

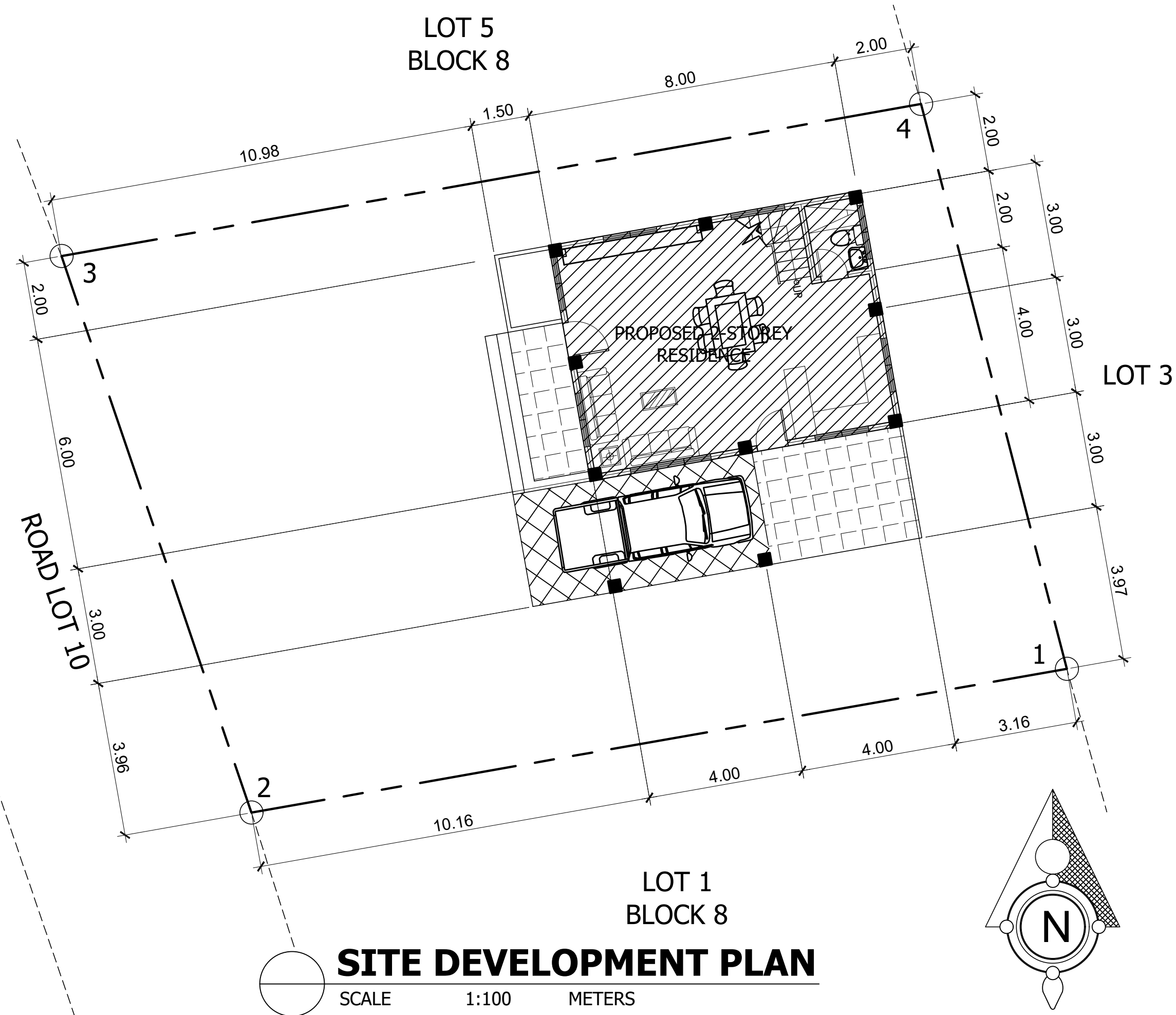
LOCATION PLAN
NOT TO SCALE



PERSPECTIVE

TECHNICAL LOT DESCRIPTIONS:

MON. #	BEARING	DISTANCE
1 - 2	S 80 DEG. 00' W	21.32 M
2 - 3	N 18 DEG. 51' W	15.14 M
3 - 4	N 79 DEG. 58' E	22.48 M
4 - 1	S 14 DEG. 29' E	15.03 M



SITE DEVELOPMENT PLAN

SCALE 1:100 METERS

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE BUILDING OFFICIAL

RECOMMENDING ISSUANCE AS TO:

HEAD SECTION: DATE:

ISSUED BY:

BUILDING OFFICIAL: DATE:

AS TO:

LAND USE AND ZONING

HEAD SECTION DATE

AS TO:

LINE AND GRADE

HEAD SECTION DATE

AS TO:

ARCHITECTURAL

HEAD SECTION DATE

AS TO:

STRUCTURAL

HEAD SECTION DATE

AS TO:

SANITARY

HEAD SECTION DATE

AS TO:

ELECTRICAL

HEAD SECTION DATE

AS TO:

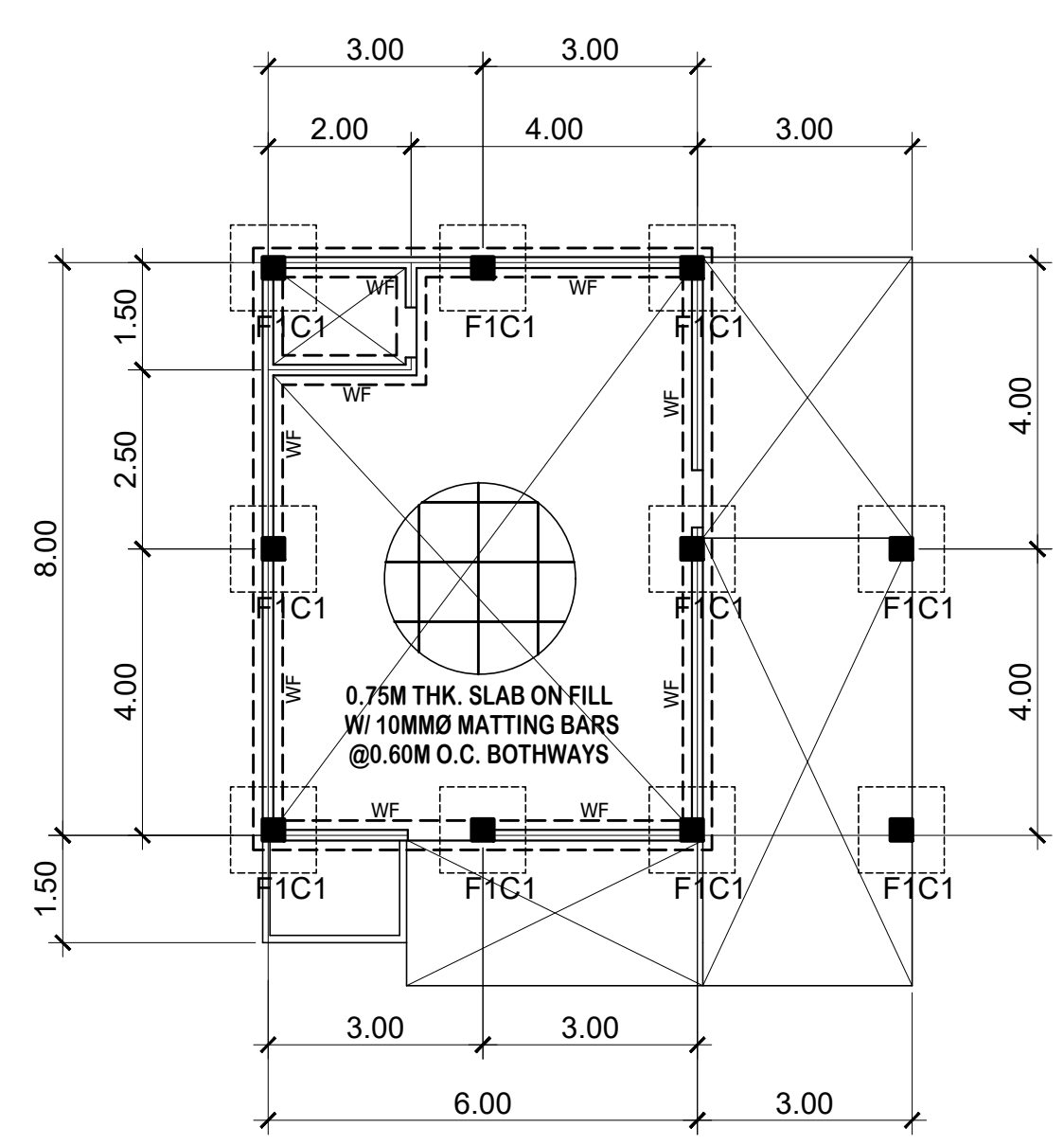
MECHANICAL

HEAD SECTION DATE

AS TO:

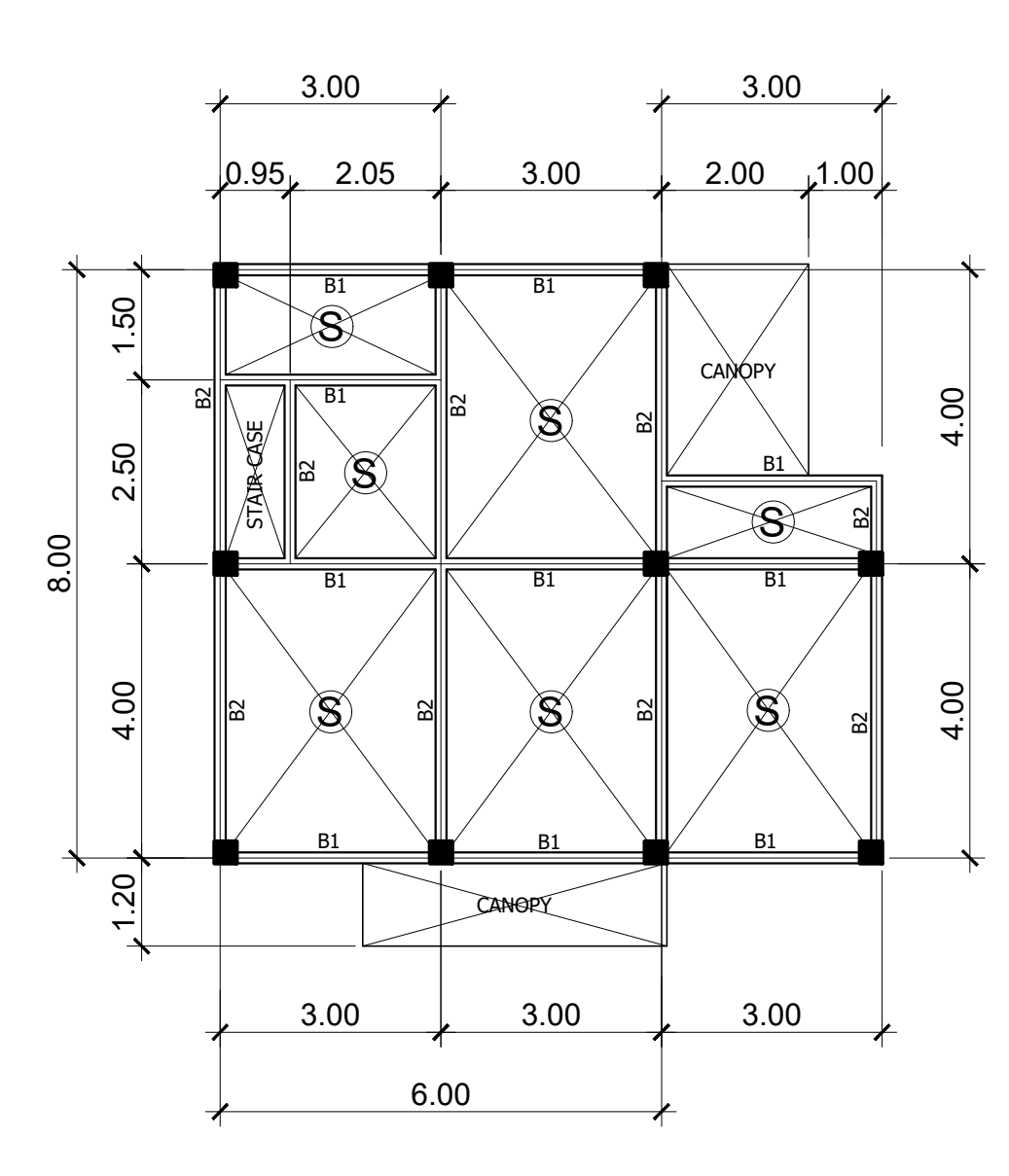
HEAD SECTION DATE

FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG NO. :	PROJECT TITLE:	APPROVED AS TO PLAN:	SHEET CONTENTS	SHEET NO:
		CIVIL ENGINEER / ARCHITECT	DATE ISSUED :	PROPOSED 2-STOREY RESIDENCE	JOHN ERIC S. BUAL AND LEAH B. BUAL	AS SHOWN...	1
ADDRESS:		ADDRESS:	PTR NO. :		OWNER		7
			DATE ISSUED :				A
			TIN NO.				LOCAL DRAFTSMAN
			DATE ISSUED :	ADDRESS:	ADDRESS:		DRAFTED BY:



