



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
WESTERN VISAYAS
PAROLA, ILOILO CITY

DETAILED ENGINEERING DESIGN PLANS

**ESTABLISHMENT OF CALIMBAJAN
SOLAR-POWERED IRRIGATION SYSTEM**
(High Value Crops Development Program 2025)

BRGY. CALIMBAJAN, MAKATO, AKLAN

Submitted:

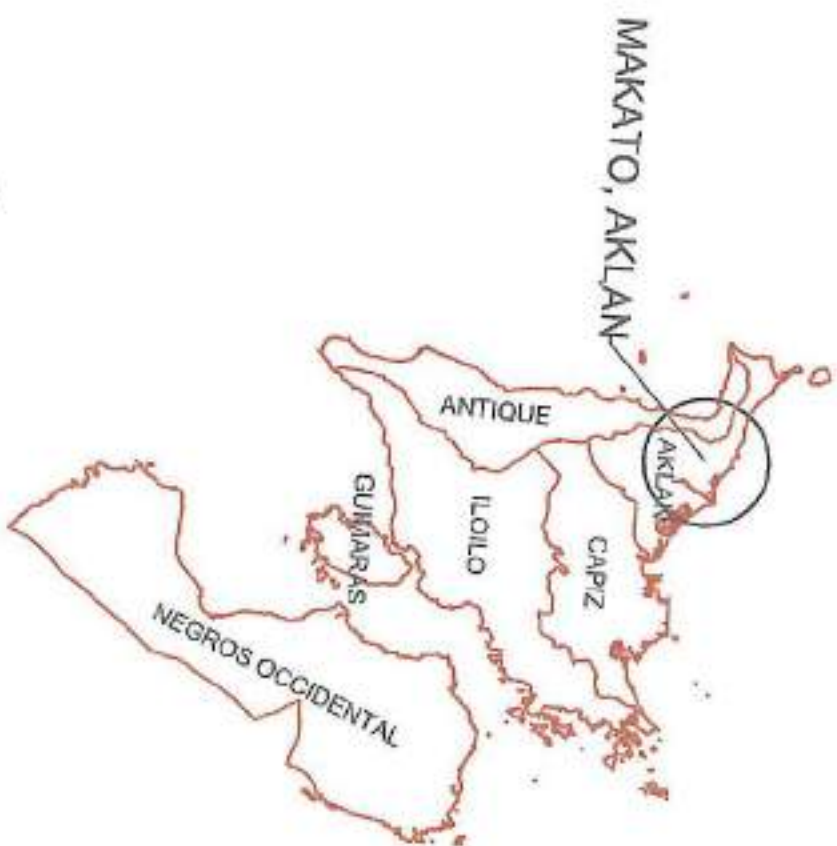
MOSES D. MANA-AY, MEE, ABE
Engineer V (License No. 00060771)
Chief, RAED

Recommended:

MARIA TERESA T. SOLIS
Off-RTD for Operations & Extensions

Approved:

DEONIS R. ARPJA
Regional Executive Director



LOCATION MAP
SCALE: NTS

TECHNICAL DATA

PUMP:	1 UNIT SHP SUBMERSIBLE PUMP
INVERTER/ CONTROLLER:	1 UNIT - 5.5kW
SOLAR PANEL:	12 PCS SOLAR MODULES (550 WATT-PEAK/MODULE)
TOTAL POWER:	6,600 WATT-PEAK
CONVEYANCE:	
FROM PUMP TO TANK	3" Ø GI PIPE SCH. 40 - 72m
MAIN PIPE LINE	2 1/2" Ø HDPE PIPE SDR 11 - 22m
SERVICE AREA	3 ha
DISCHARGE	230 m ³ /day

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Item No.	Scope of Works	Quantity	Unit
I.	GENERAL ITEM		
SPL 1	TEMPORARY FACILITY		
B.16 & B.5	PROJECT SIGNBOARD (1-4'x8'), COA BILLBOARD (1-8'x8'), AND PROJECT MARKER	1.00	lot
B.9	MOBILIZATION/DEMOLITION	1.00	lot
1.0	WELL DEVELOPMENT	1.00	lot
II.	SOLAR PUMP/ ARRAY/ MOUNTING STRUCTURE/ INVERTER CAGE		
803	STRUCTURE EXCAVATION (FOR FOUNDATION/PEDESTAL)		
404	REINFORCING STEEL BARS	3.60	cum
414	FORMWORKS	77.57	kg
405	CONCRETE WORKS (CLASS B)	5.76	sq.m
1705	STRUCTURE BACKFILL	0.88	cum
2	SOLAR POWER MODULE MOUNTING STRUCTURE (WITH INVERTER CAGE)	2.72	cum
3	SOLAR POWER MODULES (6,600 WP)	1.00	lot
4	INVERTER & CONTROLLER (5.5 kW)	1.00	unit
6	SOLAR PUMP (SUBMERSIBLE, 5.0 HP)	1.00	unit
III.	ELEVATED TANK		
803	STRUCTURE EXCAVATION		
405	CONCRETE WORKS (3000 psi)	1.58	cum
404	REINFORCING STEEL BAR	1.33	cum
SPL2	STORAGE TANK METAL FRAME	117.21	kg
1201 (B)	INSTALLATION OF WATER TANK, VALVES & FITTINGS	1.00	lot
1705	STRUCTURAL BACKFILL	1.00	lot
		0.25	cum

