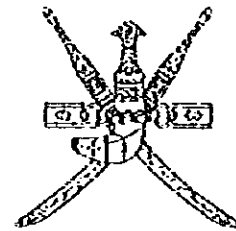


SULTANATE OF OMAN
MINISTRY OF COMMUNICATIONS
DIRECTORATE GENERAL OF ROADS

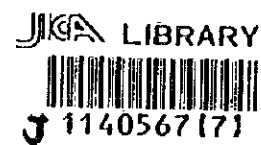


CONSTRUCTION OF PEDESTRIAN UNDERPASS
AT
AL QARAT
BATINAH HIGHWAY

TENDER DOCUMENT

DRAWINGS

PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL



March, 1997

SSF
CR(5)
97-015

DRAWING SCHEDULE
(PU4-AL QARAT PEDESTRIAN UNDERPASS)

SHEET NO.	DRAWING TITLE
G	
GENERAL	
G - 1	Drawing Schedule
P	
PEDESTRIAN UNDERPASS	
P - 1	General View (1)
P - 2	General View (2)
P - 3	General View (3)
P - 4	Re-bar Arrangement (1)
P - 5	Re-bar Arrangement (2)
P - 6	Re-bar Arrangement (3)
P - 7	Re-bar Arrangement (4)
P - 8	Re-bar Arrangement (5)
P - 9	Re-bar Arrangement (6)
P - 10	Re-bar Arrangement (7)
P - 11	Re-bar Arrangement (8)
P - 12	Re-bar Arrangement (9)
P - 13	Re-bar Arrangement (10)
T	
TEMPORARY WORKS	
T - 1	Construction Sequence
T - 2	Detour Layout

NOTES:		JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
		JICA STUDY TEAM	PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
		PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL	TITLE :	PAU-4, AL QARAT DRAWING SCHEDULE
			DATE :	DWG NO. G-1

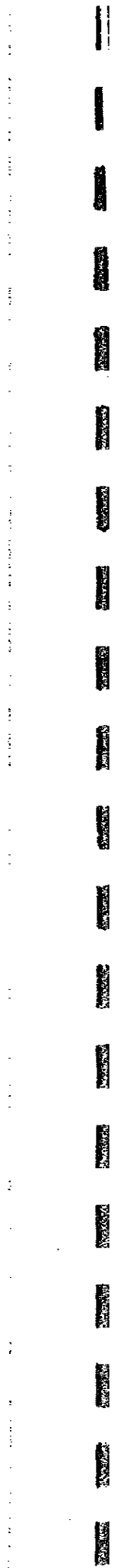
1140567 (7)

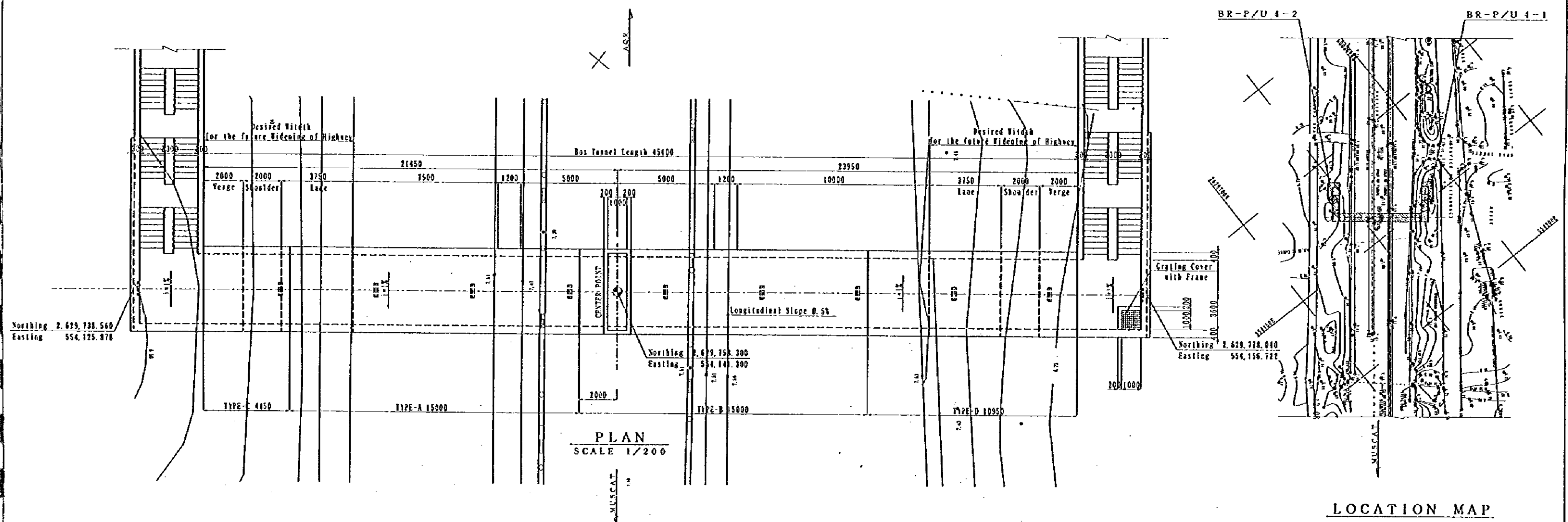
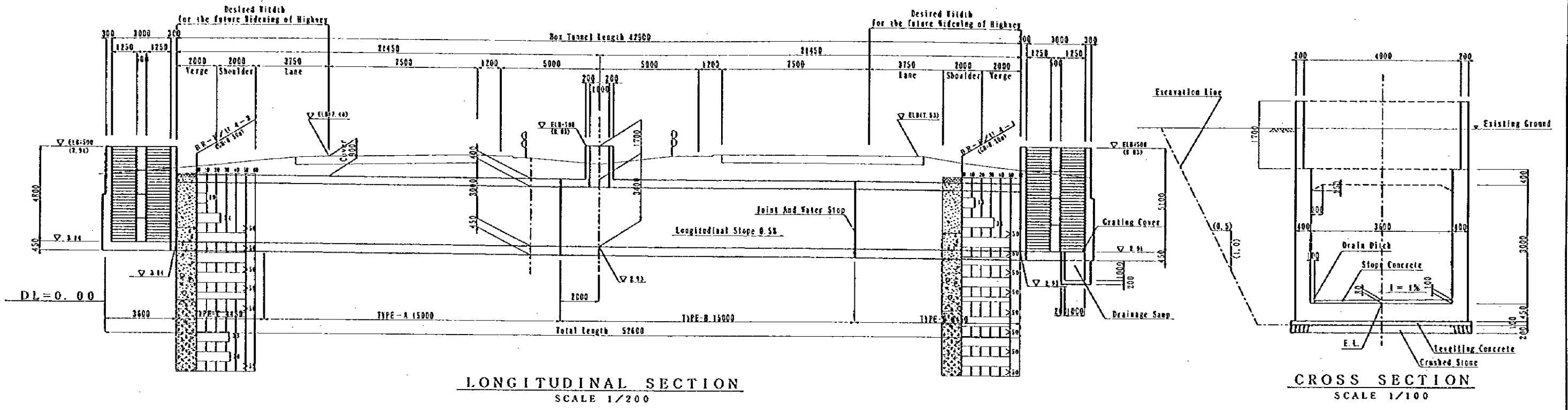


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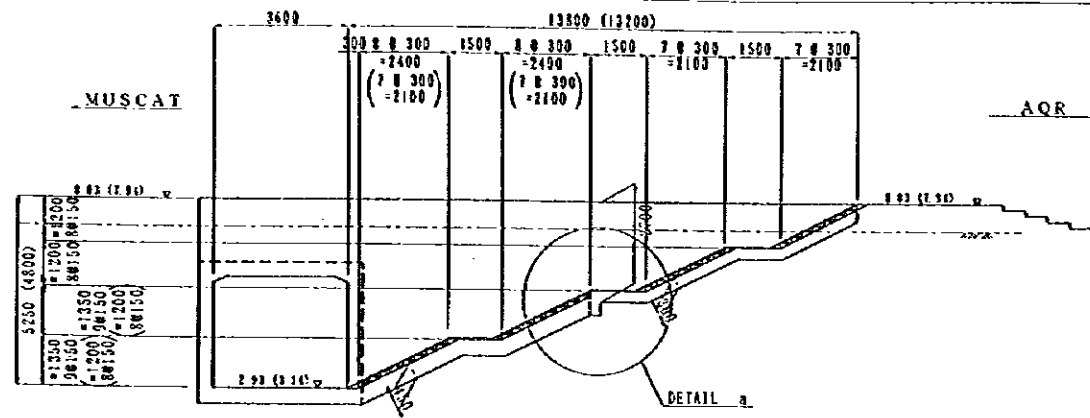
1140567 (7)

1140567 (7)

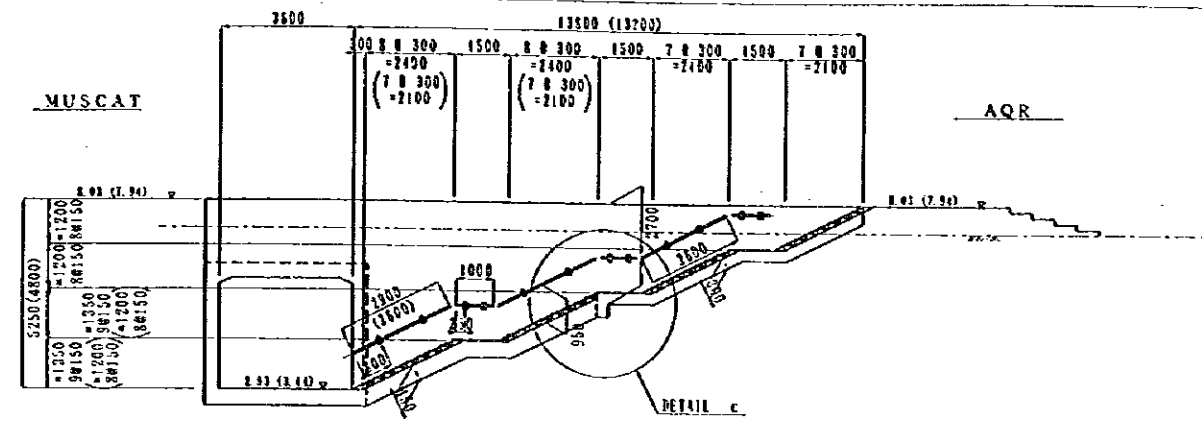




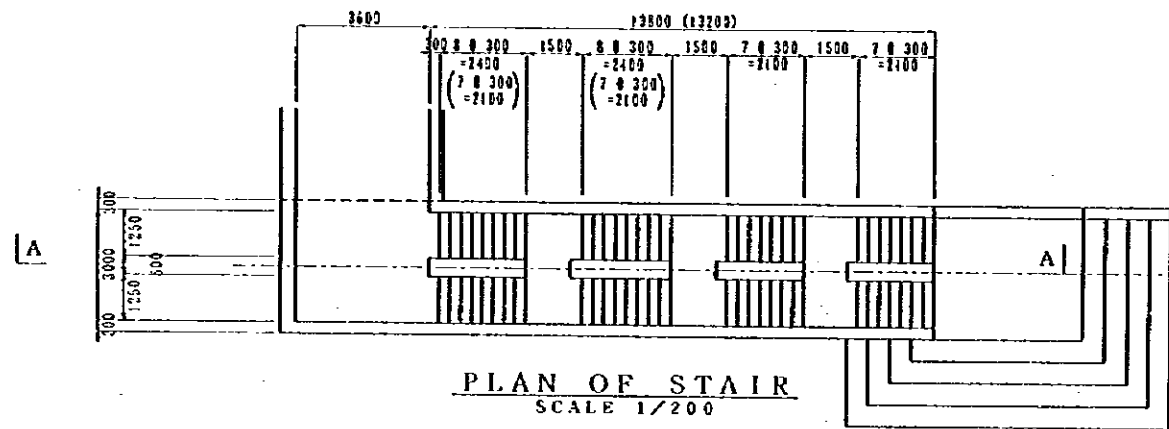
NOTES:	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	JICA STUDY TEAM	PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	PACIFIC CONSULTANTS INTERNATIONAL	TITLE : P/U-4, AL QARAT GENERAL VIEW (I)
	FUKUYAMA CONSULTANTS INTERNATIONAL	DATE
		DWG NO. P-1



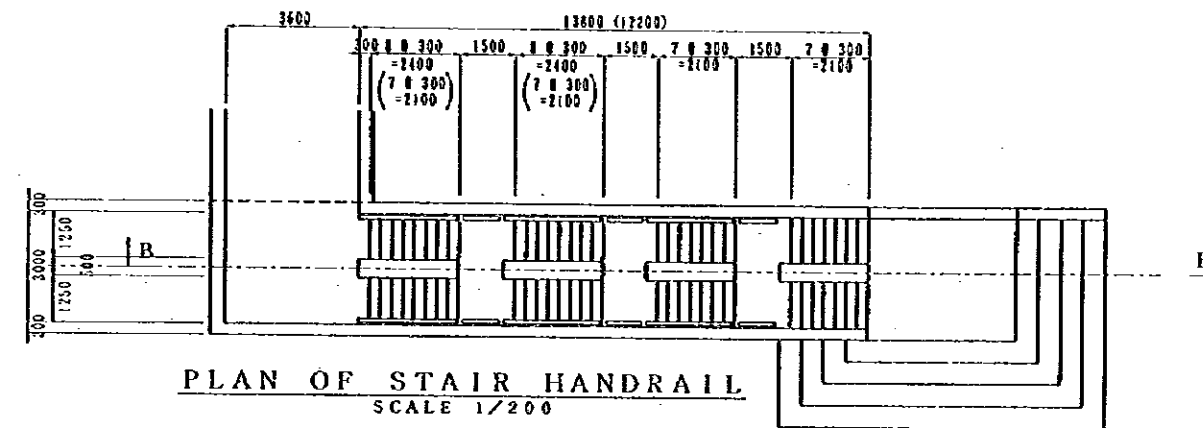
STAIR (SECTION A-A)
SCALE 1/200



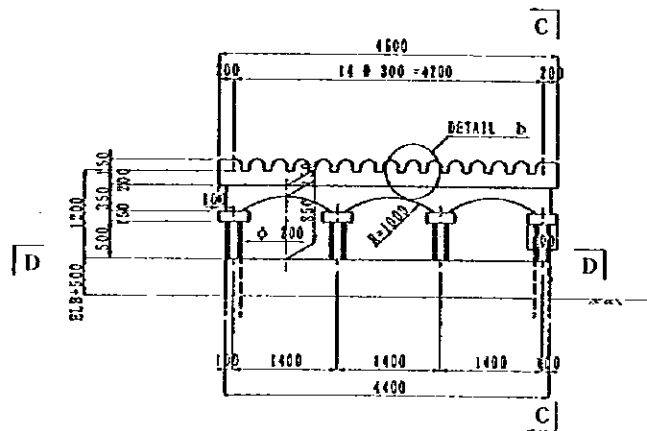
STAIR HANDRAIL (SECTION B-B)
SCALE 1/200



