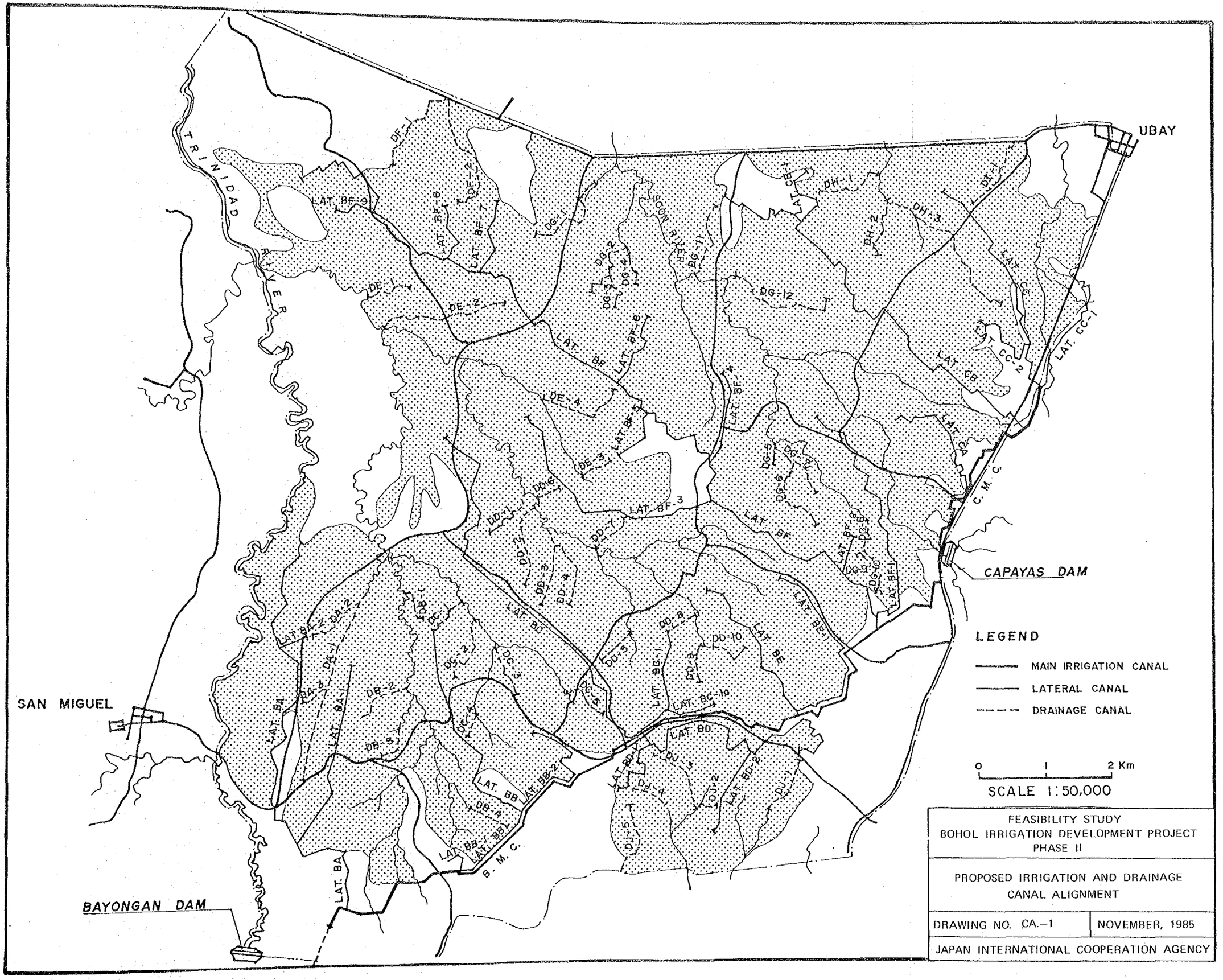


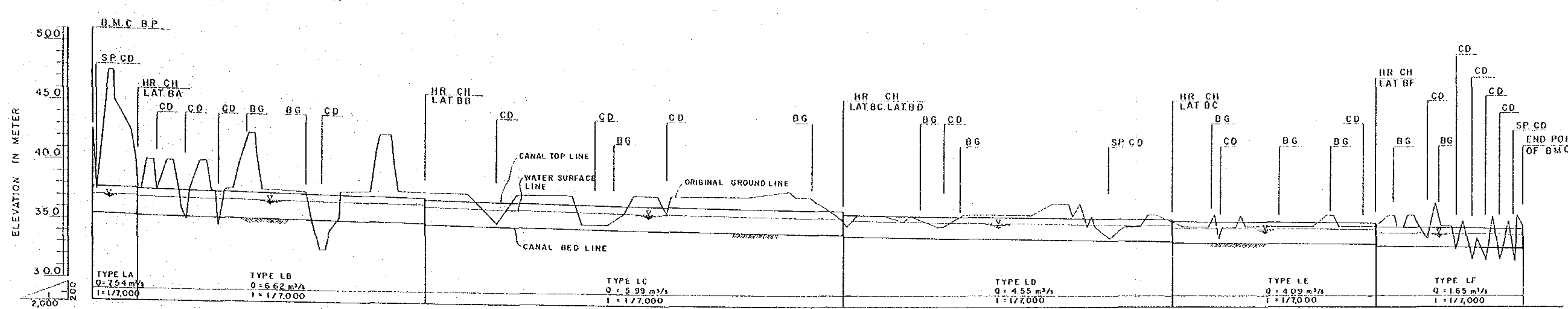
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

PROPOSED IRRIGATION AND DRAINAGE CANAL ALIGNMENT

DRAWING NO. CA.-1	NOVEMBER, 1985

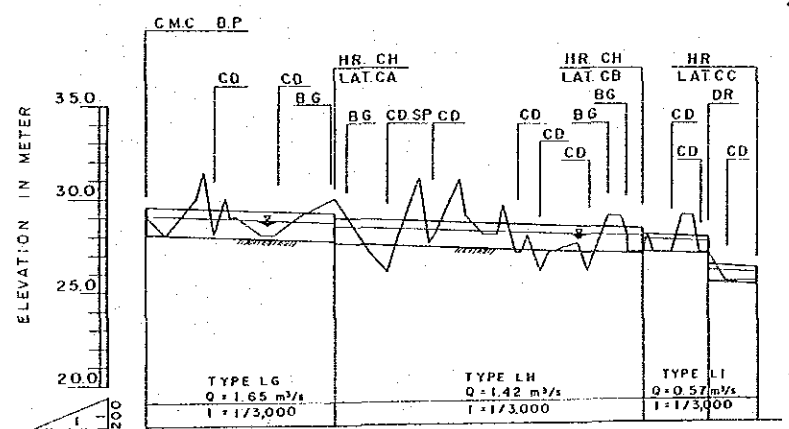
JAPAN INTERNATIONAL COOPERATION AGENCY

BAYONGAN MAIN CANAL



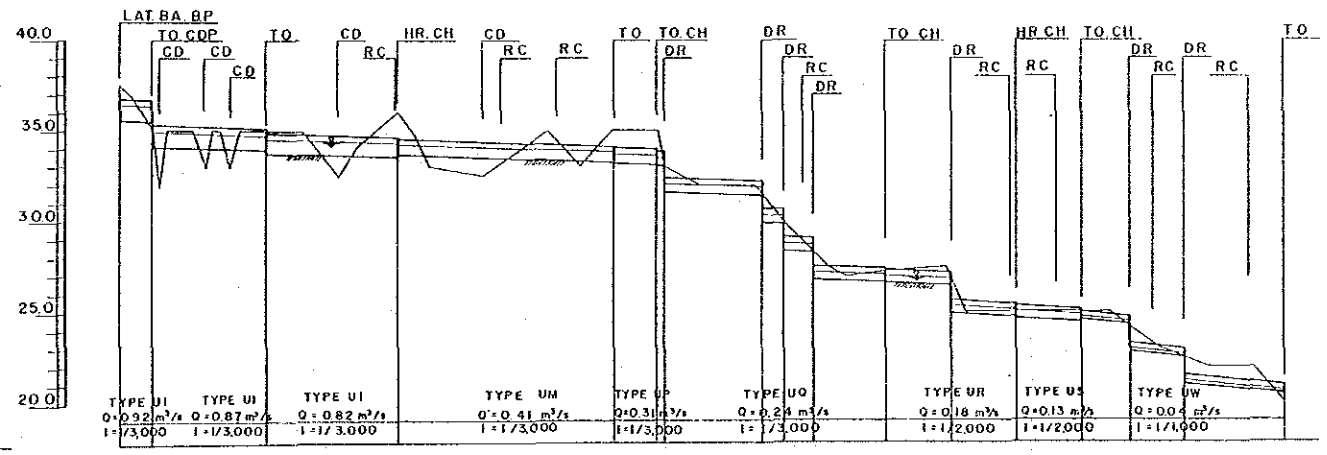
WATER SURFACE ELEVATION	37.00	36.93 / 36.83	36.76	36.62	36.50 / 36.30	36.27	36.13	35.99	35.85	35.78 / 35.58	35.50	35.36	35.22	35.17 / 34.97	34.86	34.74	34.71 / 34.51	34.39	34.32
CANAL BED ELEVATION	35.37	35.32 / 35.31	35.22	35.08	34.96 / 34.82	34.79	34.65	34.51	34.37	34.30 / 34.25	34.15	34.01	33.87	33.82 / 33.67	33.58	33.44	33.41 / 33.32	33.20	33.13
GROUND SURFACE	42.50	37.50	37.50	34.00	37.50	37.50	37.50	36.00	38.00	35.40	35.50	3600	35.00	35.40	35.00	35.00	35.00	32.00	
DISTANCE	0	380	1.000	2.000	2.820	3.000	4.000	5.000	6.000	6.470	7.000	8.000	9.000	9.360	10.000	11.000	11.150	12.000	12.450
STATION	NO.0		NO.1	NO.2		NO.3	NO.4	NO.5	NO.6		NO.7	NO.8	NO.9		NO.10	NO.11		NO.12	

CAPAYAS MAIN CANAL



WATER SURFACE ELEVATION	29.00	28.67 / 28.47	28.14	27.92 / 27.72	27.60 / 26.10	26.01
CANAL BED ELEVATION	27.98	27.65 / 27.52	27.19	26.97 / 27.04	26.92 / 25.42	25.33
GROUND SURFACE	29.00	30.00	27.00	27.00	27.00	25.40
DISTANCE	0	1.000	2.000	2.650	3.000	3.270
STATION	NO.0	NO.1	NO.2		NO.3	

LATERAL LAT. BA



WATER SURFACE ELEVATION	36.95 / 36.45	36.39 / 34.87	34.66 / 34.56	34.49	34.32 / 34.22	34.06	33.82 / 33.72	33.64 / 33.54 / 33.35 / 33.32	31.85 / 31.05	30.51 / 28.81	28.76 / 27.26	27.20	27.13 / 27.03	26.85 / 25.35	25.17 / 25.07 / 25.04	24.89 / 24.79	24.53 / 23.03	22.73 / 21.23	21.09	20.67
CANAL BED ELEVATION	35.63	35.57 / 34.07	33.86 / 33.76	33.71	33.54 / 33.67	33.51	33.27 / 33.21	33.13 / 33.07 / 33.05 / 31.56	31.38 / 29.88	29.84 / 28.34	28.29 / 26.79	26.73	26.66 / 26.65	25.47 / 24.97	24.79 / 24.73	24.55 / 24.62	24.36 / 22.86	22.56 / 21.06	20.92	20.50
GROUND SURFACE	37.50	35.00	35.00	35.00	36.00	32.50	35.00	33.00 / 33.00	31.50	30.00	28.50	27.000	27.20	27.00	25.00 / 25.00	25.00	24.20	22.50	22.00	20.00
DISTANCE	0	180	800	1.000	1.530	2.000	2.720	2.960 / 3.000	3.540	3.660	3.820	4.000	4.220	4.580	4.940 / 5.000	5.300	5.560	5.860	6.000	6.420
STATION	NO.0			NO.1		NO.2		NO.3				NO.4			NO.5				NO.6	

