

7 *References*

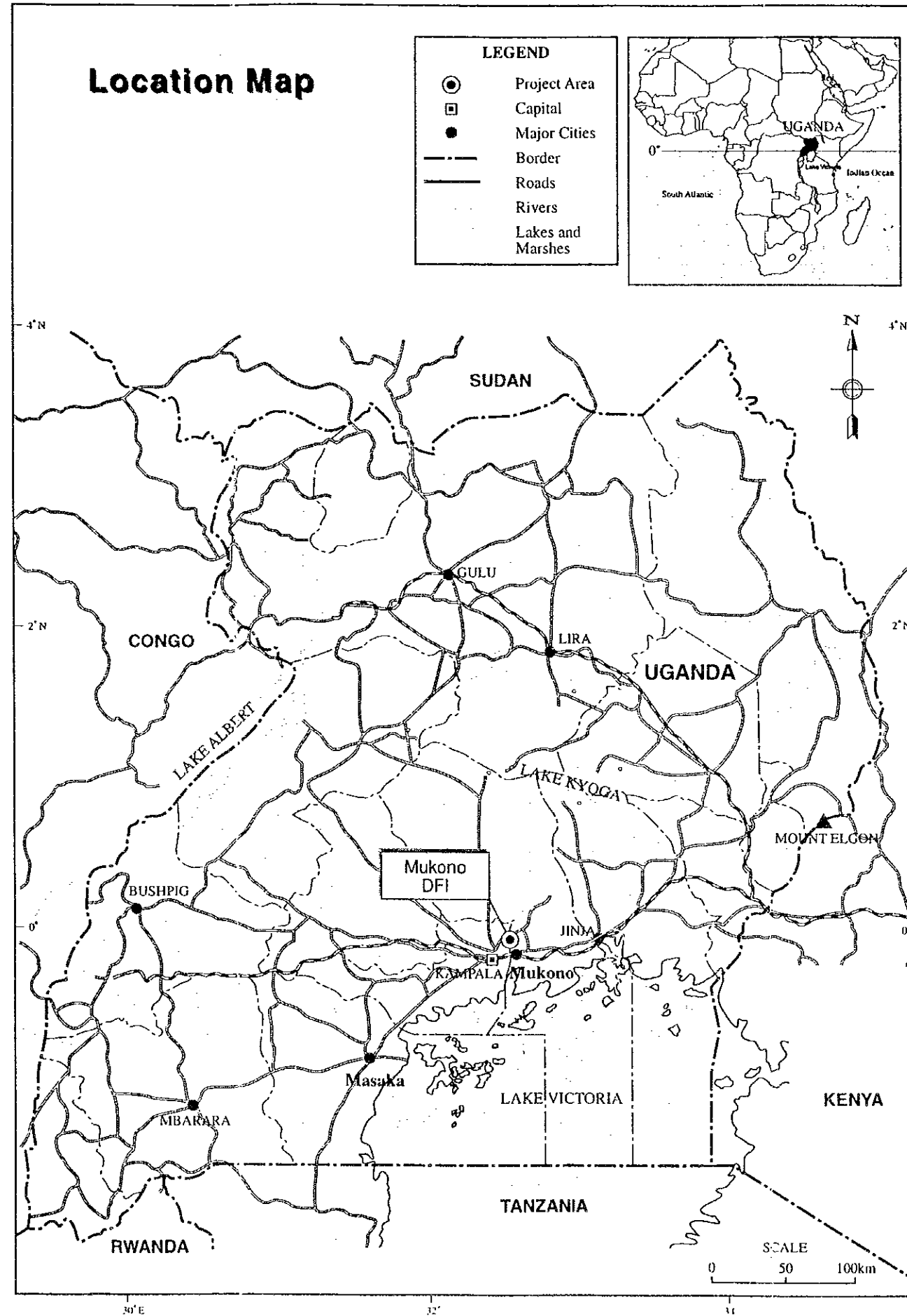
7 References

No.	Name of Documents	Year Issued	Publisher
1.	Fiance Bill 1997.	1997	
2.	Annual Report Volume 4-1994/95 Coffee Season	Oct., 1994 - Sep., 1995	Uganda Coffee Development Authority.
3.	Operationization of the Medium-term Plan for Modernization of Agriculture - 1996/97-2000/2001	April, 1997	Ministry of Planning and Economic Development Agricultural Policy Committee
4.	Reading Material, Technical Workshops	March, 1996	Directorate of Agricultural Extension Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)
5.	Ministry Corporate Plan 1995/96-1997/98 Draft	July, 1995	Department of Agricultural Planning
6.	Agricultural Extension Project (AEP) Work Plan and Programme Vol.1	Jan.,- Dec., 1997	MAAIF
7.	The National Agricultural Extension Programme (NAEP)	March, 1997	MAAIF
8.	Project for Farmers' Training and Development of Agriculture, Agro-Forestry and Animal Husbandry in the West Nile region, UGANDA 1480/ACAV/HG FINAL REPORT	December., 1995	A.C.A.V.
9.	Road Design Manual	November., 1994	Ministry of Works, Transport & Communications
10.	Background to the Budget 1997/98	Junc, 1997	Ministry of Planning and Economic Development.
11.	Rehabilitation and Development Plan 1993/94-1995/96 Vol. 1	December, 1993	Ministry of Finance
12.	Uganda Building Regulations	1968	The Local Government Order
13.	Livestock Technical Hand book		Department of Animal Production MAAIF
14.	Zero Grazing (A Guideline for Extension Workers)	1984	Ministry of Agriculture and Livestock Development

8 Basic Design Drawings

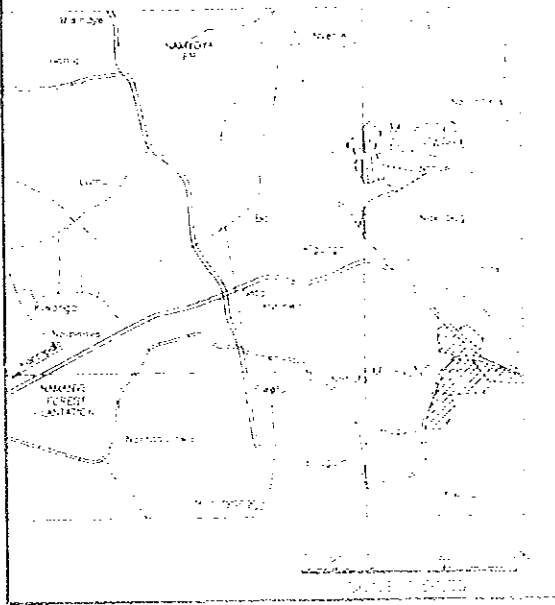
List of Basic Design Drawings

No.	Drawing No.	Drawing Titles
Mukono DFI		
Main Plan (MP)		
1	MUMP-01	Location Map
2	MUMP-02	General Layout Plan
Training Buildings (TB)		
3	MUTB-01	General Plan of Buildings
4	MUTB-02	Main Hall
5	MUTB-03	Classroom
6	MUTB-04	Dormitory
7	MUTB-05	Kitchen and Dining
Agricultural Facilities (AF)		
8	MUAF-01	General Plan of Agricultural Facilities
9	MUAF-02	Net Shade House
10	MUAF-03	Cowshed
11	MUAF-04	Piggery
12	MUAF-05	Chicken House (Broiler Use)
13	MUAF-06	Chicken House (Laying Hen Use)
14	MUAF-07	Rabbit Hutch
15	MUAF-08	Store
Farm Road (FR)		
16	MUFR-01	General Plan of Farm Road
17	MUFR-02	Typical Cross Section of Farm Road
18	MUFR-03	Typical Road Culvert
Water Supply (WS)		
19	MUWS-01	General Plan of Water Supply Facilities
20	MUWS-02	Water Collecting Trench and Pond
21	MUWS-03	Pump Station
22	MUWS-04	Deep Well and Pump Station
23	MUWS-05	Reservoir A
24	MUWS-06	Pump Station (Reservoir A)
25	MUWS-07	Reservoir B
26	MUWS-08	Elevated Water Tank (Drinking Water Use)
27	MUWS-09	Elevated Water Tank (Domestic Water Use)
Irrigation Facilities (IF)		
28	MUIF-01	General Plan of Irrigation Facilities and Flash/Check/Air-Release Valves and Irrigation Faucet
Land Reclamation (LR)		
29	MULR-01	General Plan of Land Reclamation



THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Main Plan Location Map			
DATE	OCT. 1997	DRAWING NO.	MUMP-01
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

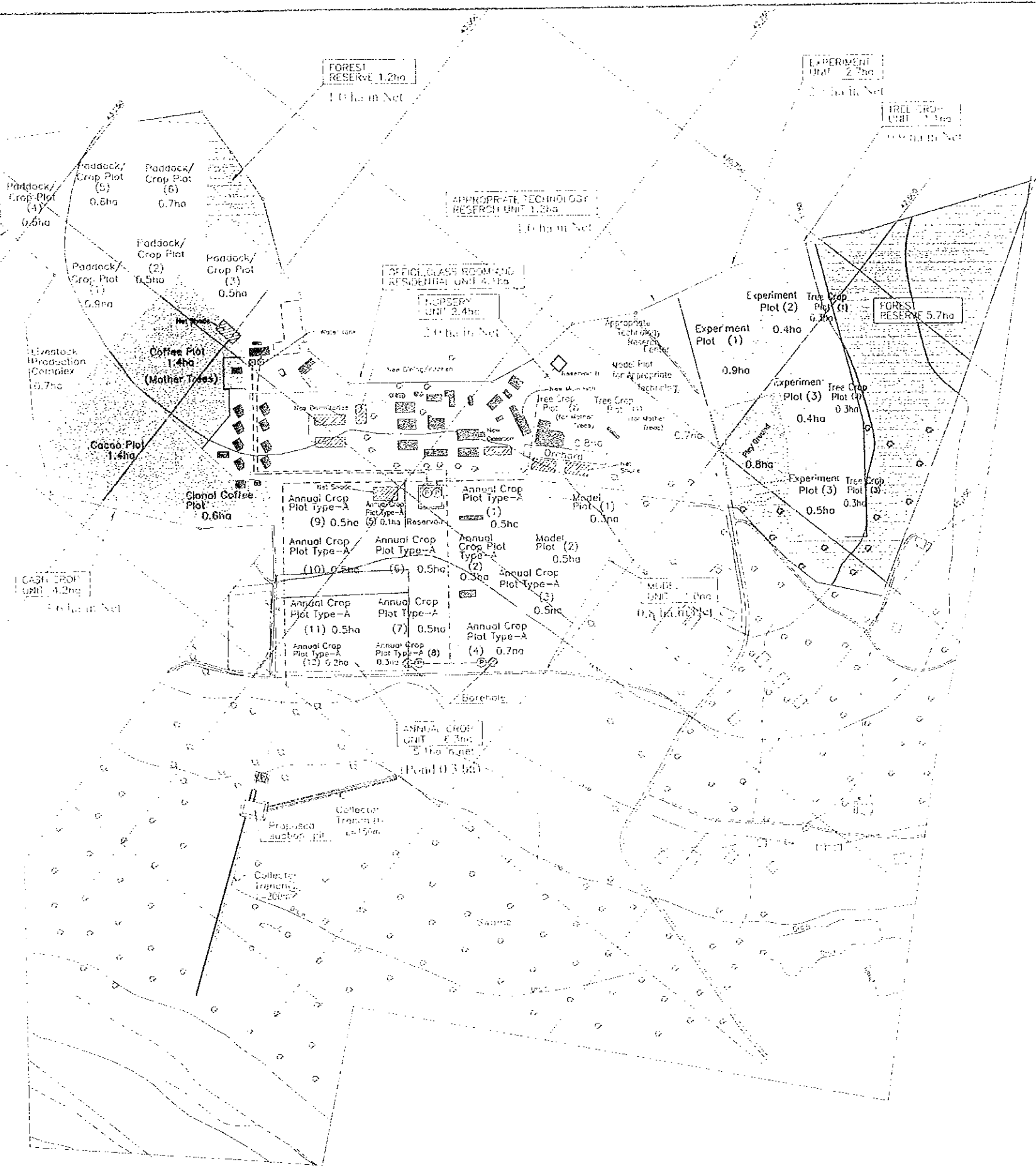
KEY MAP



LEGEND

- 1. Office Building
- 2. Residential Unit
- 3. Annual Crop Plot
- 4. Experiment Plot
- 5. Livestock Compound
- 6. Forest Reserve
- 7. Nursery
- 8. Model Plot
- 9. Cash Crop Unit
- 10. Forest Reserve
- 11. Annual Crop Plot
- 12. Experiment Plot
- 13. Livestock Compound
- 14. Forest Reserve
- 15. Nursery
- 16. Model Plot
- 17. Cash Crop Unit
- 18. Forest Reserve
- 19. Annual Crop Plot
- 20. Experiment Plot
- 21. Livestock Compound
- 22. Forest Reserve
- 23. Nursery
- 24. Model Plot
- 25. Cash Crop Unit
- 26. Forest Reserve
- 27. Annual Crop Plot
- 28. Experiment Plot
- 29. Livestock Compound
- 30. Forest Reserve
- 31. Nursery
- 32. Model Plot
- 33. Cash Crop Unit
- 34. Forest Reserve
- 35. Annual Crop Plot
- 36. Experiment Plot
- 37. Livestock Compound
- 38. Forest Reserve
- 39. Nursery
- 40. Model Plot
- 41. Cash Crop Unit
- 42. Forest Reserve
- 43. Annual Crop Plot
- 44. Experiment Plot
- 45. Livestock Compound
- 46. Forest Reserve
- 47. Nursery
- 48. Model Plot
- 49. Cash Crop Unit
- 50. Forest Reserve

Scale: 1:2500



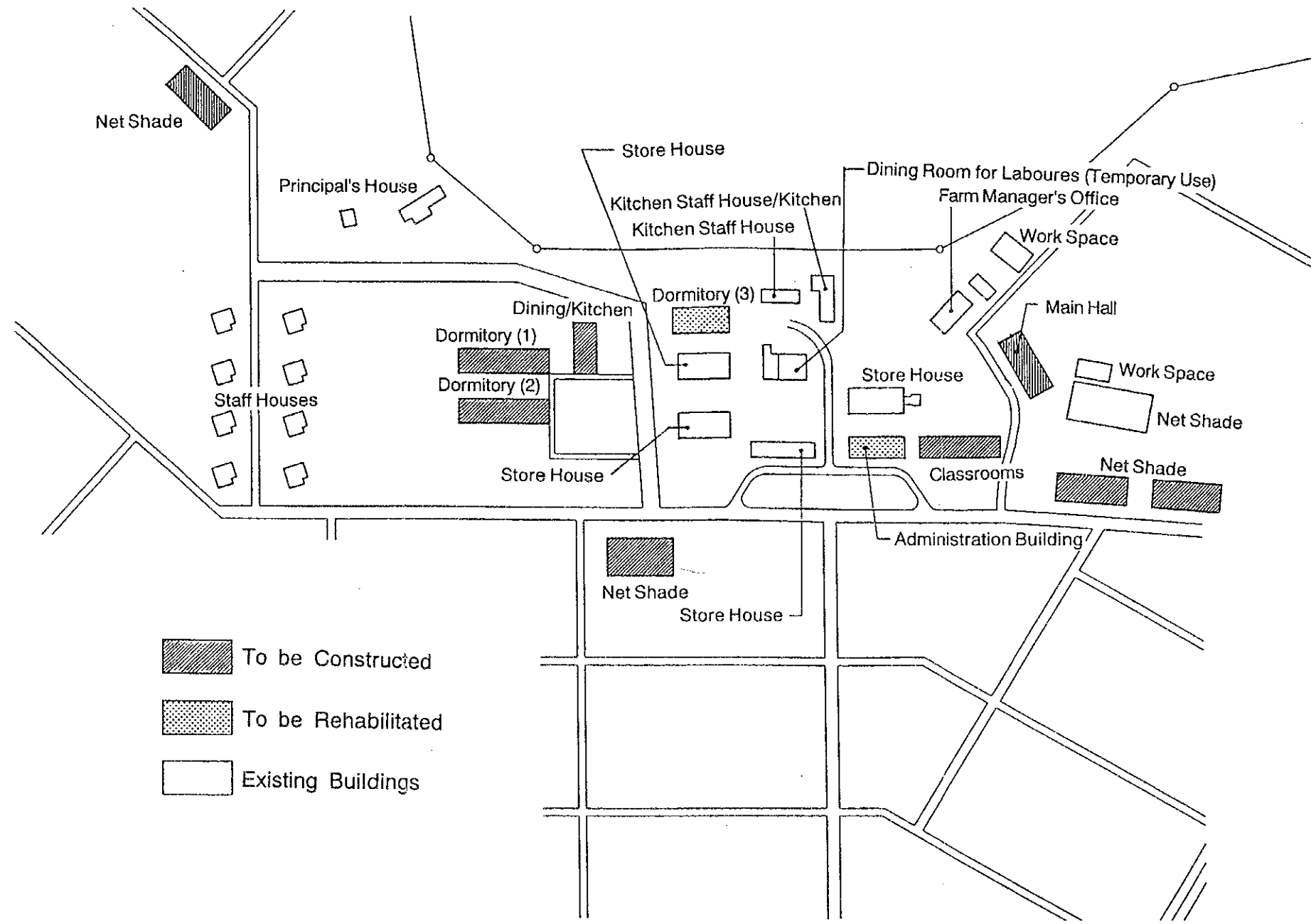
LAND USE PLAN

- 1. Office Building
- 2. Residential Unit
- 3. Annual Crop Plot
- 4. Experiment Plot
- 5. Livestock Compound
- 6. Forest Reserve
- 7. Nursery
- 8. Model Plot
- 9. Cash Crop Unit
- 10. Forest Reserve
- 11. Annual Crop Plot
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- 13. Livestock Compound
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- 34. Forest Reserve
- 35. Annual Crop Plot
- 36. Experiment Plot
- 37. Livestock Compound
- 38. Forest Reserve
- 39. Nursery
- 40. Model Plot
- 41. Cash Crop Unit
- 42. Forest Reserve
- 43. Annual Crop Plot
- 44. Experiment Plot
- 45. Livestock Compound
- 46. Forest Reserve
- 47. Nursery
- 48. Model Plot
- 49. Cash Crop Unit
- 50. Forest Reserve

