

THE REPUBLIC OF KENYA  
LARGE RIVER DEVELOPMENT AUTHORITY

**FEASIBILITY STUDY  
ON  
KANO PLAIN IRRIGATION PROJECT**

**VOLUME III  
DRAWINGS**

JANUARY 1992

Large River Development Corporation Agency



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**THE REPUBLIC OF KENYA**

**LAKE BASIN DEVELOPMENT AUTHORITY**

**FEASIBILITY STUDY  
ON  
KANO PLAIN IRRIGATION PROJECT**

**VOLUME III**

**DRAWINGS**

**JANUARY 1992**

***Japan International Cooperation Agency***



国際協力事業団

23328

FEASIBILITY STUDY  
ON  
KANO PLAIN IRRIGATION PROJECT

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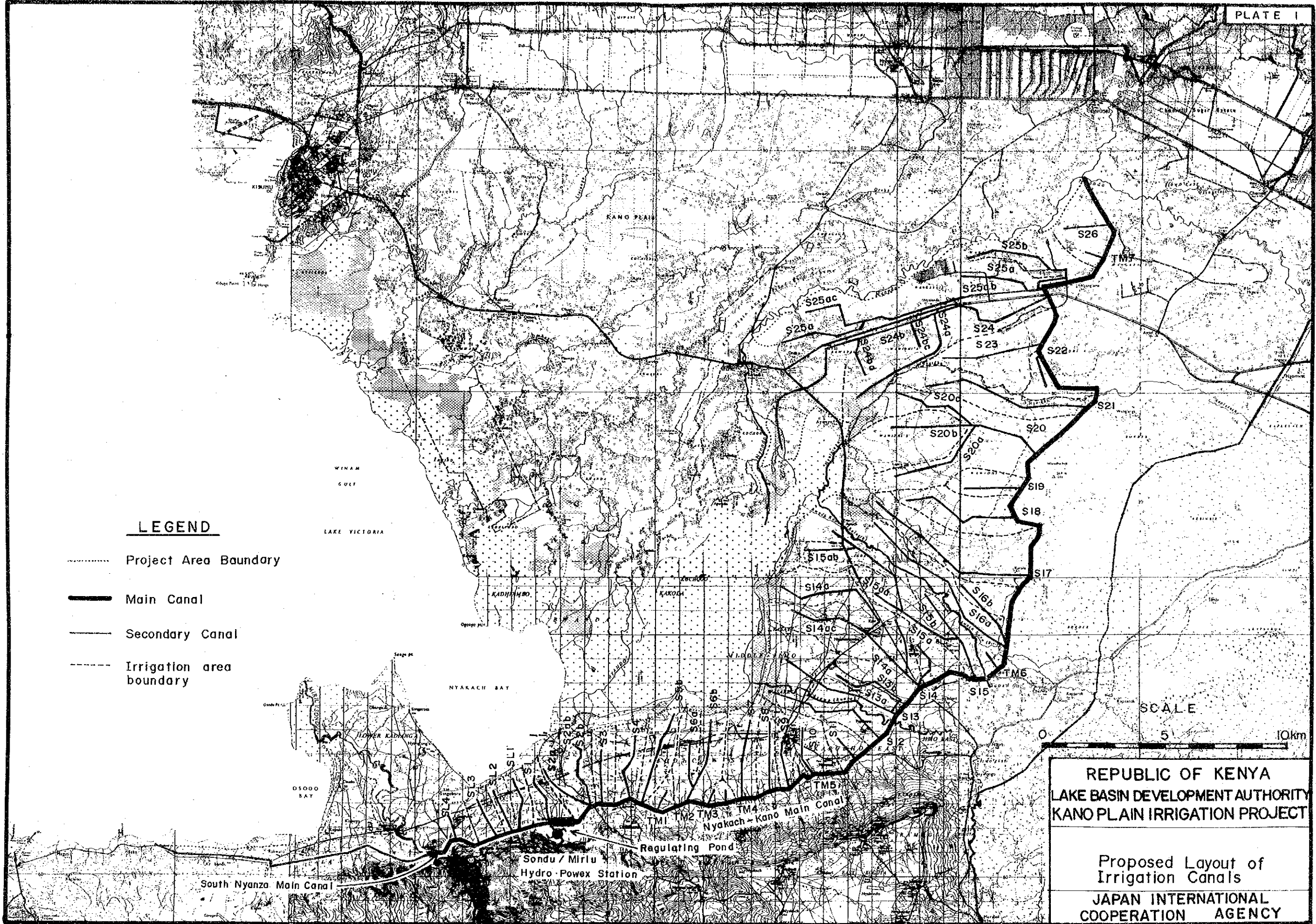
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**LEGEND**

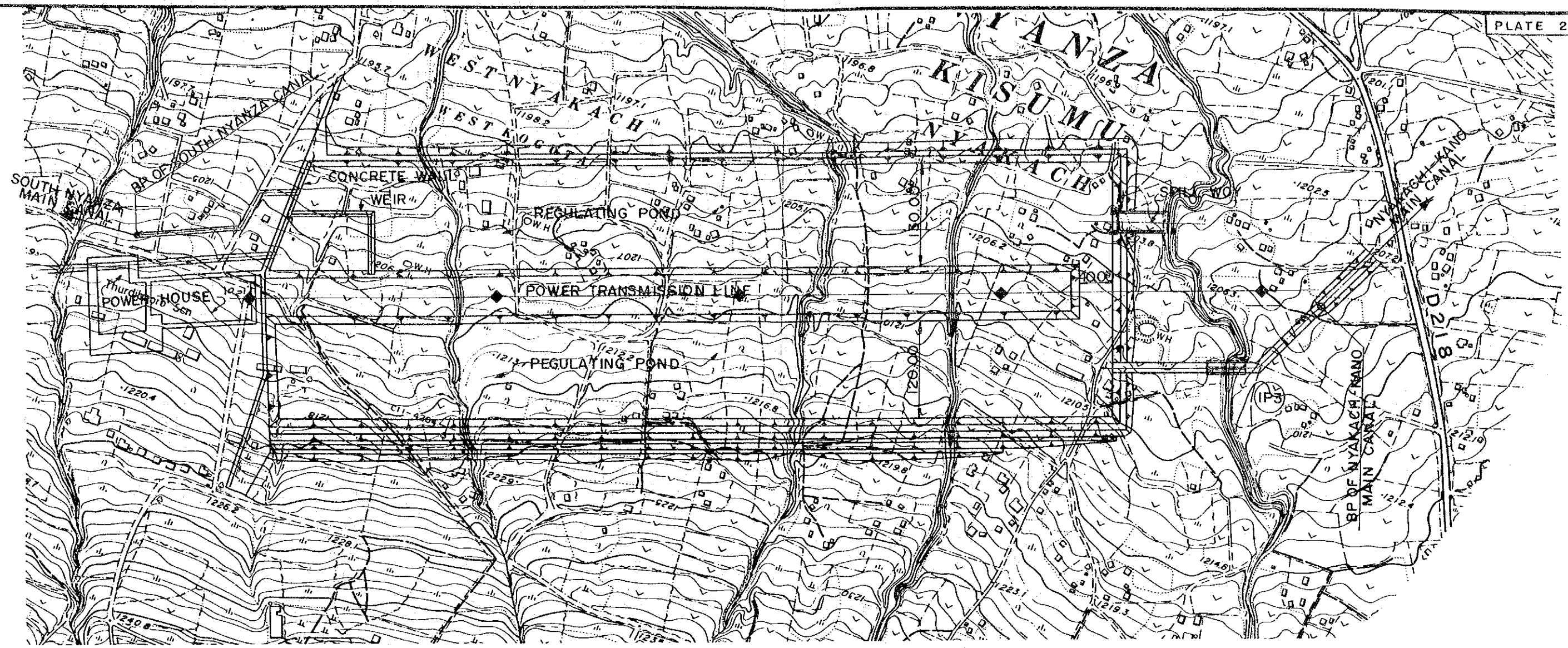
- Project Area Boundary
- Main Canal
- Secondary Canal
- - - - Irrigation area boundary



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 KANO PLAIN IRRIGATION PROJECT

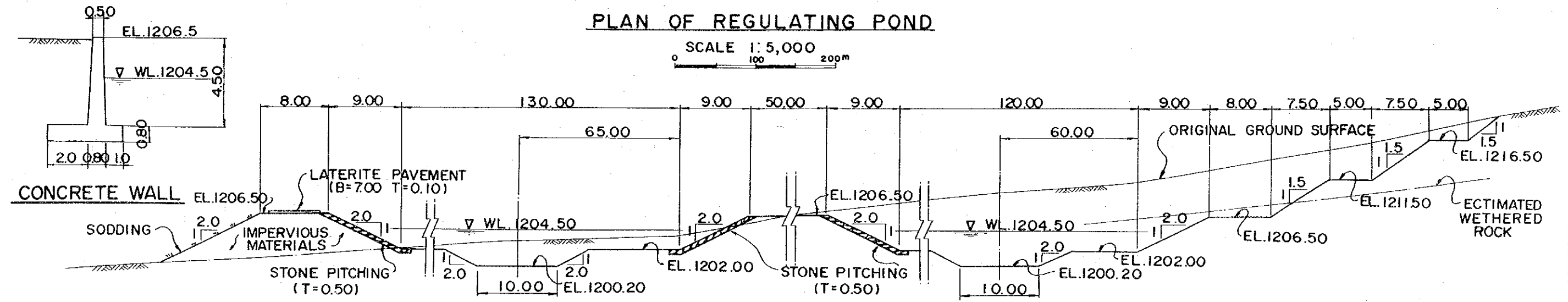
Proposed Layout of  
 Irrigation Canals

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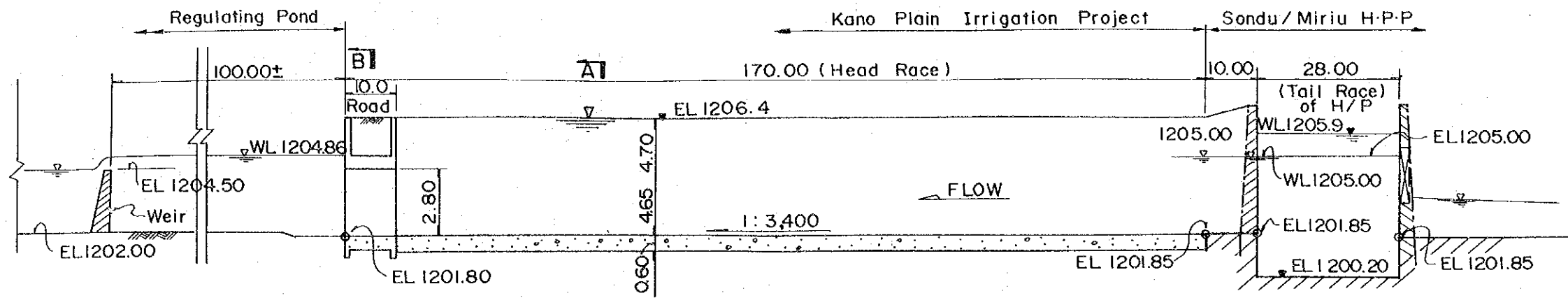
PLAN OF REGULATING POND

SCALE 1:5,000  
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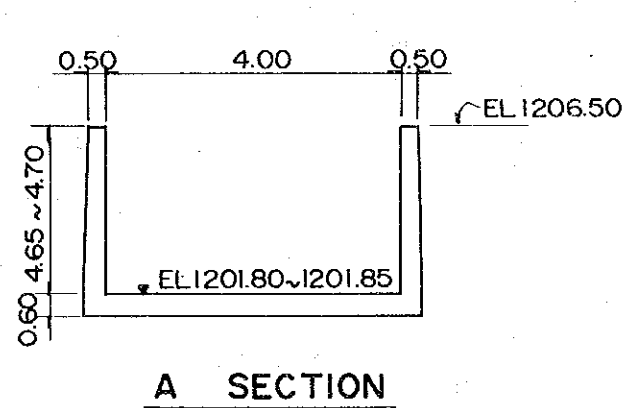


STANDARD CROSS SECTION OF REGULATING POND

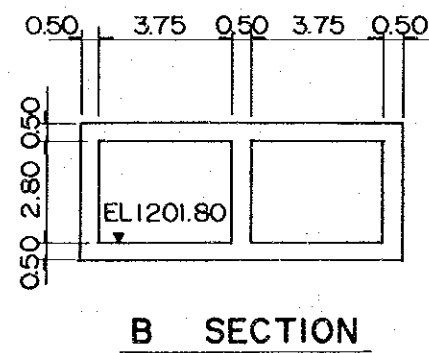
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT  
PLAN OF REGULATING POND  
JAPAN INTERNATIONAL COOPERATION AGENCY



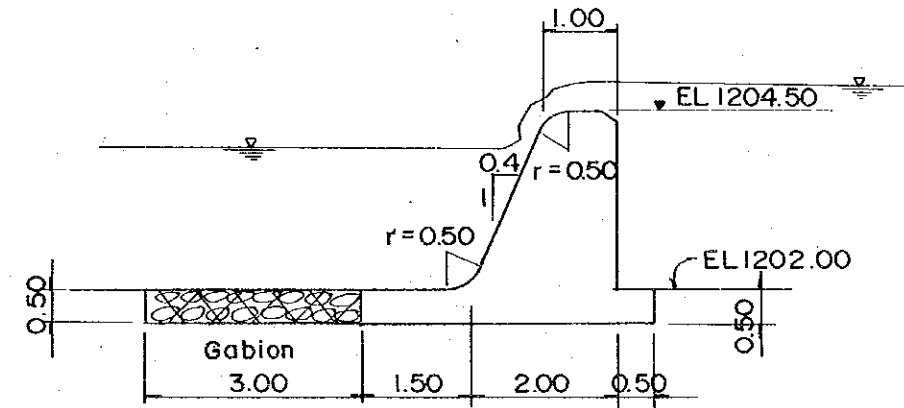
LONGITUDINAL SECTION BETWEEN TAIL RACE AND REGULATING POND



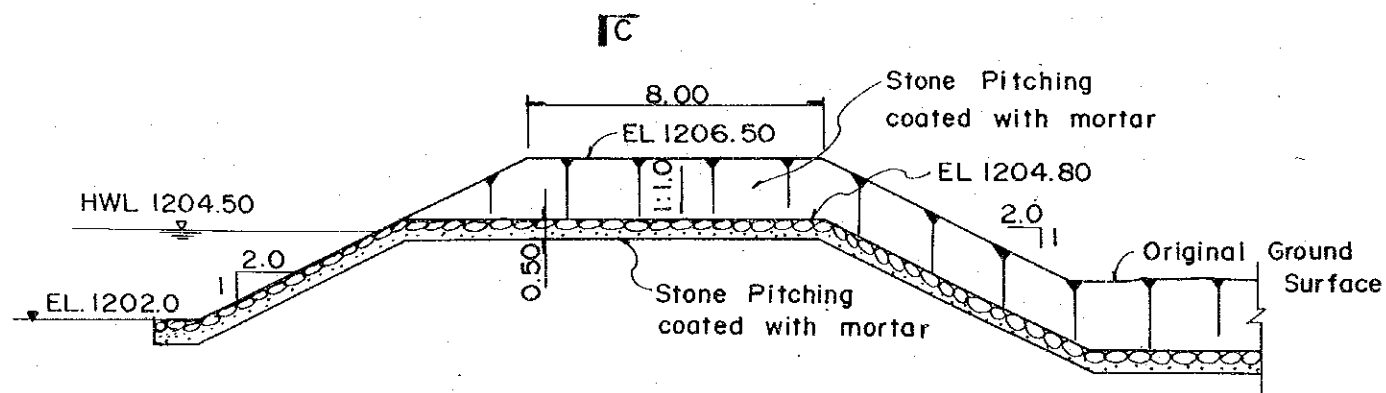
A SECTION



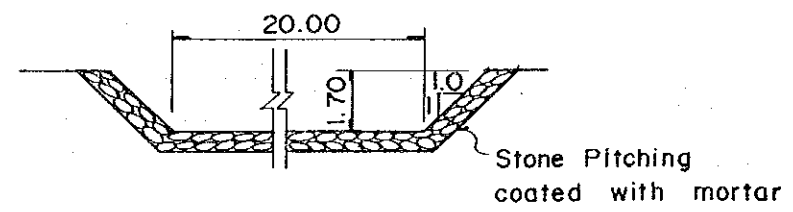
B SECTION



WEIR SECTION



SPILL WAY SECTION

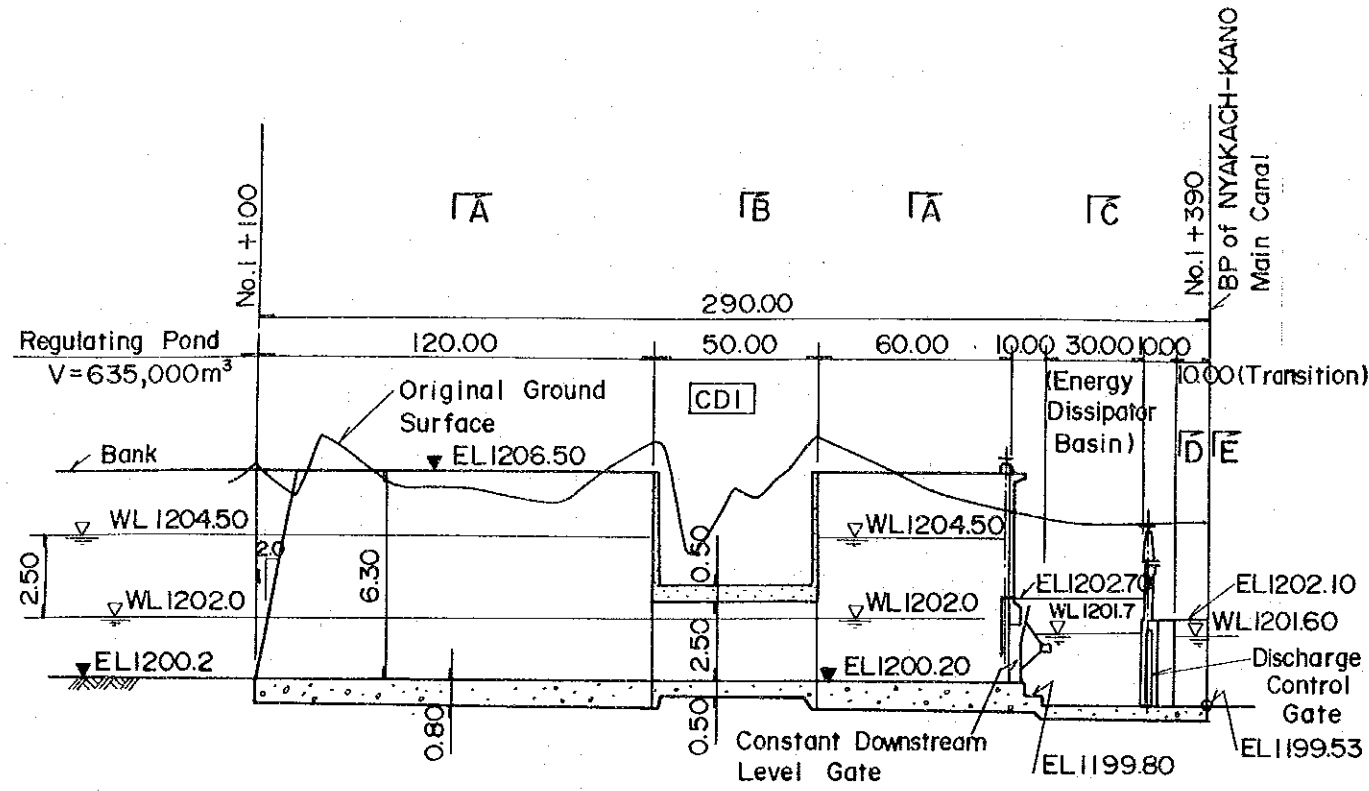


C SECTION

REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

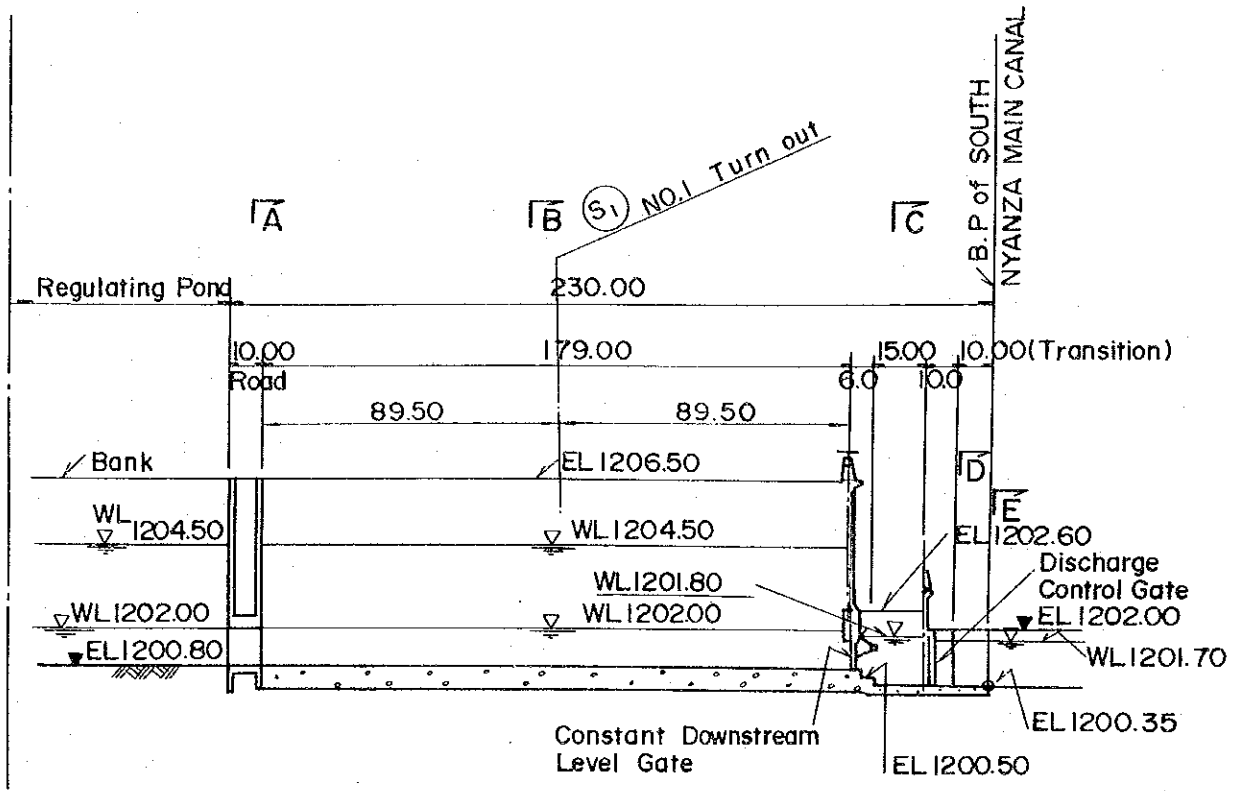
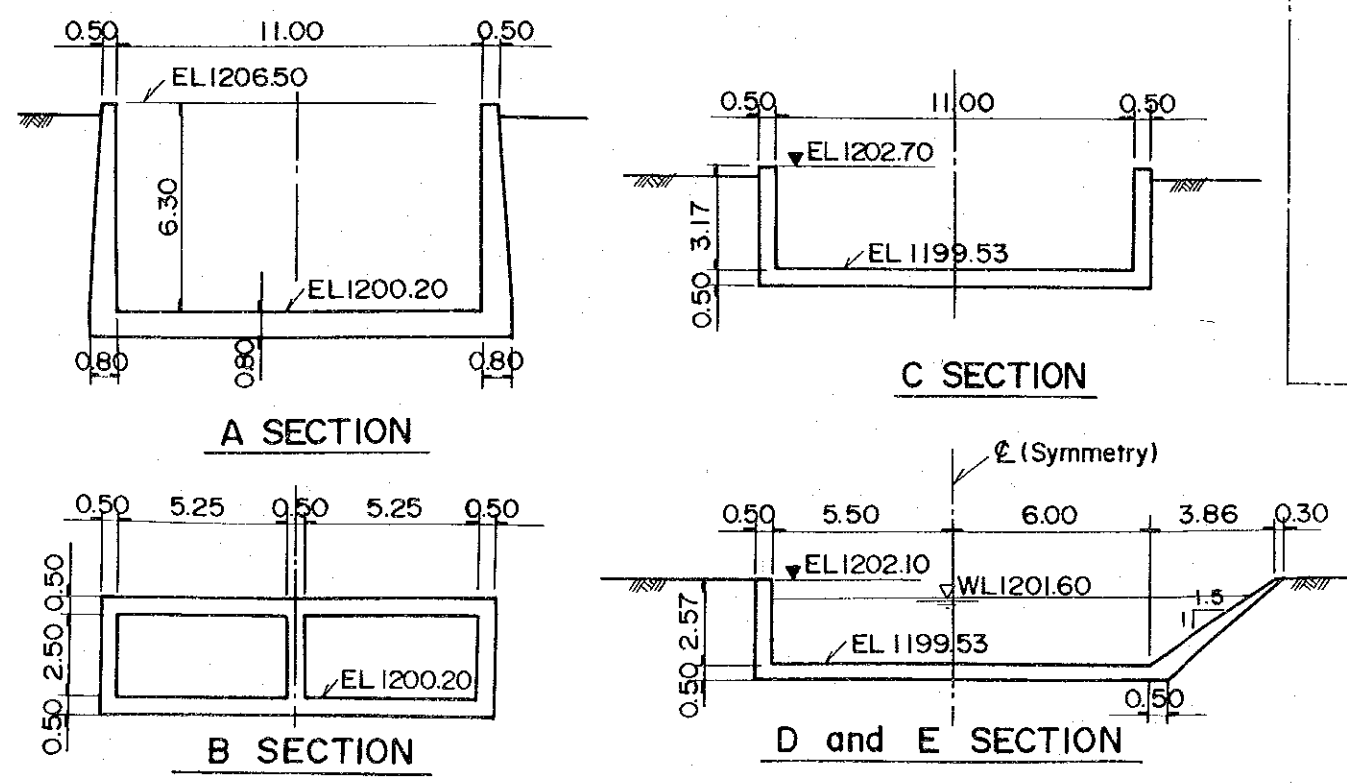
CONNECTING FACILITY OF  
REGULATING POND (1/2)

