




REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE

WESTERN VISAYAS
PAROLA, ILOILO CITY

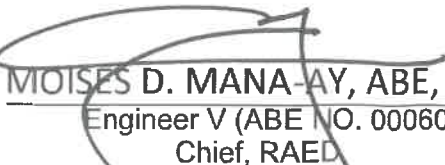
DETAILED ENGINEERING DESIGN PLANS
CONSTRUCTION OF NATIVE CHICKEN
MULTIPLIER FARM
(BROODER HOUSE)

(LEED PROGRAM 2024)

CAPSU-BRGY. CODINGLE, DUMARAO, CAPIZ


JERRY B. GUANCO, ABE
Engineer II (ABE NO. 0007298)


YVONNE GRACE H. SUR, ABE
Engineer III (ABE NO. 0005970)
Head, Engineering Plans, Designs, and
Specifications Section


MOISES D. MANA-AY, ABE, MEE
Engineer V (ABE NO. 0006077)
Chief, RAED


ENGR. JOSE ALBERT A. BARROGO
RTD For Operations and Extension


DENNIS R. ARPIA
Regional Executive Director



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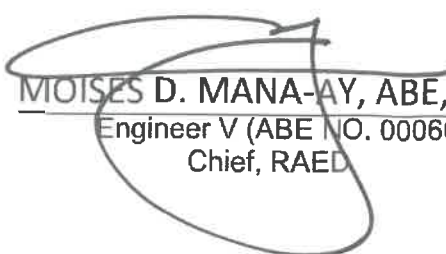
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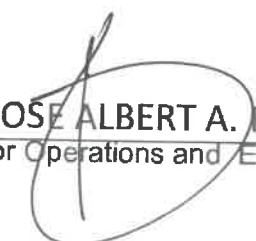
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CAPSU-BRGY. CODINGLE, DUMARAO, CAPIZ