ESTABLISHMENT OF
 CALIMBALAN SPIS
 BRGY. CALIMBALAN,
 MAKOTO, AKLAN

FARM PLAN

JEREMY S. SAMPANON, JR.
 PROJECT MANAGER

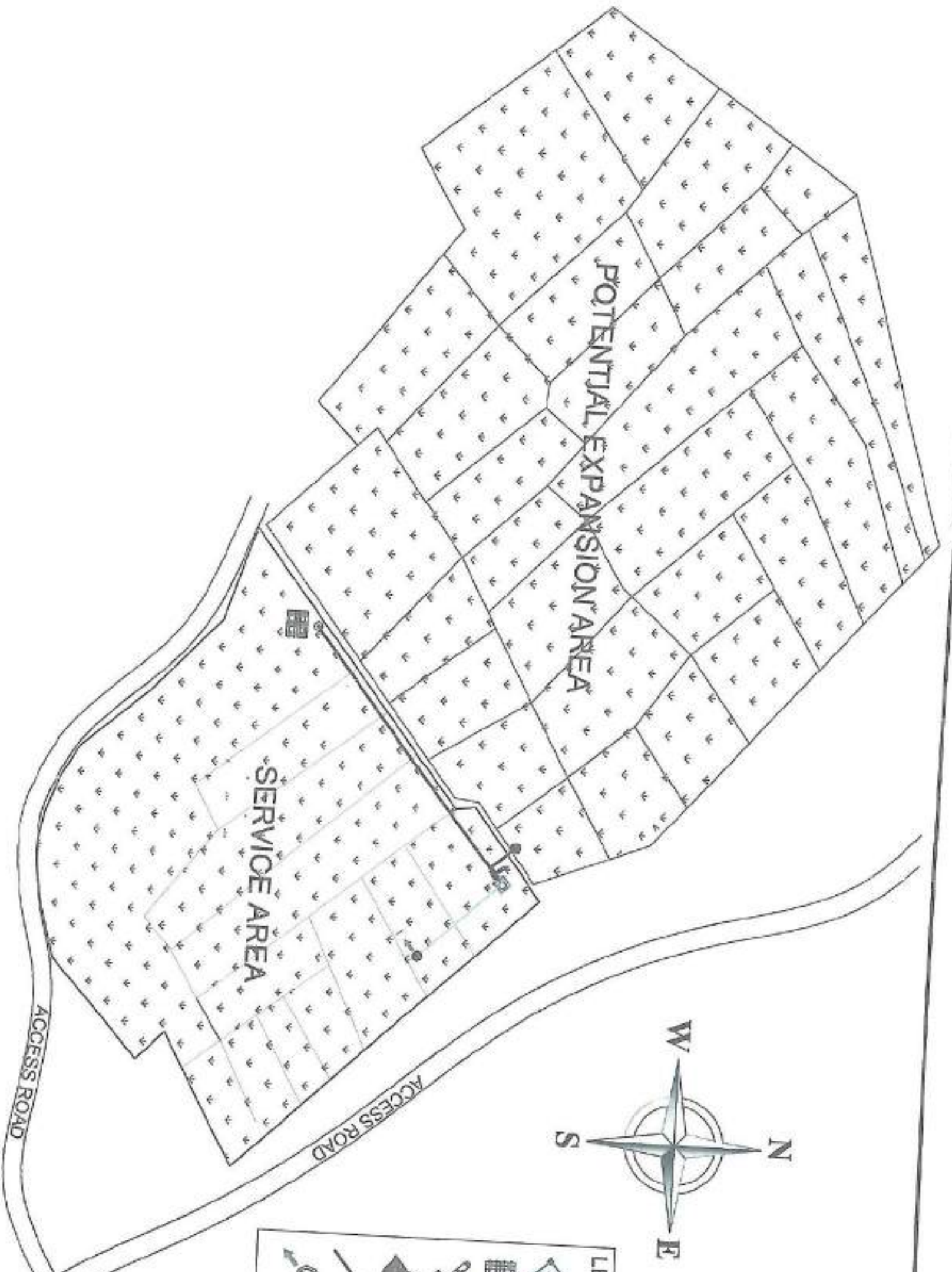
WYNN S. SAMPANON, JR.
 PROJECT MANAGER










JOHNSON L. MANA-AY, JR.
 PROJECT MANAGER

JOHNSON L. MANA-AY, JR.
 PROJECT MANAGER

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 PROJECT MANAGER

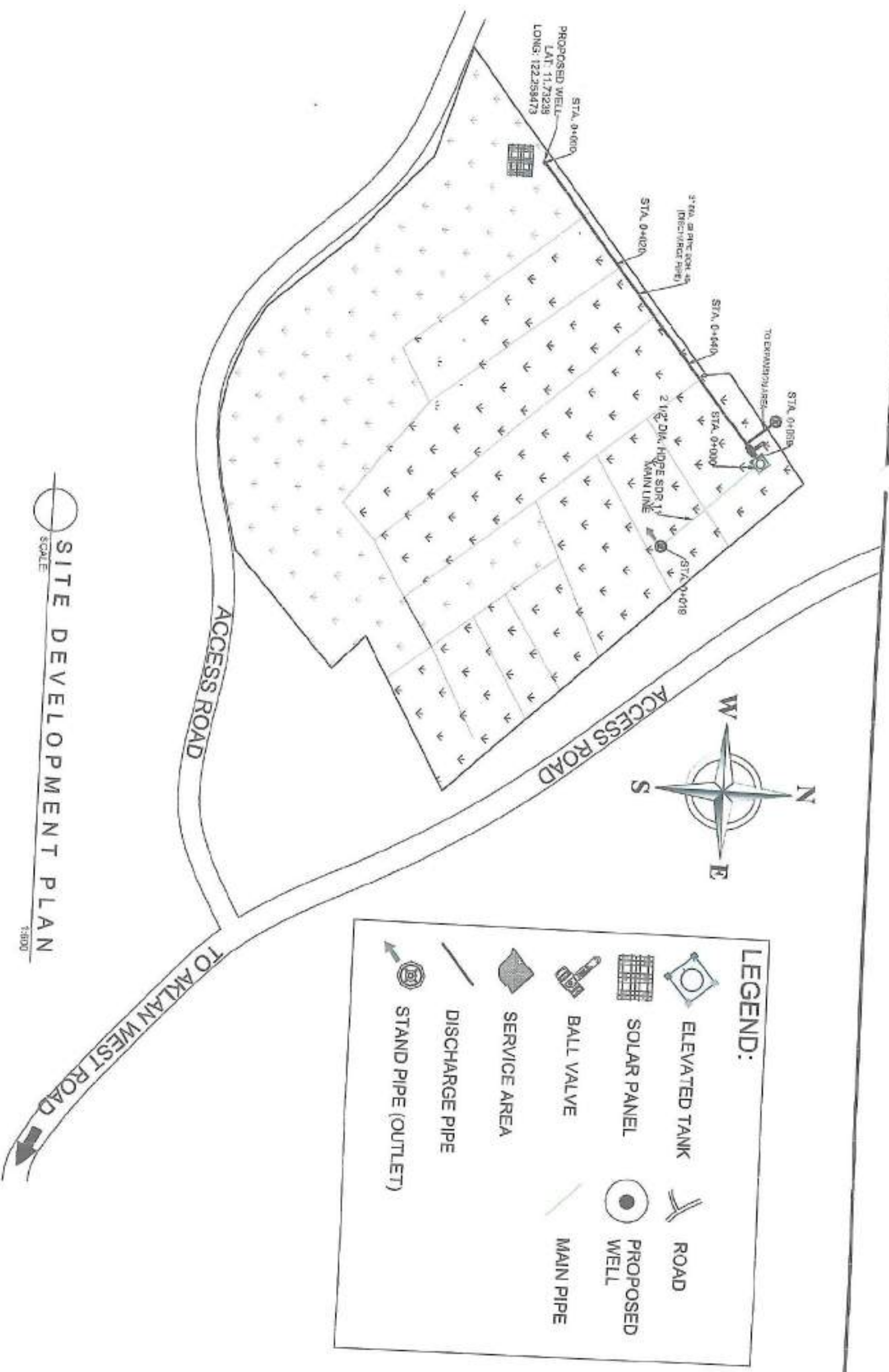
FARM PLAN
 SCALE 1:3000

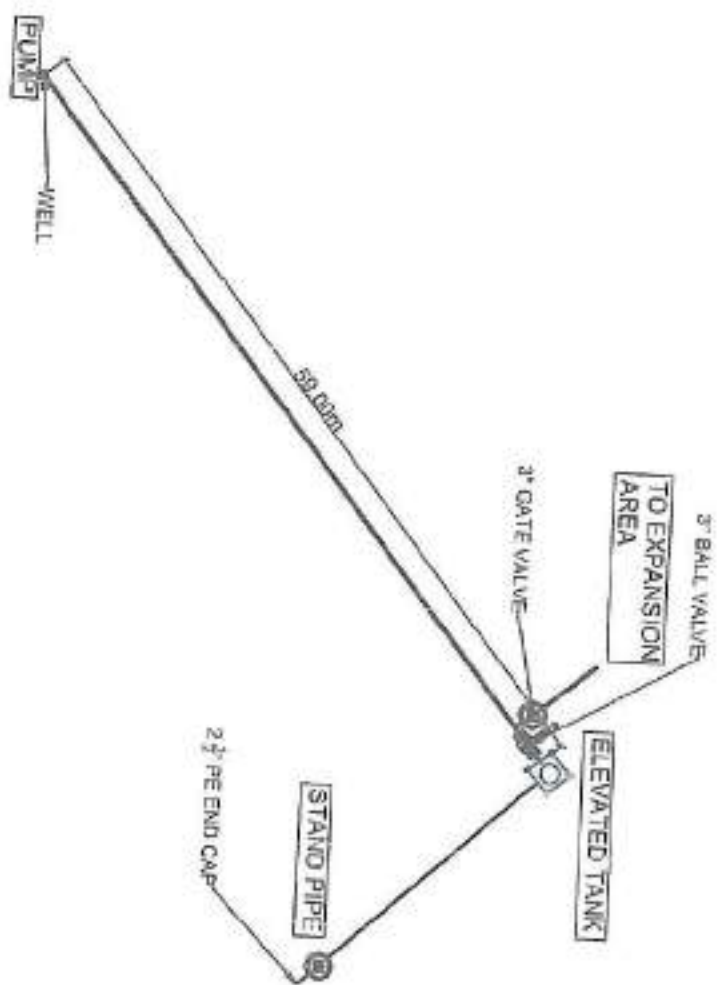


- LEGEND:**
-  ELEVATED TANK
 -  SOLAR PANEL
 -  BALL VALVE
 -  SERVICE AREA
 -  DISCHARGE PIPE
