

FIJI

RURAL WATER SUPPLY DEVELOPMENT PROJECT

DRAWINGS

MARCH 1981

JAPAN INTERNATIONAL COOPERATION AGENCY

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DRAWING LIST

NO.	TITLE	SCALE	NO.	TITLE	SCALE
1	TRANSMISSION CONDUIT AND DISTRIBUTION MAINS IN VUNICUICUI, WADAMUDAMU, VUNIMOLI	1/12,000	7	PUMP HOUSE	1/50
2	TRANSMISSION CONDUIT AND DISTRIBUTION MAINS IN VUNIKA	1/12,000	8	DISTRIBUTION TANK (HUME'S TANK)	1/40, 1/50
3	TRANSMISSION CONDUIT AND DISTRIBUTION MAINS IN NABEKAVU	1/12,000	9	DETAIL OF FOOT OPERATED PUMP WELL COMMON TAPS, VILLAGE WATER SUPPLY SYSTEM	1/20, 1/50
4	TRANSMISSION CONDUIT AND DISTRIBUTION MAINS IN VUNIVAU BUA	1/12,000	10	ELEVATED WATER TANK (FRP PANEL TANK)	1/20
5	STANDARD TRENCH DIMENSION SETTLEMENTS COMMON TAP SYSTEM	1/20	11	SHOWER HOUSE	1/50
6	PIPE ANCHORING FOR TEE & 90° BEND, RIVER CROSSING	1/10, 1/50			

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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN
VUNICUICU, WADAMUDAMU, VUNIMOLI

DWG. NO: 1 | SCALE: 1/12,000 | DATE

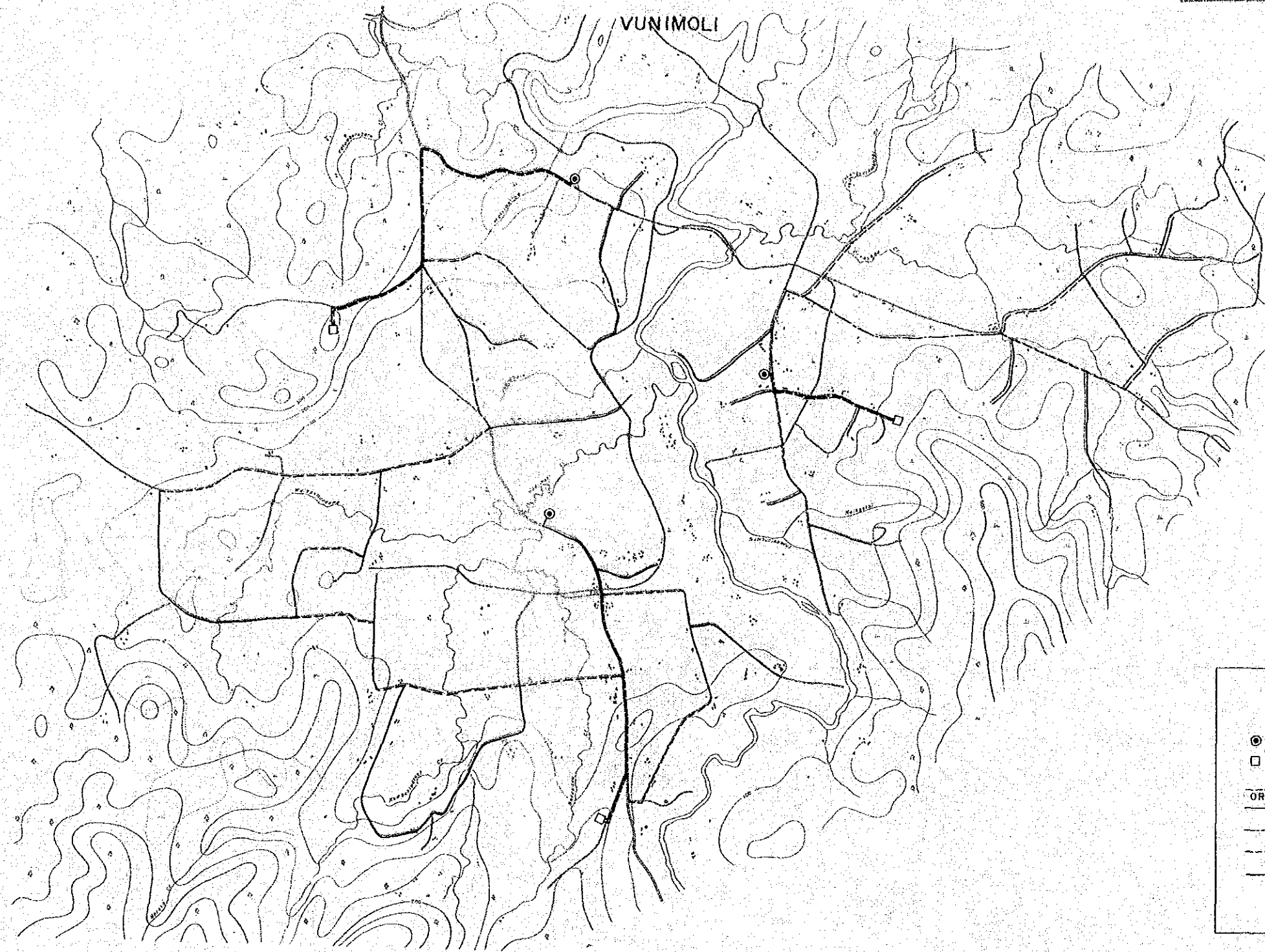
JAPAN INTERNATIONAL COOPERATION AGENCY

TRANSMISSION CONDUIT AND DISTRIBUTION MAINS

S = 1 / 12,000

IN VUNICUICU
WADAMUDAMU

VUNIMOLI



LEGEND

⊙ WELL

□ DISTRIBUTION TANK

OR

— TRANSMISSION CONDUIT

— DISTRIBUTION MAINS φ 100

— " " φ 75

— " " φ 50

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BASIC DESIGN STUDY PHASE (II)

RURAL WATER SUPPLY DEVELOPMENT

SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN
VUNICUICUI, WADAMUDAMU, VUNIMOLI

DWG. NO: 1 | SCALE: 1/12,000 | DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

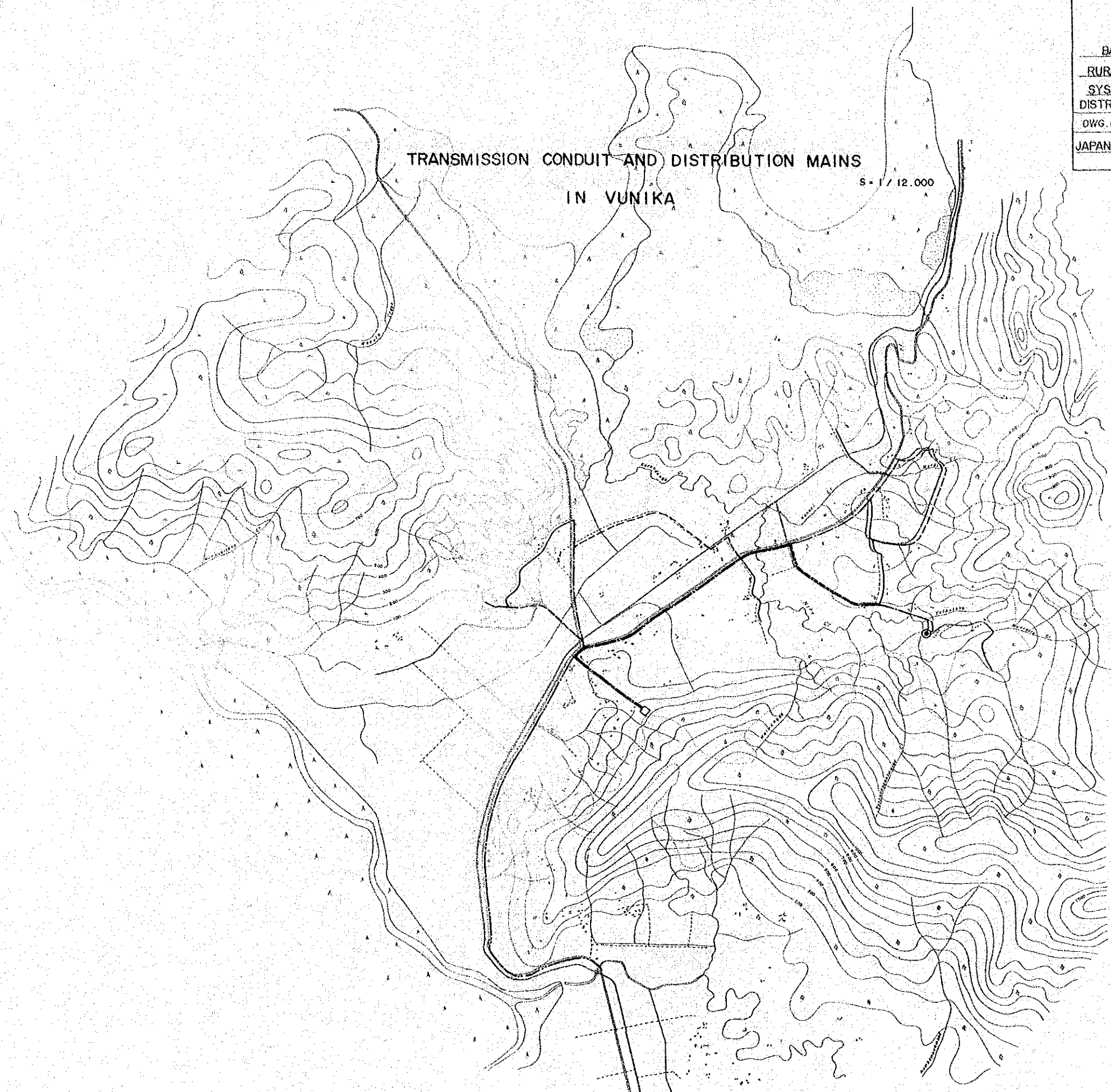


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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN VUNIKA
DWG. NO: 2 | SCALE 1/12,000 | DATE:
JAPAN INTERNATIONAL COOPERATION AGENCY

