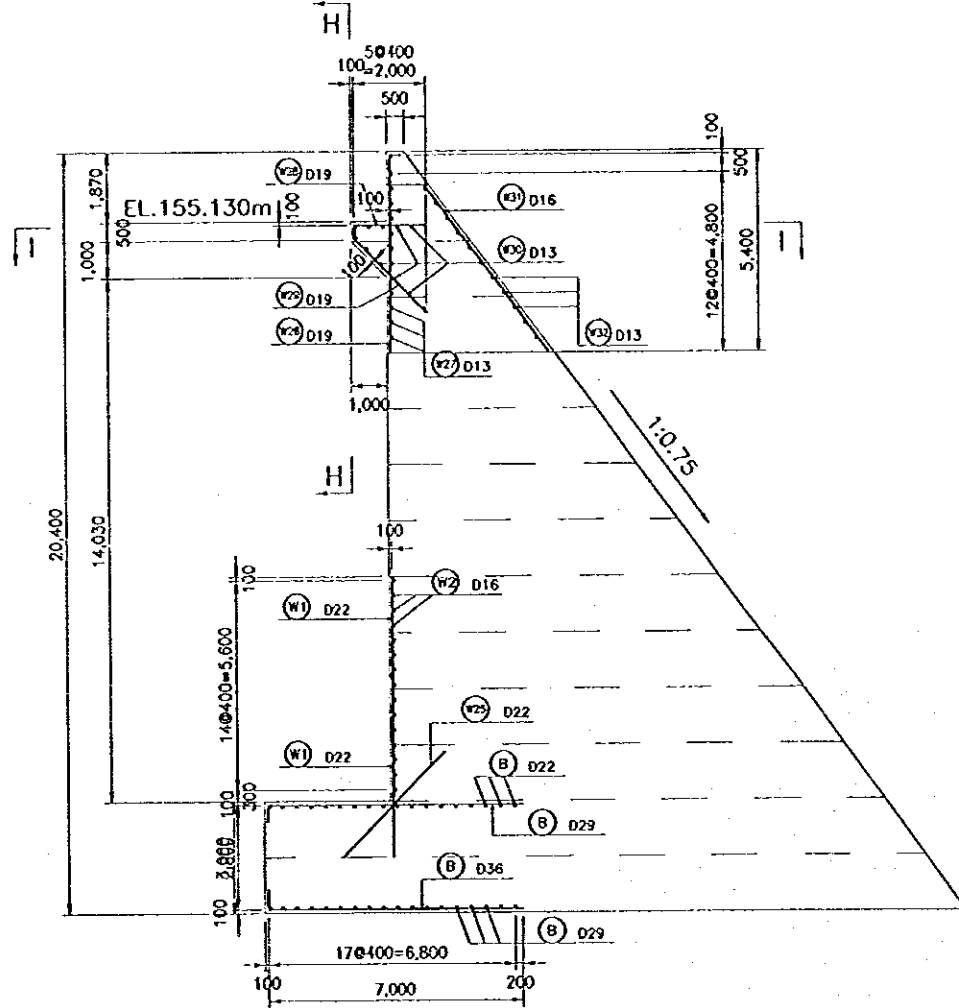
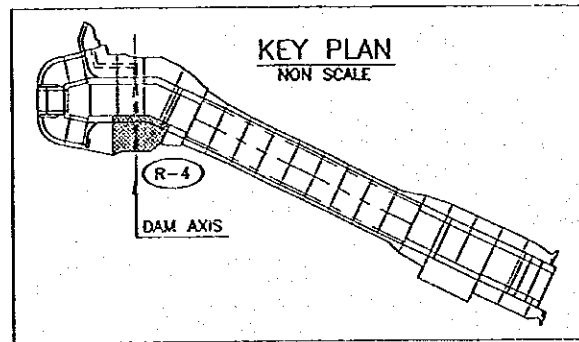
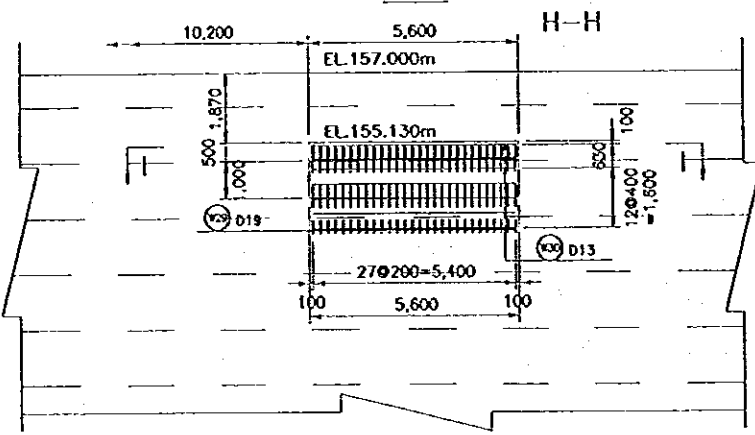


G-G (DAM AXIS)

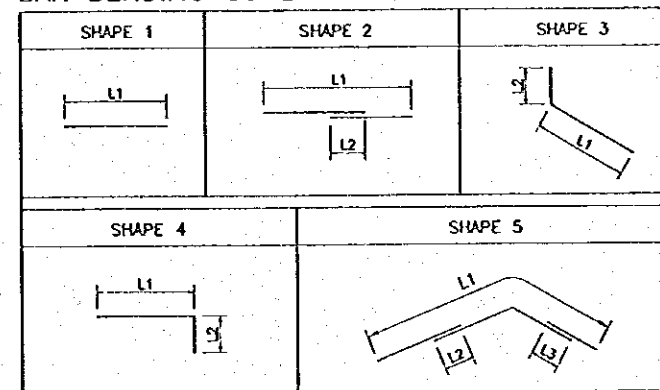


BAR WEIGHT

TYPE	DIA (mm)	NUMBER	LENGTH (mm)			WEIGHT PER 'm' (kg)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1	22	155	8,270	7,500	770	2.98	24.64	3,820	2
W2	16	15	32,020	30,891	560	1.58	50.59	759	5
W3	19	3	1,720	1,712		2.23	3.84	12	1
W4	19	3	3,430	3,424		2.23	7.65	23	1
W5	19	4	5,140	5,136		2.23	11.46	46	1
W6	19	3	6,850	6,848		2.23	15.28	46	1
W7	19	3	9,230	8,560	670	2.23	20.58	62	2
W8	19	7	10,950	10,271	670	2.23	24.42	171	2
W9	13	3	4,860	4,860		1.04	5.05	15	1
W10	13	4	4,260	4,260		1.04	4.43	18	1
W11	13	4	3,660	3,660		1.04	3.81	15	1
W12	13	3	2,860	2,860		1.04	2.97	9	1
W13	13	4	2,260	2,260		1.04	2.35	9	1
W14	19	4	1,620	1,616		2.23	3.61	14	1
W15	19	4	3,240	3,231		2.23	7.23	29	1
W16	19	4	4,850	4,847		2.23	10.82	43	1
W17	19	4	6,470	6,462		2.23	14.43	58	1
W18	19	4	8,750	8,078	670	2.23	19.51	78	2
W19	19	8	10,370	9,693	670	2.23	23.13	185	2
W20	13	3	5,860	5,860		1.04	6.09	18	1
W21	13	4	5,060	5,060		1.04	5.26	21	1
W22	13	4	4,260	4,260		1.04	4.43	18	1
W23	13	3	3,460	3,460		1.04	3.60	11	1
W24	13	4	2,660	2,660		1.04	2.77	11	1
W25	22	155	4,000	4,000		2.98	11.92	1,848	1
W26	19	36	5,590	5,300	290	2.23	12.47	449	4
W27	13	13	7,920	7,920		1.04	8.24	107	1
W28	19	28	2,290	2,000	290	2.23	5.11	143	4
W29	19	28	3,120	2,828	290	2.23	6.96	195	3
W30	13	11	5,400	5,400		1.04	5.62	62	1
W31	16	36	5,630	5,625		1.58	8.90	320	1
W32	13	11	7,920	7,920		1.04	8.24	91	1
F1	29	147	7,440	7,000	440	5.19	38.61	5,676	4
F2	29	16	4,150	3,701	440	5.19	21.54	345	4
F3	22	18	31,710	30,938	770	2.98	94.50	1,701	5
F4	36	147	7,540	7,000	540	7.99	60.24	8,856	4
F5	36	16	4,250	3,701	540	7.99	33.96	543	4
F6	29	18	31,960	30,938	1,020	5.19	165.87	2,986	5
							TOTAL =	28,813	



BAR BENDING SCHEDULE

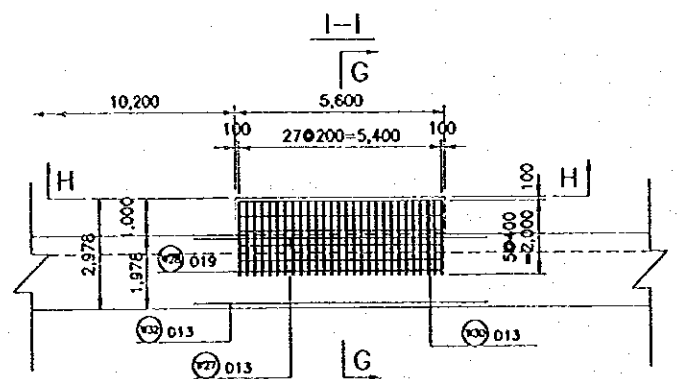


NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REFERENCE DRAWINGS

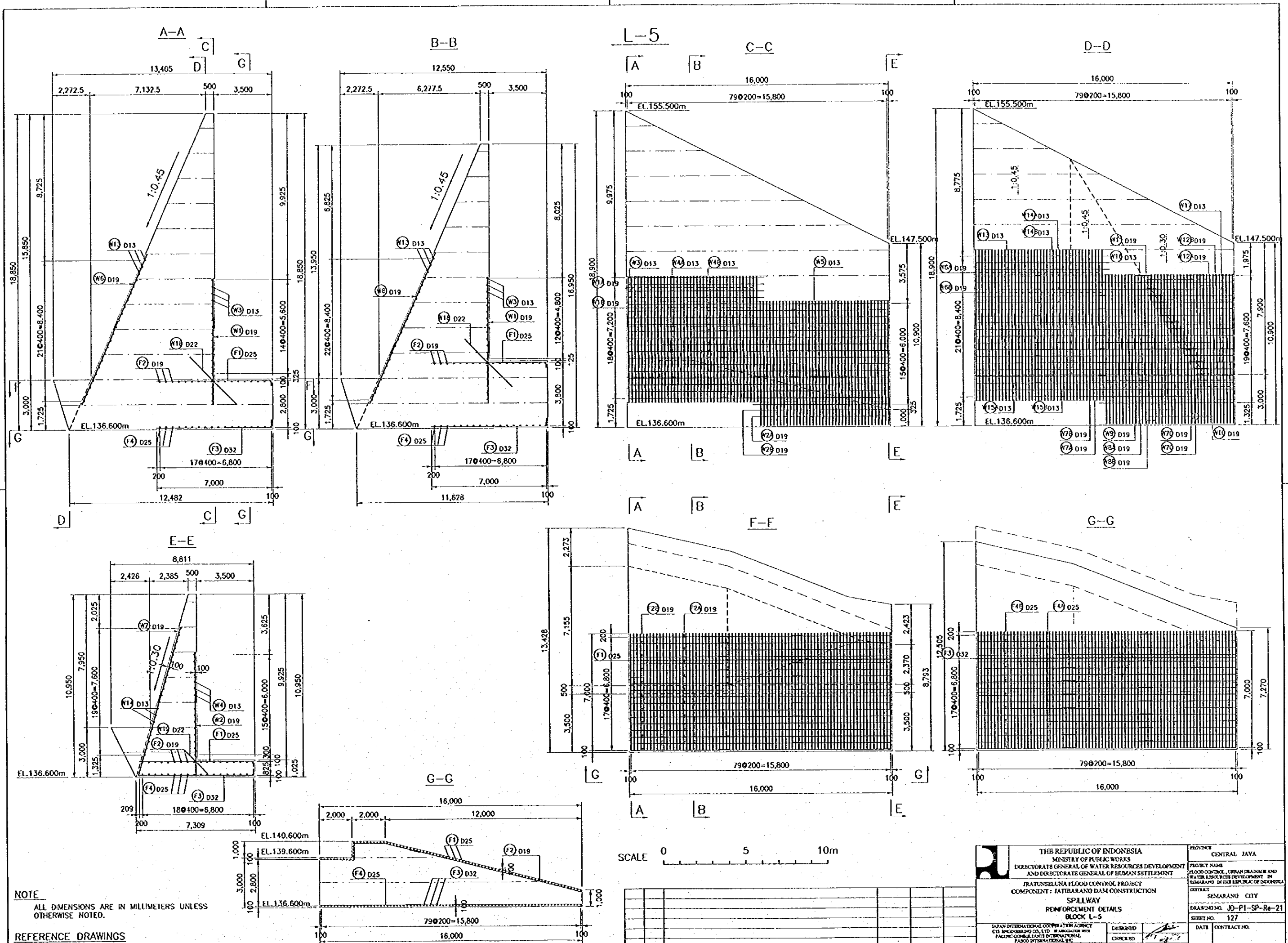
1. JD-P1-SP-Re-18 REINFORCEMENT DETAILS-BLOCK R-4 (1/3)
2. JD-P1-SP-Re-19 REINFORCEMENT DETAILS-BLOCK R-4 (2/3)



SCALE 0 5 10m

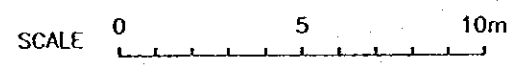
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELLUNA FLOOD CONTROL PROJECT COMPONENT : JATIHARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK R-4 (3/3)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL YAKYO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Re-20 SHEET NO. 126 DATE CONTRACT NO.



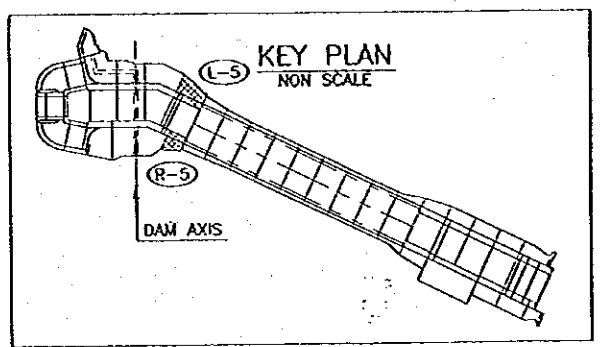
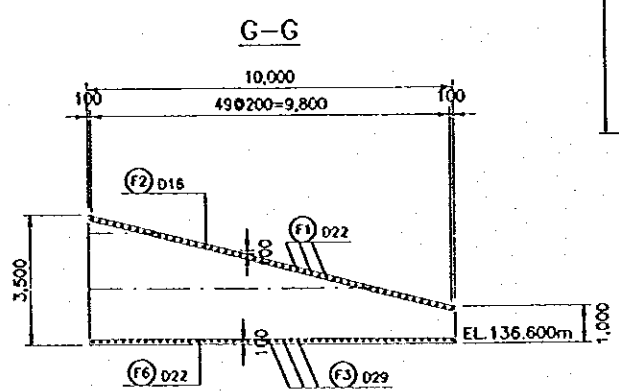
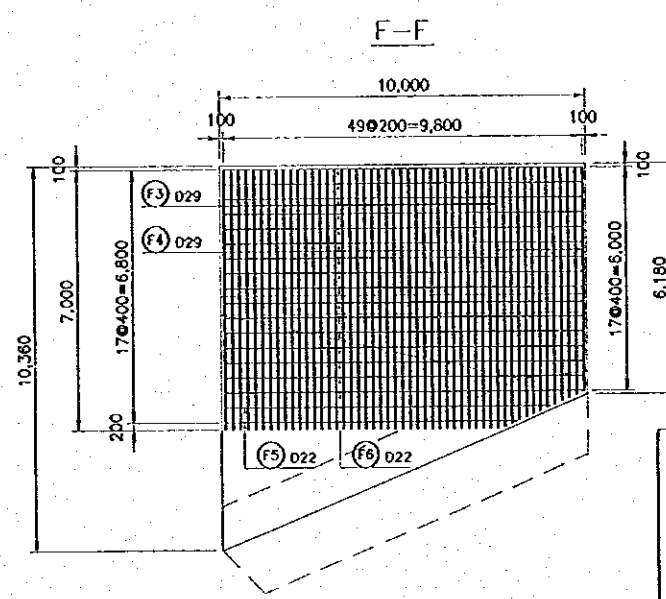
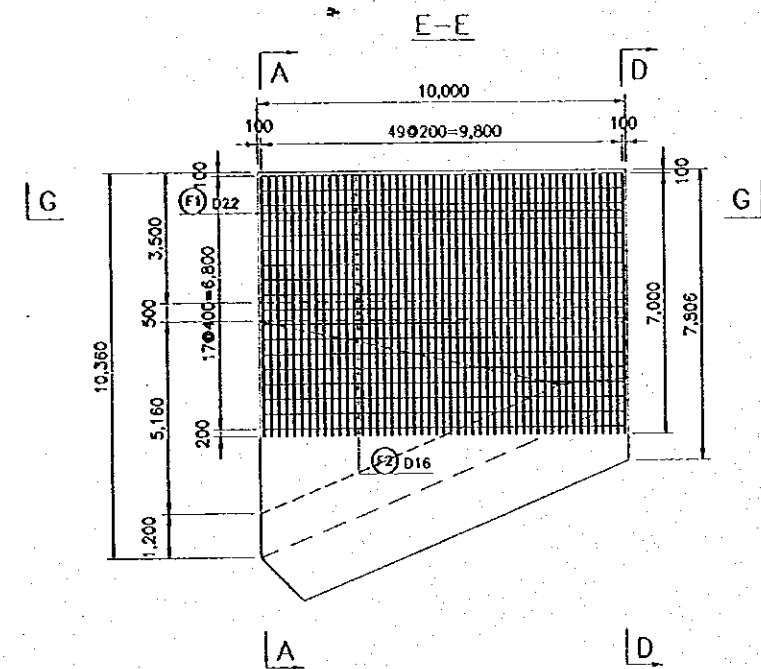
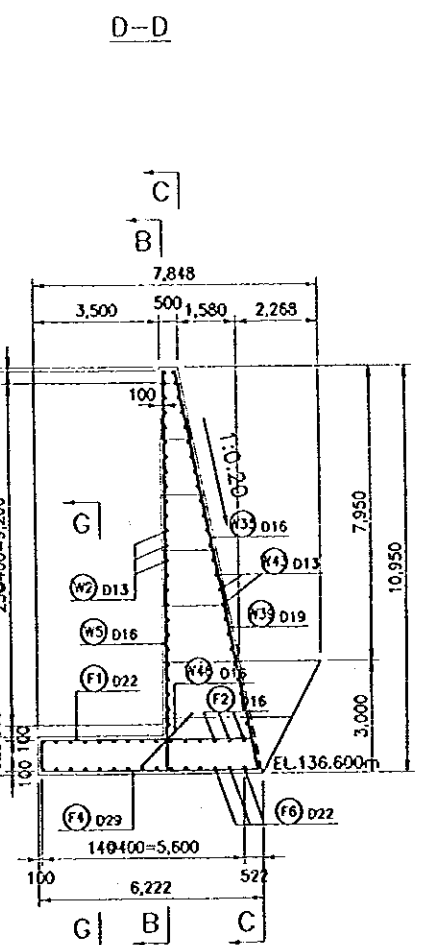
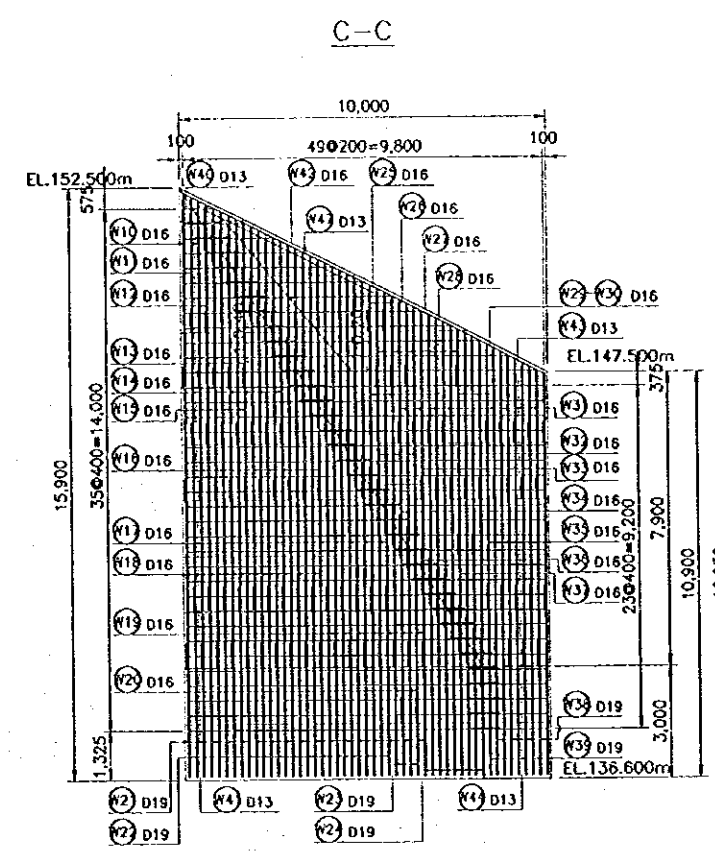
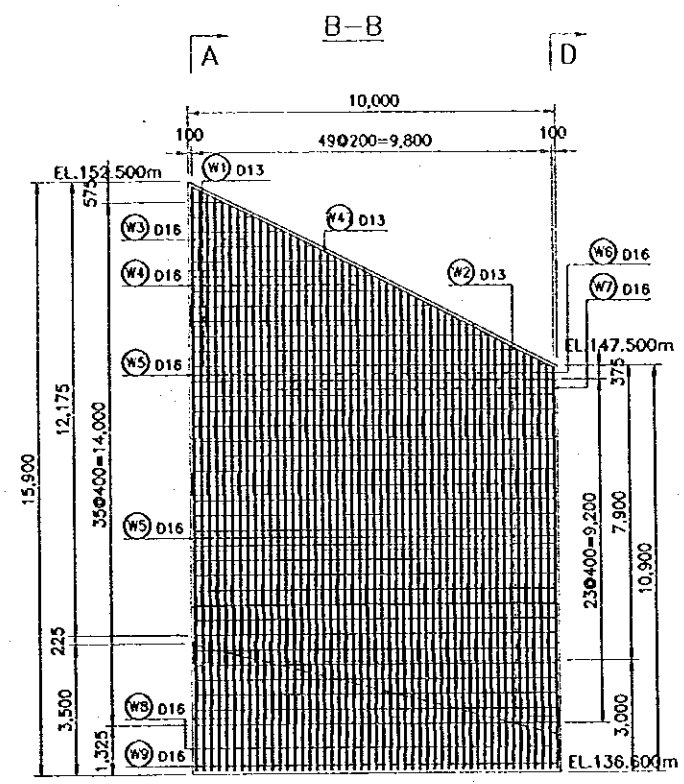
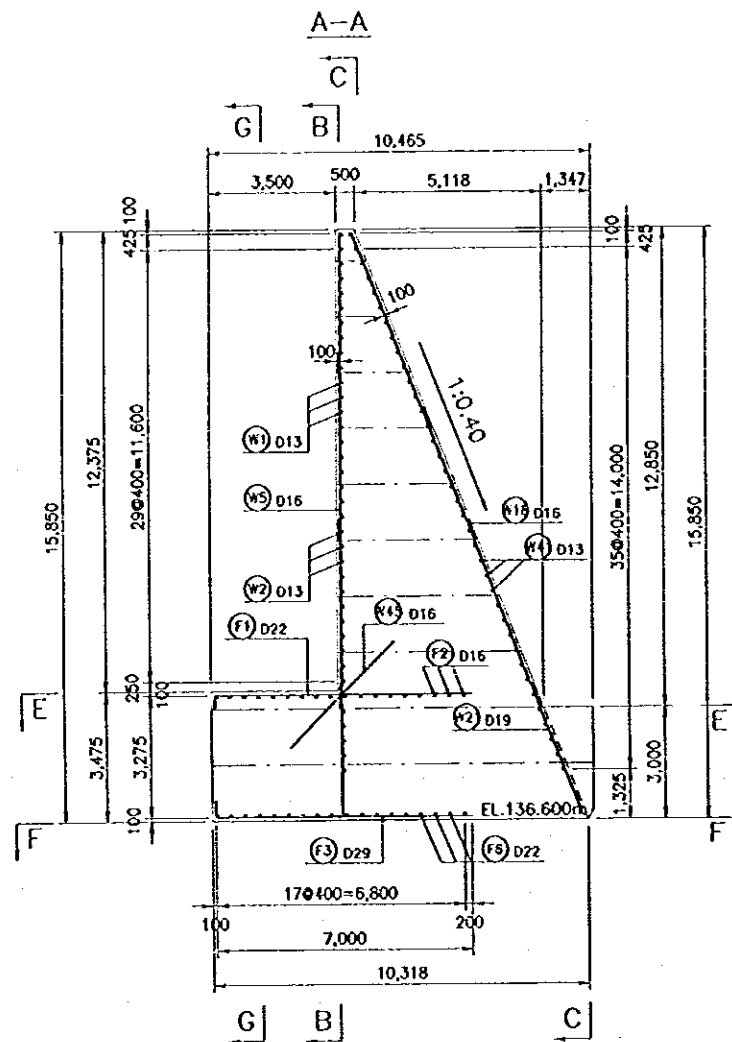
NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

- REFERENCE DRAWINGS**
- JD-P1-SP-Re-22 REINFORCEMENT DETAILS-BLOCK R-5
 - JD-P1-SP-Re-23 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-5 AND R-5



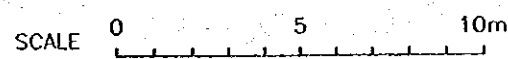
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: JATBARANO DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-5		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
SAJAN INTERNATIONAL COOPERATION AGENCY C/O. INDOCONSULTING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAPAN INTERNATIONAL INC.		DRAWING NO. JD-P1-SP-Re-21 SHEET NO. 127
DISBURSED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	DATE CONTRACT NO.	DATE CONTRACT NO.



