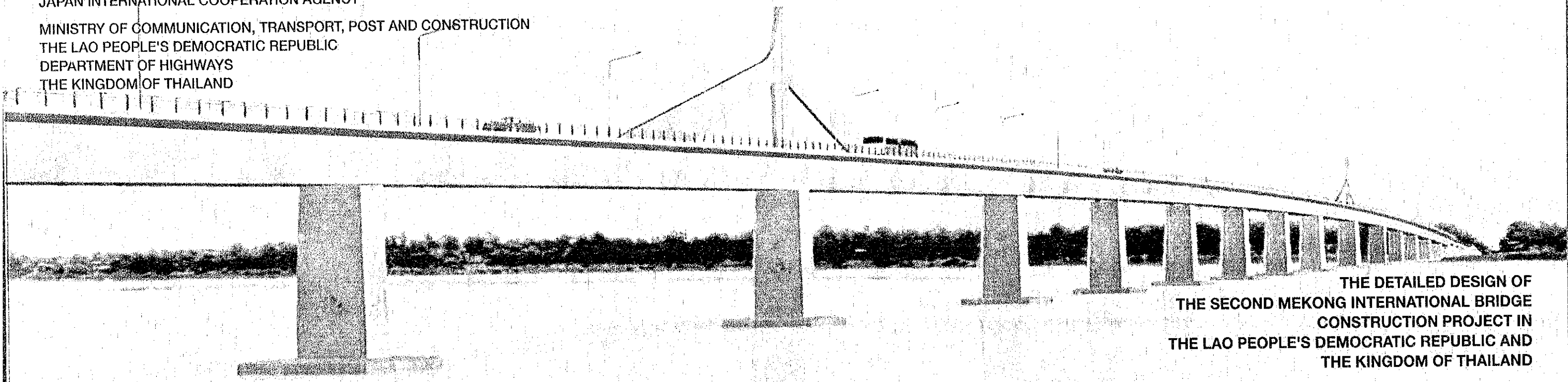


JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
DEPARTMENT OF HIGHWAYS  
THE KINGDOM OF THAILAND



THE DETAILED DESIGN OF  
THE SECOND MEKONG INTERNATIONAL BRIDGE  
CONSTRUCTION PROJECT IN  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC AND  
THE KINGDOM OF THAILAND

# FINAL REPORT

JUNE 2000



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JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC  
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**FINAL REPORT**  
**DRAWINGS (PACKAGE 3)**

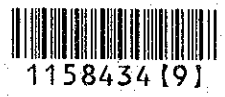
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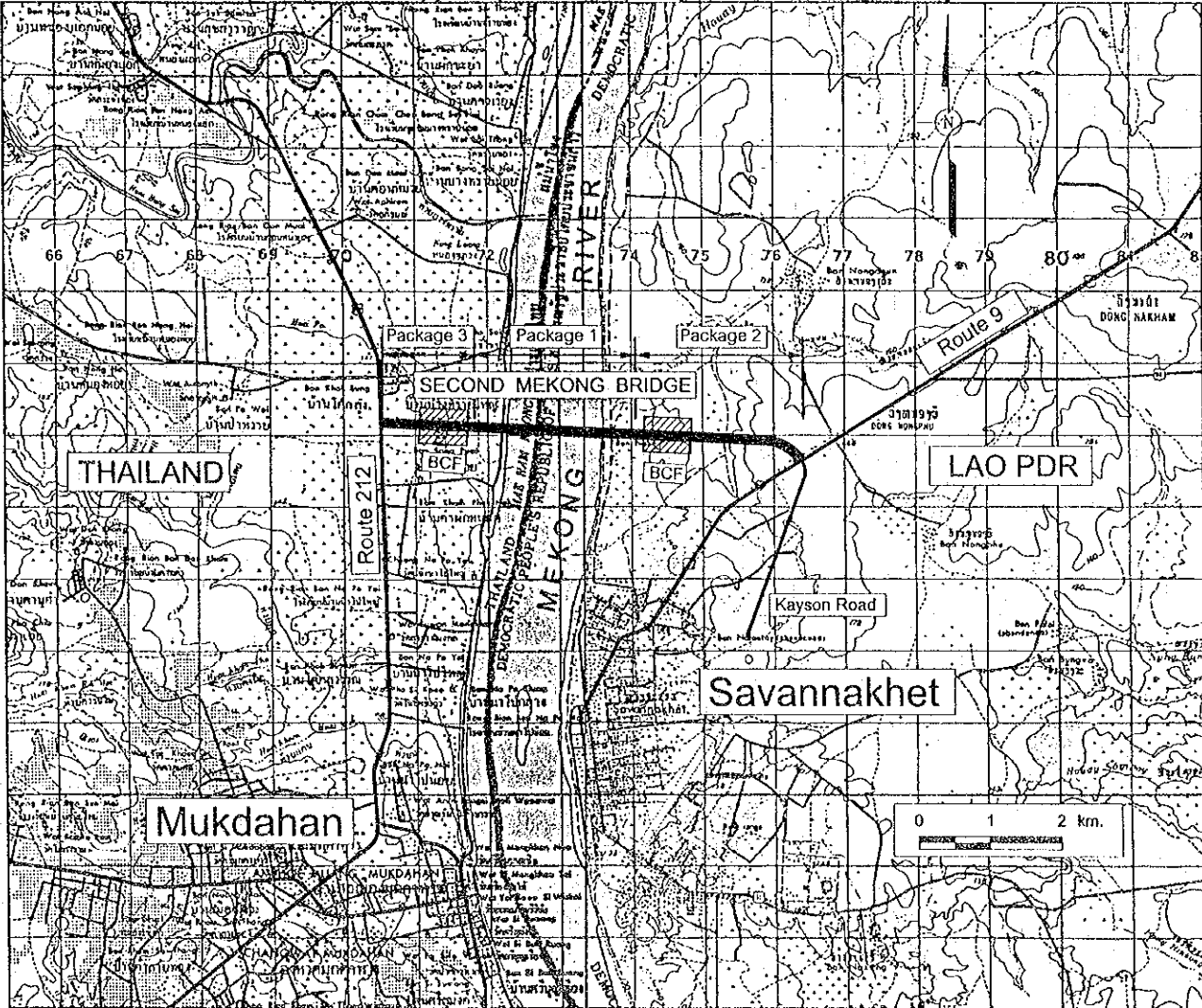
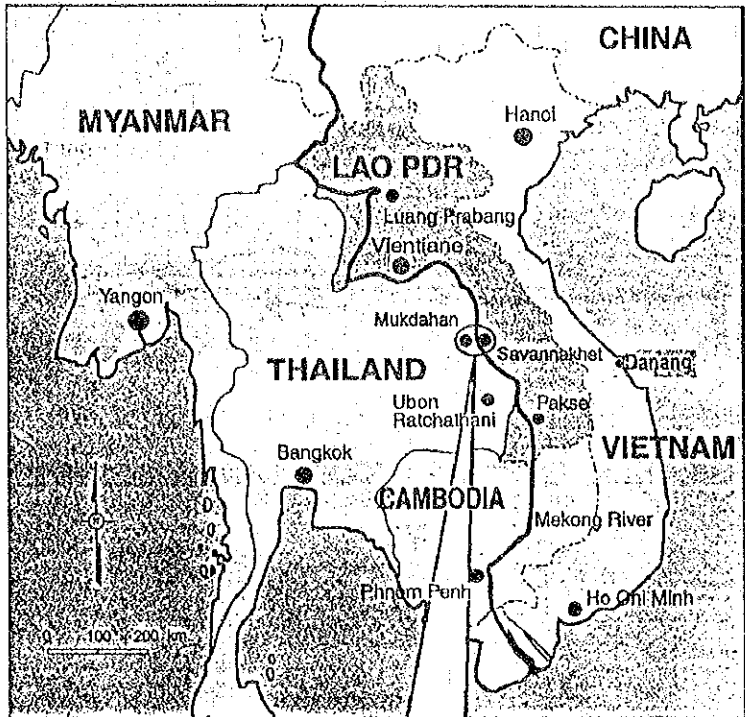
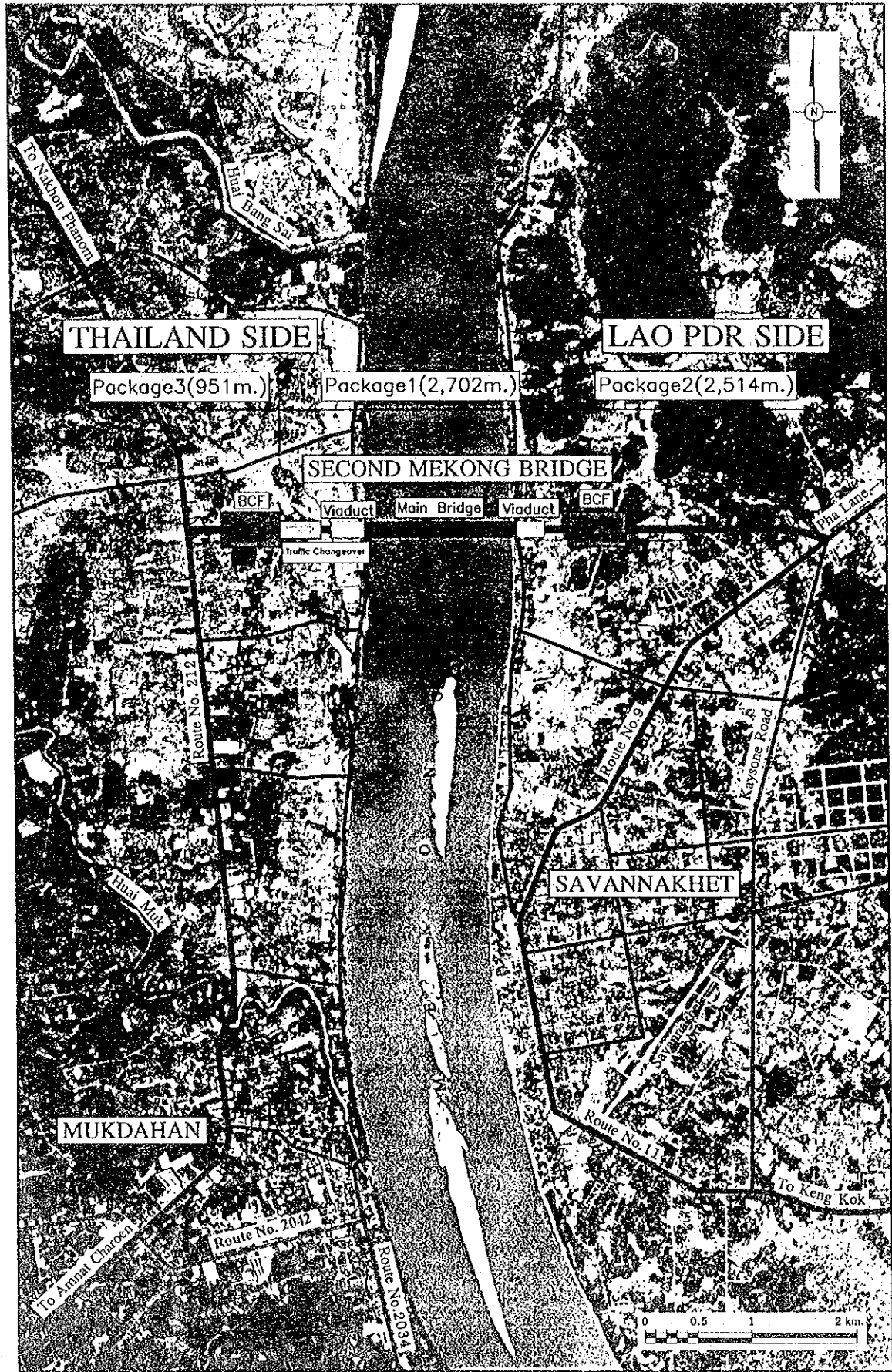
ORIENTAL CONSULTANTS COMPANY LIMITED



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1158434 [9]



REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY		QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	 THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Morieko T. Moutouso A. Hirofumi S. Terayaburo		16-01-00 17-01-00 16-02-00 22/04/00	LOCATION MAP



PACKAGE 3

DATE OF ISSUE:		05/03/2000
DWG. NO.	GE-2	SHEET NO. 2
DWG. STATUS:		

SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.
1	1. GENERAL		42	DRAINAGE				
2	PROJECT LOCATION MAP	GE-1	43	R.C. PIPE CULVERT INSTALLATION	R-D-1			
3	LIST OF DRAWING (1)	GE-2		R.C. HEADWALL FOR R.C.P. CULVERT	R-D-2			
4	LIST OF DRAWING (2)	GE-3						
5	LIST OF DRAWING (3)	GE-4		TRAFFIC SIGN & PAVEMENT MARKING				
	2. ROAD		44	TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN (1)	R-T-1			
	GENERAL		45	TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN (2)	R-T-2			
5	ABBREVIATION AND SYMBOLS	R-RG-1	46	TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN (3)	R-T-3			
6	GENERAL LAYOUT ( THAILAND SIDE & LAO PDR SIDE )	R-RG-2	47	TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN (4)	R-T-4			
7	ALIGNMENT LAYOUT	R-RG-3	48	TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN (5)	R-T-5			
8	SETTING OUT DATA	R-RG-4	49	MINOR SIGN AND SIGN POST DETAILS	R-T-6			
9	RIGHT OF WAY PLAN	R-RG-5	50	OVERHEAD SIGN BOARD DETAILS	R-T-7			
	PLAN & PROFILE		51	STEEL FRAME FOR MOUNTING OVERHEAD SIGN	R-T-8			
10	PLAN (1) STA. 0+014.000 - STA. 0+700.000	R-P-1	52	STEEL POLE FOR OVERHANGING TRAFFIC SIGN (1)	R-T-9			
11	PLAN (2) STA. 0+700.000 - STA. 0+950.000	R-P-2	53	STEEL POLE FOR OVERHANGING TRAFFIC SIGN (2)	R-T-10			
12	PROFILE (1) STA. 0+014.000 - STA. 0+700.000	R-P-3	54	STEEL POLE FOR OVERHANGING TRAFFIC SIGN (3)	R-T-11			
13	PROFILE (2) STA. 0+700.000 - STA. 0+950.000	R-P-4	55	PERMANENT TIMBER BARRICADE FOR T-INTERSECTION MARKING DETAILS	R-T-12			
14	PROFILE HIGHWAY ROUTE NO. 212 (1) STA. 0+000.000-STA. 0+420.000 "A"	R-P-5	56	TRAFFIC SIGN AND SIGN BOARD DETAILS	R-T-13			
15	PROFILE HIGHWAY ROUTE NO. 212 (2) STA. 0+000.000-STA. 0+420.000 "B"	R-P-6	57	TRAFFIC SIGN AND SIGN FACE DETAILS	R-T-14			
	GEOMETRIC		58	TRAFFIC SIGN AND SIGN LIST	R-T-15			
16	HIGHWAY ROUTE NO. 212 INTERSECTION (1)	R-G-1	59		R-T-16			
17	HIGHWAY ROUTE NO. 212 INTERSECTION (2)	R-G-2		MISCELLANEOUS				
18	HIGHWAY ROUTE NO. 212 INTERSECTION (3)	R-G-3	60	CURB AND GUTTER	R-MI-1			
19	CONNECTING ROAD TO BORDER CONTROL FACILITIES	R-G-4	61	GUARDRAIL	R-MI-2			
20	BORDER CONTROL FACILITIES	R-G-5	62	FENCE DETAILS	R-MI-3			
	CROSS SECTION		63	KILOMETER STONE	R-MI-4			
21	TYPICAL CROSS SECTION (1) AT HIGHWAY ROUTE NO. 212	R-C-1	64	RIGHT OF WAY MONUMENT & BENCH MARK	R-MI-5			
22	TYPICAL CROSS SECTION (2) AT CONNECTING ROAD	R-C-2	65	SODDING DETAILS	R-MI-6			
23	CROSS SECTION (1) STA. 0+040.000 TO STA. 1+100.000	R-C-3	66	LANDSCAPE (1)	R-MI-7			
24	CROSS SECTION (2) STA. 1+120.000 TO STA. 0+180.000	R-C-4	67	LANDSCAPE (2)	R-MI-8			
25	CROSS SECTION (3) STA. 0+200.000 TO STA. 0+260.000	R-C-5		LIGHTING				
26	CROSS SECTION (4) STA. 0+280.000 TO STA. 0+340.000	R-C-6	68	ELECTRICAL SYMBOLS AND ABBREVIATIONS	R-L-1			
27	CROSS SECTION (5) STA. 0+360.000 TO STA. 0+420.000	R-C-7	69	LIGHTING LAYOUT (1)	R-L-2			
28	CROSS SECTION (6) STA. 0+440.000 TO STA. 0+500.000	R-C-8	70	LIGHTING LAYOUT (2)	R-L-3			
29	CROSS SECTION (7) STA. 0+520.000 TO STA. 0+940.000	R-C-9	71	LIGHTING LAYOUT (3)	R-L-4			
30	CROSS SECTION (1) STA. 0+000.000 TO STA. 0+060.000 SPUR LINE "A"	R-C-10	72	LIGHTING LAYOUT (4)	R-L-5			
31	CROSS SECTION (2) STA. 0+080.000 TO STA. 0+140.000 SPUR LINE "A"	R-C-11	73	SINGLE LINE DIAGRAM AND LIGHTING COLUMN	R-L-6			
32	CROSS SECTION (3) STA. 0+160.000 TO STA. 0+220.000 SPUR LINE "A"	R-C-12	74	LIGHTING COLUMN DETAILS	R-L-7			
33	CROSS SECTION (4) STA. 0+240.000 TO STA. 0+300.000 SPUR LINE "A"	R-C-13	75	DRAWPITS	R-L-8			
34	CROSS SECTION (5) STA. 0+320.000 TO STA. 0+380.000 SPUR LINE "A"	R-C-14	76	LIGHTING COLUMN CONNECTION AND SUPPLY PILLAR	R-L-9			
35	CROSS SECTION (6) STA. 0+400.000 TO STA. 0+420.000 SPUR LINE "A"	R-C-15						
36	CROSS SECTION (1) STA. 0+000.000 TO STA. 0+060.000 SPUR LINE "B"	R-C-16						
37	CROSS SECTION (2) STA. 0+080.000 TO STA. 0+140.000 SPUR LINE "B"	R-C-17						
38	CROSS SECTION (3) STA. 0+160.000 TO STA. 0+220.000 SPUR LINE "B"	R-C-18						
39	CROSS SECTION (4) STA. 0+240.000 TO STA. 0+300.000 SPUR LINE "B"	R-C-19						
40	CROSS SECTION (5) STA. 0+320.000 TO STA. 0+380.000 SPUR LINE "B"	R-C-20						
41	CROSS SECTION (6) STA. 0+400.000 TO STA. 0+420.000 SPUR LINE "B"	R-C-21						





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REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 **ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
 **NIIPPON KORI CO., LTD.**

 **JAPAN INTERNATIONAL COOPERATION AGENCY**  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
**MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION**  
**KINGDOM OF THAILAND**  
**MINISTRY OF TRANSPORT AND COMMUNICATIONS**  
**DEPARTMENT OF HIGHWAYS**

 **THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita		11/11/00
DESIGN CHECK	T. Mizutawa		12/12/00
SUBMITTED	A. Hirataki		01/10/01
APPROVED	S. Temyaburo		21/02/00