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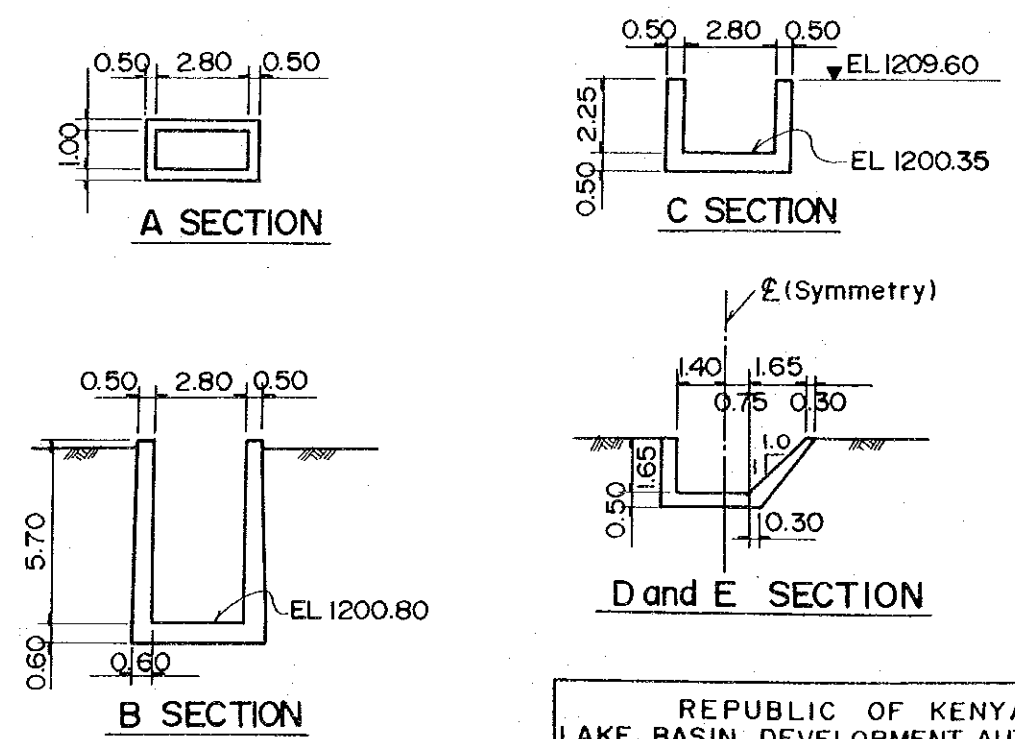


LONGITUDINAL SECTION BETWEEN REGULATING POND AND B.P. OF NYAKACH-KANO MAIN CANAL

SCALE VERTICAL 1:200  
HORIZONTAL 1:2,000



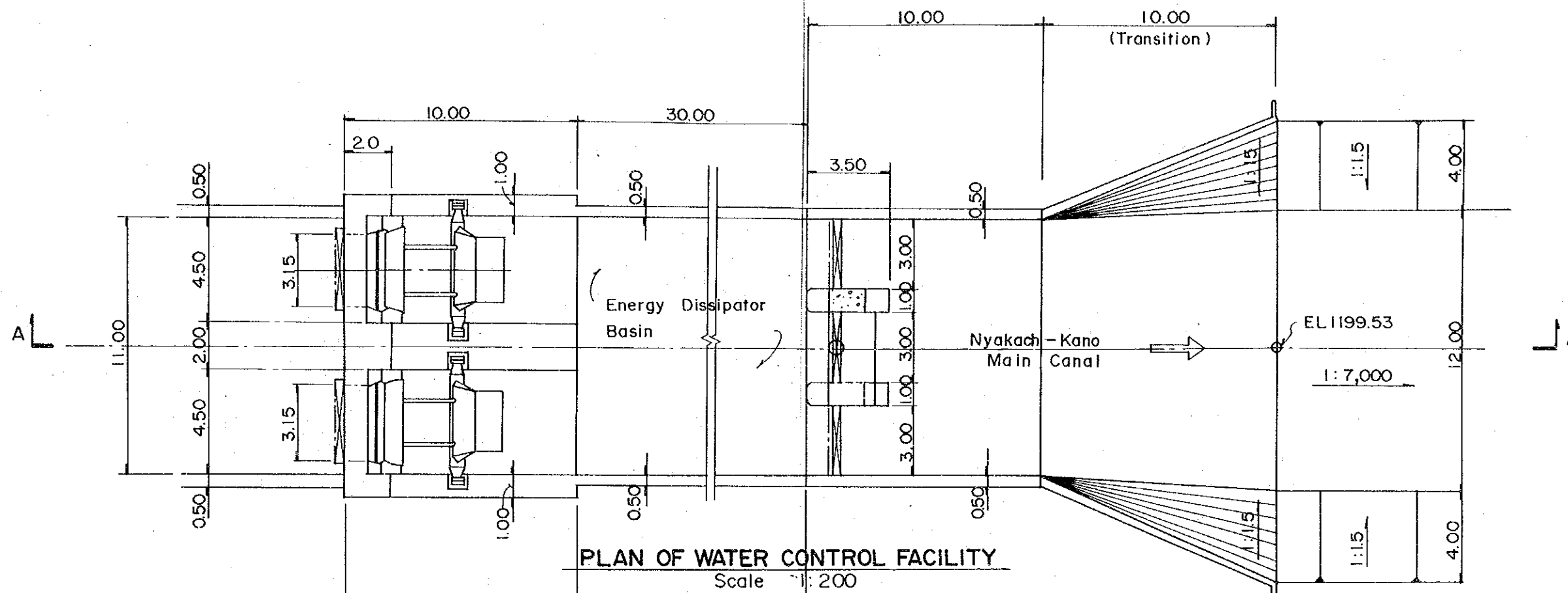
LONGITUDINAL SECTION BETWEEN REGULATING POND AND B.P. OF SOUTH NYANZA MAIN CANAL



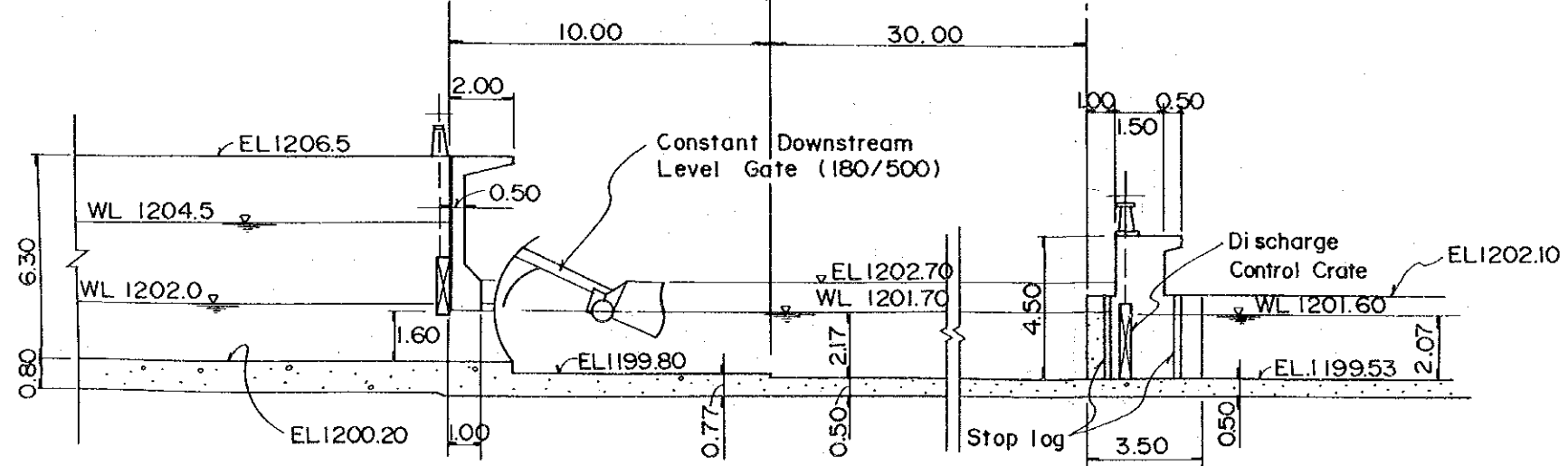
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

CONNECTING FACILITY OF  
REGULATING POND (2/2)

JAPAN INTERNATIONAL COOPERATION AGENCY

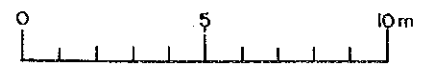


PLAN OF WATER CONTROL FACILITY  
Scale 1:200



SECTION A-A  
Scale 1:200

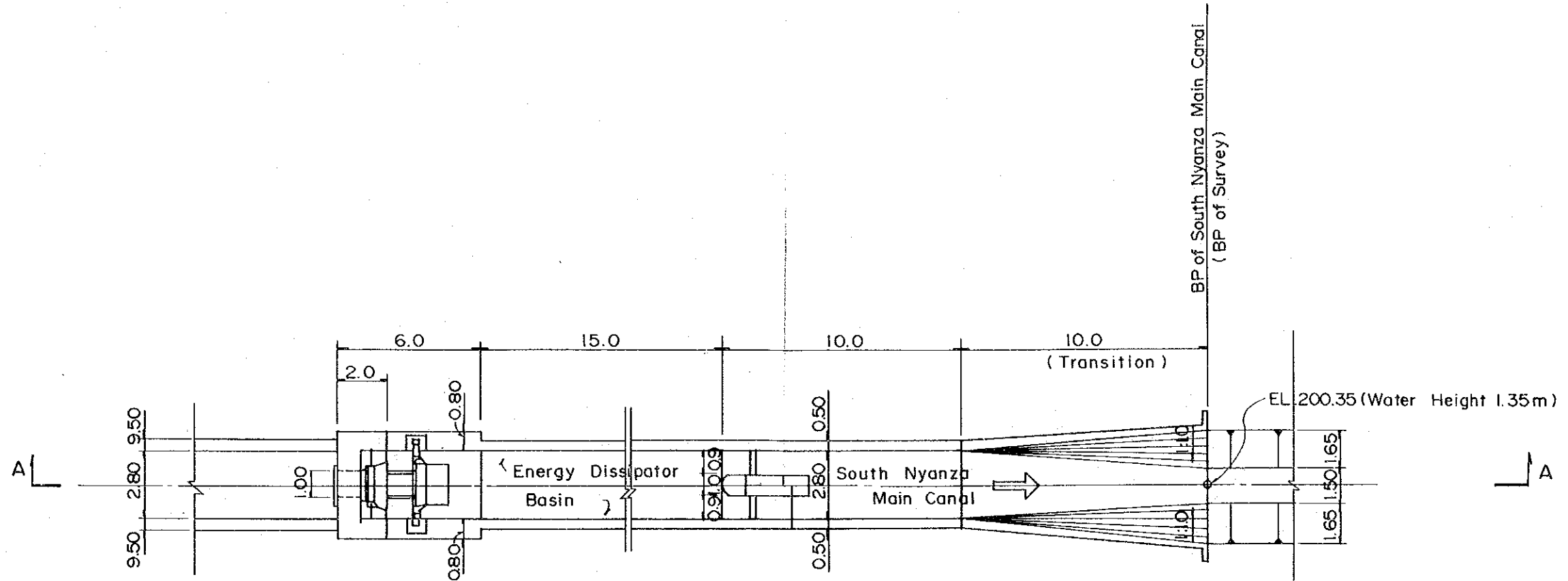
BP. of NYAKACHI-KANO  
Main Canal (No. 1 + 390)



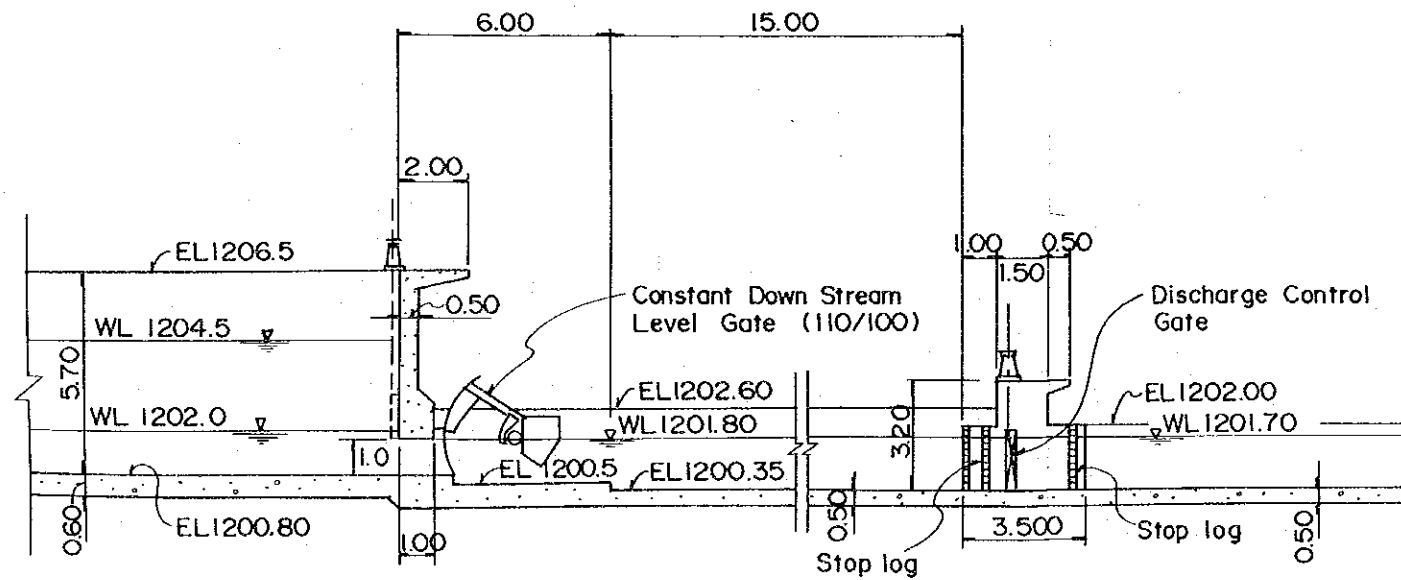
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LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

DISCHARGE CONTROL STRUCTURE  
FOR NYAKACH-KANO MAIN CANAL

JAPAN INTERNATIONAL COOPERATION AGENCY



**PLAN OF WATER CONTROL FACILITY**  
Scale 1:200



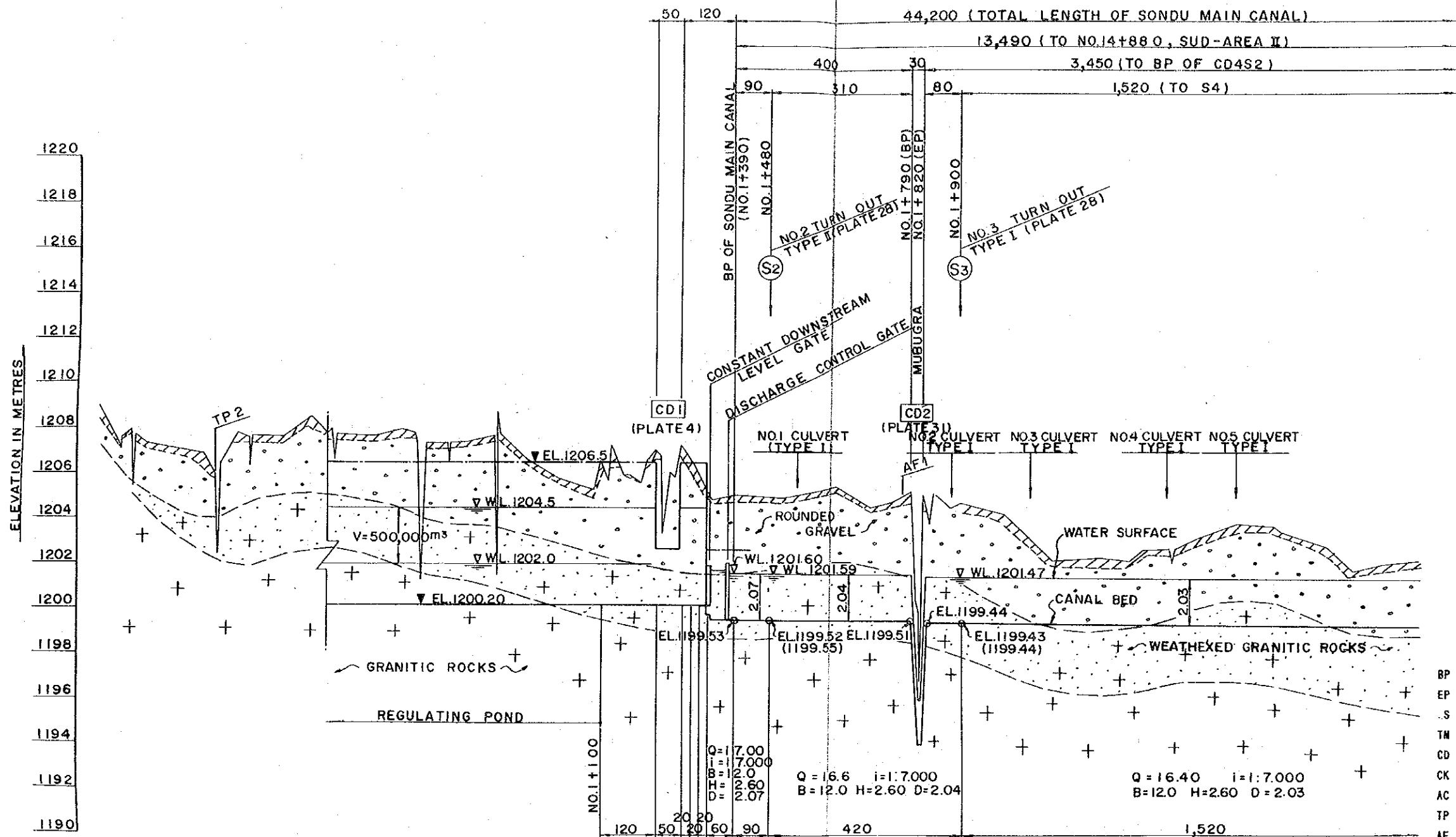
**SECTION A~A**  
Scale 1:200

REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

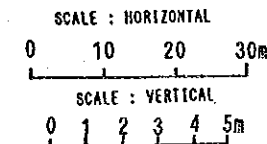
**DISCHARG CONTROL STRUCTURE  
FOR SOUTH NYANZA MAIN CANAL**

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WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1209.03		1209.03	0+000		
1207.89		1207.89	0+025		
1207.43		1207.43	0+041		
1207.74		1207.74	0+073		
1207.31		1207.31	0+100		
1207.01		1207.01	0+200		
1206.09		1206.09	0+251		
1207.81		1207.81	0+300		
1207.68		1207.68	0+331.0		
1207.60		1207.60	0+400		
1207.53		1207.53	0+466		
1207.76		1207.76	0+500		
1207.72		1207.72	0+541.0		
1207.69		1207.69	0+600		
1207.79		1207.79	0+657.23		
1207.20		1207.20	0+700.97		
1207.36		1207.36	0+764.73		
1207.38		1207.38	0+800		
1207.66		1207.66	0+833.9		
1207.35		1207.35	0+900		
1206.50		1206.50	0+929		
1206.50		1206.50	0+972.18		
1205.87		1205.87	1+000		
1205.29		1205.29	1+084.6		
1206.67		1206.67	1+100		
1205.67		1205.67	1+188.0		
1204.85		1204.85	1+151.30		
1206.52		1206.52	1+200		
1207.10		1207.10	1+221.1		
1206.88		1206.88	1+277.3		
1207.28		1207.28	1+274.8		
1206.48		1206.48	1+300		
1204.87		1204.87	1+344.30		
1205.10		1205.10	1+400		
1201.60		1201.60	1+400		
1204.95		1204.95	1+500		
1201.59		1201.59	1+500		
1205.40		1205.40	1+600		
1205.49		1205.49	1+619.0		
1204.56		1204.56	1+700		
1204.76		1204.76	1+746		
1200.42		1200.42	1+800		
1205.30		1205.30	1+897.0		
1204.51		1204.51	1+881.62		
1204.75		1204.75	1+900		
1201.47		1201.47	1+900		
1204.25		1204.25	2+000		
1204.43		1204.43	2+000		
1202.22		1202.22	2+100		
1201.77		1201.77	2+136.13		
1202.28		1202.28	2+200		
1202.13		1202.13	2+269		
1202.69		1202.69	2+300		
1203.02		1203.02	2+400		
1203.82		1203.82	2+500		
1203.66		1203.66	2+560.4		
1203.48		1203.48	2+600		
1202.77		1202.77	2+700		
1201.93		1201.93	2+800		
1201.34		1201.34	2+900		
1202.18		1202.18	2+900		

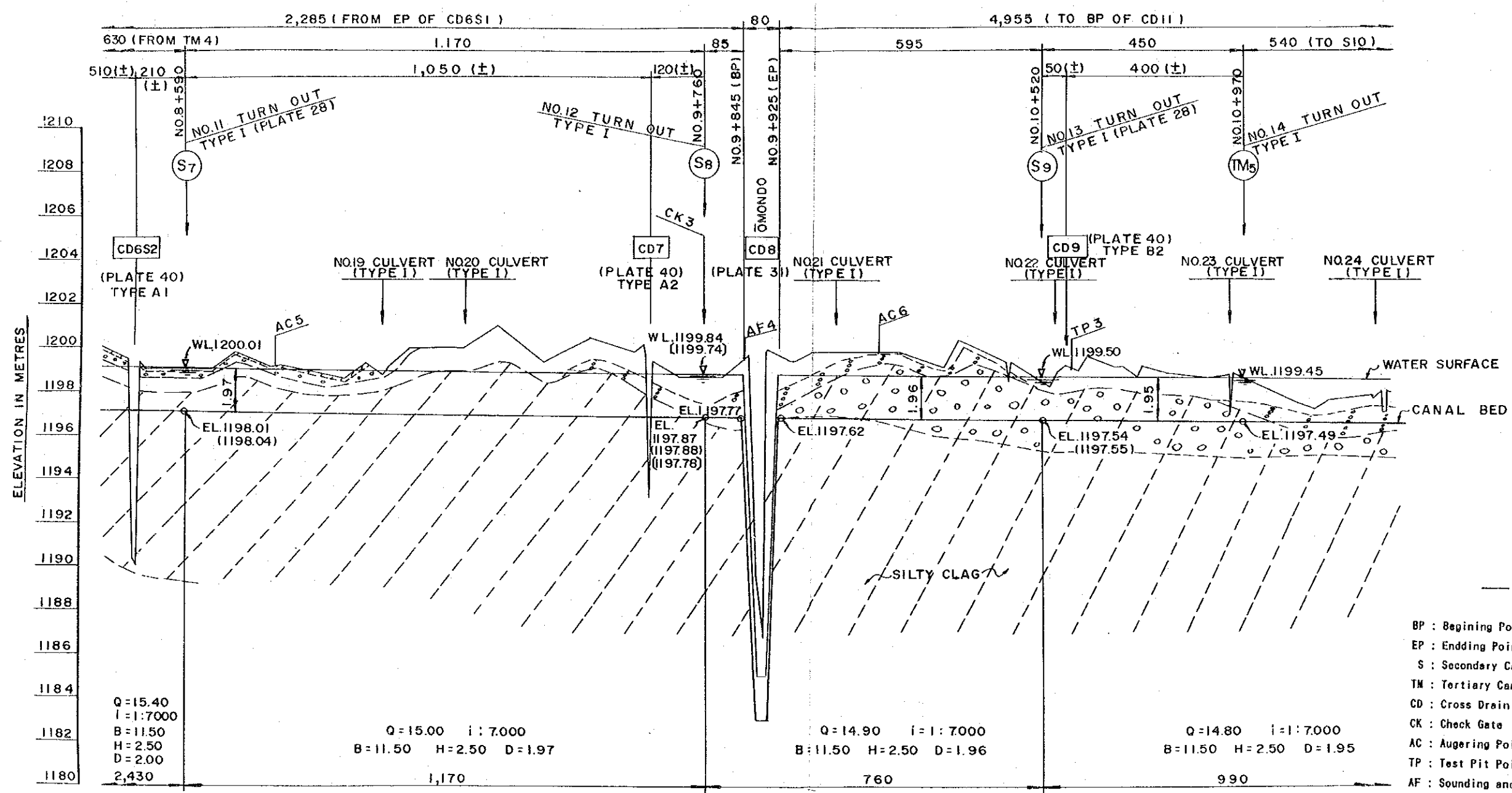


REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT  
 PROFILE OF  
 NYAKACH-KANO MAIN IRRIGATION CANAL  
 CH 0+000 TO CH 2+900 (1/17)  
 JAPAN INTERNATIONAL COOPERATION AGENCY





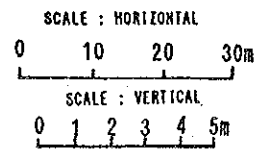




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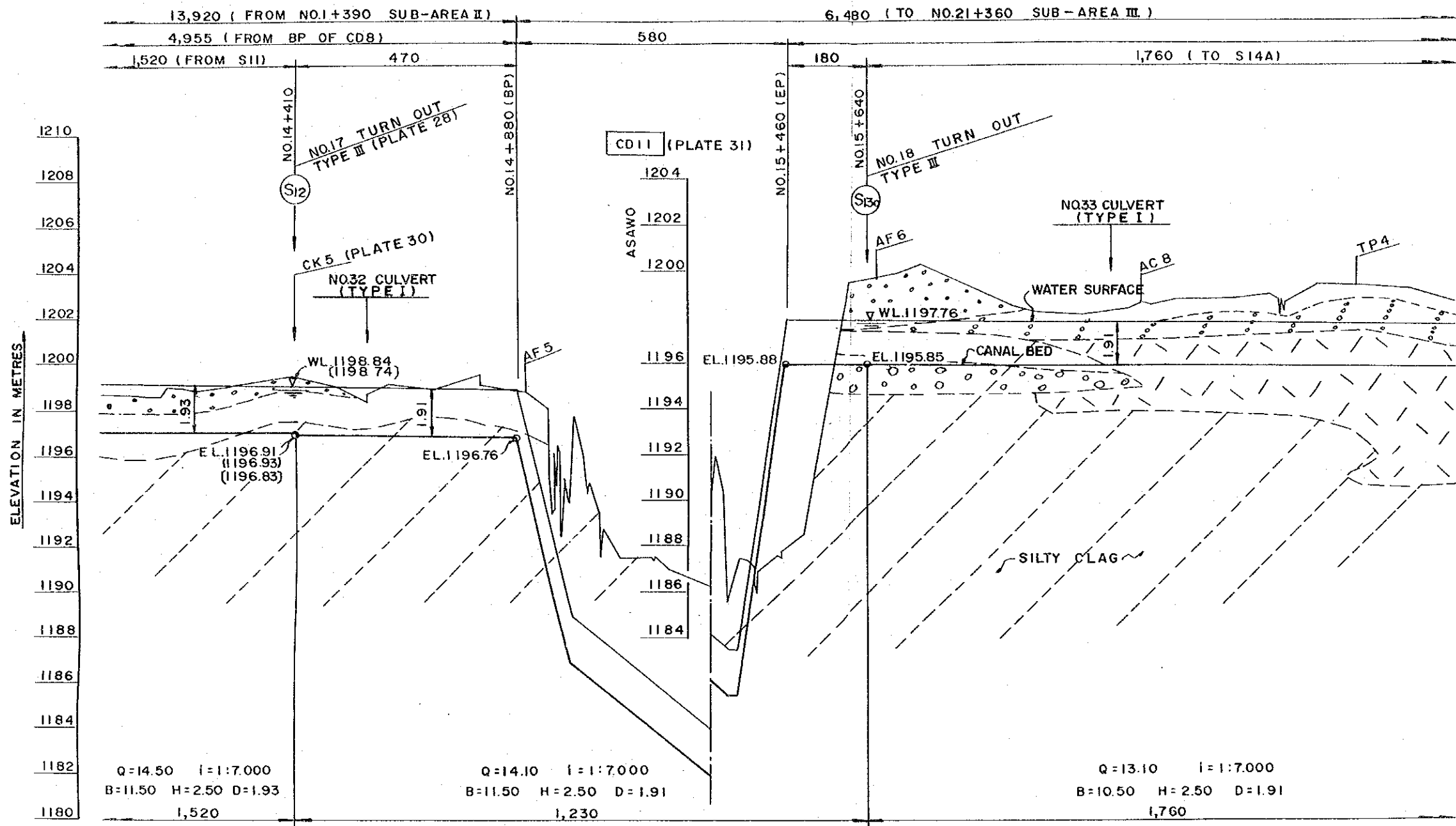
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PROPOSED CANAL BED ELEVATION	1198.01	1197.77	1197.62	1197.54	1197.49
GROUND SURFACE ELEVATION	1200.97	1200.20	1200.25	1200.03	1200.57
CUMULATIVE DISTANCE	8+400	8+500	8+600	8+700	8+800
STATION	IP.19	IP.20	IP.21	IP.22	IP.23
ANGLE	26°48'54"	22°58'47"	22°20'21"	28°31'22"	32°41'29"

