

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.



# DRAWING LIST

DRAWING NO.	DRAWING TITLE
S0000	COVER SHEET
S0001	STRUCTURAL NOTES - SHEET 1
S0002	STRUCTURAL NOTES - SHEET 2
S0003	STRUCTURAL NOTES - SHEET 3
S0011	FOOTING PLAN - ZONE 1
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S0031	GRID FLOOR PLAN - ZONE 1
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S0040	ROOF FRAMING
S0050	PLANT ROOM ROOF FRAMING PLAN
S0081	BUILDING SECTIONS - SHEET 1
S0082	BUILDING SECTIONS - SHEET 2
S0100	TYPICAL FOUNDATION AND SLAB DETAILS
S0101	TYPICAL LIFT CORE DETAILS
S0102	TYPICAL CONCRETE COLUMN DETAILS
S0103	TYPICAL SUSPENDED CEILING DETAILS
S0104	TYPICAL CONCRETE WALL DETAILS
S0105	TYPICAL CONCRETE STAR DETAILS
S0106	TYPICAL STAIRCASE DETAILS - SHEET 1
S0107	TYPICAL STEELWORK DETAILS - SHEET 2
S0109	TYPICAL SHORING DETAILS
S0110	TYPICAL RETAINING WALL DETAILS
S0111	TYPICAL MASONRY DETAILS

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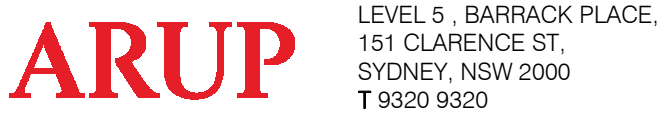
**CLIENT**



PROJECT MANAGER



## SERVICES



STRUCTURE &amp; CML



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

COWRA HOSPITAL  
REDEVELOPMENT  
64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE  
SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM		23.06.22

DESCRIPTION  
COVER SHEET

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0000	5







## REINFORCEMENT

- R1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS4671 AND OTHER RELEVANT AUSTRALIAN CODES.
- R2. REINFORCEMENT TYPE AND GRADE.

SYMBOL	TYPE	MPa	DUCTILITY CLASS
N	HOT ROLLED DEFORMED BARS	500	NORMAL
R	HOT ROLLED PLAIN BARS	250	NORMAL
W	COLD DRAWN PLAIN ROUND WIRE	500	LOW
SL	SQUARE WELDED MESH	500	LOW
RL	RECTANGULAR WELDED MESH	500	LOW
LTM	RECTANGULAR WELDED MESH	500	LOW

- R3. ALL REINFORCEMENT TO CONFORM TO AS4671, CURRENT EDITIONS WITH AMENDMENTS.
- REINFORCEMENT NOTATION GIVES THE FOLLOWING INFORMATION: NO. OF BARS, TYPE, SIZE, MIN. SPACING (MM), LAVER, FOR EXAMPLE 17N16-250 T

FABRIC OR MESH NOTATION GIVES THE FOLLOWING INFORMATION: "RL" OR "SL", PRODUCT CODE, LAYER, FOR EXAMPLE SL2 T

- R4. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.

- R5. COVER TO REINFORCEMENT - CLEAR COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE AS INDICATED IN THE CONCRETE NOTES. COVER SHALL NOT BE LESS THAN THE SIZE OF THE AGGREGATE OR THE MAIN BAR. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE COVER TO REINFORCEMENT. ADDITIONAL COVER MAY BE REQUIRED TO ACHIEVE FIRE RATINGS - REFER TO DESIGN DRAWINGS.

SUPPORT REINFORCEMENT ON MILD STEEL PLASTIC TYPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS. IN EXPOSED CONDITIONS 82 OR C (TO AS3600)

USE ONLY PLASTIC OR CONCRETE CHAIRS.

- R6. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

- R7. PROVIDE DISTRIBUTION REINFORCEMENT OR TE BARS IF NOT SHOWN, WHERE NECESSARY (PROVIDE N12@200 CENTRES (SP12E-40)).

- R8. SITE BENDING OF BARS SHALL BE DONE COLD WITH POWER OR MECHANICAL BENDING TOOLS AND A MANDEREL OR FORMER WITH A BAR DIAMETER OF 5 TIMES THE BAR SIZE. NOTE: IF BARS ARE HEATED ABOVE 450°C LESS THAN RED HEAT THEY LOSE STRENGTH.

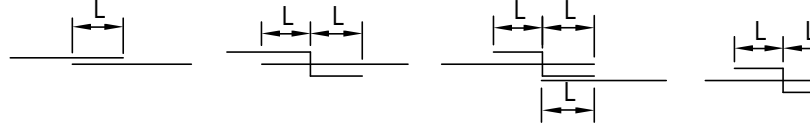
## REINFORCEMENT LAPS

- R9. LAP REINFORCEMENT ONLY AT LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS OR AS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

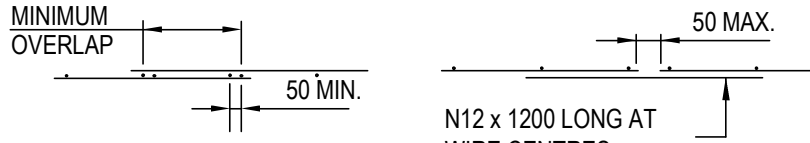
SLAB REINFORCEMENT - LAP LENGTH (mm)				
BAR DIA.	CONCRETE GRADE			
	25 MPa	32 MPa	40 MPa	
N12	600	500	400	
N16	600	500	600	
N20	1100	1000	900	

BEAM REINFORCEMENT - LAP LENGTH (mm)						
BAR DIA.	< 300mm CONCRETE CAST BELOW THE BAR			> 300mm CONCRETE CAST BELOW THE BAR		
	CONCRETE GRADE			CONCRETE GRADE		
	25 MPa	32 MPa	40 MPa	25 MPa	32 MPa	40 MPa
N12	600	500	450	750	650	600
N16	850	750	650	1100	950	850
N20	1100	1000	900	1450	1300	1150
N24	1400	1250	1100	1800	1600	1400
N28	1700	1500	1350	2200	1950	1700
N32	2000	1800	1600	2600	2300	2050
N36	2400	2100	1850	3050	2700	2400

COLUMN AND WALL REINFORCEMENT LAP LENGTH (mm)	
BAR DIA.	
N12	500
N16	650
N20	800
N24	950
N28	1150
N32	1300
N36	1450



- R10. LAPS IN MESH (FABRIC) SHALL COMPLY WITH AS3600. THE TWO OUTERMOST TRANSVERSE WIRES OF ONE SHEET SHALL OVERLAP THE TWO OUTERMOST TRANSVERSE WIRES OF THE SHEET BEING LAPPED BY 25MM. A MAXIMUM OF 3 SHEETS OF MESH SHALL BE LAPPED AT ANY POINT.



- R11. SLAB REINFORCEMENT SHALL EXTEND 70mm ONTO SUPPORTING WALLS, WITH 50% OF BOTTOM BARS COGGED TO ACHIEVE ANCHORAGE & SIMPLY SUPPORTED ENDS. MESH IN SLABS SHALL EXTEND 70mm ONTO SUPPORTING WALLS WITH A CROSS WIRE.

- R12. ALL BEAM TIES ARE TO HAVE BAR ANCHORAGES LOCATED ON THE TOP FACE OF THE BEAM UNO.

- R13. REINFORCEMENT BAR JOGGLES SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS.

## BONDEK

- B1. ALL SLABS TO BE 100mm THICK UNLESS NOTED OTHERWISE AND POURED ON LYSAGHT 1mm BONDEK OR EQUAL.

- B2. DIRECTION OF SPAN SHOWN THIS

- B3. BONDEK PANELS ARE TO BE SECURELY FIXED OR HELD DOWN TO PREVENT DISPLACEMENT DUE TO CONSTRUCTION LOADING OR WIND UPLIFT PRIOR TO CONCRETING.

- B4. FIX BONDEK PANELS TO STEELWORK BY PUDDLE WELDING, DRIVE PINS OR OTHER SUITABLE METHODS. SLIP JOINTS SHALL BE LOCATED AS SHOWN.

- B5. BONDEK TO HAVE 50 MINIMUM END BEARING ON BRICKWORK. FIXING TO MASONRY IS NOT NECESSARY, PROVIDED BONDEK IS PLACED IMMEDIATELY AFTER PANELS ARE LAID. TOP COURSE OF BRICKWORK IS TO BE STRAIGHT AND LEVEL. IF REQUIRED PROVIDE LAYER OF SMOOTH HARD MORTAR. SLIP JOINTS SHALL BE PROVIDED IN MASONRY UNLESS NOTED OTHERWISE.

- B6. PROVIDE 100mm MESH PLACED WITH MAIN BARS IN TOP AND AT RIGHT ANGLES TO DIRECTION OF BONDEK. WHERE SPAN DIRECTION OF BONDEK CHANGES, LAP MESH 450 MINIMUM IN DIRECTION OF MAIN BARS.

- B7. BEFORE CONCRETE IS PLACED, REMOVE ANY ACCUMULATED DEBRIS, GREASE OR ANY OTHER SUBSTANCE TO ENSURE CLEAN BONDING SURFACE.

- B8. FASTENING OF SIDE LAP JOINTS OF BONDEK SHALL BE IN ACCORDANCE WITH IYSAGHT PUBLICATIONS, AND GENERALLY ONE NO. 10-24 x 16mm SELF-DRILLING TAPPING SCREW IS REQUIRED MD-SPAN FOR SUPPORT SPACING OF 2700mm OR GREATER. FOR POINT LOAD RATINGS OR EXPOSED SOFFITS additional FIXINGS MAY BE REQUIRED.

- B9. UNLESS NOTED OTHERWISE, PROPPING OF THE BONDEK SHALL BE IN ACCORDANCE WITH IYSAGHT PUBLICATIONS.

- B10. PROPS SHOULD NOT BE REMOVED UNTIL CONCRETE HAS REACHED SUFFICIENT STRENGTH.

- B11. THE SHEETS SHALL NOT BE SPLICED OR LAPPED.

- B12. NO LOADS FROM STACKED MATERIALS ARE ALLOWED UNTIL THE CONCRETE IS SET.

## ASPHALTIC CONCRETE NOTES

- A1. GENERAL

a) MINERAL AGGREGATES TO COMPLY WITH CLAUSE 3 MATERIALS D.M.R. FORM 852 SPECIFICATION FOR THE SUPPLY AND DELIVERY OF AGGREGATE FOR USE IN PLANT MIX.

b) MINERAL FILLER TO COMPLY WITH AS237-1980 MINERAL FILLERS FOR ASPHALT.

c) BITUMEN BINDER SHALL COMPLY WITH D.M.R. FORM 337 "SPECIFICATION FOR RESIDUAL BITUMEN."

- A2. MIX PROPORTIONS

a) JOB MIX - 10mm NOMINAL SIZE AGGREGATE, MINIMUM BITUMEN CONTENT (%) BY MASS OF TOTAL MASS - 5.1%

b) MIX STABILITY - BETWEEN 16AN AND 36AN AS DETERMINED BY D.M.R. TEST METHOD T601 AND T603

c) AIR VOIDS IN COMPACTED MIX - BETWEEN 4% AND 7% OF THE VOLUME OF THE MIX

d) VOIDS FILLED IN BINDER - 65-80% OF AIR VOIDS IN THE TOTAL MINERAL AGGREGATE FILLED BY BINDER IN ACCORDANCE WITH D.M.R. TEST METHOD T601, T603 AND T605

- A3. PAVEMENT PREPARATION

a) THE EXISTING SURFACE TO BE SEALED SHALL BE DRY AND BROOKEED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER.

b) ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.

- A4. TACK COAT

a) THE WHOLE OF THE AREA TO BE SHEETED WITH ASPHALTIC CONCRETE SHALL BE LIGHTLY AND EVENLY COATED WITH RAPID SETTING BITUMEN COMPLYING WITH D.M.R. FORM 355.

b) APPLICATION RATE FOR RESIDUAL BITUMEN SHALL BE 0.15 TO 0.30 LITRES/SQUARE METRE. APPLICATION SHALL BE BY MEANS OF A MECHANICAL SPRAYER WITH SPRAY BAR.

- A5. SPREADING

a) ALL ASPHALTIC CONCRETE SHALL BE SPREAD WITH A SELF PROPELLED PAVING MACHINE.

b) THE ASPHALTIC CONCRETE SHALL BE LAID AT A MIX TEMPERATURE AS SHOWN BELOW.

ROAD SURFACE MIX TEMPERATURES TEMPERATURE IN SHADE (°C)

°C	NOT PERMITTED
5 - 10	NOT PERMITTED
10 - 15	150
15 - 20	145
OVER 25	140

c) ASPHALTIC CONCRETE SHALL NOT BE LAID WHEN THE ROAD SURFACE IS WET OR WHEN COLD WINDS CHILL THE MIX TO ADVERSELY AFFECT SPREADING AND COMPACTION.

d) THE MINIMUM COMPACTED THICKNESS IS 30mm OVER EXISTING SEALED PAVEMENTS AND 50mm OVER NEW PAVEMENTS.

- A6. JOINTS

a) THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.

b) THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.

- A7. COMPACTION

a) ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.

b) INITIAL ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C

c) SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 80°C

d) MINIMUM CHARACTERISTICS VALUE OF RELATIVE COMPACTION OF A LOT WHEN TESTED IN ACCORDANCE WITH D.M.R. FORM 612 SHALL BE 95%.

- A8. FINISHED PAVEMENT PROPERTIES

a) FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE TO SHAPE AND SHALL NOT VARY MORE THAN 10mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT AND SHALL NOT DEVIATE FROM THE BOTTOM OF A 3m STRAIGHT EDGE LAID IN ANY DIRECTION BY MORE THAN 5mm.

## TEMPORARY WORKS

- TW1. ACOR'S DOCUMENTATION DEPICTS THE "PERMANENT" STRUCTURE. DESIGN AND INSTALLATION OF ALL TEMPORARY WORKS AND PROCEDURES WILL BE THE SOLE RESPONSIBILITY OF THE BUILDER.

- TW2. THE BUILDER MUST ENGAGE AN EXP. QUALIFIED ENGINEER FOR THE DESIGN OF ALL TEMPORARY WORKS NECESSARY TO SAFELY ERECT THIS STRUCTURE. AS A MINIMUM THE FOLLOWING TEMPORARY WORKS REQUIRE ATTENTION: FORMWORK / TEMPORARY PROPPING / NEEDLE BEAMS / SCAFFOLDING / HOARDING.