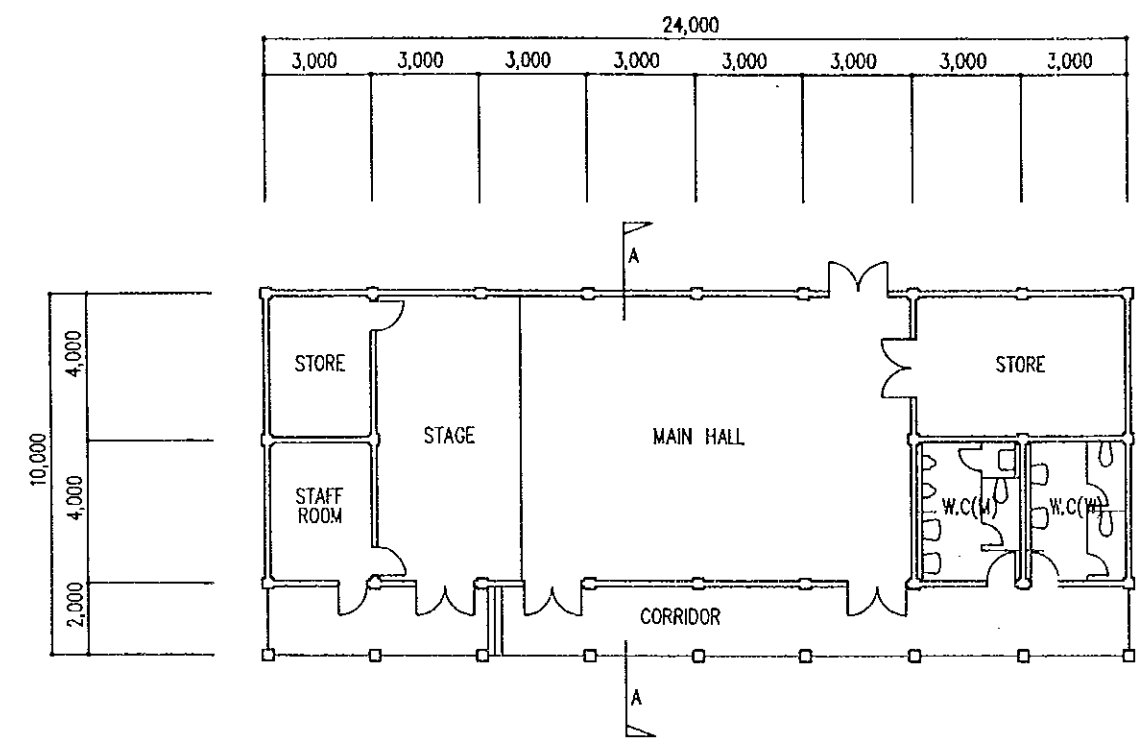
THE REPUBLIC OF UGANDA
 THE PROJECT FOR IMPROVEMENTS
 AGRICULTURAL EXTENSION AND
 TRAINING INSTITUTES

TITLE OF DRAWING
 Main Plan
 General Layout Plan

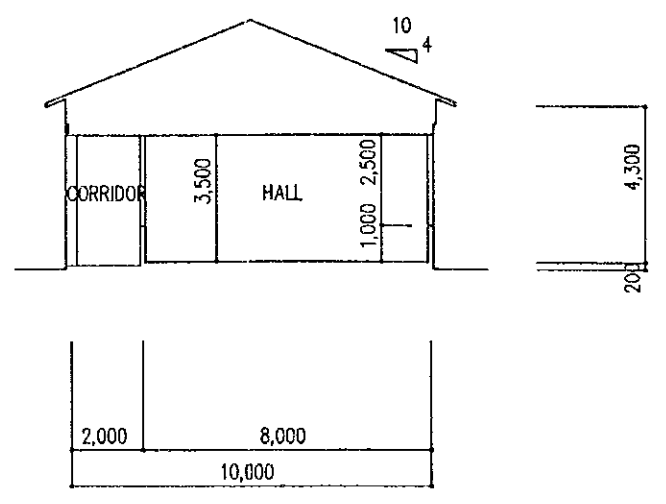
DATE | OCT. 1997 | DRAWING NO. | MJMP/97
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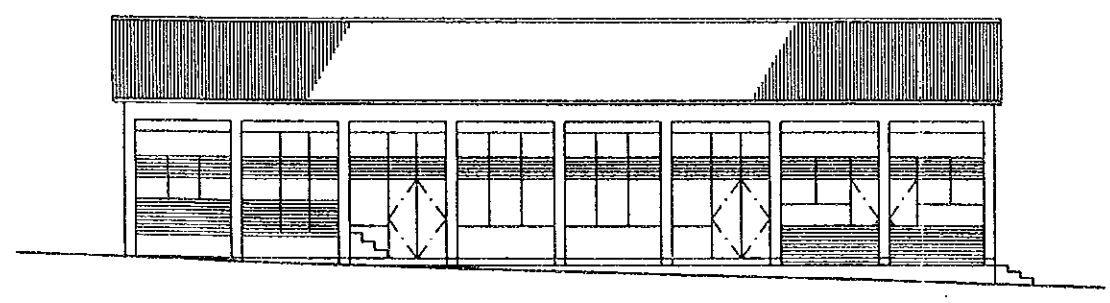
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NIPPON KOEI CO., LTD. TOKYO, JAPAN			



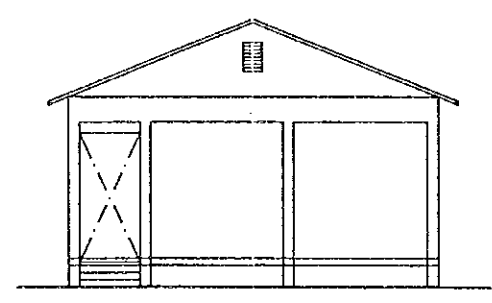
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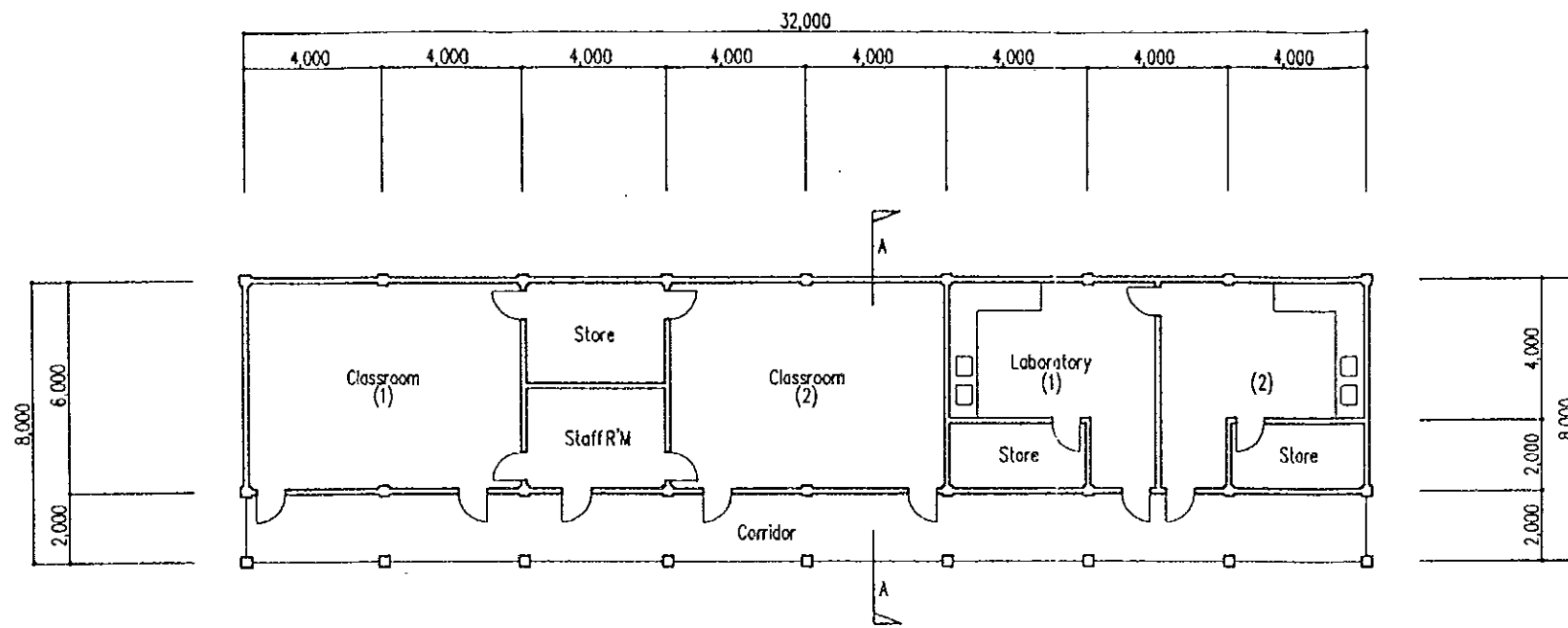


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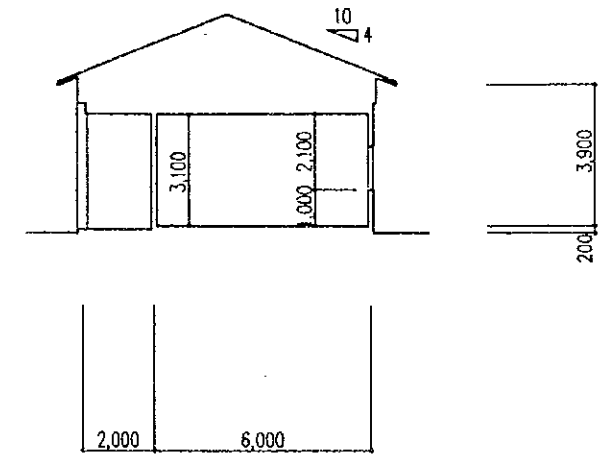


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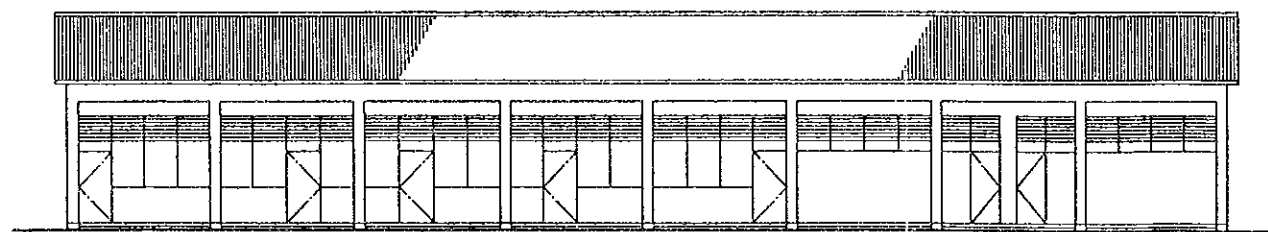
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NIPPON KOEI CO., LTD. TOKYO, JAPAN			



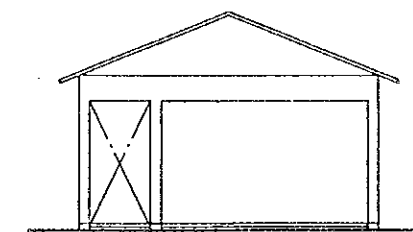
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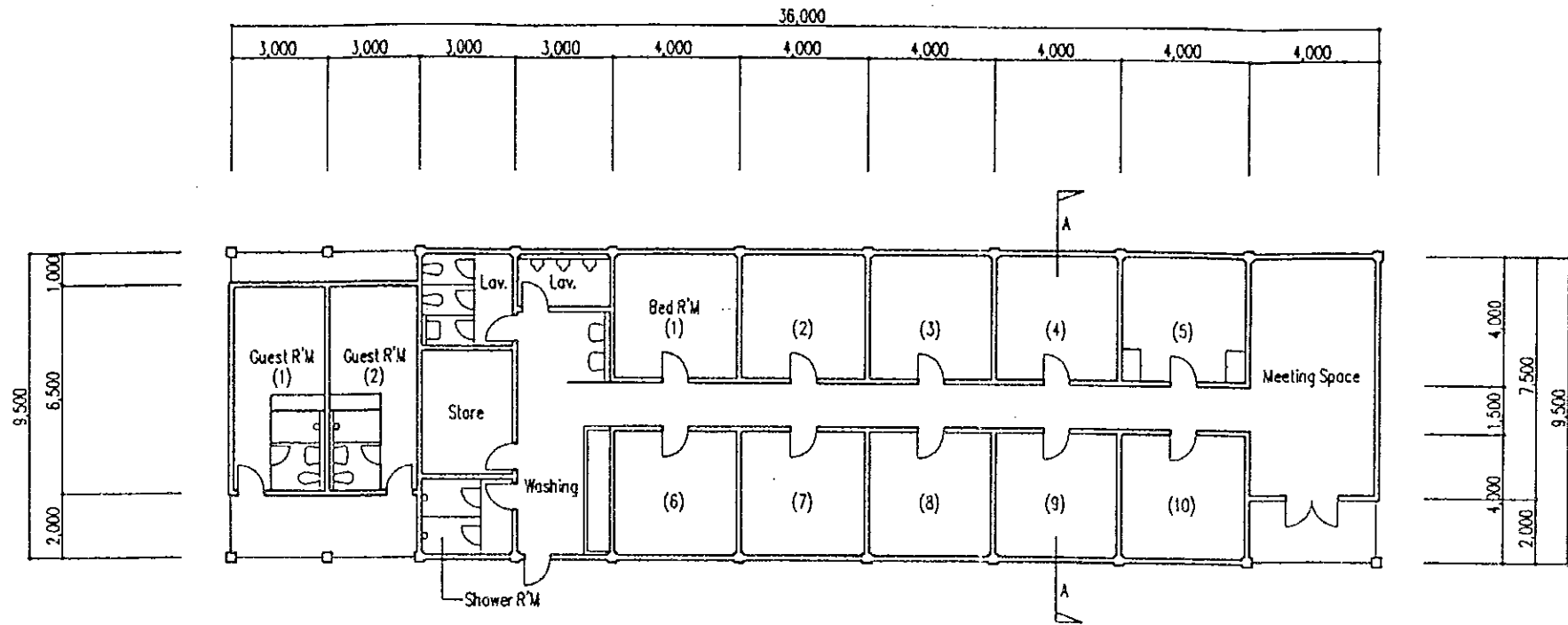


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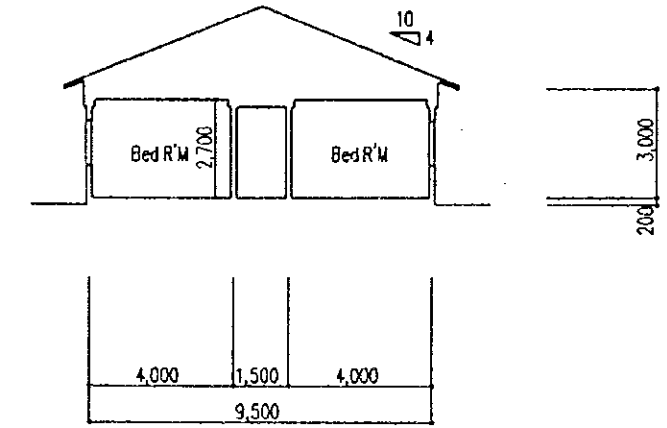


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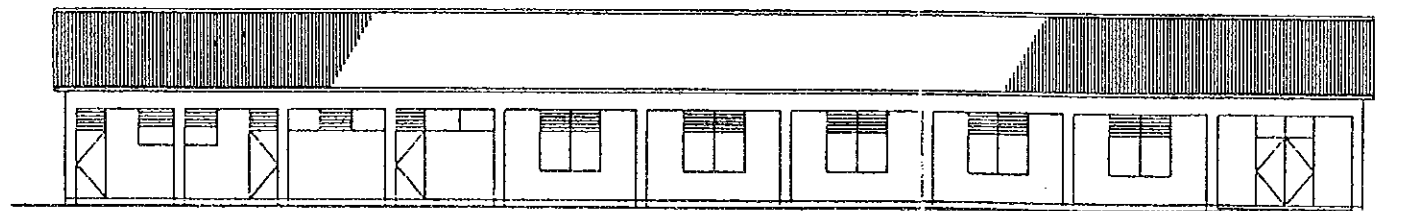
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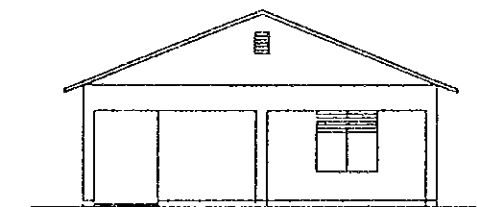
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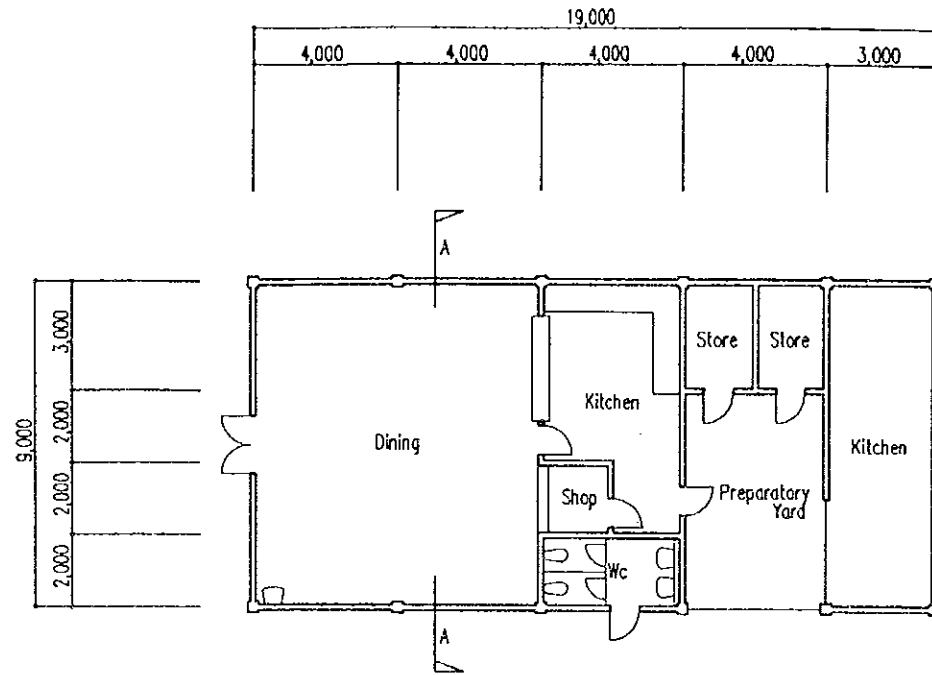


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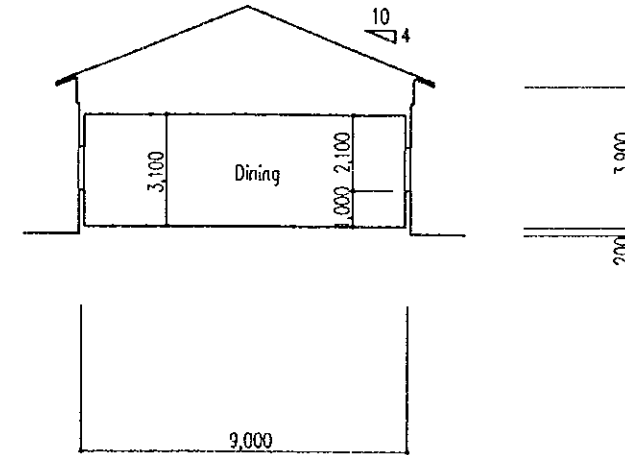


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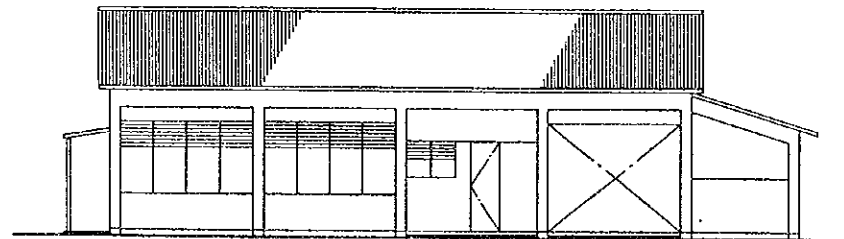
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NIPPON KOEI CO., LTD. TOKYO, JAPAN			