8+400	8+500	8+600	8+700	8+800	8+900	9+000	9+100	9+200	9+300	9+400	9+500	9+600	9+700	9+800	9+900	9+964	10+000	10+100	10+200	10+300	10+332.73	10+400	10+500	10+539.22	10+600	10+622.91	10+700	10+800	10+900	11+000	11+100	11+275	11+575	11+200	11+250	11+300			
1198.04	1198.01	1199.95	1200.11	1198.04	1198.01	1199.95	1200.39	1200.96	1200.93	1200.25	1201.37	1200.76	1199.68	1199.62	1197.77	1197.84	1197.88	1200.79	1200.78	1201.78	1201.32	1200.71	1199.54	1199.61	1199.20	1199.88	1200.50	1200.03	1199.72	1199.57	1199.88	1198.36	1198.13	1198.50	1198.51	1198.74	1198.02	1197.86	1197.44
26°48'54"	22°58'47"		22°20'21"		28°31'22"		32°41'29"		17°44'14"																														



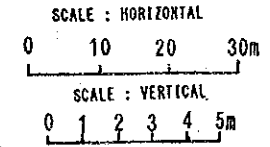
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LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT  
PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
CH 8+400 TO CH11+300 (4/17)  
JAPAN INTERNATIONAL COOPERATION AGENCY





- Legend
- BP : Beginning Point
  - EP : Ending Point
  - S : Secondary Canal branches from main canal
  - TM : Tertiary Canal branches from main canal
  - CD : Cross Drain
  - CK : Check Gate
  - AC : Augering Point
  - TP : Test Pit Point
  - AF : Sounding and Augering Point

STATION	WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	ANGLE
14+000	1199.18	1196.97	1199.18		
14+100	1198.52		1198.52		
14+200	1198.87	1196.94	1198.87		
14+300	1199.12		1199.12		
14+400	1199.53	1196.91	1199.53		
14+500	1199.03	1196.83	1199.03		
14+550	1198.41		1198.41		
14+600	1199.12	1196.80	1199.12		
14+700	1198.99		1198.99		
14+800	1199.16	1196.77	1199.16		
14+900	1198.89	1196.76	1198.89		
14+945	1198.18		1198.18		
14+963	1194.89		1194.89		
15+000	1187.89	1187.00	1187.89		
15+018	1196.37		1196.37		
15+016.2	1192.95		1192.95		
15+100	1191.63		1191.63		
15+170.5	1191.67		1191.67		
15+200	1190.20	1183.68	1190.20		
15+300	1190.33		1190.33		
15+325	1190.17		1190.17		
15+361.2	1187.50	1181.50	1187.50		
15+400	1190.75	1187.14	1190.75		
15+425	1197.65		1197.65		
15+495	1198.78	1195.88	1198.78		
15+500	1198.55		1198.55		
15+600	1199.95	1195.86	1199.95		
15+700	1199.95	1195.85	1199.95		
15+75	1200.33		1200.33		
15+800	1199.92	1195.83	1199.92		
15+900	1198.98		1198.98		
15+945	1198.61		1198.61		
16+000	1198.29	1195.80	1198.29		
16+100	1198.16		1198.16		
16+200	1198.48	1195.77	1198.48		
16+250	1198.58		1198.58		
16+300	1198.75		1198.75		
16+400	1198.75	1195.74	1198.75		
16+500	1198.94		1198.94		
16+518	1198.78		1198.78		
16+524	1198.01		1198.01		
16+600	1199.35	1195.71	1199.35		
16+700	1199.35		1199.35		
16+800	1199.30	1195.68	1199.30		
16+900	1198.79		1198.79		



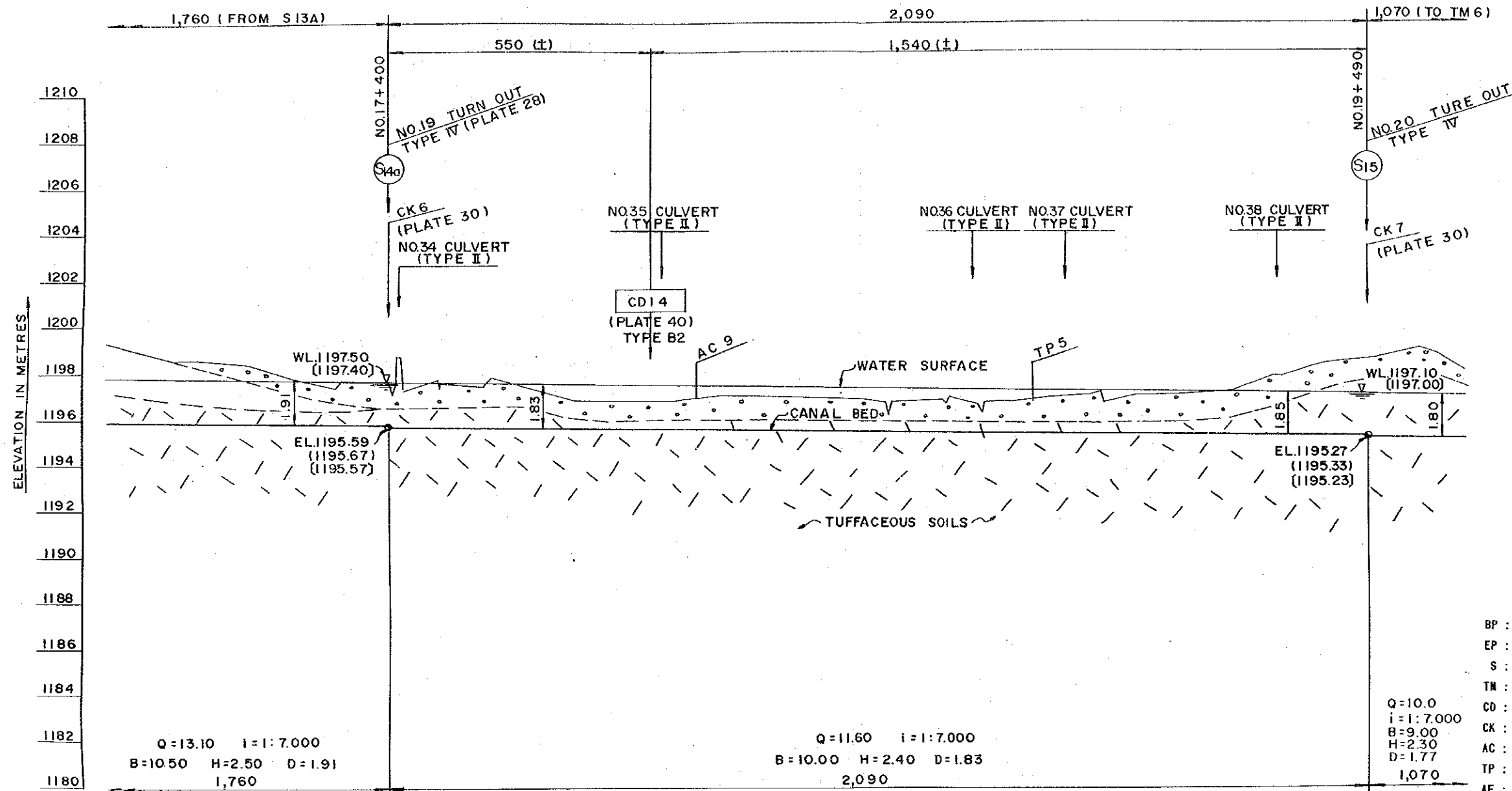
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY

KANO PLAIN IRRIGATION PROJECT

PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
(6/17)

CH14+000 TO CH16+900

JAPAN INTERNATIONAL COOPERATION AGENCY



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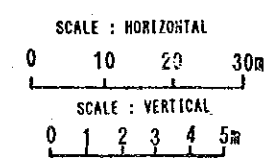
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2,090

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H=2.30  
D=1.77  
1,070

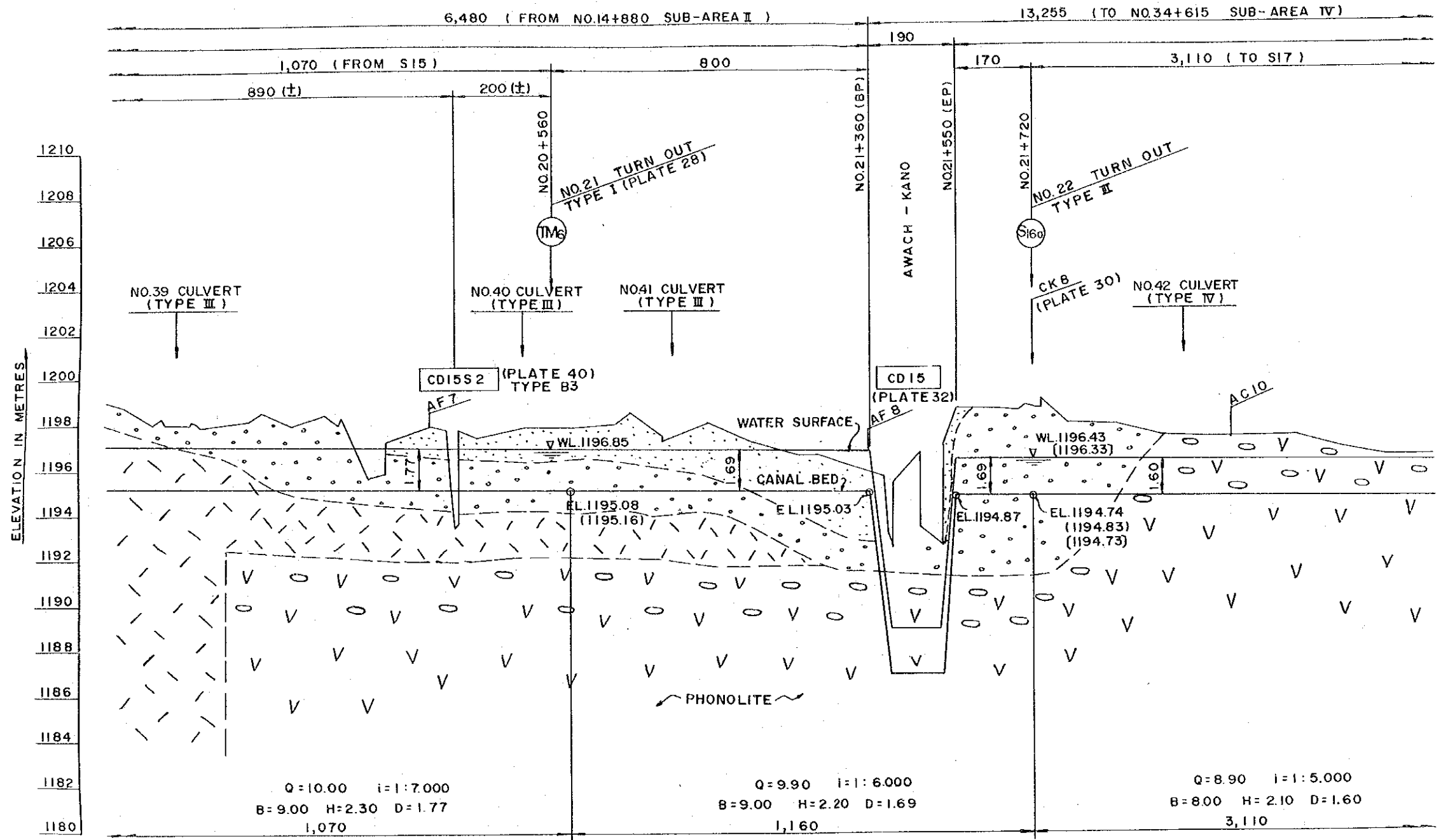
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- BP : Beginning Point
  - EP : Ending Point
  - S : Secondary Canal branches from main canal
  - TM : Tertiary Canal branches from main canal
  - CD : Cross Drain
  - CK : Check Gate
  - AC : Augering Point
  - TP : Test Pit Point
  - AF : Sounding and Augering Point

WATER SURFACE ELEVATION
1197.50
1197.40
1197.33
1197.23
1197.10

PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1195.68	1199.30	16+800		
1195.65	1198.79	16+900		
1195.62	1198.47	17+000		
1195.62	1198.36	17+100		
1195.62	1197.79	17+200		
1195.59	1197.40	17+2850	I.P.39	25°24'27"
1195.57	1197.75	17+300		
1195.57	1197.47	17+400		
1195.57	1196.97	17+407		
1195.57	1196.76	17+421		
1195.54	1197.46	17+500		
1195.54	1197.46	17+504		
1195.54	1197.46	17+5480		
1195.54	1197.43	17+600		
1195.54	1197.75	17+617		
1195.46	1197.07	17+700		
1195.46	1196.76	17+800		
1195.46	1196.80	17+900		
1195.46	1196.74	18+000		
1195.46	1196.97	18+100		
1195.46	1196.94	18+200		
1195.43	1196.86	18+300		
1195.43	1196.89	18+322	I.P.40	9°51'15"
1195.43	1196.83	18+400		
1195.43	1196.70	18+500		
1195.43	1196.76	18+500		
1195.43	1196.82	18+500		
1195.43	1196.65	18+600		
1195.43	1196.64	18+668		
1195.43	1196.75	18+700		
1195.43	1196.76	18+729	I.P.41	17°40'24"
1195.37	1196.90	18+800		
1195.37	1197.05	18+900		
1195.37	1196.66	18+933		
1195.37	1197.03	19+000		
1195.37	1197.05	19+028	I.P.42	5°21'22"
1195.37	1197.06	19+100		
1195.37	1197.16	19+200		
1195.37	1197.82	19+250		
1195.37	1197.45	19+300		
1195.37	1197.79	19+3160		
1195.37	1198.34	19+400		
1195.37	1198.59	19+500		
1195.37	1198.30	19+500		
1195.37	1198.23	19+500		
1195.37	1198.22	19+600		
1195.37	1198.79	19+622	I.P.43	13°57'11"
1195.37	1198.79	19+700		
1195.37	1198.50	19+700		



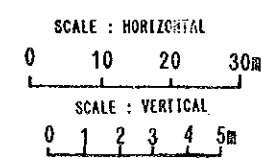
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT  
PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
(7/17)  
CH16+800 TO CH19+700  
JAPAN INTERNATIONAL COOPERATION AGENCY



- Legend
- BP : Beginning Point
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  - CK : Check Gate
  - AC : Augering Point
  - TP : Test Pit Point
  - AF : Sounding and Augering Point

WATER SURFACE ELEVATION
PROPOSED CANAL BED ELEVATION
GROUND SURFACE ELEVATION
CUMULATIVE DISTANCE
STATION
ANGLE

1199.01	1198.19	1195.20	1195.19	1196.93	1196.85	1196.75	1196.43	1196.23	1196.19
1964.224	1981.9	1985.20	1985.19	1993.12	1993.04	1992.66	1991.71	1990.67	1989.55
19700	19850	19827	19805	19815	19856	19881	19900	19923	19937
1977340	19805	19819	19815	19856	19881	19900	19923	19937	19950
19+600	19+700	19+800	19+900	19+950	20+000	20+068	20+100	20+174	20+200
IP.43						IP.44			
135°11'			40°35'20"				44°12'19"		24°15'39"
									43°56'42"



REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY

KANO PLAIN IRRIGATION PROJECT

PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
(8/17)

CH19+600 TO CH22+600

JAPAN INTERNATIONAL COOPERATION AGENCY

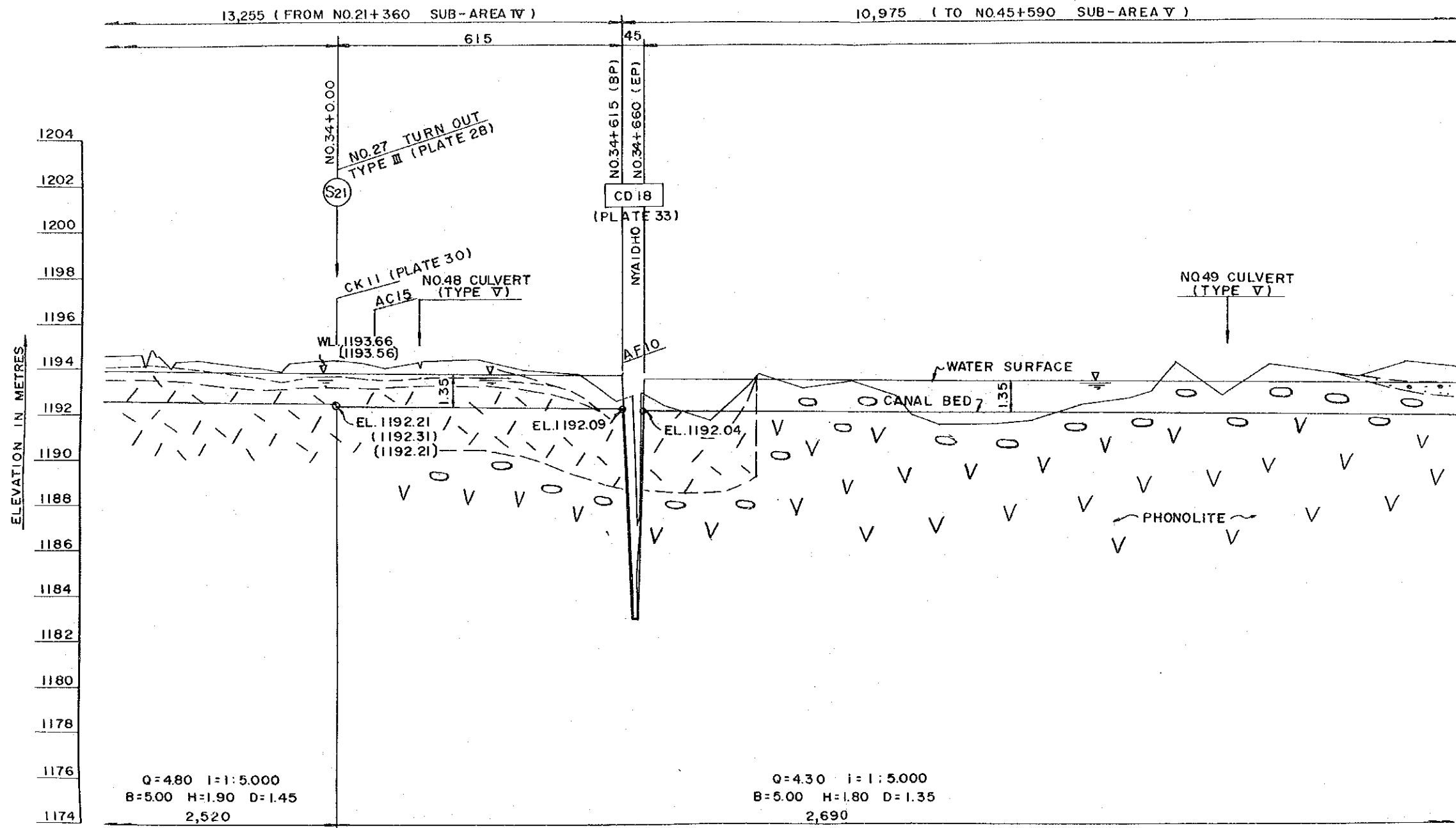




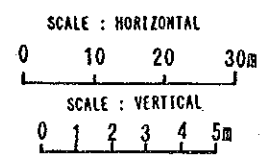






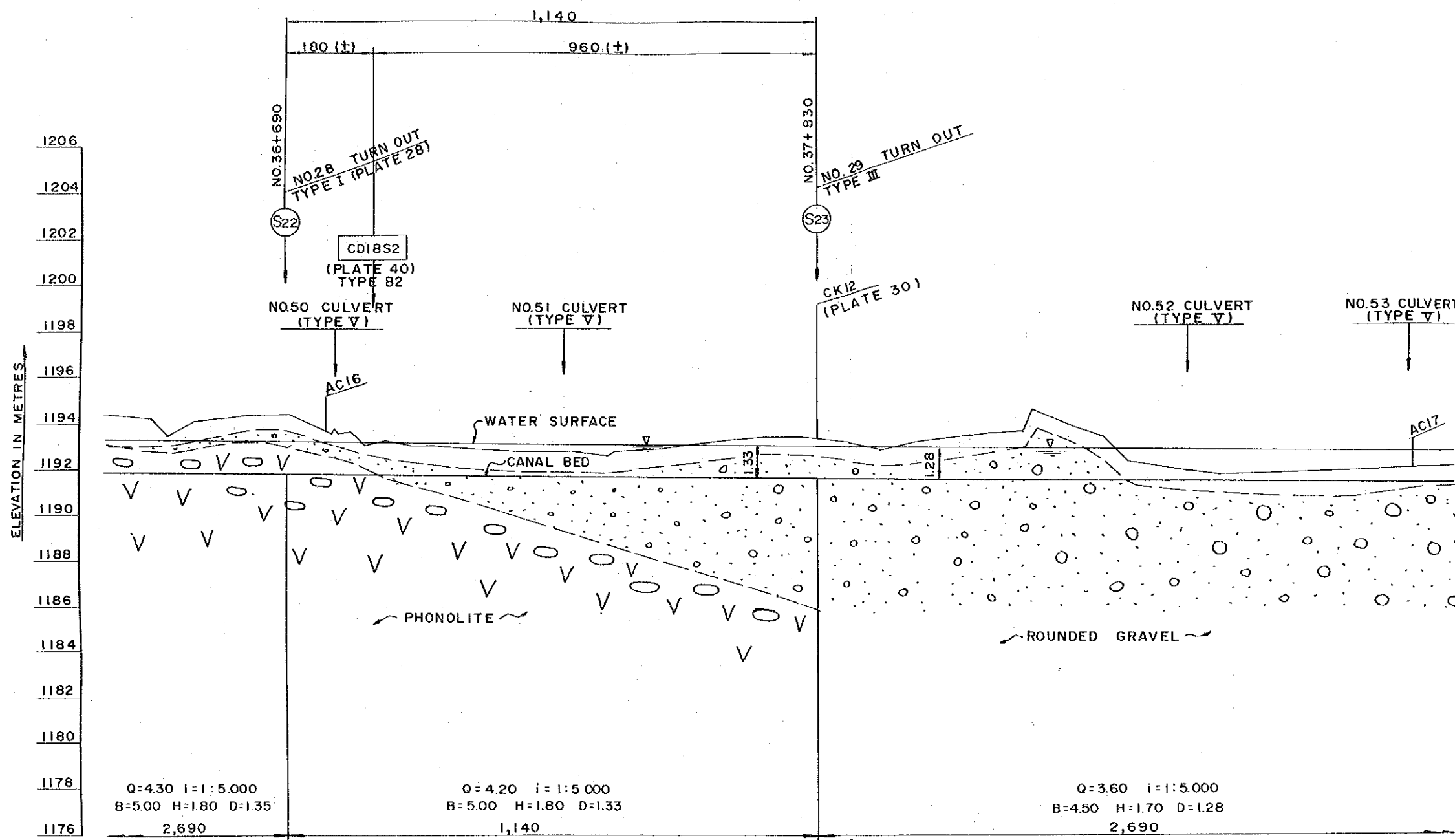


- Legend
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  - CK : Check Gate
  - AC : Augering Point
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  - AF : Sounding and Augering Point



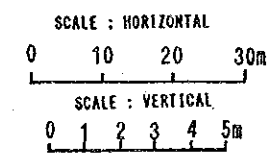
WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1193.66	1192.21	1194.50	33+500		
1193.56	1192.21	1194.59	33+579		
	1192.29	1194.76	33+600		
	1192.21	1194.46	33+634		
	1192.21	1194.35	33+650		
	1192.21	1194.34	33+700		
	1192.21	1193.70	33+800		
	1192.21	1193.85	33+882		
	1192.21	1194.22	33+900		
	1192.21	1194.33	33+950		
	1192.21	1193.66	34+000		
	1192.21	1192.31	34+050		
	1192.21	1192.21	34+100		
	1192.17	1194.27	34+176		
	1192.17	1194.36	34+200		
	1192.13	1194.34	34+300		
	1192.13	1193.95	34+367	IP.68	30°19'14"
	1192.13	1193.76	34+400		
	1192.13	1193.75	34+500	IP.69	45°27'30"
	1192.09	1192.09	34+600		
	1192.04	1192.89	34+653		
	1192.04	1192.97	34+683		
	1192.04	1192.44	34+700		
	1192.01	1193.36	34+800		
	1191.97	1193.43	34+898	IP.70	58°55'18"
	1191.97	1193.71	34+900		
	1191.97	1193.18	35+000		
	1191.97	1193.45	35+100		
	1191.93	1192.84	35+200		
	1191.93	1192.00	35+233	IP.71	1°26'60"
	1191.93	1191.53	35+300		
	1191.89	1191.54	35+400		
	1191.89	1191.73	35+500		
	1191.85	1193.20	35+600		
	1191.81	1192.69	35+700		
	1191.81	1192.99	35+780	IP.72	19°26'02"
	1191.81	1192.81	35+900		
	1191.77	1193.55	35+982		
	1191.77	1194.14	36+000		
	1191.77	1193.89	36+100		
	1191.73	1193.08	36+200		
	1191.73	1194.28	36+300		
	1191.69	1194.09	36+400		

REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT  
 PROFILE OF  
 NYAKACH-KANO MAIN IRRIGATION CANAL  
 CH33+500 TO CH36+400  
 (13/17)  
 JAPAN INTERNATIONAL COOPERATION AGENCY



- Legend
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  - AF : Sounding and Augering Point

WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1192.98	1191.63	1194.88	36+300		
1192.98	1191.65	1194.09	36+400	IP.73	48°49'32"
1192.98	1191.63	1193.34	36+500		
1192.98	1191.65	1194.04	36+600		
1192.98	1191.63	1194.29	36+700		
1192.98	1191.65	1193.46	36+800		
1192.98	1191.63	1193.59	36+900	IP.74	30°58'40"
1192.98	1191.63	1193.71	36+950		
1192.98	1191.63	1193.83	36+999		
1192.98	1191.63	1193.96	37+000		
1192.98	1191.59	1192.79	37+100		
1192.98	1191.55	1192.70	37+200		
1192.98	1191.55	1192.68	37+300		
1192.98	1191.51	1192.52	37+400	IP.75	22°26'03"
1192.98	1191.51	1192.61	37+500		
1192.98	1191.47	1192.75	37+600		
1192.98	1191.47	1193.07	37+700		
1192.98	1191.42	1193.23	37+800		
1192.98	1191.37	1193.07	37+900		
1192.98	1191.34	1192.71	38+000	IP.76	60°36'17"
1192.98	1191.34	1192.55	38+100		
1192.98	1191.30	1193.16	38+200		
1192.98	1191.30	1193.42	38+300		
1192.98	1191.30	1193.50	38+400	IP.77	16°24'03"
1192.98	1191.30	1194.41	38+500		
1192.98	1191.26	1193.57	38+600		
1192.98	1191.26	1193.31	38+700	IP.78	10°29'22"
1192.98	1191.26	1192.14	38+800		
1192.98	1191.22	1191.84	38+900		
1192.98	1191.20	1191.65	38+940		
1192.98	1191.18	1191.65	38+999		
1192.98	1191.15	1191.71	39+000		
1192.98	1191.15	1191.71	39+000		
1192.98	1191.14	1191.73	39+000		
1192.98	1191.14	1191.86	39+100		
1192.98	1191.10	1191.90	39+200		



REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY

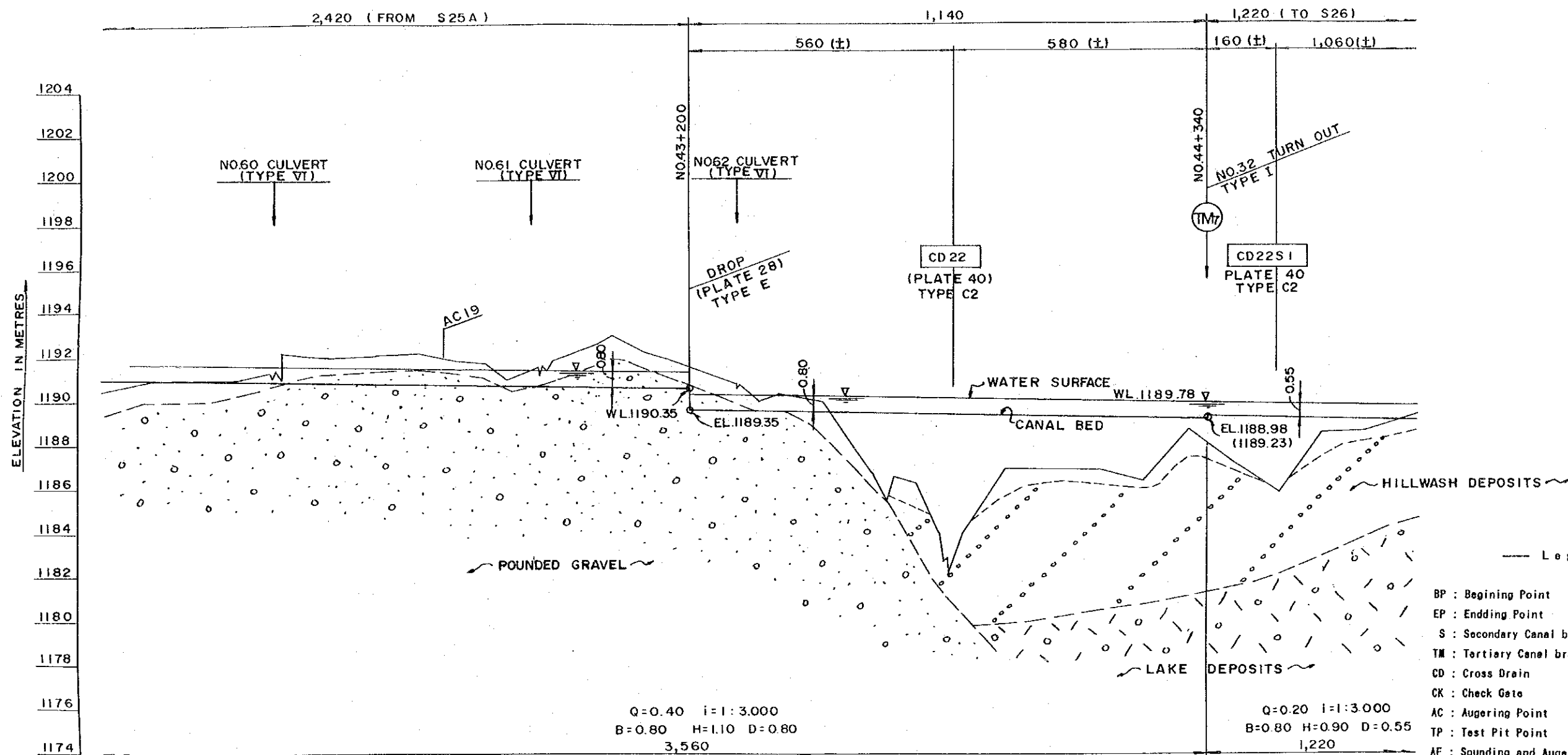
KANO PLAIN IRRIGATION PROJECT

PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
(14/17)

CH36+300 TO CH39+200

JAPAN INTERNATIONAL COOPERATION AGENCY

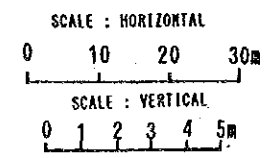




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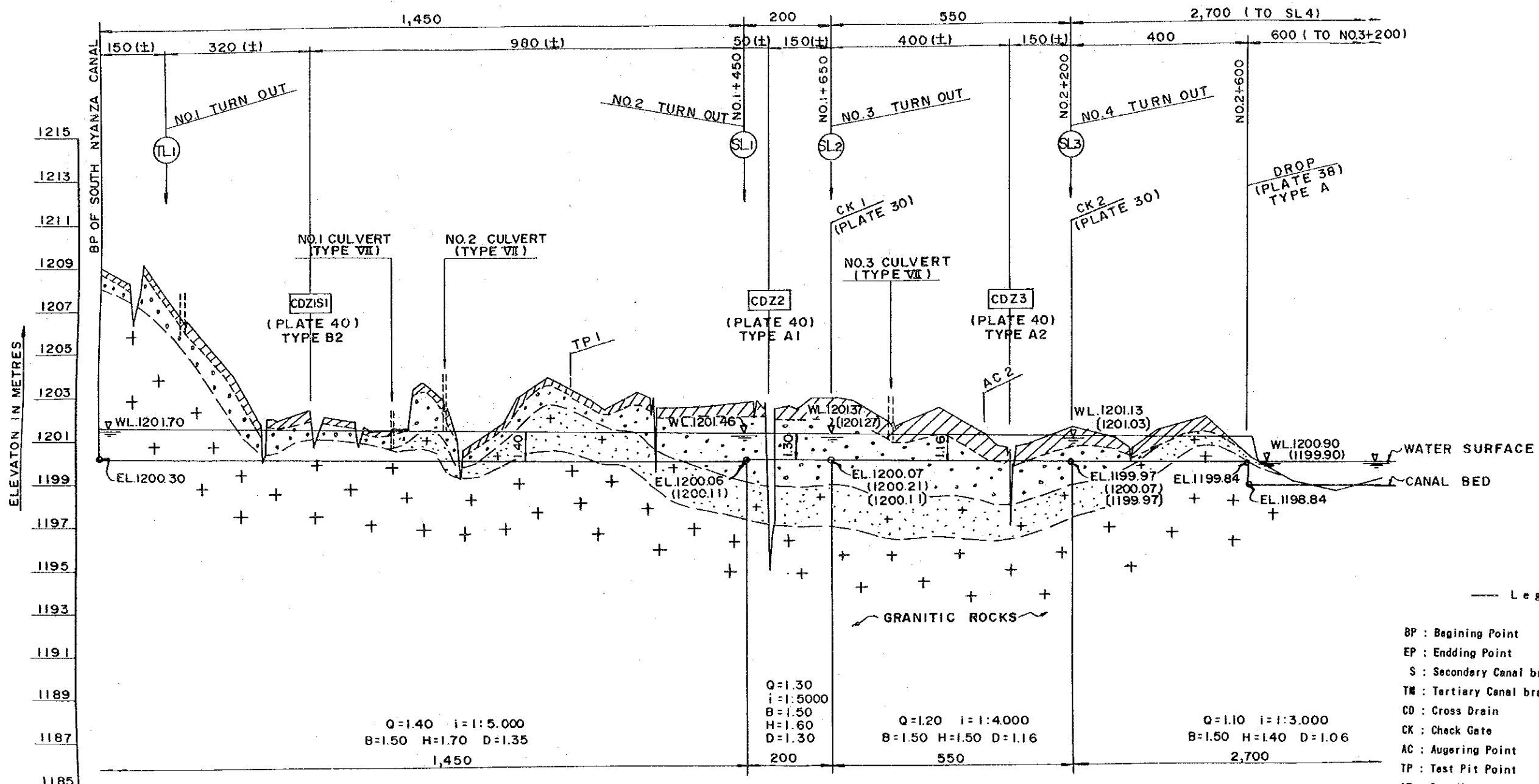
WATER SURFACE ELEVATION
PROPOSED CANAL BED ELEVATION
GROUND SURFACE ELEVATION
CUMULATIVE DISTANCE
STATION
ANGLE

41+900	1190.75	1190.75			
42+000	1190.82	1190.75			
42+100	1190.96	1190.75			
42+200	1191.01	1190.68			
42+277	1191.31	1191.01			
42+298	1191.70	1191.01			
42+300	1191.70	1191.01			
42+400	1190.98	1190.61	1191.41		
42+500	1191.07	1190.61			
42+600	1191.18	1190.54			
42+700	1190.79	1190.54			
42+790	1190.72	1190.54			
42+800	1190.96	1190.48			
42+871	1191.54	1190.48			
42+886	1191.31	1190.48			
42+900	1191.86	1190.48			
43+000	1192.62	1190.41			
43+032	1193.00	1190.41			
43+100	1192.26	1190.35	1191.15		
43+200	1191.58	1189.35	1190.15		
43+293	1190.72	1189.35			
43+300	1190.68	1189.35			
43+307	1190.68	1189.35			
43+343	1189.99	1189.35			
43+400	1190.26	1189.28			
43+480	1189.94	1189.21			
43+500	1189.76	1189.21			
43+600	1186.72	1189.21			
43+637	1185.38	1189.21			
43+650	1186.59	1189.21			
43+700	1186.29	1189.21			
43+751	1183.97	1189.15	1189.95		
43+754	1182.73	1189.15			
43+800	1183.84	1189.15			
43+900	1186.92	1189.08			
44+000	1186.91	1189.08			
44+100	1186.89	1189.02			
44+200	1186.34	1189.02			
44+300	1188.69	1188.98	1189.78		
44+400	1187.13	1189.21	1189.23		
44+500	1185.82	1189.14			
44+600	1186.55	1189.14			
44+700	1188.62	1189.08			
44+800	1189.24	1189.08			



REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT  
PROFILE OF  
NYAKACH-KANO MAIN IRRIGATION CANAL  
(16/17)  
CH41+900 TO CH44+800  
JAPAN INTERNATIONAL COOPERATION AGENCY





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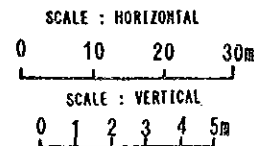
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B=1.50 H=1.70 D=1.35

Q=1.30  
i=1:5.000  
B=1.50  
H=1.60  
D=1.30

Q=1.20 i=1:4.000  
B=1.50 H=1.50 D=1.16

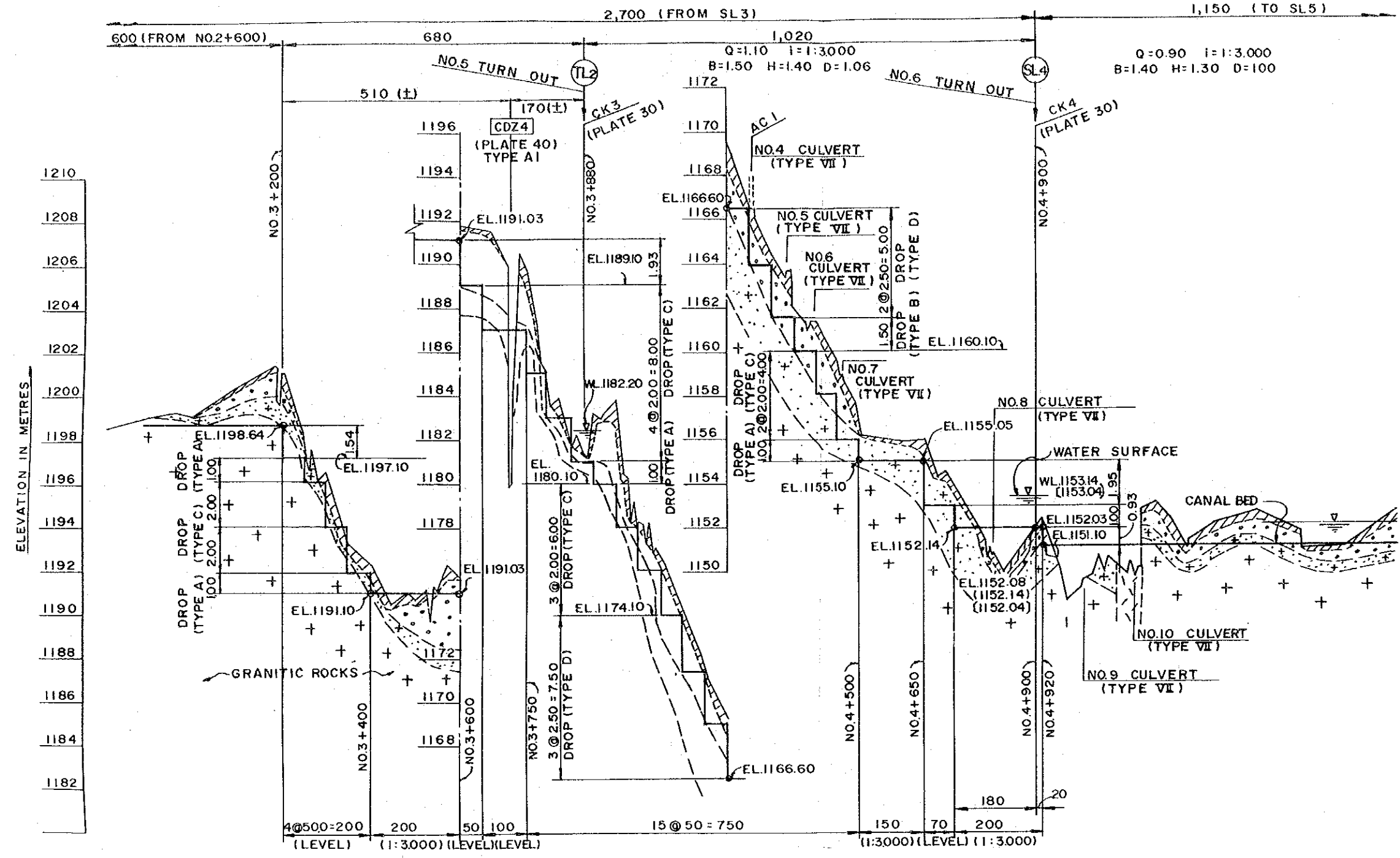
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B=1.50 H=1.40 D=1.06

WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1201.70	1200.30	1209.00	0+000		
1201.70	1200.30	1208.24	0+066.00		
1201.70	1200.30	1207.49	0+132.00		
1201.70	1200.30	1206.74	0+198.00		
1201.70	1200.30	1206.00	0+264.00		
1201.70	1200.30	1205.25	0+330.00		
1201.70	1200.30	1204.50	0+396.00		
1201.70	1200.30	1203.75	0+462.00		
1201.70	1200.30	1203.00	0+528.00		
1201.70	1200.30	1202.25	0+594.00		
1201.70	1200.30	1201.50	0+660.00		
1201.70	1200.30	1200.75	0+726.00		
1201.70	1200.30	1200.00	0+792.00		
1201.70	1200.30	1199.25	0+858.00		
1201.70	1200.30	1198.50	0+924.00		
1201.70	1200.30	1197.75	0+990.00		
1201.70	1200.30	1197.00	1+056.00		
1201.70	1200.30	1196.25	1+122.00		
1201.70	1200.30	1195.50	1+188.00		
1201.70	1200.30	1194.75	1+254.00		
1201.70	1200.30	1194.00	1+320.00		
1201.70	1200.30	1193.25	1+386.00		
1201.70	1200.30	1192.50	1+452.00		
1201.70	1200.30	1191.75	1+518.00		
1201.70	1200.30	1191.00	1+584.00		
1201.70	1200.30	1190.25	1+650.00		
1201.70	1200.30	1189.50	1+716.00		
1201.70	1200.30	1188.75	1+782.00		
1201.70	1200.30	1188.00	1+848.00		
1201.70	1200.30	1187.25	1+914.00		
1201.70	1200.30	1186.50	1+980.00		
1201.70	1200.30	1185.75	2+046.00		
1201.70	1200.30	1185.00	2+112.00		
1201.70	1200.30	1184.25	2+178.00		
1201.70	1200.30	1183.50	2+244.00		
1201.70	1200.30	1182.75	2+310.00		
1201.70	1200.30	1182.00	2+376.00		
1201.70	1200.30	1181.25	2+442.00		
1201.70	1200.30	1180.50	2+508.00		
1201.70	1200.30	1179.75	2+574.00		
1201.70	1200.30	1179.00	2+640.00		
1201.70	1200.30	1178.25	2+706.00		
1201.70	1200.30	1177.50	2+772.00		
1201.70	1200.30	1176.75	2+838.00		
1201.70	1200.30	1176.00	2+904.00		
1201.70	1200.30	1175.25	2+970.00		
1201.70	1200.30	1174.50	3+036.00		
1201.70	1200.30	1173.75	3+102.00		
1201.70	1200.30	1173.00	3+168.00		
1201.70	1200.30	1172.25	3+234.00		
1201.70	1200.30	1171.50	3+300.00		
1201.70	1200.30	1170.75	3+366.00		
1201.70	1200.30	1170.00	3+432.00		
1201.70	1200.30	1169.25	3+498.00		
1201.70	1200.30	1168.50	3+564.00		
1201.70	1200.30	1167.75	3+630.00		
1201.70	1200.30	1167.00	3+696.00		
1201.70	1200.30	1166.25	3+762.00		
1201.70	1200.30	1165.50	3+828.00		
1201.70	1200.30	1164.75	3+894.00		
1201.70	1200.30	1164.00	3+960.00		
1201.70	1200.30	1163.25	4+026.00		
1201.70	1200.30	1162.50	4+092.00		
1201.70	1200.30	1161.75	4+158.00		
1201.70	1200.30	1161.00	4+224.00		
1201.70	1200.30	1160.25	4+290.00		
1201.70	1200.30	1159.50	4+356.00		
1201.70	1200.30	1158.75	4+422.00		
1201.70	1200.30	1158.00	4+488.00		
1201.70	1200.30	1157.25	4+554.00		
1201.70	1200.30	1156.50	4+620.00		
1201.70	1200.30	1155.75	4+686.00		
1201.70	1200.30	1155.00	4+752.00		
1201.70	1200.30	1154.25	4+818.00		
1201.70	1200.30	1153.50	4+884.00		
1201.70	1200.30	1152.75	4+950.00		
1201.70	1200.30	1152.00	5+016.00		
1201.70	1200.30	1151.25	5+082.00		
1201.70	1200.30	1150.50	5+148.00		
1201.70	1200.30	1149.75	5+214.00		
1201.70	1200.30	1149.00	5+280.00		
1201.70	1200.30	1148.25	5+346.00		
1201.70	1200.30	1147.50	5+412.00		
1201.70	1200.30	1146.75	5+478.00		
1201.70	1200.30	1146.00	5+544.00		
1201.70	1200.30	1145.25	5+610.00		
1201.70	1200.30	1144.50	5+676.00		
1201.70	1200.30	1143.75	5+742.00		
1201.70	1200.30	1143.00	5+808.00		
1201.70	1200.30	1142.25	5+874.00		
1201.70	1200.30	1141.50	5+940.00		
1201.70	1200.30	1140.75	6+006.00		
1201.70	1200.30	1140.00	6+072.00		
1201.70	1200.30	1139.25	6+138.00		
1201.70	1200.30	1138.50	6+204.00		
1201.70	1200.30	1137.75	6+270.00		
1201.70	1200.30	1137.00	6+336.00		
1201.70	1200.30	1136.25	6+402.00		
1201.70	1200.30	1135.50	6+468.00		
1201.70	1200.30	1134.75	6+534.00		
1201.70	1200.30	1134.00	6+600.00		
1201.70	1200.30	1133.25	6+666.00		
1201.70	1200.30	1132.50	6+732.00		
1201.70	1200.30	1131.75	6+798.00		
1201.70	1200.30	1131.00	6+864.00		
1201.70	1200.30	1130.25	6+930.00		
1201.70	1200.30	1129.50	6+996.00		
1201.70	1200.30	1128.75	7+062.00		
1201.70	1200.30	1128.00	7+128.00		
1201.70	1200.30	1127.25	7+194.00		
1201.70	1200.30	1126.50	7+260.00		
1201.70	1200.30	1125.75	7+326.00		
1201.70	1200.30	1125.00	7+392.00		
1201.70	1200.30	1124.25	7+458.00		
1201.70	1200.30	1123.50	7+524.00		
1201.70	1200.30	1122.75	7+590.00		
1201.70	1200.30	1122.00	7+656.00		
1201.70	1200.30	1121.25	7+722.00		
1201.70	1200.30	1120.50	7+788.00		
1201.70	1200.30	1119.75	7+854.00		
1201.70	1200.30	1119.00	7+920.00		
1201.70	1200.30	1118.25	7+986.00		
1201.70	1200.30	1117.50	8+052.00		
1201.70	1200.30	1116.75	8+118.00		
1201.70	1200.30	1116.00	8+184.00		
1201.70	1200.30	1115.25	8+250.00		
1201.70	1200.30	1114.50	8+316.00		
1201.70	1200.30	1113.75	8+382.00		
1201.70	1200.30	1113.00	8+448.00		
1201.70	1200.30	1112.25	8+514.00		
1201.70	1200.30	1111.50	8+580.00		
1201.70	1200.30	1110.75	8+646.00		
1201.70	1200.30	1110.00	8+712.00		
1201.70	1200.30	1109.25	8+778.00		
1201.70	1200.30	1108.50	8+844.00		
1201.70	1200.30	1107.75	8+910.00		
1201.70	1200.30	1107.00	8+976.00		
1201.70	1200.30	1106.25	9+042.00		
1201.70	1200.30	1105.50	9+108.00		
1201.70	1200.30	1104.75	9+174.00		
1201.70	1200.30	1104.00	9+240.00		
1201.70	1200.30	1103.25	9+306.00		
1201.70	1200.30	1102.50	9+372.00		
1201.70	1200.30	1101.75	9+438.00		
1201.70	1200.30	1101.00	9+504.00		
1201.70	1200.30	1100.25	9+570.00		
1201.70	1200.30	1099.50	9+636.00		
1201.70	1200.30	1098.75	9+702.00		
1201.70	1200.30	1098.00	9+768.00		
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1201.70	1200.30	1096.50	9+900.00		



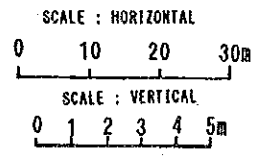
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT  
PROFILE OF  
SOUTH NYANZA MAIN IRRIGATION CANAL  
(1/3)  
CH 0+000 TO CH 2+900  
JAPAN INTERNATIONAL COOPERATION AGENCY





- Legend
- BP : Beginning Point
  - EP : Ending Point
  - S : Secondary Canal branches from main canal
  - TM : Tertiary Canal branches from main canal
  - CD : Cross Drain
  - CK : Check Gate
  - AC : Augering Point
  - TP : Test Pit Point
  - AF : Sounding and Augering Point

STATION	WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	ANGLE
2+800	1198.64	1198.64	1198.53	0	
2+900	1198.74	1198.74	1199.02	100	
2+958.66	1199.28	1199.28	1199.28	158.66	
3+000	1198.71	1198.71	1199.10	200	
3+100	1198.42	1198.42	1200.42	300	
3+101.90	1198.35	1198.35	1202.35	301.90	
3+187.00	1198.45	1198.45	1201.45	387.00	
3+200	1198.64	1198.64	1200.31	400	
3+206.22	1198.31	1198.31	1200.31	406.22	
3+236.22	1198.46	1198.46	1198.46	436.22	
3+252.22	1198.98	1198.98	1196.98	452.22	
3+300	1196.64	1196.64	1196.64	500	
3+315.00	1195.23	1195.23	1195.23	515.00	
3+345.00	1193.44	1193.44	1193.44	545.00	
3+400	1192.37	1192.37	1192.10	600	
3+448.91	1191.50	1191.50	1191.10	648.91	
3+483.06	1191.96	1191.96	1191.96	683.06	
3+500	1191.76	1191.76	1191.76	700	
3+521.50	1191.16	1191.16	1191.16	721.50	
3+541.90	1191.42	1191.42	1191.42	741.90	
3+570.40	1192.31	1192.31	1191.03	770.40	
3+600	1191.72	1191.72	1189.10	800	
3+665.02	1191.51	1191.51	1191.51	865.02	
3+700	1190.15	1190.15	1190.15	900	
3+715.00	1189.04	1189.04	1189.04	915.00	
3+720.00	1185.10	1185.10	1185.10	920.00	
3+730.00	1185.10	1185.10	1185.10	930.00	
3+730.00	1185.09	1185.09	1185.09	930.00	
3+730.00	1183.96	1183.96	1183.96	930.00	
3+730.00	1183.96	1183.96	1183.96	930.00	
3+900	1183.24	1183.24	1181.10	1180	
3+953.48	1183.86	1183.86	1183.86	1233.48	
4+000	1178.24	1178.24	1178.24	1300	
4+050.76	1176.36	1176.36	1176.10	1350.76	
4+100	1174.02	1174.02	1174.02	1400	
4+125.36	1172.79	1172.79	1172.79	1425.36	
4+155.00	1170.99	1170.99	1170.99	1455.00	
4+200.00	1169.31	1169.31	1169.10	1500	
4+250.00	1166.49	1166.49	1166.60	1550	
4+260.00	1166.00	1166.00	1166.00	1560	
4+260.00	1166.00	1166.00	1166.00	1560	
4+300.00	1162.55	1162.55	1161.60	1600	
4+341.00	1162.90	1162.90	1161.60	1641.00	
4+376.00	1161.37	1161.37	1160.10	1676.00	
4+400	1156.10	1156.10	1156.10	1700	
4+51.00	1159.64	1159.64	1159.64	1811.00	
4+467.00	1158.65	1158.65	1158.65	1867.00	
4+500	1156.76	1156.76	1156.10	1900	
4+506.46	1156.24	1156.24	1155.10	1906.46	
4+550.00	1156.10	1156.10	1156.10	1950	
4+600	1155.92	1155.92	1155.07	2000	
4+650.00	1156.01	1156.01	1155.05	2050	
4+662.00	1154.29	1154.29	1154.29	2062.00	
4+700	1154.36	1154.36	1154.36	2100	
4+735.00	1153.26	1153.26	1153.26	2135.00	
4+770.00	1152.10	1152.10	1152.11	2170.00	
4+800	1152.10	1152.10	1152.10	2200	
4+800	1152.08	1152.08	1152.08	2200	
4+800	1152.08	1152.08	1152.08	2200	
4+900	1152.12	1152.12	1152.04	2300	
4+924.00	1152.42	1152.42	1151.10	2324.00	
4+954.00	1150.70	1150.70	1150.70	2354.00	
4+967.50	1148.70	1148.70	1148.70	2367.50	
5+000	1149.31	1149.31	1151.07	2400	
5+005.20	1149.70	1149.70	1151.07	2405.20	
5+100	1149.88	1149.88	1149.88	2500	
5+370.00	1152.92	1152.92	1152.92	2770.00	
5+465.90	1153.20	1153.20	1153.20	2865.90	
5+500	1152.44	1152.44	1151.01	2900	
5+523.20	1150.99	1150.99	1150.99	2923.20	
5+523.20	1151.40	1151.40	1151.40	2923.20	
5+600	1152.16	1152.16	1150.97	3000	
5+700	1152.57	1152.57	1150.84	3100	