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

- REFERENCE DRAWINGS**
- JD-P1-SP-Re-21 REINFORCEMENT DETAILS-BLOCK L-5
 - JD-P1-SP-Re-23 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-5 AND R-5



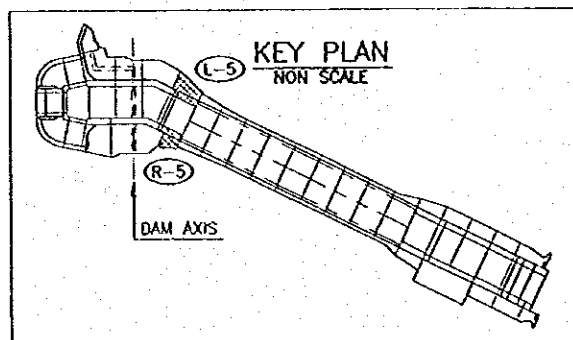
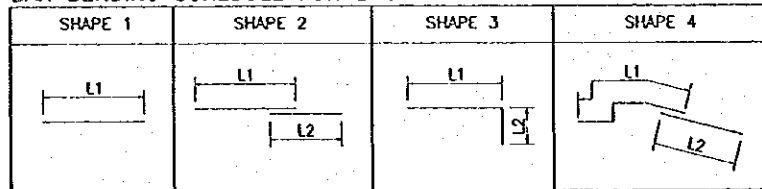
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVIDER CENTRAL JAWA
JATUNGLUNG FLOOD CONTROL PROJECT COMPONENT : JAYEBARANO DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK R-5		PROJECT NAME FLOOD CONTROL, LEVEE, DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
LIAISON ENGINEERING CONSULTANT SERVICE PT. INDOCONSULTING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKSI ENGINEERING INC.		CONTRACT SEMARANG CITY
DESIGNED CHECKED CEEB OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JO-P1-SP-Re-22 SHEET NO. 128 DATE CONTRACT NO.

BAR WEIGHT

L-5									
TYPE	DIA (mm)	NUMBER	LENGTH(mm)			WEIGHT PER 'm' (kg/m)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1A	19	20	8,170	5,170	3,000	2.23	18.22	364	2
W1B	19	20	8,170	4,500	3,670	2.23	18.22	364	2
W2A	19	20	8,070	4,500	3,570	2.23	18.00	360	2
W2B	19	20	8,070	5,070	3,000	2.23	18.00	360	2
W3	13	4	8,260	8,260		1.04	8.59	34	1
W4A	13	7	16,260	10,260	6,000	1.04	16.91	118	2
W4B	13	8	16,260	10,260	6,000	1.04	16.91	135	2
W5	13	1	8,260	8,260		1.04	8.59	9	1
W6A	19	20	10,540	5,605	4,935	2.23	23.50	470	2
W6B	19	20	10,540	6,580	3,960	2.23	23.50	470	2
W7A	19	7	10,430	6,580	3,850	2.23	23.26	163	2
W7B	19	7	10,430	5,495	4,935	2.23	23.26	163	2
W7C	19	4	9,970	6,264	3,698	2.23	22.23	89	2
W7D	19	5	9,970	5,264	4,698	2.23	22.23	111	2
W8A	19	5	8,700	4,847	3,850	2.23	19.40	97	2
W8B	19	1	9,750	5,495	4,248	2.23	21.74	22	2
W9	19	3	8,350	6,143	2,205	2.23	18.62	56	2
W10	19	8	5,070	5,063		2.23	11.31	90	1
W11	19	14	3,790	3,788		2.23	8.45	118	1
W12A	19	2	7,280	5,714	1,566	2.23	16.23	32	2
W12B	19	1	7,280	4,148	3,132	2.23	16.23	16	2
W13	13	3	8,260	8,260		1.04	8.59	26	1
W14A	13	8	12,970	8,968	4,000	1.04	13.49	108	2
W14B	13	8	13,200	8,000	5,196	1.04	13.73	110	2
W15A	13	2	16,260	12,260	4,000	1.04	16.91	34	2
W15B	13	1	16,260	8,260	8,000	1.04	16.91	17	2
W16	13	1	8,260	8,260		1.04	8.59	9	1
W17	13	16	4,150	4,142		1.04	4.32	69	1
W18	22	68	4,000	4,000		2.98	11.92	811	1
W19	22	12	2,000	2,000		2.98	5.96	72	1
F1	25	85	7,380	7,000	380	3.85	28.41	2,415	3
F2A	19	9	17,840	11,651	6,185	2.23	39.78	358	4
F2B	19	9	17,840	7,065	10,771	2.23	39.78	358	4
F3	32	80	7,480	7,000	480	6.31	47.20	3,776	3
F4A	25	9	16,680	10,680	6,000	3.85	64.22	578	2
F4B	25	9	16,680	10,680	6,000	3.85	64.22	578	2
TOTAL =								12,960	

BAR BENDING SCHEDULE FOR L-5



NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

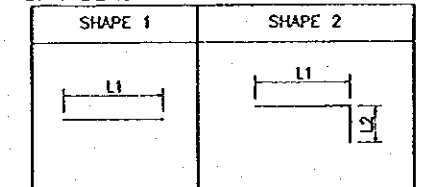
REFERENCE DRAWINGS

- JD-P1-SP-Re-21 REINFORCEMENT DETAILS-BLOCK L-5
- JD-P1-SP-Re-22 REINFORCEMENT DETAILS-BLOCK R-5

BAR WEIGHT

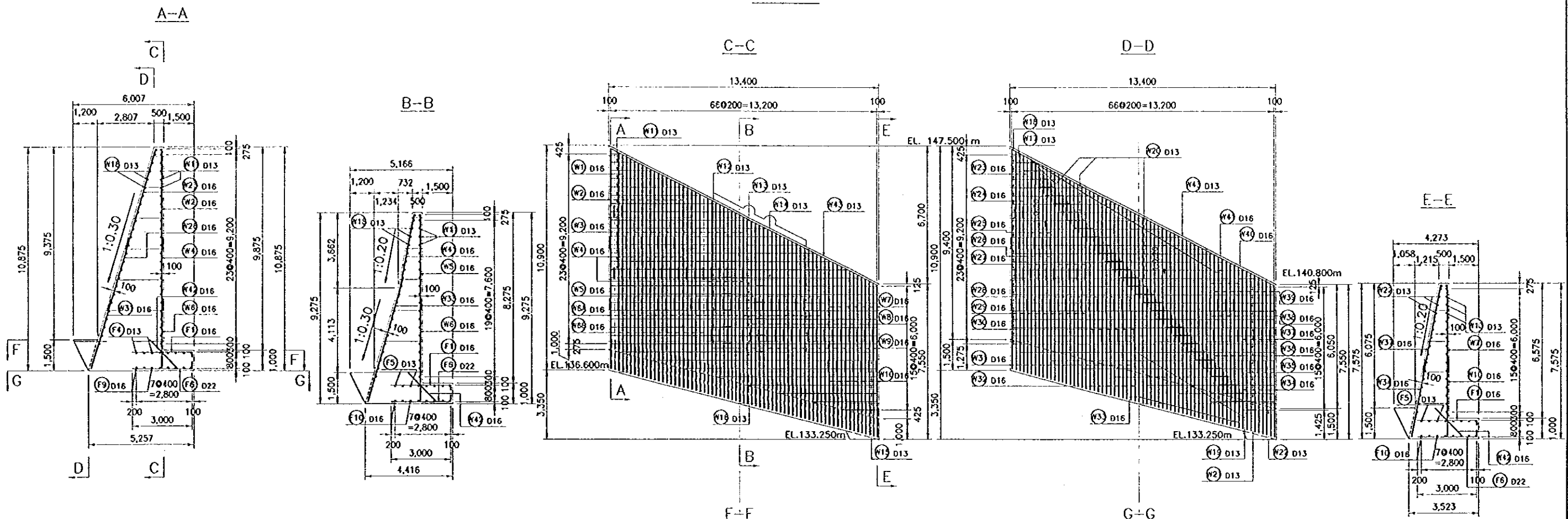
R-5									
TYPE	DIA (mm)	NUMBER	LENGTH(mm)			WEIGHT PER 'm' (kg/m)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1	13	12	5,250	5,250		1.04	5.46	66	1
W2	13	24	9,800	9,800		1.04	10.19	245	1
W3	16	4	1,850	1,850		1.58	2.92	12	1
W4	16	12	2,650	2,650		1.58	4.19	50	1
W5	16	66	5,060	5,060		1.58	7.99	528	1
W6	16	13	4,650	4,650		1.58	7.35	96	1
W7	16	21	3,850	3,850		1.58	6.08	128	1
W8	16	25	3,460	3,460		1.58	5.47	137	1
W9	16	25	4,960	4,960		1.58	7.84	196	1
W10	16	2	5,550	5,547		1.58	8.77	18	1
W11	16	1	3,940	3,931		1.58	6.23	6	1
W12	16	1	3,570	3,562		1.58	5.64	6	1
W13	16	3	4,150	4,149		1.58	6.56	20	1
W14	16	5	4,740	4,738		1.58	7.49	37	1
W15	16	7	3,800	3,791		1.58	6.00	42	1
W16	16	5	4,650	4,641		1.58	7.35	37	1
W17	16	5	4,790	4,789		1.58	7.57	38	1
W18	16	17	5,410	5,407		1.58	8.55	145	1
W19	16	7	5,380	5,378		1.58	8.50	60	1
W20	19	2	5,630	5,624		2.23	12.55	25	1
W21	19	21	3,800	3,793		2.23	8.47	178	1
W22	19	19	5,410	5,409		2.23	12.06	229	1
W23	19	2	2,180	2,178		2.23	4.86	10	1
W24	16	8	5,020	5,015		1.58	7.93	63	1
W25	16	22	3,580	3,571		1.58	5.66	124	1
W26	16	2	1,180	1,173		1.58	1.86	4	1
W27	16	4	2,270	2,269		1.58	3.59	14	1
W28	16	2	5,740	5,737		1.58	9.07	18	1
W29	13	1	5,150	5,149		1.04	5.36	5	1
W30	13	1	5,970	5,966		1.04	6.21	6	1
W31	16	9	2,960	2,958		1.58	4.68	42	1
W32	16	3	4,860	4,856		1.58	7.68	23	1
W33	16	9	4,340	4,334		1.58	6.86	62	1
W34	16	4	4,630	4,623		1.58	7.32	29	1
W35	16	9	5,150	5,149		1.58	8.14	73	1
W36	16	5	4,400	4,391		1.58	6.95	35	1
W37	16	2	3,510	3,509		1.58	5.55	11	1
W38	19	4	3,630	3,627		2.23	8.09	32	1
W39	19	5	5,160	5,157		2.23	11.51	58	1
W40	13	1	850	850		1.04	0.88	1	1
W41A	13	30	4,970	4,970		1.04	5.17	155	1
W41B	13	5	9,150	9,145		1.04	9.52	48	1
W42	13	11	4,420	4,416		1.04	4.60	51	1
W43	13	20	4,800	4,799		1.04	4.99	100	1
W44	13	4	2,290	2,282		1.04	2.38	10	1
W45	16	38	4,000	4,000		1.58	6.32	240	1
W46	16	12	2,000	2,000		1.58	3.16	38	1
W47	13	2	10,960	10,957		1.04	11.40	23	1
F1	22	50	7,330	7,000	330	2.98	21.84	1,092	2
F2	16	18	10,110	10,110		1.58	15.97	288	1
F3	29	38	7,440	7,000	440	6.31	46.95	1,784	2
F4	29	12	6,930	6,481	440	6.31	43.73	525	2
F5	22	2	8,420	8,417		2.98	25.09	50	1
F6	22	16	9,800	9,800		2.98	29.20	467	1
TOTAL =								7,780	

BAR BENDING SCHEDULE FOR R-5



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

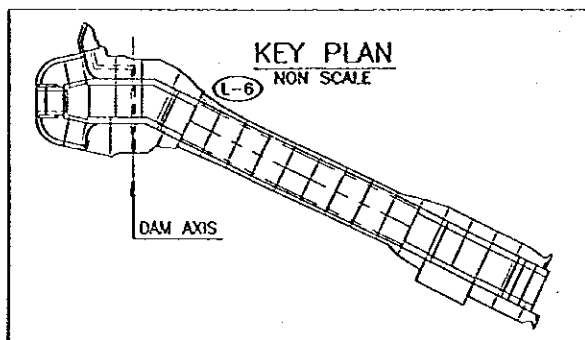
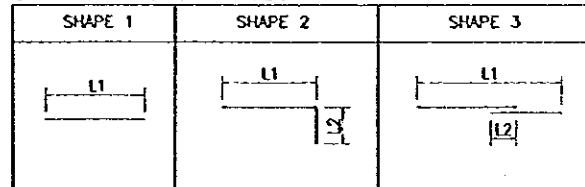
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIDARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BAR WEIGHT FOR L-5 AND R-5		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAPAN INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHECKED DESIGNED APPROVED		DRAWING NO. JD-P1-SP-Re-23 SHEET NO. 129
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.



BAR WEIGHT

TYPE	DA (mm)	NUMBER	LENGTH (mm)		REQ'T PER UNIT (kg/m)	REQ'T PER UNIT (kg)	SHAPE
			L1	L2			
W1	16	2	3150	3150	1.58	4.38	10
W2	16	10	3950	3950	1.58	6.24	62
W3	16	15	4450	4450	1.58	7.23	105
W4	16	17	4250	4250	1.58	6.72	114
W5	16	17	4250	4250	1.58	6.72	114
W6	16	27	4690	4685	1.58	7.41	200
W7	16	12	5490	5485	1.58	8.67	104
W8	16	7	4850	4850	1.58	7.66	54
W9	16	16	4350	4350	1.58	6.97	110
W10	16	21	4140	4139	1.58	6.54	137
W11	16	7	3300	3282	1.58	5.36	37
W12	13	19	6150	6150	1.04	6.62	96
W13	13	9	7660	7660	1.04	7.57	64
W14	13	1	7020	7020	1.04	7.22	7
W15	13	7	6400	6400	1.04	6.66	47
W16	13	1	7260	7260	1.04	7.58	8
W17	13	1	550	550	1.04	0.57	1
W18	13	23	5490	5485	1.04	5.71	131
W19	13	7	5970	5962	1.04	6.21	43
W20	13	15	4130	4129	1.04	4.35	65
W21	13	15	9790	9787	1.04	10.11	152
W22	13	1	1600	1600	1.04	1.66	2
W23	16	2	4960	4960	1.58	7.54	24
W24	16	2	3290	3289	1.58	5.20	10
W25	16	3	3700	3699	1.58	6.16	15
W26	16	8	3700	3692	1.58	5.85	47
W27	16	8	4530	4521	1.58	7.24	58
W28	16	10	4140	4139	1.58	6.54	65
W29	16	10	5500	5504	1.58	8.85	88
W30	16	6	4500	4504	1.58	7.27	44
W31	16	15	4290	4289	1.58	6.78	108
W32	16	6	3370	3307	1.58	5.23	21
W33	16	26	4130	4129	1.58	6.62	172
W34	16	5	3540	3540	1.58	5.59	28
W35	16	4	5070	5070	1.58	8.31	32
W36	16	4	3260	3254	1.58	5.15	21
W37	16	5	4750	4742	1.58	7.51	38
W38	16	4	4570	4564	1.58	7.22	29
W39	16	2	3620	3620	1.58	5.72	16
W40	16	4	2610	2607	1.58	4.12	16
W41	16	45	3650	3648	1.58	8.72	257
W42	16	67	2300	2300	1.58	3.15	212
W43	13	2	15220	14760	1.04	15.53	32
F1	16	67	3240	3200	2.00	13.22	343
F2	13	4	7290	7290	1.04	8.21	33
F3	13	4	6130	6130	1.04	6.44	26
F4	13	4	6130	6130	1.04	6.44	26
F5	13	4	7890	7890	1.04	8.21	33
F6	22	57	3330	3300	2.36	9.35	665
F7	16	4	7290	7290	1.58	12.62	50
F8	16	4	6130	6130	1.58	9.78	39
F9	16	4	6130	6130	1.58	9.78	39
F10	16	4	7290	7290	1.58	12.62	50
					TOTAL	4.367	

BAR BENDING SCHEDULE

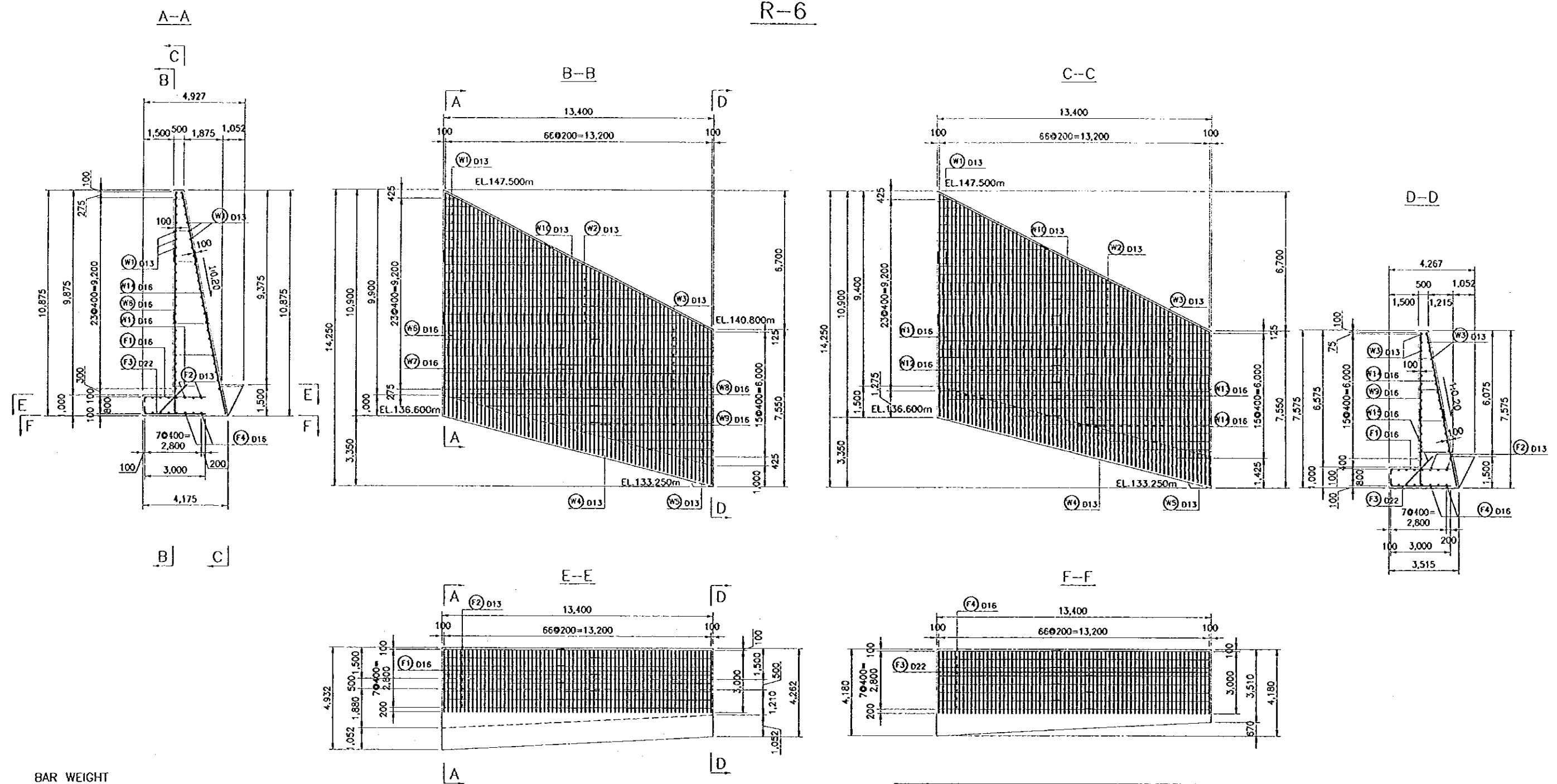


NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REFERENCE DRAWINGS
JD-P1-SP-Re-25 REINFORCEMENT DETAILS-BLOCK R-6

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

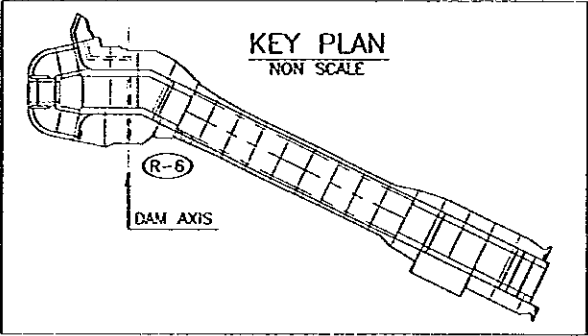
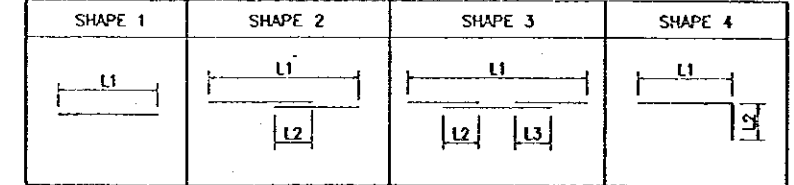
	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT PRATUNSEJENA FLOOD CONTROL PROJECT COMPONENT : JATIBARANO DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-6	PROVINCE CENTRAL JAWA
	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) ENGINEERING CONSULTANTS PACIFIC CONSULTANTS INTERNATIONAL (PACIC) INTERNATIONAL INC.	PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	CITY SEMARANG CITY
	DATE	DRAWING NO. JD-P1-SP-Re-24 SHEET NO. 130 CONTRACT NO.