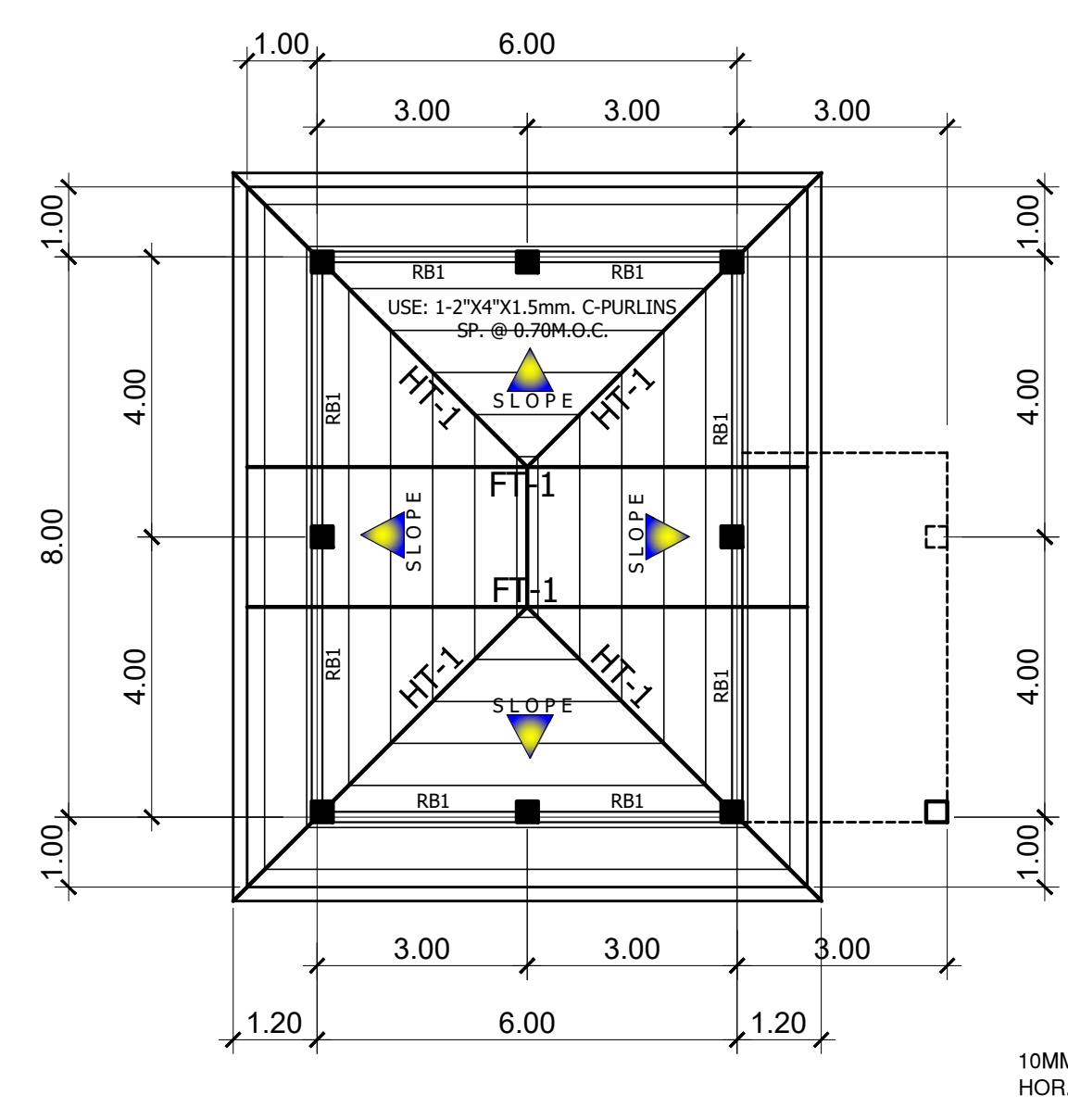
FOUNDATION PLAN

SCALE 1:100 METERS



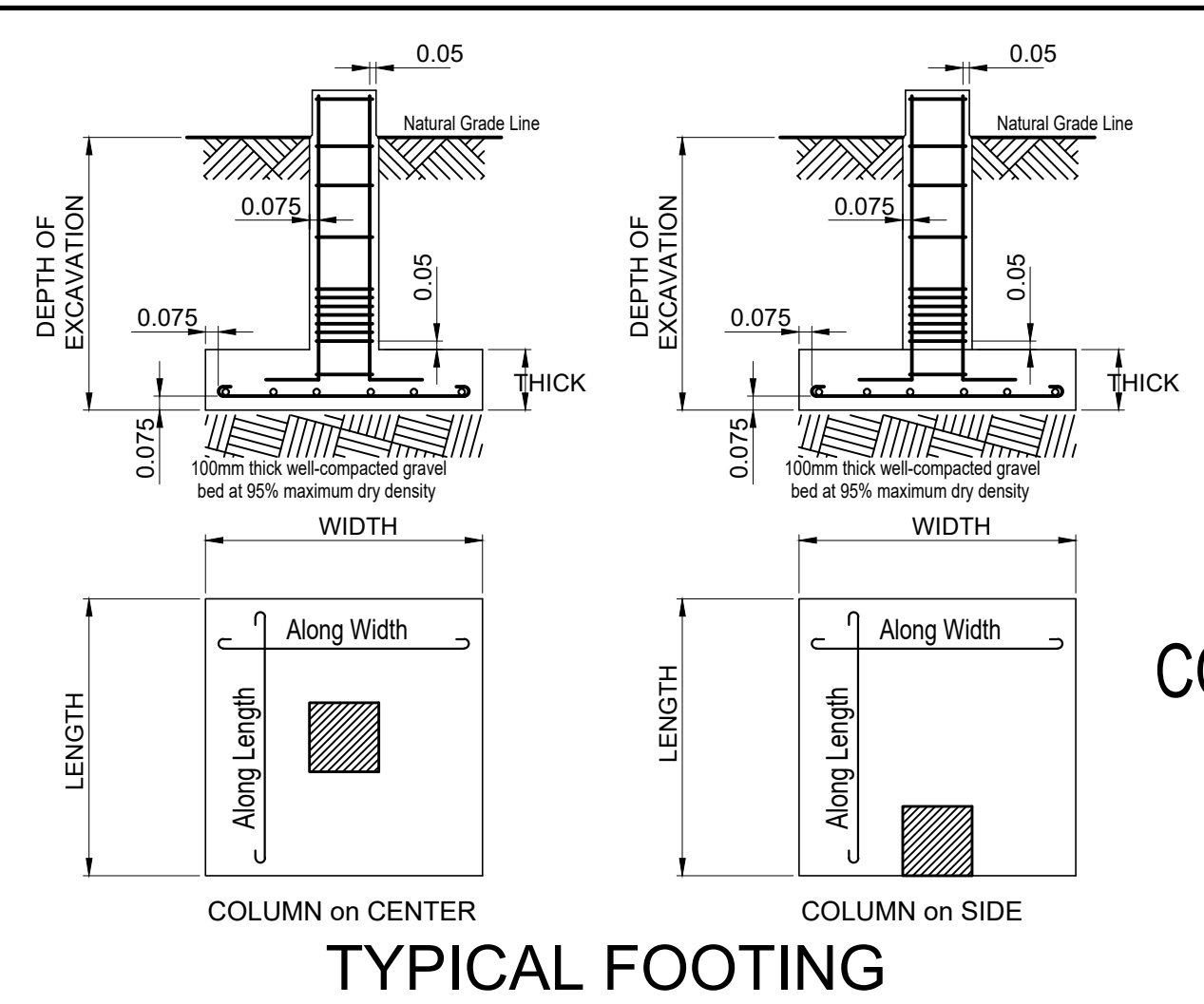
SECOND FLOOR FRAMING PLAN

SCALE 1:100 METERS



ROOF FRAMING PLAN

SCALE 1:100 METERS



TYPICAL FOOTING

COLUMN SCHEDULE

VERTICAL REBARS	6-16mmØ
REBAR TIES	1 SET - 10mmØ
STIRRUPS SPACING	7 @ .10 REST @ .20M O.C.
C1	

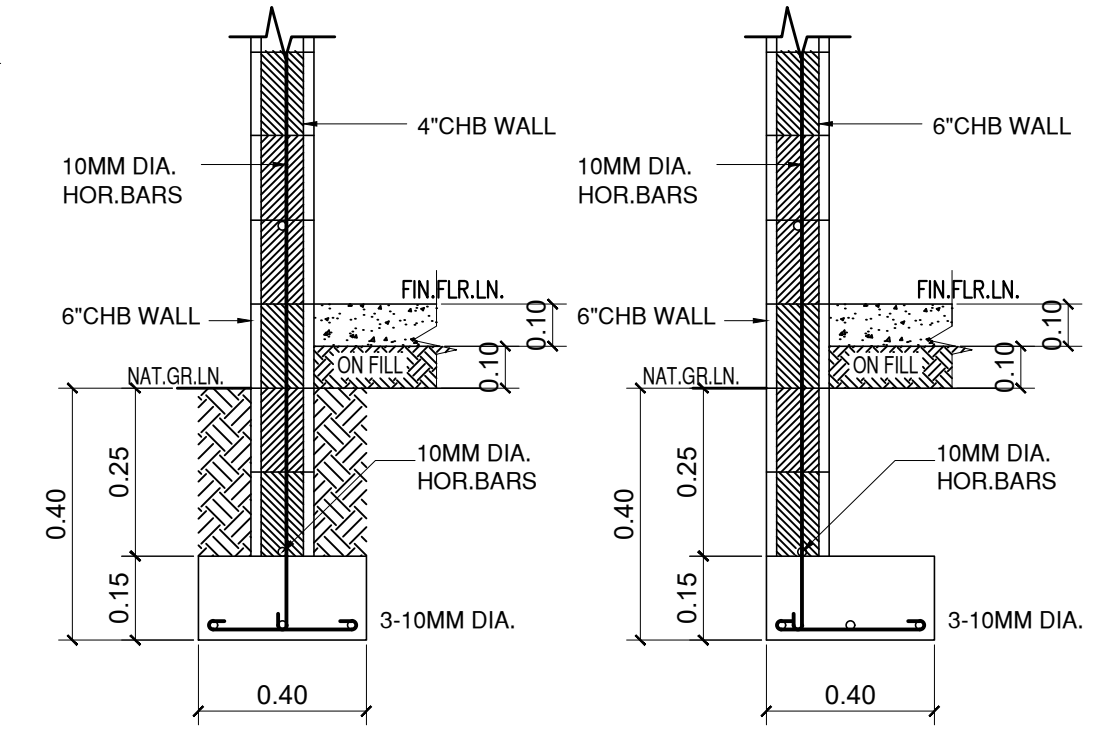
SCHEDULE OF FOOTING

MARK	SIZE OF FOOTING
F1	1.20 x 1.20 x 0.35 THK. 7-16MM DIA. BED BARS (ON CENTER BOTHWAYS)

SCHEDULE OF BEAM REINFORCEMENT

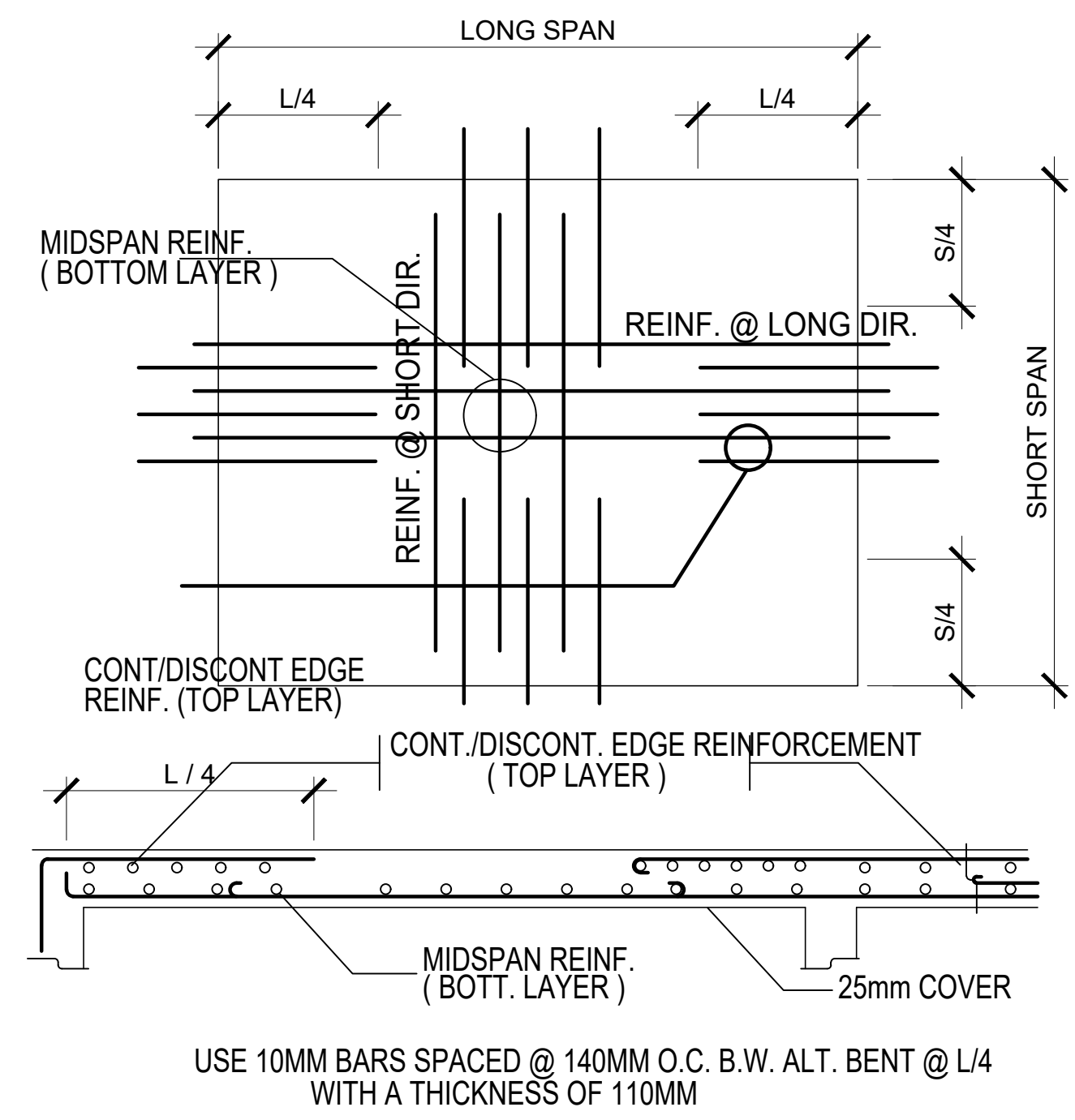
BEAM MARK	DIMENSION WxD (M)	LEFT SUPPORT		MIDSPAN		RIGHT SUPPORT		STIRRUPS
		TOP BARS	BOT. BARS	TOP BARS	BOT. BARS	TOP BARS	BOT. BARS	
FLOOR/ROOF BEAMS								
RB1	0.20 X 0.30	3-16mmØ	2-16mmØ	2-16mmØ	3-16mmØ	3-16mmØ	2-16mmØ	A
RB2	0.20 X 0.30	2-16mmØ	2-16mmØ	2-16mmØ	2-16mmØ	2-16mmØ	2-16mmØ	A

A - 10mmØ STIRRUPS: 5 @ .05, 5 @ 0.10, 3 @ 0.15 REST @ 0.20
B - 10mmØ STIRRUPS: 7 @ .05, 5 @ 0.10, 3 @ 0.15 REST @ 0.20



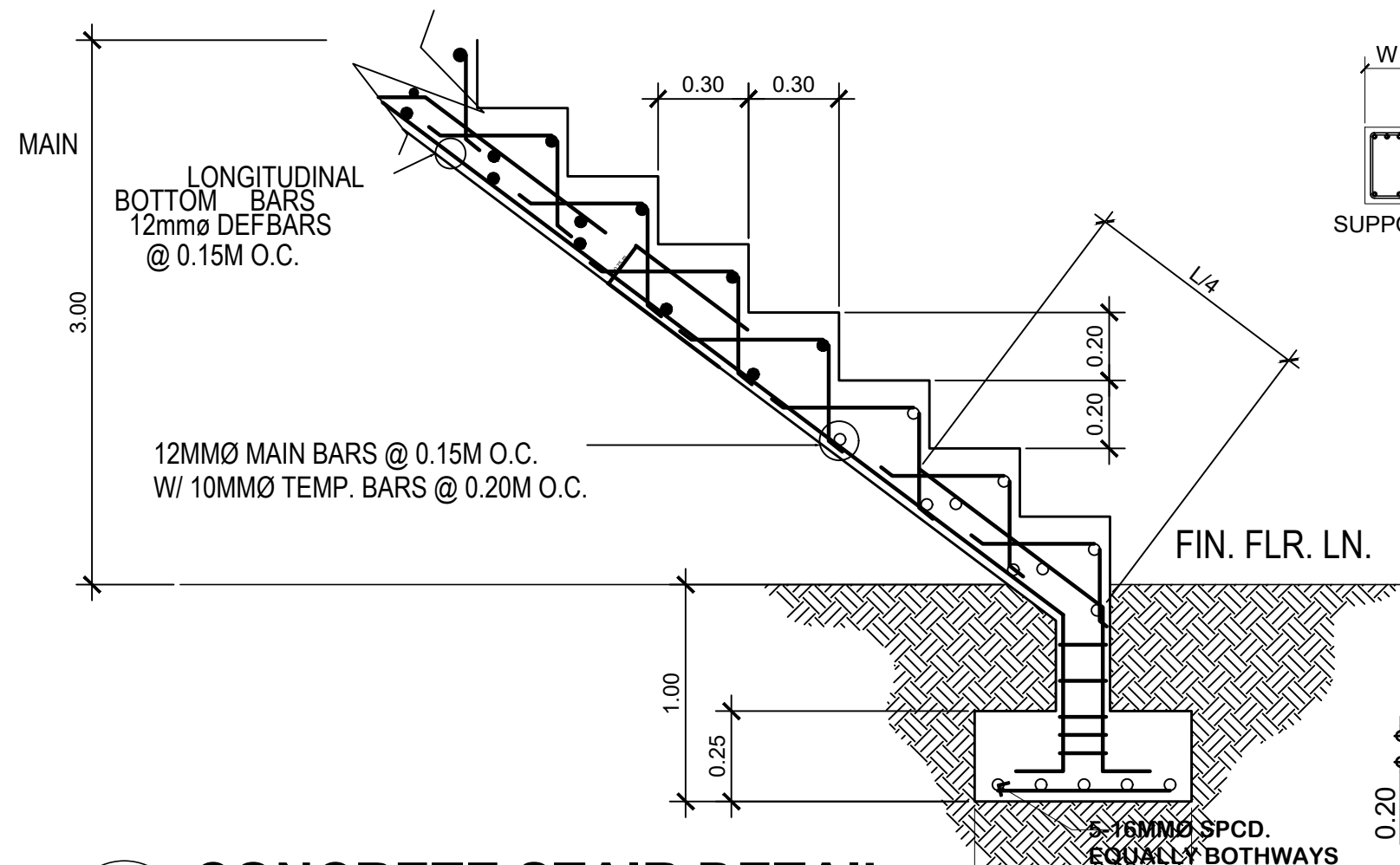
WALL FOOTING DETAIL

SCALE: 1:25 MTS.



