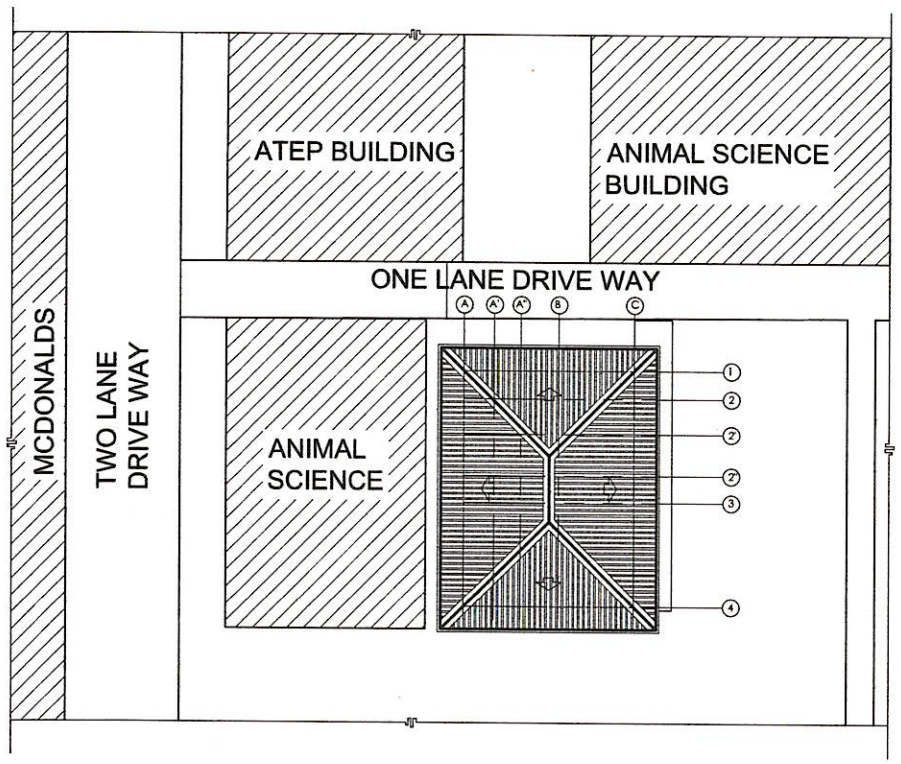
A1 / 01-01 PERSPECTIVE

SCALE NTS



A1 / 01-01 SITE DEVELOPMENT PLAN

SCALE 1:400 MTS

A1 / 01-01 VICINITY MAP

SCALE NTS

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REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL

LA TRINIDAD, BENGUET
DISTRICT/CITY/MUNICIPALITY

LAND USE AND ZONING

LINE AND GRADE

ARCHITECTURAL

CIVIL / STRUCTURAL

ELECTRICAL

MECHANICAL

SANITARY

PLUMBING

ELECTRONICS

GEODETIC ENGINEER

HAZELINE N. TIBANGAY
UNIVERSITY ARCHITECT

PRC LIC. No. 028540	VALIDITY:	PRC LIC. No.	VALIDITY:
PTR No.	ISSUED:	PTR No.	ISSUED:

CAD BY: ERGD-SEPTEMBER 2023

PROPOSED OPEN UNIVERSITY BUILDING PHASE 1
BSU,KM.5 BSU COMPOUND
LA TRINIDAD, BENGUET
PROJECT / LOCATION

BENGUET STATE UNIVERSITY · 1916 ·

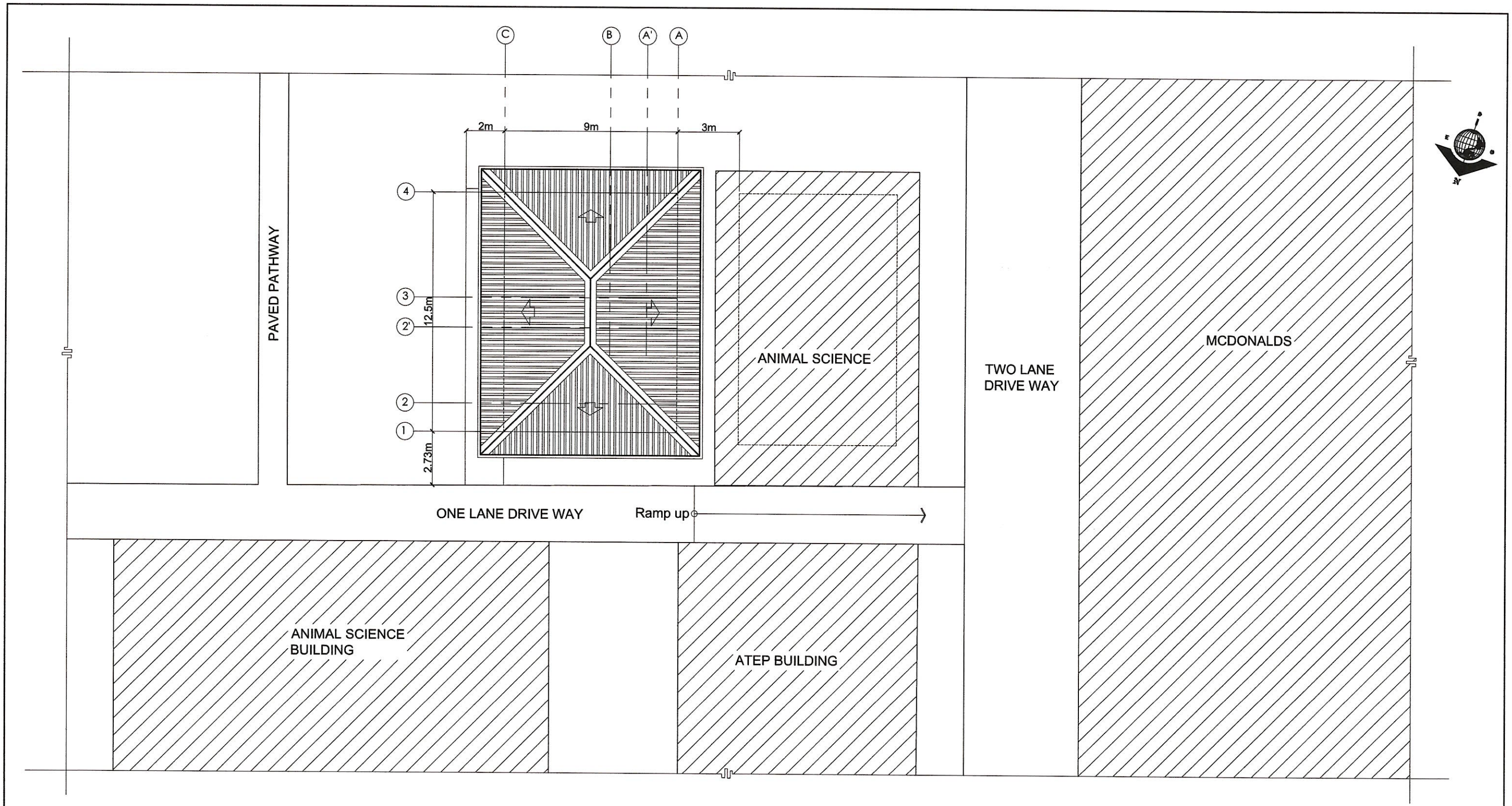
BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET
OWNER

LEONARDO T. APILIS
END USER/ BSU OPEN UNIVERSITY DIRECTOR

ALLAN CASALDO SACPA
VICE PRESIDENT- ADMINISTRATION AND FINANCE

FELIPE SALAING COMILA
PRESIDENT

SHEET CONTENT	SHEET NO.
AS SHOWN	A
REVISION DATE:	01 | 10'
REVISION NO.:	

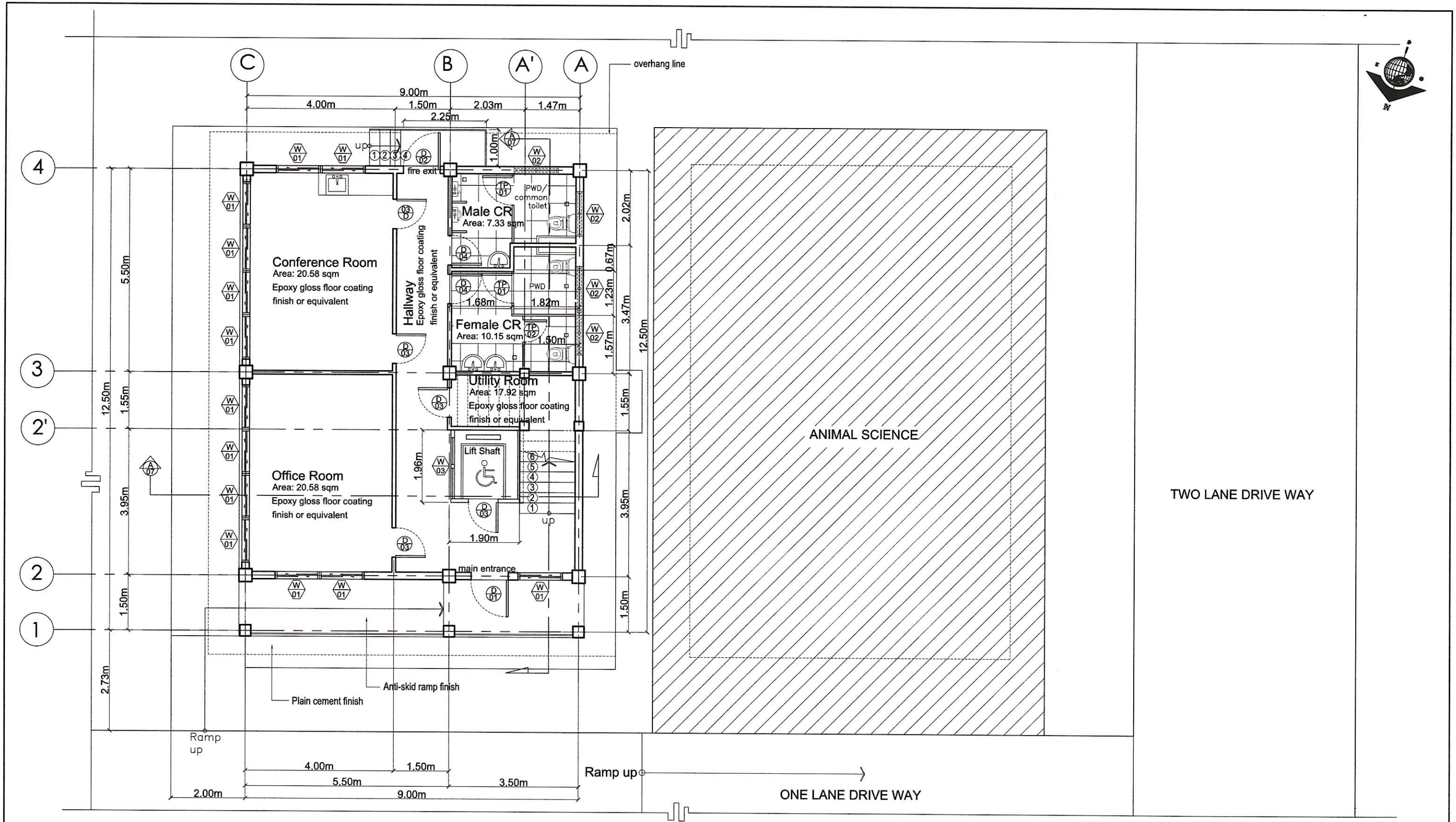


A2
01–01

SITE DEVELOPMENT PLAN

SCALE 1:200 MTS

HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 / VALIDITY: PTR No. / ISSUED:		PRC LIC. No. / VALIDITY: PTR No. / ISSUED:	CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT AS SHOWN REVISION DATE: REVISION NO.:	SHEET NO. A 02 10

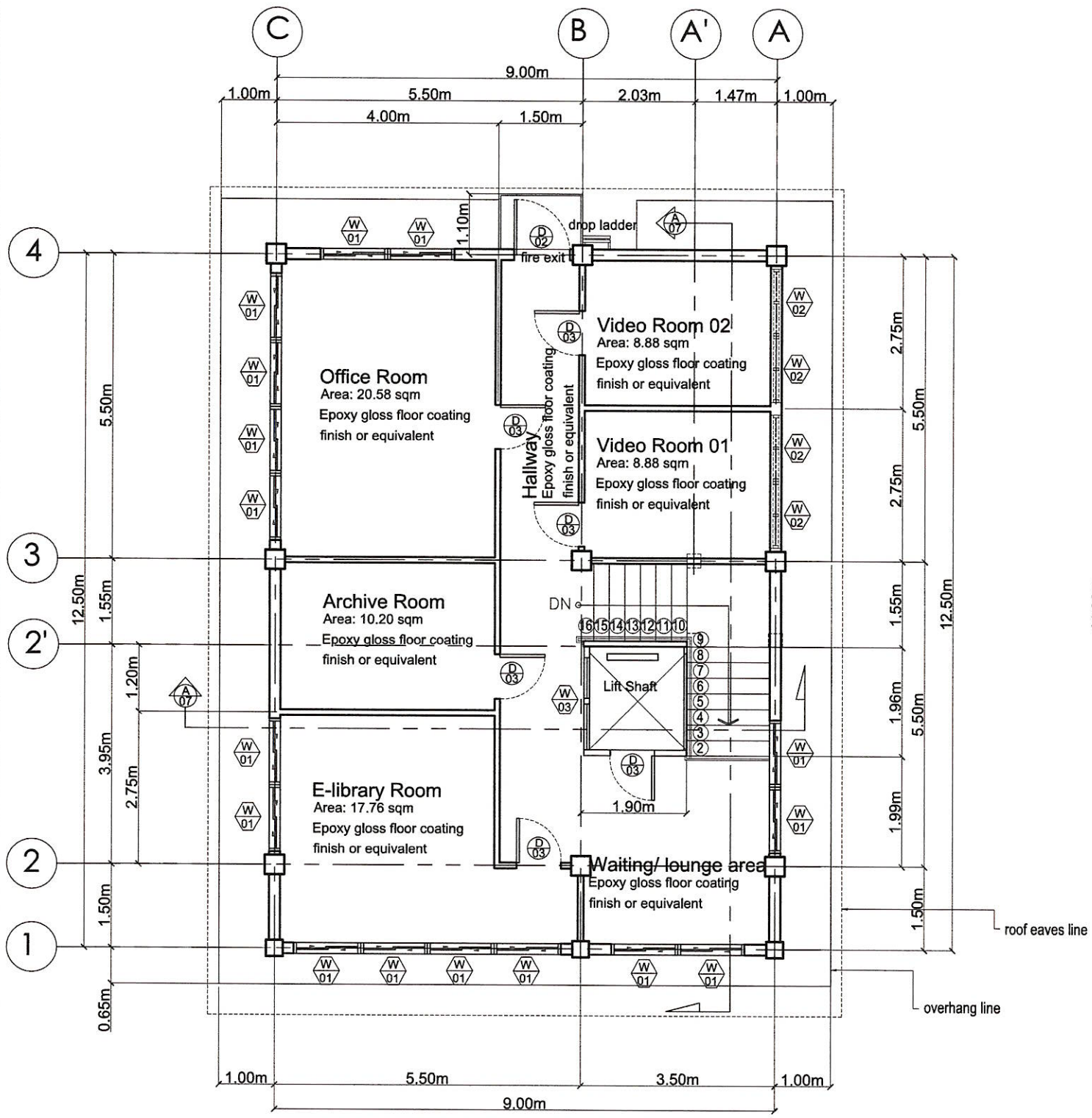


A3
01–01

FIRST FLOOR PLAN

SCALE 1:100 MTS

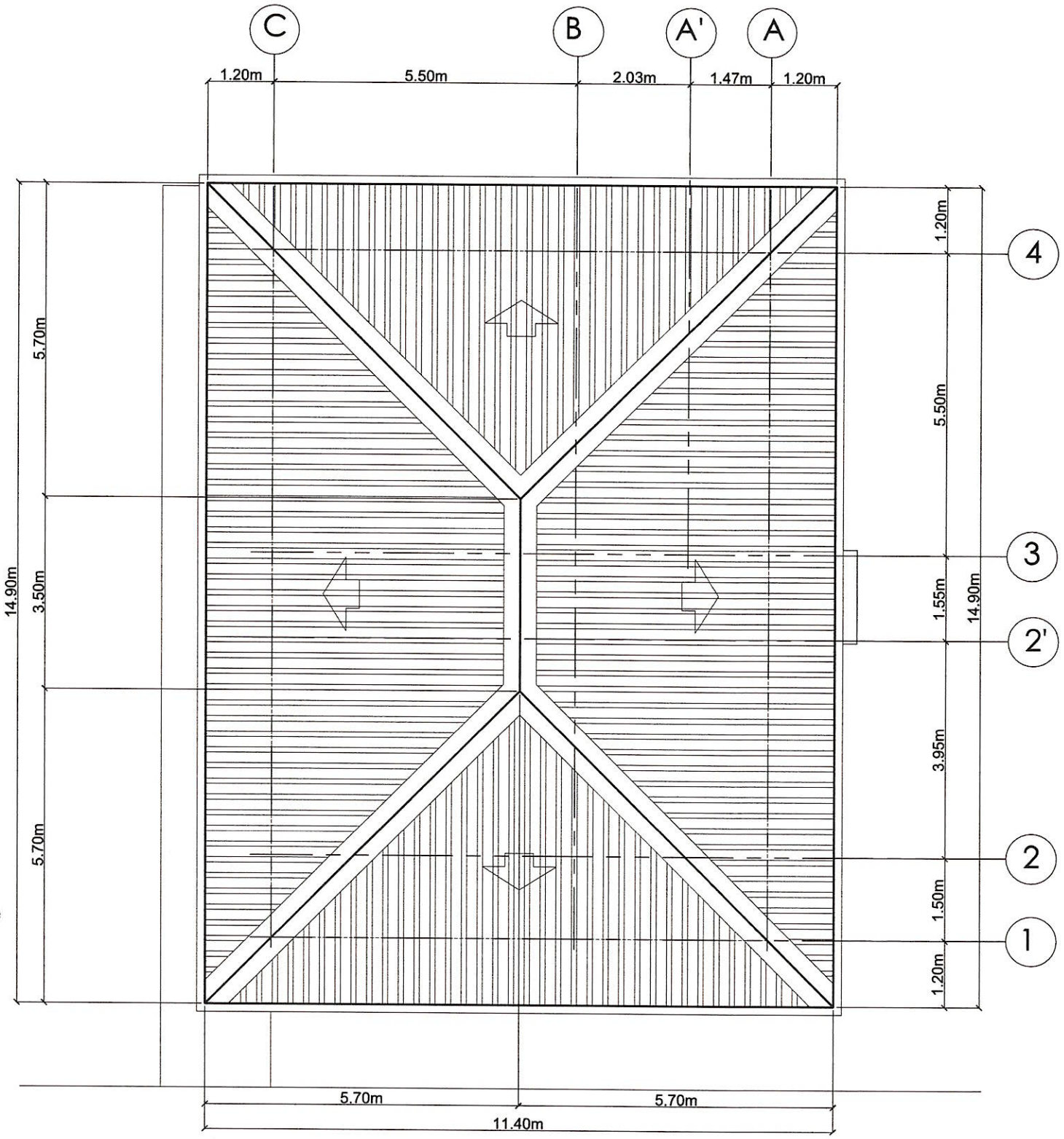
HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 VALIDITY: PTR No. ISSUED:		PRC LIC. No. VALIDITY: PTR No. ISSUED:	CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT: AS SHOWN REVISION DATE: REVISION NO.:	SHEET NO.: A 03 10'



A4
01–01

SECOND FLOOR PLAN

SCALE 1:100 MTS

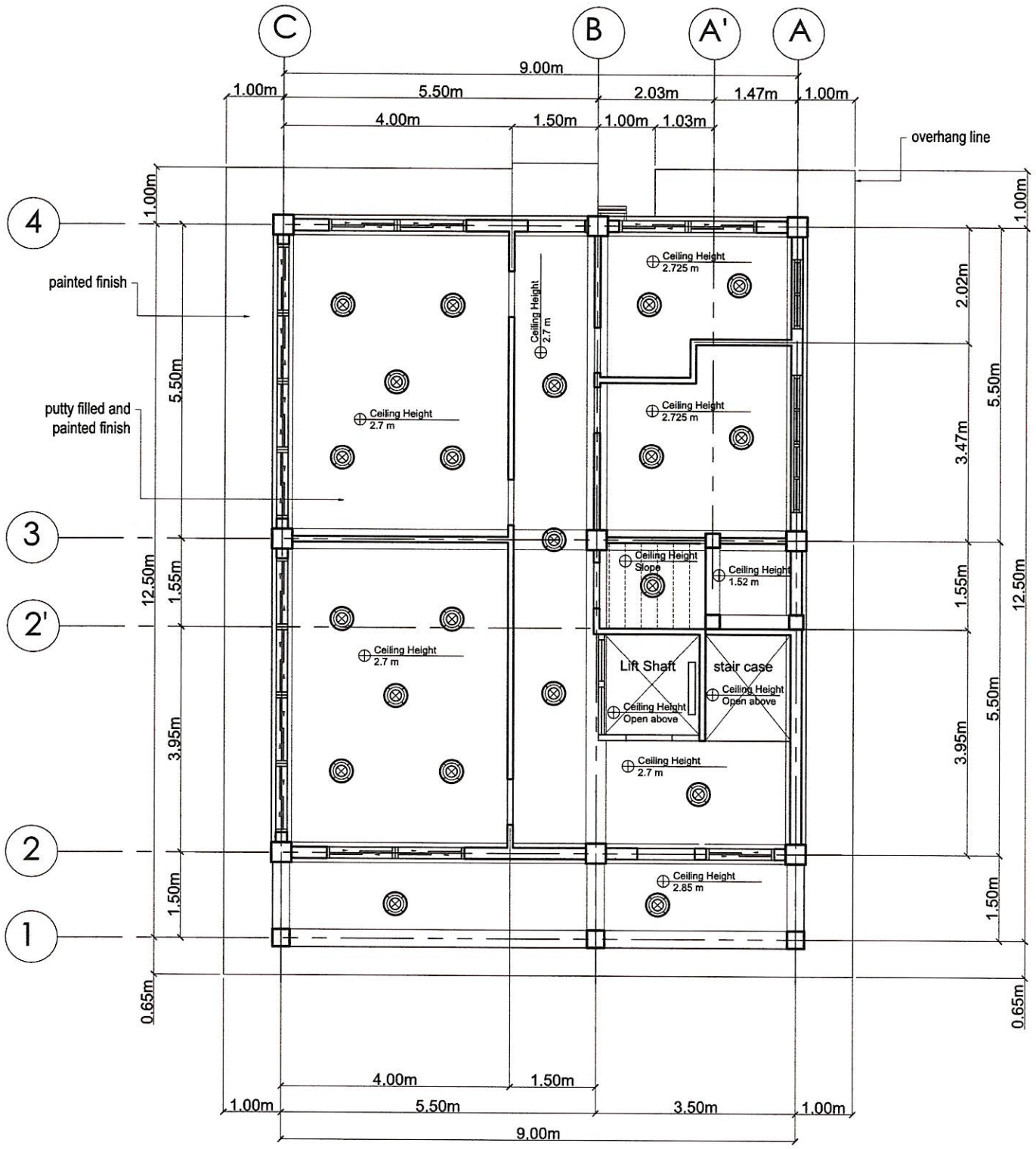


A4
01–01

ROOF PLAN

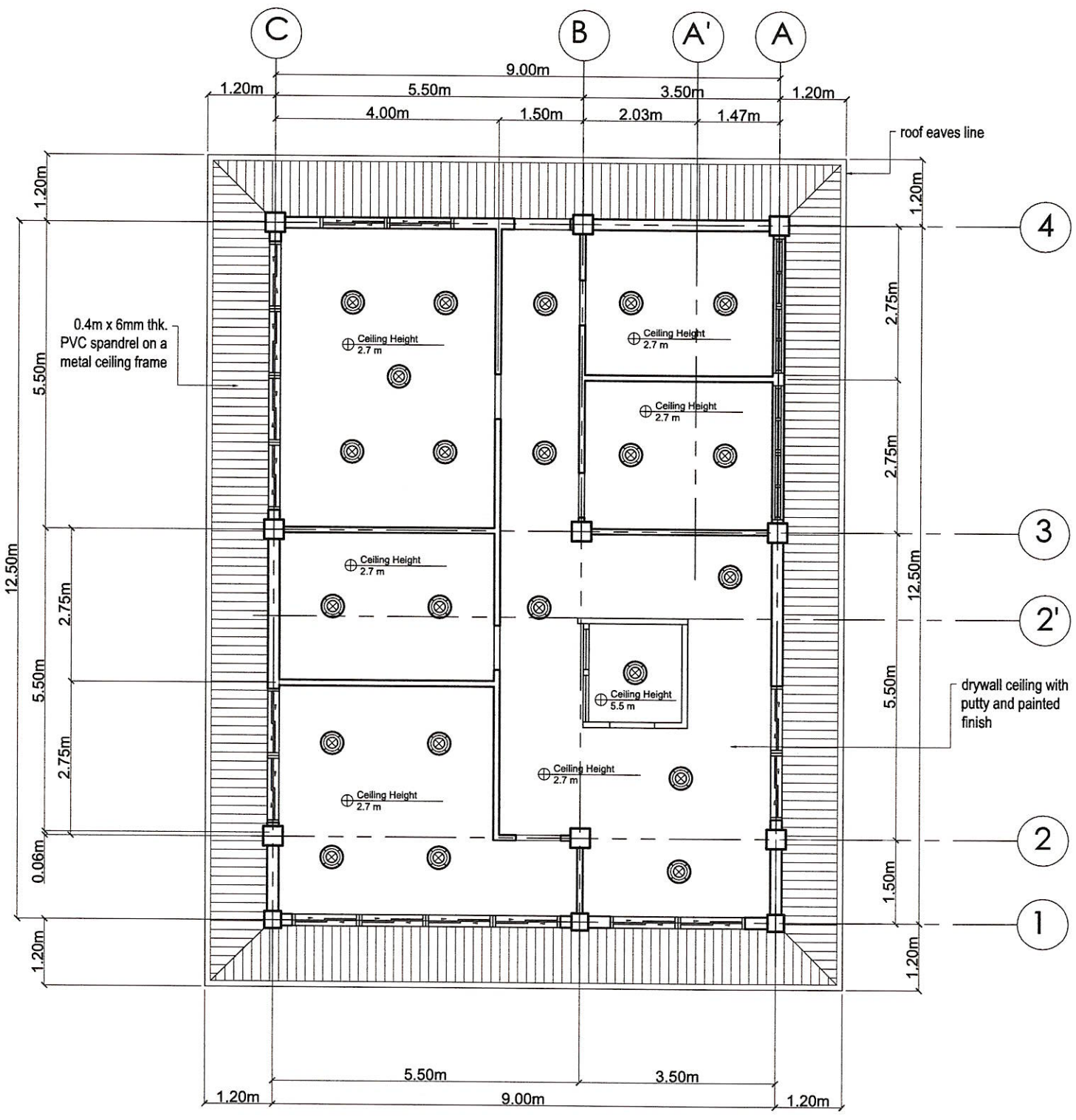
SCALE 1:100 MTS

HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 / VALIDITY: / PTR No. / ISSUED:		PRC LIC. No. / VALIDITY: / PTR No. / ISSUED:	CAD BY: ENGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT: ~~AS SHOWN~~ REVISION DATE: REVISION NO.:	SHEET NO. A 04 10'



A5 / 01-01 1ST FLOOR REFLECTED PLAN

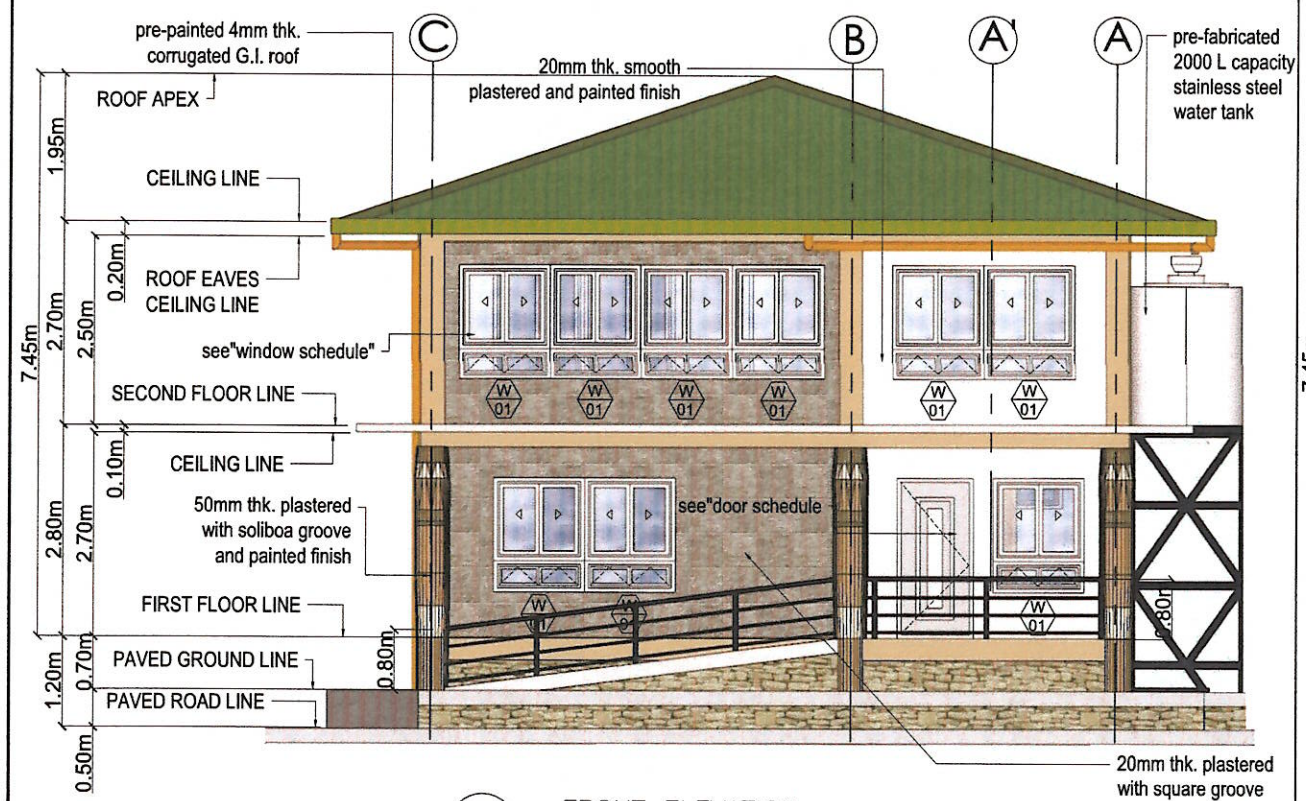
SCALE 1:100 MTS



A5 / 01-01 2ND FLOOR REFLECTED PLAN

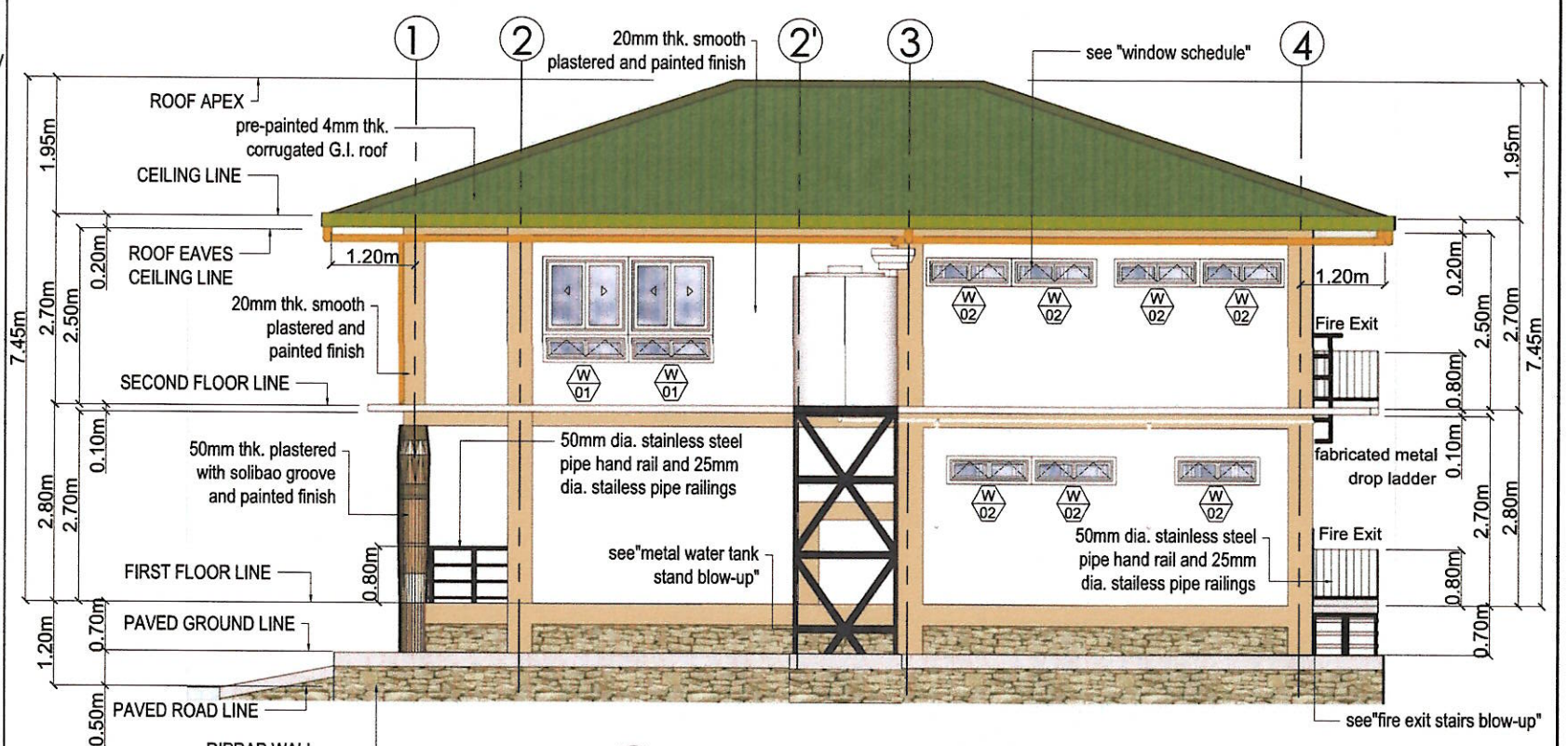
SCALE 1:100 MTS

HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 / VALIDITY: PTR No. / ISSUED:		PRC LIC. No. / VALIDITY: PTR No. / ISSUED:	CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT: AS SHOWN REVISION DATE: REVISION NO.:	SHEET NO.: A 05 10'