TRANSMISSION CONDUIT AND DISTRIBUTION MAINS
IN VUNIKA

S = 1 / 12,000

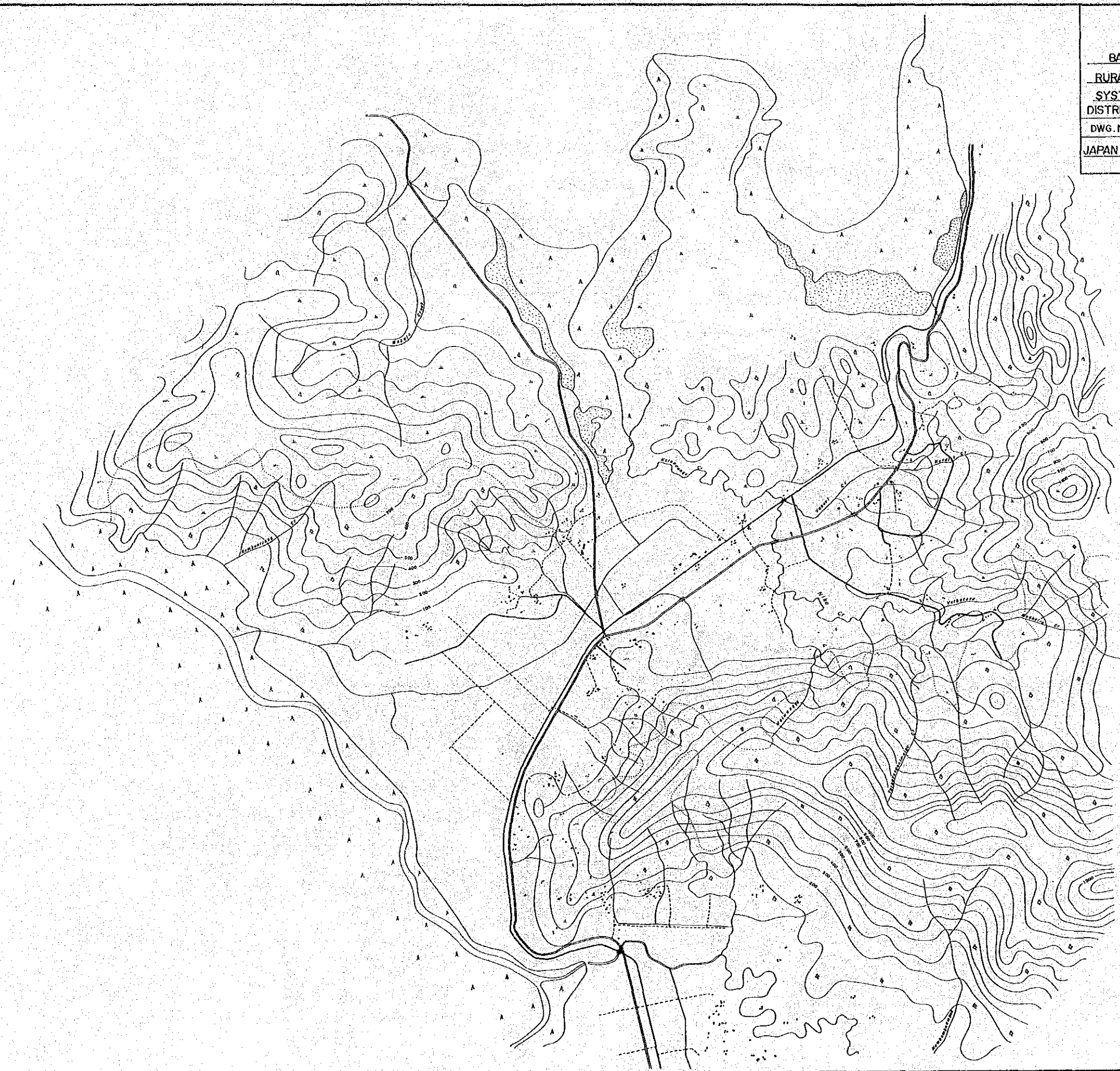


LEGEND

- ⊙ WELL
- DISTRIBUTION TANK
- TRANSMISSION CONDUIT
- DISTRIBUTION MAINS ♦ 150
- " " ♦ 100
- " " ♦ 75
- " " ♦ 50

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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN VUNIKA
DWG. NO: 2 | SCALE: 1/12,000 | DATE:
JAPAN INTERNATIONAL COOPERATION AGENCY

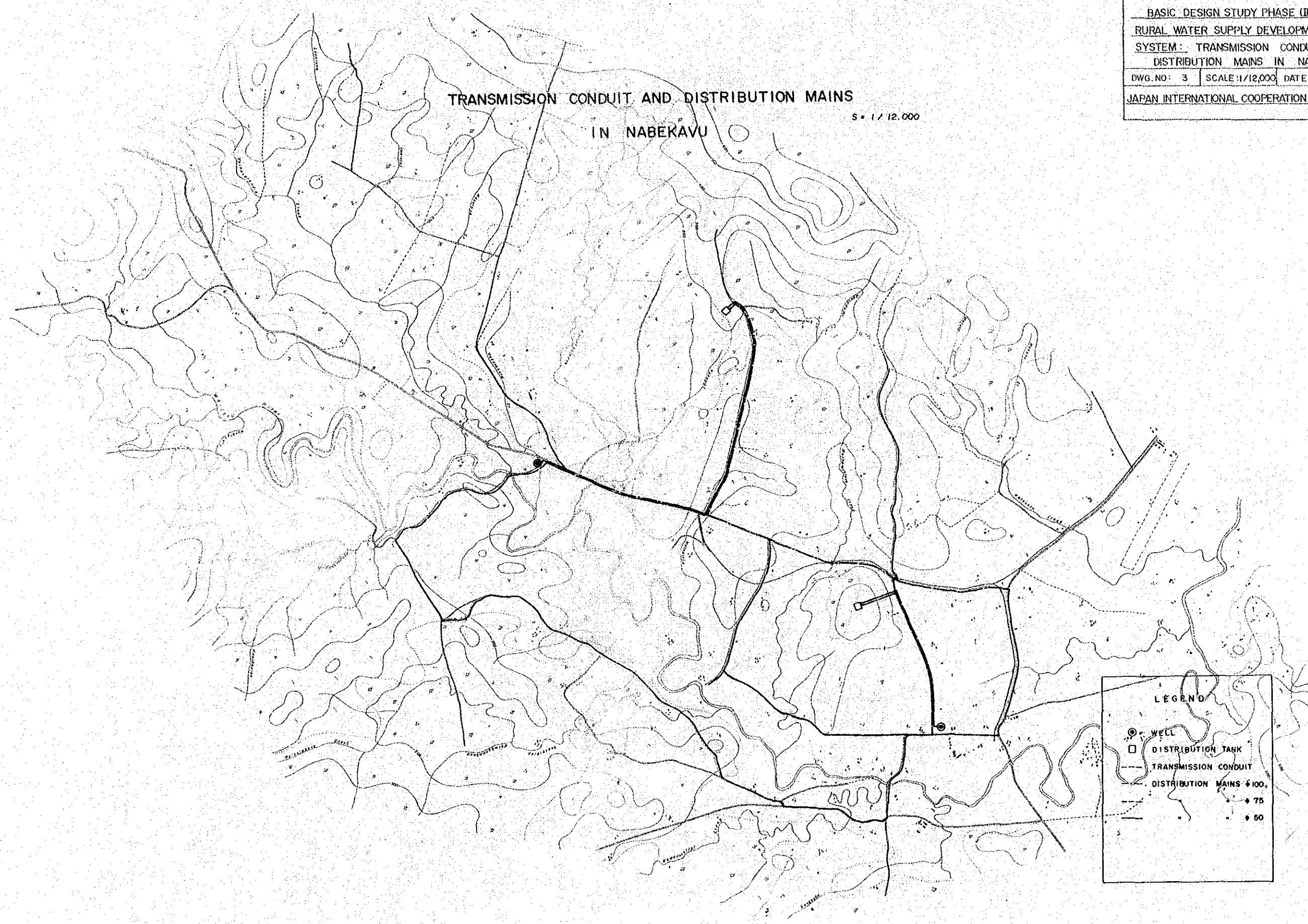


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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN NABEKAVU
DWG. NO: 3 | SCALE: 1/12,000 | DATE:
JAPAN INTERNATIONAL COOPERATION AGENCY

