



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

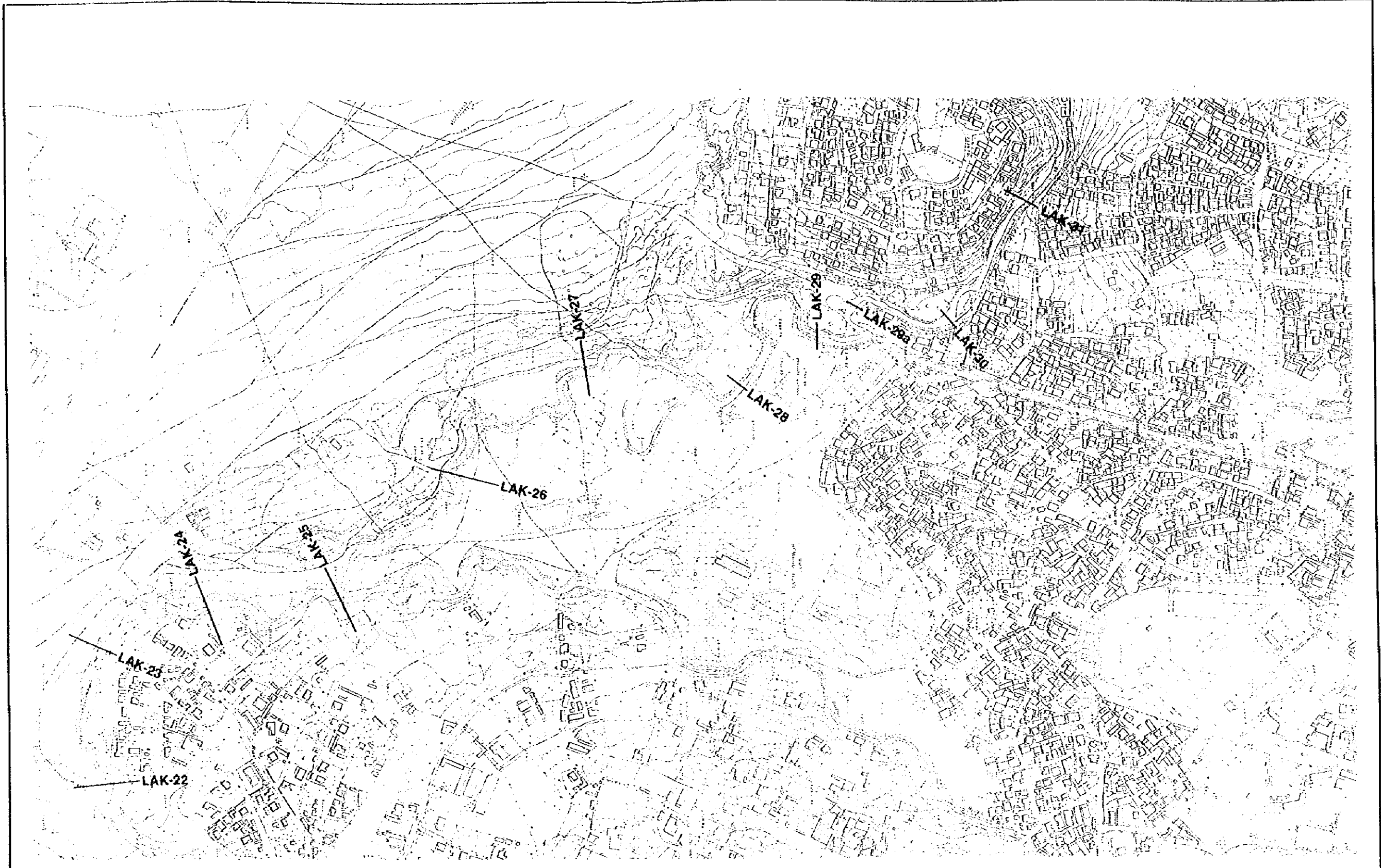
DRAWING NO.  
LAK-PLAN-03



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
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JAPAN INTERNATIONAL COOPERATION AGENCY  
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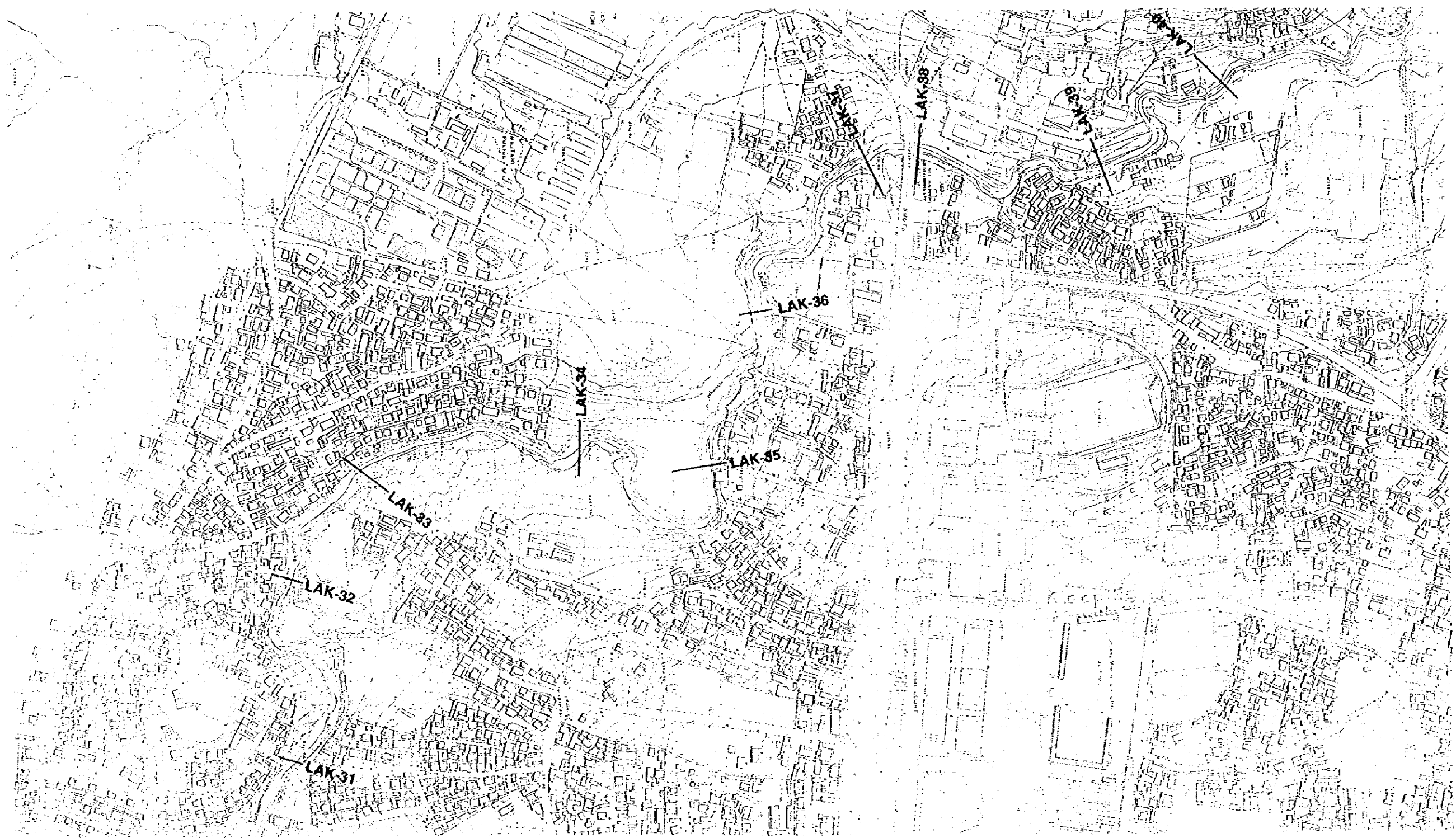
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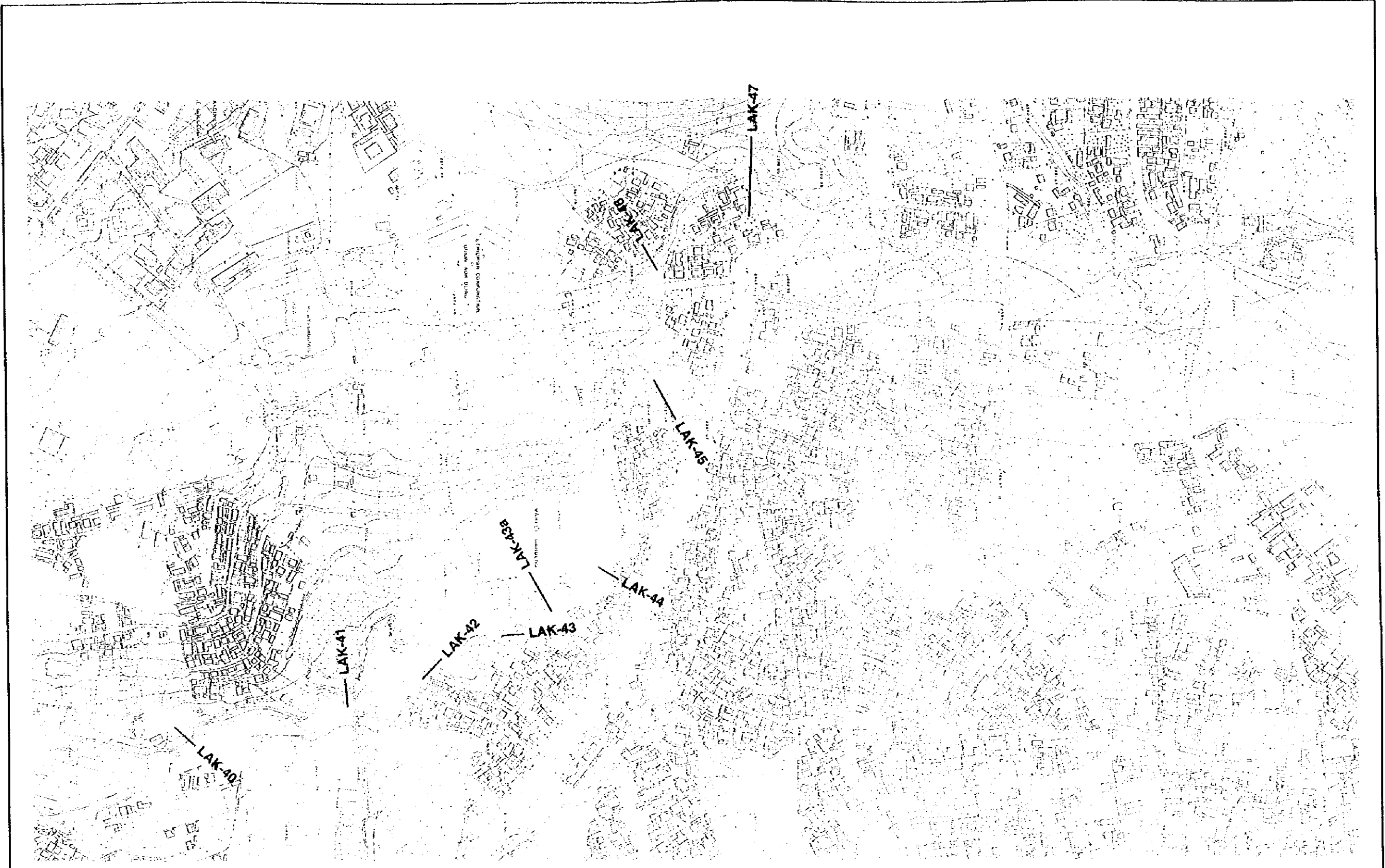
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DRAWING NO.  
LAK-PLAN-05



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-PLAN-06	



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
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REGION 14 ADMINISTRATION

DRAWING NO.  
LAK-PLAN-07





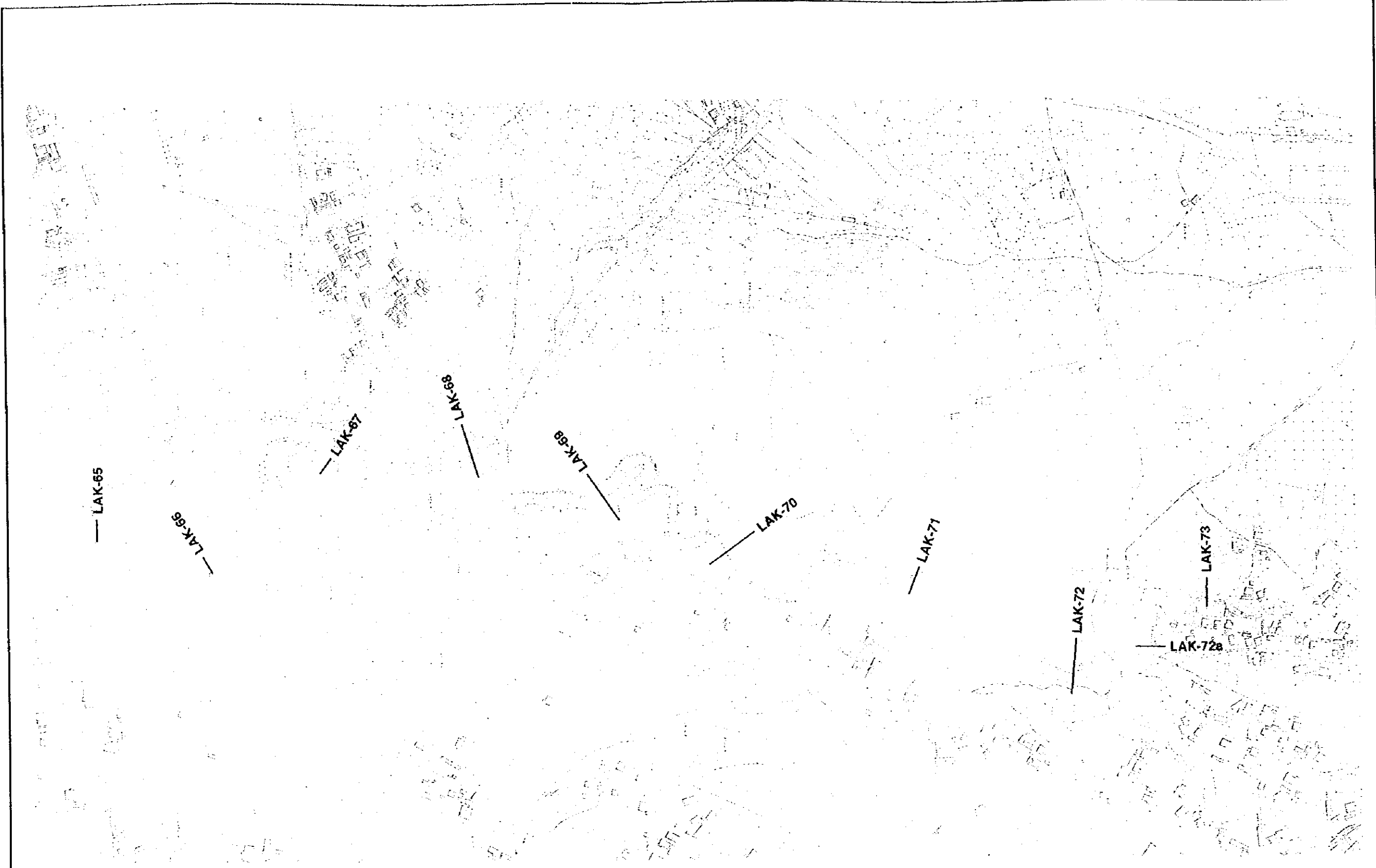
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 11 ADMINISTRATION	
DRAWING NO.	
LAK-PLAN-08	



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
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JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.  
LAK-PLAN-09

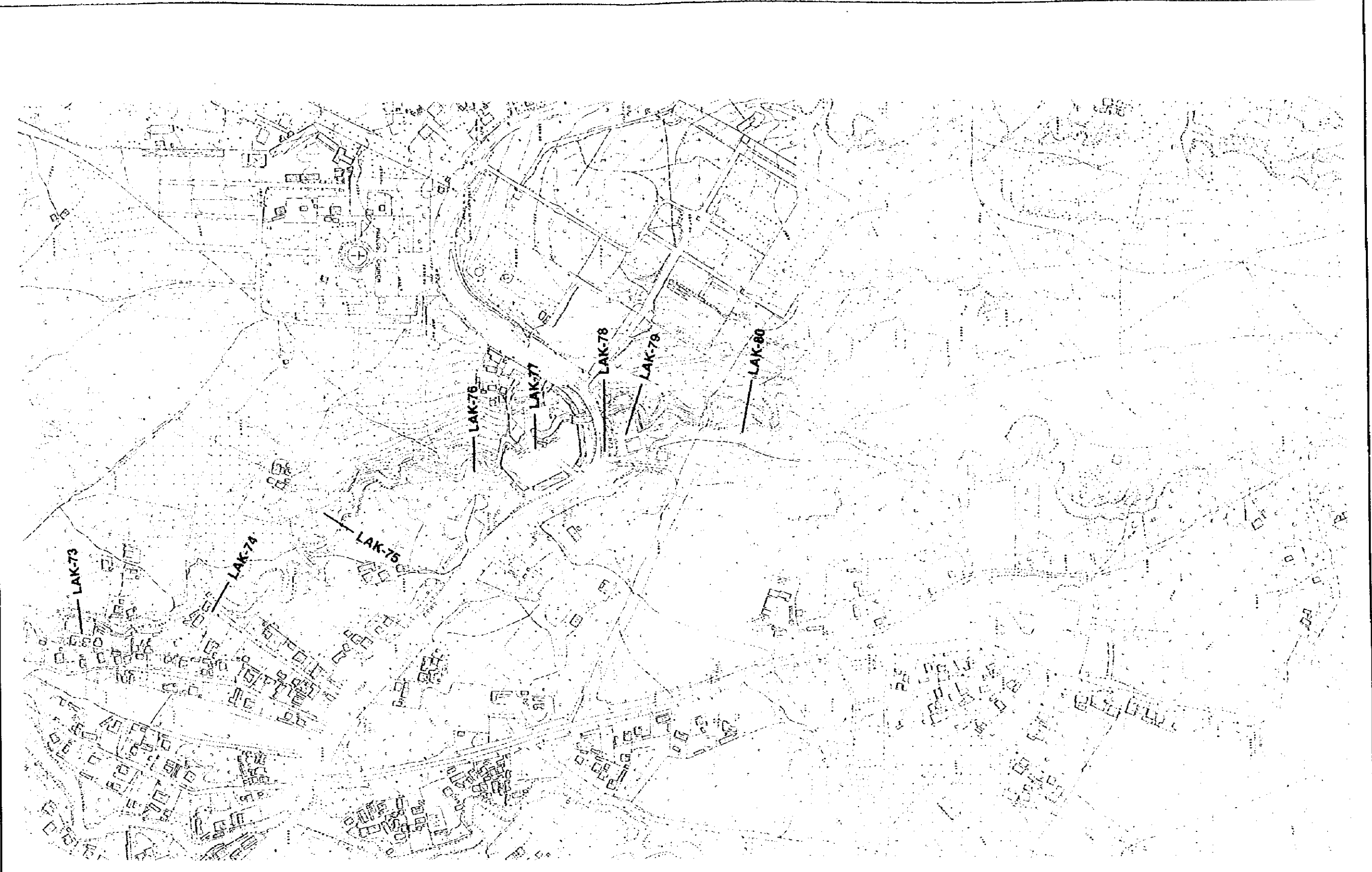


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DRAWING NO.  
LAK-PLAN-10





THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
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REGION 14 ADMINISTRATION

DRAWING NO.  
LAK-PLAN-11

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DL-2218

DL-2218

LAK-01(a)

DL-2219

DL-2219

LAK-02

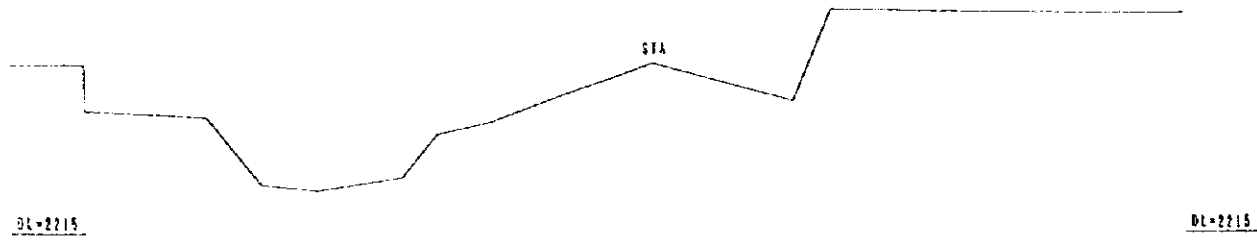
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DL-2215