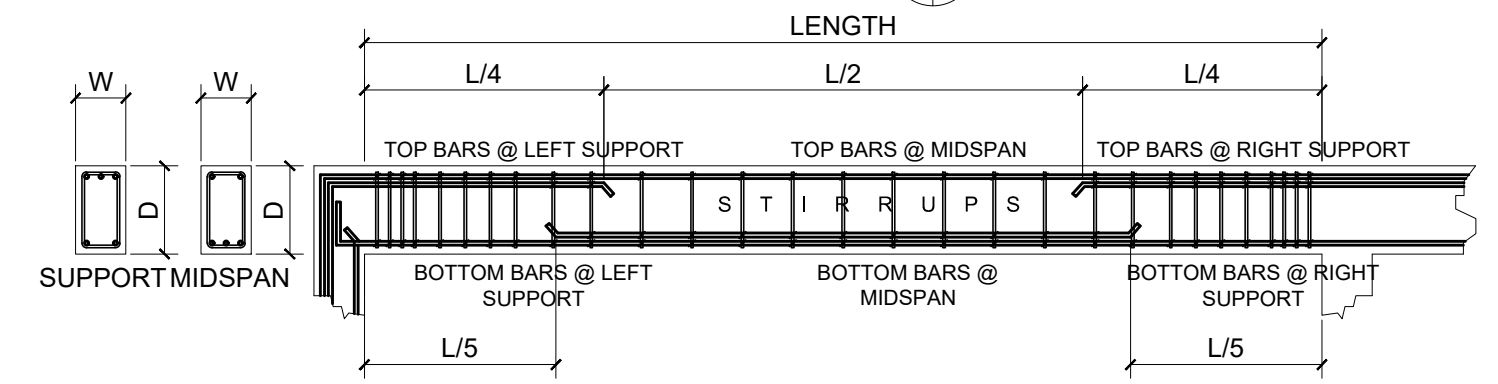
SLAB DETAIL

SCALE: 1:30 MTS



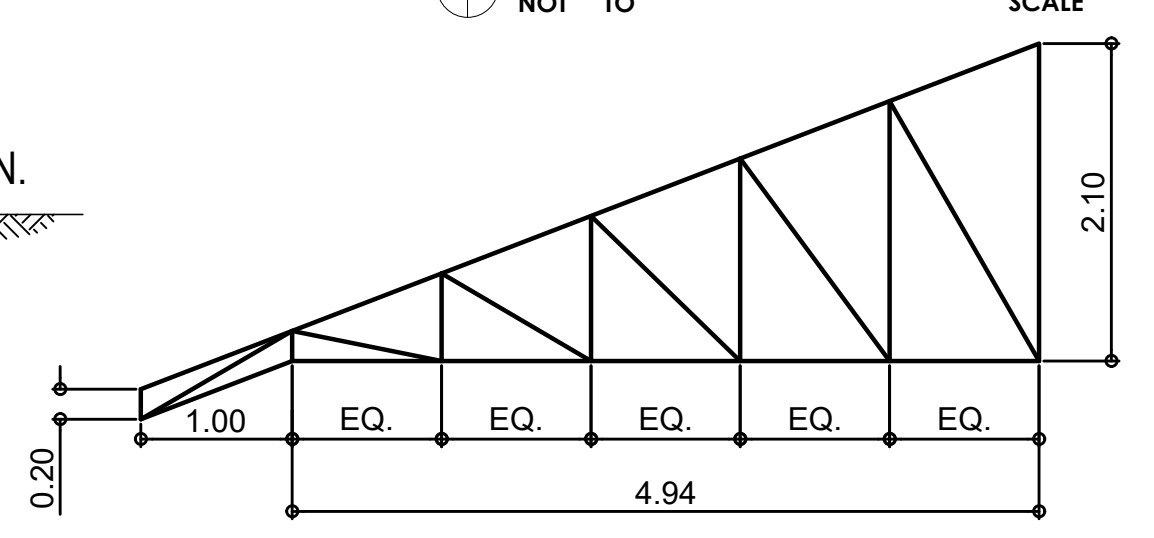
CONCRETE STAIR DETAIL

SCALE: 1:30M.



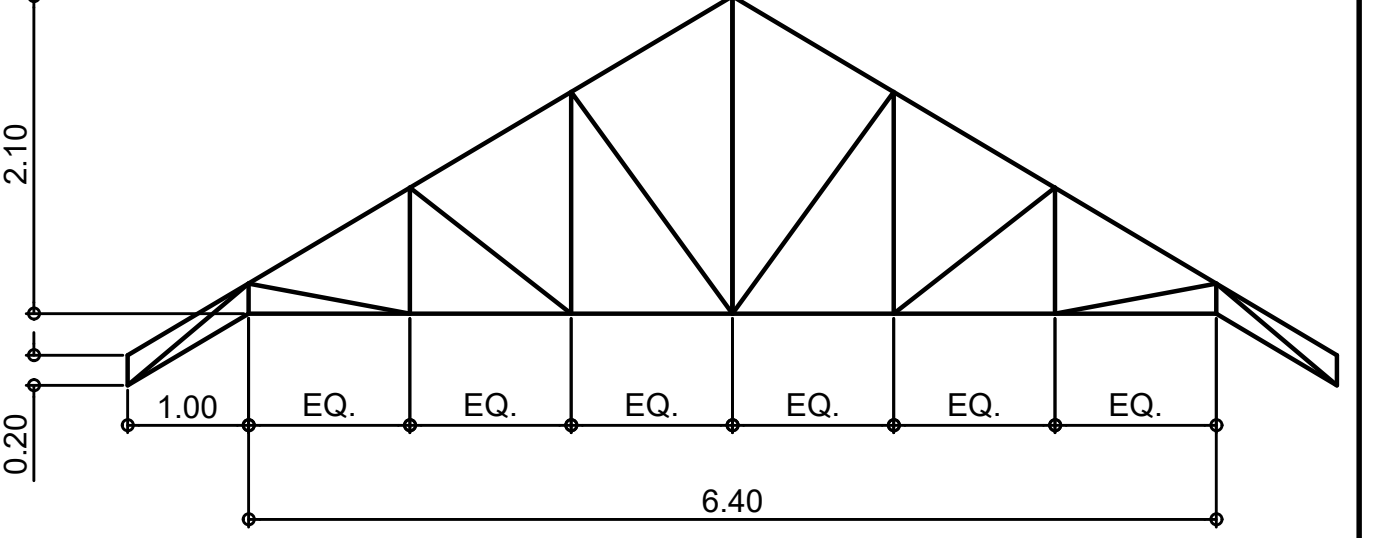
TYPICAL BEAM DETAIL

SCALE: NOT TO



HALF TRUSS-1 DETAIL

SCALE: 1:50 MTS.



FULL TRUSS-1 DETAIL

SCALE: 1:50 MTS.

FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG NO. : DATE ISSUED: PTR NO. : DATE ISSUED: TIN NO.	PROJECT TITLE: PROPOSED 2-STOREY RESIDENCE	APPROVED AS TO PLAN: JOHN ERIC S. BUAL AND LEAH B. BUAL OWNER	SHEET CONTENTS AS SHOWN...	SHEET NO. 1 7
ADDRESS:		CIVIL ENGINEER	DATE ISSUED :	ADDRESS:	ADDRESS:		DRAFTED BY: LOCAL DRAFTSMAN

RECOMMENDING ISSUANCE AS TO:

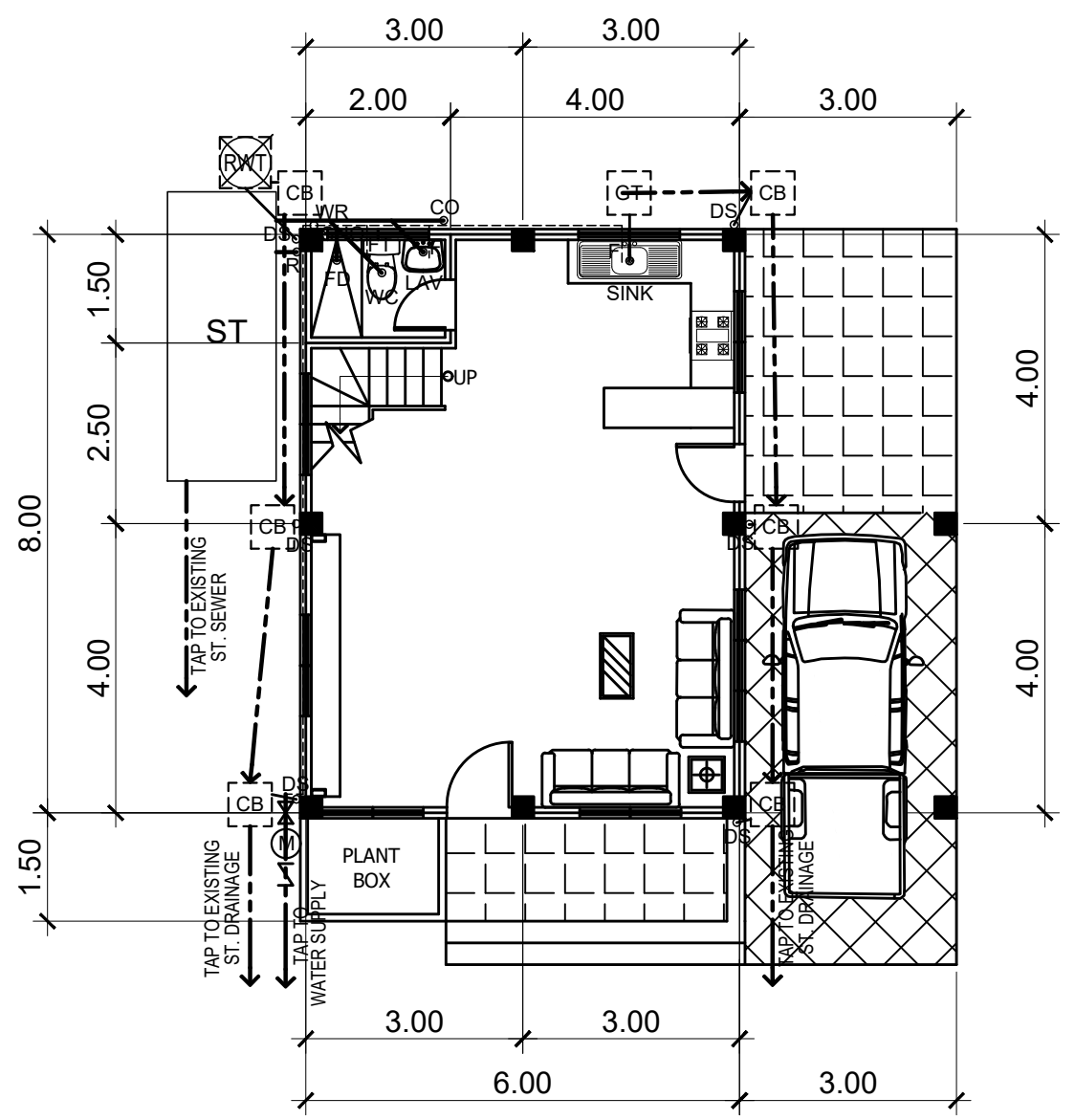
HEAD SECTION: _____ DATE: _____

ISSUED BY: _____

BUILDING OFFICIAL: _____ DATE: _____

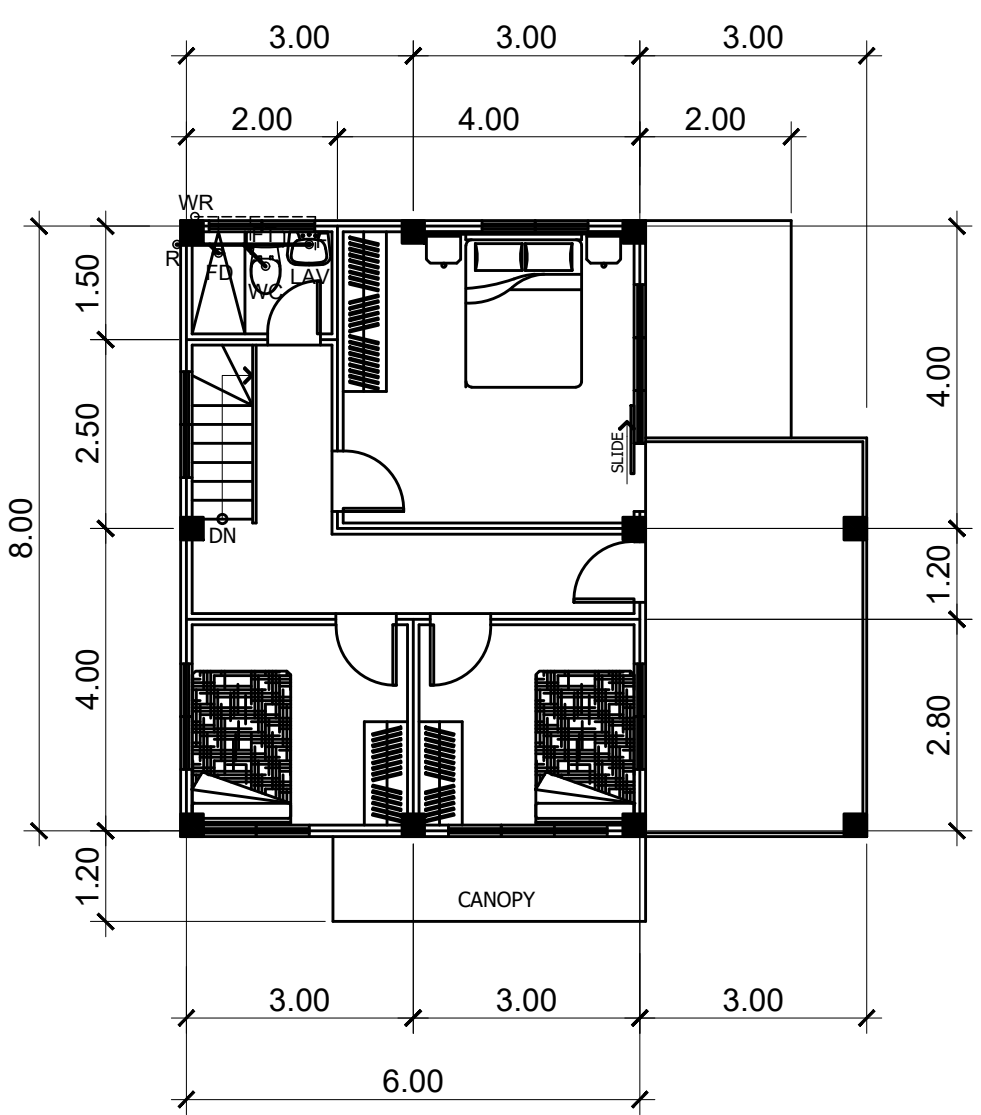
RAIN WATER TANK VOLUME CALCULATION

VOLUME OF RWT = BUILDING FOOTPRINT
 $\frac{75}{75}$
 $= 120.20 \text{ SQM}$
 $\frac{75}{75}$
 $= 1.60 \times 50\%$
VOLUME OF RWT = 0.80 CU.M



