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DRAWN SS	DESIGNED SS	APPROVED LZ
SCALE 1:200	SHEET A-3	DATE 05.06.2025
DRAWING NUMBER 2025403-S2		REVISION 0

0	ISSUED FOR CONSTRUCTION	SS	LZ	05.06.2023
REV.	AMENDMENT	DRAWN	APPROVED	DATE



GENERAL NOTES:

- G1.

COPYRIGHT OF ALL DRAWINGS AND DOCUMENTS PROVIDED BY SOAR ENGINEER CONSULTING FOR THIS PROJECT.
- G2

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G3

ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS.
- G4

ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEERING DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- G5

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 TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES. ANY EXCAVATION IN THE VICINITY OF ALL PROPOSALS MUST BE GRANTED BY THE CONSULTING ENGINEER PRIOR TO COMMENCEMENT OF WORK.
- G6

UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METERS AND ALL DIMENSIONS ARE IN MILLIMETERS
- G7

THE RELEVANT PROVISIONS OF AS1170.2 HAVE BEEN APPLIED FOR WIND LOADS WITH THE FOLLOWING PARAMETERS  
REGION: A2  
BASIC WIND SPEED: Vu=45m/s

FOUNDATION:

- F1

ALL FOOTINGS TO BE CONSTRUCTED IN ACCORDANCE WITH AS2870.
- F2

FOOTING HAVE BEEN DESIGNED TO BEAR ON CONTROLLED FILL WITH AN ALLOWABLE BEARING PRESSURE OF 100KPa.
- F3

THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE.
- F4

FOOTING TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE.
- F5

REMOVE TOPSOIL CONTAINING GRASS ROOTS OR OTHER ORGANIC MATTER, RUBBLE AND / OR DEBRIS AND OTHER UNSUITABLE MATERIAL BELOW FOUNDATIONS.
- F6

KEEP EXCAVATIONS FREE OF WATER. PROVIDE ADEQUATE DRAINAGE TO ENSURE FORMATION IS NOT AFFECTED BY MOISTURE. PREVENT FOUNDATION DRYING OUT DUE TO EXPOSURE. CONSTRUCT FOOTINGS AND BACKFILL AS SOON AS PRACTICABLE AFTER EXCAVATION.
- F7

ENSURE EXCAVATIONS ARE STABLE AND PROTECT SURROUNDING PROPERTY AND SERVICES FROM ADVERSE EFFECTS OF GROUND WORKS. PROVIDE TEMPORARY WORKS AS REQUIRED.

REINFORCEMENT:

- R1

THE FOLLOWING ABBREVIATIONS APPLY TO THE LOCATION OF REINFORCEMENT:  
  
EW EACH WAY FF FAR FACE CP CENTRALLY PLACED  
EF EACH FACE B BOTTOM BB BOTTOM BOTTOM (LAID FIRST)  
NF NEAR FACE T TOP TT TOP TOP (LAID LAST)
- R2

COGS AND HOOKS TO BE STANDARD IN ACCORDANCE WITH AS3600. TERMINATE ENDS OF BEAM LIGATURES IN A HOOK OF AT LEAST 135 DEGREES. PROVIDE FIRST LIGURE WITHIN 50 mm OF FACE OF SUPPORT.

REINFORCEMENT (CONTINUE):

- R3

SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:  
R: DENOTES STRUCTURAL GRADE 250 PLAIN ROUND BAR TO AS4671  
N: DENOTES HOT ROLLED GRADE 500 DEFORMED BAR DUCTILITY CLASS N TO AS4671  
L: DENOTES HOT ROLLED GRADE 500 DEFORMED BAR DUCTILITY CLASS L TO AS4671.
- R4

DESIGNATION OF REINFORCEMENT BARS IS AS SHOWN:  
EG: 17 N20 - 350 EF  
17: DENOTES No OF BARS AND TYPE IN GROUP  
N: DENOTES BAR GRADE AND DUCTILITY CLASS  
20: DENOTES NOMINAL BAR DIAMETER IN mm  
350: DENOTES SPACING IN mm  
EF: DENOTES LOCATION
- R5

ALL REINFORCEMENT TO BE HOT ROLLED GRADE 500 DEFORMED (RIBBED) BAR DUCTILITY CLASS N TO AS4671 U.N.O
- R6

REINFORCEMENT TO BE CLEAN, FREE OF LOOSE MILL SCALE, RUST, OIL, GREASE, MUD OR OTHER MATERIAL THAT MIGHT REDUCE THE BOND BETWEEN REINFORCEMENT AND CONCRETE.
- R7