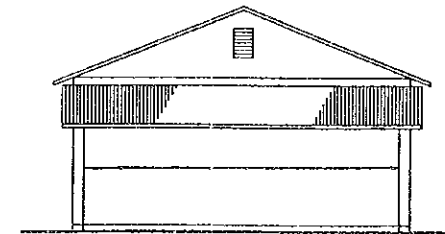
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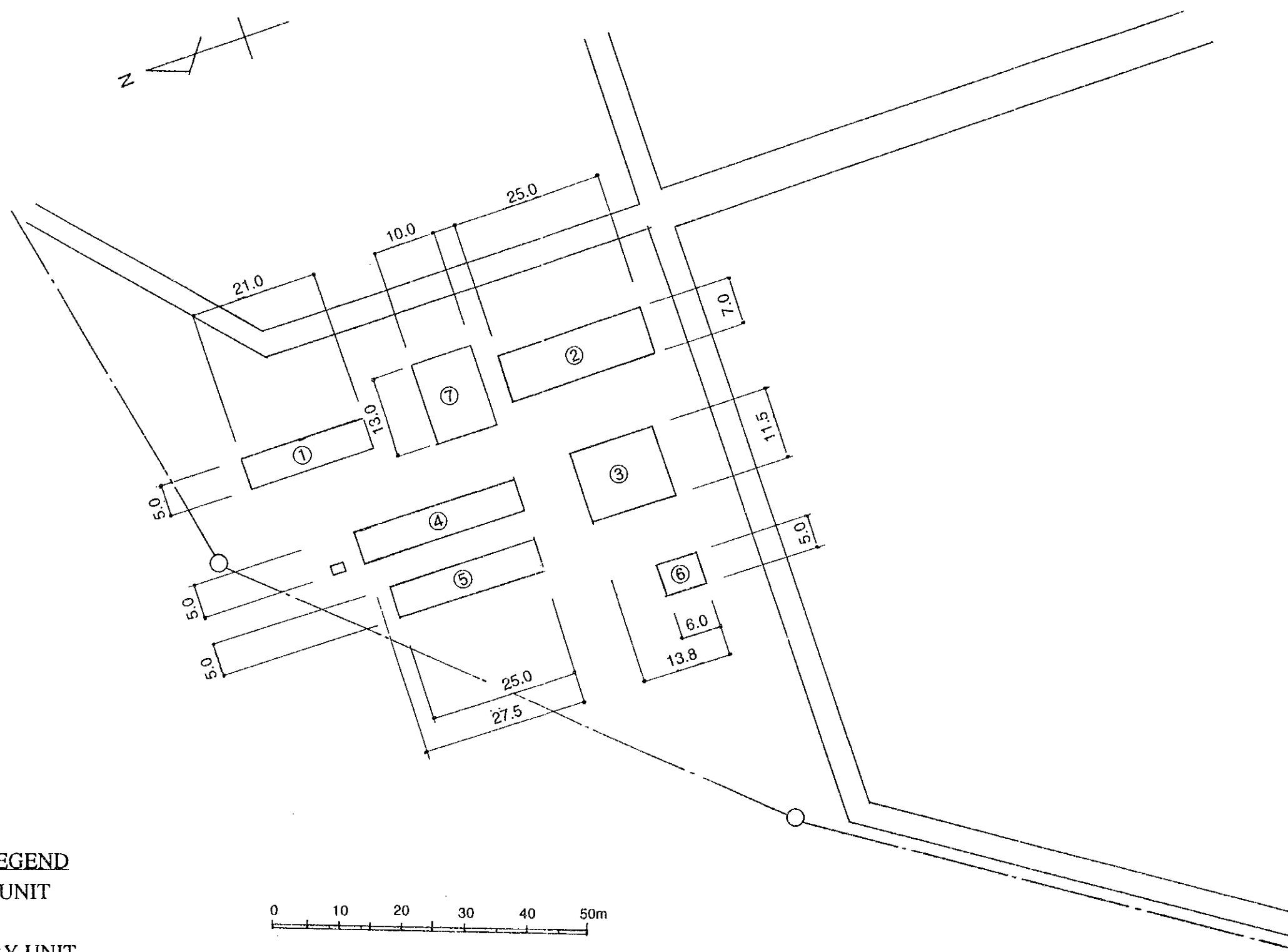


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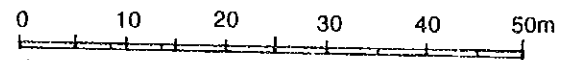
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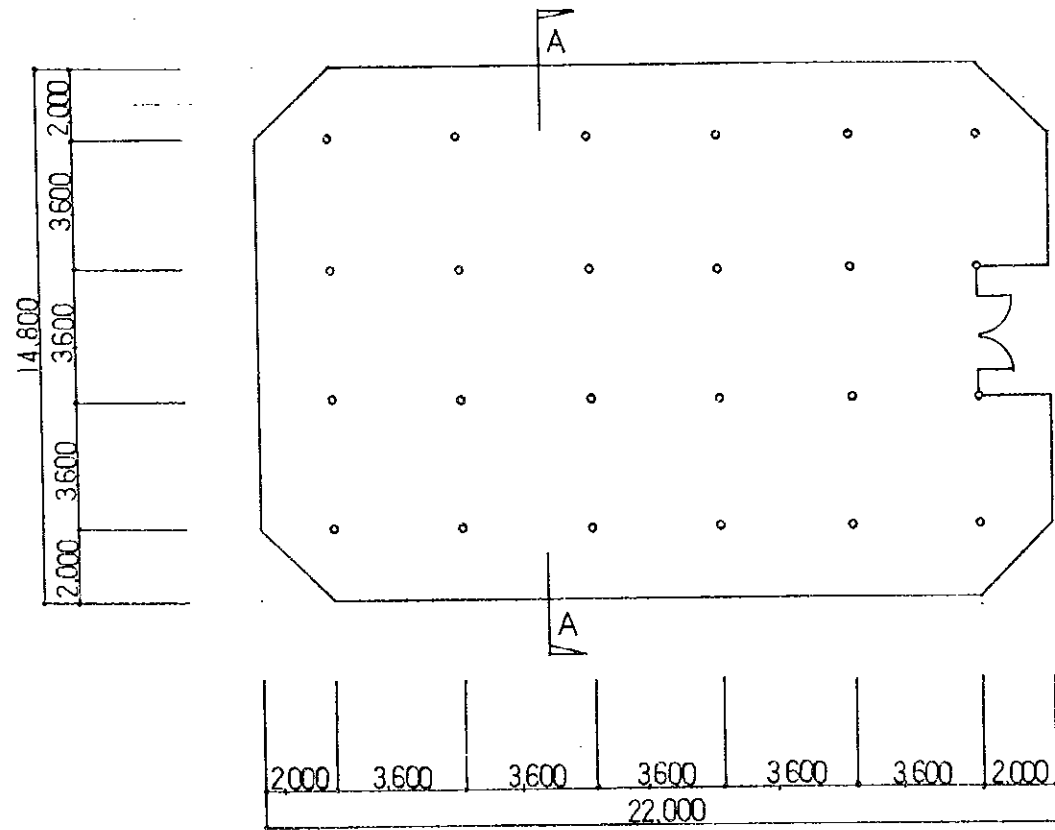


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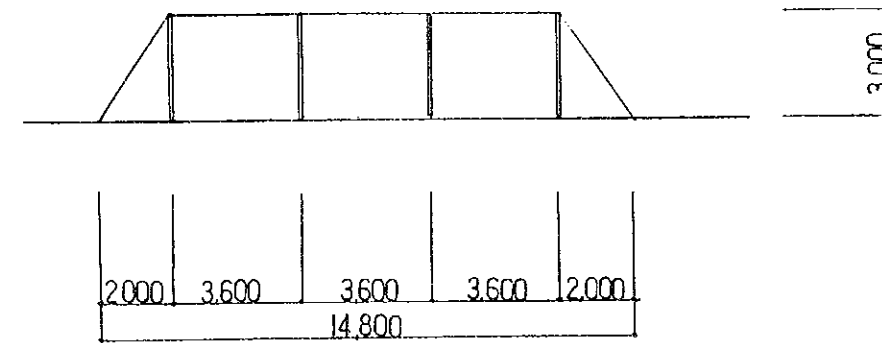
- ① DAIRY UNIT
- ② STORE
- ③ PIGGERY UNIT
- ④ POULTRY UNIT-1
- ⑤ POULTRY UNIT-2
- ⑥ RABBIT UNIT
- ⑦ SUN-DRYING FLOOR



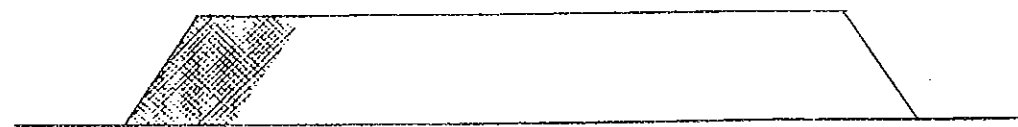
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TITLE OF DRAWING Agricultural Facilities General Plan of Agricultural Facilities			
DATE	OCT. 1997	DRAWING NO.	MUAF-01
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



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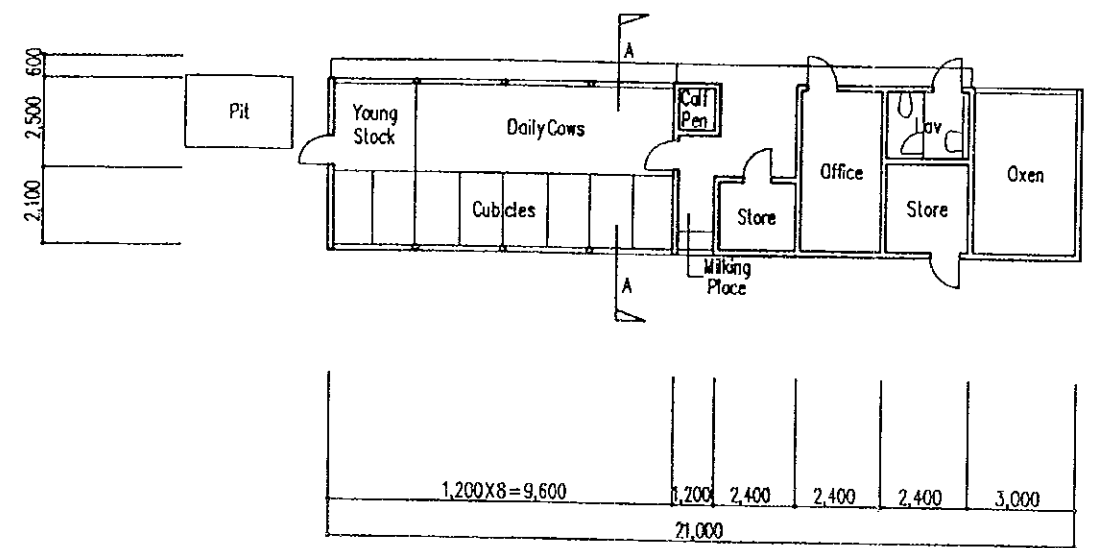


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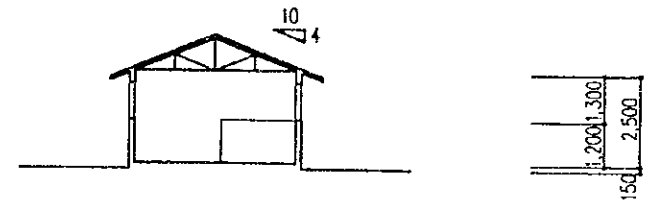


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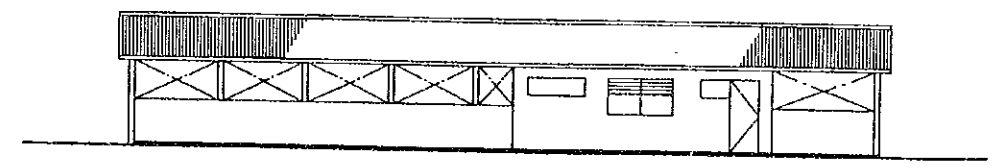
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THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Agricultural Facilities Net Shade House			
DATE	OCT. 1997	DRAWING NO.	MUAF-02
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



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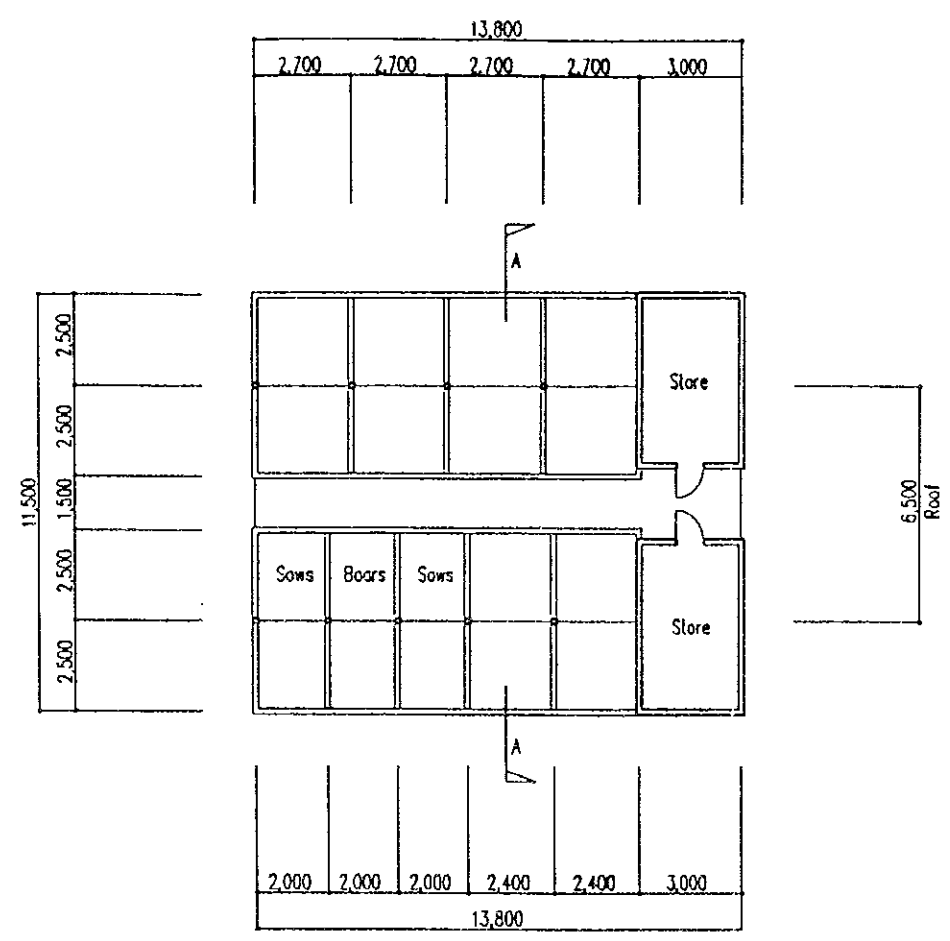


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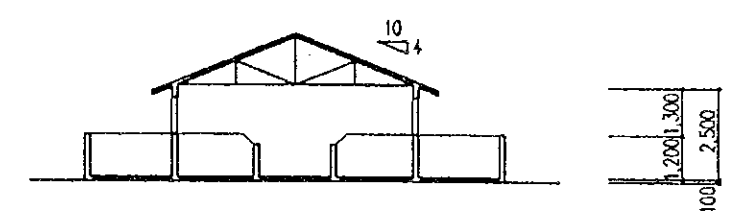


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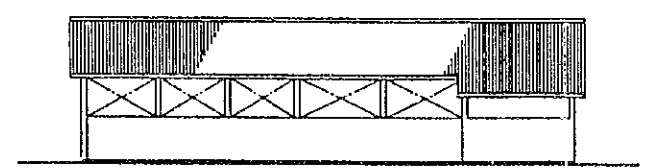
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DATE	OCT. 1997	DRAWING NO.	MUAF-03
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



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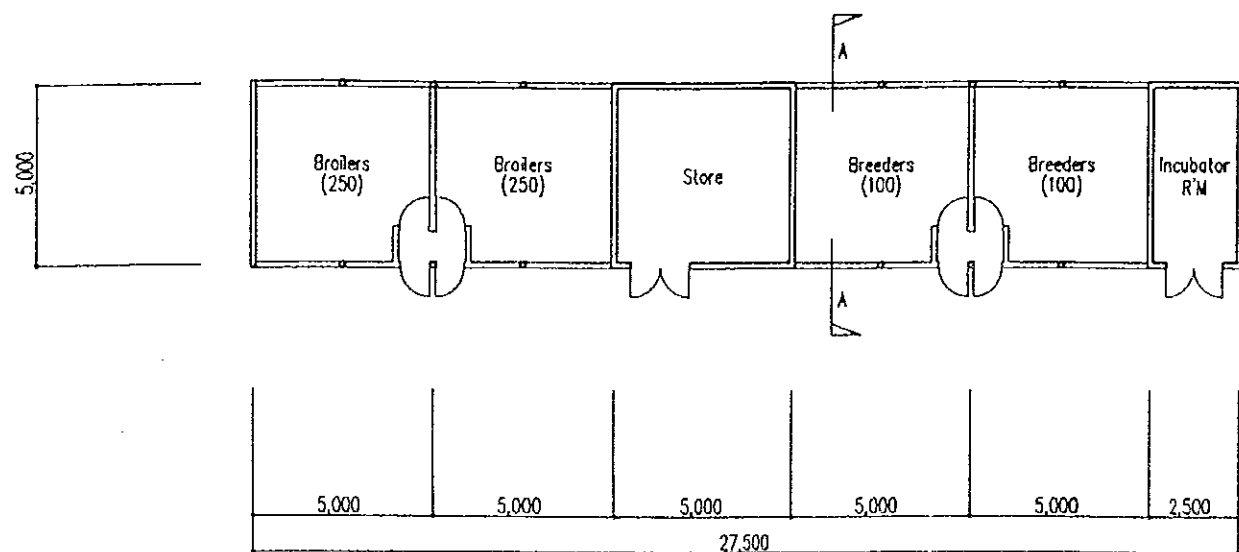


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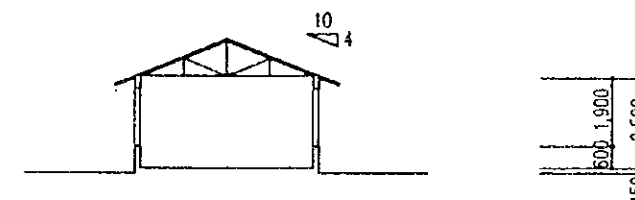
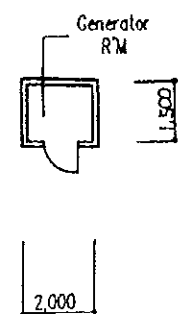


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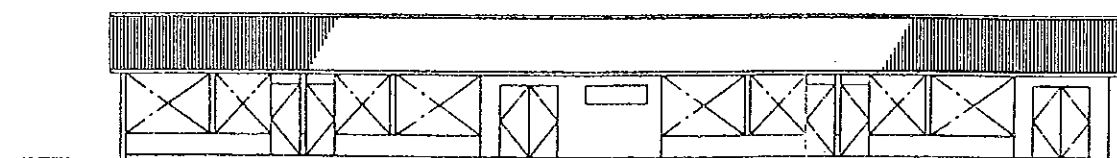
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THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
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DATE	OCT. 1997	DRAWING NO.	MUAF-04
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