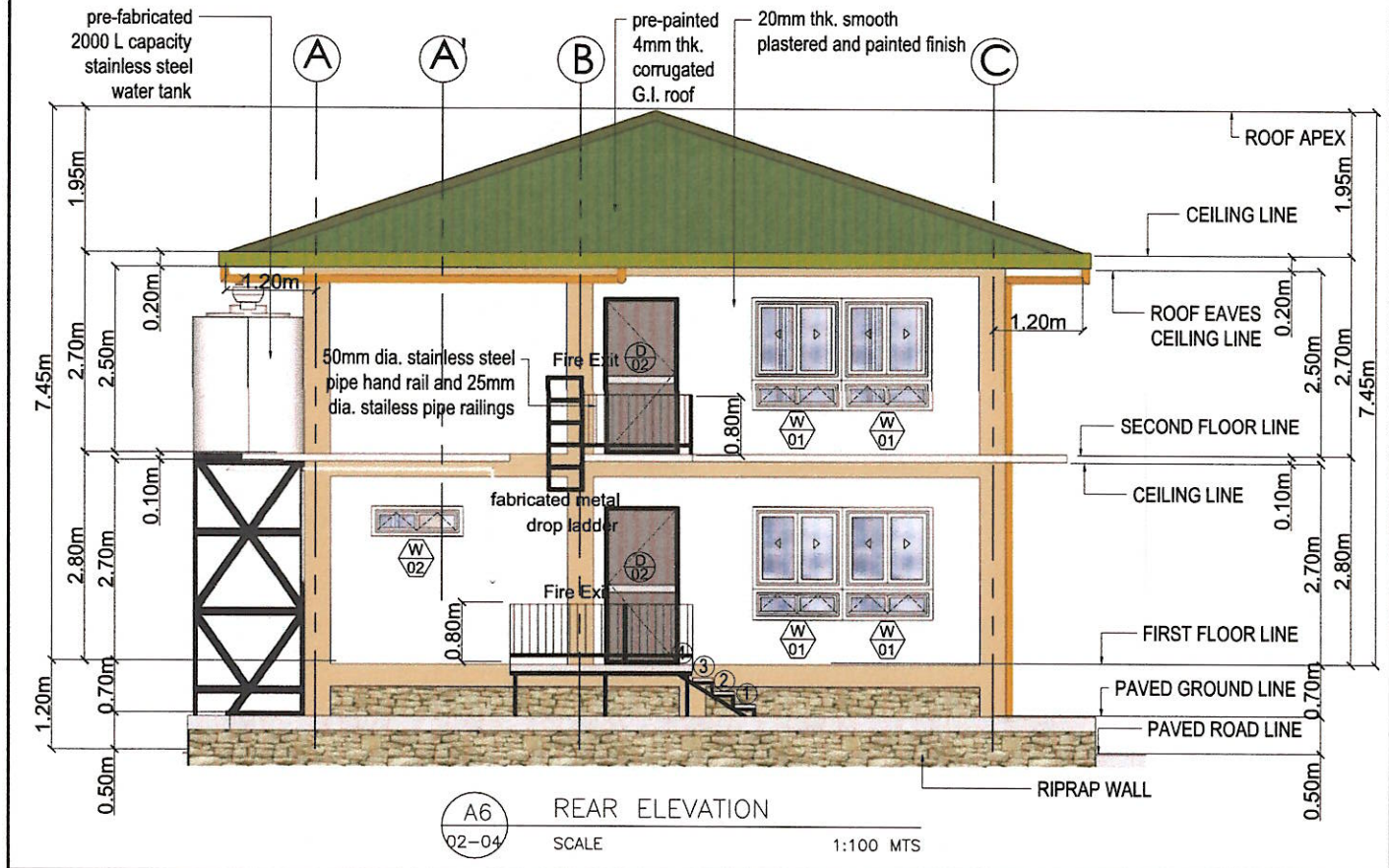
A6 01–04 FRONT ELEVATION

SCALE 1:100 MTS



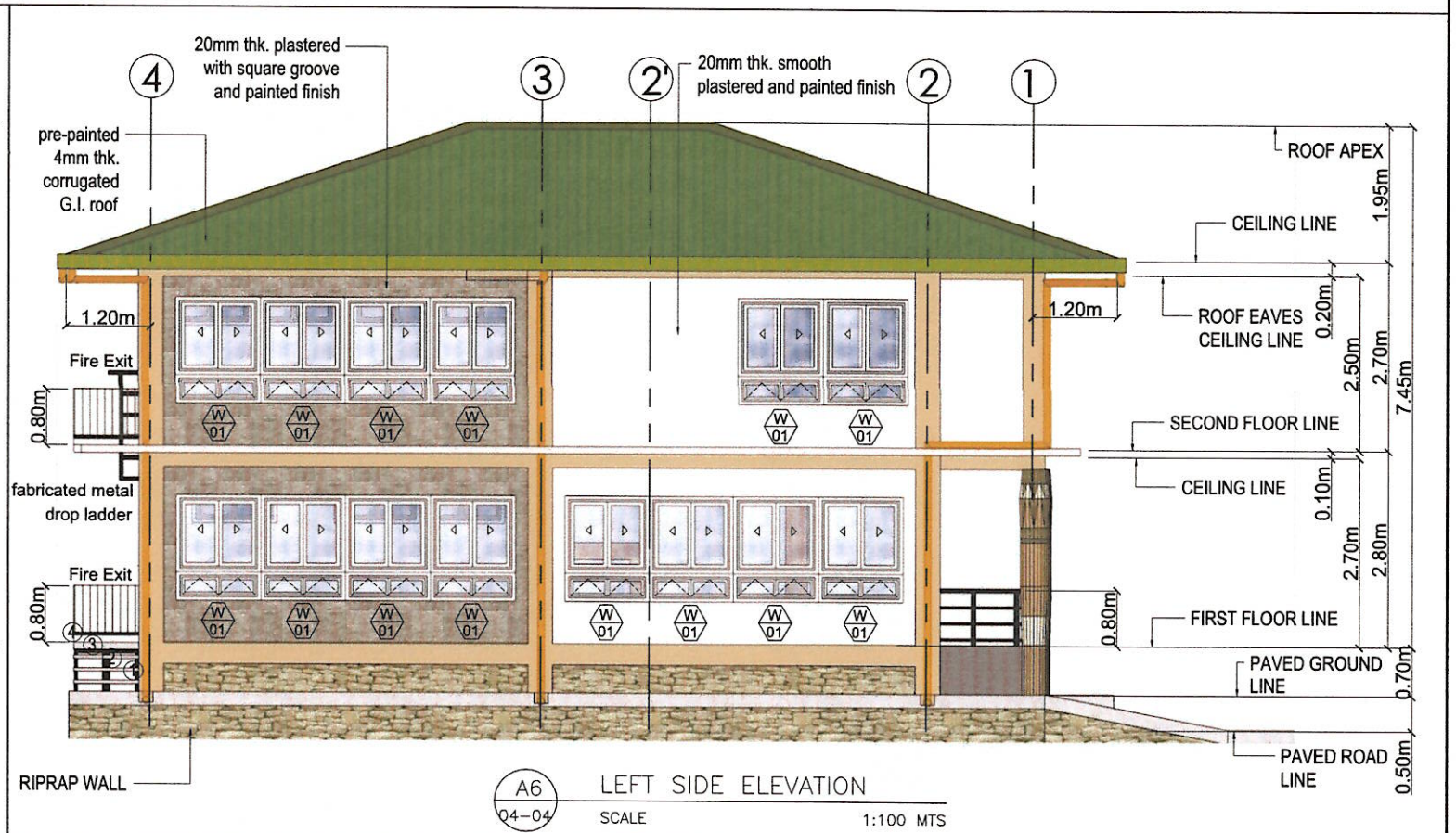
A6 03–04 RIGHT SIDE ELEVATION

SCALE 1:100 MTS



A6 02–04 REAR ELEVATION

SCALE 1:100 MTS



A6 04–04 LEFT SIDE ELEVATION

SCALE 1:100 MTS

HAZELINE N. TIBANGAY
UNIVERSITY ARCHITECT

PRC LIC. No. 028540	VALIDITY:	PRC LIC. No.	VALIDITY:
PTR No.	ISSUED:	PTR No.	ISSUED:

CAD BY: ERGD-SEPTEMBER 2023

PROPOSED OPEN UNIVERSITY BUILDING PHASE 1

BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET

PROJECT / LOCATION

BENGUET STATE UNIVERSITY

LA TRINIDAD, BENGUET

OWNER

LEONARD T. APILIS

END USER/ BSU OPEN UNIVERSITY DIRECTOR

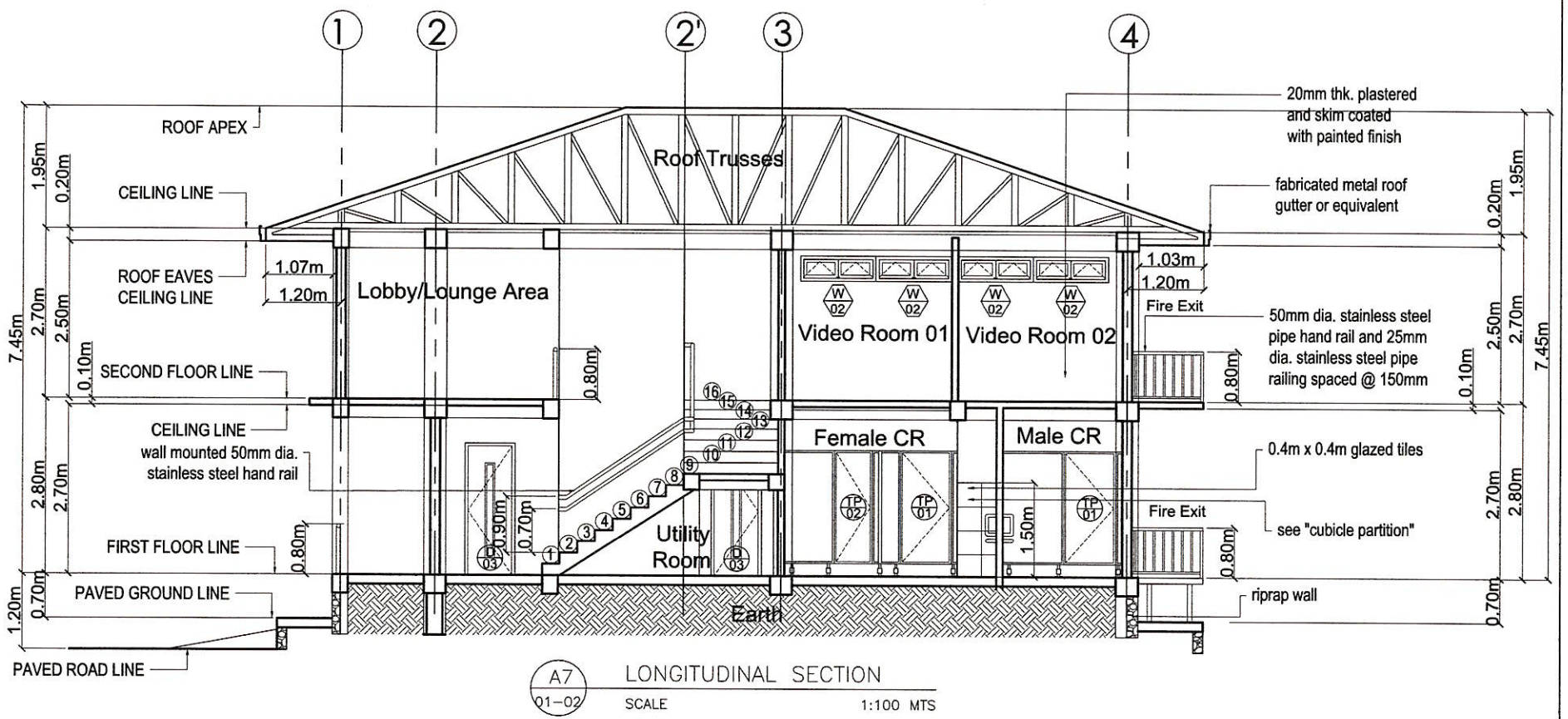
ALLAN CASALDO SACPA

VICE PRESIDENT- ADMINISTRATION AND FINANCE

FELIPE SALAING COMILA

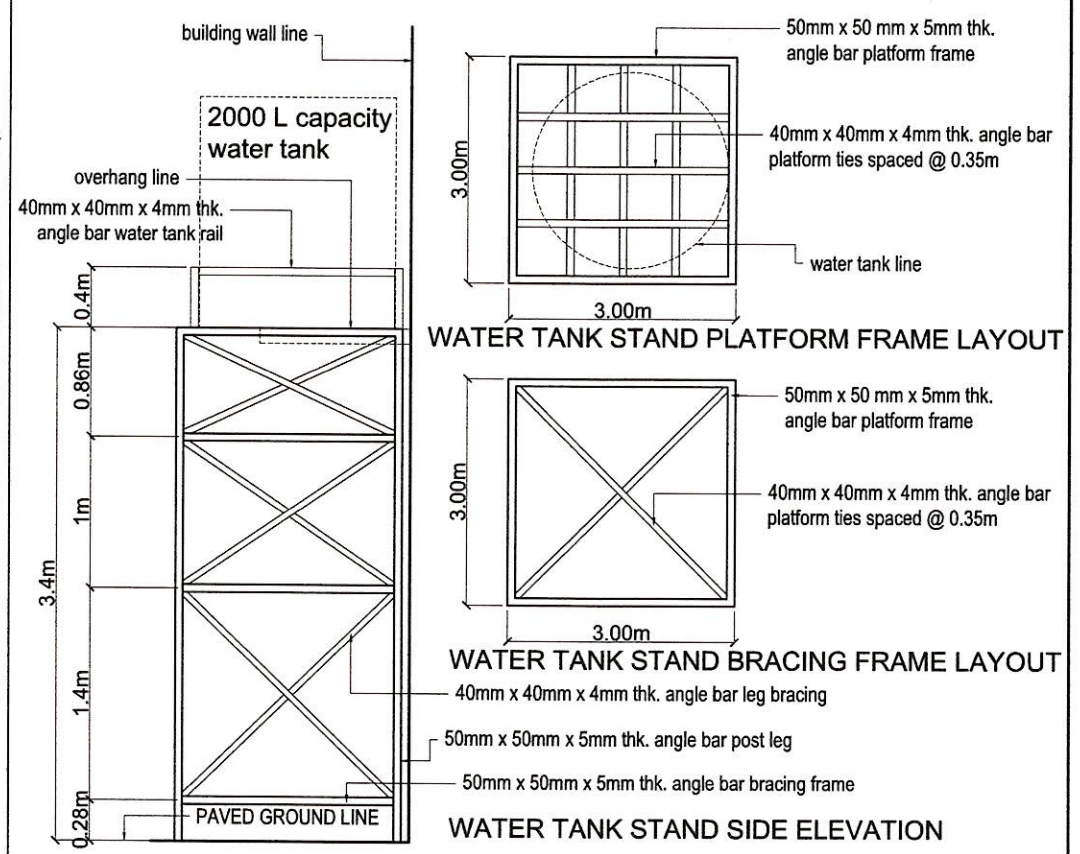
PRESIDENT

SHEET CONTENT	SHEET NO.
AS SHOWN	A 06 10'
REVISION DATE:	
REVISION NO.:	



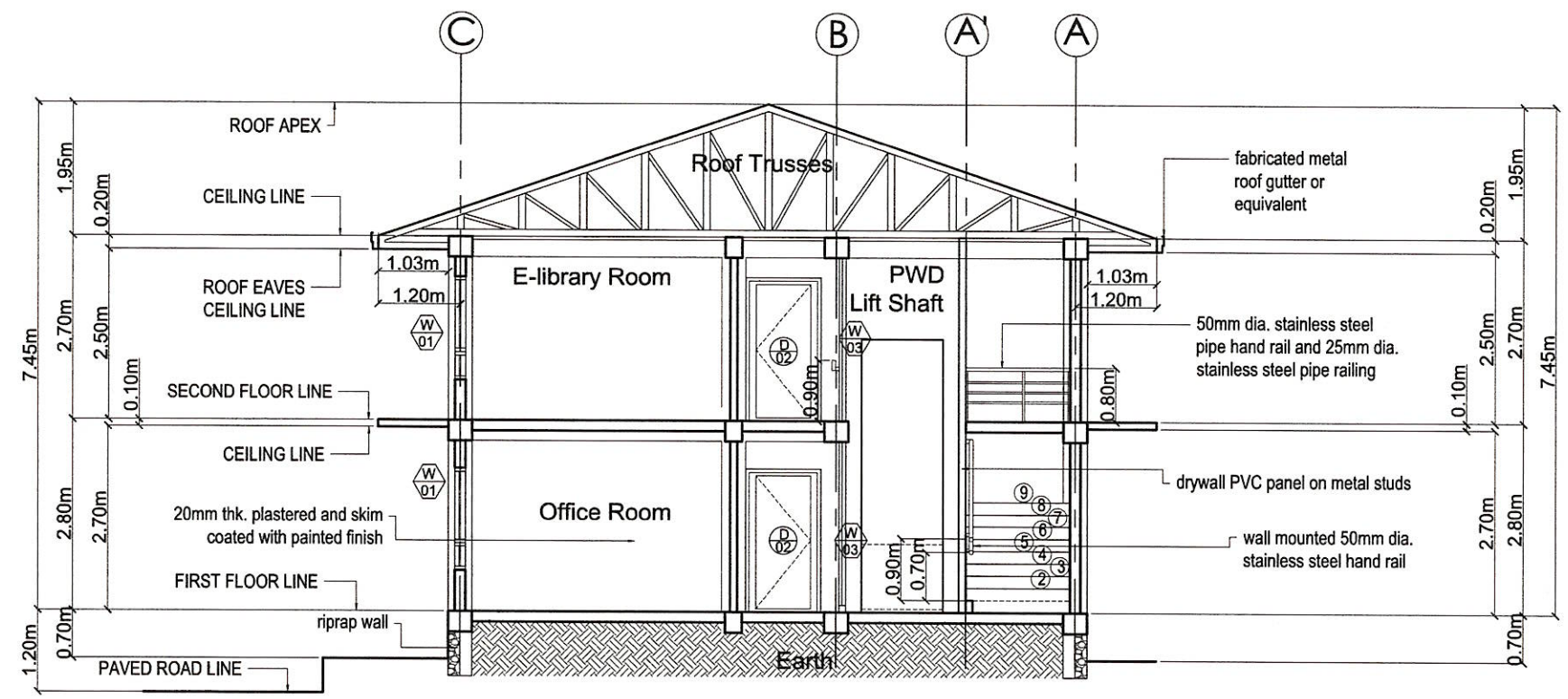
A7 01–02 LONGITUDINAL SECTION

SCALE 1:100 MTS



A7 01–01 WATER TANK STAND BLOW–UP

SCALE 1:50 MTS



A7 02–02 CROSS SECTION

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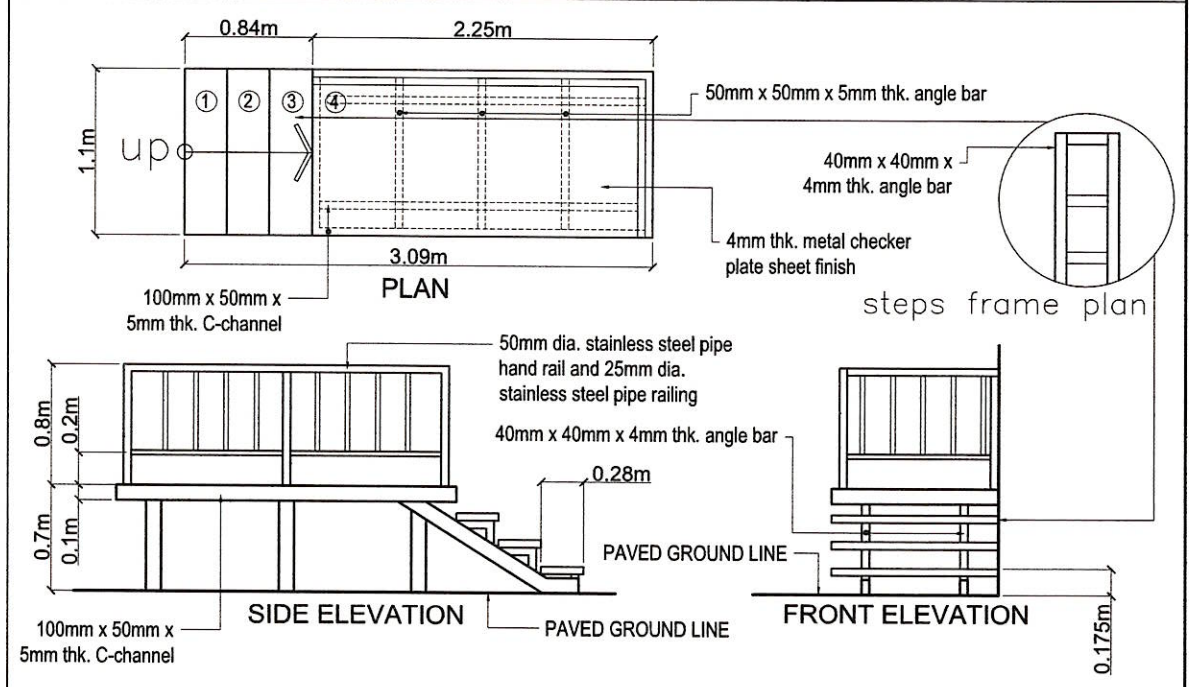
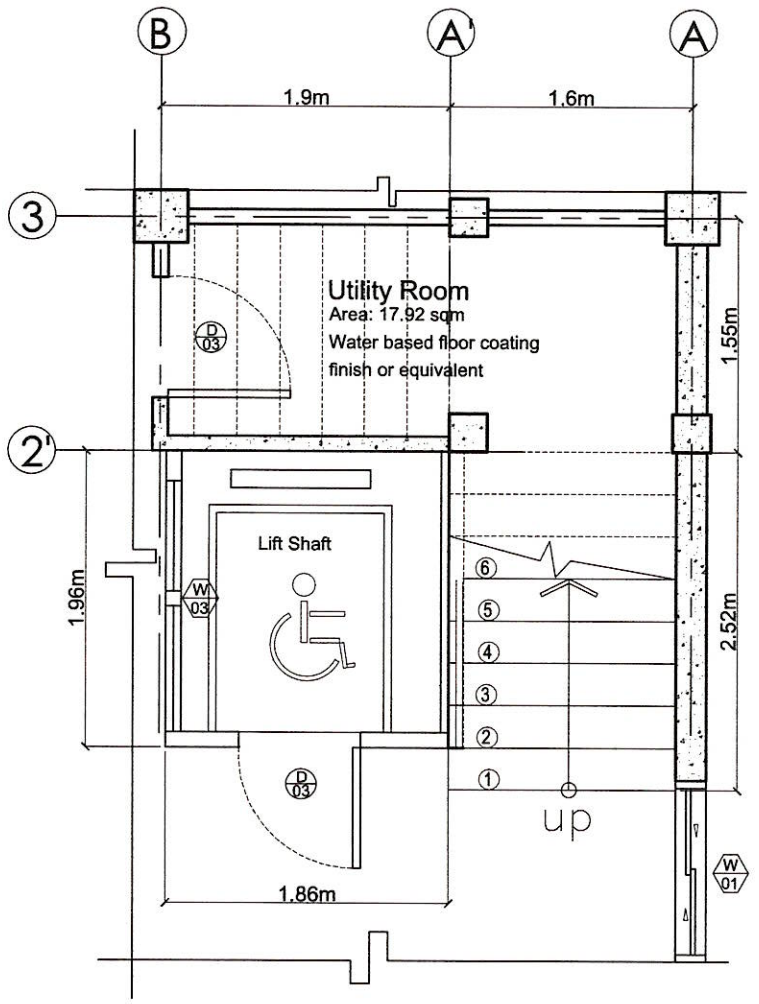
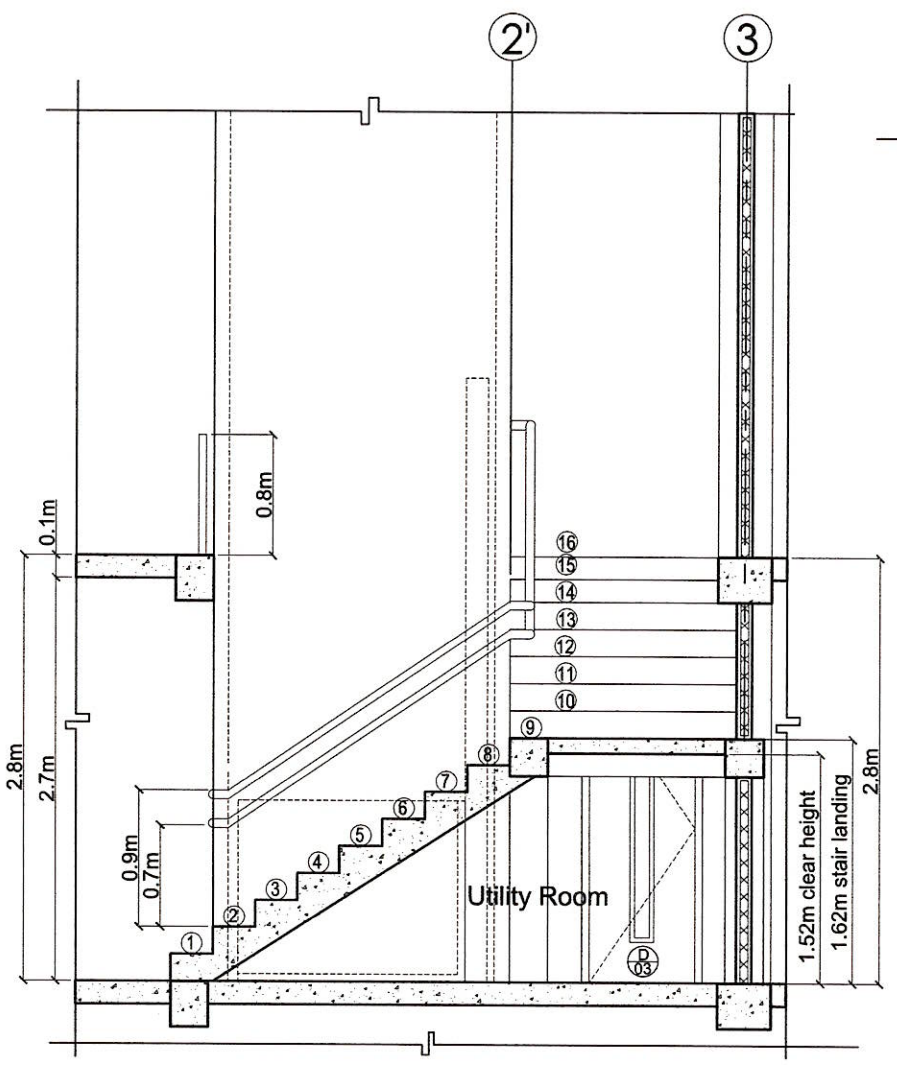


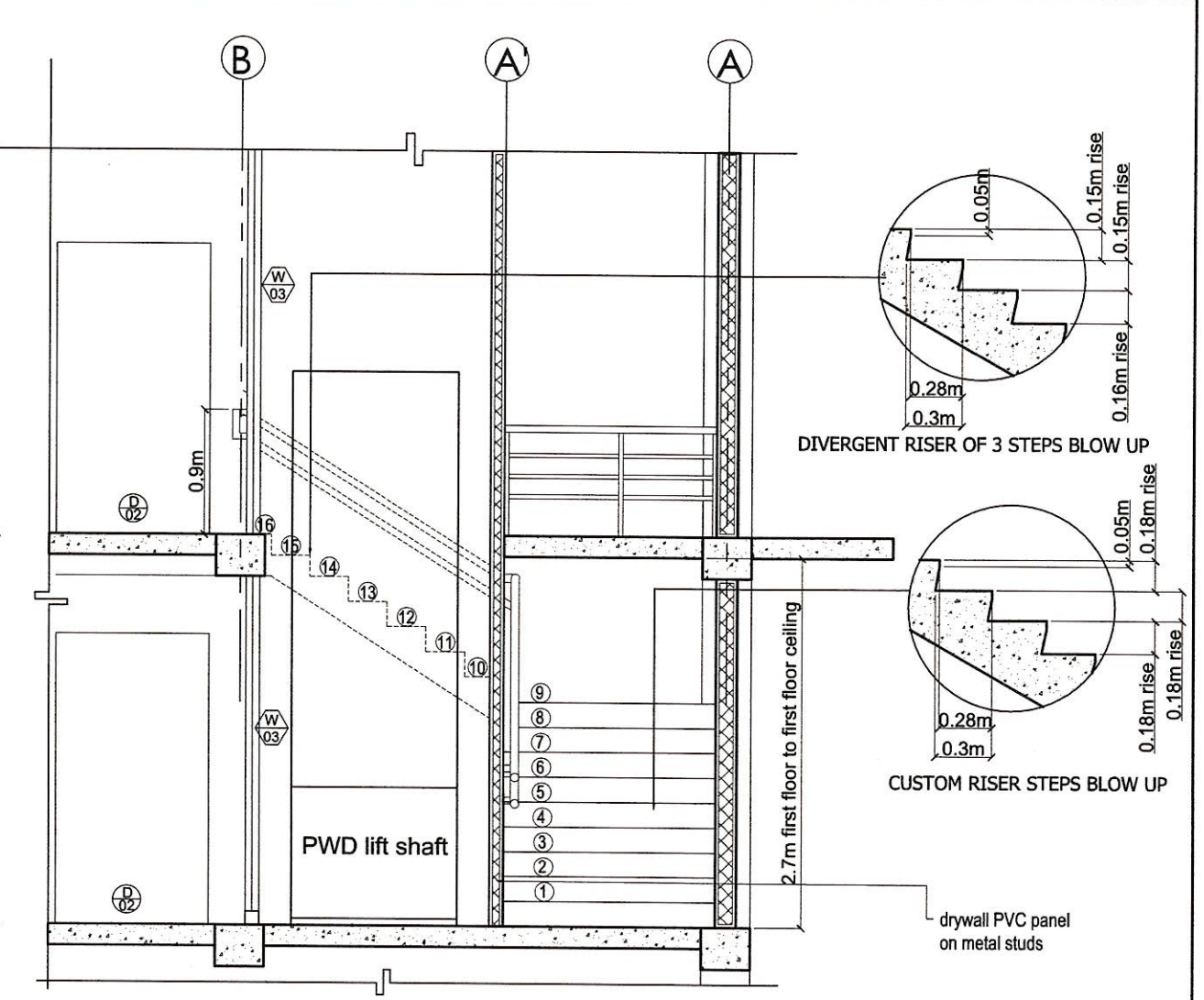
A7 01–01 FIRE EXIT STAIR BLOW–UP

SCALE 1:50 MTS

HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT			CAD BY: ERGO-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT: AS SHOWN REVISION DATE: REVISION NO.:
PRC LIC. No. 028540 / VALIDITY: / PTR No. / ISSUED:		PRC LIC. No. / VALIDITY: / PTR No. / ISSUED:		PROJECT / LOCATION	OWNER				SHEET NO.: A 07 10'

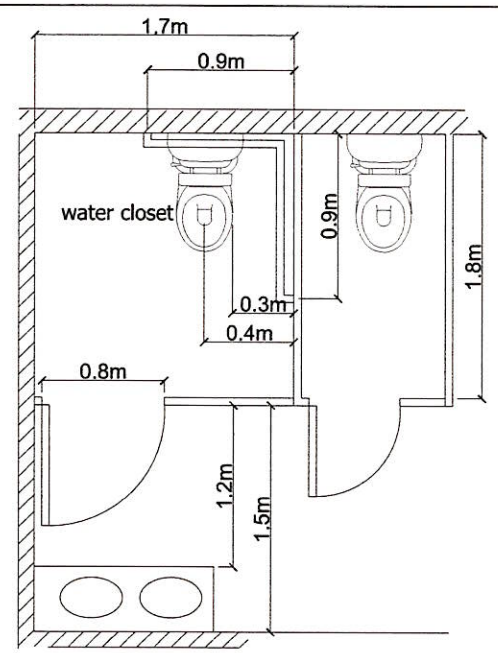


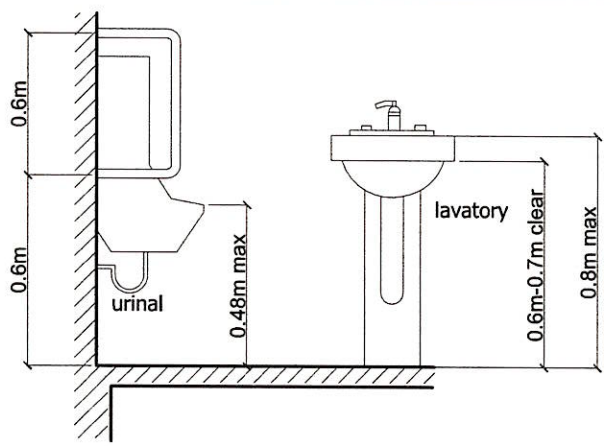


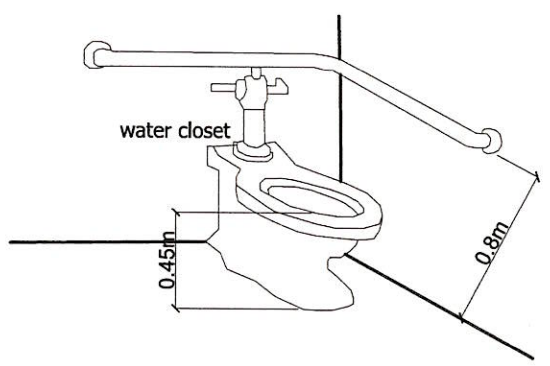


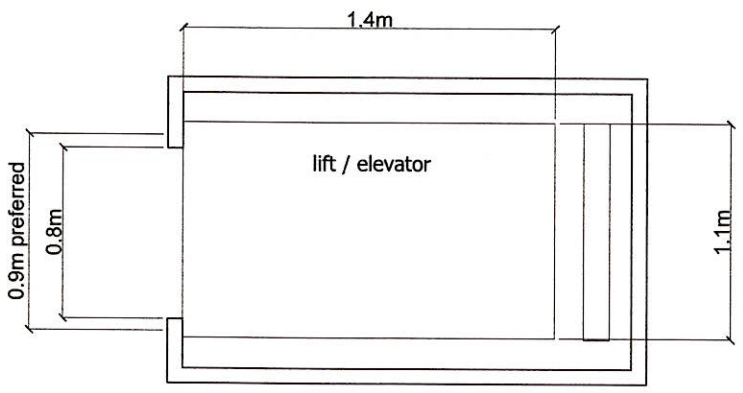
A8
01-01 STAIRS AND LIFT BLOW-UP PLAN AND ELEVATIONS

SCALE 1:50 MTS





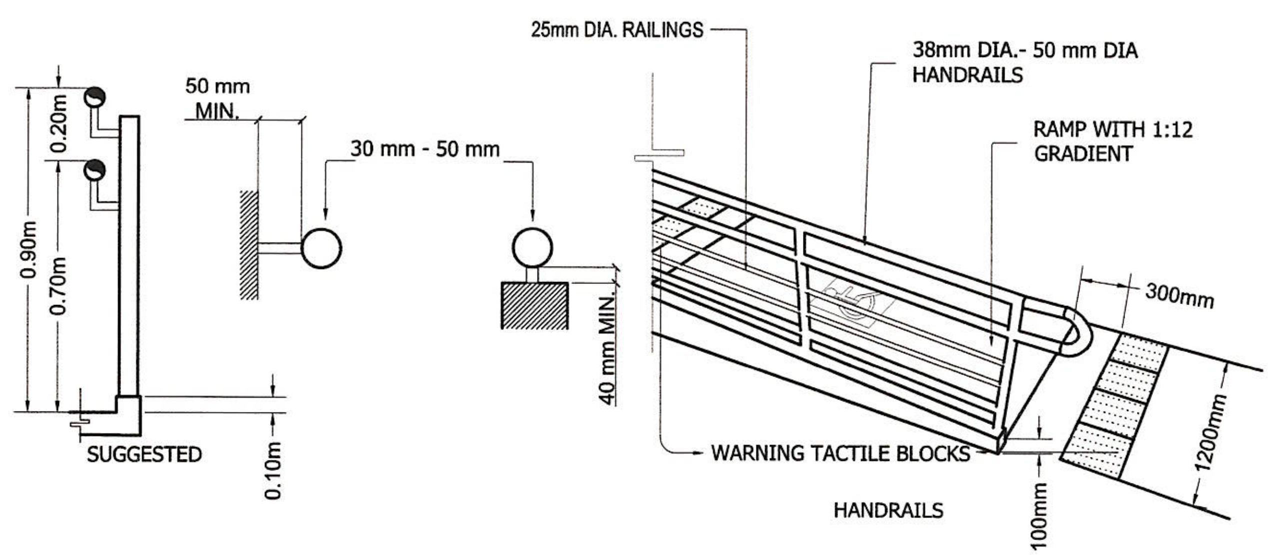




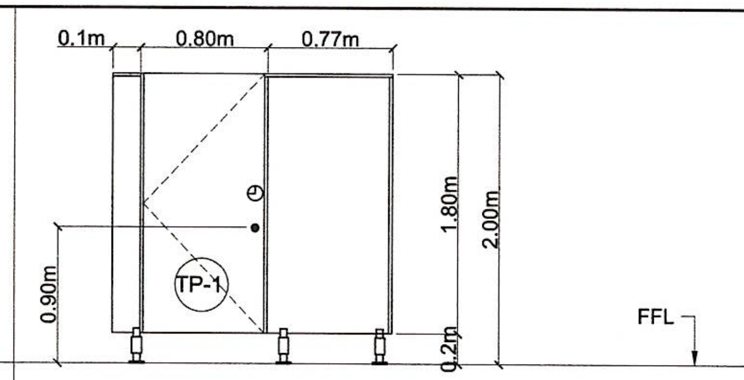
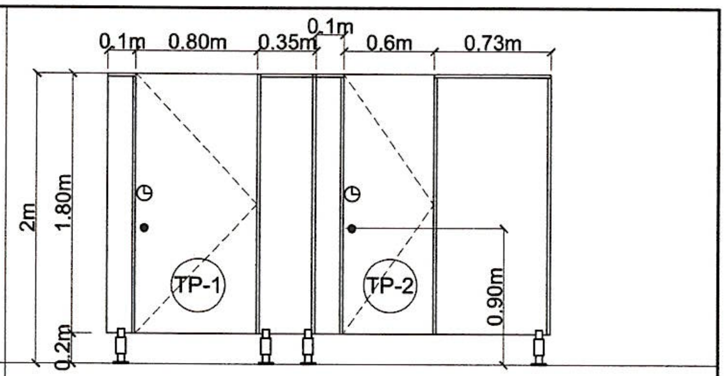
A8
01-01 MINIMUM DISTANCE AND SIZE FOR PWD FRIENDLY COMFORT ROOM AND LIFT

SCALE NTS.