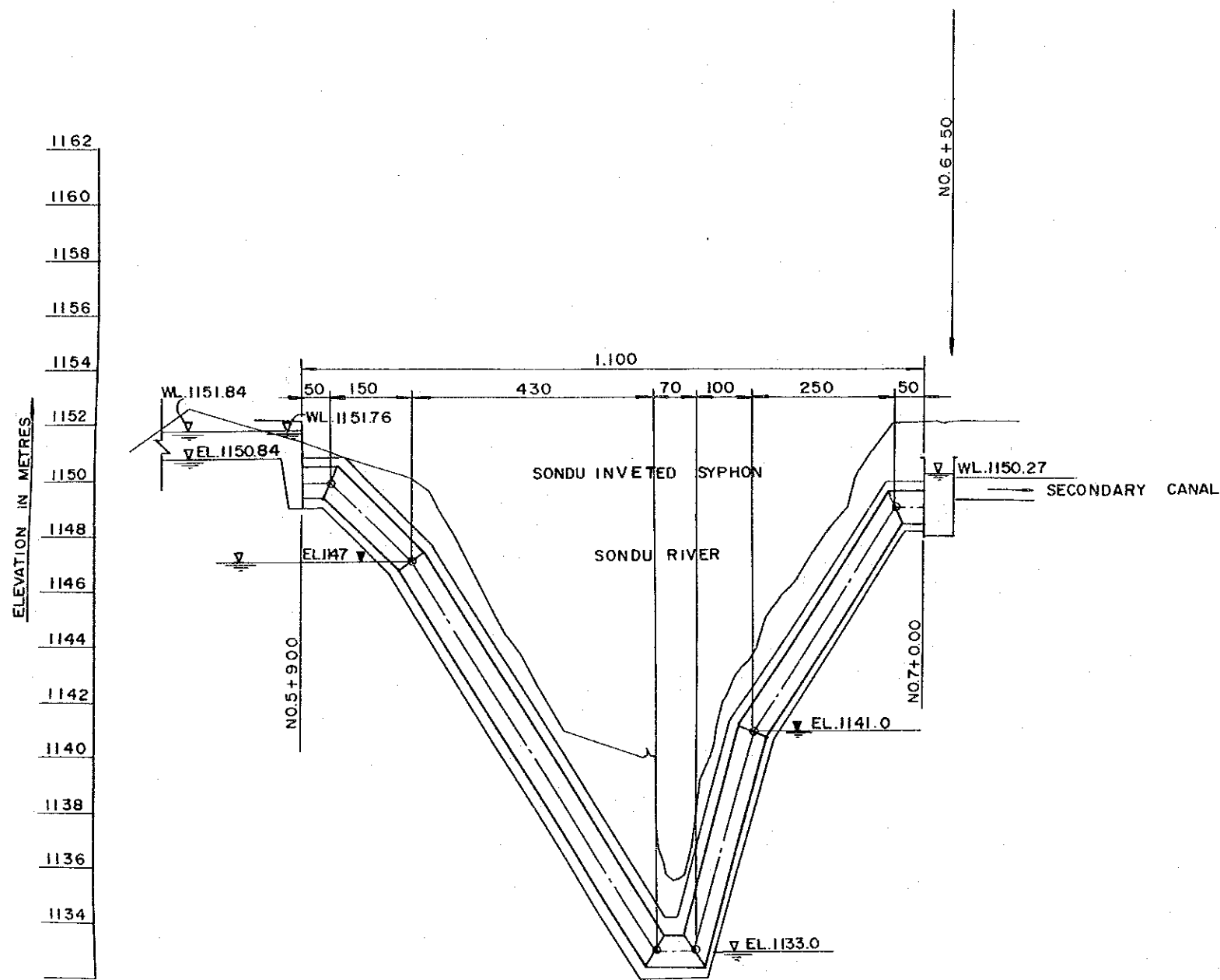


REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY

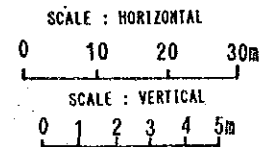
KANO PLAIN IRRIGATION PROJECT

PROFILE OF  
SOUTH NYANZA MAIN IRRIGATION CANAL  
CH 2+800 TO CH 5+700 (2/3)

JAPAN INTERNATIONAL COOPERATION AGENCY

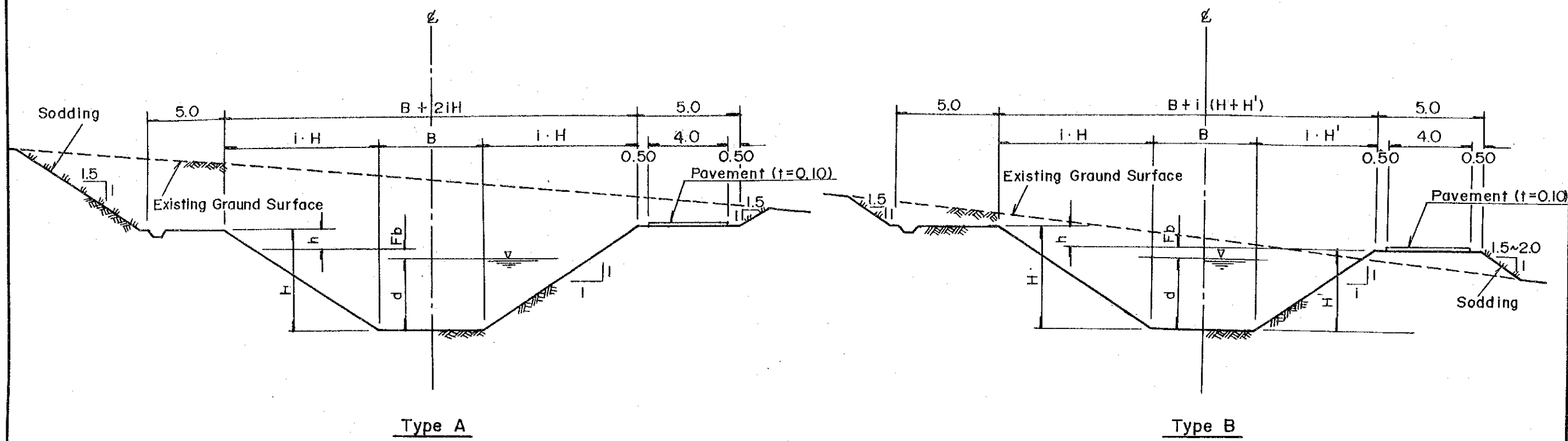


- Legend
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  - CD : Cross Drain
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  - AC : Augering Point
  - TP : Test Pit Point
  - AF : Sounding and Augering Point



WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION	GROUND SURFACE ELEVATION	CUMULATIVE DISTANCE	STATION	ANGLE
1151.84	1150.84	1151.14	5+600		
1151.84	1150.84	1152.57	5+700		
1151.76	1150.84	1151.98	5+800		
1151.76	1150.84	1151.43	5+900		
1150.84	1150.84	1150.68	5+997.69	IP.21	
1150.84	1150.84	1150.68	6+000		
1150.84	1150.84	1150.10	6+100		
1150.84	1150.84	1149.57	6+132.00		
1150.84	1150.84	1148.50	6+150.79		
1150.84	1150.84	1148.50	6+200		
1150.27	1150.27	1141.0	6+000	IP.22	
1150.27	1150.27	1141.0	6+50		

REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT  
 PROFILE OF  
 SOUTH NYANZA MAIN IRRIGATION CANAL  
 CH 5+600 TO CH 6+50 (3/3)  
 JAPAN INTERNATIONAL COOPERATION AGENCY



**STANDARD SECTION OF IRRIGATION CANAL**

NO. SCALE. unit : m  
 NOTE : "h" is variable value and less than 1.0m  
 In case of necessity, the surface of canal is protected with impermeable soil in order to seep out.

Main Canal

Sub-Area	Name	Section	Discharge Q (m <sup>3</sup> /sec)	Bottom Width B (m)	Canal Gradient	Side Slope i	Water Depth d (m)	Fee Board Fb (m)
II-1	South Nyanza Main Canal	Sondu River ~ Sondu/Mriu Hydropower Sta.	1.50 ~	1.50 ~ 1.40	1:5,000 ~ 1:3,000	1:1.0	1.40	0.30
II-2	Nyakach-Kano Main Canal	Sondu/Mriu Hydropower Sta. ~ Asawo River	16.40~13.50	12.00~11.50	1:7,000	1:1.5	2.05~1.90	0.50
III		Asqwo River ~ Awach-Kano River	13.50~9.30	11.50 ~ 9.00	1:7,000 ~ 1:6,000	1:1.5	1.90~1.70	0.50
IV		Awach-Kano River ~ Nyaido River	9.30~4.40	9.00~5.00	1:5,000	1:1.5	1.70~1.40	0.50
V		Nyaiho ~ Nyando River	4.40 ~	5.00~0.80	1:5,000 ~ 1:3,000	1:1.5 ~ 1:1.0	1.40 ~	0.50~0.30

Secondary Canal

Tertiary Canal (Q = 30~70 l/sec) Water Course

TYPE	Q (m <sup>3</sup> /sec)	B (m)	Canal Gradient	Side Slope	Water depth(m)	Canal Height		B(m)	H(m)	Width of embankment		B(m)	H(m)
1	0.3	0.5	1:500	1:1.5	0.50	0.70	Upland	0.2	0.5	0.80, 4.00 m	Upland	0.2	0.4
2	0.6	1.0	1:700	1:1.5	0.60	0.80	Paddy	0.3	0.5	0.80, 4.00 m	Paddy	0.3	0.4
3	1.0	1.5	1:800	1:1.5	0.70	0.90							
4	1.5	2.0	1:1000	1:1.5	0.70	1.00							

Canal bed elevation is 10cm higher than existig ground surface

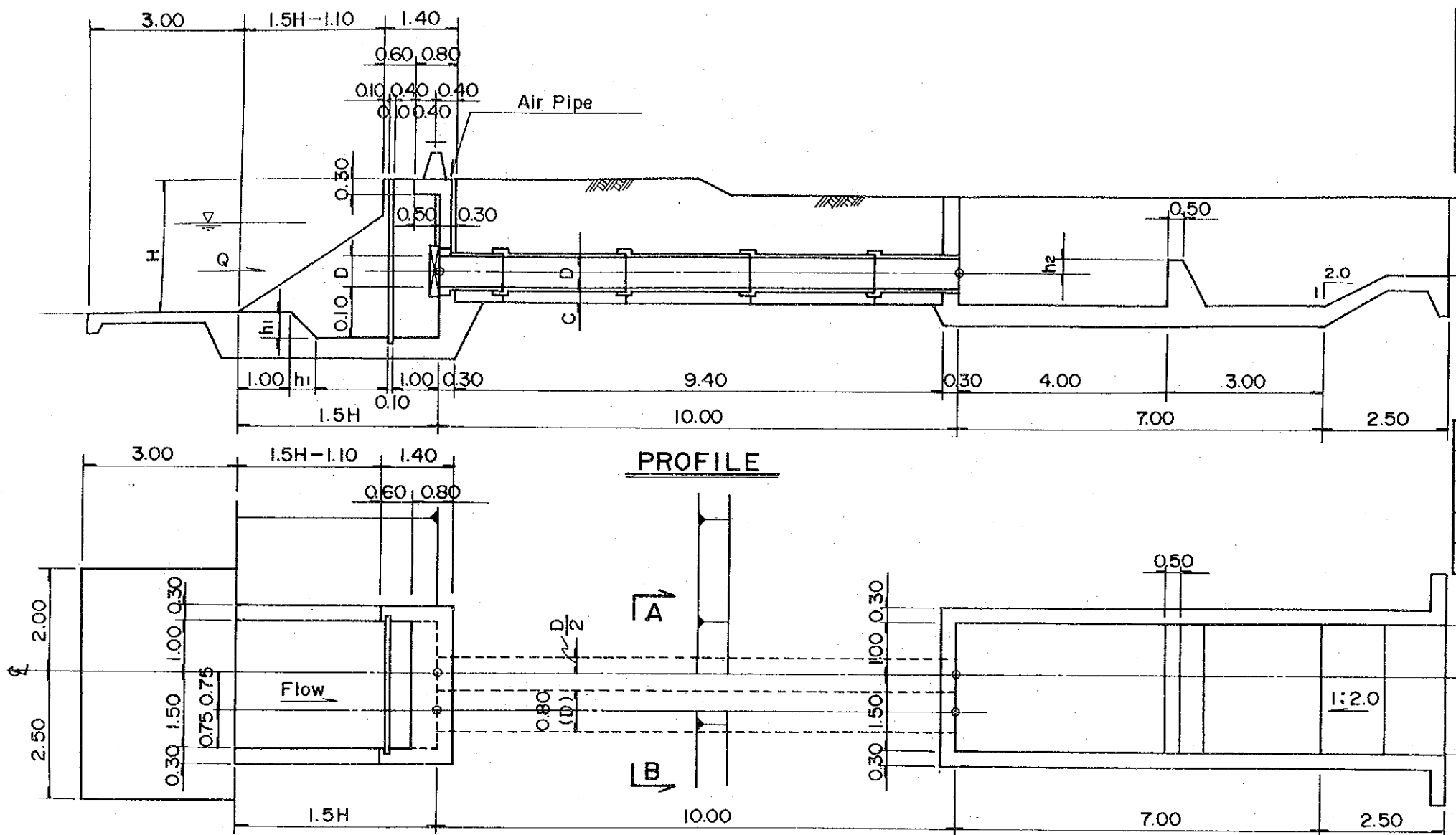
REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT  
**TYPICAL CROSS SECTION OF IRRIGATION CANAL**  
 JAPAN INTERNATIONAL COOPERATION AGENCY

	D	No of Pipe	h	B
I	0.60	1	0.04	2.0
II	0.60	1	0.09	2.0
III	0.80	1	0.08	3.0
IV	0.80	2	0.08	3.0

$h_2$  : S13a ...  $h_1 = 0.40^m$  S15 ...  $h = 0.10^m$   
 S16a ... 0.10 S17 ... 0.60  
 S18 ... 0.20 S21 ... 0.30  
 S22 ... 0.10 S23 ... 0.40  
 TM7 ... 0.50 S26 ... 0.50

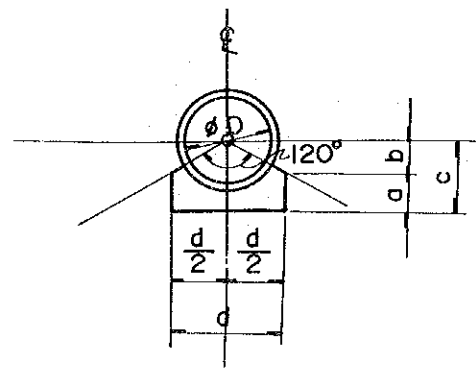
Others position  $h_1 = 0.0^m$   
 H : Hight of canal

	a	b	c	d
I	0.30	0.20	0.50	0.80
II	0.30	0.20	0.50	0.80
III	0.45	0.30	0.75	1.00
IV	0.45	0.30	0.75	2.50

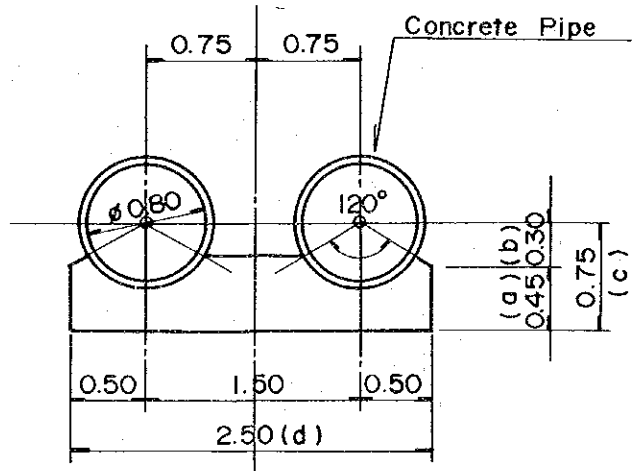


**PROFILE**

**PLAN**



**SECTION A**

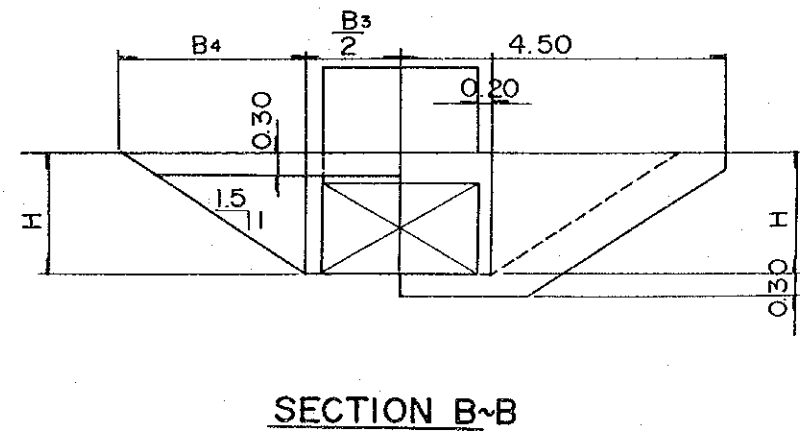
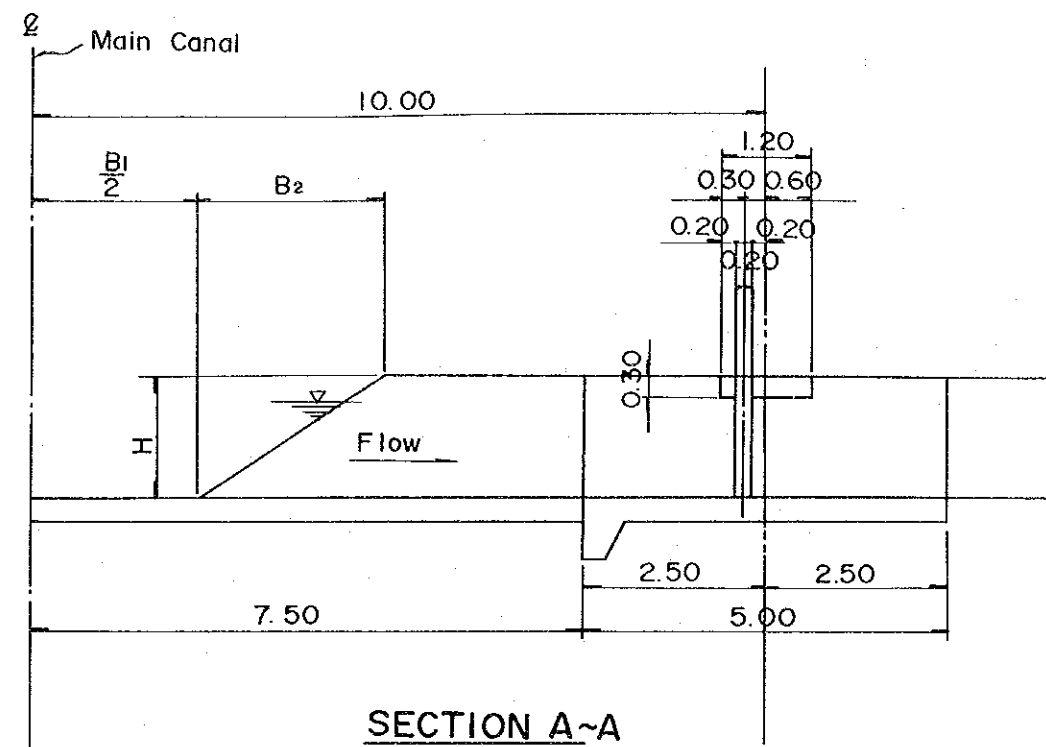
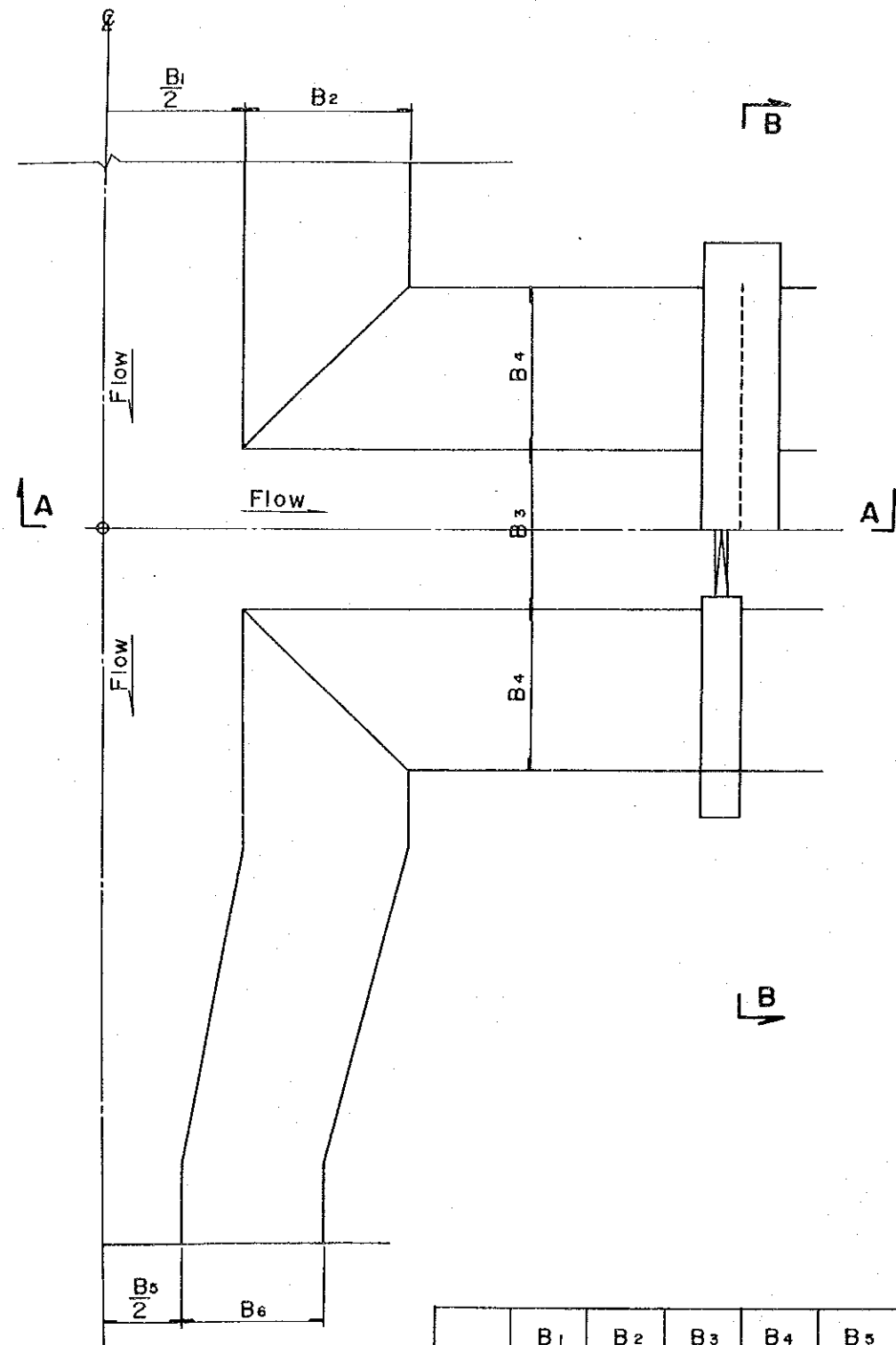


**SECTION B**

REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT

TURN OUT (1/2)

JAPAN INTERNATIONAL COOPERATION AGENCY

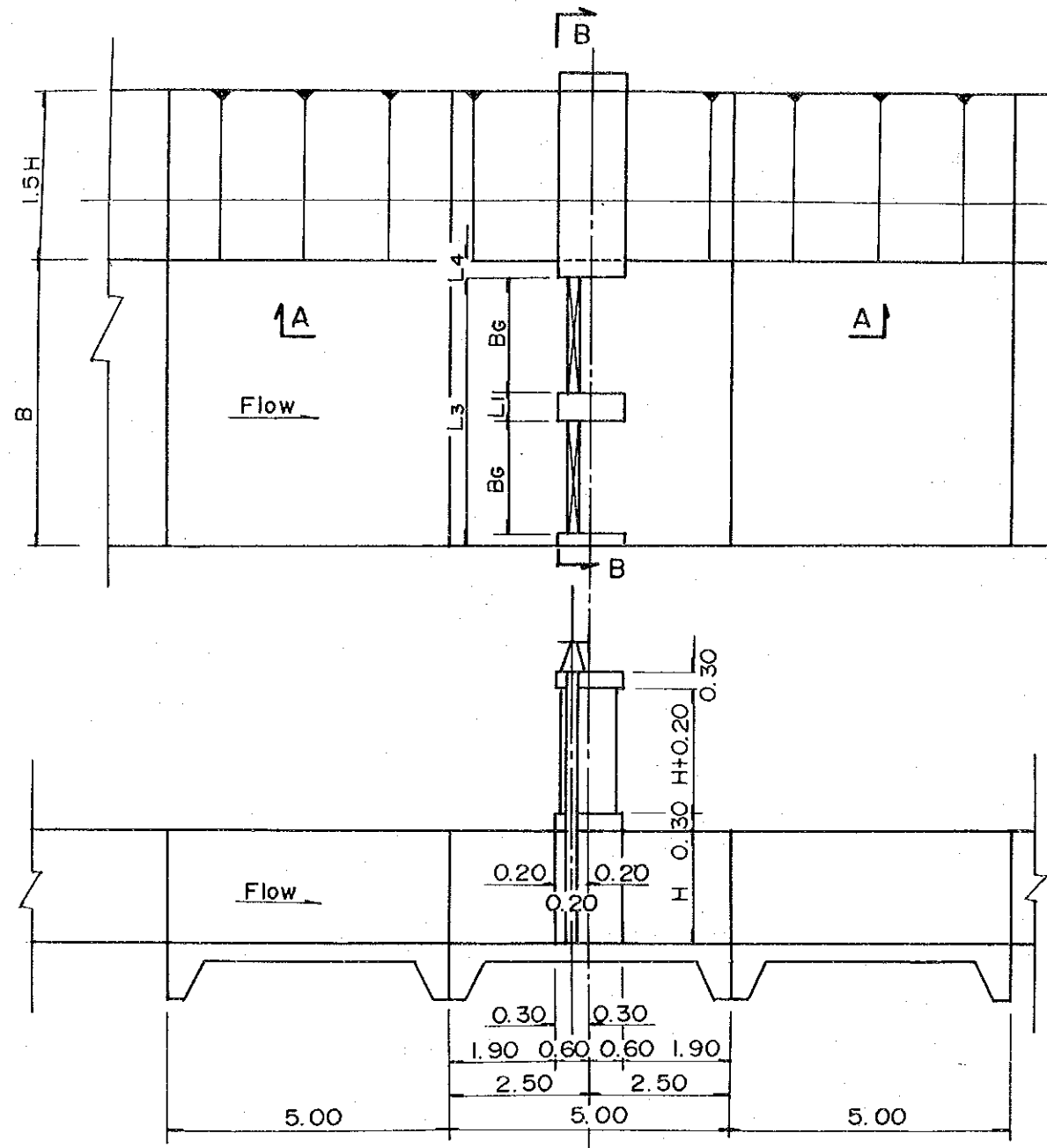


	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>	H		
S24	4.50	2.55	2.50	3.75	2.50	3.75	1.70		
S25	2.50	2.25	2.50	2.25	0.80	1.20	1.50		