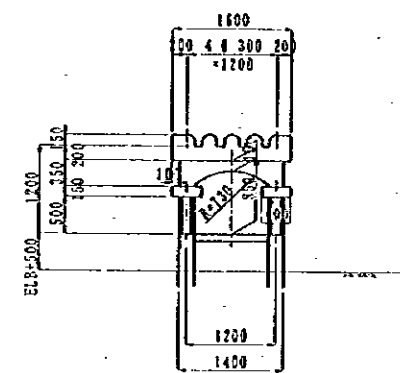
PLAN OF STAIR
SCALE 1/200



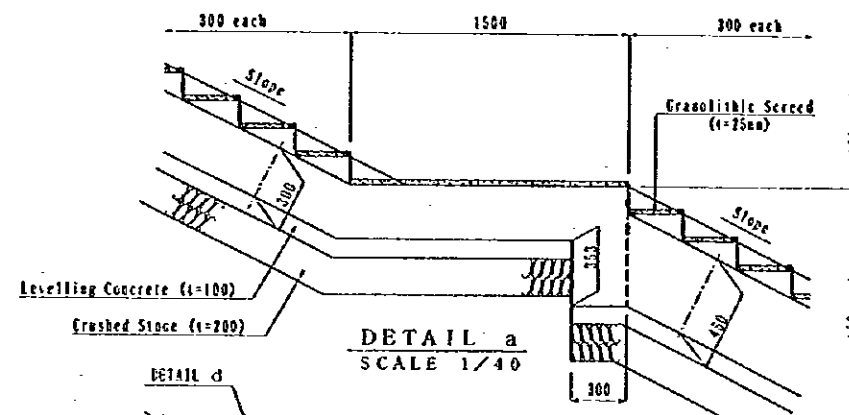
PLAN OF STAIR HANDRAIL
SCALE 1/200



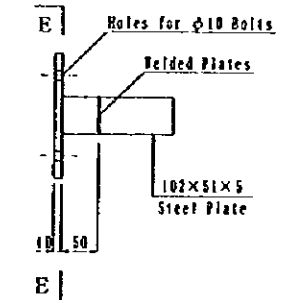
SIDE ELEVATION
SCALE 1/100



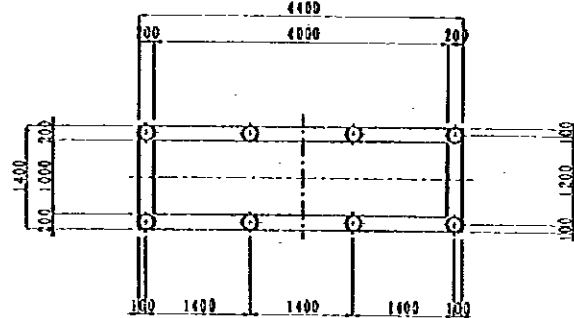
SECTION C-C
SCALE 1/100



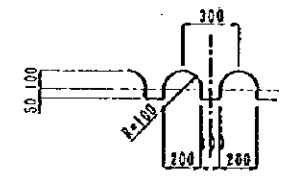
DETAIL a
SCALE 1/40



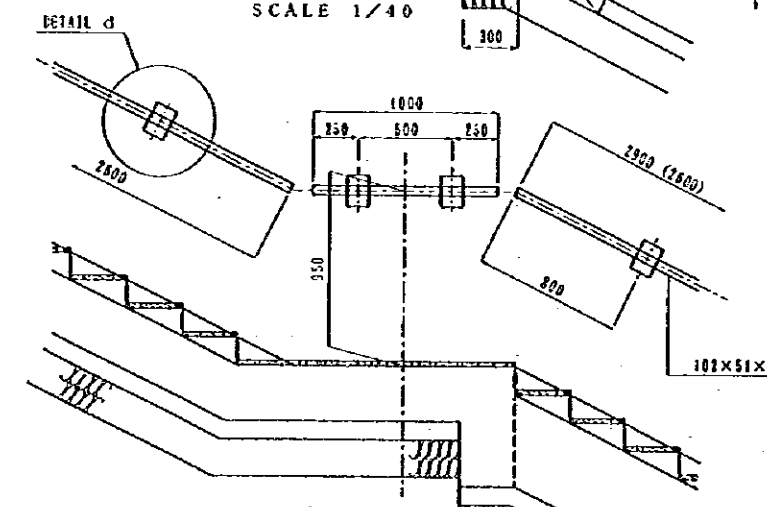
DETAIL d
SCALE 1/10



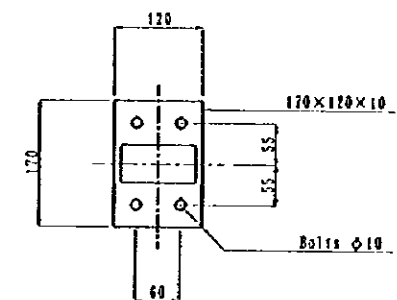
SECTION D-D
SCALE 1/100



DETAIL b
SCALE 1/40



DETAIL c
SCALE 1/40



SECTION E-E
SCALE 1/10

CANOPY ON LIGHT WELL

NOTES: Dimensions of () value are for inland stair.

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

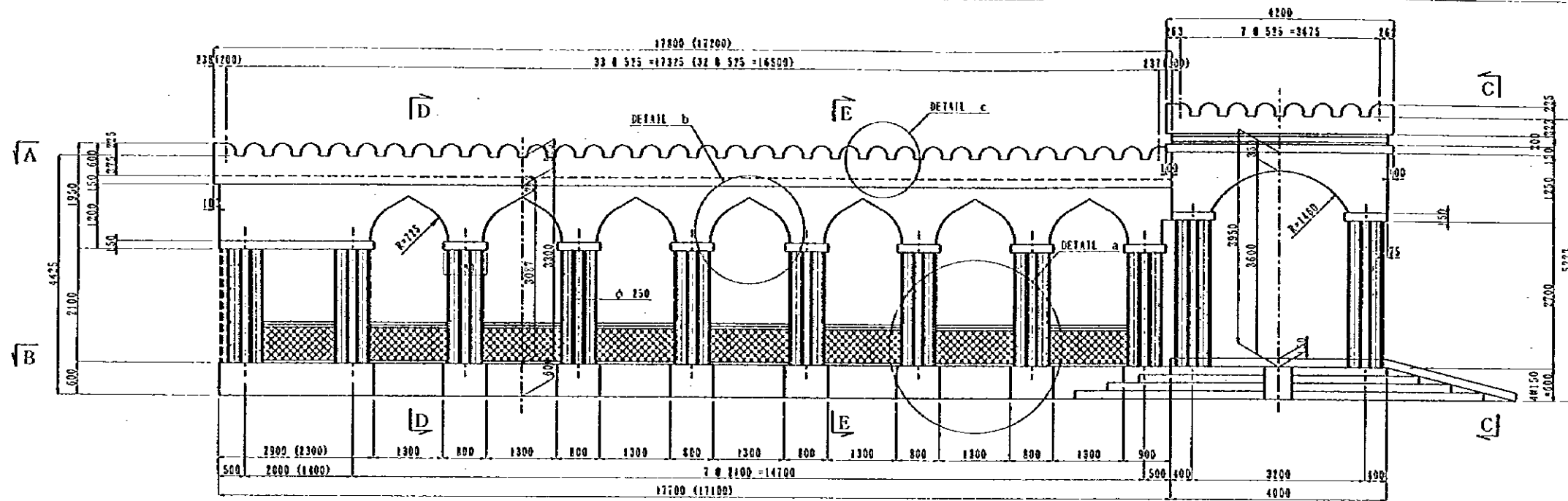
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FLUJYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

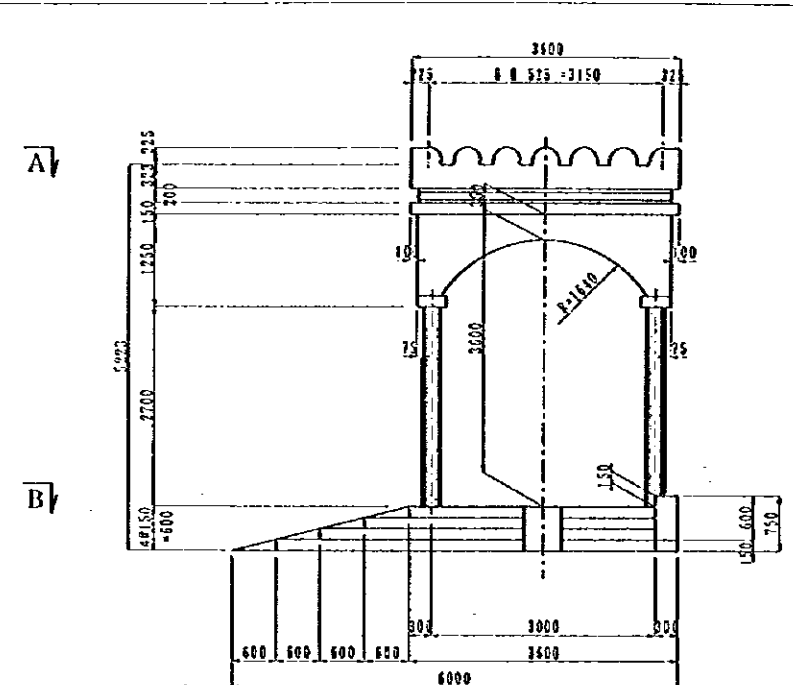
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE : P/U-4, AL QARAT GENERAL VIEW (2)

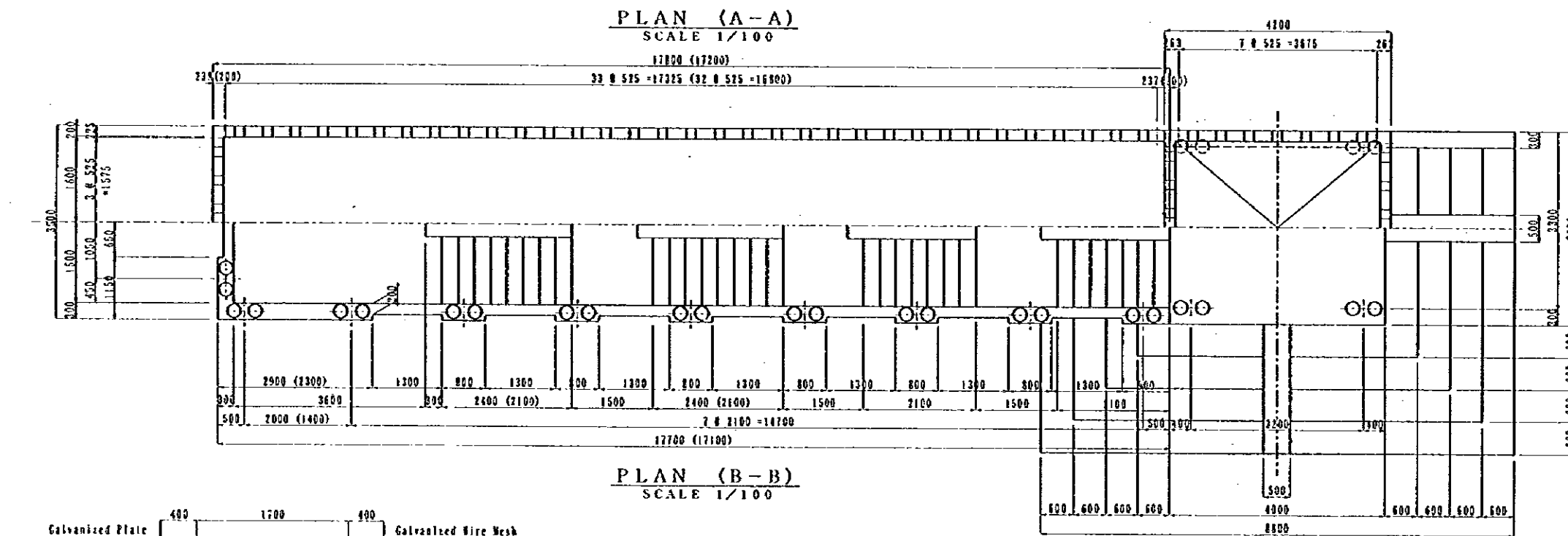
DATE : _____ Dwg No. P-2



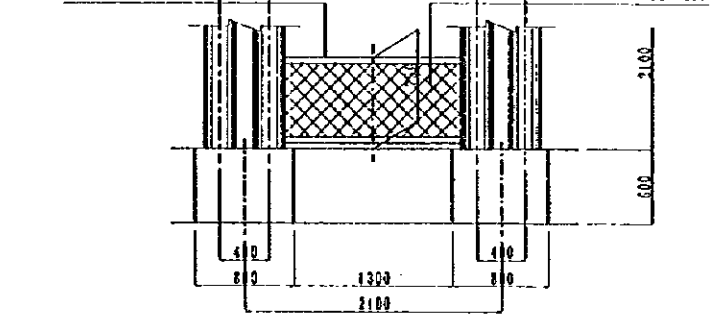
PROFILE OF CANOPY
SCALE 1/100



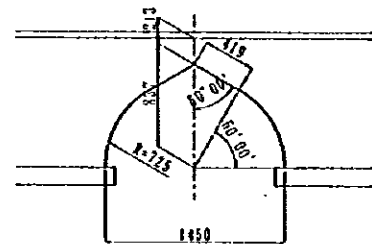
ENTRANCE (C-C)
SCALE 1/100



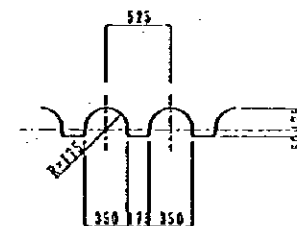
PLAN (A-A)
SCALE 1/100



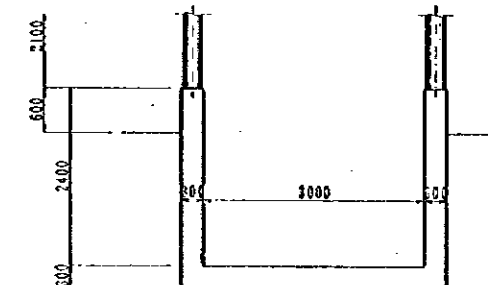
DETAIL a
SCALE 1/60



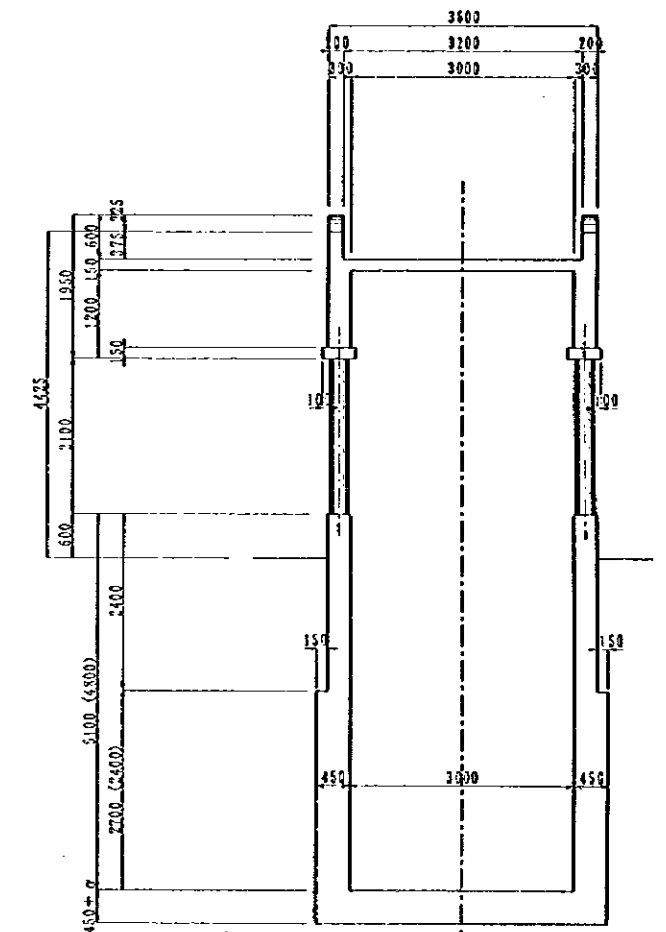
DETAIL b
SCALE 1/60



DETAIL c
SCALE 1/60



CROSS SECTION E-E
SCALE 1/100



CROSS SECTION D-D
SCALE 1/100

NOTES: Dimensions of () value are for inland stair.