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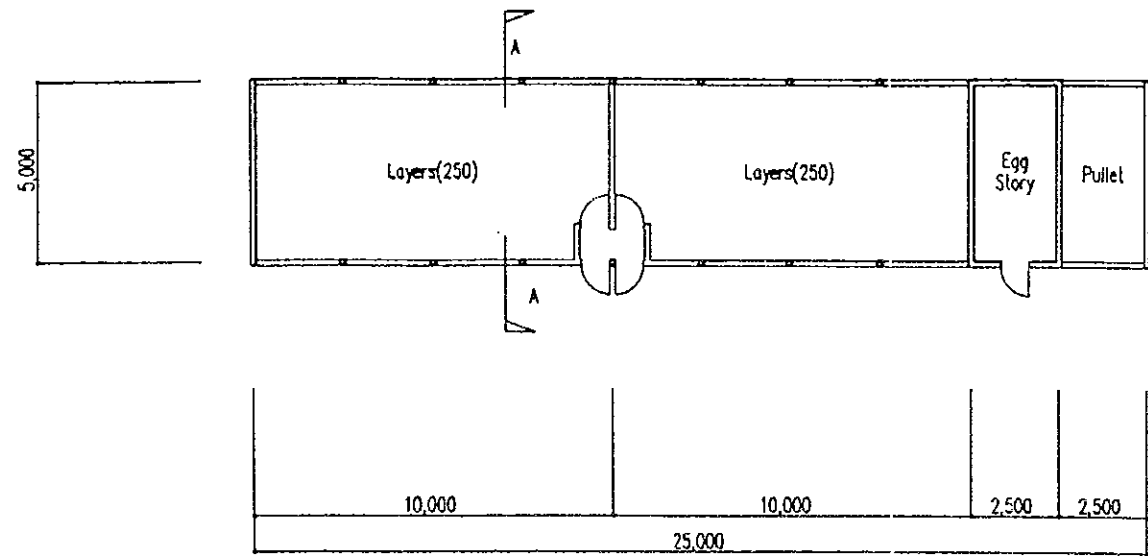


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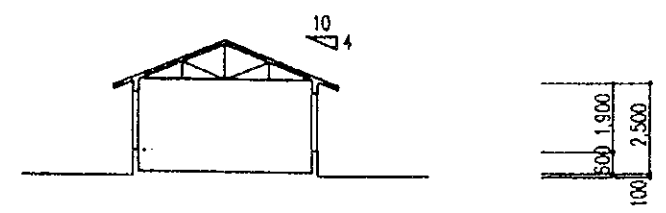


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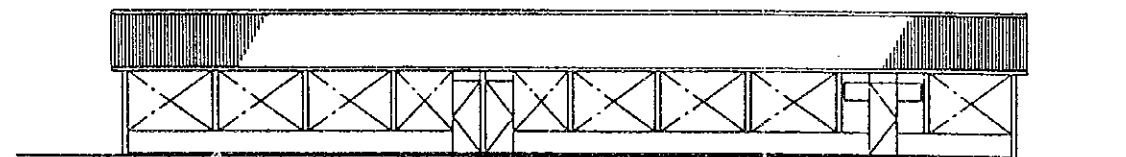
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DATE	OCT. 1997	DRAWING NO.	MUAF-05
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



GROUND FLOOR

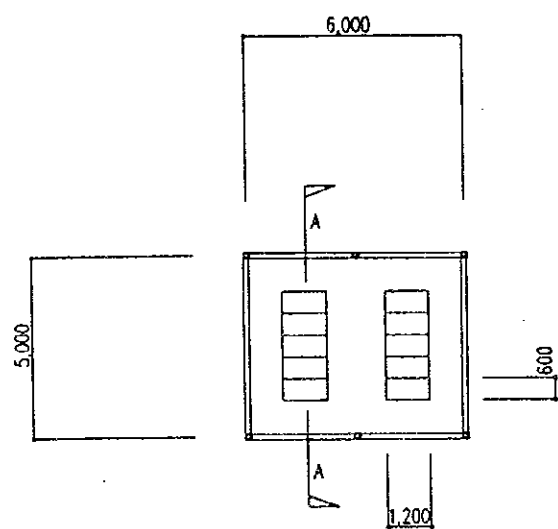


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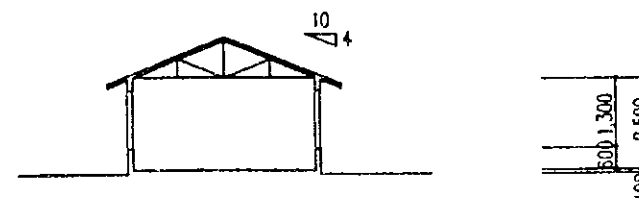


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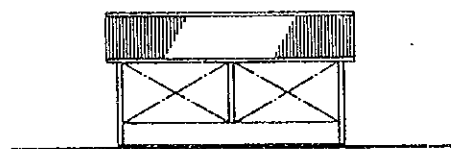
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Agricultural Facilities Chicken House (Laying Hen Use)			
DATE	OCT. 1997	DRAWING NO.	MUAI-06
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



GROUND FLOOR

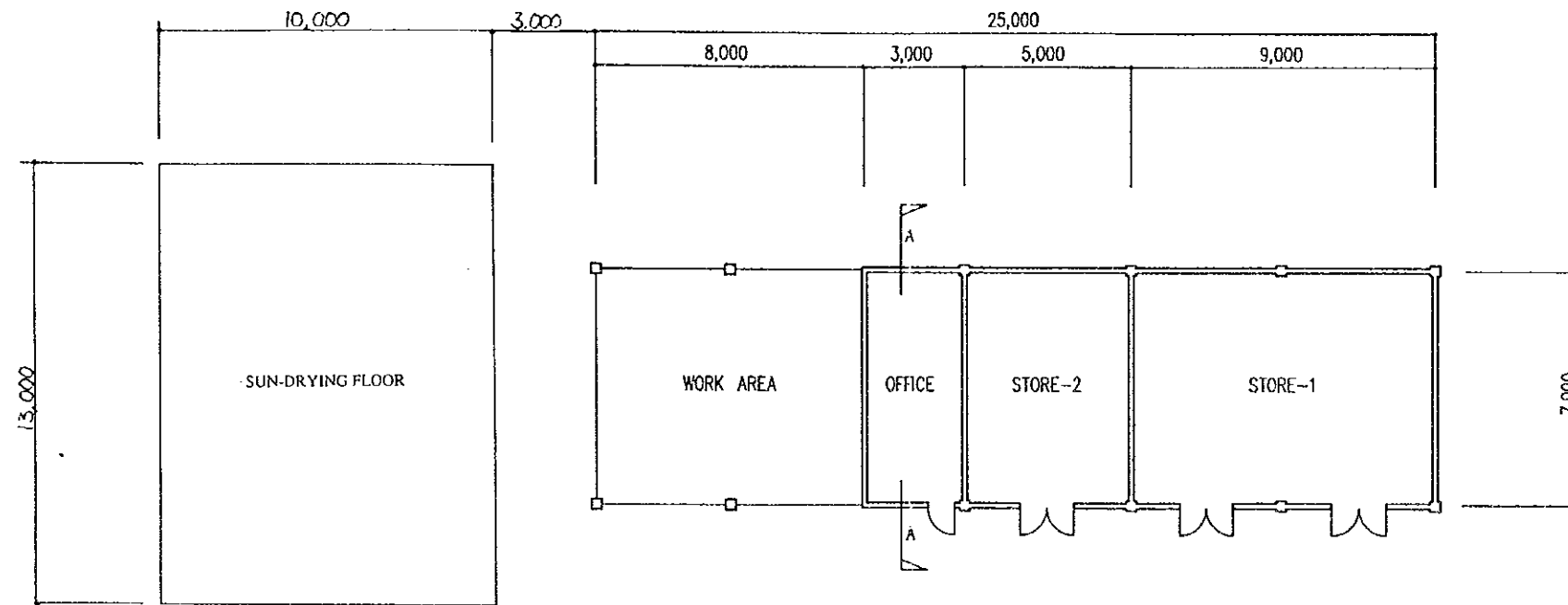


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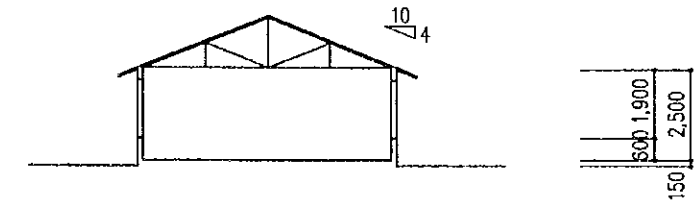


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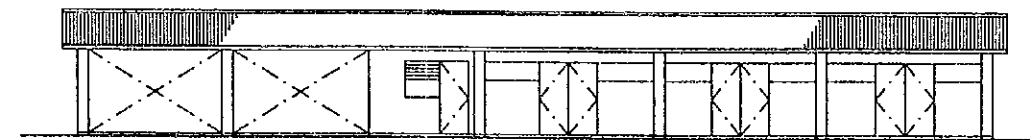
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THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
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NIPPON KOEI CO., LTD. TOKYO, JAPAN			



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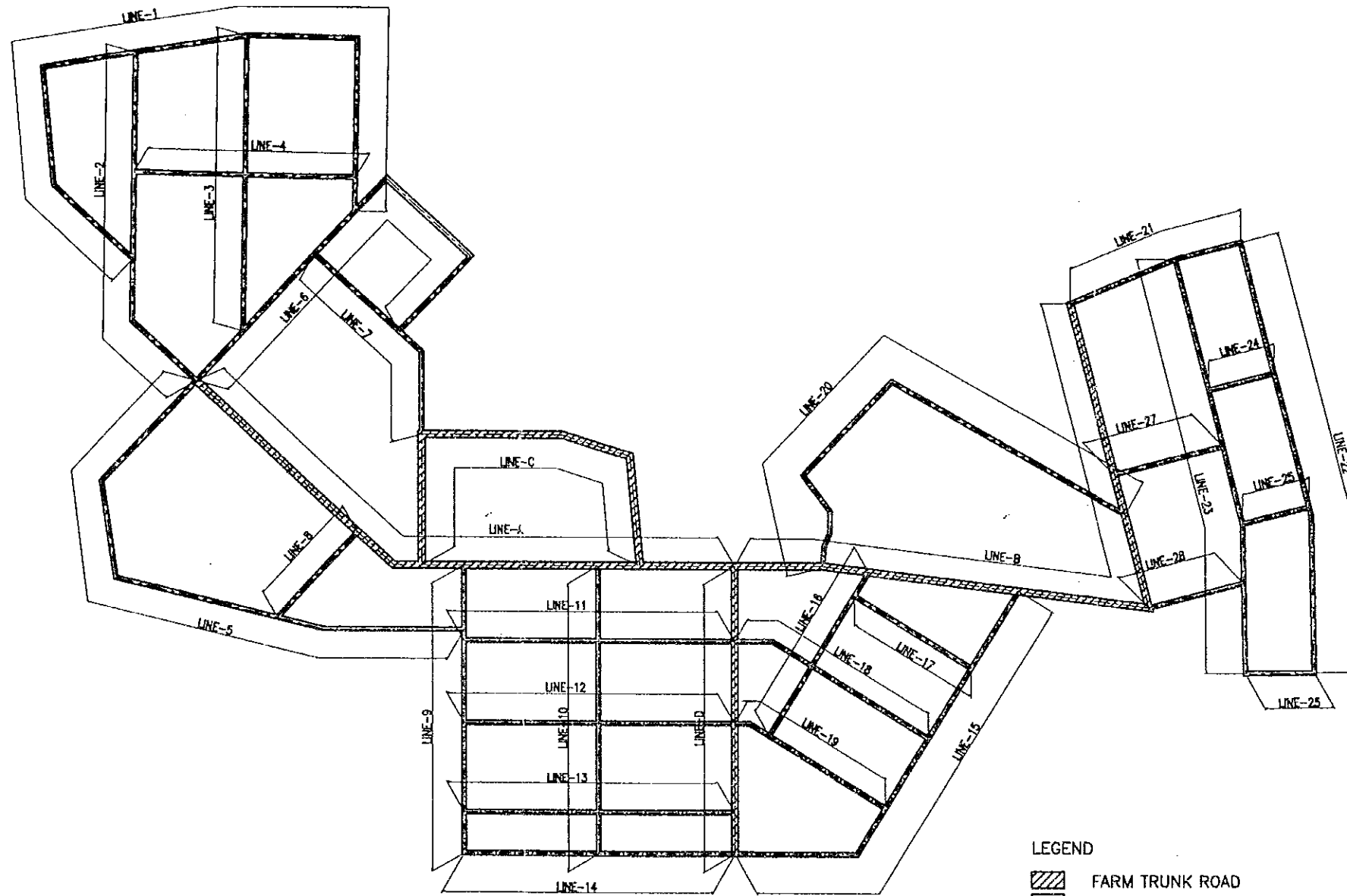


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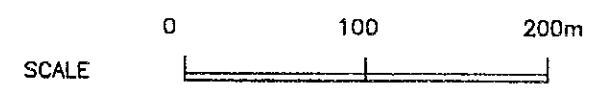


FRONT ELEVATION

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THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Agricultural Facilities.			
Store			
DATE	OCT. 1997	DRAWING NO.	MUAF-08
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

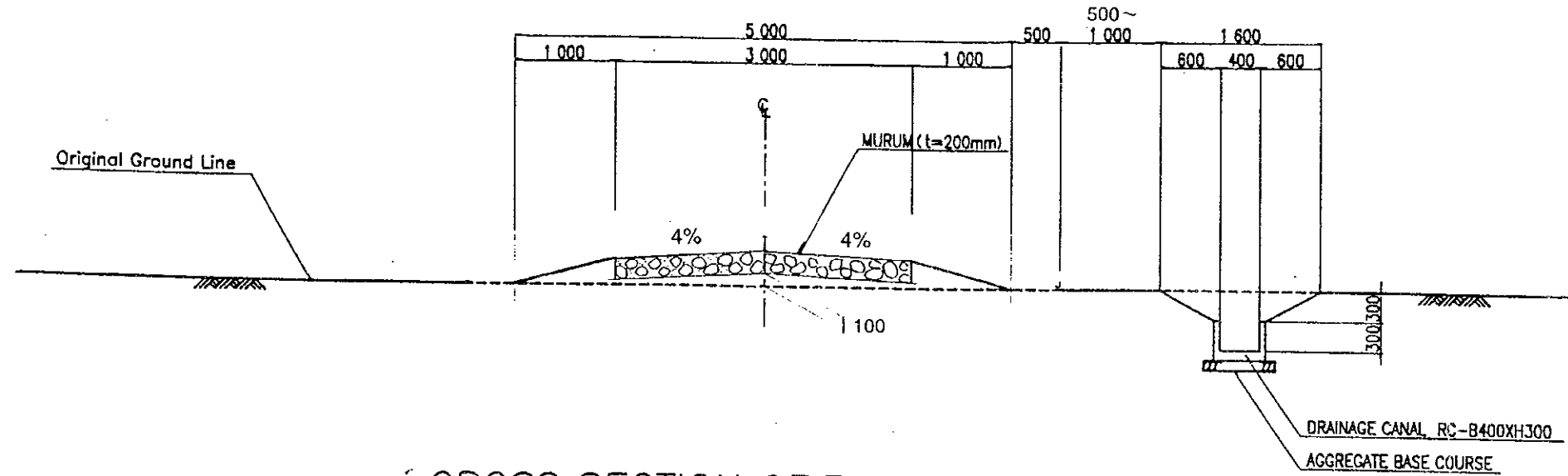


LEGEND
 [Hatched Box] FARM TRUNK ROAD
 [Solid Box] FARM FEEDER ROAD

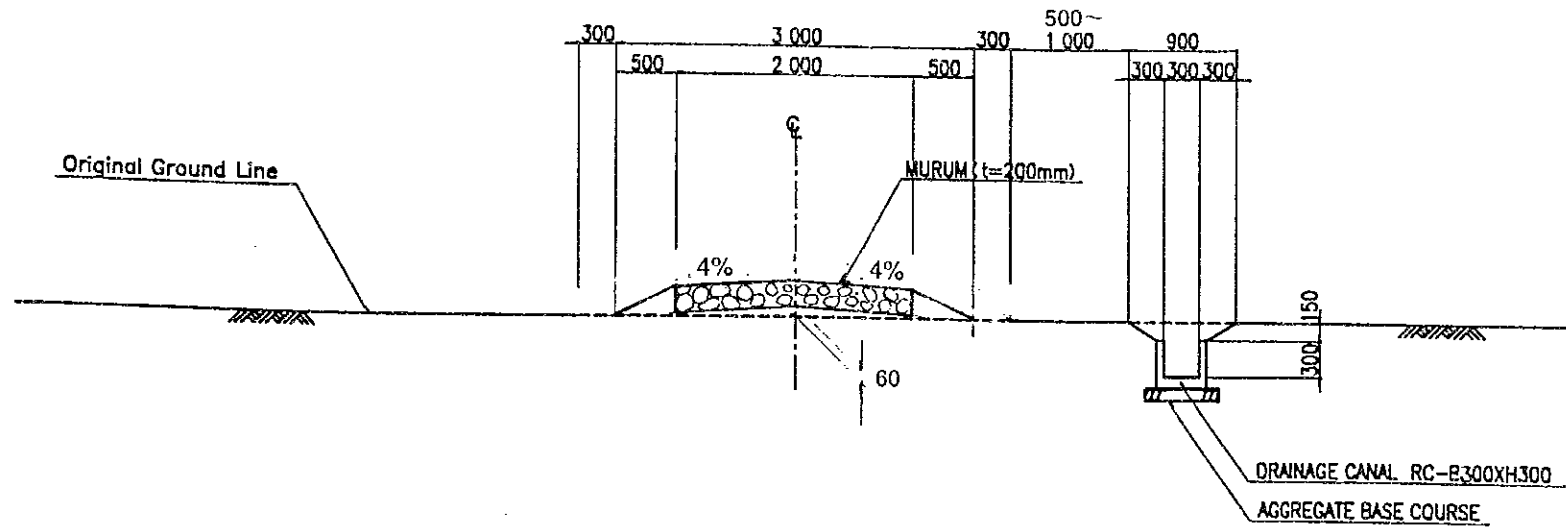


Farm Trunk Roads		
	Length (m)	Culverts (Nos.)
L - A	445.0	4
L - B	533.0	1
L - C	330.3	-
L - D	210.0	6
Sub-total	1,518.3	11
Farm Feeder Roads		
L -01	516.6	3
L -02	256.8	3
L -03	213.3	2
L -04	160.0	-
L -05	426.9	1
L -06	359.0	1
L -07	163.9	-
L -08	85.7	-
L -09	210.0	4
L -10	210.0	6
L -11	200.0	-
L -12	200.0	-
L -13	200.0	-
L -14	200.0	-
L -15	315.7	3
L -16	140.1	4
L -17	100.0	-
L -18	161.9	-
L -19	126.4	-
L -20	363.4	-
L -21	133.9	2
L -22	318.6	3
L -23	307.1	3
L -24	50.0	-
L -25	50.0	-
L -26	50.0	-
L -27	83.0	-
L -28	73.0	-
Sub-total	5,675.3	35
Total	7,193.6	46

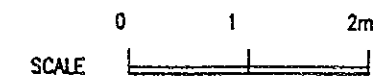
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THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING			
Farm Road		General Plan of Farm Road	
DATE	OCT, 1997	DRAWING NO.	MUFR-01
NIPPON KOEI CO., LTD, TOKYO, JAPAN			