- TW3. BUILDER MUST CONTACT ACOR IF THEY CONSIDER ANY PART OF THE STRUCTURE IS UNSAFE TO ERECT.

- TW4. THE BUILDER WILL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO ADJOINING BUILDINGS AND ROADWAYS DURING THE INSTALLATION OF THE TEMPORARY WORKS AND THE PERMANENT WORKS.

- TW5. ANY TEMPORARY WORK DETAILS AND PROCEDURES GIVEN IN THESE DRAWINGS ARE FOR THE GUIDANCE OF THE BUILDER ONLY.

## CHEMICALLY ANCHORED REINFORCEMENT

- CAR1. WHERE SHOWN ON THE DRAWINGS, REINFORCEMENT BARS SHALL BE CHEMICALLY ANCHORED INTO EXISTING CONCRETE AS DESCRIBED BELOW.

- CAR2. PERCUSSION DRILL (CORING NOT PERMITTED) A HOLE TO THE CORRECT DIAMETER AND DEPTH FOR THE PARTICULAR SIZE REINFORCING BAR AS TABULATED BELOW, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

BAR SIZE	HOLE DIA (mm)	HOLE DEPTH (mm)
N12	16	200
N16	22	350
N20	28	420
N24	32	550

- CAR3. THOROUGHLY CLEAN THE HOLE USING A ROUND WIRE BRUSH AND BLOW OUT ALL DUST.

- CAR4. ENSURE HOLE IS CLEAN AND DRY AND INSERT SUFFICIENT HILTI HIT C100 RESIN INTO THE BASE OF THE HOLE TO ENSURE THAT WHEN THE BAR IS INSTALLED RESIN APPEARS AT THE FACE OF THE HOLE.

- CAR5. IMMEDIATELY INSERT THE REINFORCING BAR INTO THE HOLE BY ROTATING SLOWLY TO FULLY COAT THE BAR WITH RESIN AND PUSH FULLY INTO THE HOLE.

- CAR6. ENSURE BAR IS NOT DISTURBED WHILST RESIN IS CURING. (APPROXIMATELY 2 HOURS).

- CAR7. CURING IS NOT PERMITTED UNLESS APPROVED BY THE ENGINEER.

## REINFORCED CONCRETE BLOCKWORK

- RB1. ALL WORKMANSHIP SHALL COMPLY WITH AS 3700, AND THE SPECIFICATIONS.
- RB2. ALL BLOCKS SHALL CONFORM TO AS 2733.
- RB3. THE DESIGN STRENGTH OF CONCRETE MASONRY SHALL BE AS FOLLOWS -

ELEMENT	BLOCK STRENGTH GRADE	MORTAR MIX CEMENT:LIME:SAND
WALLS	15	M3 MORTAR (NORMAL) 1:1:5 M4 MORTAR (EXPOSURE GRADE) 1:0.5:4.5

- RB4. LAY BOTTOM COURSE OF BLOCKS ON FULL MORTAR BED. ALL PERPENDS SHALL BE FULLY FILLED WITH MORTAR, EXCEPT WHERE REQUIRED FOR WEEPHOLES.

- RB5. CLEAN OUT BLOCKS SHALL BE PROVIDED AT THE BASE OF ALL REINFORCED CORES. REINFORCED CORES SHALL BE CLEANED OF MORTAR PROTRUSIONS BEFORE GROUTING.

- RB6. ALL REINFORCED CORES SHALL BE FILLED WITH GROUT. THE GROUT FILLING SHALL BE THOROUGHLY COMPACTED BY MECHANICAL VIBRATOR OR RODDING. UNREINFORCED CORES NEED NOT BE FILLED UNLESS OTHERWISE NOTED.

- RB7. GROUT COVER TO REINFORCEMENT IN BLOCK RETAINING WALLS SHALL BE MAINTAINED BY THE USE OF PLASTIC "BLOCKPAD" REINFORCEMENT LOCATION BRACKETS (OR APPROVED EQUIVALENT) AT THE INTERSECTION OF ALL HORIZONTAL AND VERTICAL REINFORCEMENT.

- RB8. GROUT SHALL BE IN ACCORDANCE WITH AS 3600 AND COMPLY WITH THE FOLLOWING -

CHARACTERISTIC STRENGTH  $f_{ck}$  = 20 MPa AT 28 DAYS.

MAXIMUM AGGREGATE SIZE = 10 mm.

SLUMP = 230 mm.

MAXIMUM CONTINUOUS POUR HEIGHT SHALL BE 3000 mm. STOP POUR 50 mm BELOW TOP TO PROVIDE KEY FOR THE FOLLOWING POUR.

BUILDER IS TO PROVIDE TEMPORARY PROPPING TO WALLS WHERE REQUIRED FOR STABILITY DURING CONSTRUCTION.

## VERTICAL JOINTS

- RB11. PROVIDE VERTICAL CONTROL JOINTS IN ALL WALLS AT A MAXIMUM OF 8000 mm CENTRES OR AT SLAB JOINTS UNLESS INDICATED OTHERWISE ON THE STRUCTURAL DRAWINGS.

- RB12. PROVIDE HORIZONTAL JOINT REINFORCEMENT EVERY THIRD COURSE FOR SOLID OR CORE FILLED BLOCKS.

- RB13. REFER TO TYPICAL "REINFORCED BLOCK WALL JUNCTION DETAILS" FOR REINFORCEMENT REQUIREMENTS AT CORNERS AND INTERSECTIONS.

- RB14. REFER TO THE ARCHITECT'S SPECIFICATIONS FOR ALL WATERPROOFING DETAILS OF WALLS AS REQUIRED.

- RB15. REFER TO "RETAINING WALL NOTE" FOR ADDITIONAL INFORMATION ON BACKFILLING AND DRAINAGE SYSTEMS BEHIND RETAINING WALLS.

- RB16. REFER TO TYPICAL DETAILS FOR BOND BEAM LINTELS.

- RB17. MASONRY WALLS MUST NOT BE CONSTRUCTED ON SUSPENDED CONCRETE UNTIL ALL TEMPORARY SUPPORTS ARE REMOVED AND ALL MASONRY TO BE LAID HAS BEEN STACKED ADJACENT TO PROPOSED POSITION.

## UNREINFORCED CONCRETE BLOCKWORK

- UB1. ALL WORKMANSHIP SHALL COMPLY WITH AS 3700, AND THE SPECIFICATIONS.
- UB2. ALL BLOCKS SHALL CONFORM TO AS 2733.
- UB3. THE DESIGN STRENGTH OF CONCRETE MASONRY SHALL BE AS FOLLOWS -

ELEMENT	BLOCK STRENGTH GRADE	MORTAR MIX CEMENT:LIME:SAND
WALLS	15	M3 MORTAR (NORMAL) 1:1:5 M4 MORTAR (EXPOSURE GRADE) 1:0.5:4.5

- UB4. PROVIDE HORIZONTAL JOINT REINFORCEMENT IN EVERY THIRD COURSE.

- UB5. VERTICAL CONTROL JOINTS

- UB6. PROVIDE VERTICAL CONTROL JOINTS IN ALL WALLS AT A MAXIMUM OF 8000 mm CENTRES OR AT SLAB JOINTS UNLESS INDICATED OTHERWISE ON THE STRUCTURAL DRAWINGS. (LOCATIONS TO BE CONFIRMED WITH THE ARCHITECT WHERE NECESSARY).

- UB7. WHERE MASONRY ADJOINS STRUCTURAL STEELWORK, REINFORCED CONCRETE, OR PASSES A RETURN WALL ON THE INNER SKIN, PROVIDE MEDIUM-DUTY STAINLESS STEEL METAL TIES AT 400mm MAXIMUM CENTRES.

- UB8. SHOT FIX OR SPOT WELD TIES TO STEELWORK. IF SHOT FIX ENDURE NAILS WILL BE CONCEALED.

- UB9. BUILDER IS TO PROVIDE TEMPORARY PROPPING TO WALLS WHERE REQUIRED FOR STABILITY DURING CONSTRUCTION.

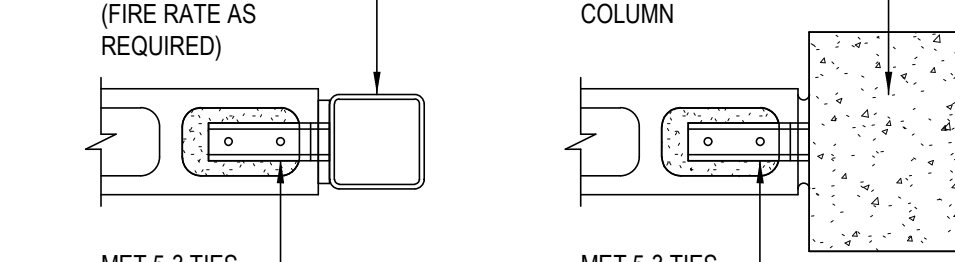
- UB10. TYPICAL INTERSECTION DETAILS

- UB11. ALL BLOCK PERPENDS ARE TO BE GROUT FILLED. (REFER REINFORCED BLOCKWORK NOTE FOR GROUT SPECIFICATION)

- UB12. FILL JOINTS WITH FLEXIBLE FOAM SLIGHTLY OVERSIZED. DO NOT USE BITUMEN IMPREGNATED FIBREBOARD TYPICAL.

- UB13. SEAL JOINT WITH APPROVED MASTIC SEALANT RECESSED 25mm FROM FACE OF WALL - SEALANT IS TO HAVE SAME FRL REQUIREMENT OF THE WALL.

- UB14. WALL TIES SHALL COMPLY WITH AS2699



- UB15. NON-LOADBEARING WALLS AT SLAB SOFFITS.

- UB16. LEAVE 20mm GAP TO SLAB SOFFIT, PROVIDE M.E.T. 4 HEAD RESTRAINT TIES AT MIN 800 CENTRES, FIXED TO SLAB SOFFIT WITH 2 x 0.33 RAMSEY PINS.

- UB17. LOAD BEARING WALLS AT SLAB SOFFITS.

- UB18. SLIP JOINTS TO BE USED ON ALL LOAD-BEARING MASONRY WALLS. USE TWO LAYERS OF GALVANISED FLAT STEEL WITH GRAPHITE GREASE BETWEEN.

- UB19. REFER TO ARCHITECTURAL DRAWINGS FOR FRL REQUIREMENTS OF MASONRY WALLS - ADDITIONAL CORE FILLING MAY BE REQUIRED TO ACHIEVE THE REQUIRED FRL.

- UB20. REFER TO TYPICAL DETAILS FOR BOND BEAM LINTELS.

- UB21. MASONRY WALLS MUST NOT BE CONSTRUCTED ON SUSPENDED CONCRETE UNTIL ALL TEMPORARY SUPPORTS ARE REMOVED AND ALL MASONRY TO BE LAID HAS BEEN STACKED ADJACENT TO PROPOSED POSITION.

## ANCHOR BOLTS

- AB1. ANCHOR BOLT MATERIAL TO BE GRADE 250 TO AS3678 U.N.O.

- AB2. ALL ANCHOR BOLTS SHALL HAVE MIN ONE FLAT WASHER AND ONE NUT U.N.O.

- AB3. ALL CHEMICAL ANCHOR BOLTS SHALL BE M20 RASTEP, HILTI OR APPROVED EQUIVALENT, U.N.O.

- AB4. ALL ANCHOR BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION.

- AB5. RESIN GROUTING OF ANCHOR BOLTS ARE ANCHOR DOWEL BARS INTO PREFORMED/DRILLED HOLES SHALL BE CARRIED OUT AS DIRECTED BY THE ENGINEER (USUALLY 100mm DAY INTERVALS MAXIMUM TIMES). IF THE ANCHOR CANNOT BE SHOWN TO BE ABLE TO MAINTAIN THE DESIGN LOAD WITHOUT LOSS OF PRESTRESS, IT WILL BE REJECTED AND A REPLACEMENT ANCHOR INSTALLED AT THE CONTRACTOR'S COST.

- AB6. ALL ANCHOR BOLTS SHALL BE INSTALLED WITH EXPANDED POLYSTYRENE BLOCKOUTS.

- AB7. WIDTH = 3 x BOLT DIAMETER

- AB8. LENGTH = 7 x BOLT DIAMETER

## RETAINING WALL - REINFORCED CONCRETE BLOCKWORK

- RW1. ALL WORKMANSHIP SHALL COMPLY WITH AS 4679 AND AS 3700.
- RW2. RETAINING WALL FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE AS NOTED ON DRAWINGS. THIS FOUNDATION MATERIAL SHALL BE UNIFORM AND BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF ANY FOOTING REINFORCEMENT.

- RW3. REFER TO "REINFORCED CONCRETE BLOCKWORK" NOTES FOR ADDITIONAL SPECIFICATIONS.

- RW4. TEMPORARY BATTERS TO BE AS PER GEOTECHNICAL ENGINEERS REPORTS.

- RW5. PROVIDE CLEAN-OUT BLOCKS AT THE BASE OF EACH POUR LIFT. REINFORCED CORES SHALL BE CLEANED OF MORTAR PROTRUSIONS BEFORE GROUTING.

- RW6. HORIZONTAL REINFORCEMENT IN WALLS IS TO BE SPLICED 60% AS REQUIRED.

- RW7. REFER TO TYPICAL DETAILS FOR FOOTING STEPS, INTERSECTION / CORNER DETAILS, AND VERTICAL CONTROL JOINT DETAILS.

- RW8. COVER TO REINFORCEMENT IN BLOCK RETAINING WALLS SHALL BE MAINTAINED BY THE USE OF PLASTIC "BLOCKPAD" REINFORCEMENT LOCATION BRACKETS (OR APPROVED EQUIVALENT) AT THE INTERSECTION OF ALL HORIZONTAL AND VERTICAL REINFORCEMENT.

- RW9. ALL CORES ARE TO BE FULLY GROUTED. GROUT SHALL BE IN ACCORDANCE WITH AS 3600 AND COMPLY WITH THE FOLLOWING -

CHARACTERISTIC STRENGTH  $f_{ck}$  = 20 MPa AT 28 DAYS.

MAXIMUM AGGREGATE SIZE = 10 mm.