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

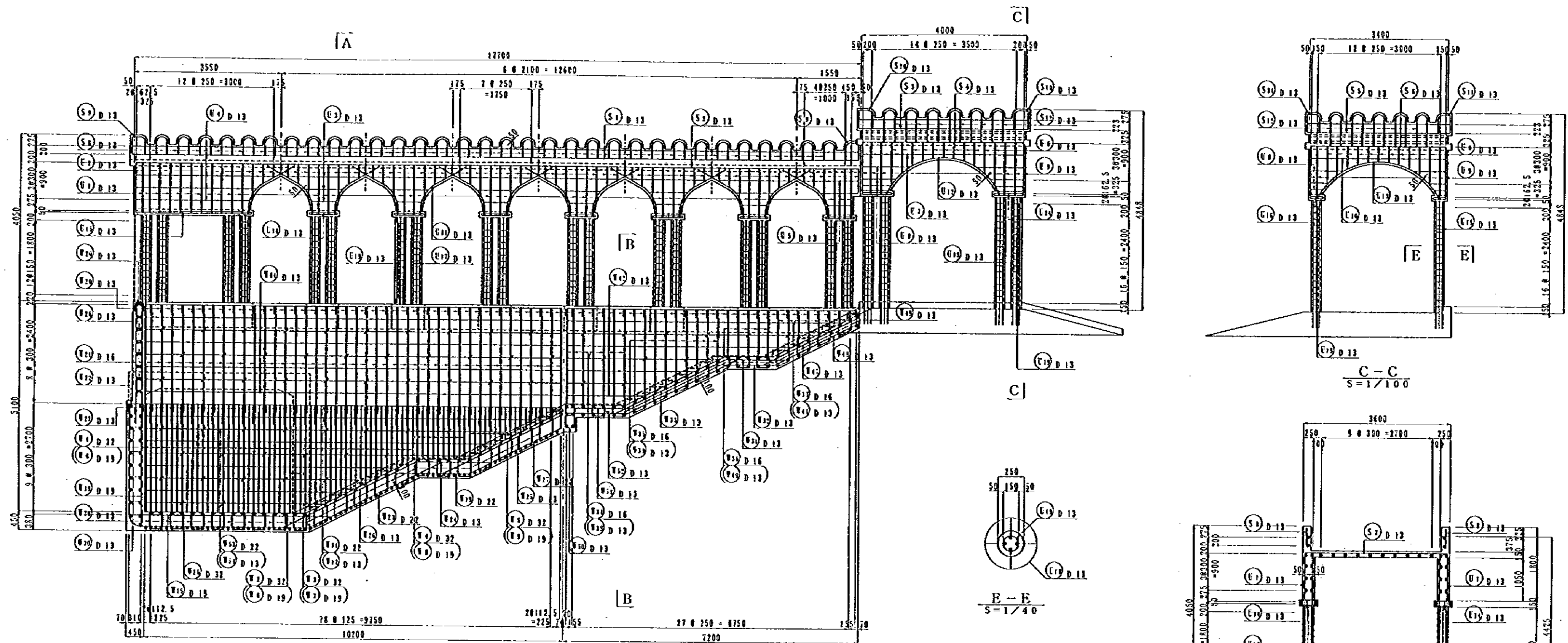
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

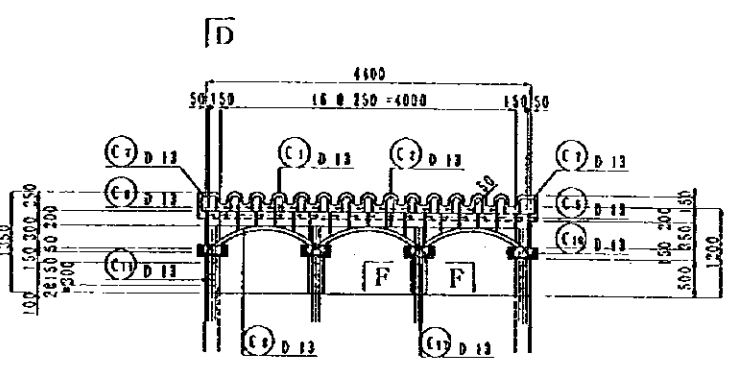
TITLE : P/U-4, AL QARAT GENERAL VIEW (3)

DATE

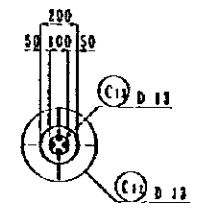
DWG NO. P-3



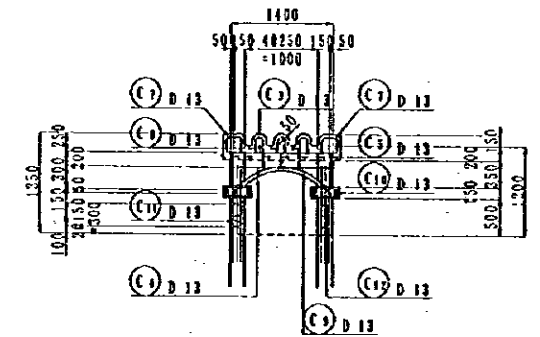
A
SIDE VIEW
S=1/100



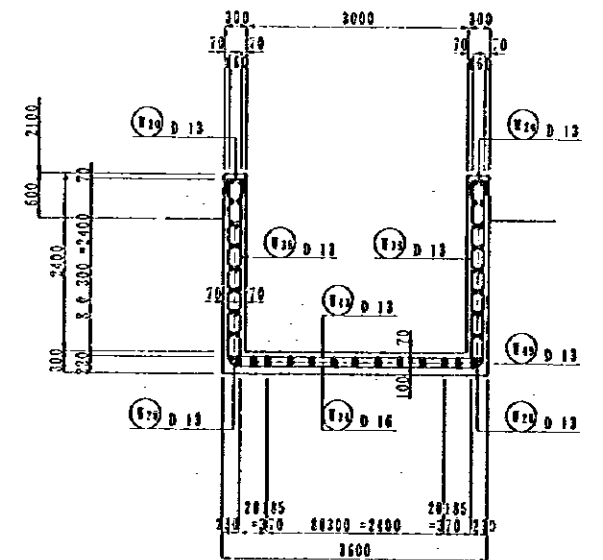
D
CANOPY ON LIGHT
S=1/100



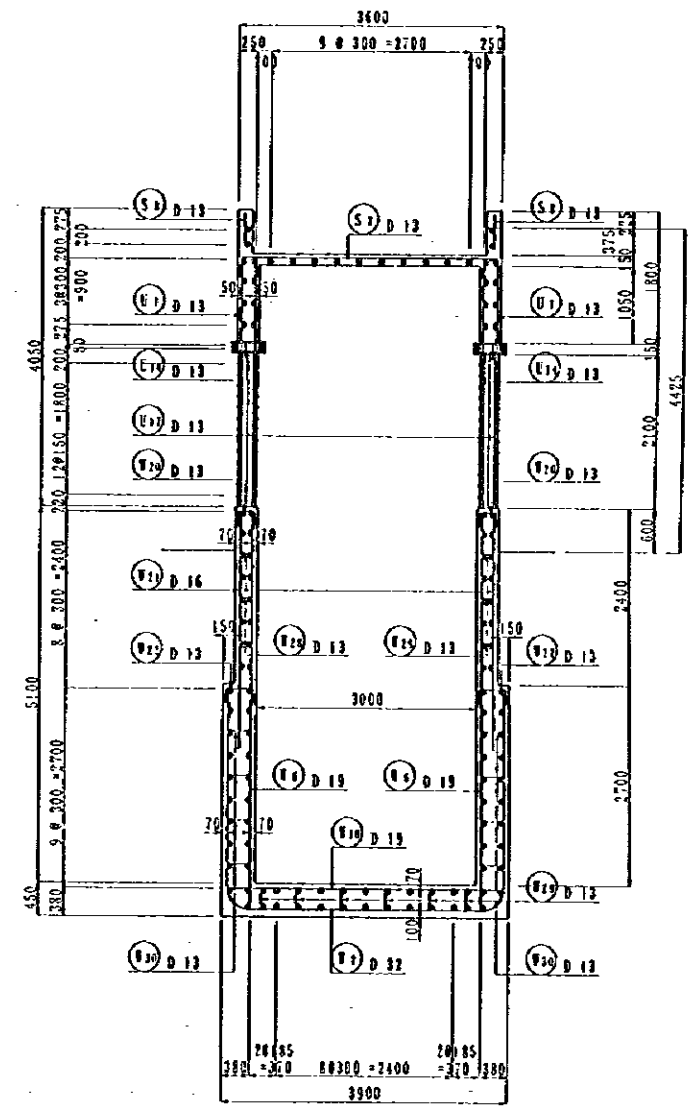
F-F
S=1/40



D-D
S=1/100



B-B
S=1/100

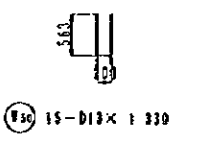
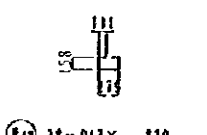
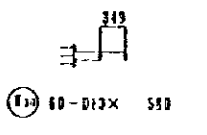
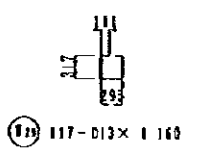
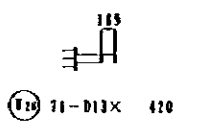
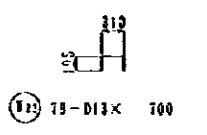
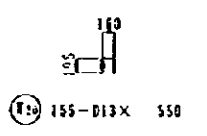
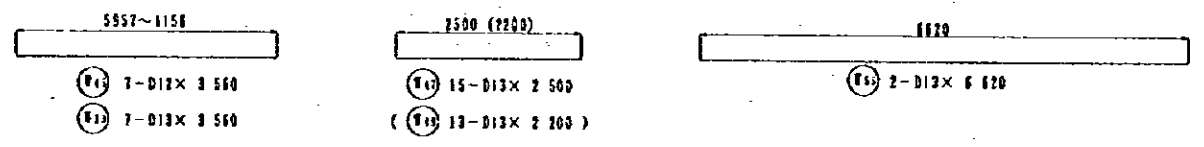
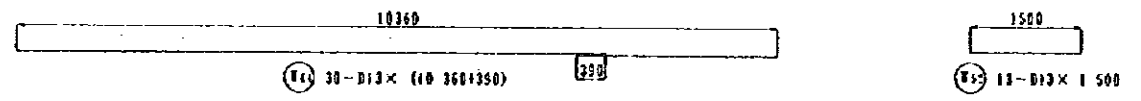
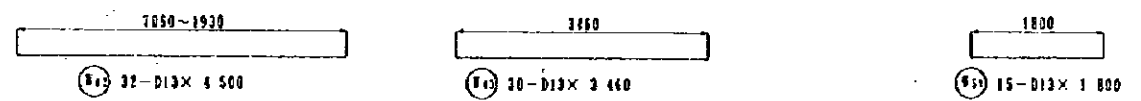
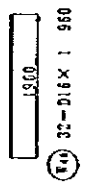
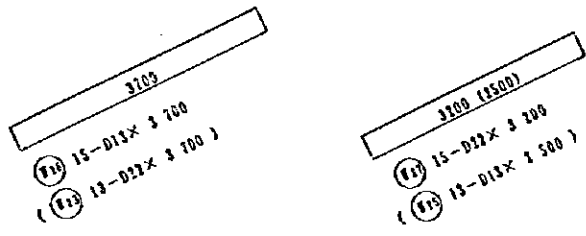
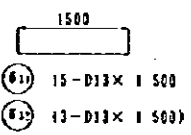
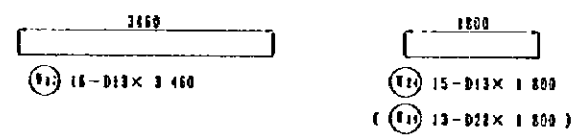
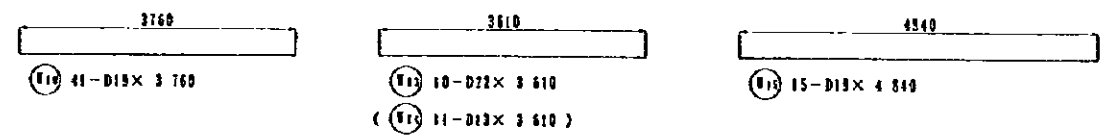
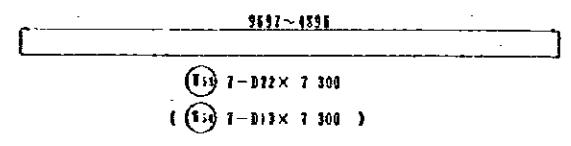
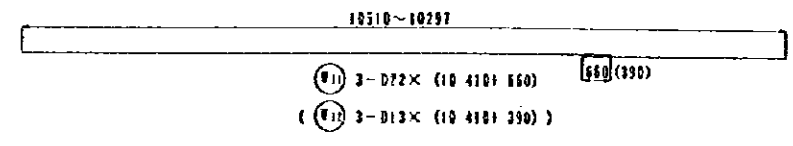
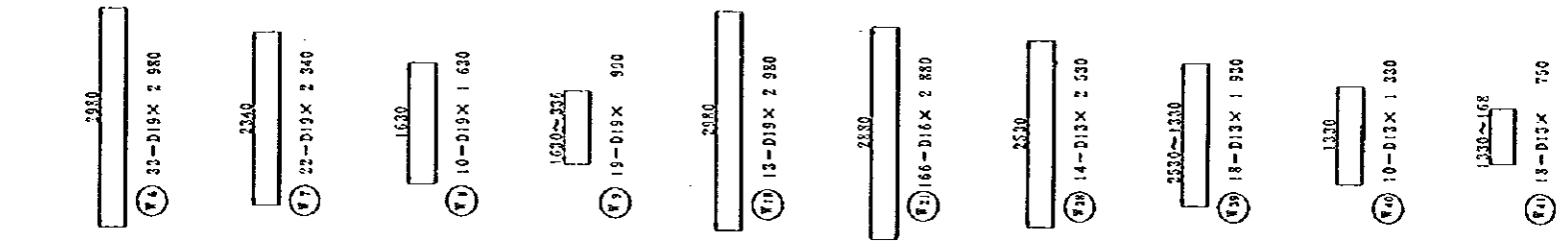
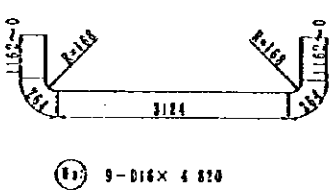
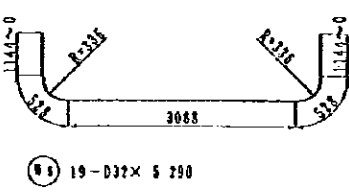
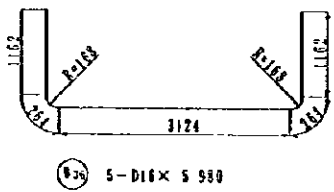
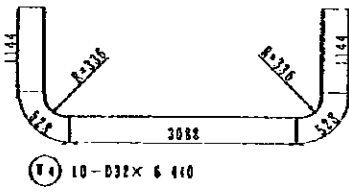
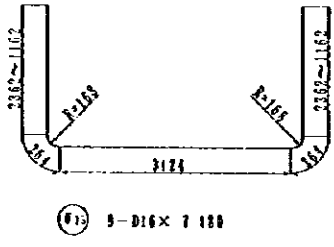
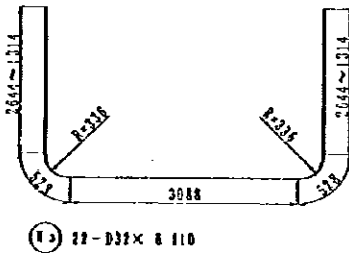
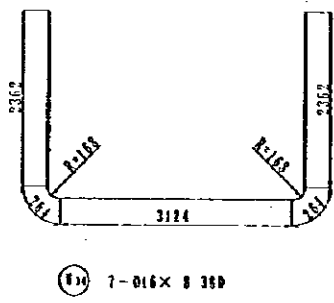
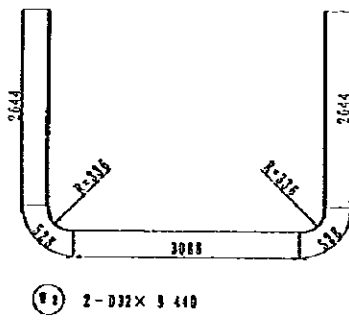
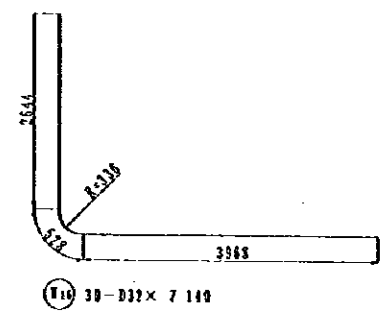
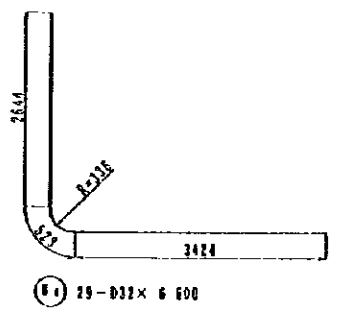