LEGEND

HR	:	HEAD REGULATOR
CH	:	CHECK
TO	:	TURNOUT
DR	:	DROP
CDP	:	CHECK CUM DROP
BG	:	BRIDGE
SP	:	SPILLWAY
SY	:	SYPHON
RC	:	ROAD CROSSING

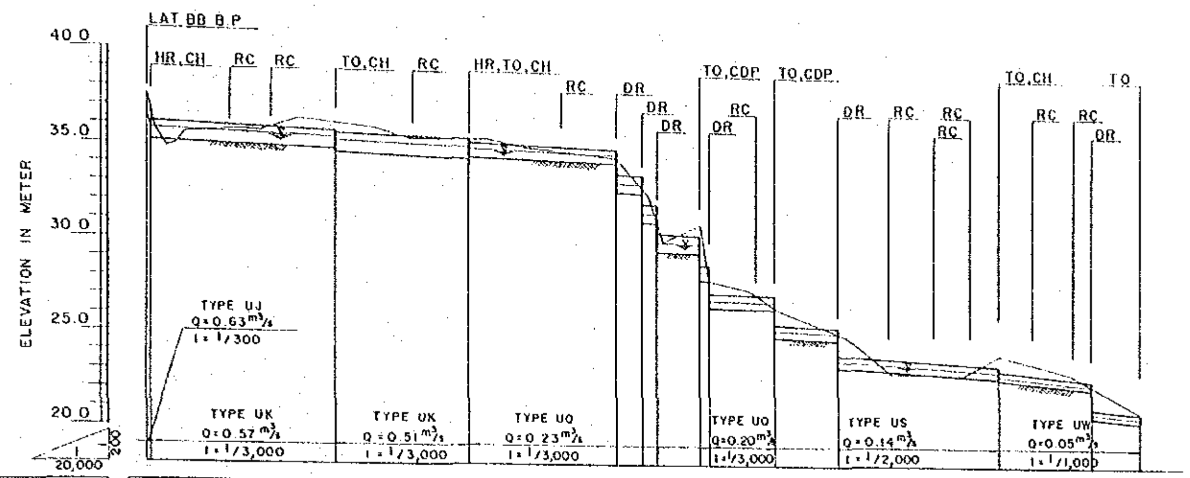
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

CANAL PROFILE (1/4)
B. M. C, C. M. C, LAT. BA

DRAWING NO. CA.-2 | NOVEMBER, 1985

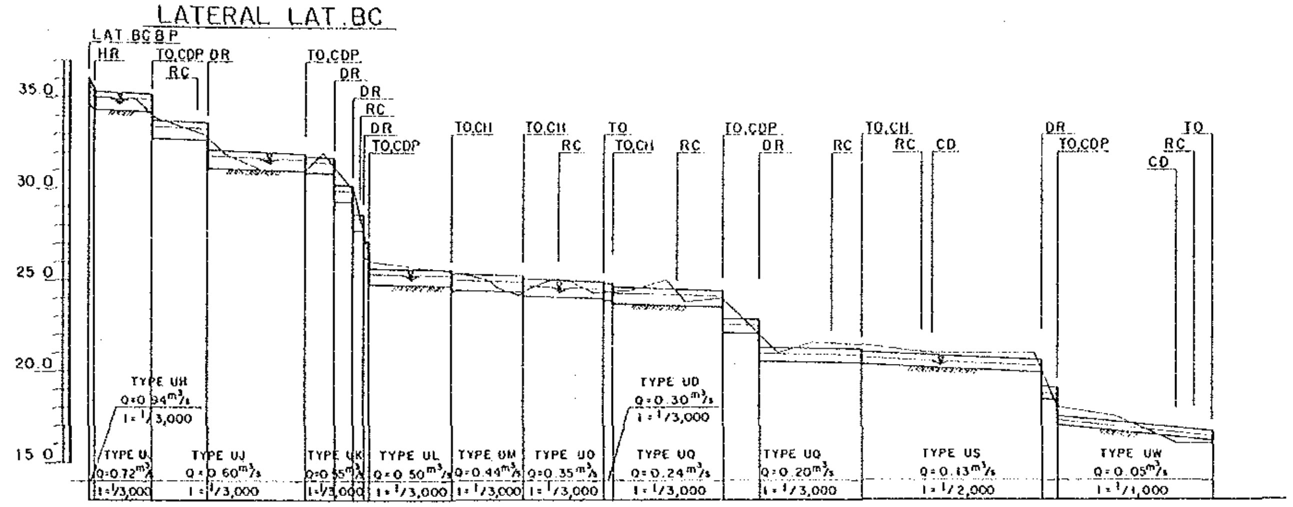
JAPAN INTERNATIONAL COOPERATION AGENCY

LATERAL LAT. BB



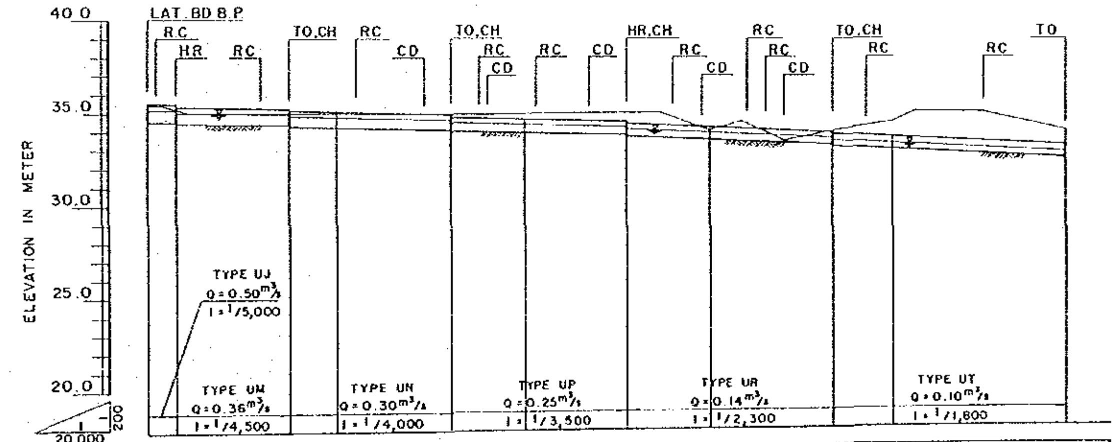
STATION	DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE
NO.0	0 / 20	36.50 / 35.99 / 35.89 / 35.79	34.96 / 35.25 / 35.24 / 35.15	37.50 / 36.40
NO.1	1,000	35.46 / 35.26	34.82 / 34.66	36.20
	1,700	35.03 / 34.93	34.41 / 34.47	35.40
NO.2	2,000	34.83	34.37	35.00
	2,500	34.66 / 33.16	34.20 / 32.70	34.50
	2,640	33.11 / 31.61	32.65 / 31.15	32.80
	2,720	31.58 / 30.08	31.12 / 29.62	31.00
	2,950	30.00 / 28.50	29.56 / 28.07	31.00
NO.3	3,000	28.48 / 26.98	28.05 / 26.55	28.00
	3,350	26.86 / 25.36	26.43 / 25.01	26.40
	3,700	25.19 / 23.69	24.84 / 23.34	25.20
NO.4	4,000	23.34	23.19	23.00
	4,390	23.07 / 22.97	22.72 / 22.78	24.00
NO.5	5,000	22.56	22.37	23.00
	5,100	22.42 / 20.92	22.23 / 20.73	22.40
	5,370	20.65	20.46	21.00

LATERAL LAT. BC



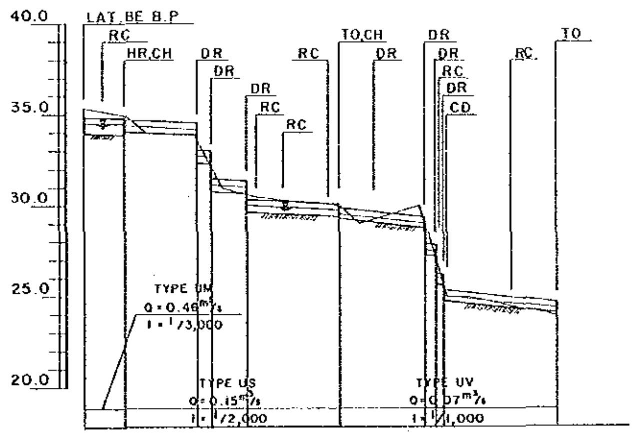
STATION	DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE
NO.0	0 / 30	35.78 / 35.27 / 35.22 / 35.07	34.30 / 34.44 / 34.44 / 34.37	35.40 / 35.00
	350	34.96 / 33.46	34.26 / 32.82	34.00
	660	33.36 / 31.86	32.72 / 31.22	33.00
NO.1	1,000	31.64	31.00	31.00
	1,200	31.68 / 31.48	31.04 / 30.85	31.00
	1,360	[illegible]	[illegible]	31.20
	1,460 / 1,520 / 1,550	[illegible]	[illegible]	30.00 / 27.40 / 26.40
NO.2	2,000	25.22 / 25.02	24.62 / 24.45	25.50
	2,400	24.89 / 24.69	24.32 / 24.14	24.20
NO.3	2,850 / 2,900 / 3,000	24.54 / 24.44 / 24.42 / 24.32 / 24.29	23.99 / 23.94 / 23.92 / 23.82 / 23.78	24.50 / 24.30 / 24.40
	3,300	24.12 / 22.62	23.61 / 22.19	24.00
	3,700	22.55 / 21.05	22.12 / 20.62	22.00
NO.4	4,000	20.95	20.52	21.50
	4,270	20.86 / 20.76	20.43 / 20.42	21.40
NO.5	5,000	20.40	20.06	21.00
	5,260 / 5,350	20.27 / 18.77 / 18.73 / 17.23	19.93 / 18.43 / 18.39 / 17.04	20.50 / 18.00
NO.6	6,000	16.58	16.39	16.00
	6,200	16.38	16.19	16.00

LATERAL LAT. BD



STATION	DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE
NO.0	0	35.70 / 35.18	34.30 / 34.52	35.40
	150	35.15 / 35.05	34.49 / 34.52	35.20
	750	34.92 / 34.82	34.35 / 34.30	35.00
NO.1	1,000	34.76	34.24	35.00
	1,600	34.61 / 34.51	34.09 / 34.03	35.00
NO.2	2,000	34.40	33.92	35.00
	2,550	34.24 / 34.14	33.76 / 33.79	35.00
NO.3	3,000	33.94	33.59	34.00
	3,470	33.63 / 33.53	33.30 / 33.23	34.00
NO.4	4,000	33.37	33.07	34.50
	4,960	32.83	32.53	34.00