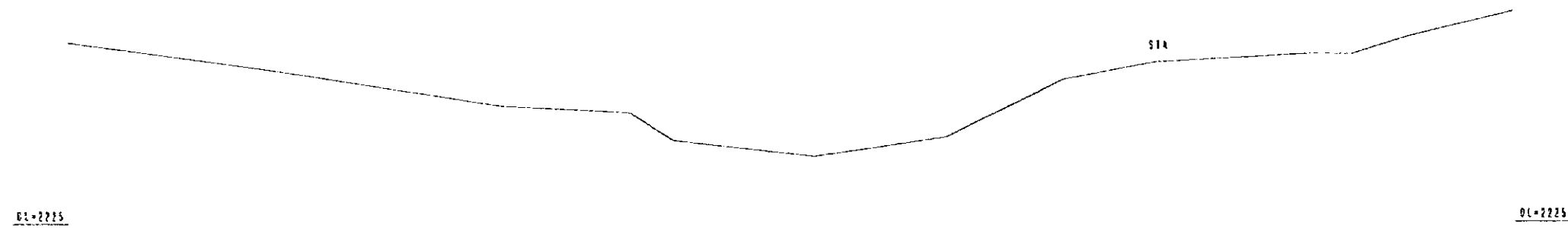
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (01/16)

Cross Section S=1:200

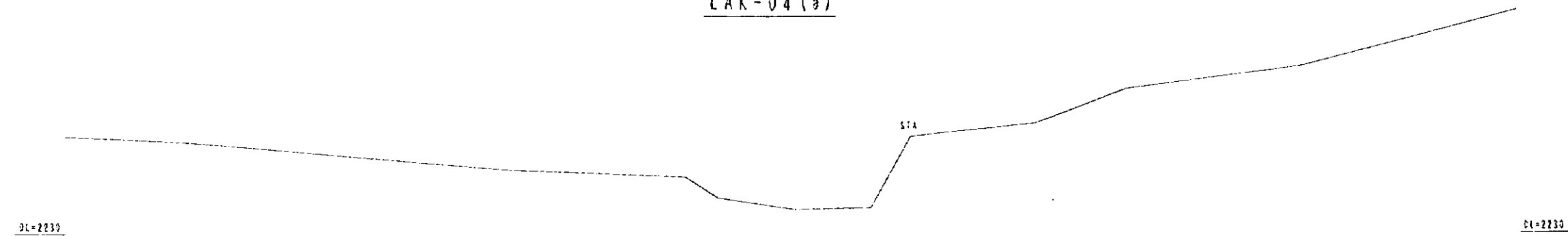
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LAK-04

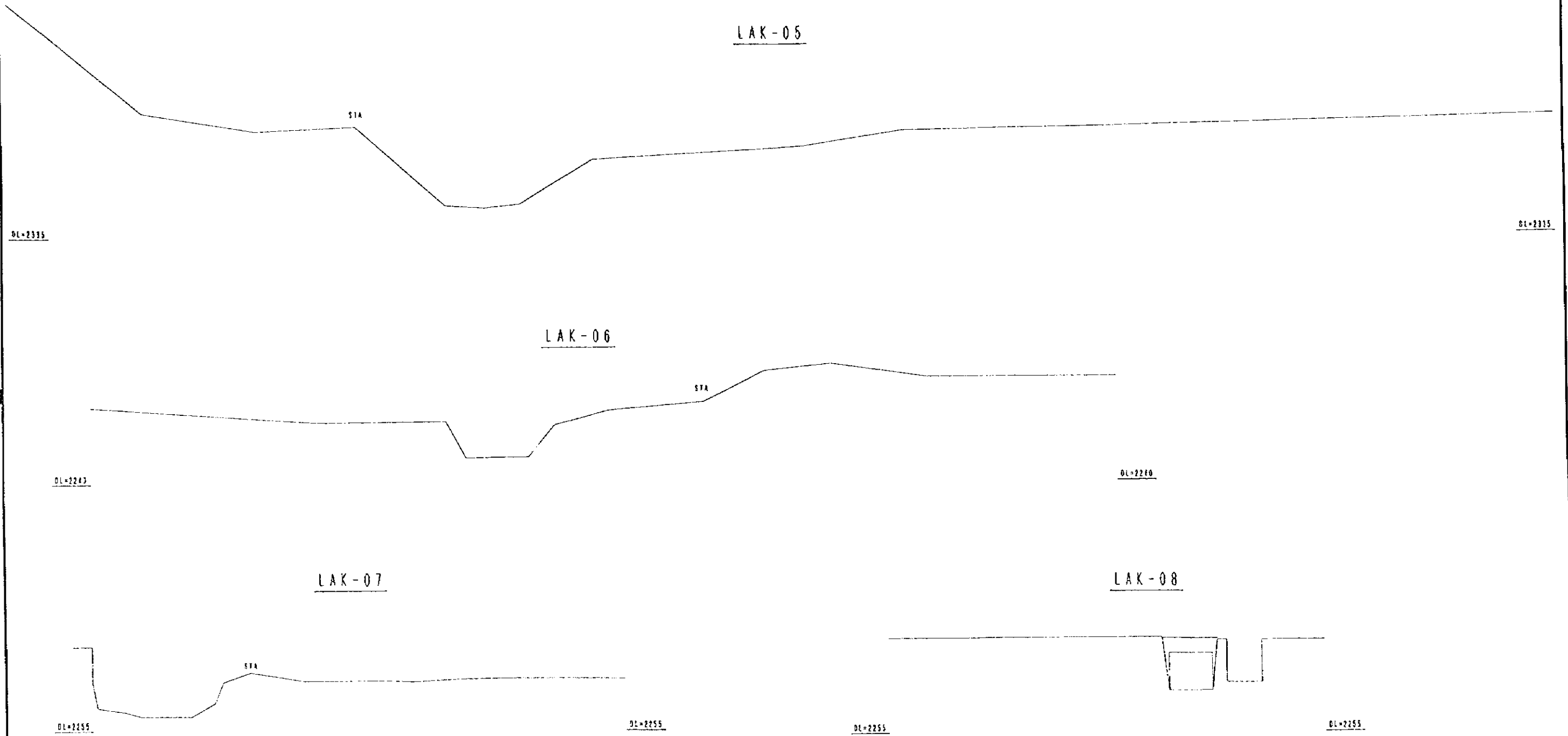


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THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
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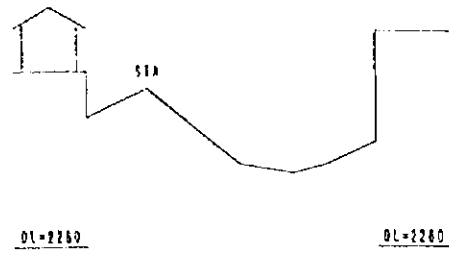
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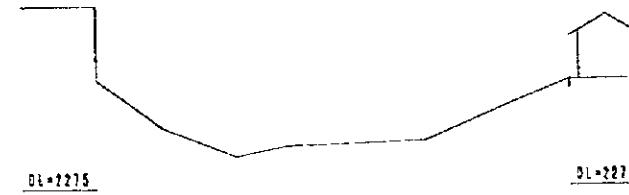
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
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Cross Section 5:1:200

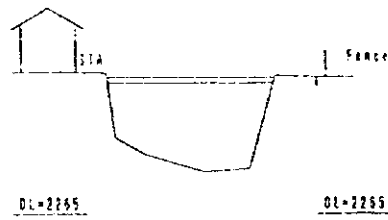
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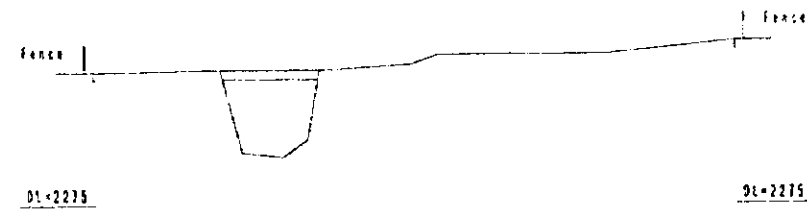
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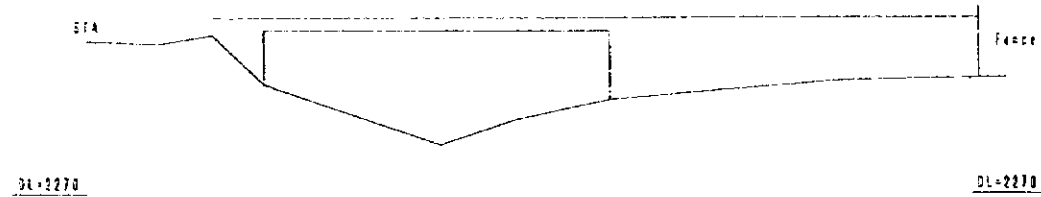
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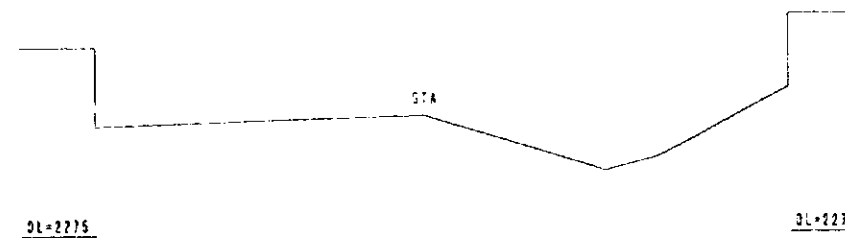
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LAK-11



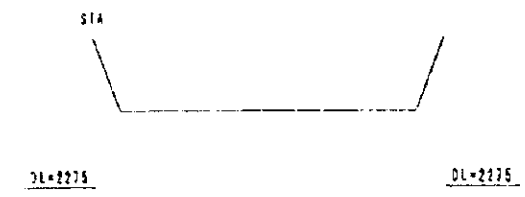
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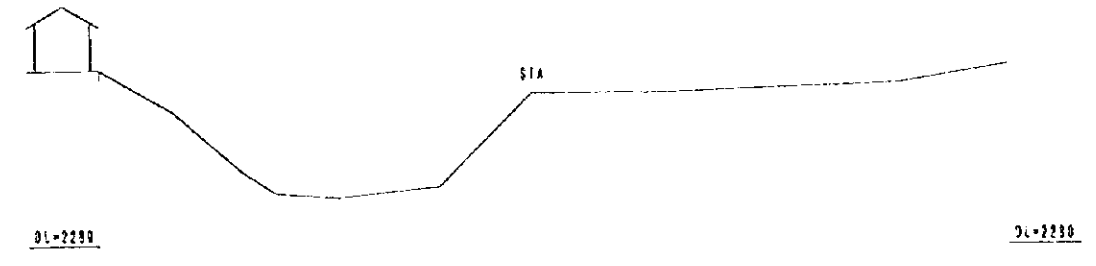
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-06	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (04/16)

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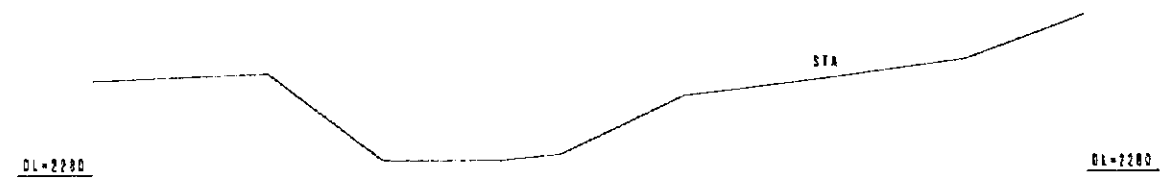
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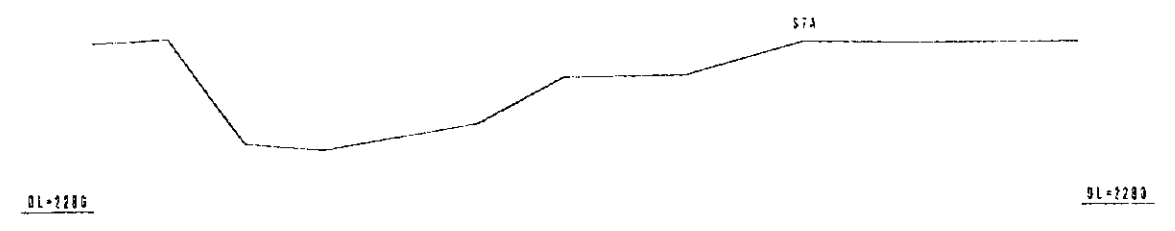
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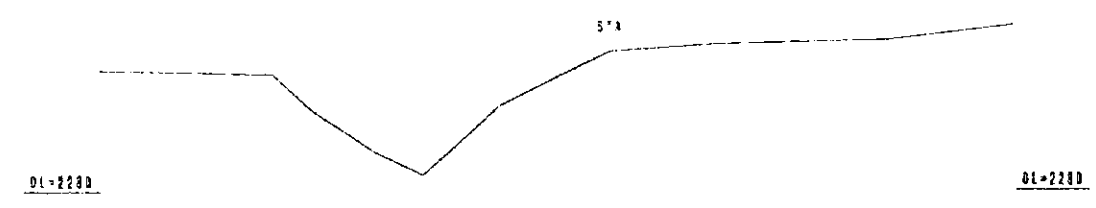
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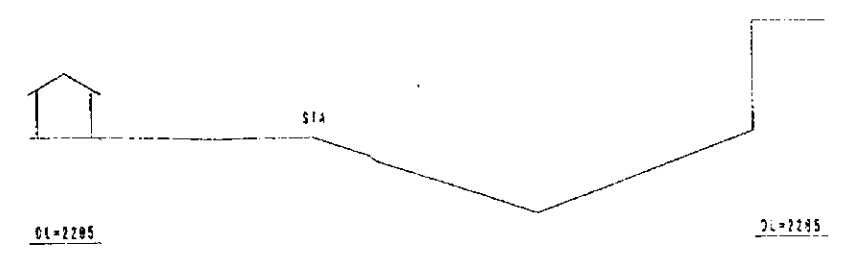
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LAK-16



LAK-19



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
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DRAWING NO. LAK-SECT-05	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (05/16)



Cross Section S=1:200

LAK-20

LAK-23

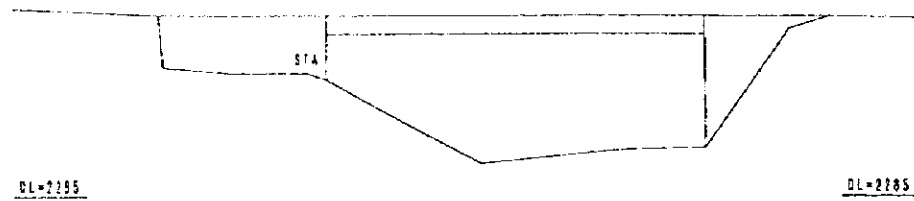


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LAK-21

LAK-24



DL=2290

DL=2290

LAK-22

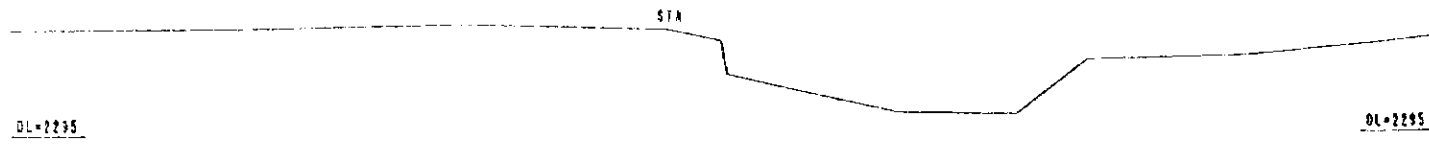
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THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY	
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DRAWING NO. LAK-SECT-06	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (06/16)

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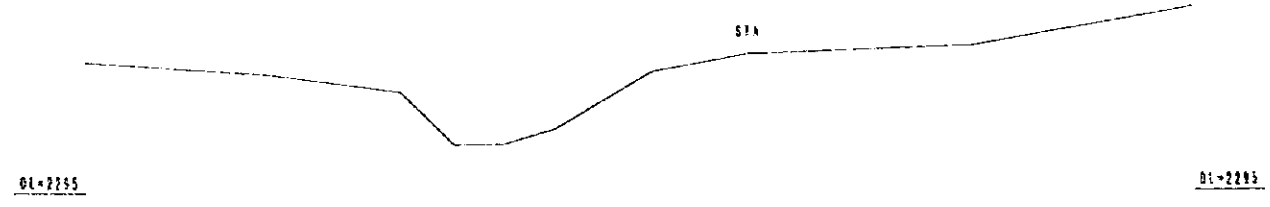
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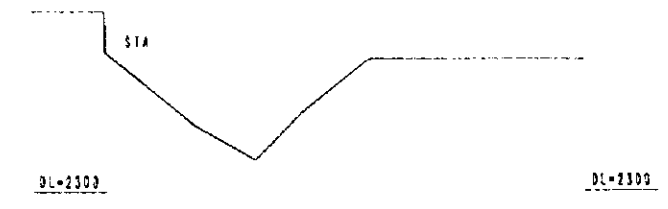
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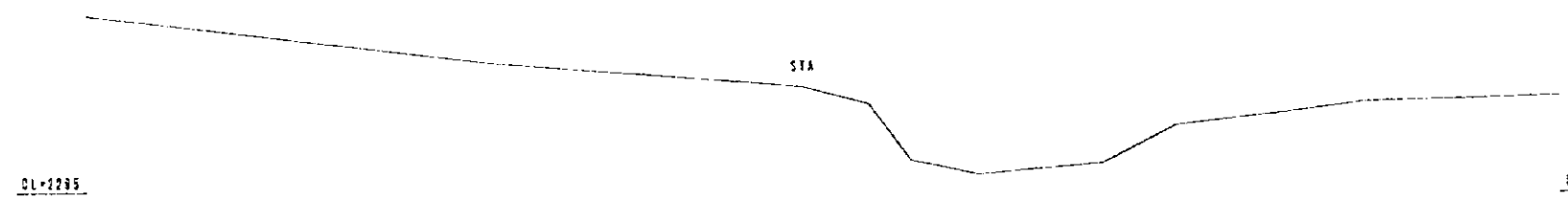
LAK-25 (a)