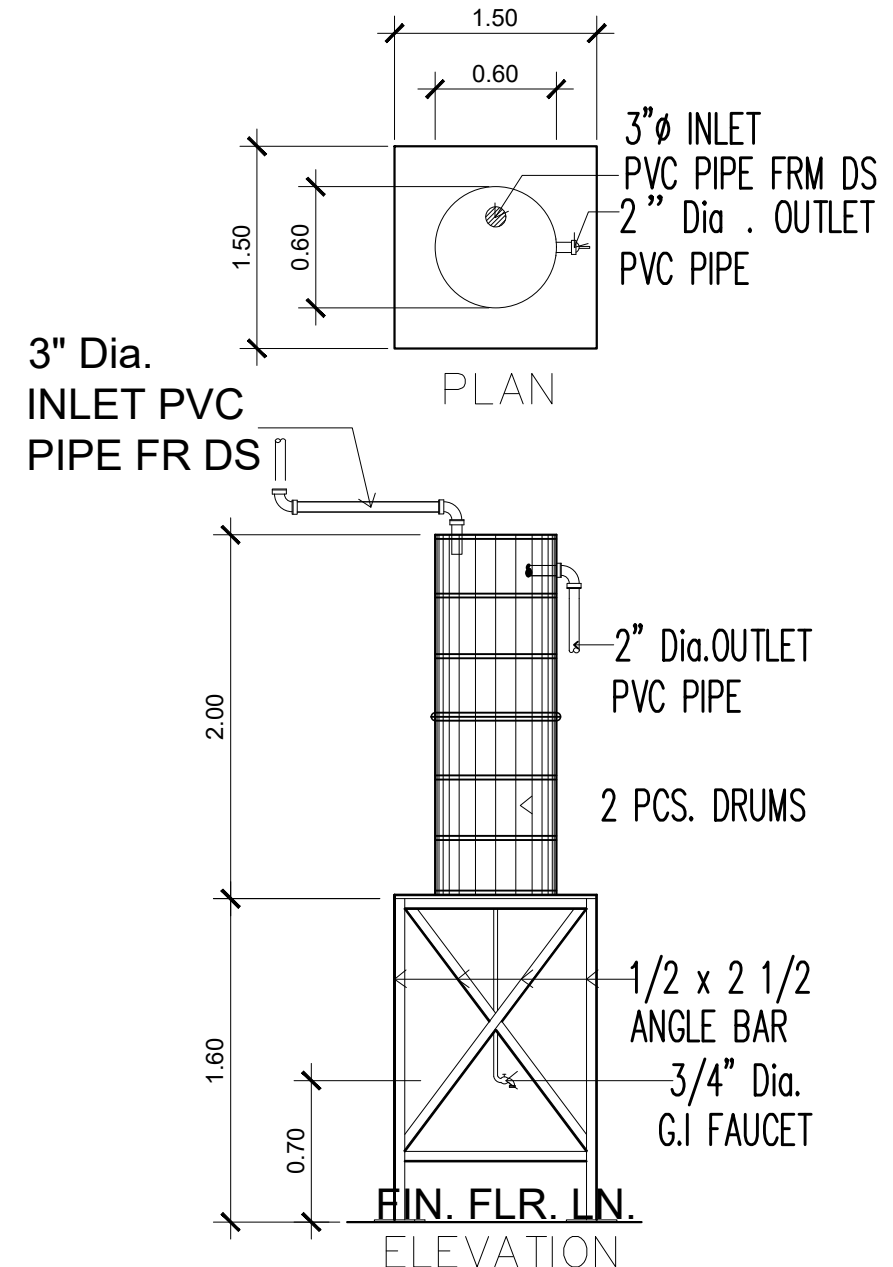
GROUND FLOOR PLUMBING PLAN

SCALE 1:100 METERS



SECOND FLOOR PLUMBING PLAN

SCALE 1:100 METERS



RAIN WATER TANK DETAIL

SCALE: NTS

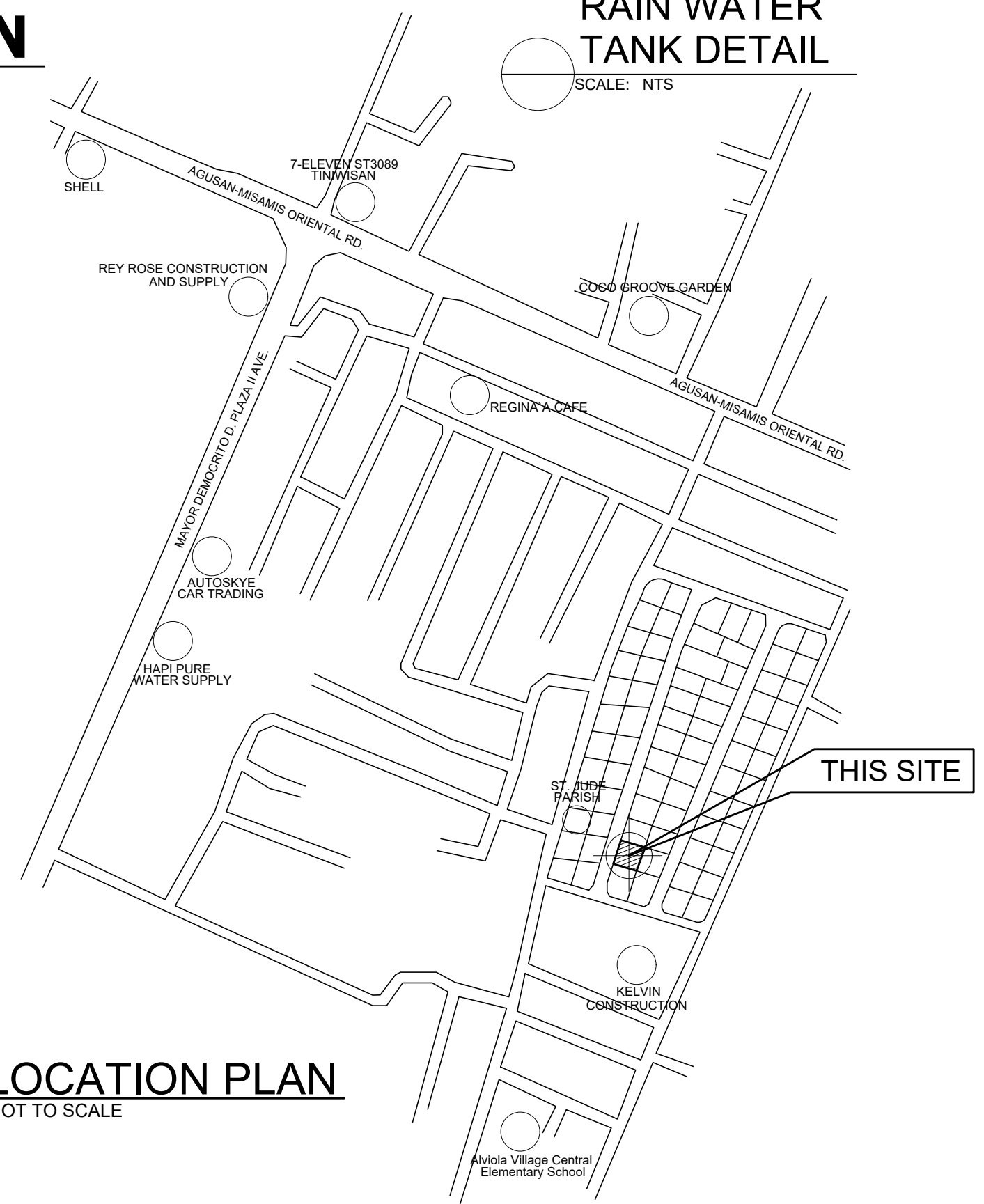
GENERAL NOTES:

- ALL PLUMBING INSTALLATIONS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE PLUMBING CODE AND IN CONFORMITY WITH THE LOCAL PLUMBING ORDINANCE.
- ALL HORIZONTAL PIPING INSTALLATIONS SHALL BE RUN IN PRACTICAL ALIGNMENT AND SHALL BE PROVIDED WITH A SLOPE OF NOT LESS THAN 2%.
- ALL PLUMBING PIPES PASSING THRU OR UNDER CONCRETE SHALL BE FULLY PROTECTED AGAINST BREAKAGE.
- VERIFY ACTUAL LOCATION AND ELEVATION OF STREET DRAINAGE AND WATER SOURCE FOR CONNECTION BEFORE CONSTRUCTION.
- ALL PLUMBING INSTALLATION SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED PLUMBING ENGINEER OR MASTER PLUMBER.
- POLYVINYL CHLORIDE (PVC) PIPES FOR WASTE, DRAIN AND VENT SHALL BE MOLDEX BRAND, NO REPLACEMENT OF MATERIALS SHALL BE MADE WITHOUT THE CONSENT OF THE DESIGNER.

CERTIFICATION

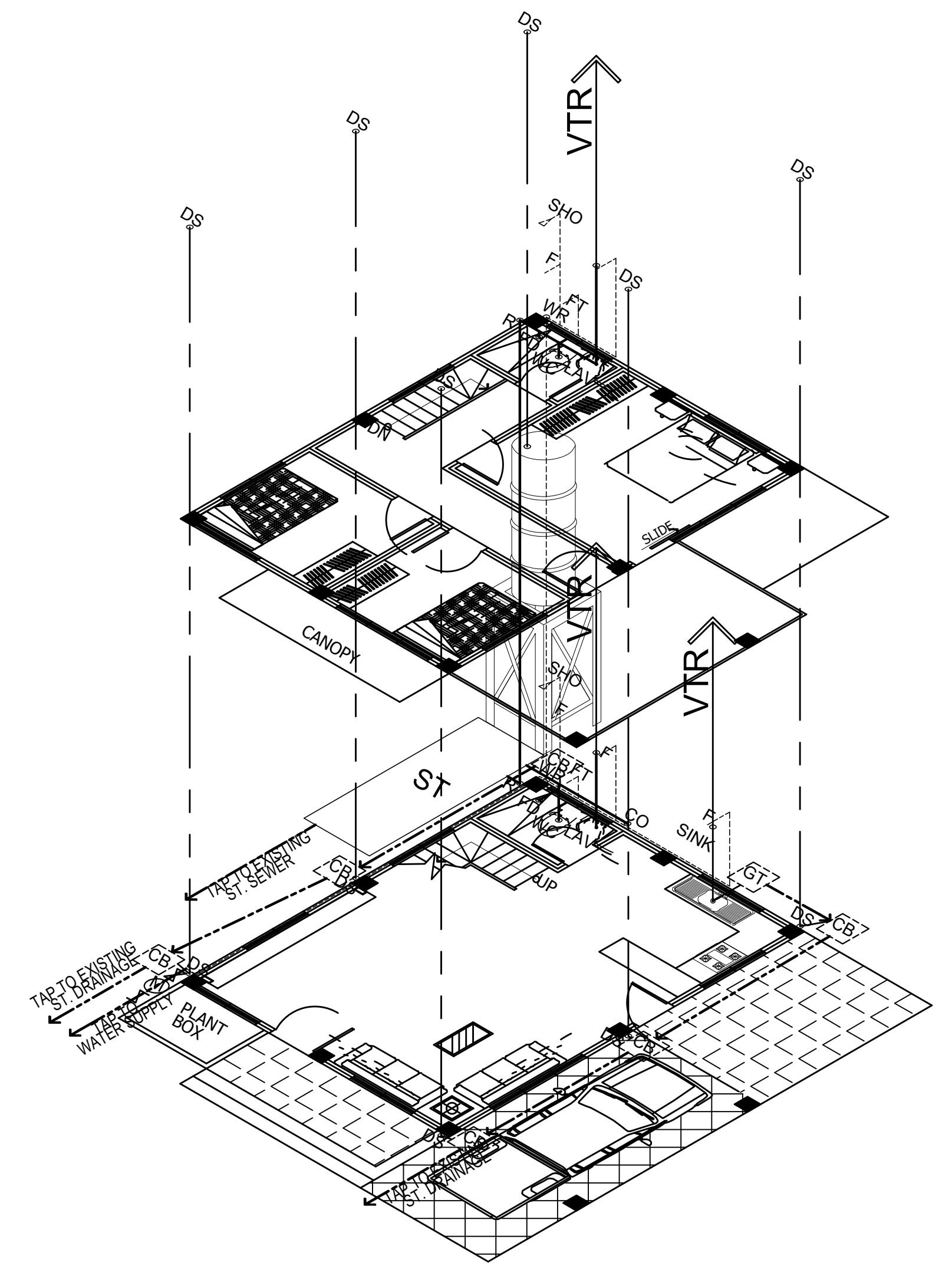
THIS TO CERTIFY THAT THERE IS NO EXISTING ARTESIAN WELL WITHIN THE RADIUS OF 25.00 METERS AWAY FROM THE PROPOSED SEPTIC TANK.

REGISTERED MASTER PLUMBER



LOCATION PLAN

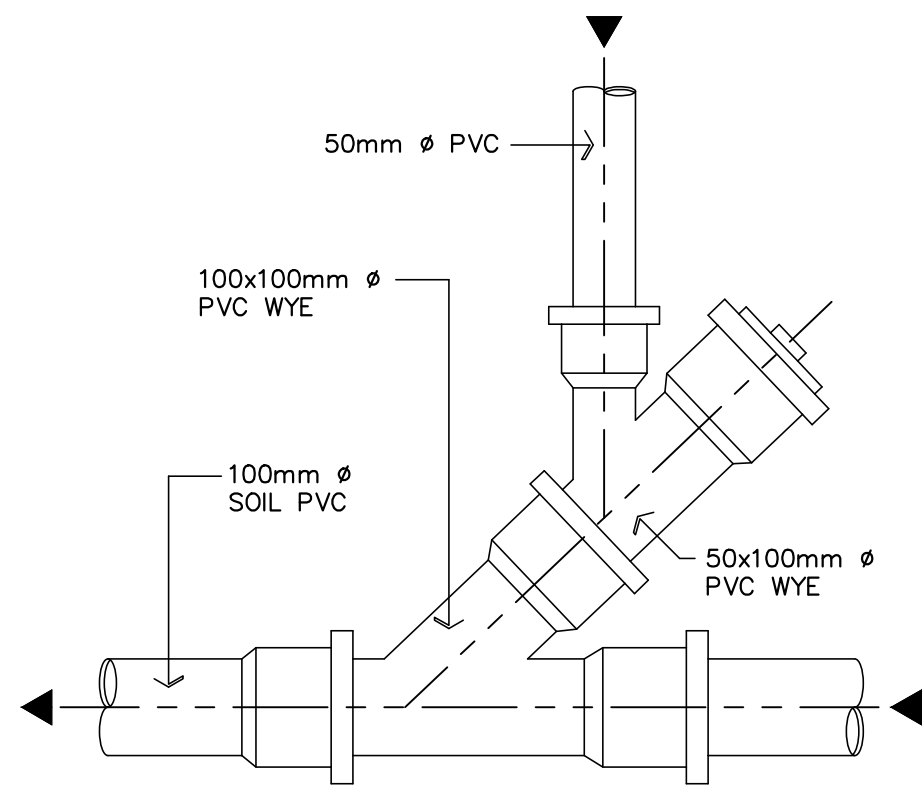
NOT TO SCALE



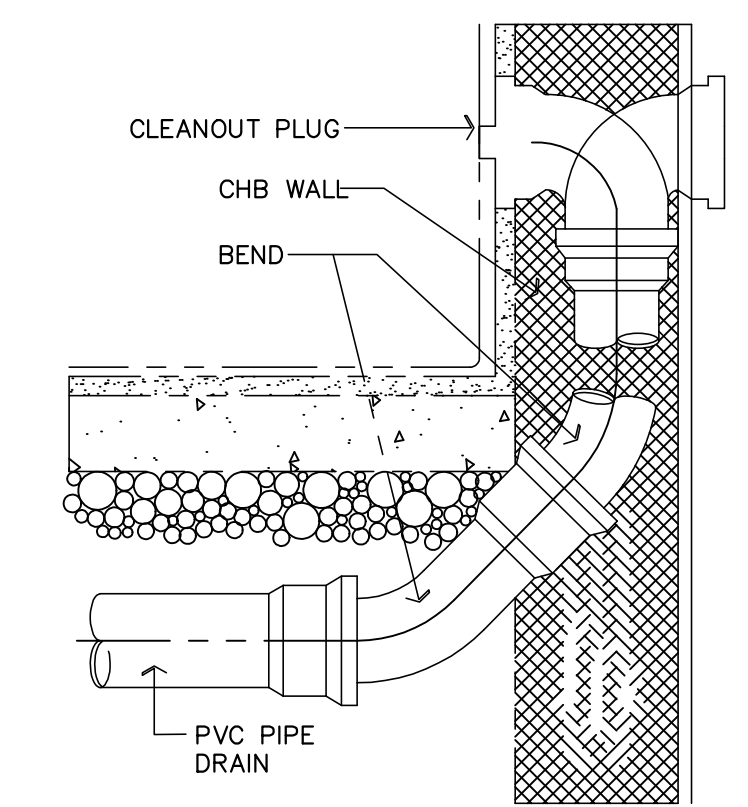
ISOMETRIC PLUMBING LAYOUT

NOT TO SCALE

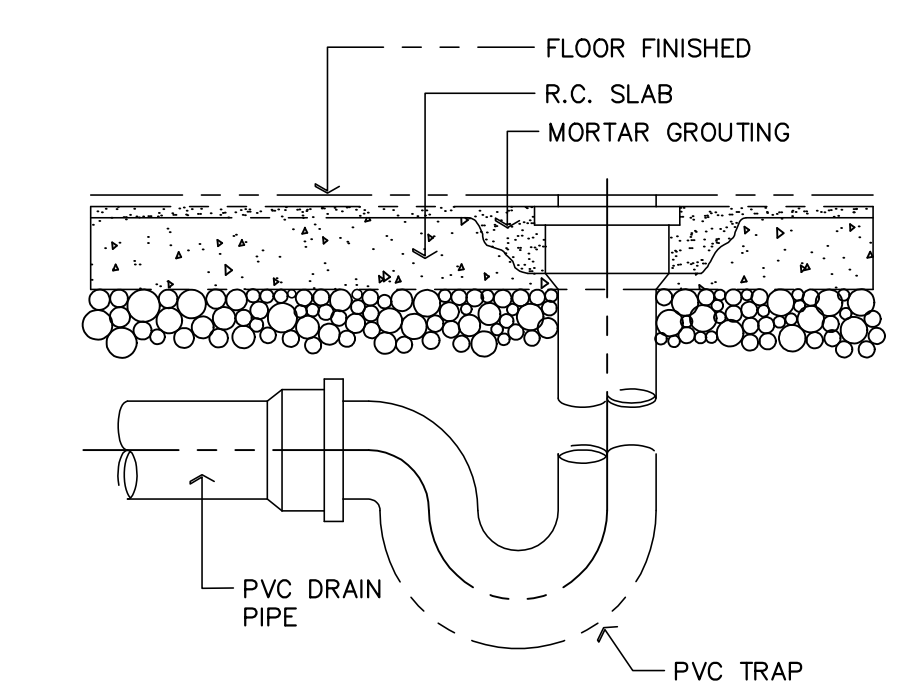
FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG NO. : DATE ISSUED:	PROJECT TITLE:	APPROVED AS TO PLAN:	SHEET CONTENTS	SHEET NO.:
		REGISTERED MASTER PLUMBER	PTR NO. : DATE ISSUED:	PROPOSED 2-STOREY RESIDENCE	JOHN ERIC S. BUAL AND LEAH B. BUAL OWNER	AS SHOWN...	P 1 7
ADDRESS:		ADDRESS:	TIN NO. DATE ISSUED :	ADDRESS:	ADDRESS:		DRAFTED BY: LOCAL DRAFTSMAN



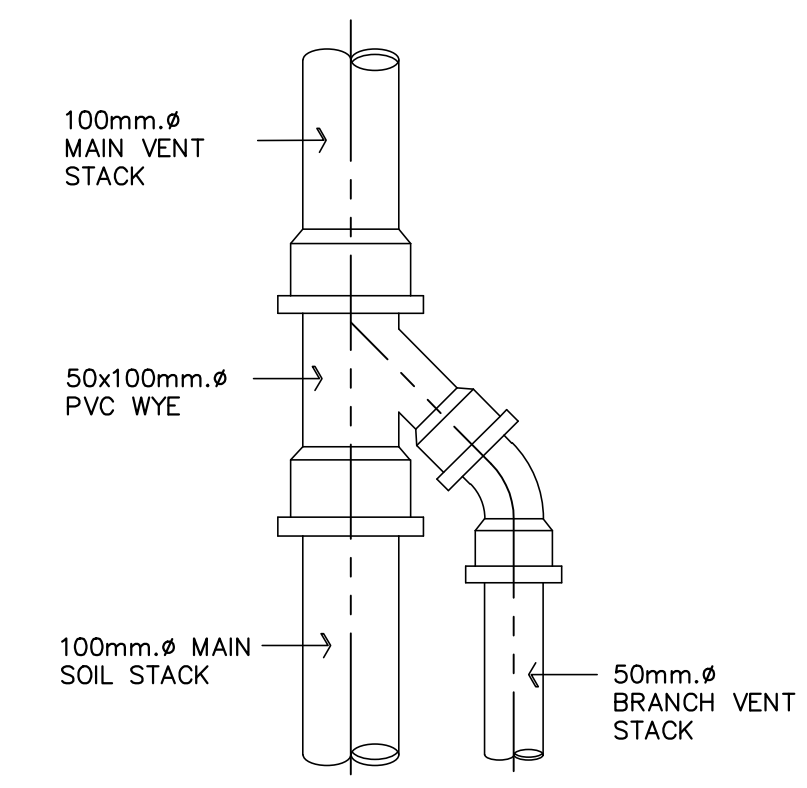
PLAN
(CHANGE OF DIRECTION HORIZONTAL)