SECURE REINFORCEMENT IN POSITION AGAINST DISPLACEMENT AND MAINTAIN SPECIFIED CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITMENTS) BY APPROVED CHAIRS, SPACERS, LIGATURES OR TIES.
- R8

PROVIDE ADEQUATE SUPPORT TO PREVENT DISPLACEMENT OF REINFORCEMENT BY WORKMEN OR EQUIPMENT DURING CONCRETE PLACEMENT.
- R9

MINIMUM LAP LENGTHS UNLESS NOTED OTHERWISE SHALL BE:  
  
500 FOR SIZE 12 BARS  
600 FOR SIZE 16 BARS  
900 FOR SIZE 20 BARS  
1000 FOR SIZE 24 BARS

CONCRETE:

- C1

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 LATEST EDITION AS AMENDED, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- C2

QUALITY OF CONCRETE ELEMENTS SHALL BE AS SET OUT BELOW.
- C3

DO NOT ADD WATER TO CONCRETE AFTER TRUCK HAS LEFT BATCHING PLANT.
- C4

ADDITIVES SHALL NOT BE USED WITHOUT THE ENGINEERS PRIOR APPROVAL.
- C5

CONCRETE IS TO BE COMPACTED USING MECHANICAL VIBRATORS.
- C6

MINIMUM CLEAR COVER (mm) TO ALL REINFORCEMENT UNLESS OTHERWISE SHOWN SHALL BE AS FOLLOWS.

STRUCTURAL ELEMENT	REMARK	COVER (mm)
FOOTINGS	GENERAL	30 TOP & BTM
SLAB ON GROUND	GENERAL	30 TOP & BTM

STRUCTURAL STEEL:

- S1

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 AND AS/NZS1554.1.
- S2

MINIMUM GUSSET PLATE THICKNESS SHALL BE 10 mm UNLESS OTHERWISE SPECIFIED.
- S3

FABRICATION TOLERANCES SHALL BE IN ACCORDANCE WITH SECTION 14 OF AS4100 U.N.O.
- S4

ALL WELDS AND WELD SYMBOLS ARE TO BE IN ACCORDANCE WITH AS/NZS 1554 AND AS 1101.3 RESPECTIVELY, AND UNLESS NOTED OTHERWISE:  
ALL WELDS TO BE CATEGORY SP  
ALL BUTT WELDS TO BE FULL PENETRATION  
ALL FILLET WELDS TO BE 6 mm CONTINUOUS U.N.O.  
ELECTRODES TO BE CLASSIFICATION E48XX
- S5

BOLT DESIGNATION:  
4.6/S COMMERCIAL BOLTS OF GRADE 4.6 TO AS1111 TIGHTENED TO A SNUG TIGHT FIT. 4.6/S  
8.8/S HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS/NZS 1252 TIGHTENED TO A SNUG TIGHT FIT.  
8.8/TB HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS/NZS 1252 FULLY TENSIONED TO AS4100 8.8/TB AS A BEARING JOINT.  
8.8/TF HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS/NZS 1252 FULLY TENSIONED TO AS4100 8.8/TF AS A FRICTION JOINT WITH FACING SURFACES LEFT UNCOATED
- S6

ALL BOLTS, NUTS AND WASHERS TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS 1214-1983. BOLTS SHALL BE FITTED WITH TWO (2) WASHERS, ONE UNDER THE BOLT HEAD AND ONE UNDER THE NUT.

STRUCTURAL TIMBER:

- T1

ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS1720.1-1997 SAA TIMBER STRUCTURES CODE AND AS1684-1999 NATIONAL TIMBER FRAME CODE.
- T2

ALL TIMBER SHALL BE FREE OF GUM VIENS, POCKETS, KNOTS, KNOT HOLES OR SPLITS WITHIN 150MM OF ANY CONNECTIONS.
- T3

IN HARDWOODS OR LOCATIONS SUBJECT TO SPLITTING, NAILS ARE TO BE INSTALLED PREDRILLED HOLES, 80% OF DIAMETER OF NAIL USED
- T4

ALL WORKS TO BE CARRIED OUT AS PER GOOD BUILDING PRACTICE, SPECIAL ATTENTION TO BE PAID TO STRAPPING DOWN ALL ROOFS.
- T5

ALL BOLTS SHALL BE LEFT ACCESSIBLE AND RETIGHTENED AT COMPLETION OF CONTRACT AND ALSO AT END OF MAINENANCE PERIOD.
- T6

STEEL & TIMBER BEAM LOCATIONS ARE INDICATIVE ONLY AND MAY CHANGE WITH THE APPROVAL OF THE ENGINEER AT NO EXTRA CHARGE TO THE CLIENT.

FOR CONSTRUCTION

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