TRANSMISSION CONDUIT AND DISTRIBUTION MAINS
IN NABEKAVU

S = 1 / 12,000



LEGEND

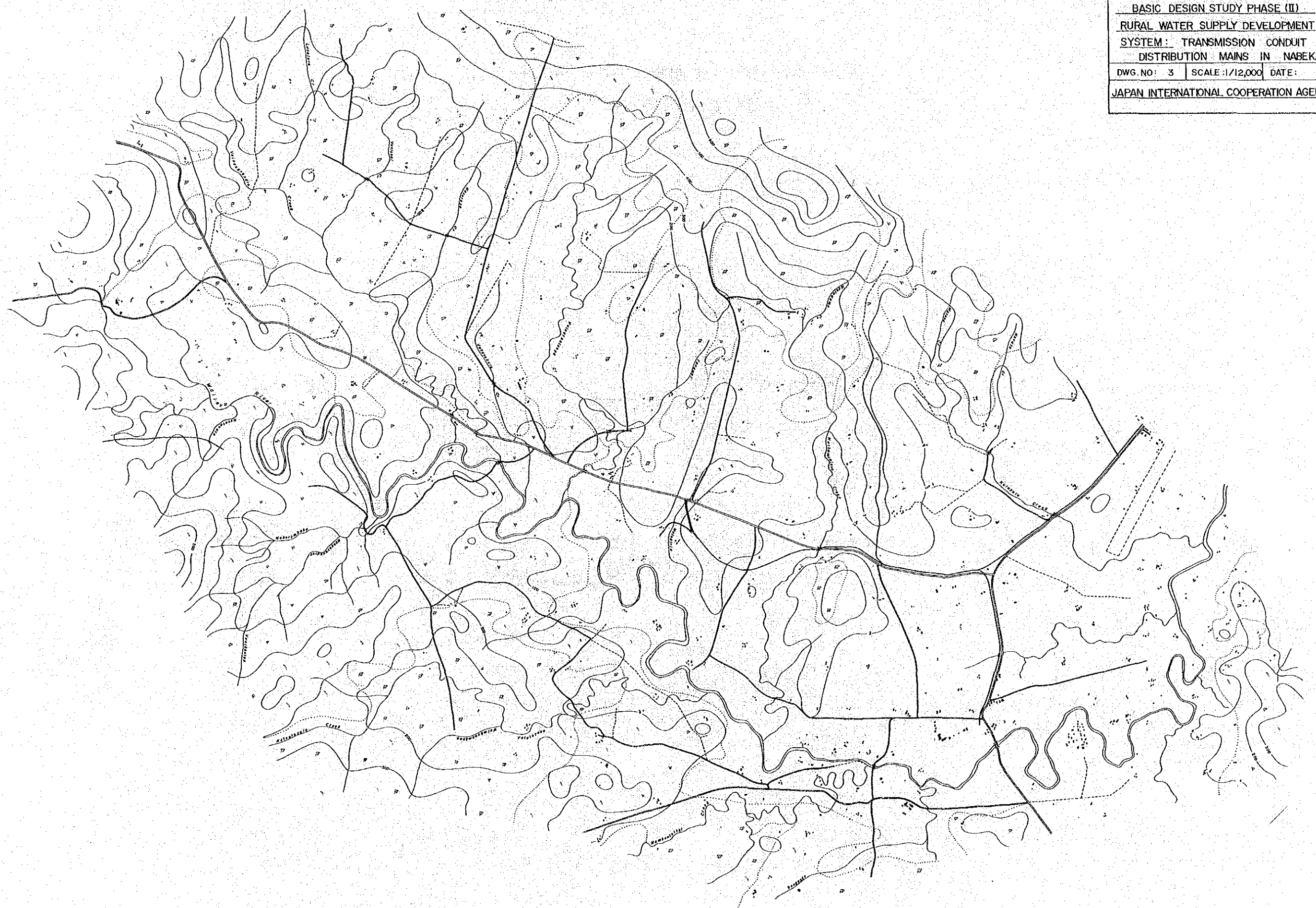
- WELL
- DISTRIBUTION TANK
- TRANSMISSION CONDUIT
- - - DISTRIBUTION MAINS
- ♦ 100
- ♦ 75
- ♦ 50

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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN NABEKAVU

DWG NO: 3 | SCALE: 1/12,000 | DATE:

JAPAN INTERNATIONAL COOPERATION AGENCY

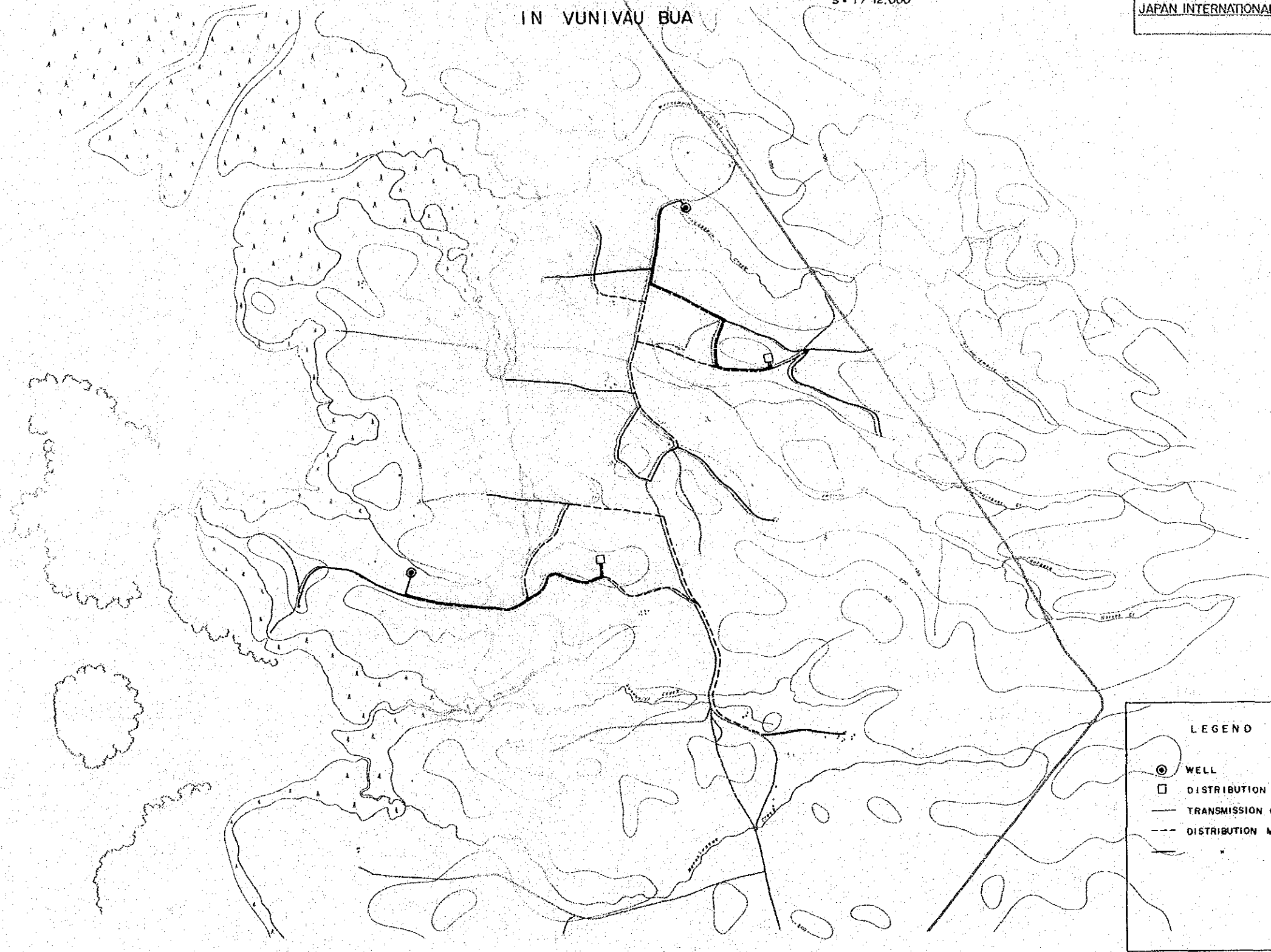


F I J I

BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN VUNIVAU BUA
DWG. NO: 4 | SCALE: 1/12,000 | DATE:
JAPAN INTERNATIONAL COOPERATION AGENCY