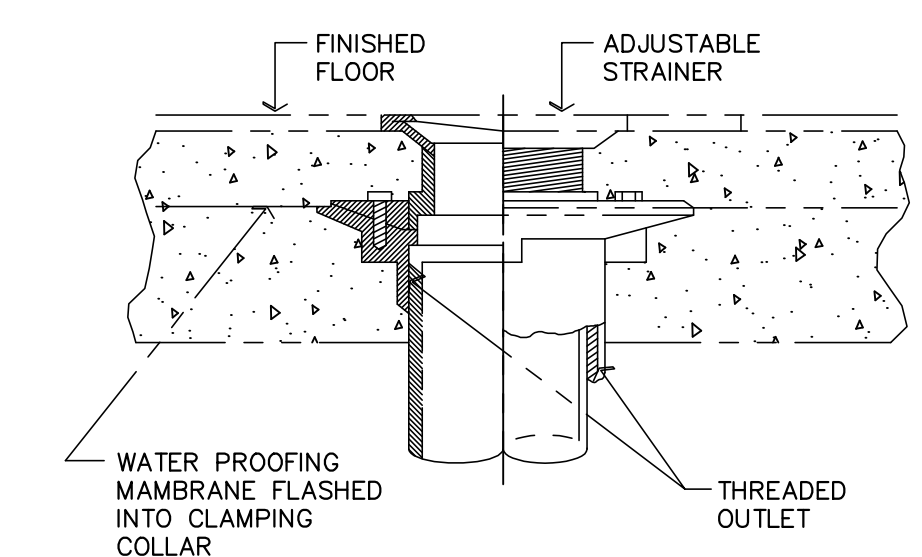
WALL CLEAN OUT DETAIL



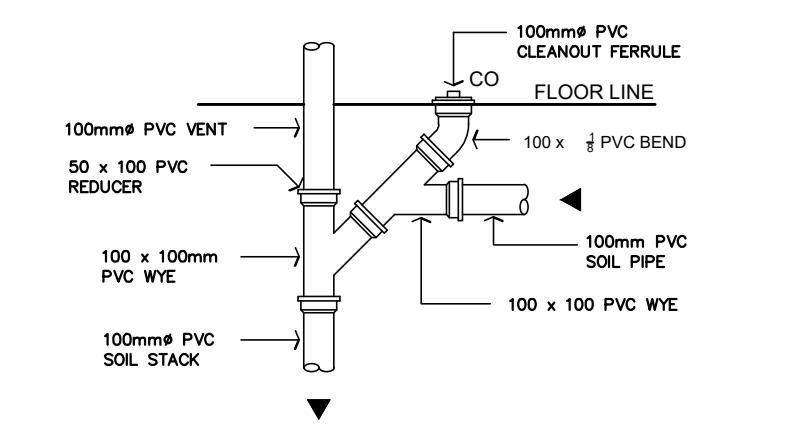
FLOOR DRAIN DETAIL



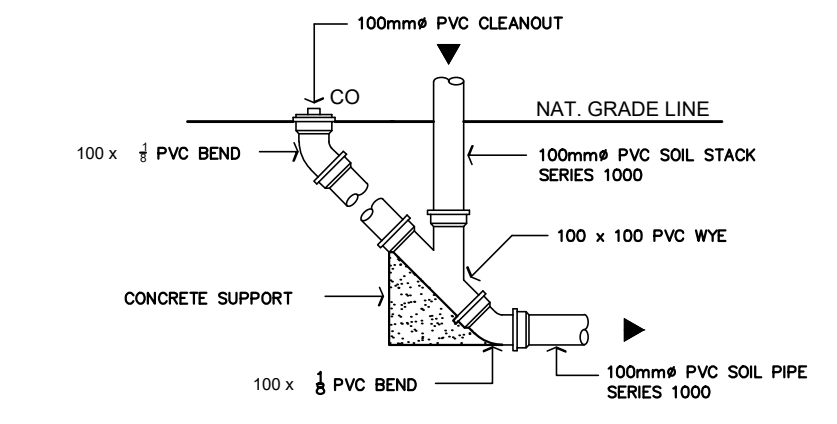
MAIN VENT STACK



MOUNTING OF WATER CLOSET



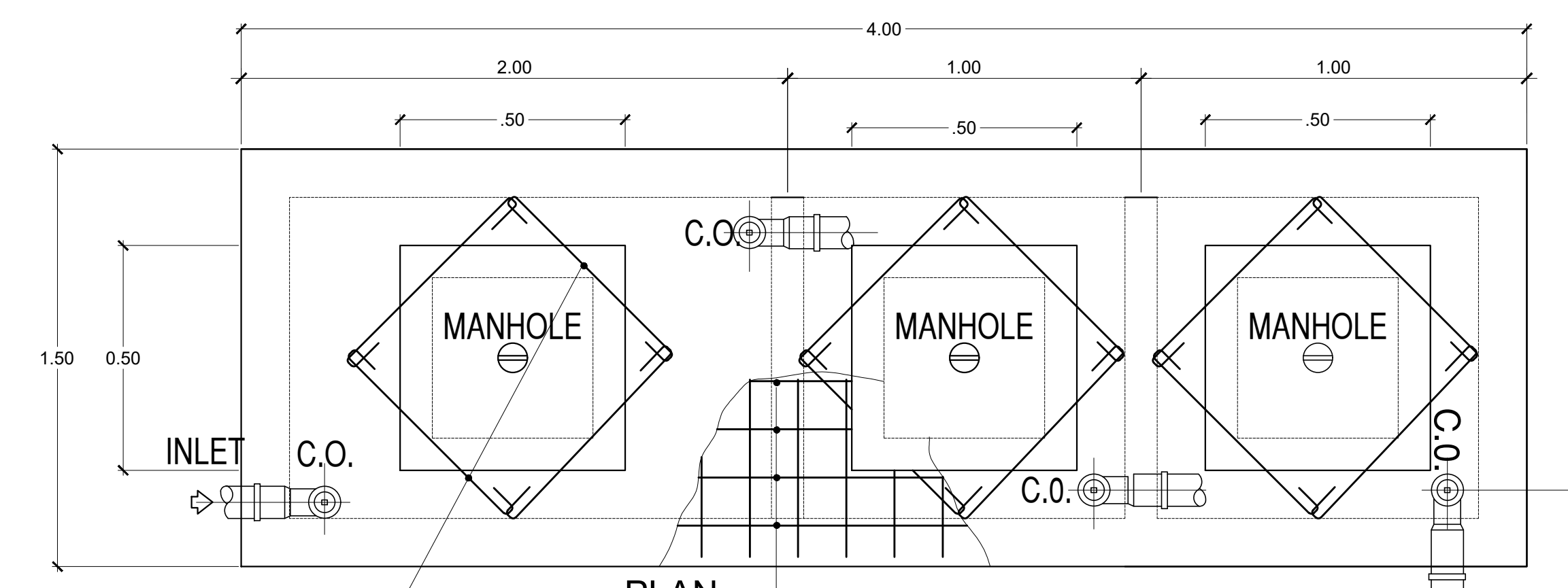
FOR HOUSE DRAIN TO SOIL STACK
(HORIZONTAL TO VERTICAL JOINT)



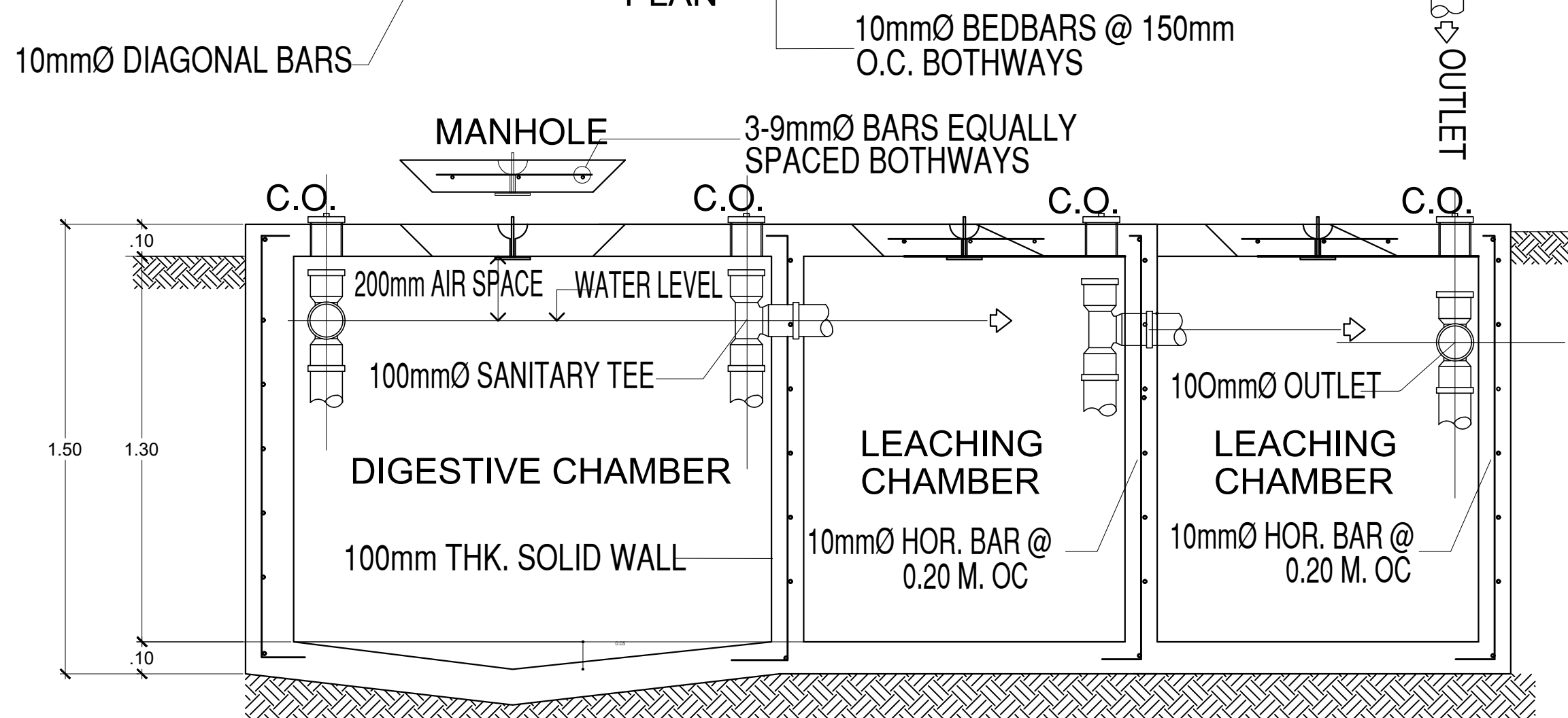
FOR SOIL STACK TO HOUSE DRAIN
(VERTICAL TO HORIZONTAL JOINT)



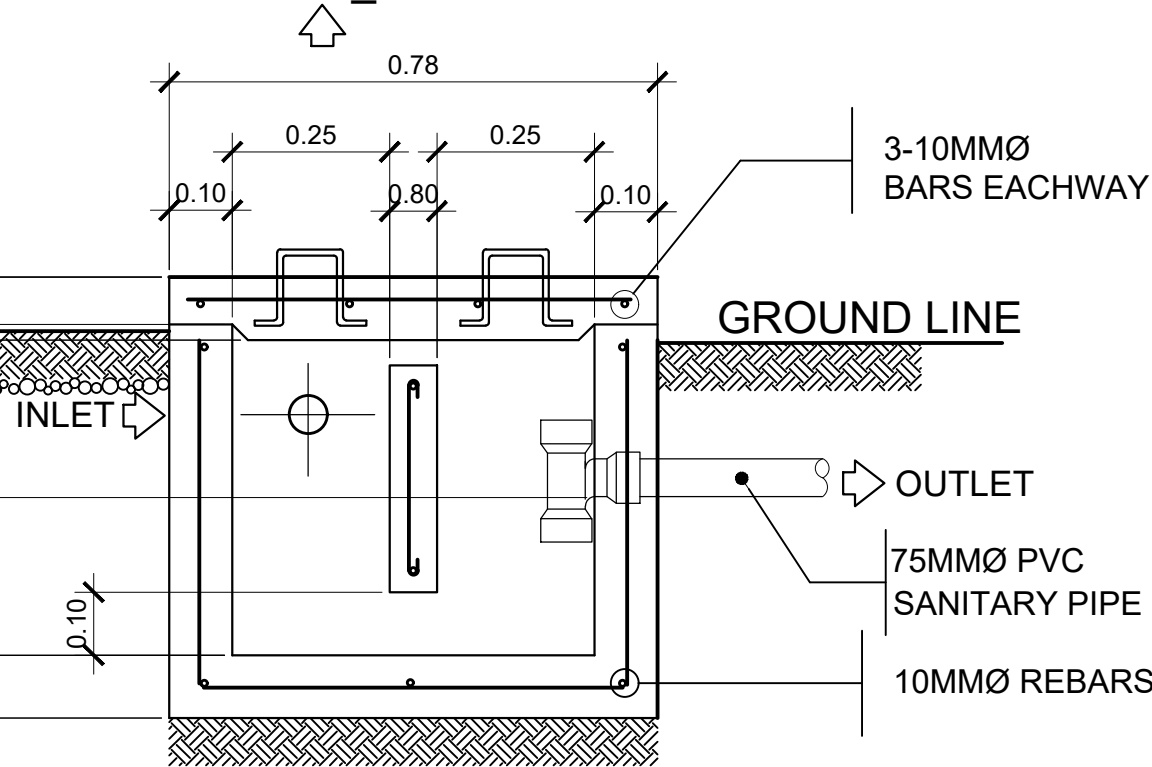
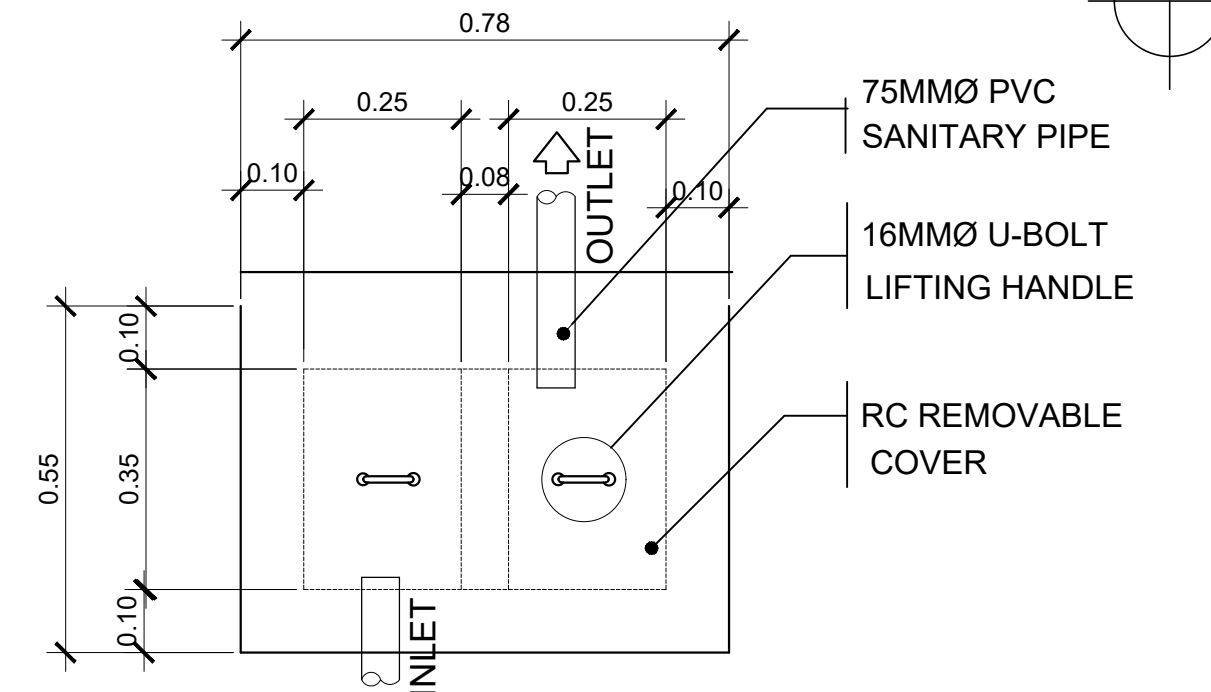
JOINT DETAIL
NTS