SLUMP = 230 mm.

- RW10. PROVIDE WATERPROOFING MEMBRANE AND CERTIFICATION OF MEMBRANE IS TO BE PROVIDED BY WATERPROOFING SPECIALIST.

- RW11. RETAINING WALLS ARE DESIGNED BASED ON THE ASSUMPTION THAT A FUNCTIONING DRAINAGE SYSTEM IS EFFECTIVE IN REMOVING HYDRAULIC PRESSURE. PROVIDE CONTINUOUS OG GRANS BEHIND THE ENTIRE EXTENT OF THE RETAINING WALL. THE DRAINAGE SYSTEM IS TO BE DESIGNED FOR LONG TERM PERFORMANCE EQUAL TO THAT OF THE DESIGN LIFE OF THE WALL. THE DESIGN AND DOCUMENTATION OF THIS SYSTEM IS BY OTHERS AND IS TO INCLUDE DETAILS OF EFFLUX POINTS FOR THE DRAINAGE AND ACCESS / MAINTENANCE POINTS.

- RW12. BACKFILL BEHIND THE WALL IS TO BE CLASSIFIED AS FREE DRAINING GRANULAR MATERIAL. FREE DRAINING GRANULAR MATERIAL SHALL BE A NON-COHESIVE WELL GRADED GRANULAR MATERIAL COMPRISING SOUND STONE PARTICLES WHICH DO NOT BREAK DOWN UNDER COMPACTION, WETTING OR EXPOSURE TO AIR. THE MATERIAL PROPERTIES SHALL COMPLY WITH THOSE SPECIFIED IN TABLE BELOW.

PROPERTY	LIMIT	VALUE
STONE SIZE	MAXIMUM	20 mm
% PASSING 0.15 mm SIEVE	MAXIMUM	5
PLASTICITY INDEX	MAXIMUM	8

- RW13. PROVIDE GEOTEXTILE SEPARATION LAYER BETWEEN FREE DRAINING GRANULAR MATERIAL AND RETAINED FILL MATERIAL.

- RW14. COMPACTION OF BACKFILL BEHIND WALLS - COMPACTION SHALL BE BY MECHANICAL PLATE VIBRATOR TO A MINIMUM OF 100% STANDARD COMPACTION. BACKFILLING IS NOT TO TAKE PLACE







FOOTINGS ASSOCIATED WITH FIRE SERVICE AND BULK OXYGEN STORAGE TANKS SHOWN INDICATIVELY ONLY FOR COSTING PURPOSES (ONLY). ALL ASSOCIATED FOUNDATIONS ARE SUBJECT TO DETAILED DESIGN FOLLOWING RECEIPT / CONFIRMATION OF ASSOCIATED LOADING AND DETAILING REQUIREMENTS.

PROPERTY BOUNDARY

NOTES:  
MEMBER SCHEDULES REFER TO DRAWING S0011.

A circular symbol with a horizontal line. The top half contains the text 'X5' and the bottom half contains the text 'S0082'. A black triangle points to the left from the center of the circle.

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

## KEY PLAN

[illegible]

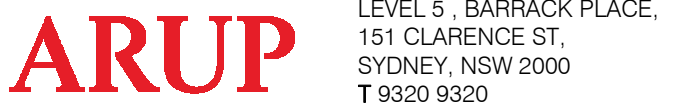
CLIENT



PROJECT MANAGER



## SERVICES



STRUCTURE &amp; CIVIL



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

COWRA HOSPITAL  
REDEVELOPMENT  
64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE  
SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	As indicated	24.11.22

DESCRIPTION  
FOOTING PLAN - ZONE 1

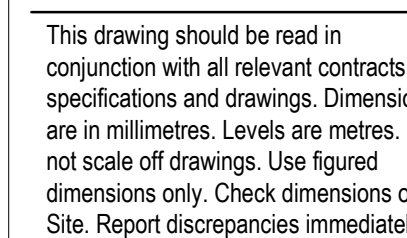
PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0011	1

DATE PRINTED: 19/12/2022 5:15:08 PM









This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on site. Report discrepancies immediately.

NOTE



### KEY PLAN

## LEGEND

220 DENOTES 220 THICK SLAB ON GROUND

 STEP DENOTES STEP IN SLAB, REFER TO ARCHITECTS DRAWINGS FOR VALUE

S.J. DENOTES SAWN JOINT. REFER DETAIL.

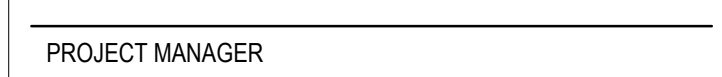
D.J. DENOTES DOWEL JOINT. REFER DETAIL

NOTES:

- REFER TO DRAWINGS S0001 FOR ALL STRUCTURAL GENERAL NOTES.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL CONCRETE SETOUT INFORMATION.
- ALL FALLS, SETDOWNS & WATERPROOFING ARE TO ARCHITECTS DETAILS U.N.O.
- UNLESS NOTED OTHERWISE ALL WET AREA SETDOWNS ARE TO BE A MINIMUM =50mm
- NON STRUCTURAL KERBS AND HOBS ARE NOT SHOWN. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT AND LOCATIONS.
- VERTICAL JOINTS IN WALLS ARE TO MATCH SLAB JOINT LOCATIONS.

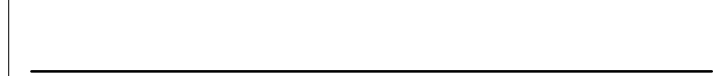
CLIENT \_\_\_\_\_

CLIENT

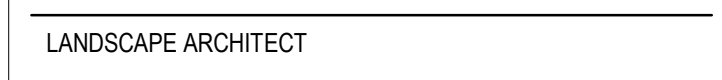


PROJECT MANAGER

## SERVICES



STRUCTURE &amp; CIVIL



LANDSCAPE ARCHITECT

ARCHITECT



PROJECT

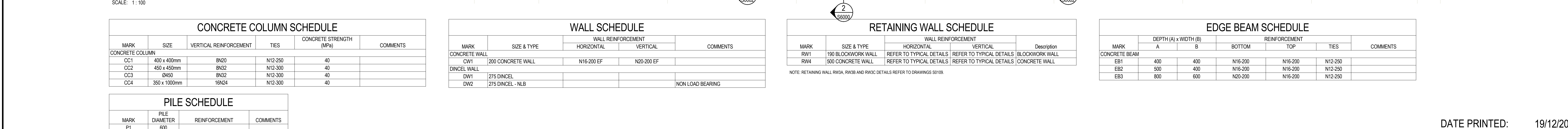
**COWRA HOSPITAL  
REDEVELOPMENT**  
64 LIVERPOOL STREET  
COWRA, NSW. 2794

## PHASE SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	As indicated	24.11.22

DESCRIPTION  
GROUND FLOOR PLAN - ZONE 1

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0021	1



GROUND FLOOR PLAN - ZONE 1

SCALE: 1:10M

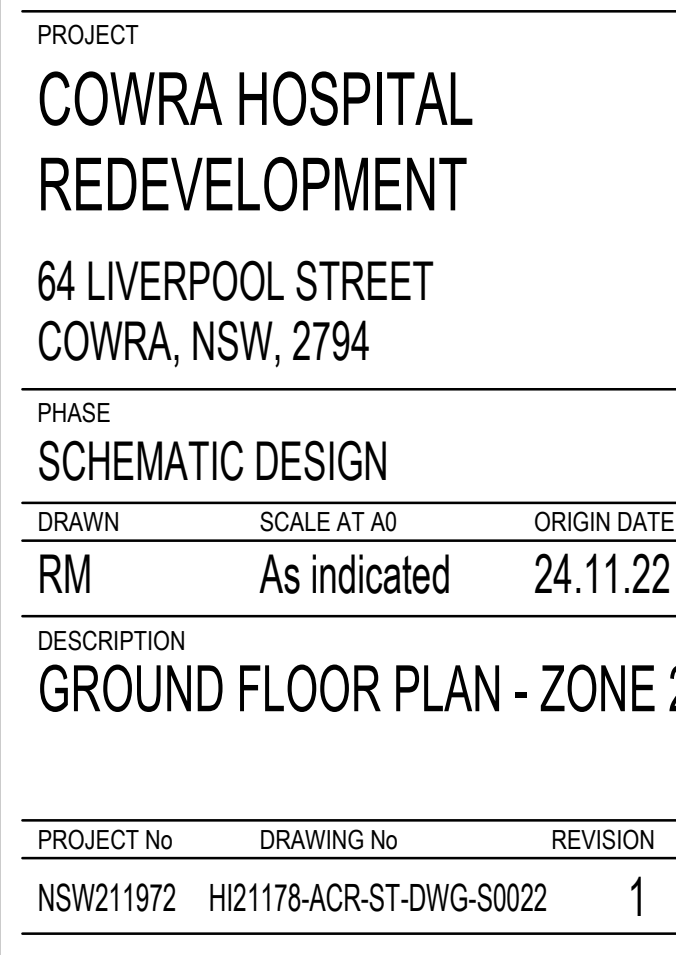
CC4	350 x 1000mm	10x24	1412-300	40	

[illegible]

DW2	275 DMCCEL - NLB			NON LOAD BEARING
-----	------------------	--	--	------------------

DATE PRINTED: 19/12/2022 4:53:18 PM





DATE PRINTED: 19/12/2022 4:53:30 PM

















STEEL FRAMING SCHEDULE			
MARK		SIZE	COMMENTS
STEEL BEAM			
SB1		360UB56.7	
SB2		310UB40.4	
SB4		200UB23.5	
SB5		380PFC	
SB6		200PFC	
SB7		200x200x10.0SHS	
STEEL BRACING			
BR1		Ø24mm BAR	TURNBUCKLE
VB2		Ø24mm BAR	TURNBUCKLE
VB3		101 6x5 DCHS	
STEEL PURLIN			
PUL1		215Z19	1200 CTS. MAX. SPACING WITH 2 ROWS OF BRIDGING
STEEL RAFTER			
R1		310UB40.4	
R2		250PFC	
R3		360UB56.7	
STEEL STRUT			
ST1		150x150x6.0SHS	
ST2		100x100x6.0SHS	

NOTE:  
EXTERNAL WALL STUDS - ALLOW 150mm LIGHT GAUGE  
WINDOW HEADS - ALLOW 150x100x6 RHS  
ADDITIONAL STEELWORK NOT SHOWN - ALLOW 7 kg/m<sup>2</sup>

ISSUE	DATE	SUBJECT	
5	19.12.22	SCHEMATIC DESIGN	AJ
4	18.11.22	SCHEMATIC DESIGN - PRELIMINARY	RM
3	07.09.22	ISSUE FOR REVIEW	RM
2	19.07.22	ISSUE FOR REVIEW	RM
1	23.06.22	ISSUE FOR REVIEW	RM

CLIENT



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**OP**

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Daniel Beekwilder 6192

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PROJECT

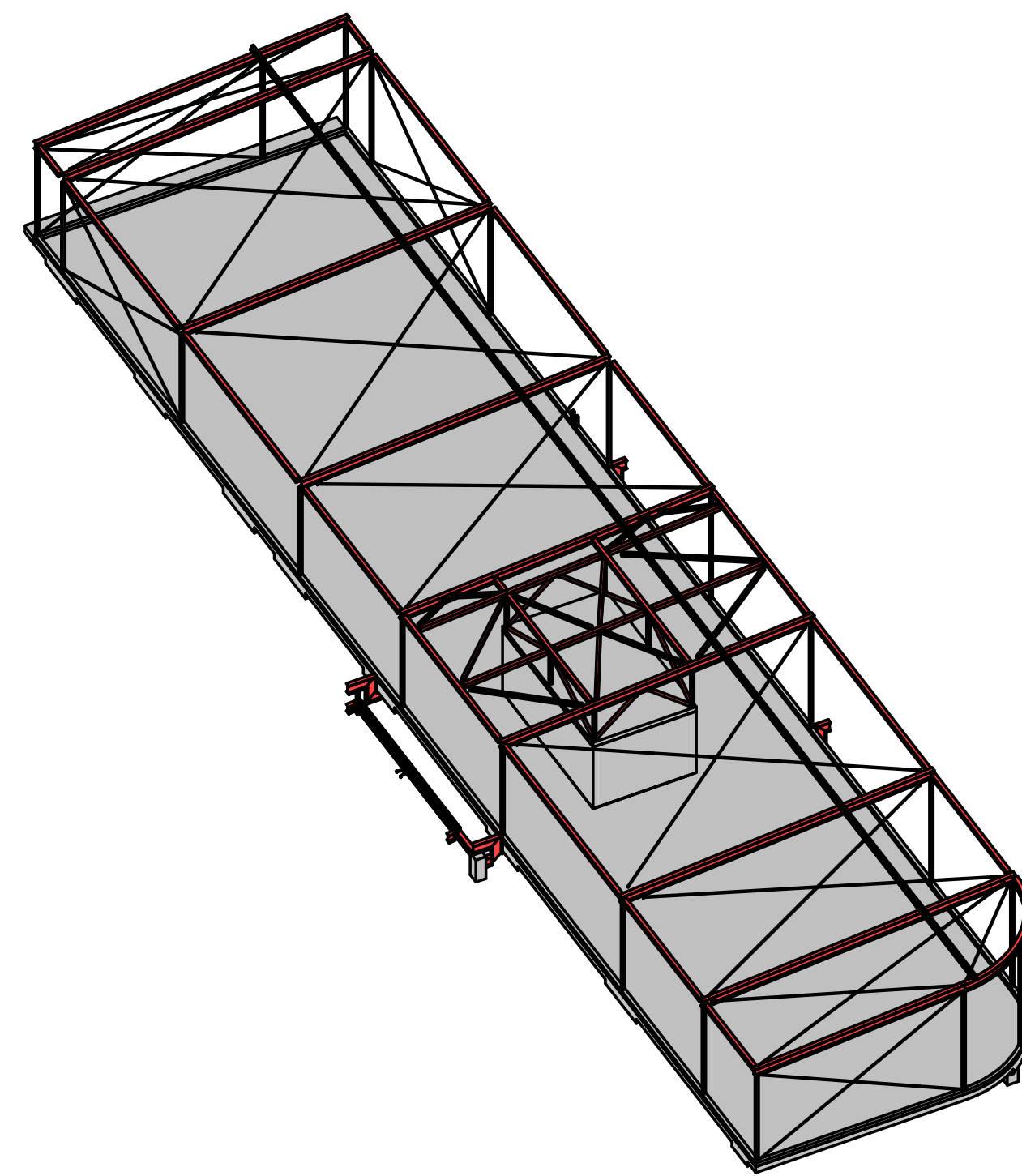
**COWRA HOSPITAL  
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64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE  
SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 100	23.06.22