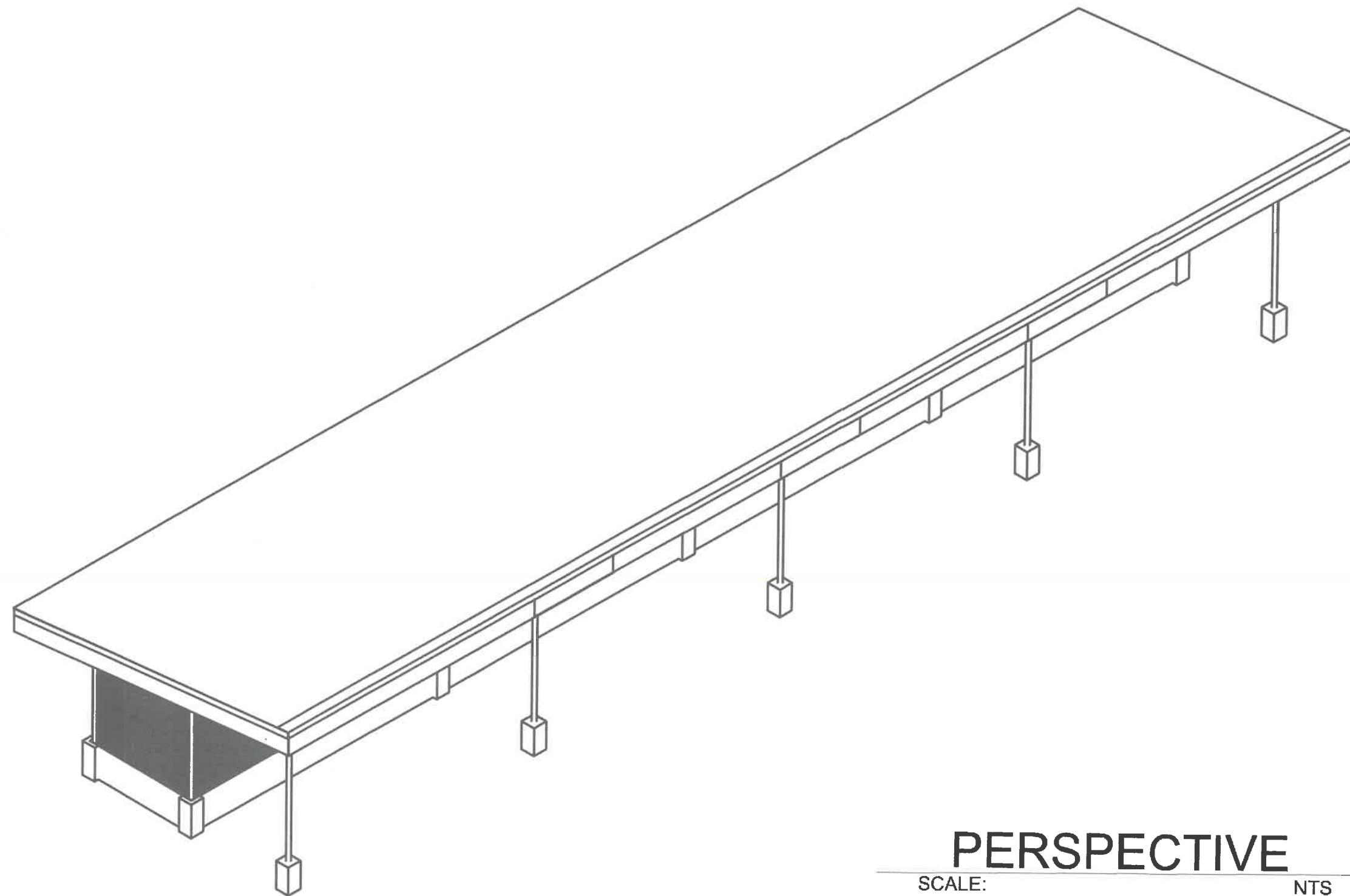

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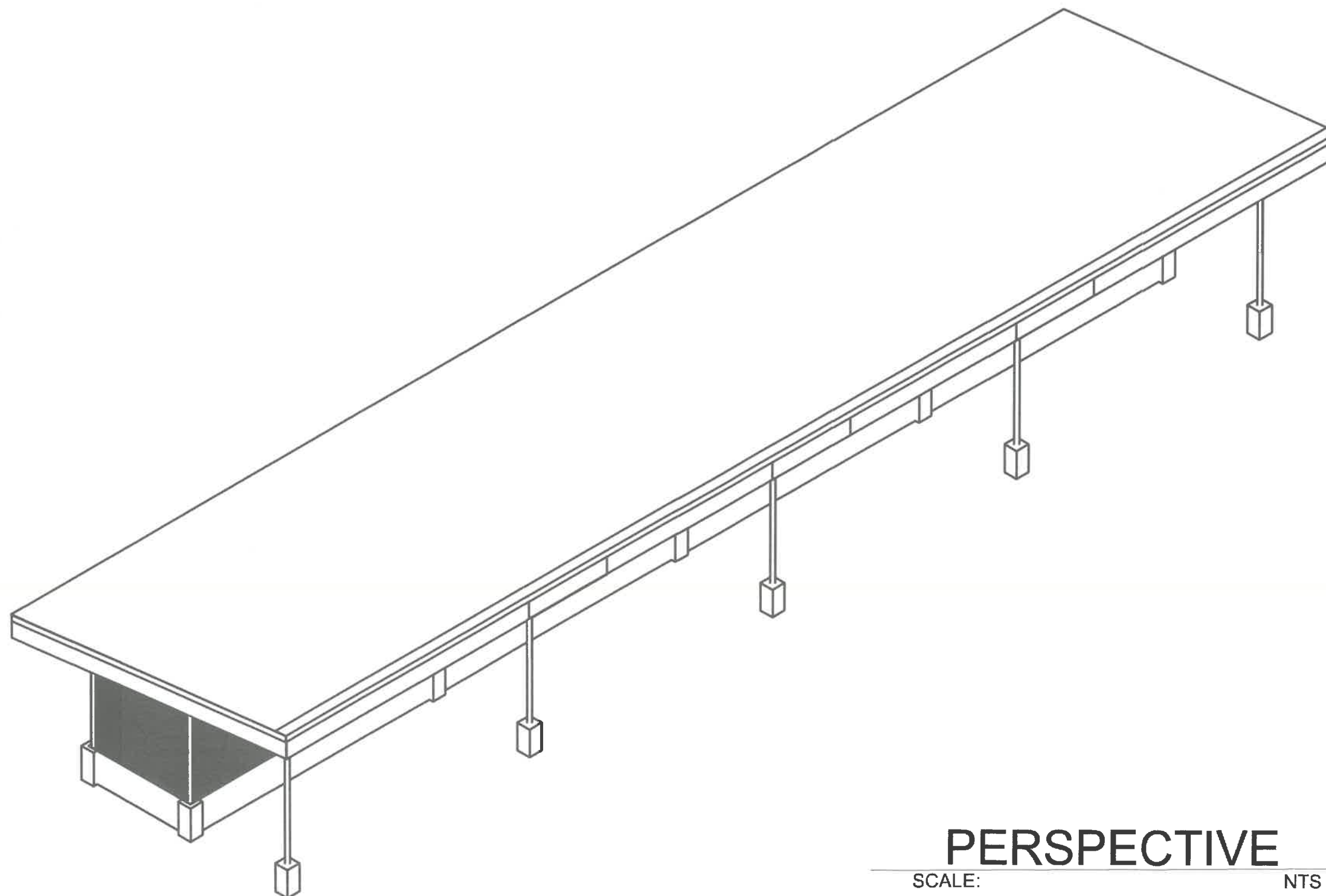


PERSPECTIVE

SCALE:







NTS

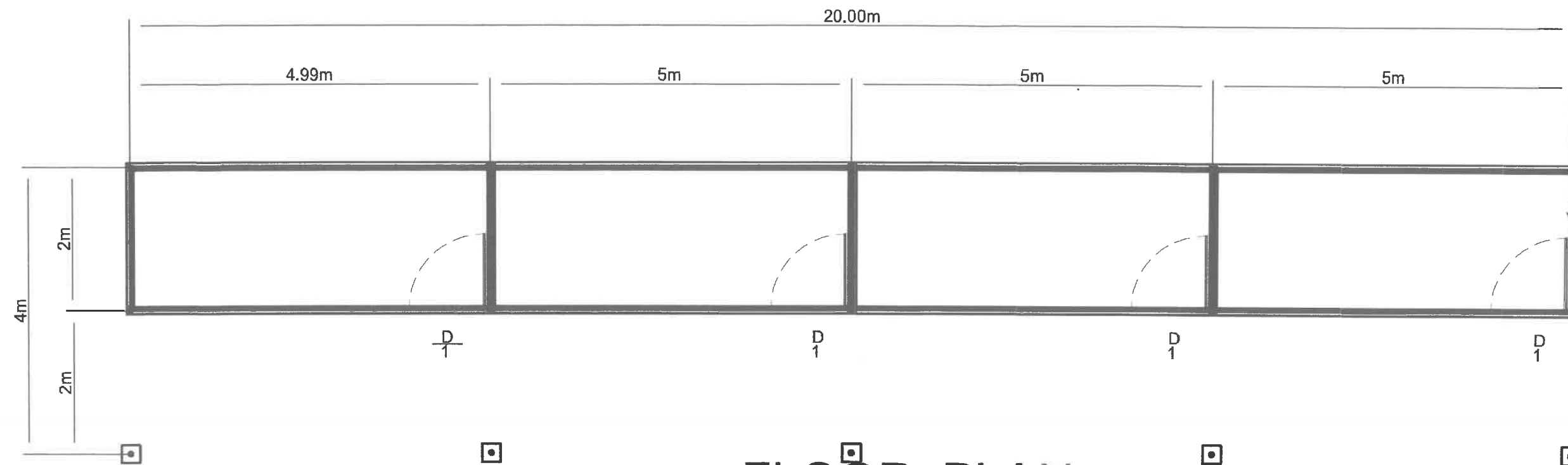
IMPLEMENTING AGENCY:  REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE WESTERN VISAYAS PAROLA, ILOILO CITY	PROJECT NAME & LOCATION : CONSTRUCTION OF NATIVE CHICKEN HOUSE FOR MULTIPLIER FARM (BROODER HOUSE) CAPSU, BRGY. CODINGLE, DUMARAO, CAPIZ	SHEET CONTENTS : PERSPECTIVE CAD BY: M.A. LOYOLA	PREPARED :  JERRY C. GUANCO, ABE Engineer II (ABE NO. 0007294)	REVIEWED:  YVONNE GRACE H. SUR, ABE Engineer III (ABE NO. 0005970) Head, CPSS	SUBMITTED:  MOISES D. MANA-AY, ABE, MEE Engineer V (ABE NO. 0006077) Chief, RAE	APPROVED BY :  ENGR. JOSE ALBERT A. BARROGO RTD for Operations and Extension	APPROVED BY :  ENGR. R. ARPIA Regional Executive Director	SHEET NO. : A 1 PAGE NO. : 1 8
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PERSPECTIVE

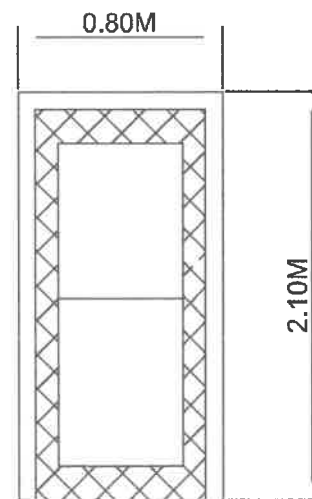
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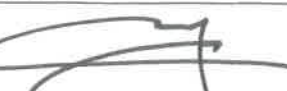


FLOOR PLAN

SCALE: NTS



STEEL DOOR DETAIL
SCALE: NTS

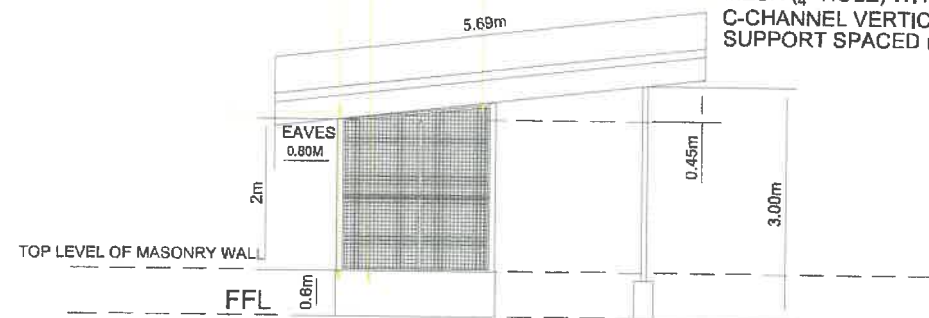
USE 2"X2"X1.2MM TUBULAR FRAME WITH
6 STEEL MATTING DOOR

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1200mmx2400mm X1.5MM TUBULAR
CORNER AND END SUPPORT

3 LAYER -100mm CHB WALL W/ 10mmØ HORIZONTAL
AND VERTICAL BAR SPACED @0.60m B.W

Gauge #16 HOT DIPPED GALVANIZED WELDED WIRE
MESH (1/4" HOLE) WITH 50mmx50mmx1.2mm
C-CHANNEL VERTICAL AND HORIZONTAL
SUPPORT SPACED @ 1.20M O.C B.W



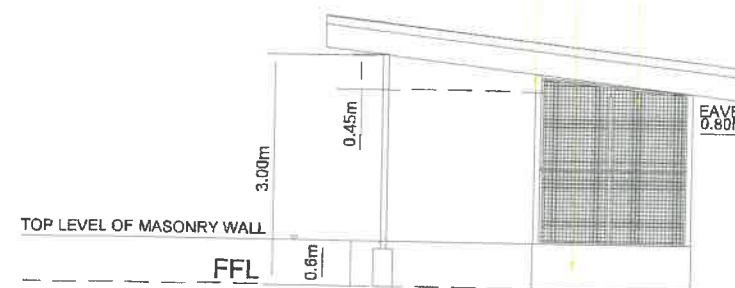
FRONT VIEW

SCALE: 1:100

1200mmx2400mmX1.5MM TUBULAR
CORNER AND END SUPPORT

3 LAYER - 100mm CHB WALL W/ 10MM HORIZONTAL
AND VERTICAL BAR SPACED @0.60M B.W

Gauge #16 HOT DIPPED GALVANIZED WELDED WIRE
MESH (1/4" HOLE) WITH 50mmx50mmx1.2mm
C-CHANNEL VERTICAL AND HORIZONTAL
SUPPORT SPACED @ 1.20M O.C B.W