BAR WEIGHT

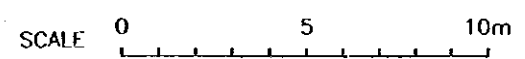
TYPE	DIA (mm)	NUMBER	LENGTH (mm)			WEIGHT PER 'm' (kg/m)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1	13	20	4,150	4,150		1.04	4.32	86	1
W2	13	12	10,210	9,750	460	1.04	10.62	127	2
W3	13	16	13,200	13,200		1.04	13.73	220	2
W4	13	8	10,860	10,400	460	1.04	11.29	90	2
W5	13	8	4,000	4,000		1.04	4.16	33	1
W6	16	2	11,750	10,625	560	1.58	18.57	37	3
W7	16	16	10,970	9,850	560	1.58	17.33	277	3
W8	16	32	9,510	8,950	560	1.58	15.03	431	2
W9	16	17	8,740	8,175	560	1.58	13.81	235	2
W10	13	2	15,220	14,758	460	1.04	15.83	32	2
W11	16	2	11,960	10,835	560	1.58	18.90	38	3
W12	16	16	11,170	10,045	560	1.58	17.65	282	3
W13	16	32	9,690	9,127	560	1.58	15.31	490	2
W14	16	17	8,500	8,337	560	1.58	14.06	239	2
W15	16	67	2,000	2,000		1.58	3.16	212	1
F1	16	67	3,240	3,000	240	1.58	5.12	343	4
F2	13	8	14,070	13,606	460	1.04	14.63	117	2
F3	22	67	3,330	3,000	330	2.98	9.92	665	4
F4	16	8	14,170	13,606	560	1.58	22.39	179	2
TOTAL =								4,183	

BAR BENDING SCHEDULE



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

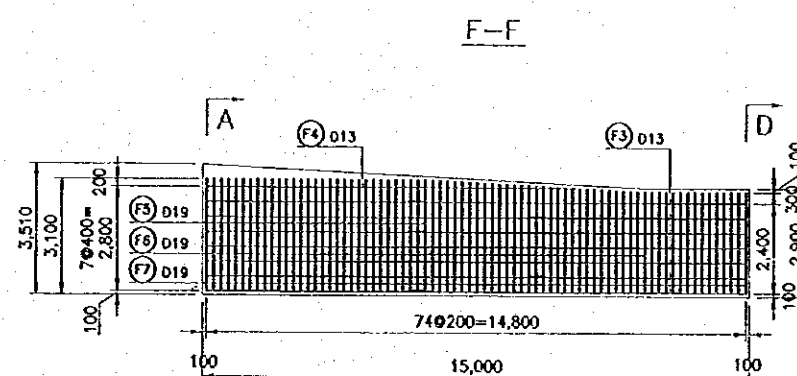
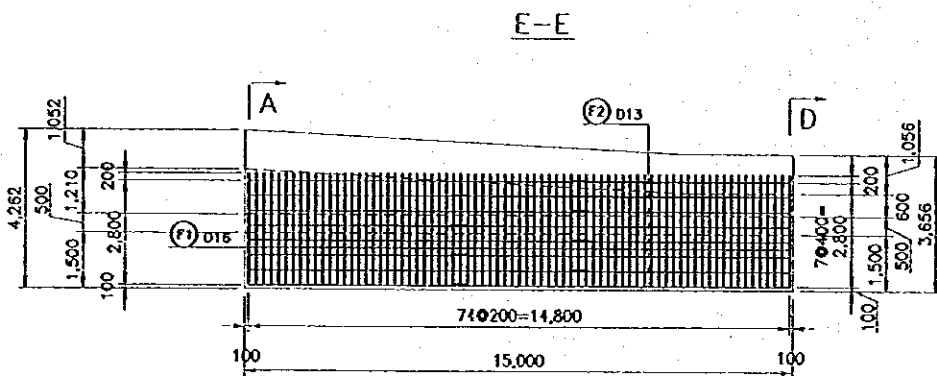
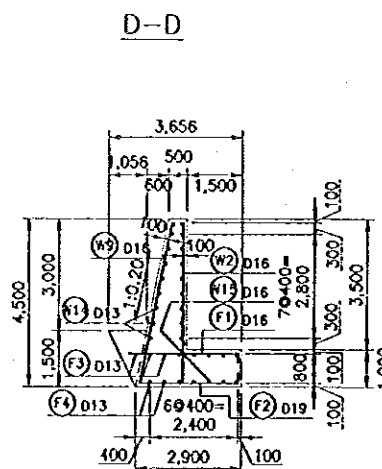
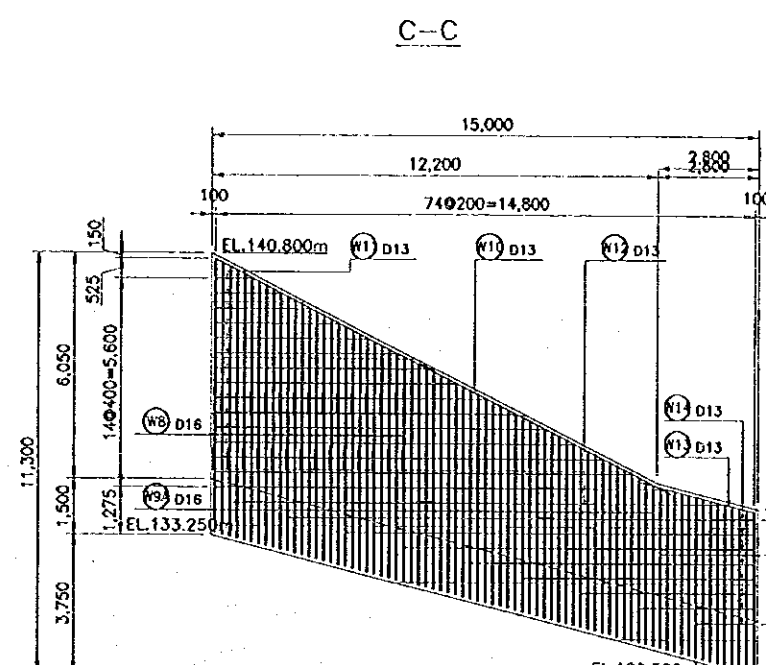
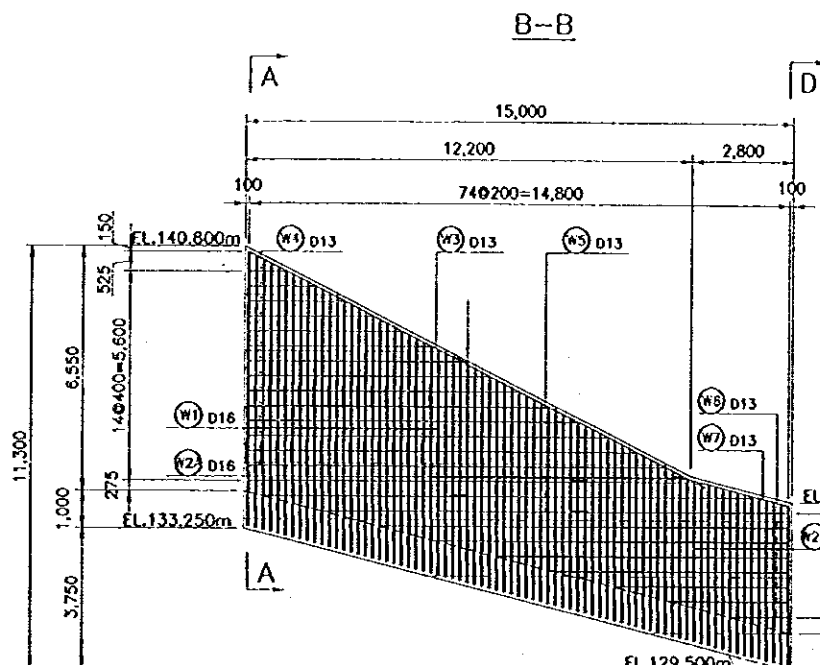
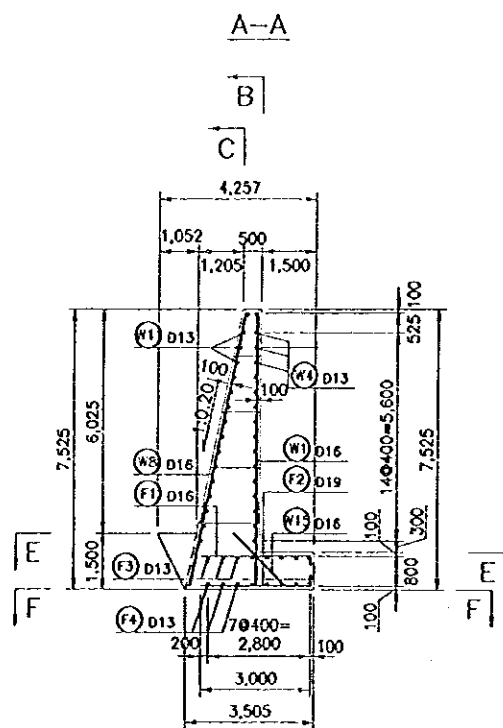
REFERENCE DRAWINGS
JD-P1-SP-Re-24 REINFORCEMENT DETAILS-BLOCK L-6



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANO DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK R-6		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SAFARI INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PARTNER INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Re-25 SHEET NO. 131 DATE CONTRACT NO.

L-7, R-7

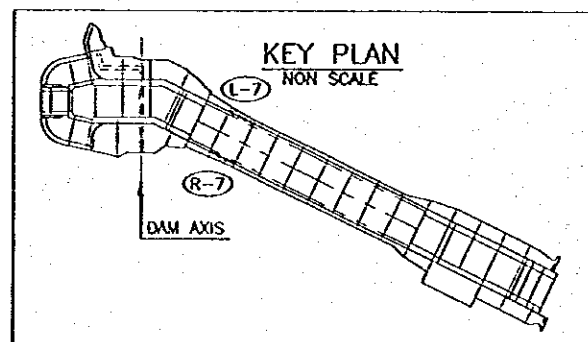
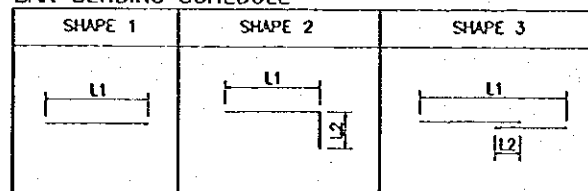


BAR WEIGHT

TYPE	DIA (mm)	NUMBER	LENGTH (mm)			WEIGHT PER 'm' BAR (kg)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1	16	27	7,240	6,675	560	1.58	11.44	309	3
W2A	16	34	5,150	5,150		1.58	8.14	277	1
W2B	16	14	4,300	4,300		1.58	6.79	95	1
W3	13	1	14,450	13,938	460	1.04	15.03	15	3
W4	13	14	6,250	6,250		1.04	6.50	91	1
W5	13	3	13,400	12,933	460	1.04	13.94	42	3
W6	13	7	6,400	6,400		1.04	6.66	47	1
W7	13	1	3,250	3,243		1.04	3.38	3	1
W8	16	27	7,370	6,807	560	1.58	11.64	314	3
W9A	16	34	5,260	5,252		1.58	8.31	283	1
W9B	16	14	4,390	4,385		1.58	6.94	97	1
W10	13	1	14,450	13,938	460	1.04	15.03	15	3
W11	13	14	6,250	6,250		1.04	6.50	91	1
W12	13	3	13,400	12,933	460	1.04	13.94	42	3
W13	13	1	3,250	3,243		1.04	3.38	3	1
W14	13	7	6,400	6,400		1.04	6.66	47	1
W15	16	75	2,000	2,000		1.58	3.16	237	1
F1	16	75	3,240	3,000	240	1.58	5.12	384	2
F2	13	8	15,720	15,260	460	1.04	16.35	131	3
F3	13	7	15,720	15,260	460	1.04	16.35	114	3
F4	13	1	10,420	10,411		1.04	10.84	11	1
F5	19	31	3,290	3,000	290	2.23	7.34	227	2
F6	19	30	3,140	2,850	290	2.23	7.00	210	2
F7	19	14	2,990	2,700	290	2.23	6.67	93	2
TOTAL =						3,178			

FOR L-7, R-7, TOTAL 12 = 6.356 (kg)

BAR BENDING SCHEDULE



NOTE

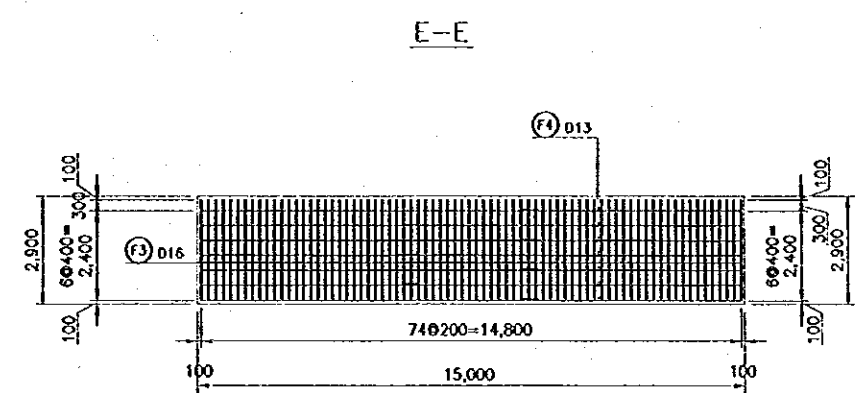
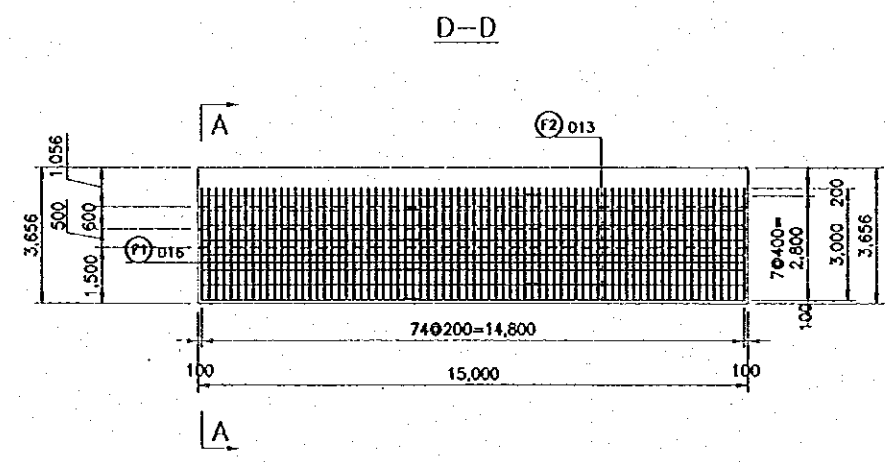
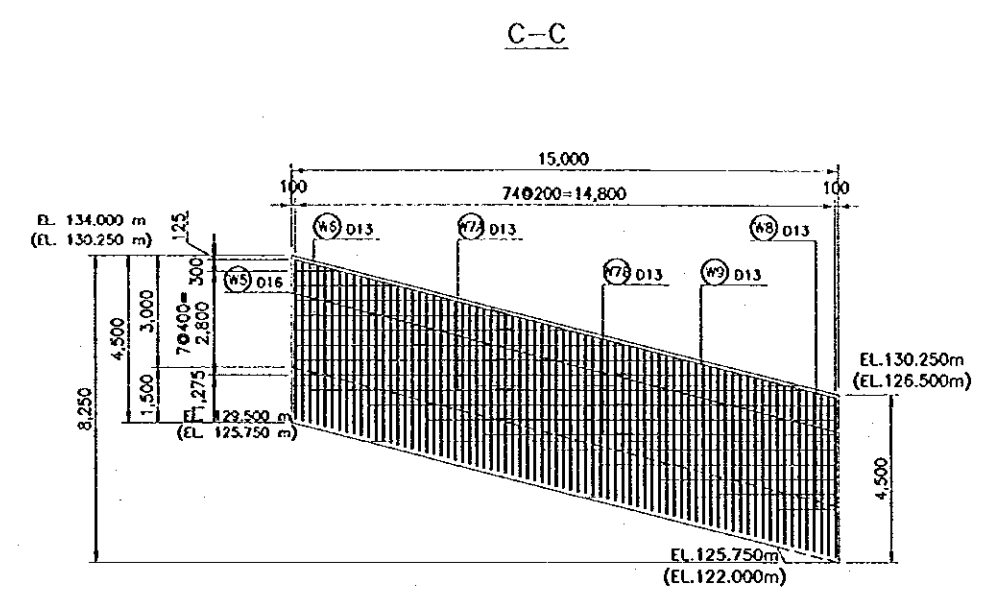
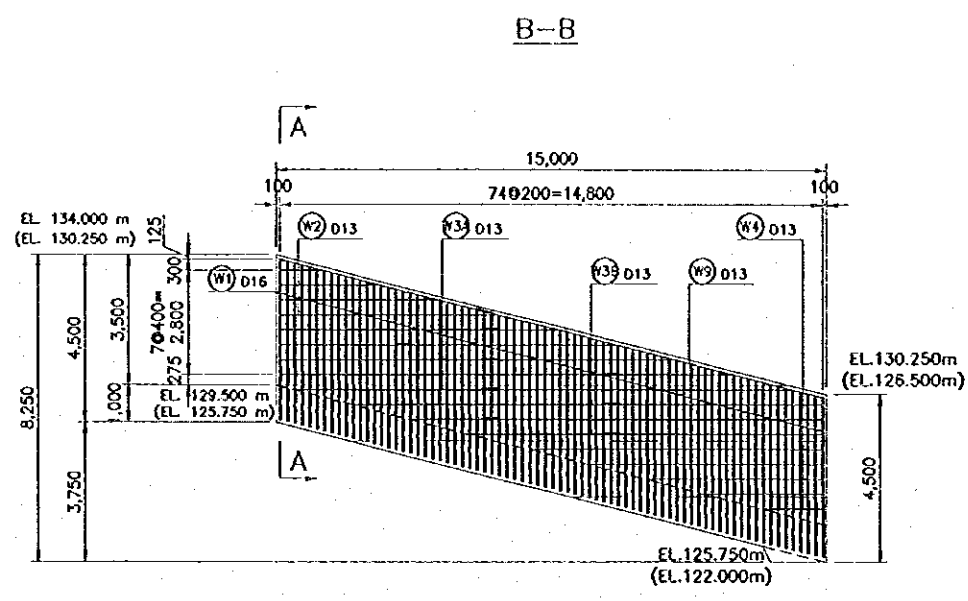
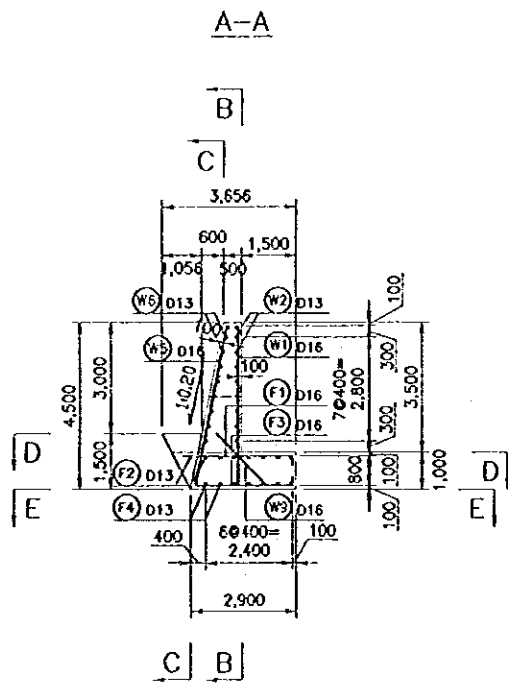
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

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NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-7, R-7		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT BY SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. J-D-P1-SP-Re-25 SHEET NO. 132 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JAPAN INTERNATIONAL CO.	DESIGNED CHECKED APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED PROJECT MANAGER

L-8, R-8
(L-9, R-9)

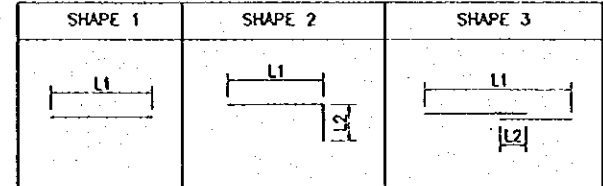


BAR WEIGHT

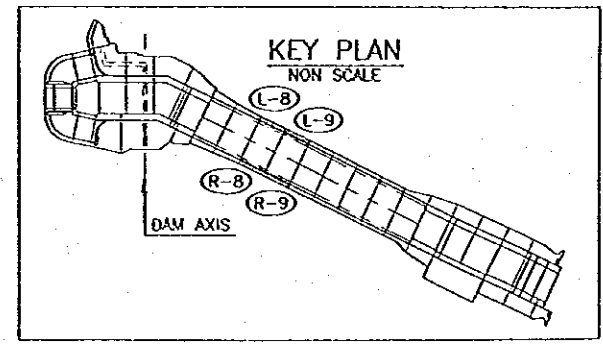
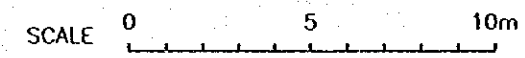
TYPE	DA (mm)	NUMBER	LENGTH (mm)			WEIGHT PER 'm' (kg/m)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1	L2				
W1	16	75	4,300	4,300		1.58	6.75	510	1
W2	13	4	3,600	3,600		1.04	3.74	15	1
W3A	13	5	11,060	10,600	460	1.04	11.50	58	3
W3B	13	3	11,660	11,200	460	1.04	12.13	36	3
W4	13	5	4,800	4,800		1.04	4.99	25	1
W5	16	75	4,300	4,300		1.58	6.94	520	1
W6	13	4	3,600	3,600		1.04	3.74	15	1
W7A	13	5	11,060	10,600	460	1.04	11.50	58	3
W7B	13	3	11,660	11,200	460	1.04	12.13	36	3
W8	13	5	4,800	4,800		1.04	4.99	25	1
W9	13	2	15,720	15,260	460	1.04	16.36	33	3
F1	16	75	3,240	3,000	240	1.58	5.12	384	2
F2	13	8	15,720	15,260	460	1.04	16.36	131	3
F3	16	75	3,000	2,700	300	1.58	4.79	359	2
F4	13	7	15,720	15,260	460	1.04	16.36	114	3
TOTAL =								2,319	