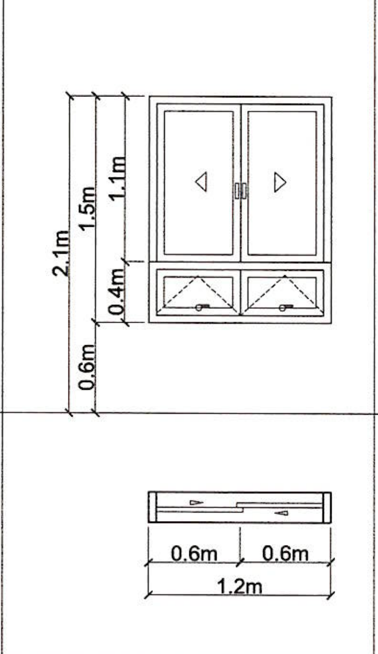
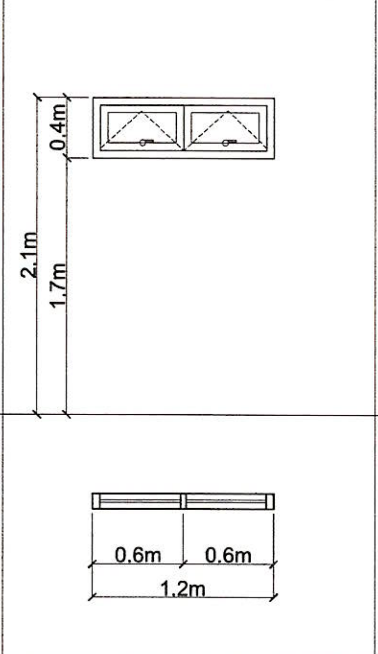
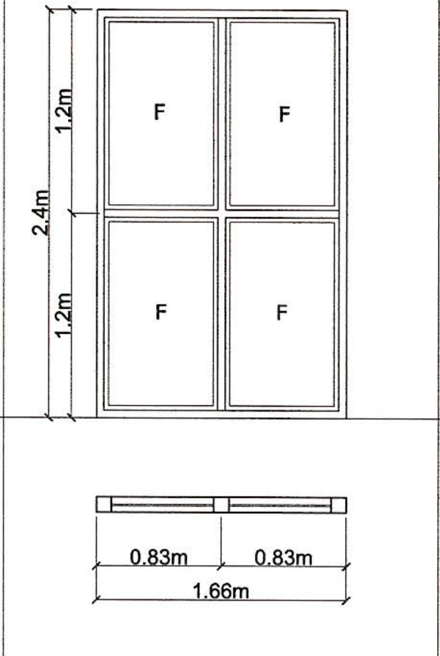
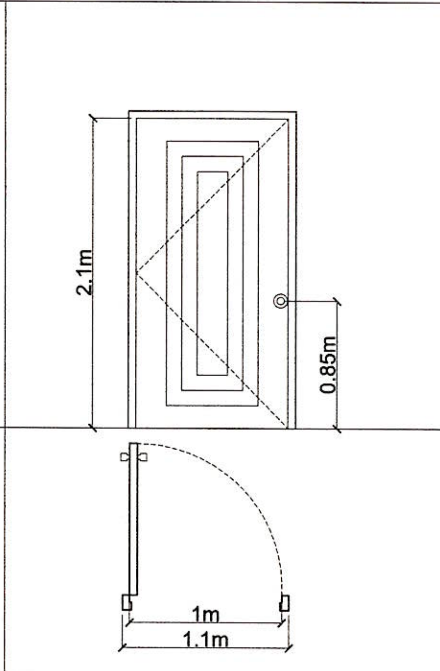
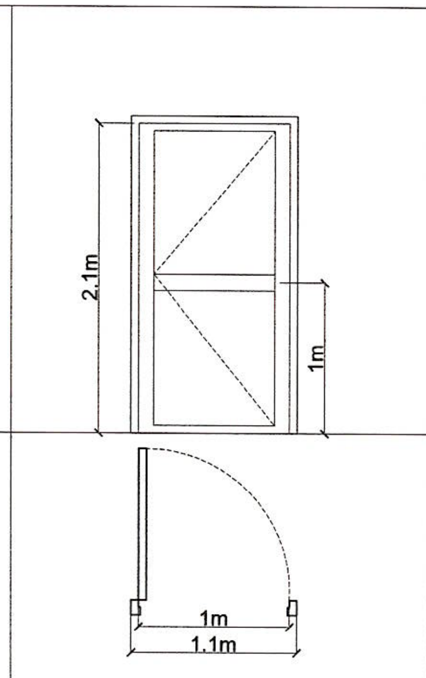
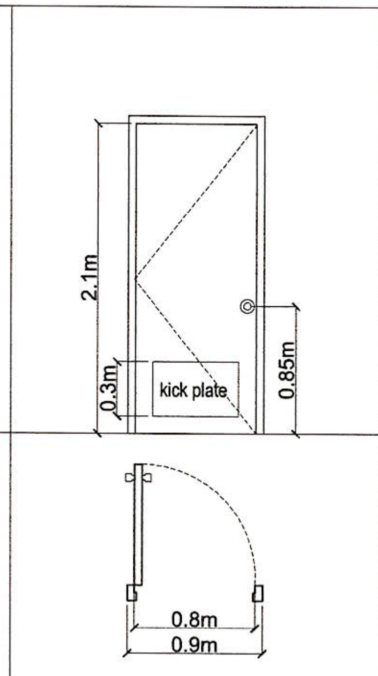
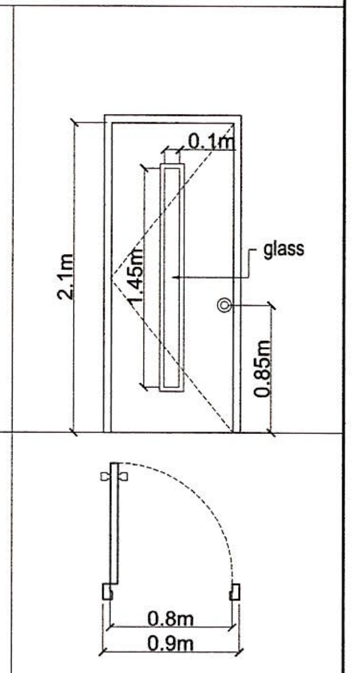
HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT			CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET	LEONARD T. APILIS	ALLAN CASALDO SACPA	FELIPE SALAING COMILA	SHEET CONTENT: AS SHOWN REVISION DATE: REVISION NO.:
PRC LIC. No. 028540	VALIDITY:	PRC LIC. No.	VALIDITY:	PROJECT / LOCATION	OWNER	END USER/ BSU OPEN UNIVERSITY DIRECTOR	VICE PRESIDENT- ADMINISTRATION AND FINANCE	PRESIDENT	SHEET NO.: A 08 10'
PTR No.	ISSUED:	PTR No.	ISSUED:						



A9 01–01 EASY GRASP HANDRAIL DESIGN
SCALE NTS.

Elevation		
	1 - Set/s Location: male restroom	1 - Set/s Location: female restroom
Description	Fabricated 3/4 " THK. PVC board partition panel fixed on a metal frame w/ complete accessories	Fabricated 3/4 " THK. PVC board partition panel fixed on a metal frame w/ complete accessories
Total cubicles	PWD size Cubicle / common toilet cubicle = 1	Common size Cubicle/s = 1 PWD size Cubicle/s= 1

A9 01–01 MALE CR AND FEMALE CR CUBICLES SCHEDULE
SCALE 1:50 MTS

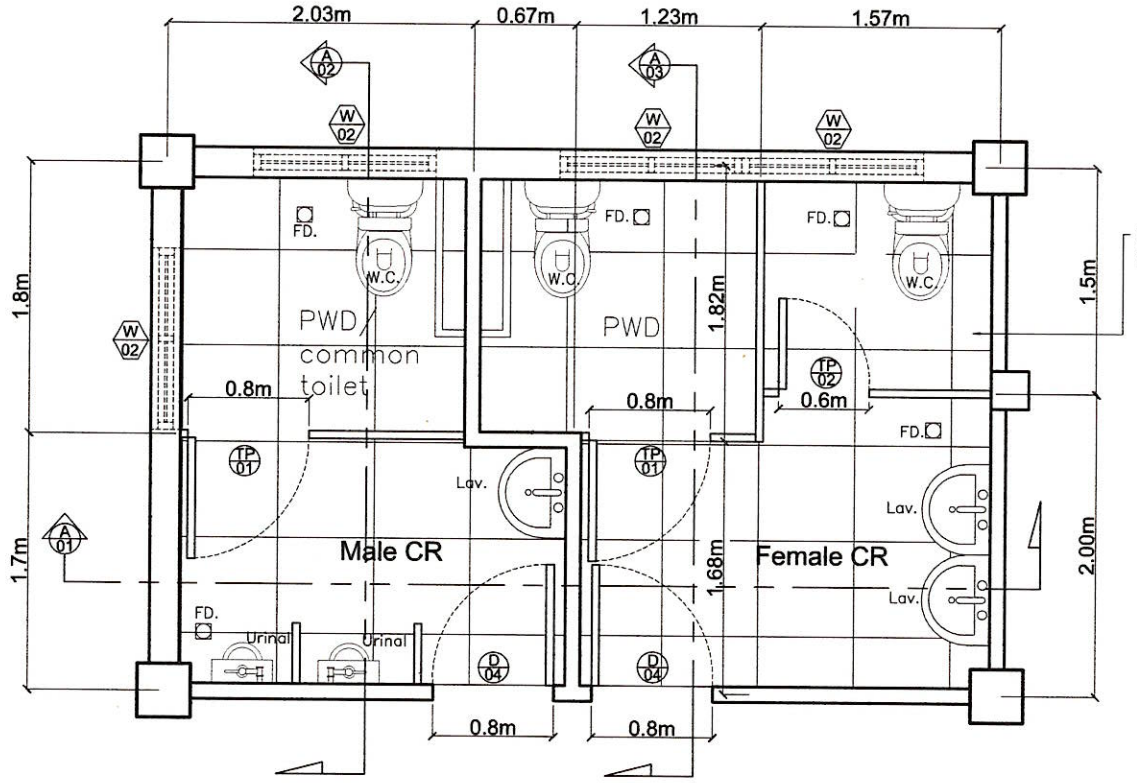
ELEVATION / PLAN							
WINDOW/ DOOR MARK	W 01	W 02	W 03	D 01	D 02	D 04	D 03
DESCRIPTION	40mm x 100mm aluminum powder coated frame sliding window with bottom transom awning window, 6mm thk. clear glass w/ complete hardware and accessories.	40mm x 100mm aluminum powder coated frame awning window, 6mm thk. clear glass w/ complete hardware and accessories.	40mm x 100mm aluminum powder coated frame fixed window, 10mm thk. clear glass w/ complete hardware and accessories.	Pre-fabricated swing type steel door on a metal door jamb w/ complete hardware and accessories.	Factory manufactured fire rated fire exit steel door with jamb and complete hardware and accessories.	Factory manufactured swing type hollow core PVC door with door jamb and complete hardware and accessories.	Pre-fabricated swing type wood door on a wood door jamb with 6mm thk. clear glass vision panel, complete hardware and accessories.
SETS / LOCATION	29 SETS — Location: Offices, lobby, conference room, E-library	8 SETS — Location: Comfort rooms and video rooms	2 SETS — Location: Lift	1 SET — Location: Main entrance	2 SET — Location: Fire exit	2 SET — Location: Comfort room	11 SET — Location: Interior rooms

A9 01–01 WINDOWS SCHEDULE
SCALE 1:50 MTS

A9 01–01 DOORS SCHEDULE
SCALE 1:50 MTS

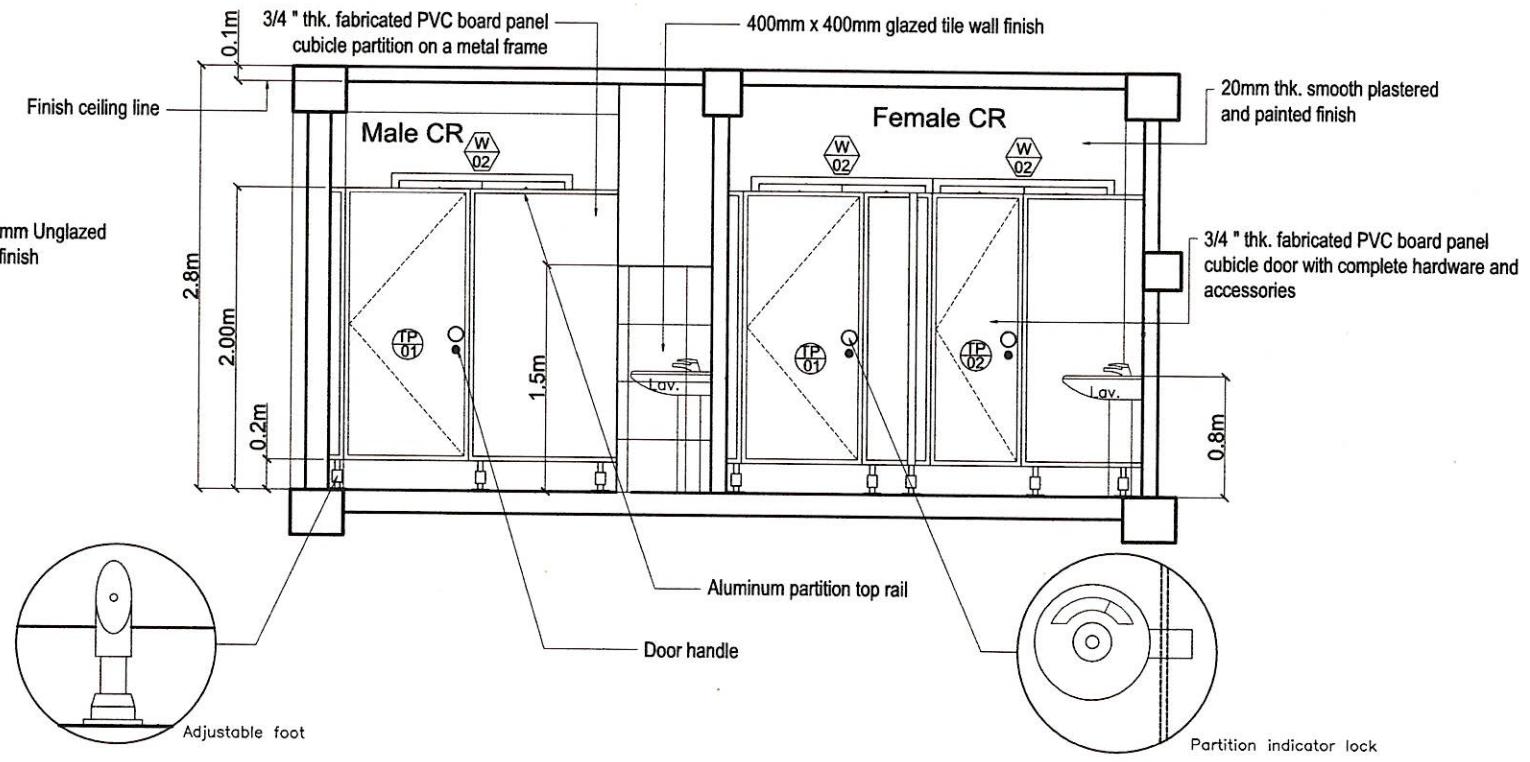
HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 VALIDITY: PTR No. ISSUED:	PRC LIC. No. VALIDITY: PTR No. ISSUED:	CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARD T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT

SHEET CONTENT	SHEET NO.
AS SHOWN	A
REVISION DATE:	09 / 10'
REVISION NO.:	



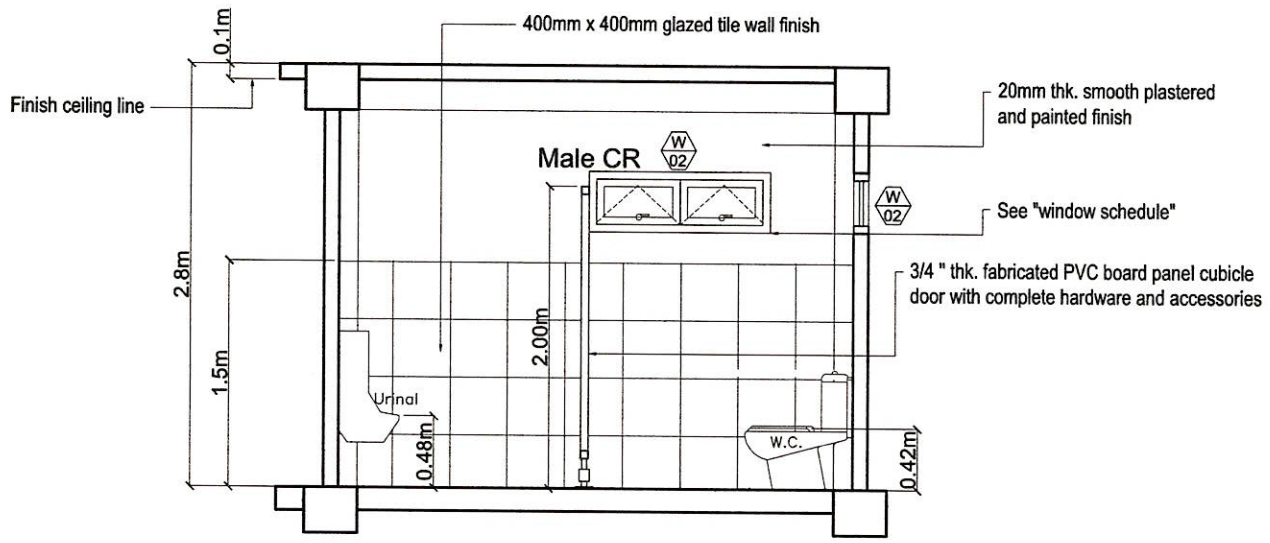
A9' 01-01 CR BLOW – UP PLAN

SCALE 1:50 MTS



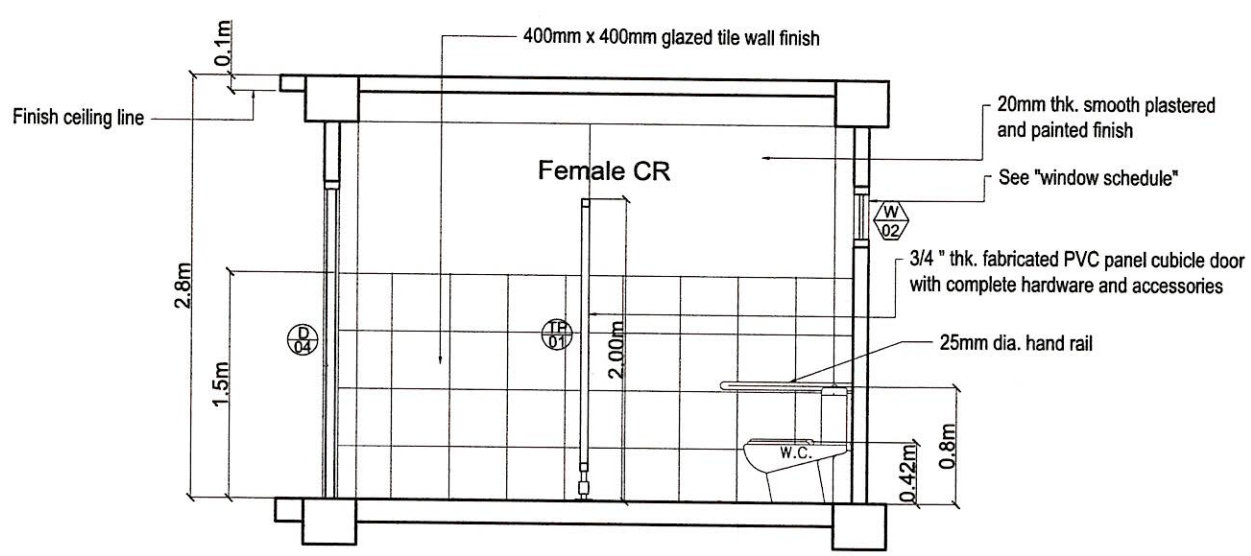
A9' 01-03 CR BLOW – UP LONGITUDINAL SECTION

SCALE 1:50 MTS



A9' 02-03 MALE CR BLOW – UP CROSS SECTION

SCALE 1:50 MTS



A9' 03-03 FEMALE CR BLOW – UP CROSS SECTION

SCALE 1:50 MTS

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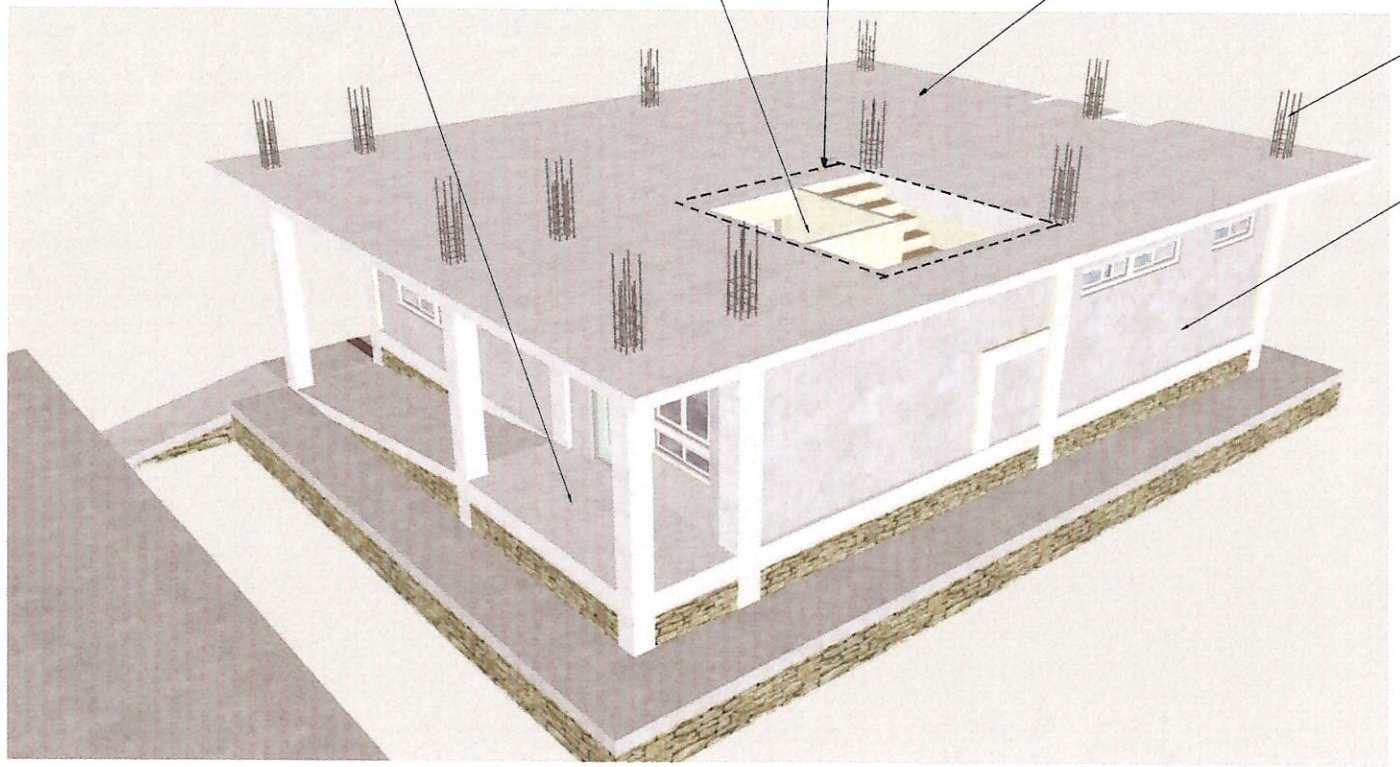
A10 / 01-01 CONFERENCE ROOM PERSPECTIVE
SCALE NTS.

A10 / 01-01 OFFICE ROOM PERSPECTIVE
SCALE NTS.

A10 / 01-01 FEMALE CR PERSPECTIVE
SCALE NTS.



A10 / 01-01 EXTERIOR PERSPECTIVE
SCALE NTS.

A10 / 01-01 MALE CR PERSPECTIVE
SCALE NTS.

A10 / 01-01 HALL WAY PERSPECTIVE
SCALE NTS.

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GENERAL NOTES:

1. ALL ELECTRICAL WORKS SHALL CONFORM TO THE LATEST EDITION OF PHILIPPINE ELECTRICAL CODE, TO THE RULES AND REGULATIONS OF LOCAL AND NATIONAL AUTHORITIES CONCERNED AND THE REQUIREMENTS OF LOCAL UTILITY COMPANIES.
2. WIRING METHODS SHALL BE AS FOLLOWS
   a. MAIN SERVICE ENTRANCE . . . . . RIGID STEEL CONDUIT (RSC)
   b. RACEWAYS SURFACE MOUNTED IN CONCRETE WALL AND EMBEDDED IN CONCRETE FLOORING . . . . . POLYVINYL CHLORIDE (PVC)
   c. RACEWAYS NOT EMBEDDED IN CONCRETE . . . . . ELECTRICAL METALLIC TUBING (EMT)
3. SERVICE VOLTAGE ENTERING THE STRUCTURE SHALL BE 220 VOLTS SINGLE PHASE TWO WIRE SYSTEM.
4. MINIMUM SIZE OF WIRE AND OF CONDUIT SHALL BE 2.0 mm Ø THHN (#14 AWG) AND 15mm (1/ 2") NOMINAL DIAMETER RESPECTIVELY, UNLESS OTHERWISE SPECIFIED ON PLANS.
5. NO BRANCH CIRCUIT WIRING IN LIGHTING AND POWER SHALL HAVE A LOAD MORE THAN 80% OF IT'S RATING.
6. ALL MATERIALS TO BE USED SHALL BE NEW AND APPROVED TYPE APPROPRIATE FOR BOTH LOCATION AND INTENDED USE.
7. UNLESS OTHERWISE SPECIFIED PULLBOXES OR JUNCTION BOXES SHALL BE PROVIDED WHENEVER REQUIRED AND NECESSARY, ALTHOUGH SUCH BOXES ARE NOT INDICATED ON PLANS.
8. FOR EACH SPARE CIRCUIT IN PANEL BOARD, PROVIDE AN EMPTY CONDUIT 20mm Ø (3/ 4") DIAMETER TERMINATING TO A COVERED SQUARE BOX.
9. ALL LOADS SHALL BE PROPERLY AND ADEQUATELY GROUNDED.
10. ALL MATERIALS AND EQUIPMENT TO BE USED SHALL BE BRAND NEW AND OF APPROVED TYPE AS LOCATION AND PURPOSE.
11. KITCHEN PLANS SHALL GOVERN ON THE ACTUAL LOCATION AND DIMENSION PRIOR TO ROUGH-IN OF CONDUIT AND PIPES.
12. ALL INSTALLATIONS AND WIRING SHALL BE CONCEALED FROM VIEW AND SHALL BE ENCASED IN POLYVINYL CHLORIDE (PVC) CONDUITS OR ELECTRICAL METALLIC TUBING (BMT) OR RIGID STEEL CONDUITS (RSC).
13. ALL JUNCTION BOXES, DISCONNECTS, ETC. SHALL BE INSTALLED SO AS NOT TO INTERFERE WITH EQUIPMENT PLACEMENTS.
14. ALL 20-AMPERES CIRCUIT HOMERUN TO PANEL BOARD MORE THAN 30 METERS IN LENGTH SHALL BE 5.5mm Ø THHN. (# 10), UNLESS OTHERWISE SPECIFIED ON PLANS.
15. LIGHT CONTROL SWITCHES SHALL BE RATED 10A 300V AND SHALL CARRY A LOAD GREATER THAN 50A.
16. AN EMPTY 3/ 4" DIA. RISER TERMINATING IN A 2" DEEP BY 4" OCTAGONAL BOX ABOVE CEILING SHALL BE PROVIDED TO ACCOMMODATE THE SPARE CIRCUIT IN PANEL BOARD.
17. ALL WORKS SHALL BE DONE WITH THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.
18. OUTLET BOXES SHALL BE AS FOLLOWS:
    A. LIGHT OUTLETS 1-1/ 2" DEEP BY 4" OCTAGONAL BOX WITH ONE OR TWO WAY ENTRIES
    B.RECEPTACLES 2-1/ 8" DEEP 2"X4" UTILITY BOX ONE GANG WITH RAISED PLASTIC COVER
19. MOUNTING HEIGHTS SHALL BE AS FOLLOWS:

a.	LIGHT SWITCHES	1370mm ABOVE FLOOR FINISH (A.F.F.)
b.	RECEPTACLES	300mm (A.F.F.)
c.	COUNTER HEIGHT OUTLET	1300mm (A.F.F.)
d.	TV/ TELEPHONE OUTLET	300mm (A.F.F.)
e.	DISCONNECT	1370mm (A.F.F.)
f.	PANEL BOARDS	1700mm (A.F.F.)
g.	OTHERS	REFER TO KITCHEN PLANS

1. ALL ELECTRICAL WORKS SHALL COMPLY WITH THESE PLANS AND SPECIFICATIONS. THE APPLICABLE PROVISIONS OF THE LATEST OF THE PHILIPPINE ELECTRICAL CODE (PEC). THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
2. THE ELECTRICAL SERVICE POWER SHALL BE 1-PHASE, 3-WIRE, 230V AC, 60Hz.
3. WIRING METHOD SHALL BE AS FOLLOWS:
   RIGID STEEL CONDUIT OR POLYVINYL CHLORIDE CONDUIT SCHEDULE 40 SHALL BE USED AS SPECIFIED IN THE PLAN
4. ALL WIRES SHALL COPPER AND THERMOPLASTIC INSULATED TYPE "THHN" UNLESS OTHERWISE INDICATED IN THE PLAN. THE MINIMUM SIZE WIRE FOR POWER AND LIGHTING CIRCUIT HOMERUNS SHALL BE 3.5mm² AND INSULATED FOR 600VOLTS. LIKE WISE, ALL CONDUCTORS SHALL BE COLOR-CODED. SMALLEST RACEWAY SHALL BE 15mmø.(NOMINAL)
5. ALL OUTLET BOXES SHALL BE GALVANIZED GAGE NO. 16 DEEP TYPE.
6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED FOR THE PARTICULAR LOCATION AND USAGE.
7. EQUIPMENT GROUNDING SYSTEM SHALL BE PROVIDED TO THE ELECTRICAL SYSTEM AS PER PHILIPPINE ELECTRICAL CODE REQUIREMENT.
8. MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS:
   a. LIGHT SWITCH - 1.20M ABOVE FINISH FLOOR
   b. CONVENIENCE OUTLET - 0.30M ABOVE FINISH FLOOR
9. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER.