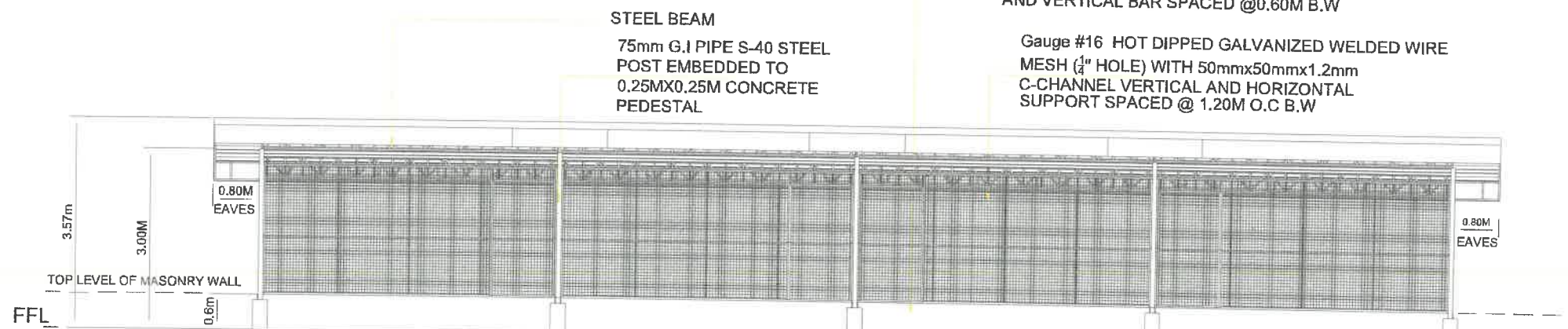


REAR VIEW

SCALE: 1:100

3 LAYER -100mm CHB WALL W/ 10MM HORIZONTAL
AND VERTICAL BAR SPACED @0.60M B.W

Gauge #16 HOT DIPPED GALVANIZED WELDED WIRE
MESH (1/4" HOLE) WITH 50mmx50mmx1.2mm
C-CHANNEL VERTICAL AND HORIZONTAL
SUPPORT SPACED @ 1.20M O.C B.W



LEFT SIDE VIEW

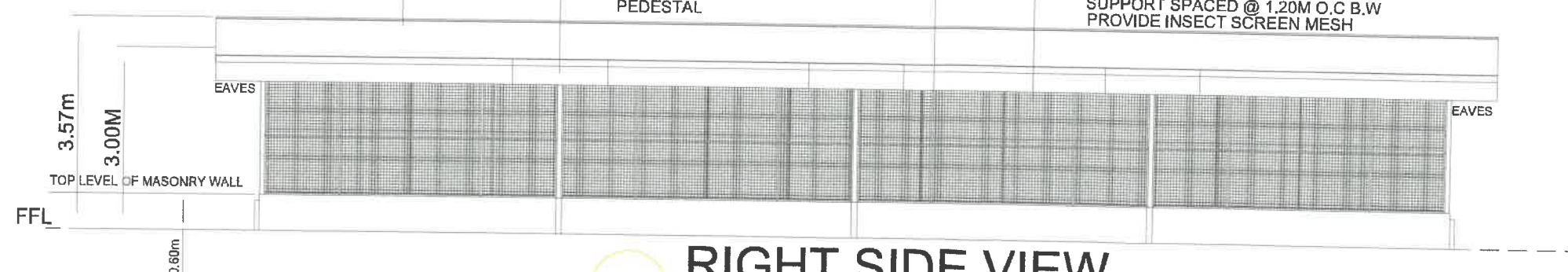
SCALE: 1:100

0.4MM G.I PRE-FAB FLASHING

75mm G.I PIPE S-40 STEEL
POST EMBEDDED TO
0.25MX0.25M CONCRETE
PEDESTAL




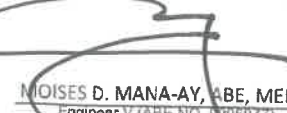


3 LAYER -100mm CHB WALL W/ 10MM HORIZONTAL
AND VERTICAL BAR SPACED @0.60M B.W

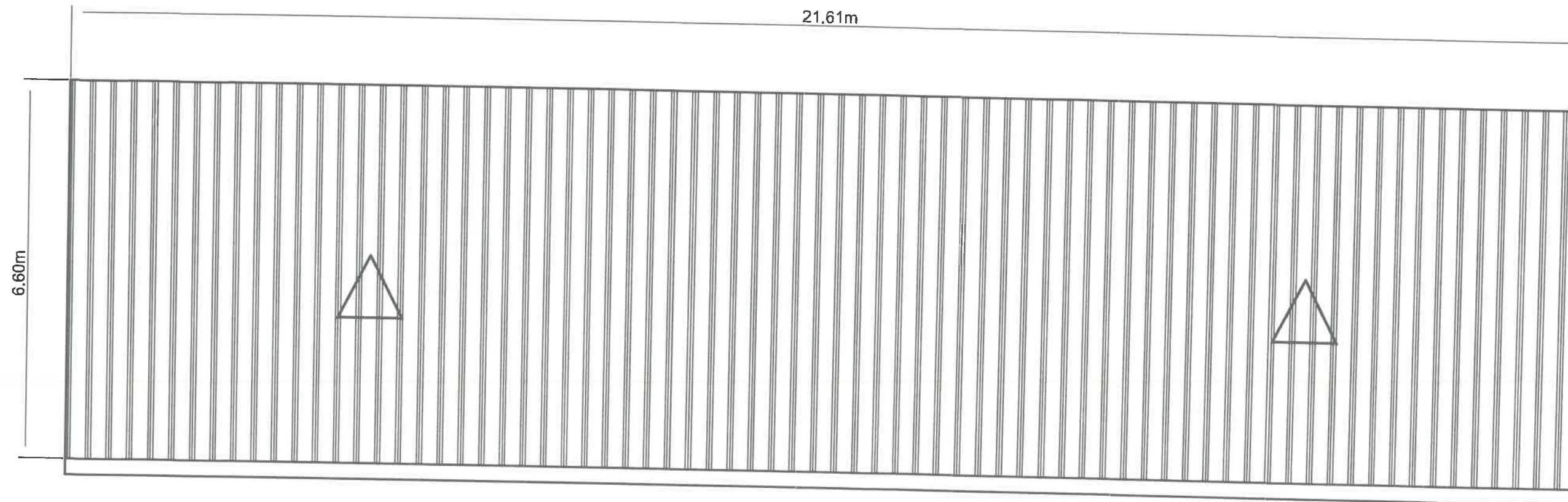
Gauge #16 HOT DIPPED GALVANIZED WELDED WIRE
MESH (1/4" HOLE) WITH 50mmx50mmx1.2mm
C-CHANNEL VERTICAL AND HORIZONTAL
SUPPORT SPACED @ 1.20M O.C B.W
PROVIDE INSECT SCREEN MESH