 -  STAND PIPE (OUTLET)
 -  ROAD
 -  PROPOSED WELL
 -  MAIN PIPE

SITE DEVELOPMENT PLAN

 SCALE 1:800

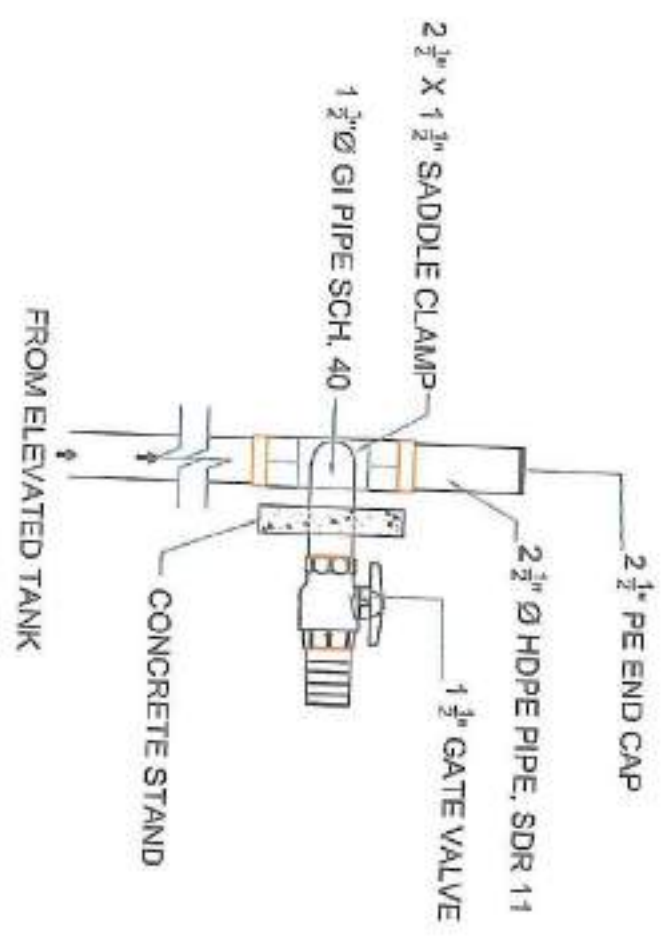




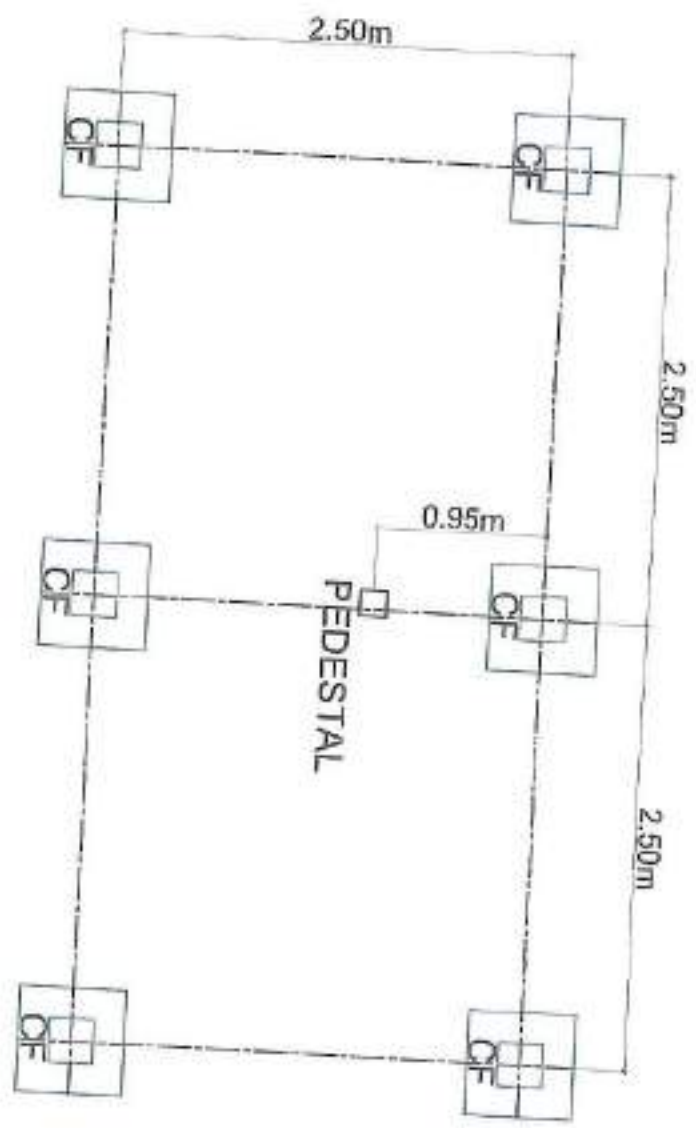
DISTRIBUTION LINE SCHEDULE

NO	ITEM / DESCRIPTION	MATERIALS	SPECIFICATION
1	DISCHARGE PIPE (PUMP TO TANK)	3"Ø GI PIPE SCH. 40	72 m
2	MAIN LINE (TANK TO OUTLET)	2 1/2"Ø HDPE PIPE, SDR 11	22 m
3	GATE VALVE	3" GATE VALVE, BRASS 2 1/2" GATE VALVE, BRASS 1 1/2" GATE VALVE	1 pc 1 pc 1 pc
4	BALL VALVE	3" BALL VALVE, BRASS	1 pc
5	SADDLE CLAMP	2 1/2" X 1 1/2" PE SADDLE CLAMP	1 pc