A-A
S=1/100

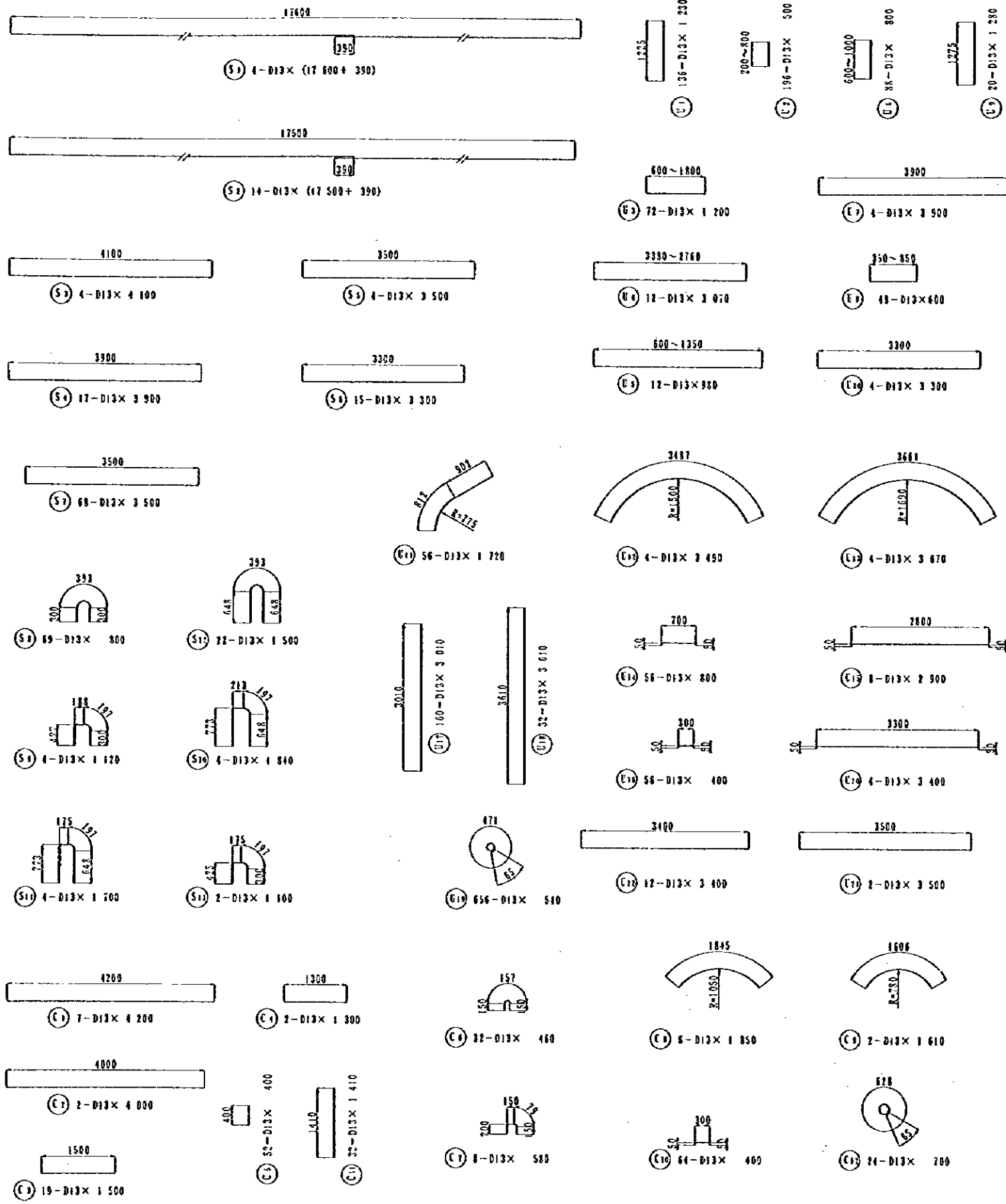
NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (I)
DATE : _____
DWG NO. : P-4



NOTES:	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FLUCYAMA CONSULTANTS INTERNATIONAL		PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
			TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (2)
			DATE : _____ Dwg No. P-5



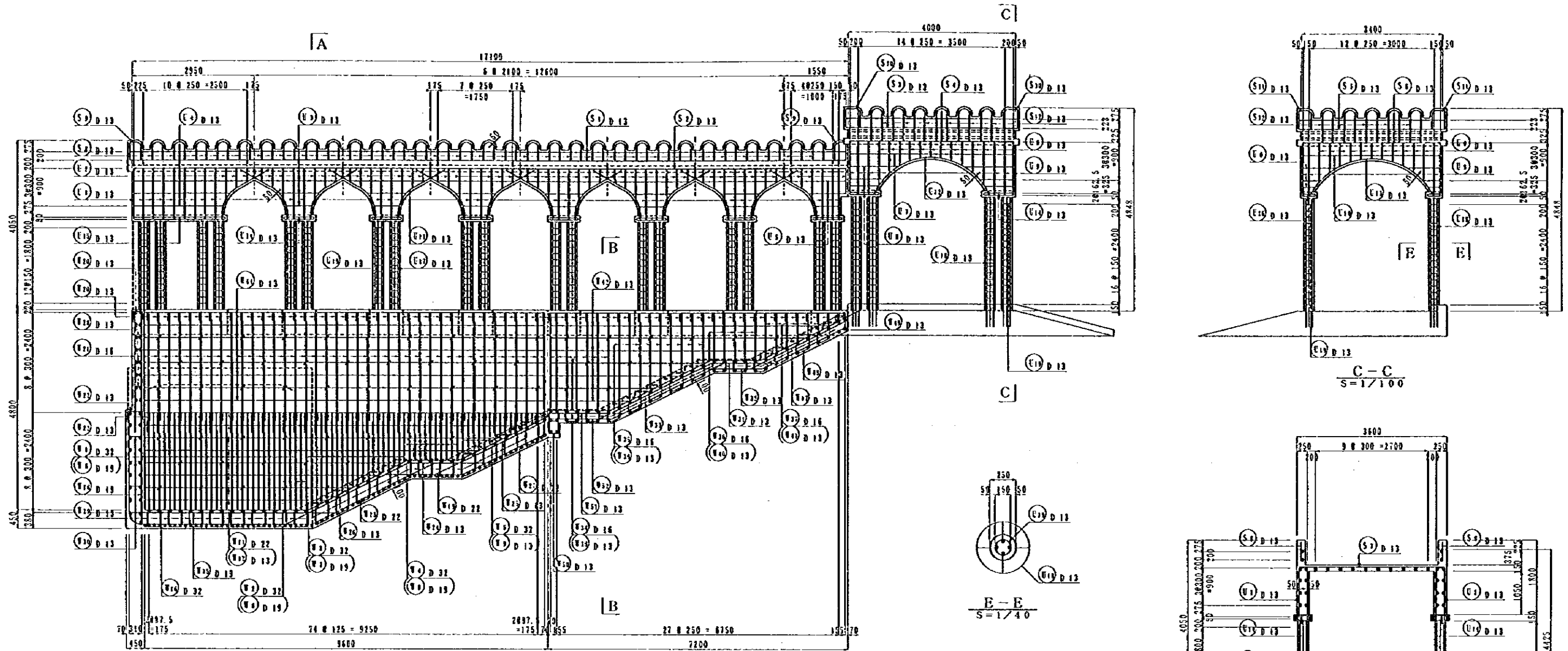
REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT (kg)	NMB	G WEIGHT	WEIGHT	REMARKS
1	D 32	6 600	6.403	29	42.260	1225.5	L
2	"	3 410	"	2	60.444	170.9	L
3	"	8 110	"	22	51.928	1142.4	"
4	"	6 410	"	10	41.735	417.4	"
5	"	5 290	"	19	33.872	643.6	"
6	D 19	2 980	2.235	33	6.668	219.8	I
7	"	2 310	"	22	5.230	115.1	"
8	"	1 630	"	18	3.643	66.4	"
9	"	990	"	19	2.213	42.0	"
10	"	3 700	"	41	8.270	339.1	"
11	D 22	11 810	3.042	3	33.675	101.0	"
12	D 13	10 800	0.994	3	10.735	32.2	"
13	D 22	3 610	3.042	10	10.922	109.8	"
14	D 13	3 610	0.994	11	3.588	39.5	"
15	"	4 840	"	15	4.811	72.2	"
16	D 32	7 410	6.403	30	47.446	1473.4	L
17	D 13	3 460	0.994	16	3.423	55.0	"
18	D 19	2 920	2.235	13	6.660	86.6	I
19	D 22	1 800	3.042	13	5.476	71.2	"
20	D 13	550	0.994	155	0.517	84.0	L
21	D 16	2 880	1.552	166	4.470	742.0	I
22	D 13	700	0.994	79	0.636	55.0	L
23	D 22	3 700	3.042	13	11.755	146.3	"
24	D 13	1 800	0.994	15	1.789	26.6	"
25	"	2 500	"	13	2.485	32.3	"
26	"	3 700	"	15	3.618	55.2	"
27	D 22	3 200	3.042	15	9.734	146.0	"
28	D 13	410	0.994	91	0.417	37.9	"
29	"	1 160	"	117	1.153	134.5	L
30	"	500	"	60	0.577	34.6	"
31	"	1 500	"	15	1.491	22.4	"
32	"	1 500	"	13	1.491	19.4	"
33	"	3 560	"	7	3.539	24.8	"
34	D 16	8 300	1.552	7	13.006	91.0	L
35	"	7 180	"	7	11.143	78.0	"
36	"	5 980	"	5	9.281	46.4	"
37	"	4 820	"	5	7.481	47.3	"
38	D 13	2 500	0.994	14	2.515	35.2	"
39	"	1 930	"	18	1.818	34.5	"
40	"	1 330	"	10	1.322	13.2	"
41	"	750	"	18	0.746	13.4	"
42	"	4 500	"	22	4.473	143.1	"
43	"	3 460	"	30	3.439	103.2	"
44	"	10 750	"	30	10.686	320.6	"
45	"	3 560	"	7	3.539	24.8	"
46	D 16	1 960	1.552	22	3.042	92.3	"
47	D 13	2 500	0.994	15	2.485	37.3	"
48	"	2 200	"	13	2.187	28.4	"
49	"	820	"	68	0.815	55.4	L
50	"	1 330	"	15	1.322	19.8	L
51	"	1 800	"	15	1.789	26.6	"
52	"	1 500	"	13	1.491	19.4	"
53	D 22	7 300	3.042	7	21.207	155.4	"
54	D 13	7 390	0.994	7	7.256	50.8	"
55	"	6 620	"	2	6.580	13.2	"
9375.0							

REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT (kg)	NMB	G WEIGHT	WEIGHT	REMARKS
S 1	D 13	17 950	0.994	4	17.892	71.5	"
2	"	17 850	"	14	17.183	245.0	"
3	"	4 100	"	4	4.075	16.3	"
4	"	3 900	"	17	3.877	65.9	"
5	"	3 500	"	4	3.479	13.9	"
6	"	3 300	"	15	3.280	49.2	"
7	"	3 500	"	69	3.479	236.6	"
8	"	300	"	69	0.195	54.9	"
9	"	1 050	"	4	1.074	4.3	"
10	"	1 840	"	4	1.829	7.3	"
11	"	1 700	"	4	1.690	6.8	"
12	"	1 500	"	22	1.491	32.8	"
13	"	1 160	"	2	1.093	2.2	"
110.7							
G 1	D 13	1 230	0.994	136	1.223	166.3	I
2	"	500	"	196	0.437	97.4	"
3	"	1 200	"	72	1.193	85.9	"
4	"	3 070	"	12	3.052	36.6	"
5	"	980	"	12	0.974	11.7	"
6	"	800	"	38	0.795	28.0	I
7	"	3 920	"	4	3.877	15.5	"
8	"	600	"	48	0.596	28.6	"
9	"	1 280	"	20	1.172	25.4	"
10	"	3 300	"	4	3.280	13.1	"
11	"	1 720	"	56	1.710	95.8	"
12	"	3 490	"	4	3.469	13.9	"
13	"	3 670	"	4	3.648	14.6	"
14	"	800	"	56	0.795	41.5	"
15	"	2 900	"	8	2.893	23.1	"
16	"	400	"	56	0.398	22.3	"
17	"	3 010	"	160	2.992	478.7	I
18	"	3 610	"	32	3.588	114.8	"
19	"	540	"	656	0.537	352.3	O
20	"	3 400	"	4	3.380	13.5	"
21	"	3 500	"	2	3.479	7.0	"
22	"	3 400	"	12	3.359	40.6	"
1771.6							
C 1	D 13	4 200	0.994	2	4.175	29.2	"
2	"	4 000	"	2	3.976	8.0	"
3	"	1 500	"	13	1.491	26.3	"
4	"	1 300	"	2	1.292	8.6	"
5	"	460	"	52	0.358	28.7	I
6	"	460	"	32	0.457	16.6	"
7	"	560	"	8	0.577	4.6	"
8	"	1 850	"	6	1.839	11.0	"
9	"	1 810	"	2	1.800	3.8	"
10	"	400	"	64	0.398	25.5	"
11	"	1 410	"	32	1.402	44.9	I
12	"	700	"	24	0.696	16.7	O
299.3							
D 32 4368.2							
D 22 129.7							
D 19 839.0							
D 16 1112.0							
D 13 4457.7							
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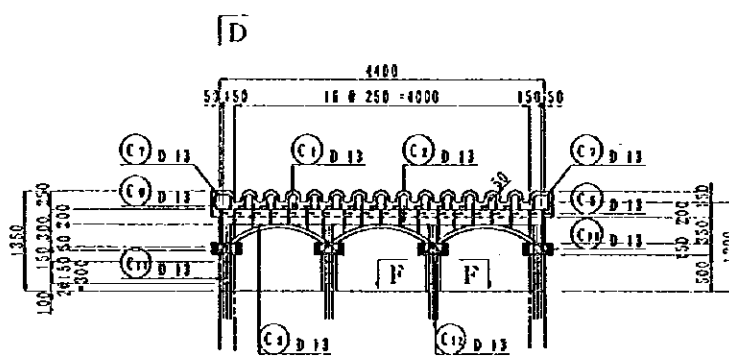
NOTES:

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 PACIFIC CONSULTANTS INTERNATIONAL
 FLUKYAMA CONSULTANTS INTERNATIONAL

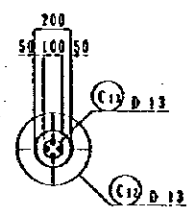
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
 PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
 TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (3)
 DATE : DWG NO. P-- 6



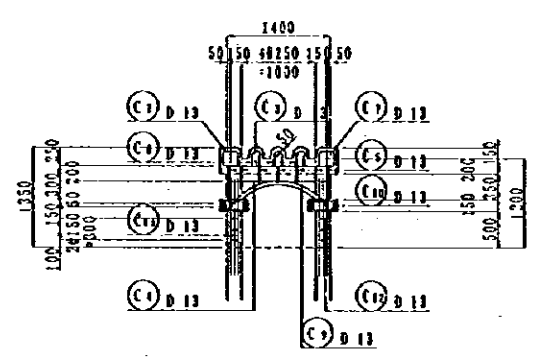
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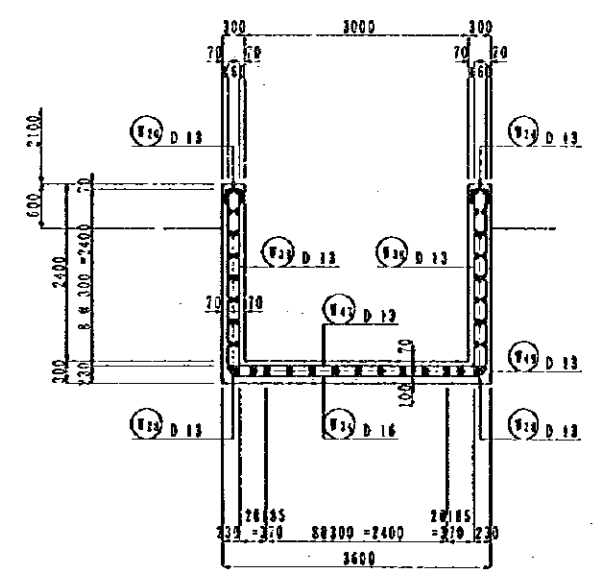
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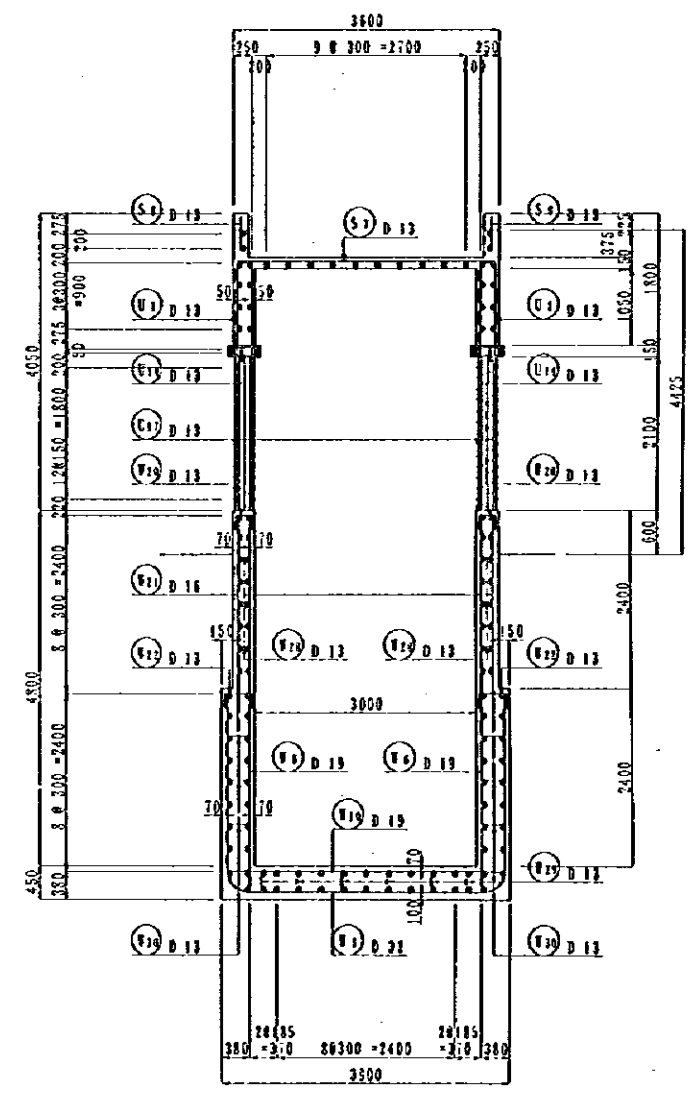
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B-B
S=1/100