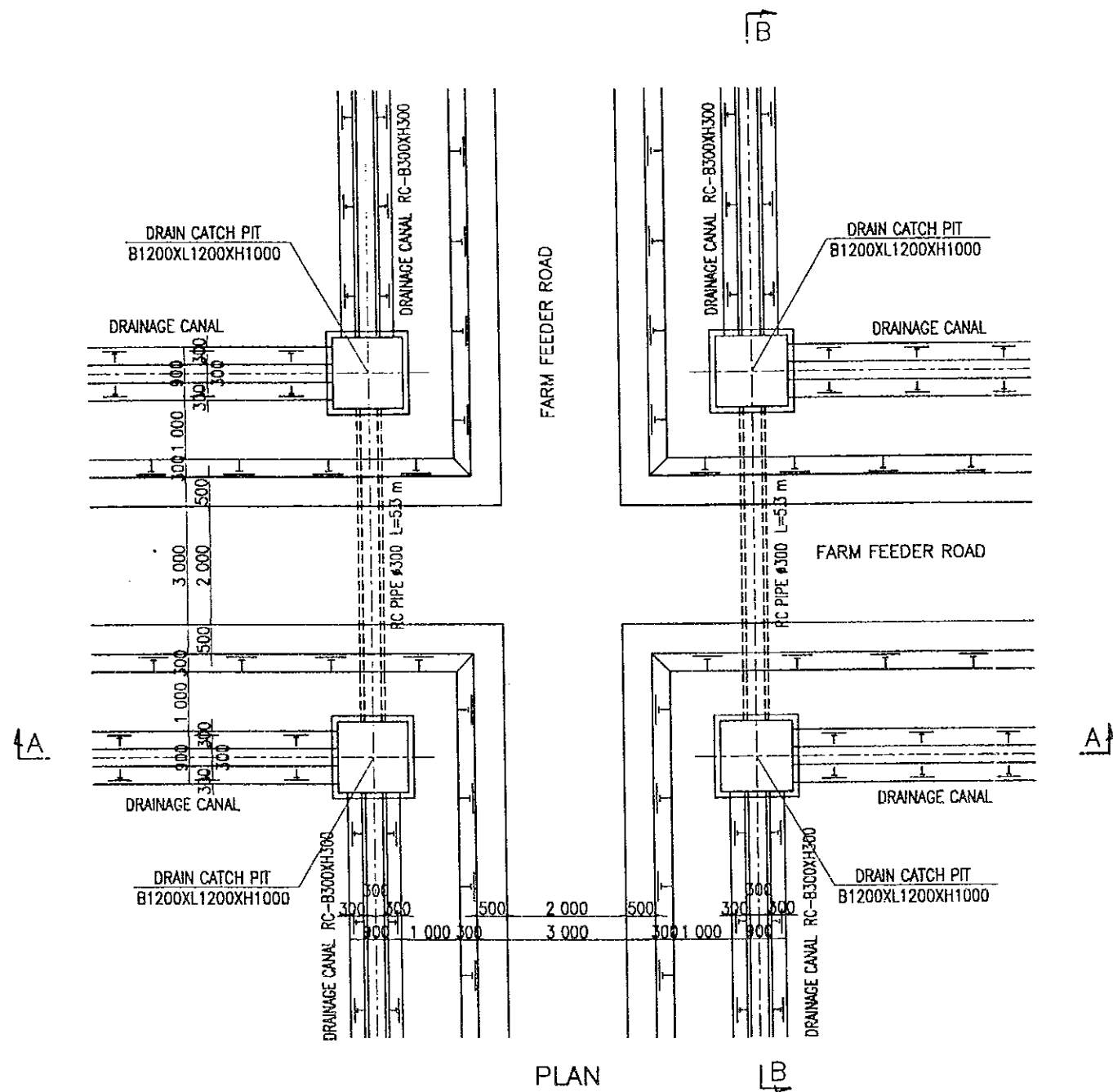
CROSS SECTION OF TRUNK ROAD



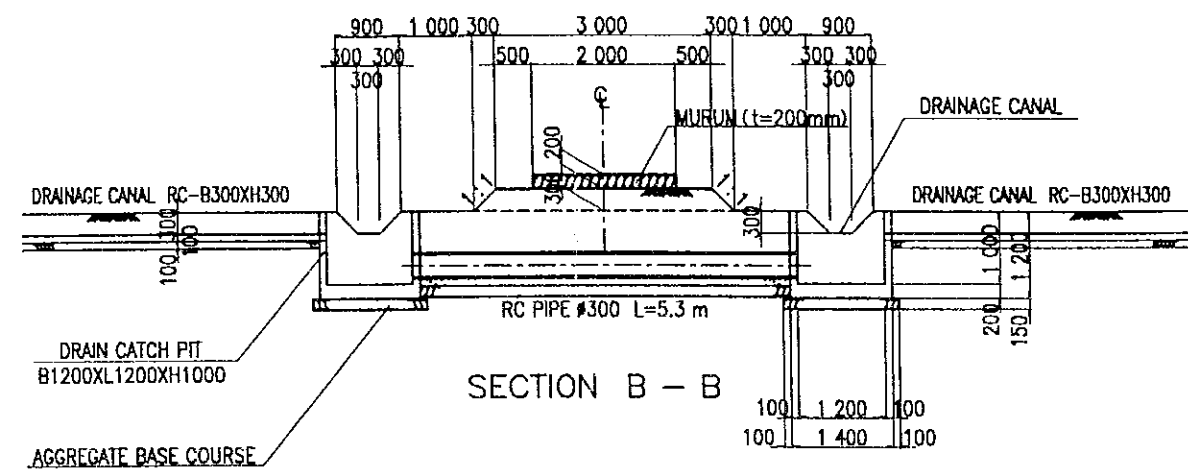
CROSS SECTION OF FEEDER ROAD



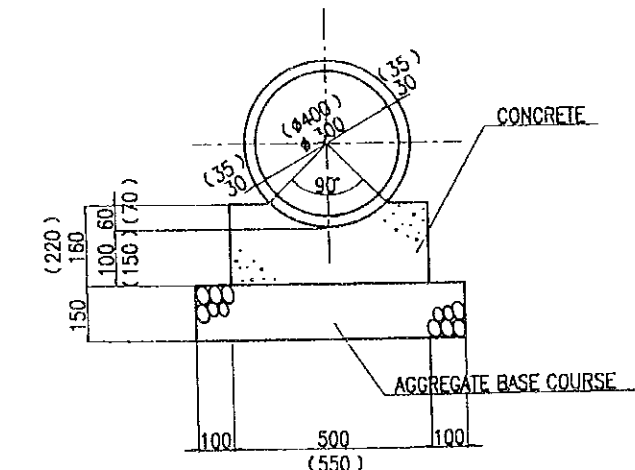
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Farm Road Typical Cross Section of Farm Road			
DATE	OCT. 1997	DRAWING NO.	MUFR-02
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



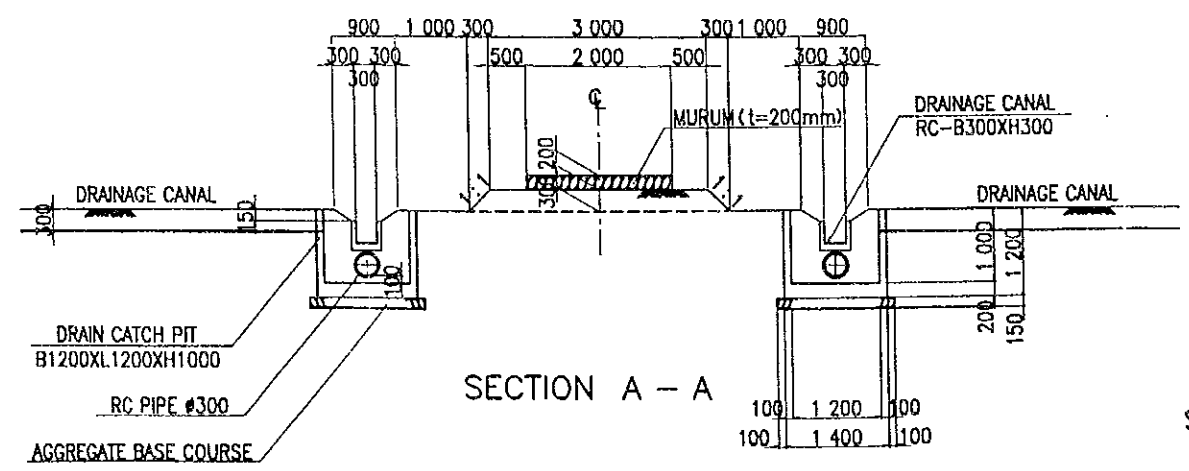
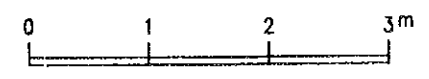
PLAN



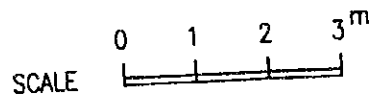
SECTION B - B



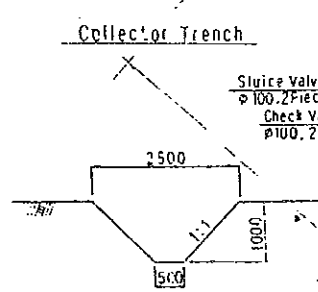
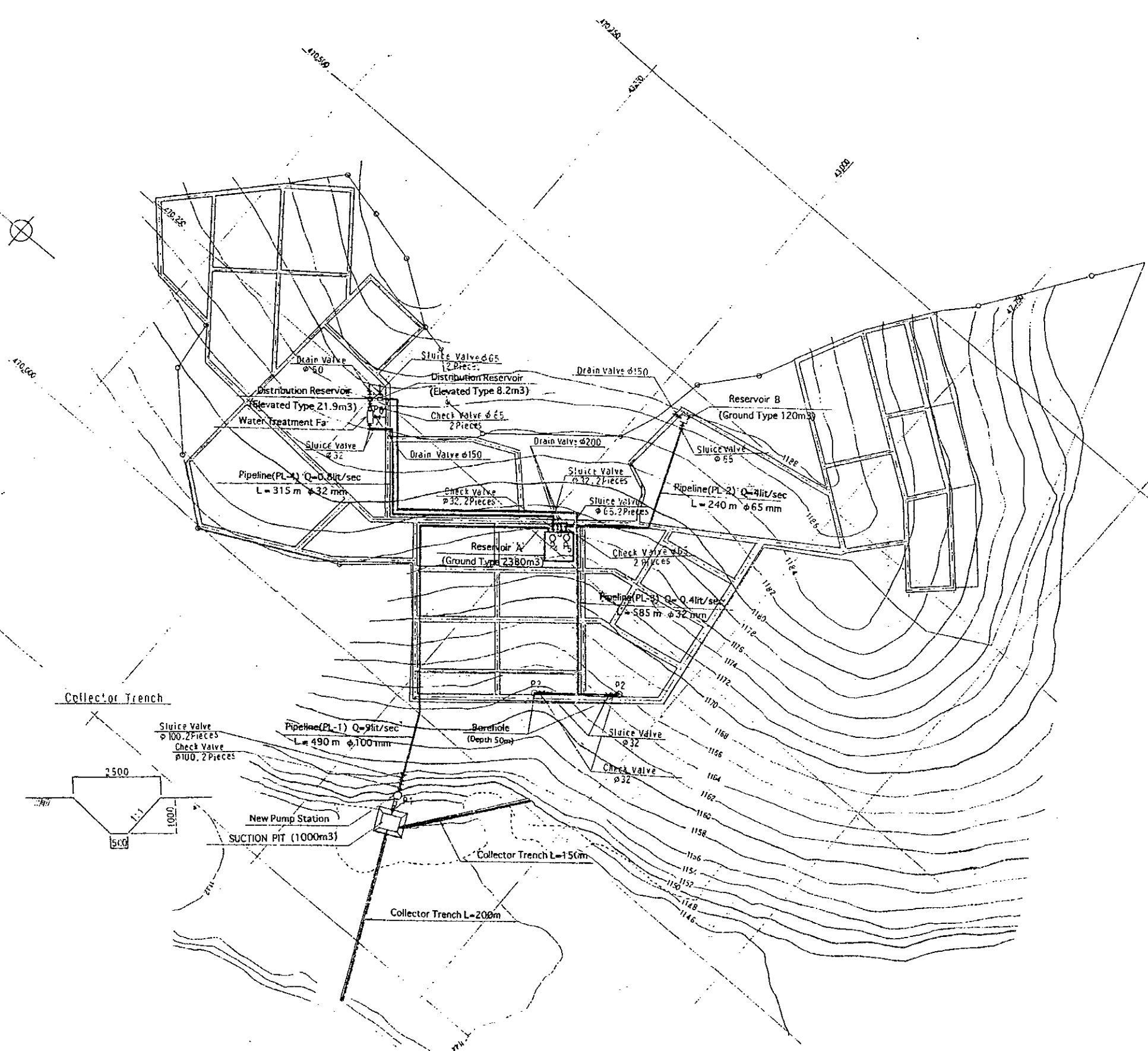
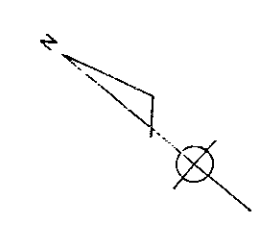
SECTION OF RC PIPE $\phi 300$
(SECTION OF RC PIPE $\phi 400$)



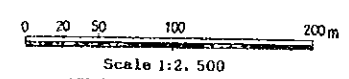
SECTION A - A



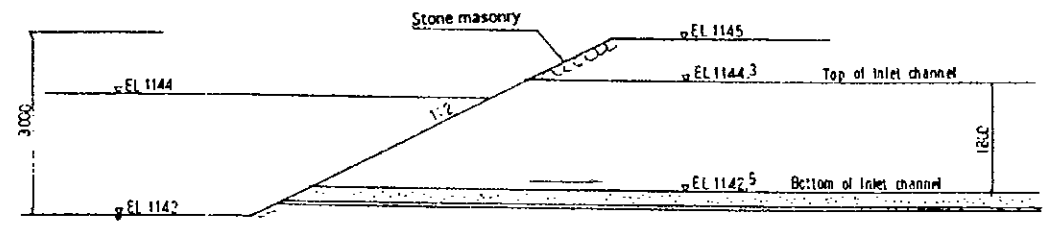
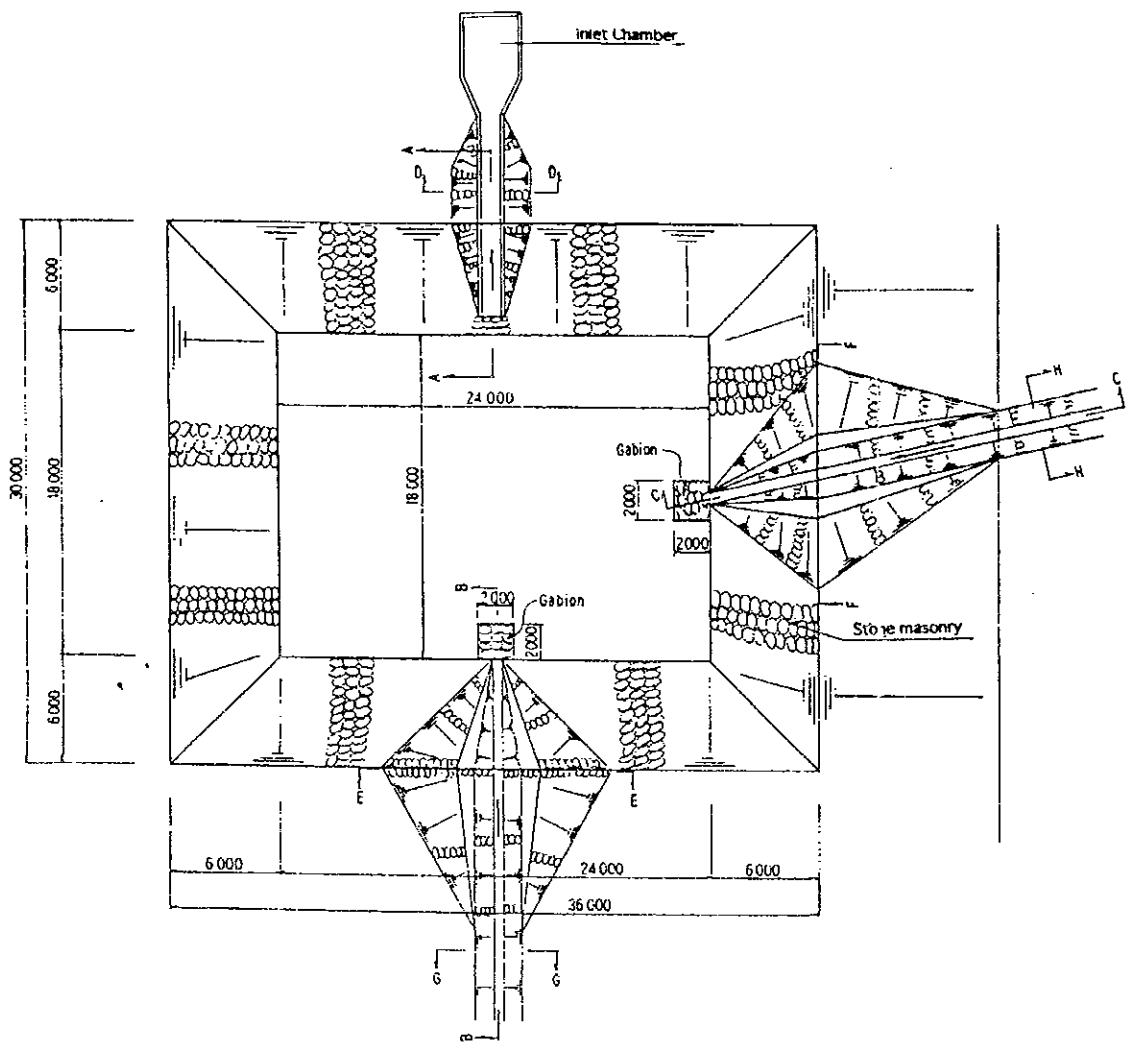
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Farm Road Typical Road Culvert			
DATE	OCT. 1997	DRAWING NO.	MUFR-03
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



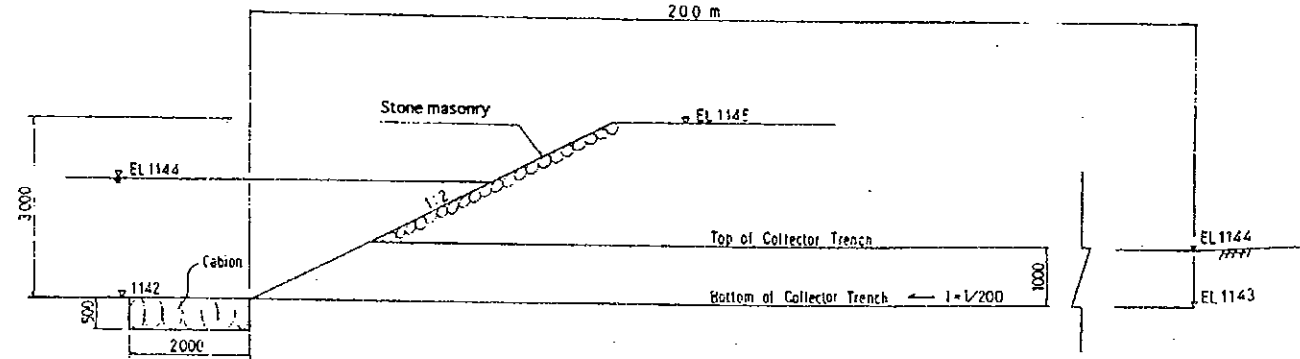
Pump list				
	D (mm)	Q (lit/min)	H (m)	kw
P1	100	0.54	46	7.5
P2	32	0.015	106	1.5
P3	32	0.015	106	1.5
P4	32	0.048	39	3.7
P5	65	0.24	26	2.2
P6	65	0.24	11	1.5