GENERAL PLAN OF DISTRIBUTION



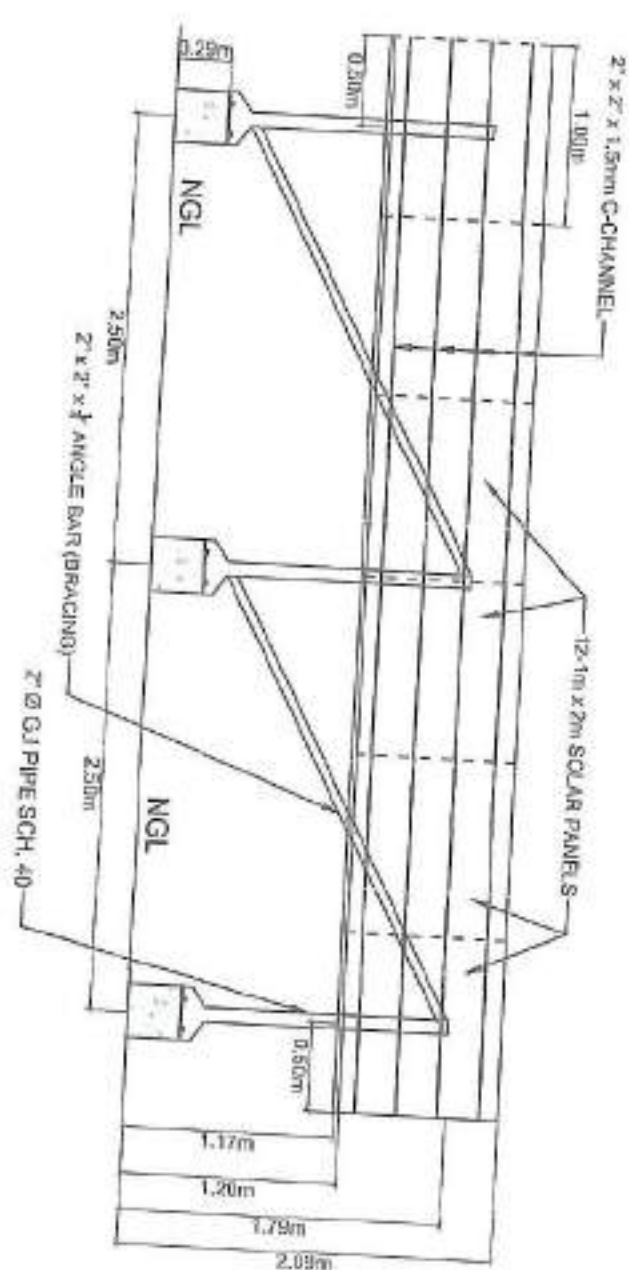
CONNECTION DETAILS



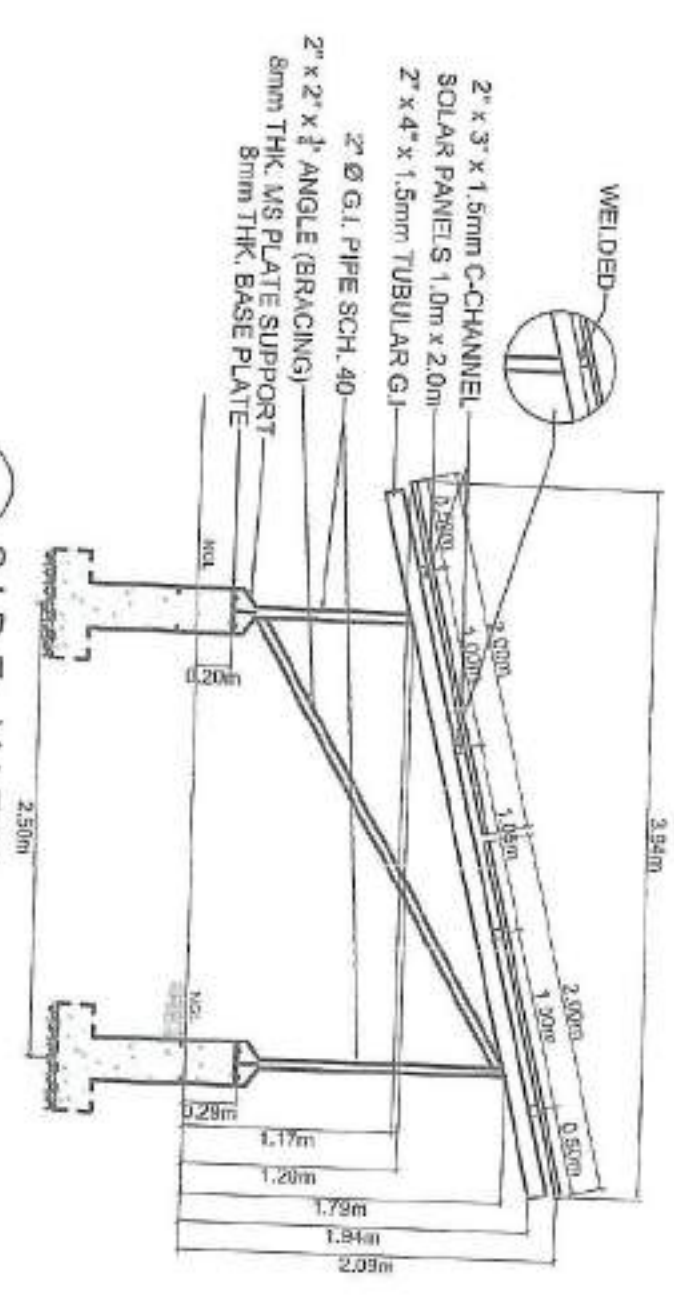
FOUNDATION PLAN