RIGHT SIDE VIEW

SCALE: 1:100

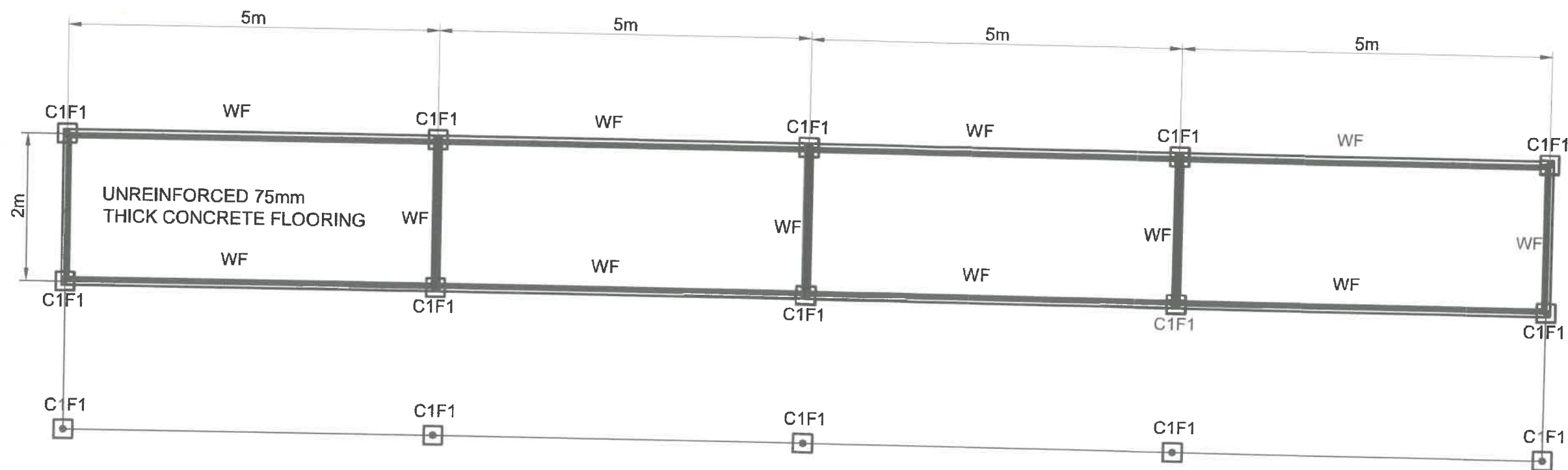
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ROOFING MATERIAL: 0.4mm THICK LONGSPAN SHEET ROOFING
END FLASHING: 0.5mm PRE-PAINTED