LATERAL LAT. BE



STATION	DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE
NO.0	0	35.17 / 34.57	33.82 / 33.98	35.40
	220	34.50 / 34.40	33.91 / 34.04	35.00
	620	34.20 / 32.70	33.84 / 32.34	34.00
	700	32.61 / 31.11	32.25 / 30.75	32.00
	900	31.01 / 30.01	30.65 / 29.65	30.60
NO.1	1,000	29.96	29.60	30.50
	1,410	29.76 / 29.56	29.40 / 29.33	30.00
NO.2	1,880 / 1,940 / 1,980 / 2,000	29.09 / 27.59 / 27.53 / 26.03 / 26.01 / 25.01 / 24.99	28.86 / 27.36 / 27.30 / 25.80 / 25.78 / 24.78 / 24.76	29.00 / 27.00 / 25.40 / 25.00
	2,600	24.39	24.16	24.00

LEGEND

- HR : HEAD REGULATOR
- CH : CHECK
- TO : TURNOUT
- DR : DROP
- CDP : CHECK CUM DROP
- BG : BRIDGE
- SP : SPILLWAY
- SY : SYPHON
- RC : ROAD CROSSING

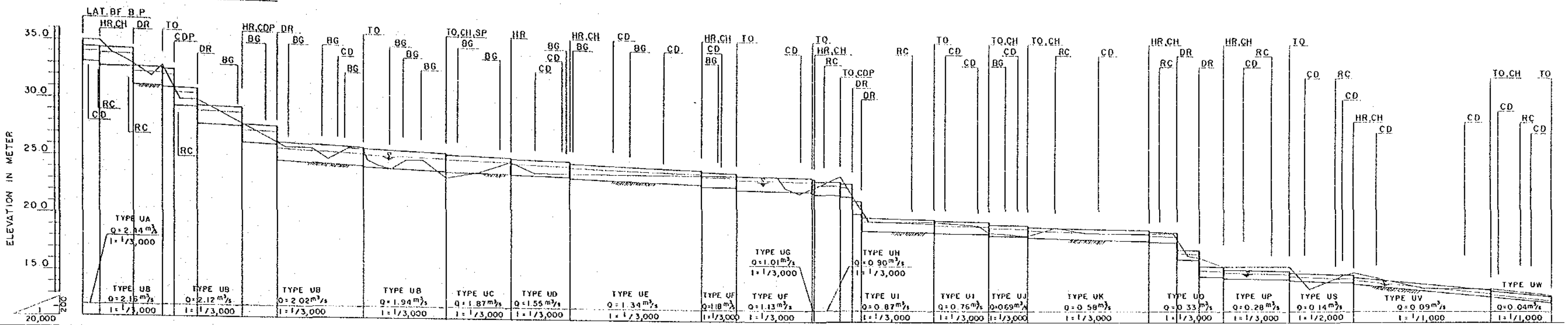
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

CANAL PROFILE (2/4)
LAT. BB, LAT. BC, LAT. BD, LAT. BE

DRAWING NO. CA.–3	NOVEMBER, 1985

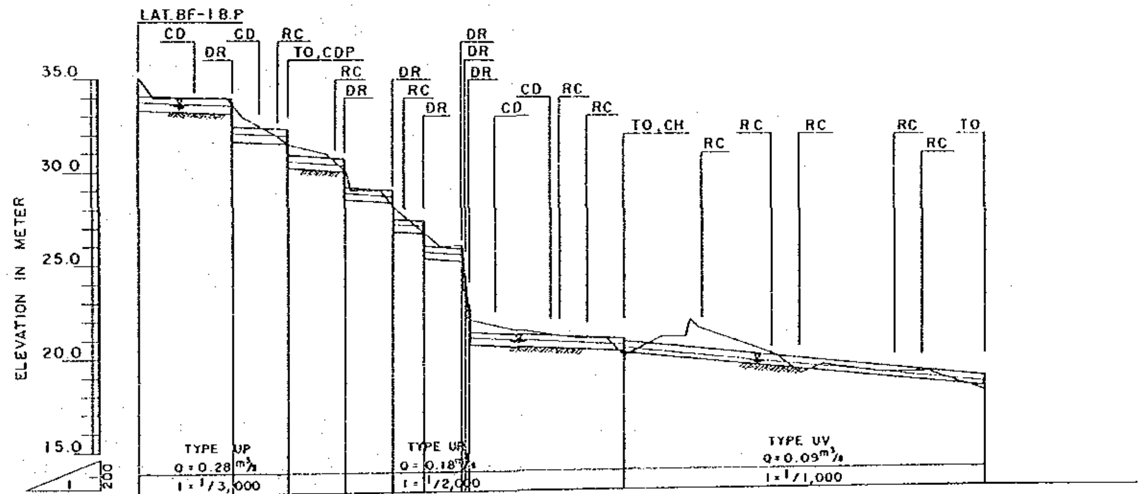
JAPAN INTERNATIONAL COOPERATION AGENCY

LATERAL LAT. BF



DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE	STATION
0	34.71 / 34.11	33.41 / 33.19	35.00	NO.0
150	34.06 / 33.96	33.14 / 32.85	35.00	
440	33.86 / 32.36	32.75 / 31.25	33.00	
700	32.27 / 32.17	31.16 / 31.05	33.00	
800	32.14 / 30.64	31.02 / 29.52	31.00	
1,000	30.57 / 29.07	29.45 / 27.95	30.00	NO.1
1,400	28.94 / 27.44	27.82 / 26.34	28.00	
1,700	27.39 / 25.89	26.29 / 24.79	26.40	
2,000	25.79	24.69	26.00	NO.2
2,470	25.54 / 25.44	24.44 / 24.37	26.00	
3,000	25.28	24.19	25.00	NO.3
3,200	25.20 / 25.10	24.13 / 24.05	23.40	
3,780	24.91 / 24.81	23.86 / 23.82	23.00	
4,000	24.74	23.75	24.00	NO.4
4,310	24.63 / 24.53	23.64 / 23.61	24.00	
5,000	24.30	23.38	24.00	NO.5
5,500	24.13 / 23.93	23.21 / 23.04	24.00	
5,820	23.82 / 23.72	22.93 / 22.84	24.00	
6,000	23.66	22.78	24.00	NO.6
6,500 / 6,520	23.49 / 23.39 / 23.38 / 23.28	22.61 / 22.56 / 22.55 / 22.47	23.00 / 23.00	
6,750 / 6,860 / 6,940 / 7,000	23.20 / 23.10 / 23.06 / 21.56 / 21.55 / 20.01	22.39 / 22.30 / 22.26 / 20.76 / 20.73 / 19.23 / 19.21	24.00 / 22.20 / 21.00 / 20.00	NO.7
7,600	19.81 / 19.71	19.01 / 19.01	20.00	
8,000	19.58 / 19.54	18.88 / 18.84	19.50	NO.8
8,100	19.44	18.76	19.00	
8,450	19.32 / 19.22	18.64 / 18.58	18.80	
9,000	19.04	18.40	19.00	NO.9
9,550	18.85 / 18.75	18.21 / 18.22	19.00	
9,800	18.67 / 17.17	18.14 / 16.64	18.50	
10,000	17.10 / 15.60	16.57 / 15.07	16.80	NO.10
10,220	15.53 / 15.43	15.00 / 14.94	16.00	
10,820	15.23 / 15.13	14.74 / 14.78	16.00	
11,000	15.07	14.72	14.00	NO.11
11,400	14.84 / 14.74	14.49 / 14.48	15.30	
12,000	14.54	14.28	14.00	NO.12
12,630	13.51 / 13.41	13.25 / 13.24	14.00	
13,000	13.29	13.12	13.60	NO.13
13,180	12.86	12.69	13.40	

SUB-LATERAL LAT. BF-1



DISTANCE	WATER SURFACE ELEVATION	CANAL BED ELEVATION	GROUND SURFACE	STATION
0	34.06 / 33.76	33.14 / 33.27	25.00	NO.0
500	33.59 / 32.09	33.10 / 31.60	33.60	
800	31.99 / 30.49	31.50 / 30.11	31.50	
1,000	30.39 / 30.34	30.01 / 29.96	31.00	NO.1
1,100	28.84	28.46	30.00	
1,360	28.71 / 27.21	28.33 / 26.83	28.20	
1,520	27.13 / 25.63	26.75 / 25.25	26.60	
1,720 / 1,740 / 1,760	25.55 / 25.50 / 24.02 / 22.52 / 22.51 / 21.01	25.15 / 23.65 / 23.64 / 22.14 / 22.13 / 20.63	26.00 / 24.00 / 22.00	
2,000	20.89	20.51	21.50	NO.2
2,600	20.59 / 20.39	20.21 / 20.13	20.00	
3,000	19.99	19.73	21.50	NO.3
4,000	18.99	18.73	19.00	NO.4
4,570	18.42	18.16	18.00	

LEGEND

HR : HEAD REGULATOR
CH : CHECK
TO : TURNOUT
DR : DROP
CDP : CHECK CUM DROP
BG : BRIDGE
SP : SPILLWAY
SY : SYPHON
RC : ROAD CROSSING

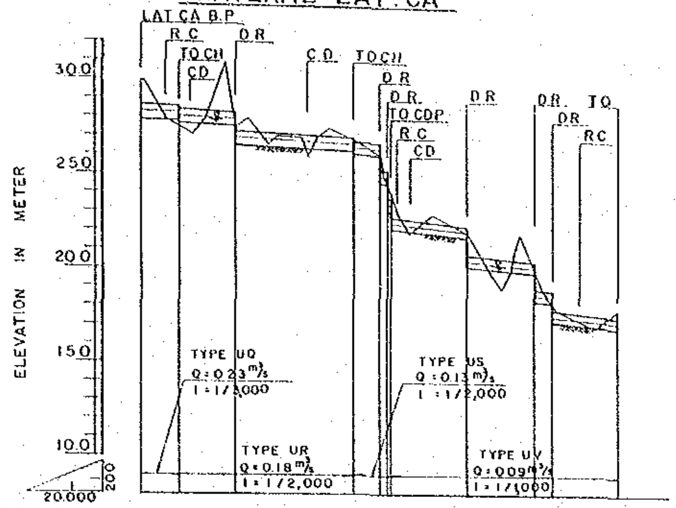
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