DWG. TITLE: **LIST OF DRAWING (1)**

PACKAGE 3

DATE OF ISSUE:	
05/03/2000	
DRG. NO.	SHEET NO.
GE-3	3
DWG. STATUS	

SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.
	3. BCF CML							
77	GENERAL LAYOUT OF BCF	F-C-1	122	MAIN OFFICE : DEPARTURE - ROOF PLAN	F-A-10	167	MAIN OFFICE : COLUMN AND FOOTING DETAILS	F-S-3
78	CROSS SECTION - 1	F-C-2	123	MAIN OFFICE : ARRIVAL AND DEPARTURE - ELEVATION 1, 2, 3 AND 4	F-A-11	168	MAIN OFFICE : BEAM SCHEDULES	F-S-4
79	CROSS SECTION - 2	F-C-3	124	MAIN OFFICE : ARRIVAL AND DEPARTURE - SECTION A-A, B-B AND C-C	F-A-12	169	MAIN OFFICE : BEAM DETAILS - 1	F-S-5
80	CROSS SECTION - 3	F-C-4	125	MAIN OFFICE : ARRIVAL AND DEPARTURE - TYPICAL SECTION 1 AND 2	F-A-13	170	MAIN OFFICE : BEAM DETAILS - 2	F-S-6
81	CROSS SECTION - 4	F-C-5	126	MAIN OFFICE : ARRIVAL AND DEPARTURE - TYPICAL SECTION 3 AND 4	F-A-14	171	MAIN OFFICE : BEAM DETAILS - 3	F-S-7
82	CROSS SECTION - 5	F-C-6	127	MAIN OFFICE : ARRIVAL AND DEPARTURE - STAIR DETAILS FOR ST.1 AND ST.2	F-A-15	172	MAIN OFFICE : BEAM DETAILS - 4	F-S-8
83	LONGITUDINAL PROFILE	F-C-7	128	MAIN OFFICE : ARRIVAL AND DEPARTURE - STAIR DETAILS FOR ST.3, ST.4, ST.5, ST.6, RAMP DETAILS FOR RM1 (RM2) AND COUNTER DETAILS	F-A-16	173	MAIN OFFICE : BEAM DETAILS - 5	F-S-9
84	GEOMETRIC LAYOUT - 1	F-C-8	129	MAIN OFFICE : ARRIVAL AND DEPARTURE - STAIR DETAILS AND TYPICAL DETAILS	F-A-17	174	MAIN OFFICE : SLAB SCHEDULE, TYP. SLAB & LAMP DETAILS	F-S-10
85	GEOMETRIC LAYOUT - 2	F-C-9	130	MAIN OFFICE : ARRIVAL AND DEPARTURE - TOILET DETAILS FOR T1 AND T2	F-A-18	175	MAIN OFFICE : STAIR DETAILS - 1 (ST1, ST2)	F-S-11
86	GENERAL LAYOUT OF EXTERNAL FINISHING	F-C-10	131	MAIN OFFICE : ARRIVAL AND DEPARTURE - TOILET DETAILS FOR T3, T4 AND T5	F-A-19	176	MAIN OFFICE : STAIR DETAILS - 2 (ST3, ST4-5)	F-S-12
87	CURB LAYOUT	F-C-11	132	MAIN OFFICE : ARRIVAL AND DEPARTURE - TOILET DETAILS FOR T6, T7 AND ACCESSORIES SCHEDULE (M)	F-A-20	177	MAIN OFFICE : CANOPY REINFORCEMENT DETAILS	F-S-13
88	25 CM. CONCRETE PAVEMENT	F-C-12	133	MAIN OFFICE : ARRIVAL - 1 <sup>st</sup> AND 2 <sup>nd</sup> CEILING PLAN	F-A-21	178	PUBLIC TOILET : STRUCTURAL DETAILS - 1	F-S-14
89	CONCRETE PAVEMENT BLOCK	F-C-13	134	MAIN OFFICE : DEPARTURE - 1 <sup>st</sup> AND 2 <sup>nd</sup> CEILING PLAN	F-A-22	179	PUBLIC TOILET : STRUCTURAL DETAILS - 2	F-S-15
90	DRAINAGE LAYOUT - 1	F-C-14	135	MAIN OFFICE : ARRIVAL - 1 <sup>st</sup> AND 2 <sup>nd</sup> FINISHING FLOOR PLAN	F-A-23	180	INSPECTION ROOF T-1 (1) : PILING LAYOUT	F-S-16
91	DRAINAGE LAYOUT - 2	F-C-15	136	MAIN OFFICE : DEPARTURE - 1 <sup>st</sup> AND 2 <sup>nd</sup> FINISHING FLOOR PLAN	F-A-24	181	INSPECTION ROOF T-1 (2) : FOUNDATION & COLUMN DETAILS	F-S-17
92	DETAIL OF 'A' AND 'B'	F-C-16	137	MAIN OFFICE : ARRIVAL AND DEPARTURE - DOOR AND WINDOW HARDWARE SCHEDULE	F-A-25	182	INSPECTION ROOF T-1 (3) : PLAN & ELEVATION	F-S-18
93	MANHOLE DETAILS - 1	F-C-17	138	MAIN OFFICE : ARRIVAL AND DEPARTURE - DOOR DETAILS	F-A-26	183	INSPECTION ROOF T-1 (4) : 3D TRUSS MODULES	F-S-19
94	MANHOLE DETAILS - 2	F-C-18	139	MAIN OFFICE : ARRIVAL AND DEPARTURE - WINDOW DETAILS	F-A-27	184	INSPECTION ROOF T-1 (5) : TOP & BOTTOM CHORD LAYOUT	F-S-20
95	RC DITCH DETAILS - 1	F-C-19	140	MAIN OFFICE : ARRIVAL AND DEPARTURE - CANOPY AND HANDRAIL DETAILS	F-A-28	185	INSPECTION ROOF T-1 (6) : DRAINAGE PLAN & ELEVATION	F-S-21
96	RC DITCH DETAILS - 2	F-C-20	141	PUBLIC TOILET : PLAN, FINISH & EQUIPMENT	F-A-29	186	INSPECTION ROOF T-1 (7) : CONSTRUCTION METHOD	F-S-22
97	DRAIN CHUTE	F-C-21	142	PUBLIC TOILET : ELEVATION 1, 2, 3 AND 4	F-A-30	187	INSPECTION ROOF T-2 (1) : PILING LAYOUT	F-S-23
98	LOCATION OF INTERCROSSING SECTION BETWEEN DRAINAGE WORKS AND ELECTRICAL WORKS (1)	F-C-22	143	PUBLIC TOILET : SECTION & DETAILS	F-A-31	188	INSPECTION ROOF T-2 (2) : FOUNDATION & COLUMN DETAILS	F-S-24
99	LOCATION OF INTERCROSSING SECTION BETWEEN DRAINAGE WORKS AND ELECTRICAL WORKS (2)	F-C-23	144	BOOTH (IMMIGRATION & CUSTOMS) : PLAN, ELEVATION, SECTION AND DETAILS	F-A-32	189	INSPECTION ROOF T-2 (3) : PLAN & ELEVATION	F-S-25
100	LOCATION OF INTERCROSSING SECTION BETWEEN DRAINAGE WORKS AND WATER SUPPLY PIPES (1)	F-C-24	145	BOOTH (IMMIGRATION & QUARANTINE) : PLAN, ELEVATION, SECTION AND DETAILS	F-A-33	190	INSPECTION ROOF T-2 (4) : 3D TRUSS MODULES	F-S-26
101	LOCATION OF INTERCROSSING SECTION BETWEEN DRAINAGE WORKS AND WATER SUPPLY PIPES (2)	F-C-25	146	CHECKING & OFFICES (1) : 1 <sup>st</sup> ROOF FLOOR PLAN, ELEVATION & SECTION, FINISHING	F-A-34	191	INSPECTION ROOF T-2 (5) : TOP & BOTTOM CHORD LAYOUT	F-S-27
102	CROSS SECTION DETAILS	F-C-26	147	CHECKING & OFFICES (2) : TOILET DETAILS AND TOILET EQUIPMENT SCHEDULE	F-A-35	192	INSPECTION ROOF T-2 (6) : DRAINAGE PLAN & ELEVATION	F-S-28
103	LAYOUT OF LANDSCAPING WORK	F-C-27	148	CHECK POINT BOOTHS : PLAN, ELEVATION, DOOR, WINDOW DETAILS AND FINISHING	F-A-36	193	INSPECTION ROOF T-2 (7) : CONSTRUCTION METHOD	F-S-29
104	PLANTING AND GRASSING IN MEDIANS	F-C-28	149	CHECK & TOLL FEE OFFICE (1) : PLAN, ROOF PLAN, MATERIALS AND FINISH SCHEDULE	F-A-37	194	INSPECTION ROOF T-3 (1) : PILING LAYOUT	F-S-30
105	PLANTING DETAILS	F-C-29	150	CHECK & TOLL FEE OFFICE (2) : ELEVATION 1, 2, 3 AND 4	F-A-38	195	INSPECTION ROOF T-3 (2) : FOUNDATION & COLUMN DETAILS	F-S-31
106	METHOD OF TRANSPLANTING TREE	F-C-30	151	CHECK & TOLL FEE OFFICE (3) : SECTION A, B, C, D, E AND SANITARY WARES & ACCESSORIES SCHEDULE	F-A-39	196	INSPECTION ROOF T-3 (3) : PLAN & ELEVATION	F-S-32
107	FENCE DETAILS - 1	F-C-31	152	CHECK & TOLL FEE OFFICE (4) : DOOR & WINDOW DETAILS, TYPICAL DETAILS	F-A-40	197	INSPECTION ROOF T-3 (4) : 3D TRUSS MODULES	F-S-33
108	FENCE DETAILS - 2	F-C-32	153	OFFICER PARKING SHED : PLAN, ELEVATION & DETAIL SECTION	F-A-41	198	INSPECTION ROOF T-3 (5) : TOP & BOTTOM CHORD LAYOUT	F-S-34
109	BORDER MAIN GATE DETAILS	F-C-33	154	POWER HOUSE (1) : PLAN	F-A-42	199	INSPECTION ROOF T-3 (6) : DRAINAGE PLAN & ELEVATION	F-S-35
110	MAIN GATE WALL DETAILS	F-C-34	155	POWER HOUSE (2) : ELEVATION AND DETAIL SECTION	F-A-43	200	INSPECTION ROOF T-3 (7) : CONSTRUCTION METHOD	F-S-36
111	MINOR GATE DETAILS	F-C-35	156	GARBAGE DISPOSAL SHED : PLAN, ELEVATION	F-A-44	201	INSPECTION ROOF T-1 (1) : ROOF GUTTER DETAILS	F-S-37
112	FLAG POLE	F-C-36	157	GARBAGE DISPOSAL SHED : STRUCTURAL DETAILS	F-A-45	202	INSPECTION ROOF T-1 (2) : ROOF GUTTER DETAILS	F-S-38
	4. BCF ARCHITECTURAL		158	VEHICLE INSPECTION PIT : DETAILS	F-A-46	203	INSPECTION ROOF T-2 (1) : ROOF GUTTER DETAILS	F-S-39
113	LOCATION MAP	F-A-1	159	FOR ALL BUILDING : TYPICAL DETAILS (1)	F-A-47	204	INSPECTION ROOF T-2 (2) : ROOF GUTTER DETAILS	F-S-40
114	LAYOUT PLAN	F-A-2	160	FOR ALL BUILDING : TYPICAL DETAILS (2)	F-A-48	205	INSPECTION ROOF T-3 (1) : ROOF GUTTER DETAILS	F-S-41
115	MAIN OFFICE : ARRIVAL AND DEPARTURE - SYMBOLS AND MATERIALS FOR ALL BUILDINGS	F-A-3	161	FOR ALL BUILDING : TYPICAL DETAILS (3)	F-A-49	206	INSPECTION ROOF T-3 (2) : ROOF GUTTER DETAILS	F-S-42
116	MAIN OFFICE : ARRIVAL AND DEPARTURE - FINISH SCHEDULE	F-A-4	162	FOR ALL BUILDING : TYPICAL DETAILS (4)	F-A-50	207	CHECKING OFFICE : BEAM, COLUMN, FOOTING, AND SLAB REINFORCEMENT	F-S-43
117	MAIN OFFICE : ARRIVAL - 1 <sup>st</sup> FLOOR PLAN	F-A-5	163	FOR ALL BUILDING : TYPICAL DETAILS (5)	F-A-51	208	CHECK & TOLL FEE OFFICE : FOOTING, BEAM AND SLAB PLAN	F-S-44
118	MAIN OFFICE : ARRIVAL - 2 <sup>nd</sup> FLOOR PLAN	F-A-6	164	MISCELLANEOUS DETAILS	F-A-52	209	CHECK POINT BOOTH : STRUCTURAL DETAILS	F-S-45
119	MAIN OFFICE : ARRIVAL - ROOF PLAN	F-A-7		5. BCF STRUCTURAL		210	POWER HOUSE : FOOTING, BEAM AND SLAB PLAN	F-S-46
120	MAIN OFFICE : DEPARTURE - 1 <sup>st</sup> FLOOR PLAN	F-A-8	165	STRUCTURAL NOTES	F-S-1	211	POWER HOUSE : BEAM, COLUMN AND FOOTING	F-S-47
121	MAIN OFFICE : DEPARTURE - 2 <sup>nd</sup> FLOOR PLAN	F-A-9	166	MAIN OFFICE : FOOTING, BEAM AND SLAB PLAN	F-S-2		6. BCF ELECTRICAL AND MECHANICAL	
						212	GENERAL SPECIFICATION FOR UTILITY WORK	F-U-1
						213	POWER SUPPLY SYSTEM	F-E-1
						214	ONE LINE DIAGRAM	F-E-2
						215	DETAIL OF DISTRIBUTION PANEL (1)	F-E-3
						216	DETAIL OF DISTRIBUTION PANEL (2)	F-E-4
						217	DETAIL OF DISTRIBUTION PANEL (3)	F-E-5
						218	DETAIL OF DISTRIBUTION PANEL (4)	F-E-6

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM:	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	H. Chit	<i>[Signature]</i>	16-11-00	LIST OF DRAWING (2)
				In association with	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Mouasoua	<i>[Signature]</i>	12-02-00	
				NIPPON KOEI CO., LTD.		SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-12-00	
						APPROVED	S. Temyabutra	<i>[Signature]</i>	02/03/00	

PACKAGE 3

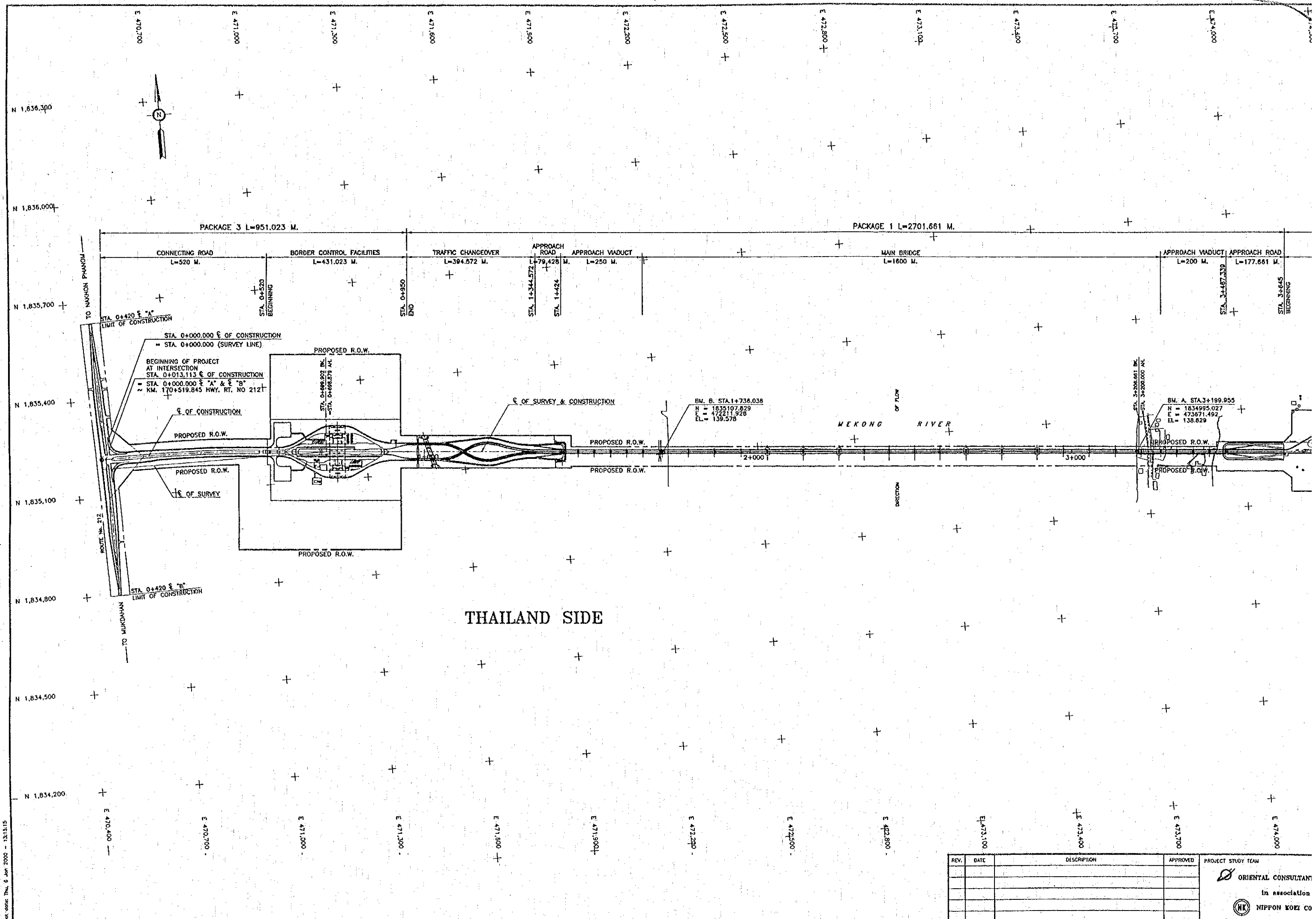
DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
GE-4	4
DWG. STATUS	

SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.	SHEET NO.	TITLE	DRAWING NO.
219	DETAIL OF DISTRIBUTION PANEL (5)	F-E-7						
220	DETAIL OF HIGH MAST LIGHTING (1)	F-E-8						
221	DETAIL OF HIGH MAST LIGHTING (2)	F-E-9						
222	FIGURE OF LIGHTING FIXTURE	F-E-10						
223	DETAIL OF MANHOLE, HANDHOLE AND UNDER GROUND CONDUIT	F-E-11						
224	PLAN OF EXTERNAL ELECTRICAL WORK (1)	F-E-12						
225	PLAN OF EXTERNAL ELECTRICAL WORK (2)	F-E-13						
226	PLAN OF EXTERNAL ELECTRICAL WORK (3)	F-E-14						
227	PLAN AND DETAIL OF POWER HOUSE	F-E-15						
228	PLAN OF INTERNAL LIGHTING AND POWER OUTLET IN MAIN OFFICE (ARRIVAL SIDE)	F-E-16						
229	PLAN OF INTERNAL LIGHTING AND POWER OUTLET IN MAIN OFFICE (DEPARTURE SIDE)	F-E-17						
230	SYSTEM OF PRIVATE TELEPHONE, PUBLIC ANNOUNCING AND TELEVISION	F-E-18						
231	PLAN OF TELEPHONE, TV AND PUBLIC ANNOUNCING SYSTEM IN MAIN OFFICE (ARRIVAL SIDE)	F-E-19						
232	PLAN OF TELEPHONE, TV AND PUBLIC ANNOUNCING SYSTEM IN MAIN OFFICE (DEPARTURE SIDE)	F-E-20						
233	PLAN OF INTERNAL ELECTRICAL WORK IN PUBLIC TOILETS, BOOTHS AND CHECK POINT OFFICES AND TOLL OFFICE AND CHECK POINT OFFICE	F-E-21						
234	WATER SUPPLY AND WASTE WATER DRAINAGE SYSTEM	F-P-1						
235	EXTERNAL PLUMBING WORK	F-P-2						
236	PLUMBING WORK IN MAIN OFFICE AND PUBLIC TOILET (ARRIVAL SIDE)	F-P-3						
237	PLUMBING WORK DETAIL (1) ARRIVAL SIDE	F-P-4						
238	PLUMBING WORK DETAIL (2) ARRIVAL SIDE	F-P-5						
239	PLUMBING WORK DETAIL (3) ARRIVAL SIDE	F-P-6						
240	PLUMBING WORK IN MAIN OFFICE AND PUBLIC TOILET (DEPARTURE SIDE)	F-P-7						
241	PLUMBING WORK DETAIL (1) DEPARTURE SIDE	F-P-8						
242	PLUMBING WORK DETAIL (2) DEPARTURE SIDE	F-P-9						
243	PLUMBING WORK DETAIL (3) DEPARTURE SIDE	F-P-10						
244	DETAILS FOR PLUMBING WORK	F-P-11						
245	WASTE WATER TREATMENT SYSTEM DETAILS	F-P-12						
246	PLAN AND DETAIL OF AIR CONDITIONER AND VENTILATION IN MAIN OFFICE (GROUND FLOOR)	F-M-1						
247	PLAN AND DETAIL OF AIR CONDITIONER AND VENTILATION IN MAIN OFFICE (SECOND FLOOR)	F-M-2						

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	H. Orita	<i>[Signature]</i>	11/23/00	LIST OF DRAWING (3)
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hirakawa	<i>[Signature]</i>	4/1/00	
						APPROVED	S. Taniyabutra	<i>[Signature]</i>	02/02/00	







PACKAGE 3 L=951.023 M.

PACKAGE 1 L=2701.661 M.

CONNECTING ROAD  
L=520 M.

BORDER CONTROL FACILITIES  
L=431.023 M.

TRAFFIC CHANGEOVER  
L=394.572 M.

APPROACH ROAD  
L=79.428 M.

APPROACH VIADUCT  
L=250 M.

MAIN BRIDGE  
L=1800 M.

APPROACH VIADUCT  
L=200 M.

APPROACH ROAD  
L=177.661 M.

STA. 0+420 ± "A"  
LIMIT OF CONSTRUCTION

STA. 0+000.000 Q. OF CONSTRUCTION  
= STA. 0+000.000 (SURVEY LINE)

BEGINNING OF PROJECT  
AT INTERSECTION  
STA. 0+013.113 Q. OF CONSTRUCTION  
= STA. 0+000.000 ± "A" & ± "B"  
≈ KM. 170+519.845 HWY. RT. NO 212

Q. OF CONSTRUCTION

PROPOSED R.O.W.

PROPOSED R.O.W.

Q. OF SURVEY

STA. 0+420 ± "B"  
LIMIT OF CONSTRUCTION

PROPOSED R.O.W.

PROPOSED R.O.W.

Q. OF SURVEY & CONSTRUCTION

PROPOSED R.O.W.

PROPOSED R.O.W.

BM. B. STA. 1+736.038  
N = 1835107.829  
E = 472211.928  
EL. = 139.576

MEKONG RIVER

Q. OF SURVEY

DIRECTION

BM. A. STA. 3+199.955  
N = 1834995.027  
E = 473671.492  
EL. = 138.829

PROPOSED R.O.W.

PROPOSED R.O.W.

THAILAND SIDE

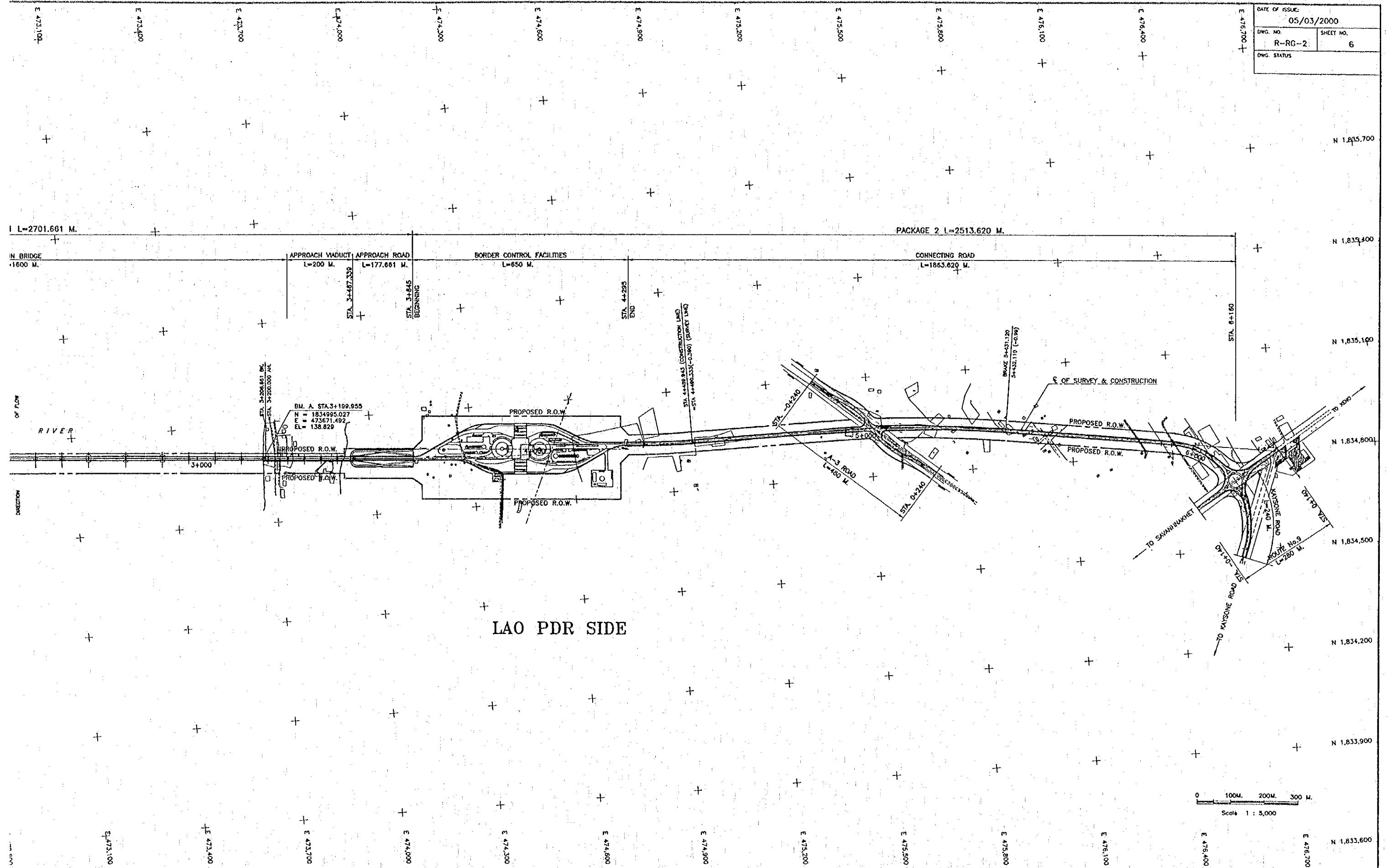
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