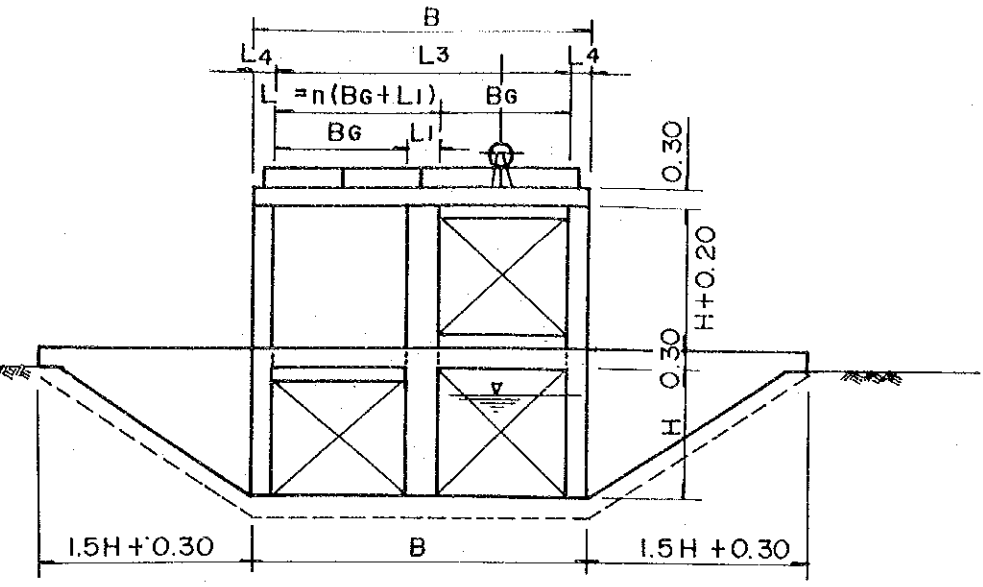
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

TURN OUT (2/2)

JAPAN INTERNATIONAL COOPERATION AGENCY



**SECTION A - A**



**SECTION B - B**

Nyakach - Kano Main Canal  $B_g = 2.00$

No.		B	H	d	n	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>
1	I	12.0	2.60	2.01	4	0.40	9.60	11.60	0.20
2	I	12.0	2.50	2.00	4	0.40	9.60	11.60	0.20
3	II	11.50	2.50	1.97	3	0.70	8.10	10.10	0.70
4	II	11.50	2.50	1.94	3	0.70	8.10	10.10	0.70
5	II	11.50	2.50	1.93	3	0.70	8.10	10.10	0.70
6	II	10.50	2.50	1.91	3	0.50	7.50	9.50	0.50
7	II	10.00	2.40	1.83	3	0.40	7.20	9.20	0.40
8	III	9.00	2.20	1.69	2	0.80	5.60	7.60	0.70
9	III	7.50	2.10	1.57	2	0.40	4.80	6.80	0.35
10	IV	7.00	2.10	1.51	1	1.00	3.00	5.00	1.00
11	IV	5.00	1.90	1.45	1	0.50	2.50	4.50	0.25
12	IV	5.00	1.80	1.33	1	0.50	2.50	4.50	0.25
13	V	2.50	1.50	1.20	0	0.0	0.0	2.00	0.25

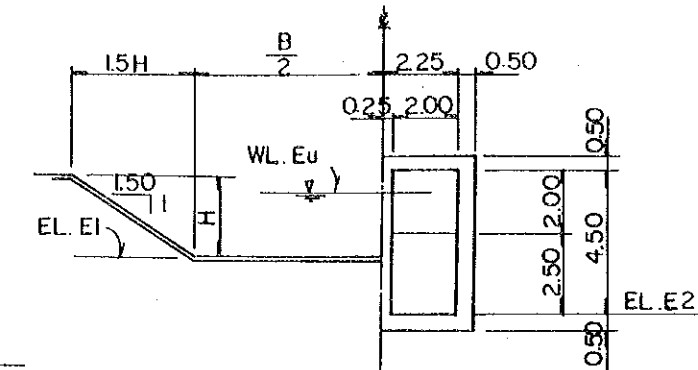
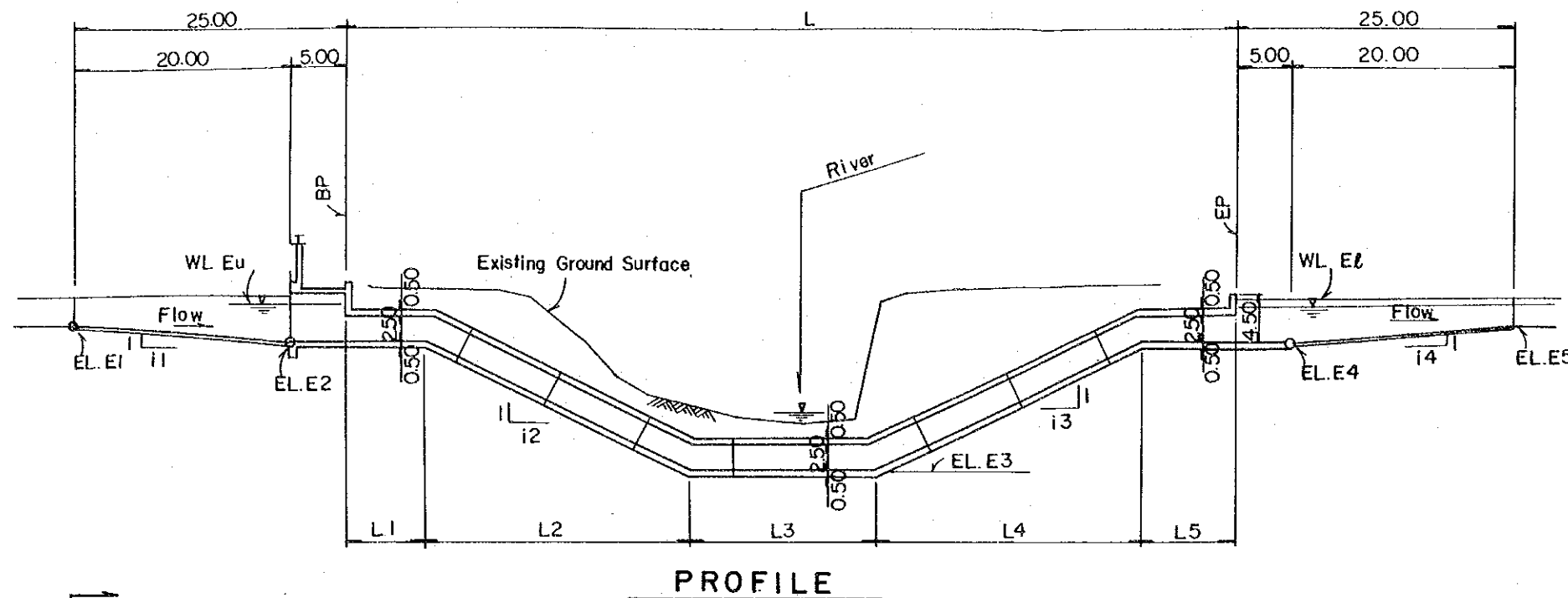
South Nyanza Main Canal  $B_g = 1.0$

No.		B	H	d	n	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>
1	VI	1.50	1.60	1.30	0	0.0	0.0	1.0	0.25
2	VI	1.50	1.50	1.16	0	0.0	0.0	1.0	0.25
3	VI	1.50	1.40	1.06	0	0.0	0.0	1.0	0.25
4	VI	1.50	1.40	1.06	0	0.0	0.0	1.0	0.25

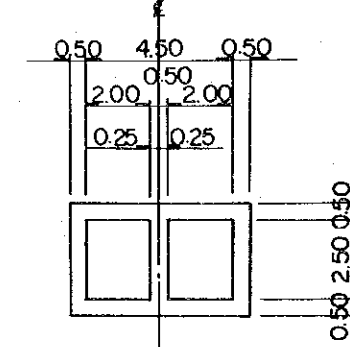
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

CHECK

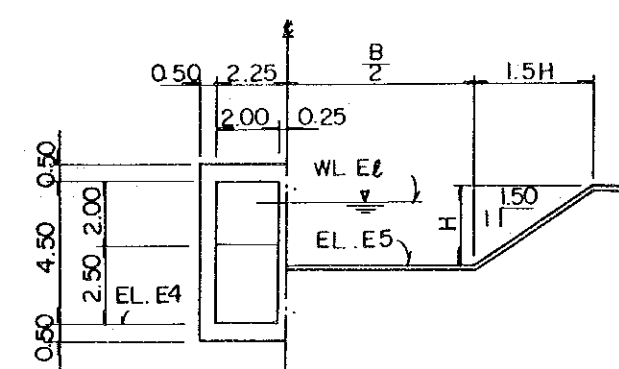
JAPAN INTERNATIONAL COOPERATION AGENCY



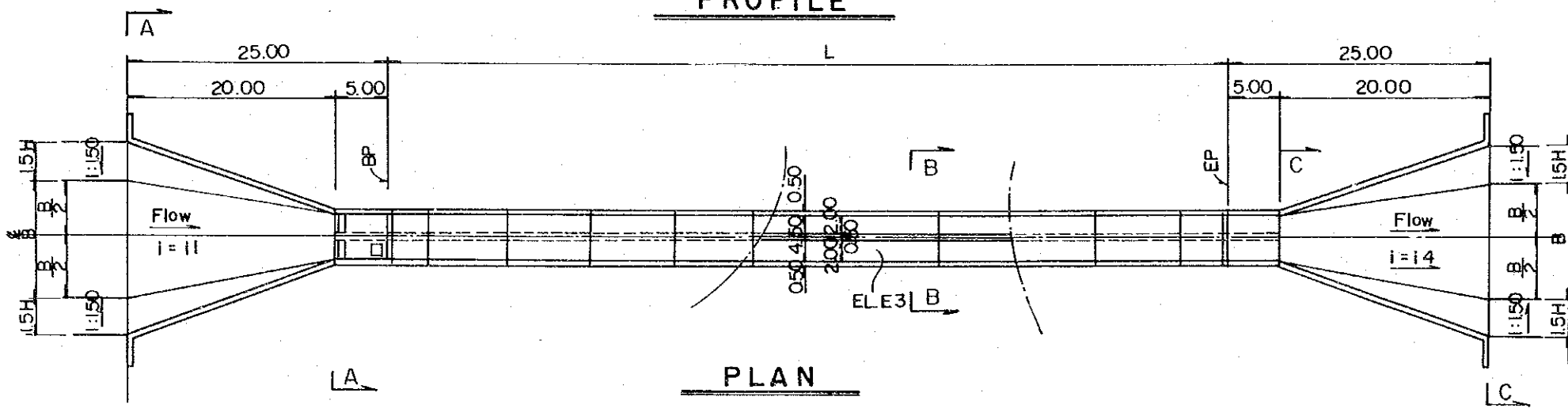
SECTION A-A



SECTION B-B



SECTION C-C



PLAN

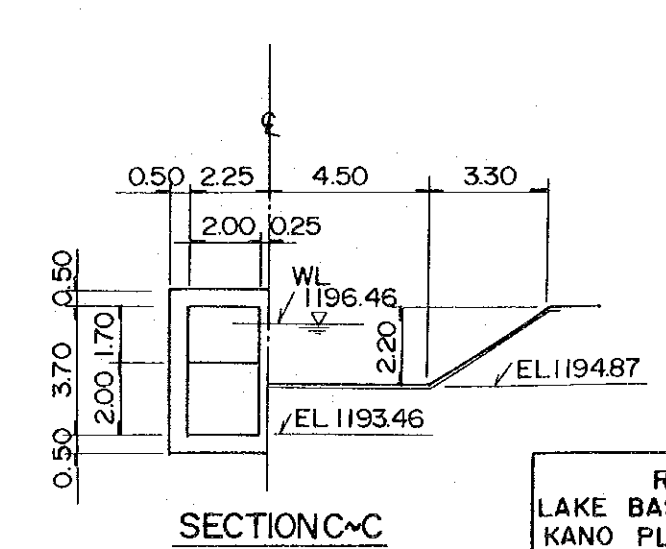
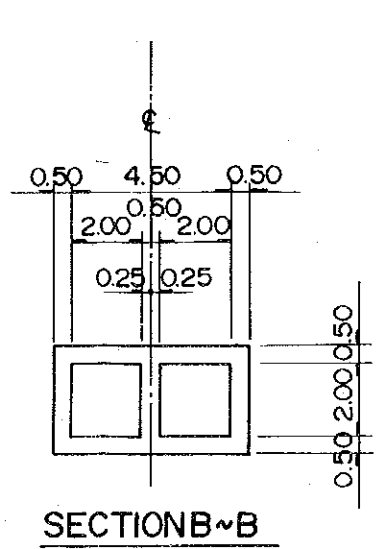
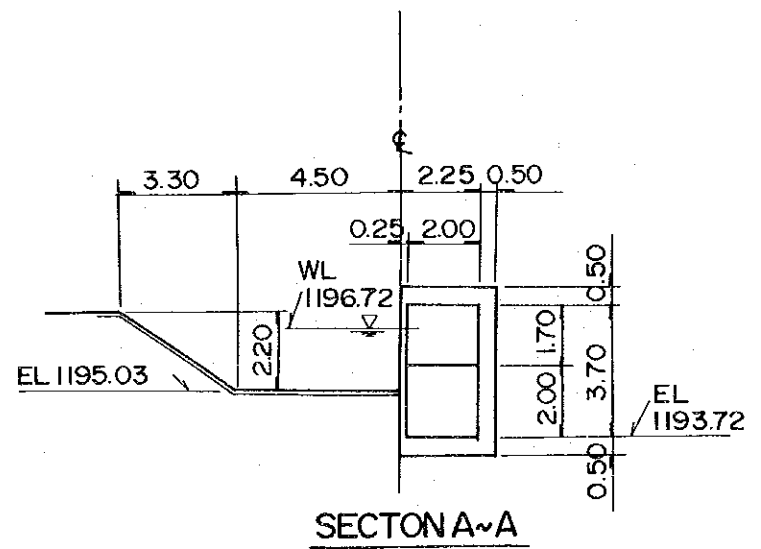
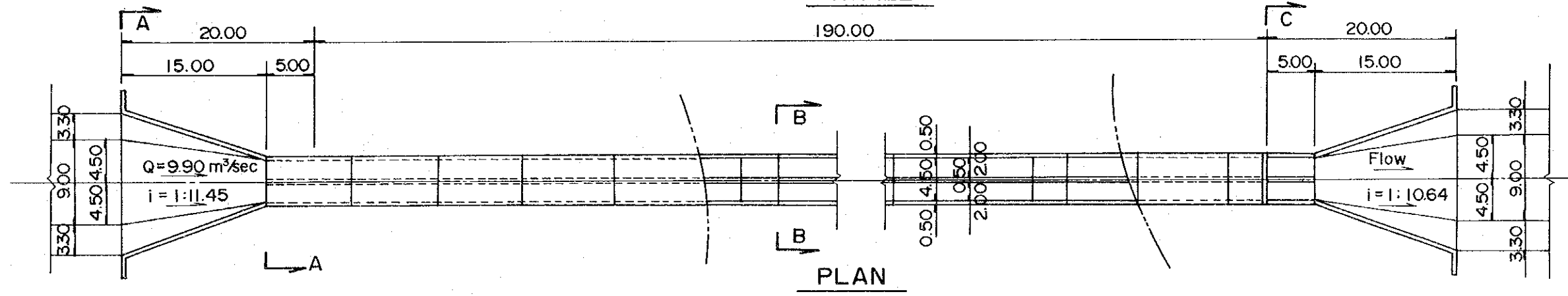
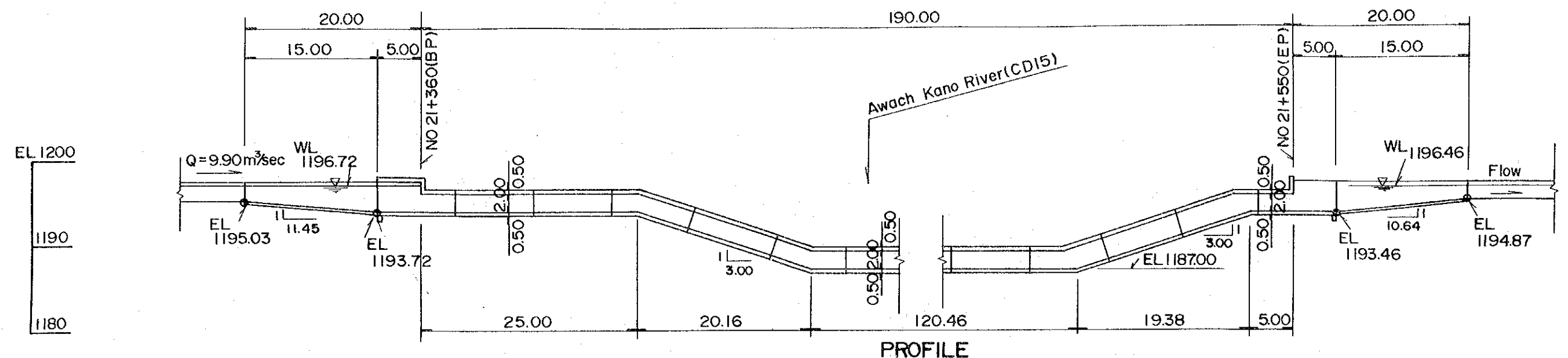
	Name of River	BP	EP	L	L1	L2	L3	L4	L5	B	H	E1	E2	E3	E4	E5	Eu	El	i1	i2	i3	i4
CD2	Mbugra	No.1+790	No.1+820	30.00	4.00	9.60	3.94	9.46	3.00	12.00	2.60	1199.51	1197.80	1193.00	1197.73	1199.44	1201.55	1201.48	1:11.70	1:2.00	1:2.00	1:11.70
CD4S2	Ragen	No.5+270	No.5+360	90.00	2.00	38.26	8.86	37.88	3.00	12.00	2.50	1198.88	1197.13	1178.00	1196.44	1198.69	1200.88	1200.69	1:11.43	1:2.00	1:2.00	1:11.43
CD6	Nyalunya-1	No.7+230	No.7+270	40.00	6.00	13.20	5.76	13.04	2.00	11.50	2.50	1198.35	1196.60	1190.00	1196.52	1198.27	1200.35	1200.27	1:11.43	1:2.00	1:2.00	1:11.43
CD6S1	Nyalunya-2	No.7+520	No.7+560	40.00	9.00	8.98	7.20	8.82	6.00	11.50	2.50	1198.24	1196.49	1192.00	1196.41	1198.16	1200.24	1200.16	1:11.43	1:2.00	1:2.00	1:11.43
CD8	Omondo	No.9+845	No.9+925	80.00	7.00	23.94	17.00	23.66	8.40	11.50	2.50	1197.77	1196.98	1184.00	1195.83	1197.62	1199.73	1199.58	1:11.17	1:2.00	1:2.00	1:11.17
CD11	Asawo	No.14+880	No.15+460	580.00	10.00	504.25	15.00	45.75	5.00	11.50	2.50	1196.76	1194.92	1182.00	1194.04	1195.88	1198.67	1197.79	1:10.87	1:3.90	1:3.80	1:10.87

unit : m

REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

SYPHON (1/4)