A-A
S=1/100

NOTES:

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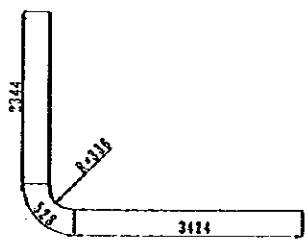
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

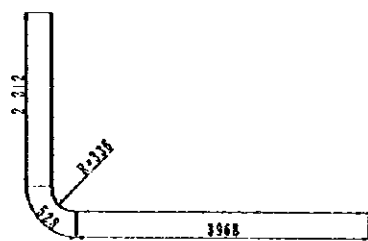
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DATE

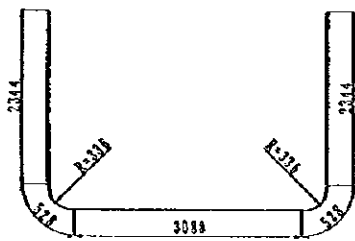
DWG NO. P - 7



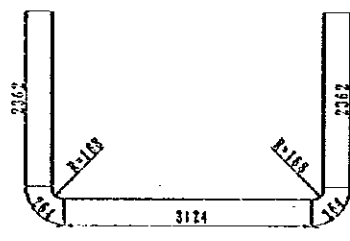
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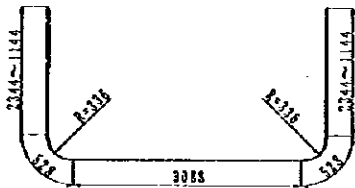
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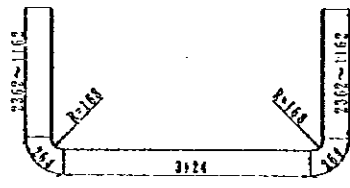
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7-D16 x 8 380



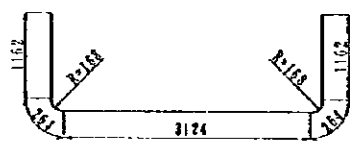
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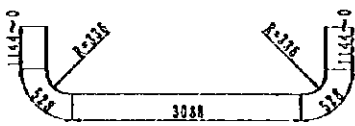
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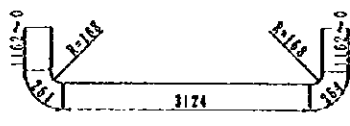
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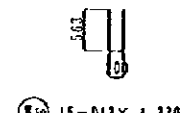
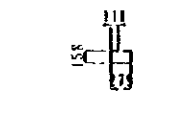
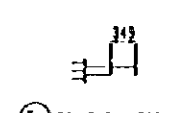
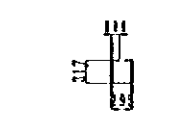
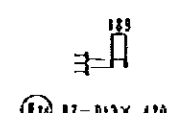
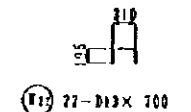
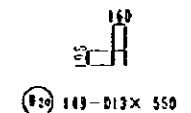
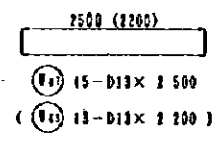
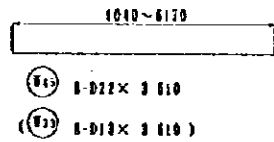
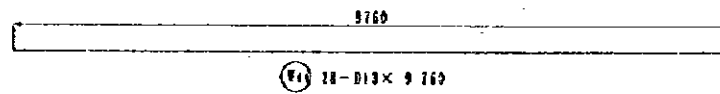
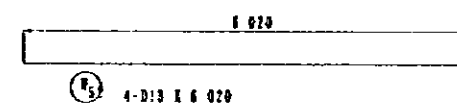
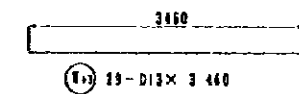
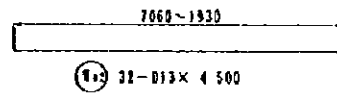
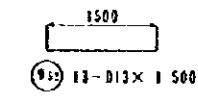
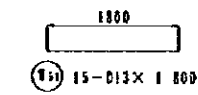
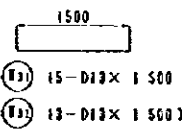
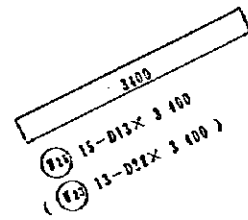
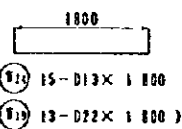
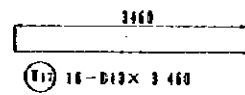
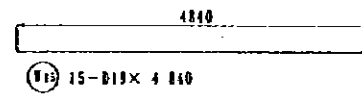
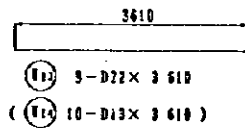
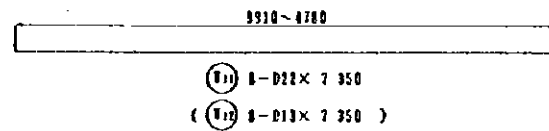
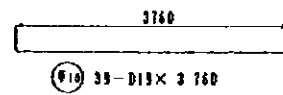
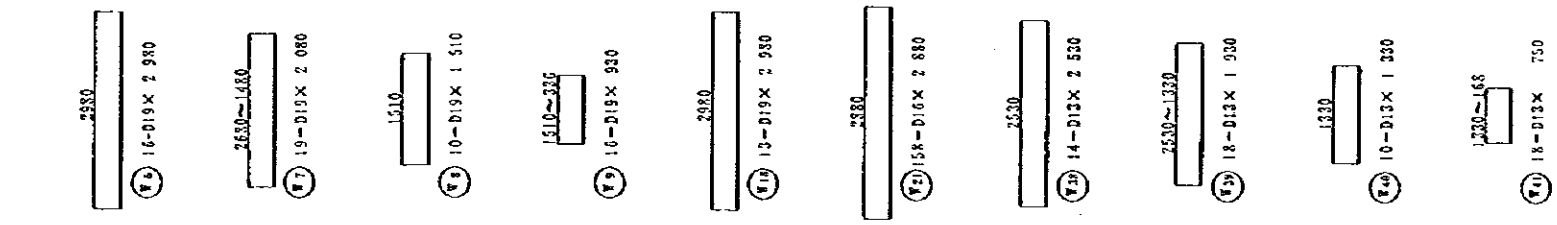
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16-D32 x 5 290



9-D16 x 4 820



NOTES:

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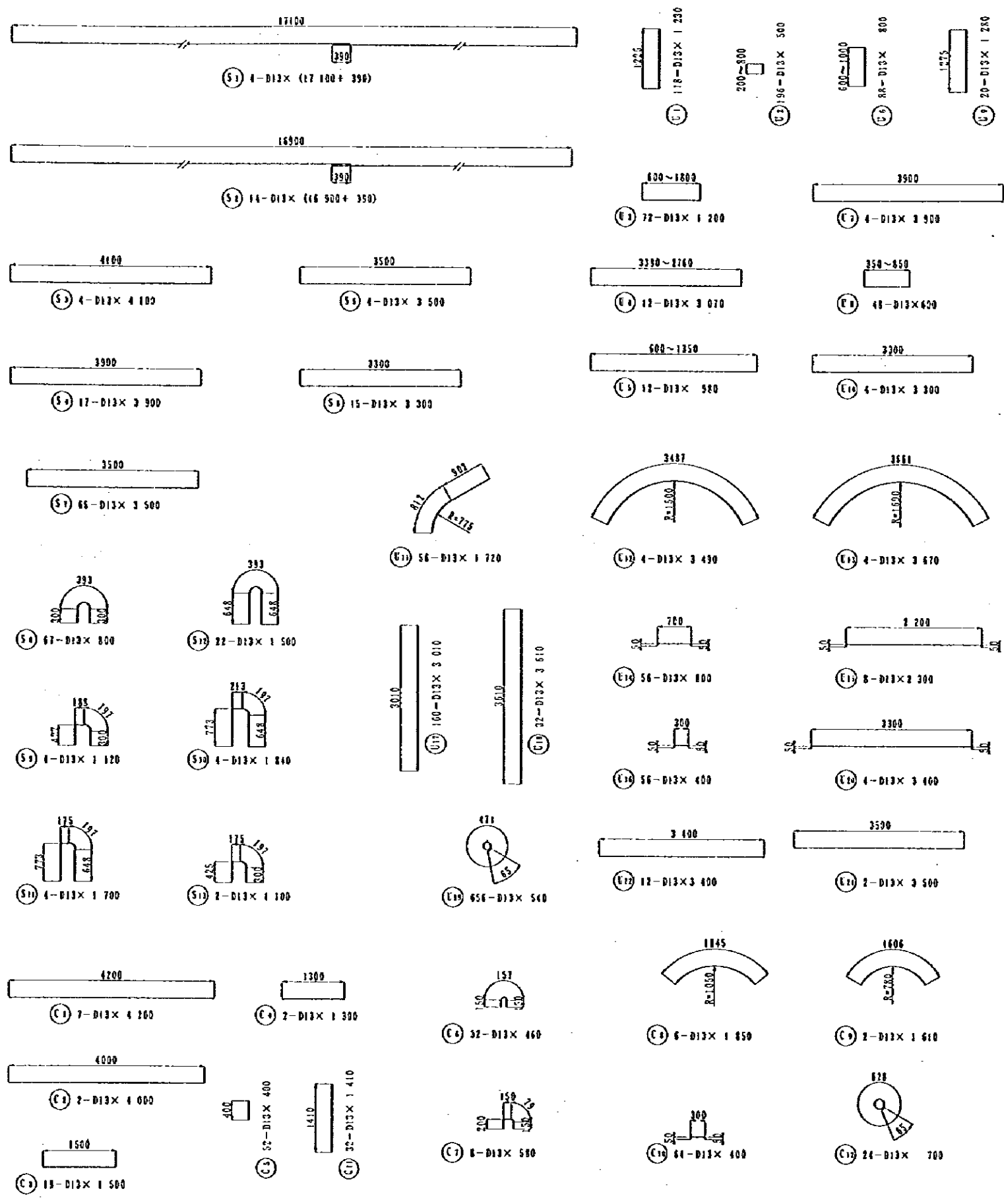
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FURUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

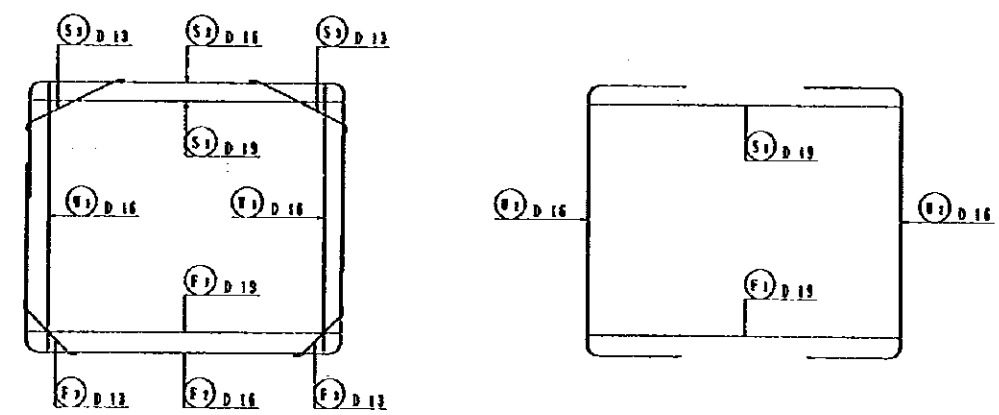
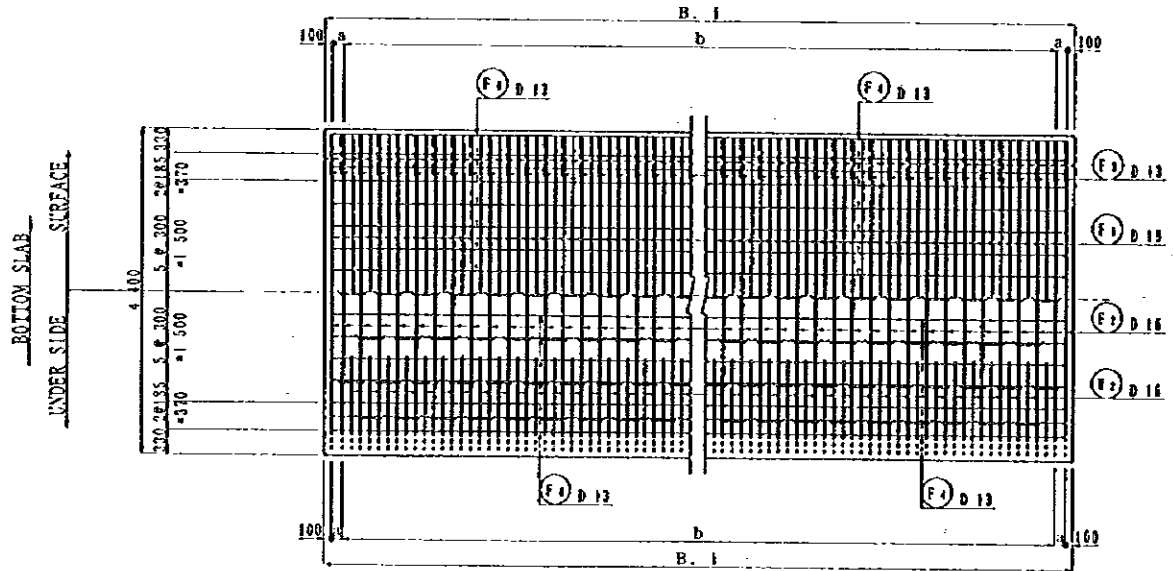
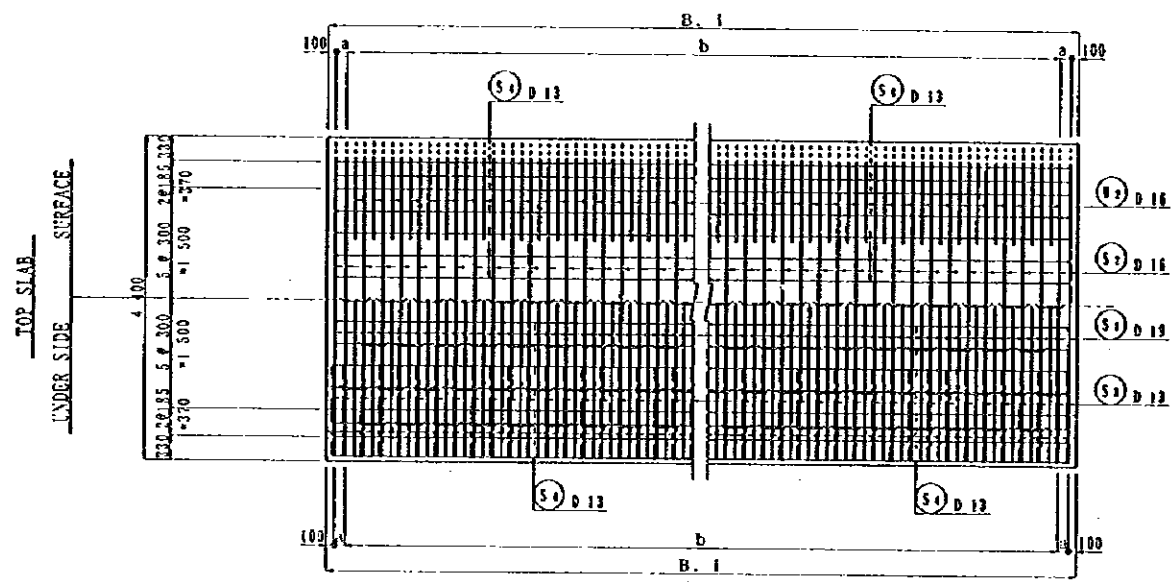
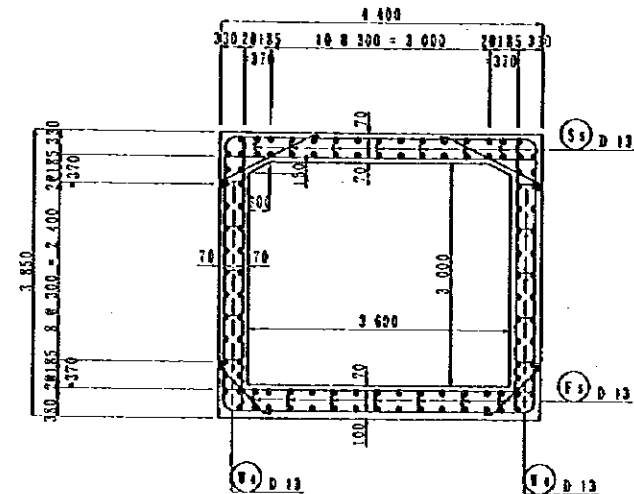
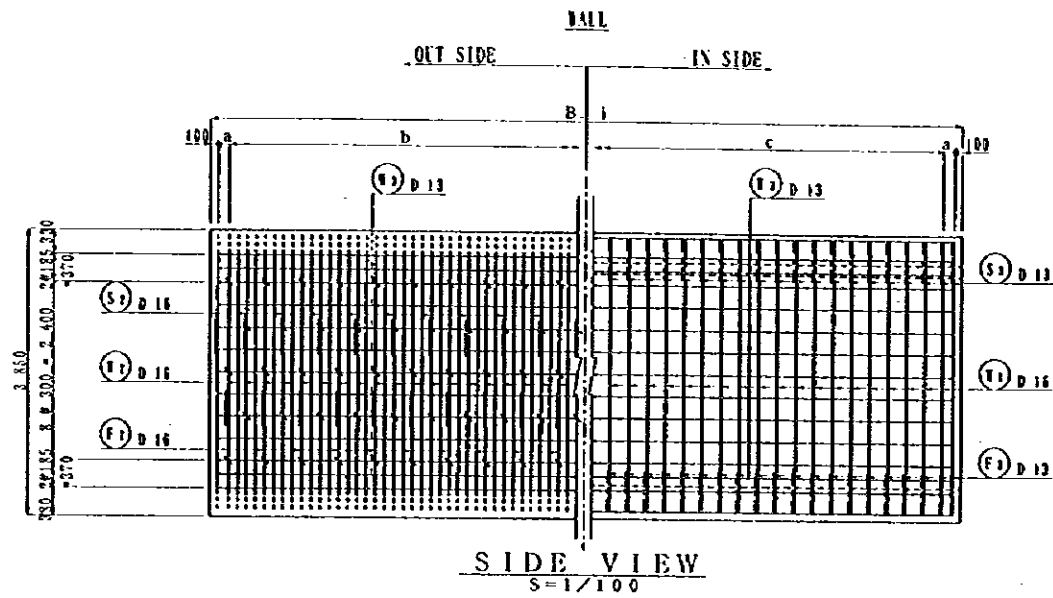
TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (5)