ORIENTAL CONSULTANT  
 In association with  
 NIPPON KOEI CO

Proj. order: Th. 6 Jan 2000 - 131515

Scale: 1:1000

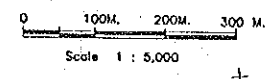
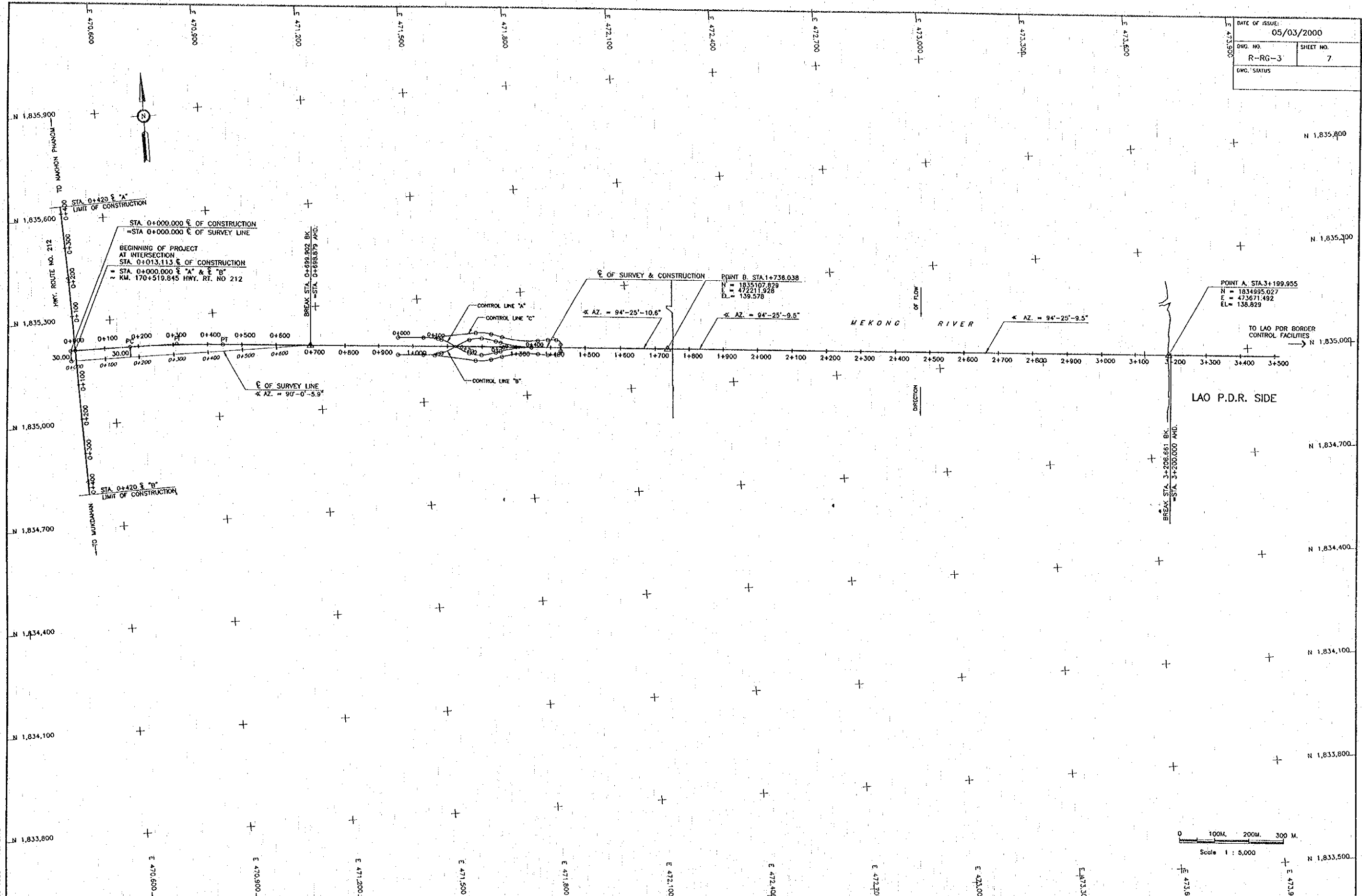
DATE OF ISSUE: 05/03/2000	
DWG. NO. R-RG-2	SHEET NO. 6
DWG. STATUS	



LAO PDR SIDE

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION		DESIGN	H. Okita	<i>[Signature]</i>	05/02/00	GENERAL LAYOUT THAILAND SIDE & LAO PDR SIDE
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN CHECK	T. Moritani	<i>[Signature]</i>	18/02/00	
							SUBMITTED	A. Hirata	<i>[Signature]</i>	21/02/00	
							APPROVED	S. Tomyabutra	<i>[Signature]</i>	22/02/00	

DATE OF ISSUE: 05/03/2000  
 DWG. NO. R-RG-3 SHEET NO. 7  
 DWG. STATUS





Plot date: Wed, 29 Dec 1999 - 10:45:18

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				<b>JICA</b> JAPAN INTERNATIONAL COOPERATION AGENCY <b>ORIENTAL CONSULTANTS CO., LTD.</b> in association with <b>NIPPON KOEI CO., LTD.</b>	DESIGN	N. Chito	<i>[Signature]</i>	11/02/00	ALIGNMENT LAYOUT
					DESIGN CHECK	T. Moritomo	<i>[Signature]</i>	12/02/00	
					SUBMITTED	A. Hirata	<i>[Signature]</i>	01/02/01	
					APPROVED	S. Temyabutra	<i>[Signature]</i>	02/02/01	

SETTING OUT DATA												
LOCATION	POINT	STATION	COORDINATES		CURVE DATA							
			EAST	NORTH	DEFLECTION ANGLE	SPIRAL IN A (M)	RADIUS R (M)	SPIRAL OUT A (M)	DEGREE OF CURVATURE, D (M)	TANGENT LENGTH, T (M)	LENGTH OF CURVE, L (M)	EXTERNAL LENGTH, E (M)
SECTION OF CONSTRUCTION												
BEGINNING OF THAILAND SIDE	BOP	0+000.000	470478.975	1835217.773								
	P.C.	0+175.581	470654.556	1835217.768								
	P.I.	0+310.588	470789.562	1835217.764	4°-25'-04.7" RT.		3500		1°-38'-13.3"	135.007	269.879	2.603
	P.T.	0+445.460	470924.167	1835207.360								
SECTION OF SURVEY & CONSTRUCTION												
BREAK POINT	BACK	0+699.902 CONSTRUCTION LINE	471177.853	1835187.753								
	AHEAD	0+698.879 SURVEY LINE	471177.853	1835187.753								
	BM. B	1+736.038	472211.928	1835107.829								
END OF THAILAND SIDE	BM. A	3+199.955	473671.492	1834995.027								
HIGHWAY ROUTE NO.212												
SPUR LINE "A"	INTERSECTION	0+000.000	470492.088	1835217.773								
	P.I.	0+211.108	470485.792	1835428.876	0°-16'-05" LT.		NO CURVE					
	END	0+420.000	470478.591	1835637.554								
SPUR LINE "B"	INTERSECTION	0+000.000	470492.088	1835217.773								
	P.I.	0+338.134	470503.509	1834834.809	0°-26'-58.35" RT.		NO CURVE					
	END	0+420.000	470504.319	1834797.951								





Plot date: Mon, 14 Feb 2000 - 11:14:53

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

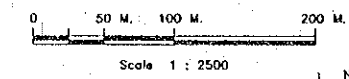
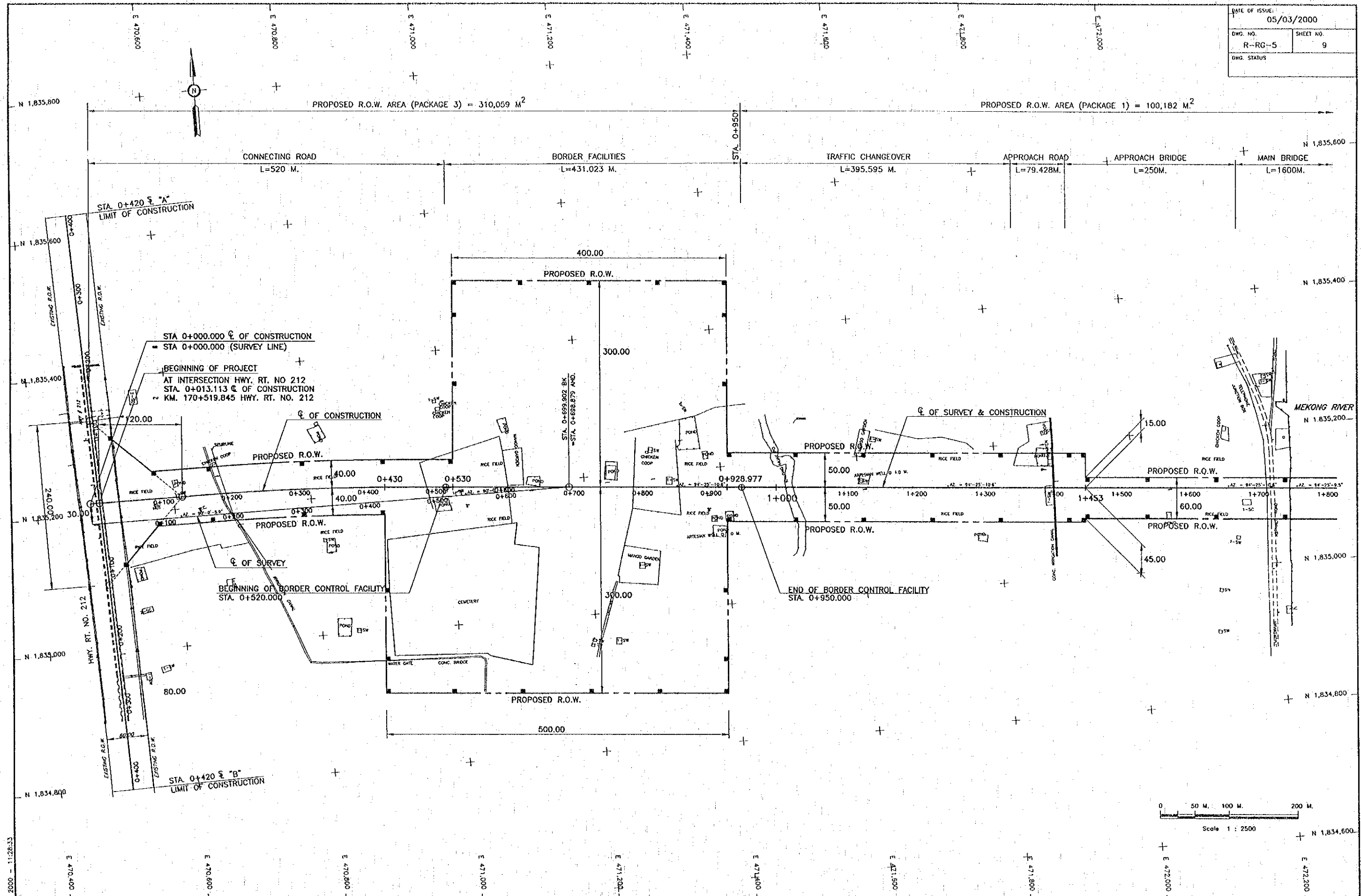
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

 THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita		16-02-00
DESIGN CHECK	T. Masuzawa		17-02-00
SUBMITTED	A. Kitani		21-02-00
APPROVED	S. Temiyabutra		22/02/00

DWG. TITLE: SETTING OUT DATA

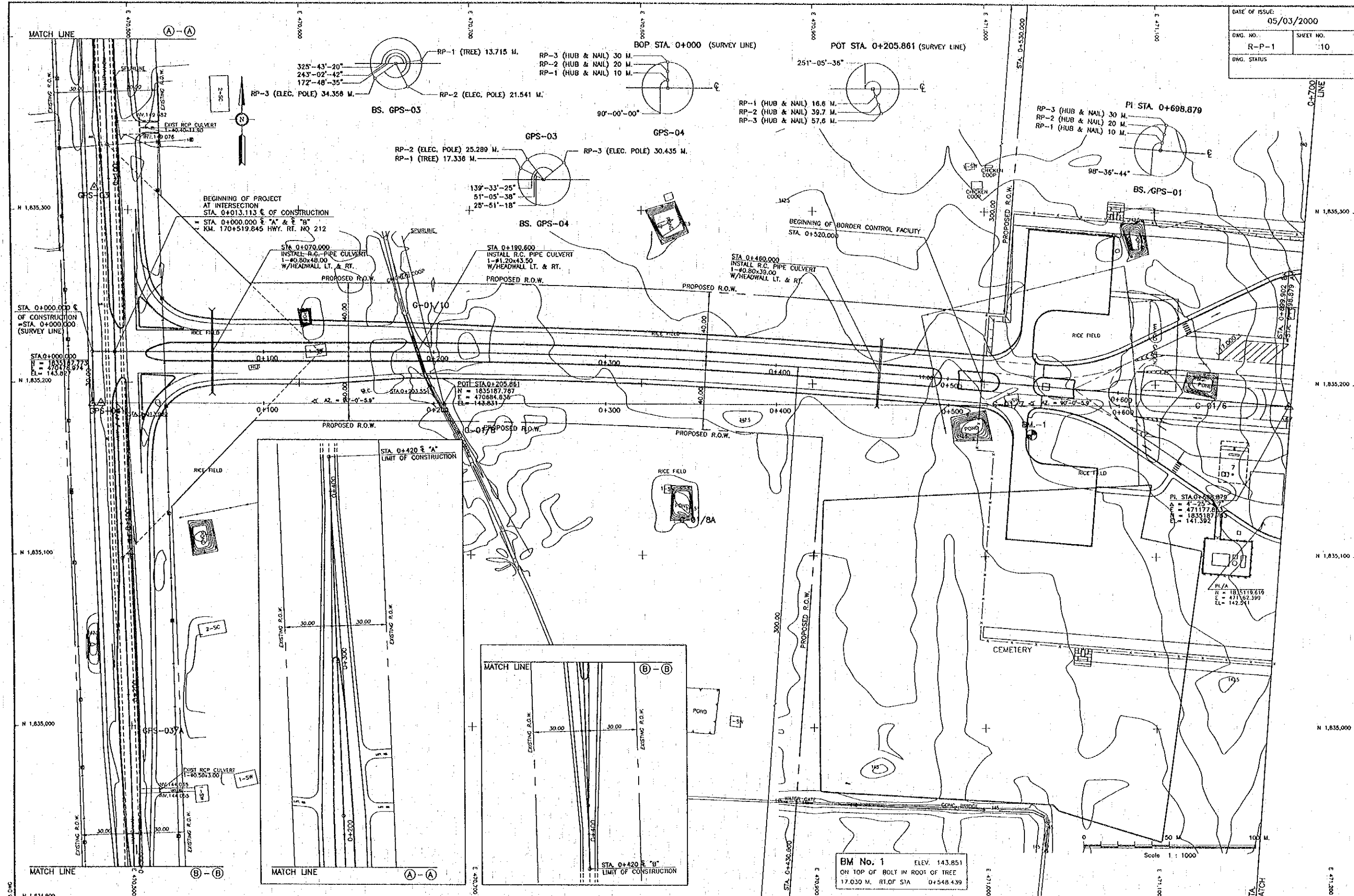
DATE OF ISSUE: 05/03/2000	
DWG. NO. R-RG-5	SHEET NO. 9
DWG. STATUS	



REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	N. Orita	<i>[Signature]</i>	16/03/00	RIGHT OF WAY PLAN
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Masutomo	<i>[Signature]</i>	18/03/00	
						SUBMITTED	A. Hirotsu	<i>[Signature]</i>	18/03/00	
						APPROVED	S. Temiyabutra	<i>[Signature]</i>	22/03/00	
					THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT					

Plot date: Mon, 14 Feb 2000 - 11:28:33

DATE OF ISSUE: 05/03/2000  
 DWG. NO. R-P-1 SHEET NO. 10  
 DWG. STATUS



REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

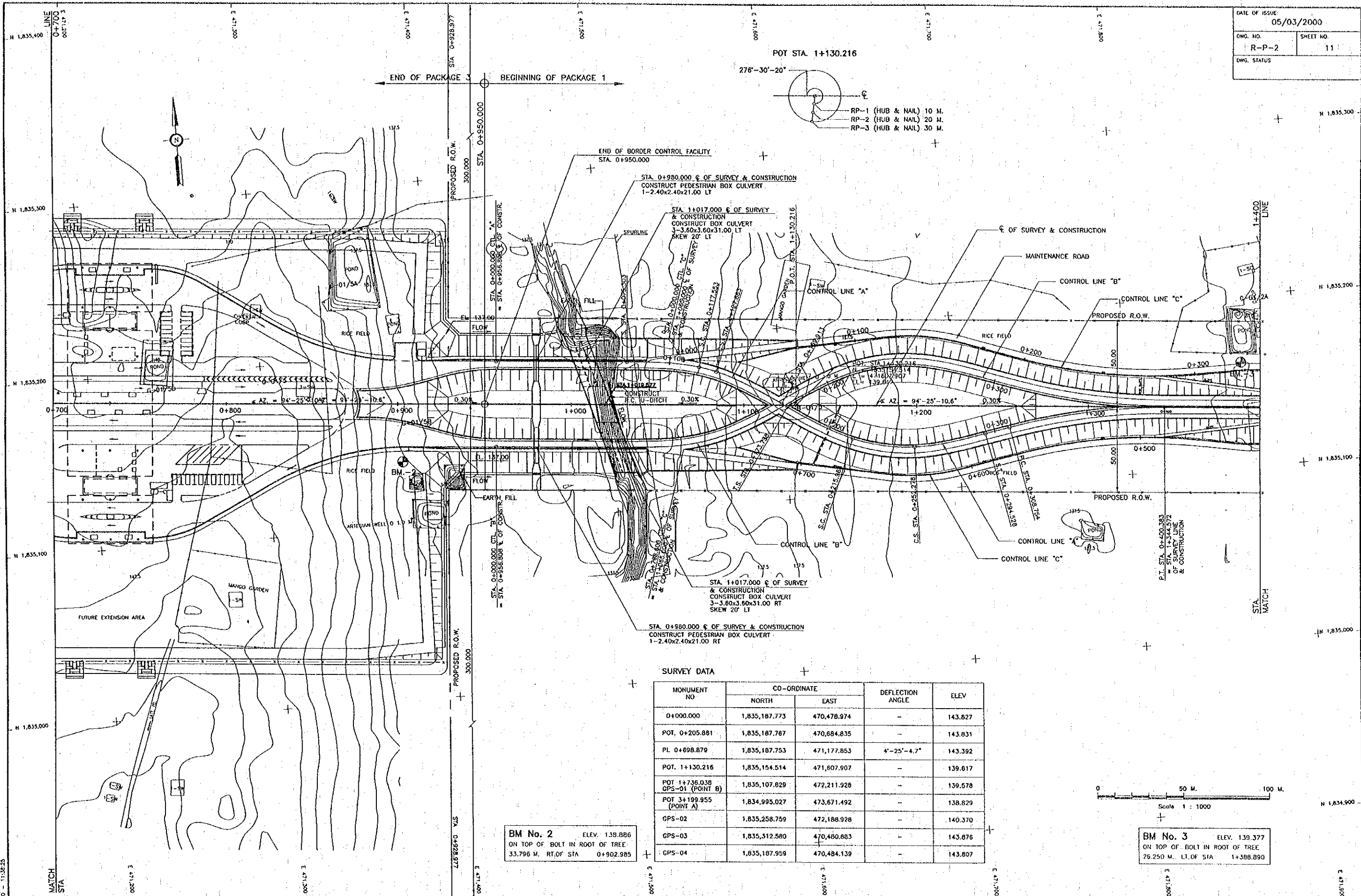
ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Orita	<i>[Signature]</i>	11/01/00	PALN-1 STA. 0+014.000 - STA. 0+700.000
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	11/02/00	
SUBMITTED	A. Hirota	<i>[Signature]</i>	11/02/00	
APPROVED	S. Taniyabutra	<i>[Signature]</i>	22/02/00	

C:\SMB-NEW\PACKAGE\VP&P\01.dwg

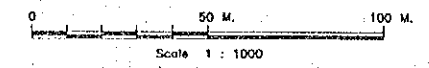


SURVEY DATA

MONUMENT NO	CO-ORDINATE		DEFLECTION ANGLE	ELEV
	NORTH	EAST		
0+000.000	1,835,187.773	470,478.974	-	143.827
POT. 0+205.881	1,835,187.787	470,684.835	-	143.831
PI. 0+698.879	1,835,187.753	471,177.853	4°-25'-4.7"	143.392
POT. 1+130.216	1,835,154.514	471,607.907	-	139.617
POT. 1+736.038 GPS-01 (POINT B)	1,835,107.829	472,211.928	-	139.578
POT. 3+199.955 (POINT A)	1,834,995.027	473,671.492	-	138.829
GPS-02	1,835,258.759	472,188.928	-	140.370
GPS-03	1,835,312.580	470,480.883	-	143.876
GPS-04	1,835,187.959	470,484.139	-	143.807

**BM No. 2** ELEV. 138.886  
 ON TOP OF BOLT IN ROOT OF TREE.  
 33.796 M. RT. OF STA 0+902.985

**BM No. 3** ELEV. 139.377  
 ON TOP OF BOLT IN ROOT OF TREE.  
 26.250 M. LT. OF STA 1+388.890



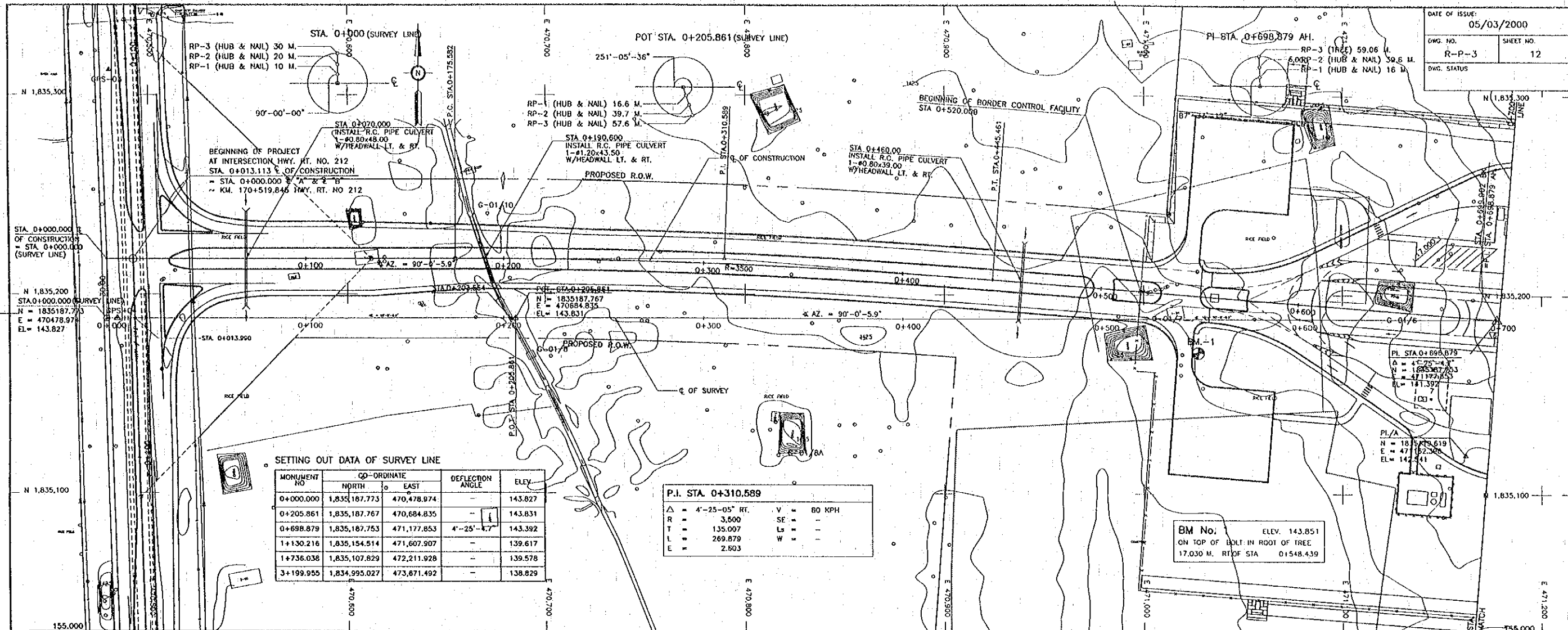
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
**KINGDOM OF THAILAND**  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Orito	<i>[Signature]</i>	11/03	PLAN-2 STA. 0+700.000 - STA. 0+950.000
DESIGN CHECK	T. Mawatana	<i>[Signature]</i>	12/03	
SUBMITTED	A. Hatanaka	<i>[Signature]</i>	1/1/04	
APPROVED	S. Temiyabutra	<i>[Signature]</i>	02/03/04	