ELECTRICAL LEGENDS:

SYMBOLS	DESCRIPTION
	LIGHTING OUTLET PINLIGHT
	LIGHT SWITCH INDICATOR
	ELECTRICAL LINE
S1	SINGLE POLE WALL SWITCH
S2	DUPLEX SWITCH, 2 SINGLE POLE SWITCHES ON ONE-GANG SWITCH PLATE
	CKT. BREAKER, RATING AS INDICATED
	DUPLEX CONVENIENCE OUTLET
C1	CIRCUIT NO. 1
C2	CIRCUIT NO. 2
PP1	DISTRIBUTION PANEL BOARD 1ST FLOOR
PP2	DISTRIBUTION PANEL BOARD 2ND FLOOR
LP	HOMERUN DIRECT TO PANELBOARD
M	SERVICE METER
	SERVICE ENTRANCE
MDP	MAIN DISTRIBUTION PANEL BOARD

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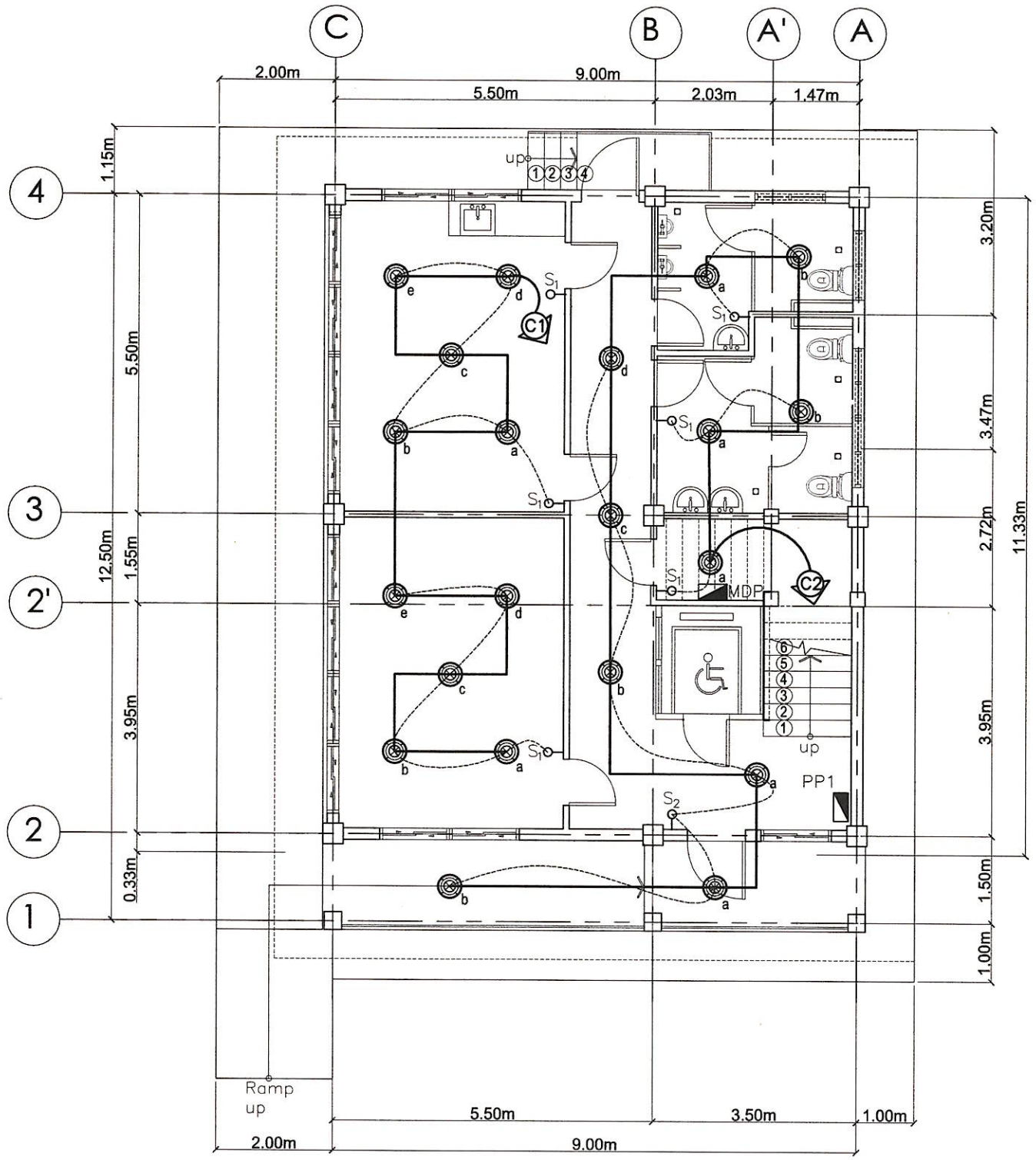
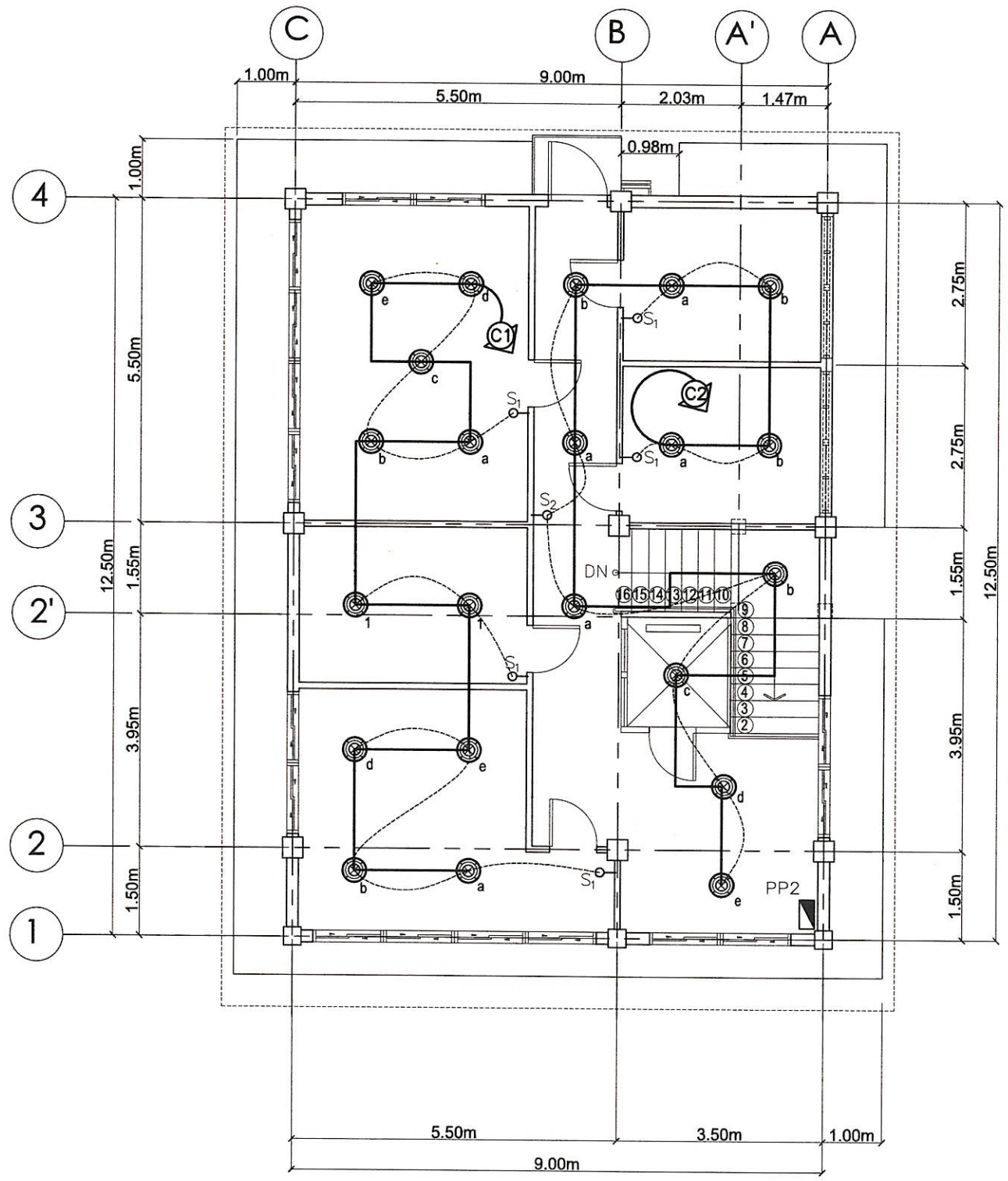


E2 01–02 1ST FLOOR LIGHTING OUTLET LAYOUT

SCALE 1:100 MTS



E2 02–02 2ND FLOOR LIGHTING OUTLET LAYOUT

SCALE 1:100 MTS

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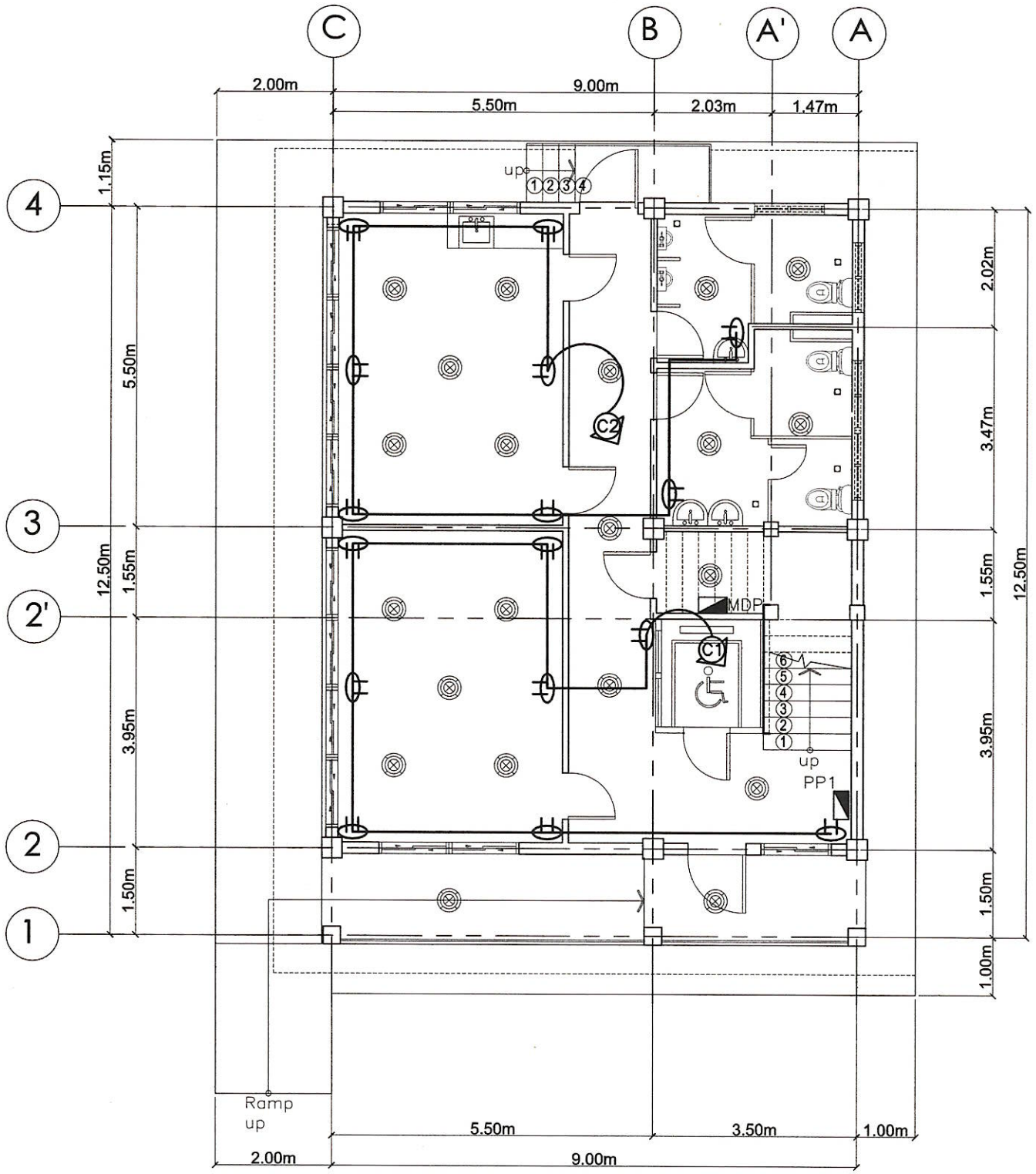
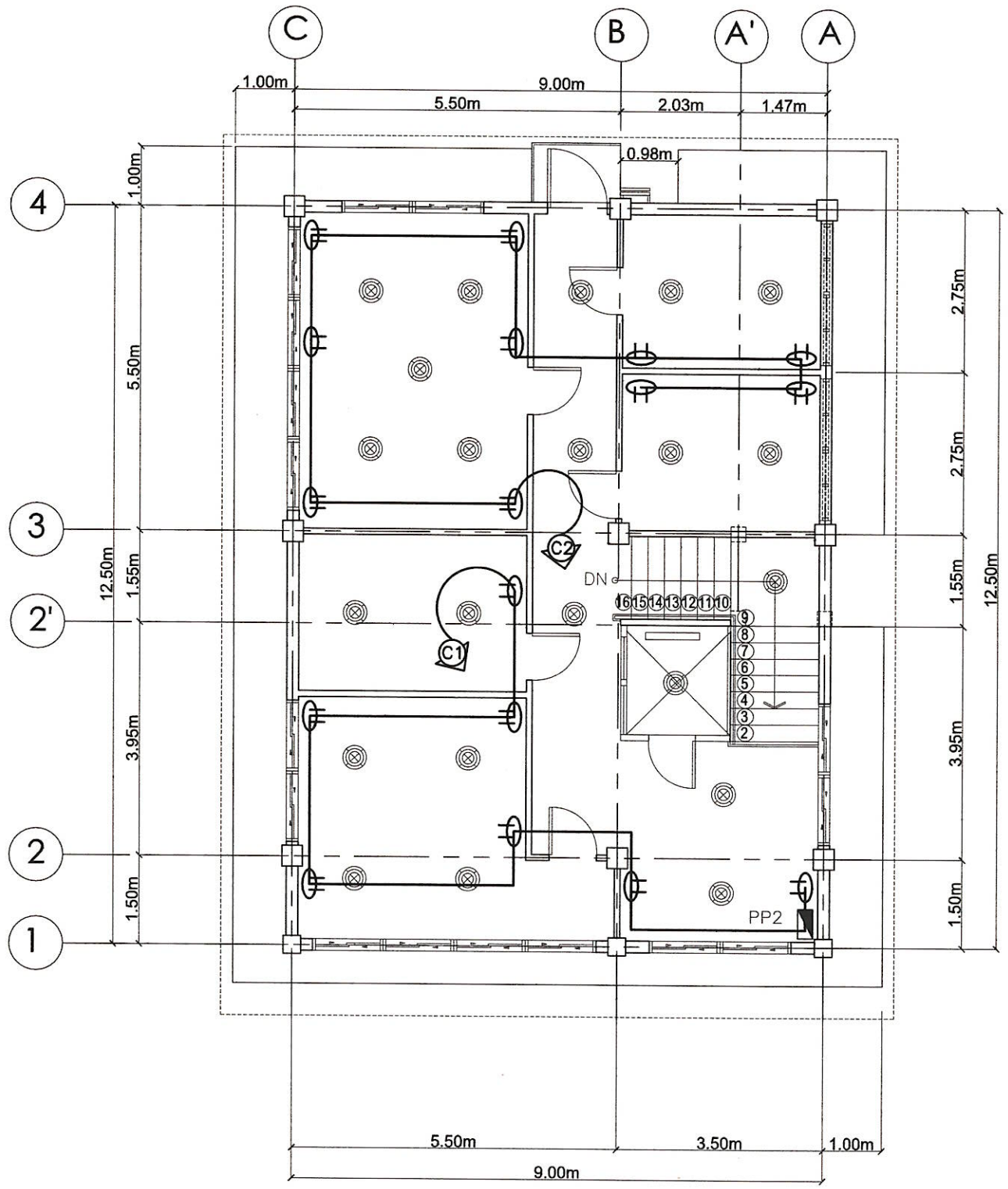


E3 / 01–02 1ST FLOOR CONVENIENCE OUTLET LAYOUT

SCALE 1:100 MTS



E3 / 02–02 2ND FLOOR CONVENIENCE OUTLET LAYOUT

SCALE 1:100 MTS

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ELECTRICAL LOAD TABULATION

PP1 FIRST FLOOR LEVEL

CKT. NO.	DESCRIPTION	QTY. L.O.	C.O.	S1	S2	VOLTS	WATTS	VA	AMPERE	TRIP BEAKER	P	KAIC	WIRE SIZE	CONDUIT SIZE
CKT. 01	LED PIN LIGHTING	10		2		230V	100	1000 W	4.35 AMP	15 AT	2	10	2–2.0mm² THHN	15mm Ø Conduit PVC
CKT. 02	LED PIN LIGHTING	11		3	1	230V	100	1100 W	4.78 AMP	15 AT	2	10	2–2.0mm² THHN	15mm Ø Conduit PVC
CKT. 03	DUPLEX CONVENIENCE OUTLET		8			230V	180	1440 W	6.26 AMP	20 AT	2	10	2–3.5mm² THHN	15mm Ø Conduit PVC
CKT. 04	DUPLEX CONVENIENCE OUTLET		8			230V	180	1440 W	6.26 AMP	20 AT	2	10	2–3.5mm² THHN	15mm Ø Conduit PVC
CKT. 05	SPARE					230V								
CKT. 06	SPARE					230V								
CKT. 07	SPARE					230V								
CKT. 08	SPARE					230V								
	SUB–TOTAL	21	16	5	1			4980W	21.65 AMP	40 AT			2–14 mm²	25mm Ø Conduit PVC

PP2 SECOND FLOOR LEVEL

CKT. NO.	DESCRIPTION	QTY. L.O.	C.O.	S1	S2	VOLTS	WATTS	VA	AMPERE	TRIP BEAKER	P	KAIC	WIRE SIZE	CONDUIT SIZE
CKT. 01	LED PIN LIGHTING	11		3		230V	100	1100 W	4.78 AMP	15 AT	2	10	2–2.0mm² THHN	15mm Ø Conduit PVC
CKT. 02	LED PIN LIGHTING	11		2	1	230V	100	1100 W	4.78 AMP	15 AT	2	10	2–2.0mm² THHN	15mm Ø Conduit PVC
CKT. 03	DUPLEX CONVENIENCE OUTLET		7			230V	180	1260 W	5.47 AMP	20 AT	2	10	2–3.5mm² THHN	15mm Ø Conduit PVC
CKT. 04	DUPLEX CONVENIENCE OUTLET		10			230V	180	1800 W	7.82 AMP	20 AT	2	10	2–3.5mm² THHN	15mm Ø Conduit PVC
CKT. 05	SPARE					230V								
CKT. 06	SPARE					230V								
CKT. 07	SPARE					230V								
CKT. 08	SPARE					230V								
	SUB–TOTAL	22	17	5	1			5260W	22.85 AMP				2–14 mm² THHN	25mm Ø Conduit PVC
	TOTAL	43	33	10	1			10240 W	44.50 AMP	40 AT			2–50 mm² THHN	25mm Ø Conduit PVC

MOUNTING: SURFACE MOUNTED

SYSTEM 230 VOLTS, SINGLE PHASE, 2–WIRE + G, 60 HZ

MAIN: 100 AT, 2–POLE, 230 V

LOCATION: UTILITY ROOM

MAIN DISTRIBUTION PANEL

CKT NO.	DESCRIPTION	VA LOAD PER CIRCUIT	AMPERES	CKT. PROTECTION P	AT	AF	CIRCUIT HOMERUN LINE WIRE(THHN)	GROUND WIRE(THHN)	CONDUIT
01	PP1	4980	21.65	2	40	50	2–16 mm²	1–8.0 mm²	25 mm dia. RMC
02	PP2	5260	22.85	2	40	50	2–16 mm²	1–8.0 mm²	25 mm dia. RMC
03	SPARE	3000	13.04	2	30	50	2–8.0 mm²	1–5.5 mm²	25 mm dia. RMC
04	SPARE	3000	13.04	2	30	50	2–8.0 mm²	1–5.5 mm²	25 mm dia. RMC
	TOTAL CONNECTED LOAD:	16,240	70.58		100				

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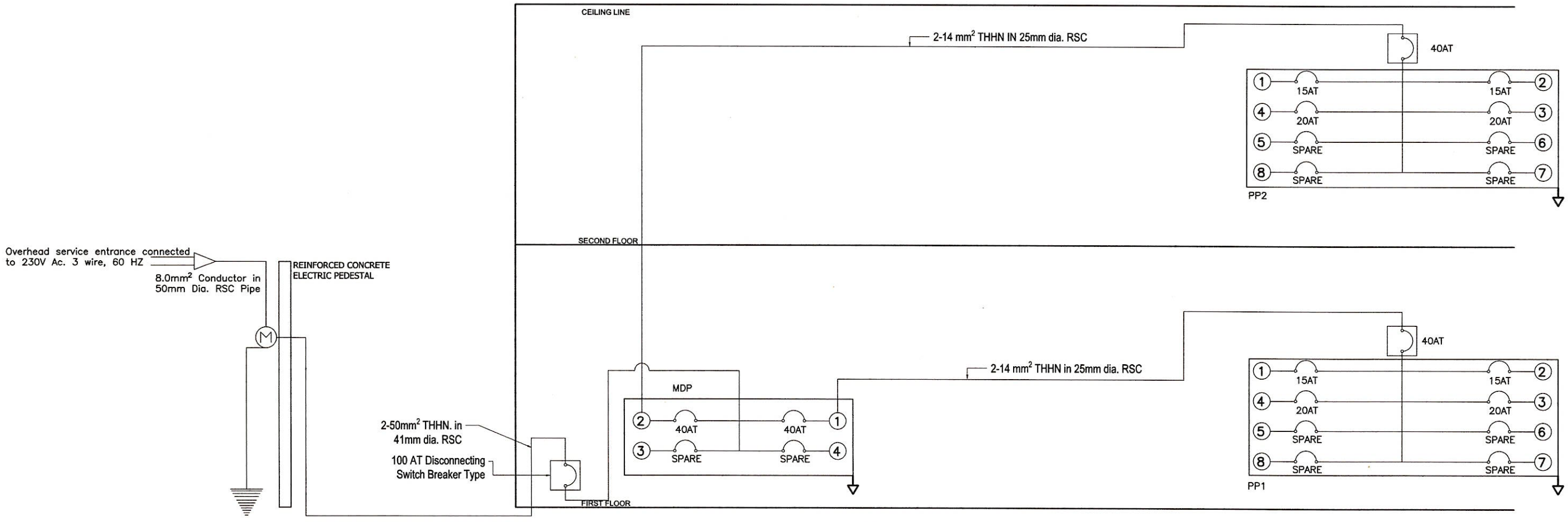


E5 / 01–01 RISER DIAGRAM

SCALE N.T.S.

LOAD COMPUTATION:

TOTAL CONNECTED LOAD= 16240 VA

I_{TOTAL} = 80% DEMAND FACTOR , AS PERMITTED BY THE NATIONAL ELECTRICAL CODE

$$\frac{16240 \times 80\%}{240 \text{ VOLTS}} = 54.13 \text{ AMP.}$$

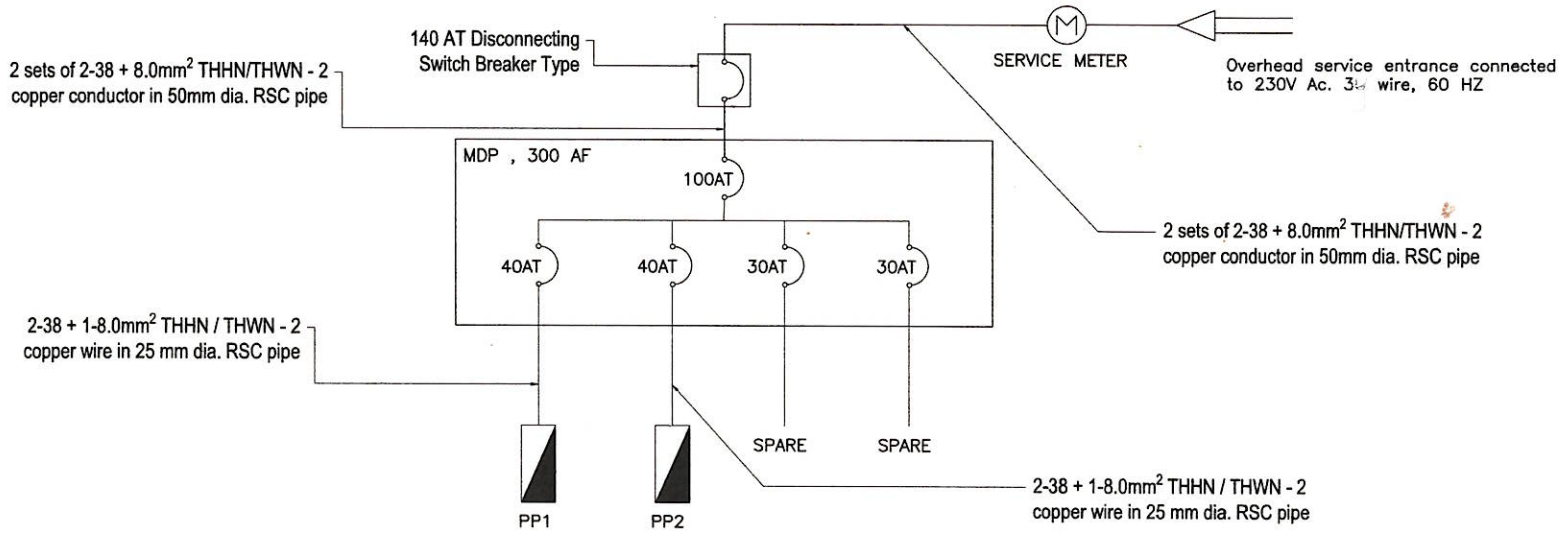
USE: 100 AT, 2P, 240V, 10 KAIC FOR MAIN SERVICE PROTECTION

SUB-FEEDER AND PROTECTION USE: 2 PIECES 8.0mm² or NO. 8 THW. COOPER WIRE

PVC CONDUIT PIPE USE 50mm Dia. PIPE

$$I_{TOTAL} = \frac{54.13 \times 240V}{1000} \times 120\% = 15.59 \text{ KVA}$$

USE: 37.5 KVA DIST'N TRANSFORMER (IF REQUIRED)



E5 / 01–01 SINGLE LINE DIAGRAM

SCALE N.T.S.

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GENERAL NOTES:

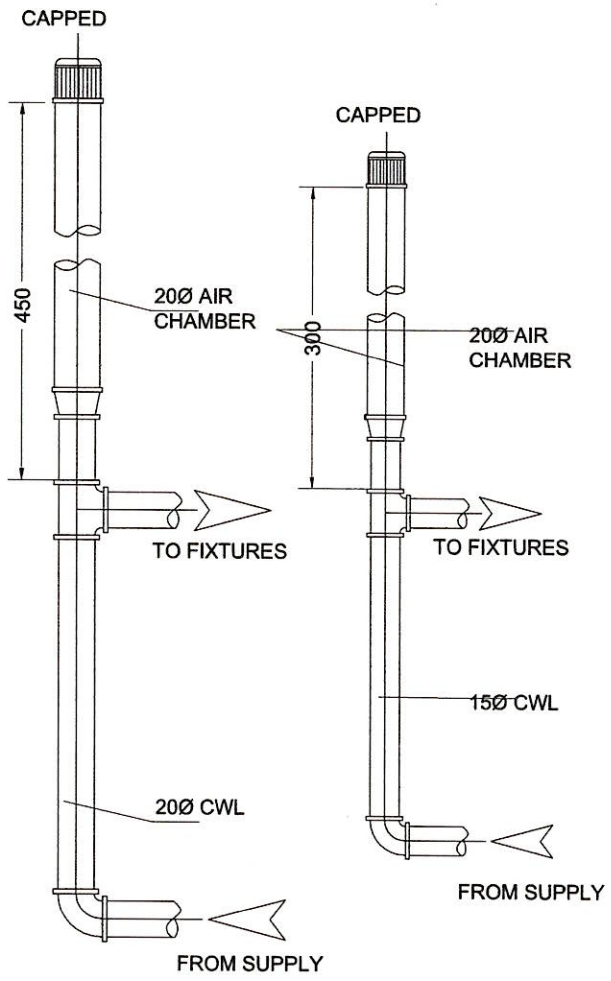
1. ALL PLUMBING WORKS TO BE DONE AND SIZES OF PIPES TO BE USED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL PLUMBING CODE OF THE PHILIPPINES AND LOCAL REGULATIONS AND ORDINANCES.
2. ALL PIPES SHALL BE INSTALLED AS INDICATED IN THE WORKING DRAWINGS. ANY RELOCATION REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL BE UPON THE APPROVAL OF THE SANITARY ENGINEER.
3. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
4. ALL PIPES SHALL BE PROVIDED W/ PROPER HANGER AND SUPPORT.
5. ALL FIXTURES SHALL BE VENTED INDIVIDUALLY AND WATERLINES SHALL BE VALVE BY GROUP.
6. UNLESS OTHERWISE SPECIFIED, ALL PLUMBING FIXTURES SHALL BE PROPERLY VENTED. MAXIMUM DISTANCE OF VENTILATION FROM FIXTURES SHALL BE 1.50m MEASURED ALONG THE LENGTH OF PIPE.
7. ALL PLUMBING FITTINGS SHALL BE ACCESSIBLE FOR MAINTENANCE. PROVIDE MANHOLE IF SUCH INSTALLATIONS ARE INSIDE THE CEILING.
8. ALL CHANGES IN DIRECTION SHALL BE MADE BY APPROPRIATE USE OF FORTY–FIVE DEGREES (45°) WYES, LONG SWEEP QUARTER BEND. ONE EIGHT WHEN THE CHANGE OF FLOW IS FROM HORIZONTAL TO VERTICAL A SINGLE BEND COMBINATION MAY BE USED ONLY ON VENT PIPE.
9. NO DOUBLE HUB OR DOUBLE TEE BRANCH SHALL BE USED ON HORIZONTAL SOIL OR WASTE LINES.
10. PROVIDE PIPE SLEEVES AT WALL, COLUMNS OR SLAB TO PROTECT FROM BREAKAGE.
11. ALL EXPOSED PIPINGS AND FITTINGS IN THE AREAS SHALL BE CHROME PLATED.
12. THE BRAND AND OTHER DETAILED PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH THE SCHEDULE FURNISHED BY THE ARCHITECT.
13. GATE VALVE SHALL BE BRONZE BODY, SOLID WEDGE TYPE, SCREWED OR FLANGE END.
14. USE POLYPROPYLENE RANDOM, TYPE 3, PN20 FOR ALL WATER PIPING SYSTEM.
15. USE uPVC SANITARY PIPING SYSTEM SERIES 1000 FOR 100 ø AND SMALLER AND GRAVITY SEWER MAIN uPVC PIPING SYSTEM FOR 150 ø AND BIGGER.
16. ENGINEER–IN–CHARGE TO VERIFY ACTUAL LOCATION AND ELEVATION OF STREET DRAINAGE, STREET SEWER AND STREET WATER MAINS FOR CONNECTION BEFORE CONSTRUCTION.

MATERIAL SPECIFICATIONS

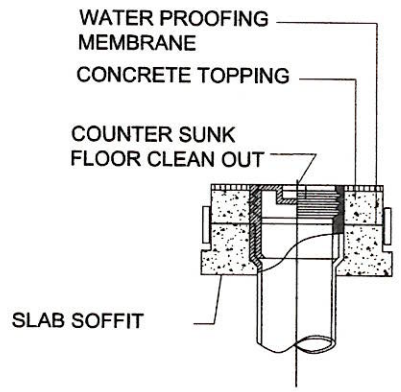
COLD WATER LINE (FOR INTERIOR PIPES)	– POLYPROPYLENE BY VESBO, UNITEC, WIRSBO & REHAU,OR APPROVED EQUIVALENT.
VENT & DOWNSPOUT	– 50 TO 150mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SERIES 1000. (FOR EXTERIOR AND EXPOSED PIPES) PNS/SAO 374. MANUFACTURED ACCORDING TO ASTM 2729.
DRAINAGE LINE	– 50 TO 150mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE. SERIES 1000. MANUFACTURED ACCORDING TO ASTM 2729. – 300mm. Ø LARGER SHALL BE REINFORCED CONCRETE PIPE. CONFORMING TO ASTM–76 & NON–REINFORCED CONCRETE PIPE 200mm. TO 350mm.Ø TO ASTM–C14.
SEWER LINE	– 50 TO 150mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE.SDR–35 MANUFACTURED ACCORDING TO ASTM 3034.
PIPE DIAMETER	– ALL PIPE DIAMETERS INDICATED IN THE DRAWINGS ARE INSIDE DIAMETERS.