CANAL PROFILE (3/4)
LAT. BF, LAT. BF-1

DRAWING NO. CA-4 | NOVEMBER, 1985

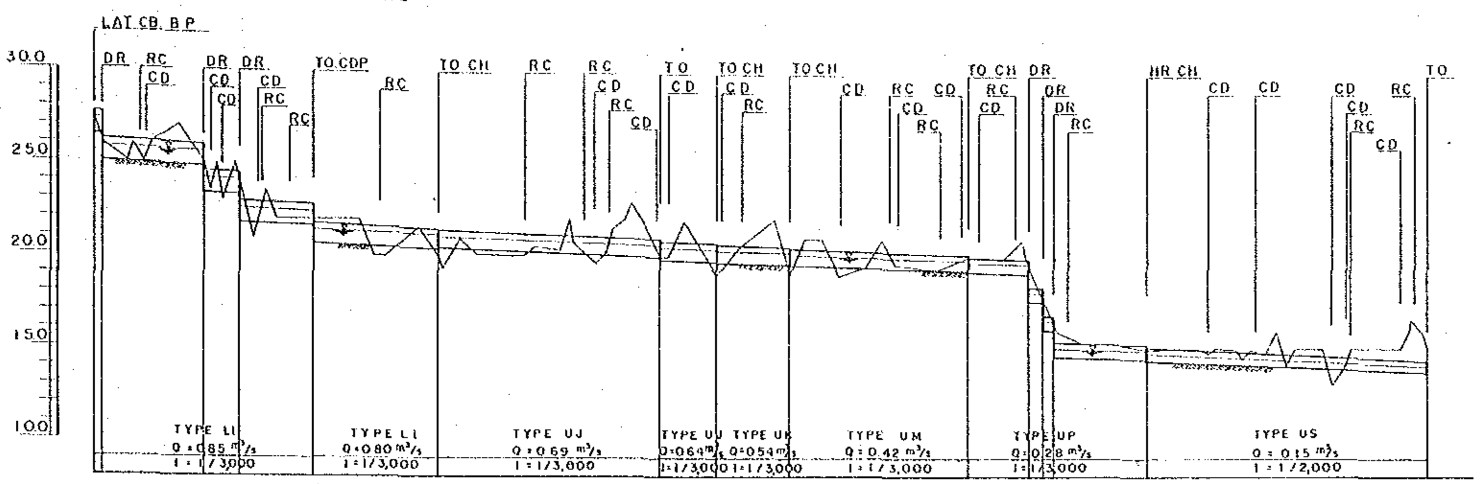
JAPAN INTERNATIONAL COOPERATION AGENCY

LATERAL LAT. CA



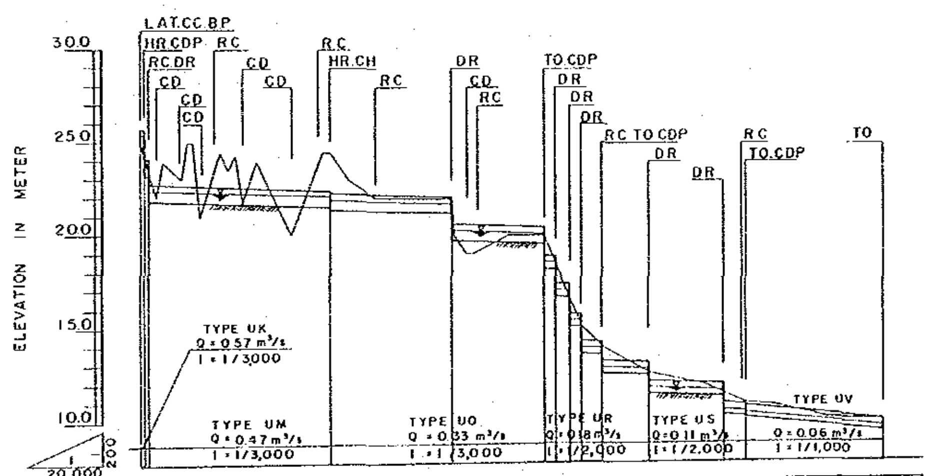
WATER SURFACE ELEVATION	28.67 / 28.37	28.30 / 28.10	27.95 / 26.95	26.70	26.64 / 26.54	[illegible]	22.04 / 20.54	[illegible]	17.23
CANAL BED ELEVATION	27.65 / 27.91	27.84 / 27.72	27.57 / 26.57	26.32	26.26 / 26.20	[illegible]	21.78 / 20.28	20.00 / 19.92 / 19.42 / 18.32 / 17.52	16.97
GROUND SURFACE	30.00	27.50	27.50	27.50	27.00	26.00 / 24.60 / 24.00	22.00	22.00 / 20.00 / 18.20	18.00
DISTANCE	0	200	500	1,000	1,120	1,260 / 1,300 / 1,320	1,720	2,000 / 2,080 / 2,180	2,530
STATION	NO.0			NO.1				NO.2	

LATERAL LAT. CB



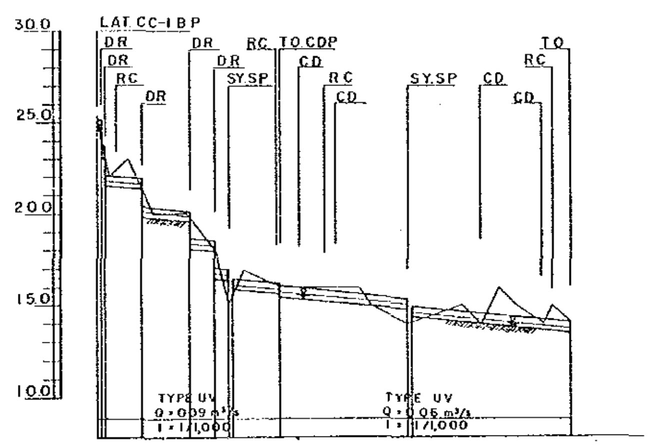
WATER SURFACE ELEVATION	[illegible]	25.62 / 24.12	24.05 / 22.55	22.48	22.42 / 21.42	21.19 / 21.09	21.05	20.72 / 20.68	20.58	20.48 / 20.38	20.24 / 20.14	20.08	19.81 / 19.71	19.64	[illegible]	14.88 / 14.79	14.69	14.19	14.02
CANAL BED ELEVATION	26.97 / [illegible] / 25.02	24.83 / 23.33	23.26 / 21.76	21.69	21.63 / 20.65	20.42 / 20.41	20.37	20.04 / 20.00	19.92	19.82 / 19.76	19.62 / 19.58	19.52	19.25 / 19.32	19.15	[illegible]	14.39 / 14.43	14.33	13.83	13.66
GROUND SURFACE	27.00 / 26.00	25.00	24.00	22.00	22.00	20.00	21.00	22.00	20.00	19.00	19.00	21.00	20.00	20.00	21.00 / 17.80 / 16.60	15.00	15.00	15.00	15.00
DISTANCE	0 / 40	600	800	1,000	1,200	1,880	2,000	3,000	3,100	3,410	3,820	4,000	4,800	5,000	5,140 / 5,220 / 5,280	5,800	6,000	7,000	7,350
STATION	NO.0			NO.1			NO.2	NO.3				NO.4		NO.5			NO.6	NO.7	

LATERAL LAT. CC



WATER SURFACE ELEVATION	[illegible]	22.07 / 21.97	21.76 / 20.26	20.14	[illegible]	12.82 / 11.82	11.67	11.62 / 10.56	10.46	9.70
CANAL BED ELEVATION	[illegible]	21.48 / 21.44	21.23 / 19.73	19.61	[illegible]	12.51 / 11.51	11.36	11.31 / 10.25	10.25	9.49
GROUND SURFACE	25.40 / 25.20	24.50	22.00	20.00	20.00 / 18.50 / 16.50 / 15.00 / 14.00	12.50	12.00	11.50	11.00	10.00
DISTANCE	0 / 20 / 40	1,000	1,640	2,000	2,140 / 2,200 / 2,260 / 2,340 / 2,450	2,700	3,000	3,100	3,220	3,980
STATION	NO.0	NO.1		NO.2			NO.3			

SUB-LATERAL LAT. CC-I



WATER SURFACE ELEVATION	[illegible]	[illegible]	19.83 / 18.33	18.19 / 16.69 / 16.61 / 16.09	15.83 / 15.73	15.03 / 14.61	14.33	13.73
CANAL BED ELEVATION	[illegible]	[illegible]	19.57 / 18.07	17.93 / 16.43	16.07 / 15.12		14.12	13.52
GROUND SURFACE	25.00 / 25.00 / 23.00	21.40	19.80	18.00 / 18.00 / 15.40	16.00	14.00 / 14.00	15.00	14.00
DISTANCE	0 / 20 / 40	240	500	640 / 720 / 740	1,000	1,700 / 1,720	2,000	2,600
STATION	NO.0				NO.1		NO.2	

LEGEND

HR : HEAD REGULATOR
CH : CHECK
TO : TURNOUT
DR : DROP
CDP : CHECK CUM DROP
BG : BRIDGE
SP : SPILLWAY
SY : SYPHON
RC : ROAD CROSSING

FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

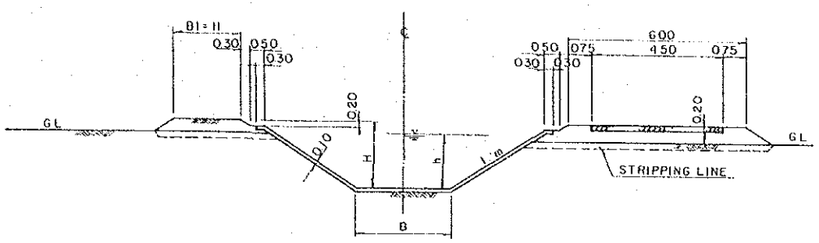
CANAL PROFILE (4/4)
LAT. CA, LAT. CB, LAT. CC, LAT. CC–1

DRAWING NO. CA.–5	NOVEMBER, 1985

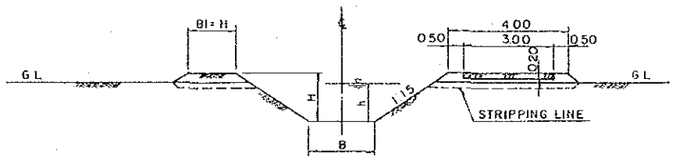
JAPAN INTERNATIONAL COOPERATION AGENCY

TYPICAL CANAL SECTIONS

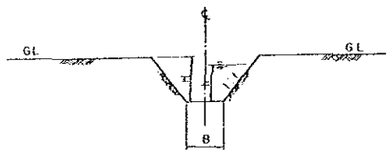
S = 1 : 100



MAIN CANAL (LINED)



LATERAL CANAL (UNLINED)



DRAINAGE CANAL (UNLINED)