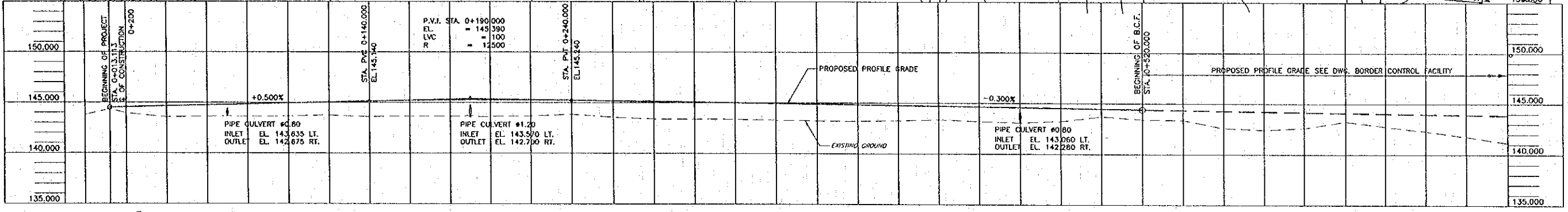
SETTING OUT DATA OF SURVEY LINE

MONUMENT NO.	COORDINATE	DEFLECTION ANGLE	ELEV.
	NORTH EAST		
0+000.000	1,835,187.773 470,478.974	-	143.827
0+205.861	1,835,187.767 470,684.835	-	143.831
0+698.879	1,835,187.753 471,177.853	4'-25'-4.7"	143.392
1+130.216	1,835,154.514 471,607.907	-	139.617
1+736.038	1,835,107.829 472,211.928	-	139.578
3+199.955	1,834,995.027 473,671.492	-	138.829

P.I. STA. 0+310.589

Δ	4'-25'-05" RT.	V	80 KPH
R	3,500	SE	-
T	135.007	LS	-
L	269.879	W	-
E	2.803		

BM No. ELEV. 143.851  
 ON TOP OF BOLT IN ROOT OF TREE  
 17.030 M. RT OF STA 0+548.439



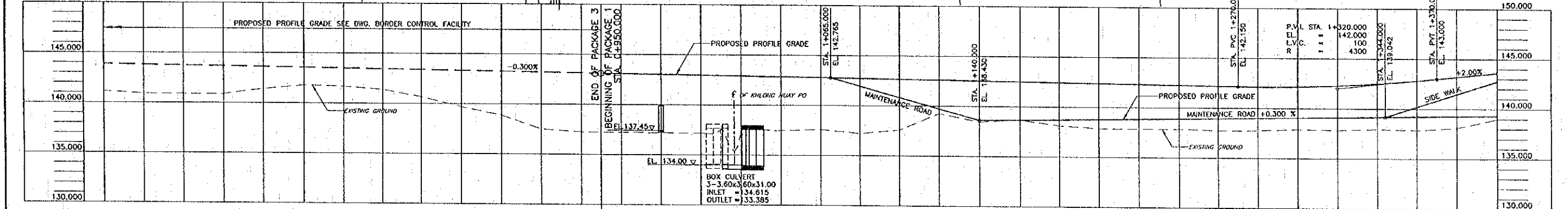
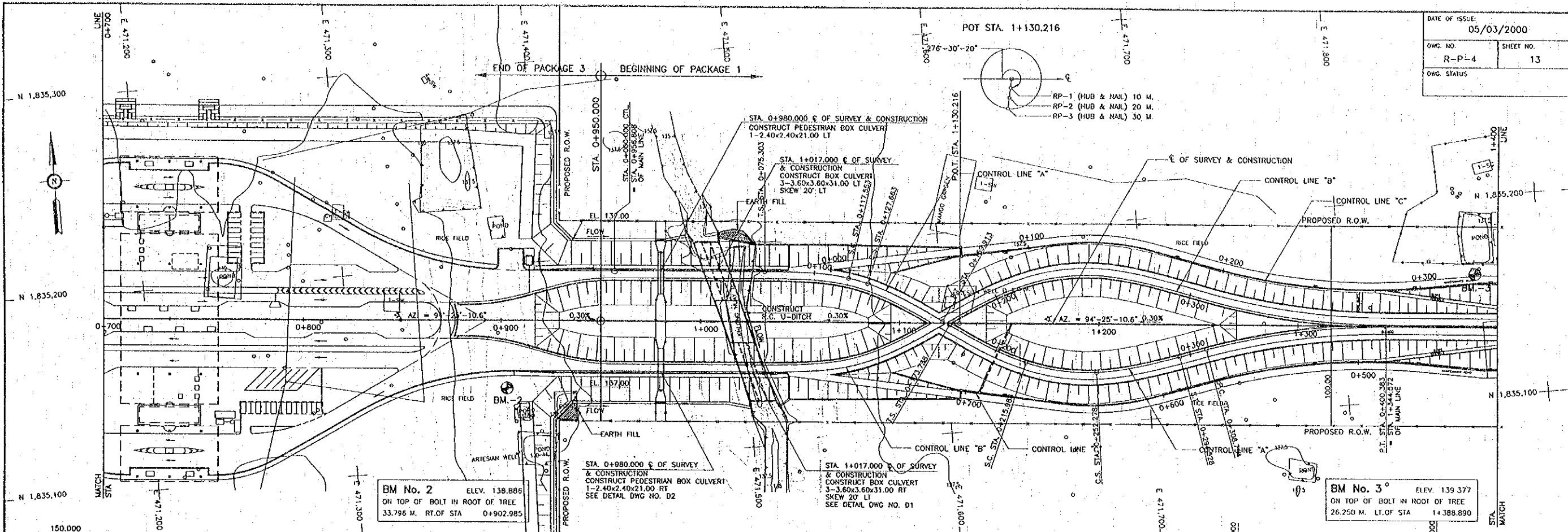
STATION	EXISTING HEIGHT	PROPOSED HEIGHT	GRADIENT
0+000	142.760	144.500	+0.500% L=177.911
0+020	142.539	144.540	
0+040	142.550	144.640	+0.500% L=177.911
0+060	142.620	144.740	
0+080	142.660	144.840	+0.500% L=177.911
0+100	142.680	144.940	
0+120	142.740	145.040	+0.500% L=177.911
0+140	142.880	145.140	
0+160	143.67	145.224	+0.500% L=177.911
0+180	143.650	145.276	
0+200	143.520	145.296	+0.500% L=177.911
0+220	143.680	145.284	
0+240	143.640	145.240	+0.500% L=177.911
0+260	143.560	145.180	
0+280	143.400	145.120	+0.500% L=177.911
0+300	143.400	145.06	
0+320	143.360	145.000	+0.500% L=177.911
0+340	143.290	144.940	
0+360	143.220	144.880	+0.500% L=177.911
0+380	143.210	144.820	
0+400	143.260	144.760	+0.500% L=177.911
0+420	143.360	144.700	
0+440	143.190	144.640	+0.500% L=177.911
0+460	142.680	144.580	
0+480	142.220	144.520	+0.500% L=177.911
0+500	142.690	144.460	
0+520	143.410	144.400	+0.500% L=177.911
0+540	143.260	144.340	
0+560	142.560	144.280	+0.500% L=177.911
0+580	142.410	144.220	
0+600	142.610	144.160	+0.500% L=177.911
0+620	142.250	144.100	
0+640	142.750	144.040	+0.500% L=177.911
0+660	142.290	143.980	
0+680	141.760	143.920	+0.500% L=177.911
0+700	141.260	143.860	

Scale H 1 : 1000  
 V 1 : 200

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	DESIGN	H. Okita	[Signature]	16.02.00	PROFILE-1 STA. 0+014.000 - STA. 0+700.000
				JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN CHECK	T. Masudawa	[Signature]	17.02.00	
				KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	SUBMITTED	A. Hirakawa	[Signature]	17.02.00	
				THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	APPROVED	S. Temiyabutra	[Signature]	23/02/00	

Proj. 0084, Min. 14, Feb. 2000 - 11:40:52



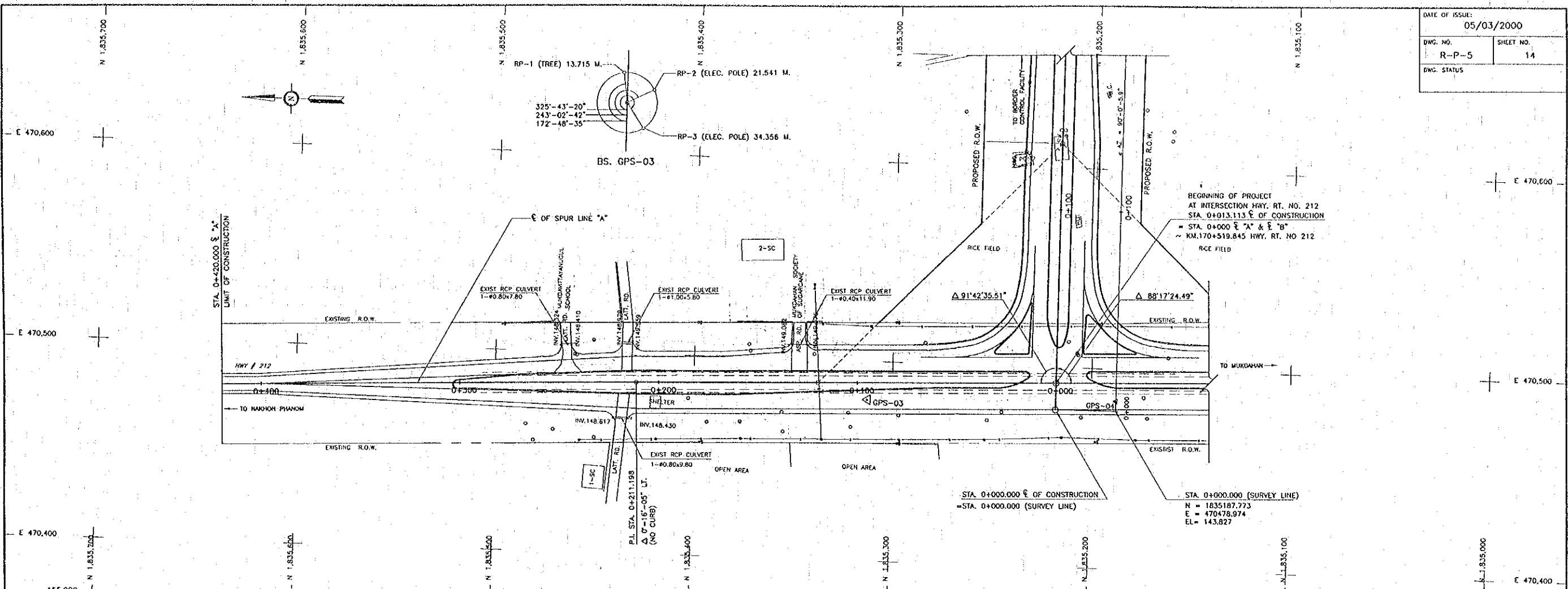


STATION	EXISTING HEIGHT	PROPOSED HEIGHT	STATION OF CONTROL LINE "A" & "B"	SUPER ELEVATION	GRADIENT
0+700	141.140	143.860			
720	140.900	143.800			
740	140.660	143.740			
760	140.660	143.680			
780	141.400	143.620			
0+800	141.770	143.560			
820	141.680	143.500			
840	141.860	143.440			
860	140.660	143.380			
880	138.670	143.320			
0+900	138.860	143.260			
920	137.510	143.200			
940	137.230	143.140			
960	137.240	143.080	0+956.808 0+1000.000 CTL "A" & "B"	-2.0%	
980	137.180	143.020			
1+000	137.19	142.960			
020	137.16	142.900			
040	137.469	142.840	T.S. 0+075.303		
060	137.872	142.780			
080	137.819	142.720	S.C. 0+117.853 T.S. 0+127.863	+5.0%+8.0%	
1+100	137.859	142.660			
120	138.240	142.600	S.T. 0+169.913	0.0%	
140	138.440	142.540	T.S. 0+173.738		
160	138.660	142.480			
180	138.710	142.420	S.C. 0+215.988	-6.0%	
200	137.880	142.360			
220	137.870	142.300			
240	137.860	142.240			
260	137.740	142.180	S.T. 0+294.528 P.C. 0+308.754	2.0%	
280	137.780	142.120			
1+300	137.690	142.160			
320	137.640	142.283	P.L. 0+354.832		
340	137.630	142.500	P.T. 1+344.572 S.T.A. 0+400.383 CTL "A" & "B"	+2.0%	
360	137.660	142.810			
380	136.090	143.200			
1+400	136.220	143.600			



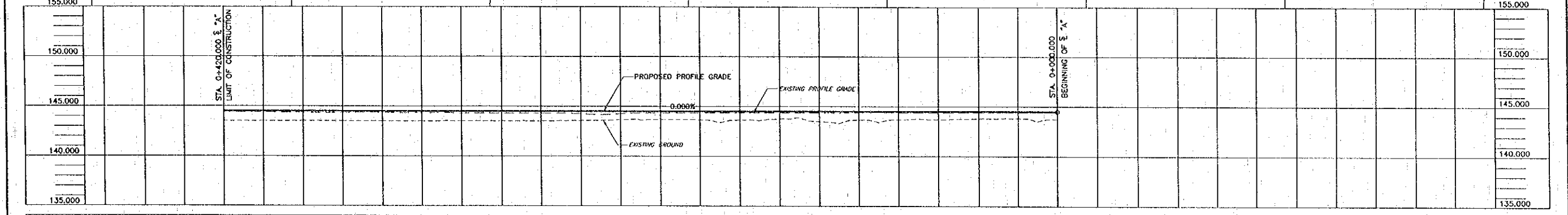
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN: M. Oiso DESIGN CHECK: T. Mochizuki SUBMITTED: A. Nitani APPROVED: S. Temiyabutra				PROFILE-3 STA. 0+700.000 - STA. 0+950.000

DATE OF ISSUE: 05/03/2000  
 DWS. NO. R-P-5 SHEET NO. 14  
 DWS. STATUS



BEGINNING OF PROJECT  
 AT INTERSECTION HWY. RT. NO. 212  
 STA. 0+013.113 E OF CONSTRUCTION  
 = STA. 0+000 E "A" & E "B"  
 ~ KM.170+519.845 HWY. RT. NO 212  
 RICE FIELD

STA. 0+000.000 E OF CONSTRUCTION  
 = STA. 0+000.000 (SURVEY LINE)  
 N = 1835187.773  
 E = 470478.974  
 EL = 143.827



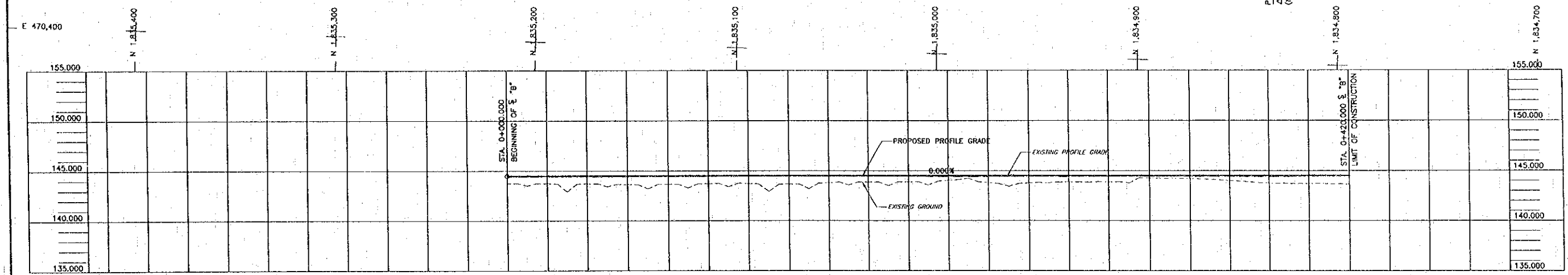
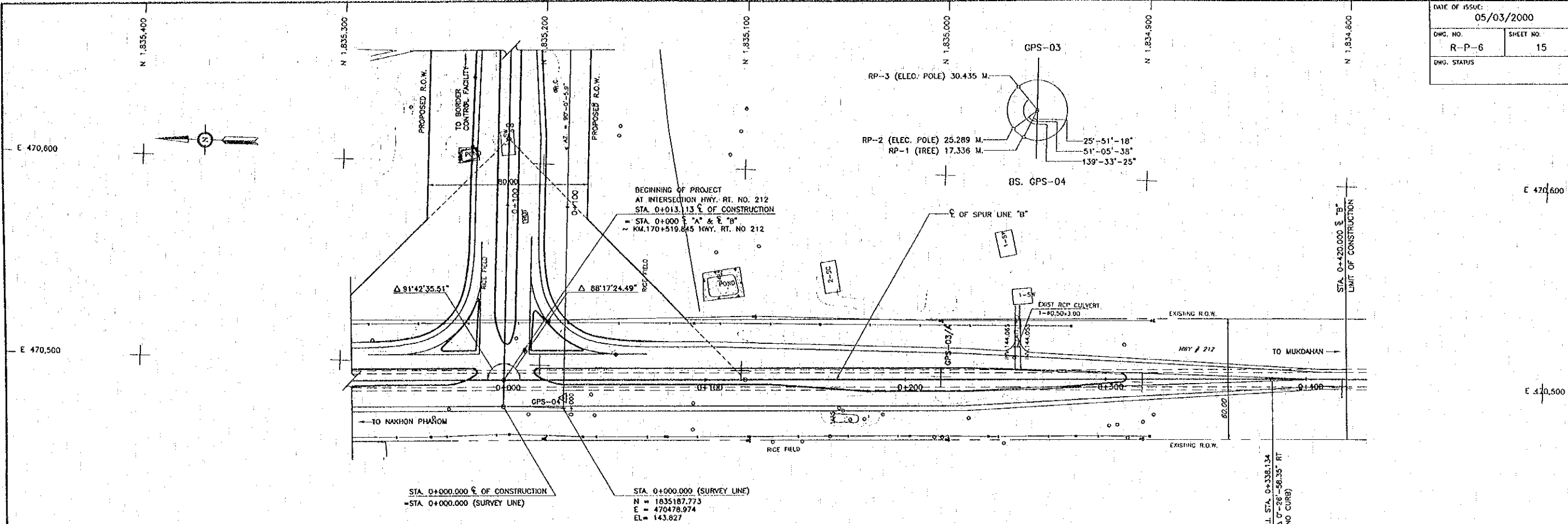
STATION	EXISTING HEIGHT	EXISTING GRADE HEIGHT	PROPOSED HEIGHT	GRADIENT
0+420	142.578	144.460	144.500	AS EXISTING GRADE
0+400	142.530	144.375	144.500	
380	142.525	144.345		0.000% L=420.000
360	142.511	144.340		
340	142.528	144.355		
320	142.532	144.355		
300	142.535	144.375		
280	142.534	144.370		
260	142.536	144.375		
240	142.536	144.376		
220	142.639	144.279		
0+200	142.685	144.335	144.500	
180	142.658	144.350		0.000%
160	142.637	144.355		
140	142.747	144.355		
120	142.491	144.345		
0+100	142.646	144.374	144.500	
080	142.691	144.395		
060	142.715	144.375		
040	142.890	144.400		
020	142.822	144.410		
0+000	142.755	144.410	144.500	

0 50 M. 100 M. Scale H 1 : 1000  
 V 1 : 200

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	ORG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION		DESIGN	H. Ohta	<i>[Signature]</i>	11/02/00	
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN CHECK	T. Mutsaers	<i>[Signature]</i>	11/02/00	
							SUBMITTED	A. Hiratake	<i>[Signature]</i>	11/11/00	
							APPROVED	S. Teanyabutra	<i>[Signature]</i>	02/02/01	

PROFILE HIGHWAY NO. 212-1  
 STA. 0+000.000 - STA 0+420.000 SPUR LINE "A"

Plot Date: Mar. 14, Feb. 2000 - 13:11:36  
 C:\15WB-NEW\PACKAGE3\PA&P-05.dwg



STATION	EXISTING HEIGHT	EXISTING GRADE HEIGHT	PROPOSED HEIGHT	GRADIENT	
0+000	142.255	144.410	144.500	0.000% L=420.000	
0+20	142.744	144.425	144.500		
0+40	142.721	144.415	144.500		
0+60	142.660	144.410	144.500		
0+80	142.689	144.420	144.500		
0+100	142.729	144.474	144.500		
0+120	142.718	144.465	144.500		
0+140	142.672	144.460	144.500		
0+160	142.606	144.425	144.500		
0+180	142.681	144.460	144.500		
0+200	142.615	144.425	144.500		
0+220	144.027	144.385	144.500		
0+240	142.797	144.389	144.500		
0+260	142.763	144.418	144.500		
0+280	142.676	144.385	144.500		
0+300	142.622	144.422	144.500		
0+320	144.202	144.421	144.500		
0+340	144.216	144.400	144.500		
0+360	144.154	144.418	144.500		
0+380	142.729	144.389	144.500		
0+400	142.718	144.422	144.500		
0+420	142.662	144.471	144.500		AS EXISTING GRADE



REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY          LAO PEOPLE'S DEMOCRATIC REPUBLIC          MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION          KINGDOM OF THAILAND          MINISTRY OF TRANSPORT AND COMMUNICATIONS          DEPARTMENT OF HIGHWAYS</p>	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD.		DESIGN	H. Orita	<i>[Signature]</i>	11/01/00	<b>PROFILE HIGHWAY NO. 212-2</b> STA. 0+000.000 - STA. 0+420.000 SPUR LINE "B"
				In association with		DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	11/01/00	
				NIPPON KORI CO., LTD.		SUBMITTED	A. Hirofani	<i>[Signature]</i>	11/01/00	
					APPROVED	S. Temiyabutra	<i>[Signature]</i>	22/01/00		