PLUMBING LEGENDS

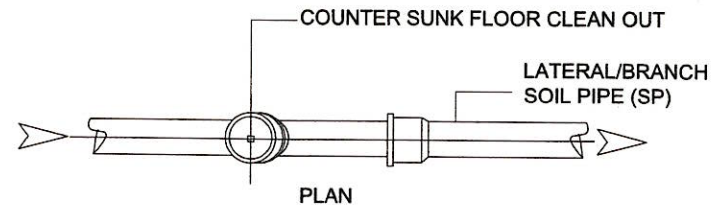
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	GATE VALVE	fd.	FLOOR DRAIN
	CHECK VALVE	lav.	LAVATORY
	FLOW DIRECTION	wc.	WATER CLOSET
	WYE TEE PIPE	uri.	URINAL
	ANGLE FITTING PIPE	sink.	SINK
	P-TRAP PIPE		CLEAN-OUT PIPE
DS.	DOWN SPOUT		WATER TAP

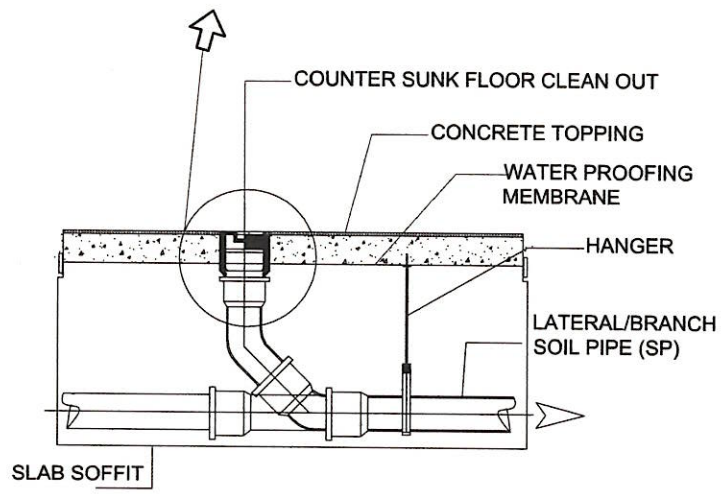


AIR CHAMBER DETAIL

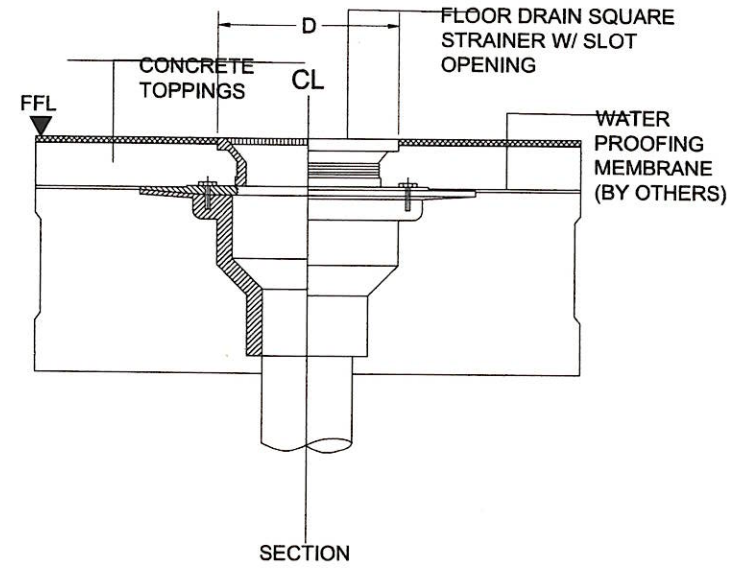


SPOT DETAIL





SECTION
FLOOR DRAIN DETAIL



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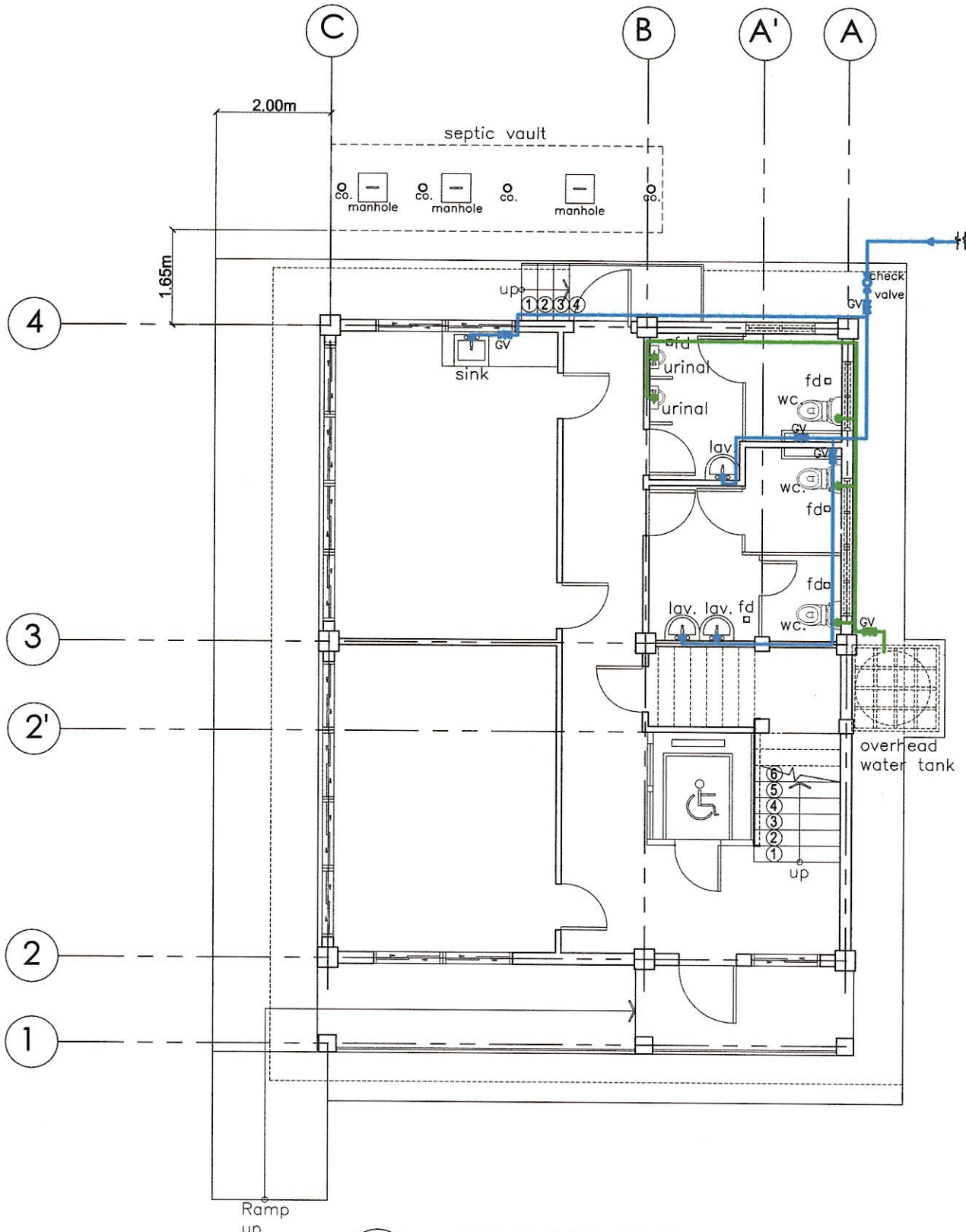
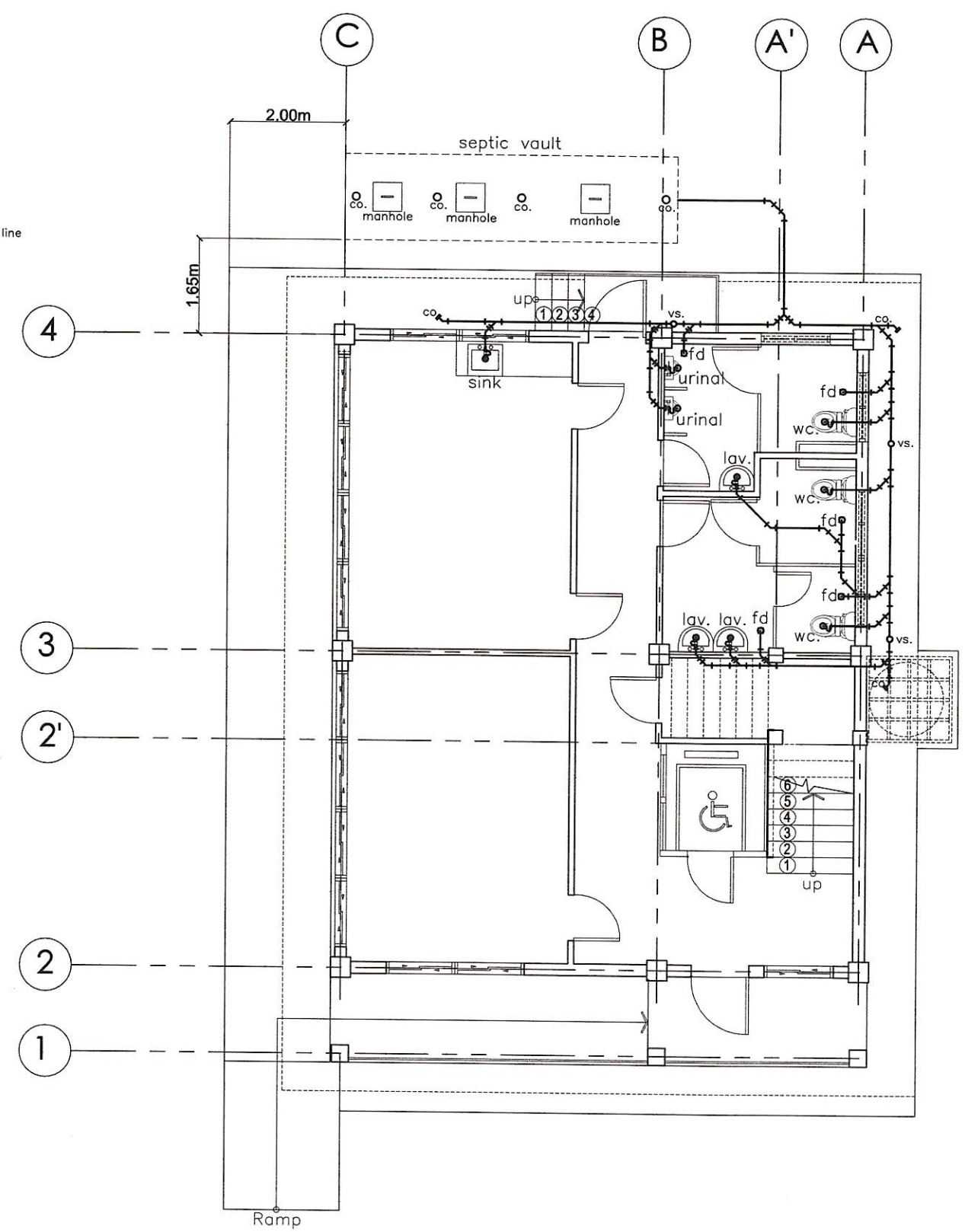


P2 / 01-02 1ST FLOOR WATER LINE LAYOUT

SCALE 1:100 MTS



P2 / 02-02 1ST FLOOR SANITARY LAYOUT

SCALE 1:100 MTS

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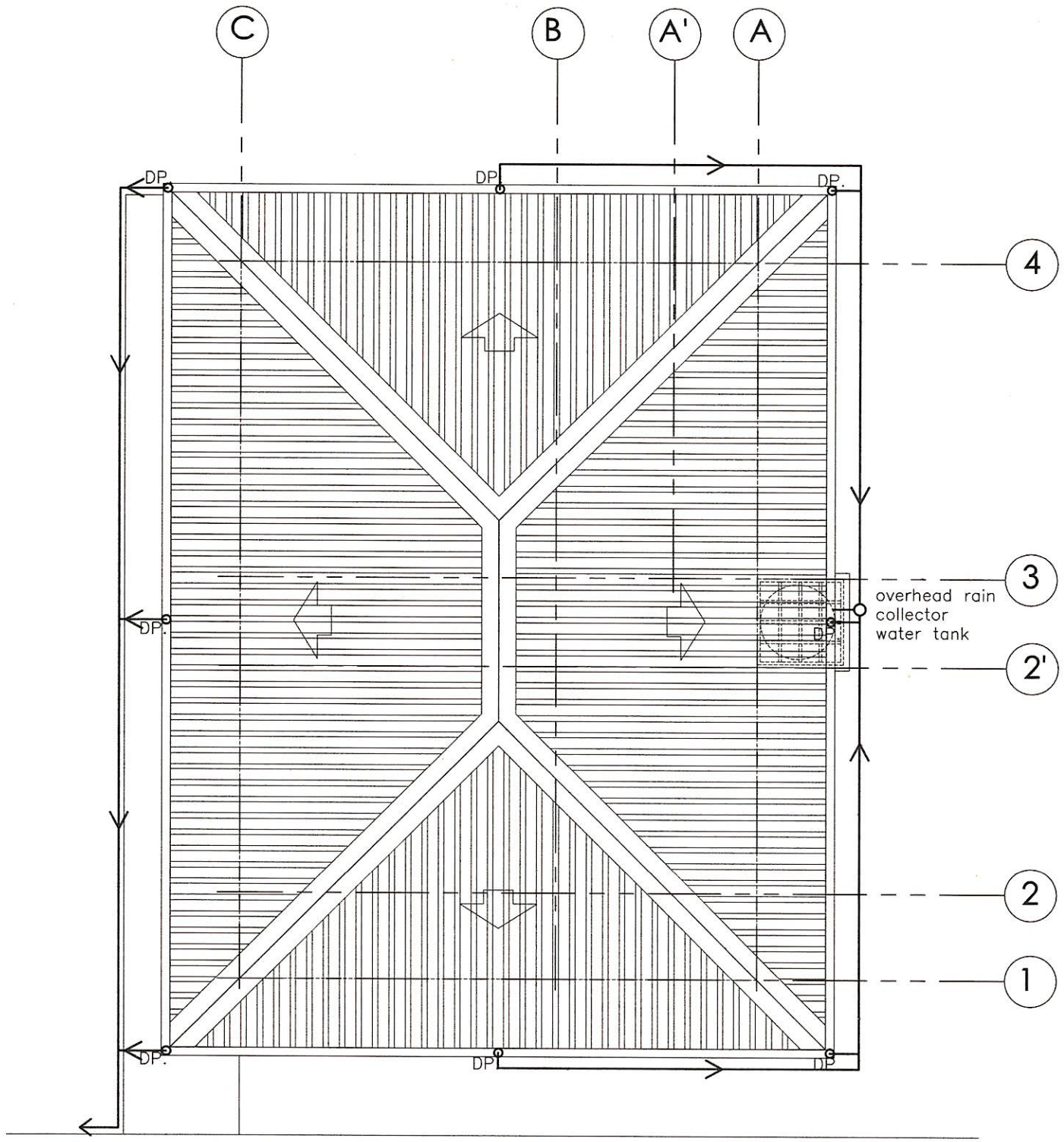
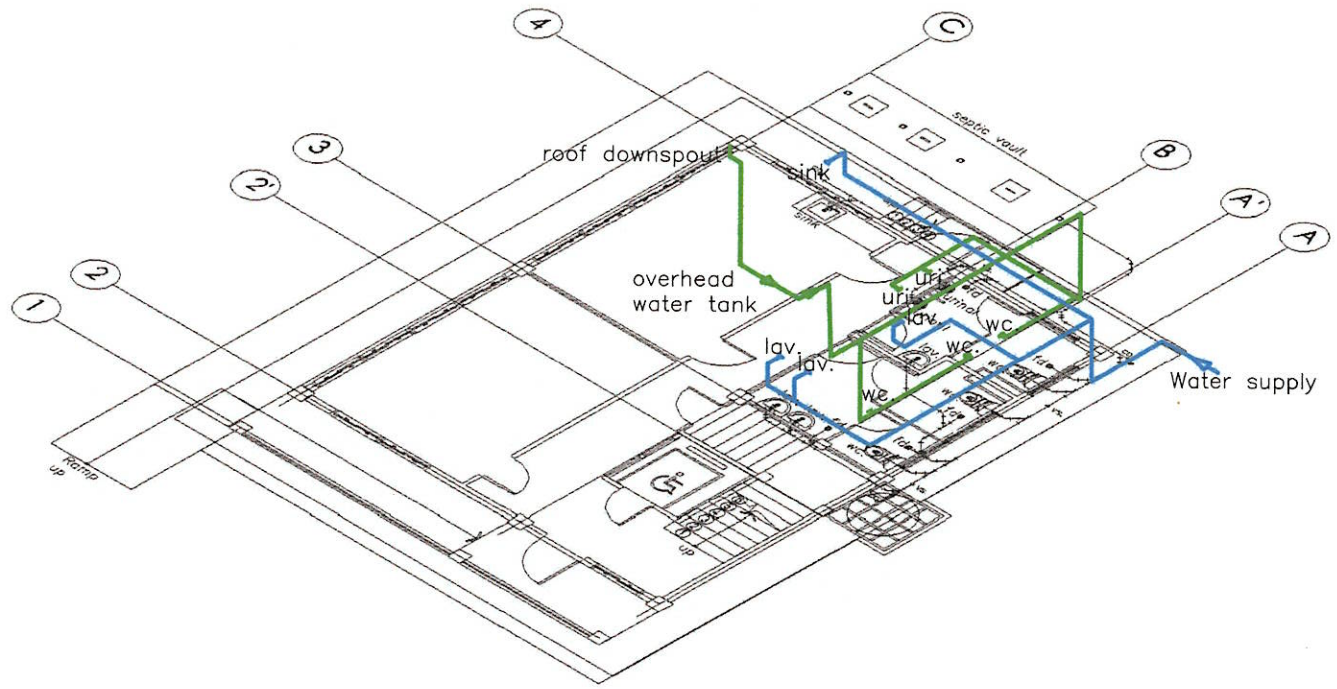


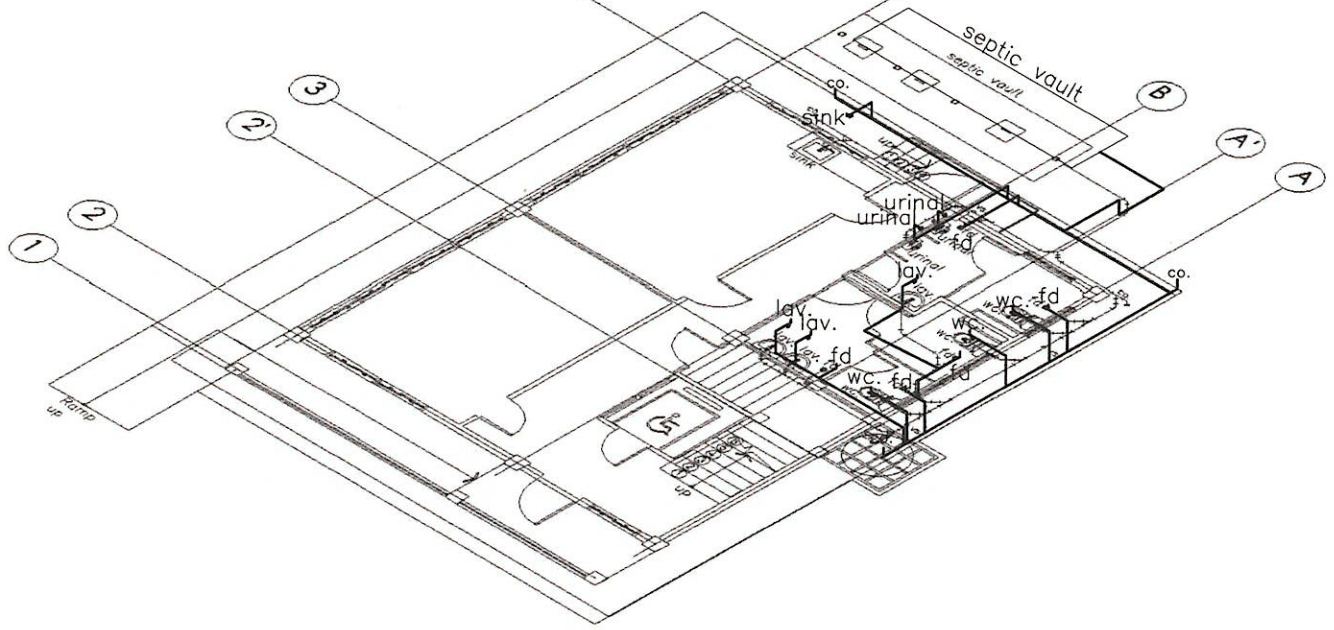
P3 01-01 ROOF DOWNSPOUT LAYOUT

SCALE NTS.



P3 01-02 1ST FLOOR WATER LINE ISOMETRIC

SCALE NTS.



P3 02-02 1ST FLOOR SANITARY ISOMETRIC

SCALE NTS.

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PLUMBING ANALYSIS

RESTROOM 1 (FIRST FLOOR - FEMALE CR. WITH PWD CUBICLE)

FIXTURES	NO. OF FIXTURES	EQUIVALENT FIXTURE UNIT	TOTAL FIXTURE UNIT
1. LAVATORY	2	1	2 FIXTURE UNIT
2. WATER CLOSET	2	6	12 FIXTURE UNIT
3. FLOOR DRAIN	3	2	6 FIXTURE UNIT
		SUB-TOTAL =	20 FIXTURE UNIT

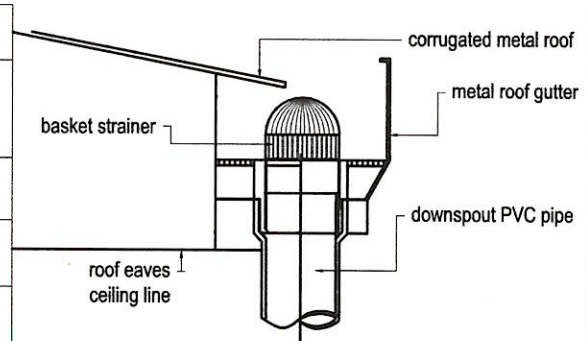
RESTROOM 2 (FIRST FLOOR - MALE CR. WITH PWD CUBICLE)

FIXTURES	NO. OF FIXTURES	EQUIVALENT FIXTURE UNIT	TOTAL FIXTURE UNIT
1. LAVATORY	1	1	1 FIXTURE UNIT
2. WATER CLOSET	1	6	6 FIXTURE UNIT
3. URINAL	2	2	4 FIXTURE UNIT
4. FLOOR DRAIN	2	2	4 FIXTURE UNIT
		SUB-TOTAL =	15 FIXTURE UNIT

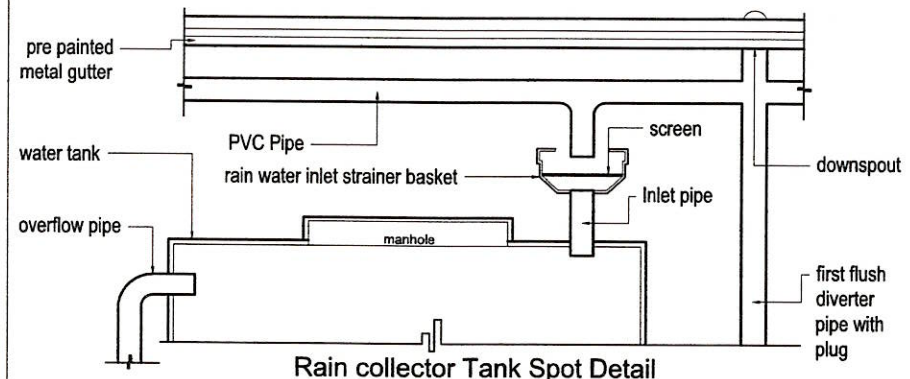
PANTRY (FIRST FLOOR)

FIXTURES	NO. OF FIXTURES	EQUIVALENT FIXTURE UNIT	TOTAL FIXTURE UNIT
1. KITCHEN SINK	1	1	1 FIXTURE UNIT
		SUB-TOTAL =	1 FIXTURE UNIT
		TOTAL =	36 FIXTURE UNIT

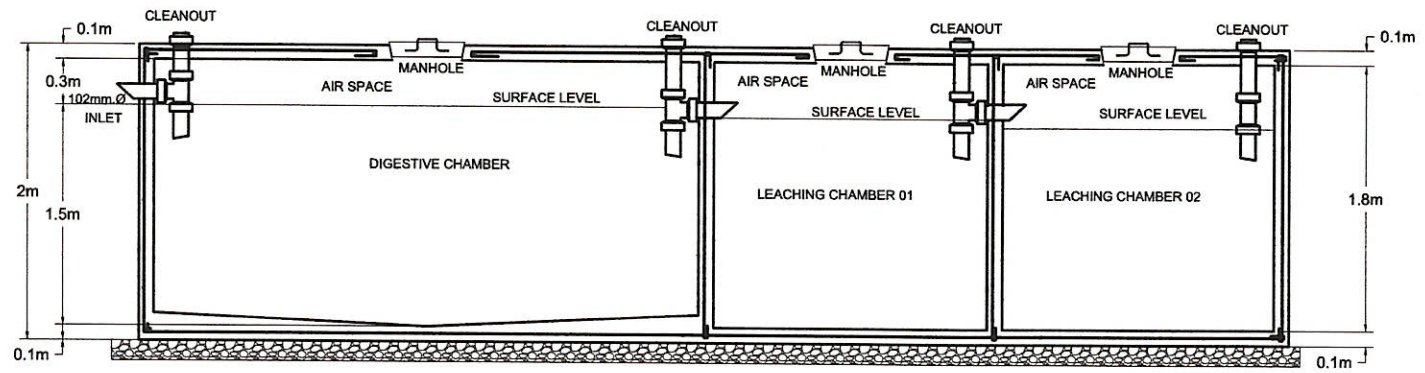
IN THE PRESENCE OF WATER CLOSET USE MINIMUM SIZE OF DISCHARGE PIPE = 75 MM DIA.
USE MINIMUM VENT PIPE SIZE = 50 MM DIA.



Downspout Blow-up Section

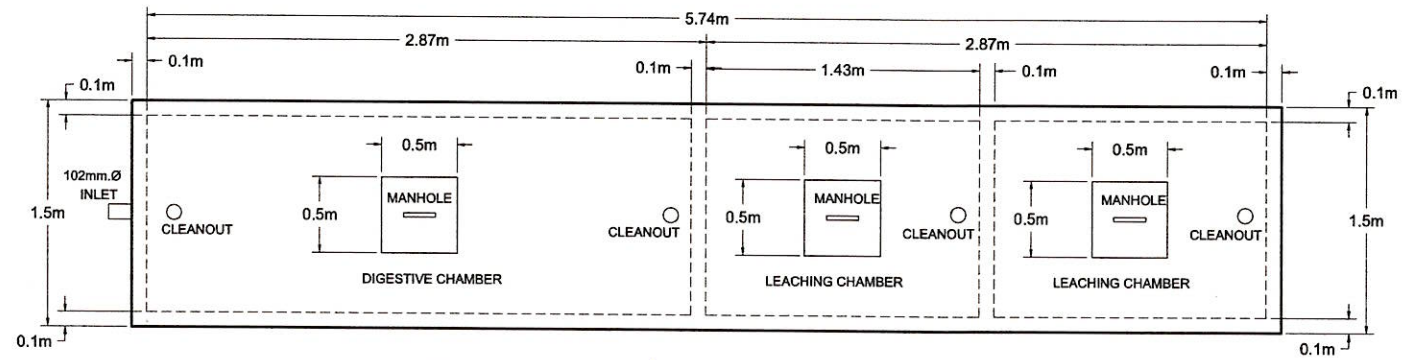


Rain collector Tank Spot Detail



P4 / 01-01 SEPTIC VAULT BLOW-UP SECTION

SCALE NTS.



P4 / 01-01 SEPTIC VAULT BLOW-UP PLAN

SCALE N.T.S.

SEPTIC TANK DIMENSION

L	W	H	Lc
5.74m	1.50m	2.00m	1.43m

Plain cement plastered finish with water proofing compound (to be applied with at least two coats water proofing membrane)

100 Persons Expected to use the Facility

0.086 cu.m. / person (school building) according to Max Fajardo

100 x 0.086 = 8.6 cu.m/person

Length of Digestion chamber = 8.6 / width(1.5) x depth(2) = 2.87m

Total length of Septic Tank(two leaching chamber)
= (2.87 / 2) + (2.87 / 2)+ 2.87 = 5.74m

HAZELINE N. TIBANGAY UNIVERSITY ARCHITECT PRC LIC. No. 028540 / VALIDITY: PTR No. / ISSUED:	PLUMBER / SANITARY ENGINEER PRC LIC. No. / VALIDITY: PTR No. / ISSUED:	CAD BY: ERGD-SEPTEMBER 2023	PROPOSED OPEN UNIVERSITY BUILDING PHASE 1 BSU,KM.5 BSU COMPOUND LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ BSU OPEN UNIVERSITY DIRECTOR	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET CONTENT: AS SHOWN REVISION DATE: REVISION NO.:	SHEET NO.: P 04 04

GENERAL CONSTRUCTION NOTES

1. IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES AND SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
2. IN REFERENCE TO THE OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONS IN FLOOR SLABS , OPENING IN THE WALLS AND SLABS, INTERIOR PARTITIONS, LOCATION OF DRAINS, ETC.
3. IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS BETWEEN THE STRUCTURAL PLANS, AND ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL NOTIFY BOTH THE STRUCTURAL ENGINEER AND ARCHITECT.
4. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI.318 95 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK ACCORDING WITH AISC SPECIFICATION (9th EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT.
5. ACI REFERS TO AMERICAN CONCRETE INSTITUTE, AISC TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.
6. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
7. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENT'S AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
9. ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, AND STRUCTURAL STEEL MUST BE NOTED AND APPROVED BY THE STRUCTURAL DESIGNER.

NOTES ON CONCRETE MIXES & PLACING

1. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE END OF THE TWENTY EIGHTH (28) DAYS WITH CORRESPONDING MAXIMUM SIZE AGGREGATE AND SLUMPS AS FOLLOWS.

LOCATION	28 DAYS STRENGTH	MAX. SIZE OF AGG.	MAX. SLUMP
SLABS	4000 PSI (27.58 MPa.)	20 mm	100 mm
COLUMNS	4000 PSI (27.58 MPa.)	20 mm	100 mm
BEAMS	4000 PSI (27.58 MPa.)	20 mm	100 mm
FOOTINGS	3500 PSI (2O.70 MPa.)	20 mm	100 mm

2. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.
   - SUSPENDED SLABS ---------- 20mm
   - SLAB ON GRADE ---------- 40mm
   - WALLS ABOVE GRADE ---------- 25mm
   - BEAM STIRRUPS AND COLUMN TIES ---------- 40mm
   - WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS ---------- 50mm
   - WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH ---------- 75mm
3. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HANDLING OR PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEELBORROWS, NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEELBORROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN AGGREGATE LENGTH.
4. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH.
5. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
6. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
7. STRIPPING OF FORMS AND SHORES:
   - FOUNDATION ---------- 24 HRS.
   - SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED ---------- 8 DAYS
   - WALLS ---------- 21 DAYS
   - BEAMS ---------- 14 DAYS
   - COLUMNS ---------- 21 DAYS
8. THE CONTRACTOR SHALL SUBMIT THE SCHEDULE OF POURING AND THE LOCATION OF THE CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER AT LEAST FOUR (4) DAYS PRIOR TO THE POURING FOR APPROVAL.
9. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE FORMS AND SHORING UNTIL THE CONCRETE MEMBERS HAVE ATTAINED THEIR WORKING CONDITION AND STRENGTH.

NOTES ON REINFORCEMENT

1. UNLESS OTHERWISE NOTED IN THE PLANS, THE YIELD STRENGTH OF REINFORCING BARS SHALL BE:
   - FOOTINGS ---------- FY = 276 MPA (40,000 PSI) GRADE 40
   - COLUMNS ---------- FY = 414 MPA (60,000 PSI) GRADE 60
   - BEAMS, SLABS ---------- FY = 276 MPA (40,000 PSI) GRADE 40

A. NON-LOAD BEARING WALL PARTITIONS, BEDDED SLABS, FLOOR AND ROOF SLABS, PARAPETS, CATCH BASIN, SIDE WALK - FY = 227.5 MPA (33,000 PSI)

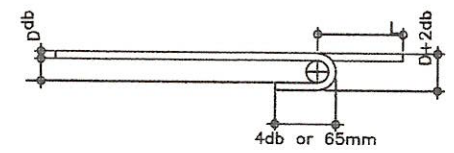
2. ALL REINFORCING BARS SIZE 10MM OR LARGER SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A 706. BARS SMALLER THAN 10MM MAY BE PLAIN.
3. SPLICES SHALL BE SECURELY WIRED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE A AND TABLE B (TABLE OF LAP SPLICE & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS, SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE AND NO SPLICE SHALL BE MORE THAN 50%..

NOTES ON CONCRETE SLABS

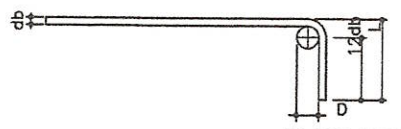
1. ALL SLAB REINFORCEMENTS SHALL BE 20MM CLEAR MINIMUM FROM BOTTOM AND FROM THE TOP OF SLAB.

NOTES ON STIRRUPS

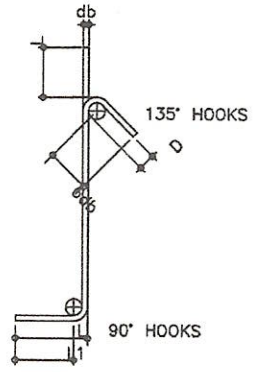
1. ALL REINFORCEMENT SHALL BE BENT COLD UNLESS OTHERWISE PERMITTED BY THE STRUCTURAL ENGINEER.
2. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FILLED BENT, EXCEPT AS SHOWN IN THE DESIGN DRAWINGS OR PERMITTED BY THE STRUCTURAL ENGINEER.
3. TIES AND CLOSE STIRRUPS MUST BE BENT AT 135°.



180° END HOOKS



90° END HOOKS



MAIN BAR END HOOKS (ALL GRADES)

BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm ø	60	75	125	150
12mm ø	75	100	150	200
16mm ø	95	125	175	250
20mm ø	115	150	200	300
25mm ø	150	200	230	450
28mm ø	240	300	350	550
32mm ø	300	335	450	600

STIRRUP AND TIE HOOKS (ALL GRADES)

BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm ø	40	125	85	100
12mm ø	50	165	115	115
16mm ø	65	200	140	150
20mm ø	115	250	165	300
25mm ø	150	365	230	405

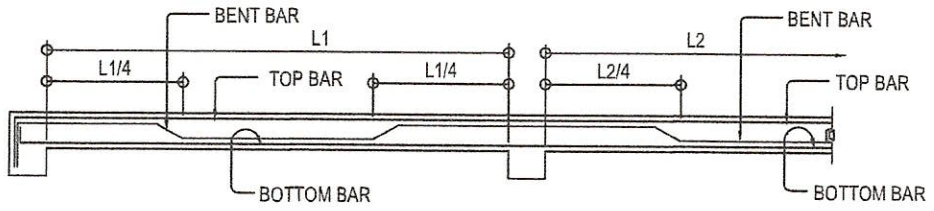
SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S1 01 | 14

NOTES ON FOOTINGS

1. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 84 KPA. THE CONTRACTOR SHALL REPORT TO THE ENGINEER, IN WRITING, THE ACTUAL SOIL CONDITIONS UNCOVERED AND CONFIRM ACTUAL BEARING CAPACITY OF SOIL BEFORE DEPOSITING CONCRETE.
2. FOOTING SHALL REST AT LEAST 3000MM BELOW NATURAL GRADE LINES UNLESS OTHERWISE INDICATED IN THE PLANS. NO FOOTING SHALL REST OF FILL.
3. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75MM CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50MM FOR CONCRETE DEPOSITED AGAINST A FORMWORK.