LAK-28



LAK-26

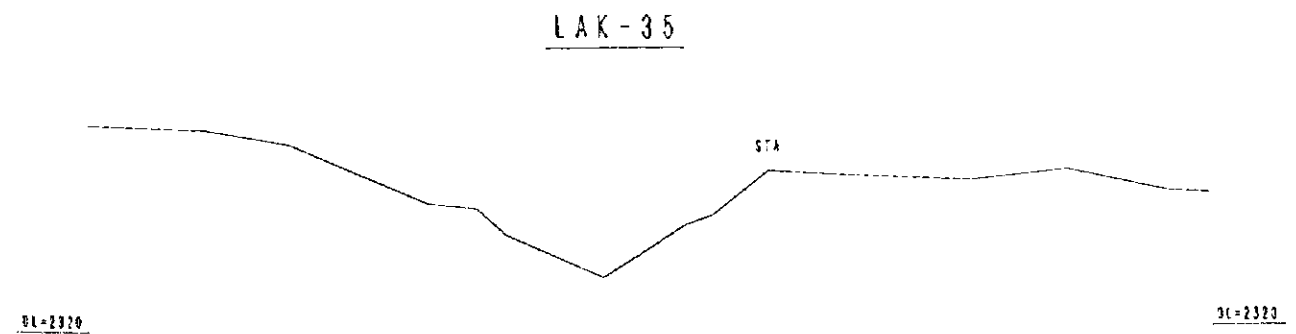
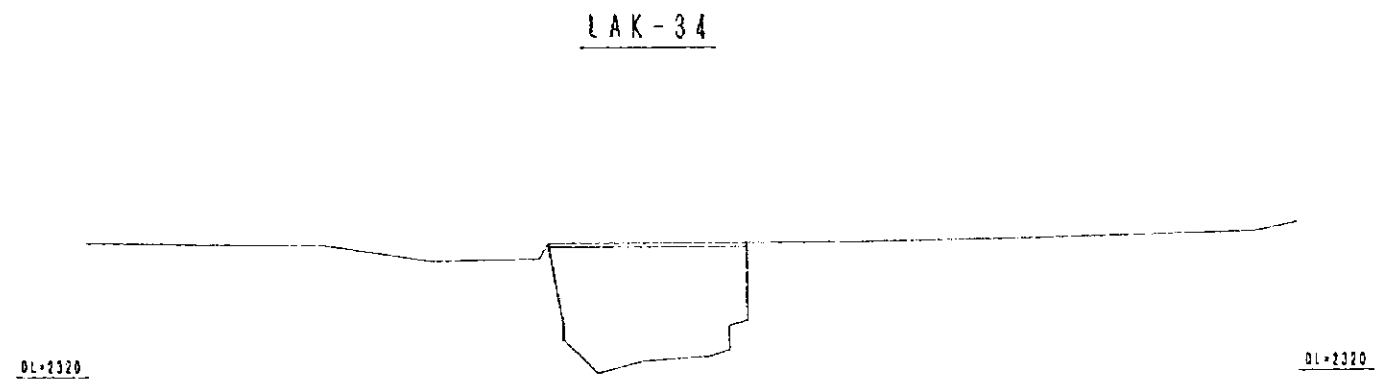
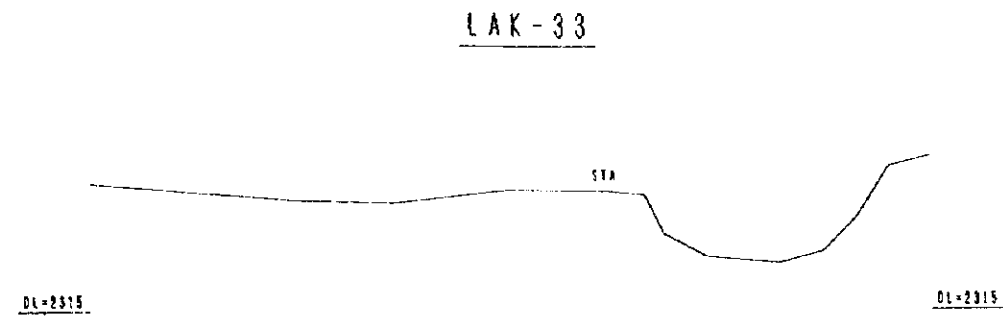
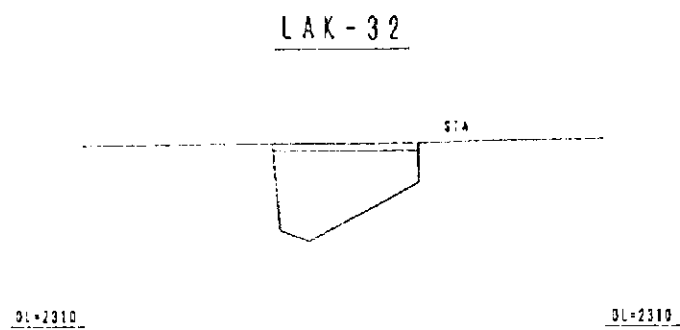
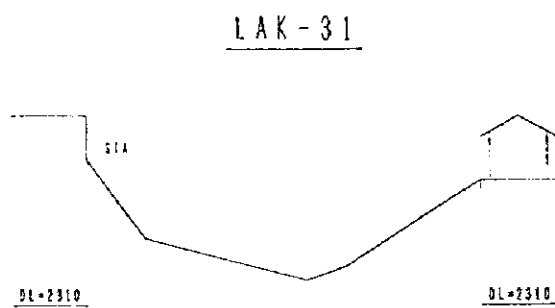
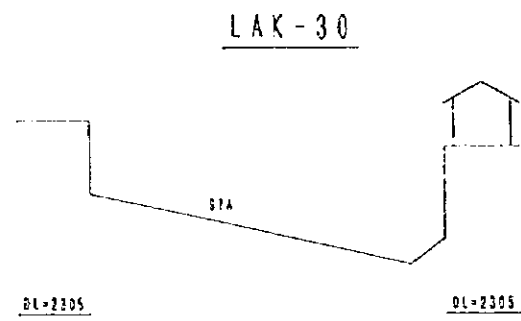
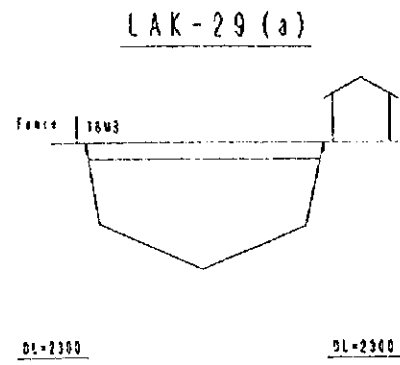


LAK-29



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DRAWING NO. LAK-SECT-07	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (07/16)

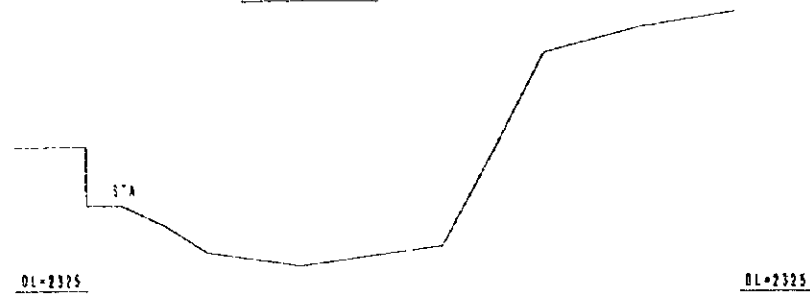
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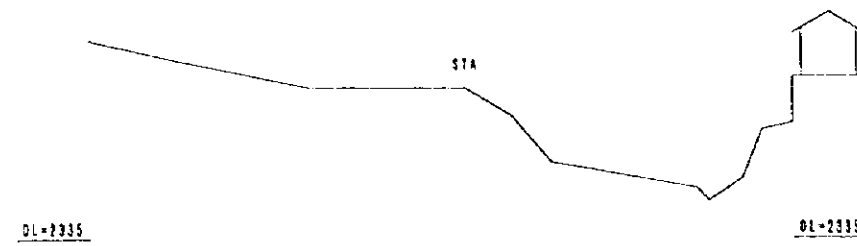
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DRAWING NO. LAK-SECT-08	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (08/16)

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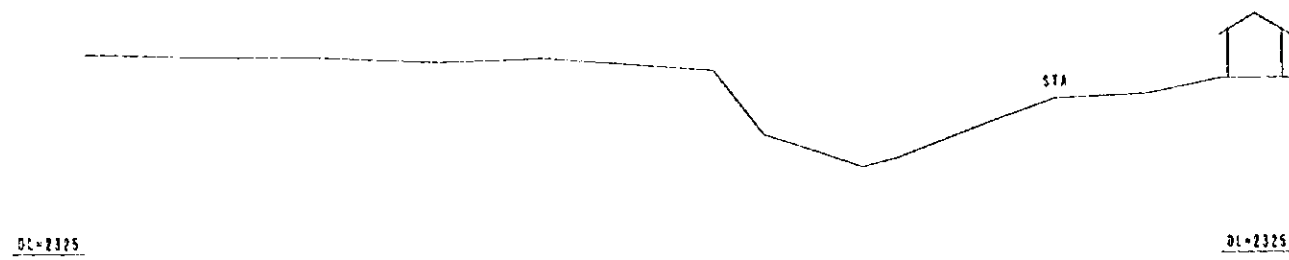
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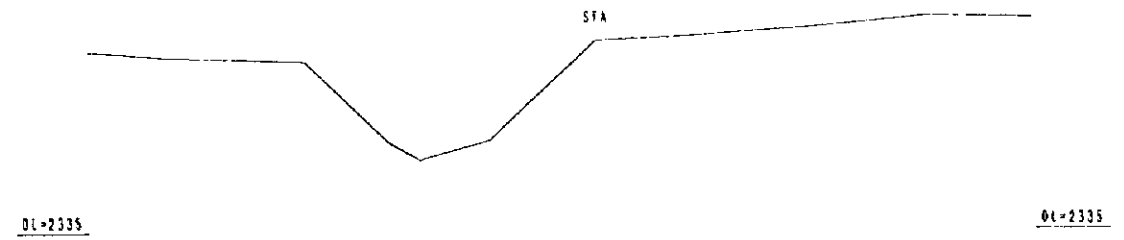
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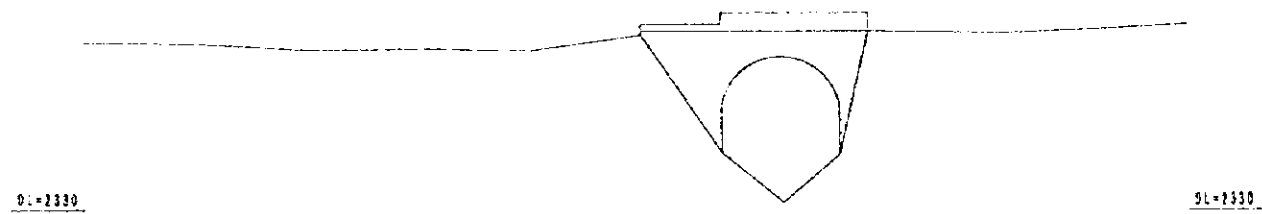
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LAK-40



LAK-38



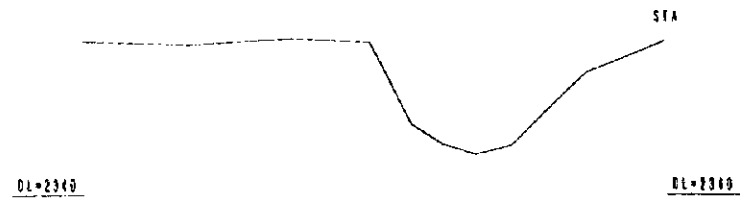
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THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
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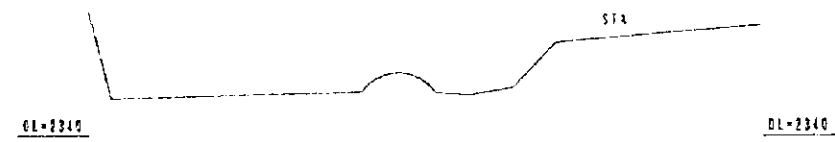
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LAK-44



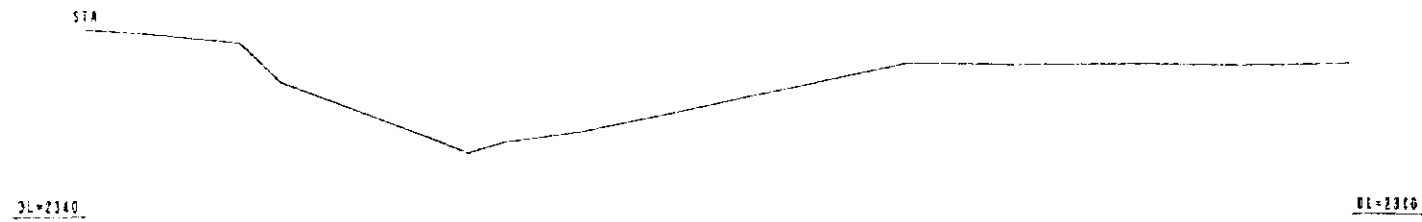
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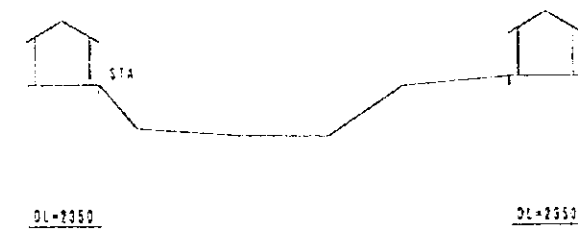
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LAK-43 (a)



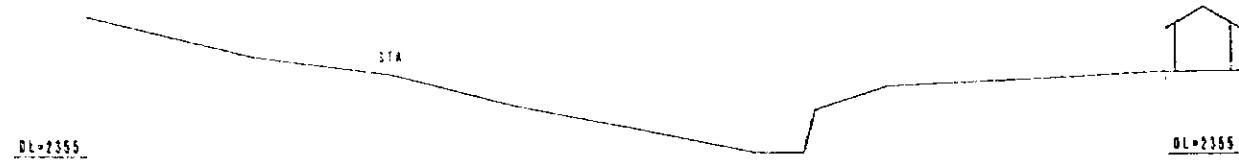
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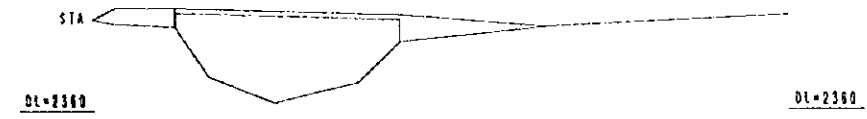
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-10	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (10/15)

Cross Section S=1:200

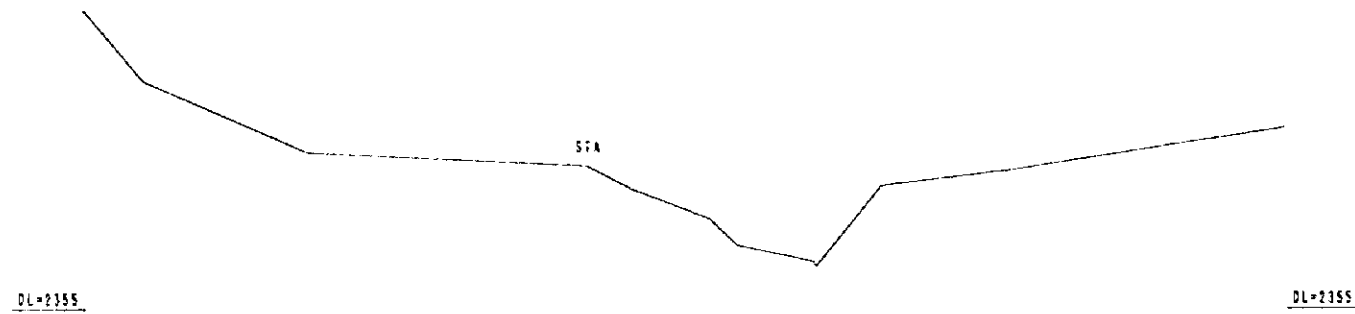
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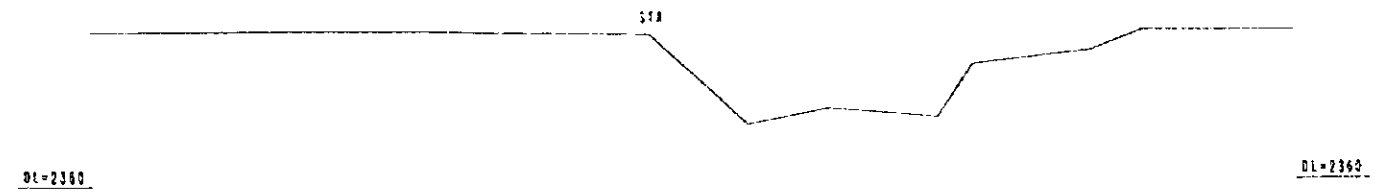
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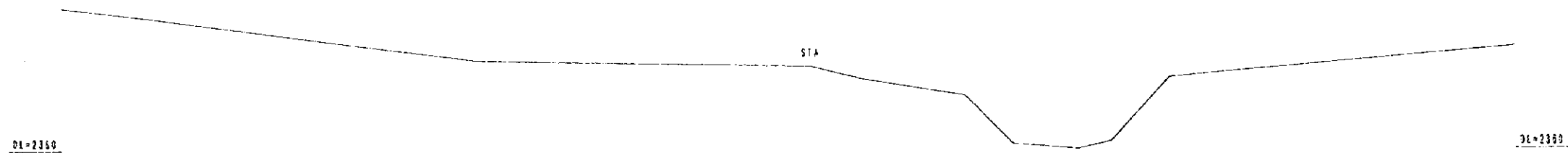
LAK-48



LAK-51



LAK-49



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-11	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (11/16)



Cross Section S=1:200

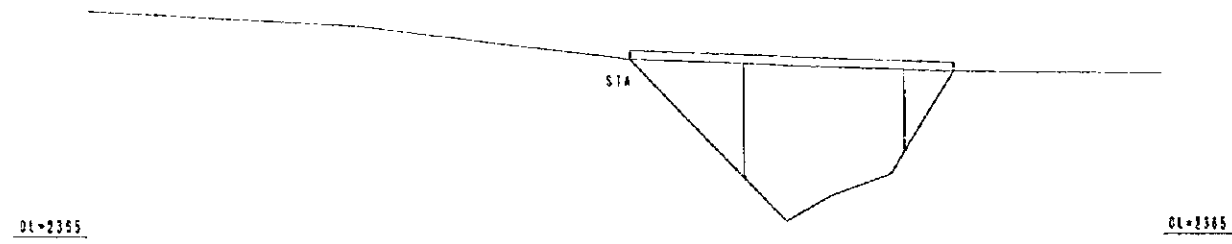
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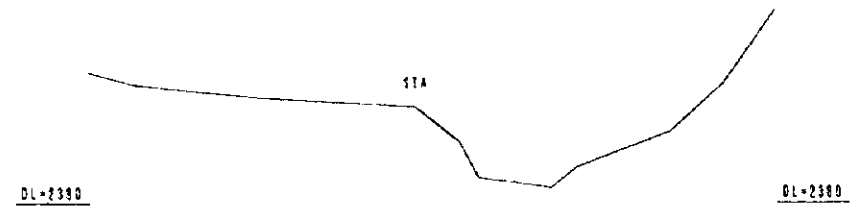
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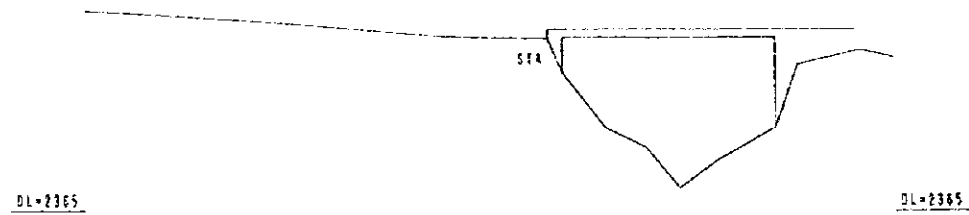
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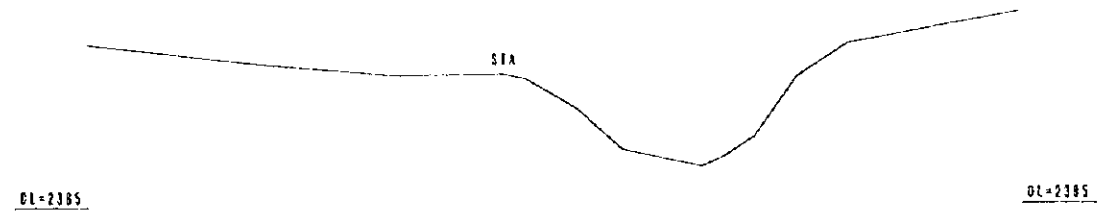
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LAK-54



LAK-57



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-12	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (12/16)

Cross Section S=1:200

LAK-58

LAK-61

STA

STA

DL-2330

DL-2330

DL-2415

DL-2415

LAK-59

LAK-62

DL-2405

DL-2405

DL-2425

DL-2425

LAK-60

LAK-63

STA

SEA

DL-2410

DL-2410

DL-2425

DL-2425

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

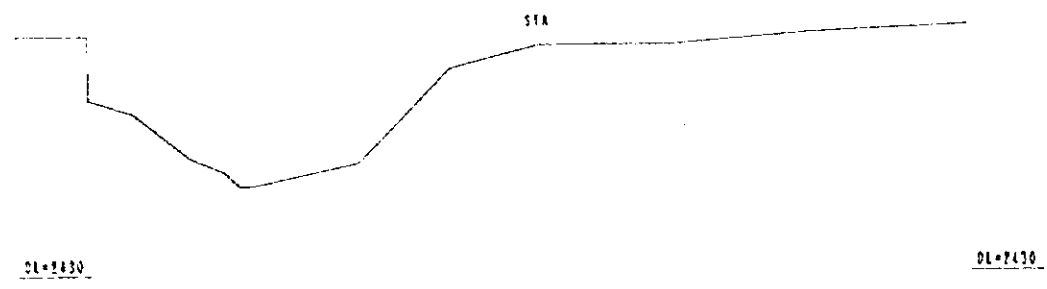
JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.  
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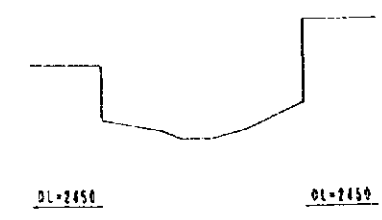
LOCATION OF RIVER CROSS SECTION  
LITTLE AKAKE (LAK) RIVER (13/16)