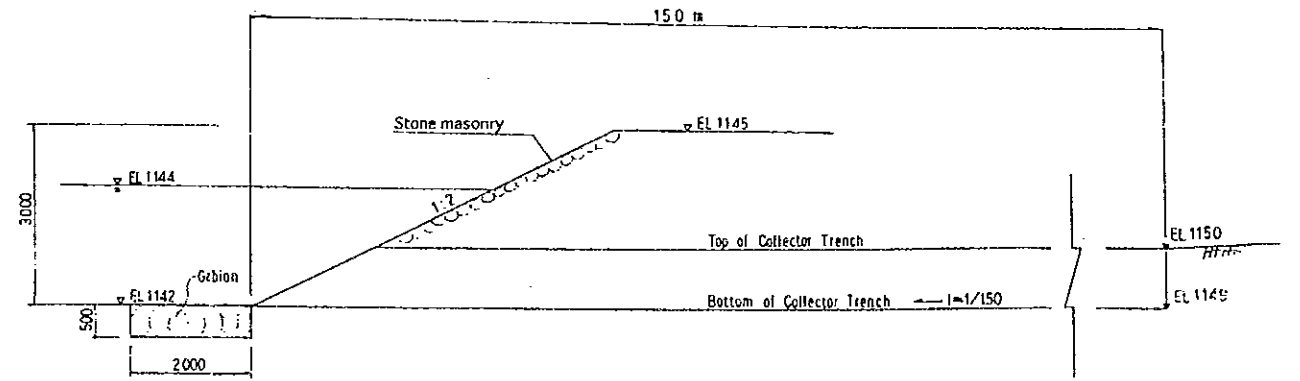
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply General Plan of Water Supply Facilities			
DATE	OCT. 1997	DRAWING NO.	MUWS-01
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



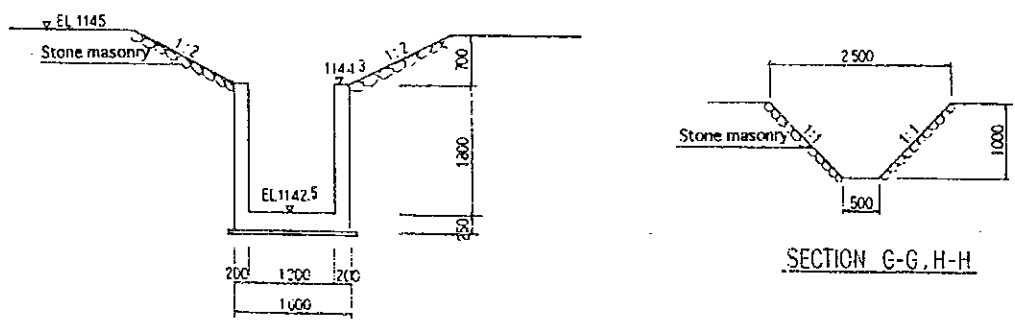
SECTION A-A



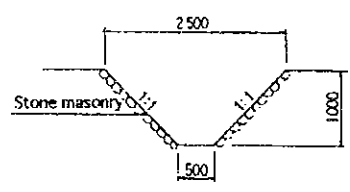
SECTION B-B



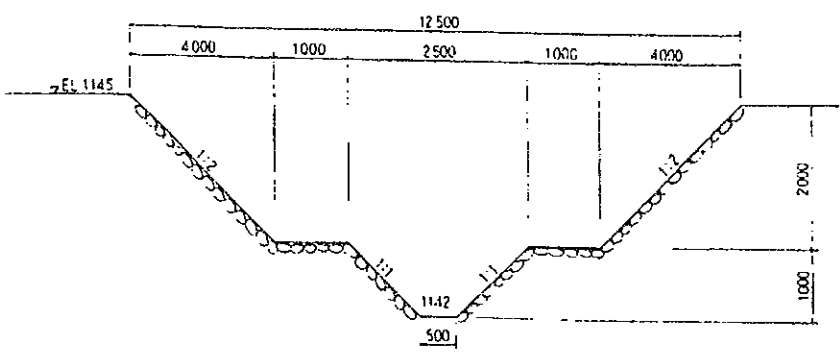
SECTION C-C



SECTION D-D

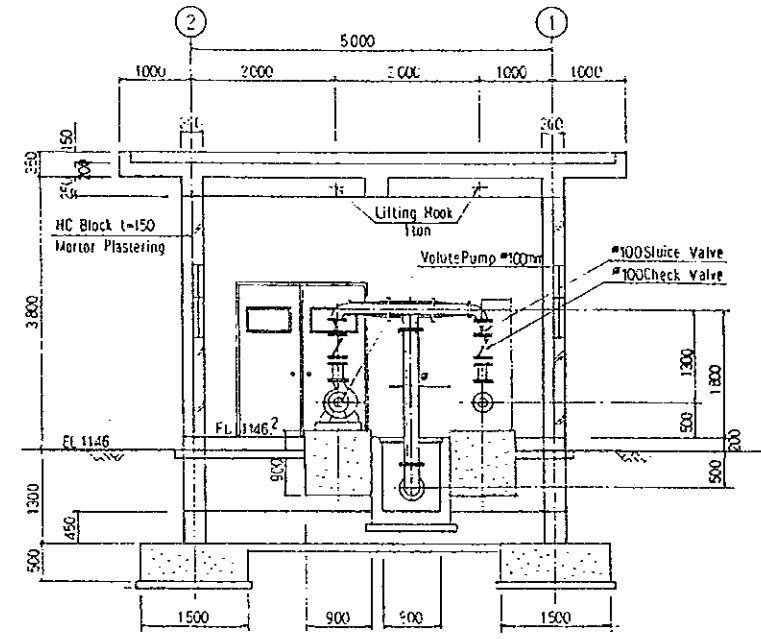
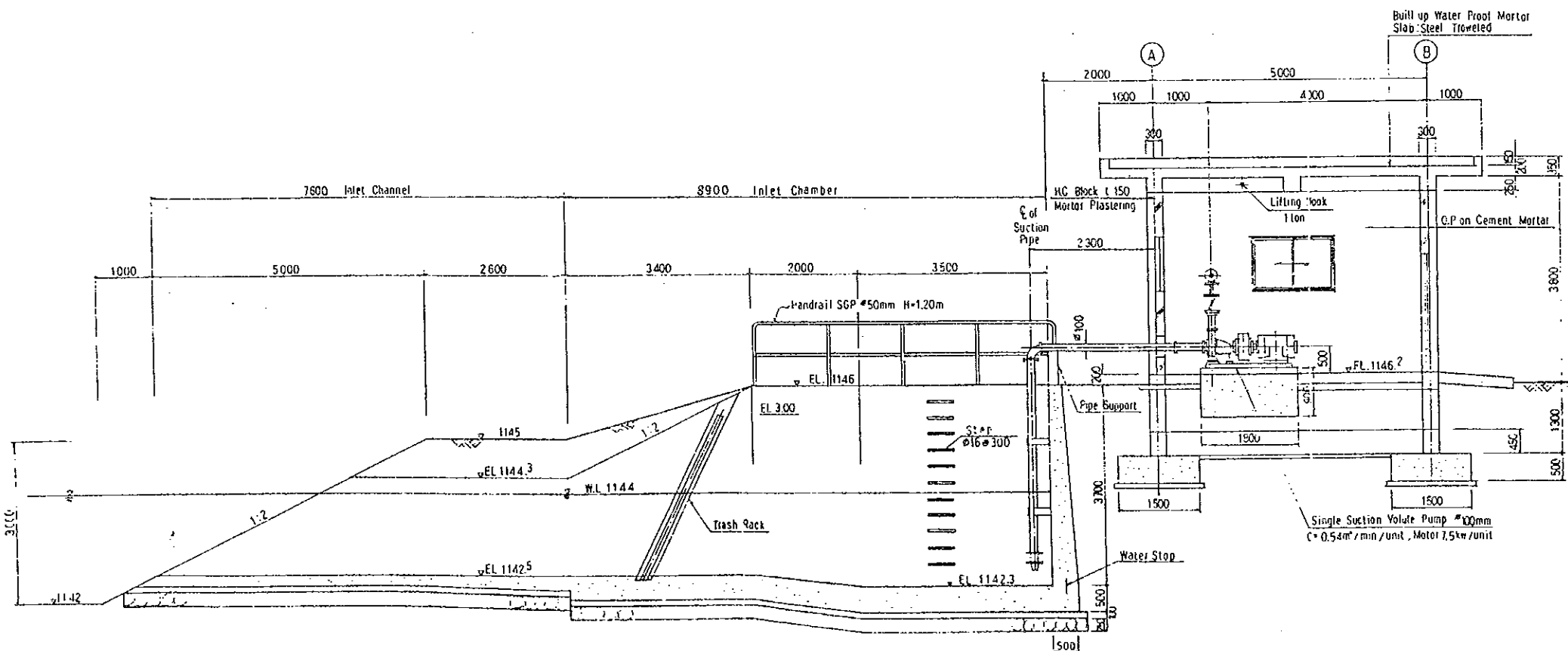
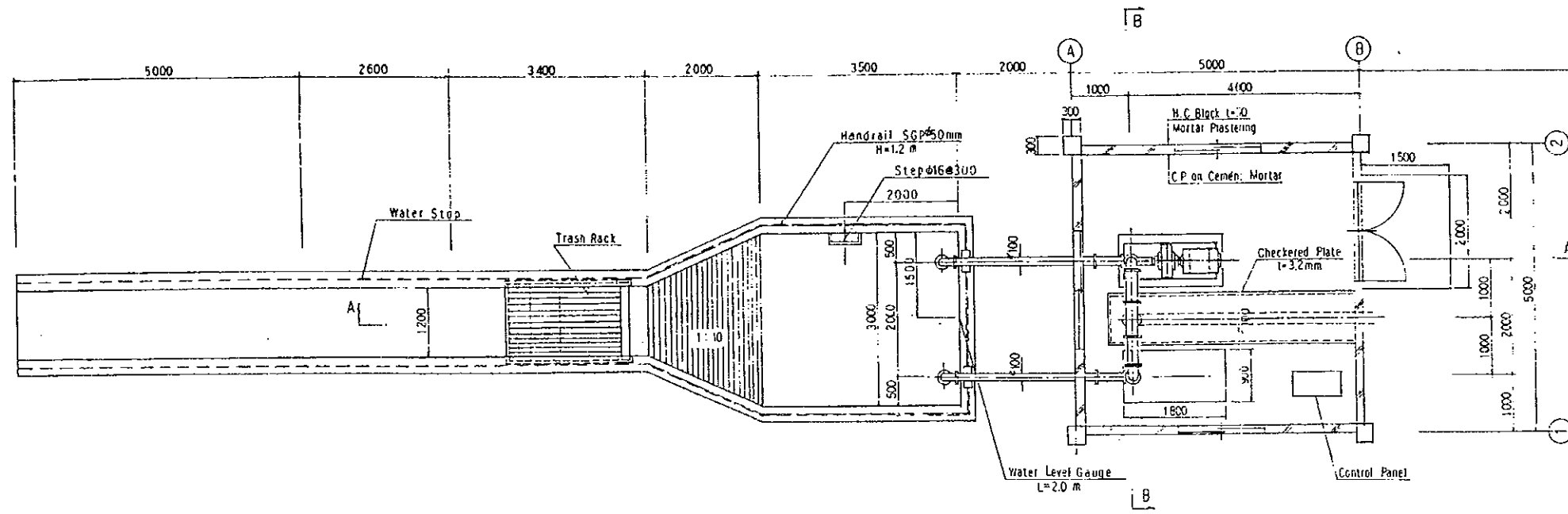


SECTION G-G, H-H

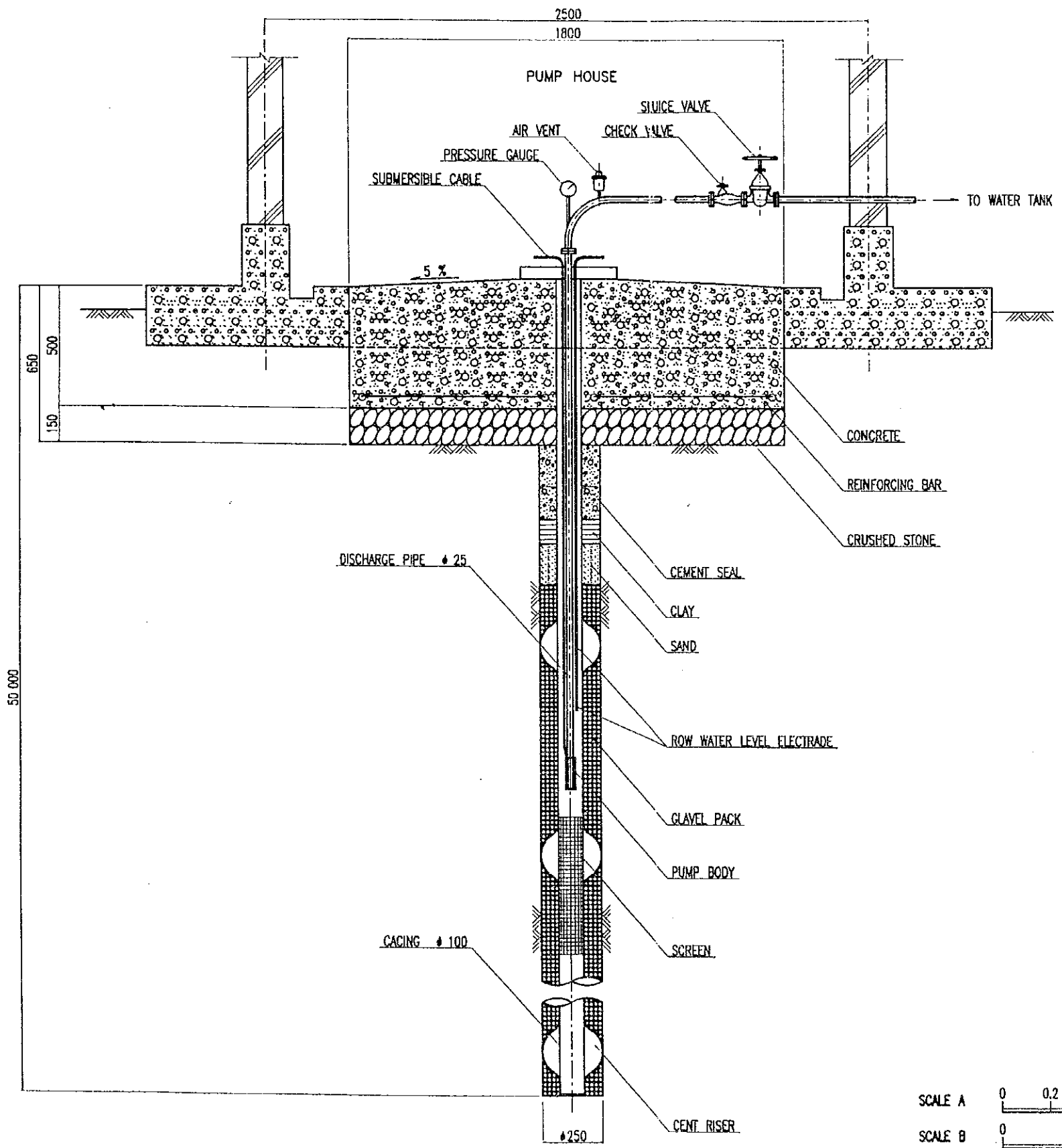


SECTION E-E, F-F

THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply			
Water Collecting Trench and Pond			
DATE	OCT. 1997	DRAWING NO.	MUWS-02
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



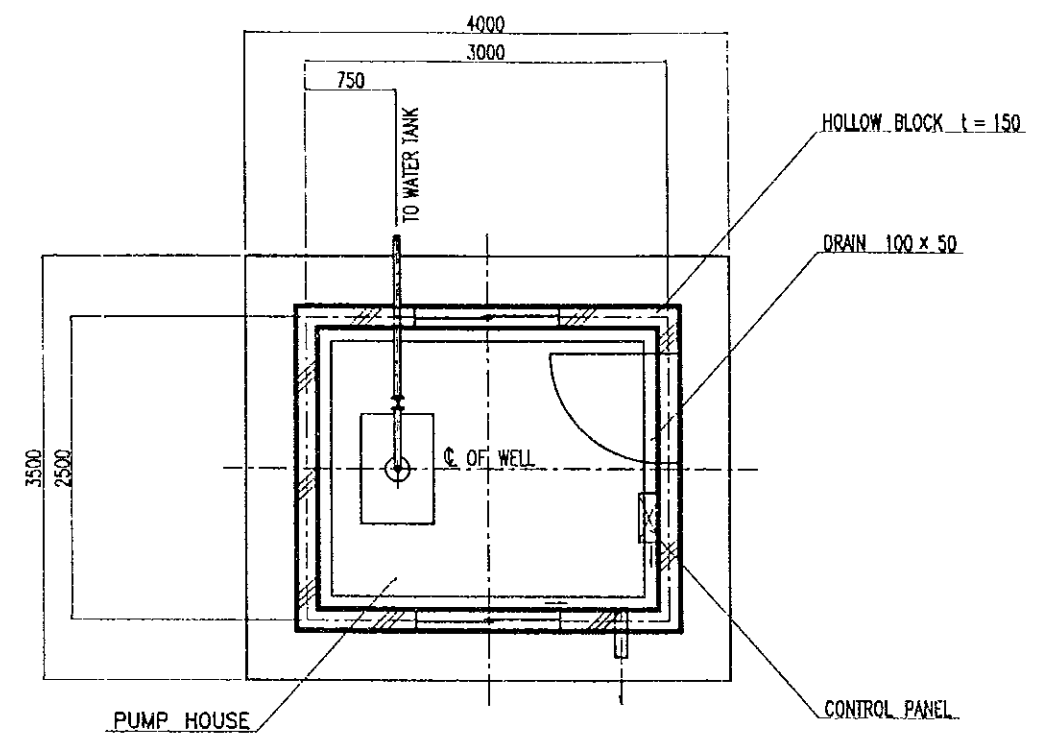
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply Pump Station			
DATE	OCT. 1997	DRAWING NO.	MUWS-03
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