NOTES ON CONCRETE SLABS

1. ALL SLAB REINFORCEMENTS SHALL BE 20MM CLEAR MINIMUM FROM BOTTOM AND FROM THE TOP OF SLAB.
2. UNLESS OTHERWISE SHOWN, REINFORCEMENT IN CONTINUOUS ELEVATED SLAB SHALL BE CUT AS FOLLOWS:

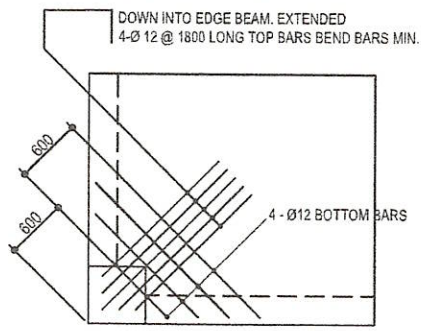


TYPICAL BAR BENDING AND CUTTING DETAILS FOR SLABS

3. IF SLABS ARE REINFORCED BOTH WAYS BARS ALONG THE SHORTER SPAN SHALL BE PLACED BELOW THOSE ALONG THE LONG SPAN AT THE CENTER AND OVER THE LONGER SPAN FOR REINFORCING BARS NEAR THE SUPPORTS. THE SPACING OF THE BARS AT THE COLUMN STRIPS SHALL NOT BE MORE THAN ONE AND A HALF (1 ½) SLAB THICKNESS.
4. TEMPERATURE BARS FOR SLAB SHALL BE GENERALLY PLACED NEAR THE FACE IN TENSION AND SHALL NOT BE LESS THAN 0.0025 X GROSS CROSS-SECTIONAL AREA (Ag) OF THE SLAB (SEE SCHEDULE BELOW):

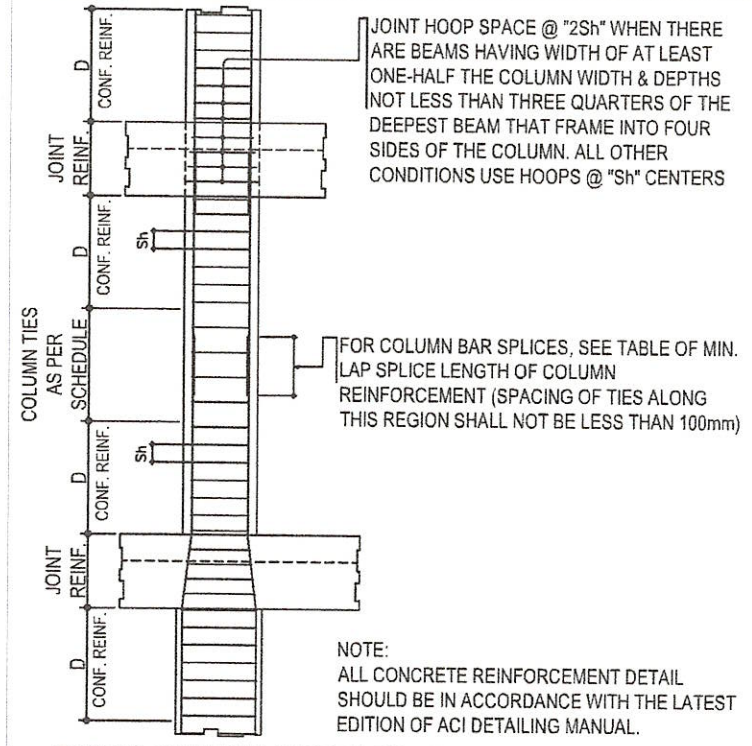
SCHEDULE OF MINIMUM SLAB REINFORCEMENT	
THICKNESS	MINIMUM TEMPERATURE BARS
100 mm	10 mm Ø 250mm EACH WAY
125 mm	10 mm Ø 225mm EACH WAY
150 mm	10 mm Ø 185mm EACH WAY
175 mm	10 mm Ø 150mm EACH WAY
200 mm	10 mm Ø 140mm EACH WAY

5. UNLESS OTHERWISE NOTED IN THE PLANS, ALL BEDDED SLABS SHALL BE REINFORCED WITH 10mm Ø AT 250mm O.C. EACH WAY TO CENTER OF SLAB AND CONSTRUCTION JOINTS FOR SAME SHALL NOT BE LESS THAN 3.65 METERS APART.
6. PROVIDE EXTRA REINFORCEMENTS FOR CORNER SLAB (TWO ADJACENT DISCONTINUOUS EDGES) AS SHOWN BELOW.
7. CONCRETE SLAB REINFORCEMENTS SHALL BE PROPERLY SUPPORTED WITH 10MM Ø STEEL CHAIR OR APPROVED EQUIVALENT SPACED AT 1.0 METER ON CENTER BOTH WAYS.

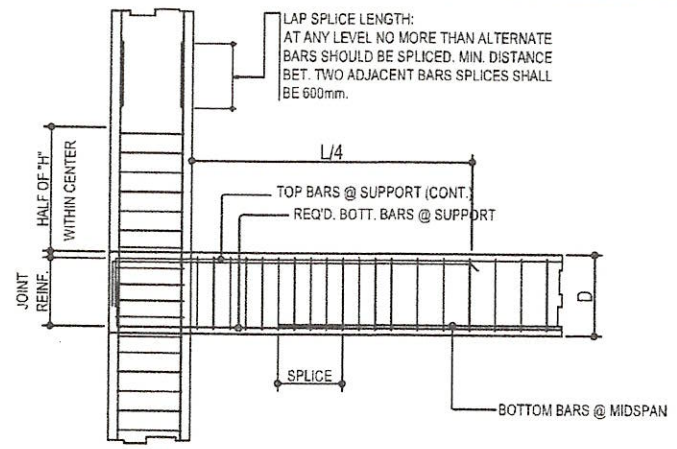


NOTES ON COLUMNS

1. PROVIDE EXTRA SETS OF TIES AT 100MM O.C. FOR TIED COLUMN REINFORCEMENT ABOVE AND BELOW BEAM-COLUMN CONNECTIONS FOR A DISTANCE FROM FACE OF CONNECTION EQUAL TO THE GREATER OF THE OVERALL THICKNESS OF COLUMN, $\frac{1}{6}$ THE CLEAR HEIGHT OF COLUMN OR 450MM.
2. COLUMN TIES SHALL BE PROTECTED EVERYWHERE BY A COVERING OF CONCRETE CAST MONOLITHICALLY WITH THE CORE WITH THE MINIMUM THICKNESS OF 40MM AND NOT LESS THAN 40 TIMES THE MAXIMUM SIZE OF COARSE AGGREGATE IN MILLIMETERS.
3. WHERE COLUMNS CHANGE IN SIZE, VERTICAL REINFORCEMENTS SHALL BE OFFSET AT A SLOPE OF NOT MORE THAN 1 IN 6 AND EXTRA 10MM TIES AT 100MM SHALL BE PROVIDED THROUGHOUT THE OFFSET REGION.
4. UNLESS OTHERWISE INDICATED IN THE PLANS, LAP SPLICES FOR VERTICAL COLUMN REINFORCEMENT SHALL BE MADE WITHIN THE CENTER HALF OF COLUMN HEIGHT, AND THE SPLICE LENGTH SHALL NOT BE LESS THAN 40 BAR DIAMETERS. WELDING OR APPROVED MECHANICAL DEVICES MAY BE USED PROVIDED THAT NOT MORE THAN ALTERNATE BARS ARE WELDED OR MECHANICALLY SPLICED AT ANY LEVEL AND THE VERTICAL DISTANCES BETWEEN THESE WELDS OR SPLICES OF ADJACENT BARS IS NOT LESS THAN 600mm.



TYPICAL COLUMN ELEVATION SHOWING DOWELS AND TIES SPACING



TYPICAL DETAIL OF COLUMN LAP SPLICE AND EXTERIOR GIRDER TO COLUMN CONNECTION

NOTES ON BEAMS AND GIRDERS

1. UNLESS, OTHERWISE NOTED IN PLANS, CAMBER ALL BEAMS AND GIRDER AT LEAST 6MMØ FOR EVERY 4.5M OF SPAN. EXCEPT CANTILLEVERS FOR WHICH THE CAMBER SHALL BE AS NOTED IN PLANS OR AS ORDERED BY THE ENGINEER BUT IN NO CASE LESS THAN 20MM FOR EVERY 3.0M OF FREE SPAN.
2. TYPICAL BARS BENDING AND CUTTING DETAILS FOR BEAMS SHALL BE AS SHOWN IN FIGURE B-2.
3. IF THE BEAM REINFORCING BARS END IN A WALL, THE CLEAR DISTANCE FROM THE BAR TO THE FARTHER FACE OF THE WALL NOT BE LESS THAN 25MM. EMBEDMENT LENGTH SHALL BE AS SHOWN IN TABLE 'A' FOR TENSION BARS AND TABLE 'B' FOR COMPRESSION BARS UNLESS SPECIFIED IN PLAN. TOP BAR SHALL NOT BE SPLICED WITHIN THE COLUMN OR WITHIN A DISTANCE TWICE THE MEMBER DEPTH FROM THE FACE OF THE COLUMN. AT LEAST TWO STIRRUPS SHALL BE PROVIDED AT ALL SPLICES.
4. IF THERE ARE TWO OR MORE LAYERS OF REINFORCING BARS, USE 25MMØ BAR SEPARATORS SPACED AT 1.0M ON CENTER. IN NO CASE SHALL THERE BE LESS THAN TWO (2) SEPARATORS BETWEEN TWO LAYERS OF BARS.
5. MINIMUM CONCRETE PROTECTION FOR REINFORCING BARS OR STEEL SHAPES SHALL BE AS SHOW IN FIGURE B-1 UNLESS SPECIFIED ELSEWHERE.
6. WHEN A BEAM CROSSES A GIRDER, REST BEAM ON TOP OF GIRDER BARS, BEAM REINFORCING BAR SHALL BE SYMMETRICAL ABOUT CENTER LINE WHENEVER POSSIBLE.
7. GENERALLY, NO SPLICE SHALL BE PERMITTED AT POINTS WHERE CRITICAL BENDING STRESSES OCCUR. SPLICES WHERE SO PERMITTED SHALL BE INDICATED IN THE TABLE 'A' AND 'B'. WELDED SPLICES SHALL DEVELOP IN TENSION AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. NOT MORE THAN 50% OF THE BARS AT ANY ONE SECTION IS ALLOWED TO BE SPLICED THEREIN.

NOTES ON EMBEDDED PIPES

1. ALL EMBEDDED PIPES FOR UTILITIES, ETC., THAT PASS THROUGH BEAMS SHALL NOT EXCEED 100mm IN DIAMETER OR 1/3 BEAM DEPTH WHICHEVER IS LESS, UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
2. NO PIPES SHALL BE ALLOWED TO PASS THROUGH BEAMS VERTICALLY.
3. NO PIPES SHALL BE EMBEDDED IN COLUMNS.

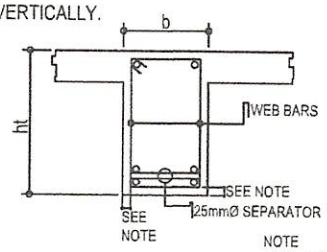


FIG. B-1

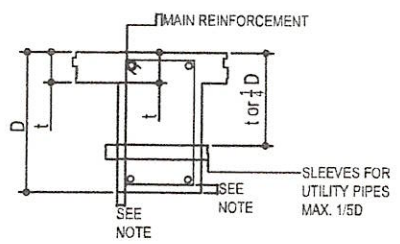


FIG. B-3

TYPICAL DETAILS FOR SLEEVES THRU CONCRETE BEAM

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S2 02 | 14

TABLE 'A'
TENSION BARS
EMBEDMENT LENGTHS AND LAPPED SPLICED IN MILLIMETERS

BAR SIZE (DEFORMED)	f'c = 20.7MPa (3,000 psi)		f'c = 27.6MPa (4,000 psi)	
	EMBEDMENT	LAPPED	EMBEDMENT	LAPPED
10mm ø	300	300	300	300
12 mm ø	300	300	300	300
16 mm ø	300	400	300	400
20 mm ø	400	550	350	500
25 mm ø	600	800	550	750
28 mm ø	750	1000	650	850
32 mm ø	950	1300	850	1100

TABLE 'B'
COMPRESSION BARS
EMBEDMENT LENGTHS AND LAPPED SPLICED IN MILLIMETERS

BAR SIZE (DEFORMED)	f'c = 20.7MPa (3,000 psi)		f'c = 27.6MPa (4,000 psi)	
	EMBEDMENT	LAPPED	EMBEDMENT	LAPPED
10mm ø	225	300	200	300
12 mm ø	275	300	250	300
16 mm ø	350	400	325	400
20 mm ø	450	500	475	500
25 mm ø	550	625	550	625
28 mm ø	625	675	625	675
32 mm ø	700	775	700	775

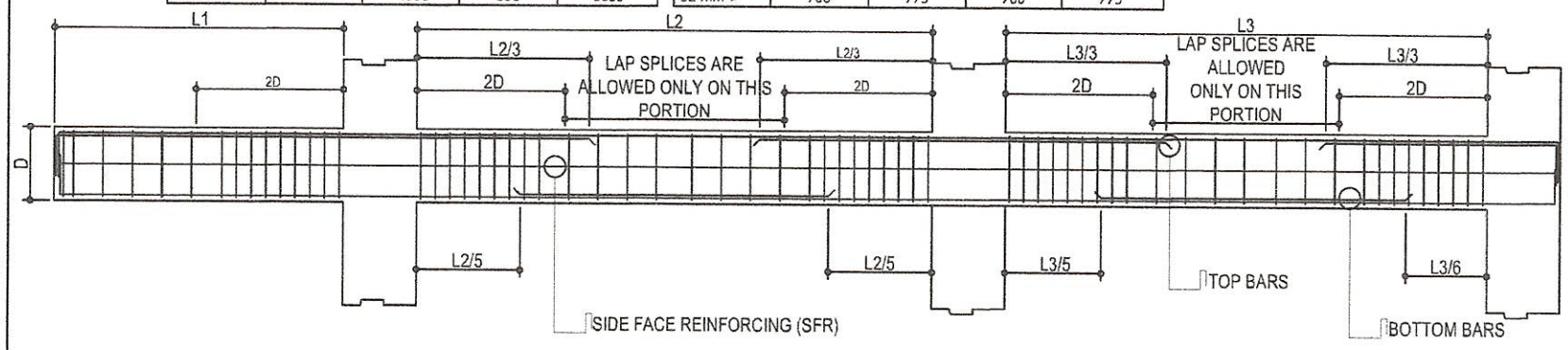


FIG. B-2
TYPICAL BEAM ELEVATION SHOWING DOWELS AND TIES SPACING

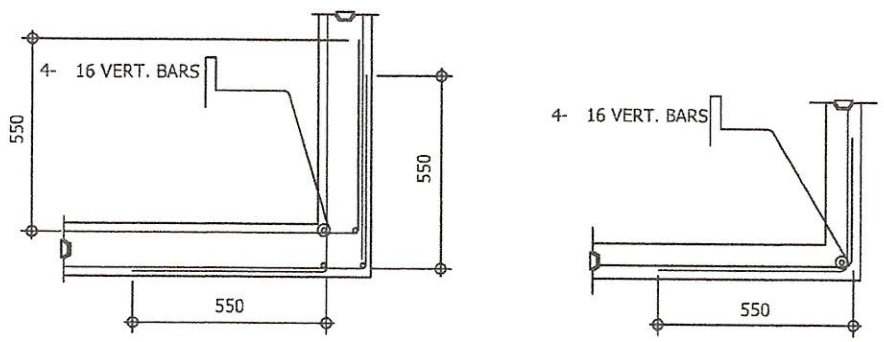
NOTES ON WELDS
1. USE E70xx ELECTRODES FOR ALL MEMBERS WELDED.
2. WELDS SHALL DEVELOP THE FULL STRENGTH OF MEMBERS JOINED UNLESS OTHERWISE SHOWN OR DETAILED IN THE DRAWINGS.

NOTES ON STRUCTURAL STEEL
1. STRUCTURAL STEEL TO BE USED FOR FABRICATION AND ERECTION OF THIS STRUCTURE SHALL COMPLY WITH ALL THE PERTINENT PROVISIONS OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING LATEST EDITION.
2. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
3. ALL WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF THE MEMBERS CONNECTED.
4. UNLESS OTHERWISE SPECIFIED, ALL WELDING RODS SHALL CONFORM AWS E60 ELECTRODES.
5. ALL BOLTS USED UNLESS OTHERWISE SPECIFIED SHALL BE ASTM A 307 BOLTS.

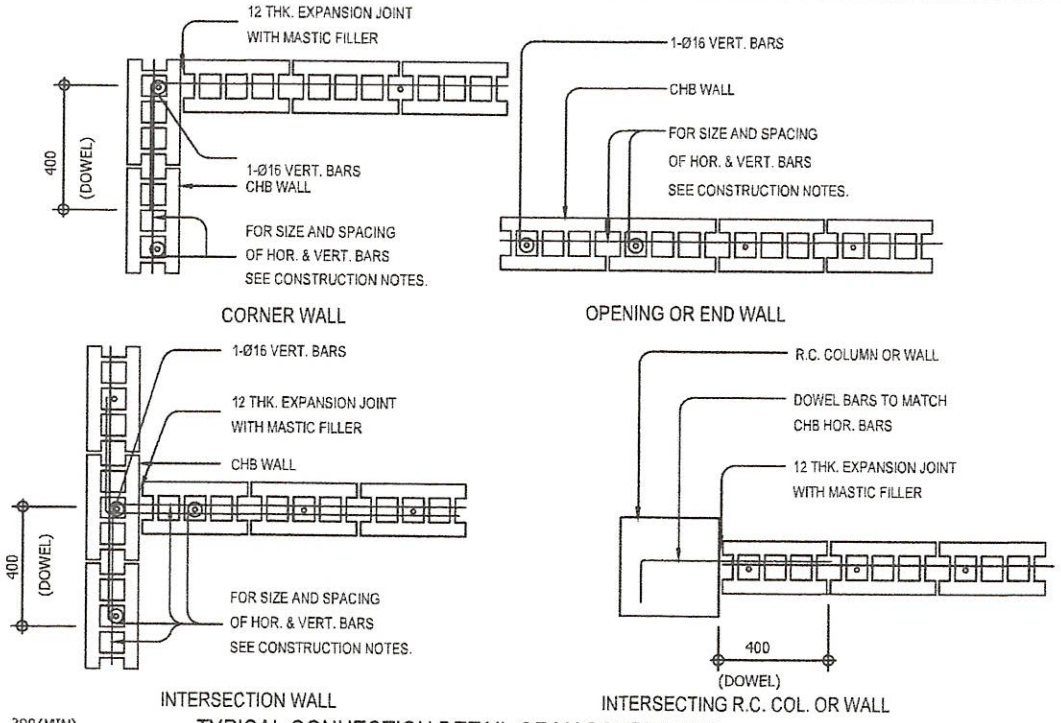
NOTES ON CONCRETE HOLLOW BLOCK WALLS
1. UNLESS OTHERWISE SHOWN IN THE PLANS, ALL CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCKS ARE REINFORCED AS SHOWN IN THE SCHEDULE OF CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCK REINFORCEMENT.
2. PROVIDE 150mm x 300mm STIFFENER COLUMN REINFORCED WITH 4-12mm WITH 6mmØ TIES AT 150mm ON CENTER WHERE CONCRETE HOLLOW BLOCK TERMINATES AND AT EVERY 3.0m LENGTH OF CONCRETE HOLLOW BLOCK WALLS UNLESS NOTED IN THE STRUCTURAL PLANS.

SCHEDULE OF CONCRETE HOLLOW BLOCK AND CERAMIC BLOCK REINFORCEMENT

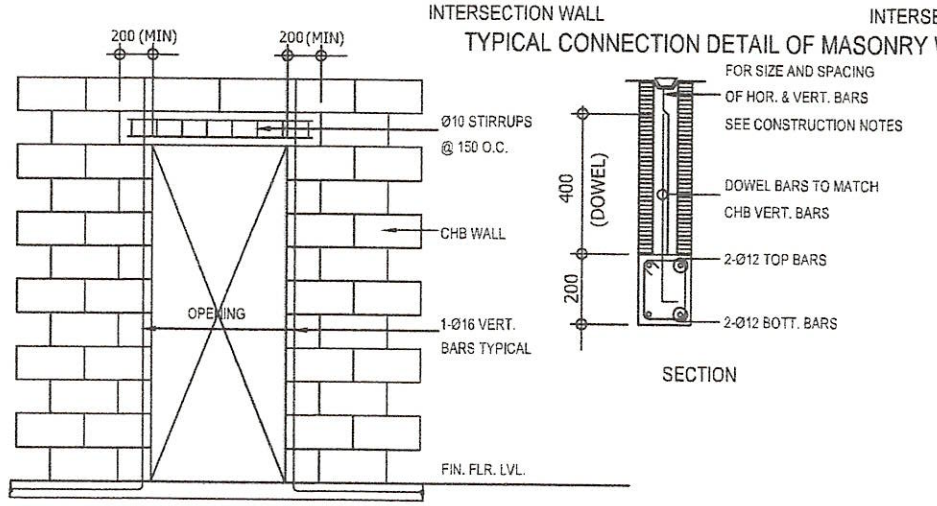
BLOCK THICKNESS	REINFORCEMENT		NOTES
	HORIZONTAL	VERTICAL	A. MINIMUM LAPS AT SPLICE = 0.25m B. PROVIDE RIGHT ANGLED REINFORCEMENT AT CORNERS 0.92m LONG C. WHERE CHB OR CERAMIC BLOCK WALL DOWELS JOIN COL. R.C. BEAMS AND WALL DOWELS WITH THE SAME SIZE AS VERTICAL OR HORIZONTAL REINFORCEMENT SHALL BE PROVIDED.
75 mm	10mmØ @ 600mm O.C.	10mmØ @ 600mm O.C.	
125 mm	10mmØ @ 600mm O.C.	10mmØ @ 600mm O.C.	
150 mm	10mmØ @ 600mm O.C.	10mmØ @ 600mm O.C.	
200 mm	12mmØ @ 600mm O.C.	12mmØ @ 600mm O.C.	



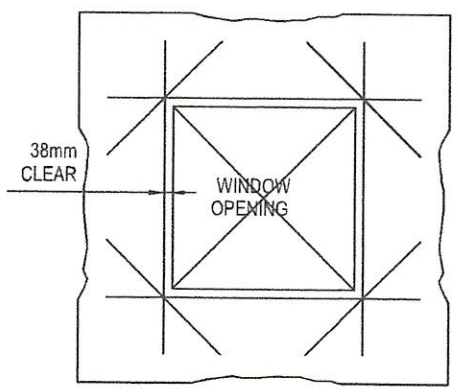
TYPICAL CONNECTION DETAIL OF R.C. WALL AT CORNERS



TYPICAL CONNECTION DETAIL OF MASONRY WALL

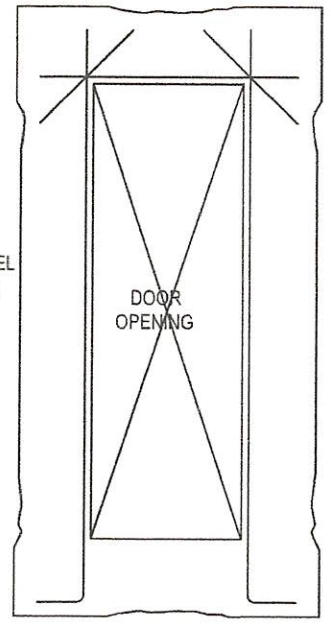


TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING



NOTE:
PROVIDE THESE ADDITIONAL BARS FOR ALL OPENINGS PLUS BARS (NOT SHOWN) PARALLEL TO SIDE OF OPENING EQUAL TO THE NUMBER OF TERMINATED BARS AT OPENING

SEE ARCHITECTURAL & MECHANICAL PLANS FOR SLAB OPENING LOCATION.



TYP. EXTERIOR WINDOW & DOOR OPENING

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HAZELINE N. TIBANGAY
HEAD, PROJECT MANAGEMENT UNIT

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BSU COMPOUND, KM.3, LA TRINIDAD, BENGUET
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BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET
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LEONARDO T. APILIS
END USER/ DIRECTOR-OPEN UNIVERSITY

ALLAN CASALDO SACPA
VICE PRESIDENT- ADMINISTRATION AND FINANCE

FELIPE SALAING COMILA
PRESIDENT

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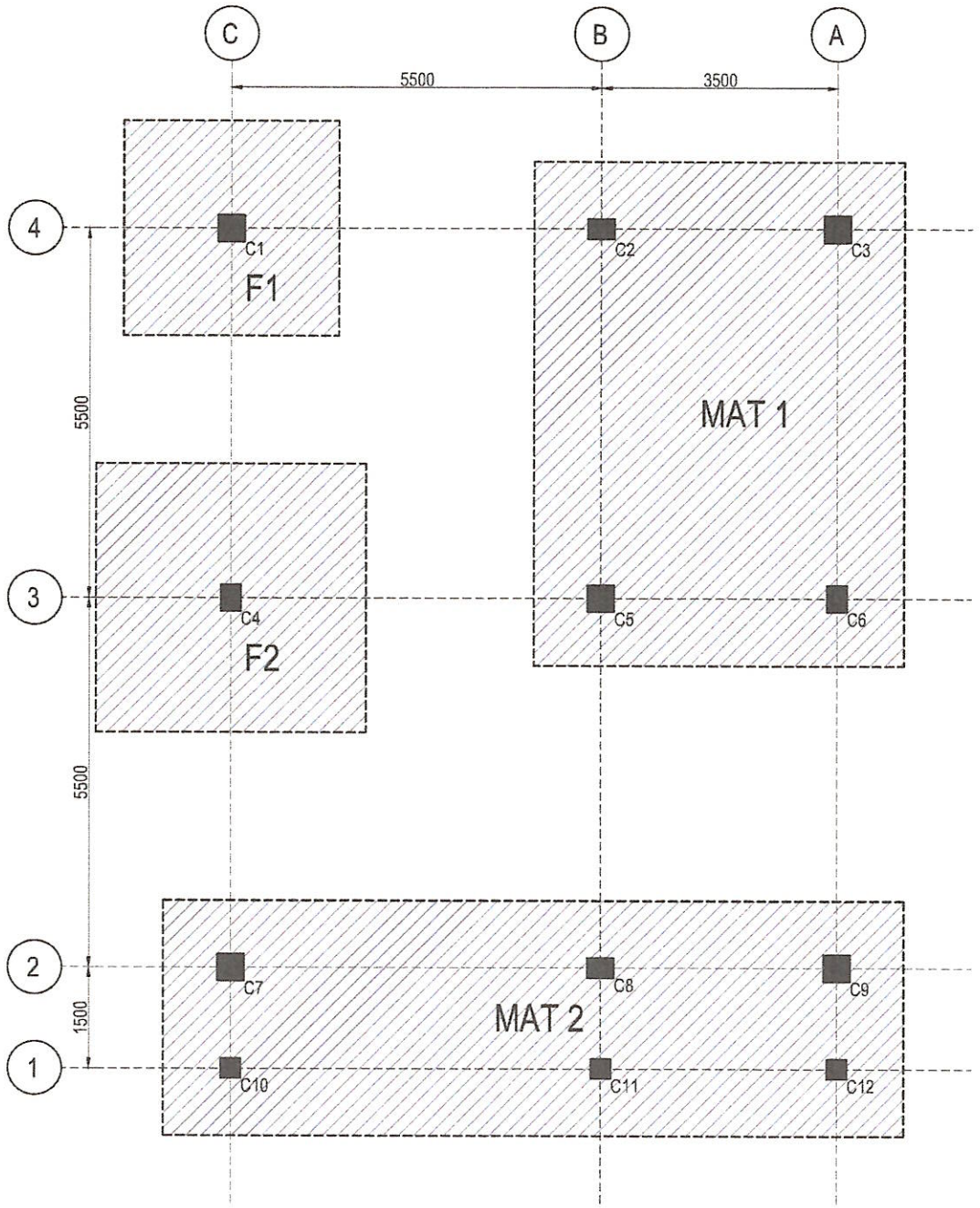
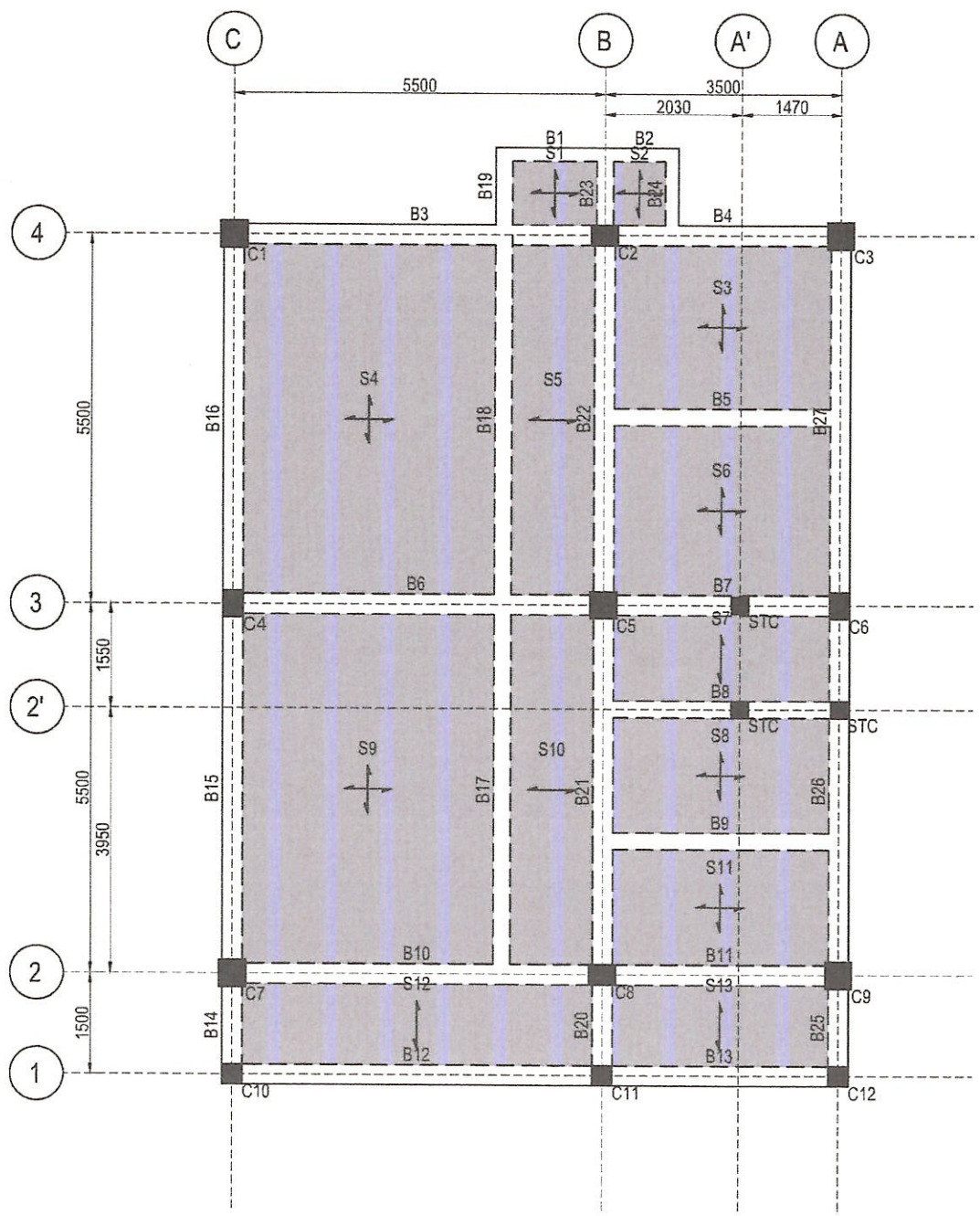




PLAN AT 3 M

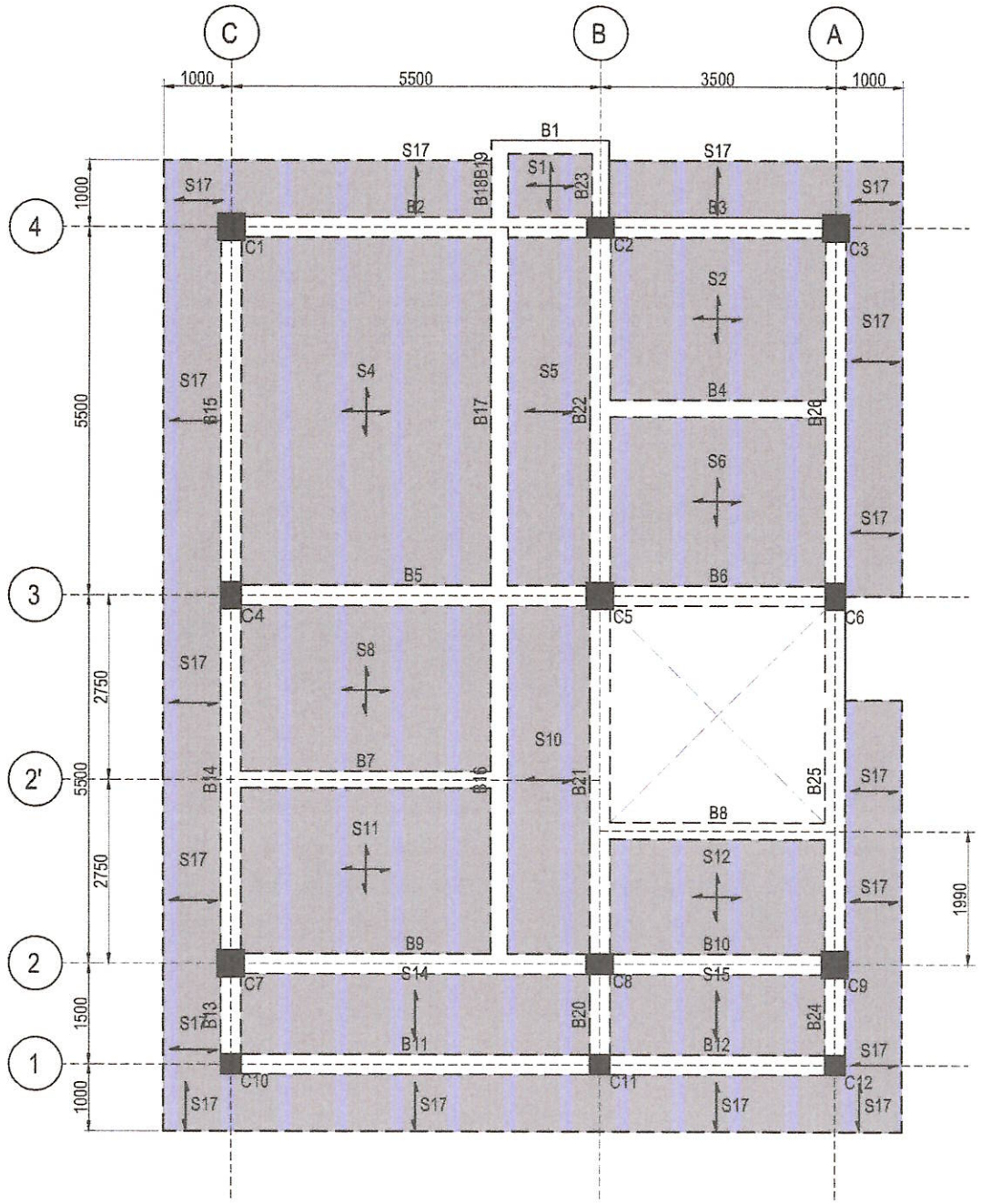
S 1 4 **FOUNDATION LAYOUT**

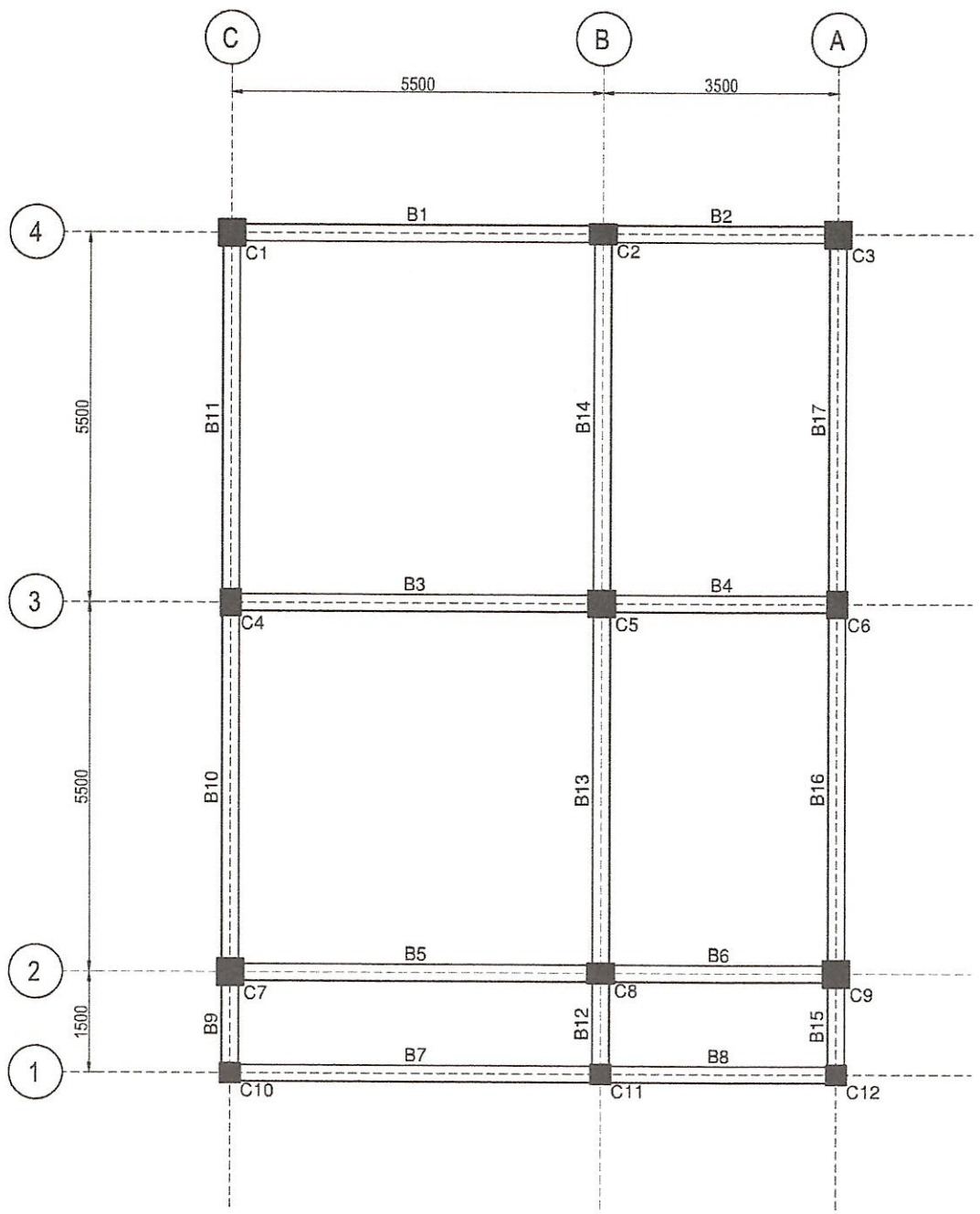
SCALE 1:100

S 2 4 **FIRST FLOOR FRAMING PLAN**

SCALE 1:100

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPPE SALAING COMILA PRESIDENT	SHEET NO. S4 04 14