DATE OF ISSUE:  
05/03/2000

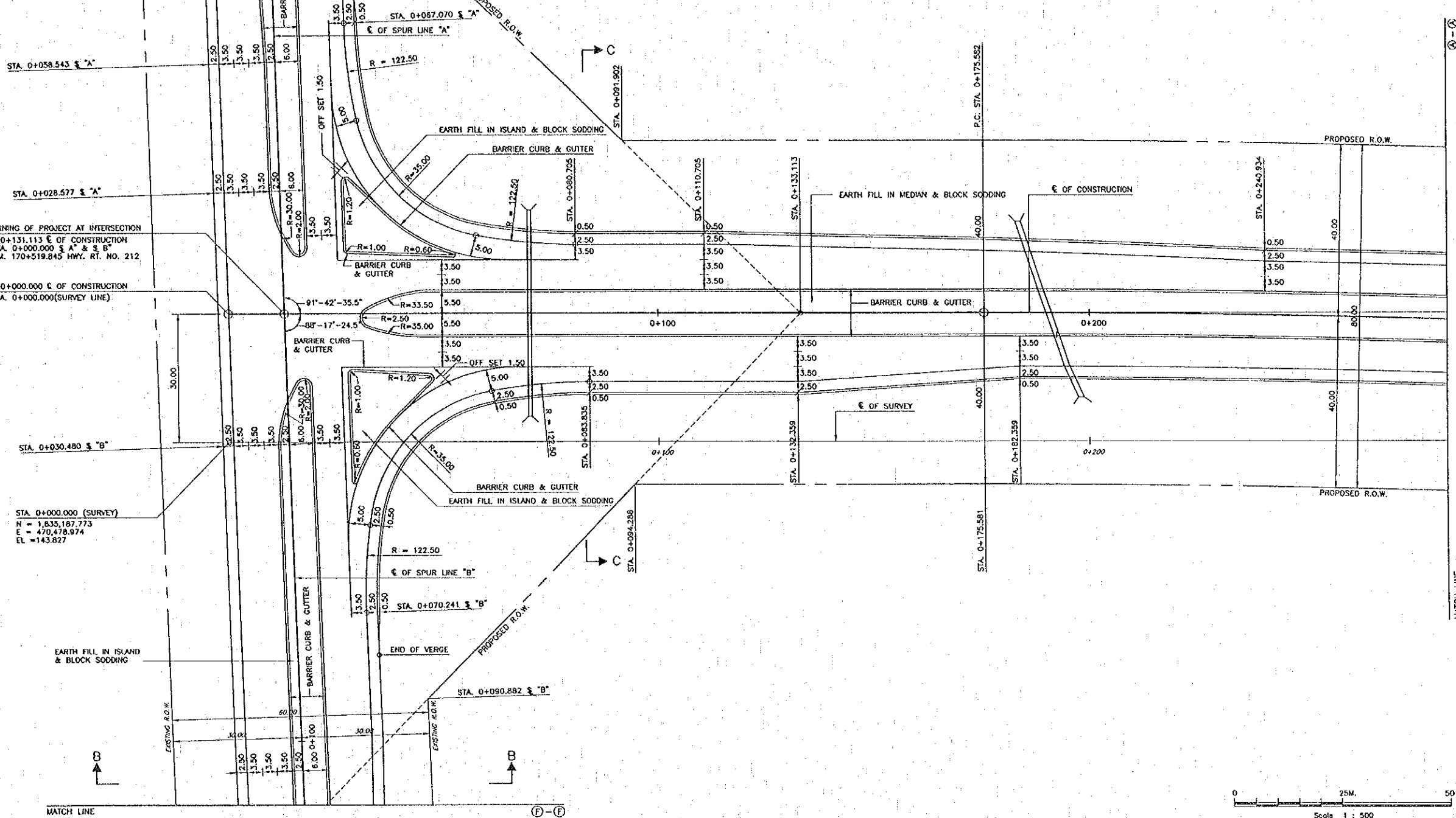
DWG. NO. R-G-1 SHEET NO. 16  
DWG. STATUS

MATCH LINE

E-E



EARTH FILL IN ISLAND & BLOCK SODDING



BEGINNING OF PROJECT AT INTERSECTION  
STA. 0+131.113 € OF CONSTRUCTION  
= STA. 0+000.000 € 'A' & 'B'  
= KM. 170+519.845 HWY. RT. NO. 212

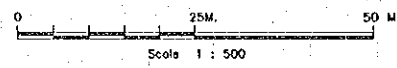
STA. 0+000.000 € OF CONSTRUCTION  
= STA. 0+000.000 (SURVEY LINE)

STA. 0+000.000 (SURVEY)  
N = 1,835,187.773  
E = 470,478.974  
EL = 143.827





MATCH LINE

F-F







Proj. date: Mar. 14, Feb. 2000 - 1323-48

REV.	DATE	DESCRIPTION	APPROVED

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 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

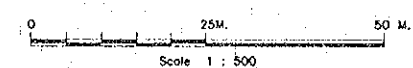
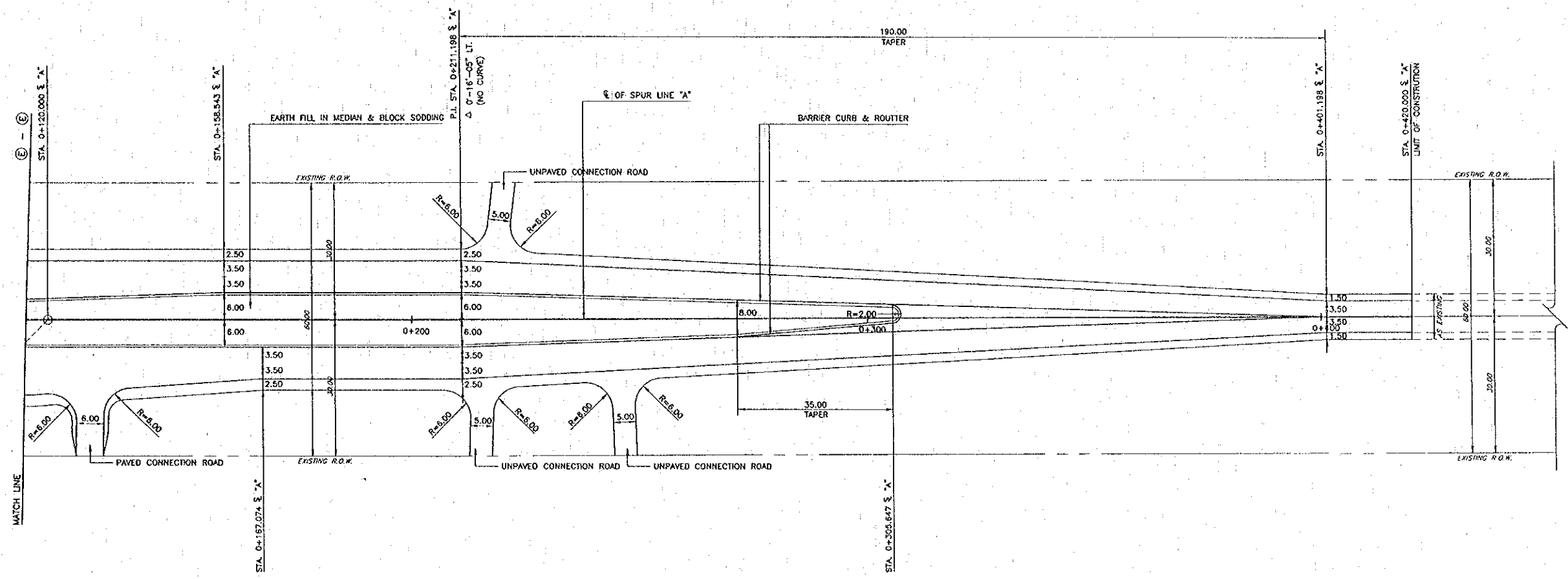
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Oka		11/0/00
DESIGN CHECK	T. Masuzawa		12/2/00
SUBMITTED	A. Hirahara		2/16/00
APPROVED	S. Taniyabara		2/22/00

DWG. TITLE:  
 HIGHWAY ROUTE NO. 212  
 INTERSECTION-1  
 CONNECTING ROAD

DATE OF ISSUE: 05/03/2000	
DWG. NO. R-G-2	SHEET NO. 17
DWG. STATUS	



Plot date: Mon, 14 Feb 2000 - 13:20:11

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM

**ORIENTAL CONSULTANTS CO., LTD.**

In association with

**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

LAO PEOPLE'S DEMOCRATIC REPUBLIC

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

KINGDOM OF THAILAND

MINISTRY OF TRANSPORT AND COMMUNICATIONS

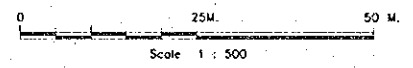
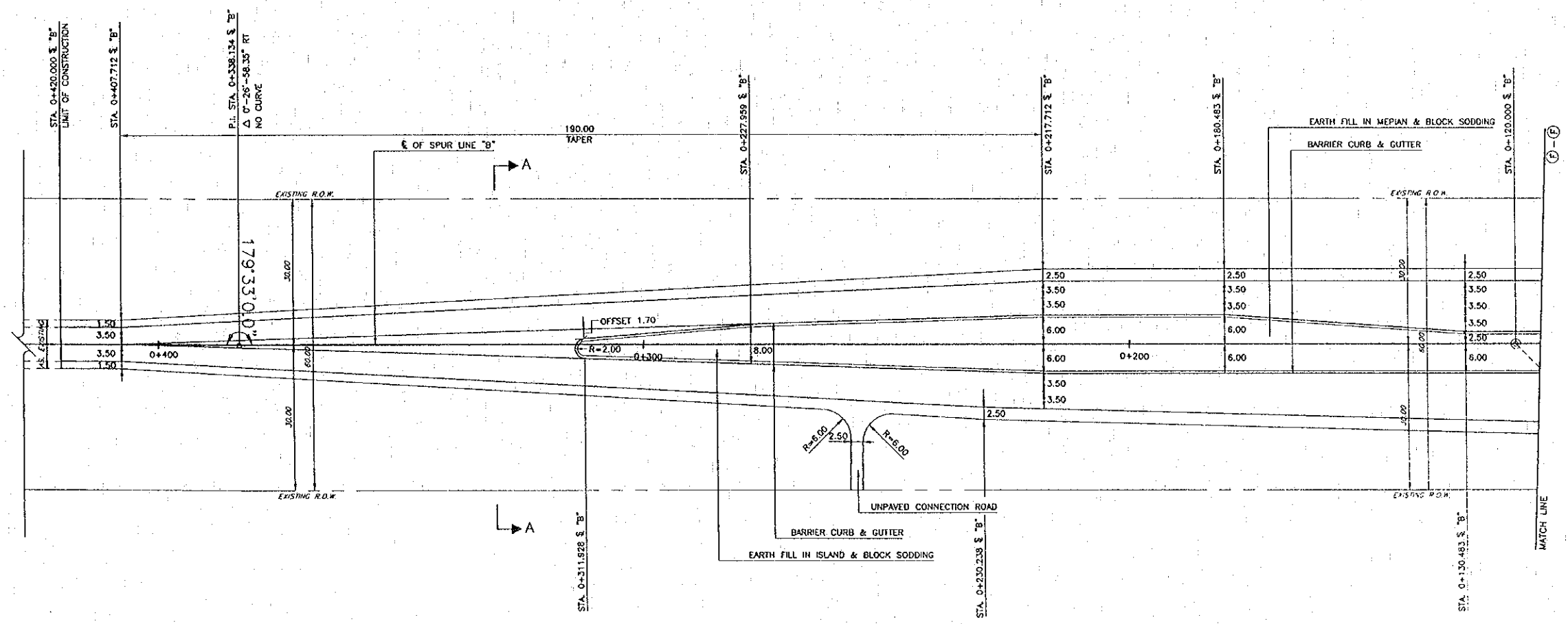
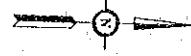
DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	4/11/00
DESIGN CHECK	F. Masugawa	<i>[Signature]</i>	12/12/00
SUBMITTED	A. Higatori	<i>[Signature]</i>	01/11/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	21/03/00

DWG. TITLE:

**HIGHWAY ROUTE NO. 212 INTERSECTION-2**



Plot date: Mon, 14 Feb 2000 - 13:32:47

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KORI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

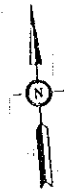
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/02/00
DESIGN CHECK	T. Matsuoka	<i>[Signature]</i>	11/02/00
SUBMITTED	A. Hirata	<i>[Signature]</i>	11/02/00
APPROVED	S. Temmalakra	<i>[Signature]</i>	21/02/00

DWG. TITLE:  
**HIGHWAY ROUTE NO. 212 INTERSECTION-3**

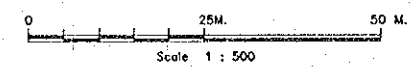
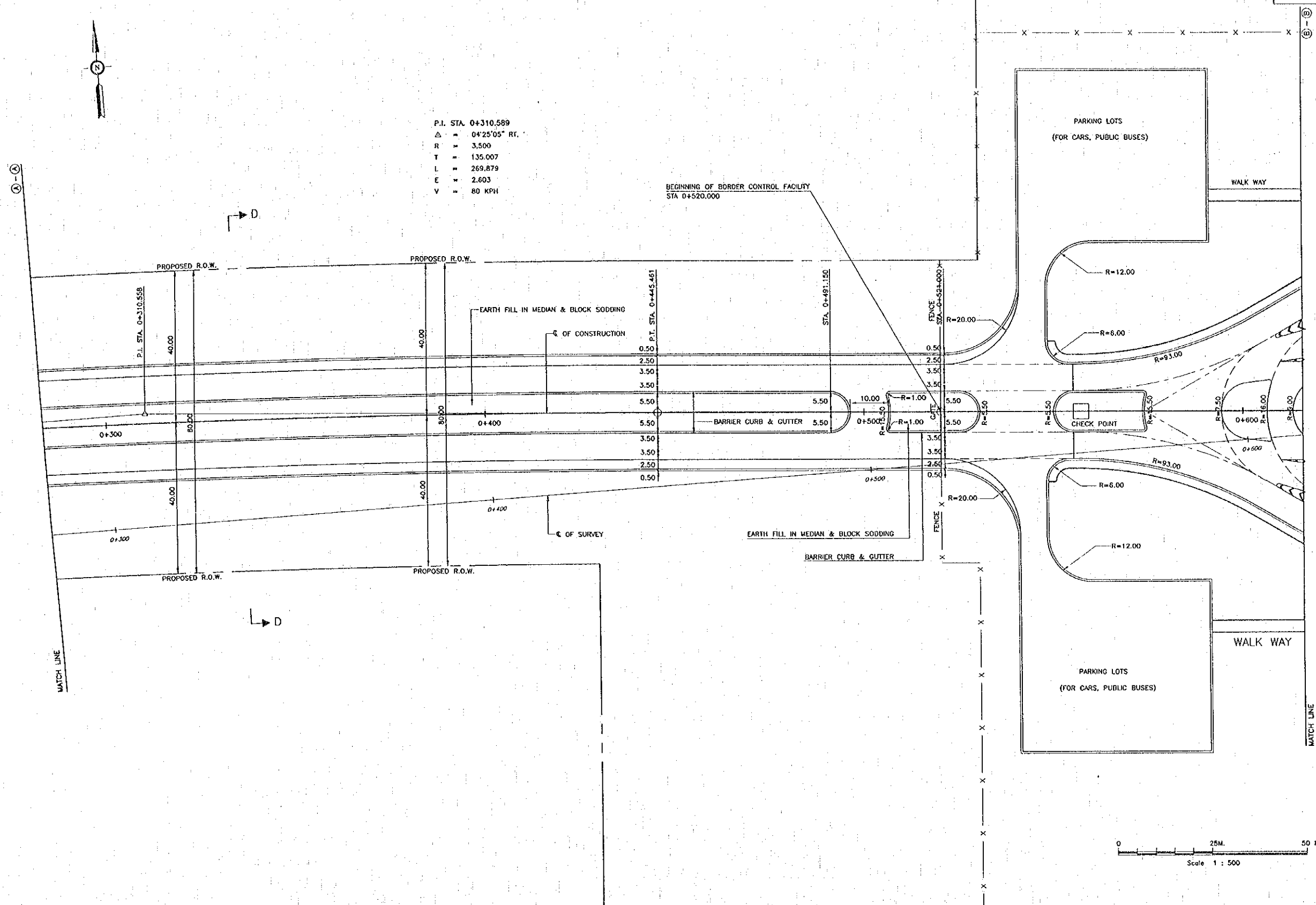
DATE OF ISSUE: 05/03/2000

DWG. NO. R-G-4 SHEET NO. 19  
 DWG. STATUS





P.I. STA. 0+310.589  
 $\Delta = 04^{\circ}25'05''$  RT.  
 R = 3.500  
 T = 135.007  
 L = 269.879  
 E = 2.603  
 V = 80 KPH

BEGINNING OF BORDER CONTROL FACILITY  
 STA 0+520.000







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REV.	DATE	DESCRIPTION	APPROVED

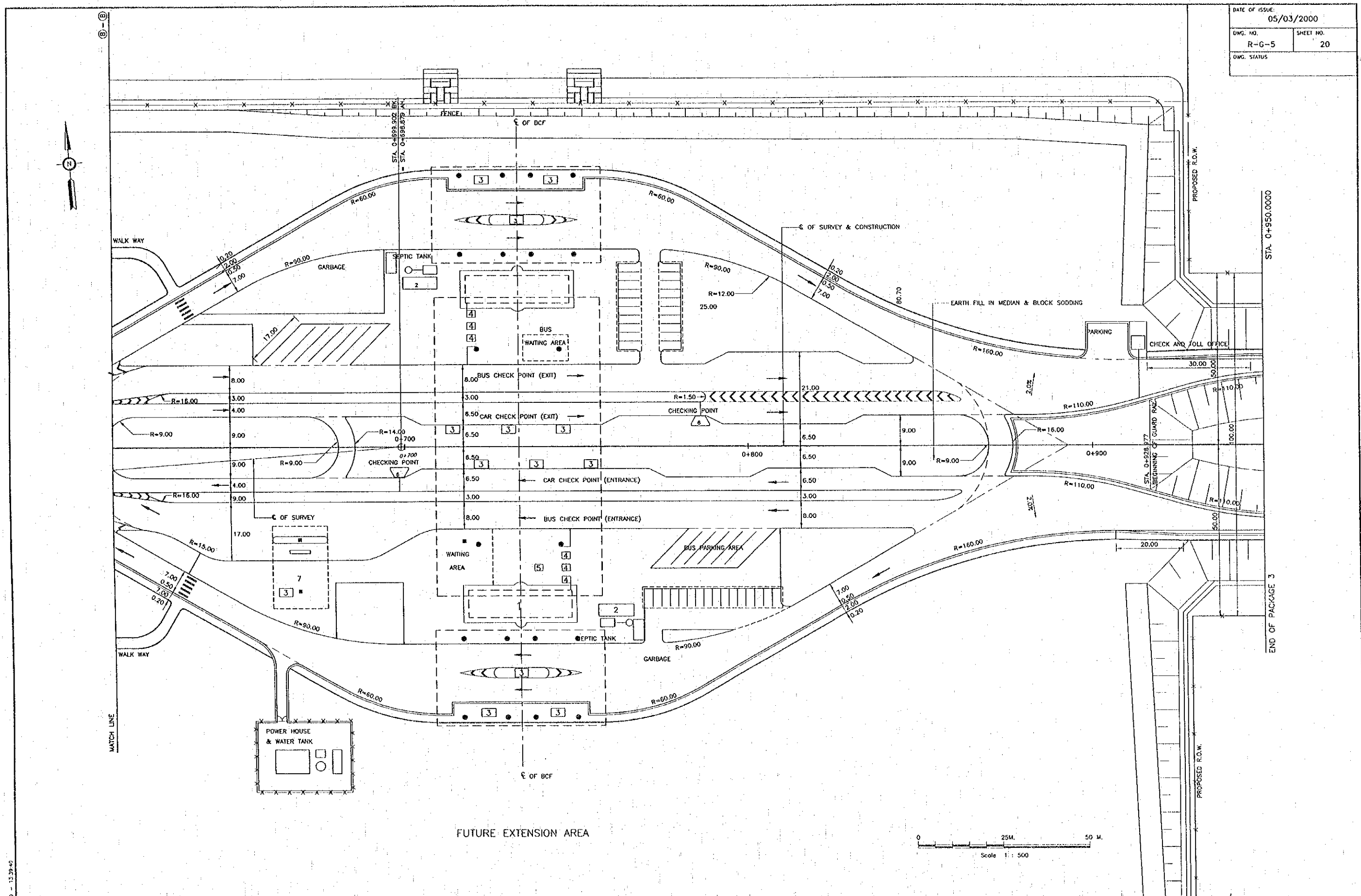
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

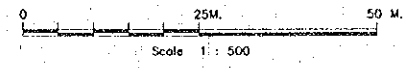
   
 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Oida		16/02/00
DESIGN CHECK	T. Mochizawa		17/02/00
SUBMITTED	A. Hiratani		17/02/00
APPROVED	S. Temiyabutra		22/02/00

DWG. TITLE:  
**CONNECTING ROAD  
 TO BORDER CONTROL FACILITIES**



FUTURE EXTENSION AREA



REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

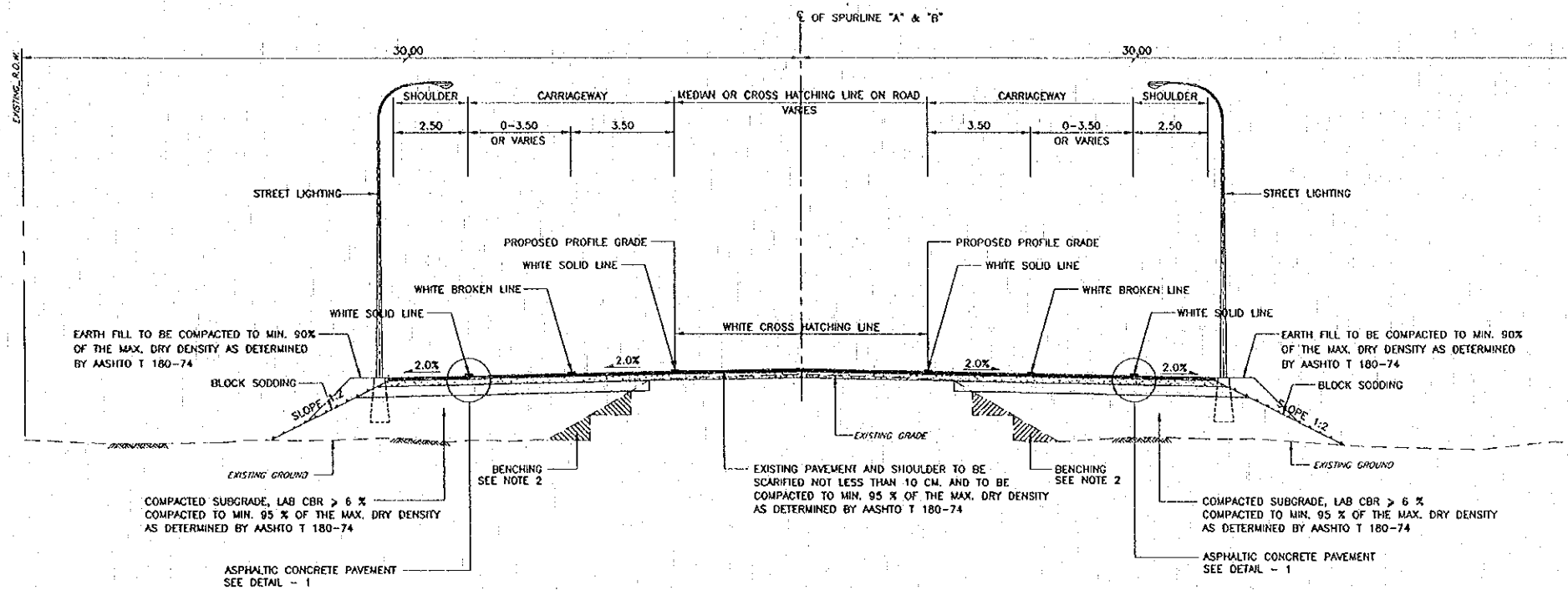
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Oshio	<i>[Signature]</i>	11/20/99
DESIGN CHECK	T. Masutani	<i>[Signature]</i>	12/20/99
SUBMITTED	A. Hirata	<i>[Signature]</i>	1/10/00
APPROVED	S. Femyatada	<i>[Signature]</i>	2/10/00