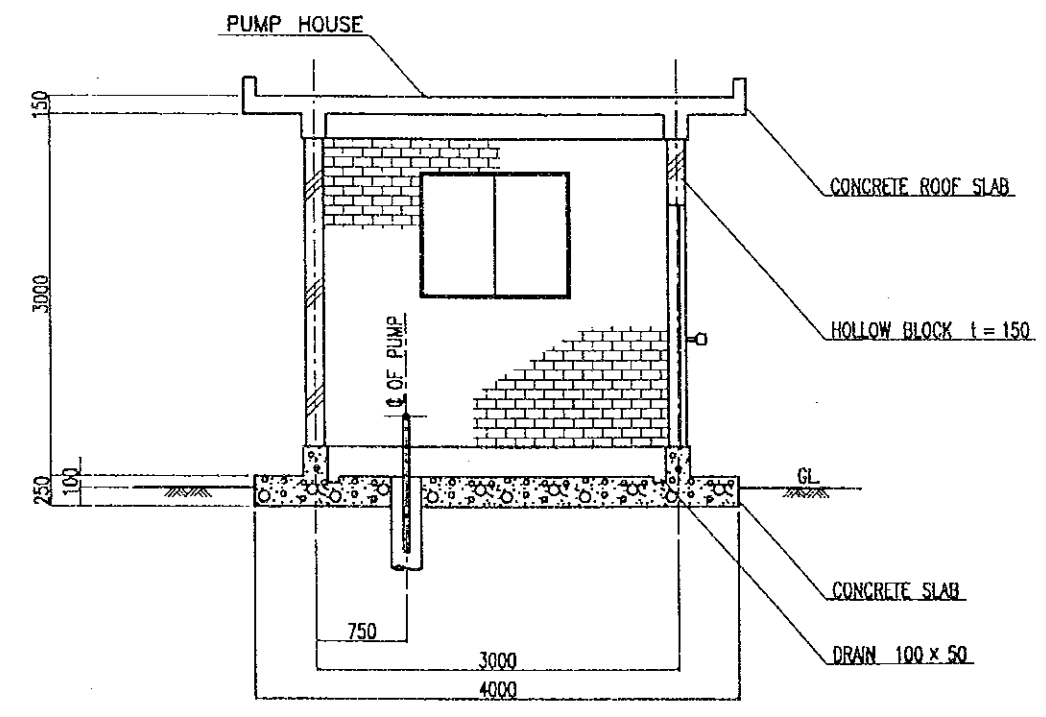
DETAIL OF DEEP TUBE WELL
SCALE A



DEEP TUBE WELL

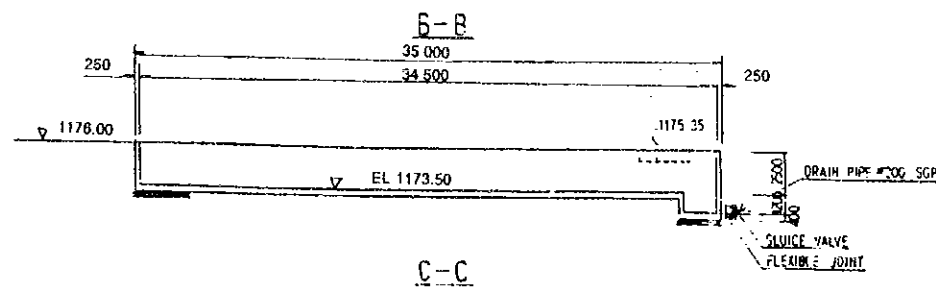
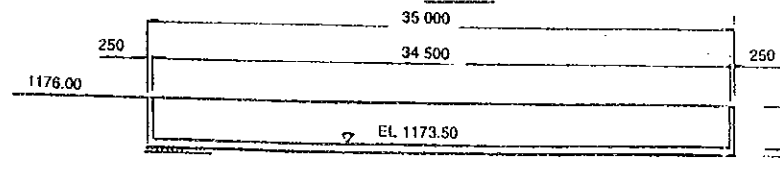
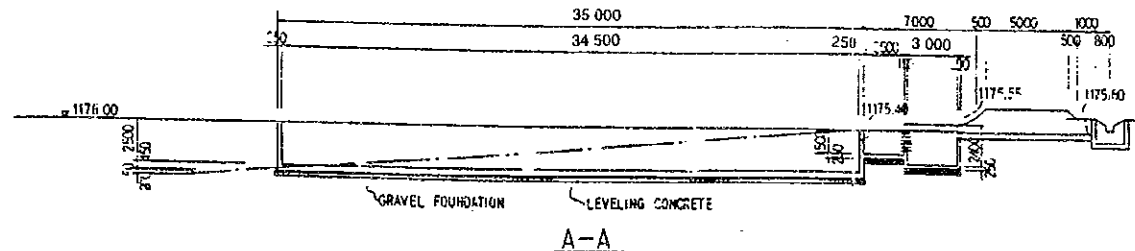
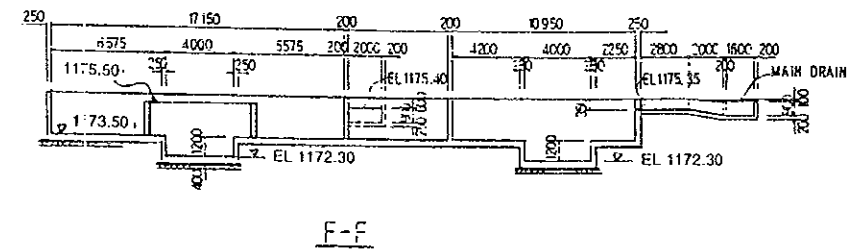
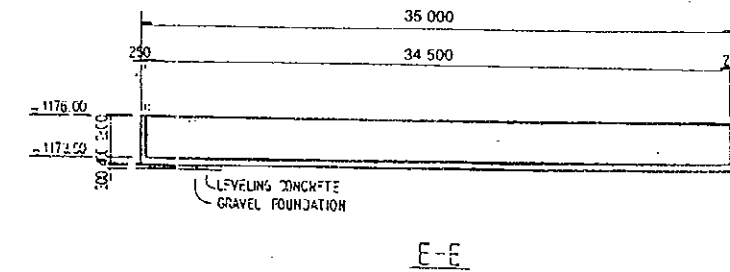
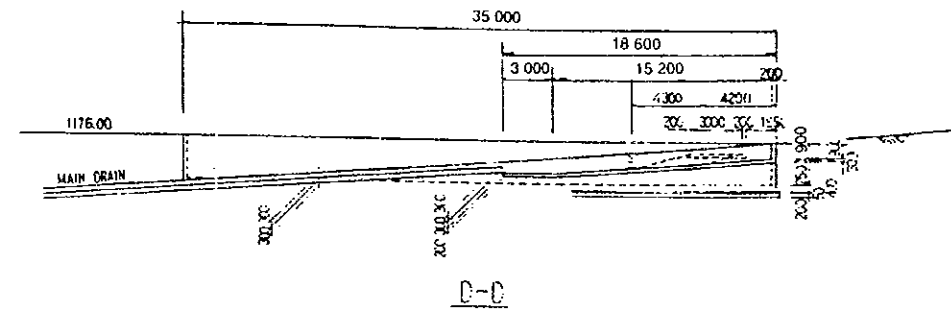
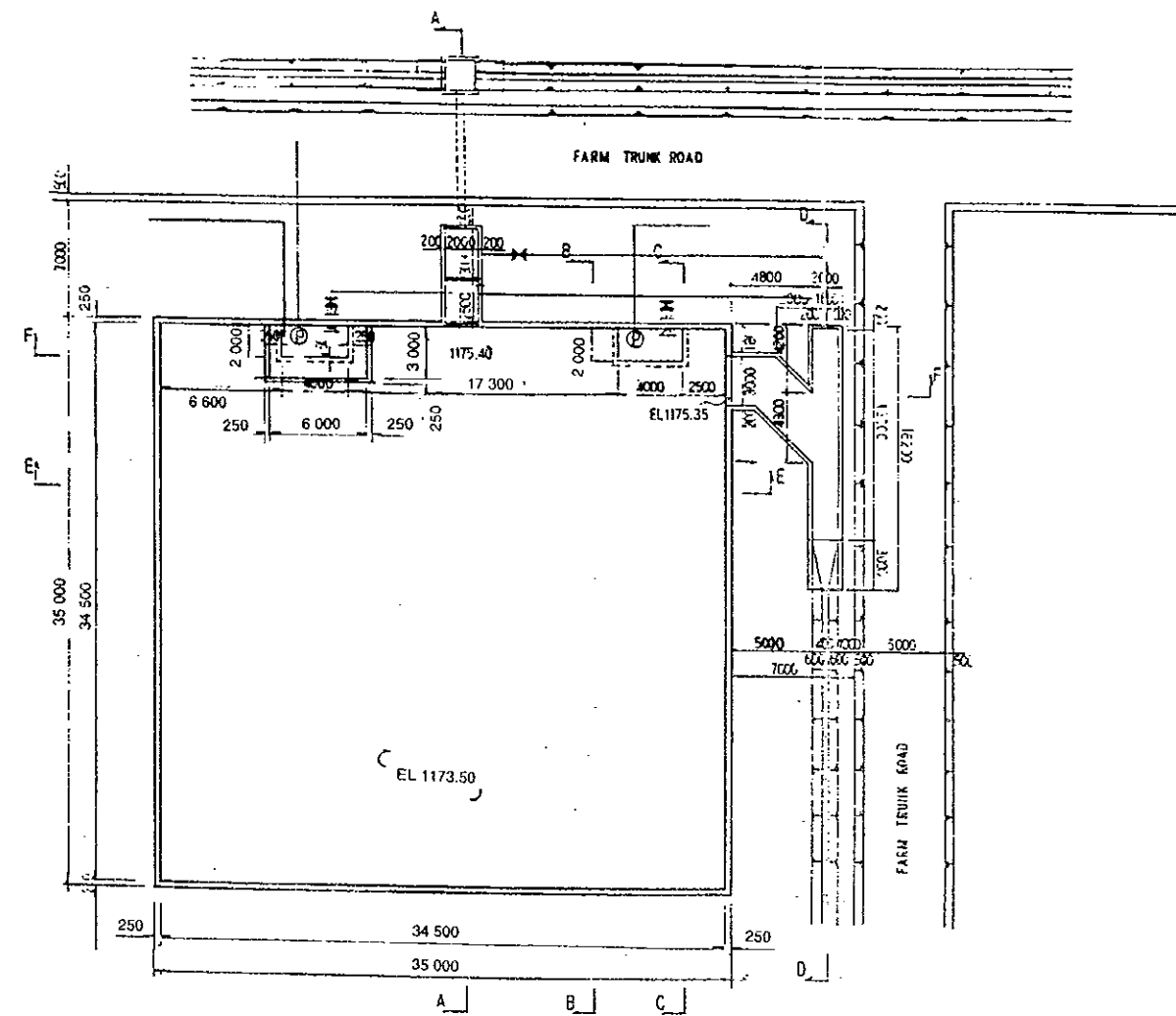


PLAN
SCALE B



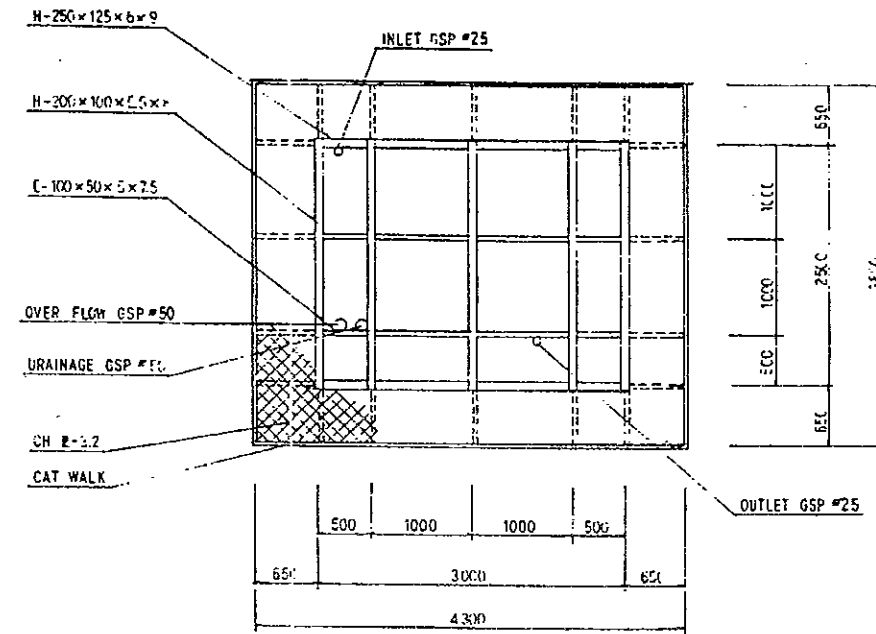
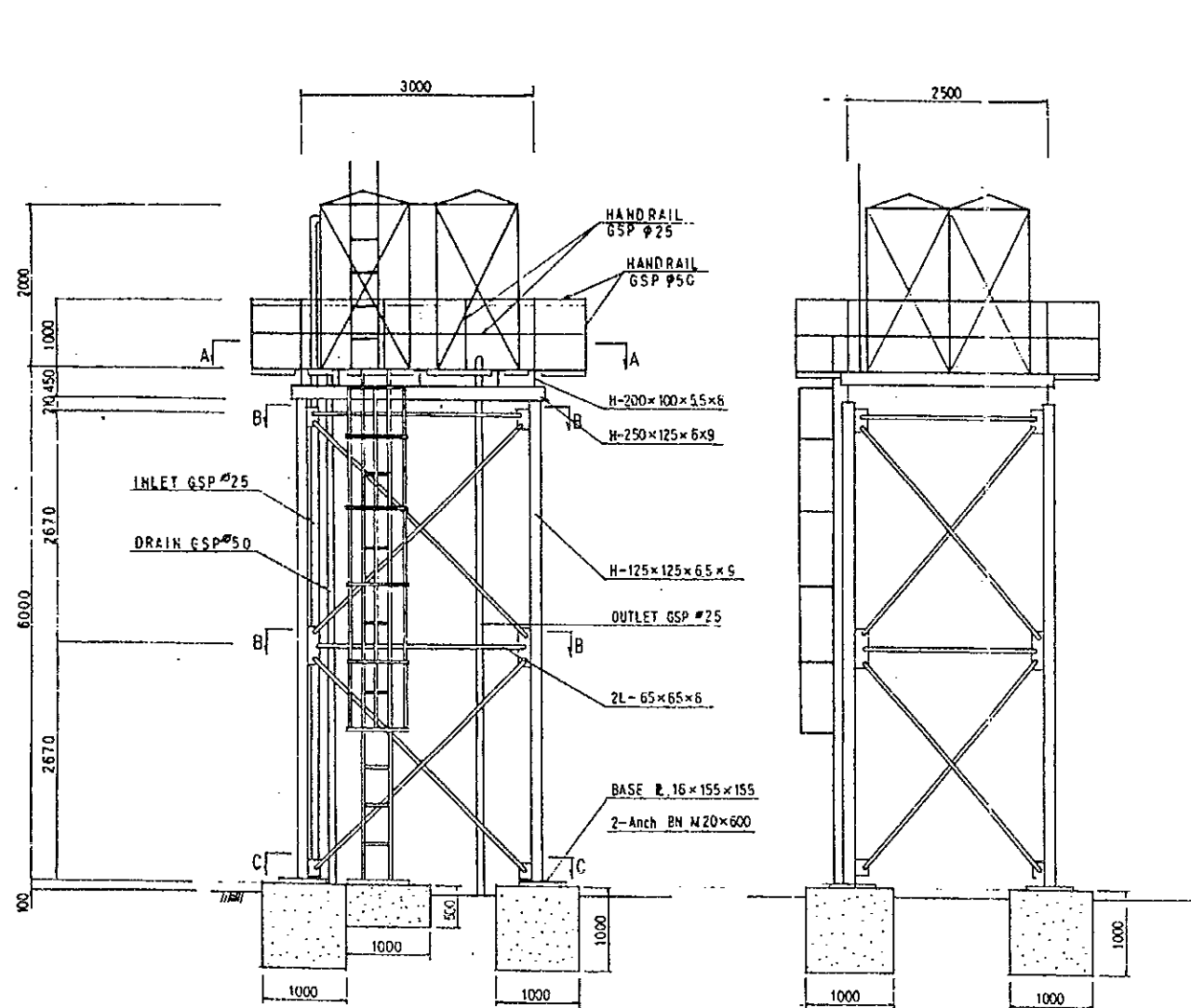
SECTION
SCALE B

THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply			
Deep Well and Pump Station			
DATE	OCT. 1997	DRAWING NO.	MUWS-04
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

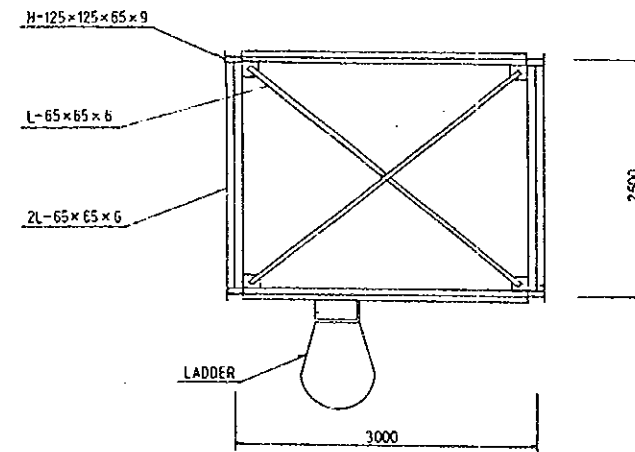


THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply Reservoir A			
DATE	OCT. 1997	DRAWING NO.	MUWS-05
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

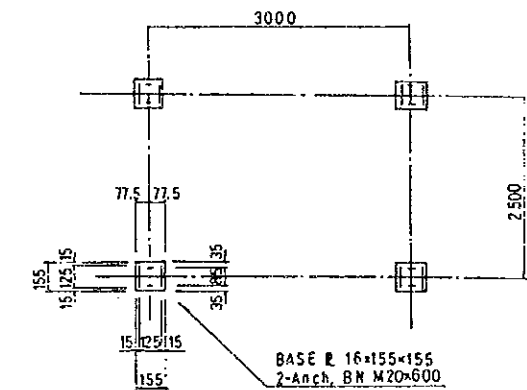
DISTRIBUTION RESERVOIR (ELEVATED TYPE) 8.2m³