ROOF PLAN SCALE: _____ NTS







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	CAD BY: M.A. LOYOLA							

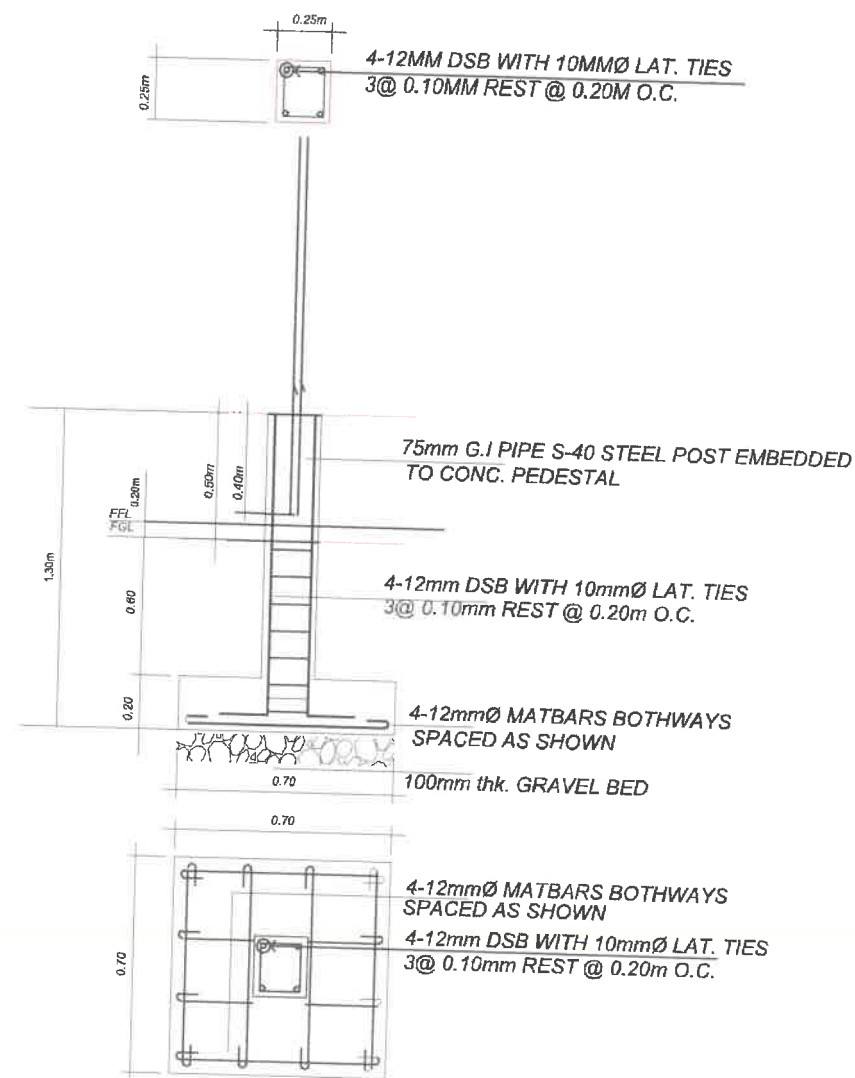


FOUNDATION PLAN

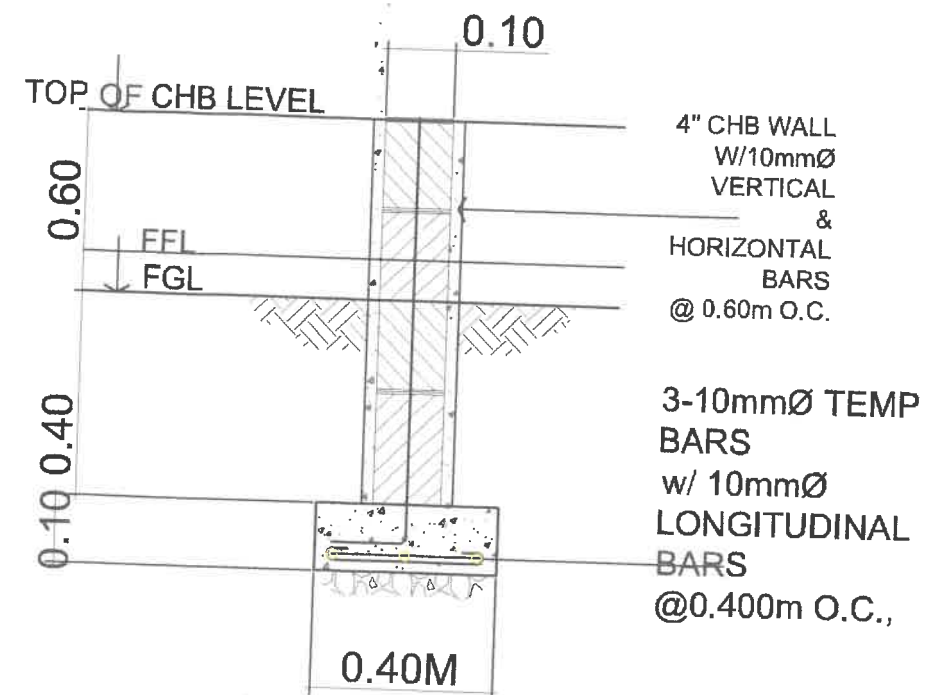
SCALE: 1:20

NOTE:
PROVIDE UNREINFORCED 75mm THICK CONCRETE FLOORING

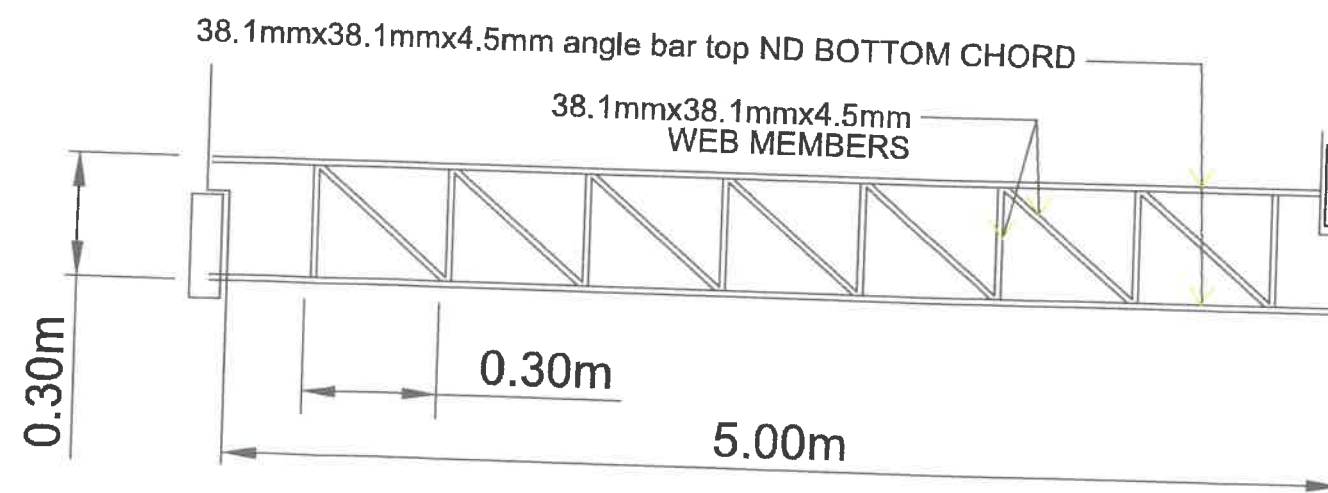
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C1/F1 DETAIL
SCALE 1:15