SCALE 1:40



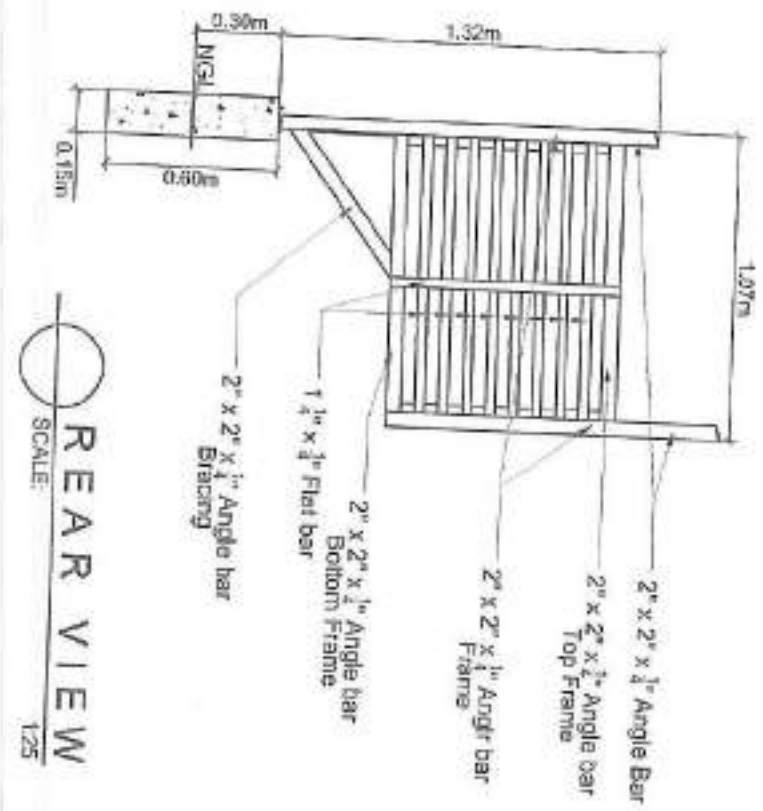
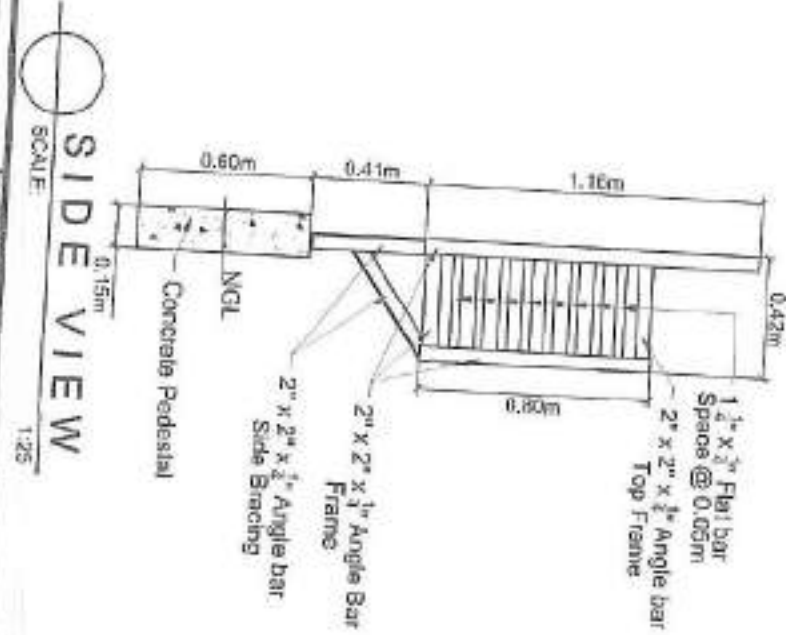
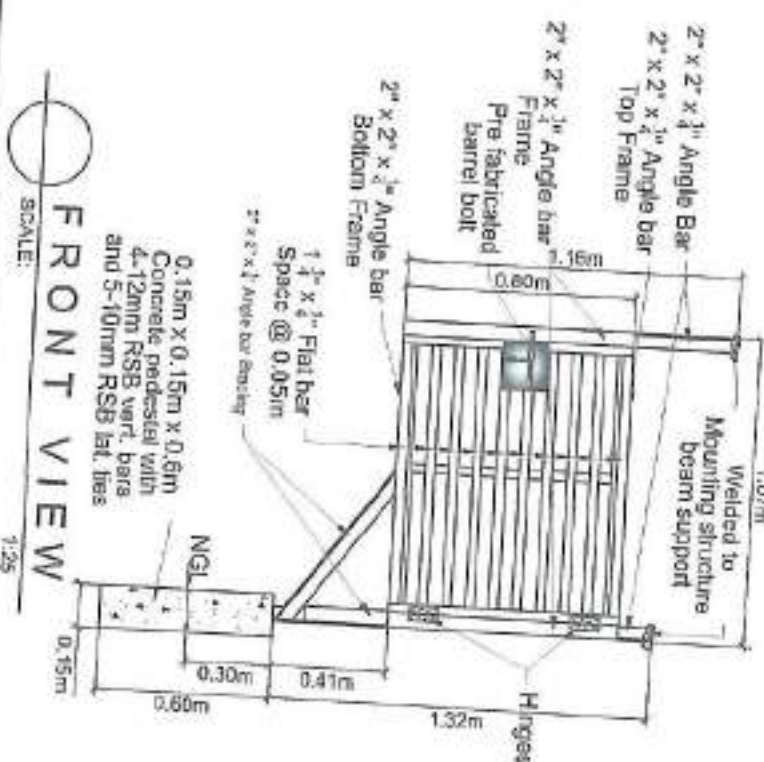
