOWN

RE: C.C. SUBMISSION FOR STRUCTURAL DRAWINGS

Elite Australian Engineering Pty Ltd hereby advise that we are responsible and certify the structural design and documentation for the proposed development mentioned above.

The structural design of the building is in accordance with the provisions of the Building Code of Australia, relevant DA consent conditions and the relevant Australian Standards such as:

•	AS1170.1	Loading Code (2002 Part 1, 2011 Part 2)
•	AS3600	Concrete Structures Code (2018)
•	AS3700	Masonry Structures code (2001)
•	AS2870	Residential Slabs & Footings Code (2011)
•	AS4100	Steel Structures Code (1998)
•	AS1684	Timber Framing Code (2010)

We at Elite Australian Engineering Pty Ltd certify that the design on the structural drawings with the project number 24061, Revision A, dated 12.06.2024 complies with above.

Signed,

Matthew Luke Hindi

B.Eng Dip Eng Prac MIEAust NER (4268215) Registered Professional Engineer (PRE0001261) Registered Design Practitioner (DEP0001826) Builders License No. 331352C

Director