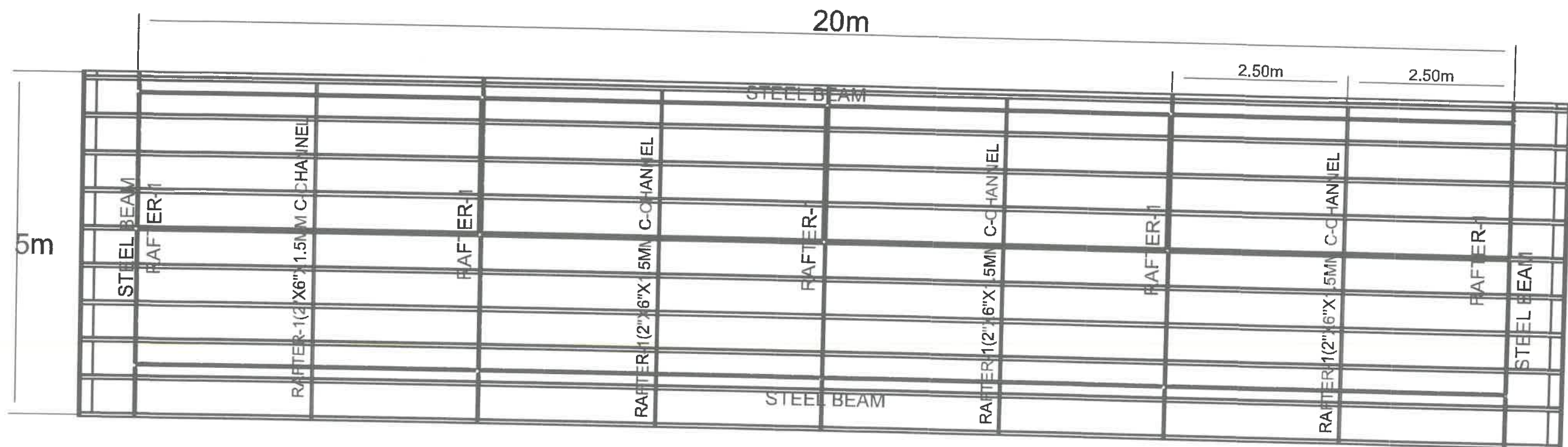


WF DETAIL
SCALE: NTS






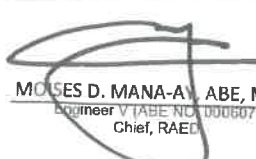
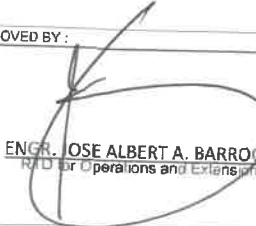

TYPICAL STEEL BEAM DETAIL
SCALE: NTS

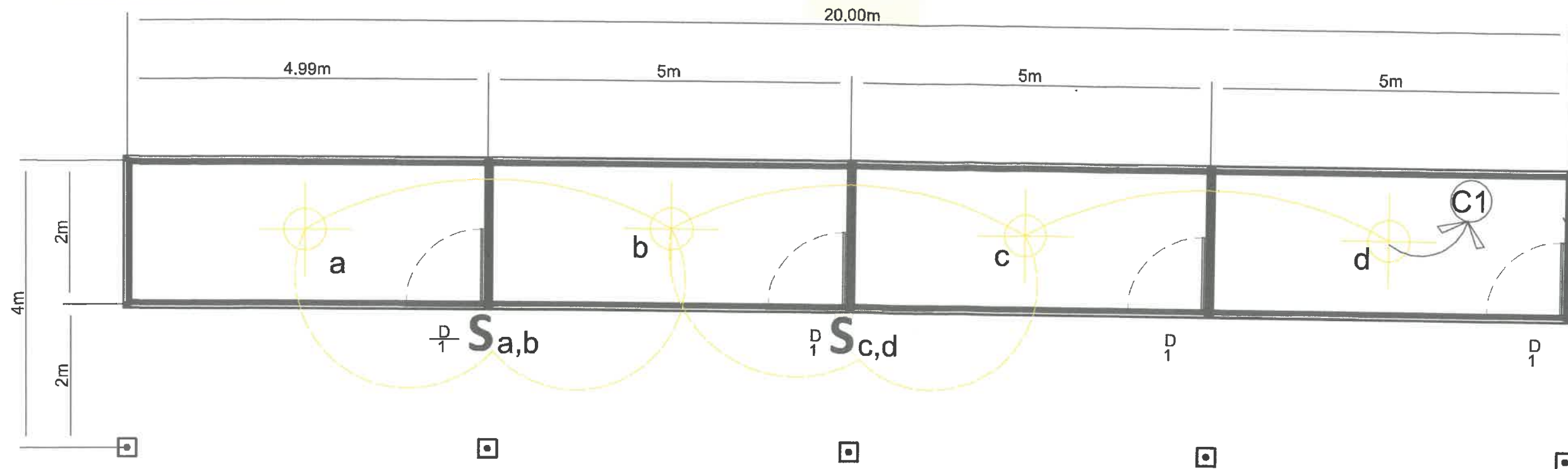
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ROOF FRAMING SCALE: NTS

NOTE: SPACING OF RAFTER TYPE TRUSS= 2.50meters
 PURLINS=50mmx100mmx1.5mm CEE-PURLIN
 @ 500mm O.C