FOR L-8 & AND L-9 R-9: TOTAL x4 = 9,276 (kg)

BAR BENDING SCHEDULE



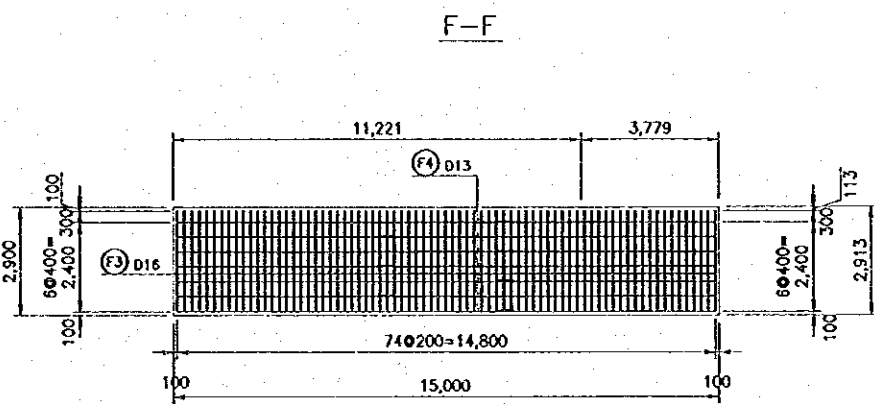
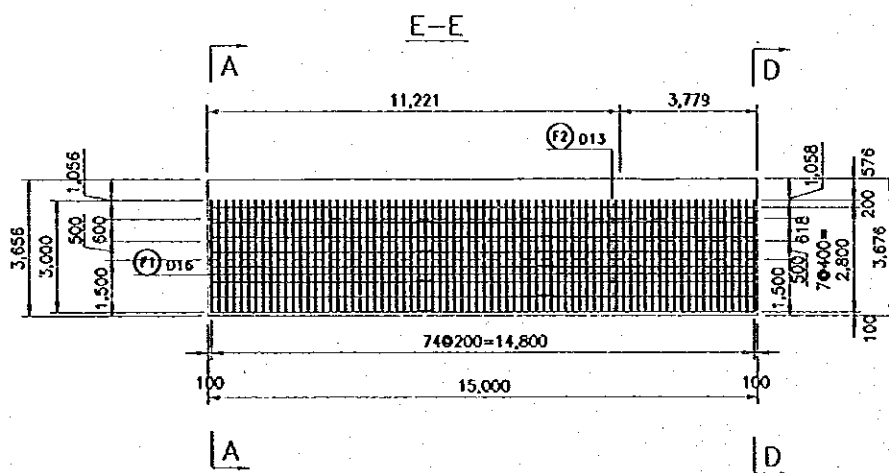
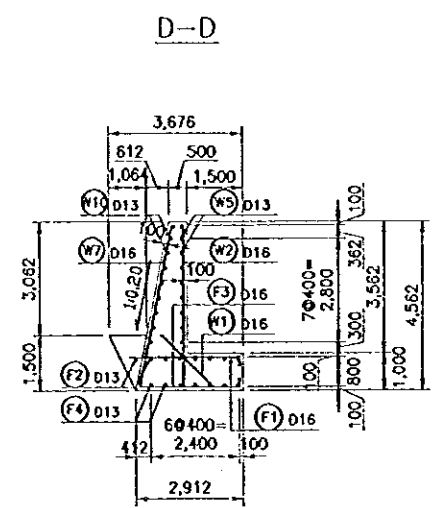
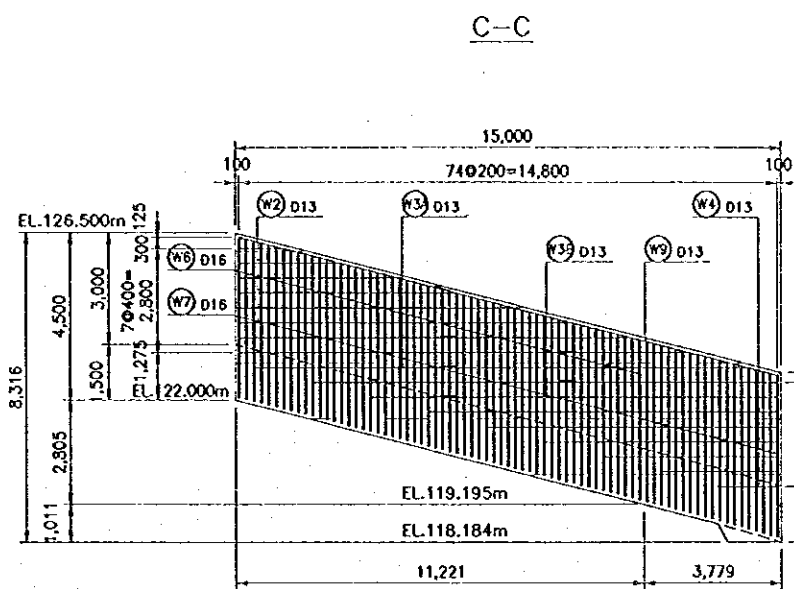
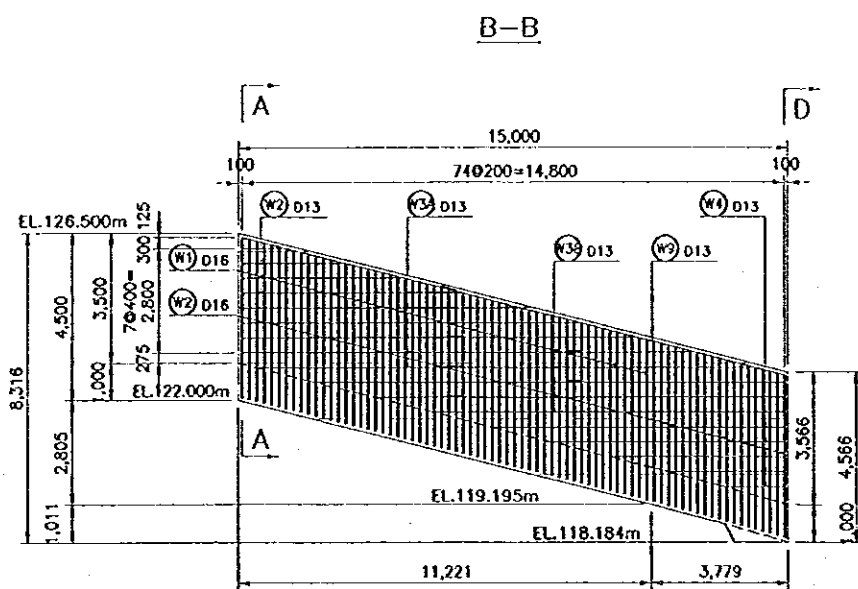
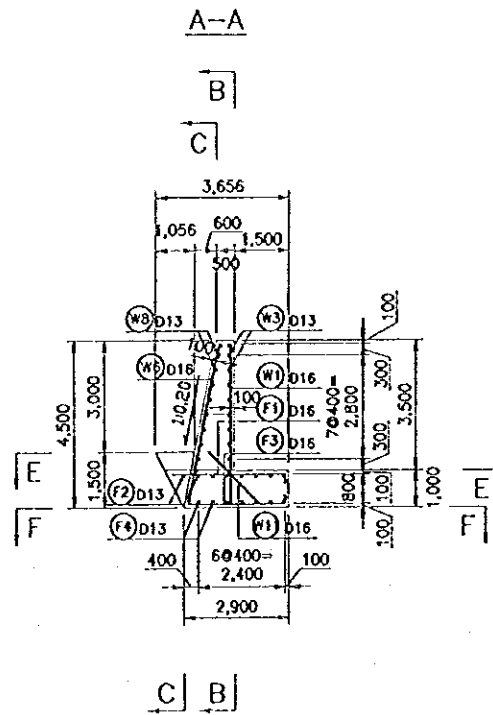
NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-8, R-8 AND L-9, R-9		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN BOJALANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CII (INDONESIA) CO., LTD. IN COOPERATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACO INTERNATIONAL, INC.		CITY SEMARANG CITY
DESIGNED CHECKED CURF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Rs-27 SHEET NO. 133
NO. DATE REVISIONS ORIGINATED DESIGNED APPROVED		DATE CONTRACT NO.

L-10, R-10

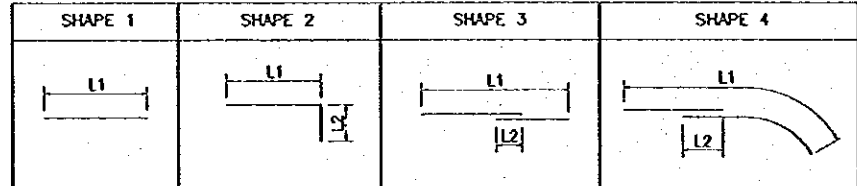


BAR WEIGHT

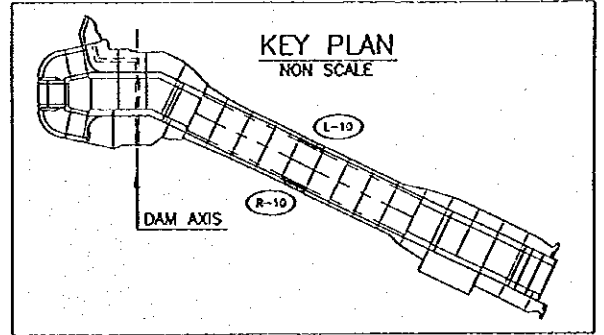
TYPE	DIA (mm)	NUMBER	LENGTH (mm)		WEIGHT PER 'm' (kg)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE
			TOTAL	L1				
W1	16	56	4,300	4,300	1.58	6.79	380	1
W2	16	19	4,340	4,332	1.58	6.86	130	1
W3	13	6	5,200	5,200	1.04	5.41	32	1
W4A	13	3	12,270	12,267	1.04	12.76	38	3
W4B	13	2	12,000	12,000	1.04	12.48	25	3
W5	13	6	5,640	5,637	1.04	5.97	35	1
W6	16	56	4,390	4,355	1.58	6.94	383	1
W7	16	19	4,420	4,418	1.58	6.98	133	1
W8	13	6	5,200	5,200	1.04	5.41	32	1
W9A	13	3	12,270	12,267	1.04	12.76	38	3
W9B	13	2	12,000	12,000	1.04	12.48	25	3
W10	13	6	5,640	5,637	1.04	5.97	35	1
W11	16	75	2,000	2,000	1.58	3.16	237	1
W12	13	2	15,720	15,255	1.04	16.35	33	3
F1	16	75	3,240	3,000	2.40	5.12	384	2
F2	13	8	15,740	15,271	1.04	16.37	131	4
F3	16	25	2,940	2,700	2.40	4.65	348	2
F4	13	7	15,740	15,271	1.04	16.37	115	4
TOTAL =						2539		

FOR L-10,R-10: TOTAL x 2 = 5,078 (kg)

BAR BENDING SCHEDULE



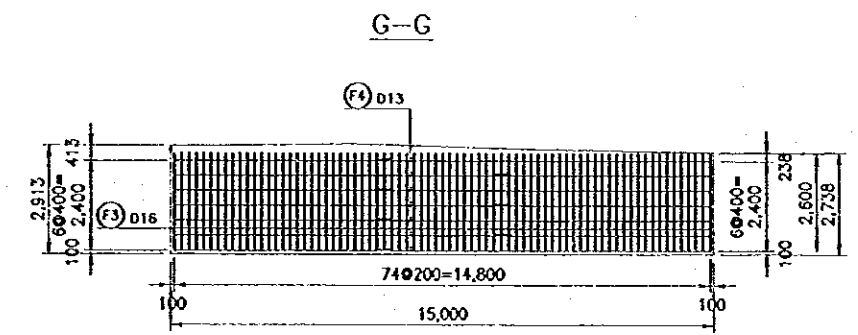
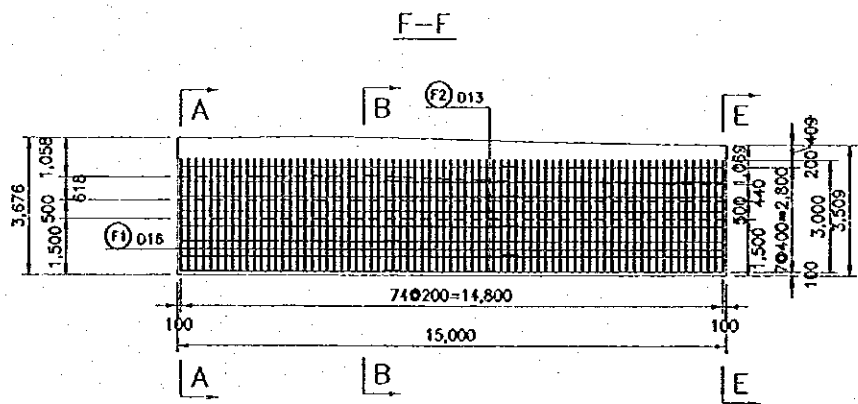
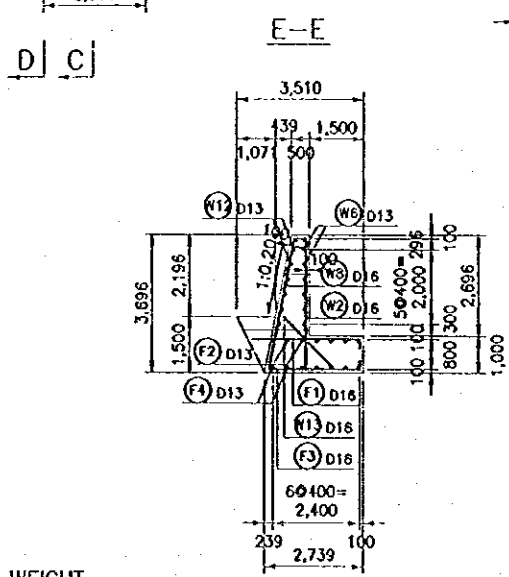
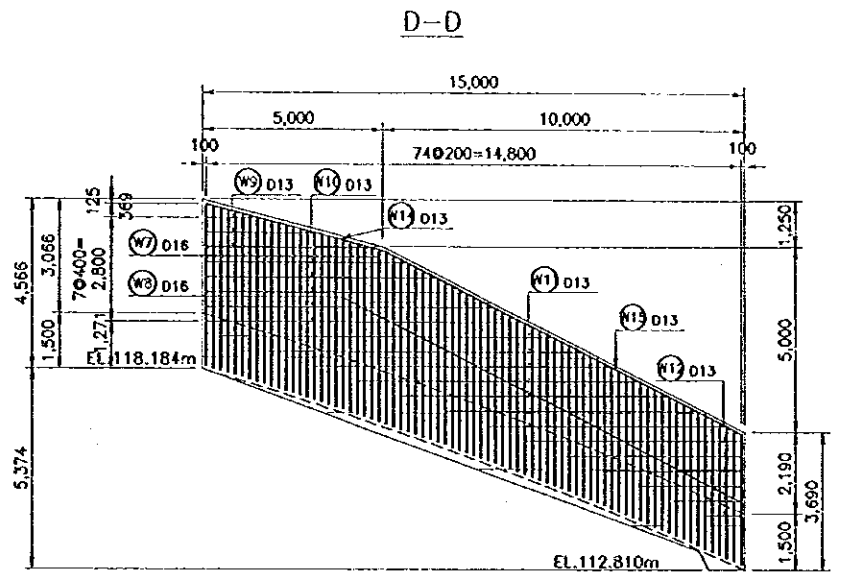
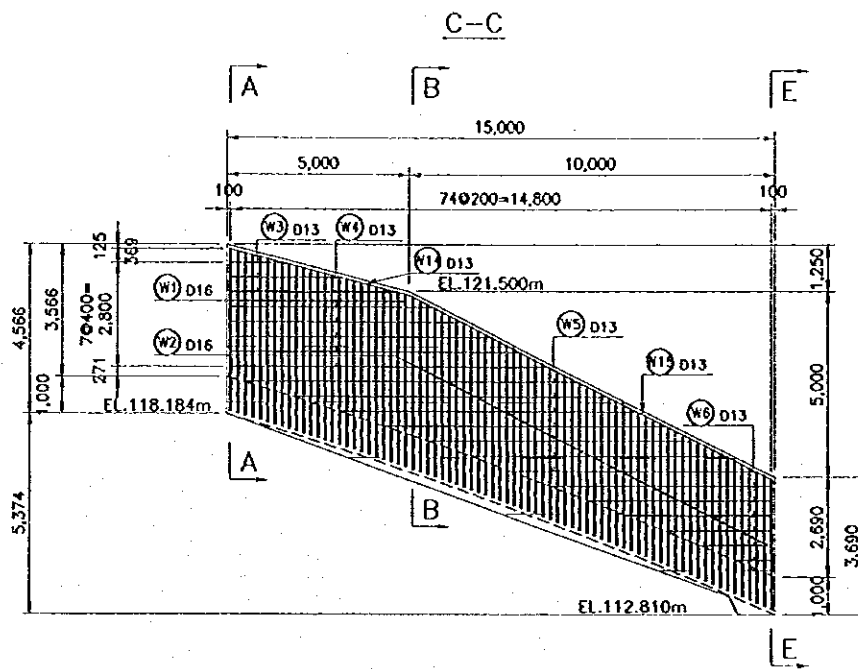
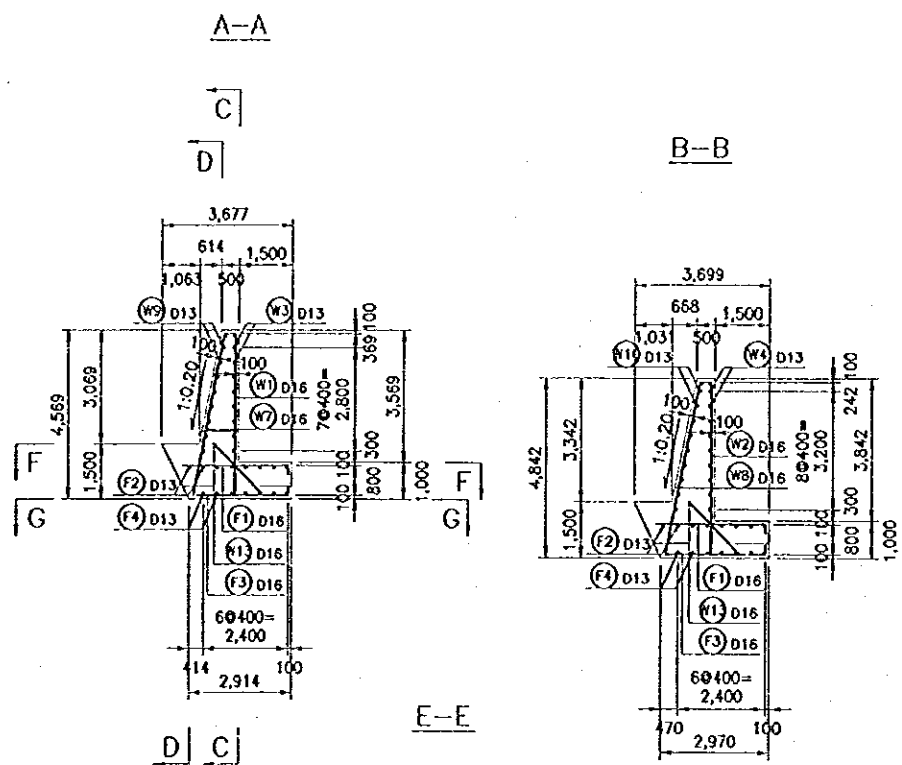
NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT TRATUNSELUMA FLOOD CONTROL PROJECT COMPONENT: JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-10, R-10	PROVINCE	CENTRAL JAVA
	PROJECT NAME	FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	DISTRICT	SEMARANG CITY
	DRAWING NO.	JD-P1-SP-R-28
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. PACIFIC CONSULTING INTERNATIONAL PAKCO INTERNATIONAL INC. CHIEF OF PLANNING AND DESIGN	DRAFTER CHECKED DATE	CONTRACT NO. 134

L-11, R-11

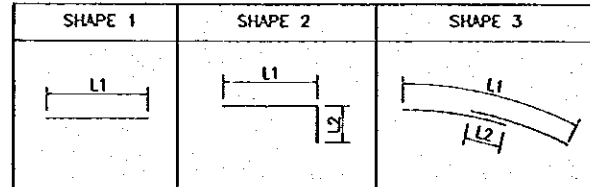


BAR WEIGHT

TYPE	DIA (mm)	NUMBER	LENGTH (m)			VOLUME PER BAR (m³)	VOLUME PER BAR (kg)	VOLUME (m³)	SHAPE	
			L1	L2	L3					
W1	16	2	4.50	4.50		1.58	7.13	1.8	1	
W2	16	5	4.00	4.00		1.58	6.40	3.2	1	
W3	13	3	3.00	3.00		1.04	3.20	1.0	1	
W4	13	5	7.10	7.10		1.04	7.45	3.7	1	
W5	13	7	7.90	7.90		1.04	8.27	5.8	1	
W6	13	6	3.40	3.40		1.04	3.84	2.2	1	
W7	16	2	4.80	4.80		1.58	7.27	1.8	1	
W8	16	5	4.10	4.10		1.58	6.95	3.5	1	
W9	13	3	3.20	3.00		1.04	3.20	1.0	1	
W10	13	5	7.10	7.10		1.04	7.45	3.7	1	
W11	13	7	7.90	7.90		1.04	8.27	5.8	1	
W12	13	6	3.40	3.40		1.04	3.84	2.2	1	
W13	16	7	2.00	2.00		1.58	3.38	2.9	1	
W14	13	2	5.00	5.00		1.04	5.36	1.1	1	
W15	13	2	11.00	11.00		1.04	11.52	2.3	1	
F1	16	7	3.20	3.00	2.00	1.58	5.12	3.8	2	
F2	13	8	16.30	15.70	4.00	1.04	16.58	1.5	3	
F3	16	7	2.90	2.80	2.00	1.58	4.48	3.9	2	
F4	13	7	16.20	15.70	4.00	1.04	16.58	1.8	3	
			TOTAL =			2.50				

FOR L11: L11L2 = 500 (kg)