JAPAN INTERNATIONAL COOPERATION AGENCY

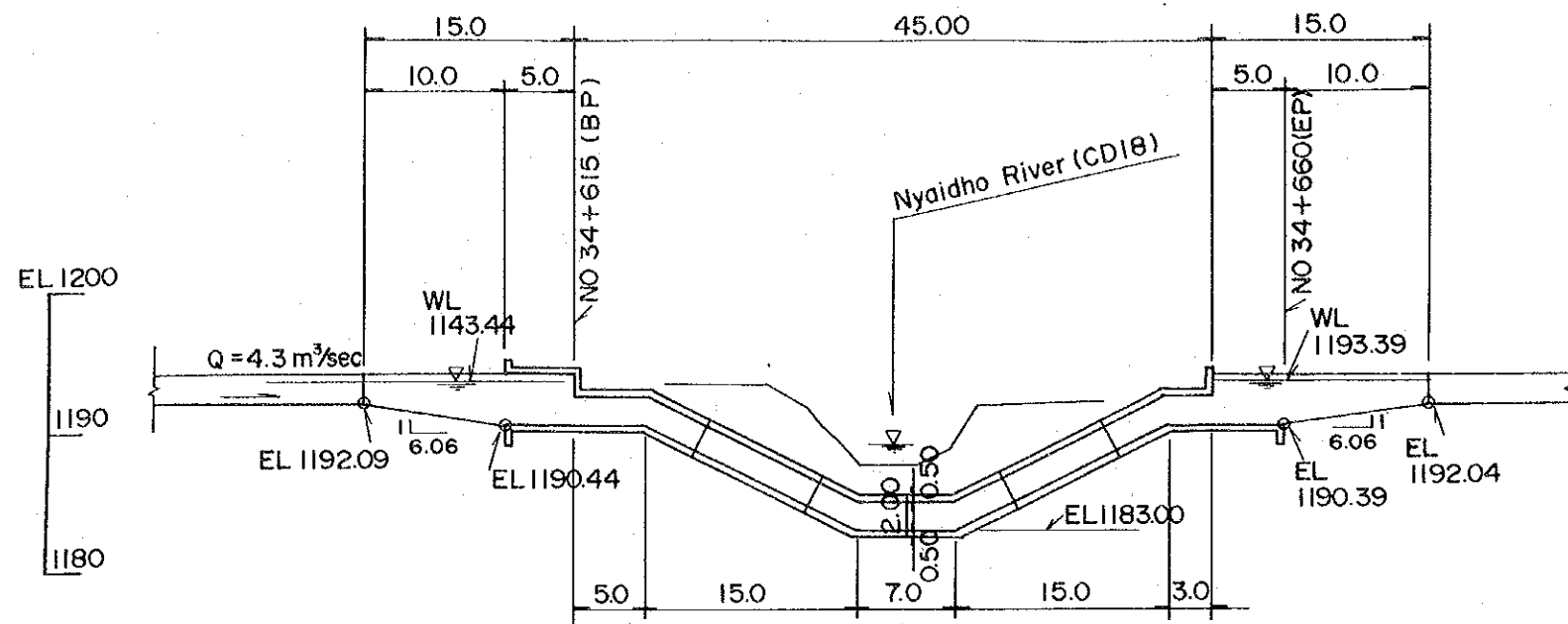


REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT

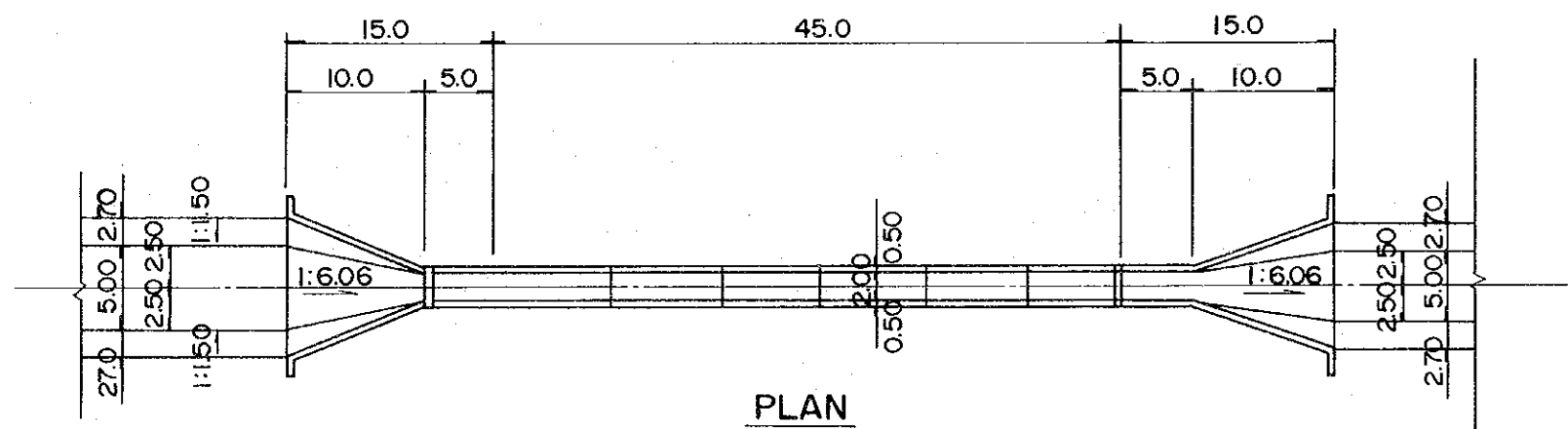
**SYPHON (2/4)**

JAPAN INTERNATIONAL COOPERATION AGENCY

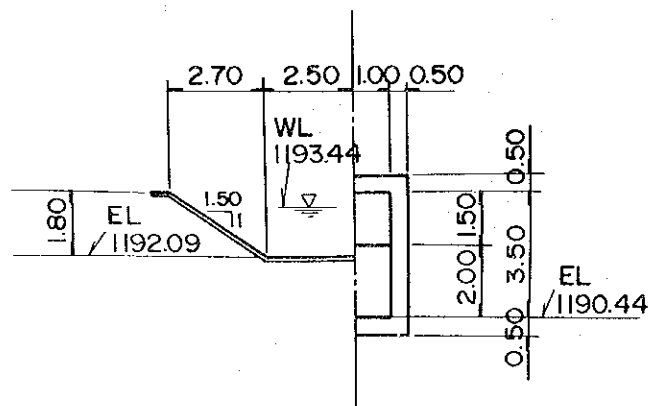




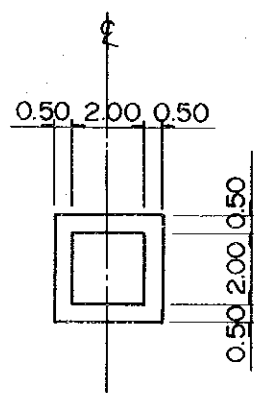
PROFILE



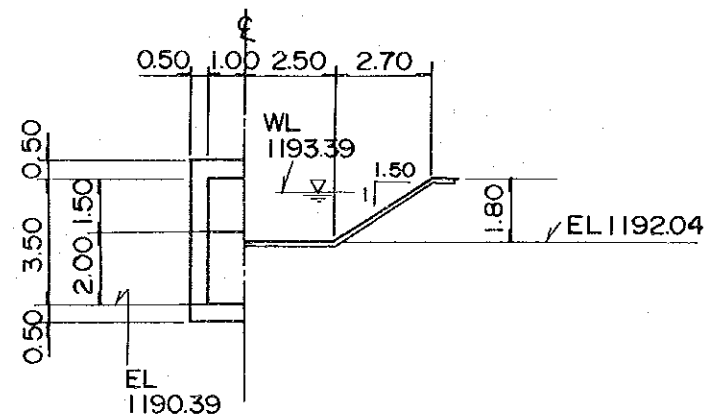
PLAN



SECTION A-A



SECTION B-B

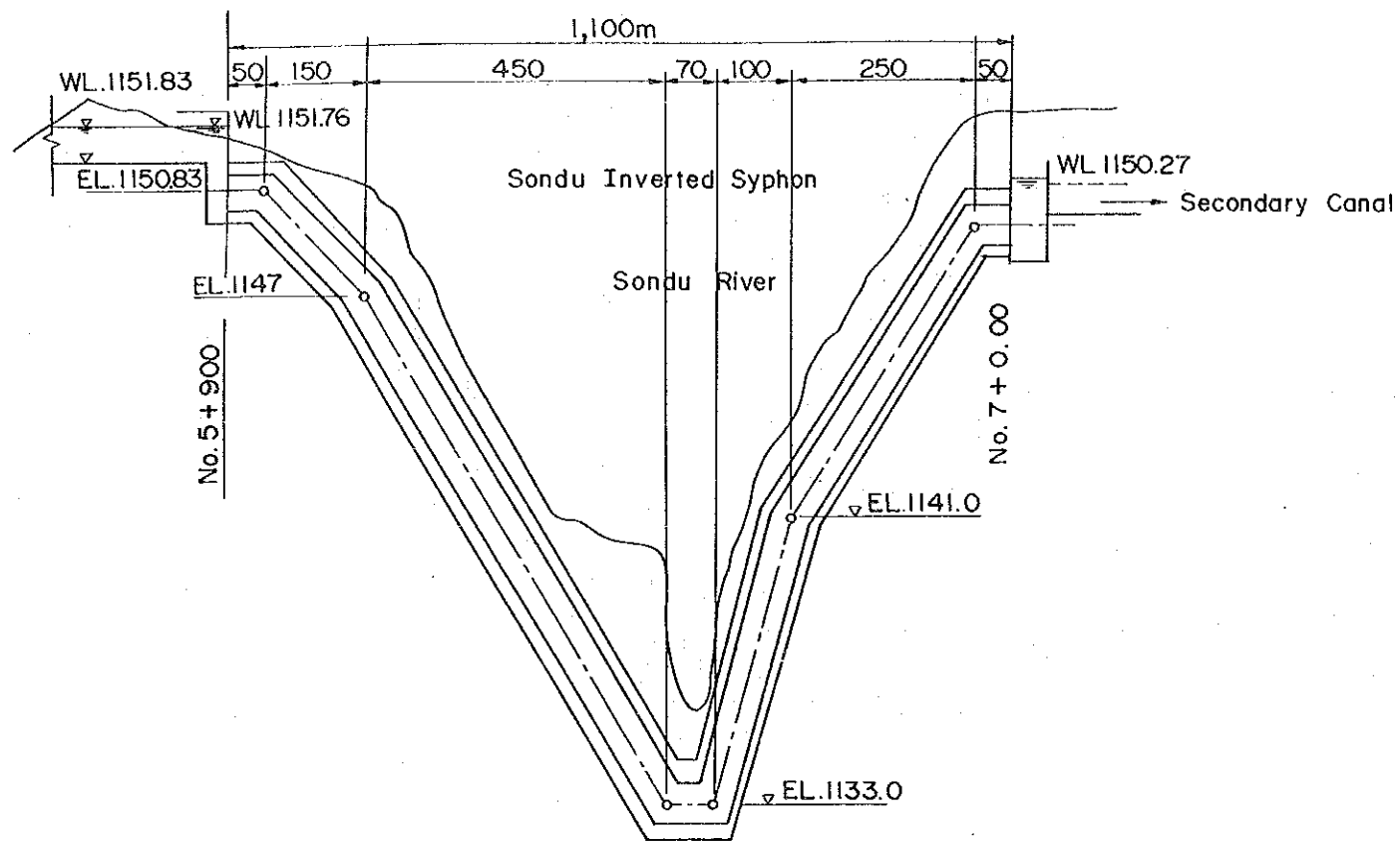


SECTION C-C

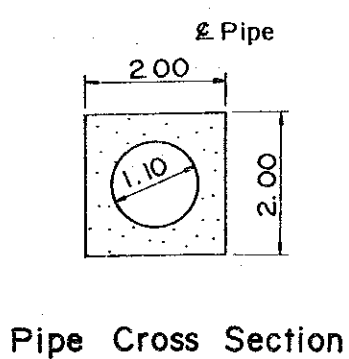
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

SYPHON (3/4)

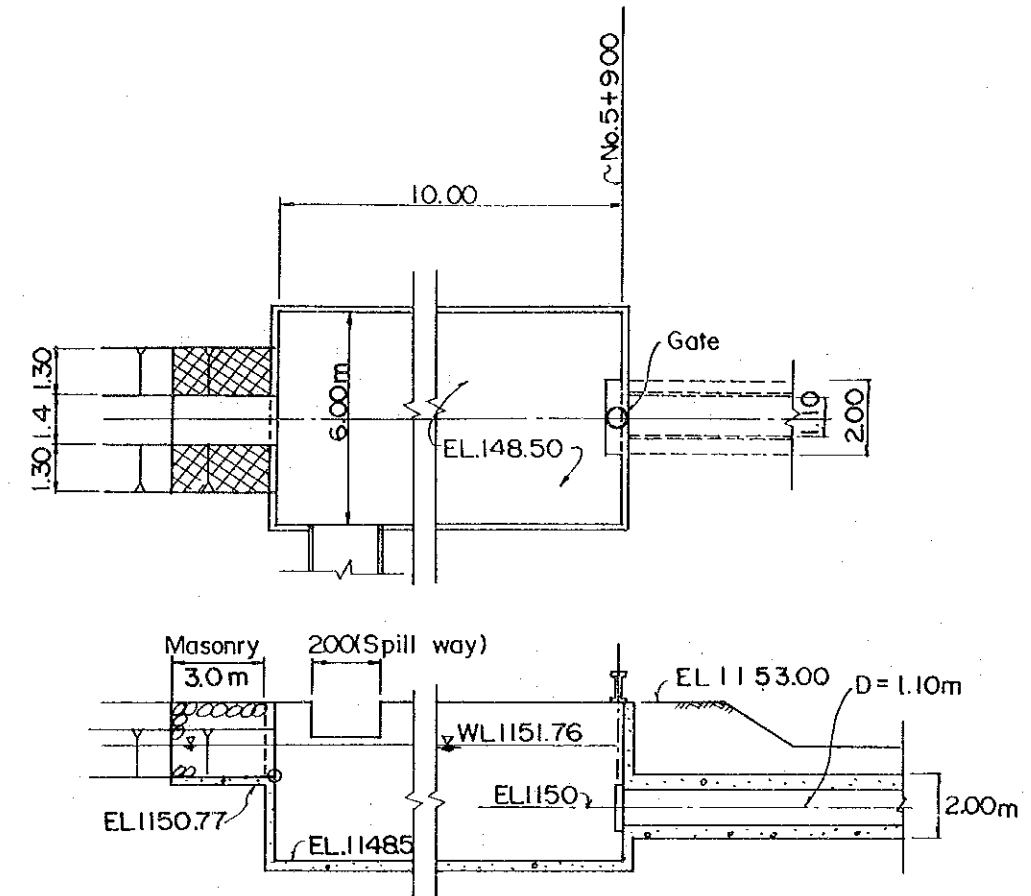
JAPAN INTERNATIONAL COOPERATION AGENCY



Profile



Pipe Cross Section



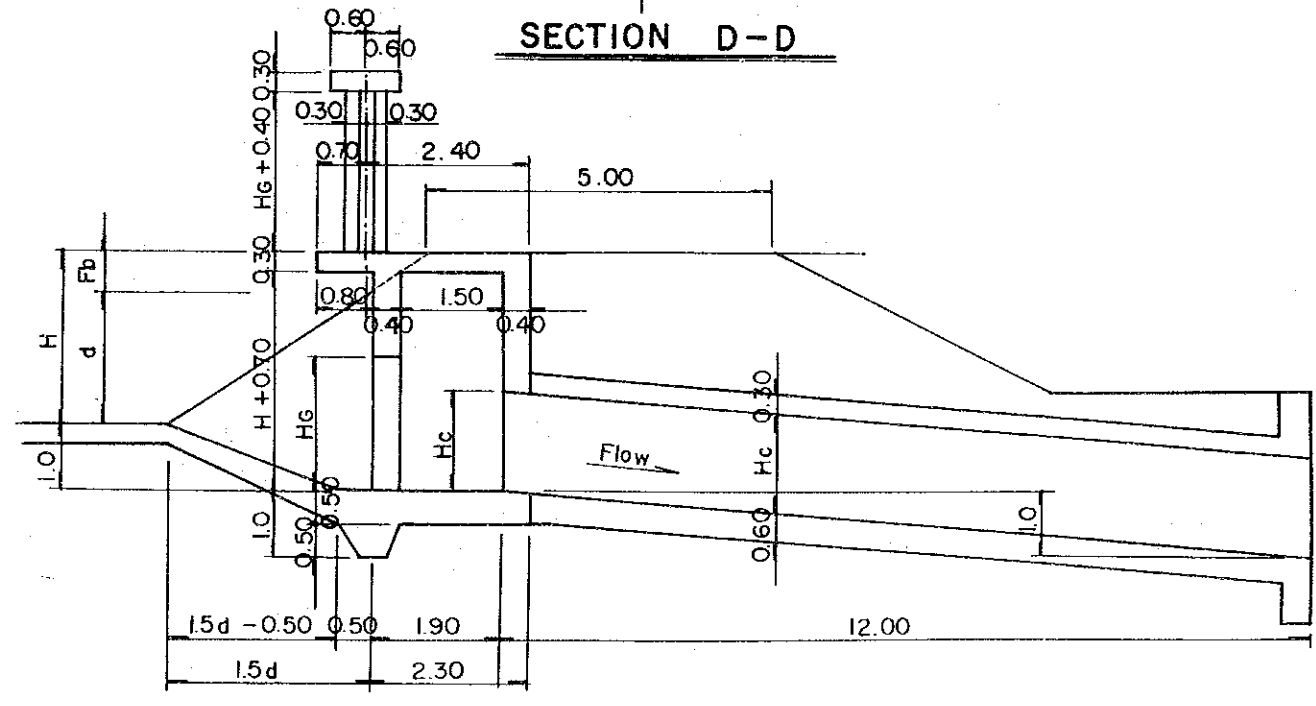
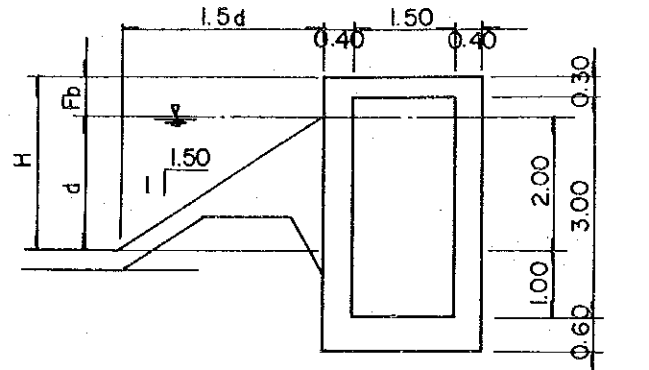
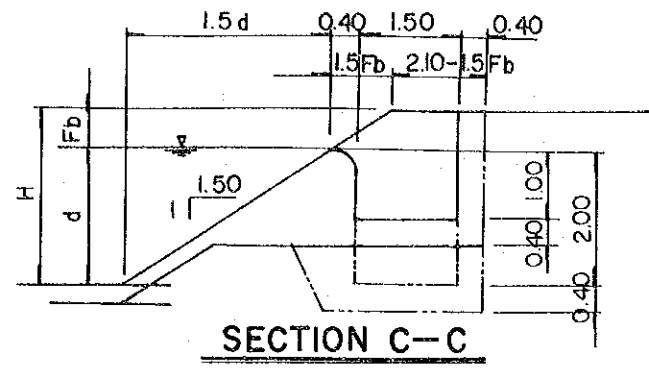
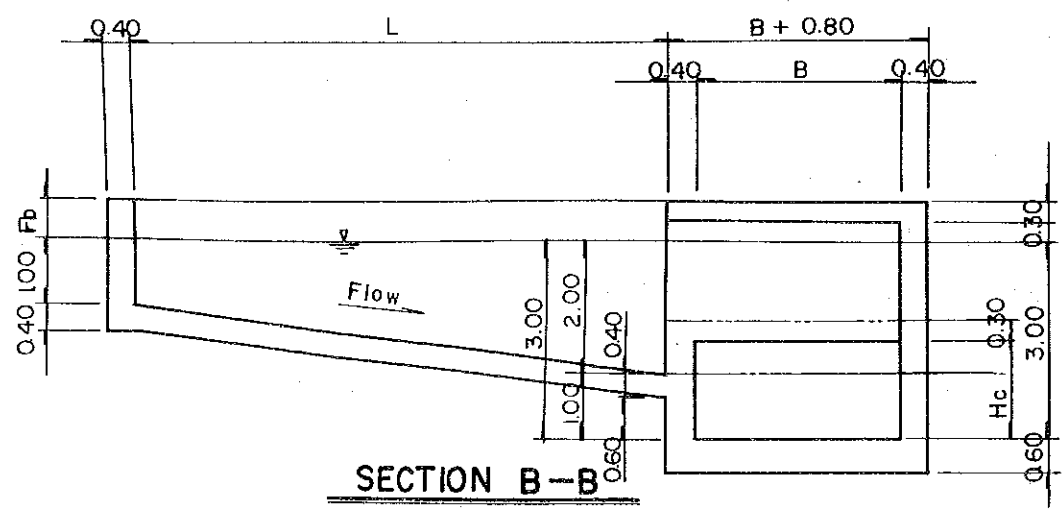
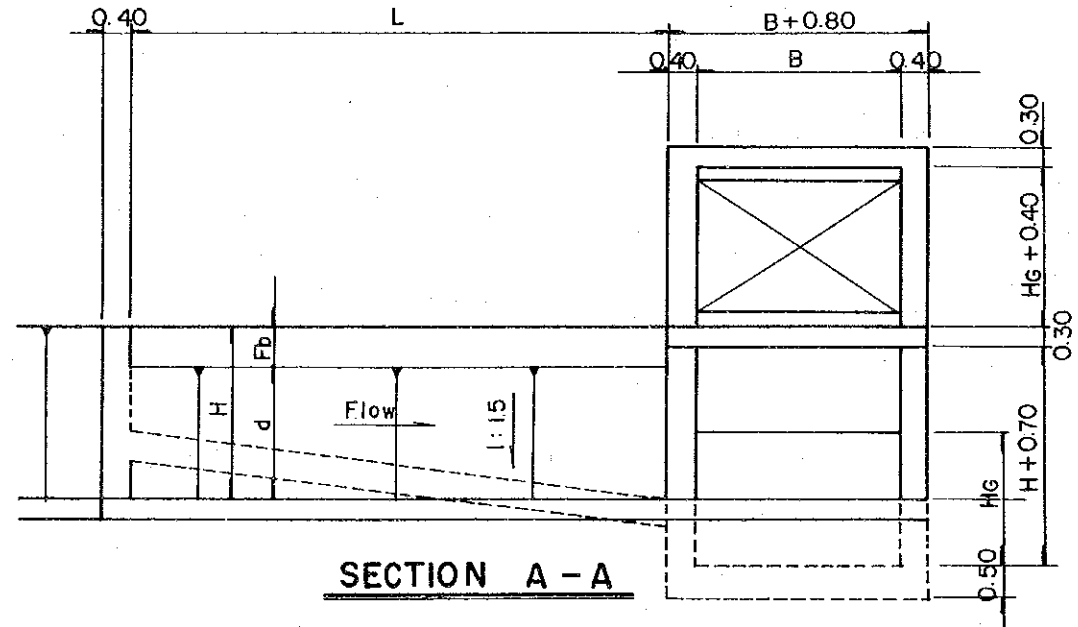
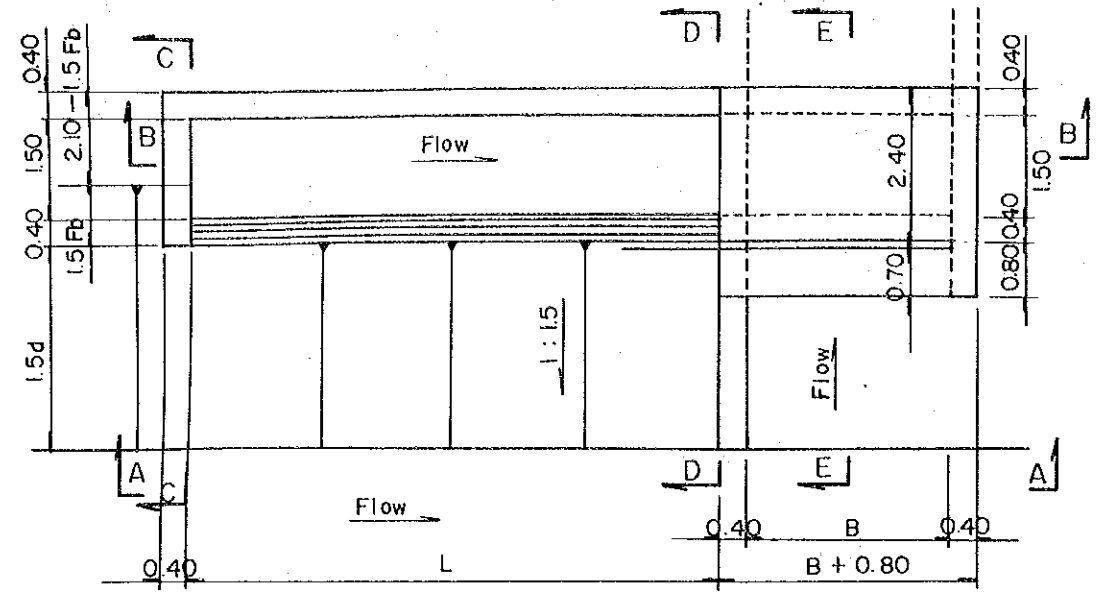
Plan of Inlet

Plan of Outlet

REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT

**SYPHON (4/4)**

JAPAN INTERNATIONAL COOPERATION AGENCY

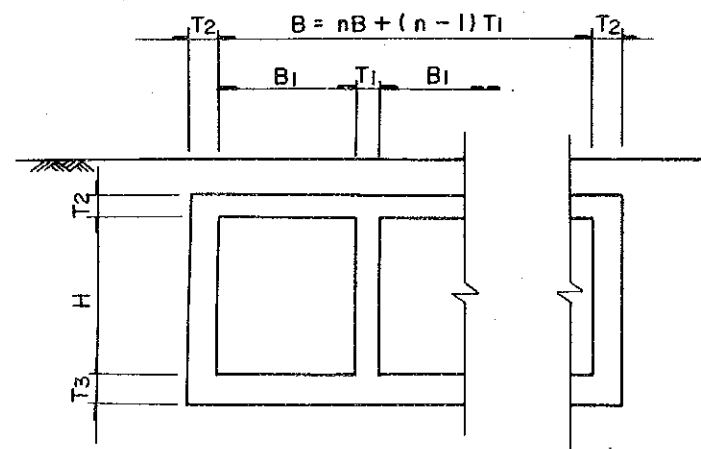
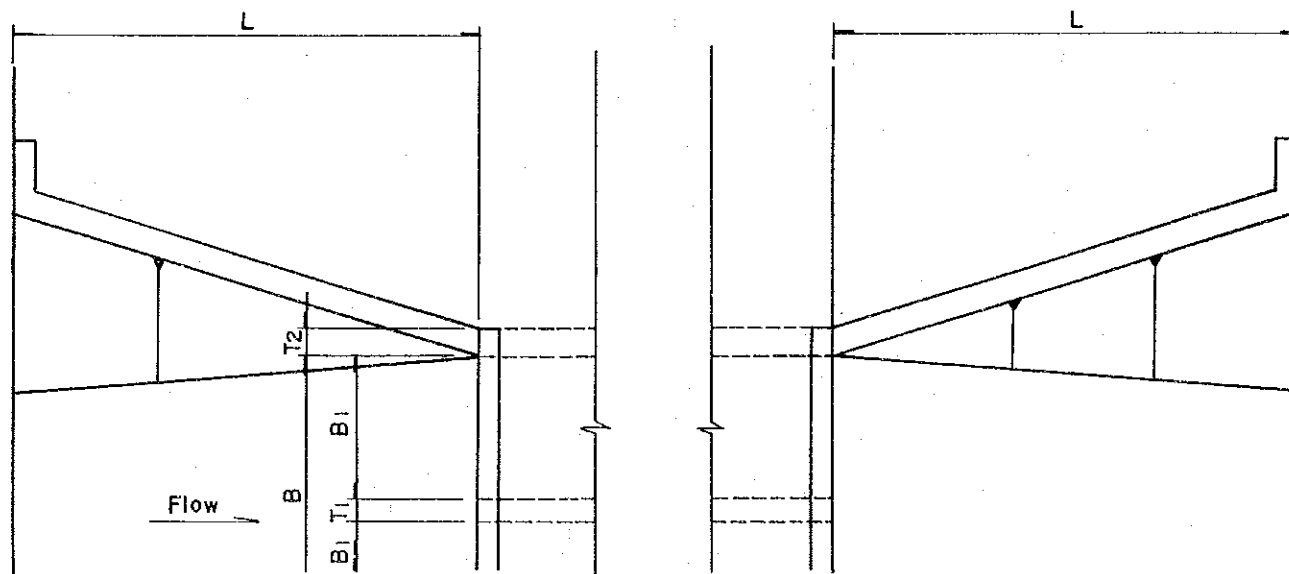
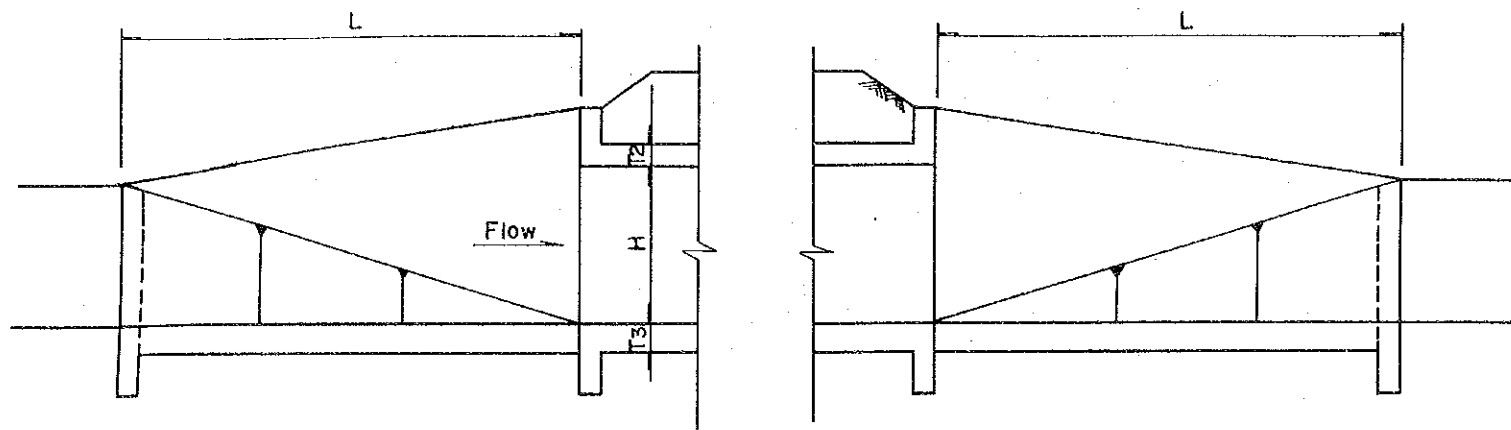


	H	d	Fb	L	B	Hg	Hc
1	2.60	2.04	0.56	12.0	3.0	2.0	1.5
2	2.50	2.00	0.50	12.0	3.0	2.0	1.5
3	2.50	2.00	0.50	11.5	3.0	2.0	1.5
4	2.50	2.00	0.50	11.5	3.0	2.0	1.5
5	2.50	1.96	0.54	11.5	3.0	2.0	1.5
6	2.50	1.91	0.59	11.5	3.0	2.0	1.5
7	2.20	1.69	0.51	9.0	2.0	2.0	1.5
8	1.80	1.35	0.45	5.0	2.0	1.5	1.0

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LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

**SPILOWAY**

JAPAN INTERNATIONAL COOPERATION AGENCY



Nyakach-Kano Main Canal

Type		n	B1	B	H	T1	T2	T3	L
I	S2 ~ S13	5	3.50	19.10	2.60	0.40	0.50	0.60	16.0
II	S13 ~ S15	4	3.50	15.20	2.60	0.40	0.50	0.60	11.0
III	S15 ~ S16	4	3.50	15.20	2.30	0.40	0.50	0.60	14.0
IV	S16 ~ S20	3	3.50	11.30	2.30	0.40	0.50	0.60	8.0
V	S20 ~ S25	2	3.50	7.40	2.00	0.40	0.50	0.60	6.0
VI	S25 ~ S26	1	1.75	1.75	1.30	0.30	0.40	0.50	3.0