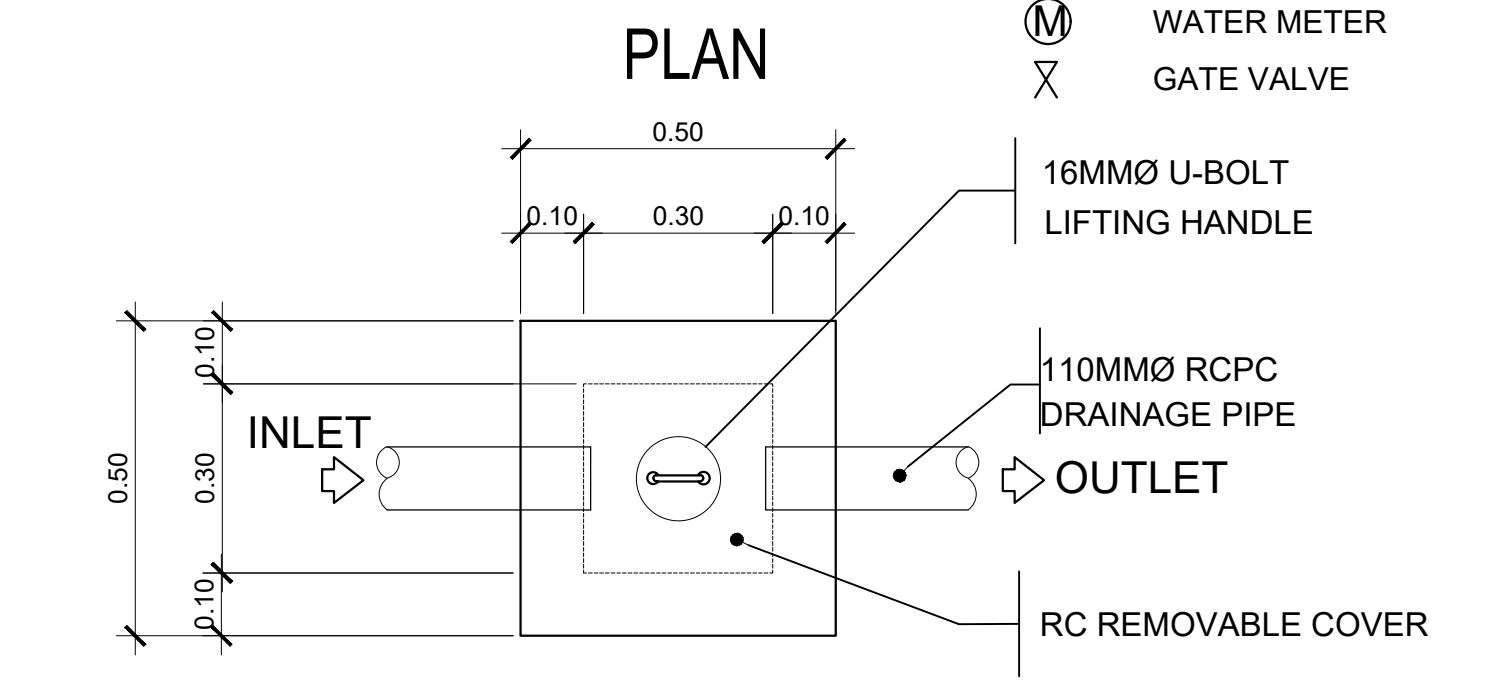
PLAN



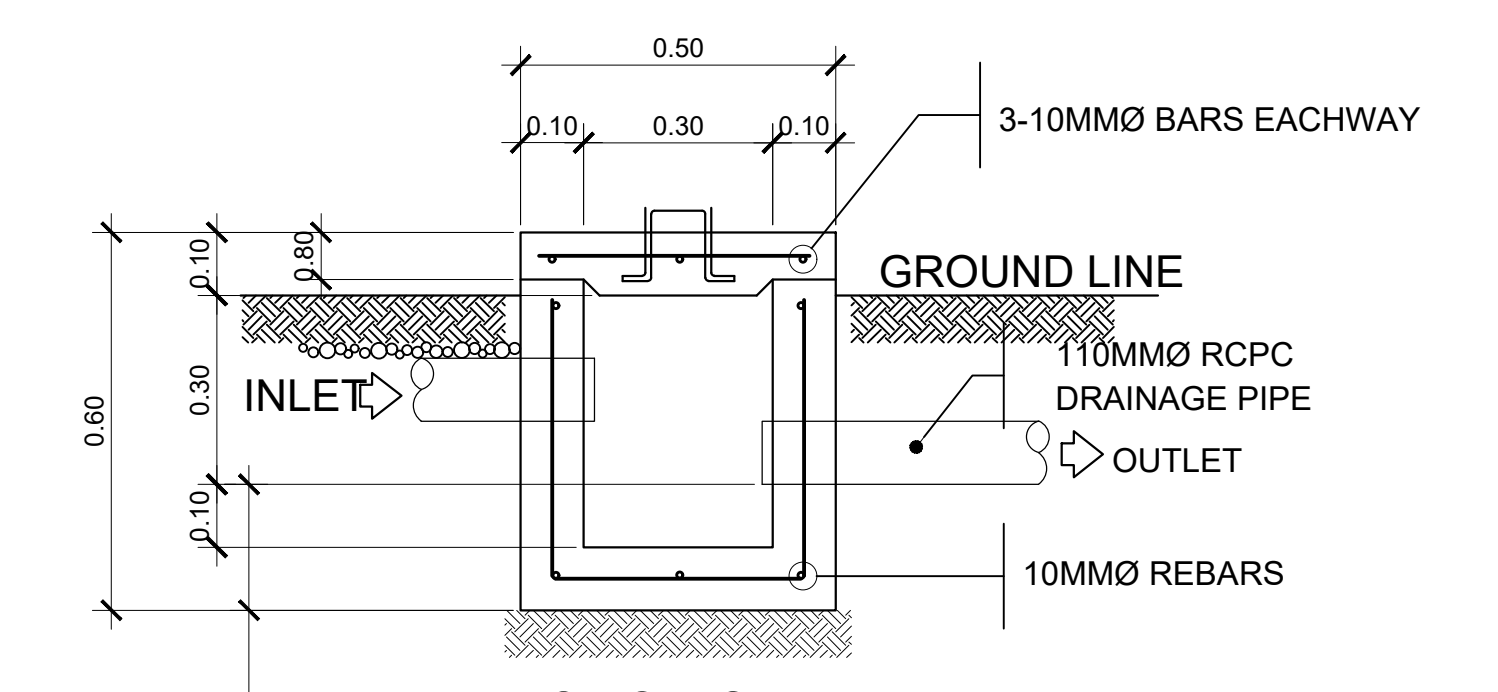
SECTION
SEPTIC TANK DETAIL
NTS



SECTION
GREASE TRAP DETAIL
SCALE: 1:15 MTS.



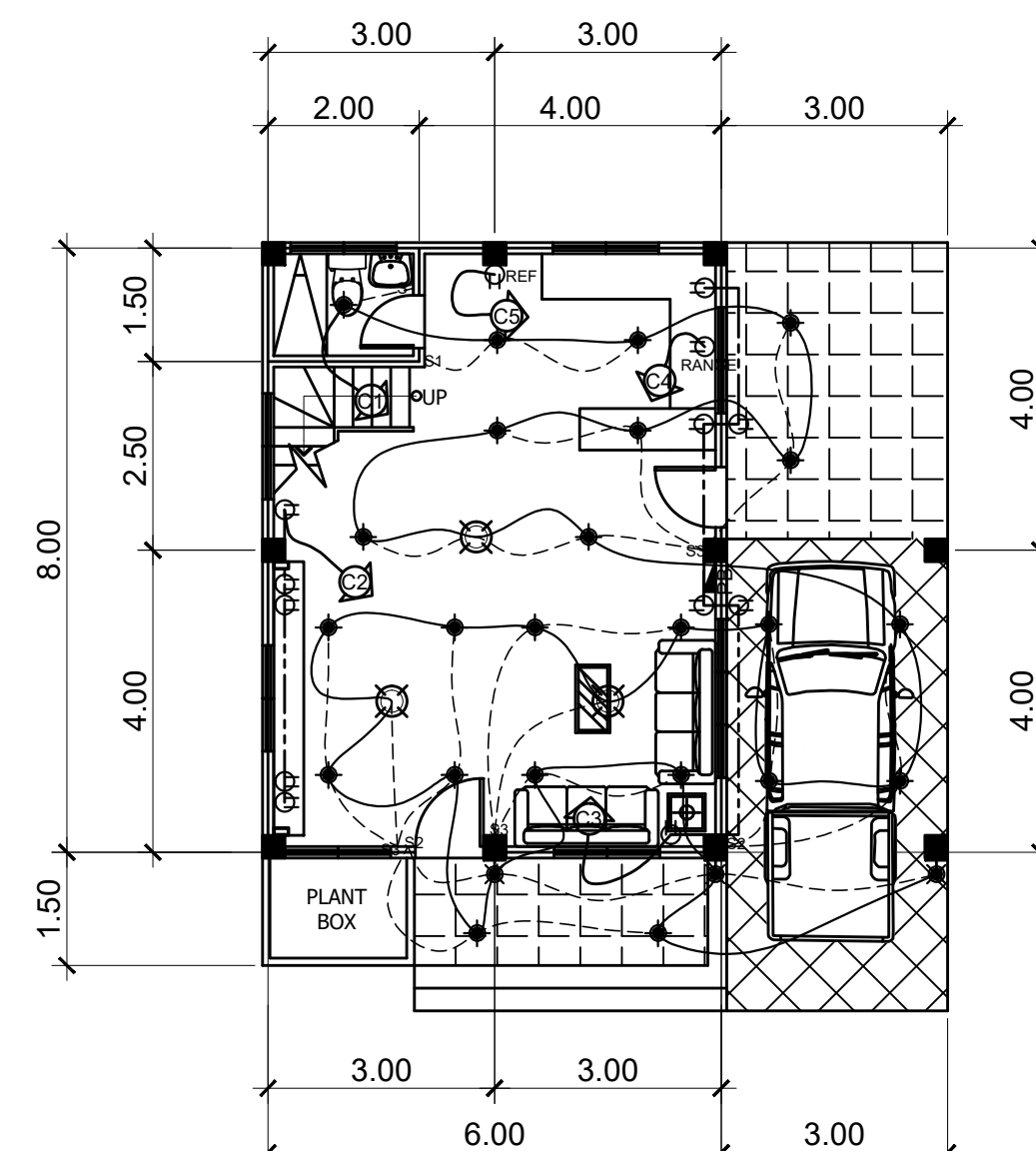
PLAN



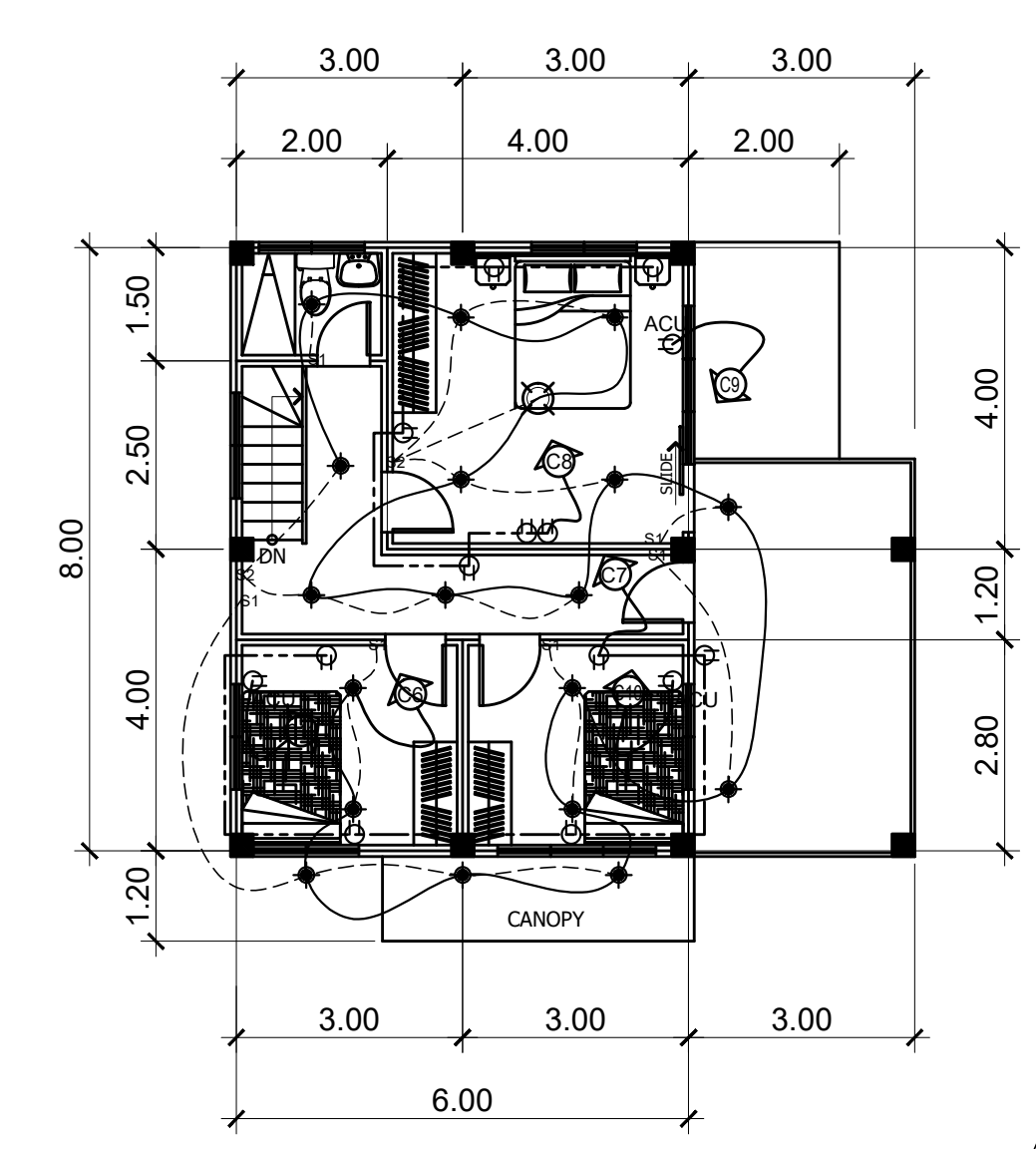
SECTION
CATH BASIN DETAIL
SCALE: 1:15 MTS.

- LEGEND:**
- RWT RAIN WATER TANK
 - WC WATER CLOSET
 - FD FLOOR DRAIN
 - LAV LAVATORY
 - VTR VENT THRU ROOF
 - CO CLEAN OUT
 - DS DOWN SPOUT
 - CB CATCH BASIN
 - F FAUCET
 - KS KITCHEN SINK
 - FT FLUSH TANK
 - ST SEPTIC TANK
 - WT WATER TANK
 - GT GREASE TRAP
- WATER PIPE LN.
--- SOIL PIPE LN.
--- WASTE WATER PIPE LN.
- (SM) WATER SUBMETER
 - Z STOP COCK
 - (M) WATER METER
 - X GATE VALVE

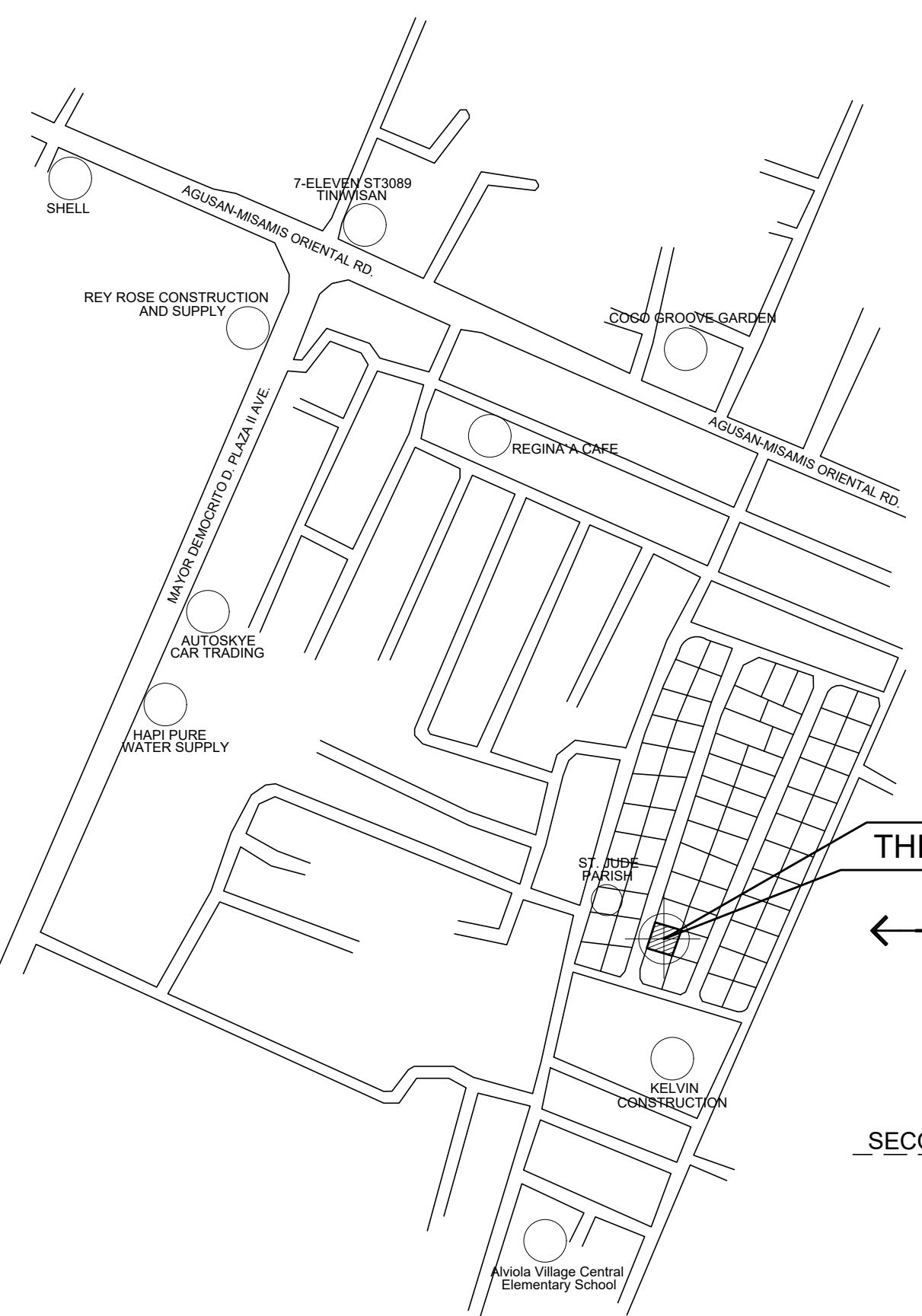
FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG NO. : DATE ISSUED:	PROJECT TITLE:	APPROVED AS TO PLAN:	SHEET CONTENTS	SHEET NO:
		REGISTERED MASTER PLUMBER	PTR NO. : DATE ISSUED: TIN NO.	PROPOSED 2-STOREY RESIDENCE	JOHN ERIC S. BUAL AND LEAH B. BUAL OWNER	AS SHOWN...	P
ADDRESS:		ADDRESS:	DATE ISSUED :	ADDRESS:	ADDRESS:		DRAFTED BY: LOCAL DRAFTSMAN