Cross Section S=1:200

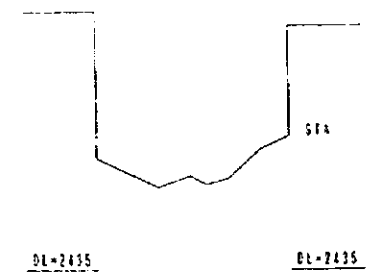
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LAK-67



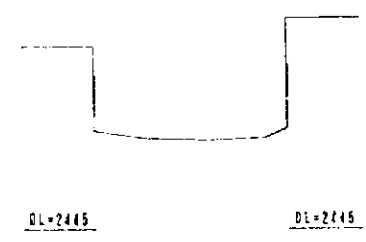
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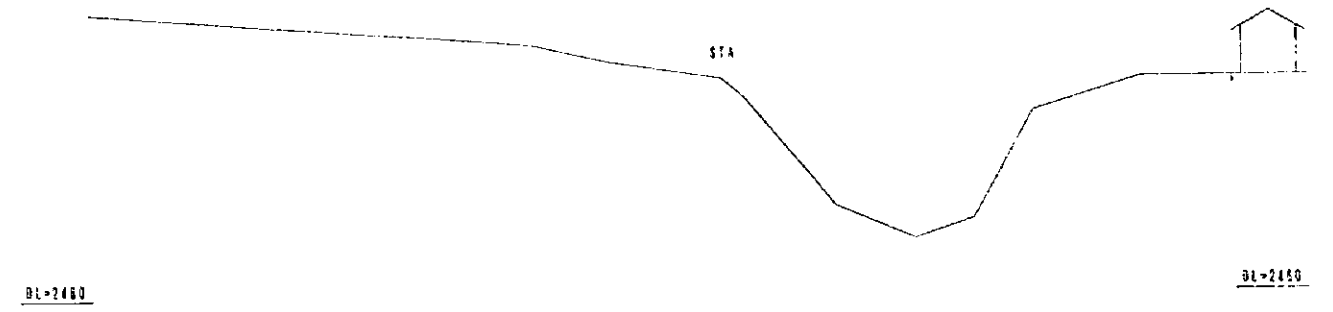
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LAK-66



LAK-69



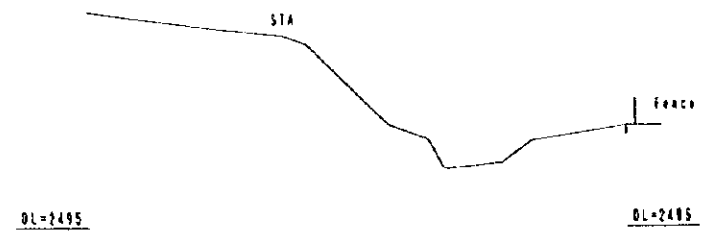
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-14	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (14/16)

Cross Section S=1:200

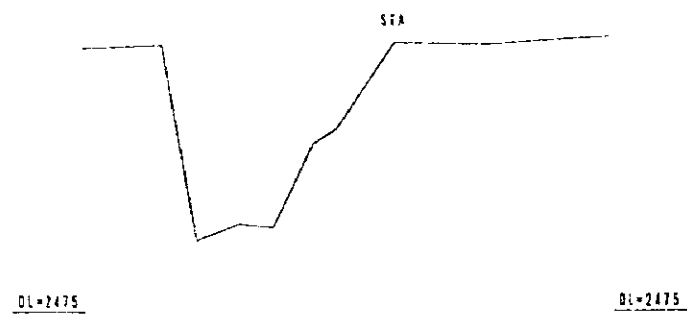
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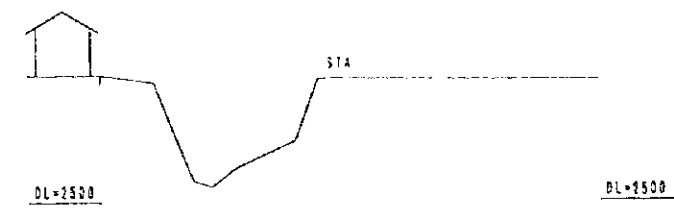
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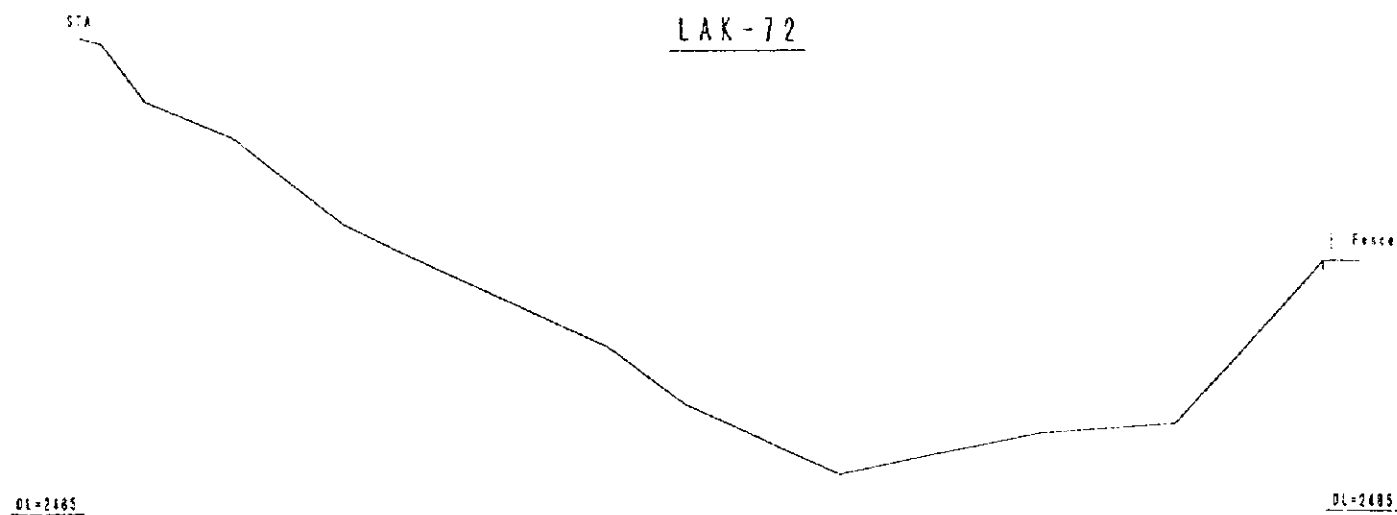
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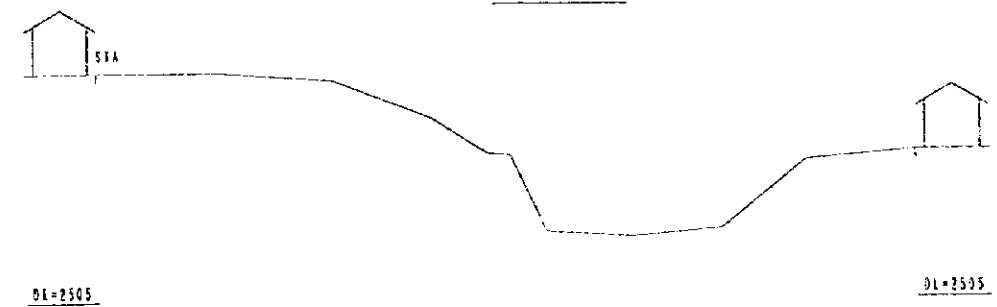
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LAK-72



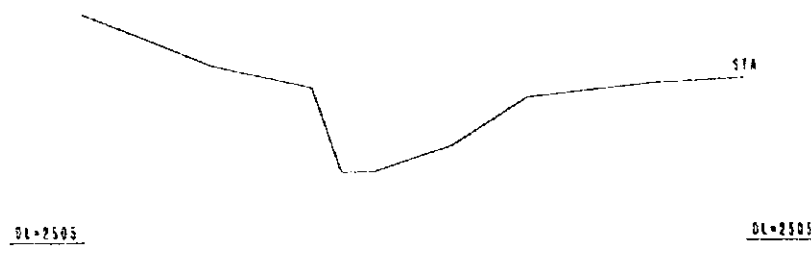
LAK-74



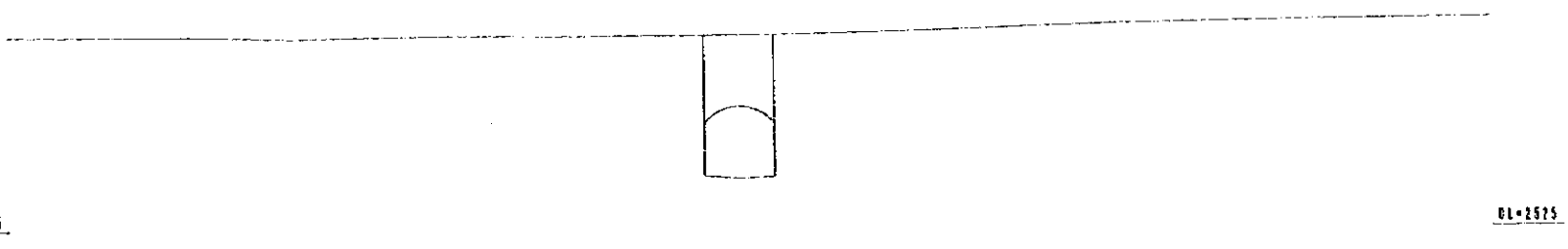
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-15	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (15/16)

Cross Section S=1:200

LAK-75



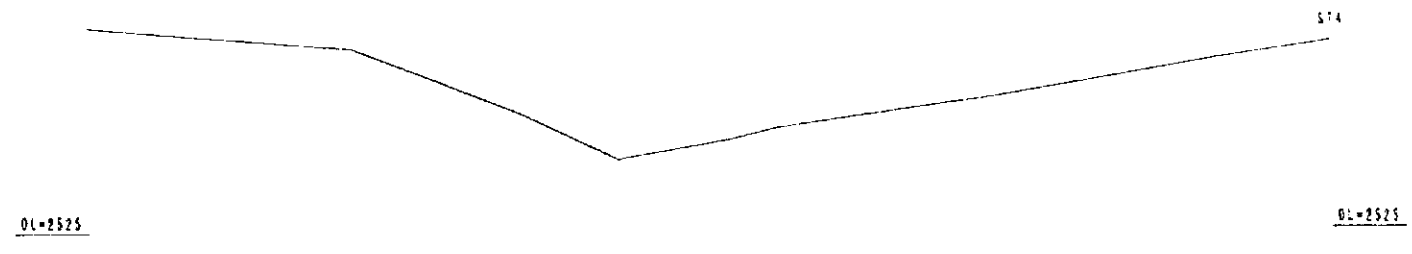
LAK-78



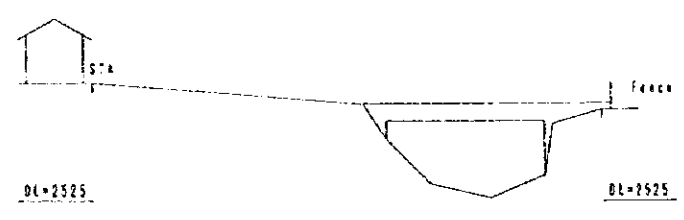
LAK-76



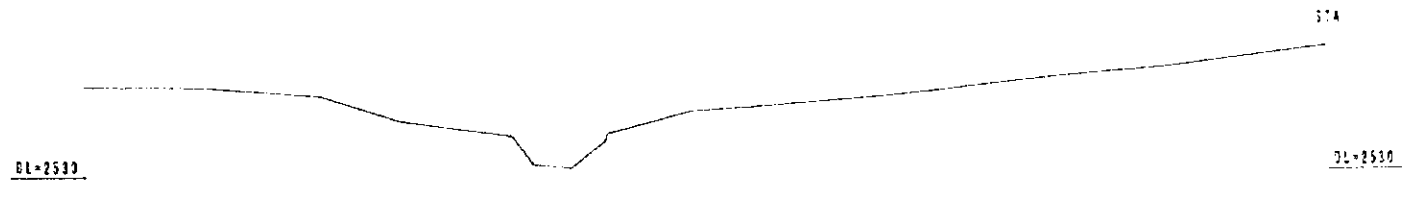
LAK-79



LAK-77



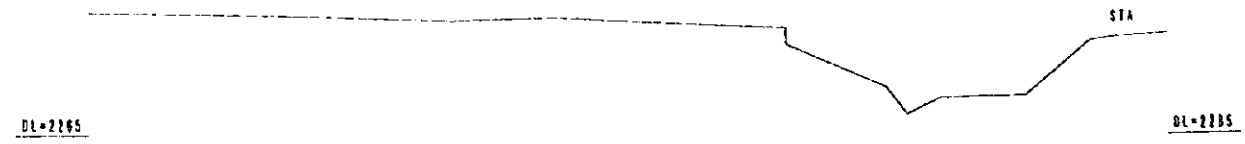
LAK-80



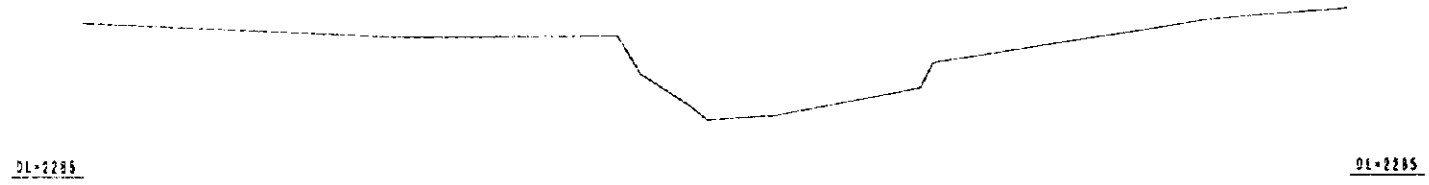
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-16	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (16/16)

Cross Section S=1:200

Mekanisa Bridge G/S



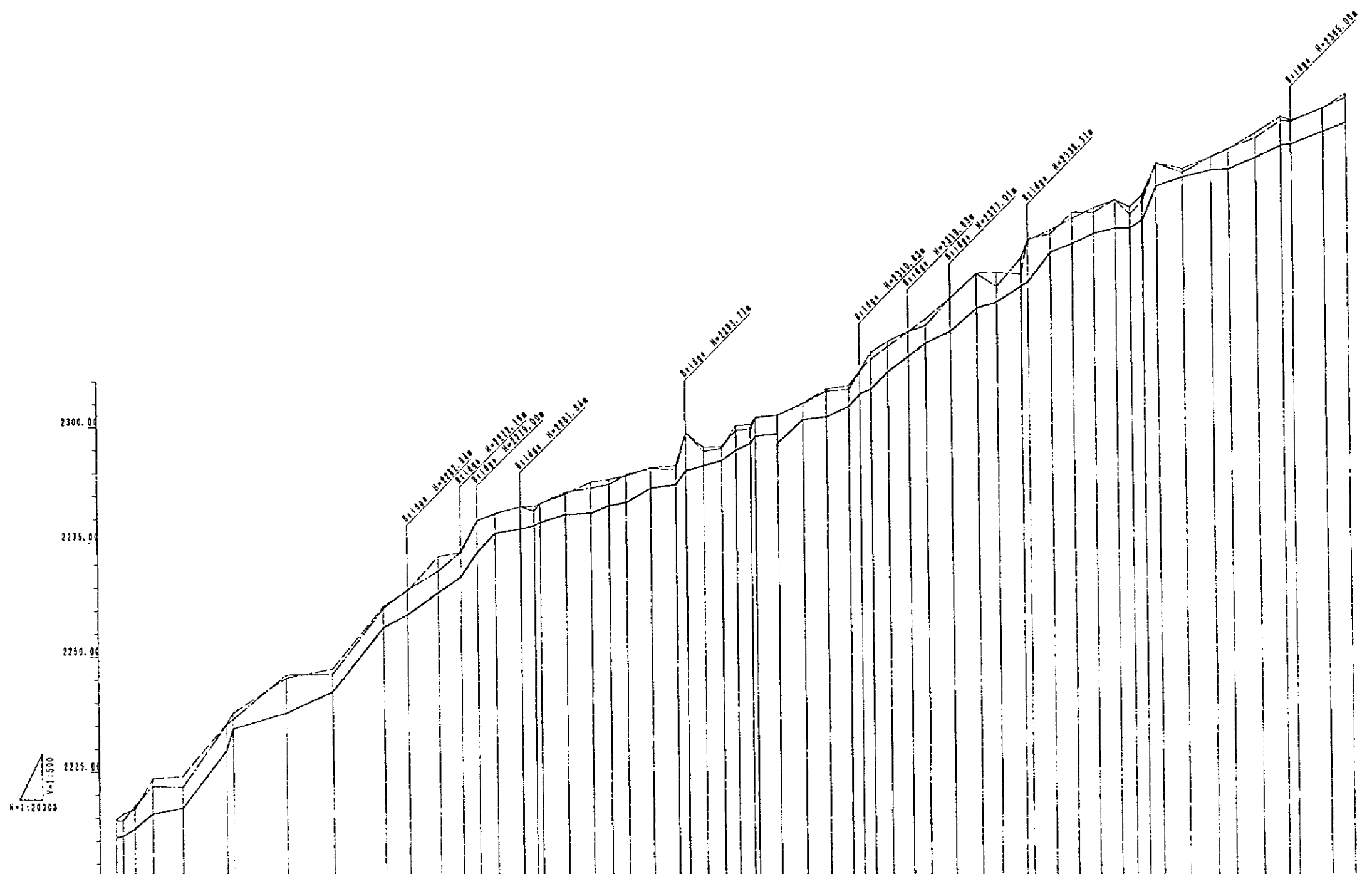
Mekanisa Bridge Obs. Post



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAK-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAK) RIVER (01/01)



Profile Section V=1:500  
H=1:20000



Station No.	Distance	Accumulate D	River Bed	Right Bank	Left Bank
0+000	0.0	0.0	2210.84	2214.51	2214.40
1	60.0	60.0	2211.12	2215.80	2214.58
2	120.0	120.0	2212.78	2216.84	2215.58
3	180.0	180.0	2213.98	2217.54	2216.98
4	240.0	240.0	2217.25	2221.04	2221.68
5	300.0	300.0	2217.51	2221.58	2224.78
6	360.0	360.0	2217.51	2221.58	2224.78
7	420.0	420.0	2218.48	2220.97	2226.52
8	480.0	480.0	2218.17	2220.58	2226.57
9	540.0	540.0	2218.01	2221.06	2228.56
10	600.0	600.0	2217.35	2222.54	2229.88
11	660.0	660.0	2217.67	2223.42	2229.58
12	720.0	720.0	2218.81	2221.04	2228.98
13	780.0	780.0	2217.64	2222.37	2232.38
14	840.0	840.0	2218.42	2223.84	2235.42
15	900.0	900.0	2218.78	2223.88	2235.54
16	960.0	960.0	2218.96	2223.84	2235.48
17	1020.0	1020.0	2218.52	2223.58	2237.28
18	1080.0	1080.0	2218.74	2223.92	2238.31
19	1140.0	1140.0	2218.54	2223.74	2239.58
20	1200.0	1200.0	2218.14	2223.58	2240.02
21	1260.0	1260.0	2218.28	2223.58	2241.58
22	1320.0	1320.0	2218.24	2223.52	2243.77
23	1380.0	1380.0	2218.28	2223.24	2244.44
24	1440.0	1440.0	2218.58	2223.74	2245.02
25	1500.0	1500.0	2218.42	2223.82	2245.82
26	1560.0	1560.0	2218.42	2223.82	2246.42
27	1620.0	1620.0	2218.42	2223.82	2246.18
28	1680.0	1680.0	2218.74	2223.82	2246.84
29	1740.0	1740.0	2218.74	2223.72	2247.88
30	1800.0	1800.0	2218.74	2223.82	2248.42
31	1860.0	1860.0	2218.42	2223.82	2249.57
32	1920.0	1920.0	2218.74	2223.82	2250.04
33	1980.0	1980.0	2218.82	2223.82	2251.24
34	2040.0	2040.0	2218.82	2223.82	2252.21
35	2100.0	2100.0	2218.82	2223.82	2252.48
36	2160.0	2160.0	2218.74	2223.82	2253.62
37	2220.0	2220.0	2218.74	2223.82	2254.52
38	2280.0	2280.0	2218.74	2223.82	2255.52
39	2340.0	2340.0	2218.74	2223.82	2256.52
40	2400.0	2400.0	2218.74	2223.82	2257.52
41	2460.0	2460.0	2218.74	2223.82	2258.52
42	2520.0	2520.0	2218.74	2223.82	2259.52
43	2580.0	2580.0	2218.74	2223.82	2260.52
44	2640.0	2640.0	2218.74	2223.82	2261.52
45	2700.0	2700.0	2218.74	2223.82	2262.52
46	2760.0	2760.0	2218.74	2223.82	2263.52
47	2820.0	2820.0	2218.74	2223.82	2264.52
48	2880.0	2880.0	2218.74	2223.82	2265.52
49	2940.0	2940.0	2218.74	2223.82	2266.52
50	3000.0	3000.0	2218.74	2223.82	2267.52
51	3060.0	3060.0	2218.74	2223.82	2268.52
52	3120.0	3120.0	2218.74	2223.82	2269.52