DESCRIPTION  
PLANT ROOM ROOF FRAMING  
PLAN

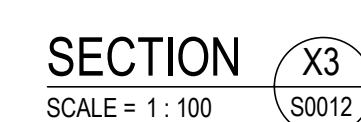
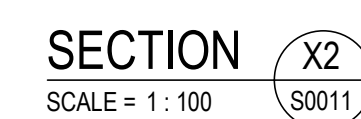
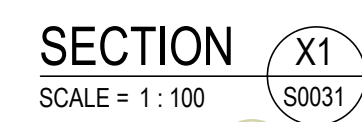
PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0050	5



AXONOMETRIC VIEW  
SCALE:



## NOTES



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PROJECT

**COWRA HOSPITAL  
REDEVELOPMENT**

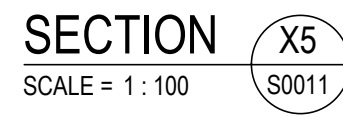
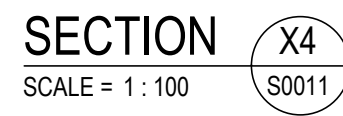
64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE		
SCHEMATIC DESIGN		
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 100	17.11.22
DESCRIPTION		
BUILDING SECTIONS - SHEET 1		

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0081	2



## NOTES



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## SERVICES

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LANDSCAPE ARCHITECT

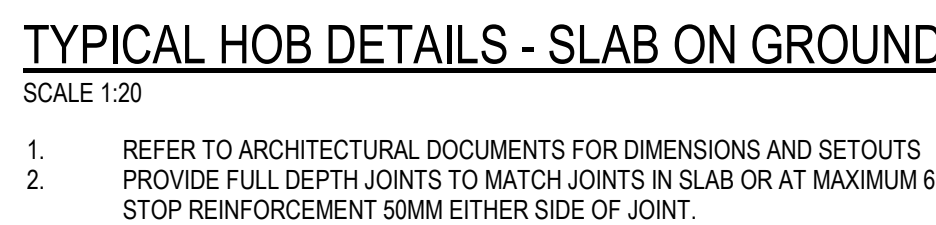
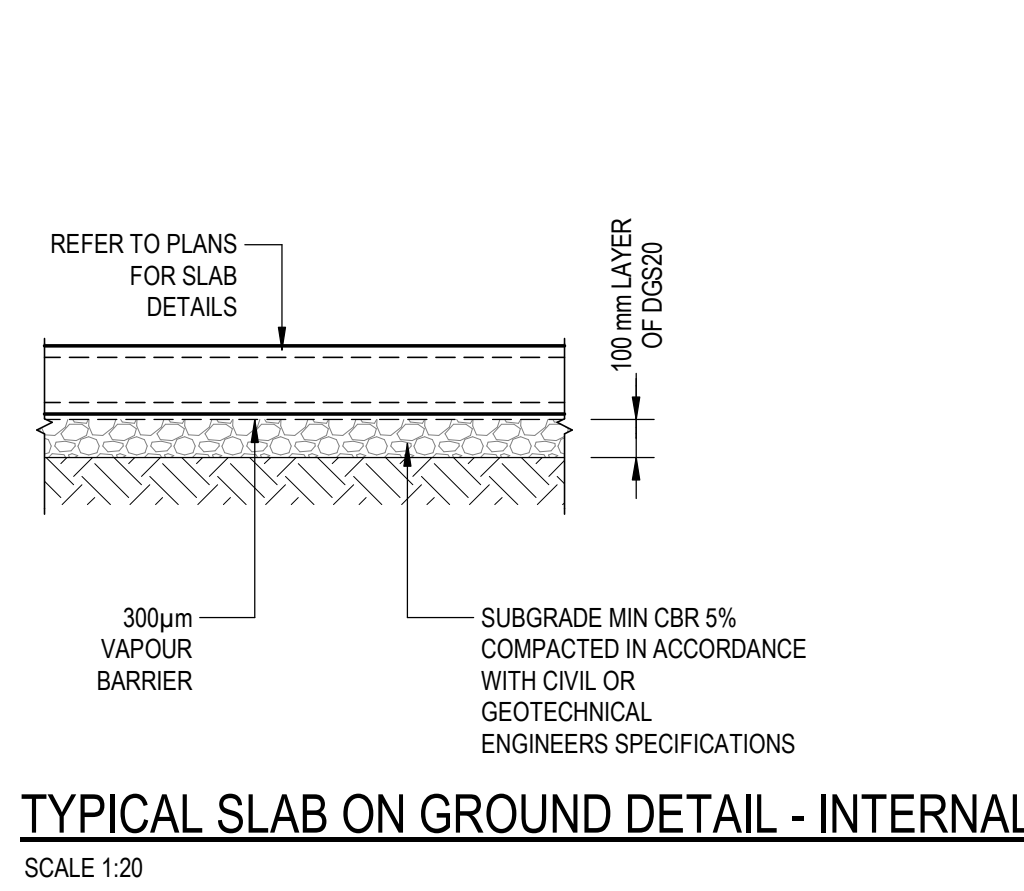
ARCHITECT

PHASE  
SCHEMATIC DESIGN

DESCRIPTION  
BUILDING SECTIONS - SHEET 2

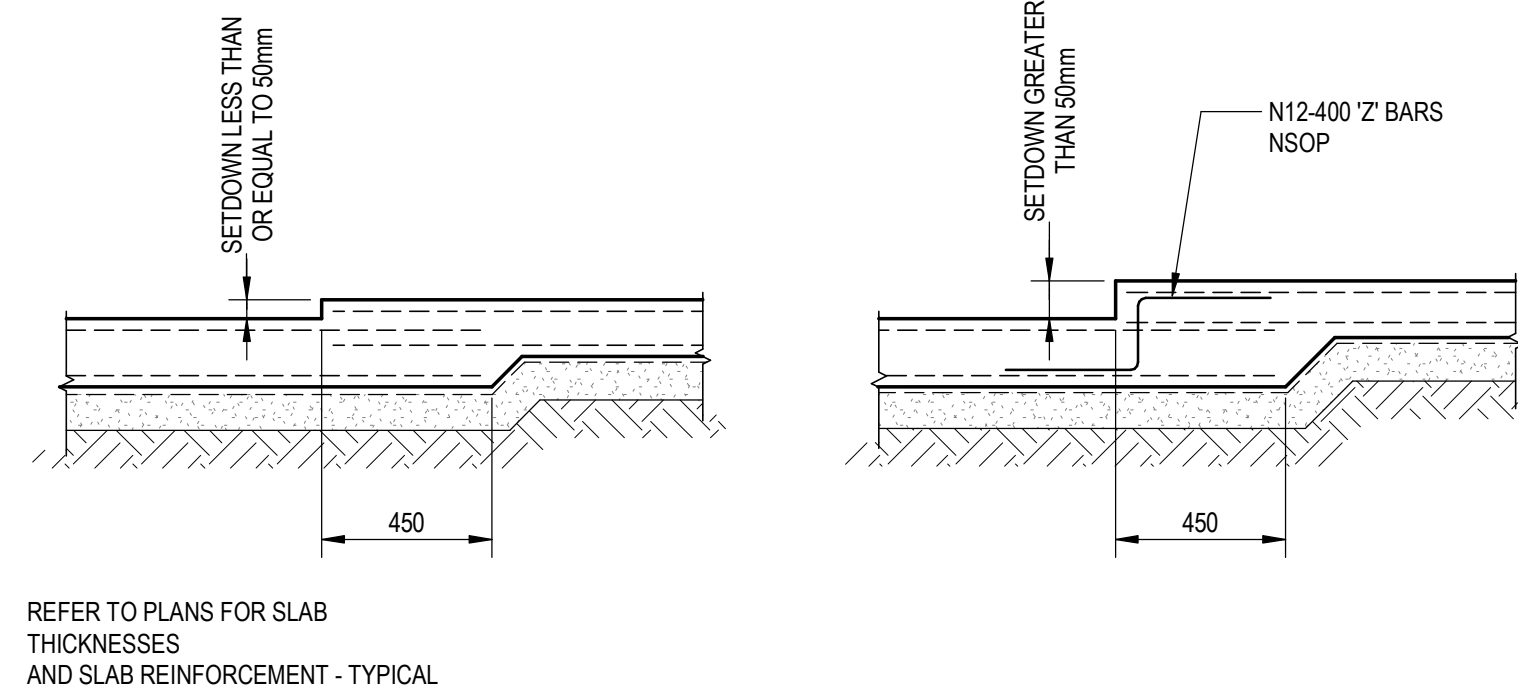
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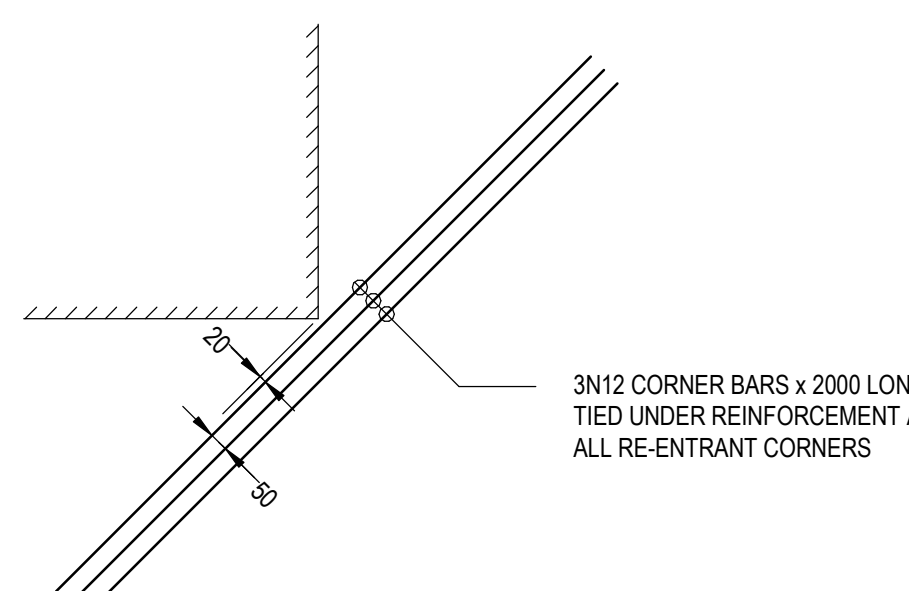
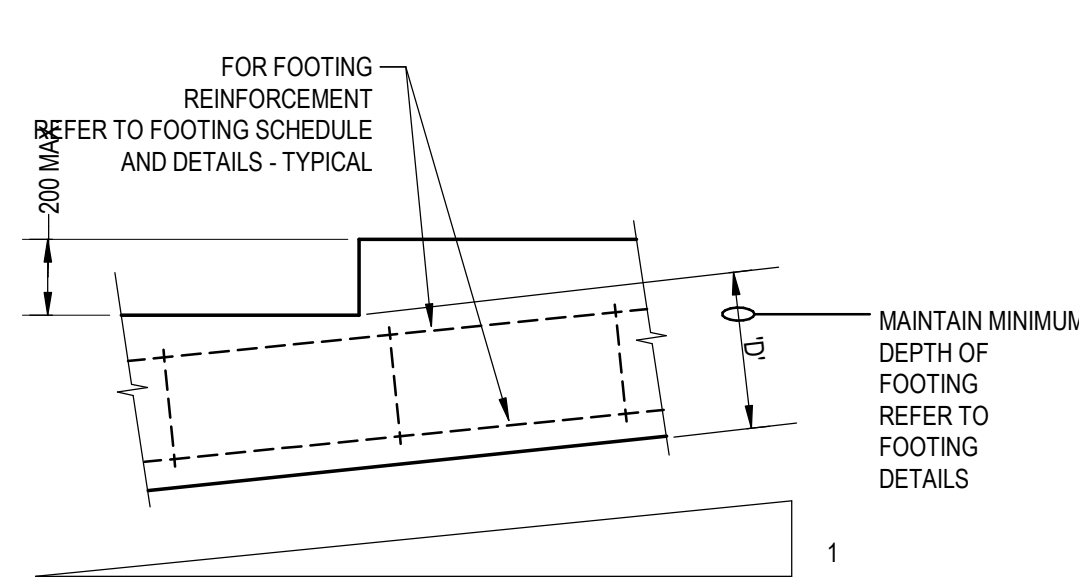