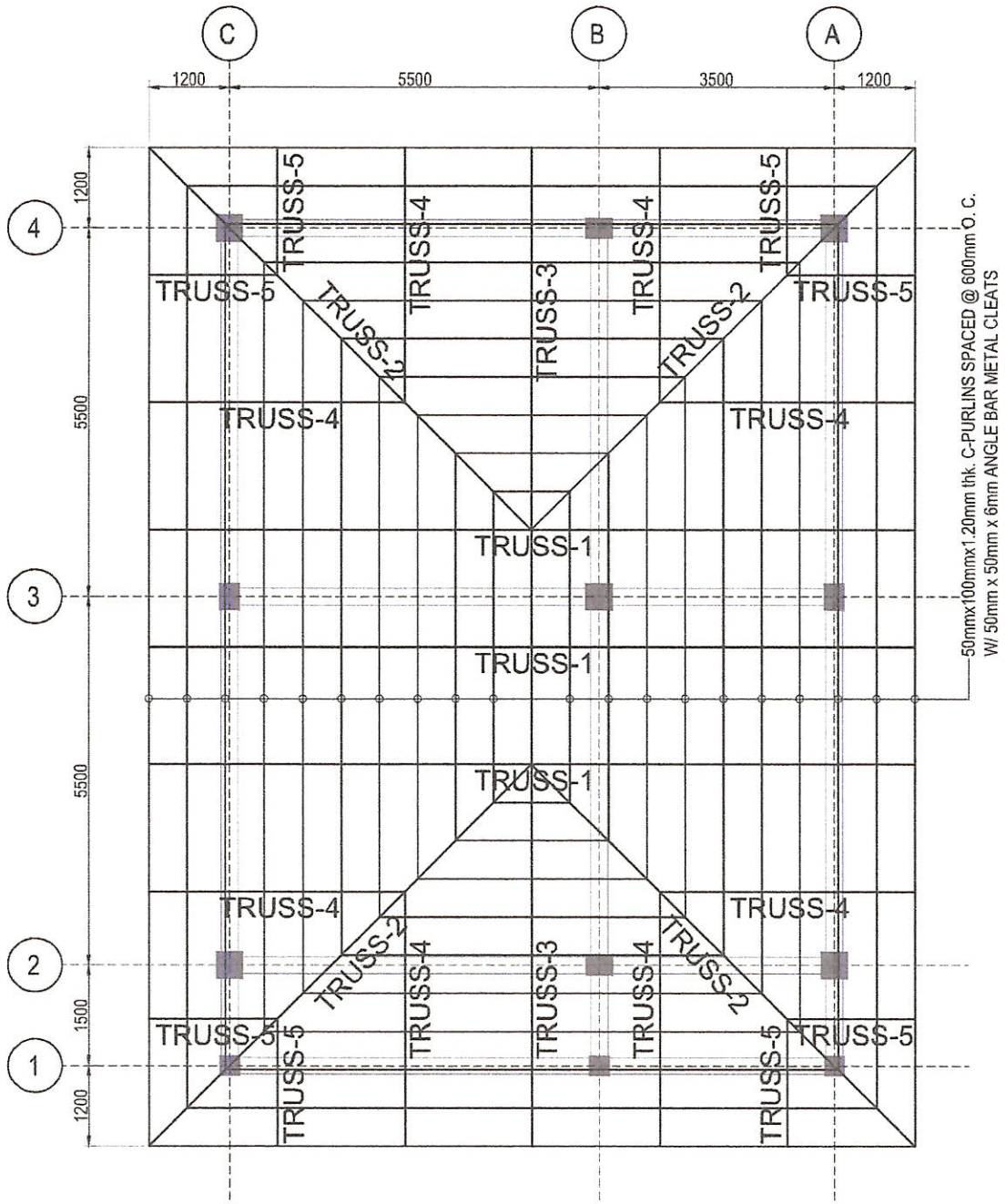
S 1 5 **SECOND FLOOR FRAMING PLAN**

SCALE 1:100

S 2 5 **ROOF FRAMING PLAN @ BOTTOM CHORD LEVEL**

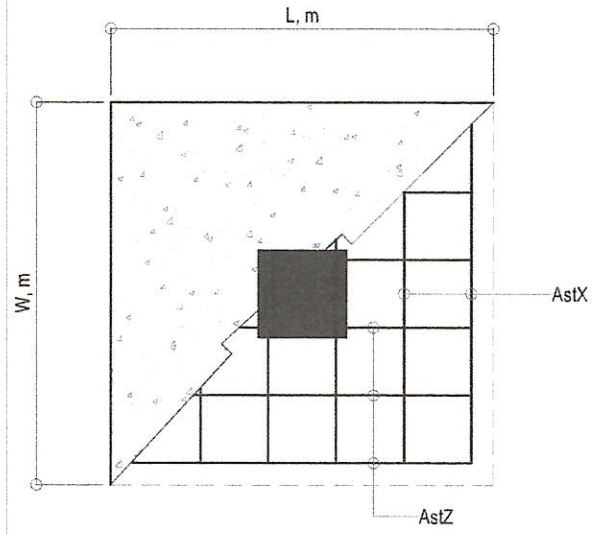
SCALE 1:100

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S5 05 14

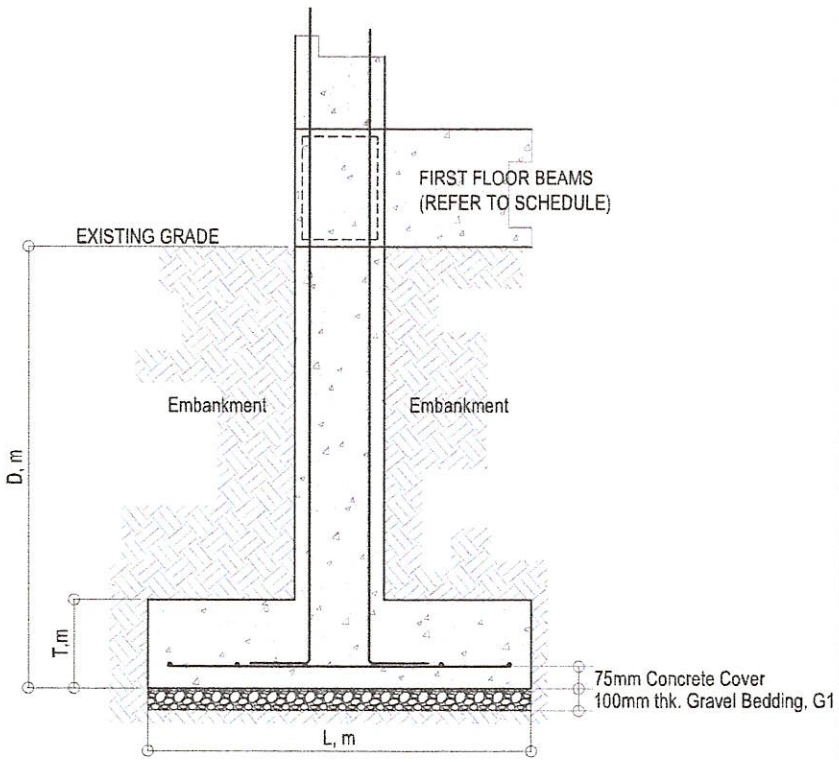


S 1 6 **ROOF FRAMING PLAN @ TOP CHORD LEVEL**

SCALE 1:100



PLAN



SECTION

TYPICAL ISOLATED FOOTING DETAILS

MARK	FOOTING DIMENSIONS					REINFORCEMENT			
	L, m	W, m	T, m	D, m	CONCRETE COVER, m	AstX(TOP)	AstZ(TOP)	AstX(BOTTOM)	AstZ(BOTTOM)
F1	3.20	3.20	0.40	3.00	0.075	N/A	N/A	13pcs. - Ø16mm	13pcs. - Ø16mm
F2	4.00	4.00	0.40	3.00	0.075	N/A	N/A	17pcs. - Ø16mm	17pcs. - Ø16mm

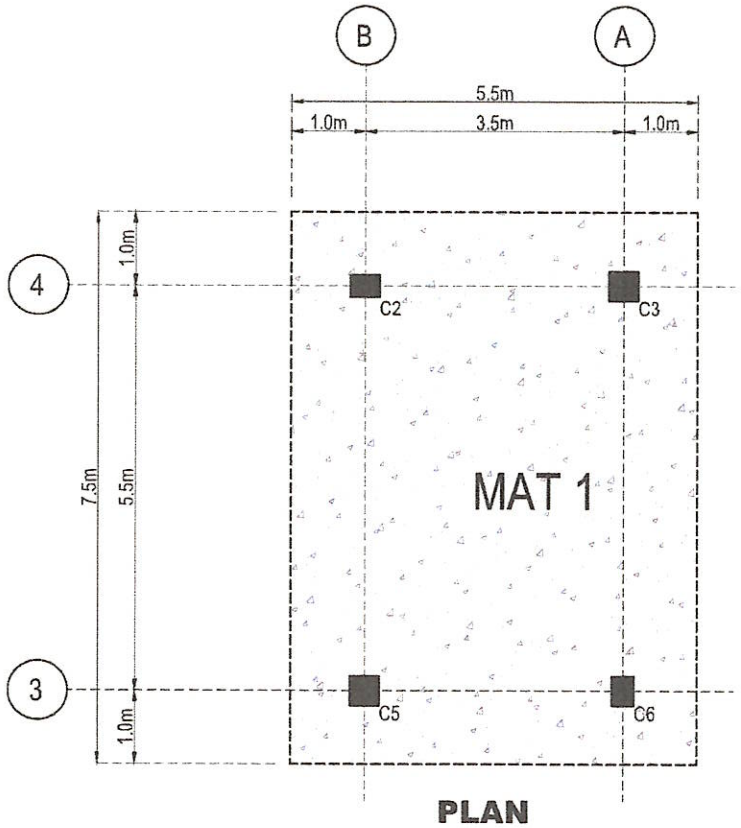
MATERIAL SPECIFICATION:
CONCRETE ---------- F'c = 3,500 PSI (27.58 MPA) @ 28 DAYS
REINFORCING STEEL BAR --------- Fy = 40,000 PSI (275.8 MPA) GRADE 40 DEFORMED

ISOLATED FOOTING SCHEDULE

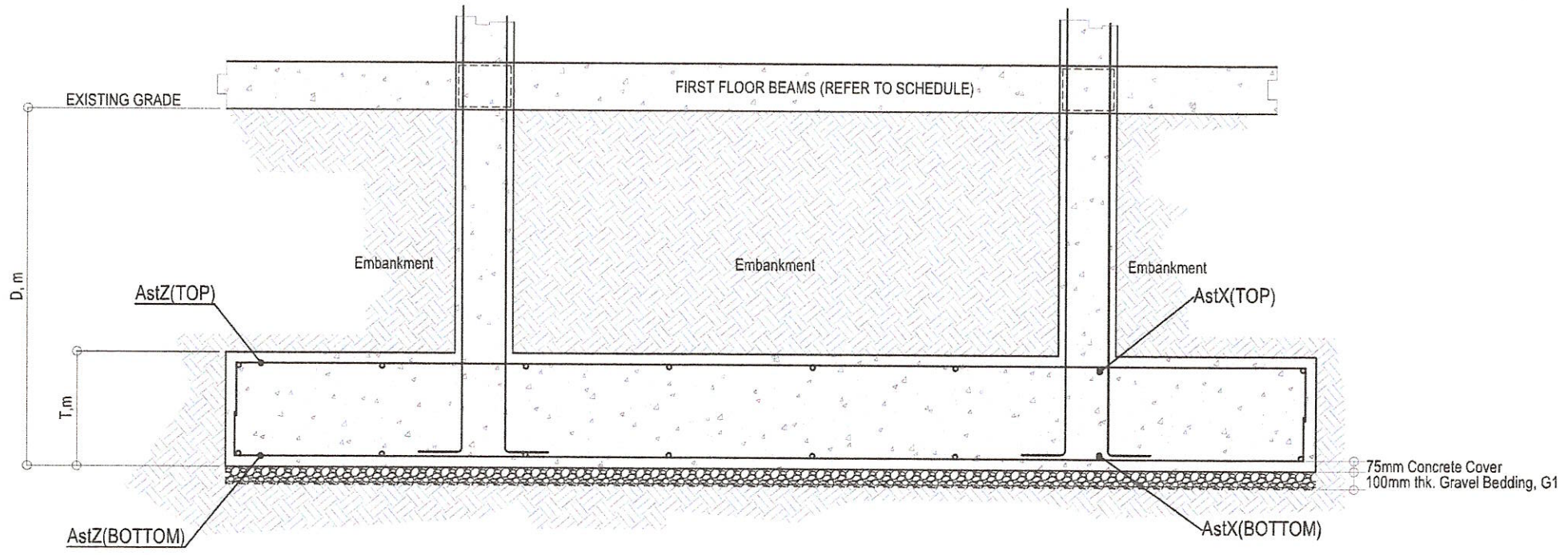
S 2 6 **SCHEDULE OF ISOLATED FOOTINGS**

SCALE 1:100

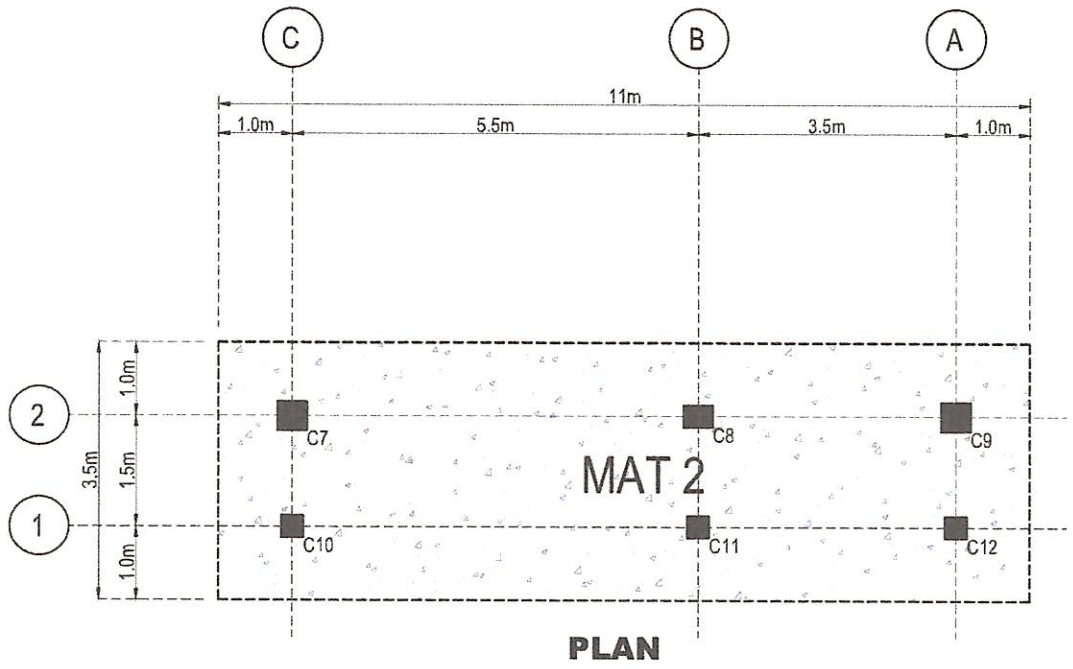
SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S6 06 14



PLAN



TYPICAL SECTION



PLAN

Mark	FOUNDATION					REINFORCEMENT			
	L (m)	W (m)	T (m)	D (m)	Cover (m)	AstX(T)	AstZ(T)	AstX(B)	AstZ(B)
MAT 1	REFER TO PLAN	REFER TO PLAN	0.40	3.00	0.075	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center
MAT 2	REFER TO PLAN	REFER TO PLAN	0.40	3.00	0.075	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center	Ø16 @ 200 mm Equally Spaced Center-to-Center

MATERIAL SPECIFICATION:
CONCRETE ---------- F'c = 3,500 PSI (27.58 MPA) @ 28 DAYS
REINFORCING STEEL BAR --------- Fy = 40,000 PSI (275.8 MPA) GRADE 40 DEFORMED

S 17 **SCHEDULE OF MAT FOUNDATIONS**

SCALE 1:100

SHERIFF JOHN C. LA MADRID
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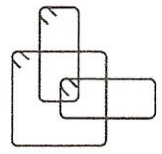
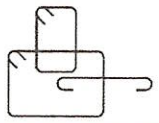
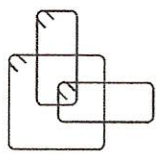
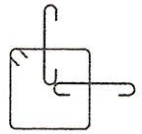
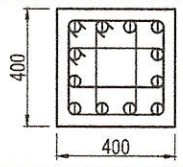
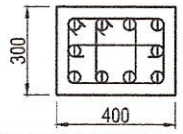
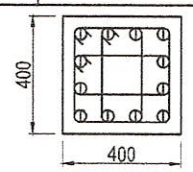
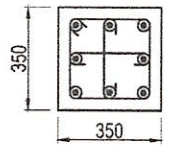
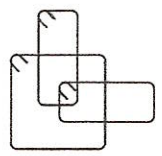
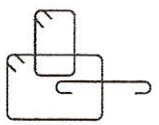
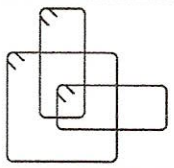
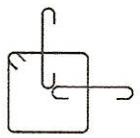
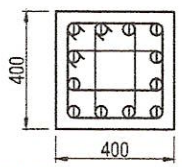
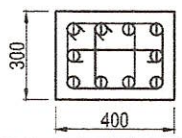
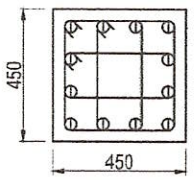
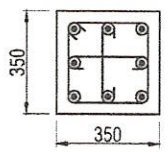
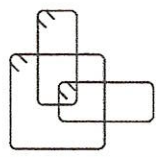
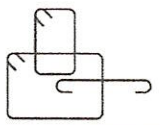
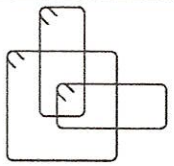
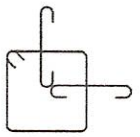
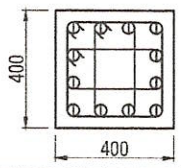
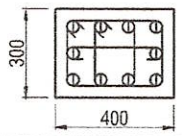
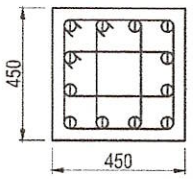
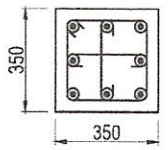
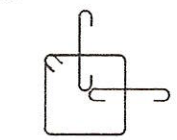
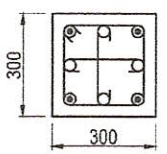
PRESIDENT

SHEET NO. S7 07 14

6 M TO 9 M	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 
	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150
	 ⊕ Ø20	 ⊕ Ø20	 ⊕ Ø20	 ⊛ Ø16
	12 - Ø20	10 - Ø20	12 - Ø20	8 - Ø16
3 M TO 6 M	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 
	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150
	 ⊕ Ø20	 ⊕ Ø20	 ⊕ Ø20	 ⊛ Ø16
	12 - Ø20	10 - Ø20	12 - Ø20	8 - Ø16
0 M TO 3 M	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 
	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 100 Z1 OTHERS: Ø10 @ 100 Z2 LINKS: Ø10 @ 150	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150
	 ⊕ Ø20	 ⊕ Ø20	 ⊕ Ø20	 ⊛ Ø16
	12 - Ø20	10 - Ø20	12 - Ø20	8 - Ø16
COLUMN MARKED	C1, C3, C7, C9	C2, C4, C6, C8	C5	C10, C11, C12

3 M TO 6 M	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM 			
	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150			
	 ⊛ Ø16 ○ Ø12			
	4 - Ø16 + 4 - Ø12			
0 M TO 3 M	C27.58 : Fy414 , COVER = 40mm CONFINING ZONE = 450 MM			
	Z1 MAIN LINK: Ø10 @ 75 Z1 OTHERS: Ø10 @ 75 Z2 LINKS: Ø10 @ 150			
	⊛ Ø16			
	8 - Ø16			
COLUMN MARKED	C10, C11, C12			STC

NOTES:
1. BE = BOUNDARY ELEMENT AS PER NSCP C101 - 2015. PROVIDE CONFINING REINFORCEMENT ACROSS ENTIRE HEIGHT OF WALL IN THE BOUNDARY ELEMENT
2. Z1 = SPECIAL CONFINING ZONE AS PER NSCP C101 - 2015, Z2 = REMAINING ZONES AS PER NSCP C101 - 2015

S 18

COLUMN SCHEDULE

SCALE 1:100

SHERIFF JOHN C. LA MADRID
CIVIL ENGINEER
PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025
PTR No. 8208216 ISSUED: JANUARY 5, 2023

HAZELINE N. TIBANGAY
HEAD, PROJECT MANAGEMENT UNIT

PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I)
BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET
PROJECT / LOCATION

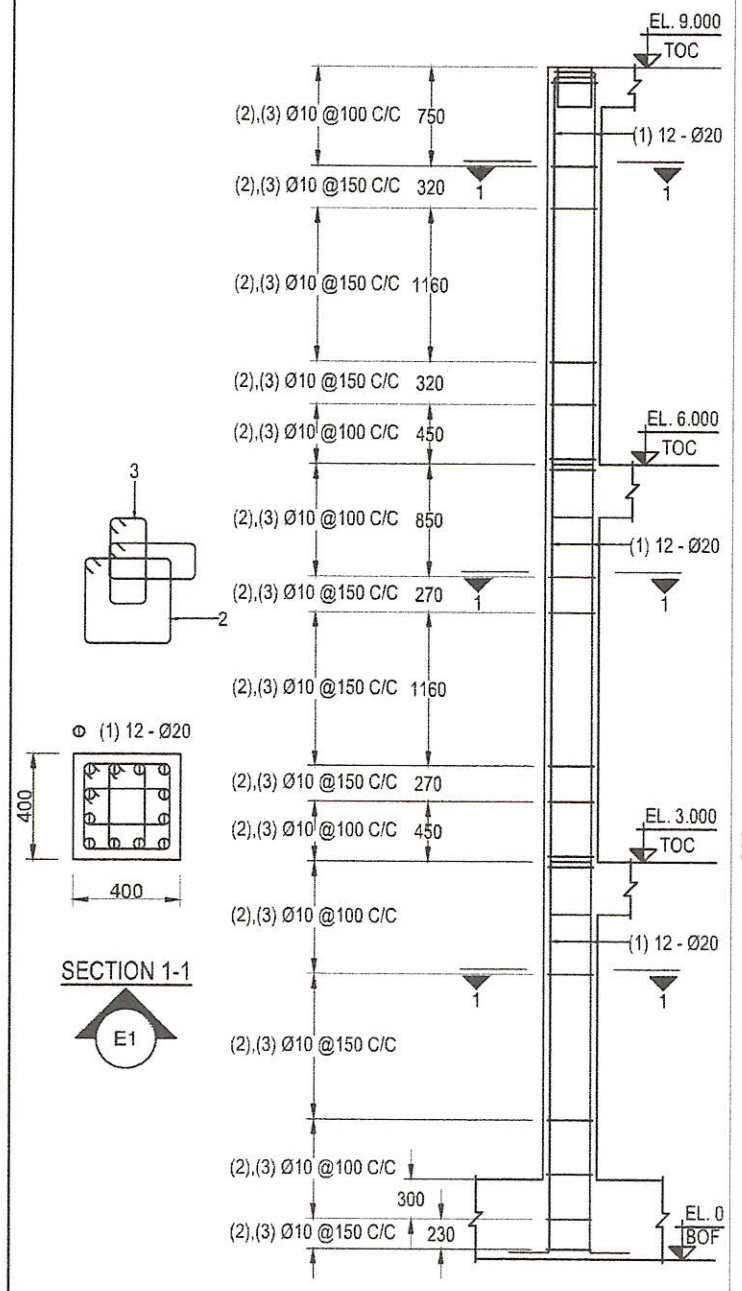
BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET
OWNER