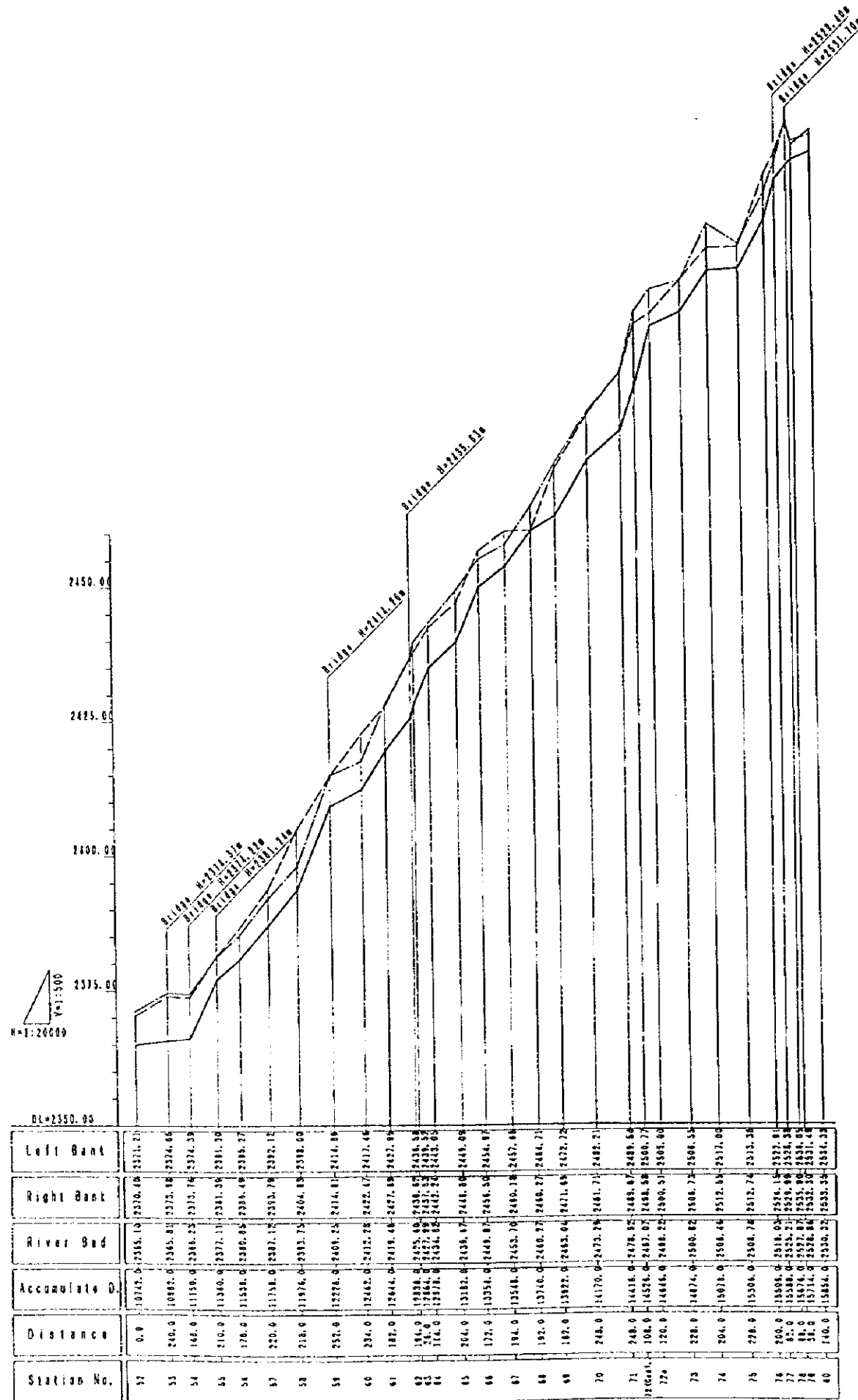
Left Bank	—————
Right Bank	-----
River Bed	.....

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO. LAK-SECT-01 LOCATION OF RIVER PROFILE SECTION  
LITTLE AKAKI (LAK) RIVER (01/02)

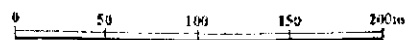
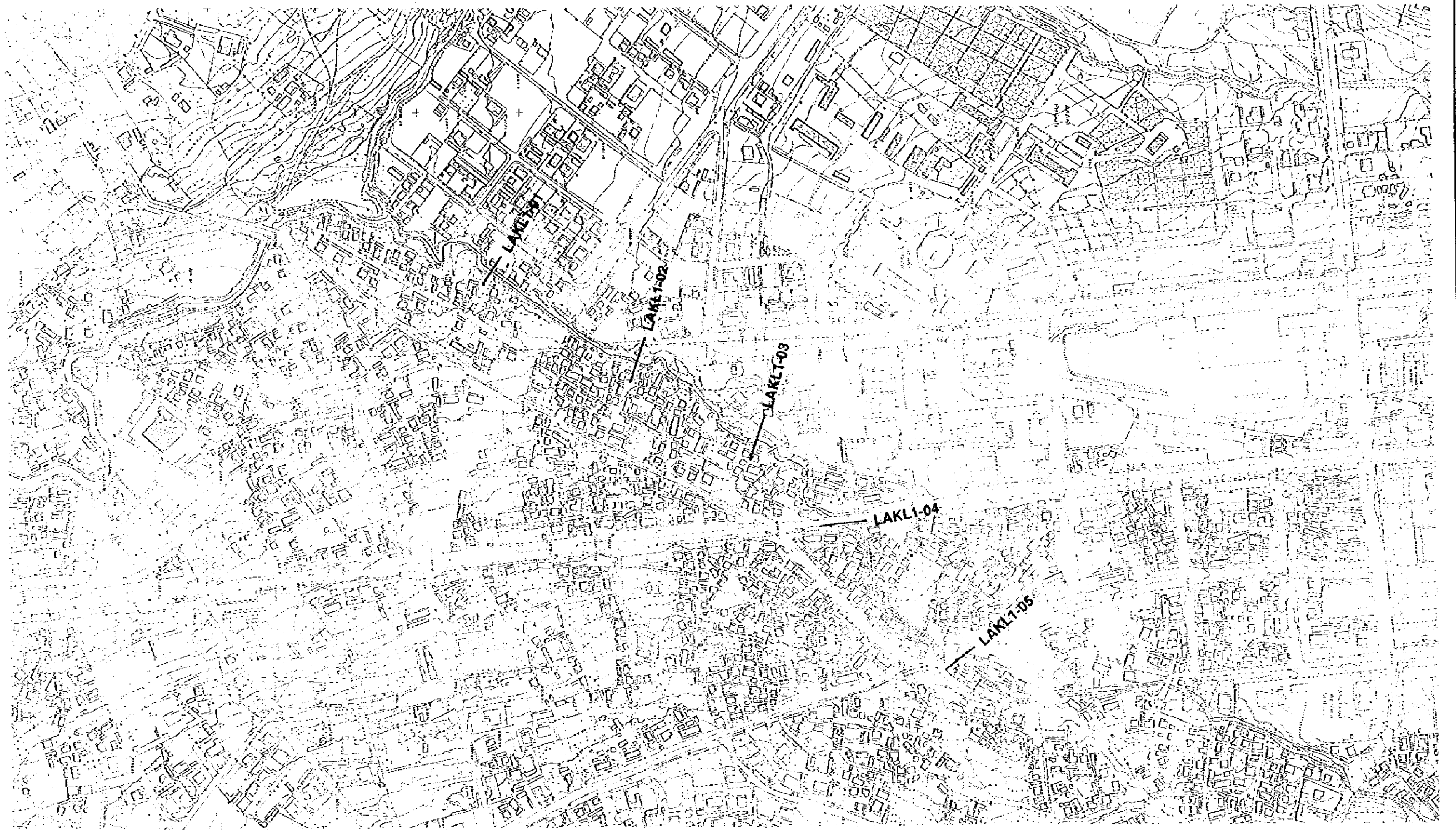
Profile Section V=1:500  
H=1:20000



Left Bank	—————
Right Bank	-----
River Bed	.....

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA  
JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO. LAK-SECF-02	LOCATION OF RIVER PROFILE SECTION LITTLE AKAKI (LAK) RIVER (02/02)
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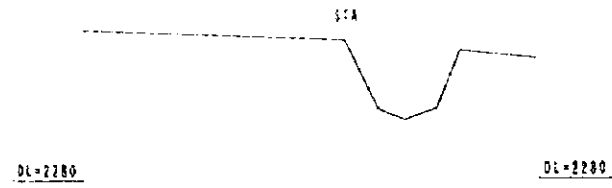
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

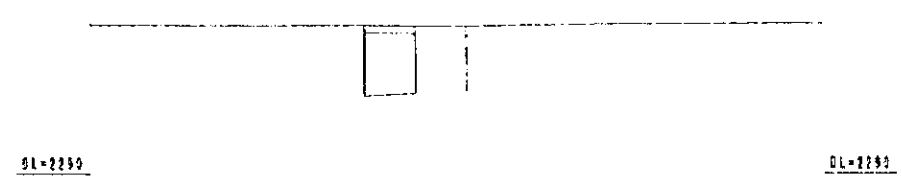
DRAWING NO.  
LAKL1-PLAN-01

Cross Section S=1:200

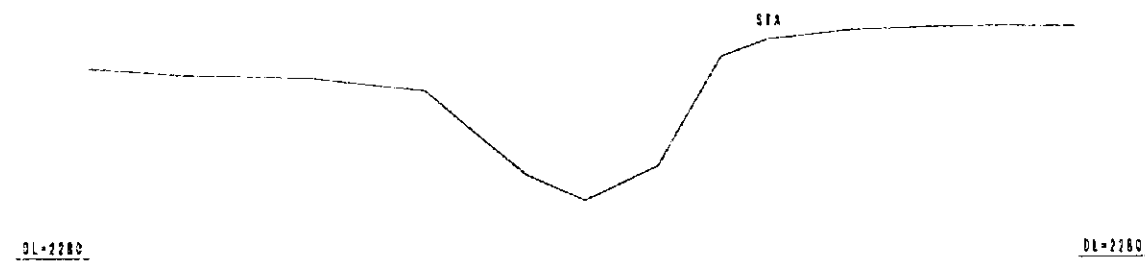
LAKLI-01



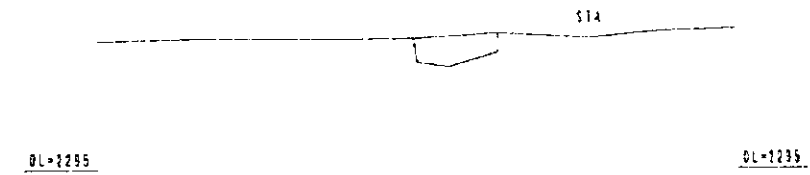
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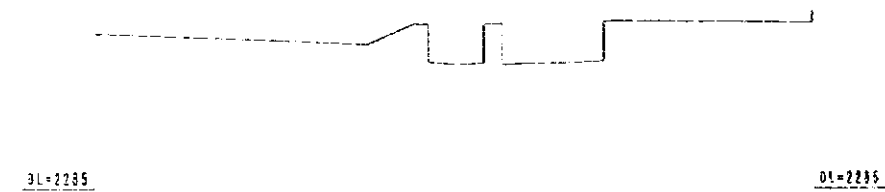
LAKLI-02



LAKLI-05

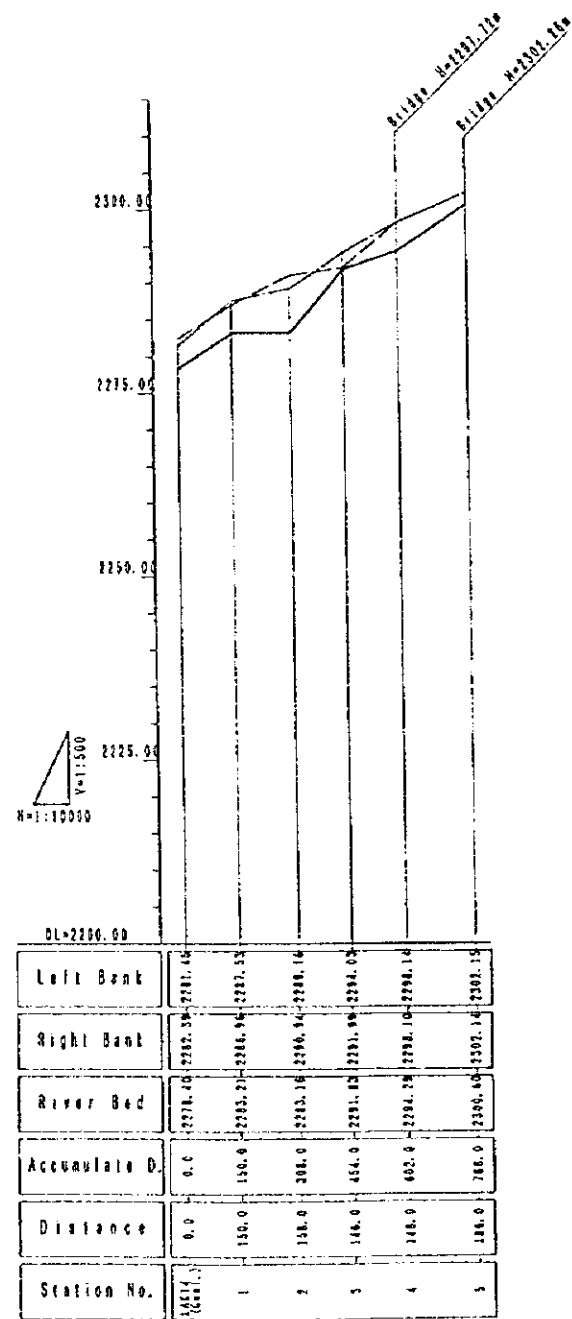


LAKLI-03



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAKLI-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAKLI) RIVER (01/01)

Profile Section V=1:500  
H=1:10000

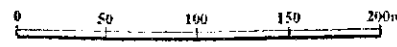


Left Bank	———
Right Bank	.....
River Bed	———

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO. LAKLI-SECT-01	LOCATION OF RIVER PROFILE SECTION LITTLE AKAKI (LAKLI) RIVER (01/01)
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THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