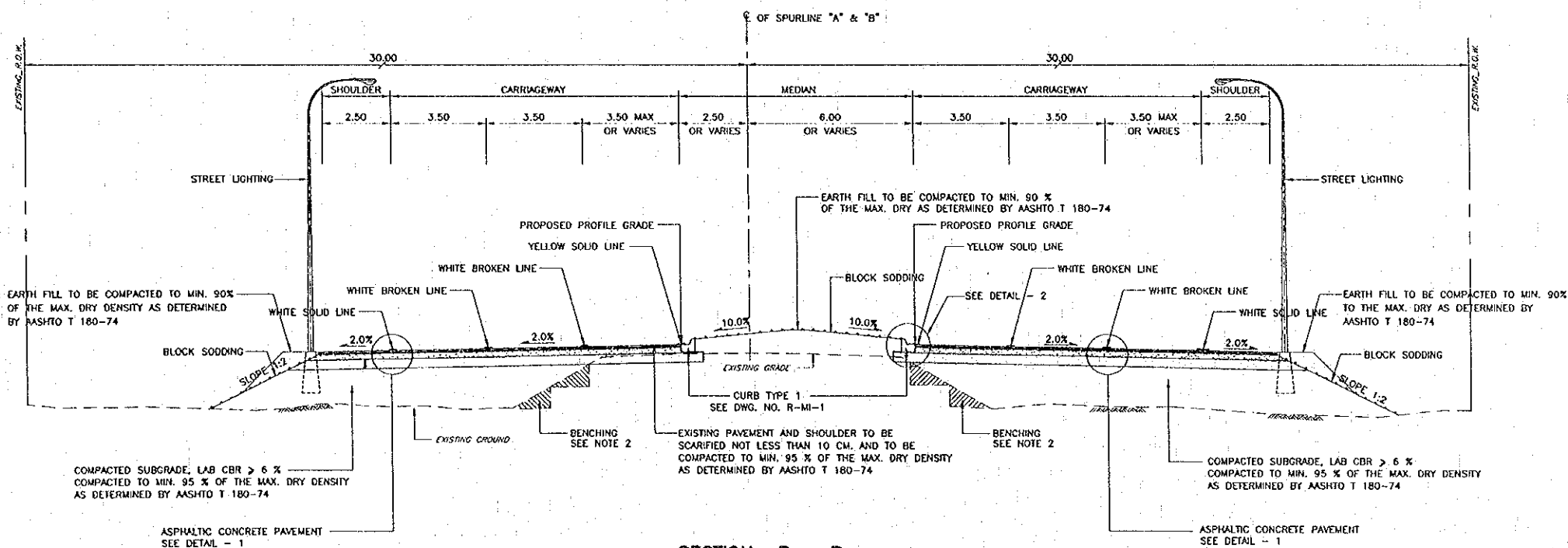
DWG. TITLE: BORDER CONTROL FACILITIES

Proj. date: Mon, 14 Feb 2000 13:39:40  
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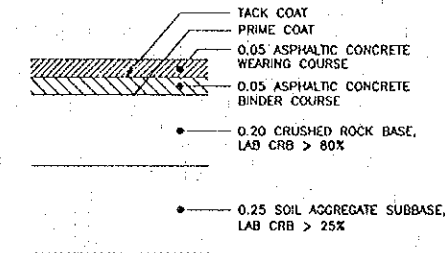




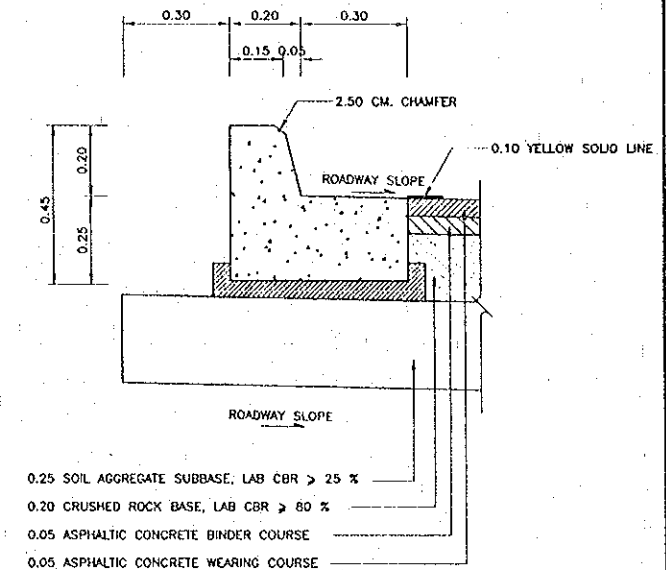
SECTION A - A  
 SCALE 1 : 100



SECTION B - B  
 SCALE 1 : 100



DETAIL-1  
 ASPHALTIC CONCRETE PAVEMENT  
 NOT TO SCALE



DETAIL-2  
 NOT TO SCALE

- NOTES :
- DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  - BENCHING SHALL BE REQUIRED ON EXISTING GROUND SLOPE OR EXISTING ROADBED IN THE PORTION OF EMBANKMENT. THE NUMBER OF STEPS FOR BENCHING DEPENDS UPON THE HEIGHT OF SLOPE. THE HEIGHT OF EACH STEP SHALL BE PERMITTED FOR COMPACTED EQUIPMENT, AND THE DENSITY OF THE COMPACTED MATERIAL SHALL NOT BE LESS THAN 95% OF STANDARD PROCTOR.
  - SLOPE VERTICAL : HORIZONTAL.

Proj. date: Mon. 14 Feb 2000 - 13:46:13

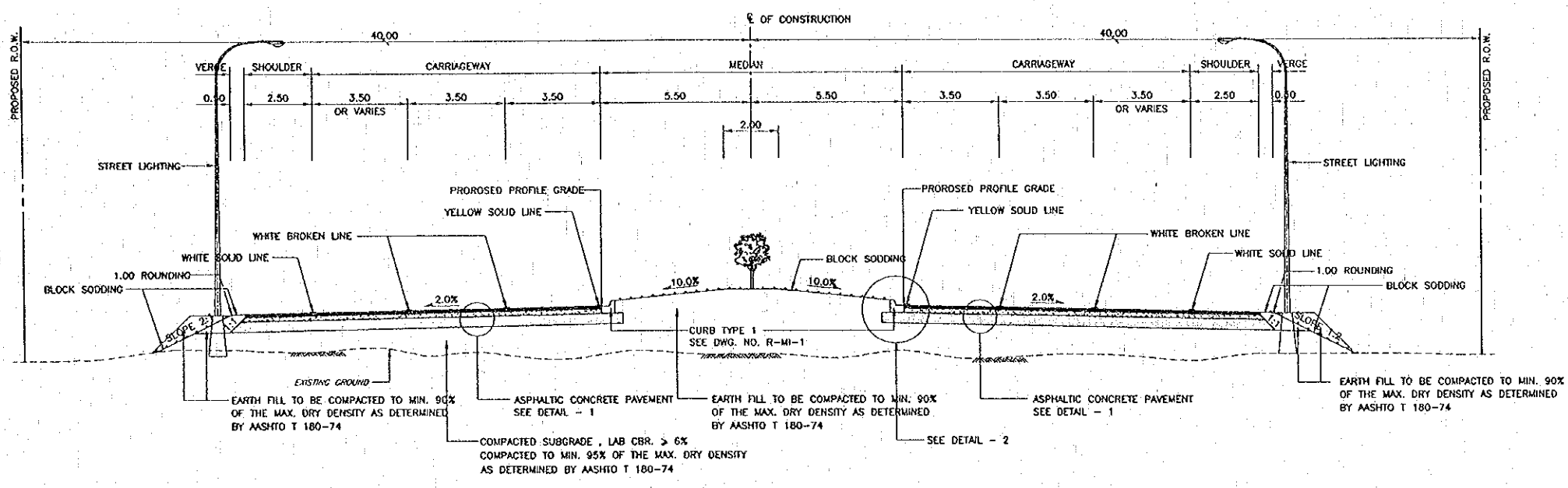
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

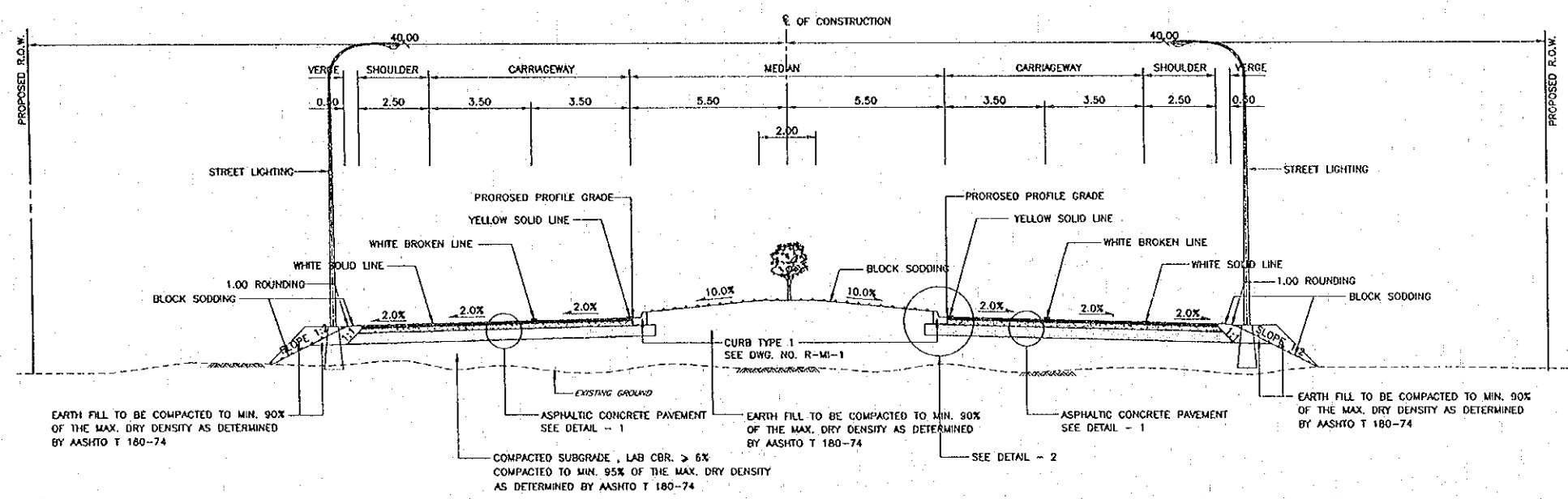
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

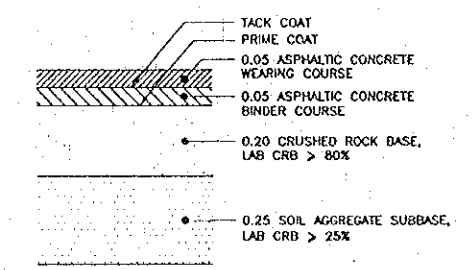
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	H. Okita	<i>[Signature]</i>	11/01/00	TYPICAL CROSS SECTION-1 AT HIGHWAY ROUTE NO. 212
DESIGN CHECK	S. Masuzawa	<i>[Signature]</i>	11/01/00	
SUBMITTED	A. Harahara	<i>[Signature]</i>	21/01/00	
APPROVED	S. Teriyabutra	<i>[Signature]</i>	22/02/00	



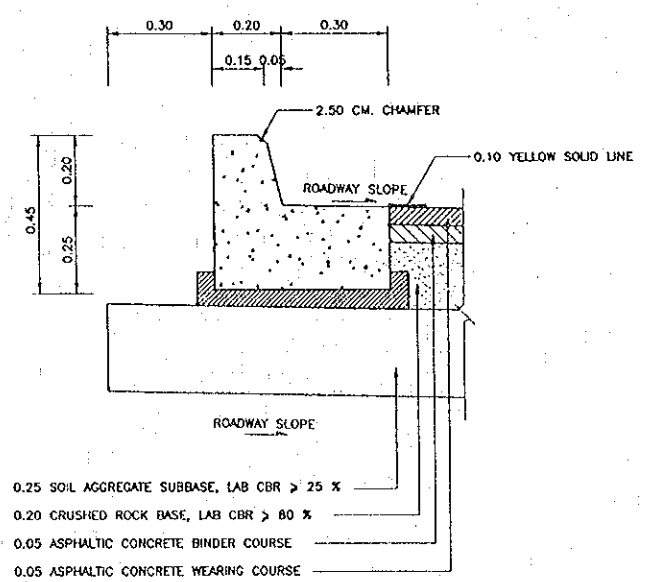
SECTION C - C  
 SCALE 1 : 100



SECTION D - D  
 SCALE 1 : 100



DETAIL-1  
 ASPHALTIC CONCRETE PAVEMENT  
 NOT TO SCALE



DETAIL-2  
 NOT TO SCALE

- NOTES :
1. DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  2. SLOPE VERTICAL : HORIZONTAL

Plot date: Mon, 14 Feb 2000 - 13:47:39

REV.	DATE	DESCRIPTION	APPROVED

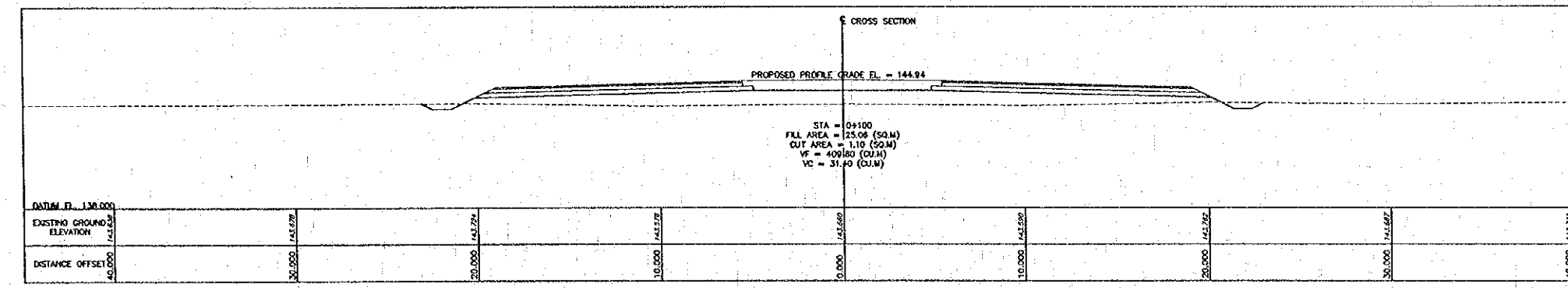
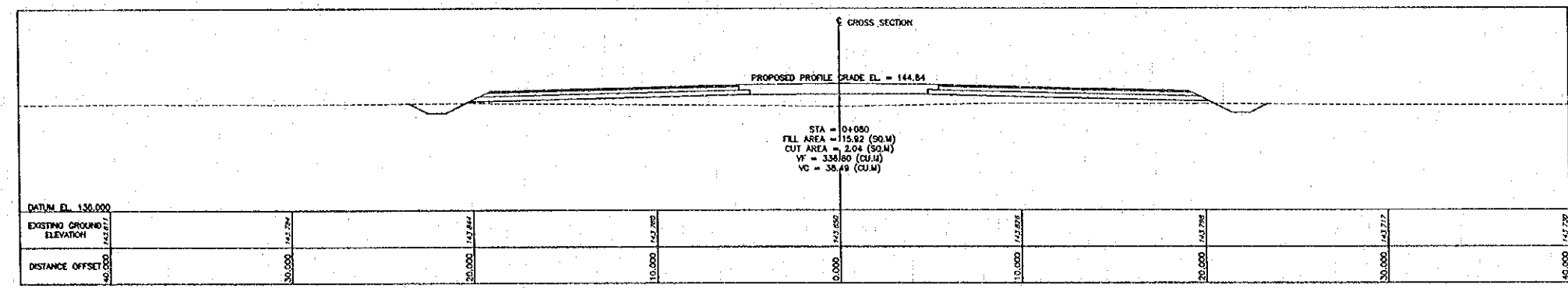
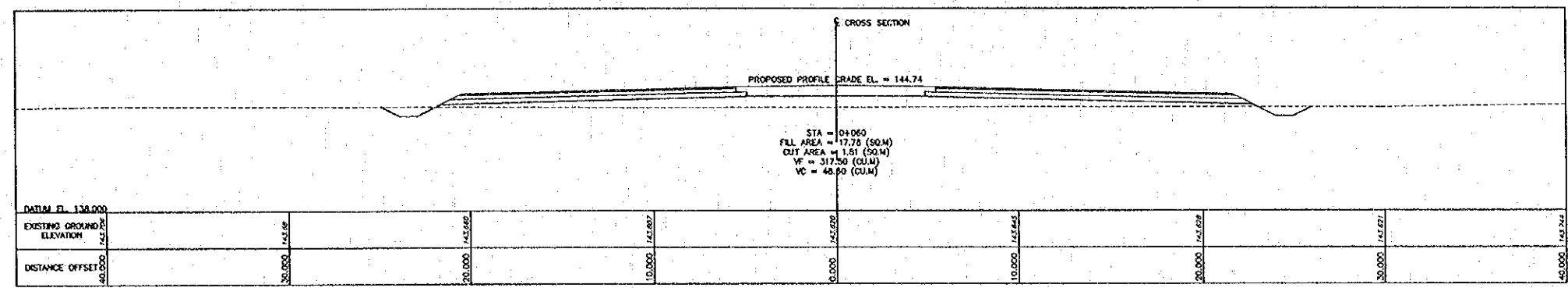
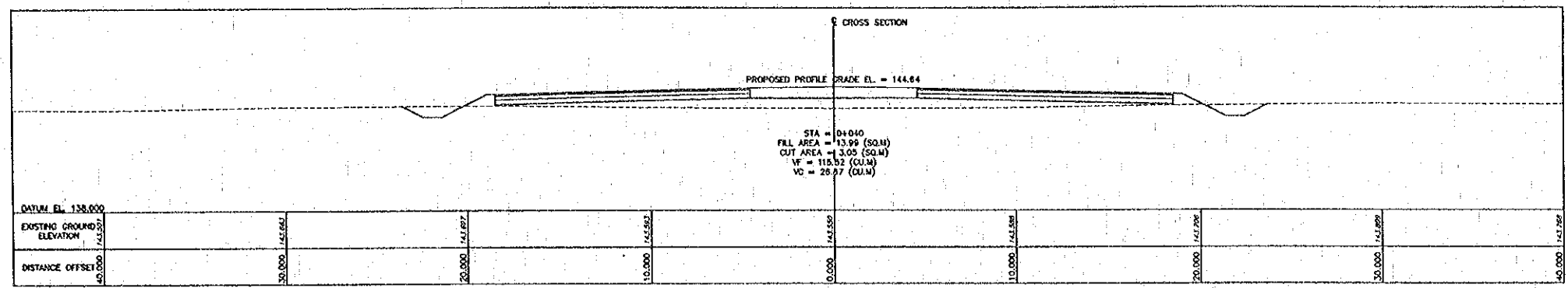
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT



QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/05/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	12/01/00
SUBMITTED	A. Hirata	<i>[Signature]</i>	01/01/01
APPROVED	S. Tomyabutra	<i>[Signature]</i>	21/02/01