**DIAGRAMMATIC PAD FOOTING (PF) DETAIL - SECTION VIEW**

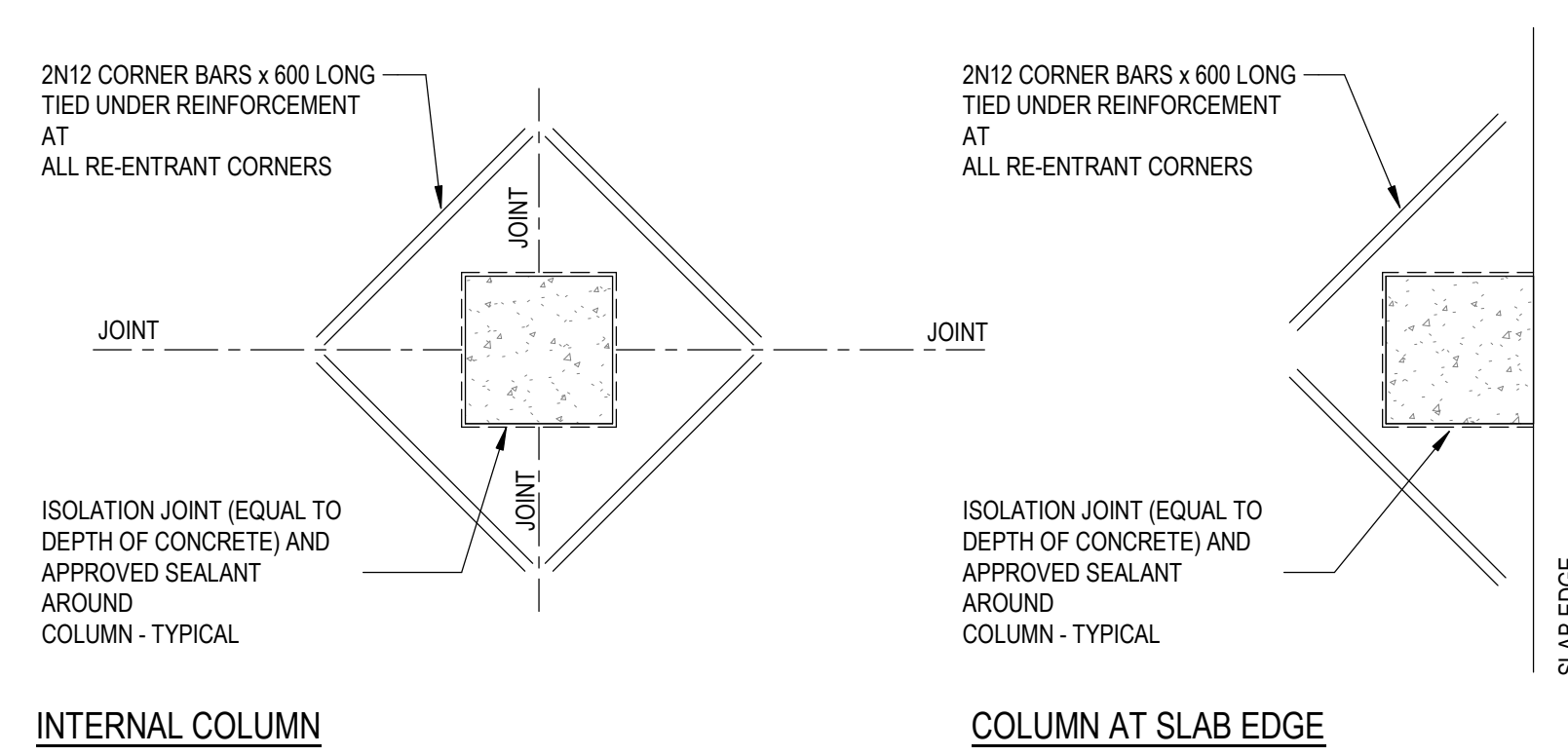
- 
- Figure 10.10 illustrates the reinforcement details for three types of beam connections: CORNER, T-INTERSECTION, and INTERSECTION. The diagrams show the placement of reinforcement bars (main bars, lap bars, and corner bars) and the required lap lengths (40 BAR DIA. LAP).
- CORNER:** Shows a corner joint where two beams meet. The reinforcement detail includes 40 BAR DIA. LAP L-BARS TO MATCH MAIN BEAM BARS TOP & BOTTOM. A note specifies: CORNER BAR TO MATCH MAIN BEAM BARS TOP & BOTTOM, 40 BAR DIA. LAP.
  - T-INTERSECTION:** Shows a T-junction where a beam crosses another. The reinforcement detail includes 40 BAR DIA. LAP L-BARS TO MATCH MAIN BEAM BARS TOP & BOTTOM. A note specifies: WHERE CENTRAL BAR IS REQUIRED PROVIDE L-BARS TO MATCH BEAM BARS TOP & BOTTOM 40 BAR DIA. LAP TYPICAL.
  - INTERSECTION:** Shows a full intersection of two beams. The reinforcement detail includes 40 BAR DIA. LAP. BARS TO MATCH MAIN BEAM BARS TOP & BOTTOM. A note specifies: FOOTING BEAM BARS, REFER TO ELEVATION OR SCHEDULE FOR DETAILS.



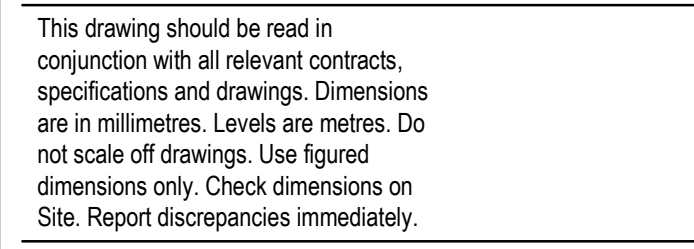
## FOOTING STEP FOR ABRUPT SLOPES



## FOOTING BEAM STEP



## TYPICAL RE-ENTRANT BARS AT COLUMNS

[illegible]

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Health  
Infrastructure

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PROJECT

COWRA HOSPITAL  
REDEVELOPMENT

64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE		
SCHEMATIC DESIGN		
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1:20	17.11.22
DESCRIPTION		
TYPICAL FOUNDATION AND SLAB DETAILS		

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0100	2





NOTES:

1. REFER TO LIFT MANUFACTURER AND ARCHITECT FOR ALL LIFT PIT DIMENSIONS AND SETOUT.
2. REFER TO LIFT MANUFACTURER FOR LIFT PIT SUMP LOCATIONS AND DIMENSIONS
3. REFER TO THE ARCHITECT SPECIFICATION FOR ALL LIFT PIT WATERPROOFING DETAIL AND REQUIREMENTS INCLUDING MEMBRANES ETC
4. CONCRETE MIX FOR LIFT BASE AND WALLS TO HAVE XYPEX ADMISTURE C-10000NF OR CALTIT. REFER TO ARCH SPEC.
- ALL CONSTRUCTION JOINTS BELOW GROUND LEVEL TO HAVE CONTINUOUS HYDOPHYLIC WATERSTOPS TYPE KUNISAL C-31.

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

[illegible]

**CLIENT**



PROJECT MANAGER



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Daniel Beekwilder 61

PROJECT

COWRA HOSPITAL  
REDEVELOPMENT

64 LIVERPOOL STREET  
COWRA, NSW, 2794

## PHASE

## SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 20	17.11.22

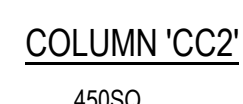
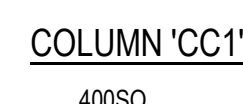
DESCRIPTION

## TYPICAL LIFT CORE DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0101	2

DATE PRINTED: 19/12/2022 4:55:02 PM





### COLUMN REINFORCEMENT AND TIE ARRANGEMENT DETAILS

REFER TO ASSOCIATED STRUCTURAL FLOOR PLANS FOR COLUMN GRADE, REINFORCEMENT SIZE AND TIE SPACING

---

NOTES

[illegible]

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PROJECT MANAGER



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## SERVICES



LEVEL 5, BARRACK PLACE,  
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---

STRUCTURE & CML



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LANDSCAPE ARCHITECT



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djrd.com.au

PROJECT

COWRA HOSPITAL  
REDEVELOPMENT

64 LIVERPOOL STREET  
COWRA, NSW, 2794

## PHASE

## SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 20	17.11.22

DESCRIPTION  
TYPICAL CONCRETE COLUMN  
DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0102	2







### TYPICAL DOOR OPENING REINFORCEMENT

OR CHOOSE ONE AND DELETE OTHER

**TYPICAL DOOR OPENING REINFORCEMENT**  
SCALE 1:20

**PLAN-DOUBLE REINFORCEMENT**  
SCALE 1:20

PLAN-SINGLE REINFORCEMENT  
SCALE 1:20

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

[illegible]

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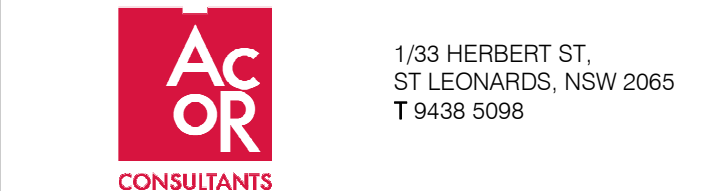


## SERVICES



---

STRUCTURE & CML



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

COWRA HOSPITAL  
REDEVELOPMENT

64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE

## SCHEMATIC DESIGN

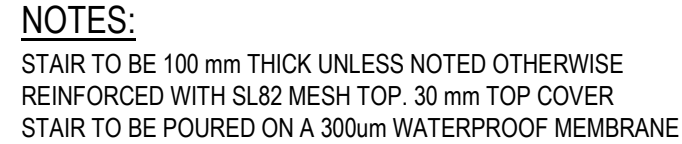
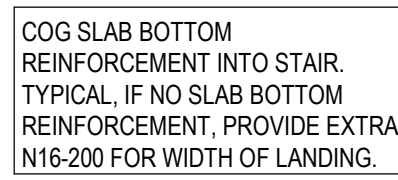
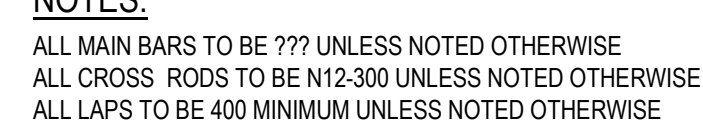
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1:20	17.11.22

DESCRIPTION  
TYPICAL CONCRETE WALL  
DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0104	2

DATE PRINTED: 19/12/2022 4:55:17 PM





STAIR KEY	
THROAT THICKNESS "T"	REFER ENGINEER
LANDING THICKNESS "L"	REFER ENGINEER
"S" BAR	N16-200
"L1" LAP	450
"L2" LAP	750

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

[illegible]

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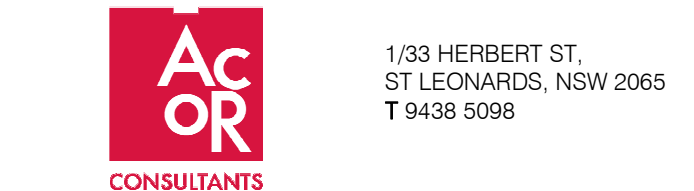
PROJECT MANAGER



## SERVICES



STRUCTURE &amp; CIVIL



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

# COWRA HOSPITAL REDEVELOPMENT

64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE

## SCHEMATIC DESIGN

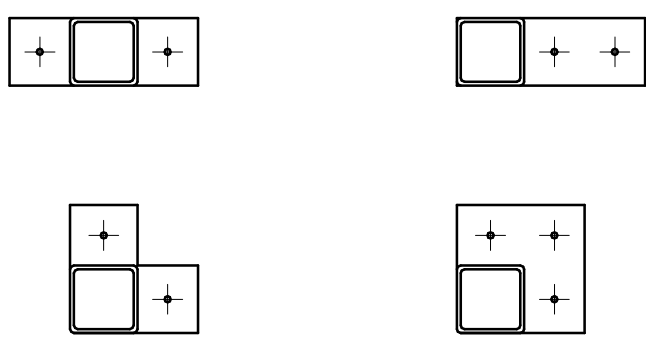
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 20	17.11.22

DESCRIPTION  
TYPICAL CONCRETE STAIR  
DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0105	2

DATE PRINTED: 19/12/2022 4:55:21 PM



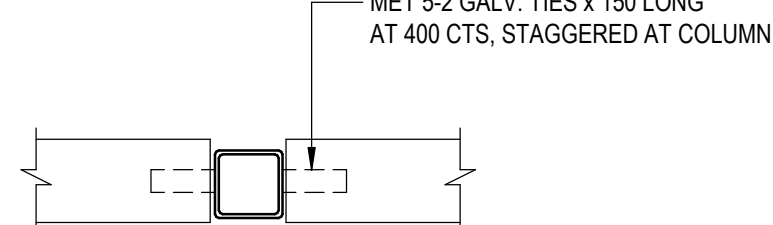


TYPICAL BASE PLATE DETAILS

SCALE 1:10

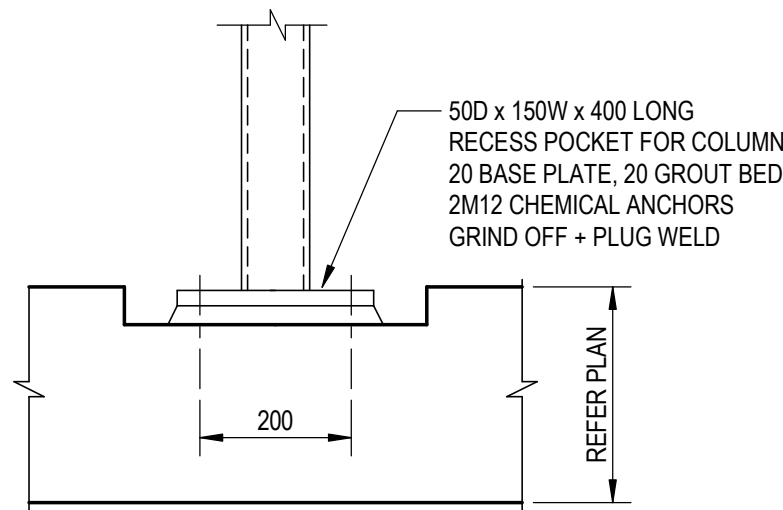
NOTE:  
ALL BASE PLATES ARE TO BE 10mm THICK U.N.O.  
OVERLAYING A 20mm BED OF NON-SHRINK GROUT.