CANAL DIMENSIONS

	TYPE	DISCHARGE	B/H	n	I	m	B	H	V	h
IRRIGATION CANAL	MAIN CANAL	LA	7.54 m³/s	2	0.015	1/7,000	1.5	3.30 m	2.30 m	0.807 m/s	1.627 m
		LB	6.62	〃	〃	〃	〃	3.20	2.20	0.780	1.540
		LC	5.99	〃	〃	〃	〃	3.10	2.10	0.761	1.480
		LD	4.55	〃	〃	〃	〃	2.70	1.90	0.712	1.352
		LE	4.09	〃	〃	〃	〃	2.60	1.90	0.693	1.298
		LF	1.65	〃	〃	〃	〃	1.20	1.70	0.581	1.189
		LG	1.65	〃	〃	1/3,000	〃	1.00	1.50	0.798	1.022
		LH	1.42	〃	〃	〃	〃	1.00	1.40	0.769	0.948
		LI	0.57	〃	〃	〃	〃	0.70	1.00	0.612	0.677
	LATERAL AND/OR SUB-LATERAL CANAL	UA	2.44	2	0.025	1/3,000	1.5	2.20	1.60	0.571	1.108
		UB	2.16～1.94	〃	〃	〃	〃	2.10	1.50	0.553～0.538	1.058～1.002
		UC	1.87	〃	〃	〃	〃	2.00	1.40	0.534	1.001
		UD	1.55	〃	〃	〃	〃	1.90	1.30	0.509	0.926
		UE	1.34	〃	〃	〃	〃	1.80	1.20	0.491	0.877
		UF	1.18～1.13	〃	〃	〃	〃	1.70	1.20	0.475～0.470	0.839～0.820
		UG	1.01	〃	〃	〃	〃	1.60	1.20	0.457	0.792
		UH	0.94～0.90	〃	〃	〃	〃	1.60	1.10	0.449～0.443	0.763～0.746
		UI	0.92～0.76	〃	〃	〃	〃	1.50	1.10	0.447～0.425	0.773～0.701
		UJ	0.72～0.50	〃	〃	1/3,000～1/5,000	〃	1.40	1.00	0.420～0.316	0.699～0.661
		UK	0.58～0.51	〃	〃	1/3,000	〃	1.30	1.00	0.398～0.385	0.643～0.602
		UL	0.50	〃	〃	〃	〃	1.30	0.90	0.383	0.596
		UM	0.41～0.36	〃	〃	1/3,000～1/4,500	〃	1.20	0.90	0.378～0.303	0.554～0.575
		UN	0.30	〃	〃	1/4,000	〃	1.10	0.90	0.303	0.525
		UO	0.35～0.30	〃	〃	1/3,000	〃	1.00	0.90	0.352～0.338	0.546～0.505
		UP	0.28～0.25	〃	〃	1/3,000～1/3,500	〃	1.00	0.80	0.332～0.304	0.488～0.479
		UQ	0.24～0.20	〃	〃	1/3,000	〃	0.90	0.80	0.320～0.305	0.468～0.426
		UR	0.18～0.14	〃	〃	1/2,000～1/2,300	〃	0.80	0.70	0.380～0.346	0.345～0.307
		US	0.15～0.11	〃	〃	1/2,000	〃	0.70	0.70	0.331～0.305	0.364～0.310
		UT	0.10	〃	〃	1/1,800	〃	0.60	0.70	0.311	0.304
		UU	0.09	〃	〃	1/1,800	〃	0.60	0.60	0.302	0.288
		UV	0.10～0.06	〃	〃	1/1,000	〃	0.50	0.60	0.389～0.339	0.280～0.215
		UW	0.05～0.04	〃	〃	1/1,000	〃	0.50	0.50	0.322～0.303	0.195～0.174

DRAINAGE CANAL	A	0.87	1	0.040	1/3,000	1.0	1.20	1.50	0.326	1.141
	B	0.81	〃	〃	〃	〃	1.10	1.50	0.320	1.133
	C	0.72	〃	〃	〃	〃	1.00	1.40	0.311	1.068
	D	0.68	〃	〃	1/2,000	〃	1.00	1.30	0.357	0.968
	E	0.65～0.62	〃	〃	〃	〃	0.90	1.30	0.353～0.349	0.980～0.957
	F	0.45～0.41	〃	〃	1/5,000	〃	0.80	1.10	0.360～0.350	0.798～0.754
	G	0.40	〃	〃	〃	〃	0.70	1.10	0.348	0.777
	H	0.35～0.27	〃	〃	1/1,000	〃	0.60	1.00	0.392～0.367	0.691～0.608
	I	0.26～0.24	〃	〃	〃	〃	0.60	0.90	0.364～0.357	0.597～0.574
	J	0.21～0.19	〃	〃	1/750	〃	0.50	0.90	0.384～0.375	0.530～0.505
	K	0.17～0.16	〃	〃	〃	〃	0.50	0.80	0.364～0.359	0.477～0.463
	L	0.14～0.13	〃	〃	1/500	〃	0.40	0.80	0.404～0.397	0.421～0.406
	M	0.12～0.09	〃	〃	〃	〃	0.40	0.70	0.389～0.361	0.390～0.338

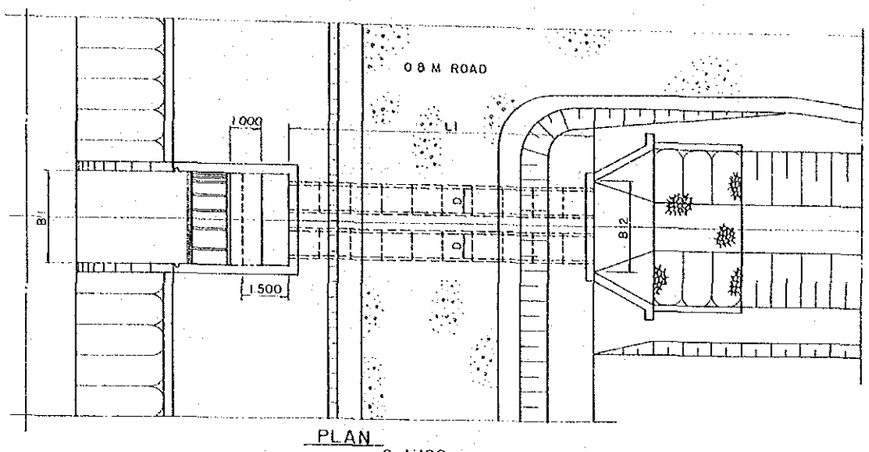
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

TYPICAL CANAL SECTIONS

DRAWING NO. CA.-6 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY

HEAD REGULATOR



PLAN
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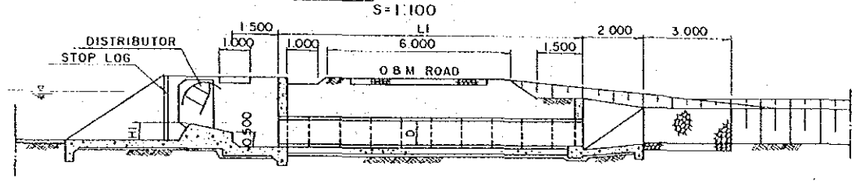

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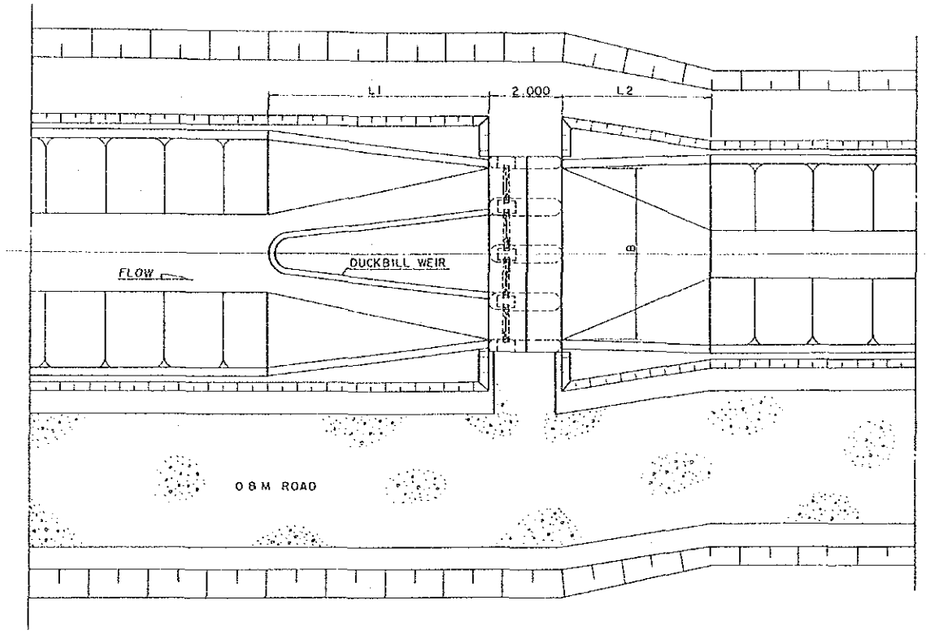
CHECK



PLAN
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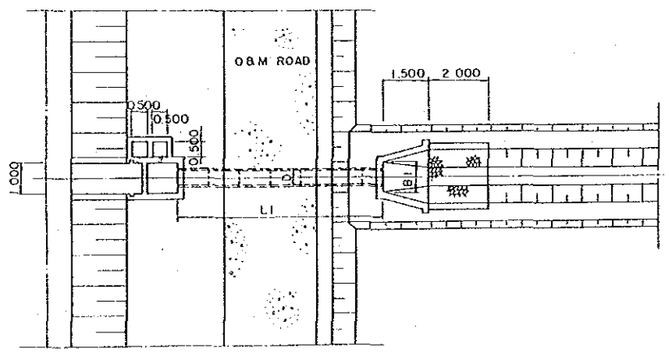
NOTE : DUCKBILL WEIR IS FURNISHED ONLY FOR THE MAIN CANAL.

DIVERSION STRUC. & TURNOUT



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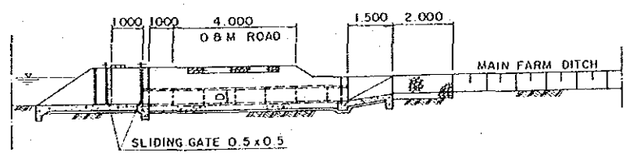

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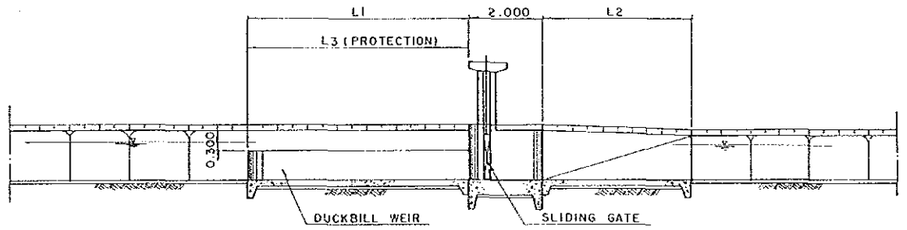

PROFILE
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TABLE OF DIMENSIONS FOR HEAD REGULATOR

TYPE	Q (CMS)	B1 m	B2 m	D m	NOS OF PIPE BARREL	H1 m
HR-1	0.30~1.00	2.00	2.00	0.60	2	0.50
HR-2	1.00~1.50	3.00	2.50	0.80	2	0.60
HR-3	MORE THAN 3.0	3.00	3.00	1.00	2	0.65

TABLE OF DIMENSIONS FOR DIVERSION STRUC. & TURNOUT

TYPE	Q (CMS)	D m	B1 m
CHO-1	LESS THAN 0.1	0.45	1.00
CHO-2	0.10~0.50	0.60	1.00
CHO-3	MORE THAN 0.5	0.80	1.20

TABLE OF DIMENSIONS FOR CHECK

TYPE	Q (CMS)	B m	L1 m	NOS OF GATE	L2 m	L3 m
CH-1	LESS THAN 0.5	1.00	1.00	1	3.00	3.00
CH-2	0.50~1.00	2.60	1.50	2	3.00	3.00
CH-3	1.00~2.00	3.00	3.00	2	4.00	3.00
CH-4	2.00~3.00	3.60	4.50	2	4.00	4.50
CH-5	3.00~4.00	4.20	6.00	3	5.00	6.00
CH-6	4.00~5.00	5.80	7.50	4	5.00	7.50
CH-7	MORE THAN 5.0	7.40	9.00	5	5.00	9.00