TYPICAL CROSS SECTION-2  
 AT CONNECTING ROAD







Rev. 6/14 Mar. 14, Feb. 2000 - 13:55:10

REV.	DATE	DESCRIPTION	APPROVED

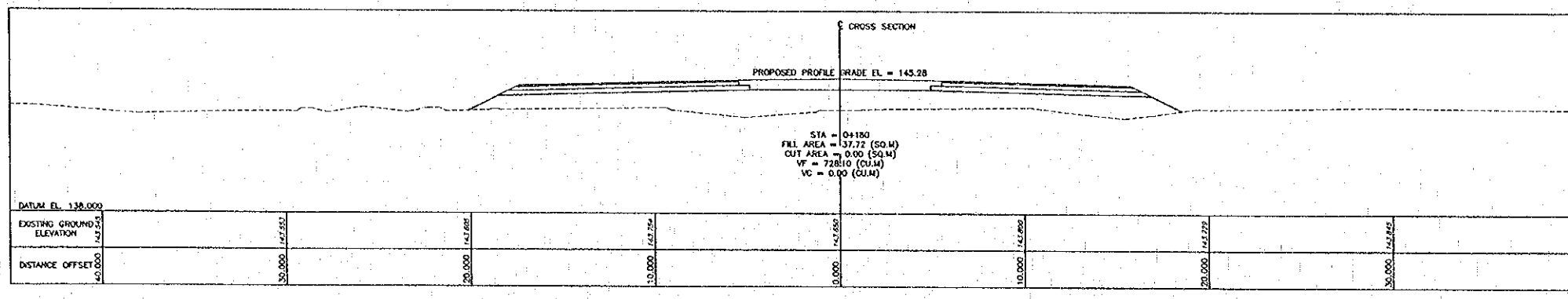
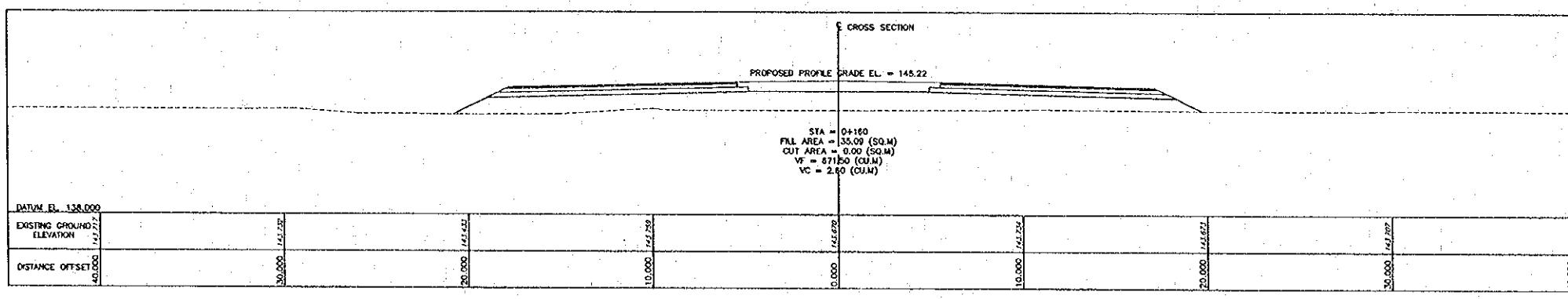
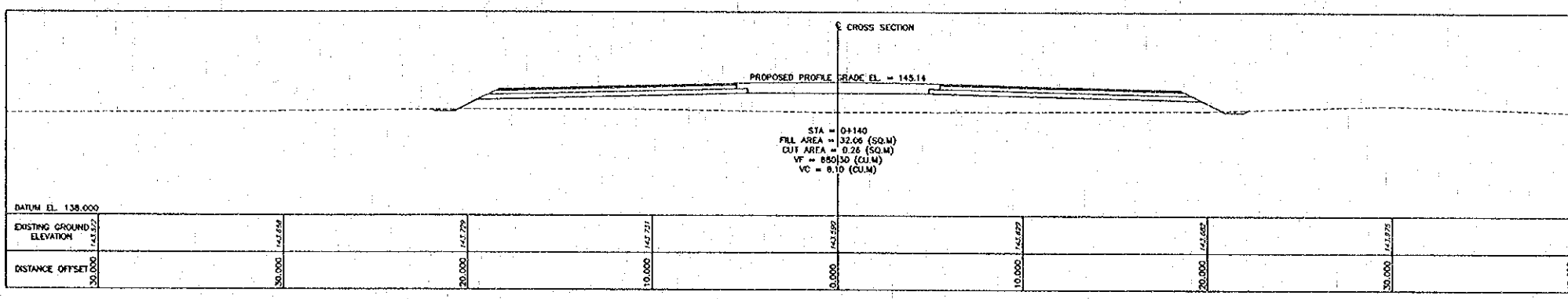
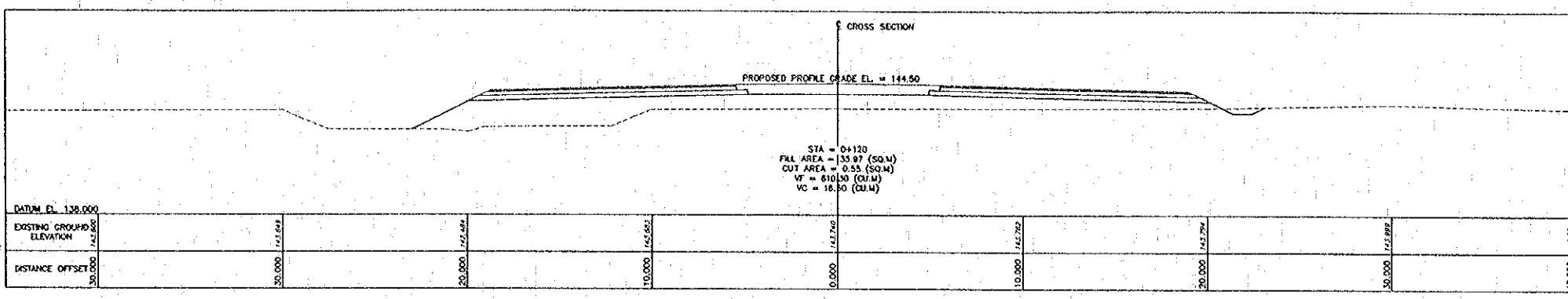
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita		11/12/00
DESIGN CHECK	T. Moriyama		12/21/00
SUBMITTED	A. Hirakawa		11/16/00
APPROVED	S. Tamayabara		02/02/00

DWG. TITLE: CROSS SECTION-1  
 STA. 0+040 TO STA. 0+100



Plot date: Mon, 14 Feb 2000 - 13:26:53

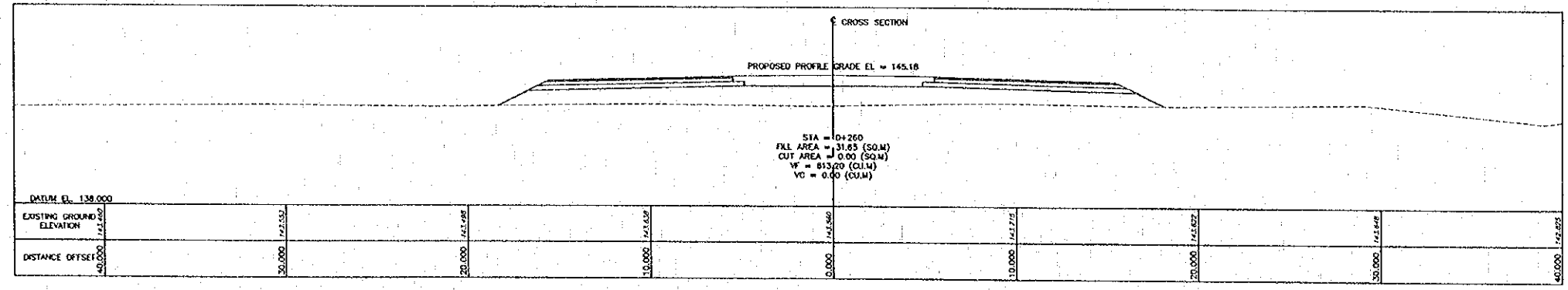
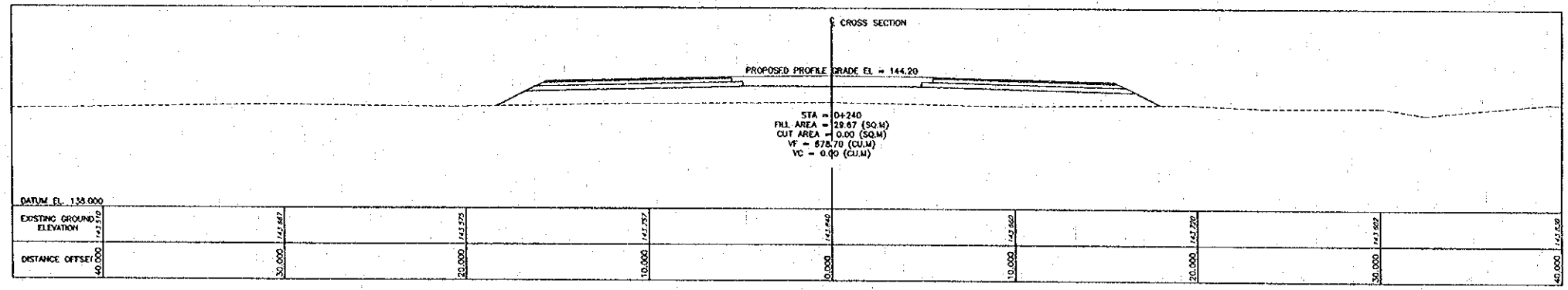
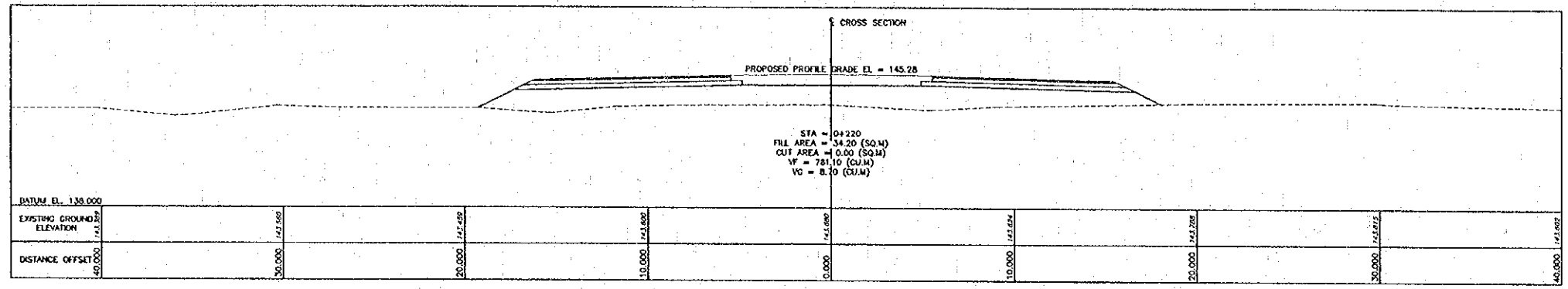
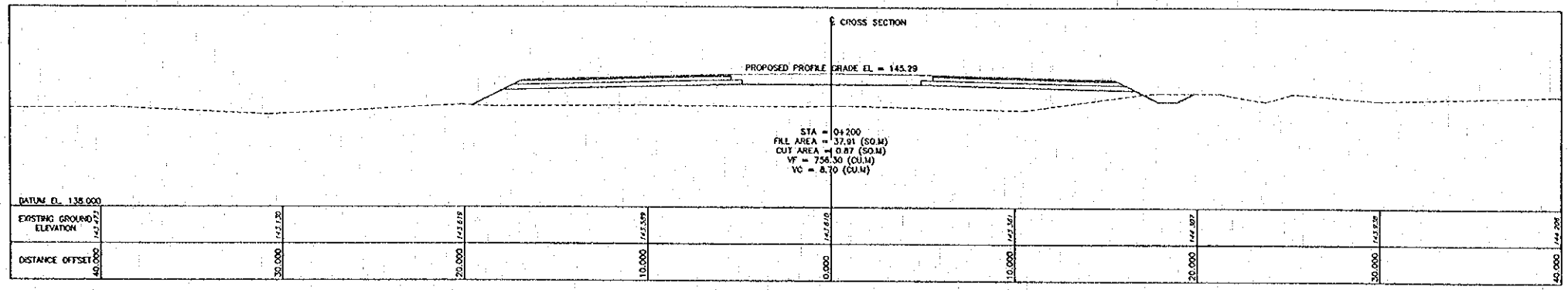
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	H. Onito	<i>[Signature]</i>	11/05	CROSS SECTION-2 STA. 0+120 TO STA. 0+180
DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	11/05	
SUBMITTED	A. Hiratori	<i>[Signature]</i>	11/05	
APPROVED	S. Temiyabura	<i>[Signature]</i>	02/02/00	



Plot date: Tue, 4 Jun 2000 10:03:51

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
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 NIPPON KOKI CO., LTD.

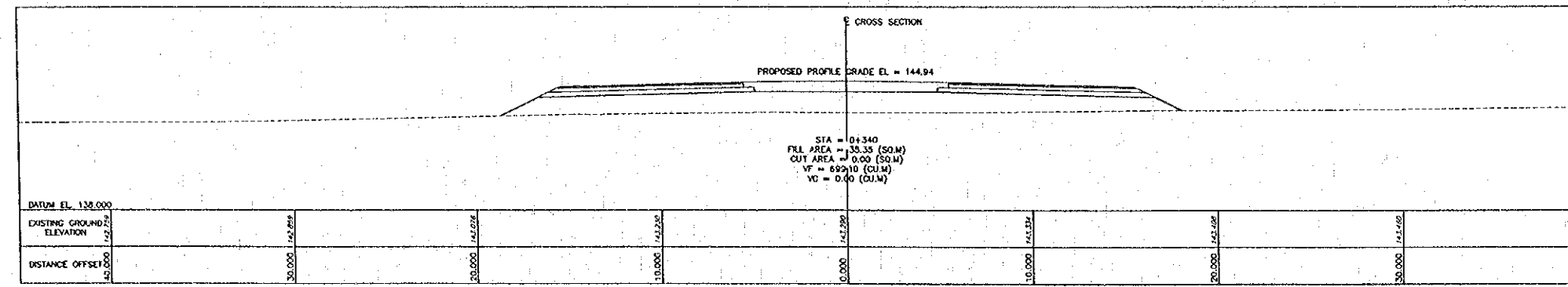
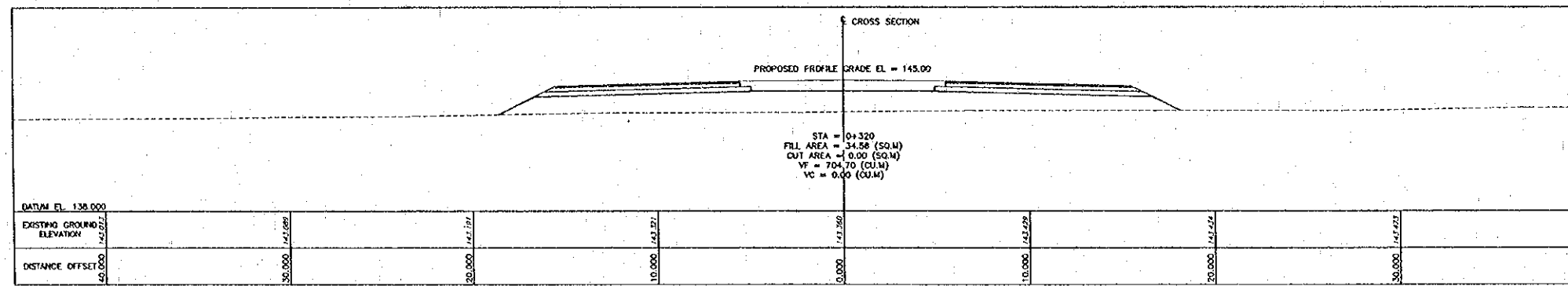
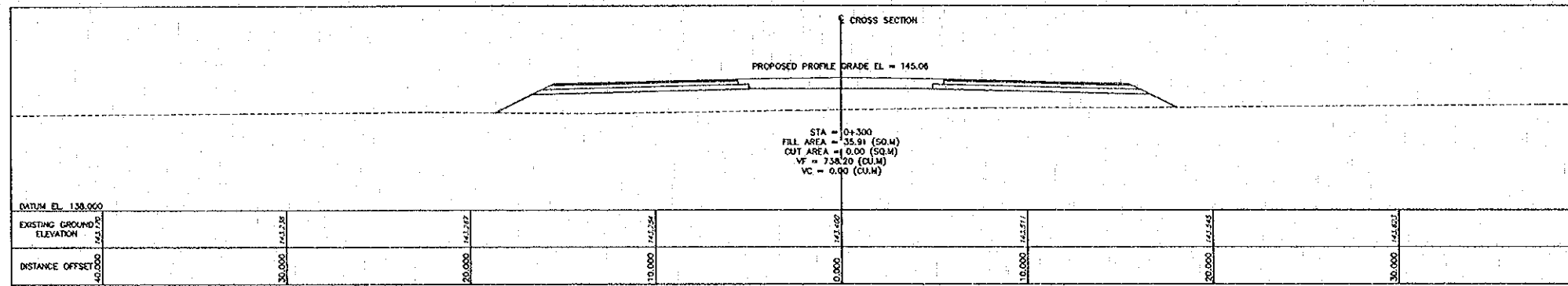
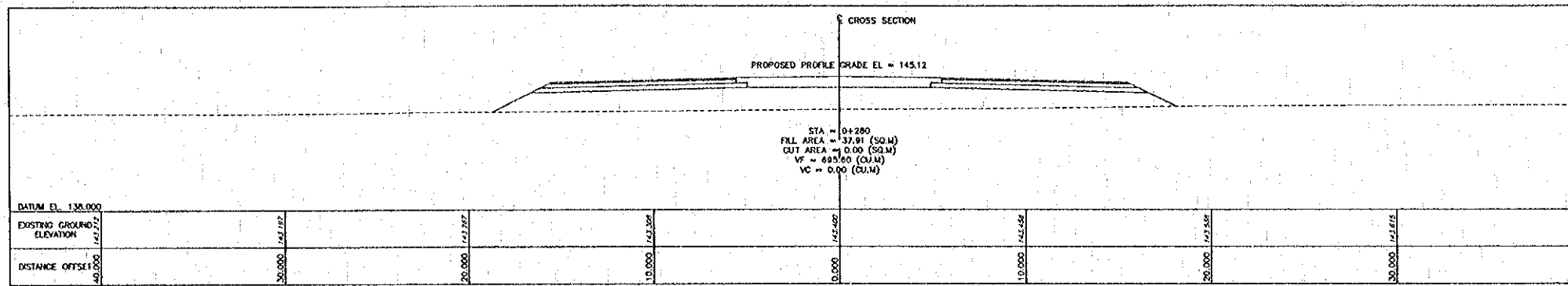
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>H. Okita</i>	11/01/00
DESIGN CHECK	T. Moritawa	<i>T. Moritawa</i>	11/01/00
SUBMITTED	A. Hirata	<i>A. Hirata</i>	11/01/00
APPROVED	S. Teriyabutra	<i>S. Teriyabutra</i>	22/02/00

DWG. TITLE: CROSS SECTION-3  
 STA. 0+200 TO STA. 0+260

DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
R-C-6	26
DWG. STATUS	



Proj. Date: Mon, 14 Feb 2000 - 14:17:47

REV.	DATE	DESCRIPTION	APPROVED

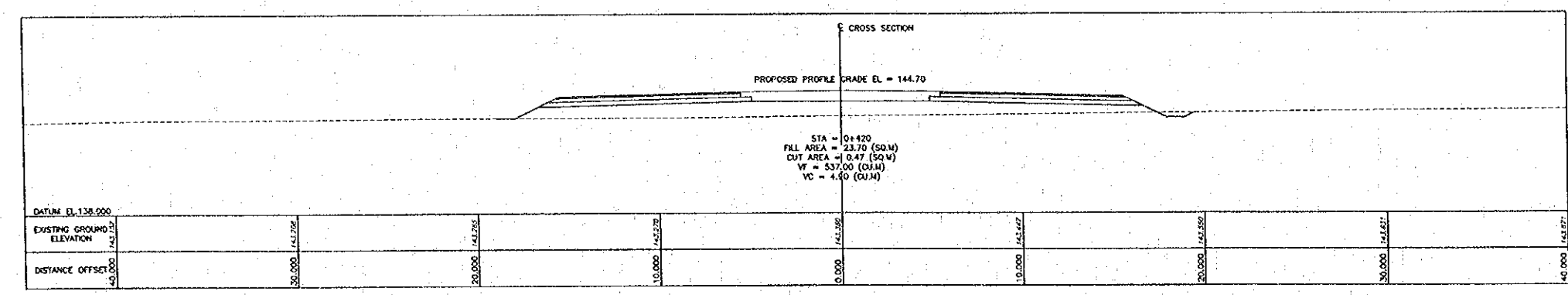
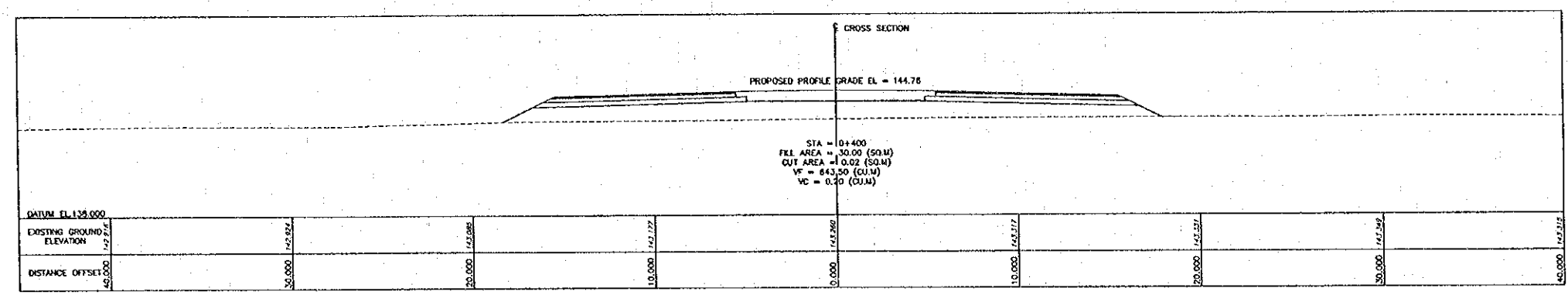
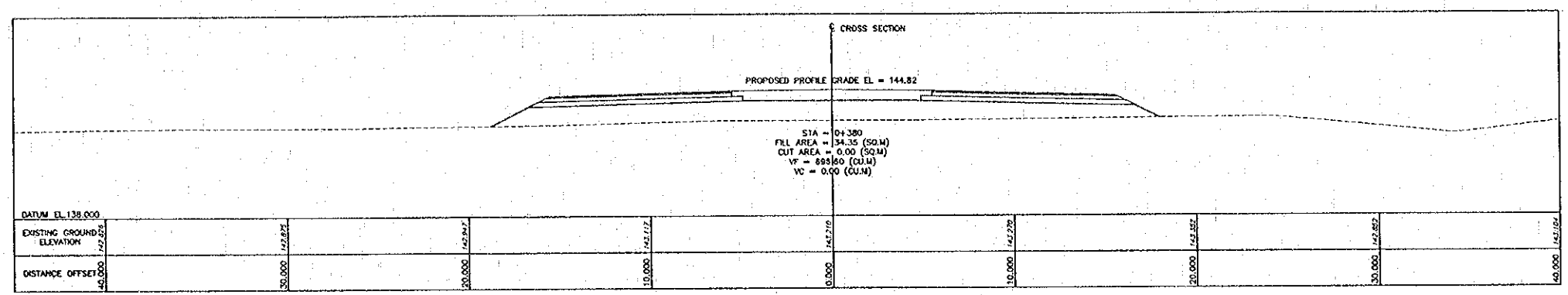
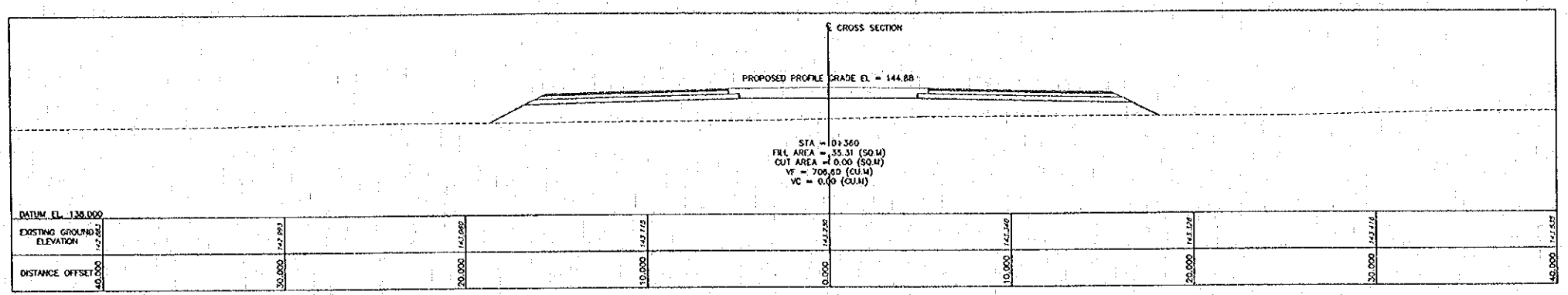
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KORI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. OMO	<i>[Signature]</i>	11/12/00
DESIGN CHECK	T. Masutova	<i>[Signature]</i>	12/12/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	11/12/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	20/02/00