TRANSMISSION CONDUIT AND DISTRIBUTION MAINS
IN VUNIVAU BUA

S = 1 / 12,000

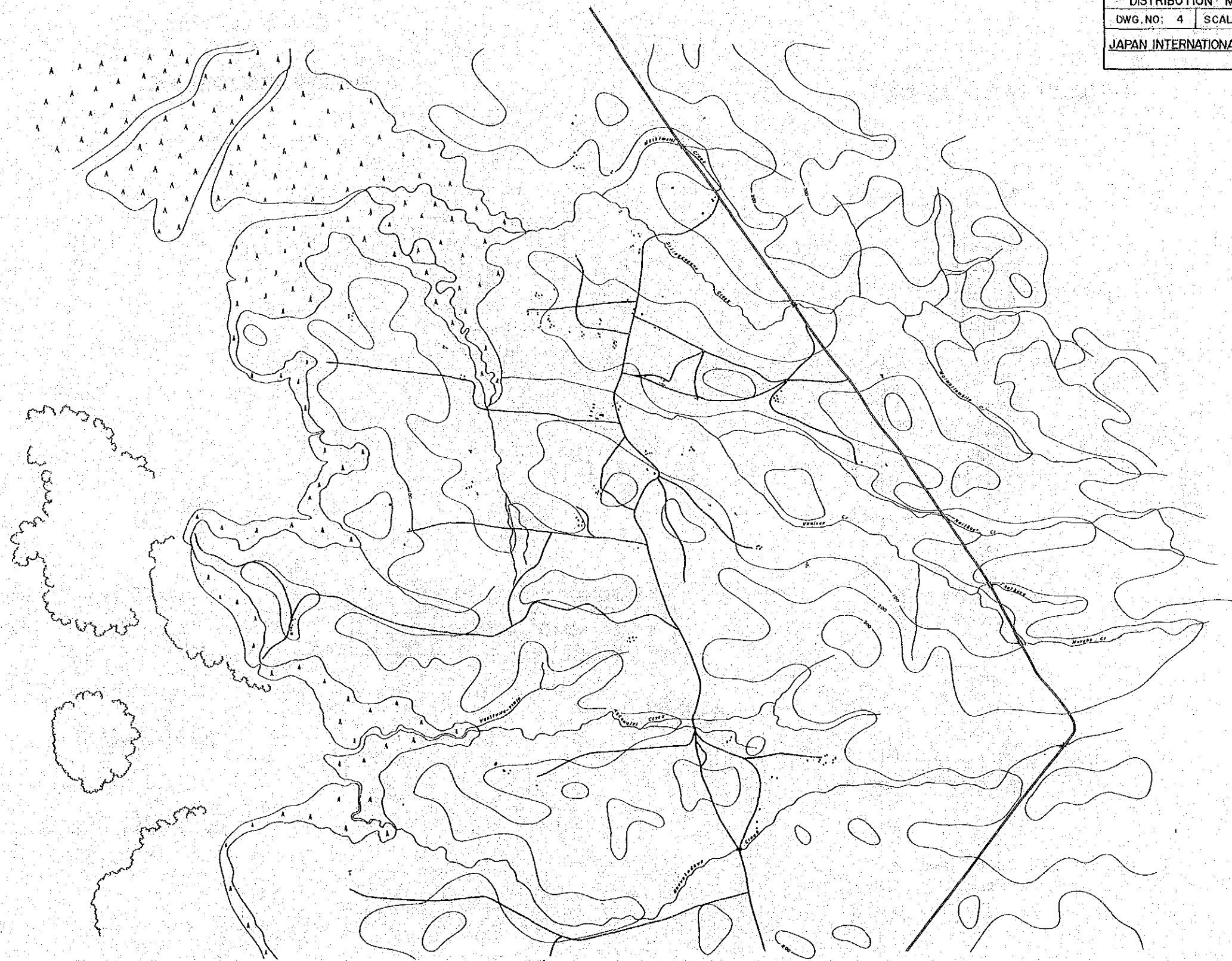


LEGEND

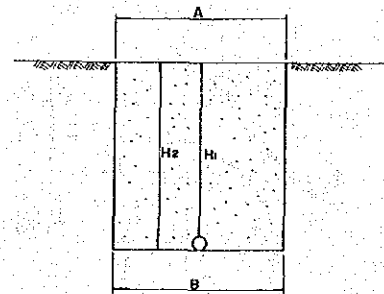
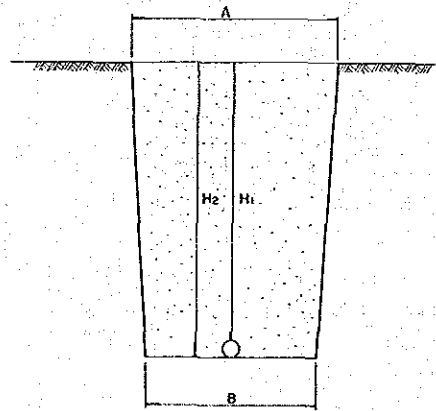
- WELL
- DISTRIBUTION TANK
- TRANSMISSION CONDUIT
- - - DISTRIBUTION MAINS + 75
- " " " + 50

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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: TRANSMISSION CONDUIT AND
DISTRIBUTION MAINS IN VUNIVAU BUA
DWG. NO: 4 | SCALE: 1/12,000 | DATE:
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STANDARD TRENCH DIMENSION



DIA (mm)	A (mm)	B (mm)	H1 (mm)	H2 (mm)	EXCAVATION SOIL (m³)	SURPLUS SOIL (m³)	BACKFILL (m³)
50	600	500	800	850	0.47	0.00	0.47
75	-	-	-	875	0.48	0.00	0.48
100	-	-	-	900	0.50	0.01	0.49
125	-	-	-	925	0.51	0.01	0.50
150	-	-	-	950	0.52	0.02	0.50
200	-	-	-	1000	0.55	0.03	0.52

(Earth Volume: Per Linear Meter)

NOTE

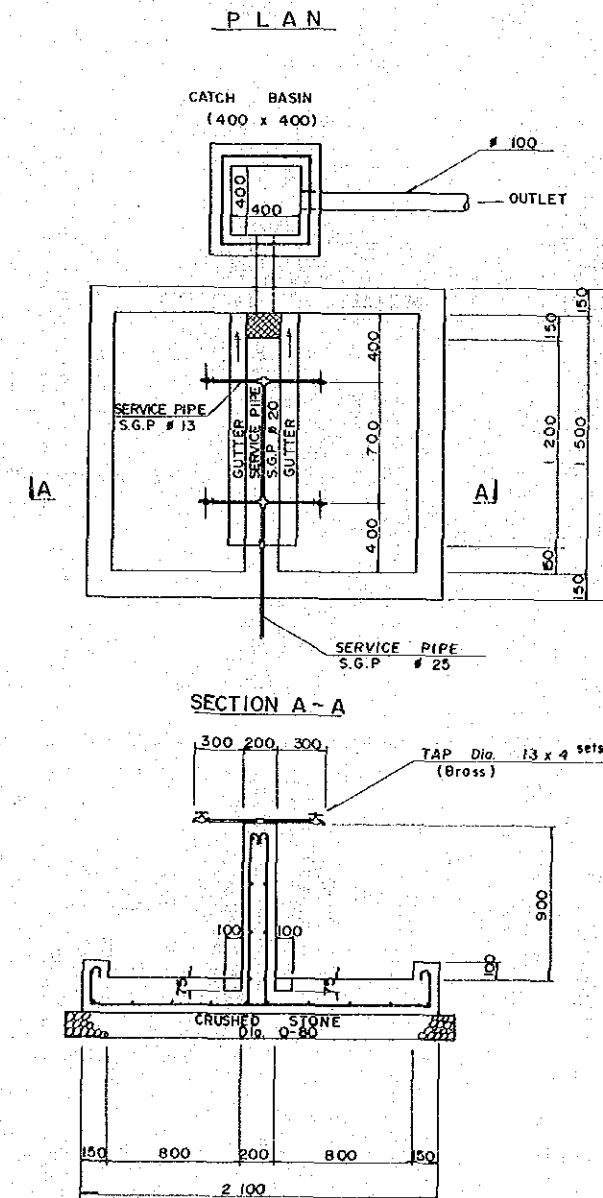
Earth covering for road crossing and railway crossing shall
 Not be less than 1.2 m.
 Surplus soil may be spread nearby by the direction of the Engineer.

DIA (mm)	A	B	H1	H2	EXCAVATION SOIL (m³)	SURPLUS SOIL (m³)	BACKFILL (m³)
13	300	300	300	313	0.09	0.00	0.09
25	-	-	-	~ 325	0.25	0.00	0.25
30	500	500	500	530	0.25	0.00	0.25
40	-	-	-	~ 540	-	-	-

(Earth Volume: Per Linear Meter)

SETTLEMENTS COMMON TAP SYSTEM

S = 1/20



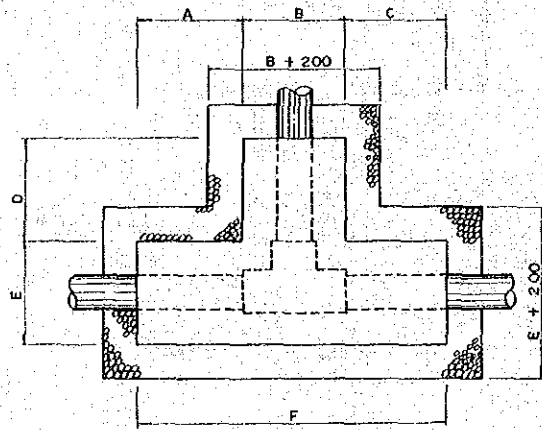
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BASIC DESIGN STUDY PHASE (II)
 RURAL WATER SUPPLY DEVELOPMENT
 SYSTEM: PIPE ANCHORING FOR
 TEE & 90° BEND, RIVER CROSSING
 DWG. NO: 6 SCALE: 1/10, 1/50 DATE:
 JAPAN INTERNATIONAL COOPERATION AGENCY