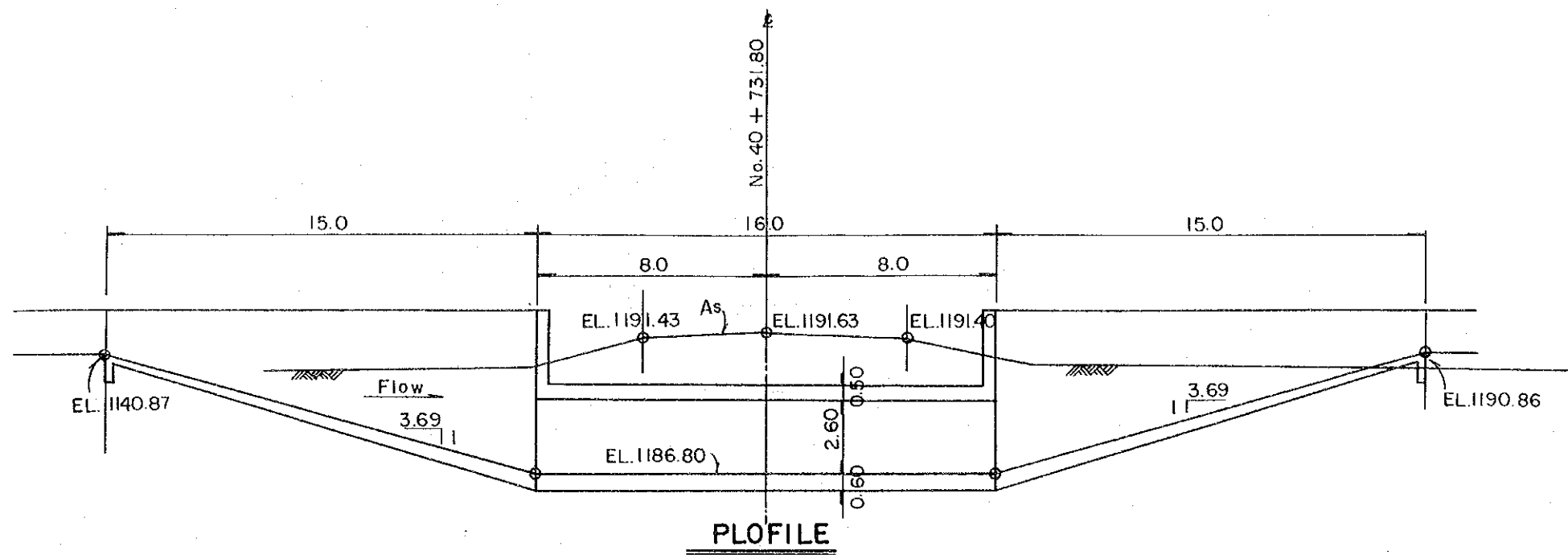
South Nyanza Main Canal

Type		n	B1	B	H	T1	T2	T3	L
VII	P/H ~ S15	1	3.00	3.00	1.85	0.30	0.40	0.50	4.0

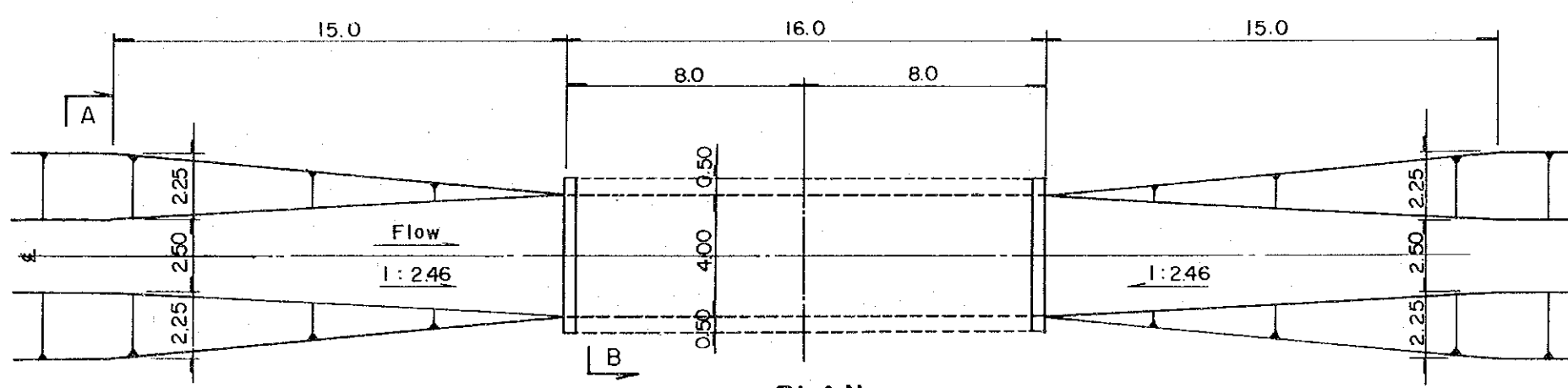
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

CULVERT (1/2)

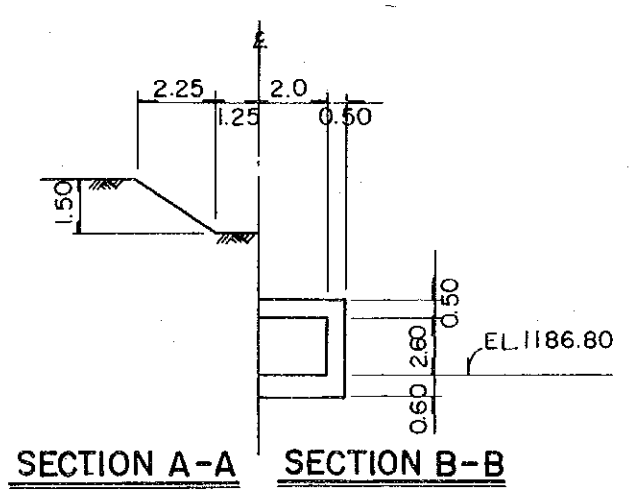
JAPAN INTERNATIONAL COOPERATION AGENCY



PROFILE



PLAN



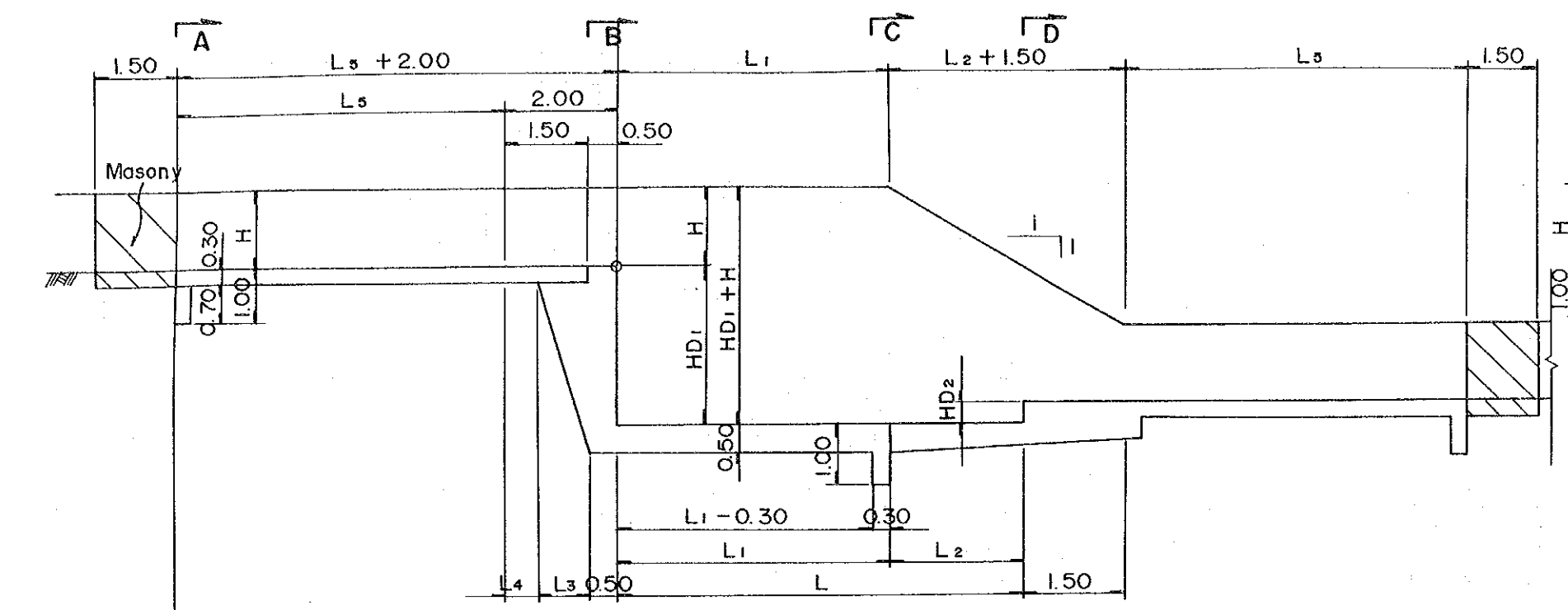
SECTION A-A

SECTION B-B

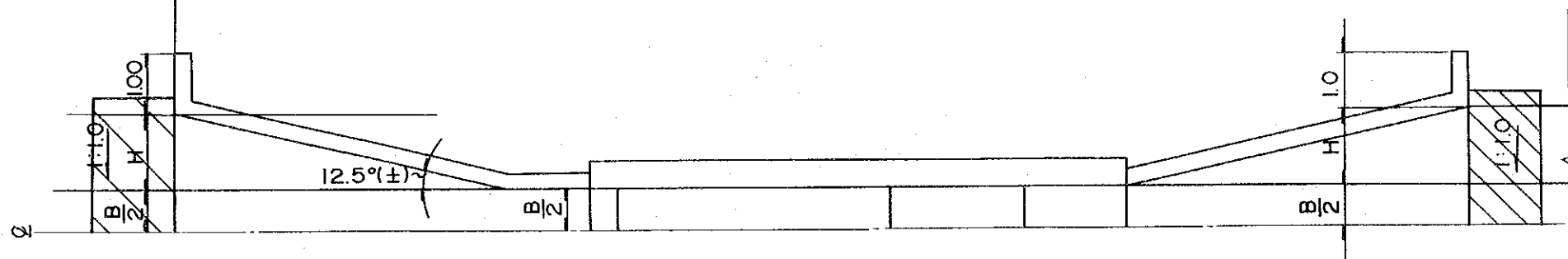
REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

CULVERT (2/2)

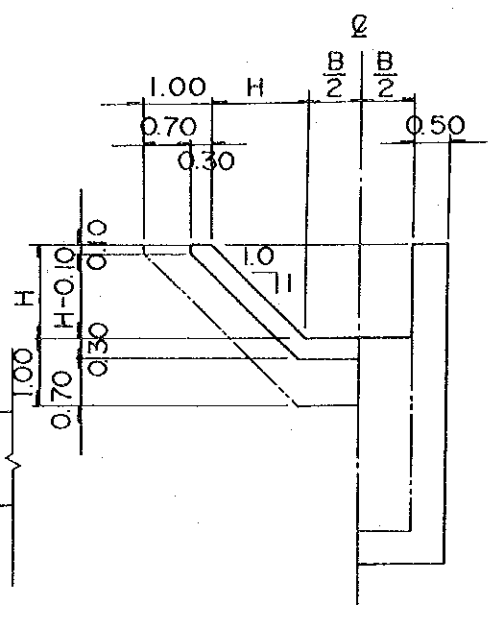
JAPAN INTERNATIONAL COOPERATION AGENCY



PROFILE

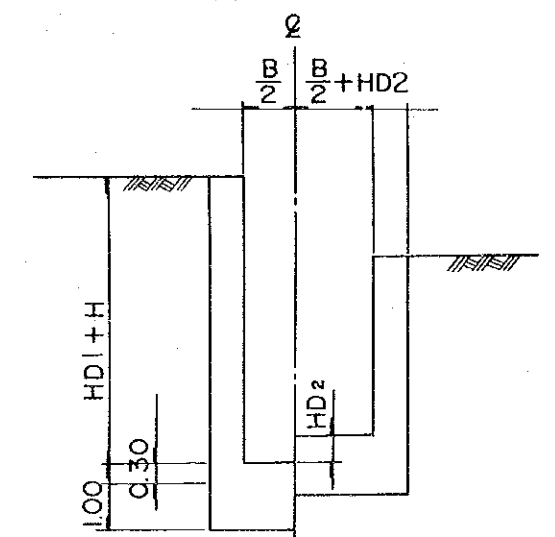


PLAN



SECTION A~A

SECTION B~B



SECTION C~C

SECTION D~D

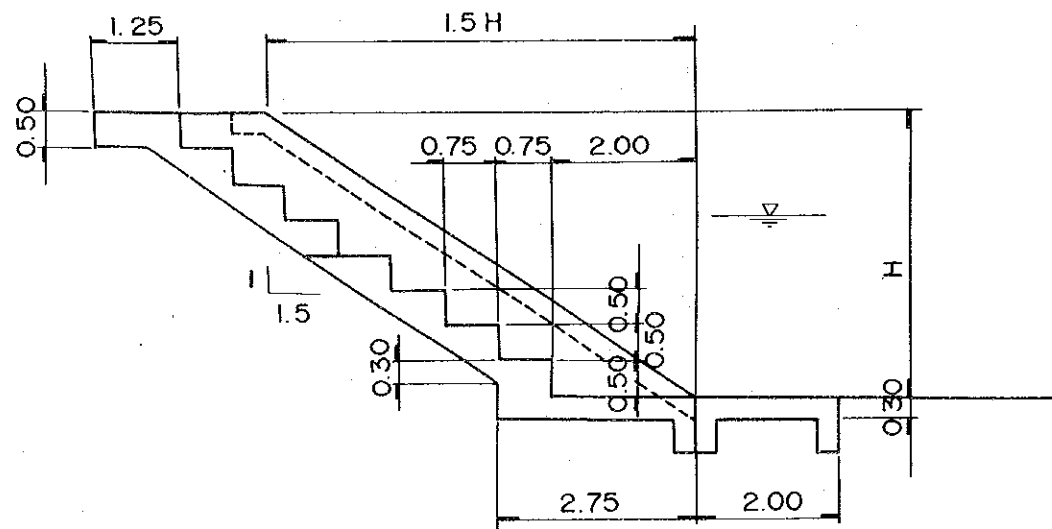
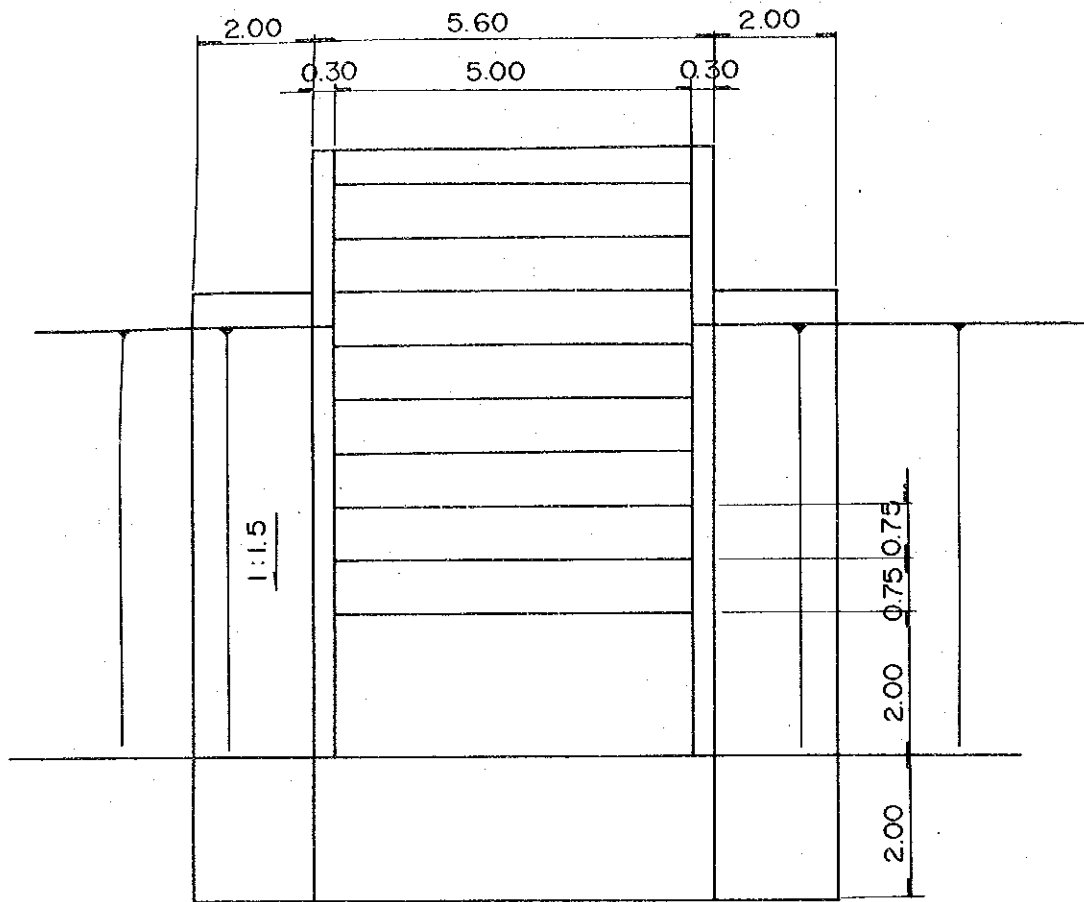
Type	H	HD <sub>1</sub>	HD <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	B	i
A	1.40	1.10	0.10	5.80	3.90	1.90	0.42	1.08	6.30	1.50	3.40
B	1.40	1.70	0.20	5.90	4.00	1.90	0.60	0.90	6.30	1.50	2.27
C	1.40	2.20	0.20	6.30	4.20	2.10	0.75	0.75	6.30	1.50	1.80
D	1.40	2.70	0.20	6.80	4.60	2.20	0.90	0.60	6.30	1.50	1.48
E	1.10	1.20	0.20	4.60	3.10	1.50	0.45	1.05	5.00	0.80	3.00
F	0.90	1.60	0.10	3.70	2.50	1.20	0.57	0.93	4.10	0.80	1.80

DIMENSION TABLE

REPUBLIC OF KENYA  
 LAKE BASIN DEVELOPMENT AUTHORITY  
 KANO PLAIN IRRIGATION PROJECT

**DROP**

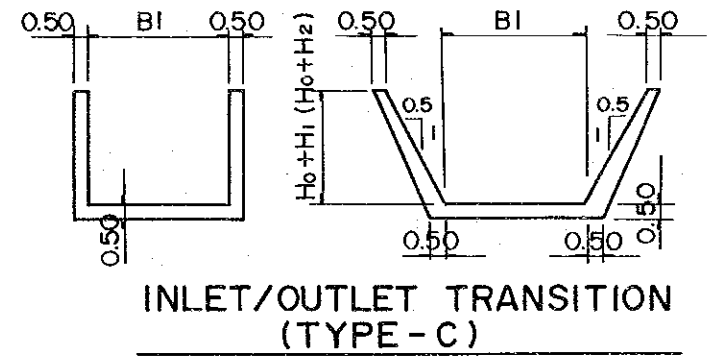
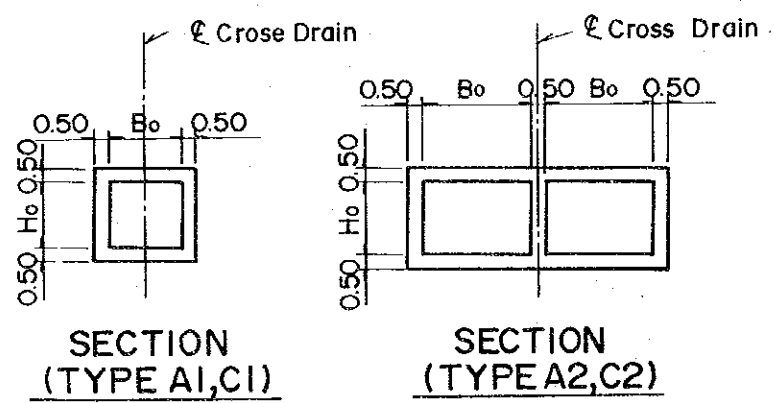
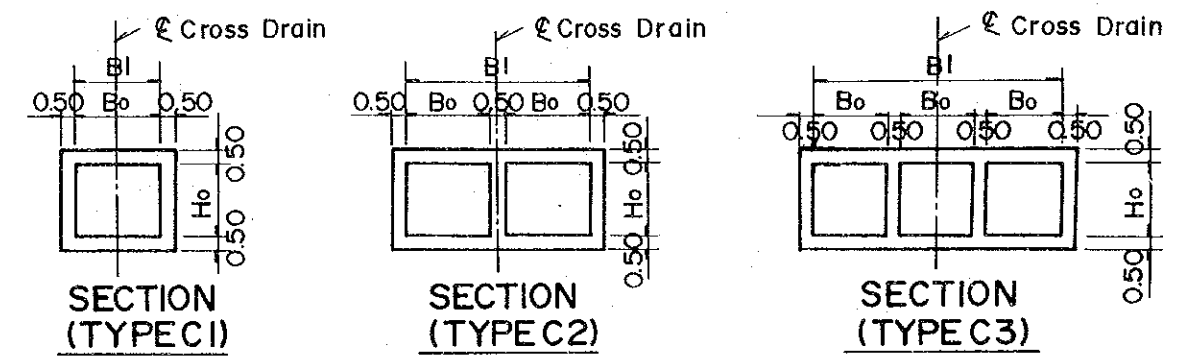
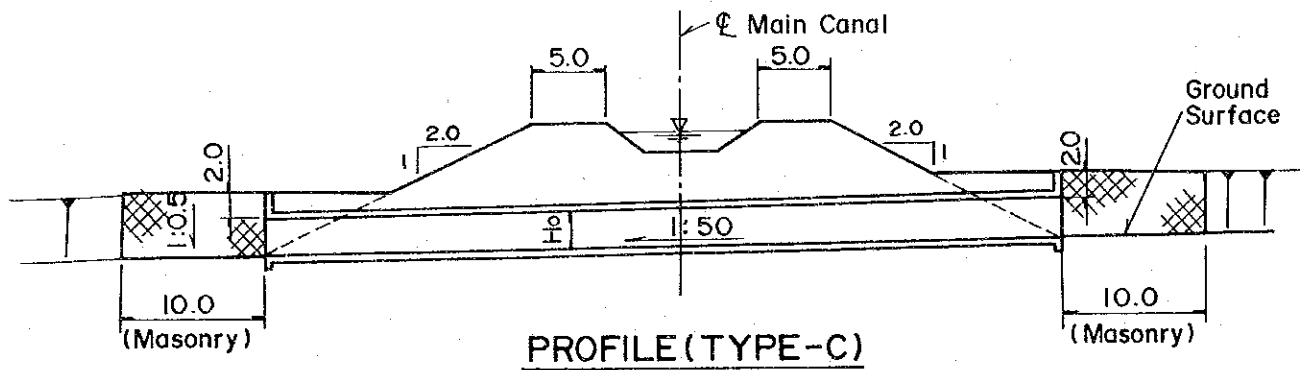
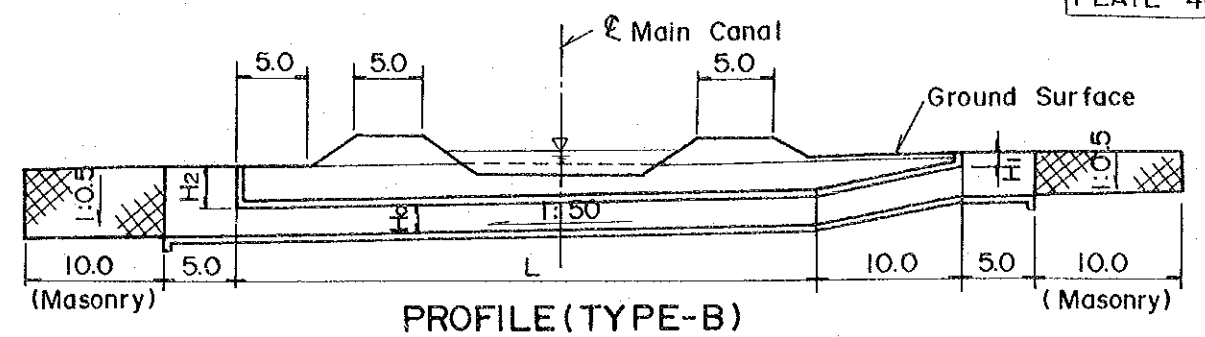
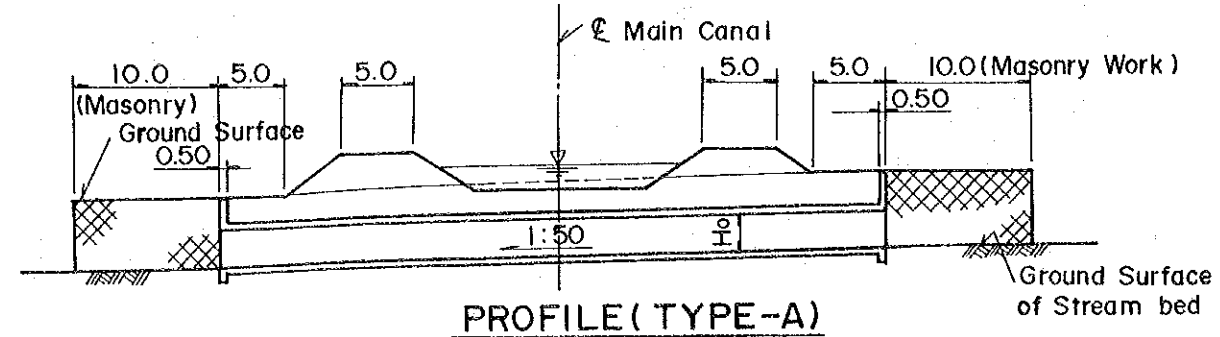
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REPUBLIC OF KENYA  
LAKE BASIN DEVELOPMENT AUTHORITY  
KANO PLAIN IRRIGATION PROJECT

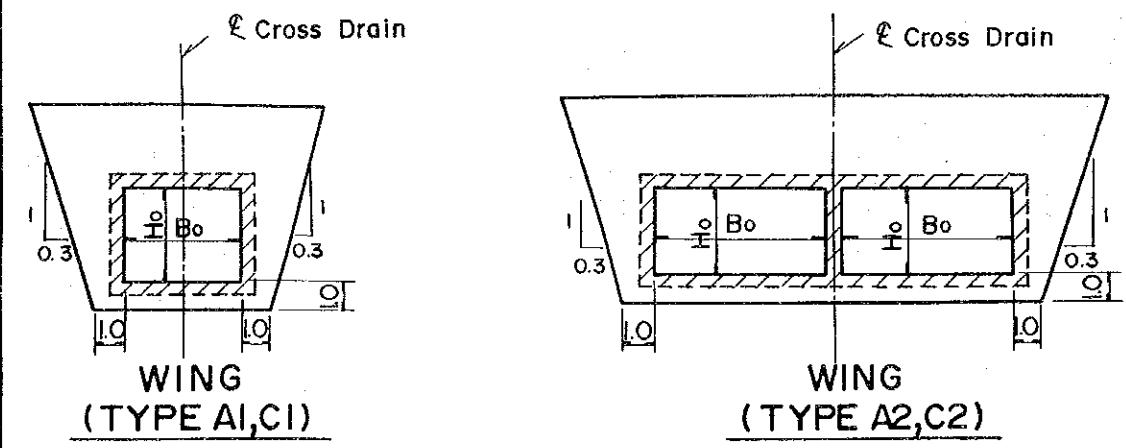
**WASHING STEP**

JAPAN INTERNATIONAL COOPERATION AGENCY



Discharge	TYPE
0~30 m <sup>3</sup> /s	TYPE-A1,B1,C1
30~100	TYPE-A2,B2,C2
100~150	TYPE B3

Area	TYPE-A1			TYPE-A2			TYPE-B1			TYPE-B2			TYPE-B3		
	Ho(m)	Bo(m)	L(m)	Ho(m)	Bo(m)	L(m)	Ho(m)	Bo(m)	L(m)	Ho(m)	Bo(m)	L(m)	Ho(m)	Bo(m)	L(m)
2-1	2.0	1.5~3.0	26~30	1.5	3.5	30				2.0	3.0	26			
2-2	2.0	2.5	43~44	2.0~2.5	3.0~4.5	44~46				2.5~3.0	3.5~5.0	37~45			
3										2.0	2.5	37	2.5	5.0	35
4							2.0	2.0~3.0	32~35	2.0	5.0	33	2.5	5.0	32
5										2.0~2.5	3.0~4.0	29~32			



Area	TYPE-C1			TYPE-C2		
	Ho(m)	Bo(m)	L(m)	Ho(m)	Bo(m)	L(m)
2-1						
2-2						
3						
4	2.0	3.0	47	3.0	4.0	59
5				1.5~2.0	3.0~3.5	32~47

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 KANO PLAIN IRRIGATION PROJECT  
**PLAN OF CROSS DRAIN IN  
 MAIN IRRIGATION CANAL**  
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**LEGEND**

- Project Area Boundary
- ~~~~~ Drainage System
- Catchment Boundary

Aoch Nyandoga  
 Rambira (DZ 13)  
 Luanda (DZ 12)  
 Nyamburu (DZ 11)  
 Nyadanga (DZ 10)

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Proposed Layout of  
 Drainage Canals

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