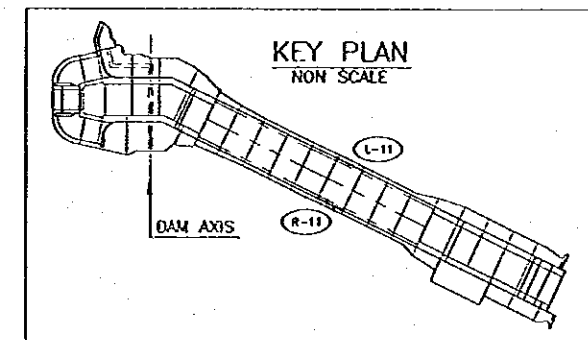
BAR BENDING SCHEDULE



NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

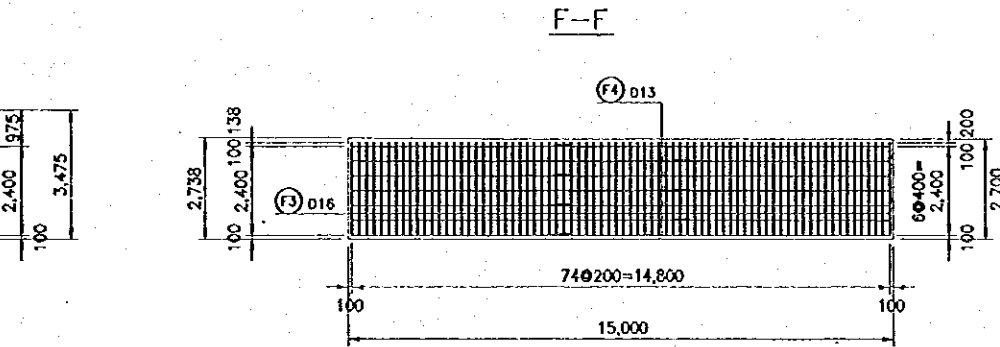
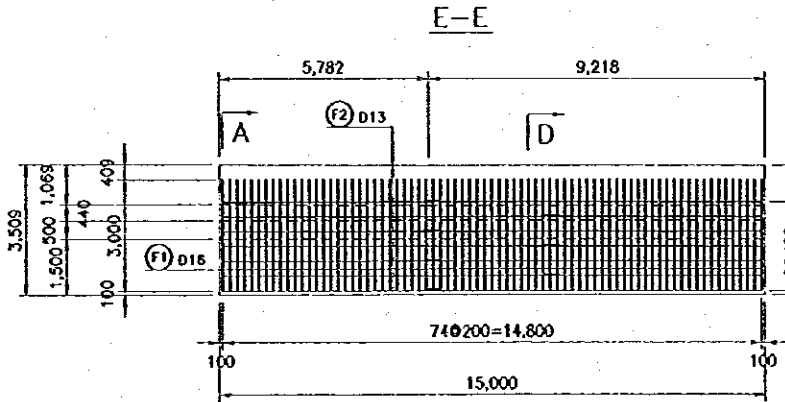
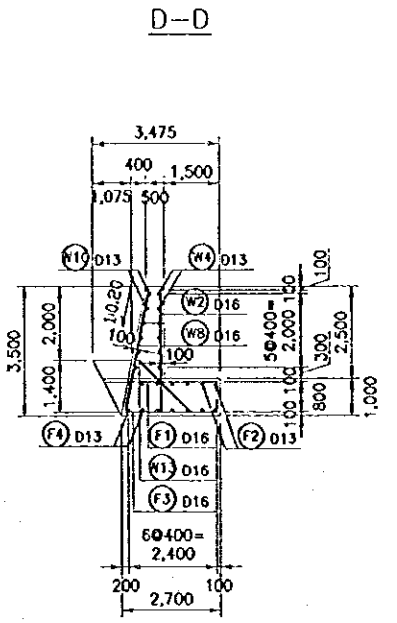
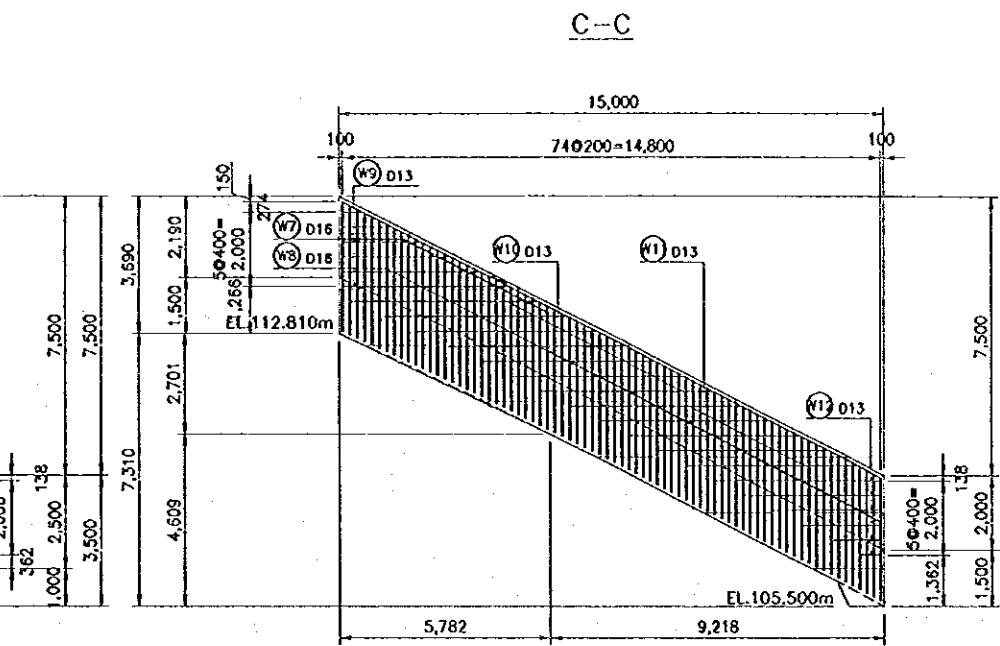
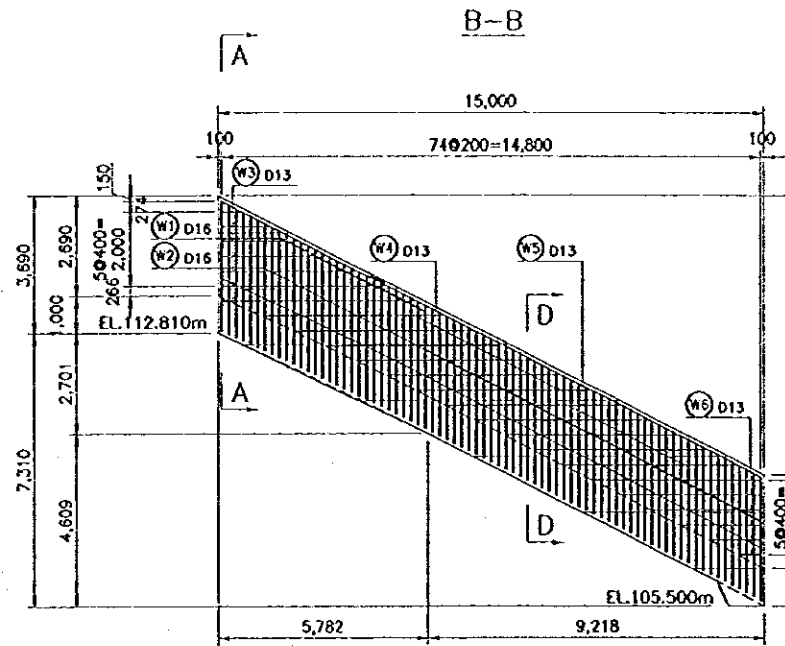
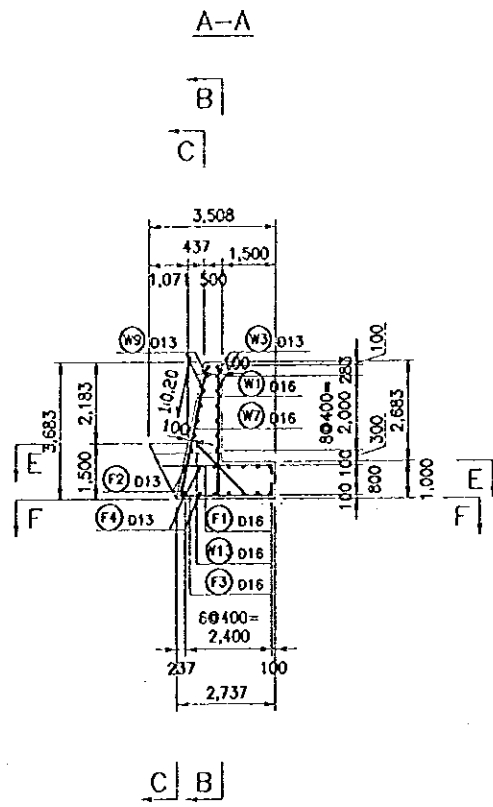
SCALE 0 5 10m



NO.	DATE	REVISIONS	DESIGNED	CHECKED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT ZIATUNGELANA FLOOD CONTROL PROJECT COMPONENT : IATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-11, R-11		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER INFRASTRUCTURE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. JD-P1-SP-Re-29 SHEET NO. 135
JOYAN INTERNATIONAL COORDINATOR AGENCY CIBI ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKO INTERNATIONAL INC.	DESIGNED CHECKED APPROVED PROJECT MANAGER	DATE CONTRACTING

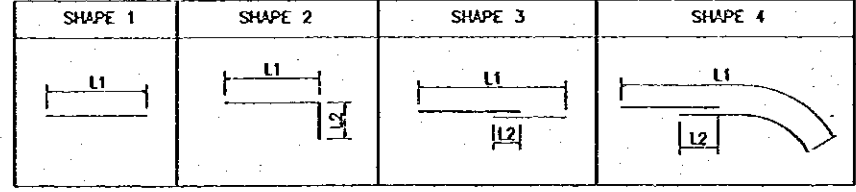
L-12, R-12



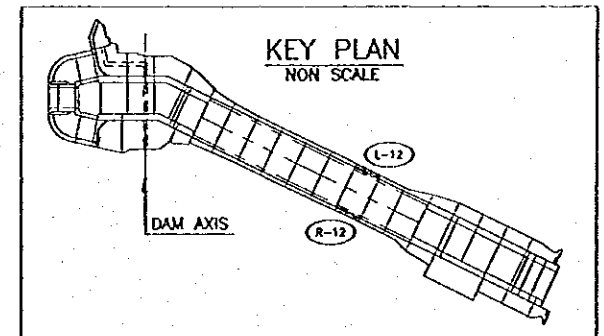
TYPE	DIA (mm)	NUMBER	LENGTH (mm)		WEIGHT PER 'm' (kg/m)	WEIGHT PER BAR (kg)	WEIGHT (kg)	SHAPE	
			TOTAL	L1					L2
W1	16	29	3,400	3,392	1.58	5.37	156	1	
W2	16	46	3,300	3,300	1.58	5.21	240	1	
W3	13	7	2,970	2,967	1.04	3.09	22	1	
W4	13	6	4,920	4,919	1.04	5.12	31	1	
W5	13	5	4,800	4,800	1.04	4.99	25	1	
W6	13	6	2,640	2,633	1.04	2.75	16	1	
W7	16	29	3,470	3,461	1.58	5.48	159	1	
W8	16	46	3,370	3,365	1.58	5.32	245	1	
W9	13	6	2,570	2,567	1.04	2.67	16	1	
W10	13	7	4,970	4,970	1.04	5.17	36	1	
W11	13	5	4,800	4,800	1.04	4.99	25	1	
W12	13	6	2,640	2,633	1.04	2.75	16	1	
W13	13	75	2,000	2,000	1.04	2.08	156	1	
W14	13	2	17,010	15,547	460	1.04	17.69	35	3
F1	16	75	3,240	3,000	240	1.58	5.12	384	2
F2	13	7	16,930	16,468	460	1.04	17.61	123	4
F3	16	75	2,740	2,500	240	1.58	4.33	325	2
F4	13	7	16,930	16,468	460	1.04	17.61	123	4
							TOTAL =	2,133	

FOR L-12/R-12: TOTAL x 2 = 4,266 (kg)

BAR BENDING SCHEDULE



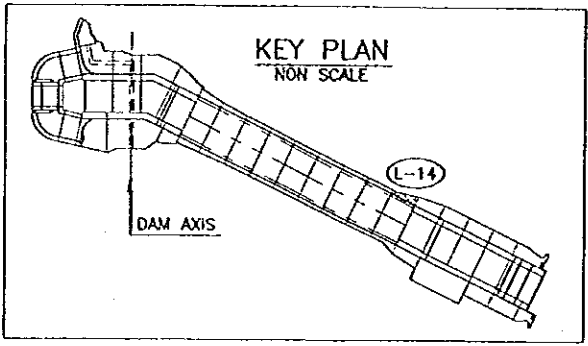
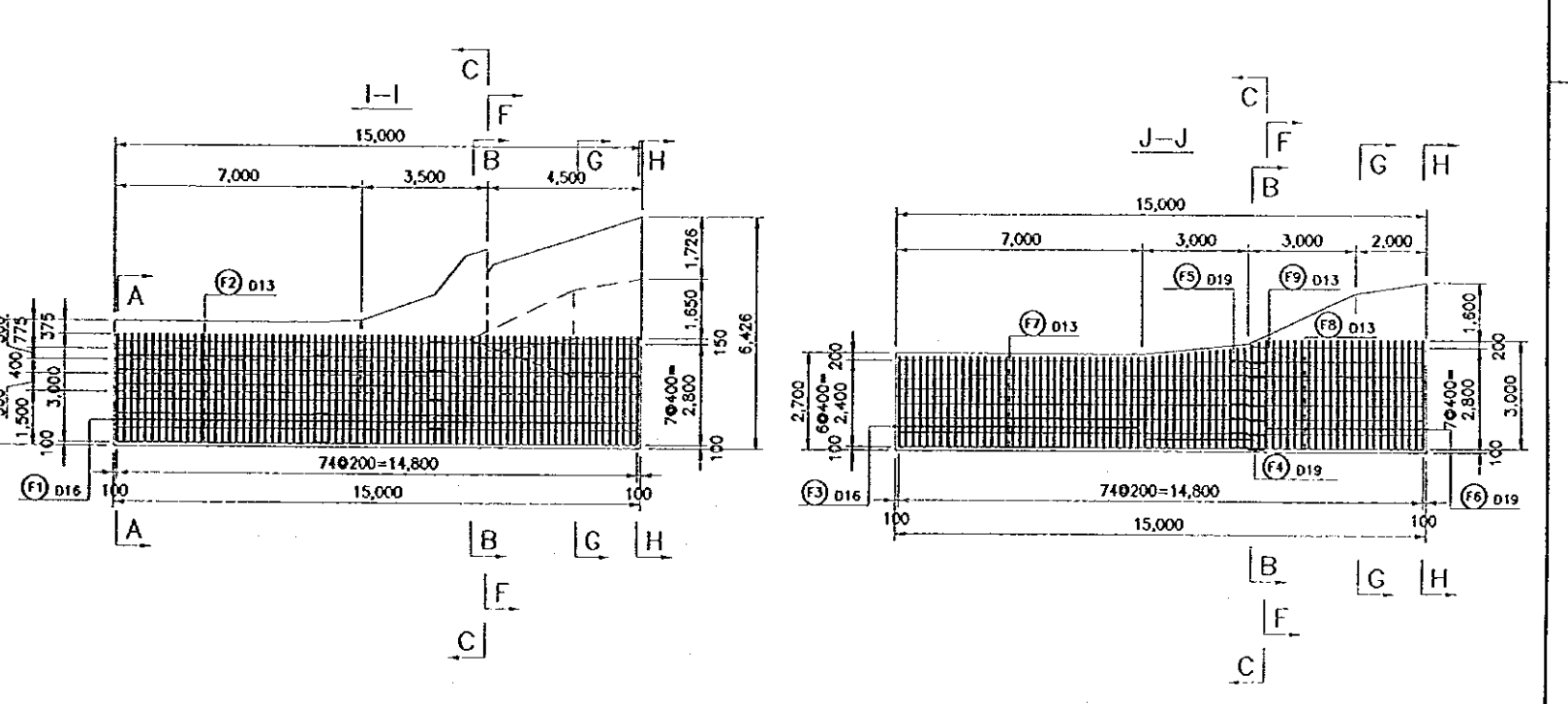
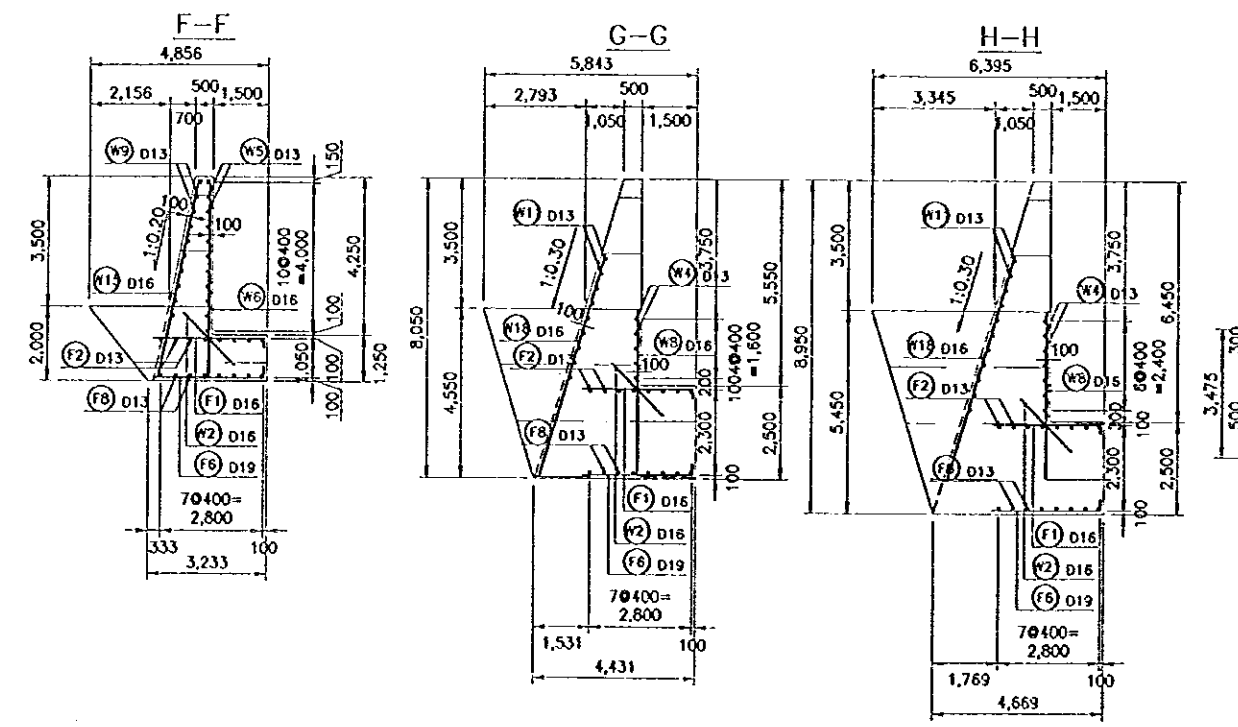
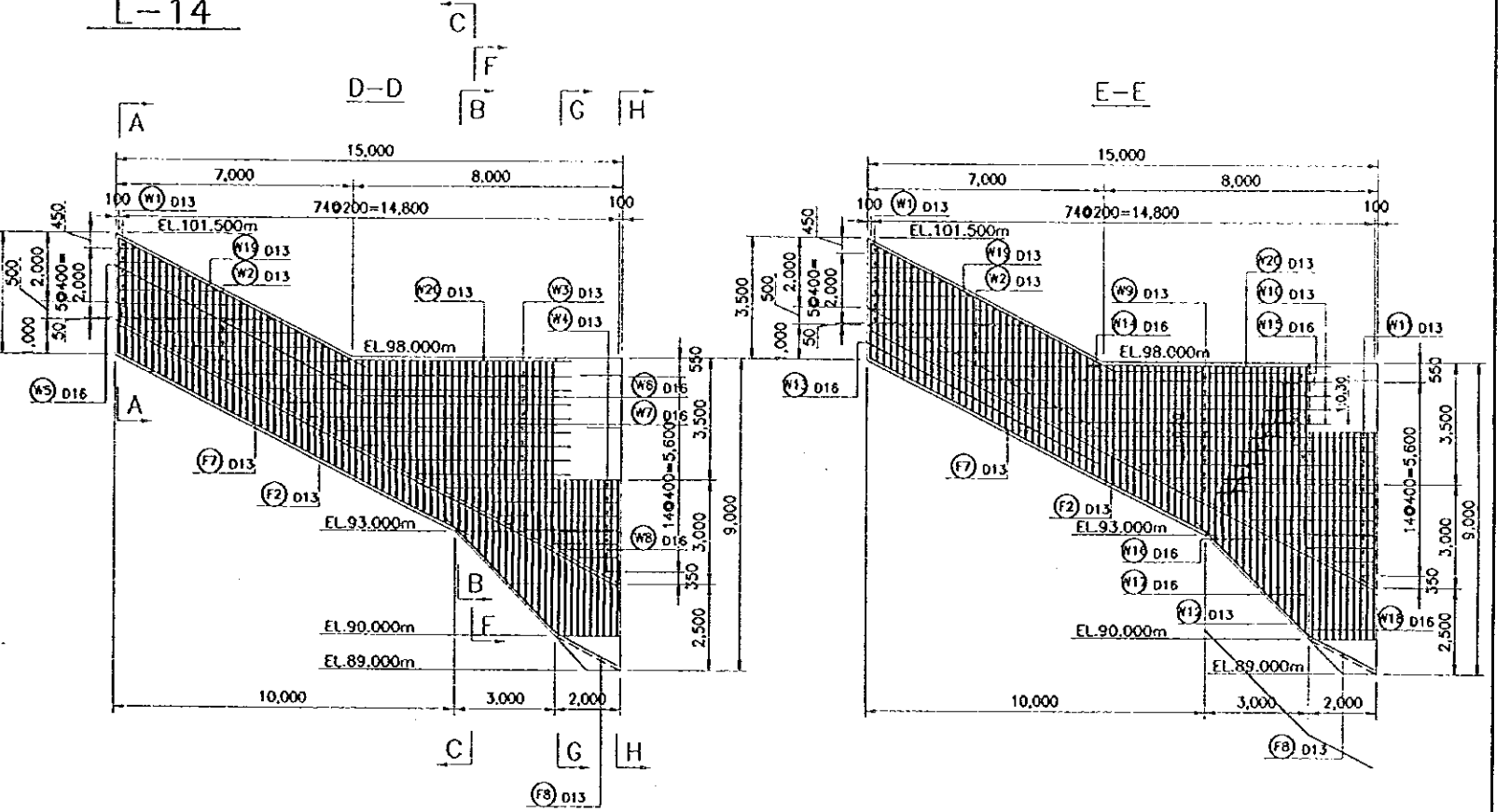
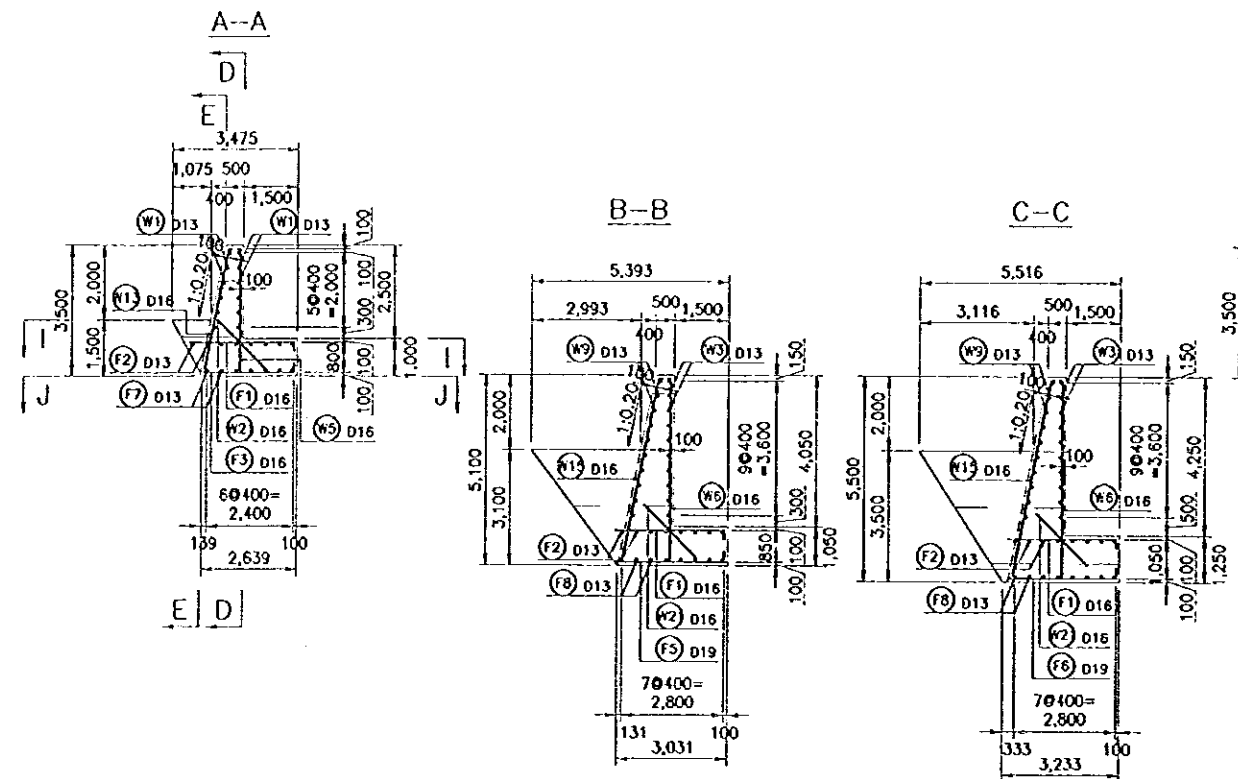
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENTS		PROVINCE CENTRAL JAVA
JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-12, R-12		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JABOD INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CRUISE OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Re-30 SHEET NO. 136 DATE CONTRACTING NO.