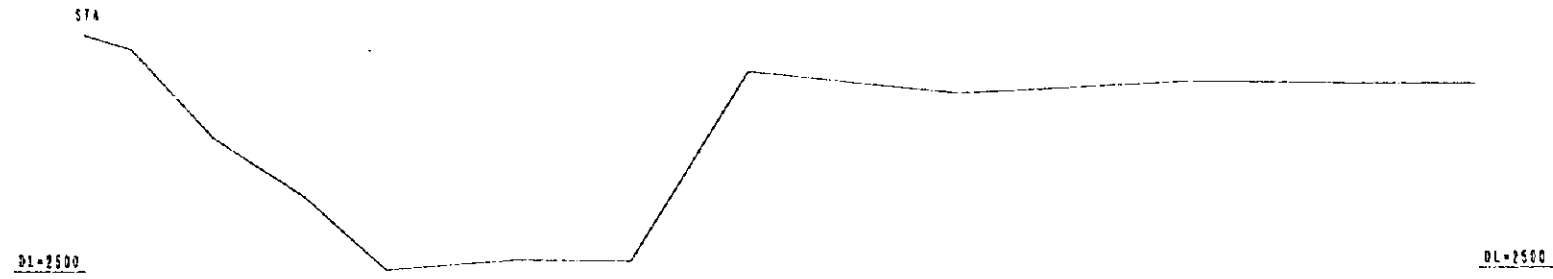
DRAWING NO.  
LAKL2-PLAN-01

1-5-34

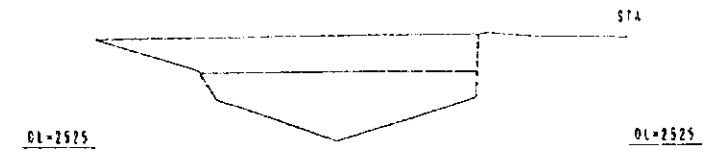


Cross Section S=1:200

LAKL2-01



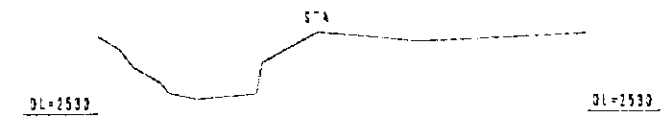
LAKL2-04



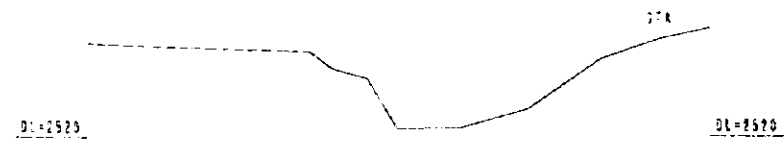
LAKL2-02



LAKL2-05

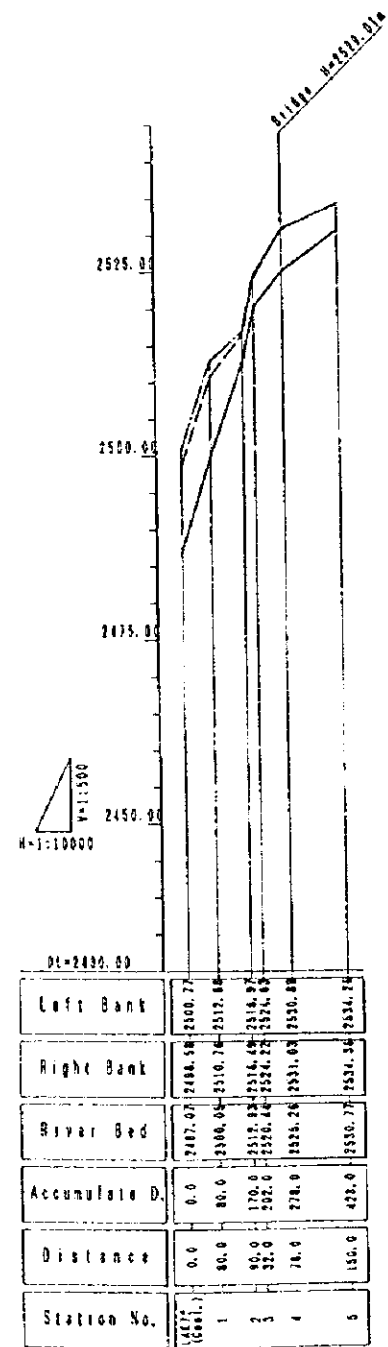


LAKL2-03



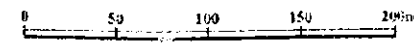
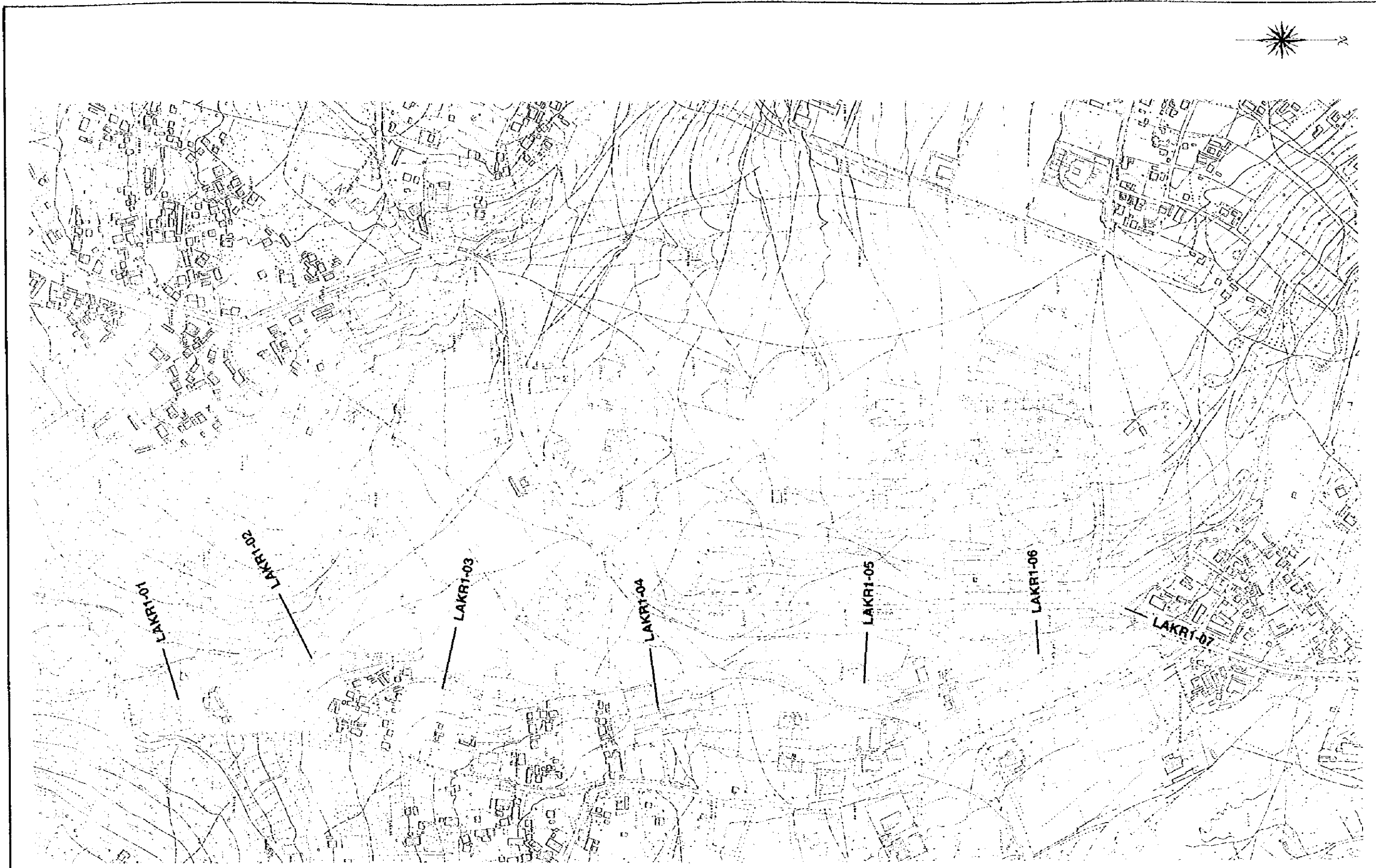
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAKL2-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAKL2) RIVER (01/01)

Profile Section V=1:500  
H=1:10000



Left Bank	-----
Right Bank	-----
River Bed	-----

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY	
REGION 14 ADMINISTRATION	
DRAWING NO. LAKL2-SECT-01	LOCATION OF RIVER PROFILE SECTION LITTLE AKAKI (LAKL2) RIVER (01/01)



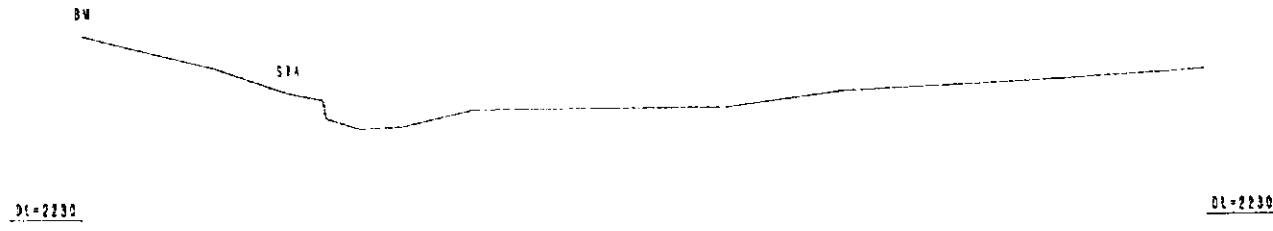
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

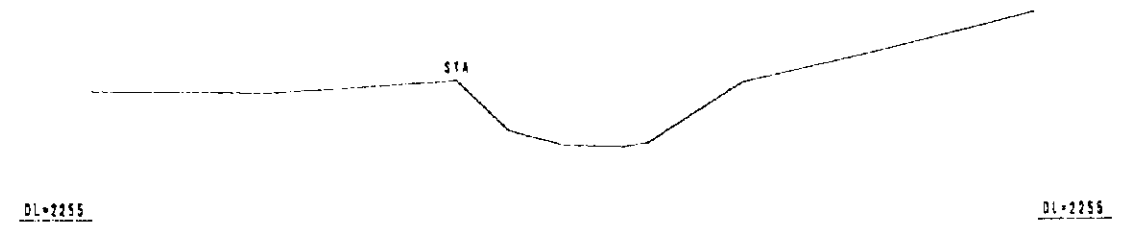
DRAWING NO.  
LAKR1-PLAN-01

Cross Section S=1:200

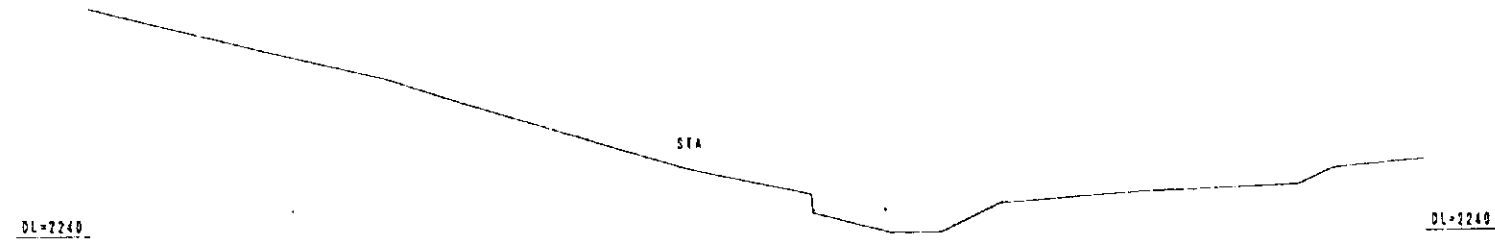
LAKRI-01



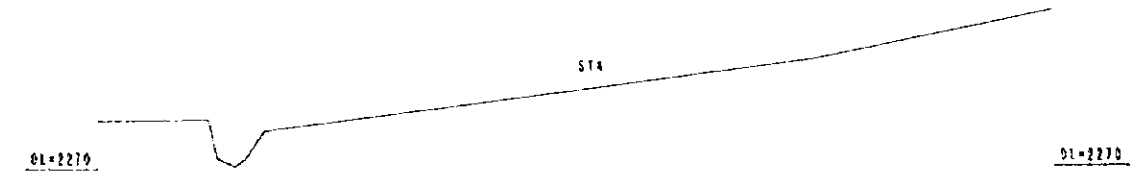
LAKRI-04



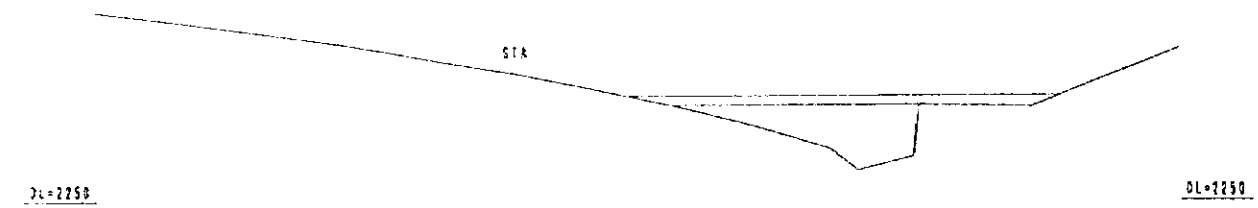
LAKRI-02



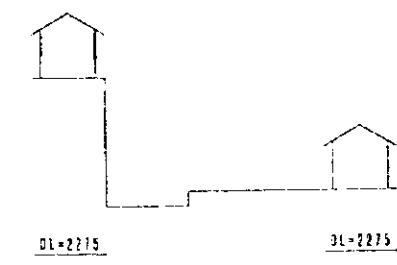
LAKRI-05



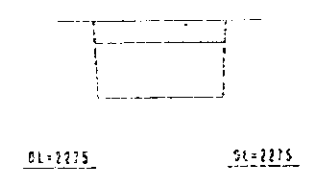
LAKRI-03



LAKRI-06

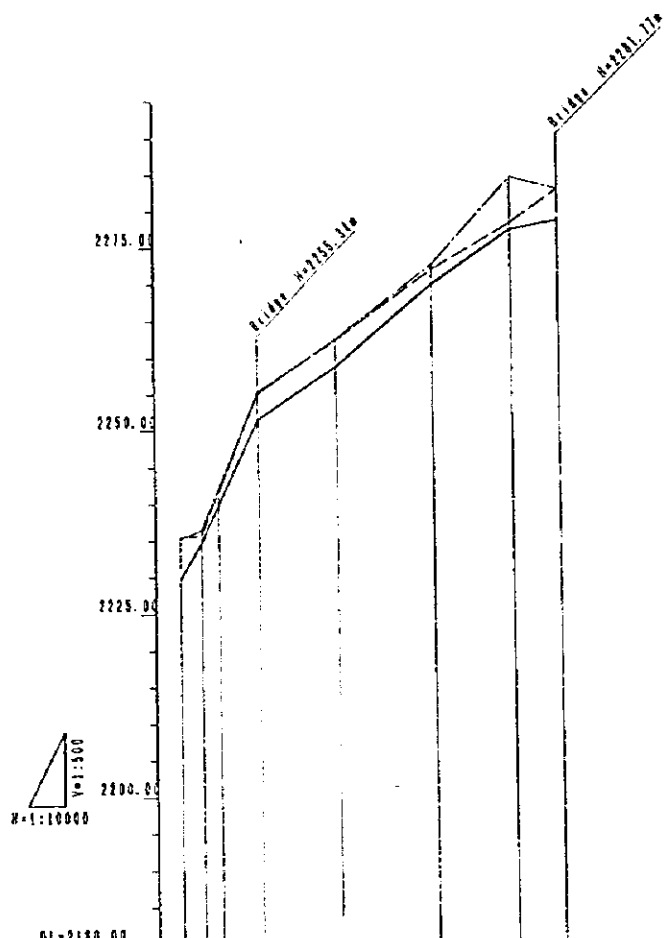


LAKRI-07

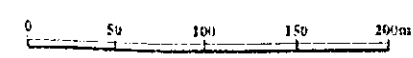
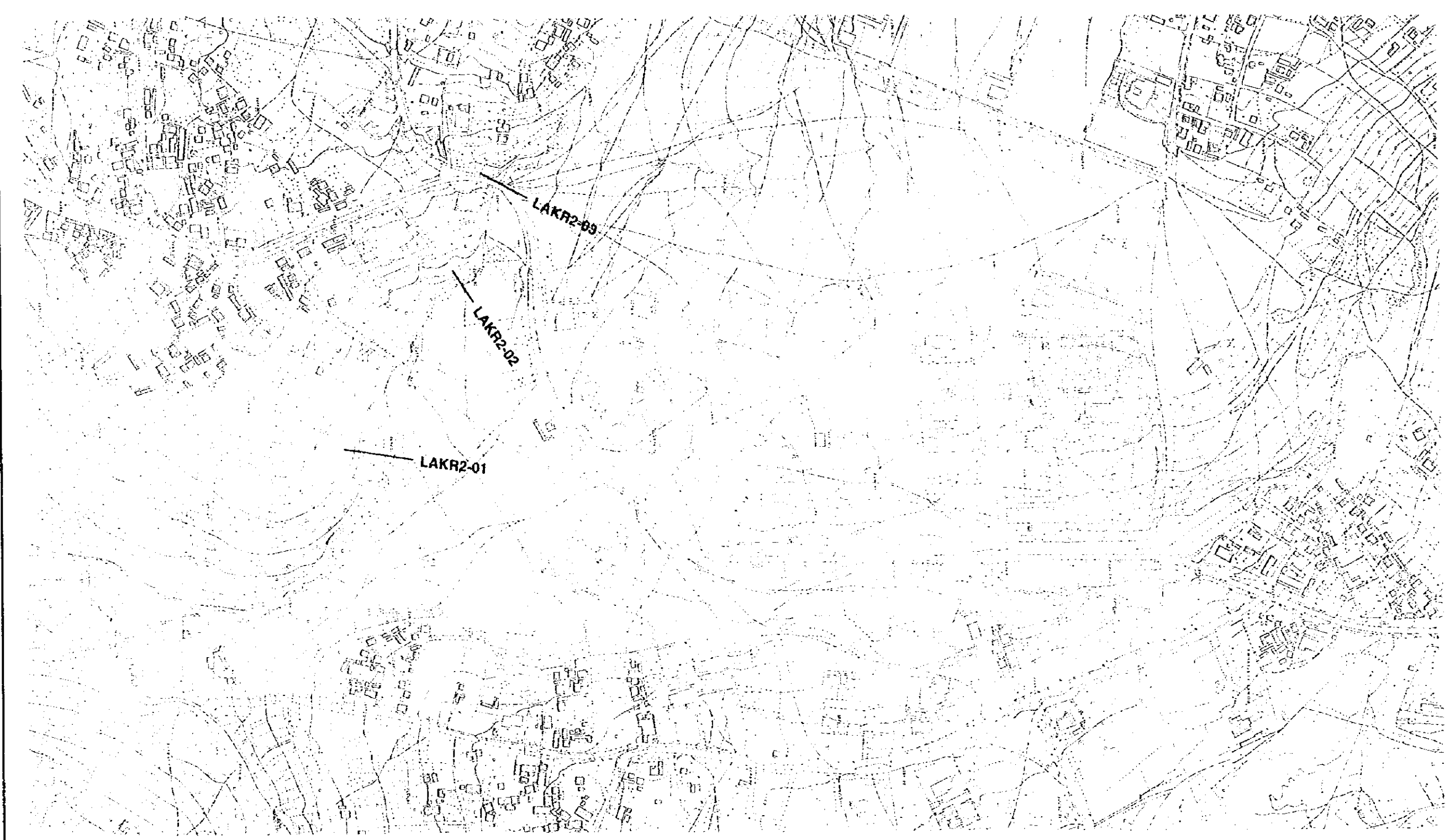


THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAKRI-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAKRI) RIVER (01/01)