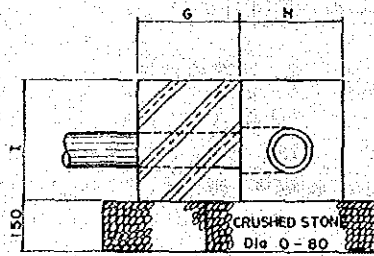
PIPE ANCHORING FOR TEE & 90° BEND

S = 1/10

PLAN

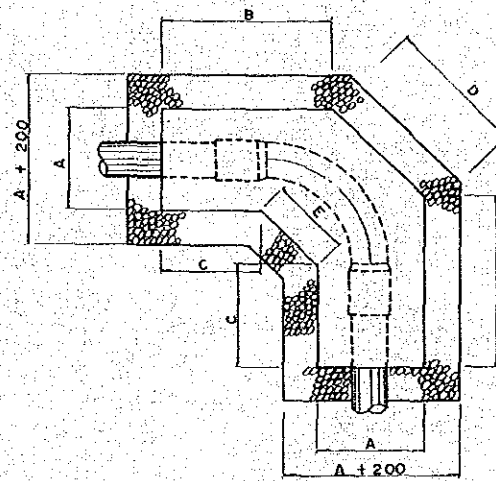


PROFILE

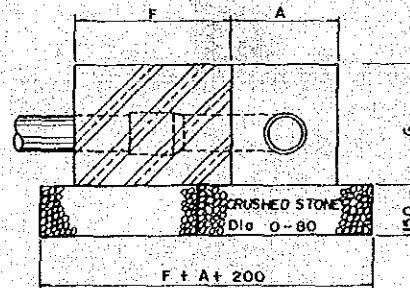


	DIA 100	DIA 150
A	300	350
B	300	350
C	300	350
D	300	350
E	300	350
F	900	1050
G	300	350
H	300	350
I	300	350

PLAN



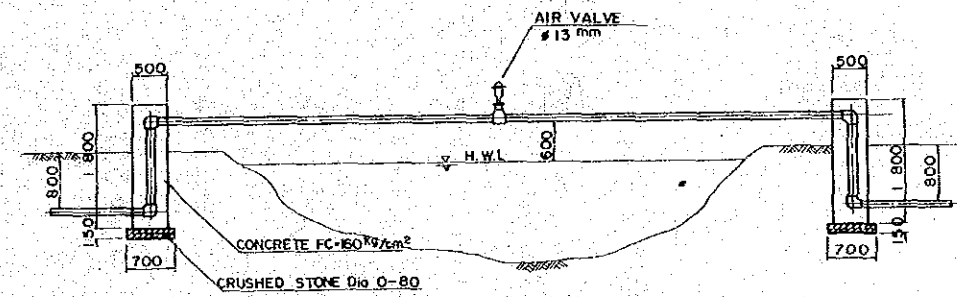
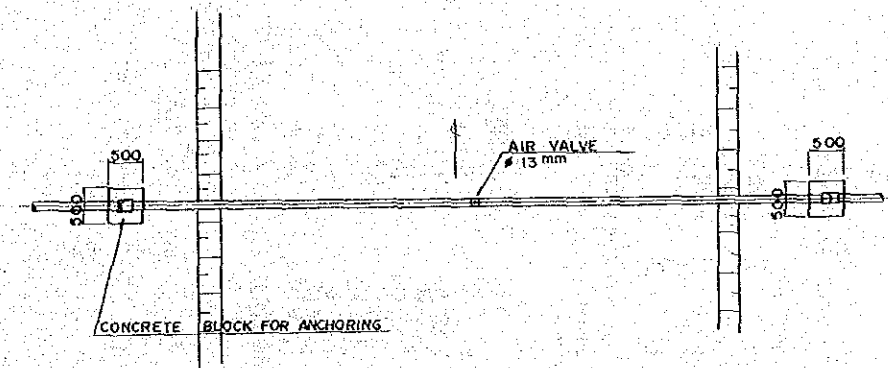
PROFILE



	DIA 100	DIA 150
A	300	350
B	500	550
C	300	350
D	212	460
E	354	672
F	450	600
G	300	350

RIVER CROSSING

S = 1/50



PUMP HOUSE s = 1/50

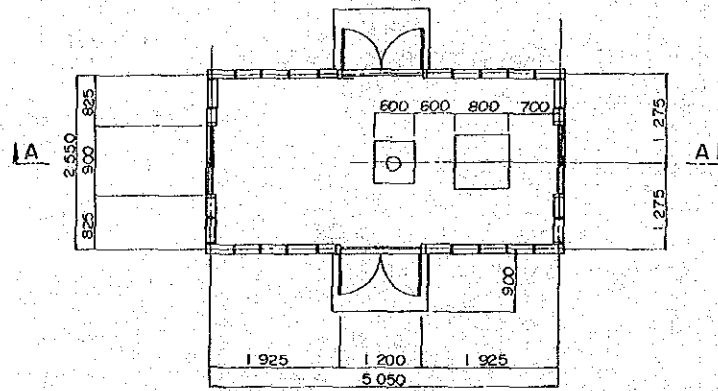
FI J1

BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: PUMP HOUSE

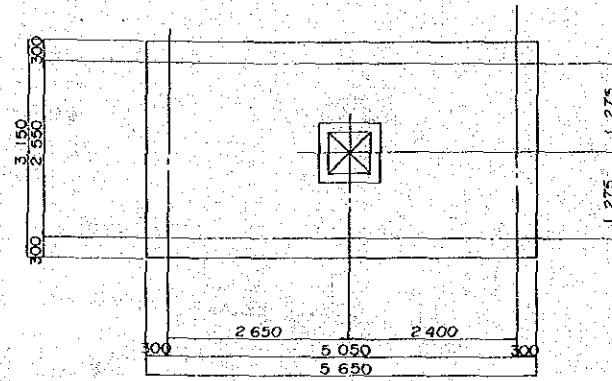
DWG. NO: 7 SCALE: 1/50 DATE:

JAPAN INTERNATIONAL COOPERATION AGENCY

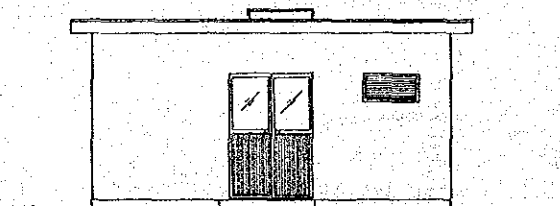
GROUND FLOOR PLAN s = 1/50



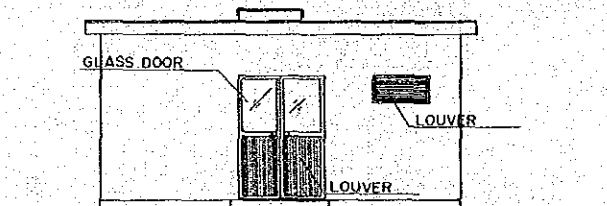
ROOF PLAN s = 1/50



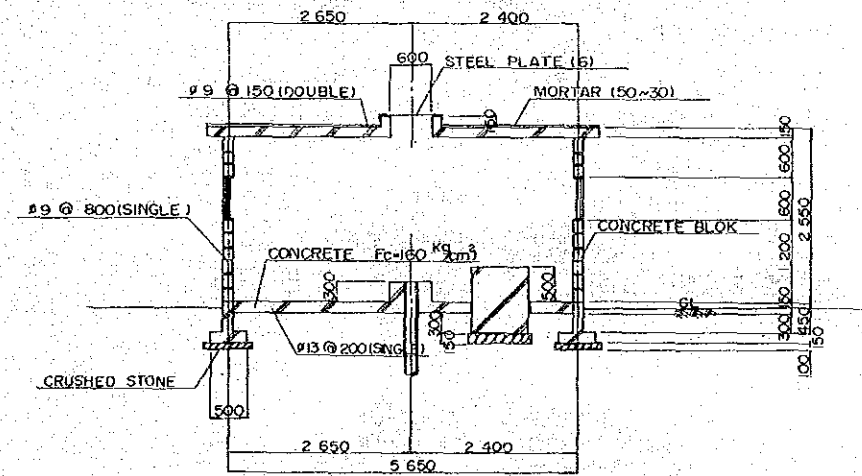
FRONT SIDE VIEW s = 1/50



BACK SIDE VIEW s = 1/50



A - A SECTION s = 1/50



LEFT RIGHT SIDE VIEW s = 1/50

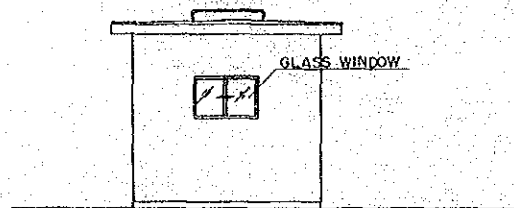


TABLE OF QUANTITIES

CRUSHED STONE	1.06 m ³
CONCRETE Fc=160 kg/cm ²	7.80 m ³
MORTAR 50~30	17.89 m ²
CONCRETE BLOK	389 UNIT
STEEL BAR (#9, #13)	43.7 kg
STEEL PLATE (6)	33.56 kg
GLASS DOOR (1200x1800)	2 UNIT
GLASS WINDOW (900x600)	2
STEEL LOUVER (800x400)	2

DISTRIBUTION TANK (HUME'S TANK)