L-14



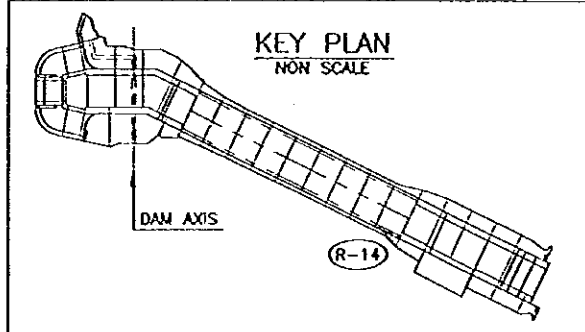
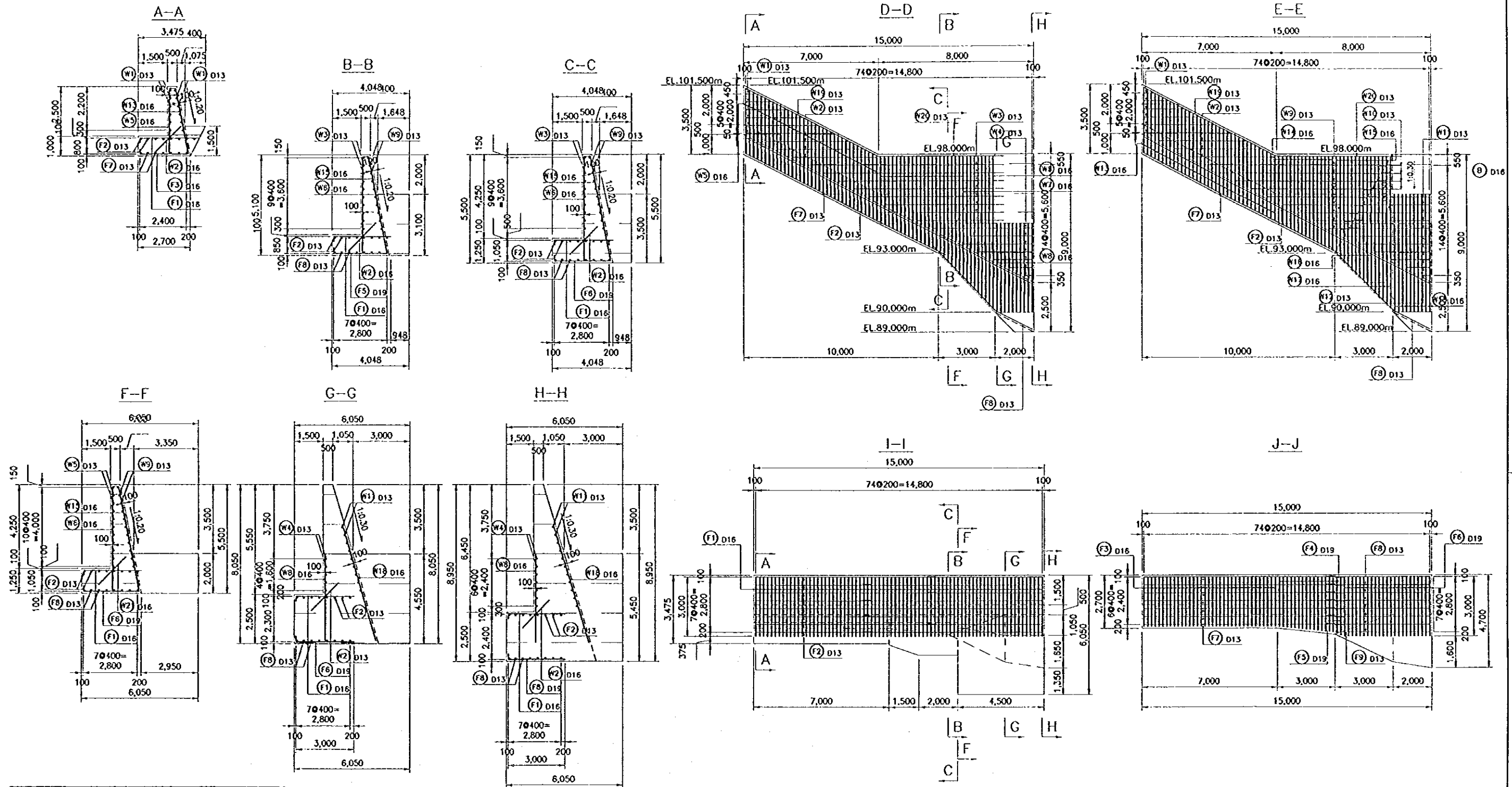
NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REFERENCE DRAWINGS
1. JD-P1-SP-Re-33 REINFORCEMENT DETAILS-BLOCK R-14
2. JD-P1-SP-Re-34 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-14, R-14

SCALE 0 5 10m

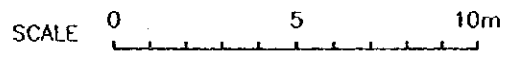
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF RUMAN SETTLEMENT IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-14		PROVINCE : CENTRAL JAWA PROJECT NAME : FLOOD CONTROL, URBAN GRABANG AND WATER BONDING DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT : SEMARANG CITY DRAWING NO. : JD-P1-SP-Re-32 SHEET NO. : 138 DATE : CONTRACT NO. :
LAPAN INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKSI INTERNATIONAL JOE	DESIGNED : CHECKED : APPROVED :	CHIEF OF PLANNING AND DESIGN PROJECT MANAGER



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

- REFERENCE DRAWINGS**
- 1. JD-PI-SP-Re-32 REINFORCEMENT DETAILS-BLOCK L-14
 - 2. JD-PI-SP-Re-34 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-14, R-14



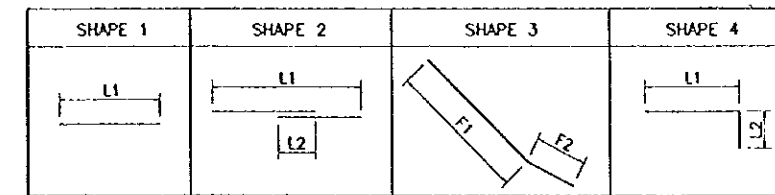
NO.	DATE	REVISIONS	OPERATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK R-14		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
BAJAN INTERNATIONAL COOPERATION AGENCY CEE (INDONESIA) CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKCO INTERNATIONAL INC.		DRAWING NO. JD-PI-SP-Re-33 SHEET NO. 139
DESIGNED CHECKED GROUP OF PLANNING AND DESIGN PROJECT MANAGER	DATE	CONTRACT NO.

BAR WEIGHT OF L-14 OR R-14

TYPE	DIA (mm)	NUMBER	LENGTH (mm)			WEIGHT PER 'm' (kg/m)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE	
			TOTAL	L1	L2					L3
W1	13	12	2,600	2,600		1.04	2.70	32	1	
W2	13	6	4,600	4,600		1.04	4.78	29	1	
W3	13	8	7,360	7,357		1.04	7.65	61	1	
W4	13	7	2,800	2,800		1.04	2.91	20	1	
W5	16	35	3,300	3,300		1.58	5.21	182	1	
W6	16	21	4,630	4,625		1.58	7.32	154	1	
W7	16	9	7,460	6,900	560	1.58	11.79	106	2	
W8	16	10	4,500	4,500		1.58	7.11	71	1	
W9	13	9	6,240	6,233		1.04	6.49	58	1	
W10	13	4	2,280	2,279		1.04	2.37	9	1	
W11	13	5	4,760	4,752		1.04	4.95	25	1	
W12	13	6	2,400	2,400		1.04	2.50	15	1	
W13	16	35	3,370	3,365		1.58	5.32	186	1	
W14	16	15	4,130	4,130		1.58	6.53	98	1	
W15	16	13	3,350	3,348		1.58	5.29	69	1	
W16	16	9	3,520	3,518		1.58	5.56	50	1	
W17	16	5	7,180	7,171		1.58	11.34	57	1	
W18	16	10	6,270	6,264		1.58	9.91	99	1	
W19	13	2	8,180	8,174		1.04	8.51	17	1	
W20	13	2	6,920	6,917		1.04	7.20	14	1	
W21	16	75	2,000	2,000		1.58	3.16	237	1	
F1	16	75	3,240	3,000	240	1.58	5.12	384	4	
F2	13	8	17,010	16,547	460	1.04	17.69	142	2	
F3	16	35	2,740	2,500	240	1.58	4.33	152	4	
F4	19	15	2,940	2,650	290	2.23	6.56	98	4	
F5	19	2	3,190	2,894	290	2.23	7.11	14	4	
F6	19	23	3,290	3,000	290	2.23	7.34	169	4	
F7	13	7	11,530	11,529		1.04	11.99	84	1	
F8	13	7	6,830	4,703	2,124	1.04	7.10	50	3	
F9	13	1	6,370	4,243	2,124	1.04	6.62	7	3	
							TOTAL =	2,689		

BAR BENDING SCHEDULE



NOTE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

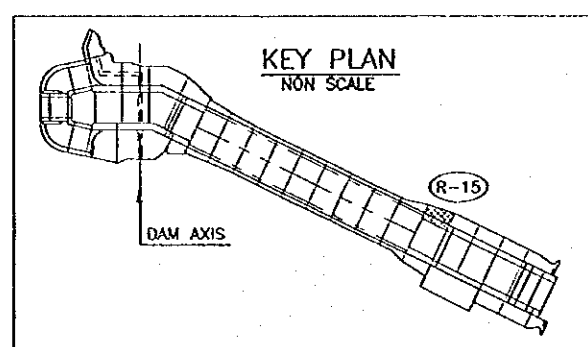
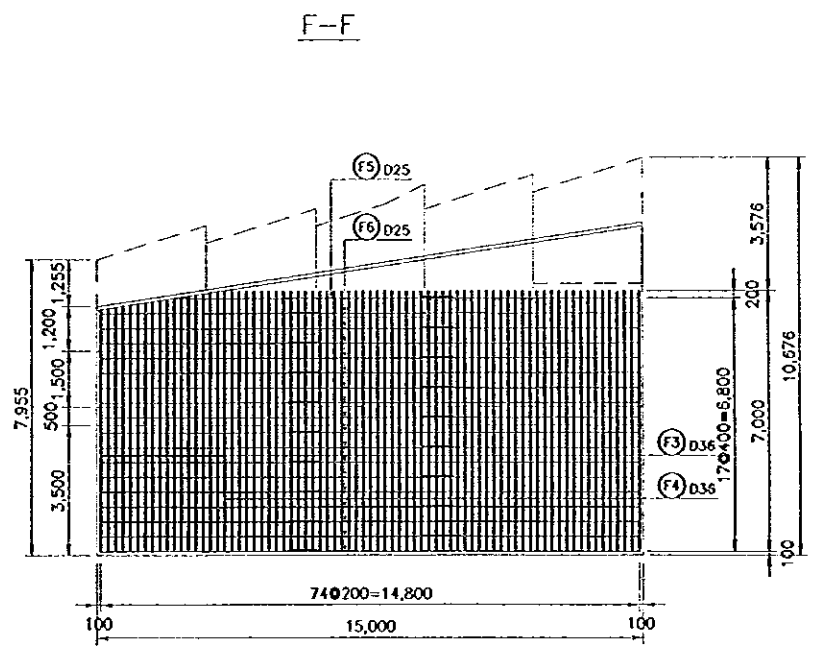
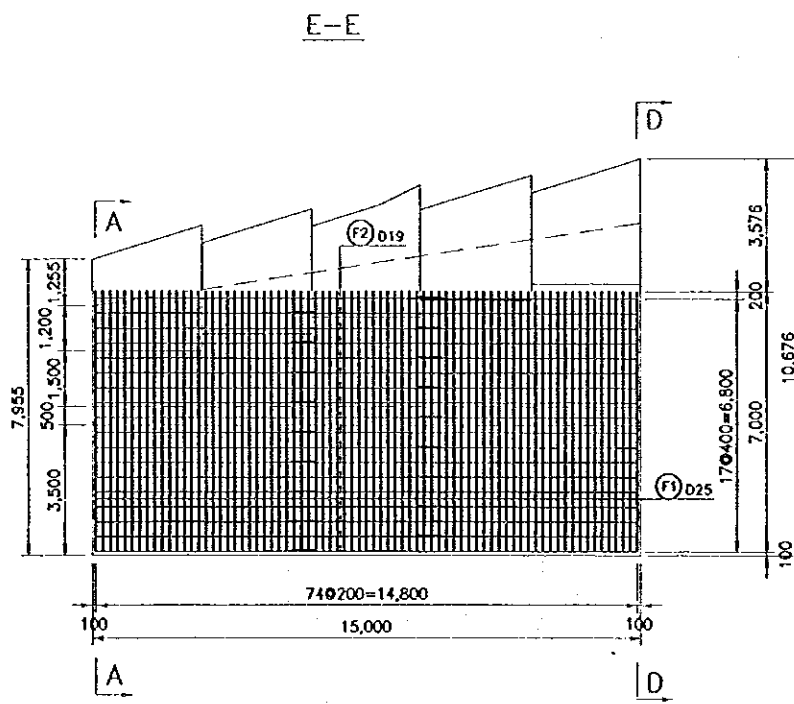
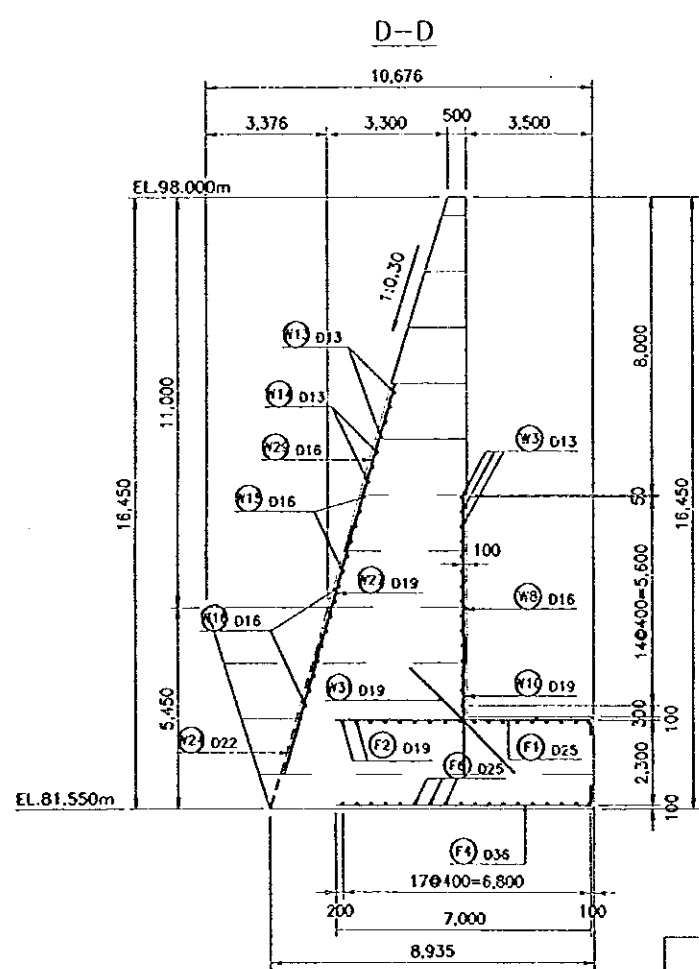
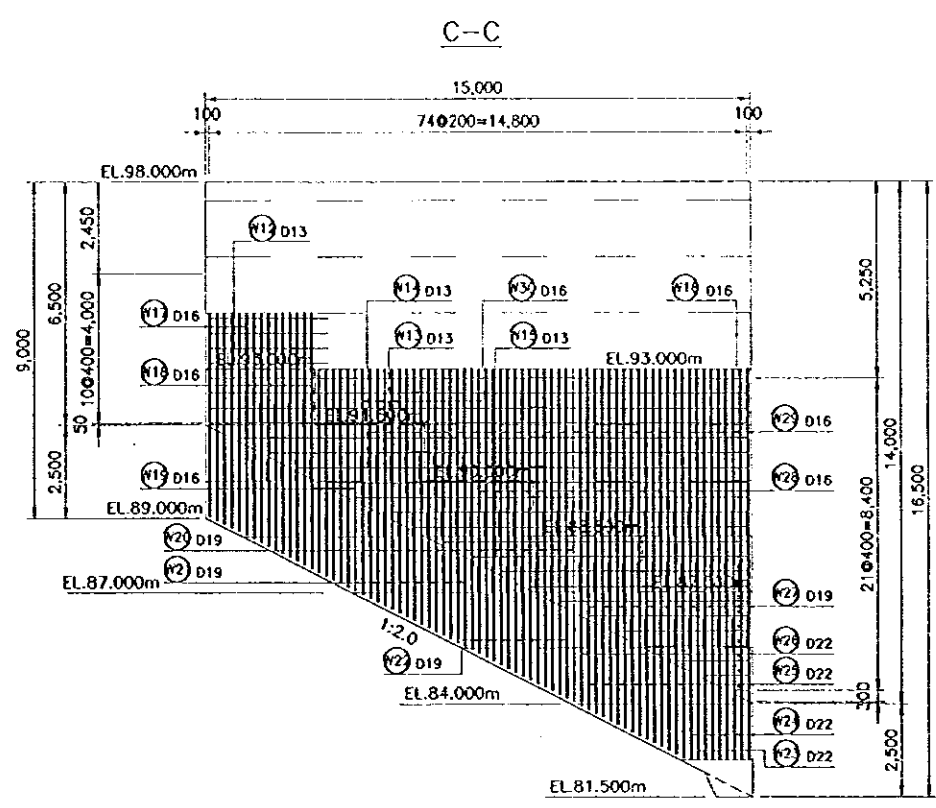
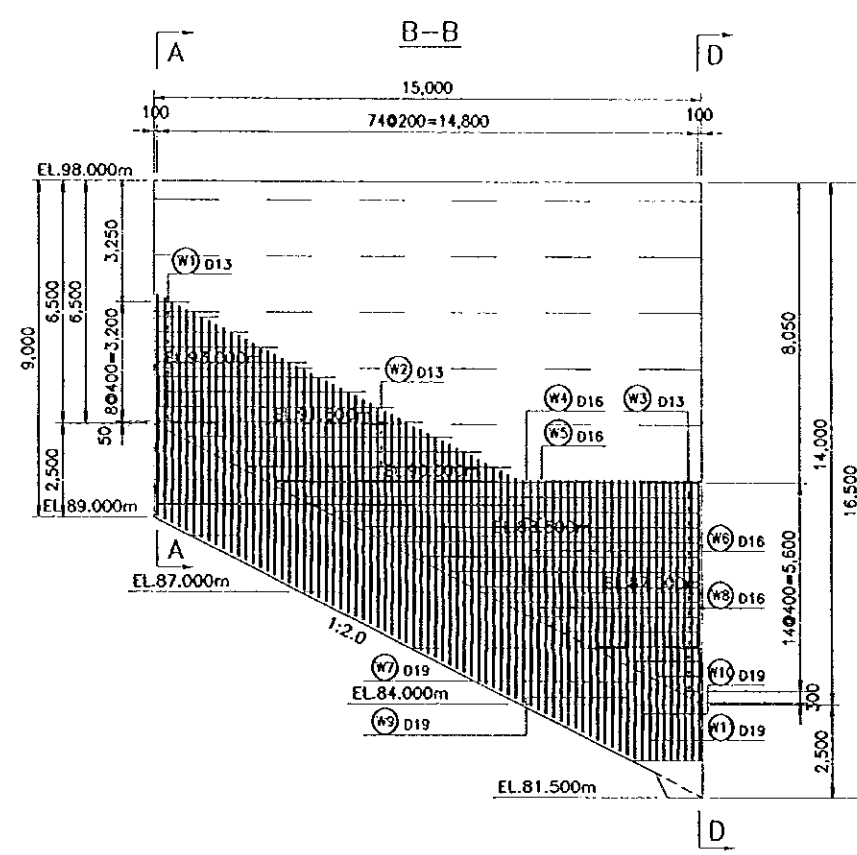
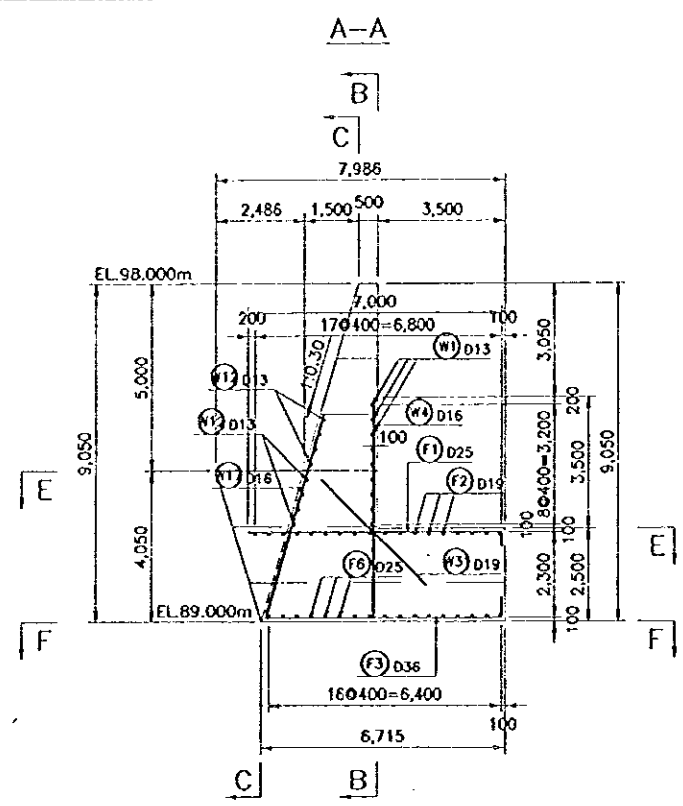
REFERENCE DRAWINGS

1. JD-P1-SP-Re-32 REINFORCEMENT DETAILS-BLOCK L-14
2. JD-P1-SP-Re-33 REINFORCEMENT DETAILS-BLOCK R-14

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

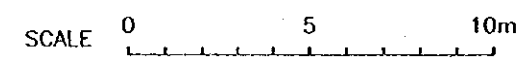
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT JRATUNSELUMA FLOOD CONTROL PROJECT COMPONENT : JATURARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BAR WEIGHT FOR L-14, R-14		PROVINCE CENTRAL JAVA
JAPAN INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JABOD INTERNATIONAL P.T.C.		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. JD-P1-SP-Re-34 SHEET NO. 140 DATE CONTRACT NO.