Profile Section  
 V=1:500  
 H=1:10000



Left Bank	2233.34	2235.51	2238.42	2241.16	2243.78	2246.28	2248.66	2250.92	2253.06	2255.08	2256.98	2258.76	2260.42	2261.96	2263.38	2264.68	2265.86	2266.92	2267.86	2268.68	2269.38	2270.00	2270.54	2271.02	2271.46	2271.86	2272.22	2272.54	2272.82	2273.06	2273.26	2273.42	2273.54	2273.62	2273.68	2273.72	2273.76	2273.78	2273.80	2273.82	2273.84	2273.86	2273.88	2273.90	2273.92	2273.94	2273.96	2273.98	2274.00	2274.02	2274.04	2274.06	2274.08	2274.10	2274.12	2274.14	2274.16	2274.18	2274.20	2274.22	2274.24	2274.26	2274.28	2274.30	2274.32	2274.34	2274.36	2274.38	2274.40	2274.42	2274.44	2274.46	2274.48	2274.50	2274.52	2274.54	2274.56	2274.58	2274.60	2274.62	2274.64	2274.66	2274.68	2274.70	2274.72	2274.74	2274.76	2274.78	2274.80	2274.82	2274.84	2274.86	2274.88	2274.90	2274.92	2274.94	2274.96	2274.98	2275.00																																																																																																																																																																																																																																																																																																																																																																																													
Right Bank	2233.34	2235.51	2238.42	2241.16	2243.78	2246.28	2248.66	2250.92	2253.06	2255.08	2256.98	2258.76	2260.42	2261.96	2263.38	2264.68	2265.86	2266.92	2267.86	2268.68	2269.38	2270.00	2270.54	2271.02	2271.46	2271.86	2272.22	2272.54	2272.82	2273.06	2273.26	2273.42	2273.54	2273.62	2273.68	2273.72	2273.76	2273.78	2273.80	2273.82	2273.84	2273.86	2273.88	2273.90	2273.92	2273.94	2273.96	2273.98	2274.00	2274.02	2274.04	2274.06	2274.08	2274.10	2274.12	2274.14	2274.16	2274.18	2274.20	2274.22	2274.24	2274.26	2274.28	2274.30	2274.32	2274.34	2274.36	2274.38	2274.40	2274.42	2274.44	2274.46	2274.48	2274.50	2274.52	2274.54	2274.56	2274.58	2274.60	2274.62	2274.64	2274.66	2274.68	2274.70	2274.72	2274.74	2274.76	2274.78	2274.80	2274.82	2274.84	2274.86	2274.88	2274.90	2274.92	2274.94	2274.96	2274.98	2275.00																																																																																																																																																																																																																																																																																																																																																																																													
River Bed	2228.00	2230.00	2232.00	2234.00	2236.00	2238.00	2240.00	2242.00	2244.00	2246.00	2248.00	2250.00	2252.00	2254.00	2256.00	2258.00	2260.00	2262.00	2264.00	2266.00	2268.00	2270.00	2272.00	2274.00	2276.00	2278.00	2280.00	2282.00	2284.00	2286.00	2288.00	2290.00	2292.00	2294.00	2296.00	2298.00	2300.00	2302.00	2304.00	2306.00	2308.00	2310.00	2312.00	2314.00	2316.00	2318.00	2320.00	2322.00	2324.00	2326.00	2328.00	2330.00	2332.00	2334.00	2336.00	2338.00	2340.00	2342.00	2344.00	2346.00	2348.00	2350.00	2352.00	2354.00	2356.00	2358.00	2360.00	2362.00	2364.00	2366.00	2368.00	2370.00	2372.00	2374.00	2376.00	2378.00	2380.00	2382.00	2384.00	2386.00	2388.00	2390.00	2392.00	2394.00	2396.00	2398.00	2400.00																																																																																																																																																																																																																																																																																																																																																																																																									
Accumulate D.	0.0	60.0	110.0	176.0	256.0	346.0	446.0	556.0	676.0	806.0	946.0	1096.0	1256.0	1426.0	1606.0	1796.0	1996.0	2206.0	2426.0	2656.0	2906.0	3176.0	3466.0	3776.0	4106.0	4456.0	4826.0	5216.0	5626.0	6056.0	6506.0	6976.0	7466.0	7976.0	8506.0	9056.0	9626.0	10216.0	10826.0	11456.0	12106.0	12776.0	13466.0	14176.0	14906.0	15656.0	16426.0	17216.0	18026.0	18856.0	19706.0	20576.0	21466.0	22376.0	23306.0	24256.0	25226.0	26216.0	27226.0	28256.0	29306.0	30376.0	31466.0	32576.0	33706.0	34856.0	36026.0	37216.0	38426.0	39656.0	40906.0	42176.0	43466.0	44776.0	46106.0	47456.0	48826.0	50216.0	51626.0	53056.0	54506.0	55976.0	57466.0	58976.0	60506.0	62056.0	63626.0	65216.0	66826.0	68456.0	70106.0	71776.0	73466.0	75176.0	76906.0	78656.0	80426.0	82216.0	84026.0	85856.0	87706.0	89576.0	91466.0	93376.0	95306.0	97256.0	99226.0	101216.0	103226.0	105256.0	107306.0	109376.0	111466.0	113576.0	115706.0	117856.0	120026.0	122216.0	124426.0	126656.0	128906.0	131176.0	133466.0	135776.0	138106.0	140456.0	142826.0	145216.0	147626.0	150056.0	152506.0	154976.0	157466.0	159976.0	162506.0	165056.0	167626.0	170216.0	172826.0	175456.0	178106.0	180776.0	183466.0	186176.0	188906.0	191656.0	194426.0	197216.0	200026.0	202856.0	205706.0	208576.0	211466.0	214376.0	217306.0	220256.0	223226.0	226216.0	229226.0	232256.0	235306.0	238376.0	241466.0	244576.0	247706.0	250856.0	254026.0	257216.0	260426.0	263656.0	266906.0	270176.0	273466.0	276776.0	280106.0	283456.0	286826.0	290216.0	293626.0	297056.0	300506.0	303976.0	307466.0	310976.0	314506.0	318056.0	321626.0	325216.0	328826.0	332456.0	336106.0	339776.0	343466.0	347176.0	350906.0	354656.0	358426.0	362216.0	366026.0	369856.0	373706.0	377576.0	381466.0	385376.0	389306.0	393256.0	397226.0	401216.0	405226.0	409256.0	413306.0	417376.0	421466.0	425576.0	429706.0	433856.0	438026.0	442216.0	446426.0	450656.0	454906.0	459176.0	463466.0	467776.0	472106.0	476456.0	480826.0	485216.0	489626.0	494056.0	498506.0	502976.0	507466.0	511976.0	516506.0	521056.0	525626.0	530216.0	534826.0	539456.0	544106.0	548776.0	553466.0	558176.0	562906.0	567656.0	572426.0	577216.0	582026.0	586856.0	591706.0	596576.0	601466.0	606376.0	611306.0	616256.0	621226.0	626216.0	631226.0	636256.0	641306.0	646376.0	651466.0	656576.0	661706.0	666856.0	672026.0	677216.0	682426.0	687656.0	692906.0	698176.0	703466.0	708776.0	714106.0	719456.0	724826.0	730216.0	735626.0	741056.0	746506.0	751976.0	757466.0	762976.0	768506.0	774056.0	779626.0	785216.0	790826.0	796456.0	802106.0	807776.0	813466.0	819176.0	824906.0	830656.0	836426.0	842216.0	848026.0	853856.0	859706.0	865576.0	871466.0	877376.0	883306.0	889256.0	895226.0	901216.0	907226.0	913256.0	919306.0	925376.0	931466.0	937576.0	943706.0	949856.0	956026.0	962216.0	968426.0	974656.0	980906.0	987176.0	993466.0	999776.0	1006106.0	1012456.0	1018806.0	1025156.0	1031506.0	1037856.0	1044206.0	1050556.0	1056906.0	1063256.0	1069606.0	1075956.0	1082306.0	1088656.0	1095006.0	1101356.0	1107706.0	1114056.0	1120406.0	1126756.0	1133106.0	1139456.0	1145806.0	1152156.0	1158506.0	1164856.0	1171206.0	1177556.0	1183906.0	1190256.0	1196606.0	1202956.0	1209306.0	1215656.0	1222006.0	1228356.0	1234706.0	1241056.0	1247406.0	1253756.0	1260106.0	1266456.0	1272806.0	1279156.0	1285506.0	1291856.0	1298206.0	1304556.0	1310906.0	1317256.0	1323606.0	1329956.0	1336306.0	1342656.0	1349006.0	1355356.0	1361706.0	1368056.0	1374406.0	1380756.0	1387106.0	1393456.0	1400006.0	1406456.0	1412906.0	1419356.0	1425806.0	1432256.0	1438706.0	1445156.0	1451606.0	1458056.0	1464506.0	1470956.0	1477406.0	1483856.0	1490306.0	1496756.0	1503206.0	1509656.0	1516106.0	1522556.0	1529006.0	1535456.0	1541906.0	1548356.0	1554806.0	1561256.0	1567706.0	1574156.0	1580606.0	1587056.0	1593506.0	1600006.0	1606456.0	1612906.0	1619356.0	1625806.0	1632256.0	1638706.0	1645156.0	1651606.0	1658056.0	1664506.0	1670956.0	1677406.0	1683856.0	1690306.0	1696756.0	1703206.0	1709656.0	1716106.0	1722556.0	1729006.0	1735456.0	1741906.0	1748356.0	1754806.0	1761256.0	1767706.0	1774156.0	1780606.0	1787056.0	1793506.0	1800006.0	1806456.0	1812906.0	1819356.0	1825806.0	1832256.0	1838706.0	1845156.0	1851606.0	1858056.0	1864506.0	1870956.0	1877406.0	1883856.0	1890306.0	1896756.0	1903206.0	1909656.0	1916106.0	1922556.0	1929006.0	1935456.0	1941906.0	1948356.0	1954806.0	1961256.0	1967706.0	1974156.0	1980606.0	1987056.0	1993506.0	2000006.0
Distance	0.0	60.0	110.0	176.0	256.0	346.0	446.0	556.0	676.0	806.0	946.0	1096.0	1256.0	1426.0	1606.0	1796.0	1996.0	2206.0	2426.0	2656.0	2906.0	3176.0	3466.0	3776.0	4106.0	4456.0	4826.0	5216.0	5626.0	6056.0	6506.0	6976.0	7466.0	7976.0	8506.0	9056.0	9626.0	10216.0	10826.0	11456.0	12106.0	12776.0	13466.0	14176.0	14906.0	15656.0	16426.0	17216.0	18026.0	18856.0	19706.0	20576.0	21466.0	22376.0	23306.0	24256.0	25226.0	26216.0	27226.0	28256.0	29306.0	30376.0	31466.0	32576.0	33706.0	34856.0	36026.0	37216.0	38426.0	39656.0	40906.0	42176.0	43466.0	44776.0	46106.0	47456.0	48826.0	50216.0	51626.0	53056.0	54506.0	55976.0	57466.0	58976.0	60506.0	62056.0	63626.0	65216.0	66826.0	68456.0	70106.0	71776.0	73466.0	75176.0	76906.0	78656.0	80426.0	82216.0	84026.0	85856.0	87706.0	89576.0	91466.0	93376.0	95306.0	97256.0	99226.0	101216.0	103226.0	105256.0	107306.0	109376.0	111466.0	113576.0	115706.0	117856.0	120026.0	122216.0	124426.0	126656.0																																																																																																																																																																																																																																																																																																																																																																								



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

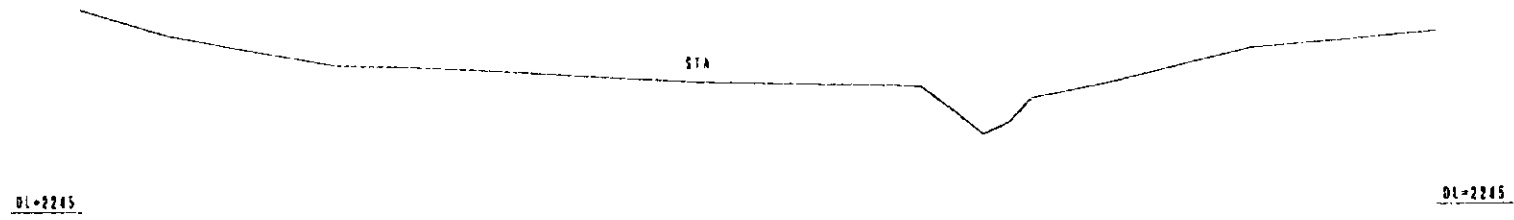
DRAWING NO.  
LAKR2-PLAN-01

1-5-40

No.78,89

Cross Section S=1:200

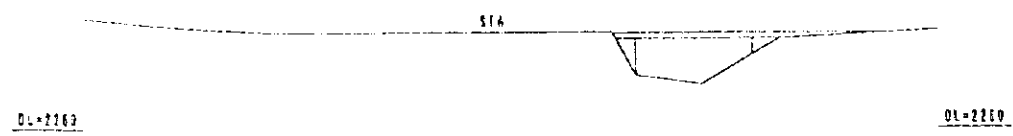
LAKR2-01



LAKR2-02

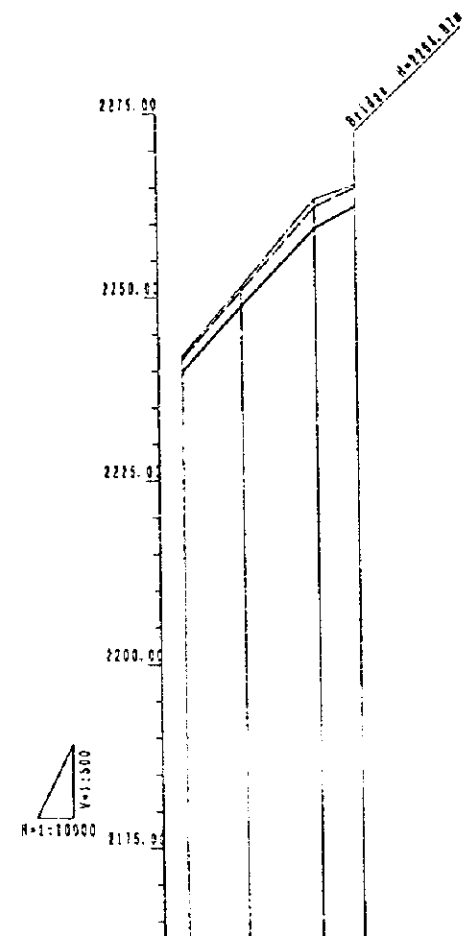


LAKR2-03



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAKR2-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (LAKR2) RIVER (01/01)

Profile Section  $V=1:500$   
 $H=1:10000$

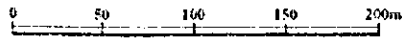
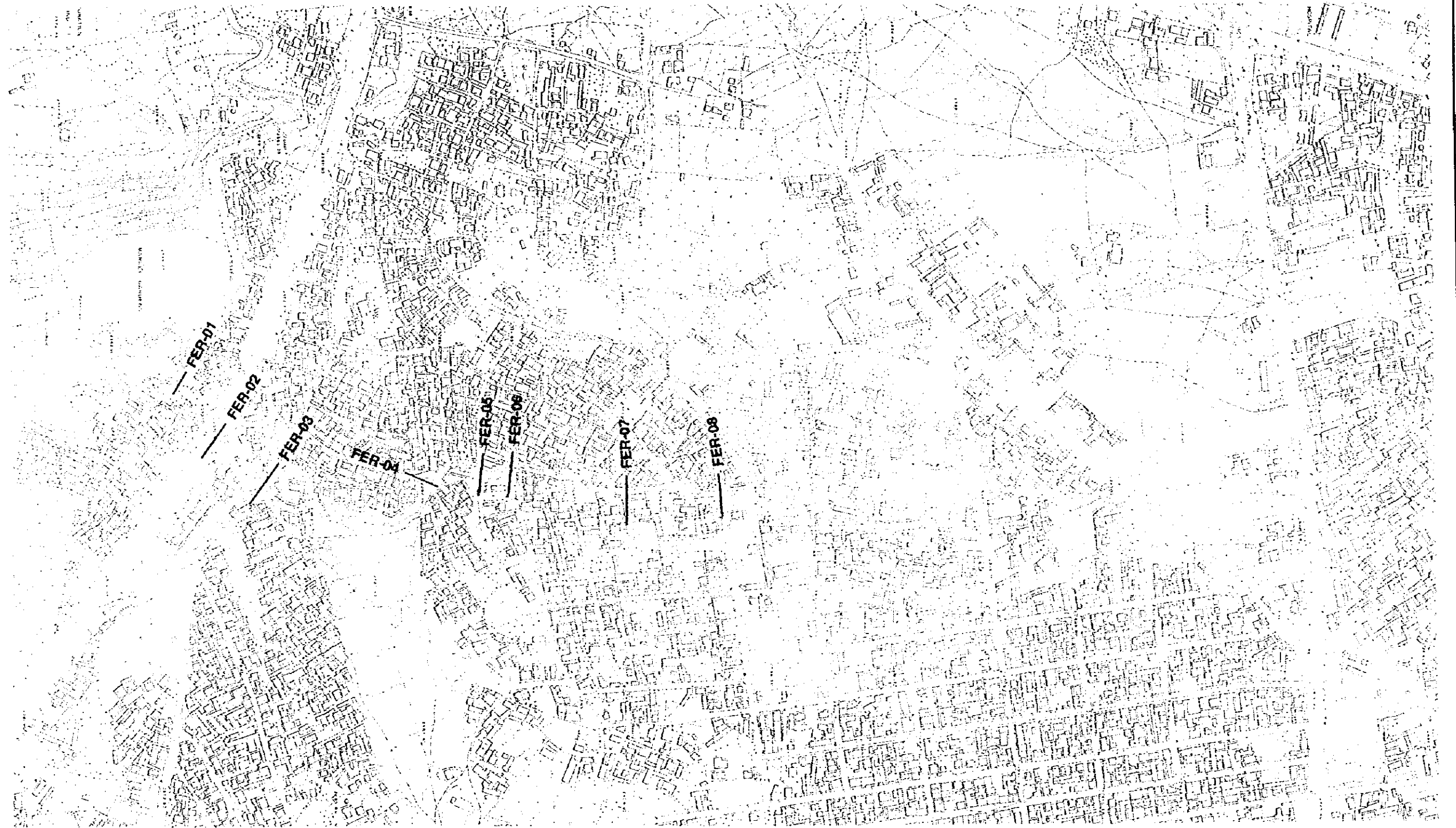


96=2160.00			
Left Bank	2242.16	2242.16	2242.16
Right Bank	2241.66	2250.65	2241.66
River Bed	2240.08	2236.34	2241.66
Accumulate D.	0.0	170.0	484.0
Distance	0.0	170.0	110.0
Station No.	1	2	3

Left Bank	-----
Right Bank	-----
River Bed	-----

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. LAKR2-SECT-01	LOCATION OF RIVER PROFILE SECTION LITTLE AKAKI (LAKR2) RIVER (01/01)

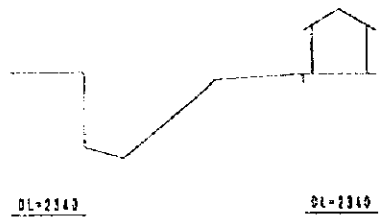




THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO.	
FER-PLAN-01	

Cross Section S=1:200

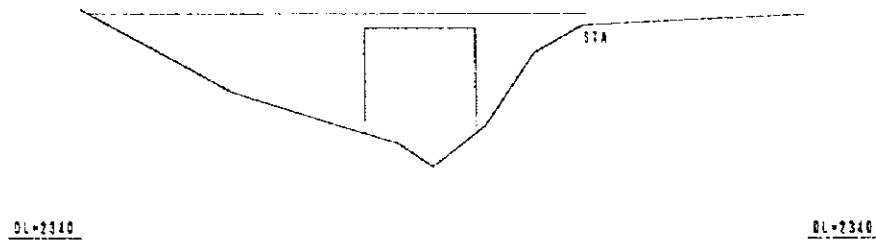
FER-01



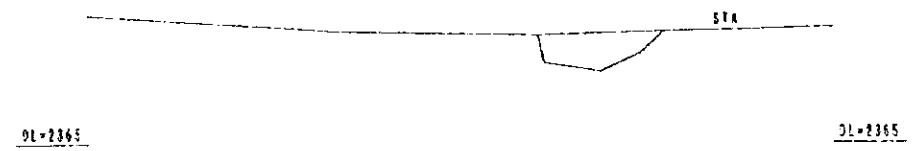
FER-04



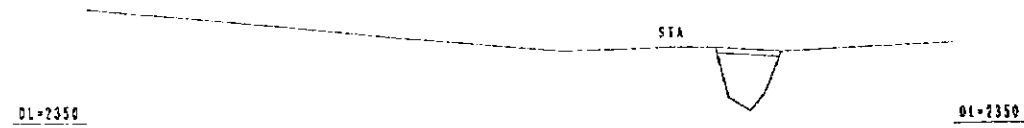
FER-02



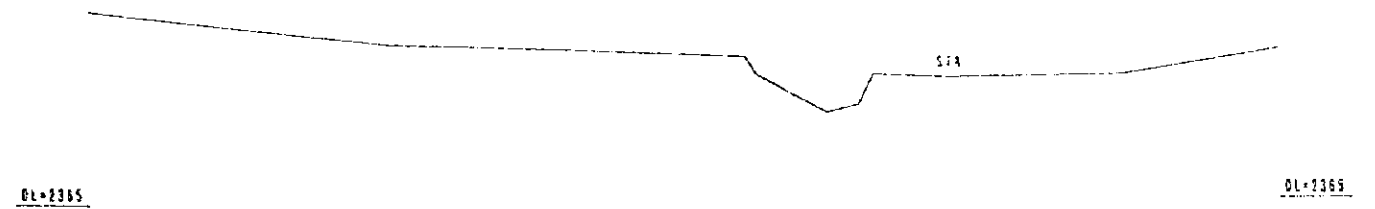
FER-05



FER-03

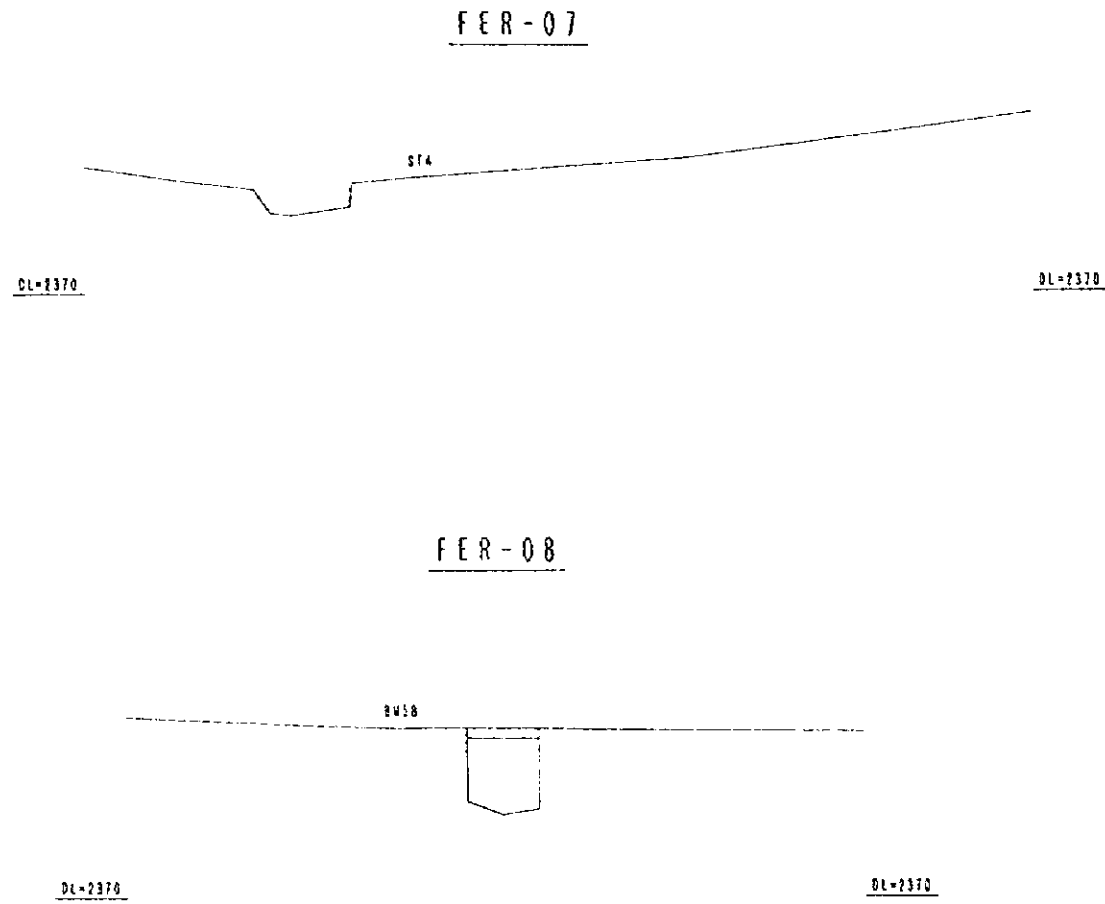


FER-06



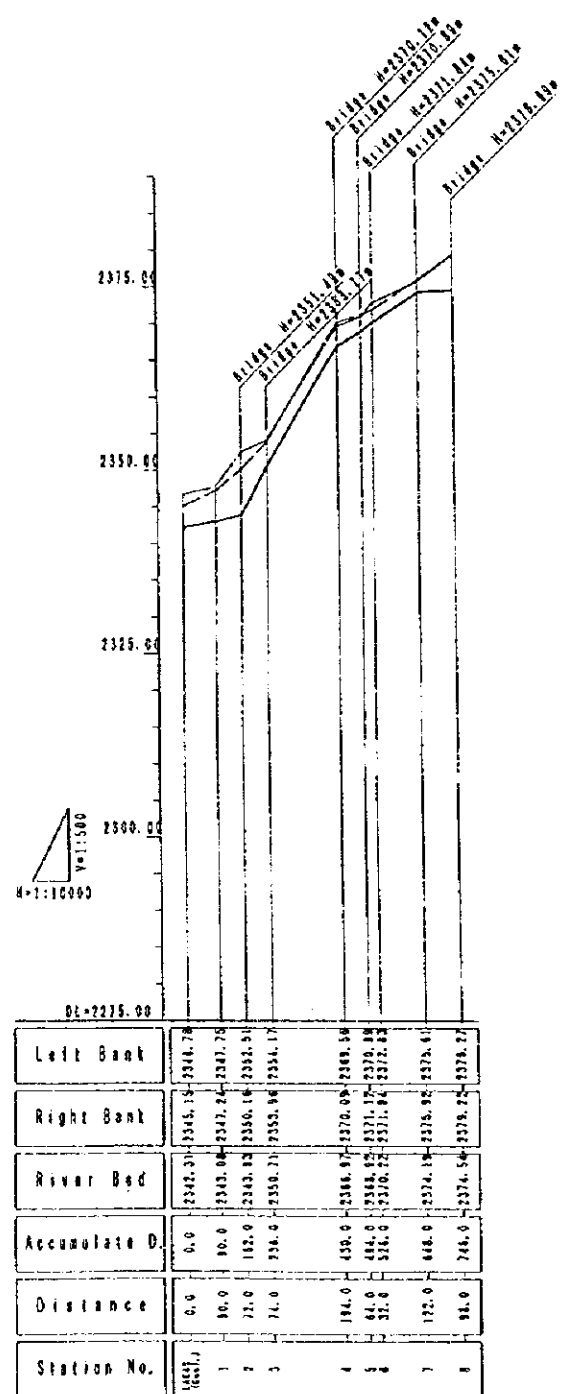
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. FER-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (FER) RIVER (01/02)