S = 1/40

STRUCTURAL DRAWING

REINFORCING BAR ARRANGEMENT DRAWING

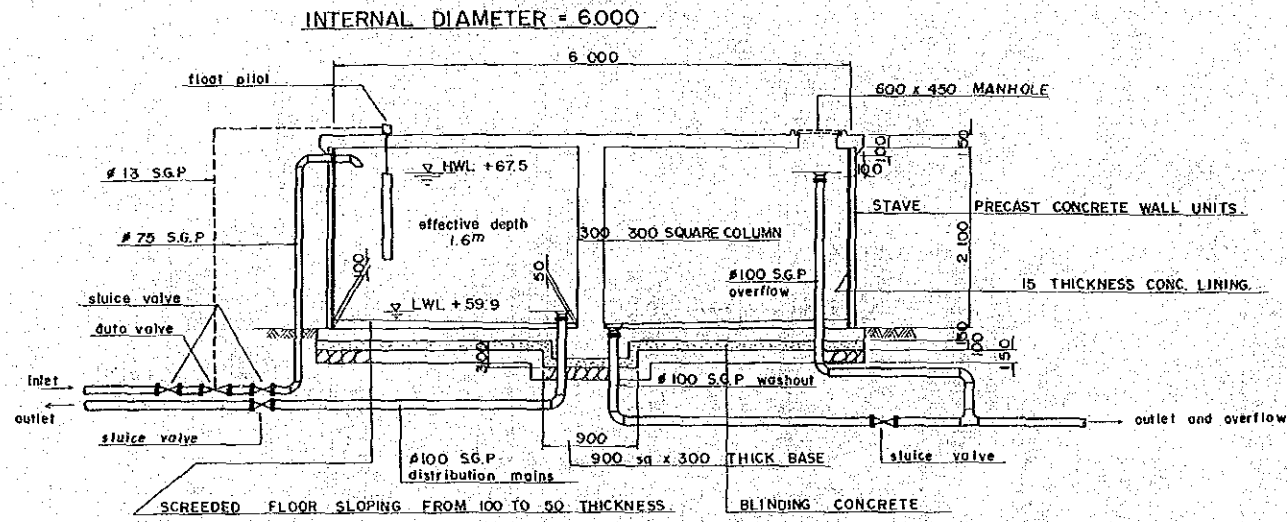
FIJI

BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: DISTRIBUTION TANK
(HUME'S TANK)

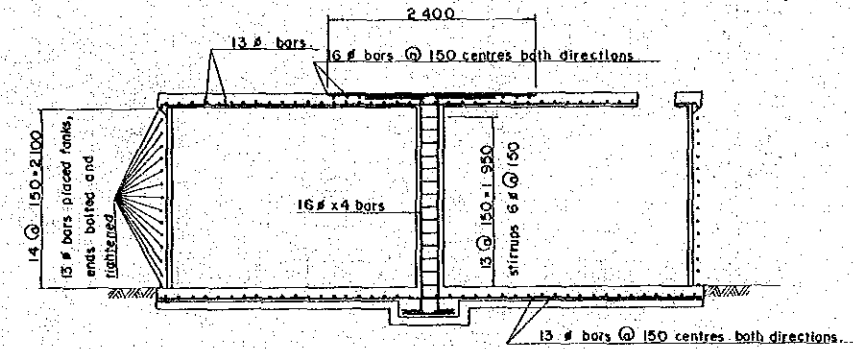
DWG. NO: 8 SCALE: 1/40, 1/10 DATE:

JAPAN INTERNATIONAL COOPERATION AGENCY

B-B SECTION

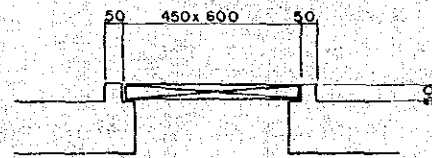


A-A SECTION



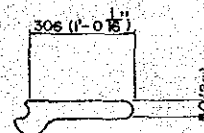
SECTION THRU MANHOLE

S = 1/10



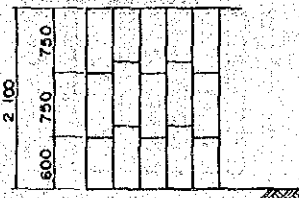
STAVE DETAIL

S = 1/10



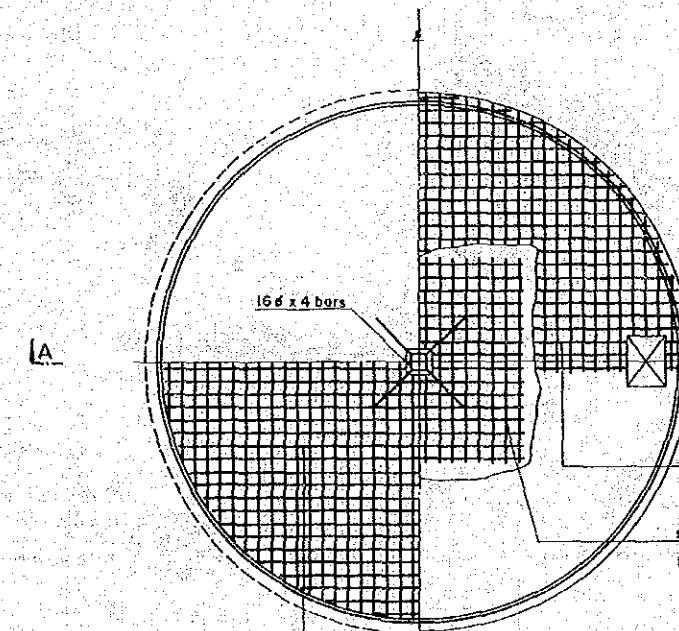
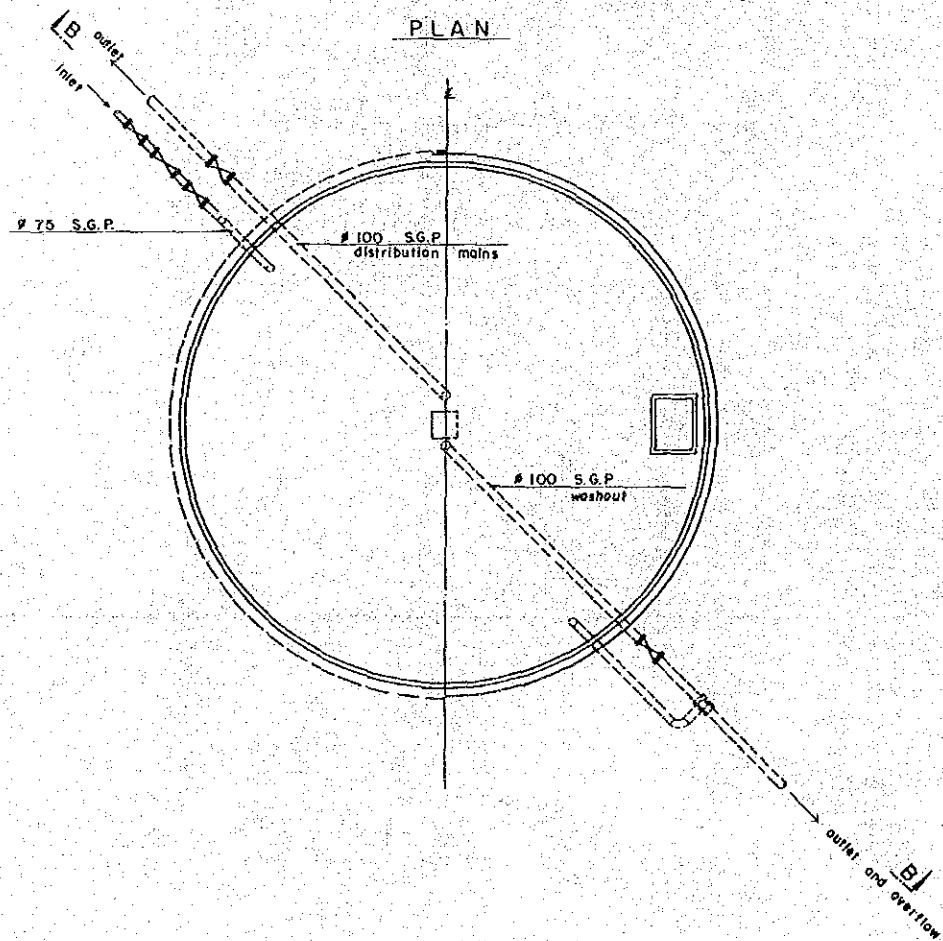
STANDARD LENGTH 600 (2'-0")
750 (2'-6")

S = 1/40



HALF FLOOR PLAN

HALF ROOF PLAN



steel in bottom face of floor slab 13 # @ 150 crs both ways.

steel in top face of floor slab 16 # @ 150 crs both ways.