DATE : _____ DWG NO. P-8



REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	SLNB	U WEIGHT	WEIGHT	REMARKS
1	D 32	6 300	6.403	23	40.333	1169.8	
2	"	8 840	"	2	56.603	113.2	
3	"	7 610	"	19	48.727	325.8	"
4	"	6 440	"	10	41.235	412.4	"
5	"	5 230	"	16	33.832	542.0	"
6	D 13	2 980	2.235	16	6.660	146.6	
7	"	2 080	"	13	4.649	88.3	"
8	"	1 510	"	10	3.375	32.8	"
9	"	930	"	16	2.075	33.3	"
10	"	3 760	"	29	8.404	322.7	
11	D 22	7 350	3.042	8	22.359	178.9	"
12	D 13	7 350	0.994	8	7.350	58.8	"
13	D 22	3 610	3.042	9	10.932	98.8	"
14	D 13	3 610	0.994	10	3.592	35.9	"
15	D 19	4 860	2.235	15	10.817	162.3	"
16	D 32	6 810	6.403	39	43.694	1308.1	
17	D 13	3 460	0.994	16	3.439	55.0	
18	D 19	2 920	2.235	13	6.660	86.6	
19	D 22	1 800	3.042	13	5.476	71.2	"
20	D 13	550	0.994	149	0.547	81.5	
21	D 16	2 830	1.552	158	4.470	706.2	
22	D 13	700	0.994	77	0.696	53.6	
23	D 22	3 400	3.042	12	3.678	134.5	
24	D 13	1 800	0.994	15	4.073	60.3	"
25	"	2 200	"	12	2.187	28.4	"
26	"	3 400	"	15	3.389	50.7	"
27	D 22	2 900	3.042	15	8.822	132.3	"
28	D 13	470	0.994	89	0.418	37.2	
29	"	1 160	"	114	1.152	131.4	
30	"	530	"	34	0.577	19.6	
31	"	1 500	"	15	1.491	22.4	"
32	"	1 500	"	13	1.491	19.4	"
33	"	3 610	"	9	3.588	28.7	"
34	D 16	8 380	1.552	7	13.096	91.0	
35	"	7 180	"	9	11.443	100.3	"
36	"	5 980	"	5	9.281	46.4	"
37	"	4 820	"	9	7.481	67.3	"
38	D 13	2 530	0.994	14	2.515	35.2	
39	"	1 930	"	18	1.918	34.5	"
40	"	1 930	"	10	1.322	13.2	"
41	"	750	"	18	0.746	13.4	"
42	"	4 500	"	22	4.473	143.1	
43	"	3 460	"	29	2.439	99.7	"
44	"	9 760	"	28	9.701	271.6	"
45	D 22	3 610	3.042	8	10.982	87.9	"
46	D 16	1 660	1.552	32	2.578	82.4	
47	D 13	2 500	0.994	15	2.485	37.3	
48	"	2 200	"	12	2.187	28.4	"
49	"	820	"	78	0.815	63.6	
50	"	1 330	"	15	1.322	19.8	
51	"	1 400	"	15	1.789	26.8	"
52	"	1 500	"	13	1.451	19.4	"
7 254.4							

REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	SLNB	U WEIGHT	WEIGHT	REMARKS
5	D 13	17 450	0.994	4	17.385	69.5	
6	"	17 280	"	14	17.186	240.6	"
7	"	4 100	"	4	4.075	16.3	
8	"	3 900	"	17	3.872	65.8	"
9	"	3 500	"	4	3.479	13.9	"
10	"	3 300	"	15	3.260	49.2	"
11	"	3 500	"	66	3.479	229.6	"
12	"	800	"	67	0.795	53.3	"
13	"	1 120	"	4	1.113	4.5	"
14	"	1 840	"	4	1.879	7.3	"
15	"	1 700	"	4	1.490	6.1	"
16	"	1 500	"	12	1.491	32.8	"
17	"	1 100	"	2	1.093	2.2	"
791.9							
18	D 13	1 230	0.994	118	1.223	144.3	
19	"	500	"	196	0.497	97.4	"
20	"	1 200	"	72	1.193	85.9	"
21	"	3 070	"	12	3.052	36.6	"
22	"	580	"	12	0.974	11.7	"
23	"	800	"	85	0.795	70.0	
24	"	3 900	"	4	3.872	15.5	"
25	"	500	"	24	0.556	20.3	"
26	"	1 280	"	20	1.272	25.4	"
27	"	3 300	"	4	3.260	13.1	"
28	"	1 720	"	56	1.710	95.7	"
29	"	3 430	"	4	3.469	13.9	"
30	"	3 670	"	4	3.648	14.6	"
31	"	800	"	56	0.795	44.5	
32	"	2 300	"	8	2.286	18.3	"
33	"	400	"	56	0.398	22.3	"
34	"	3 010	"	160	2.992	478.7	
35	"	3 610	"	32	3.588	114.8	"
36	"	540	"	656	0.537	352.1	
37	"	3 400	"	4	3.380	12.5	"
38	"	3 500	"	2	3.479	7.0	"
39	"	3 400	"	12	3.389	40.6	"
1 736.8							
40	D 13	4 400	0.994	7	4.175	29.2	
41	"	4 000	"	2	3.976	8.0	"
42	"	1 500	"	19	1.491	28.3	"
43	"	1 300	"	2	1.292	2.6	"
44	"	400	"	52	0.398	20.7	
45	"	460	"	32	0.457	14.6	"
46	"	580	"	8	0.577	4.6	"
47	"	1 550	"	6	1.539	11.0	"
48	"	1 610	"	2	1.600	3.2	"
49	"	400	"	64	0.398	25.4	"
50	"	1 410	"	32	1.402	44.9	"
51	"	700	"	24	0.698	16.7	"
203.1							
					D 32	4 471.3	
					D 22	703.6	
					D 19	838.6	
					D 16	1 093.6	
					D 13	4 192.6	
TOTAL WEIGHT						11 259.7	



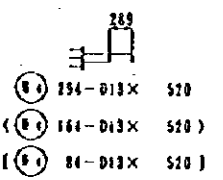
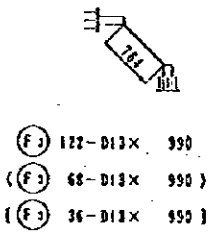
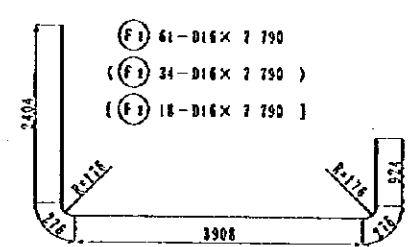
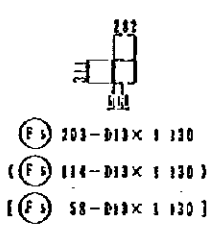
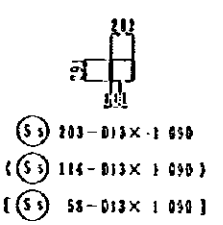
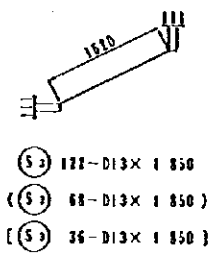
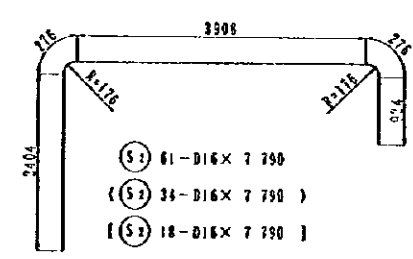
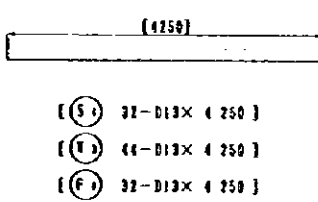
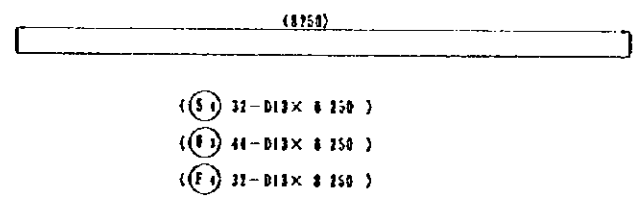
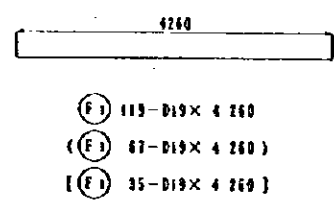
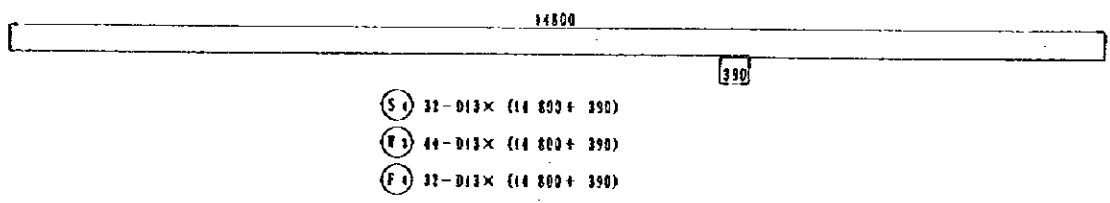
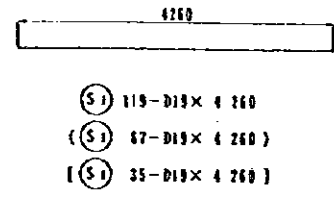
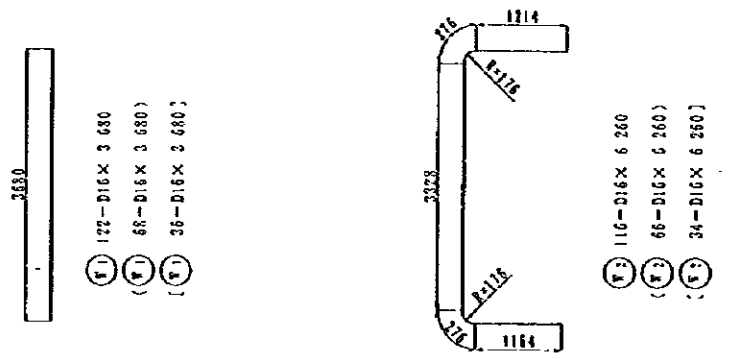
	B. i	a	b	c
TYPE A	15 000	150	116 @ 125	58 @ 250
TYPE C	4 450	---	34 @ 125	17 @ 250
TYPE D	8 450	---	66 @ 125	33 @ 250

PLAN
S=1/100

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (?)
DATE : _____ Dwg No. P-10