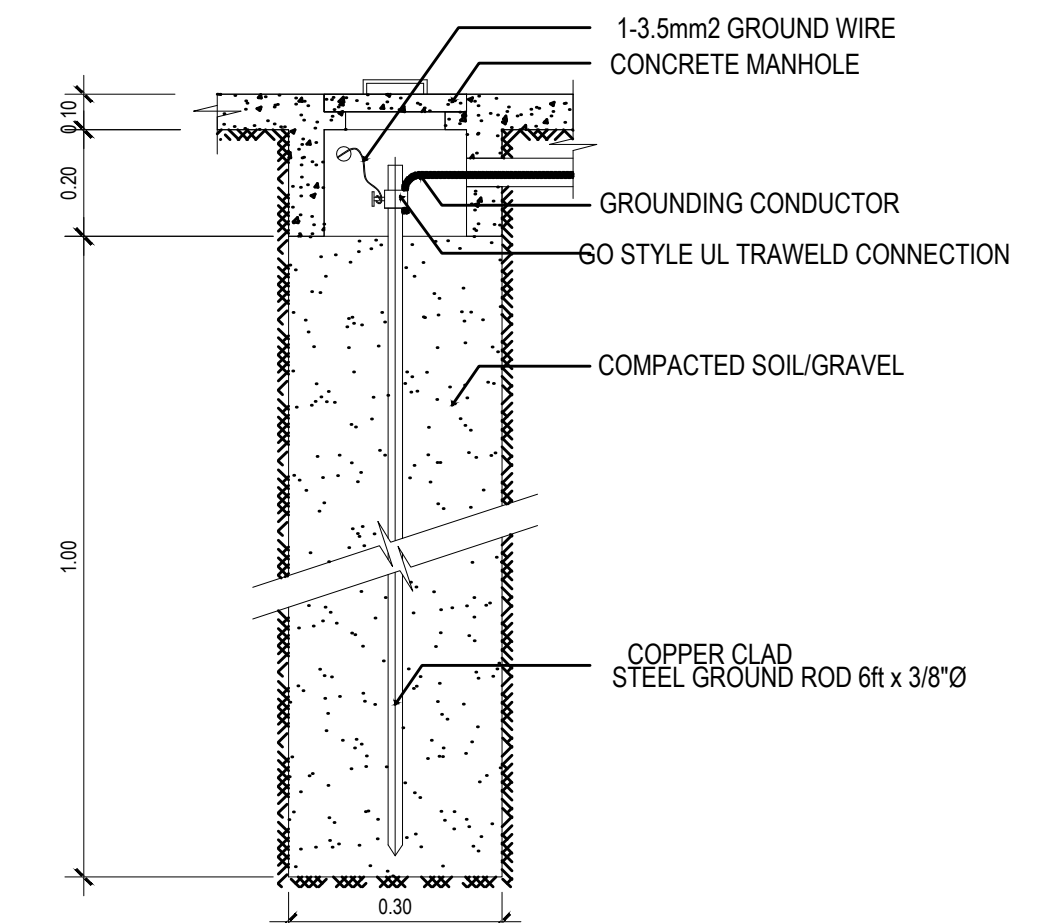
GROUND FLOOR ELECTRICAL PLAN
SCALE 1:100 METERS



SECOND FLOOR ELECTRICAL PLAN
SCALE 1:100 METERS



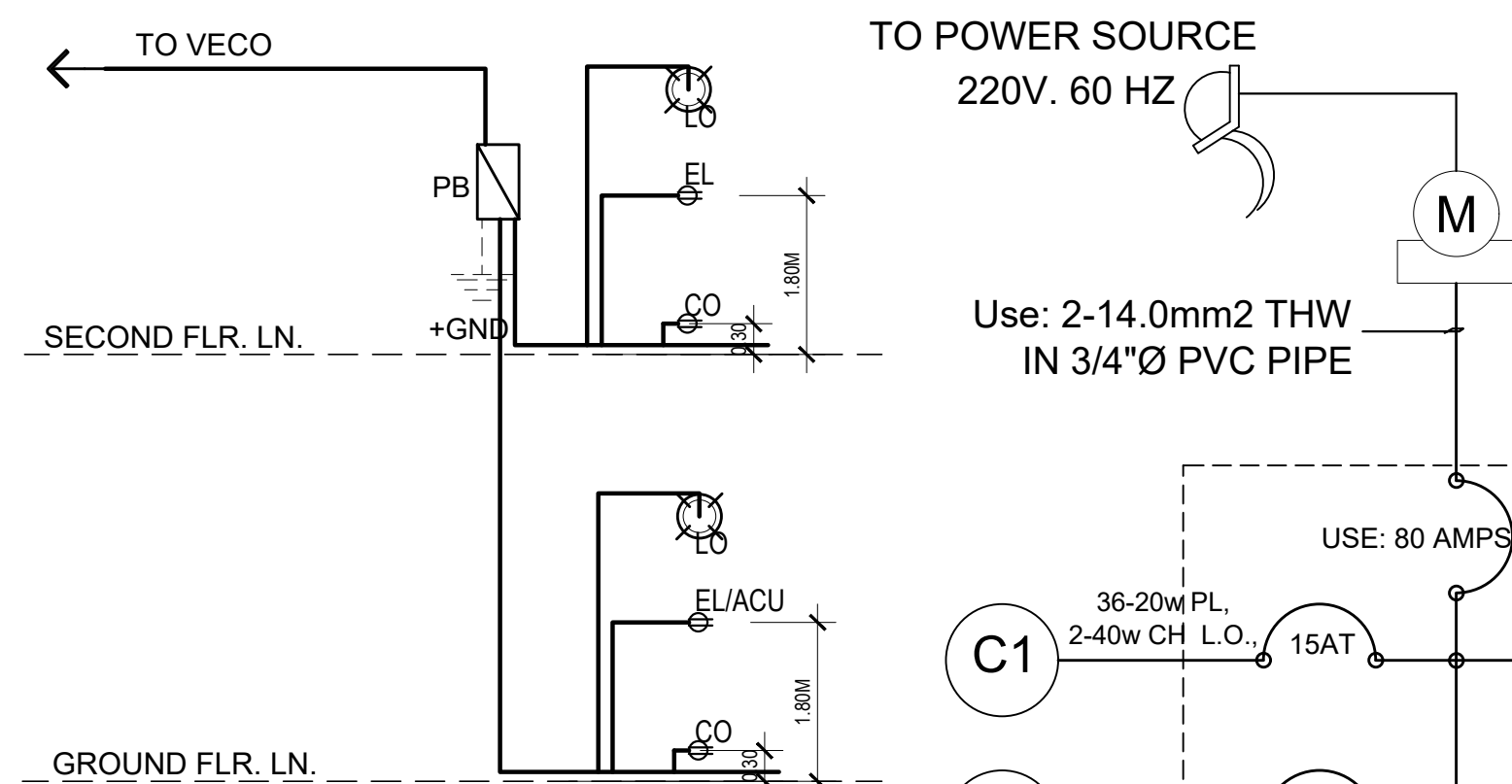
LOCATION PLAN
NOT TO SCALE



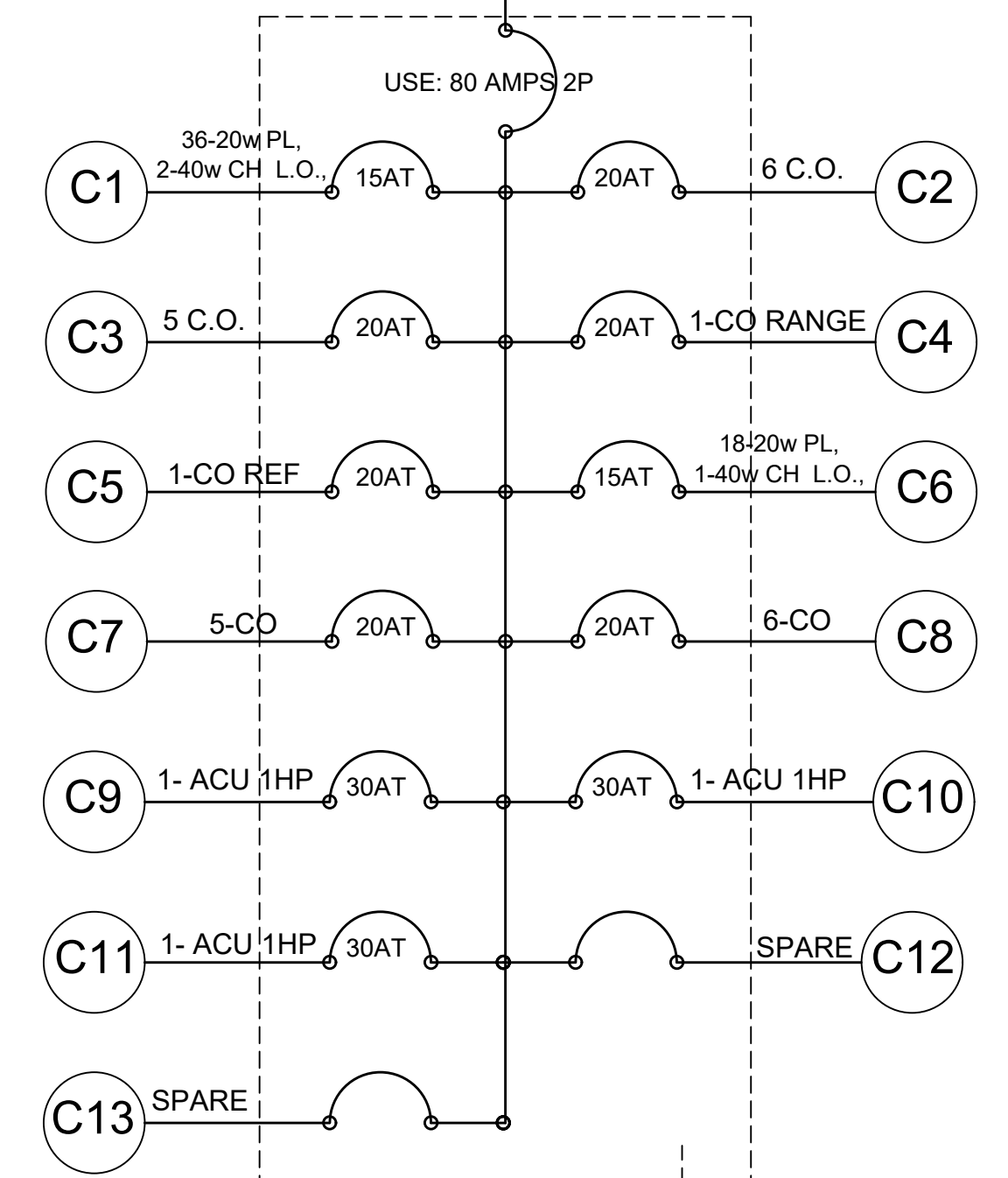
GROUNDING DETAIL

LEGEND:

	40w CL (CENTER LIGHT) LIGHT OUTLET
	20w PL (PIN LIGHT) LIGHT OUTLET
	20w WL (WALL LAMP) LIGHT OUTLET
	REFRIGERATOR
	EMERGENCY LIGHT OUTLET
	AIR CONDITIONING UNIT OUTLET
	GROUND FAULT CIRCUIT INTERRUPTER CONVENIENCE OUTLET
	CONVENIENCE OUTLET
	PANEL BOARD
	KILOWATT HOUR METER
	LIGHTING LINE
	POWER LINE
	CIRCUIT HOMERUN
	CIRCUIT BREAKER
	S1 SINGLE GANG SWITCH
	S2 DOUBLE GANG SWITCH
	S3 THREE GANG SWITCH



RISER DIAGRAM



SCHEMATIC DIAGRAM
GRND +1-8.0 mm2 GNG

SCHEDULE OF LOADS AND COMPUTATIONS APB

CKT. NO.	LOAD	VIA	SWITCH			CURRENT		VOLT	PHASE	CB RATING	CONDUCTOR	CONDUIT SIZE	KAIC RATING (KA)
			S1	S2	S3	AMP							
C1	23-PL (20W), 3-CH (40W), 3-WL (20W) L.O.	800				3.63		220V	1φ	15AT2P	2-3.5 MM² THHN	1/2"Ø PVC	10
C2	6-CO	1200	2	2	3	5.45		220V	1φ	20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C3	5-CO	1000				4.54				20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C4	1-CO RANGE	375				1.70				20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C5	1-CO REF	375				1.70				20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C6	18-PL (20W), 1-CH (40W) L.O.	500	6	2		2.27				15AT2P	2-3.5 MM² THHN	1/2"Ø PVC	10
C7	5-CO	1000				4.54				20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C8	6-CO	1200				5.45				20AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C9	1- ACU 1HP	1750				7.95				30AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C10	1- ACU 1HP	1750				7.95				30AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C11	1- ACU 1HP	1750				7.95				30AT2P	2-5.5 MM² THHN +1-3.5 MM² GND	1/2"Ø PVC	10
C12	SPARE									30AT2P		1/2"Ø PVC	10
C13	SPARE									30AT2P		1/2"Ø PVC	10
TOTAL		11,700	8	4	3	53.13		220V	1φ	80AT2P	2-14.0 MM² THW +1-8.0 MM² GND	1.0"Ø RSC	20

MAIN WIRE DESIGN:
 $I_w = [I + (I \times X \times 0.25)] / DF$
 $= [53.13 + (7.95 \times 0.25)] / 0.80$
 $= (53.13 + 1.98) / 0.80$
 $= 55.11 \times 0.80$
 $I_w = 44.088 \text{ AMPS.}$
USE = 2-14.0 MM² THW +1-8.0 MM² GND

MAIN SWITCH DESIGN:
 $I_s = [I + (I \times X \times 0.25)] / DF$
 $= [53.13 + (7.95 \times 2.0)] / 0.80$
 $= (53.13 + 15.90) / 0.80$
 $= 69.03 \times 0.80$
 $I_s = 55.224 \text{ AMPS.}$
USE: 80 AT 2P MAIN BREAKER

GENERAL ELECTRICAL NOTES:

ALL ELECTRICAL INSTALLATION ON THE PLAN SHALL CONFIRMED ALL THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE RULES AND REGULATIONS OF THE LOCAL COMPANY

ALL PROTECTIVE DEVICES ENCLOSURE MUST BE FIRE PROOF.

THE SMALLEST BRANCH CIRCUIT SHALL BE 3.5mm TW (12 AWG).

KILOWATT HOUR METER 1.52 ABOVE GROUND ON THE NEAREST FUD POST.

SWITCH 1.35 M. ABOVE FIRST FLOOR EXCEPT ON THE KITCHEN COUNTER IS 1.10M. ABOVE FINISH FLOOR LINE.

ALL ELECTRICAL INSTALLATION SHALL BE DONE UNDER DIRECT SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.