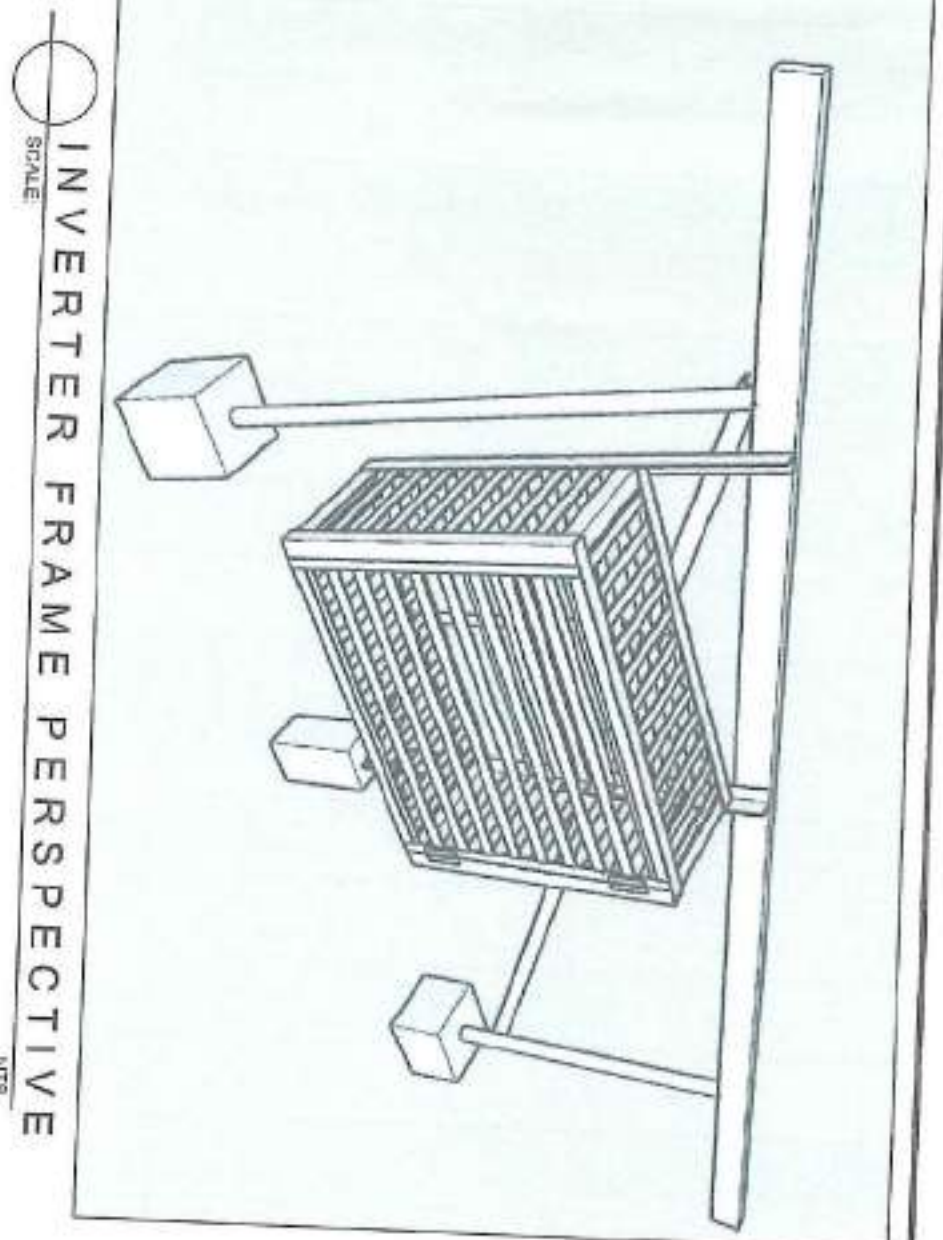
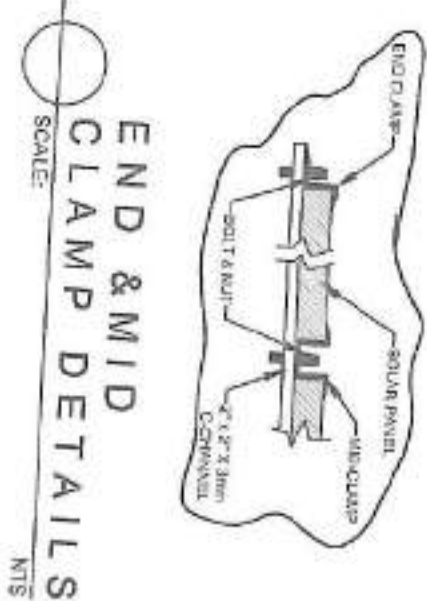
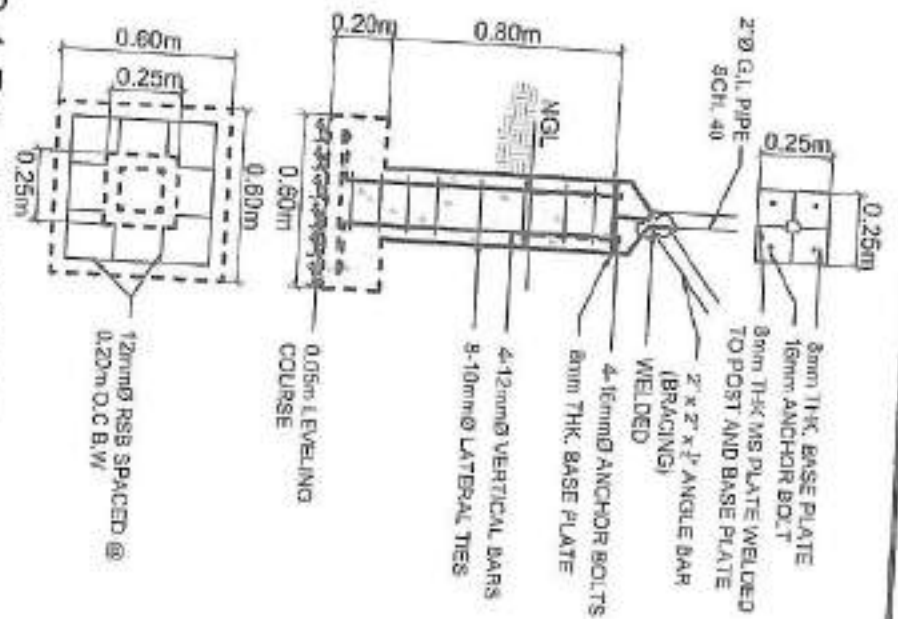
TOP VIEW
SCALE 1:50