ALL BOLTS ARE TO BE M16 MAXIMA SPIN CAPSULES  
125mm MINIMUM EMBEDMENT U.N.O



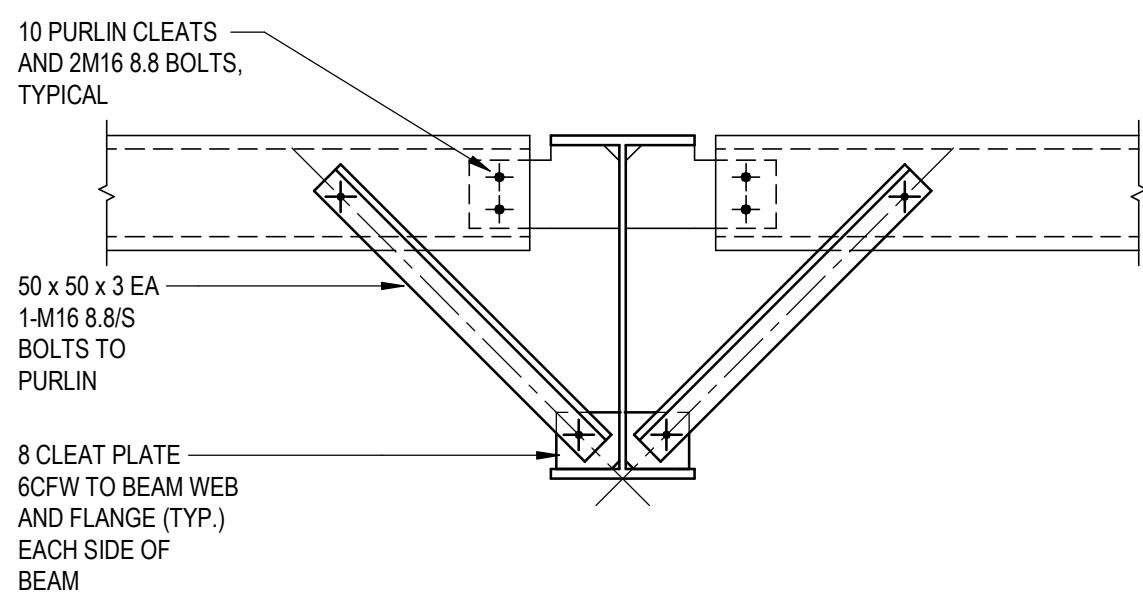
TYPICAL SHS TO BRICKWORK DETAIL

SCALE 1:10



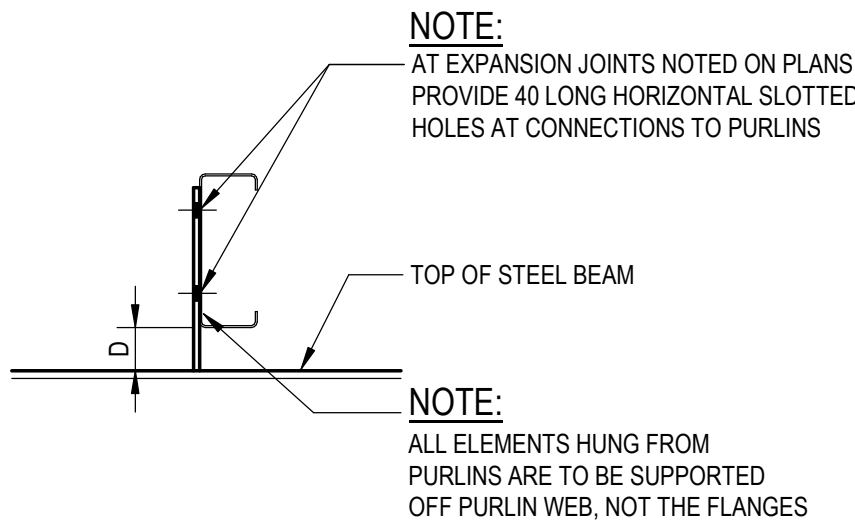
TYPICAL COLUMN RECESS DETAIL

SCALE 1:10



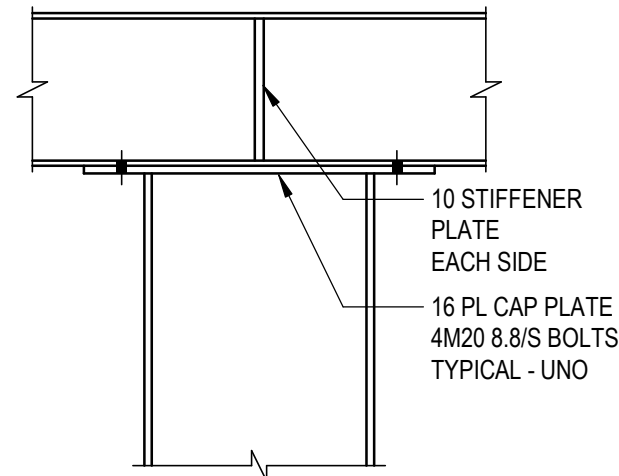
TYPICAL FLY-BRACE DETAIL TO BEAM (FB)

SCALE 1:10



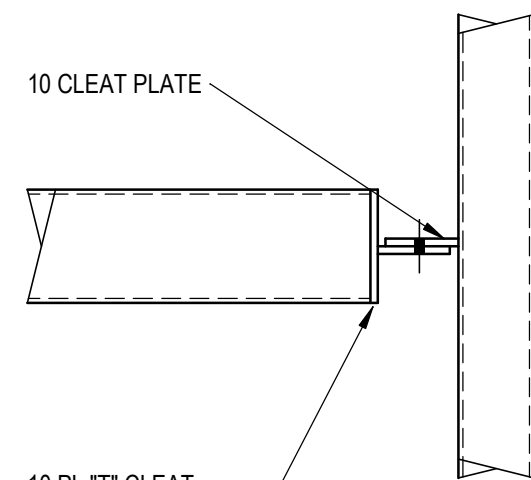
TYPICAL 'C' PURLIN CLEAT DETAIL

SCALE 1:10



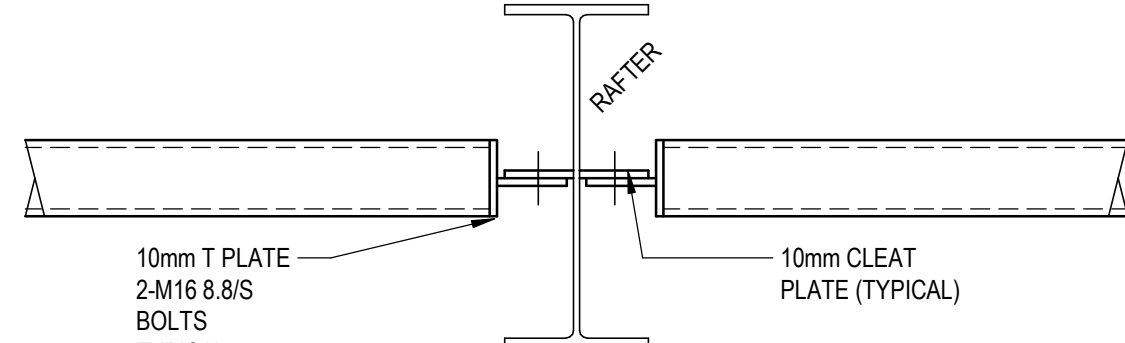
TYPICAL COLUMN CAP PLATE DETAIL

SCALE 1:10



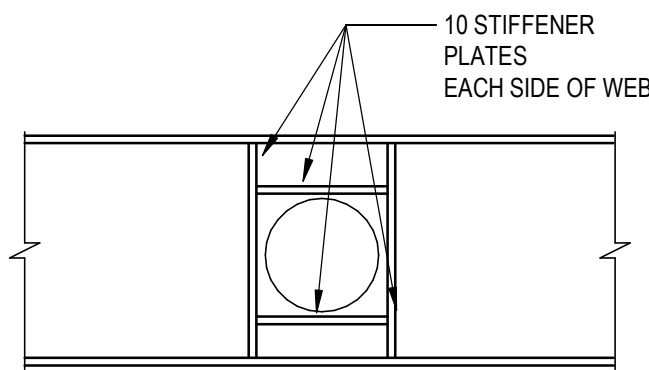
TYPICAL  
RHS, CHS, SHS BEAM  
END CONNECTION

SCALE 1:10



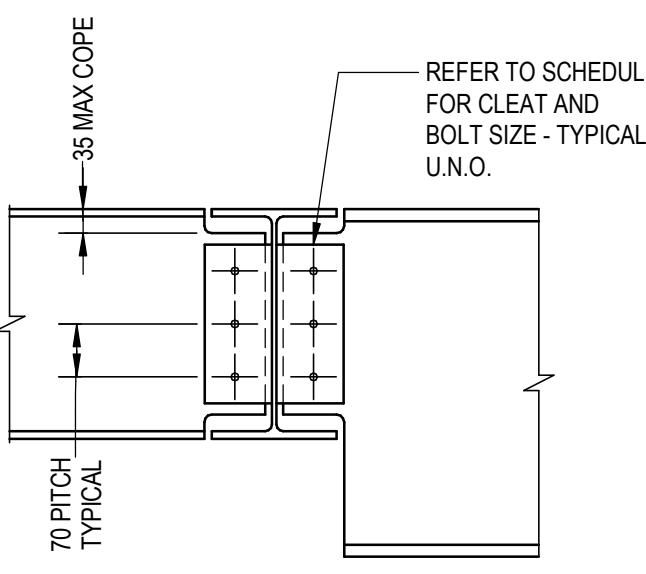
TYPICAL RHS/CHS/SHS BEAM TO RAFTER DETAIL

SCALE 1:10

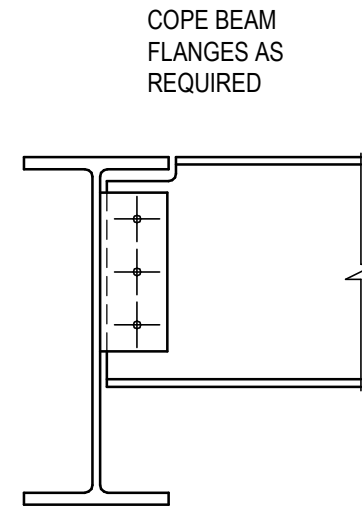


TYPICAL PENETRATION THROUGH BEAM  
DETAIL

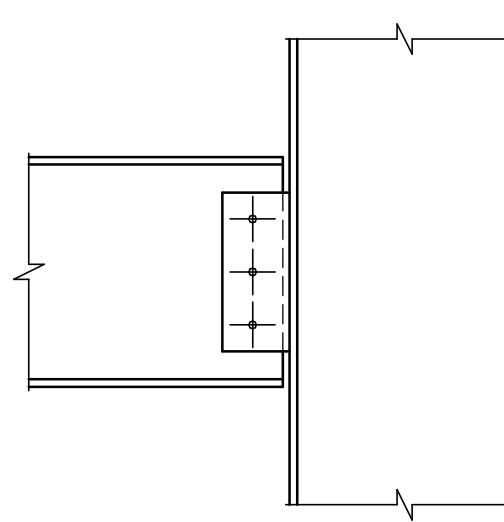
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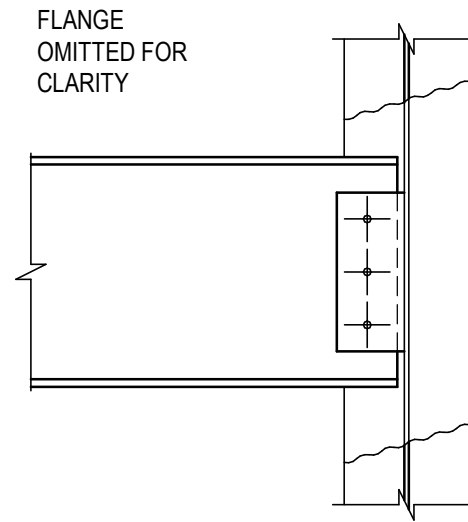
BEAM TO BEAM DETAIL



BEAM TO BEAM DETAIL



BEAM TO BEAM  
COLUMN

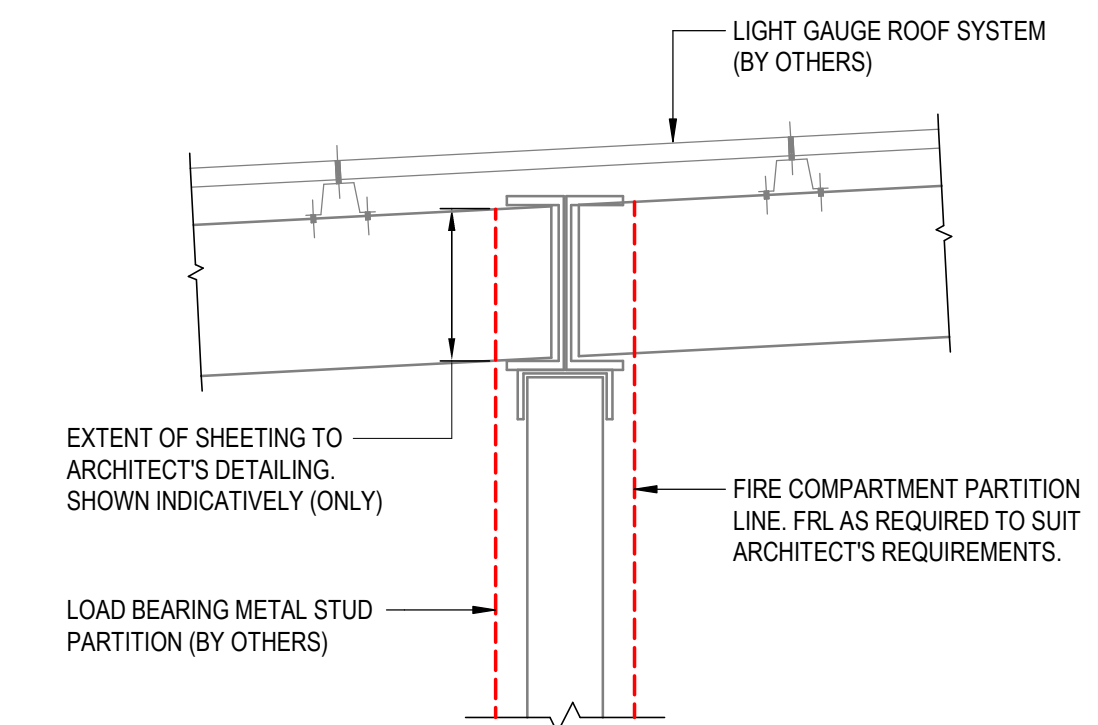


BEAM TO BEAM  
COLUMN

WEB CLEAT SCHEDULE			
BEAM SIZE	CONNECTION ULTIMATE SHEAR CAP.	WEB CLEAT	BOLTS
180UB OR 180 PFC	50 kN	10 PLATE	2M20 8.8'S
200UB/UC OR 200 PFC / 230 PFC	60 kN	10 PLATE	2M20 8.8'S
250UB/UC OR 250 PFC	85 kN	10 PLATE	2M20 8.8'S
310UB/UC OR 300 PFC	140 kN	10 PLATE	3M20 8.8'S
360UB OR 360 PFC	175 kN	10 PLATE	3M20 8.8'S
410UB	260 kN	10 PLATE	4M20 8.8'S
460UB	260 kN	10 PLATE	4M20 8.8'S
530UB	360 kN	10 PLATE	5M20 8.8'S
610UB	440 kN	12 PLATE	6M20 8.8'S
700WB	700 kN	16 PLATE	6M24 8.8'S

MINIMUM WEB CLEAT CONNECTION DETAILS  
U.N.O.