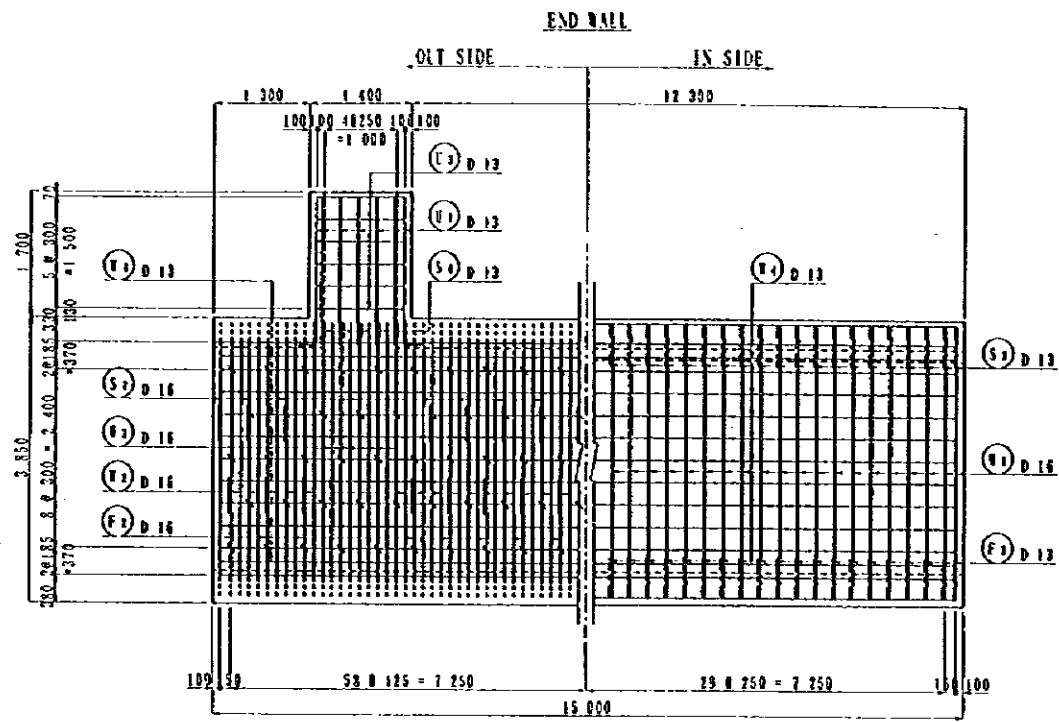


REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	NO.	C WEIGHT	WEIGHT	REMARKS
TYPE-A							
S 1	D 16	4 260	2.235	119	9.521	1133.0	
2	D 16	7 790	1.552	61	12.090	737.5	
3	D 13	1 850	0.994	122	1.839	224.4	
4	"	15 190	"	32	15.099	483.2	
5	"	1 090	"	203	1.083	219.9	
W 1	D 16	3 680	1.552	122	5.711	696.7	
2	"	6 260	"	116	9.716	1127.1	
3	D 13	15 190	0.994	44	15.699	664.4	
4	"	520	"	294	0.517	152.0	
F 1	D 16	4 260	2.235	119	9.521	1133.0	
2	D 16	7 790	1.552	61	12.090	737.5	
3	D 13	990	0.994	122	0.984	120.0	
4	"	15 190	"	32	15.099	483.2	
5	"	1 120	"	203	1.123	226.0	
							8139.9
TYPE-C							
S 1	D 16	4 260	2.235	67	9.521	637.9	
2	D 16	7 790	1.552	34	12.090	411.1	
3	D 13	1 850	0.994	68	1.839	125.1	
4	"	8 250	"	32	8.201	262.4	
5	"	1 090	"	114	1.083	123.5	
W 1	D 16	3 680	1.552	68	5.711	389.3	
2	"	6 260	"	66	9.716	641.3	
3	D 13	8 250	0.994	44	8.201	360.8	
4	"	520	"	184	0.517	84.8	
F 1	D 16	4 260	2.235	67	9.521	637.9	
2	D 16	7 790	1.552	34	12.090	411.1	
3	D 13	990	0.994	68	0.984	66.9	
4	"	8 250	"	32	8.201	262.4	
5	"	1 120	"	114	1.123	126.0	
							4547.5
TYPE-D							
S 1	D 16	4 260	2.235	35	9.521	333.2	
2	D 16	7 790	1.552	18	12.090	217.6	
3	D 13	1 850	0.994	36	1.839	66.2	
4	"	4 250	"	32	4.225	135.2	
5	"	1 090	"	58	1.083	62.8	
W 1	D 16	3 680	1.552	36	5.711	205.6	
2	"	6 260	"	34	9.716	330.3	
3	D 13	4 250	0.994	44	4.225	185.9	
4	"	520	"	84	0.517	43.4	
F 1	D 16	4 260	2.235	35	9.521	333.2	
2	D 16	7 790	1.552	18	12.090	217.6	
3	D 13	990	0.994	36	0.984	35.4	
4	"	4 250	"	32	4.225	135.2	
5	"	1 120	"	58	1.123	65.1	
							2366.7
					D 16	4208.2	
					D 13	6127.7	
					D 13	4718.2	
TOTAL WEIGHT						15048.1	

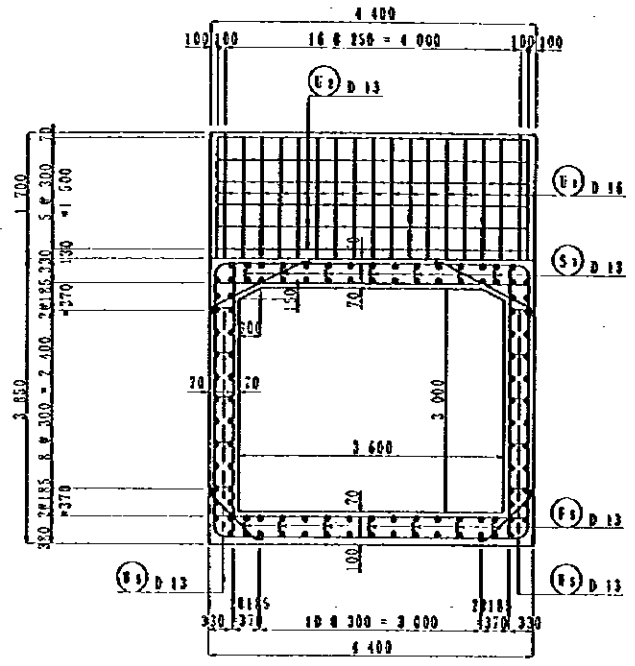
NOTES: () TYPE-C
 [] TYPE-D

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA STUDY TEAM
 PACIFIC CONSULTANTS INTERNATIONAL
 FUKUYAMA CONSULTANTS INTERNATIONAL

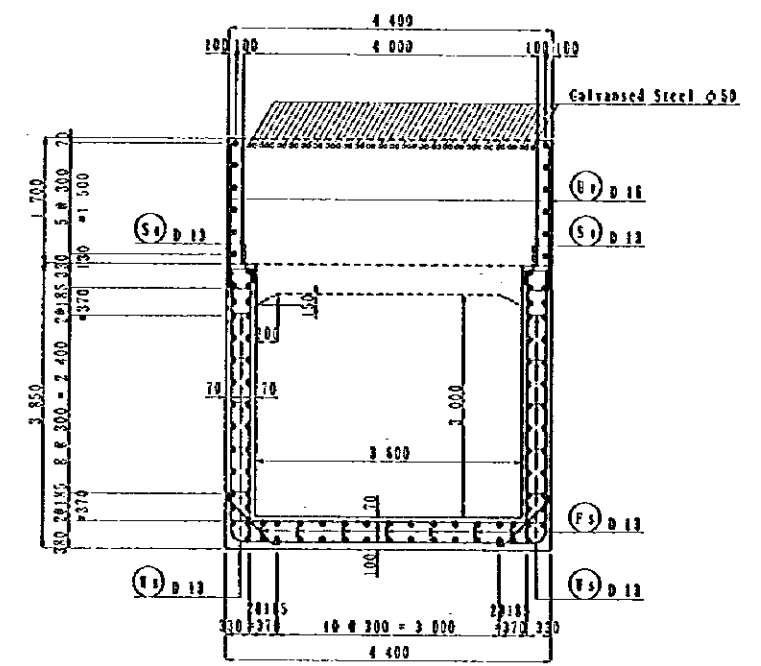
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
 PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
 TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (8)
 DATE : _____ DWG NO. P-11



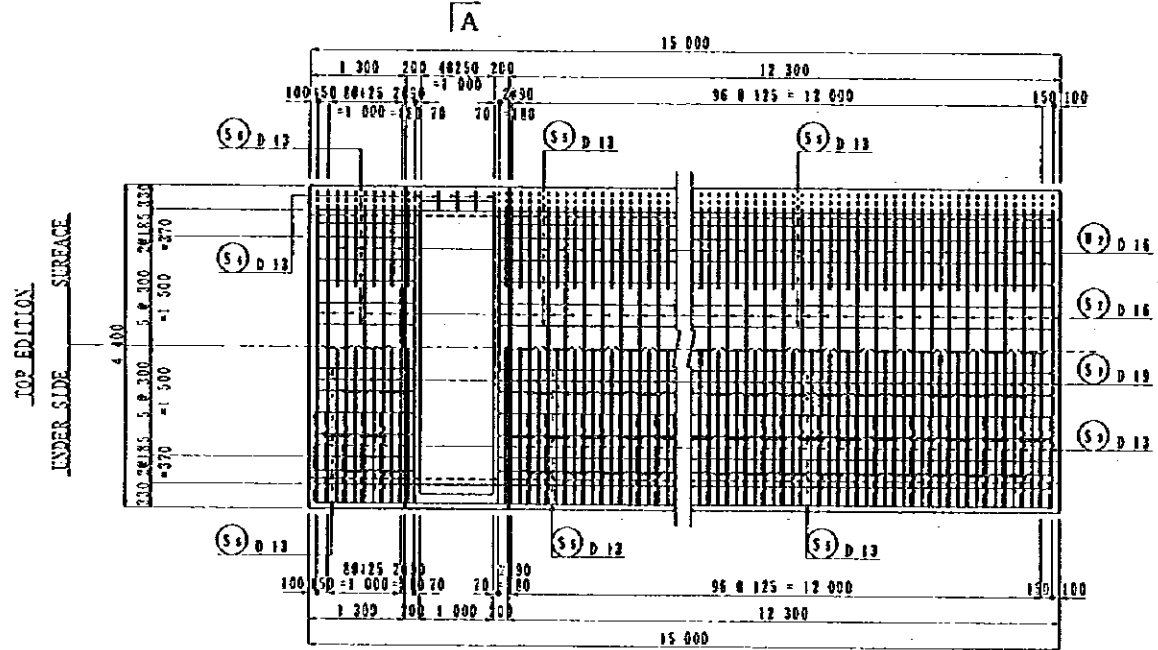
SIDE VIEW
S=1/100



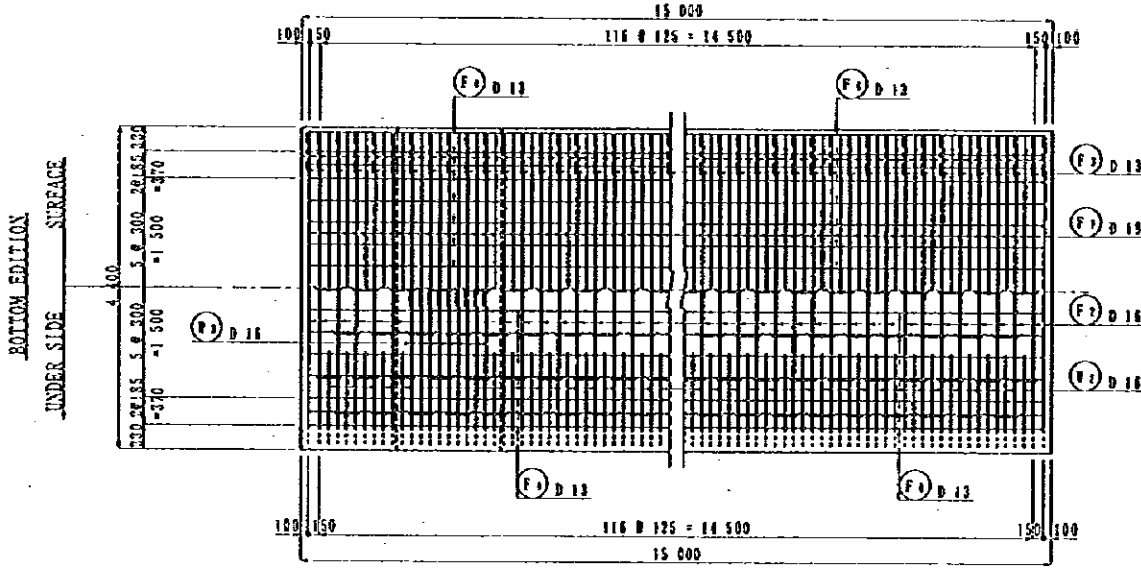
SECTION
S=1/100



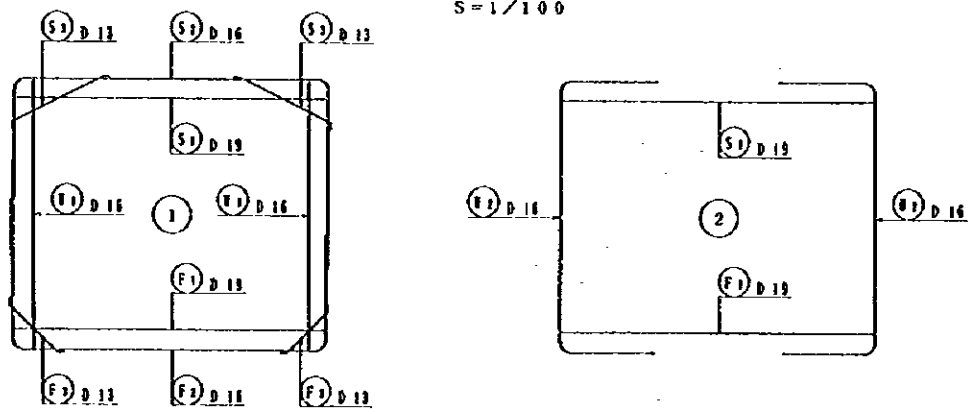
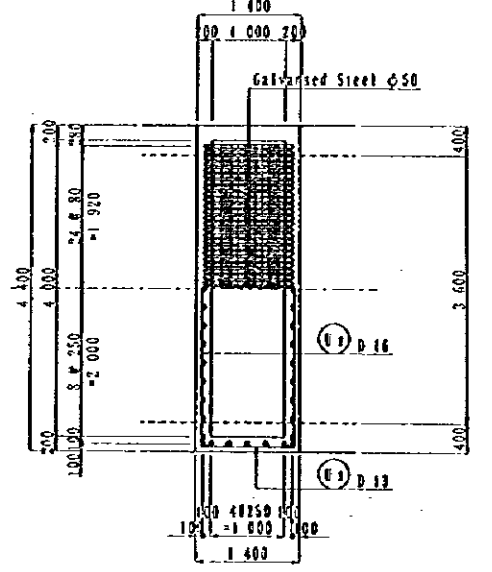
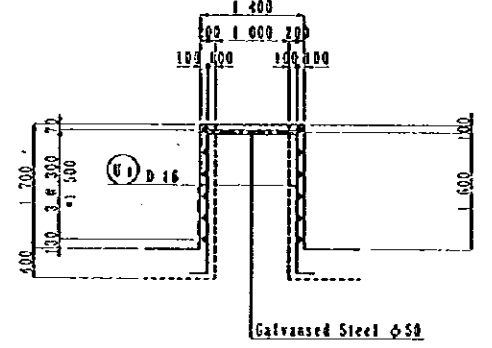
A-A
S=1/100



PLAN
S=1/100



PLAN
S=1/100



NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
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PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

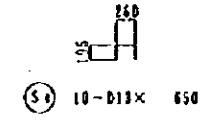
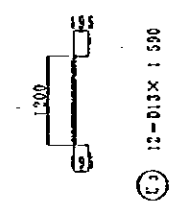
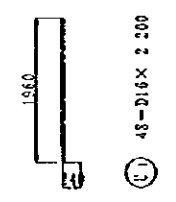
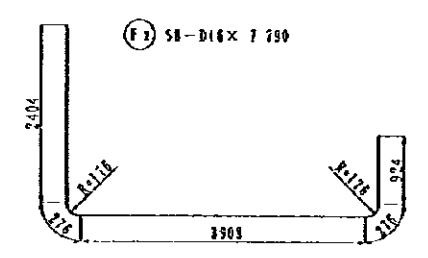
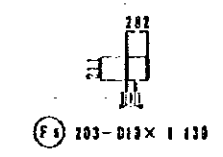
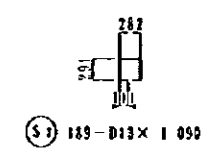
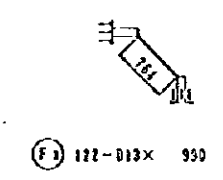
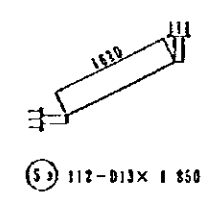
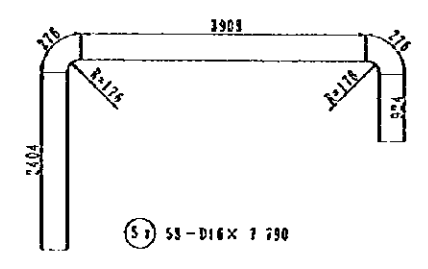
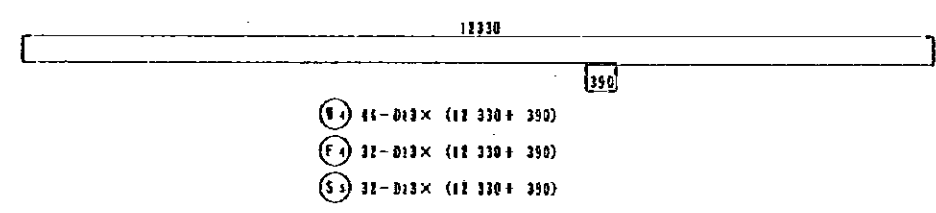
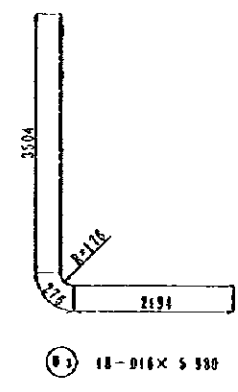
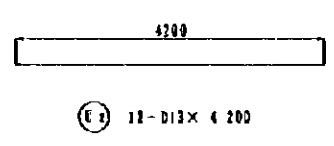
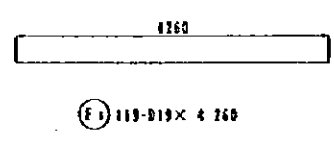
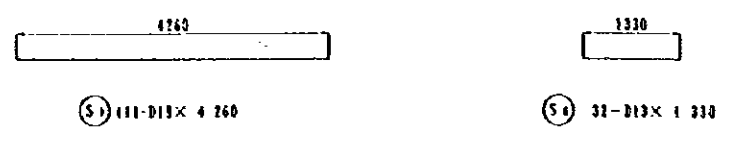
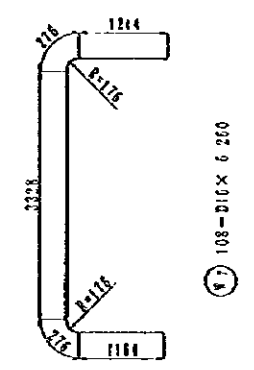
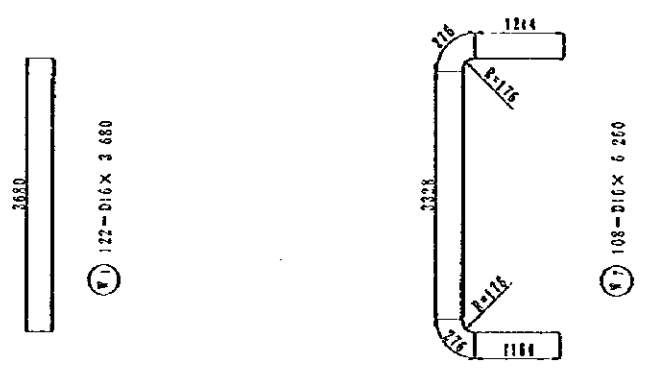
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE : P/U-4, AL QARAT RE-BAR ARRANGEMENT (9)