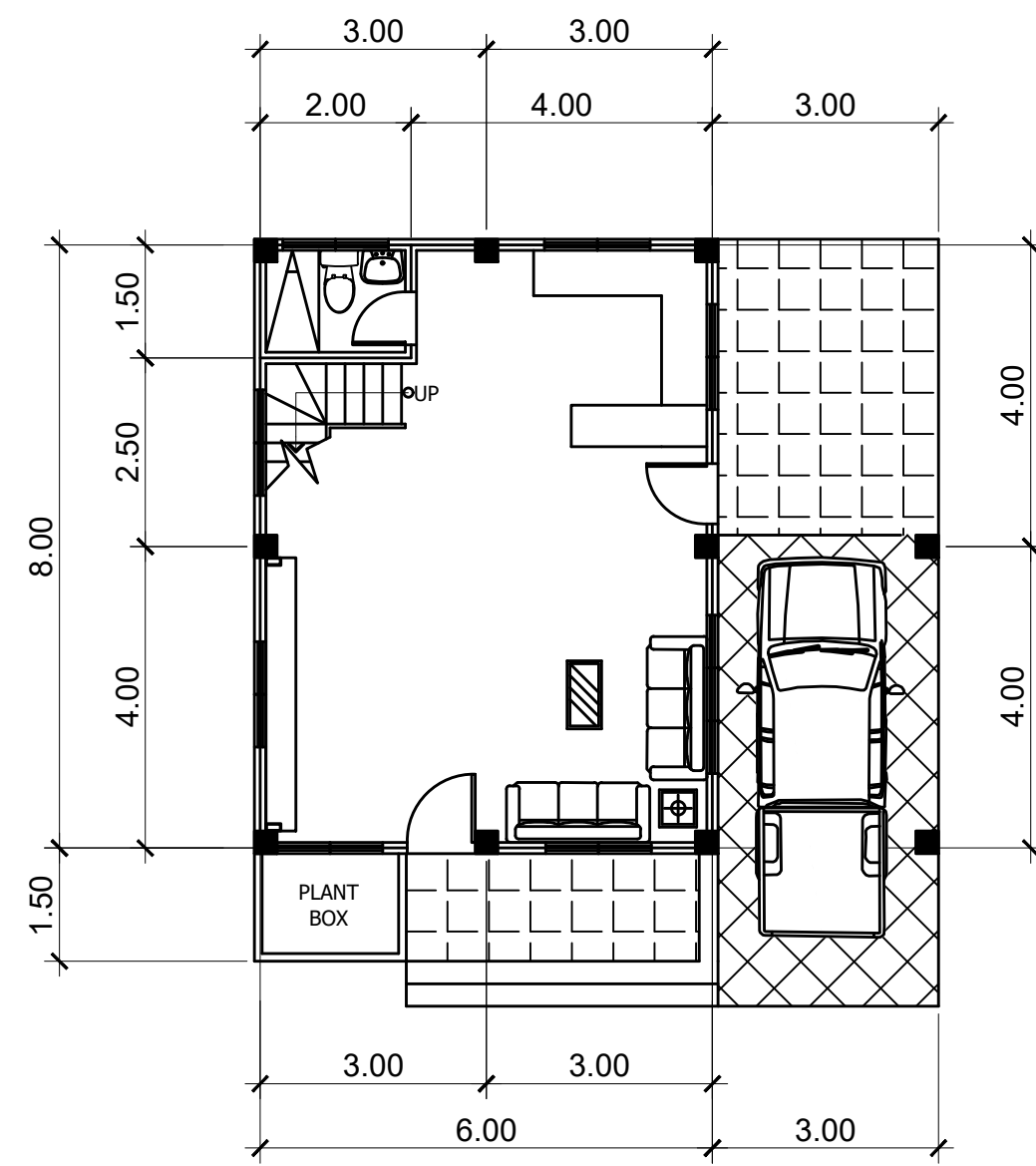
FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG. NO. :	PROJECT TITLE:	APPROVED AS TO PLAN:	SHEET CONTENTS	SHEET NO.:
		PROFESSIONAL ELECTRICAL ENGINEER	DATE ISSUED:	PROPOSED 2-STOREY RESIDENCE	JOHN ERIC S. BUAL AND LEAH B. BUAL	AS SHOWN...	1
ADDRESS:		ADDRESS:	PTR. NO. :		OWNER		7
			DATE ISSUED:				E
			TIN NO. :				LOCAL DRAFTSMAN
			DATE ISSUED:	ADDRESS:	ADDRESS:		DRAFTED BY:

RECOMMENDING ISSUANCE AS TO:

HEAD SECTION: DATE:

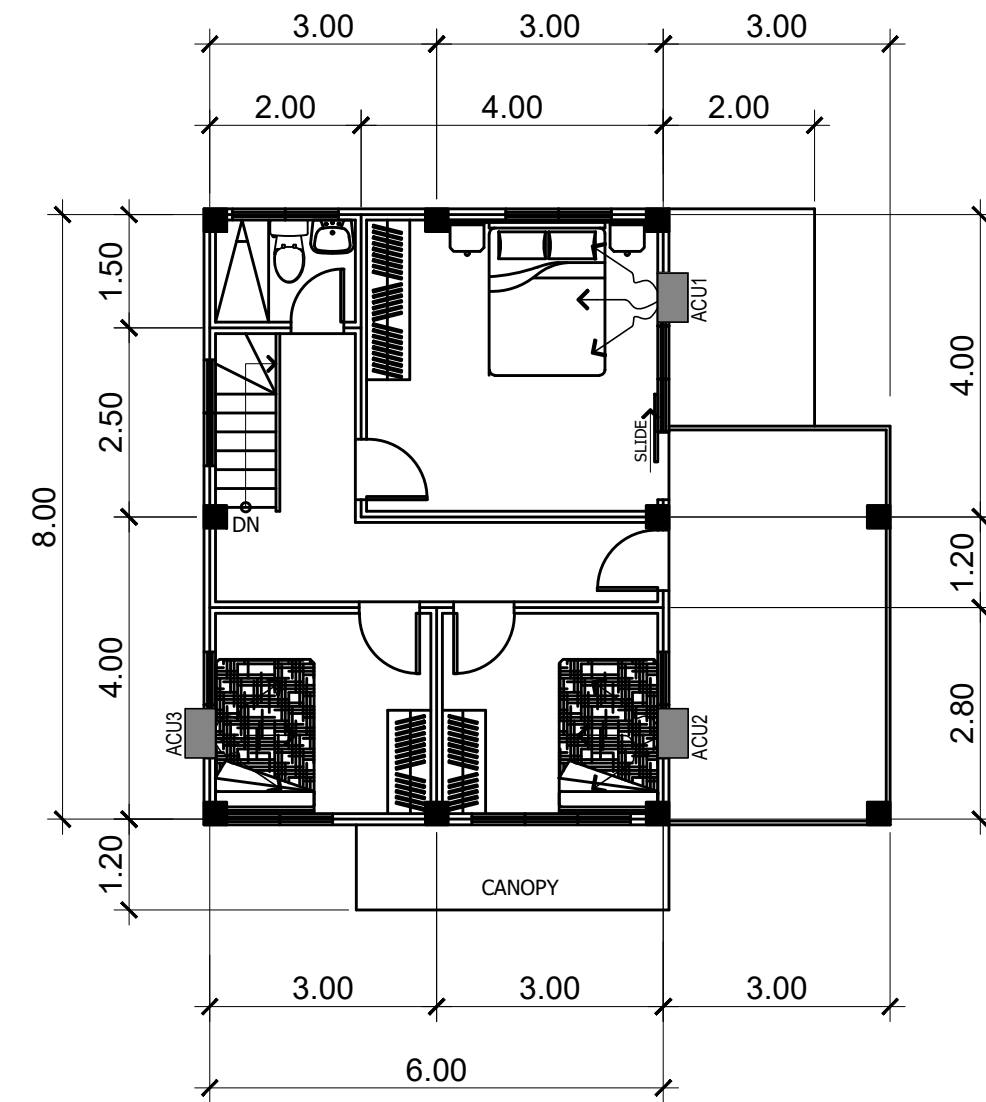
ISSUED BY:

BUILDING OFFICIAL: DATE:



GROUND FLOOR MECHANICAL PLAN

SCALE 1:100 METERS

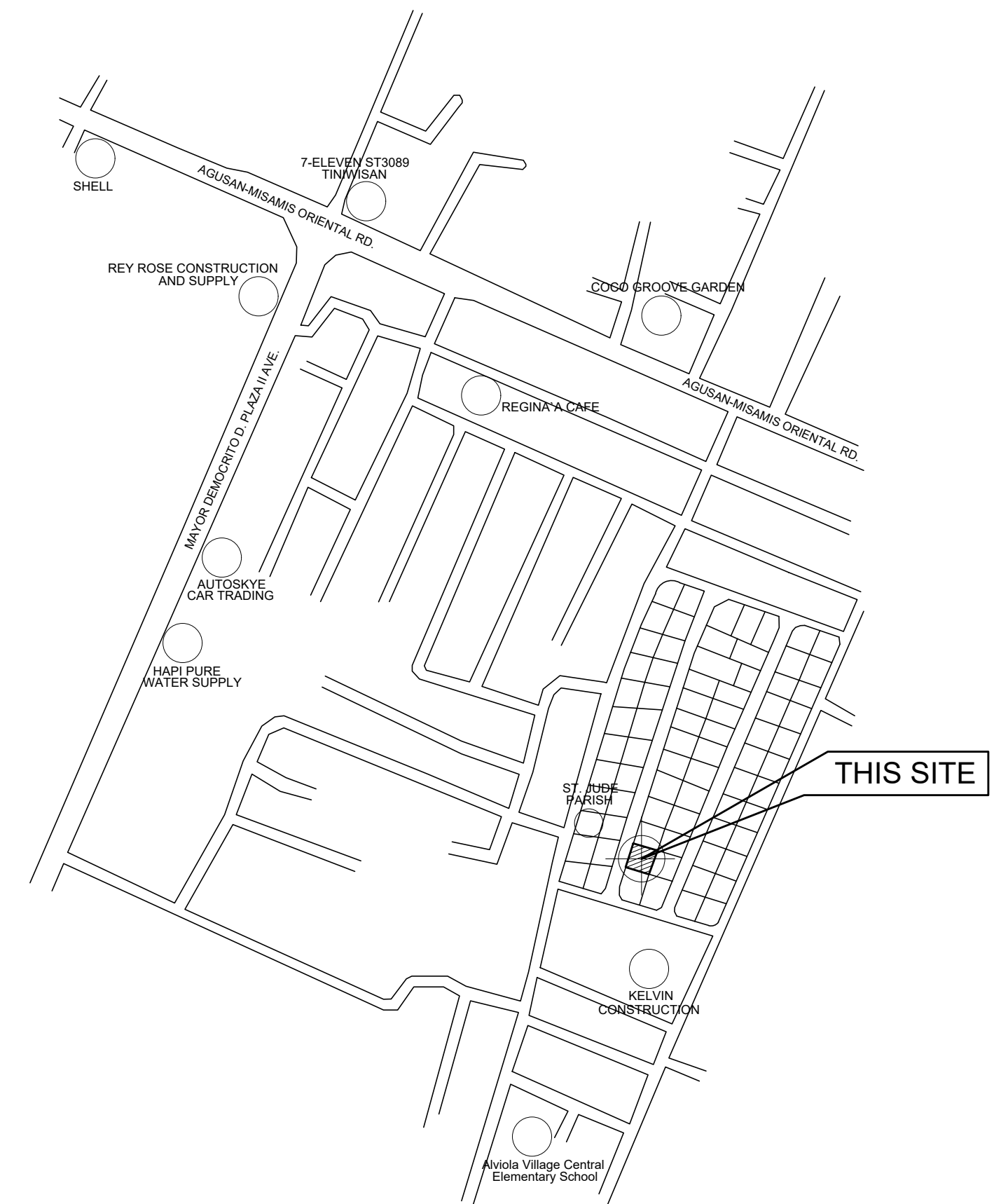


SECOND FLOOR MECHANICAL PLAN

SCALE 1:100 METERS

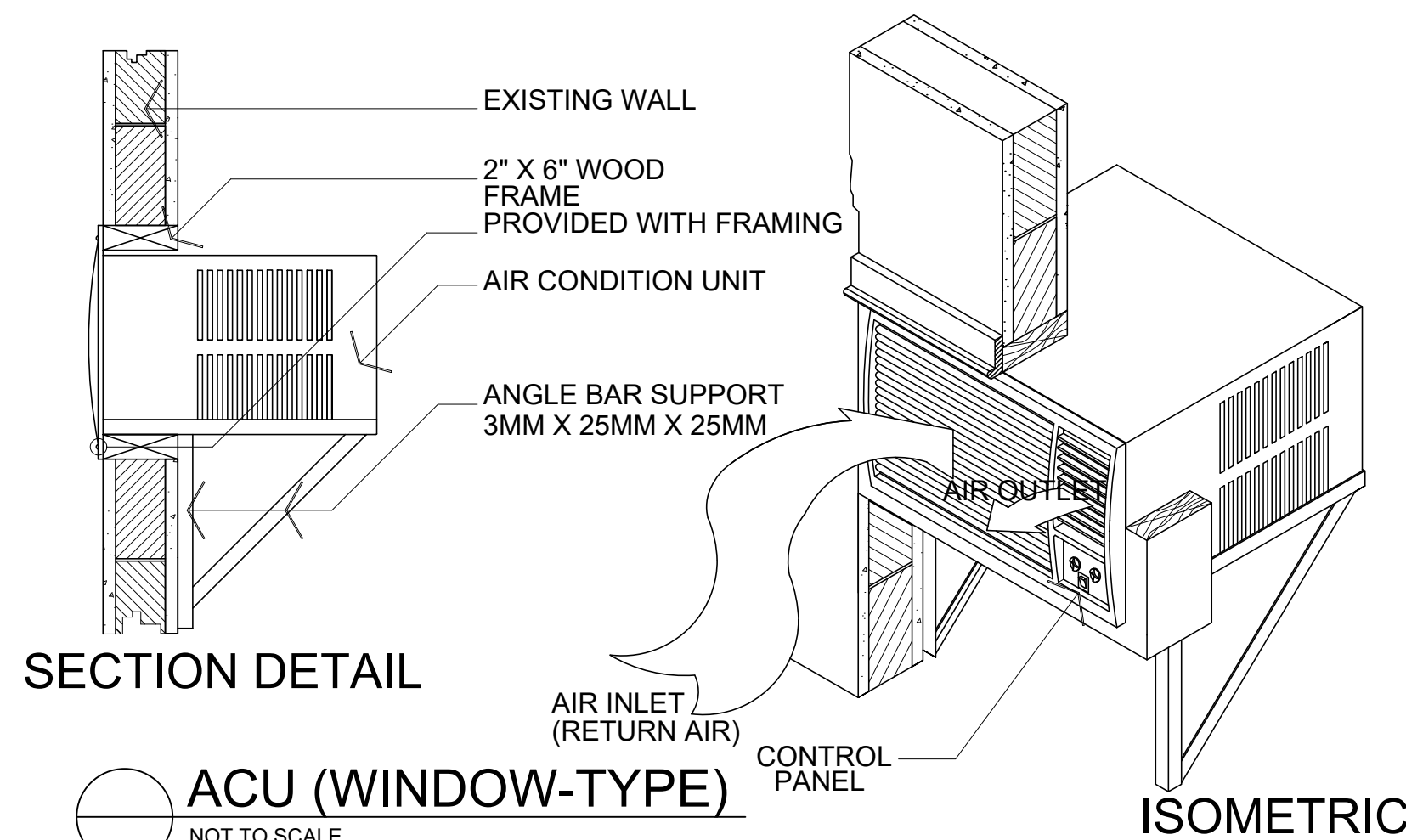
SCHEDULE OF EQUIPMENTS

MARK	HP	VOLTS	PHASE	DESCRIPTIONS
ACU1	1 HP	220	1Ø	AIRCONDITIONING UNIT (WINDOW-TYPE)
ACU2	1 HP	220	1Ø	AIRCONDITIONING UNIT (WINDOW-TYPE)
ACU3	1 HP	220	1Ø	AIRCONDITIONING UNIT (WINDOW-TYPE)



LOCATION PLAN

NOT TO SCALE



SECTION DETAIL

ACU (WINDOW-TYPE)

NOT TO SCALE

ISOMETRIC

SPECIFICATIONS

- 1) THE WHOLE MECHANICAL INSTALLATION SHALL CONFORM TO THE RULES AND REGULATIONS OF R.A. 8495, OTHERWISE KNOWN AS THE MECHANICAL ENGINEERING ACT OF "1998" IN THE PHILIPPINES, THE BUILDING CODE, AND THE LATEST LOCAL SAFETY ORDINANCES.
- 2) THE WHOLE MECHANICAL INSTALLATION SHALL BE DONE UNDER THE DIRECT AND RESPONSIBLE SUPERVISION OF A DULLY LICENSED PROFESSIONAL MECHANICAL ENGINEER
- 3) ALL MATERIALS USED SHALL BE BRAND NEW AND APPROVED TYPE FOR LOCATION AND PURPOSE INTENDED .
- 4) ALL ACU'S (WINDOW - TYPE) SHALL BE PROVIDED WITH 1/2 INCH DIAMETER PVC DRAIN PIPE .
- 5) ALL EQUIPMENTS SHALL BE MOUNTED ON OR SUPPORTED WITH VIBRATION INSULATION UNITS ON ASSEMBLIES AS SPECIFIED .
- 6) ALL EQUIPMENTS SHALL BE SET ON LEVEL , REINFORCED CONCRETE FOUNDATION AT LEAST 150.0 mm HIGHER THAN THE FLOOR LINE , IF APPLICABLE .

FROM THE OFFICE OF:	SEAL	FROM THE OFFICE OF:	REG NO. :	PROJECT TITLE:	APPROVED AS TO PLAN:	SHEET CONTENTS	SHEET NO:
			DATE ISSUED:	PROPOSED 2-STOREY RESIDENCE	JOHN ERIC S. BUAL AND LEAH B. BUAL OWNER	AS SHOWN...	M
			PTR NO. :				
			DATE ISSUED:				
			TIN NO.				
ADDRESS:		ADDRESS:	DATE ISSUED :	ADDRESS:	ADDRESS:		DRAFTED BY: LOCAL DRAFTSMAN