SCALE 1:10



TYPICAL LOAD BEARING STUD PARTITION TO ROOF DETAIL

SCALE 1:10

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimeters. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

NOTES

ISSUE	DATE	SUBJECT
2	19.12.22	SCHEMATIC DESIGN
1	18.11.22	SCHEMATIC DESIGN - PRELIMINARY

CLIENT



PROJECT MANAGER



SERVICES



STRUCTURE & CIVIL



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

COWRA HOSPITAL  
REDEVELOPMENT  
64 LIVERPOOL STREET  
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PHASE

SCHEMATIC DESIGN

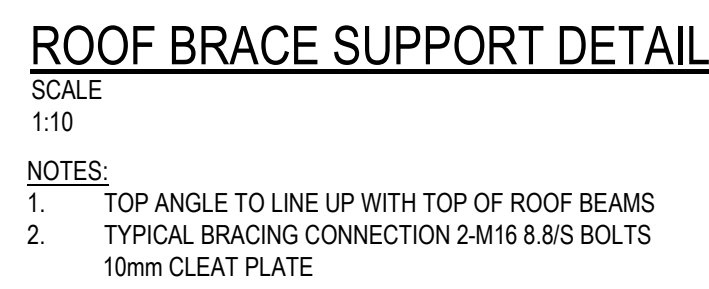
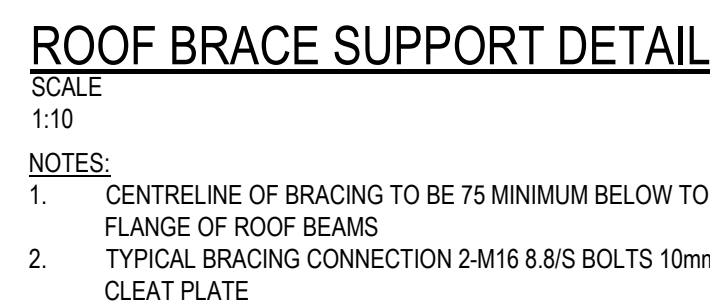
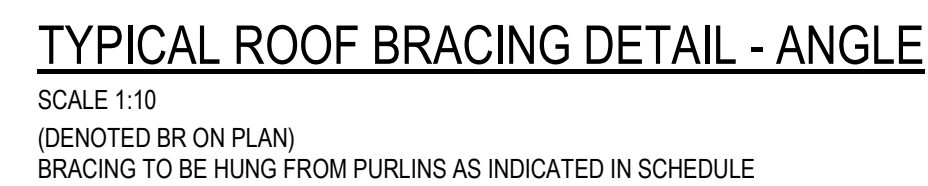
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1:10	17.11.22

DESCRIPTION  
TYPICAL STEELWORK DETAILS -  
SHEET 1

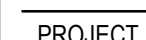
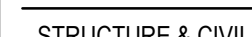
PROJECT No	DRAWING No	REVISION
NSW211972	H121178-ACR-ST-DWG-S0106	2



## NOTES



CLIENT



## PHASE SCHEMATIC DESIGN

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0107	2





III

H2

[illegible]

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**AcOR**  
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T 9438 5098

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**djrd**  
architects

T + 612 9319 2955  
ABN: 48 942 921 969  
Nominated Architects:  
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Daniel Beekwilder 6192

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**COWRA HOSPITAL  
REDEVELOPMENT**  
64 LIVERPOOL STREET  
COWRA, NSW, 2794

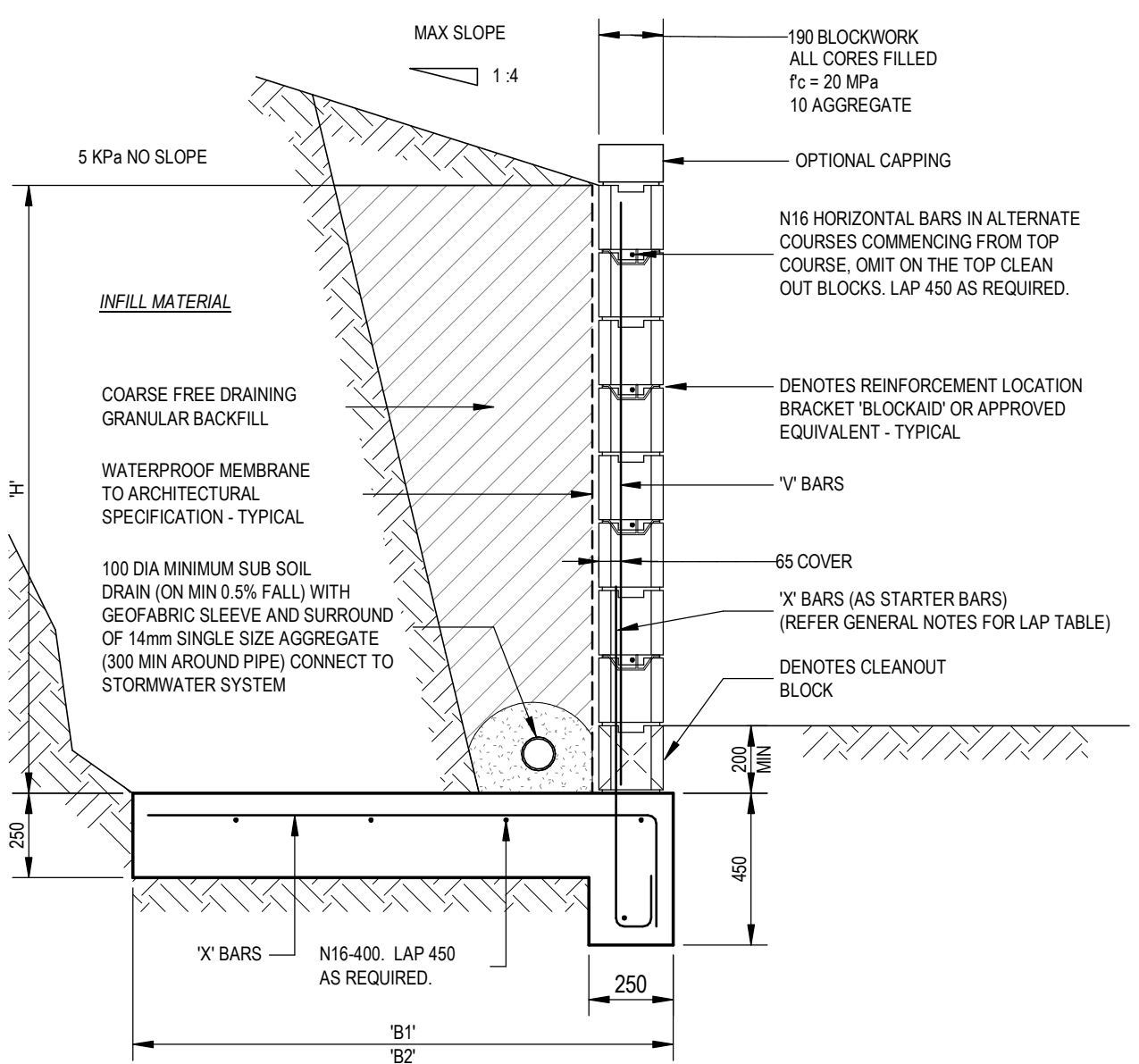
DRAWN	SCALE AT A0	ORIGIN DATE
RM	1 : 20	17.11.22

DESCRIPTION  
TYPICAL SHORING DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0109	2

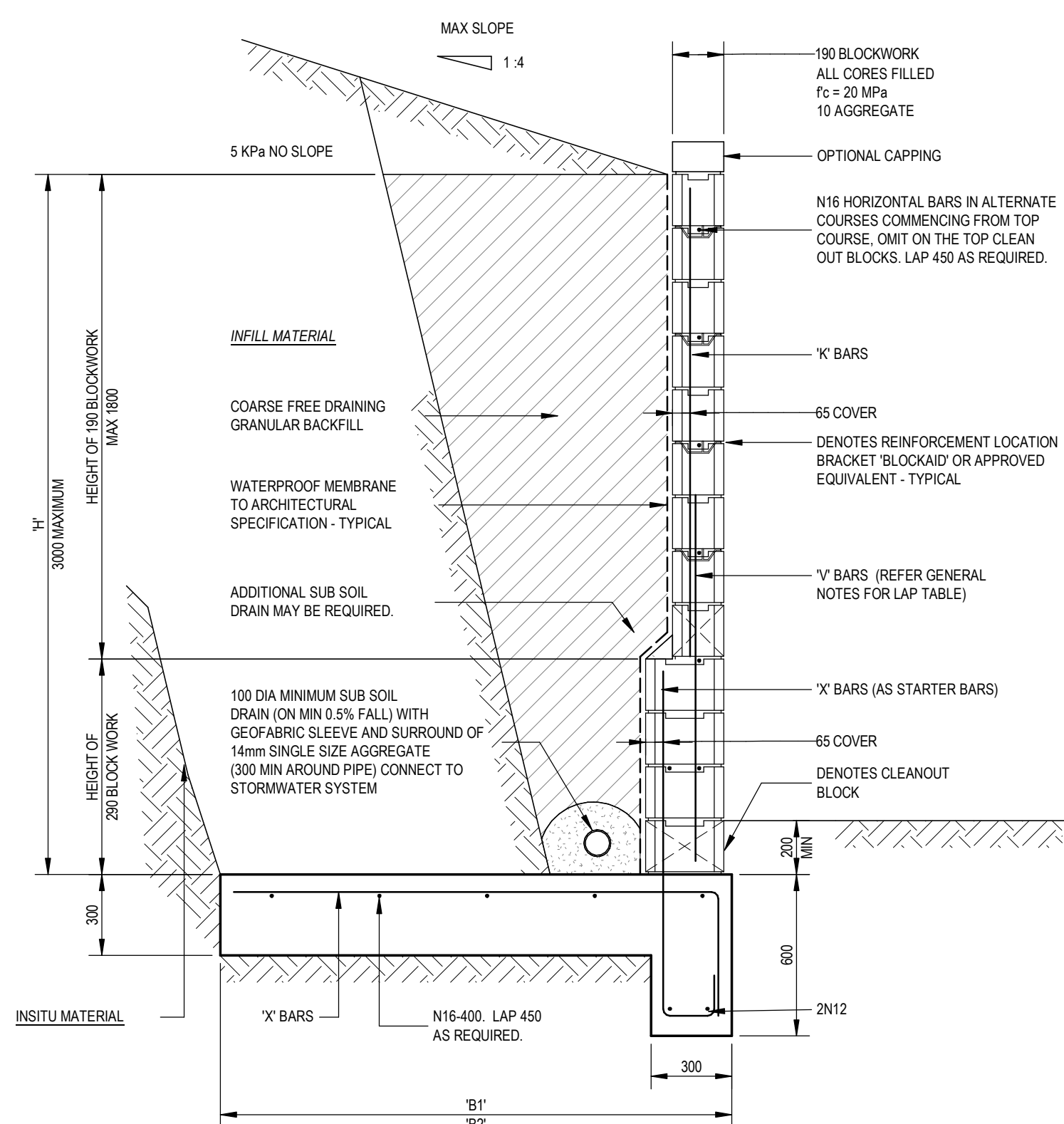


PROPERTIES AND COMPOSITION OF THE IN-SITU MATERIAL, RETAINED MATERIAL AND INFILL MATERIAL IS TO BE INSPECTED / CONFIRMED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION OF ANY RETAINING WALLS.

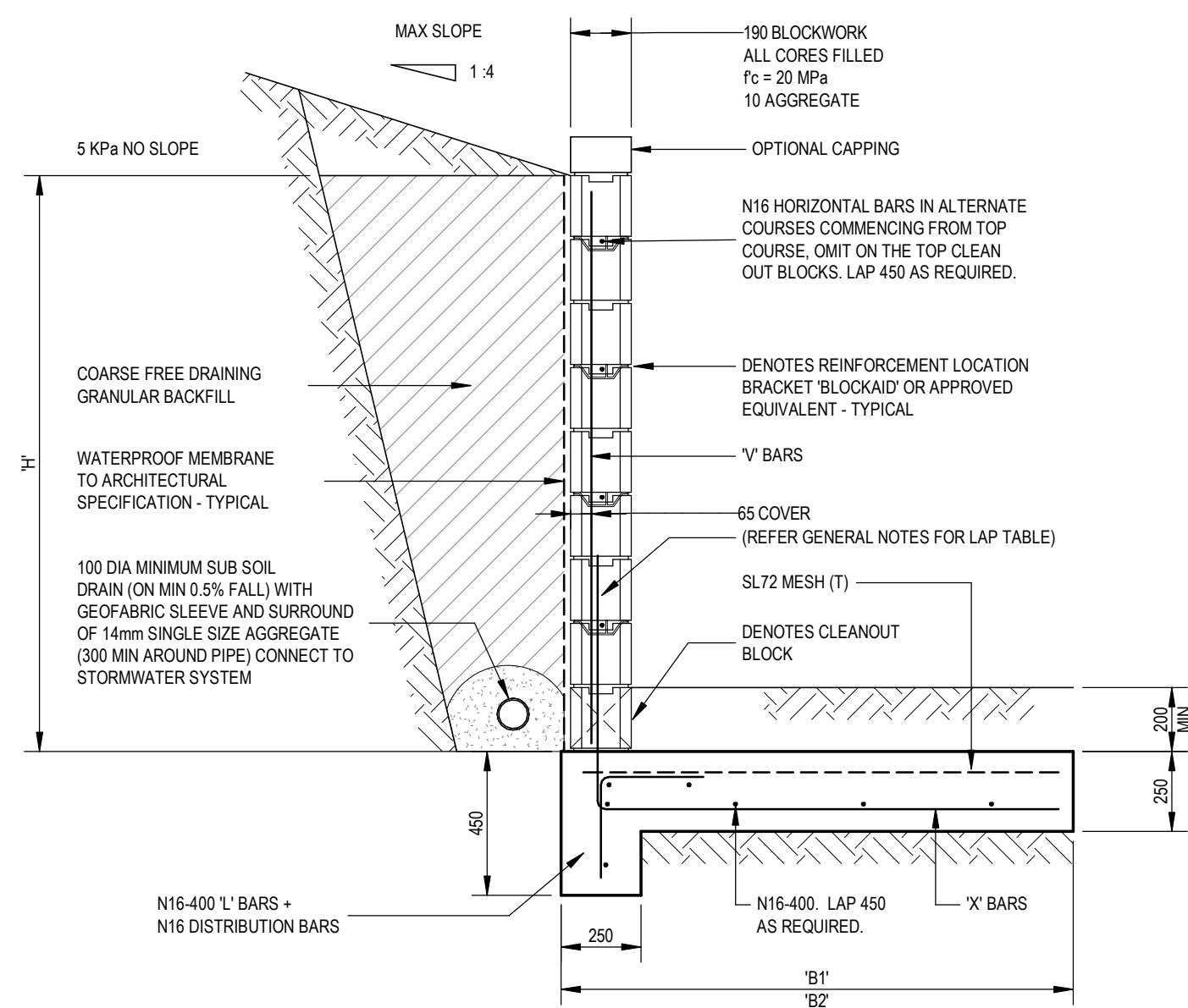


**NOTES:**  
FOOTING FOUNDED ON NATURAL GROUND - MIN 150 KPa BEARING  
CONTROL JOINTS AT 8000 MAXIMUM CENTRES  
FOOTING CONCRETE STRENGTH  $f_c = 25\text{MPa}$   
BLOCK WALLS TO BE ADEQUATELY PROPPED DURING BACKFILL AND COMPACTION  
REFER TO RETAINING WALL AND REINFORCED BLOCKWORK GENERAL NOTES