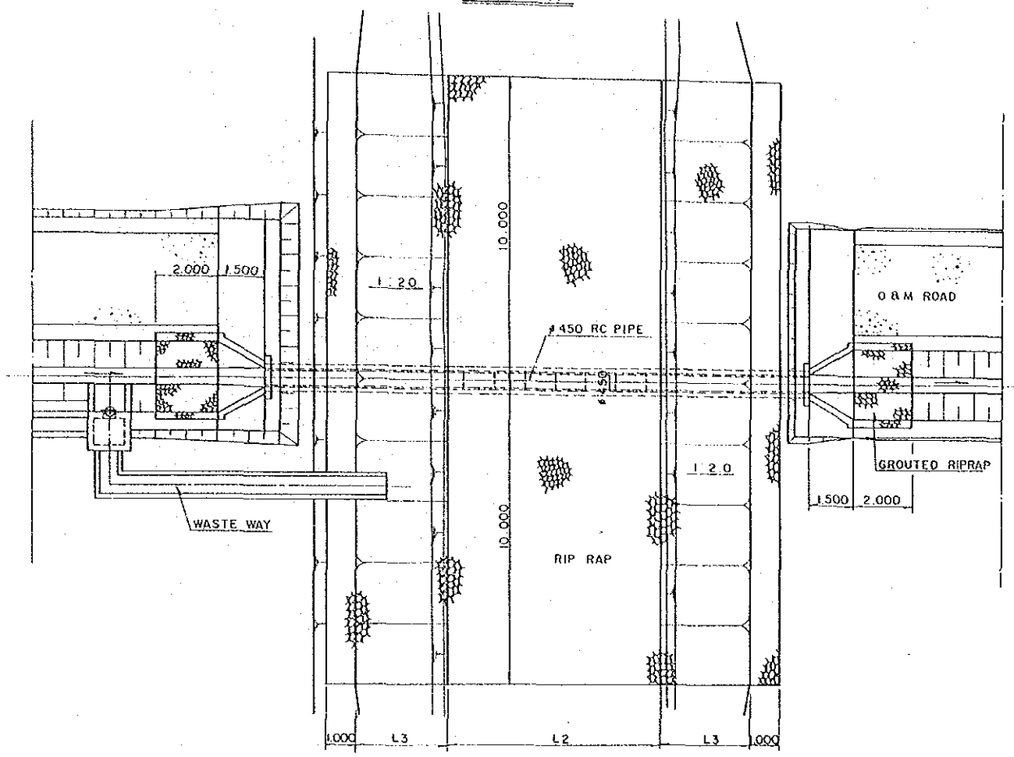
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

RELATED STRUCTURE (1/4)

DRAWING NO. CA-7 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY

SYPHON



PLAN
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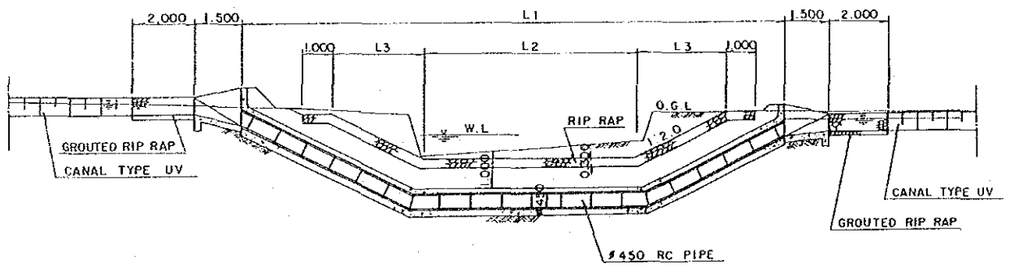
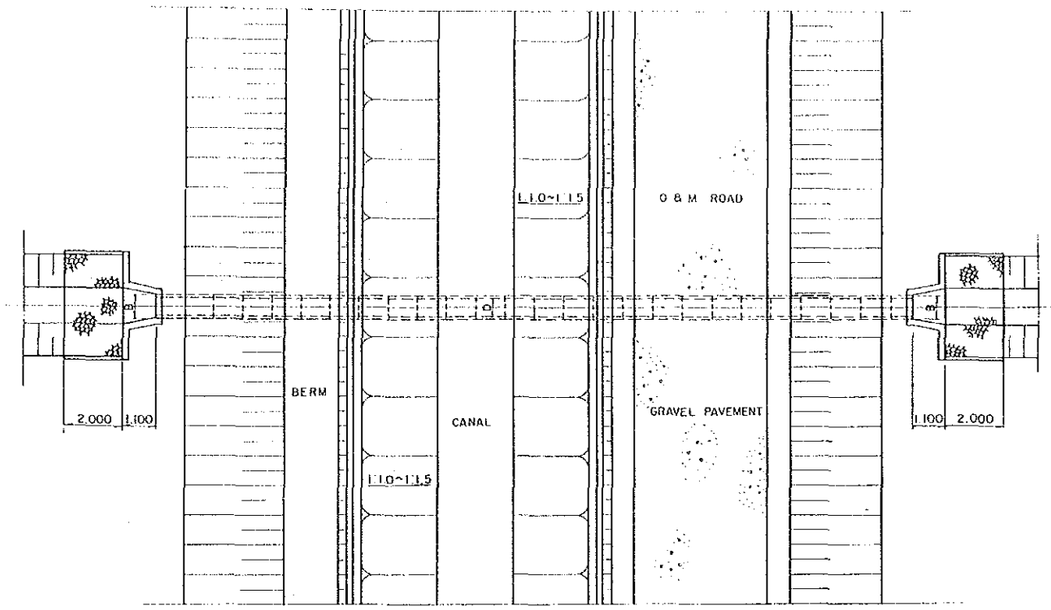


PROFILE
S=1:100

TABLE OF DIMENSIONS FOR SYPHON

TYPE	Qmax (CMS)	TYPE OF BARREL	ϕ mm
SY-1	LESS THAN 050	PRE-CAST CONCRETE PIPE	450

CROSS DRAIN



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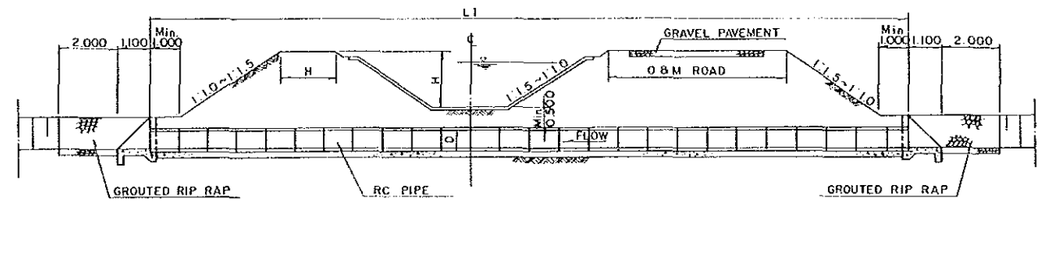


PROFILE
S=1:100

TABLE OF DIMENSIONS FOR CROSS DRAIN

TYPE	Q (CMS)	TYPE OF BARREL	D mm	B m
CD-1	LESS THAN 1.00	PRE-CAST CONCRETE PIPE	450	0.60
CD-2	1.00 ~ 1.50	"	600	0.80
CD-3	MORE THAN 1.50	"	1,000	1.20

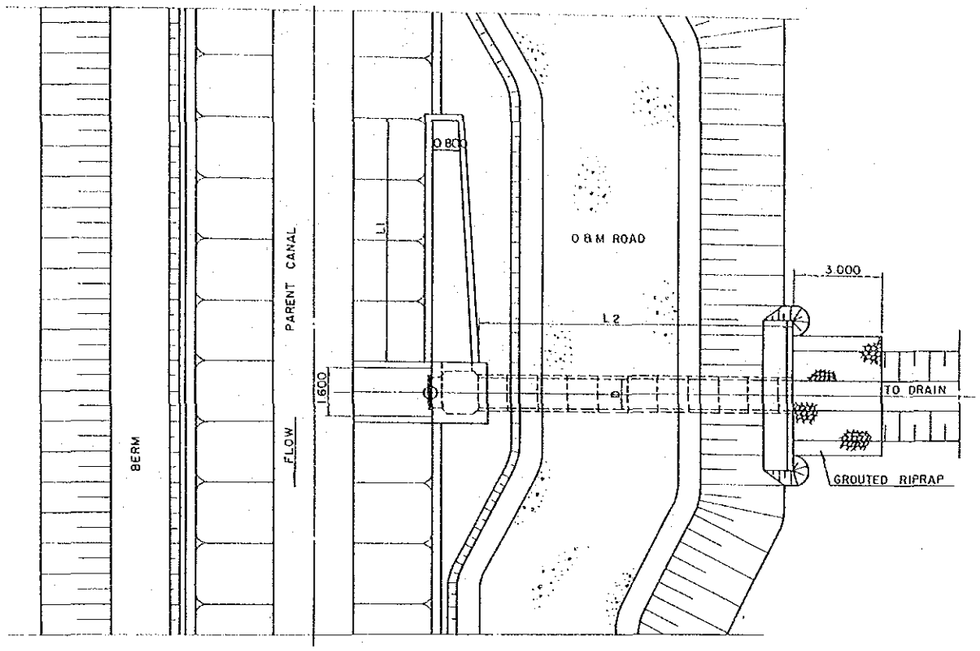
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

RELATED STRUCTURE (2/4)

DRAWING NO. CA.-8 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY

SPILLWAY



PLAN
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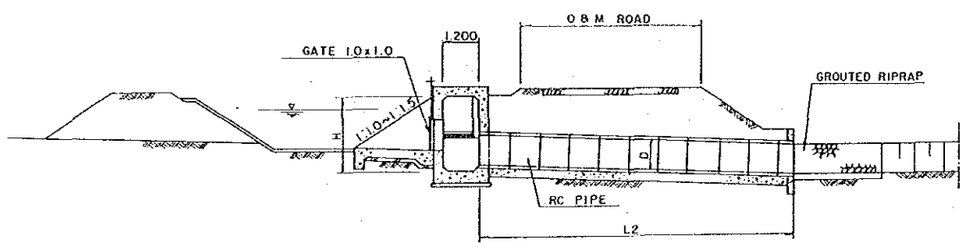
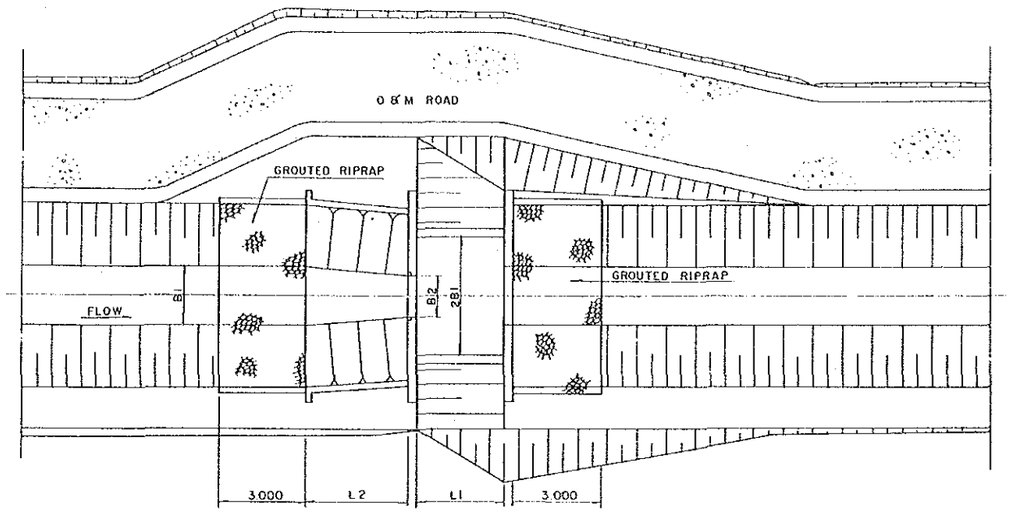