L-15



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

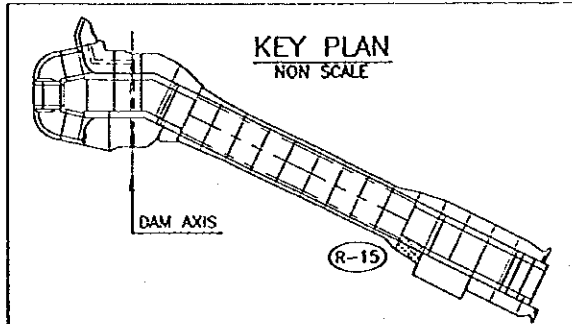
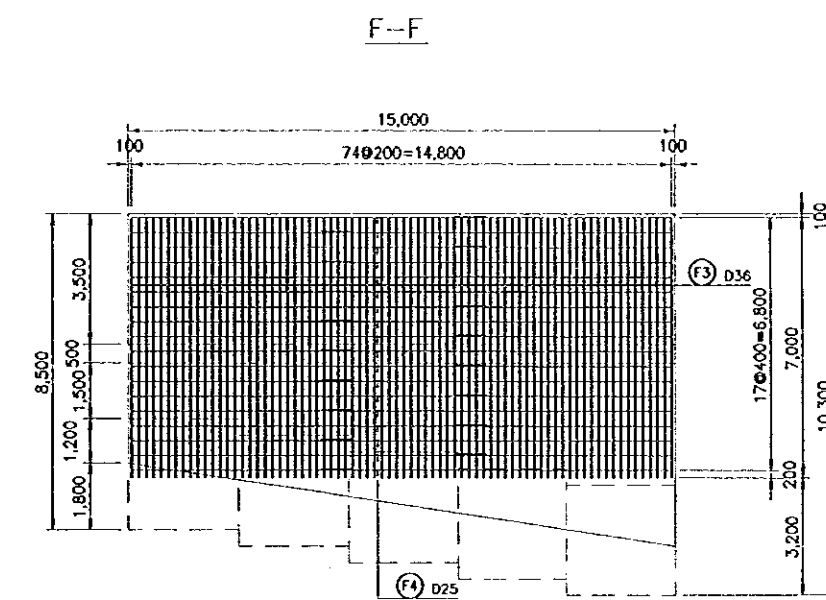
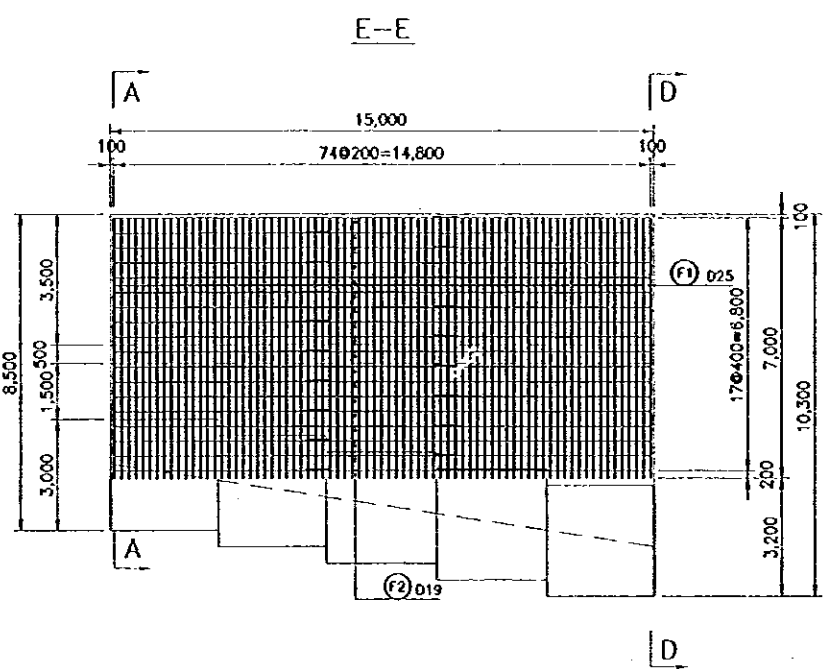
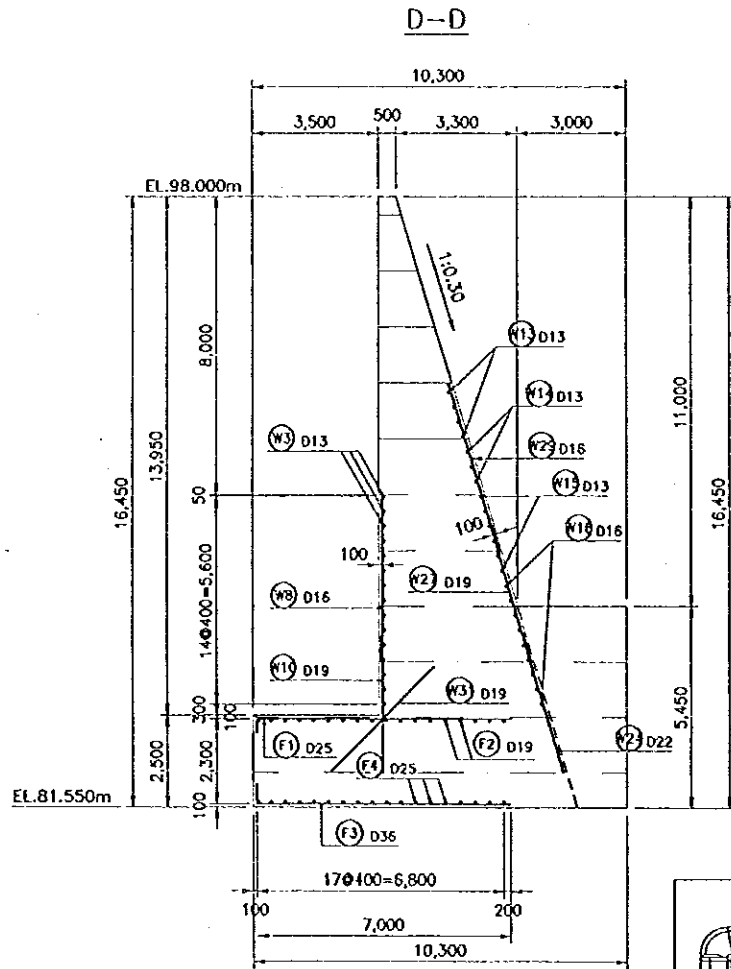
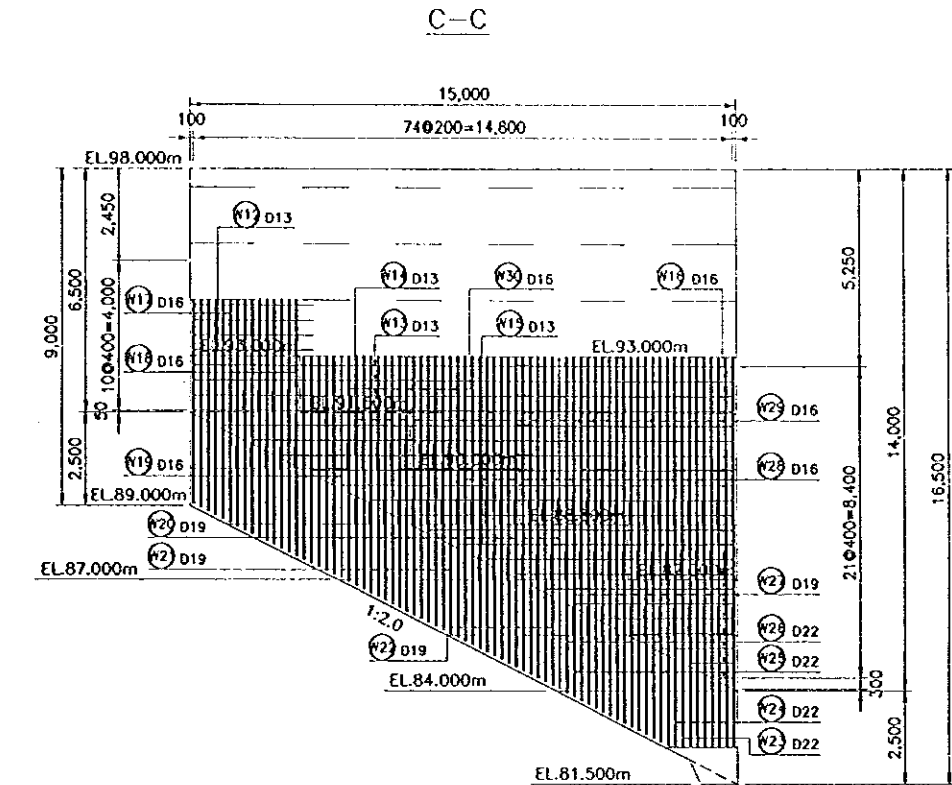
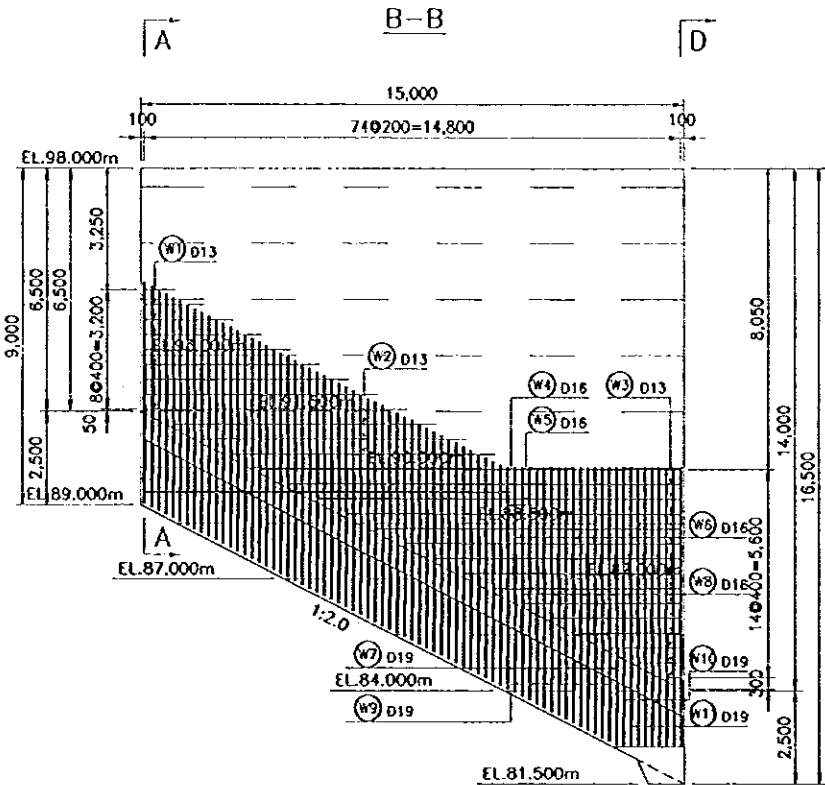
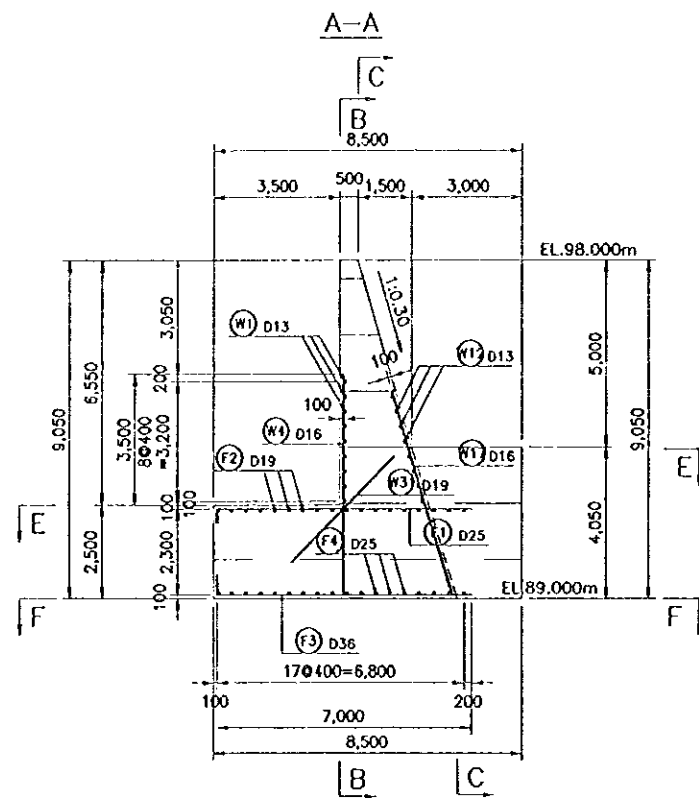
- REFERENCE DRAWINGS
1. JD-P1-SP-Re-36 REINFORCEMENT DETAILS-BLOCK R-15
 2. JD-P1-SP-Re-37 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-15, R-15



NO.	DATE	REVISIONS	ORDINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-15		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCE DEVELOPMENT IN SURABAYA IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CII ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN	APPROVED PROJECT MANAGER	DRAWING NO. JD-P1-SP-Re-35 SHEET NO. 141 DATE CONTRACT NO.

R-15



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

- REFERENCE DRAWINGS
1. JD-P1-SP-Re-35 REINFORCEMENT DETAILS-BLOCK L-15
 2. JD-P1-SP-Re-37 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-15, R-15



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSEJANA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK R-15		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN		DRAWING NO. JD-P1-SP-Re-36 SHEET NO. 142
APPROVED PRODUCT MANAGER		DATE CONTRACT NO.

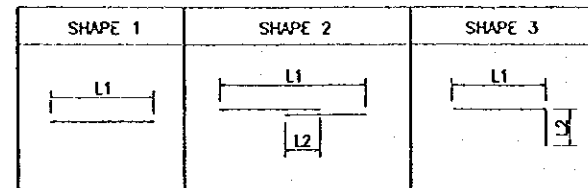
BAR WEIGHT OF L-15

TYPE	DA (mm)	NUMBER	LENGTH (mm)				WEIGHT PER m (kg/m)	WEIGHT PER BAR (kg)	WEIGHT (kg)	SHAPE	
			TOTAL	L1	L2	L3					
W1	13	9	4,060	4,060			1.04	4.22	38	1	
W2	13	3	7,260	7,260			1.04	7.55	23	1	
W3	13	15	6,000	6,000			1.04	6.24	94	1	
W4	16	50	5,900	5,900			1.58	9.32	466	1	
W5	16	1	5,950	5,950			1.58	9.40	9	1	
W6	16	12	3,000	3,000			1.58	4.74	57	1	
W7	19	8	3,750	3,750			2.23	8.36	67	1	
W8	16	12	4,500	4,500			1.58	7.11	85	1	
W9	19	7	2,920	2,920			2.23	6.51	46	1	
W10	19	5	3,670	3,670			2.23	8.18	41	1	
W11	19	4	5,170	5,170			2.23	11.53	46	1	
W12	13	4	3,260	3,260			1.04	3.39	14	1	
W13	13	4	15,260	14,800	460		1.04	15.87	63	2	
W14	13	3	13,660	13,200	460		1.04	14.21	43	2	
W15	13	6	9,200	9,200			1.04	9.57	57	1	
W16	16	9	3,600	3,600			1.58	5.69	51	1	
W17	16	6	5,950	5,951			1.58	9.42	57	1	
W18	16	9	7,300	6,734	560		1.58	11.53	104	2	
W19	16	6	5,950	5,951			1.58	9.42	57	1	
W20	19	15	3,860	3,855			2.23	8.61	129	1	
W21	19	8	4,590	4,585			2.23	10.24	82	1	
W22	19	7	3,020	3,020			2.23	6.73	47	1	
W23	22	4	5,470	5,468			2.98	16.30	66	1	
W24	22	5	3,910	3,902			2.98	11.65	58	1	
W25	22	7	3,120	3,120			2.98	9.30	66	1	
W26	22	8	4,690	4,685			2.98	13.98	112	1	
W27	19	12	3,810	3,802			2.23	8.50	102	1	
W28	16	19	6,270	6,264			1.58	9.91	188	1	
W29	16	27	4,700	4,698			1.58	7.43	201	1	
W30	16	8	3,140	3,132			1.58	4.96	40	1	
W31	19	75	4,000	4,000			2.23	8.92	669	1	
F1	25	75	7,380	7,000	380		3.85	28.41	2,131	3	
F2	19	18	17,220	16,547	670		2.23	38.40	691	2	
F3	36	17	7,300	6,755	540		7.99	58.33	992	3	
F4	36	58	7,540	7,000	540		7.99	60.24	3,494	3	
F5	25	1	15,310	14,423	880		3.85	58.94	59	2	
F6	25	17	17,430	16,547	880		3.85	67.11	1,141	2	
TOTAL =								11,684			

BAR WEIGHT OF R-15

TYPE	DA (mm)	NUMBER	LENGTH (mm)				WEIGHT PER m (kg/m)	WEIGHT PER BAR (kg)	WEIGHT (kg)	SHAPE	
			TOTAL	L1	L2	L3					
W1	13	9	4,060	4,060			1.04	4.22	38	1	
W2	13	3	7,260	7,260			1.04	7.55	23	1	
W3	13	15	6,000	6,000			1.04	6.24	94	1	
W4	16	50	5,900	5,900			1.58	9.32	466	1	
W5	16	1	5,950	5,950			1.58	9.40	9	1	
W6	16	12	3,000	3,000			1.58	4.74	57	1	
W7	19	8	3,750	3,750			2.23	8.36	67	1	
W8	16	12	4,500	4,500			1.58	7.11	85	1	
W9	19	7	2,920	2,920			2.23	6.51	46	1	
W10	19	5	3,670	3,670			2.23	8.18	41	1	
W11	19	4	5,170	5,170			2.23	11.53	46	1	
W12	13	4	3,260	3,260			1.04	3.39	14	1	
W13	13	4	15,260	14,800	460		1.04	15.87	63	2	
W14	13	3	13,660	13,200	460		1.04	14.21	43	2	
W15	13	6	9,200	9,200			1.04	9.57	57	1	
W16	16	9	3,600	3,600			1.58	5.69	51	1	
W17	16	6	5,950	5,951			1.58	9.42	57	1	
W18	16	9	7,300	6,734	560		1.58	11.53	104	2	
W19	16	6	5,950	5,951			1.58	9.42	57	1	
W20	19	15	3,860	3,855			2.23	8.61	129	1	
W21	19	8	4,590	4,585			2.23	10.24	82	1	
W22	19	7	3,020	3,020			2.23	6.73	47	1	
W23	22	4	5,470	5,468			2.98	16.30	66	1	
W24	22	5	3,910	3,902			2.98	11.65	58	1	
W25	22	7	3,120	3,120			2.98	9.30	66	1	
W26	22	8	4,690	4,685			2.98	13.98	112	1	
W27	19	12	3,810	3,802			2.23	8.50	102	1	
W28	16	19	6,270	6,264			1.58	9.91	188	1	
W29	16	27	4,700	4,698			1.58	7.43	201	1	
W30	16	8	3,140	3,132			1.58	4.96	40	1	
W31	19	75	4,000	4,000			2.23	8.92	669	1	
F1	25	75	7,380	7,000	380		3.85	28.41	2,131	3	
F2	19	18	17,220	16,547	670		2.23	38.40	691	2	
F4	36	75	7,540	7,000	540		7.99	60.24	4,518	3	
F5	25	18	17,430	16,547	880		3.85	67.11	1,208	2	
TOTAL =								11,724			