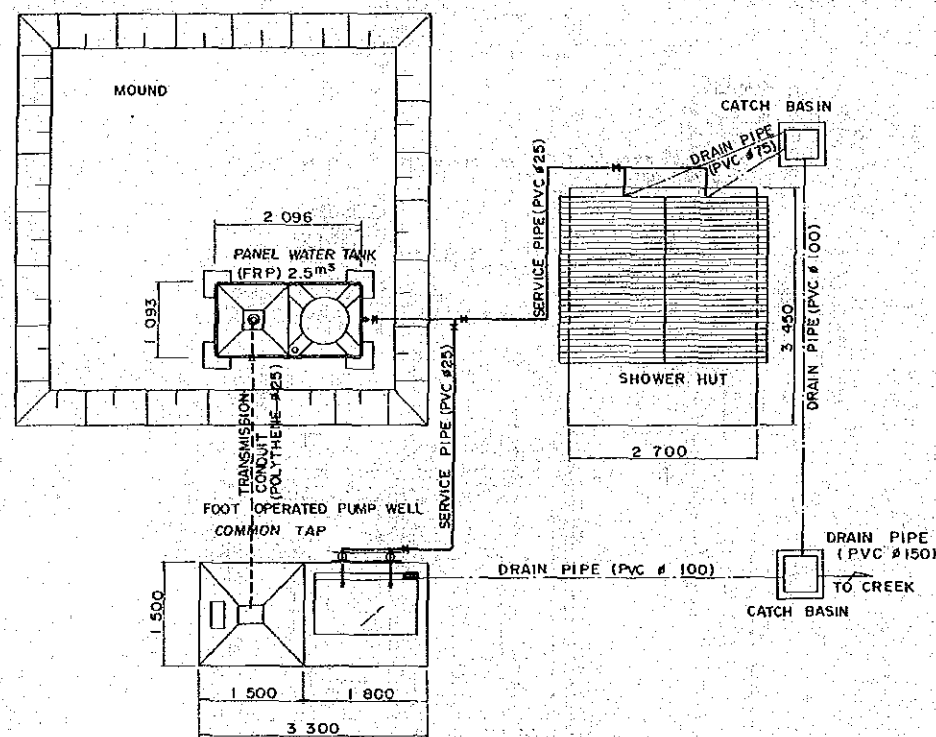
steel is symmetrical about A-A

NOTES

- CONCRETE MIX: COARSE AGGREGATE / SAND / CEMENT 4 : 2 : 1 BY VOLUME
6 : 3 : 1 BY VOLUME FOR BLINDING CONCRETE.
- RUBBLE STONE FOUNDATION DIA. 50~100

VILLAGE WATER SUPPLY SYSTEM

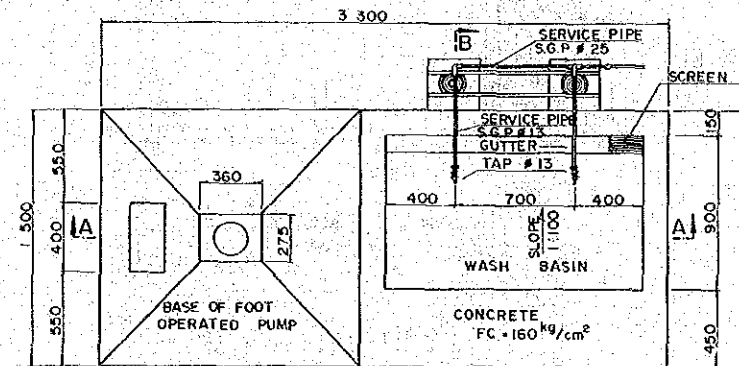
GENERAL PLAN
S = 1/50



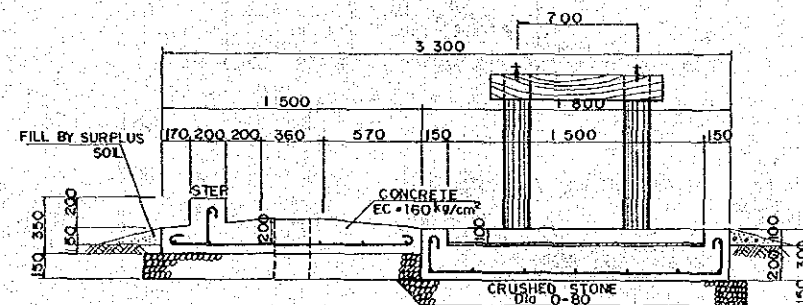
DETAIL OF FOOT OPERATED PUMP WELL & COMMON TAP

S = 1/20

PLAN



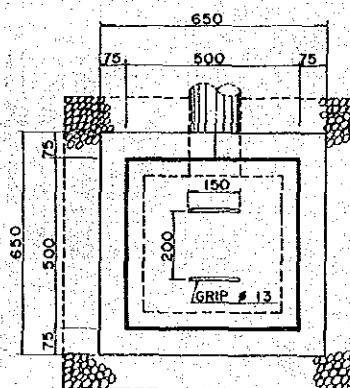
SECTION A-A



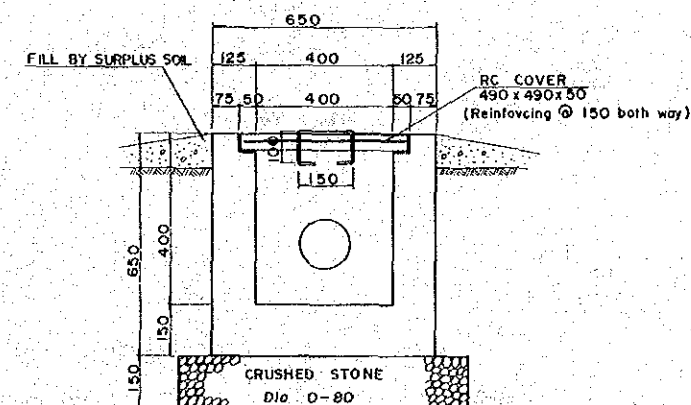
DETAIL OF CATCH BASIN

S = 1/10

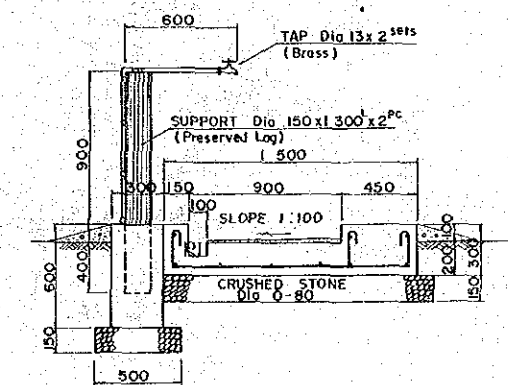
PLAN



PROFILE

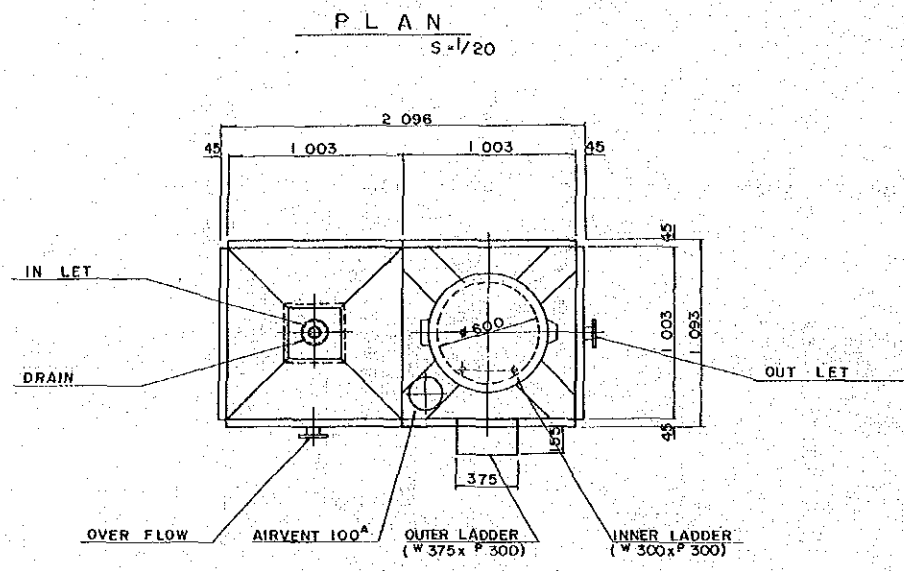


SECTION B-B

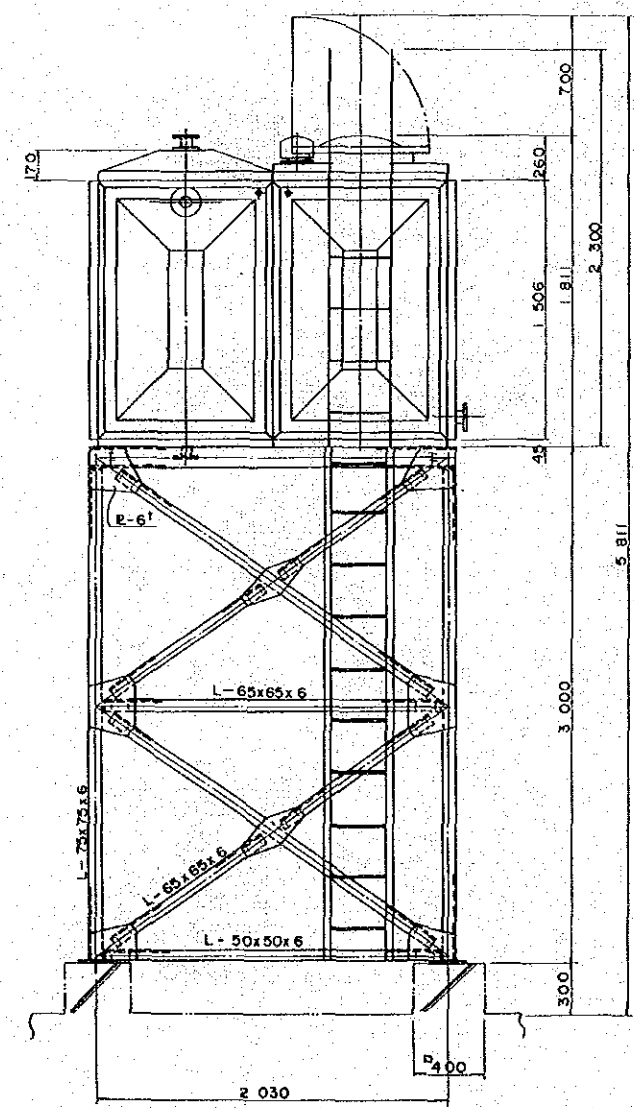


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BASIC DESIGN STUDY PHASE (II)		
RURAL WATER SUPPLY DEVELOPMENT		
SYSTEM: DETAIL OF FOOT OPERATED PUMP WELL & COMMON TAP, VILLAGE WATER SUPPLY SYSTEM		
DWG. NO: 9	SCALE: 1/20, 1/50	DATE:
JAPAN INTERNATIONAL COOPERATION AGENCY		