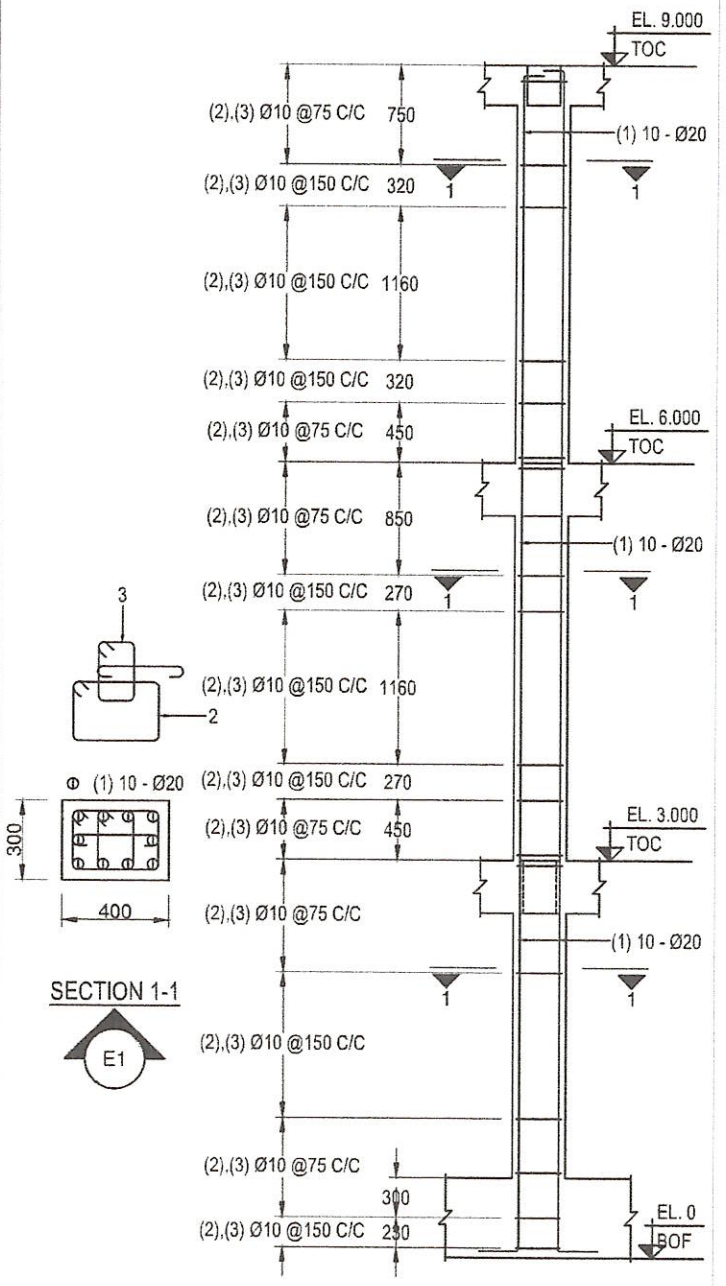
LEONARDO T. APILIS
END USER/ DIRECTOR-OPEN UNIVERSITY

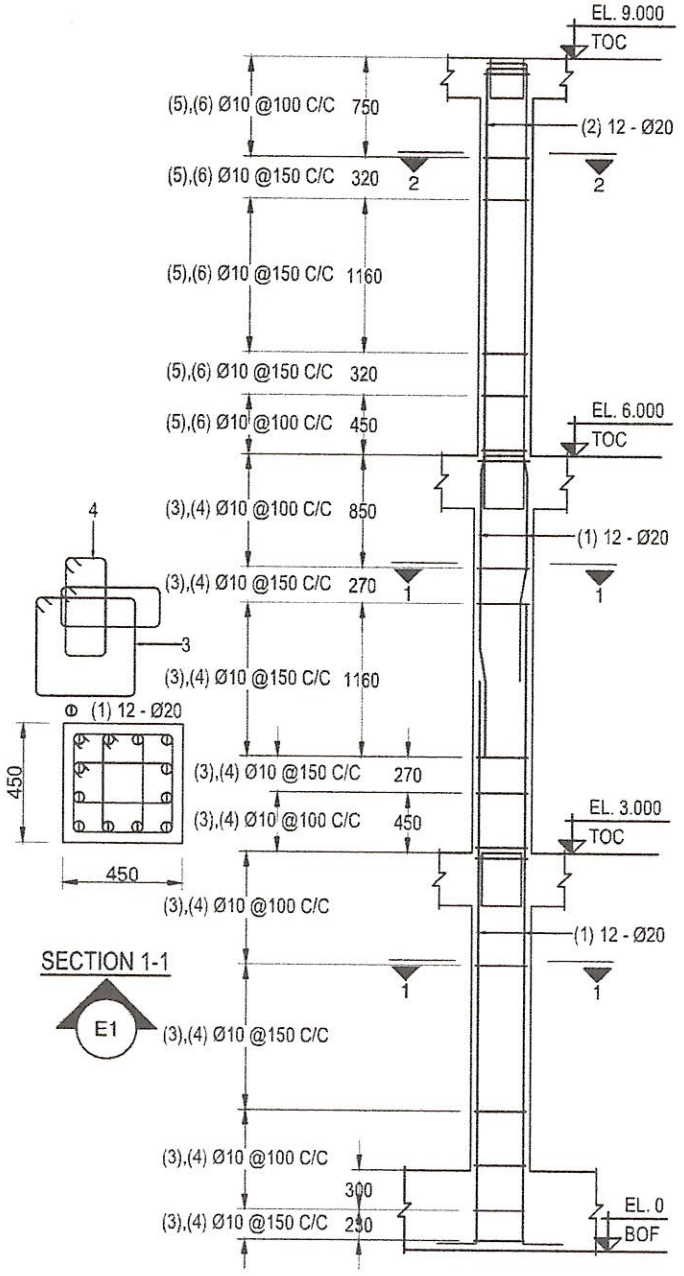
ALLAN CASALDO SACPA
VICE PRESIDENT- ADMINISTRATION AND FINANCE

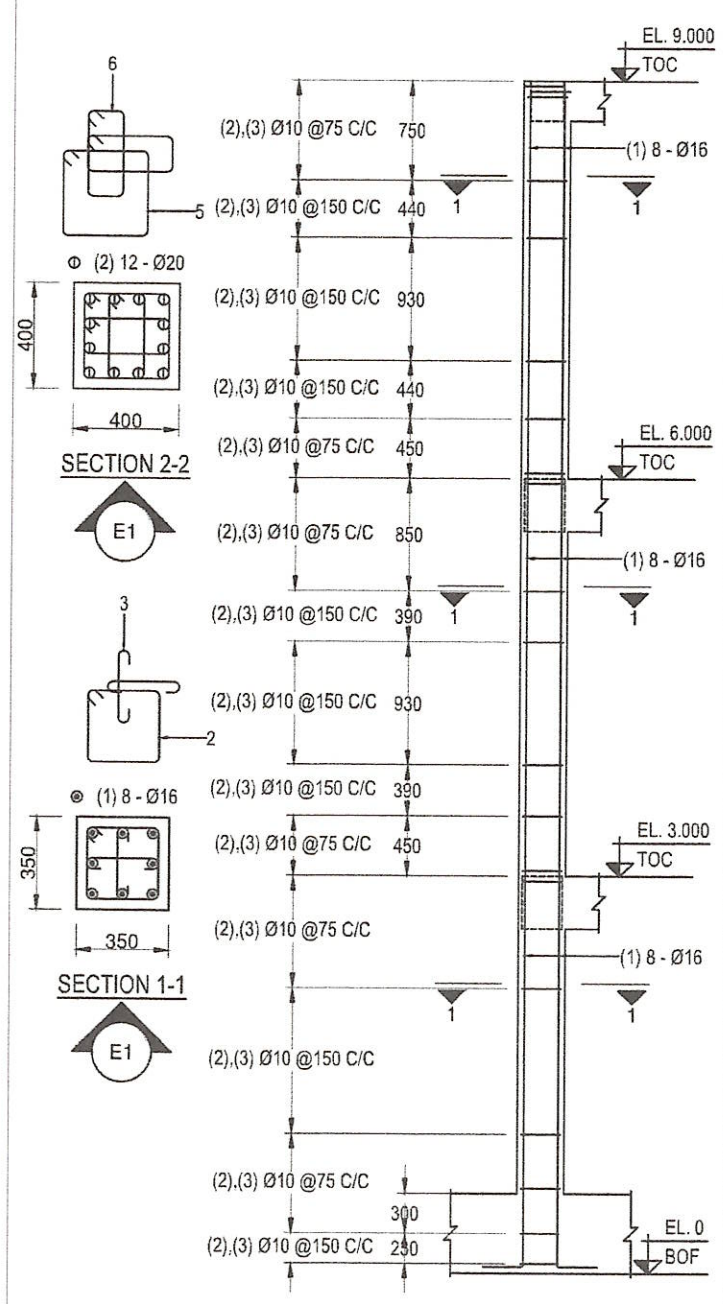
FELIPE SALAING COMILA
PRESIDENT

SHEET NO. S8 08 14









S 1 9 DETAILS OF COLUMN C1,C3,C7,C9 — SCALE AS SHOWN

S 2 9 DETAILS OF COLUMN C2, C8 — SCALE AS SHOWN

S 3 9 DETAILS OF COLUMN C4, C5, C6 — SCALE AS SHOWN

S 4 9 DETAILS OF COLUMN C10, C12 — SCALE AS SHOWN

S 5 9 COLUMN DETAILS — SCALE AS SHOWN

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S9 09 14

BEAM SCHEDULE (C24:Fy276) (LEVEL: 3 m *FIRST FLOOR)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SIDE FACE RSB (SFR)	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1	200	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	6 - 2L-Ø10@100 C/C	4 - 2L-Ø10@100 C/C	6 - 2L-Ø10@100 C/C	2 - Ø12EF	-	-
B2	200	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	4 - 2L-Ø10@100 C/C	2 - 2L-Ø10@100 C/C	4 - 2L-Ø10@100 C/C	2 - Ø12EF	-	-
B3	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 2L-Ø10@75 C/C	34 - 2L-Ø10@100 C/C	12 - 2L-Ø10@75 C/C	2 - Ø12EF	-	-
B4	300	400	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 4L-Ø10@75 C/C	11 - 4L-Ø10@125 C/C	12 - 4L-Ø10@75 C/C	-	-	-
B5,B8,B9	250	300	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	10 - 2L-Ø10@125 C/C	8 - 2L-Ø10@125 C/C	10 - 2L-Ø10@125 C/C	-	-	-
B6	300	400	4 - Ø16	4 - Ø16	4 - Ø16	3 - Ø20 + 2 - Ø20	2 - Ø20	3 - Ø20 + 3 - Ø20	15 - 2L-Ø10@125 C/C	13 - 2L-Ø10@125 C/C	15 - 2L-Ø10@125 C/C	-	-	-
B7	300	400	4 - Ø16	4 - Ø16	4 - Ø16	3 - Ø20 + 3 - Ø20	2 - Ø20	3 - Ø20	10 - 2L-Ø10@125 C/C	8 - 2L-Ø10@125 C/C	10 - 2L-Ø10@125 C/C	-	-	-
B10	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	12 - 4L-Ø10@75 C/C	27 - 4L-Ø10@125 C/C	12 - 4L-Ø10@75 C/C	2 - Ø12EF	-	-
B11	300	400	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16 + 4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 4L-Ø10@75 C/C	11 - 4L-Ø10@125 C/C	12 - 4L-Ø10@75 C/C	2 - Ø12EF	-	-
B12	350	400	4 - Ø16	4 - Ø16	4 - Ø16	5 - Ø16	3 - Ø16	5 - Ø16	13 - 2L-Ø10@150 C/C	11 - 2L-Ø10@150 C/C	13 - 2L-Ø10@150 C/C	-	-	-
B13	350	400	4 - Ø16	4 - Ø16	4 - Ø16	5 - Ø16	3 - Ø16	5 - Ø16	9 - 2L-Ø10@150 C/C	7 - 2L-Ø10@150 C/C	9 - 2L-Ø10@150 C/C	-	-	-
B14	350	400	5 - Ø16 + 2 - Ø16	5 - Ø16	5 - Ø16 + 3 - Ø16	5 - Ø16 + 2 - Ø16	5 - Ø16	5 - Ø16 + 2 - Ø16	4 - 2L-Ø10@150 C/C	2 - 2L-Ø10@150 C/C	4 - 2L-Ø10@150 C/C	2 - Ø12EF	-	-
B15	300	400	4 - Ø16	4 - Ø16	4 - Ø16	5 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 2L-Ø10@75 C/C	27 - 2L-Ø10@125 C/C	12 - 2L-Ø10@75 C/C	2 - Ø12EF	-	-
B16	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 2L-Ø10@75 C/C	27 - 2L-Ø10@125 C/C	12 - 2L-Ø10@75 C/C	2 - Ø12EF	-	-
B17	250	400	3 - Ø16	3 - Ø16 + 2 - Ø16	3 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	15 - 2L-Ø10@125 C/C	13 - 2L-Ø10@125 C/C	15 - 2L-Ø10@125 C/C	-	-	-
B18	250	400	3 - Ø16	3 - Ø16 + 3 - Ø16	3 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	15 - 2L-Ø10@125 C/C	13 - 2L-Ø10@125 C/C	15 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B19	250	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	4 - 2L-Ø10@125 C/C	2 - 2L-Ø10@125 C/C	4 - 2L-Ø10@125 C/C	2 - Ø12EF	-	CANTILEVERED
B20	300	400	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	5 - 2L-Ø10@125 C/C	3 - 2L-Ø10@125 C/C	5 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B21	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	15 - 2L-Ø12@125 C/C	13 - 2L-Ø12@125 C/C	15 - 2L-Ø12@125 C/C	3 - Ø12EF	-	-
B22	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	15 - 2L-Ø10@125 C/C	13 - 2L-Ø10@125 C/C	15 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B23	250	400	2 - Ø16	2 - Ø16	2 - Ø16	3 - Ø16	3 - Ø16	3 - Ø16	4 - 2L-Ø12@125 C/C	2 - 2L-Ø12@125 C/C	4 - 2L-Ø12@125 C/C	3 - Ø12EF	-	CANTILEVERED
B24	200	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	5 - 2L-Ø10@100 C/C	3 - 2L-Ø10@100 C/C	5 - 2L-Ø10@100 C/C	2 - Ø12EF	-	CANTILEVERED
B25	300	400	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	5 - 2L-Ø10@125 C/C	3 - 2L-Ø10@125 C/C	5 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B26	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 4L-Ø12@75 C/C	34 - 4L-Ø12@100 C/C	12 - 4L-Ø12@75 C/C	3 - Ø12EF	-	-
B27	300	400	4 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	4 - Ø16	4 - Ø16 + 2 - Ø16	12 - 4L-Ø10@75 C/C	27 - 4L-Ø10@125 C/C	12 - 4L-Ø10@75 C/C	2 - Ø12EF	-	-

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S10 10 | 14

BEAM SCHEDULE (C28:Fy276) (LEVEL: 6 m *SECOND FLOOR)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SIDE FACE RSB (SFR)	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1	200	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	+ 2 - Ø16 2 - Ø16	+ 2 - Ø16 2 - Ø16	6 - 2L-Ø10@100 C/C	4 - 2L-Ø10@100 C/C	6 - 2L-Ø10@100 C/C	2 - Ø12EF	-	-
B2,B5	350	400	+ 5 - Ø16 2 - Ø16	+ 5 - Ø16 2 - Ø16	+ 5 - Ø16 2 - Ø16	+ 4 - Ø20 4 - Ø20	4 - Ø20	+ 4 - Ø20 4 - Ø20	12 - 4L-Ø10@75 C/C	34 - 4L-Ø10@100 C/C	12 - 4L-Ø10@75 C/C	-	-	-
B3	300	400	4 - Ø16	4 - Ø16	4 - Ø16	+ 4 - Ø20 4 - Ø20	+ 3 - Ø16 2 - Ø16	+ 3 - Ø16 2 - Ø16	12 - 2L-Ø12@75 C/C	11 - 2L-Ø12@125 C/C	12 - 2L-Ø12@75 C/C	2 - Ø12EF	-	-
B4,B7,B8	300	300	3 - Ø16	3 - Ø16	3 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16	10 - 2L-Ø10@125 C/C	8 - 2L-Ø10@125 C/C	10 - 2L-Ø10@125 C/C	-	-	-
B9	350	400	5 - Ø16	5 - Ø16	5 - Ø16	+ 5 - Ø16 2 - Ø16	3 - Ø16	+ 5 - Ø16 4 - Ø16	12 - 2L-Ø12@75 C/C	34 - 2L-Ø12@100 C/C	12 - 2L-Ø12@75 C/C	-	-	-
B6, B10	350	400	5 - Ø16	3 - Ø16	3 - Ø16	+ 5 - Ø16 4 - Ø16	3 - Ø16	5 - Ø16	12 - 2L-Ø10@75 C/C	14 - 2L-Ø10@100 C/C	12 - 2L-Ø10@75 C/C	2 - Ø12EF	-	-
B11	350	400	3 - Ø16	3 - Ø16	3 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16	13 - 2L-Ø10@150 C/C	11 - 2L-Ø10@150 C/C	13 - 2L-Ø10@150 C/C	-	-	-
B12	350	400	3 - Ø16	3 - Ø16	3 - Ø16	4 - Ø16	4 - Ø16	4 - Ø16	9 - 2L-Ø10@150 C/C	7 - 2L-Ø10@150 C/C	9 - 2L-Ø10@150 C/C	-	-	-
B13,B20	350	400	3 - Ø16	3 - Ø16	3 - Ø16	4 - Ø20	4 - Ø20	+ 4 - Ø20 4 - Ø16	4 - 2L-Ø10@150 C/C	2 - 2L-Ø10@150 C/C	4 - 2L-Ø10@150 C/C	-	-	-
B14,B21	350	400	+ 5 - Ø16 2 - Ø16	+ 5 - Ø16 2 - Ø16	+ 5 - Ø16 2 - Ø16	+ 4 - Ø20 4 - Ø16	4 - Ø20	+ 4 - Ø20 4 - Ø16	12 - 4L-Ø10@75 C/C	27 - 4L-Ø10@125 C/C	12 - 4L-Ø10@75 C/C	4 - Ø12EF	-	-
B15,B22	350	400	+ 5 - Ø16 2 - Ø16	5 - Ø16	5 - Ø16	+ 4 - Ø20 4 - Ø16	4 - Ø20	+ 4 - Ø20 2 - Ø16	12 - 2L-Ø10@75 C/C	46 - 2L-Ø10@75 C/C	12 - 2L-Ø10@75 C/C	2 - Ø12EF	-	-
B16,B17	300	400	+ 3 - Ø20 2 - Ø20	+ 3 - Ø20 3 - Ø20	+ 3 - Ø20 2 - Ø20	3 - Ø16	3 - Ø16	3 - Ø16	15 - 2L-Ø10@125 C/C	13 - 2L-Ø10@125 C/C	15 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B18	250	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	4 - 2L-Ø10@125 C/C	2 - 2L-Ø10@125 C/C	4 - 2L-Ø10@125 C/C	2 - Ø12EF	-	CANTILEVERED
B19	250	400	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - Ø16	2 - 2L-Ø10@125 C/C	2 - 2L-Ø10@125 C/C	2 - 2L-Ø10@125 C/C	2 - Ø12EF	-	CANTILEVERED
B24	300	400	4 - Ø16	4 - Ø16	4 - Ø16	3 - Ø20	2 - Ø20	+ 3 - Ø20 3 - Ø20	5 - 2L-Ø10@125 C/C	3 - 2L-Ø10@125 C/C	5 - 2L-Ø10@125 C/C	2 - Ø12EF	-	-
B25	300	400	+ 4 - Ø16 2 - Ø16	+ 4 - Ø16 2 - Ø16	+ 4 - Ø16 2 - Ø16	+ 3 - Ø20 3 - Ø20	2 - Ø20	+ 3 - Ø20 3 - Ø20	12 - 2L-Ø12@75 C/C	46 - 2L-Ø12@75 C/C	12 - 2L-Ø12@75 C/C	3 - Ø12EF	-	-
B26	300	400	+ 4 - Ø16 2 - Ø16	+ 4 - Ø16 2 - Ø16	+ 4 - Ø16 2 - Ø16	+ 3 - Ø20 3 - Ø20	2 - Ø20	+ 3 - Ø20 3 - Ø20	12 - 2L-Ø12@75 C/C	46 - 2L-Ø12@75 C/C	12 - 2L-Ø12@75 C/C	2 - Ø12EF	-	-

SLAB SCHEDULE (C28 : FY227) (LEVEL : 3 M *FIRST FLOOR)

SLAB MARKED	SLAB THICKNESS	BOTTOM REINFORCEMENT				TOP REINFORCEMENT					REMARKS
		ALONG SHORT SPAN		ALONG LONG SPAN		OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	CURTAILED	FULL LENGTH	CURTAILED	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1, S2	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S3, S4, S9	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S5, S10	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	---	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S6, S8, S11	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S7	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S12	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S13	100	#10 @ 150 C/C	---	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---

SHERIFF JOHN C. LA MADRID
CIVIL ENGINEER
PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025
PTR No. 8208216 ISSUED: JANUARY 5, 2023

HAZELINE N. TIBANGAY
HEAD, PROJECT MANAGEMENT UNIT

PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I)
BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET
PROJECT / LOCATION

BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET
OWNER

LEONARDO T. APILIS
END USER/ DIRECTOR-OPEN UNIVERSITY

ALLAN CASALDO SACPA
VICE PRESIDENT- ADMINISTRATION AND FINANCE

FELIPE SALAING COMILA
PRESIDENT

SHEET NO. S11 11 | 14

BEAM SCHEDULE (C21:Fy276) (LEVEL: 9 m *ROOF BEAMS)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SIDE FACE RSB (SFR)	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1	250	400	3 - Ø12	2 - Ø12	3 - Ø12	3 - Ø16	2 - Ø16	2 - Ø16	17 - 2L-Ø10@50 C/C	27 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B2	250	400	3 - Ø12	2 - Ø12	2 - Ø12	2 - Ø16	2 - Ø16	2 - Ø16	17 - 2L-Ø10@50 C/C	11 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B3,B13,B14	250	400	3 - Ø12	3 - Ø12	3 - Ø12	3 - Ø12 + 2 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	17 - 2L-Ø10@50 C/C	28 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B4	250	400	3 - Ø12	2 - Ø12	3 - Ø12	3 - Ø12 + 2 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	17 - 2L-Ø10@50 C/C	12 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B5,B10,B11,B16 ,B17	250	400	3 - Ø12	2 - Ø12	3 - Ø12	3 - Ø12 + 2 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	17 - 2L-Ø10@50 C/C	27 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B6	250	400	3 - Ø12	2 - Ø12	3 - Ø12	3 - Ø12 + 2 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	17 - 2L-Ø10@50 C/C	11 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B7	250	400	2 - Ø12	2 - Ø12	2 - Ø12	3 - Ø12	2 - Ø12	3 - Ø12	17 - 2L-Ø10@50 C/C	28 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B8	250	400	2 - Ø12	2 - Ø12	2 - Ø12	3 - Ø12	2 - Ø12	3 - Ø12	17 - 2L-Ø10@50 C/C	12 - 2L-Ø10@125 C/C	17 - 2L-Ø10@50 C/C	-	-	-
B9	250	400	3 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	3 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	13 - 2L-Ø12@50 C/C	-	13 - 2L-Ø12@50 C/C	-	-	-
B12	250	400	2 - Ø12	2 - Ø12	3 - Ø12	3 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	14 - 2L-Ø10@50 C/C	-	14 - 2L-Ø10@50 C/C	-	-	-
B15	250	400	2 - Ø12	2 - Ø12	3 - Ø12	2 - Ø12	2 - Ø12	3 - Ø12 + 2 - Ø12	13 - 2L-Ø10@50 C/C	-	13 - 2L-Ø10@50 C/C	-	-	-

SLAB SCHEDULE (C27.58 : FY227) (LEVEL : 6 M *SECOND FLOOR)

SLAB MARKED	SLAB THICKNESS	BOTTOM REINFORCEMENT				TOP REINFORCEMENT					REMARKS
		ALONG SHORT SPAN		ALONG LONG SPAN		OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	CURTAILED	FULL LENGTH	CURTAILED	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S2, S6	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S3, S10, S14,S16	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S4	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	#10 @ 145 C/C	#10 @ 150 C/C	#10 @ 135 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S5	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	---	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S7	100	#16 @ 125 C/C	---	#16 @ 125 C/C	---	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S8, S11	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S12	100	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---
S13	100	#10 @ 150 C/C	---	#10 @ 150 C/C	---	---	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S15	100	#10 @ 150 C/C	---	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	---
S17	100	#10 @ 150 C/C	---	#10 @ 300 C/C	#10 @ 300 C/C	#10 @ 150 C/C	#10 @ 150 C/C	---	#10 @ 150 C/C	#10 @ 150 C/C	CANTILEVERED

SHERIFF JOHN C. LA MADRID
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PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I)
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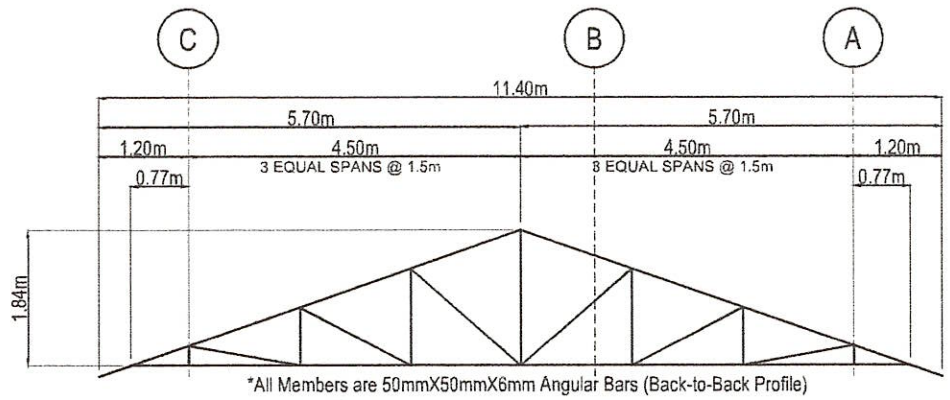
ALLAN CASALDO SACPA
VICE PRESIDENT- ADMINISTRATION AND FINANCE

FELIPE SALAING COMILA
PRESIDENT

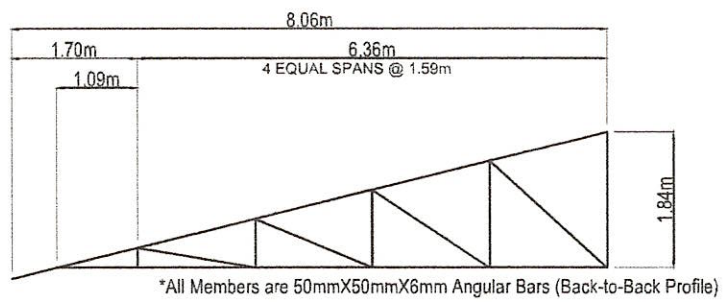
SHEET NO. S12 12 | 14



*All Members are 50mmX50mmX6mm Angular Bars (Back-to-Back Profile)

S 1 13 TRUSS 1 DETAILS

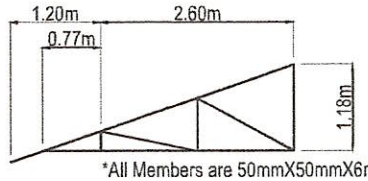
SCALE 1:100



*All Members are 50mmX50mmX6mm Angular Bars (Back-to-Back Profile)

S 2 13 TRUSS 2 DETAILS

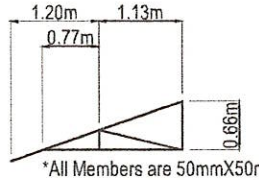
SCALE 1:100



*All Members are 50mmX50mmX6mm Angular Bars (Back-to-Back Profile)

S 4 13 TRUSS 4 DETAILS

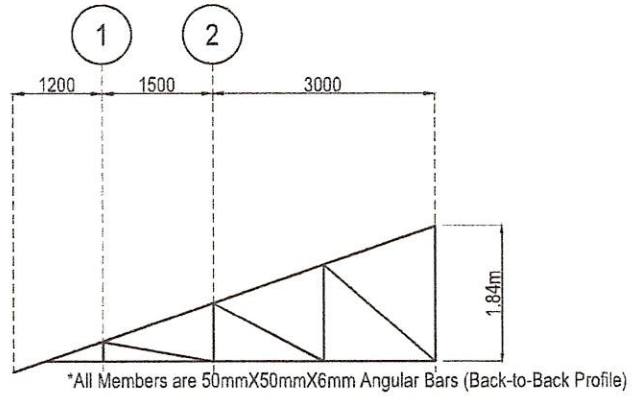
SCALE 1:100



*All Members are 50mmX50mmX6mm Angular Bars (Back-to-Back Profile)

S 5 13 TRUSS 5 DETAILS

SCALE 1:100

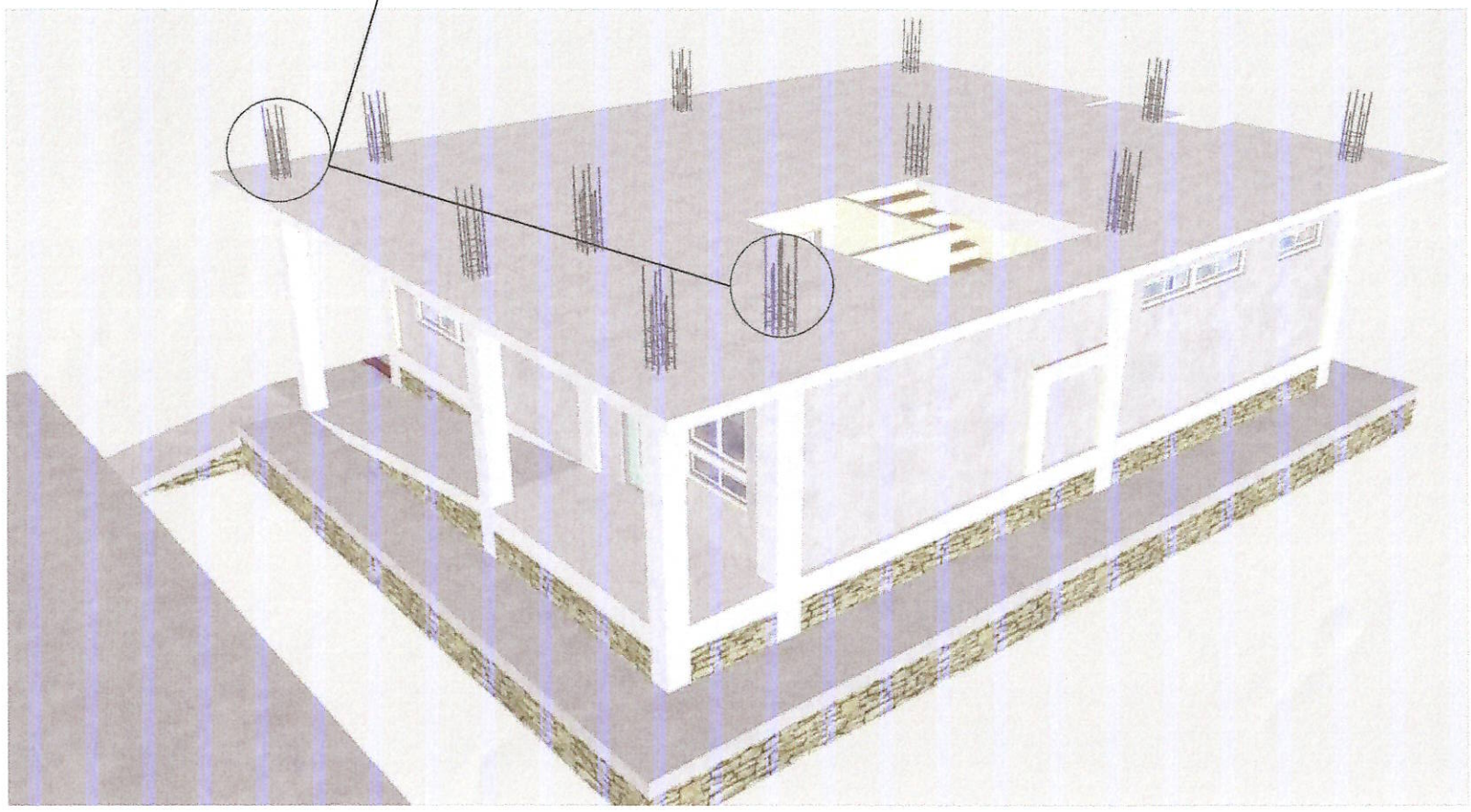


*All Members are 50mmX50mmX6mm Angular Bars (Back-to-Back Profile)

S 3 13 TRUSS 3 DETAILS

SCALE 1:100

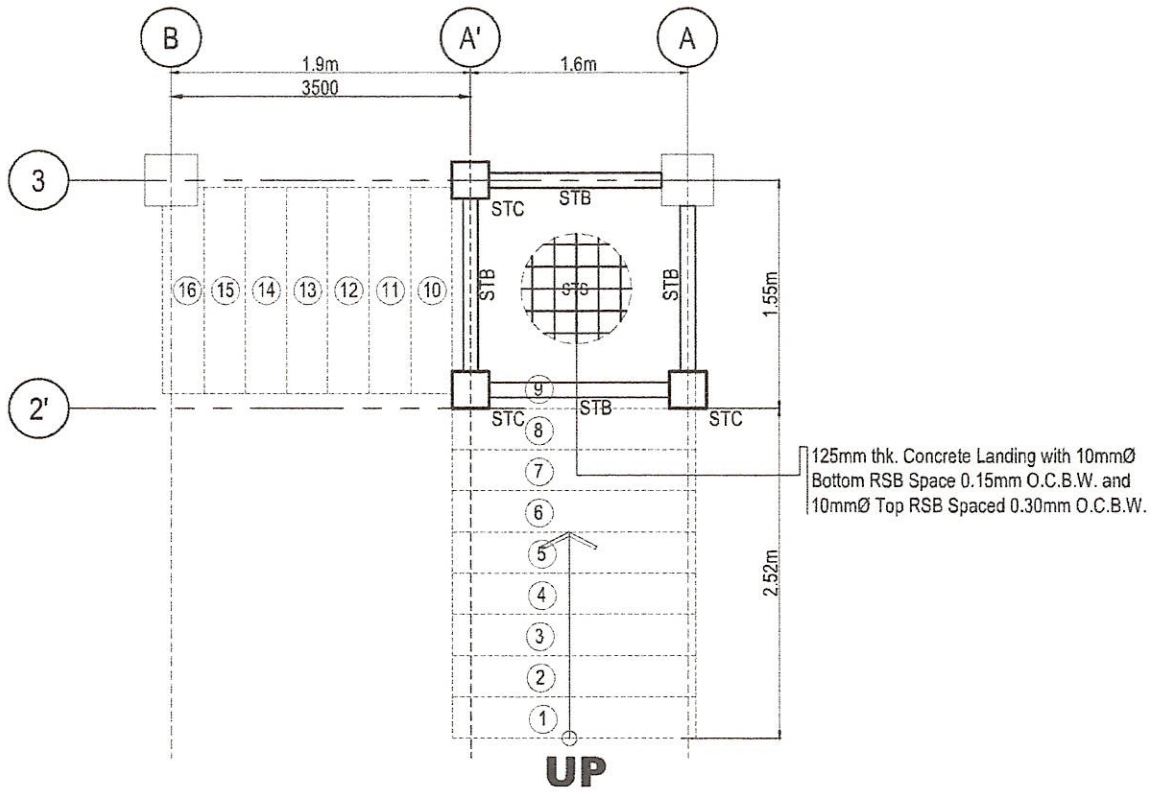
*NOTE: All Column Reinforcing Bars Shall be Protruded/Extended with Atleast 1.5m-2.0m



S 6 13 PHASE I STRUCTURAL LIMIT

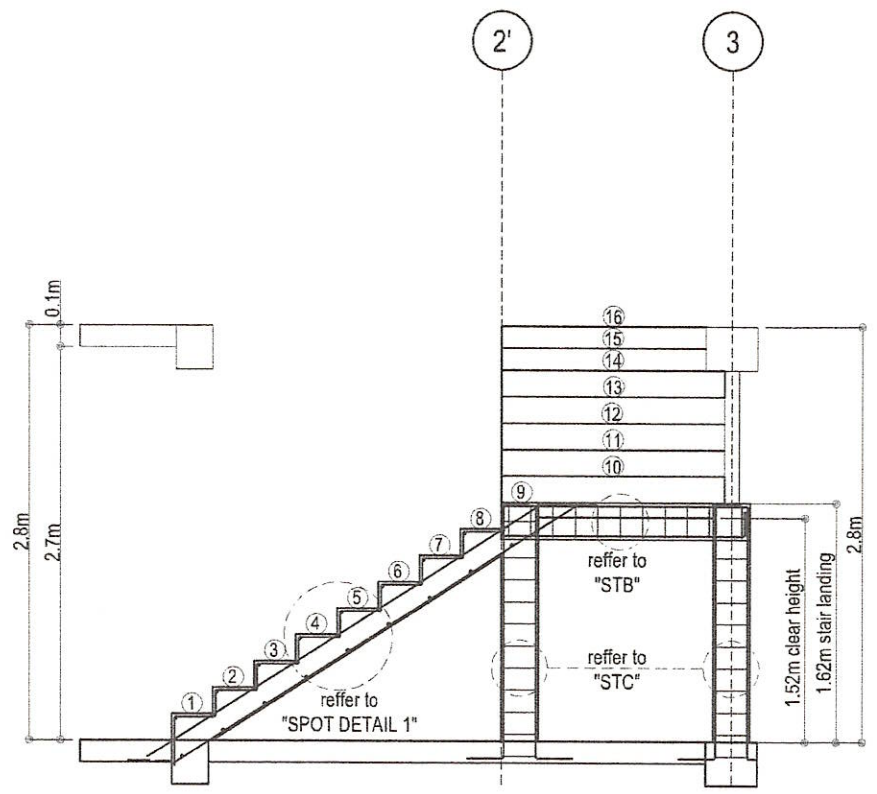
SCALE 1:100

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION		BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S13 13 | 14



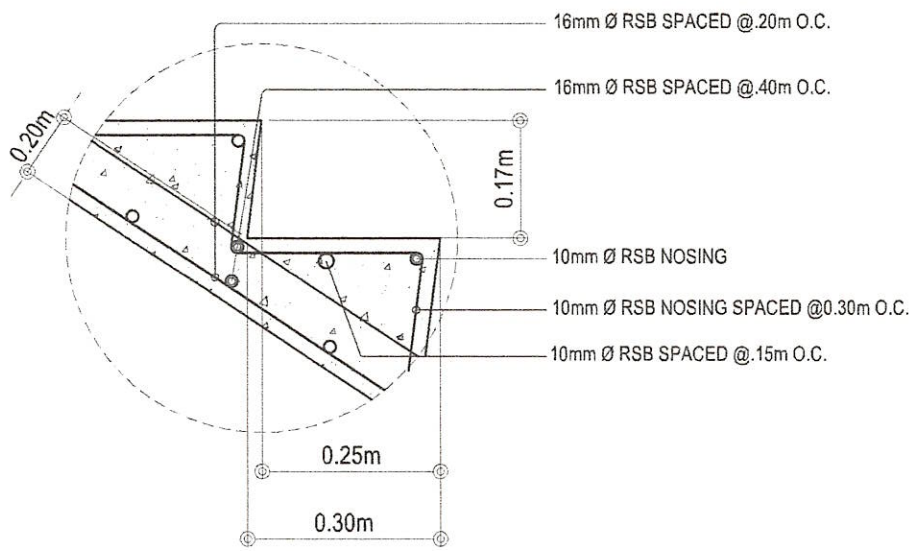
S 1 14 STAIR FRAMING PLAN

SCALE AS SHOWN



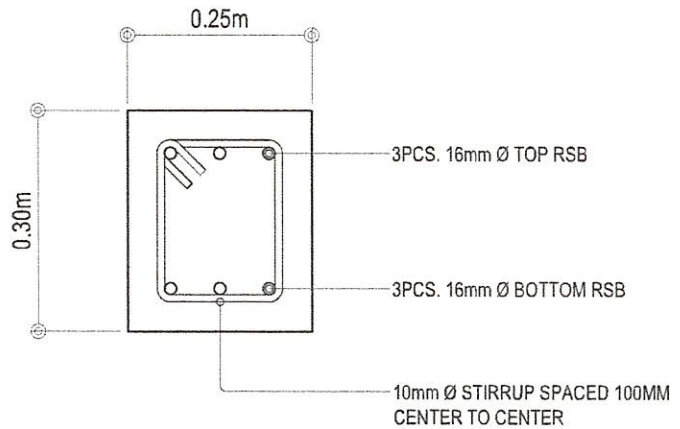
S 2 14 STAIR SECTION DETAILS

SCALE AS SHOWN



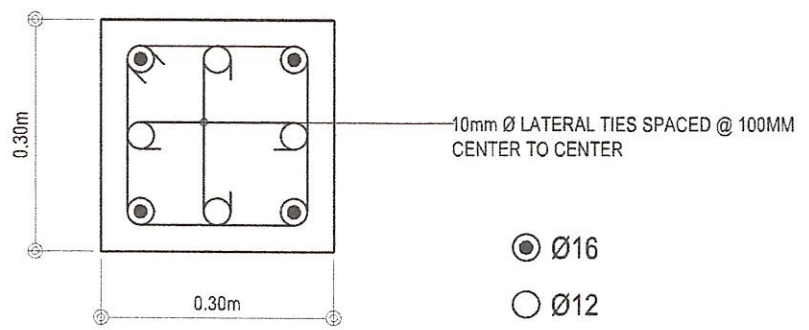
S 3 14 SPOT DETAIL 1

SCALE AS SHOWN



S 4 14 DETAIL OF STB

SCALE AS SHOWN



S 5 14 DETAILS OF STC

SCALE AS SHOWN

SHERIFF JOHN C. LA MADRID CIVIL ENGINEER PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 8208216 ISSUED: JANUARY 5, 2023	HAZELINE N. TIBANGAY HEAD, PROJECT MANAGEMENT UNIT	PROPOSED OPEN UNIVERSITY BUILDING (PHASE-I) BSU COMPOUND, KM.5, LA TRINIDAD, BENGUET PROJECT / LOCATION	BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET OWNER	LEONARDO T. APILIS END USER/ DIRECTOR-OPEN UNIVERSITY	ALLAN CASALDO SACPA VICE PRESIDENT- ADMINISTRATION AND FINANCE	FELIPE SALAING COMILA PRESIDENT	SHEET NO. S14 14 14