RETAINING WALL SCHEDULE						
WALL HEIGHT	BACKFILL CONDITION AT TOP OF WALL				REINFORCEMENT	
	5 KPa NO SLOPE		MAX 1:4 SLOPE			
	BASE WIDTH					
1"	'B1'	'B2'		"X" BARS	"Y" BARS	
800	800	700		N16-400	N12-400	
1000	900	800		N16-400	N12-400	
1200	1000	1000		N16-400	N16-400	
1400	1100	1200		N16-400	N16-400	
1600	1200	1400		N16-400	N16-400	
1800	1400	1600		N16-200	N16-400	

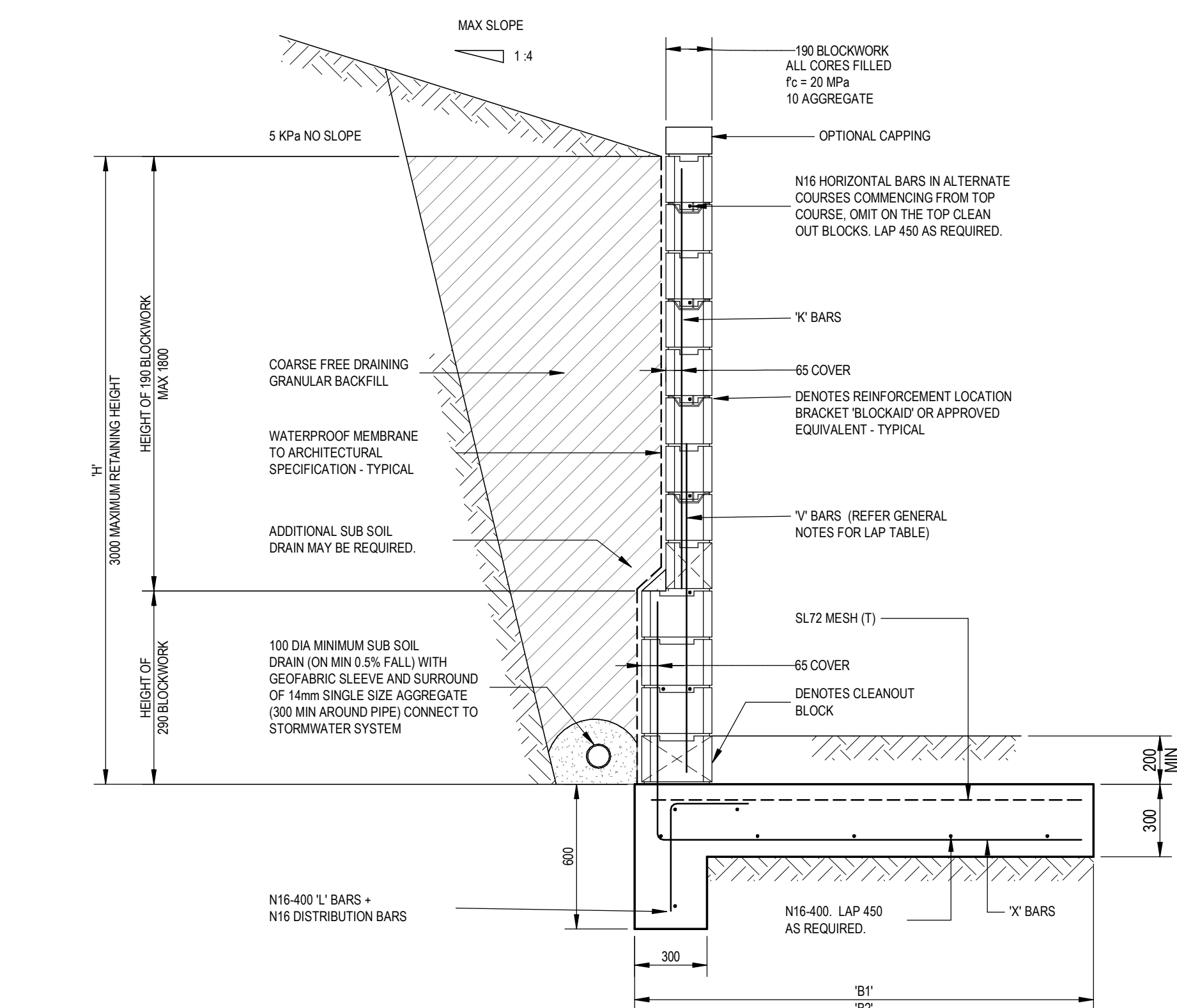


**NOTES:**  
FOOTING FOUNDED ON NATURAL GROUND - MIN 150 kPa BEARING  
CONTROL JOINTS AT 8000 MAXIMUM CENTRES  
FOOTING CONCRETE STRENGTH  $f_c = 25\text{MPa}$   
BLOCK WALLS TO BE ADEQUATELY PROPPED DURING BACKFILL AND COMPACTION  
REFER TO RETAINING WALL AND REINFORCED BLOCKWORK GENERAL NOTES

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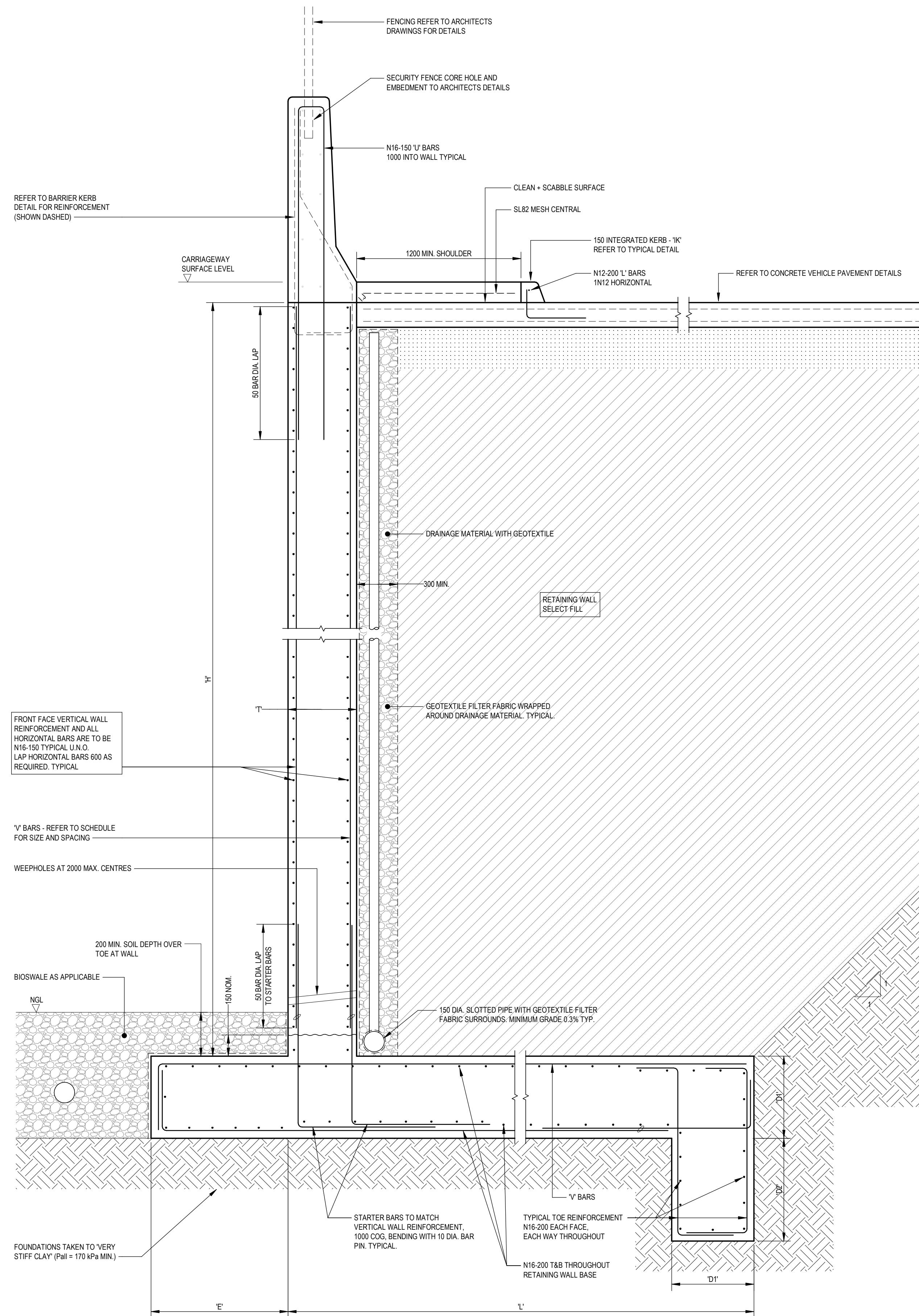
**NOTES:**  
FOOTING FOUNDED ON NATURAL GROUND - MIN 150 kPa BEARING  
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FOOTING CONCRETE STRENGTH  $f_c = 25\text{MPa}$   
BLOCK WALLS TO BE ADEQUATELY PROPPED DURING BACKFILL AND COMPACTION  
REFER TO RETAINING WALL AND REINFORCED BLOCKWORK GENERAL NOTES

RETAINING WALL SCHEDULE					
WALL HEIGHT	BACKFILL CONDITION AT TOP OF WALL			REINFORCEMENT	
	5 KPa NO SLOPE		MAX 14 SLOPE		
	BASE WIDTH				
"H"	"B1"	"B2"		"X" BARS	"Y" BARS
800	700	650		N16-400	N12-400
1000	850	800		N16-400	N12-400
1200	1050	900		N16-400	N16-400
1400	1150	1000		N16-400	N16-400
1600	1350	1200		N16-400	N16-400



**NOTES:**  
FOOTING FOUNDED ON NATURAL GROUND - MIN 150 kPa BEARING  
CONTROL JOINTS AT 8000 MAXIMUM CENTRES  
FOOTING CONCRETE STRENGTH  $f_c = 25\text{MPa}$   
BLOCK WALLS TO BE ADEQUATELY PROPPED DURING BACKFILL AND COMPACTION  
REFER TO RETAINING WALL AND REINFORCED BLOCKWORK GENERAL NOTES

RETAINING WALL SCHEDULE							
WALL HEIGHT	BACKFILL CONDITION AT TOP OF WALL						
	5 kPa NO SLOPE		MAX 1:4 SLOPE				
	BASE WIDTH		HEIGHT OF BLOCKWORK		REINFORCEMENT		
"H"	B1"	B2"	200 BLOCK	190 BLOCK	"X BARS	"Y BARS	"K BARS
1800	1550	1300	0	1800	N16-200	N16-400	N16-400
2200	1750	1600	800	1400	N16-200	N16-400	N16-400
2600	2150	2000	1000	1600	N16-200	N16-400	N16-400
3000	3200	3000	1200	1800	N20-200	N16-400	N16-400



**NOTES:**  
RETAINING WALL SHALL BE FOUND ON GROUND WITH ALLOWABLE BEARING CAPACITY OF 20 tps OR BETTER I.E.BY GEOTECHNICAL ENGINEER.  
DOWELED JOINTS TO BE  
IN FOOTING AT LESSER OF 3x HEIGHT AND 16m. OR WHERE FOOTING TRANSITIONS FROM CLAY TO ROCK.  
IN FOOTING AT 40m MAX. CENTRES  
WHERE ALLOWABLE BEARING IS INSUFFICIENT. FOOTINGS SHALL BE EXCAVATED UNTIL THE REQUIRED FOUNDATION IS REACHED AND CONFIRMED BY  
GEOTECHNICAL ENGINEER. OVER EXCAVATION SHALL BE BACKFILLED WITH HIS CONCRETE.  
INSTALLATION OF BACKFILL FOR SUCH FOUNDATION SHALL BE REGENERATED TO REQUIREMENTS OF THE BACKFILL SPECIFICATION.  
ALL EXPOSED FACES OF CONCRETE RETAINING WALLS TO HAVE CLASS 2 SURFACE FINISH IN ACCORDANCE WITH AS 3610 U.N.O.  
REFER TO XXX FOR BACKFILL SPECIFICATION

RETAINING WALL SCHEDULE							
WALL HEIGHT	MIN. WALL THICKNESS	BASE WIDTH	BASE EXTENSION LENGTH	MIN. BASE DEPTH	TOE DEPTH	REINFORCEMENT	COMMENT
'H'	'T'	'L'	'E'	'D1'	'D2'	'V' BARS	
4001-5500	500	3400	1000	600	750	N24-100	PERIMETER RETAINING WALL

## NOTES

[illegible]

CLIENT



PROJECT MANAGER



## SERVICES



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SYDNEY, NSW 2000  
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STRUCTURE &amp; CMI



LANDSCAPE ARCHITECT



ARCHITECT



PROJECT

**COWRA HOSPITAL  
REDEVELOPMENT**  
64 LIVERPOOL STREET  
COWRA, NSW, 2794

PHASE  
SCHEMATIC DESIGN

DRAWN	SCALE AT A0	ORIGIN DATE
RM	1:20	17.11.22

### DESCRIPTION

## TYPICAL RETAINING WALL DETAILS

PROJECT No	DRAWING No	REVISION
NSW211972	HI21178-ACR-ST-DWG-S0110	2

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