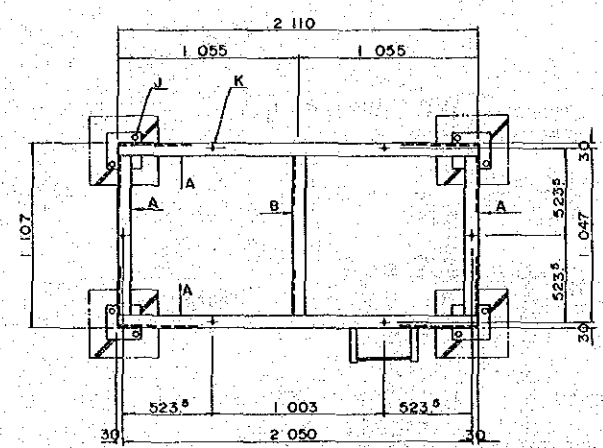
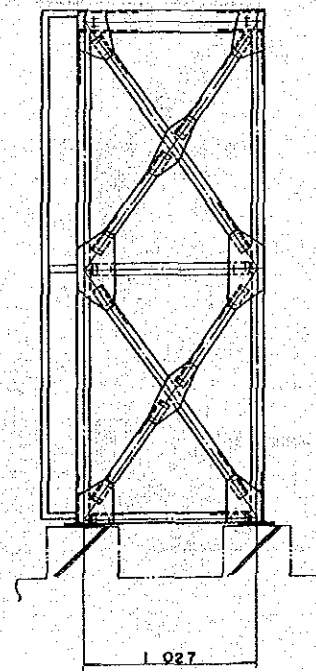
ELEVATED WATER TANK
 S = 1/20



FRONT VIEW
 S = 1/20



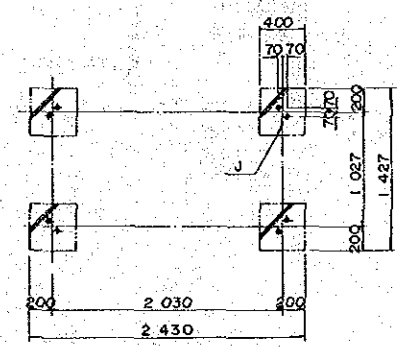
SIDE VIEW
 S = 1/20



STEEL FOUNDATION NOTE

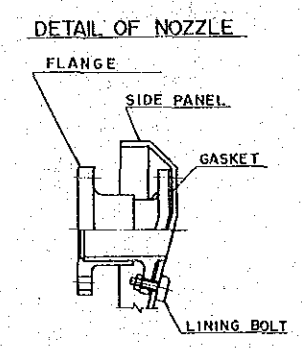
A	C-125 x 65 x 6
B	L-65 x 65 x 6
K	6-M12 SET BOLTS
J	8-M20 ANCHOR BOLTS

ANCHOR BOLTS DWG

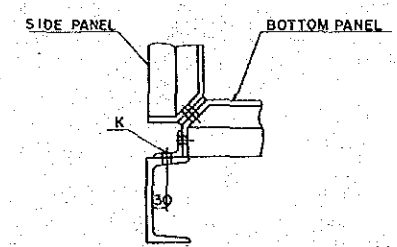


NOTE

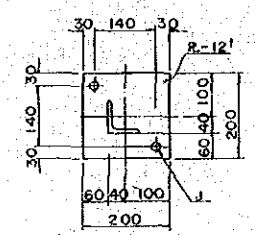
1. TANK COLOUR IS IVORY.
2. THE STEEL FRAMEWORK SHOULD BE CONSTRUCTED WITH CROSSMEMBERS PROPERLY LOCATED AND SHOULD BE CARED ABOUT THE LEVEL.
3. STANDARD NOZZLES ARE MADE OF PVC. (JIS 10 K).
4. STEEL FRAMEWORK IS OUT OF SUPPLY.



DETAIL OF ANCHOR SET



DETAIL OF BASE PLATE



FRP PANEL TANK
SIZE (1 x 2 x 1.5 ^H)

SHOWER HOUSE s = 1/50

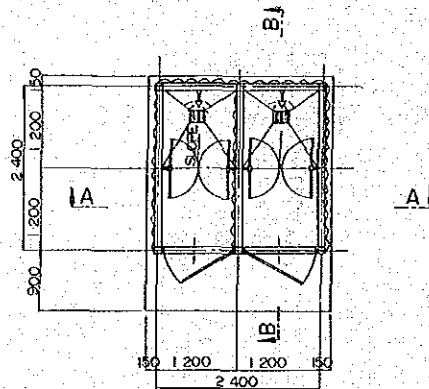
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BASIC DESIGN STUDY PHASE (II)
RURAL WATER SUPPLY DEVELOPMENT
SYSTEM: SHOWER HOUSE

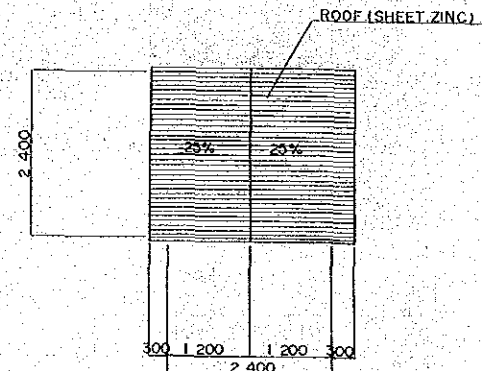
DWG. NO: 1.1 SCALE: 1/50 DATE:

JAPAN INTERNATIONAL COOPERATION AGENCY

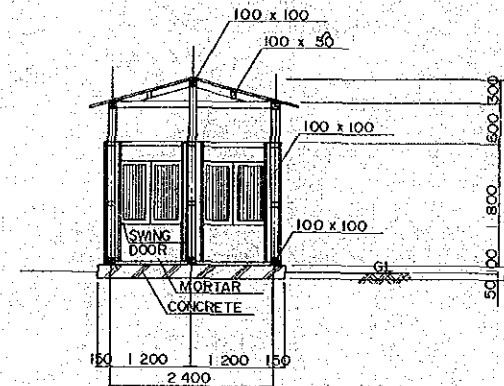
GROUND FLOOR PLAN s = 1/50



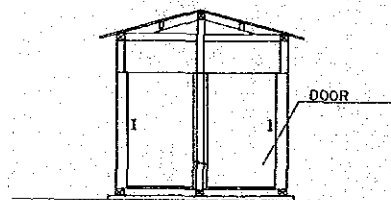
ROOF PLAN s = 1/50



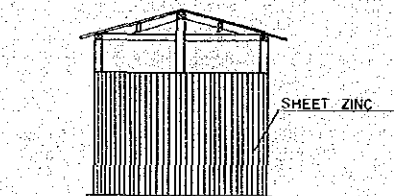
A-A SECTION s = 1/50



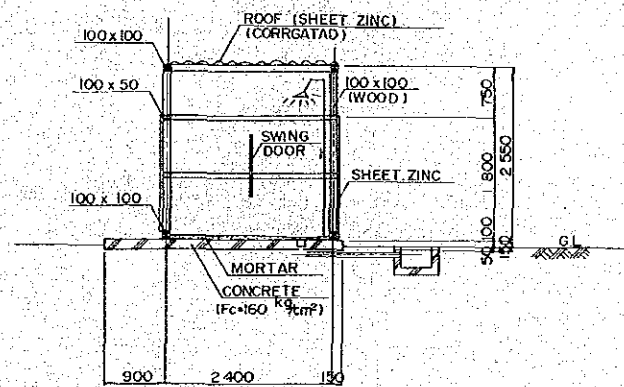
FRONT SIDE VIEW s = 1/50



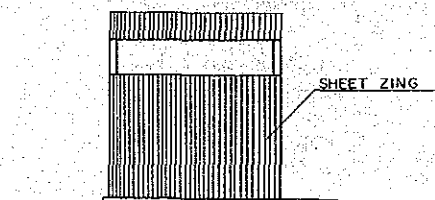
BACK SIDE VIEW s = 1/50



B-B SECTION s = 1/50



LEFT SIDE VIEW s = 1/50



RIGHT SIDE VIEW s = 1/50

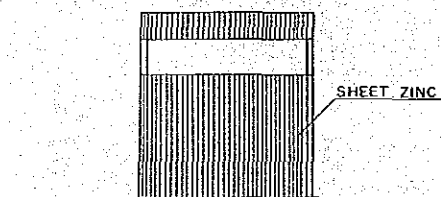


TABLE OF QUANTITIES

CONCRTE	Fc = 160 kg/cm ²	1.09 m ³
MORTAR	50~30 mm	5.06 m ²
SHEET ZINC (CORRUGATED)	0.27cm	9.15 m ²
SHEET ZINC	0.27cm	4.10 m ²
WOOD		0.61 m ³

JICA