Cross Section S=1:200



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. FER-SECT-02	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (FER) RIVER (02/02)

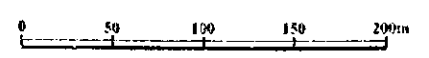
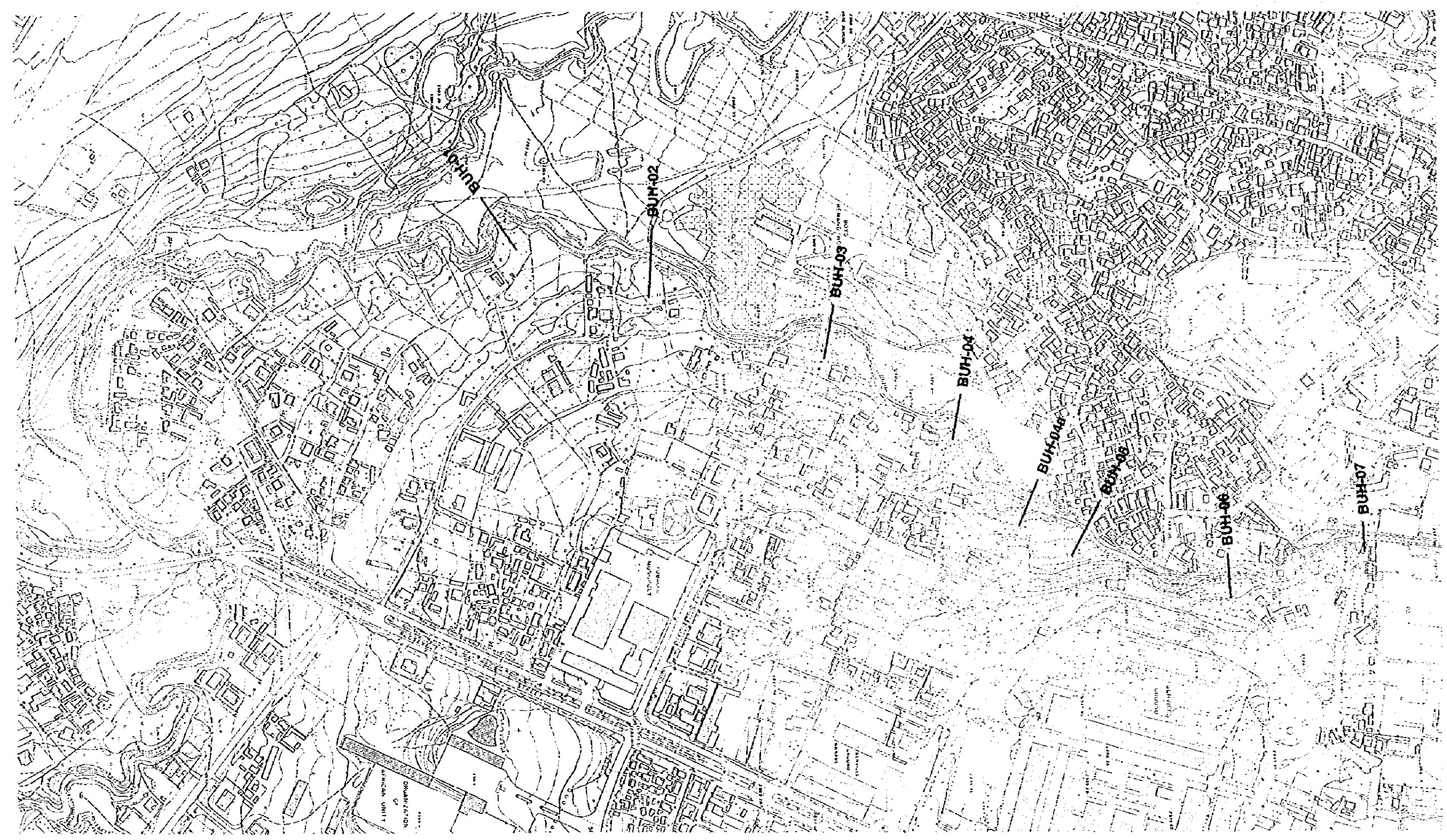
Profile Section  $V=1:500$   
 $H=1:10000$



Left Bank	-----
Right Bank	-----
River Bed	-----

THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
 IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 REGION 14 ADMINISTRATION

DRAWING NO. FER-SECT-01	LOCATION OF RIVER PROFILE SECTION LITTLE AKAKI (FER) RIVER (01/01)
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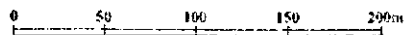


THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.	
BUH-PLAN-01	

No.66,78



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

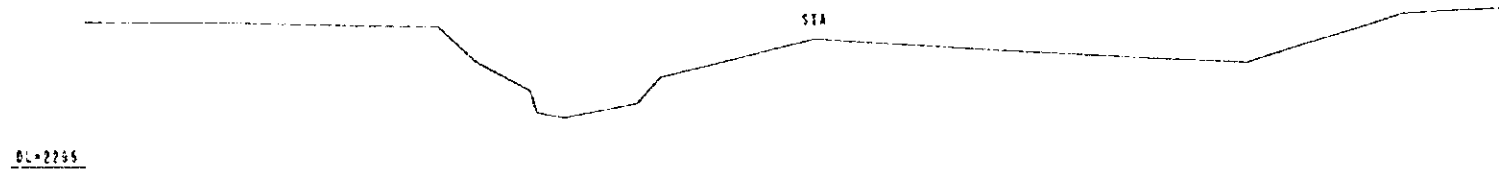
JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.  
BUH-PLAN-02

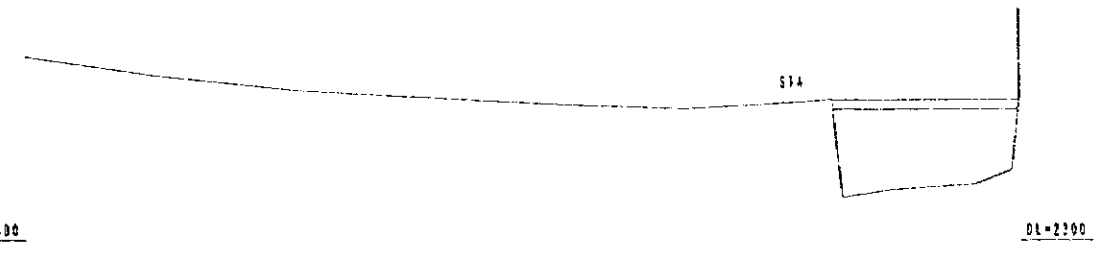
1-5-48

Cross Section S=1:200

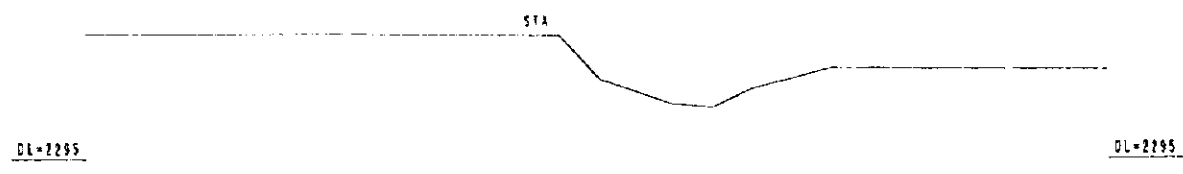
BUH-01



BUH-03



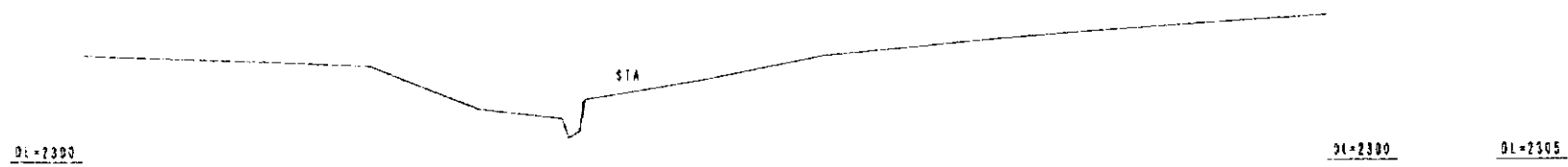
BUH-01 (a)



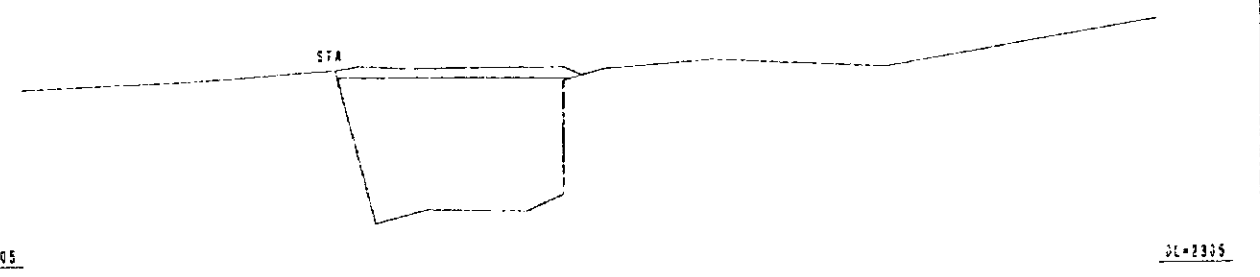
BUH-04



BUH-02



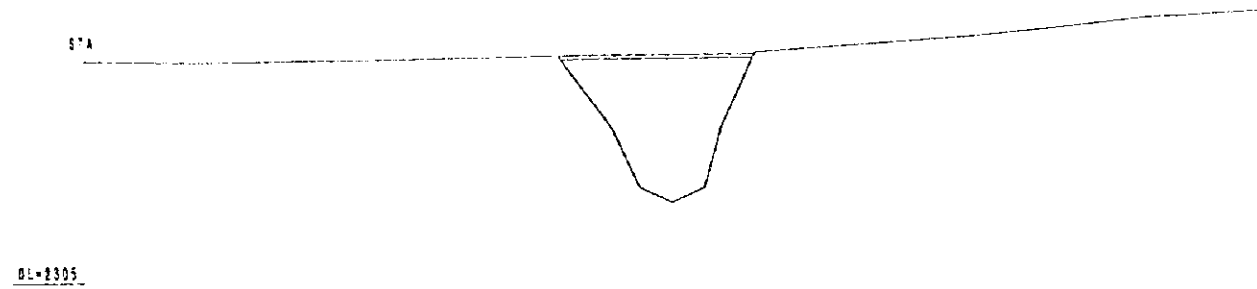
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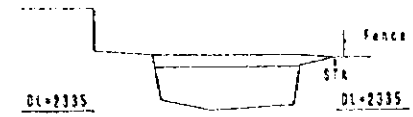
THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY	
REGION 14 ADMINISTRATION	
DRAWING NO. BUH-SECT-01	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (BUH) RIVER (01/02)

Cross Section S=1:200

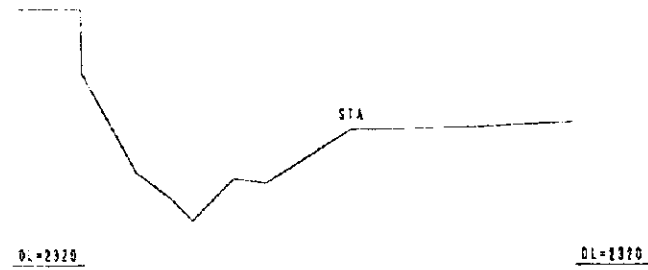
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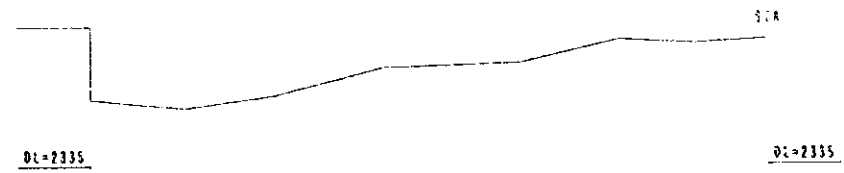
BUH-08



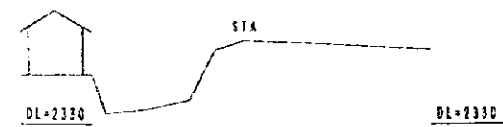
BUH-06



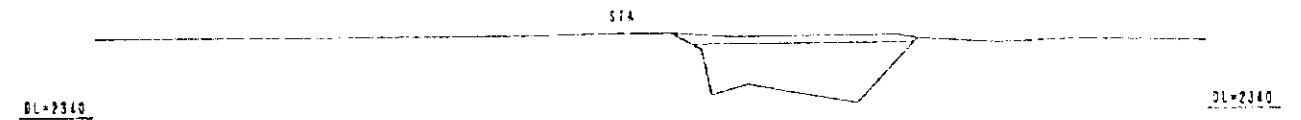
BUH-09



BUH-07



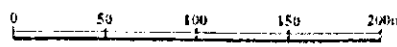
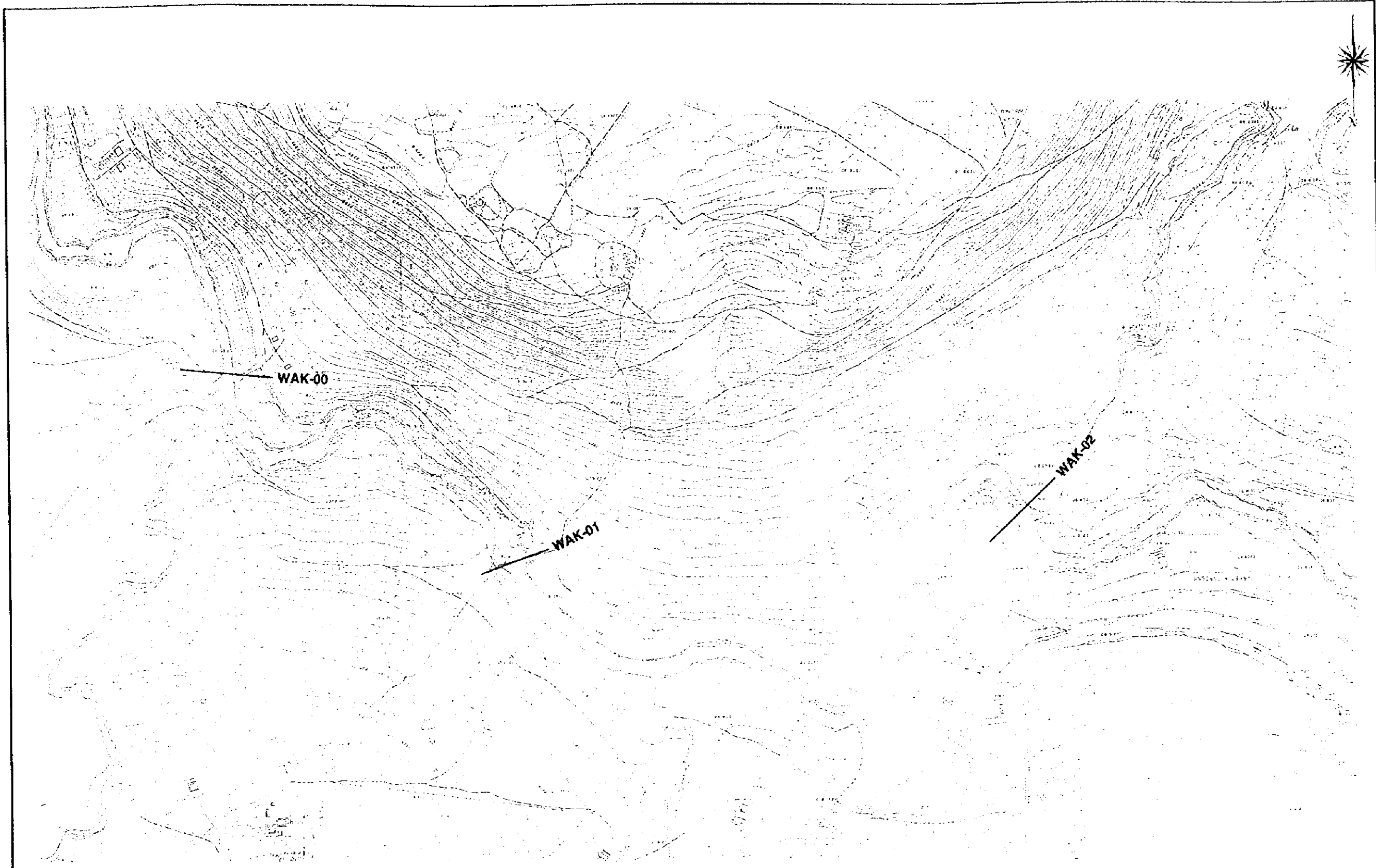
BUH-10



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO. BUH-SECT-02	LOCATION OF RIVER CROSS SECTION LITTLE AKAKI (BUH) RIVER (02/02)



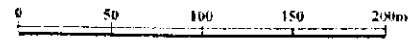




THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.	
WAK-PLAN-01	



THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA	
JAPAN INTERNATIONAL COOPERATION AGENCY REGION 14 ADMINISTRATION	
DRAWING NO.	
WAK-PLAN-02	

No.99,108



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THE STUDY ON ADDIS ABABA FLOOD CONTROL PROJECT  
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

JAPAN INTERNATIONAL COOPERATION AGENCY  
REGION 14 ADMINISTRATION

DRAWING NO.  
WAK-PLAN-03

No.88,89,98,99