PROFILE
S = 1 : 100

TABLE OF DIMENSIONS FOR SPILLWAY

TYPE	Q (CMS)	L1	D	H
SW-1	LESS THAN 1.0	3.0 m	0.45 m	1.3 m
SW-2	1.0 ~ 3.0	7.0	0.7	2.5
SW-3	MORE THAN 3.0	10.0	1.0	3.1

DROP



PLAN
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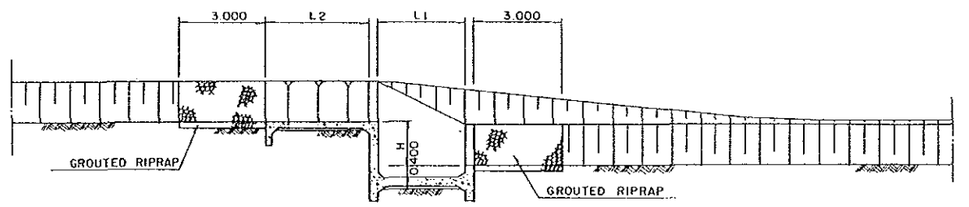


PROFILE
S = 1 : 100

TABLE OF DIMENSIONS FOR DROP

TYPE	Q (CMS)	H	L1	L2
DP-1	LESS THAN 0.5	1.00 m	2.00 m	2.50 m
DP-2	"	1.50	2.50	"
DP-3	LESS THAN 2.5	1.00	2.50	3.50
DP-4	"	1.50	3.00	"

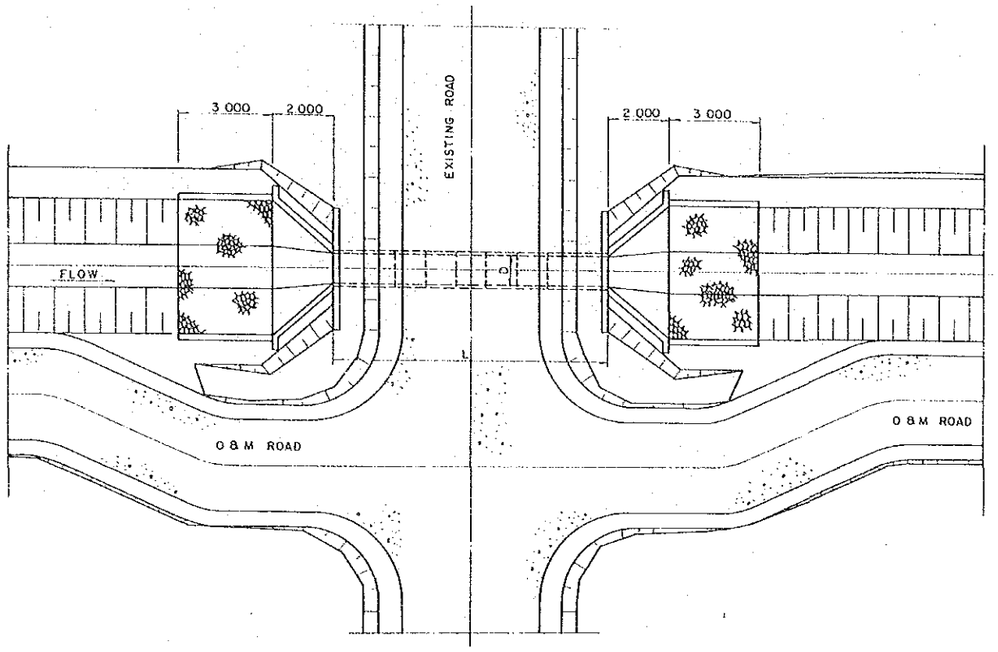
FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

RELATED STRUCTURE (3/4)

DRAWING NO. CA.-9 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY

ROAD CROSSING



PLAN
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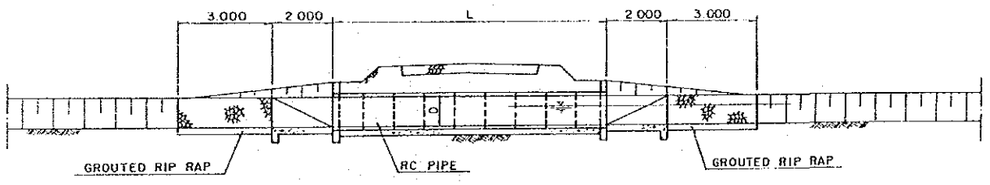
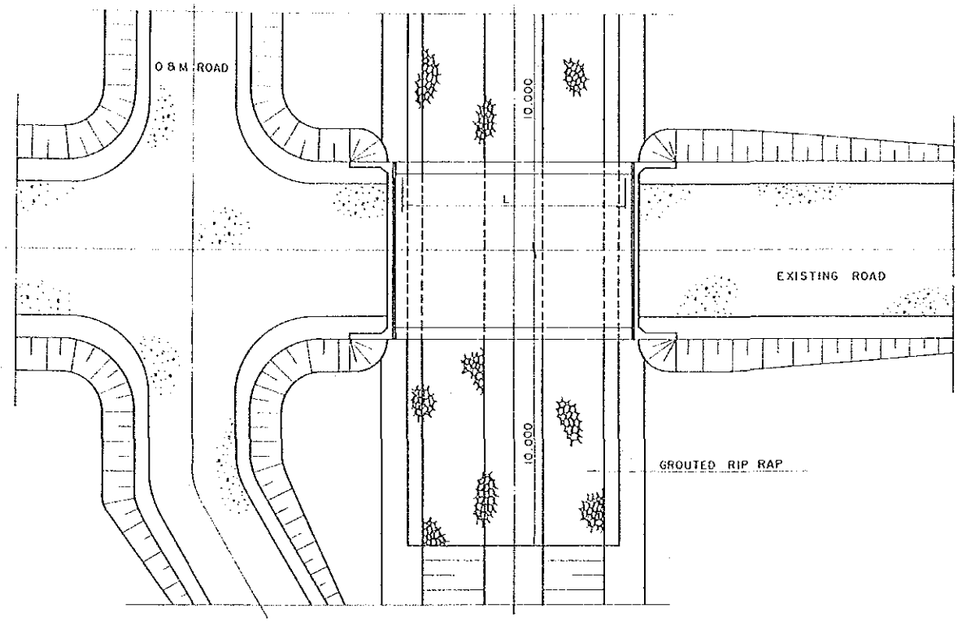


PROFILE
S = 1 : 100

TABLE OF DIMENSIONS FOR ROAD CROSSING

TYPE	Q (CMS)	TYPE OF BARREL	D mm
CR-1	LESS THAN 0.3 m^3/s	PRE-CAST CONCRETE PIPE	450
CR-2	0.3 ~ 0.6	"	600
CR-3	0.6 ~ 1.0	"	1,000
--	MORE THAN 1.0	BRIDGE	

BRIDGE



PLAN
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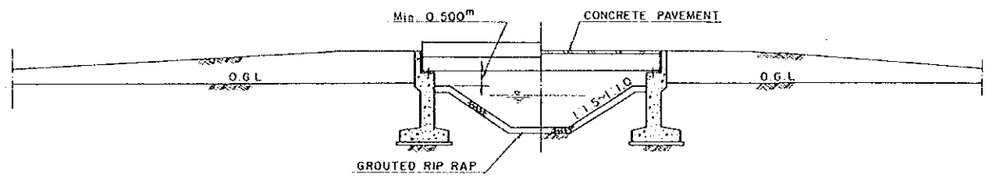


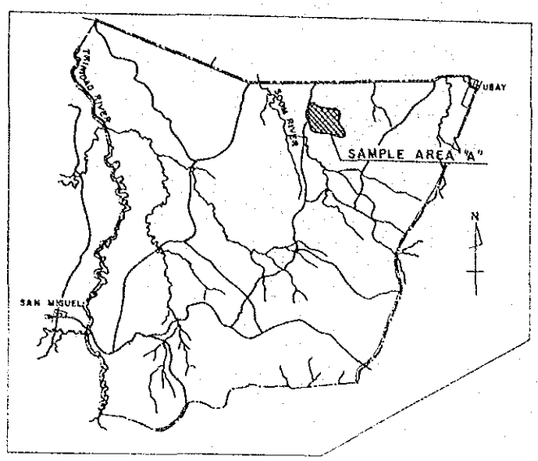
PROFILE
S = 1 : 100

FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

RELATED STRUCTURE (4/4)

DRAWING NO. CA.-10 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

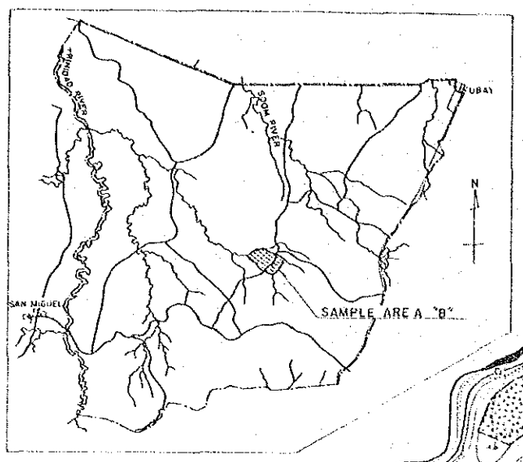
- TURNOUT
- DIVISION BOX
- LATERAL CANAL
- MAIN FARM DITCH
- SUPPLEMENTARY FARM DITCH
- FARM DRAIN
- FARM TURNOUT
- INTERNAL DITCH
- FARM ROAD
- PROPOSED IRRIGATION UNIT
- (2) ROTATION UNIT

FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

TYPICAL LAYOUT OF ON-FARM FACILITIES
IN SAMPLE AREA "A"

DRAWING NO. OF-1	NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

- TURNOUT
- DIVISION BOX
- LATERAL CANAL
- MAIN FARM DITCH
- SUPPLEMENTARY FARM DITCH
- FARM DRAIN
- FARM TURNOUT
- INTERNAL DITCH
- FARM ROAD
- (2) ROTATION UNIT

SCALE

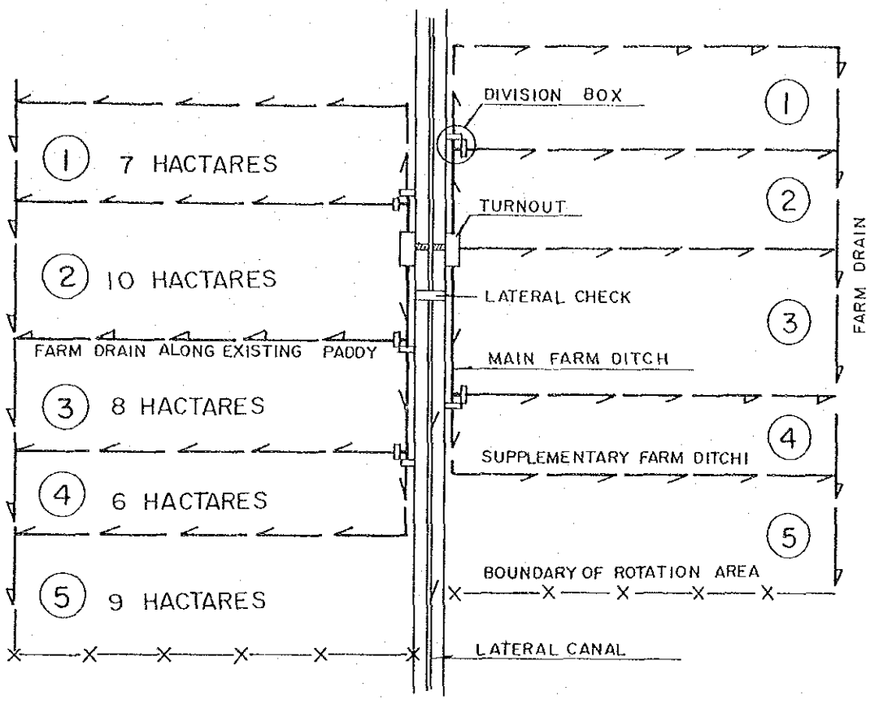
0 100 200 500(M)

FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

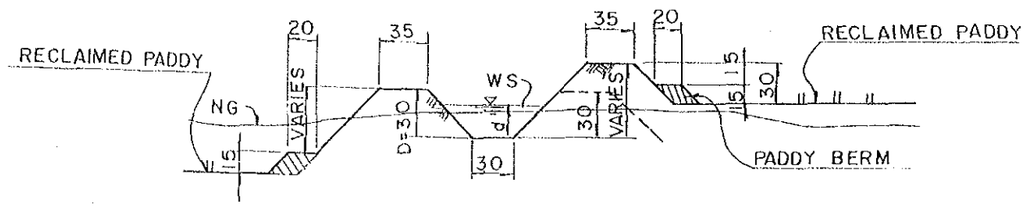
TYPICAL LAYOUT OF ON-FARM FACILITIES
IN SAMPLE AREA "B"

DRAWING NO. OF-2	NOVEMBER, 1985

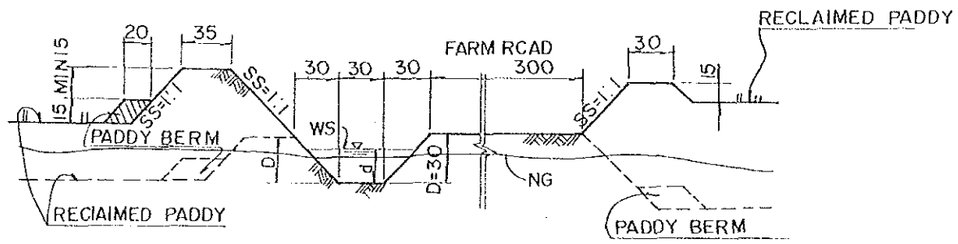
JAPAN INTERNATIONAL COOPERATION AGENCY



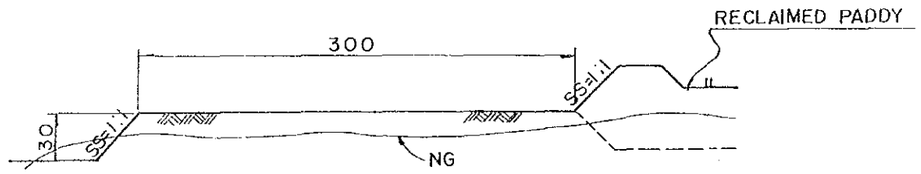
LAYOUT OF TWO ROTATION AREAS



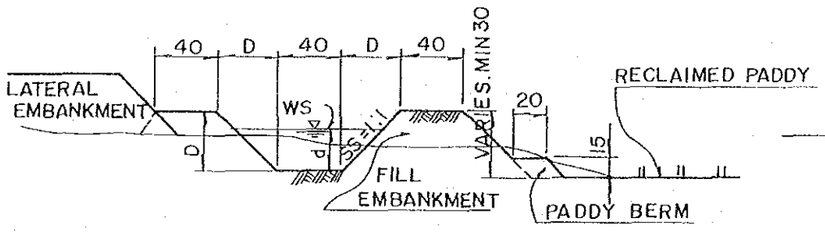
SUPPLEMENTARY FARM DITCH IN THE THE RECLAIMED AREA



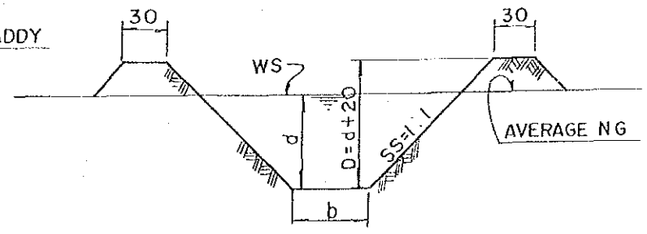
SUPPLEMENTARY FARM DITCH AND FARM ROAD



FARM ROAD

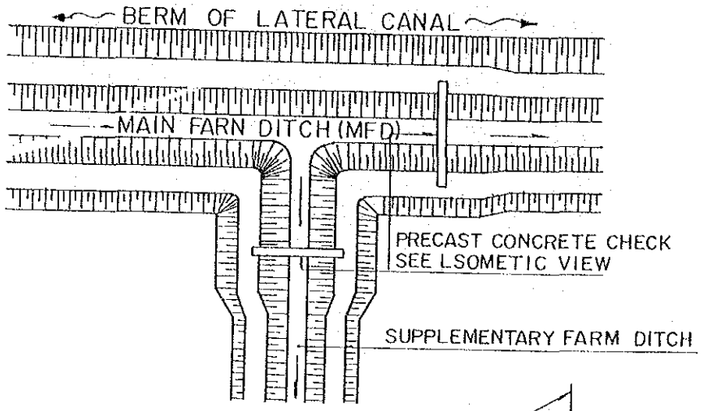


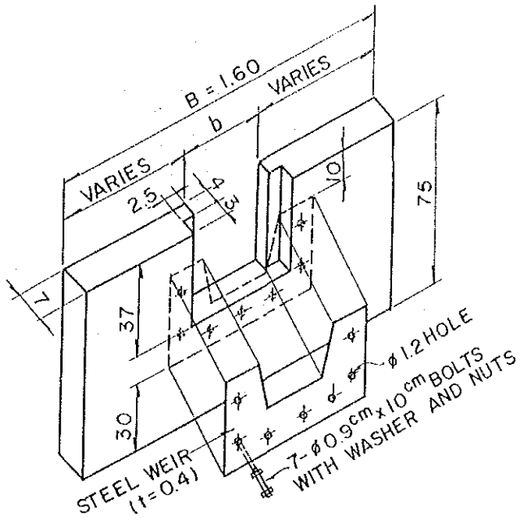
MAIN FARM DITCH ADJACENT TO LATERAL



FARM DRAIN

FEASIBILITY STUDY BOHOL IRRIGATION DEVELOPMENT PROJECT PHASE II	
STANDARD DESIGN OF ROTATION AREA AND ON-FARM FACILITIES	
DRAWING NO. OF.-3	NOVEMBER, 1985
JAPAN INTERNATIONAL COOPERATION AGENCY	



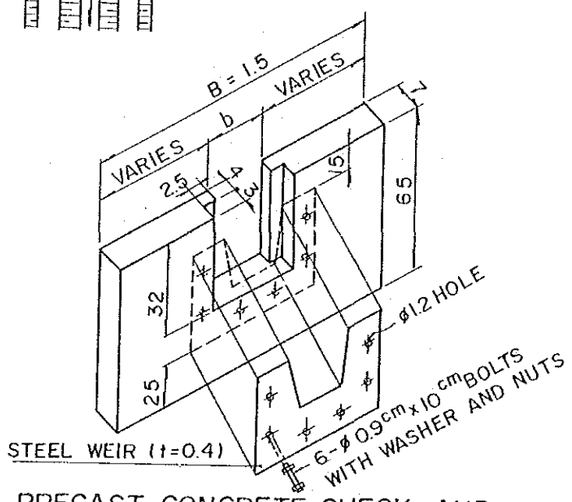


PRECAST CONCRETE CHECK AND STEEL WEIR (TYPE.A)

DISCHARG OF WEIR (LITRE/SEC) $Q = 1.86 \cdot L \cdot H^{\frac{3}{2}}$					
HEAD H(cm)	LENGTH OF WEIR (Cm)				
	42.5	40	30	20	10
5	8.8	8.3	6.2	4.2	2.1
6	11.6	10.9	8.2	5.5	2.7
7	14.6	13.8	10.3	6.9	3.4
8	17.9	16.2	12.6	8.4	4.2
9	21.3	20.1	15.0	10.0	5.0
10	25.0	23.5	17.6	11.8	5.9
11	28.8	27.1	20.3	13.6	6.8
12	32.8	30.9	23.2	15.5	7.7
13	37.0	34.8	26.1	17.4	8.7
14	41.4	38.9	29.2	19.5	9.7
15	45.9	43.2	32.4	21.6	10.8
16		47.6	35.7	23.8	11.9
17		52.1	39.1	26.1	13.0
18		56.8	42.6	28.4	14.2
19		61.6	46.2	30.8	15.4
20		66.5	49.9	33.3	16.6
21		71.5	53.7	35.8	17.9
22		76.7	57.6	38.4	19.2
23		82.1	61.5	41.0	20.5
24		87.5	65.6	43.7	21.9
25		93.0	69.8	46.5	23.3

L	W	b
42.5~32.5+	70	50
32.5~22.5+	60	40
22.5~12.5+	50	30
12.5≥	40	20

DEMENSION OF TYPE,B



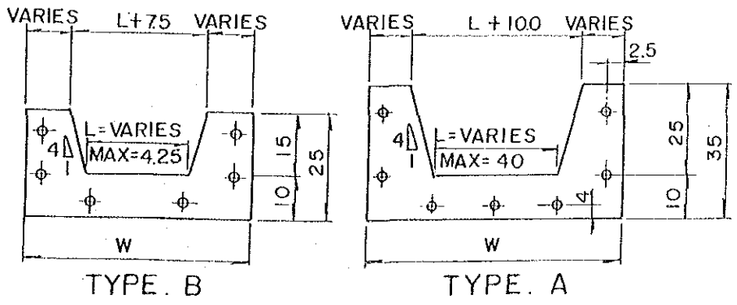
PRECAST CONCRETE CHECK AND STEEL WEIR (TYPE,B)

L	W	b
40~30+	70	50
30~20+	60	40
20~10+	50	30
10≥	40	20

DEMENSION OF TYPE.A

NOTES:

1 TYPEA: USE FOR 40 TO 20HA OF SERVICE AREA.
  TYPEB: USE FOR 20HA OR LESS SERVICE AREA.
2 PEIR OF CHECK SHALL BE USE THE SOME TYPE.
3 WEIR EDGE SHALL BE MANUFACTURED IN PROPORTION TO EACH SIZE OF SERVICE AREA.
4 ELEVATION OF WEIR EDGE SHALL BE 10cm HIGHER FROM THE DITCH BOTTOM
5 UNIT BISCHARGE FOR MED AND SFD IS 2.183L/SEC/HA.



DETAIL OF STEEL WEIR

FEASIBILITY STUDY
BOHOL IRRIGATION DEVELOPMENT PROJECT
PHASE II

STANDARD DESIGN OF DIVISION BOX AND DIVERSION WEIR

DRAWING NO. OF-4 | NOVEMBER, 1985

JAPAN INTERNATIONAL COOPERATION AGENCY