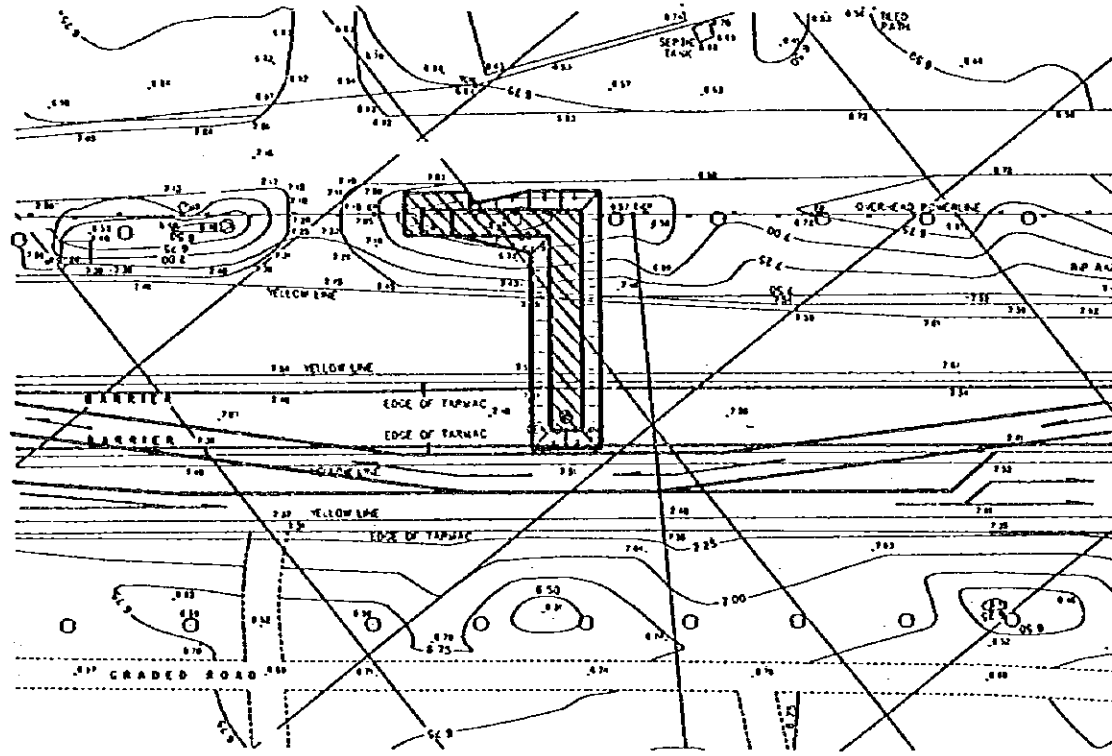
DATE

DWG NO. P-12

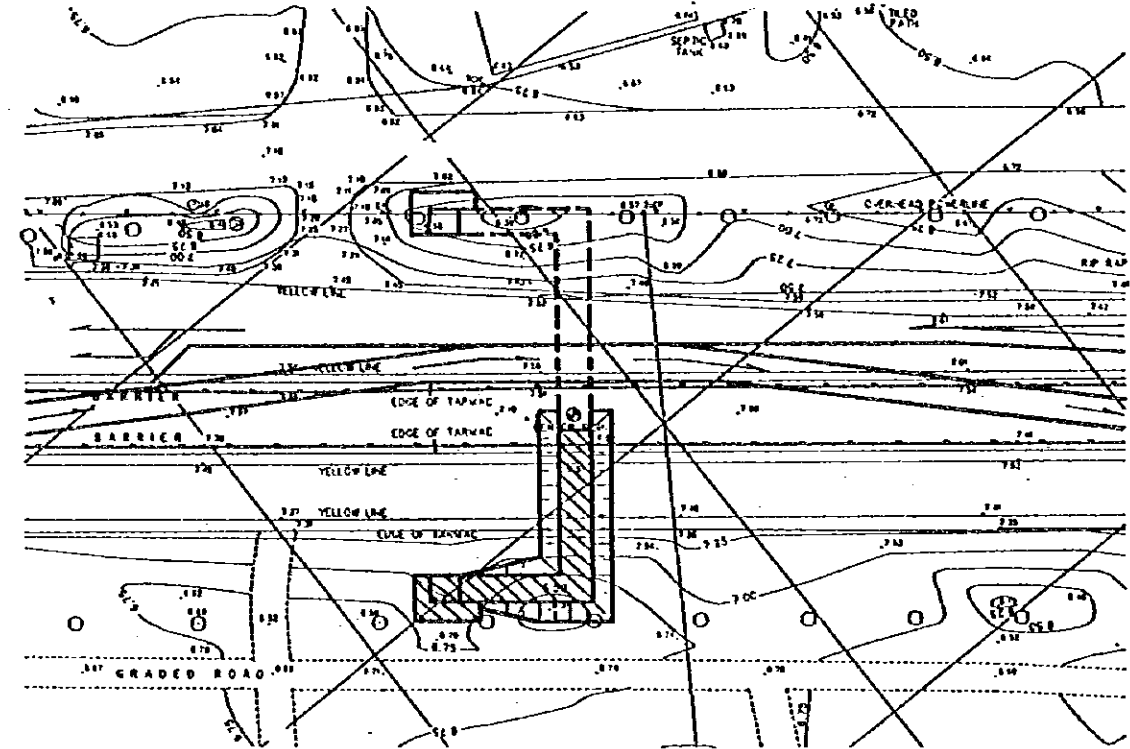


REIN. NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	SLUG	U WEIGHT	WEIGHT	REMARKS
TYPE - B							
S 1	D 19	4 260	2.235	111	9.585	1056.8	—
2	D 16	7 790	1.552	58	12.050	701.2	—
3	D 19	1 850	0.994	117	1.841	206.2	—
4	"	850	"	10	0.645	6.5	—
5	"	12 720	"	32	12.644	404.6	—
6	"	1 330	"	32	1.322	41.3	—
7	"	1 090	"	189	1.083	204.7	—
W 1	D 16	3 680	1.552	122	5.211	636.7	—
2	"	6 260	"	103	9.716	1049.3	—
3	"	5 980	"	18	9.201	167.1	—
4	D 13	12 720	0.994	44	12.644	558.3	—
5	"	570	"	234	0.512	152.0	—
F 1	D 19	4 260	2.235	119	9.521	1133.0	—
2	D 16	7 790	1.552	58	12.050	701.2	—
3	D 13	990	0.994	122	0.981	120.8	—
4	"	12 720	"	32	12.644	404.6	—
5	"	1 130	"	203	1.123	226.0	—
E 1	D 16	4 200	1.552	48	3.414	163.9	—
2	D 13	4 200	0.994	12	4.125	50.1	—
3	"	1 590	"	12	1.580	19.0	—
						D 19	2189.8
						D 16	3079.4
						D 13	2334.1
						TOTAL WEIGHT	8043.3

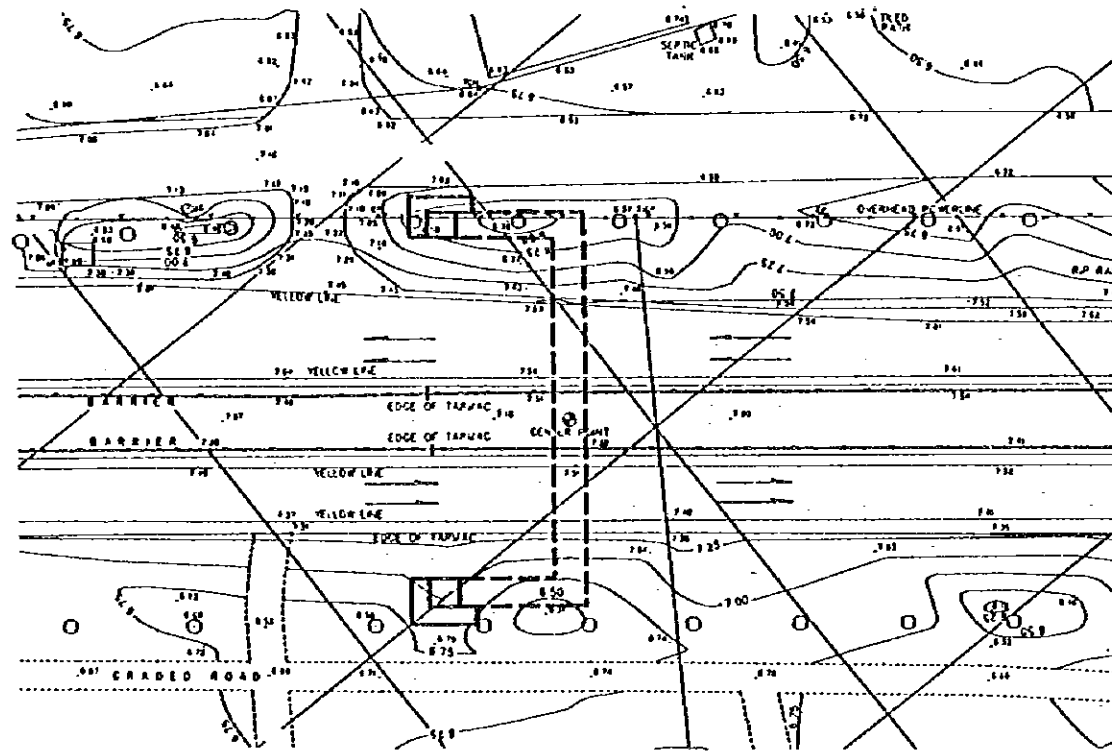
FIRST CONSTRUCTION STAGE



SECOND CONSTRUCTION STAGE



THIRD CONSTRUCTION STAGE



FIRST CONSTRUCTION STAGE

1. Divert traffic from the existing carriageway and demarcate the yard for the first stage of construction.
2. Carry out the first stage of construction for the underpass.
3. After completion of first stage of construction, restore the existing carriageway to allow traffic flow.

SECOND CONSTRUCTION STAGE

1. Divert traffic from the other carriageway and demarcate the yard for the second stage of construction.
2. Carry out the second stage of construction for the underpass.
3. After completion of second stage of construction, restore the existing carriageway to allow traffic flow.

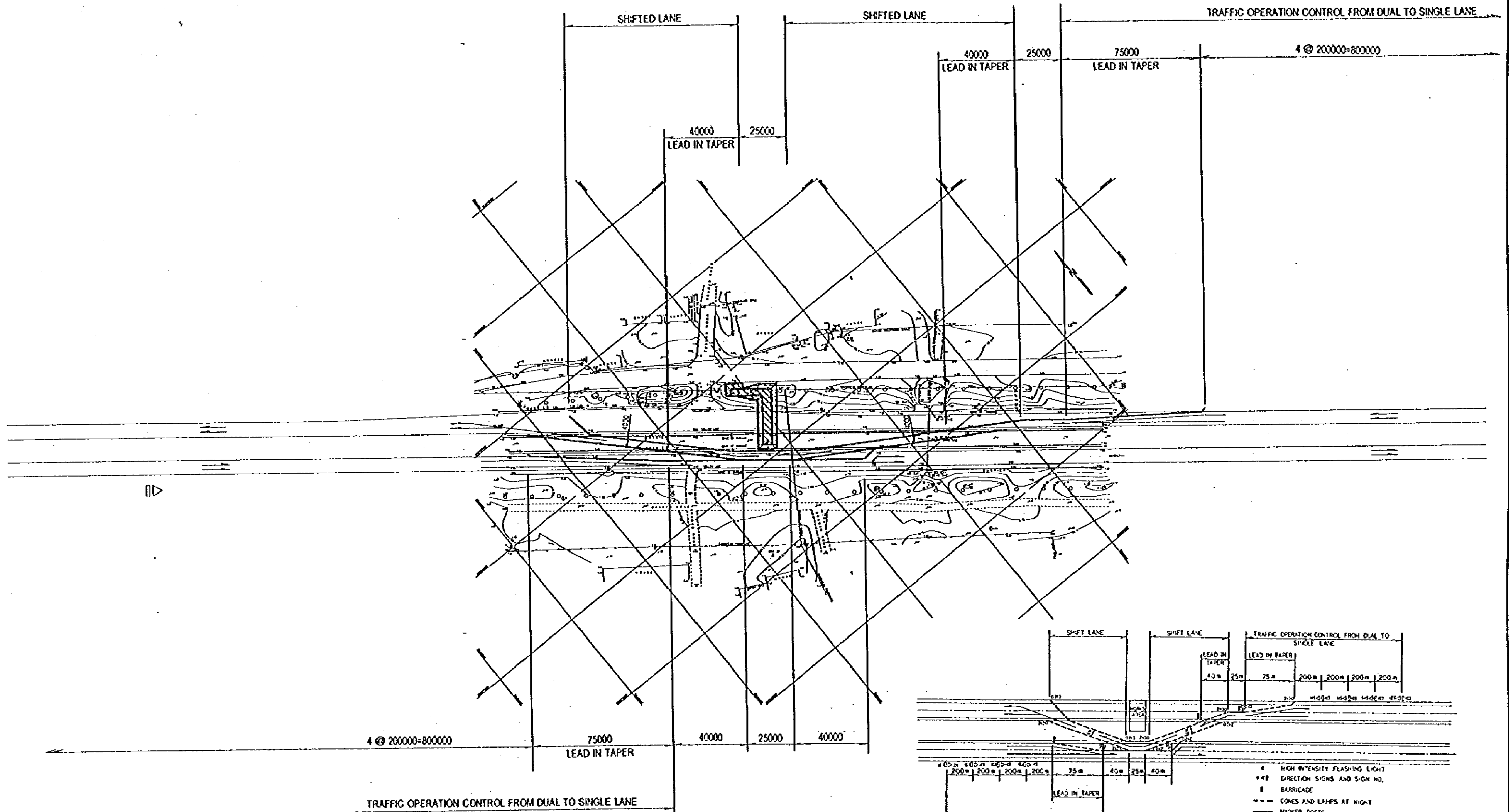
THIRD CONSTRUCTION STAGE

1. Carry out accessory installation work for pedestrian underpass and open it to use.
2. Construction completed.

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
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JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE SEQUENCE OF AL QARAT PAU CONSTRUCTION
DATE DWGNO. T-1



SCALE 1/2000

GENERAL LAYOUT PLAN OF P/U WORKS

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL, FUKUYAMA CONSULTANTS INTERNATIONAL.	CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE: DETOUR LAYOUT OF AL QARAT P/U WORKS	DATE:
DWGNO.	T-2