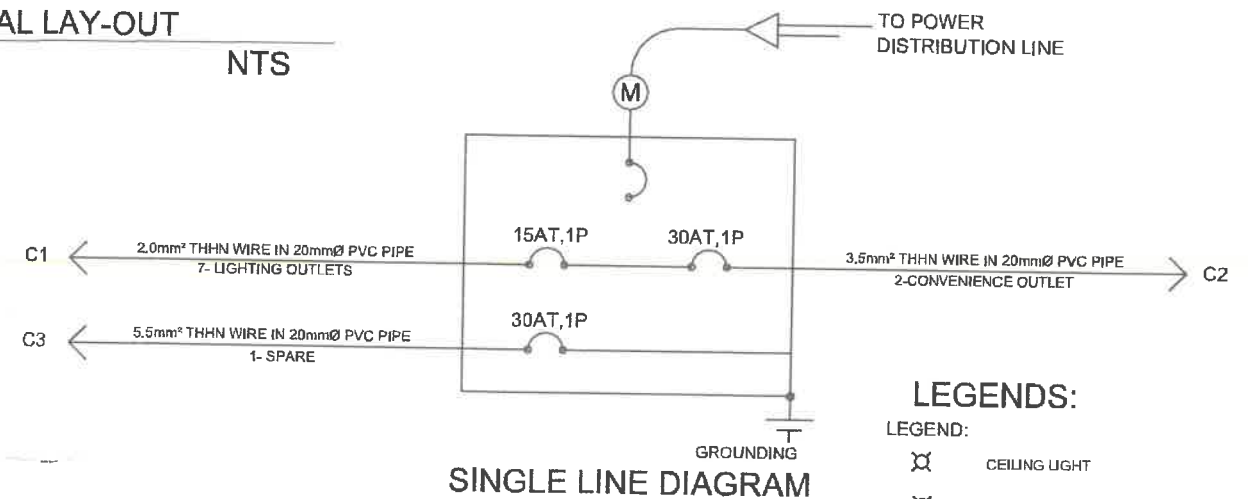
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ELECTRICAL LAY-OUT
SCALE: NTS

SCHEDULE OF LOADS FOR LPP

NO.	LOAD DESCRIPTION	VOLTAGE (V)	POWER (VA)	CURRENT (AMP)	CIRCUIT PROTECTION	SIZE OF WIRE AND CONDUIT
C1	4- LIGHTING OUTLETS	230	84	0.37	15AT,1P	2.0mm ² THHN WIRE IN 20mmØ PVC PIPE
C2	2- CONVENIENCE OUTLETS	230	400	1.74	30AT,1P	3.5mm ² THHN WIRE IN 20mmØ PVC PIPE
C3	SPARE	230	1500	6.52	30AT,1P	5.5mm ² THHN WIRE IN 20mmØ PVC PIPE
TOTAL CONNECTED LOAD			4984	8.63	40AT,1P	



LEGENDS:



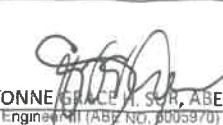
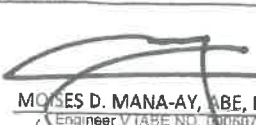


⊗	CEILING LIGHT
⊗ _{WL}	WALL LIGHT
⊗ _{WP}	CONV. OUTLET
⊗ _{REF}	WATER-PROOF CONV. OUTLET
⊗ _{REF}	REFRIGERATOR OUTLET
⊗ _{AC}	RANGE OUTLET
⊗ _{AC}	AIR-CONDITIONING UNIT OUTLET
⊗ _{LPP}	PANEL BOARD
⊗ _R	LED STRIP LIGHT
⊗ ₋₋₋	CIRCUIT HOMERUN
S1	SINGLE SWITCH
S2	TWO GANG SWITCH
S3	THREE GANG SWITCH
S3W	THREE-WAY SWITCH
⊕	GROUNDING

SPECIFICATIONS:

- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE (PEC) WITH THE RULES AND REGULATIONS OF THE NATIONAL BUILDING CODE AND LOCAL AUTHORITIES CONCERNED.
- THE TYPE OF ELECTRICAL INSTALLATION HEREIN SHALL BE SINGLE PHASE, 220V, 60Hz.
- SIZE OF SERVICE ENTRANCE CONDUCTORS FOR LPP SHALL BE _____ THW WIRE IN _____ RSC PIPE.
- SIZE OF MAIN SERVICE EQUIPMENT FOR LPP SHALL BE _____, 1P CIRCUIT BREAKER.
- WIRING INSTALLATION SHALL BE DONE IN PVC CONDUIT FOR LIGHTINGS AND SYSTEMS THAT ARE EMBEDDED IN CONCRETE WALLS.

DESIGN ANALYSIS

CIRCUIT 1		CIRCUIT 3 1-1500W (MAX.), SPARE
LOAD:	10-12W (MAX.)	
I = 12W(7) / (230) = 0.37A		I = 1500W(1) / (230) = 6.52A
USE: 15 AT, 1P, 240V CIRCUIT BREAKER		30AT, 1P, 240V CIRCUIT BREAKER
2.0mm ² THHN COPPER WIRE		5.5mm ² THHN COPPER WIRE
IN 20mmØ UPVC PIPE		IN 25mmØ UPVC PIPE
CIRCUIT 2		TOTAL CONNECTED LOAD
LOAD:	2-200W (MAX.)	I/L = 4984/220 = 22.64 A
USE: 40AT/50AF, 2P, 240V CIRCUIT BREAKER		
FEEDER SIZE: 8.0mm ² THHN/THWN COPPER WIRE		
CONDUIT SIZE: 25mmØ UPVC PIPE		
I = 200W(2) / (230) = 1.74A		
USE: 30 AT, 1P, 240V CIRCUIT BREAKER		
3.5mm ² THHN COPPER WIRE		
IN 20mmØ UPVC PIPE		

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