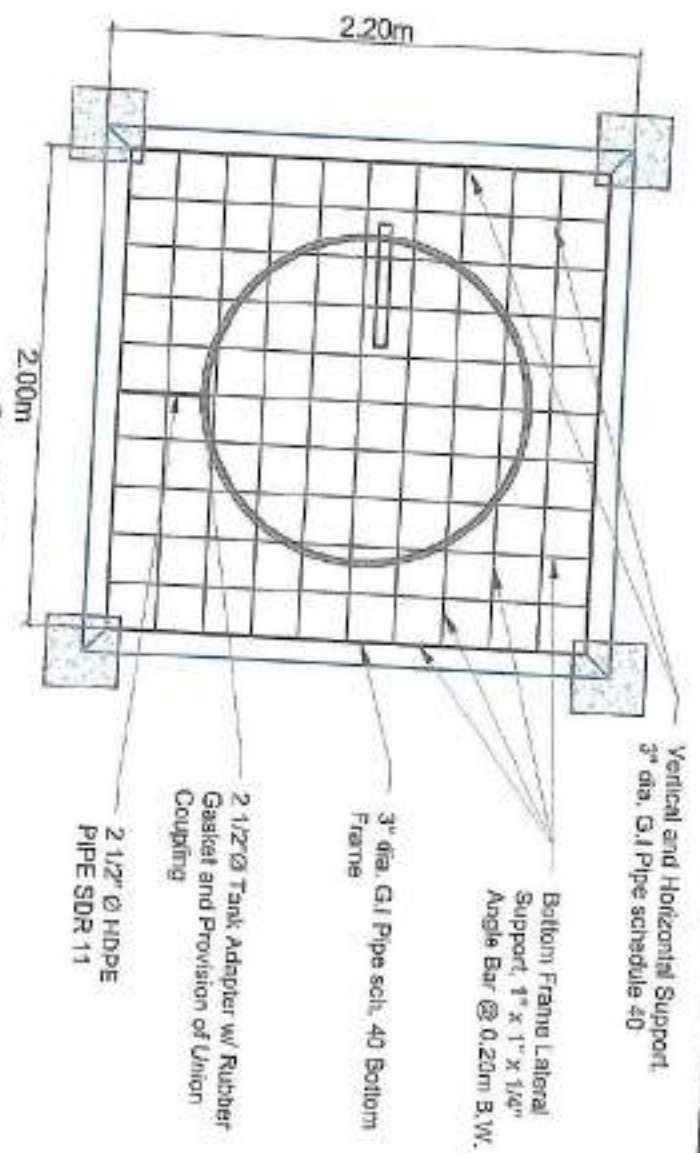


FRONT VIEW
SCALE 1:50

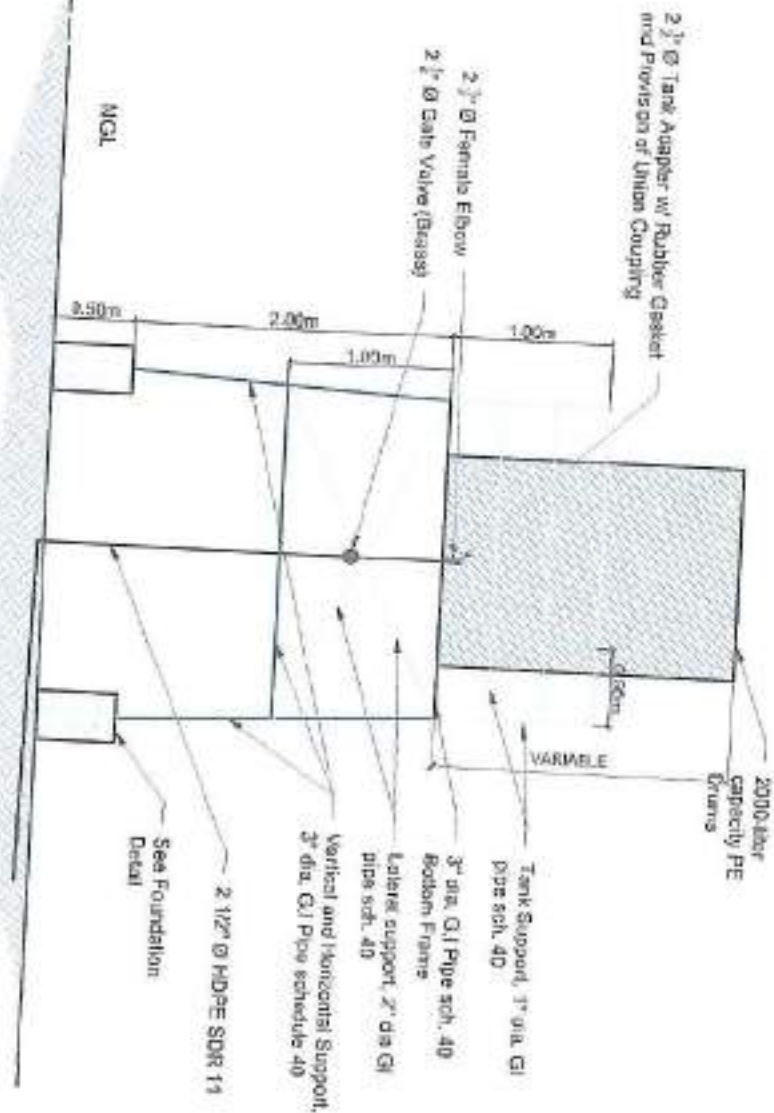


SIDE VIEW
SCALE 1:40

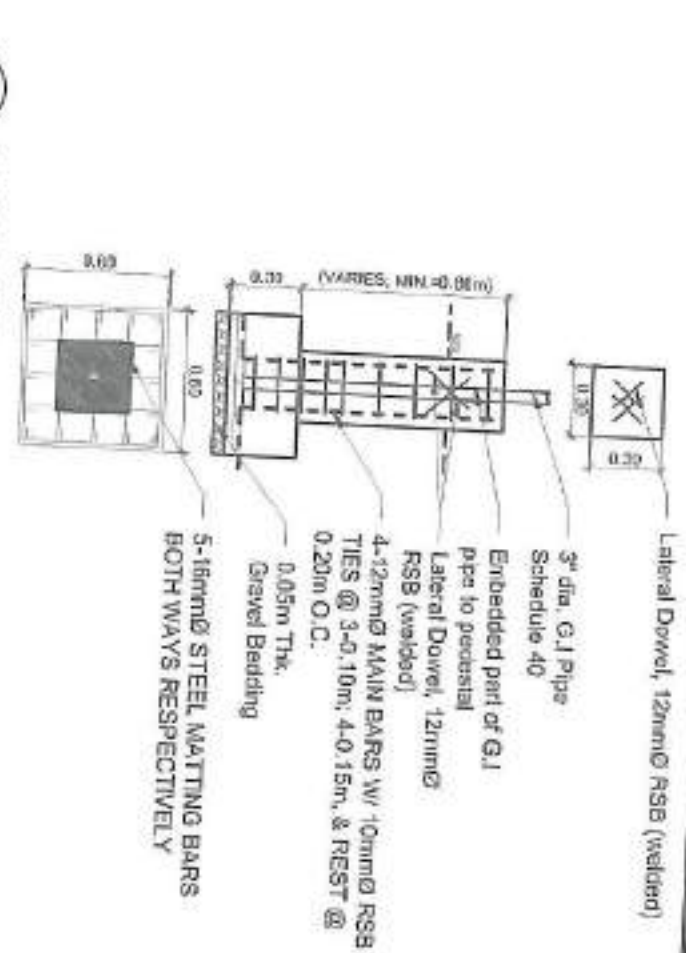




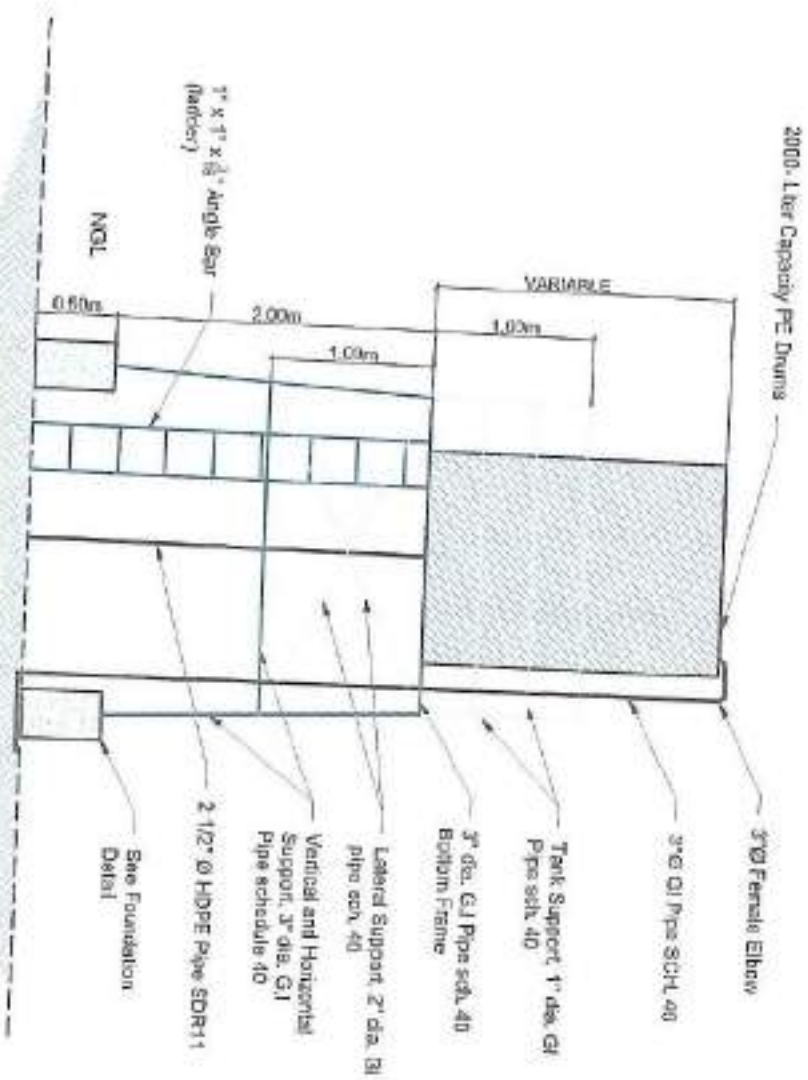
TOP VIEW
SCALE: 1:30



FRONT ELEVATION
SCALE: 1:45



FOUNDATION DETAILS
SCALE: 1:30



SIDE ELEVATION
SCALE: 1:45

Name of Project:
Location:

CONTRACTOR
DATE STARTED
CONTRACT COMPLETION DATE
CONTRACT COST
IMPLEMENTING OFFICE
SOURCE OF FUND

DEPARTMENT OF AGRICULTURE FIELD OFFICE VI
DA-HIGH VALUE CROPS DEVELOPMENT PROGRAM 2005



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- THE BILLBOARD DESIGN LAYOUT AND DIMENSION SHALL BE ON A STANDARD BILLBOARD MEASURING 1200 mm x 2400 mm (4 FT x 8 FT.) USING 12 mm (½ INCH) THICK MARINE PLYWOOD OR TARPULIN POSTED ON 5 mm (¼ INCH) MARINE PLYWOOD.

- THE BILLBOARD SHALL BE INSTALLED IN FRONT OF THE PROJECT SITE.

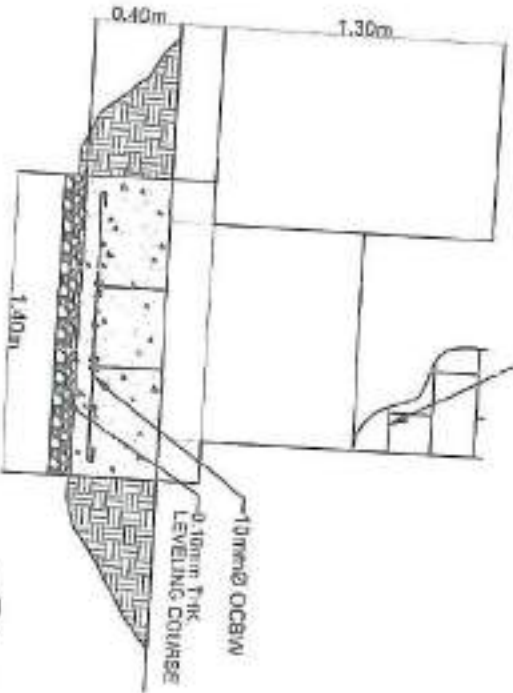
PROJECT SIGNBOARD



SCALE

NIS

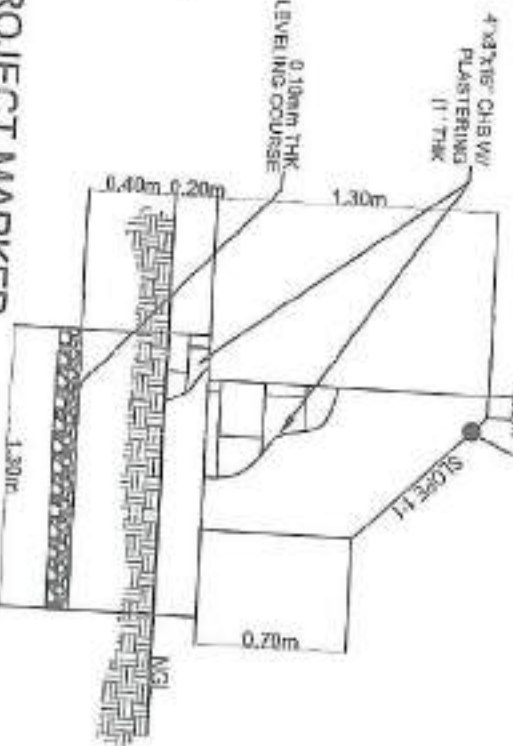
CHB W/ 10mm Ø RISB
VERTICAL BARS
HORIZONTAL BARS @
EVERY 0.40m INTERVAL



PROJECT MARKER

SCALE

NIS



PLAN

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
WESTERN VISAYAS
BAROLA, ILOILO CITY

PROJECT PROFILE

NAME OF PROJECT : ESTABLISHMENT OF CALIMBAJAN SPIS
LOCATION : BRGY. CALIMBAJAN, BAROLA, Aklan
FUNDING SOURCE : DA-HVCDP 2005