BAR BENDING SCHEDULE



NOTE

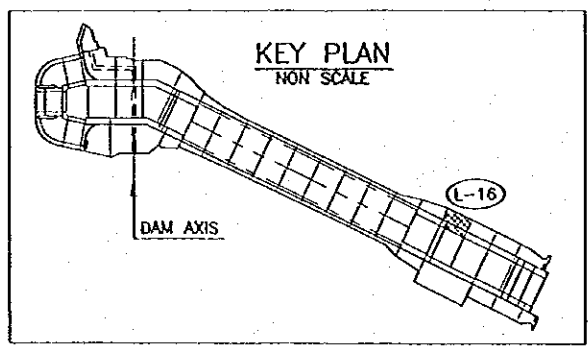
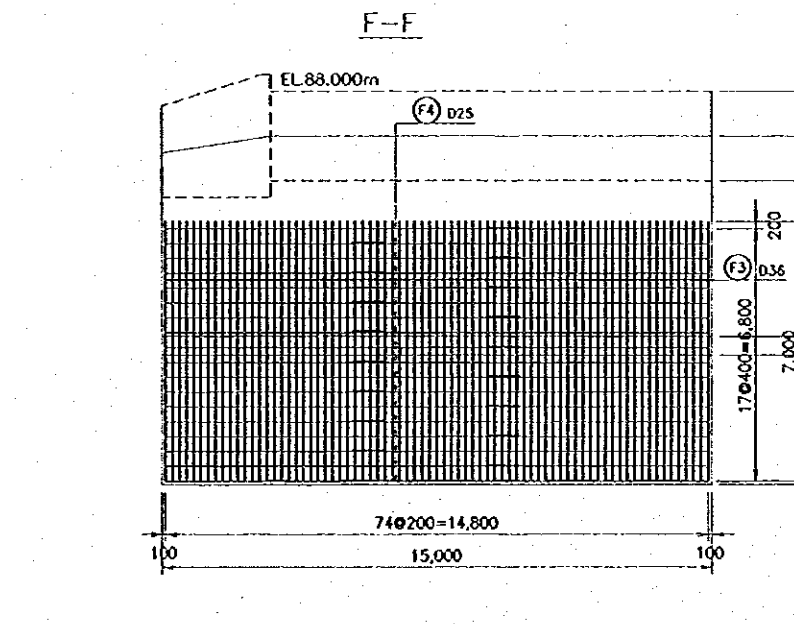
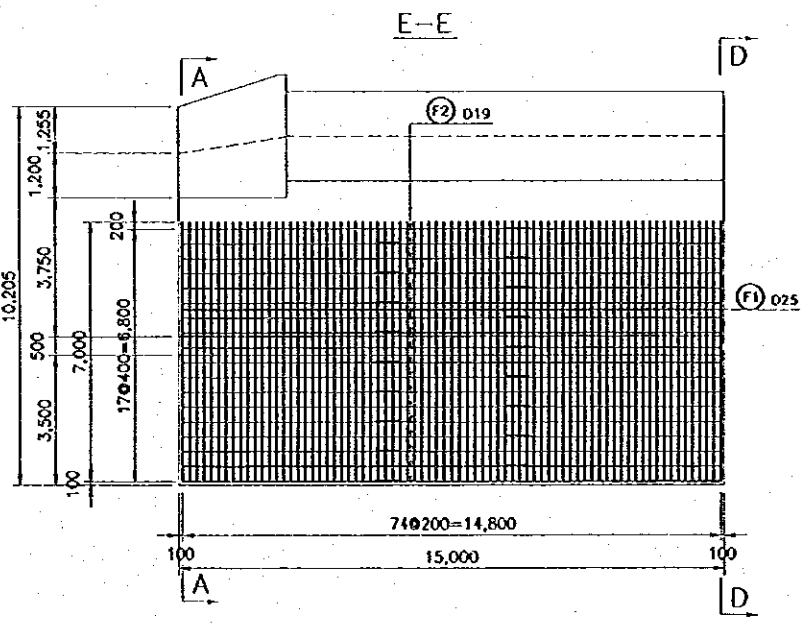
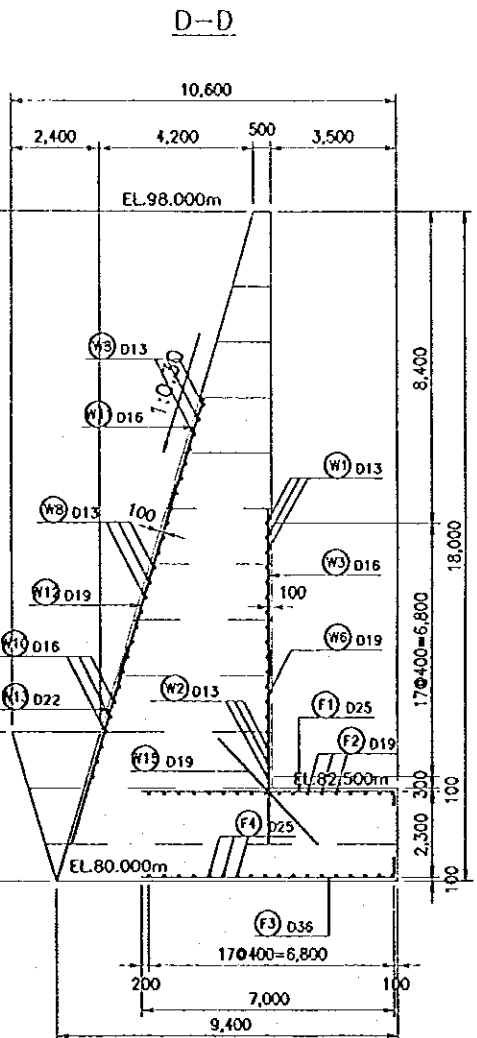
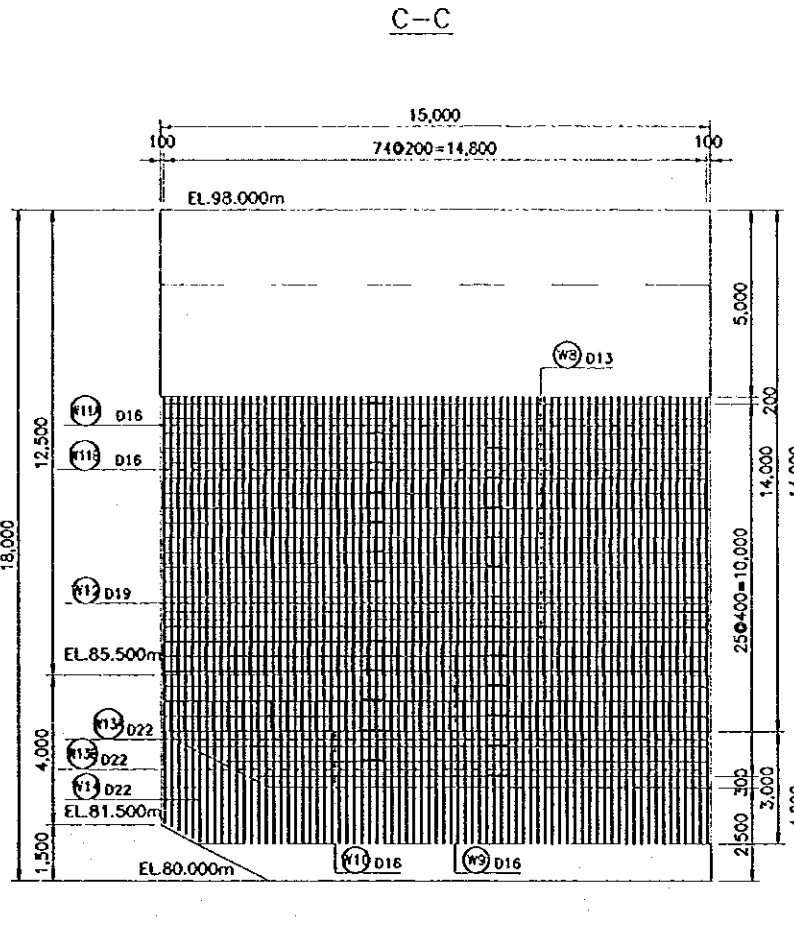
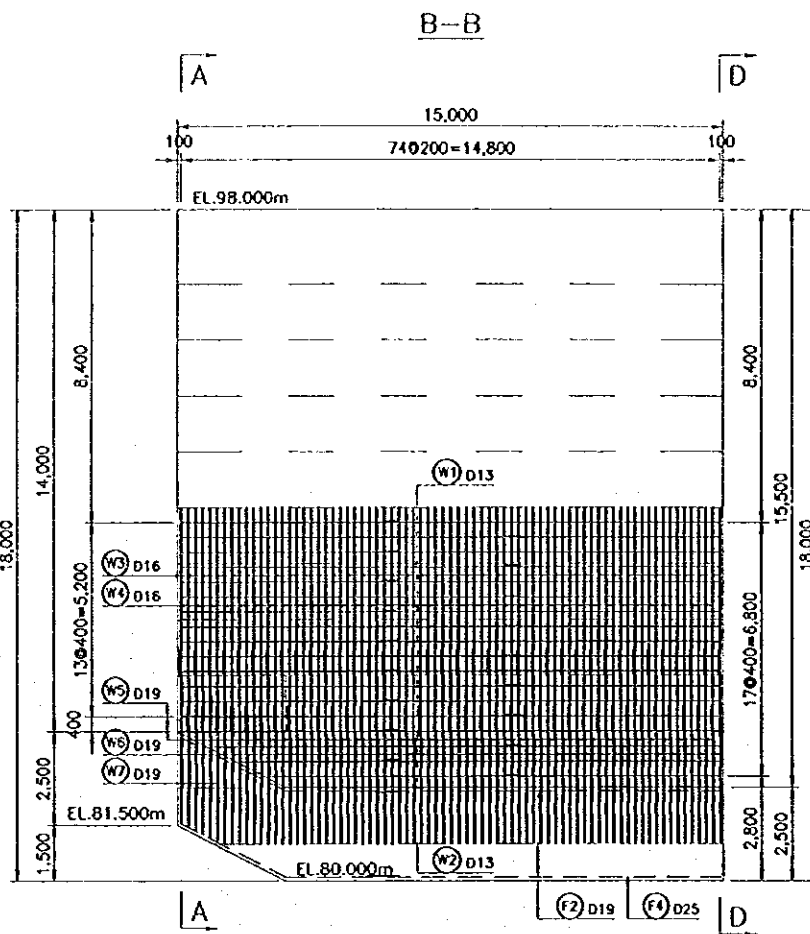
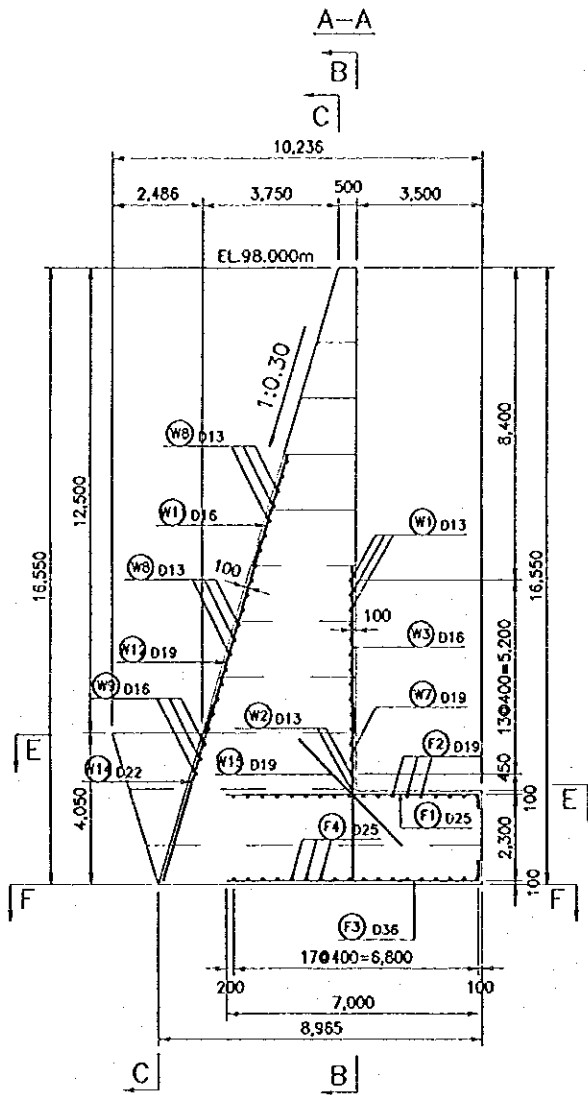
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REFERENCE DRAWINGS

- JD-P1-SP-Re-35 REINFORCEMENT DETAILS-BLOCK L-15
- JD-P1-SP-Re-36 REINFORCEMENT DETAILS-BLOCK R-15

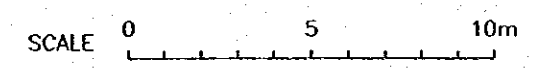
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BAR WEIGHT FOR L-15 AND R-15		PROVIDER CENTRAL JAWA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN BOJALANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. JD-P1-SP-Re-37 SHEET NO. 143 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY OJI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACO INTERNATIONAL INC.	DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN	APPROVED PROJECT MANAGER



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

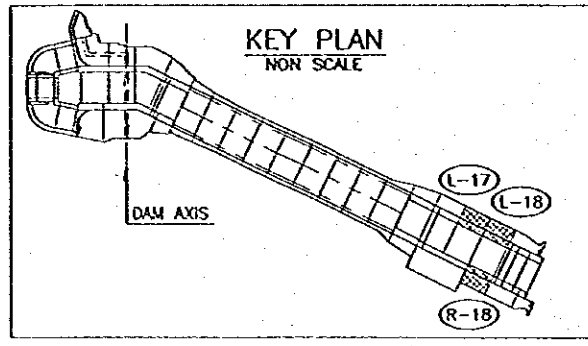
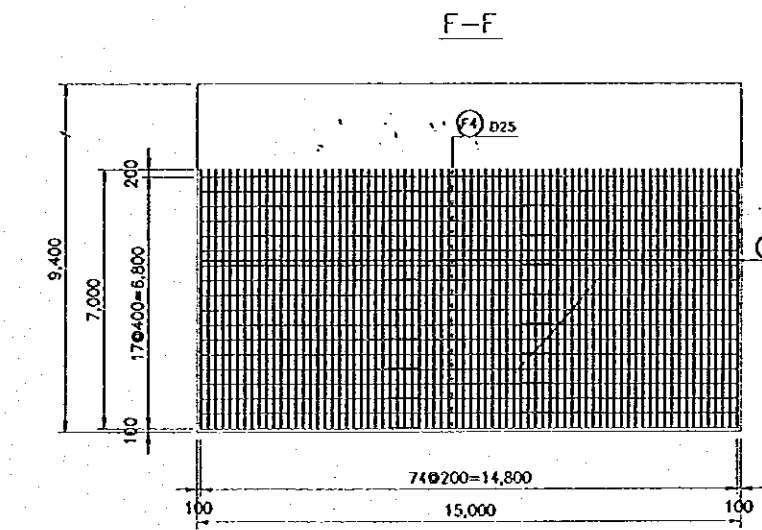
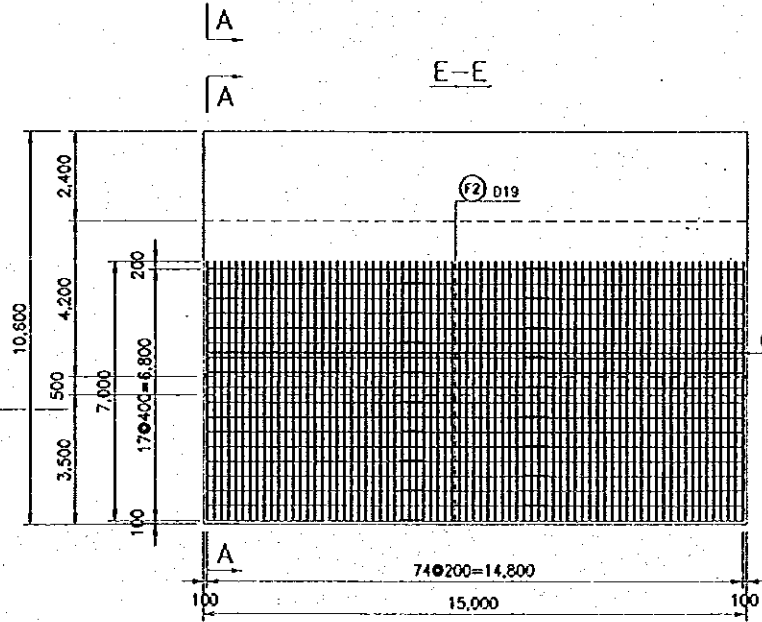
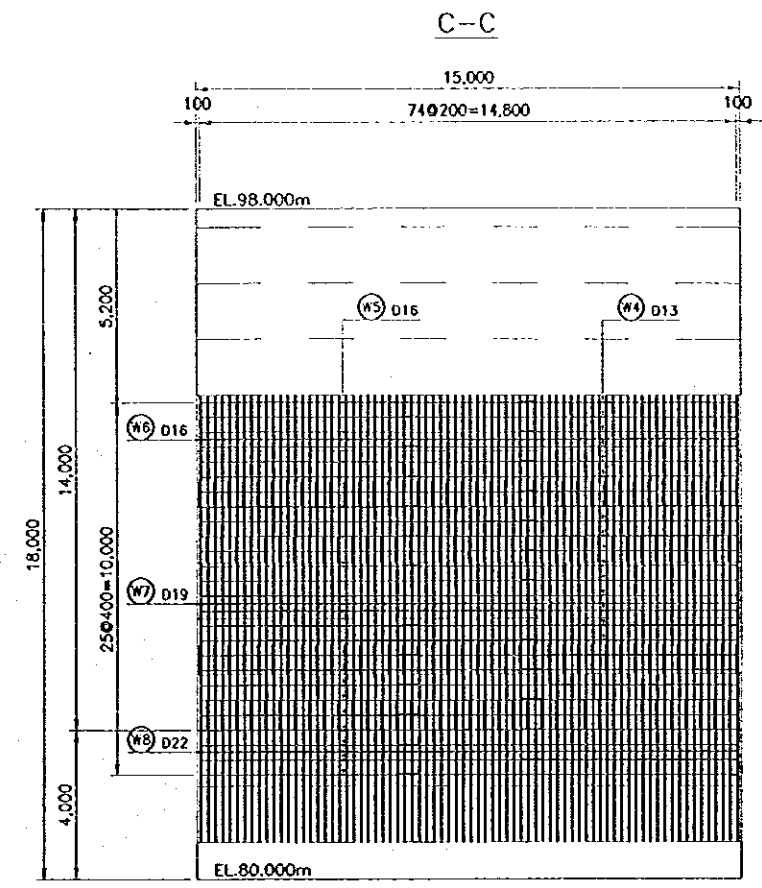
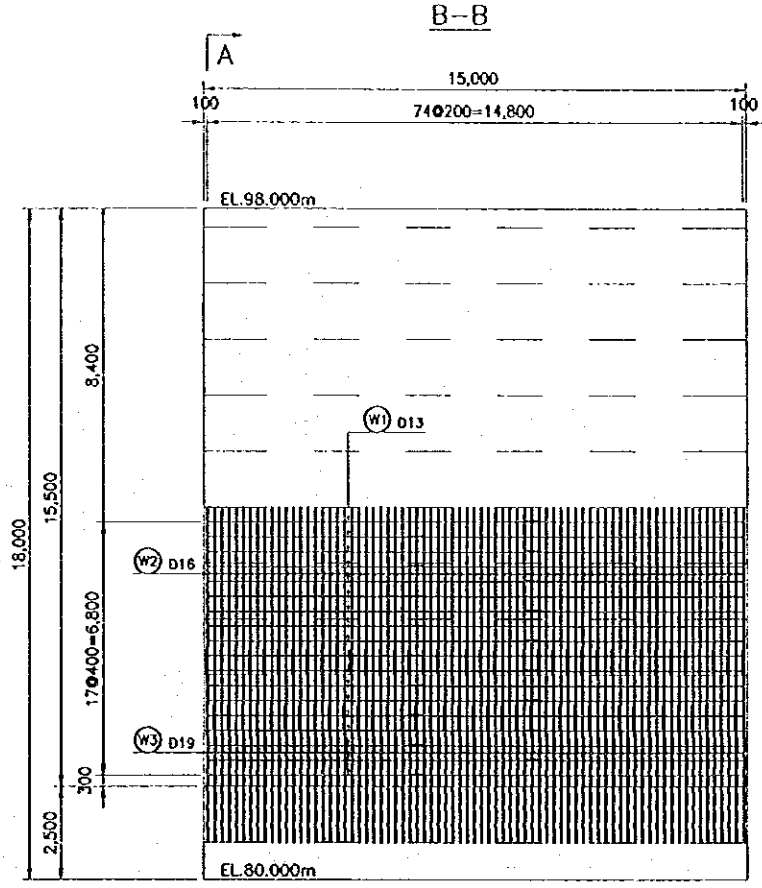
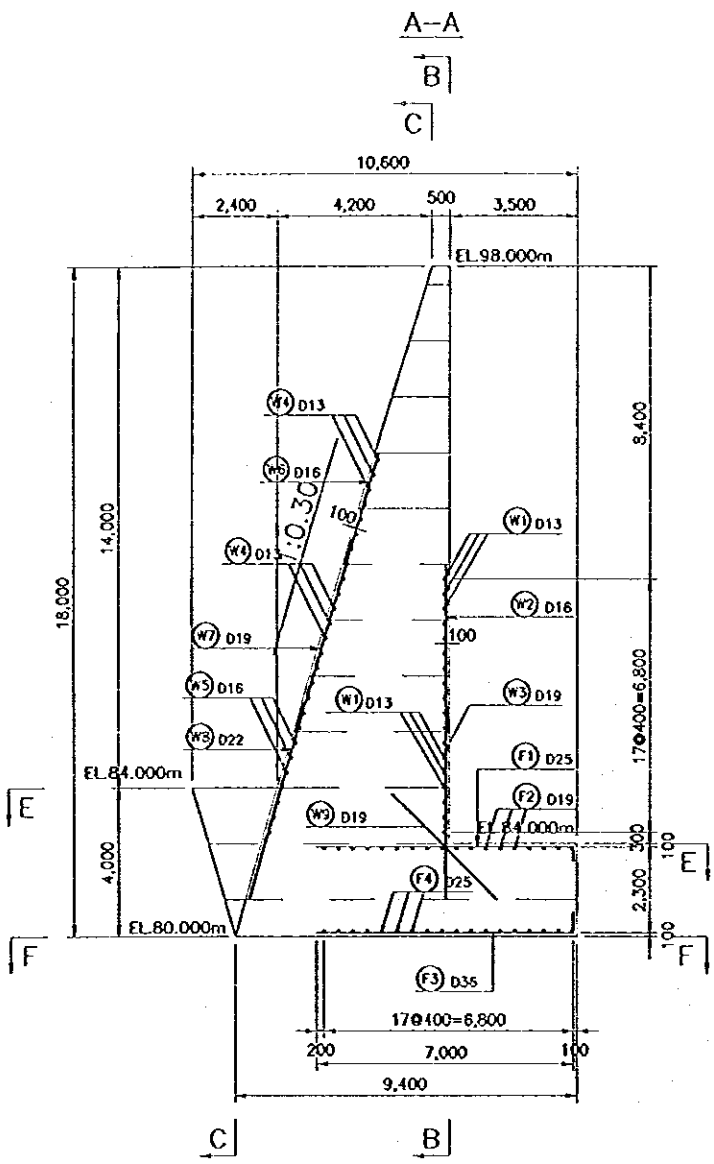
REFERENCE DRAWINGS
JD-P1-SP-Re-40 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-16, L-17, L-18 AND R-18



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

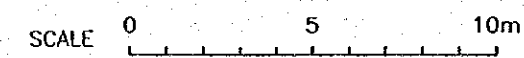
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DISTRIBUTION AND DIRECTORATE GENERAL OF RURAL SETTLEMENT		PROVINCE CENTRAL JAVA
RATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-16		PROJECT NAME FLOOD CONTROL, RURAL DEVELOPMENT AND WATER RESOURCES DEVELOPMENT IN KAWASAN... IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CCI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PACIFIC INTERNATIONAL INC.		DRAWING NO. JD-P1-SP-Re-38 SHEET NO. 144 DATE CONTRACT NO.
DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED	

L-17,18 , R-18



NOTE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

REFERENCE DRAWINGS
JD-P1-SP-Re-40 REINFORCEMENT DETAILS-BAR WEIGHT FOR L-16, L-17, L-18 AND R-18



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : JATIBARANG DAM CONSTRUCTION SPILLWAY REINFORCEMENT DETAILS BLOCK L-17 AND L-18, R-18		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CTE INTERNATIONAL CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL PAKED INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHECKED DESIGNED APPROVED		DRAWING NO. JD-P1-SP-Re-39 SHEET NO. 145
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.