SECTION A-A



SECTION B-B

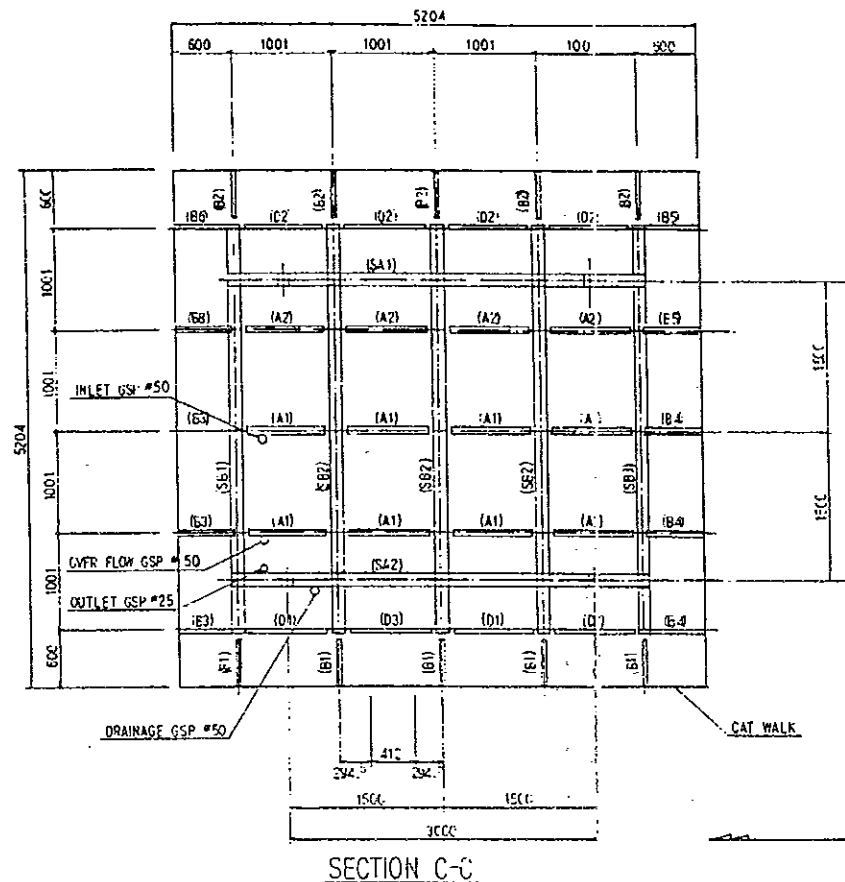
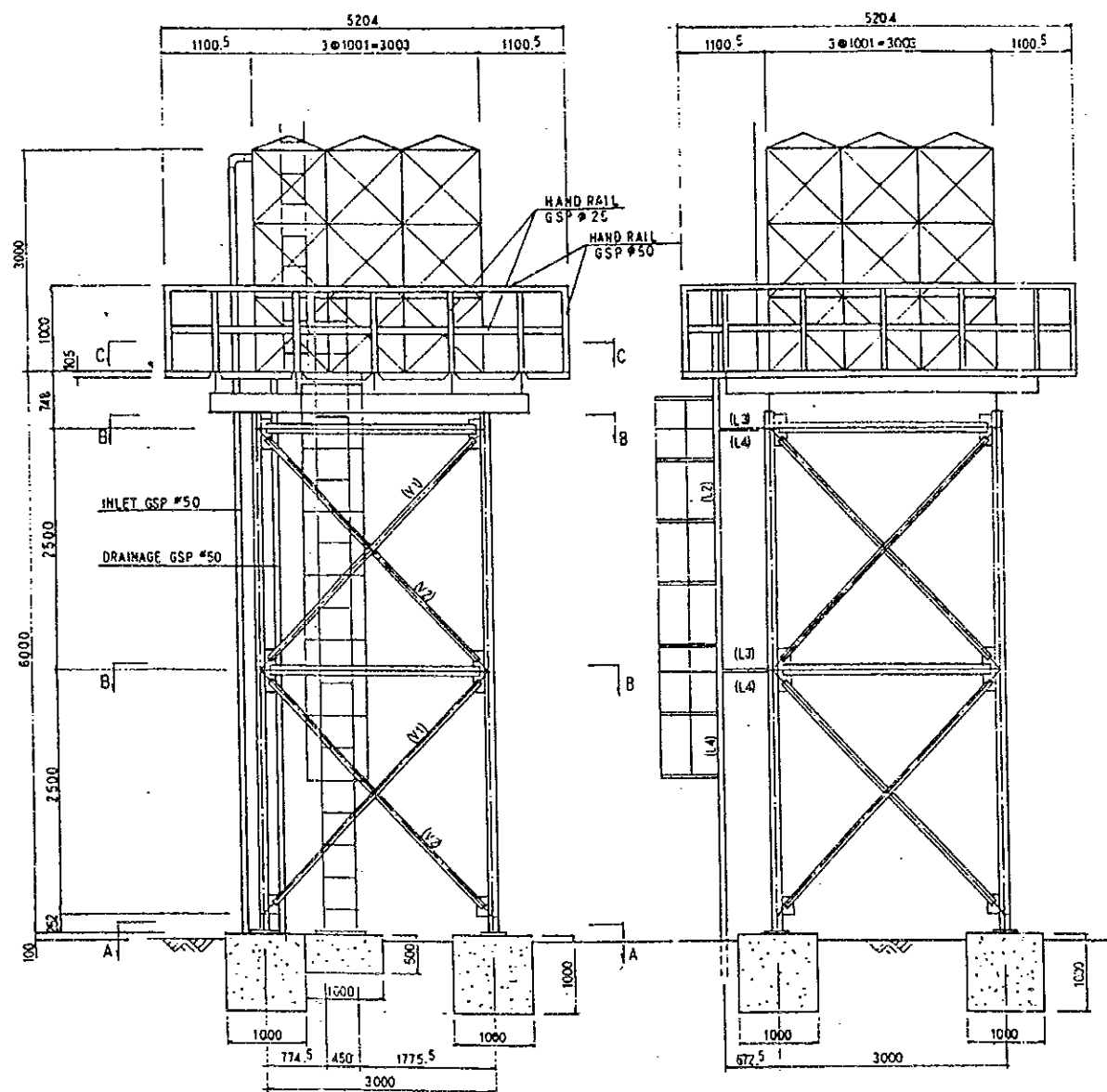


ANCHOR PLAN
SECTION C-C

GENERAL NOTE
1. ALL MATERIAL IS GALVANIZED.
(JIS G 3101 SS400)
2. BOLT IS GALVANIZED
(equivalent JIS B 1186 F8T)

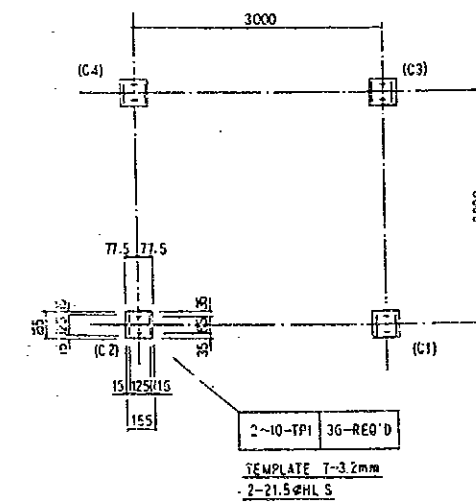
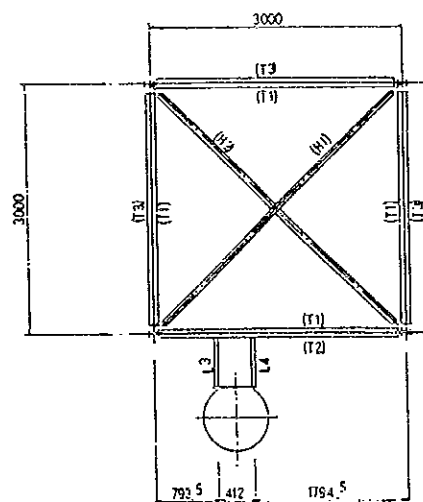
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply Elevated Water Tank (Drinking Water Use)			
DATE	OCT. 1997	DRAWING NO.	MUWS-08
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

DISTRIBUTION RESERVOIR (ELEVATED TYPE) 21.9m³



MEMBERS LIST

C	H-125x125x6.5x9
SA	H-248x124x5x8
SB	H-248x124x5x8
H	L-65x65x6
V	L-65x65x6
T	L-65x65x6
L	L-50x50x6
A	[-100x50x5x7.5
B	[-75x40x5x7
D	[-100x50x5x7.5

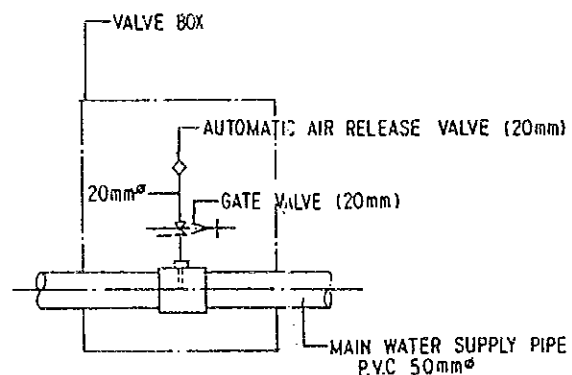
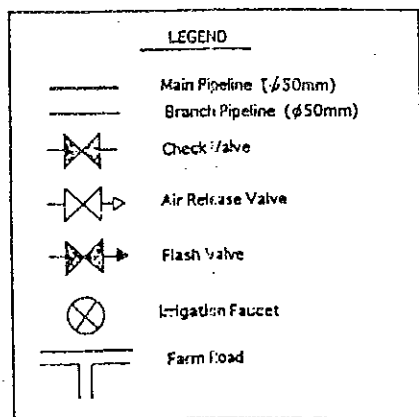
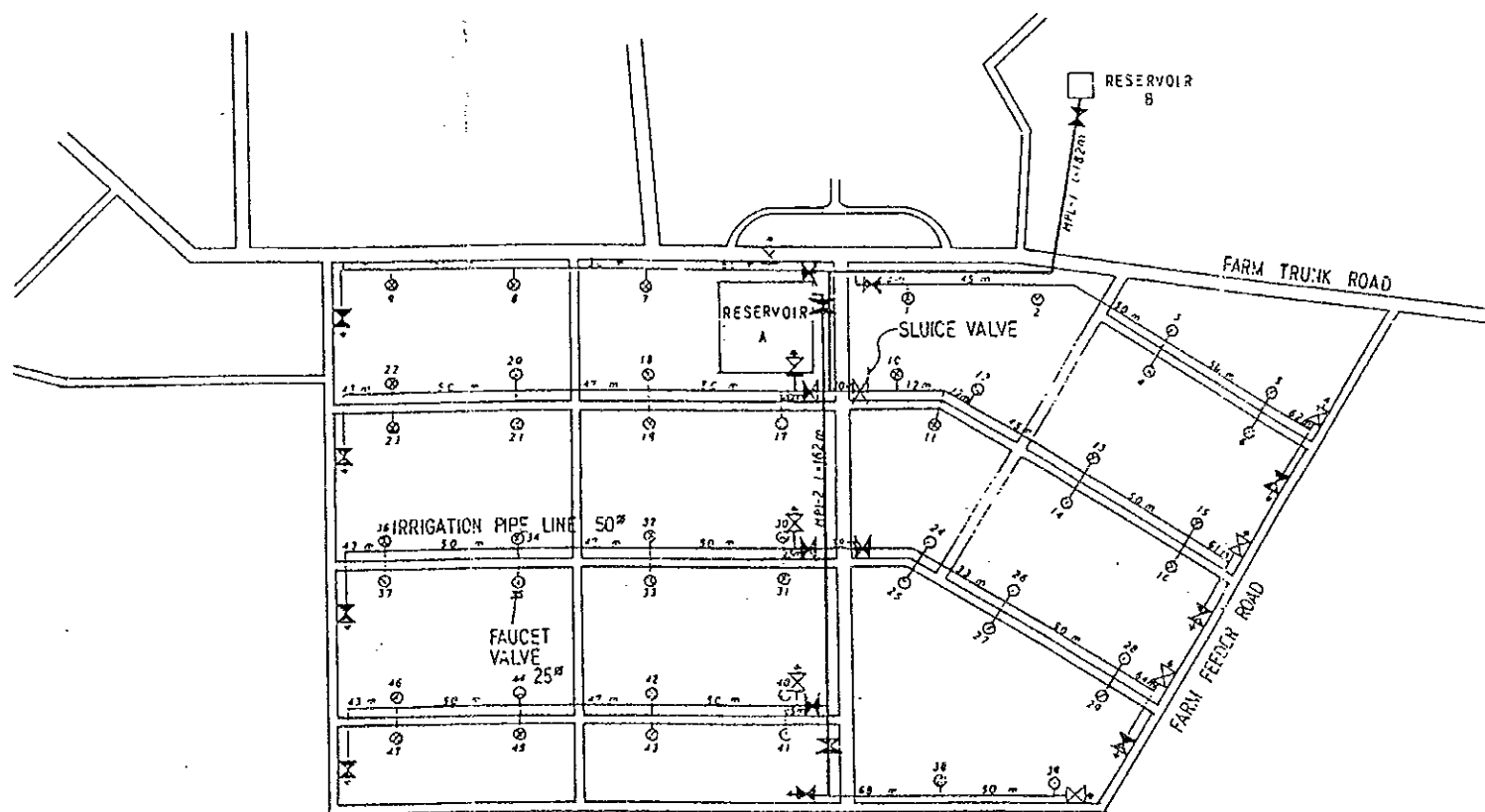


GENERAL NOTE
 1. ALL MATERIAL IS GALVANIZED (JIS G 3101 SS400)
 2. BOLT IS GALVANIZED (equivalent JIS B 1186 F8T)

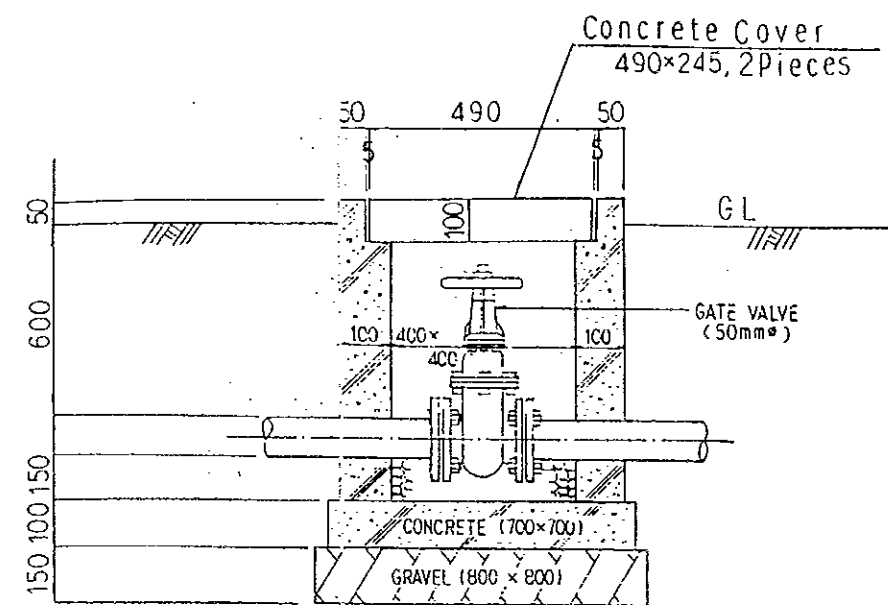
SECTION B-B

ANCHOR PLAN SECTION A-A

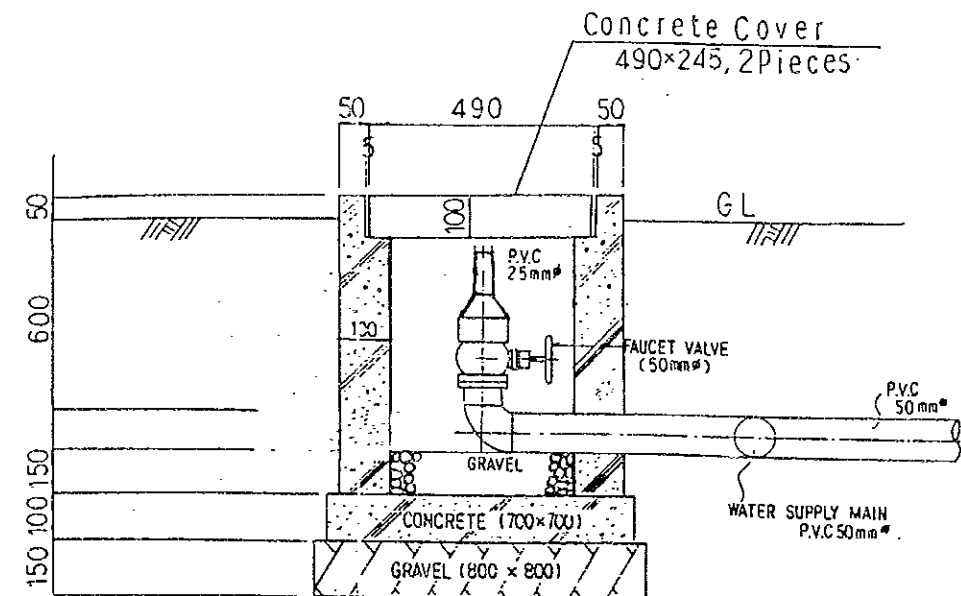
THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Water Supply Elevated Water Tank (Domestic Water Use)			
DATE	OCT. 1997	DRAWING NO.	MUWS-09
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



Detail of Air Release Valve

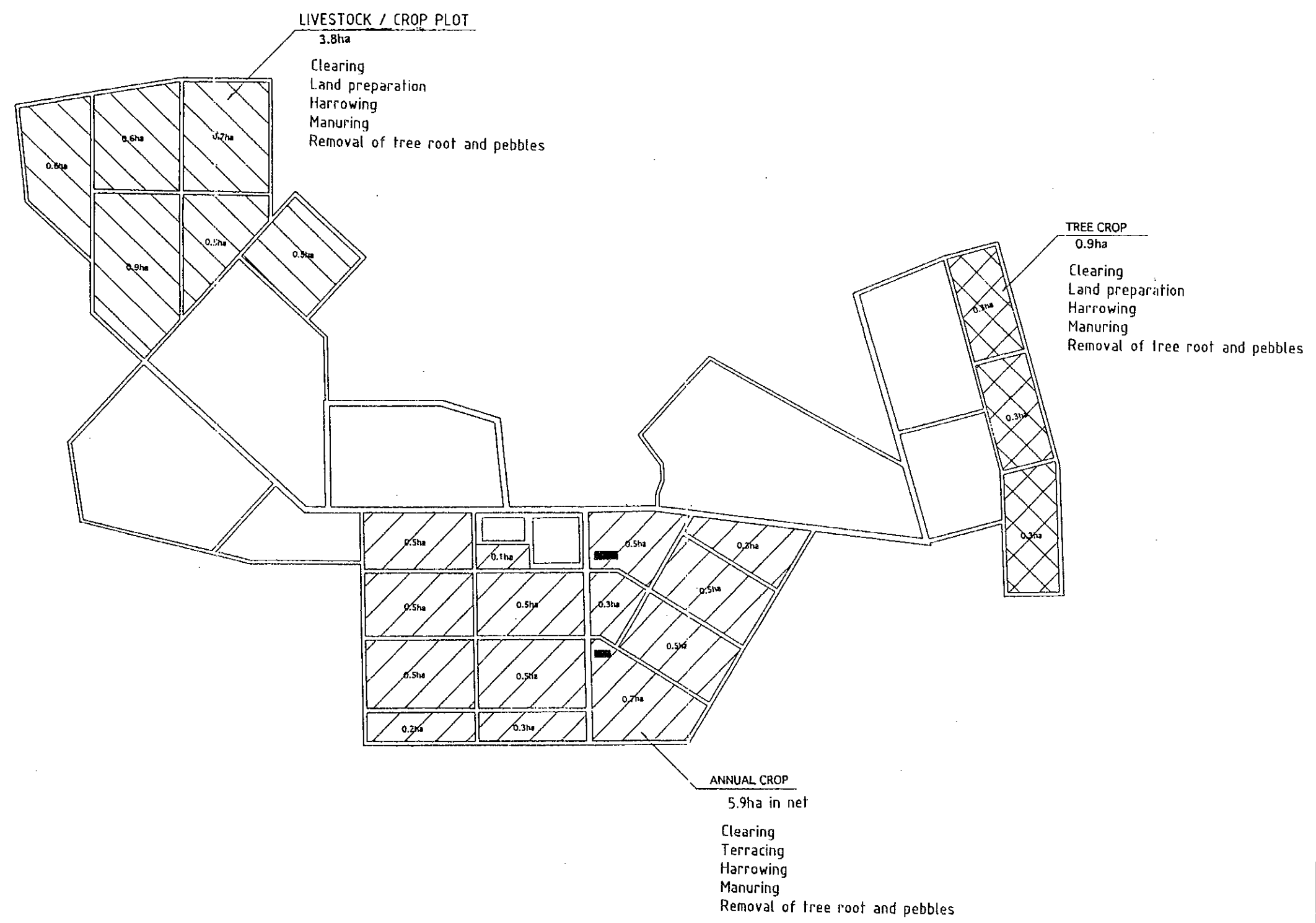


Detail of Flash/Check Valve



Detail of Irrigation Faucet

THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING		Irrigation Facilities	
General Plan of Irrigation Facilities and Flash/Check/Air-release Valves and Irrigation Faucet			
DATE	OCT. 1997	DRAWING NO.	MUIF-01
NIPPON KOEI CO., LTD. TOKYO, JAPAN			



THE REPUBLIC OF UGANDA			
THE PROJECT FOR IMPROVEMENT OF AGRICULTURAL EXTENSION AND TRAINING INSTITUTES			
TITLE OF DRAWING Land Reclamation General Plan of Land Reclamation			
DATE	OCT. 1997	DRAWING NO.	MULR-01
NIPPON KOEI CO., LTD. TOKYO, JAPAN			

JICA