BENEFICIARIES : Calimbajan Misamiswaga Community Association, Inc.
SERVICE AREA : 3 HA
PROJECT COST (P) :

TARPULIN, WHITE, 8 FT x 8 FT
RESOLUTION: 70 DPI
FONT: HELVETICA
FONT SIZE: MAIN INFORMATION - 3"
SUB INFORMATION - 1"
FONT COLOR: BLACK



COA BILLBOARD

SCALE

NIS



REPUBLIC OF THE PHILIPPINES
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FIND SOURCES: DA-HVCDP 2005

PROJECT : ESTABLISHMENT OF CALIMBAJAN SPIS
LOCATION : BRGY. CALIMBAJAN, BAROLA, Aklan
IMPLEMENTING AGENCY : DEPARTMENT OF AGRICULTURE FIELD OFFICE VI
CONTRACTOR SUPPLIER :
BRIEF DESCRIPTION OF PROJECT :

PROJECT DETAILS

PROJECT DATE		PROJECT STATUS			
DURATION	STARTED	THRESHOLD DATE OF COMPLETION	PERCENTAGE OF COMPLETION	COST INCURRED TO DATE	DATE COMPLETED

FOR PARTICULARS OR COMPLAINTS ABOUT THE PROJECT, PLEASE CONTACT THE REGIONAL OFFICE OR CLUSTER WHICH HAS JURISDICTION ON THIS PROJECT.

COA REMOVAL OFFICE NO. 1234567
ADDRESS :
CONTACT NO. :
OR TEXT COA CITIZENS DESK 0915-4567890



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BAROLA, ILOILO CITY

ESTABLISHMENT OF
CALIMBAJAN SPIS
BRGY. CALIMBAJAN,
BAROLA, Aklan

PROJECT SIGNBOARD
PROJECT MARKER
COA BILLBOARD

DESIGNED BY: E. R. RANAL, ABE
DRAWN BY: E. R. RANAL, ABE
CHECKED BY: E. R. RANAL, ABE
APPROVED BY: E. R. RANAL, ABE

MONITORING & EVALUATION
COORDINATOR: E. R. RANAL, ABE
DATE: 10/10/2005

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