DWG. TITLE:  
**CROSS SECTION-4**  
 STA. 0+280 TO STA. 0+340



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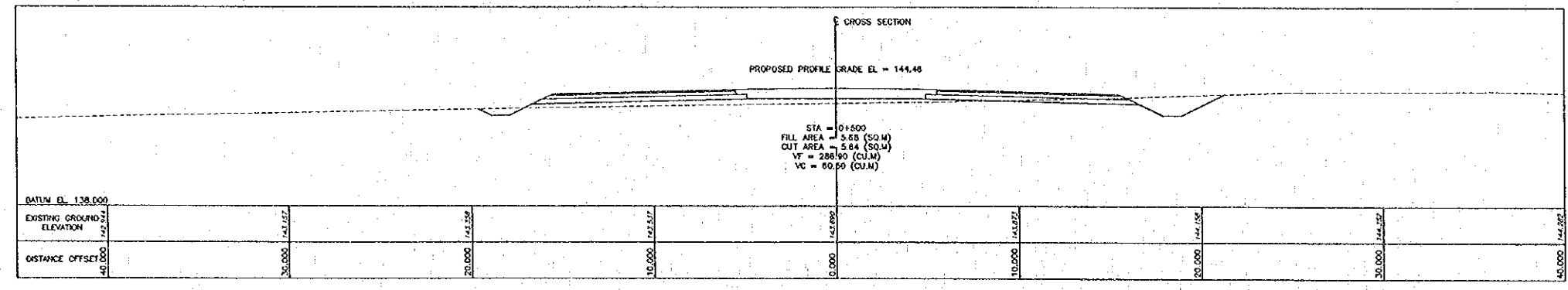
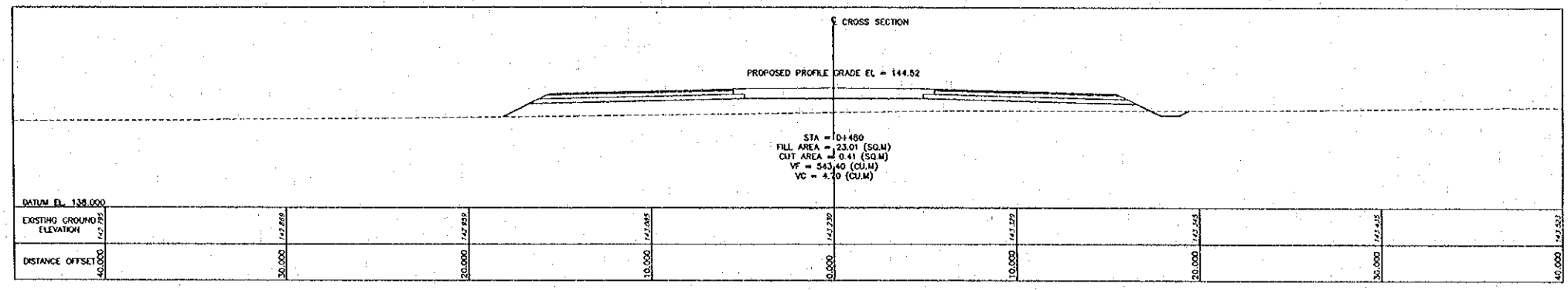
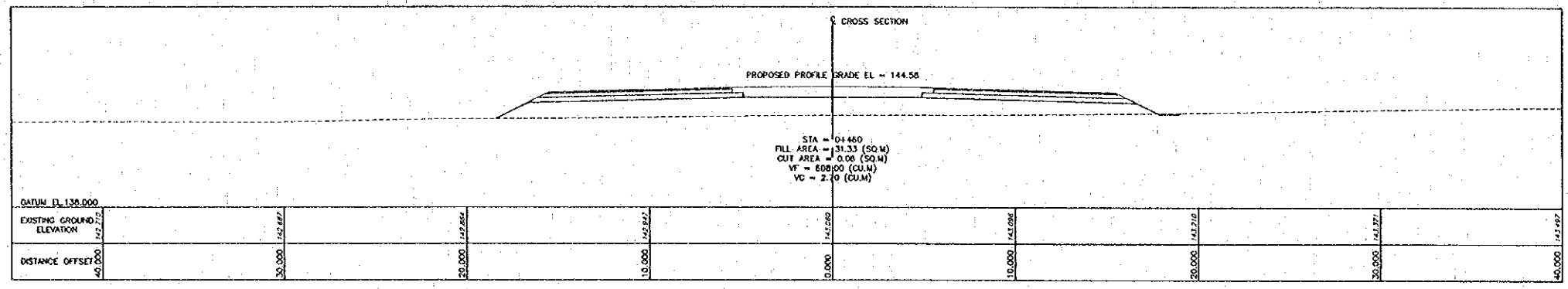
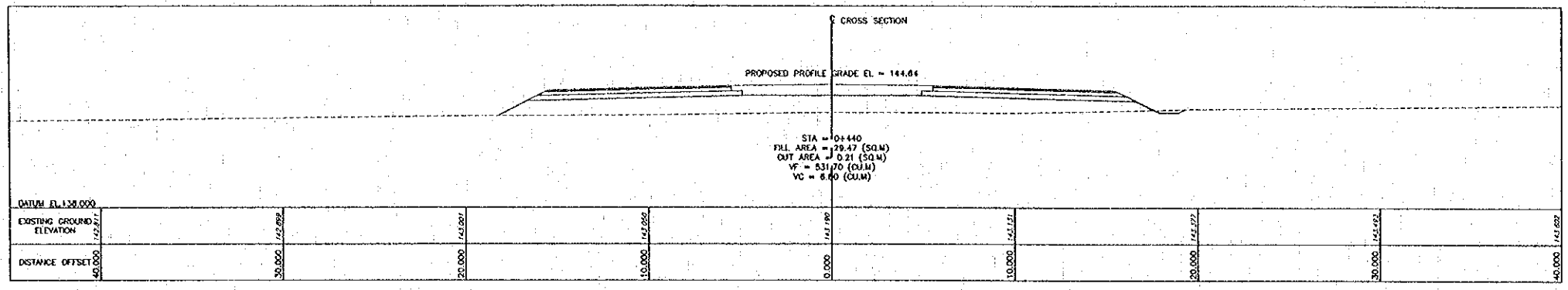
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KORI CO., LTD.

JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	4/02/00
DESIGN CHECK	T. Matsuura	<i>[Signature]</i>	4/02/00
SUBMITTED	A. Hirata	<i>[Signature]</i>	4/16/00
APPROVED	S. Tamiyama	<i>[Signature]</i>	2/02/00

DWG. TITLE:  
 CROSS SECTION--5  
 STA. 0+360 TO STA. 0+420



Plot Date: Mon, 14 Feb 2000 14:23:38

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

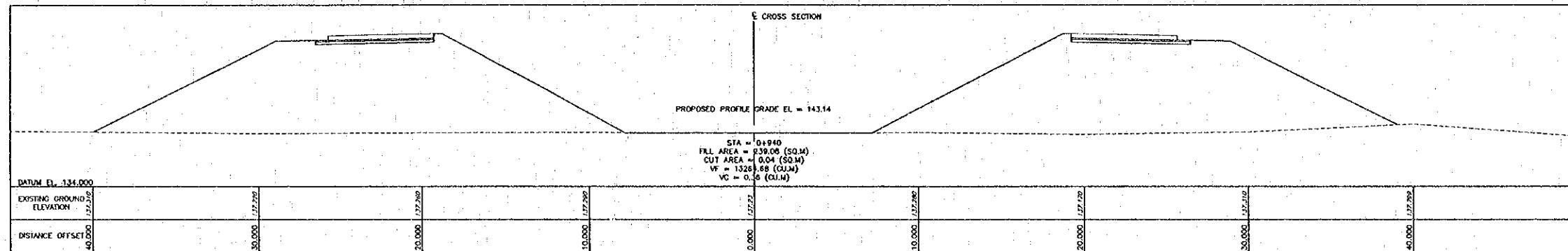
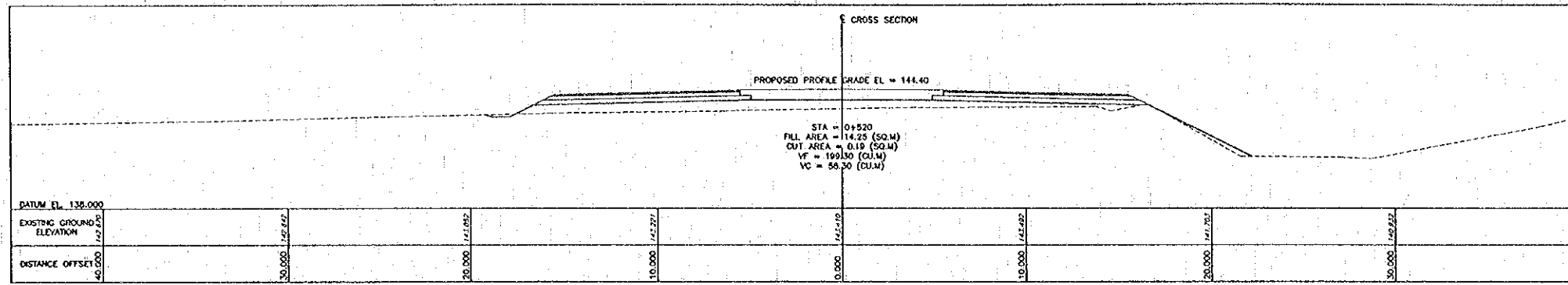
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DESIGN	H. Orita	<i>[Signature]</i>	16.02.00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	16.02.00
SUBMITTED	A. Haratani	<i>[Signature]</i>	27.02.00
APPROVED	S. Temjebutra	<i>[Signature]</i>	01/03/00

DWG. TITLE: CROSS SECTION-6  
 STA. 0+440 TO STA. 0+500



DATE OF ISSUE: 05/03/2000

DWG. NO. R-C-9 SHEET NO. 29  
 DWG. STATUS



Rev. 1.4 Feb. 2000 - 14-3813B

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM

**ORIENTAL CONSULTANTS CO., LTD.**

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**NIPPON KORI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

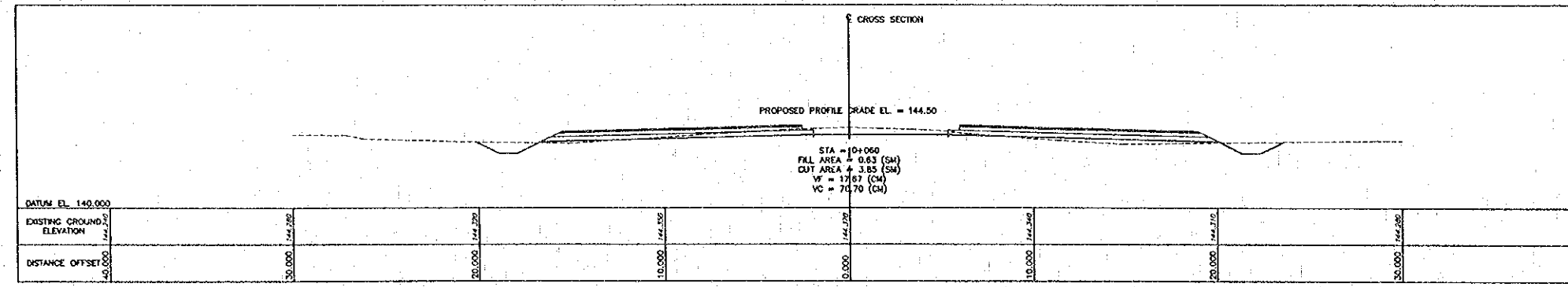
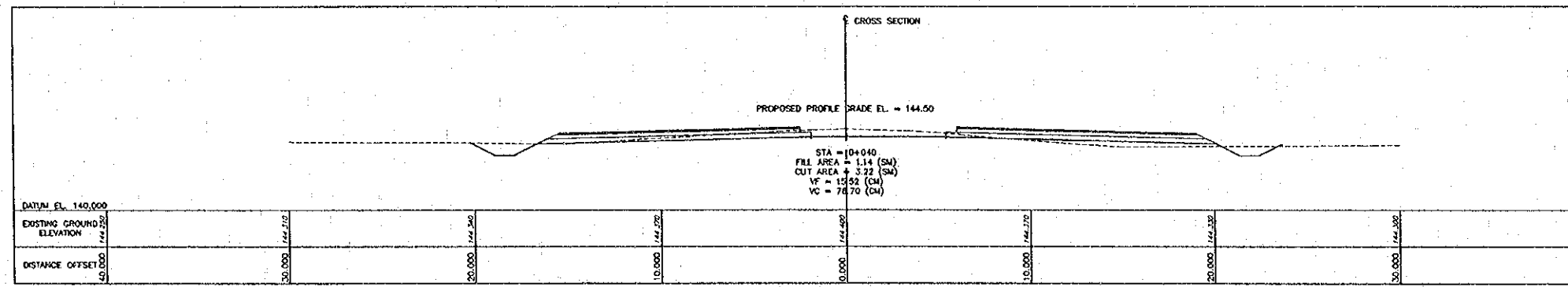
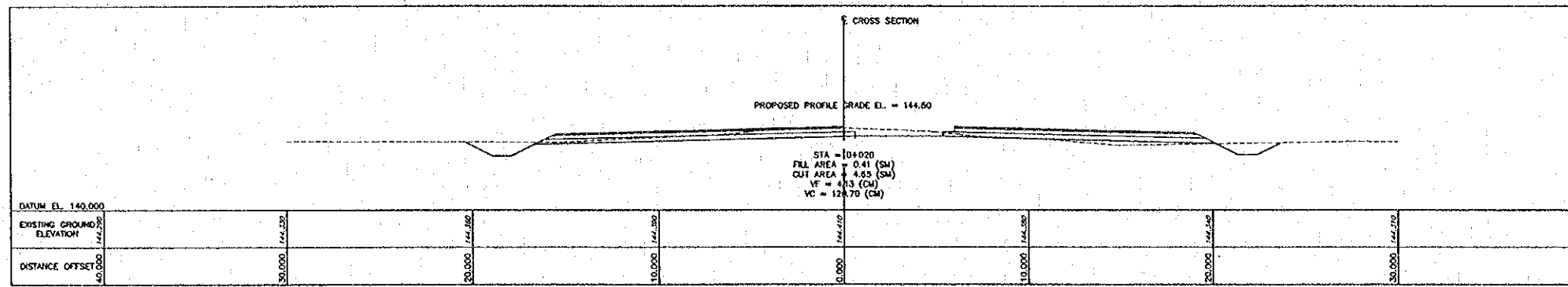
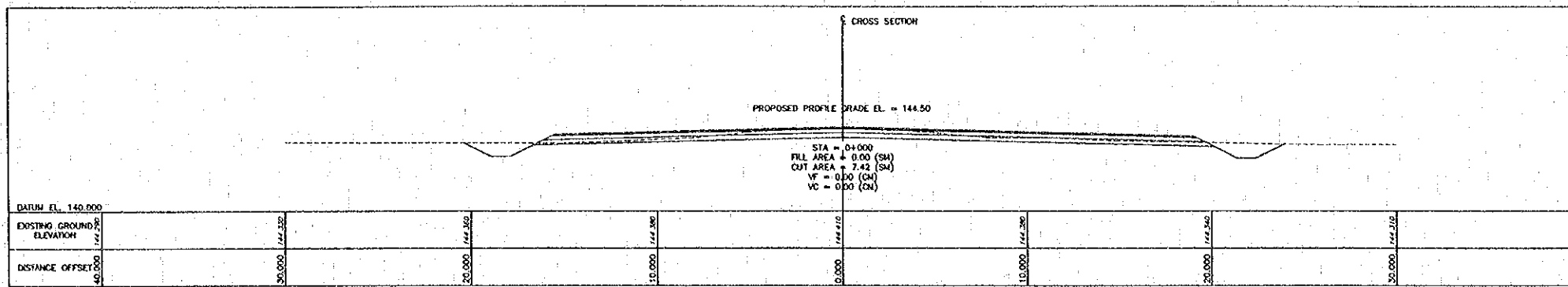
LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/22/00
DESIGN CHECK	T. Motuzawa	<i>[Signature]</i>	11/22/00
SUBMITTED	A. Hirata	<i>[Signature]</i>	11/22/00
APPROVED	S. Temiyabura	<i>[Signature]</i>	11/22/00

DWG. TITLE: CROSS SECTION--7  
 STA. 0+520 & STA. 0+940



Plot date: Mon, 14 Feb 2000 14:47:29

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

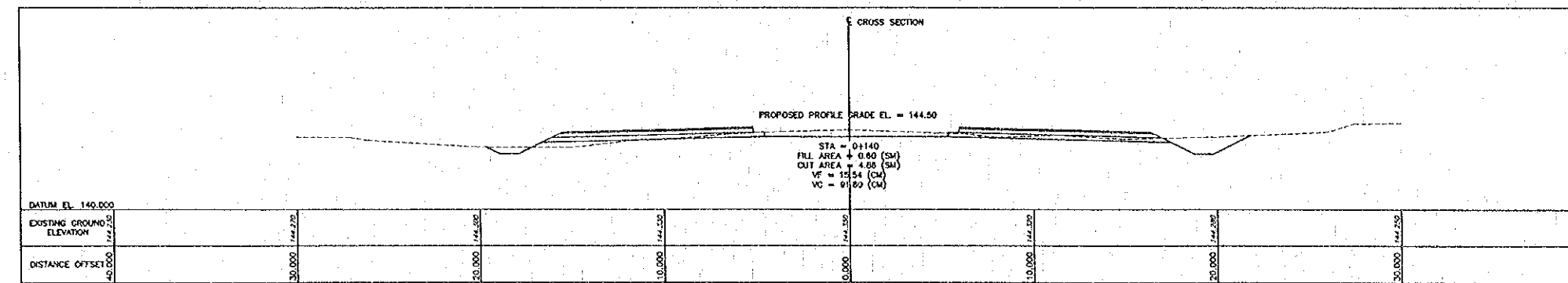
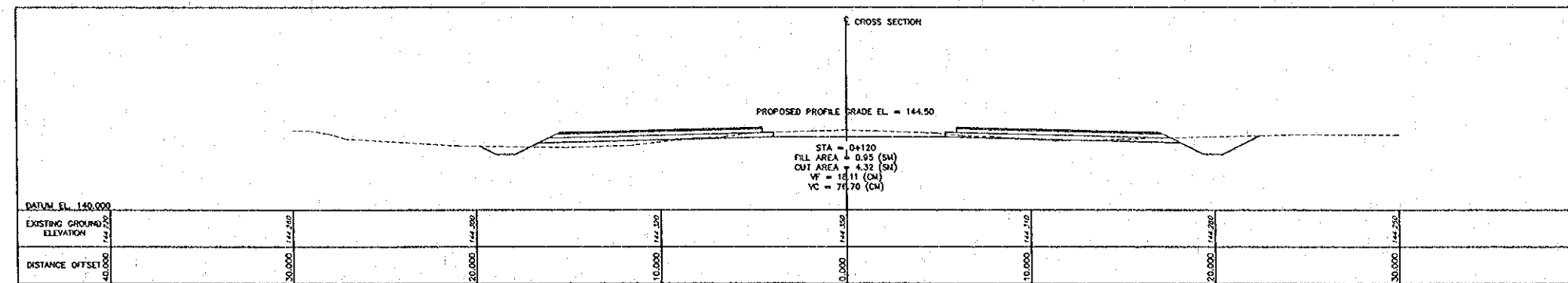
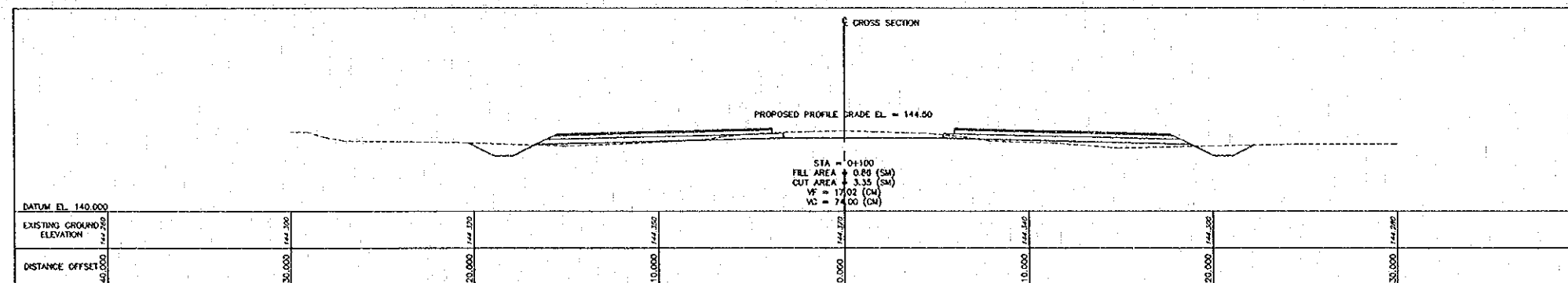
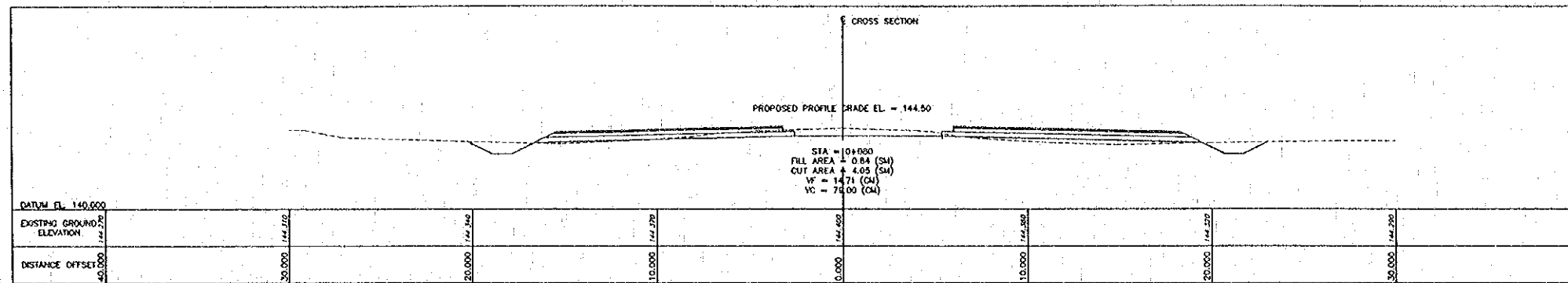
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>H. Okita</i>	11/27/00
DESIGN CHECK	T. Masutomo	<i>T. Masutomo</i>	11/27/00
SUBMITTED	A. Hirokari	<i>A. Hirokari</i>	11/27/00
APPROVED	S. Terayabutra	<i>S. Terayabutra</i>	01/02/01

DWG. TITLE: CROSS SECTION-1  
 STA. 0+000 TO STA. 0+060 SPUR LINE "A"

DATE OF ISSUE: 05/03/2000

DWG. NO. R-C-11 SHEET NO. 31

DWG. STATUS



Plot date: Mon, 14 Feb 2000 - 16:44:25

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KORI CO., LTD.**

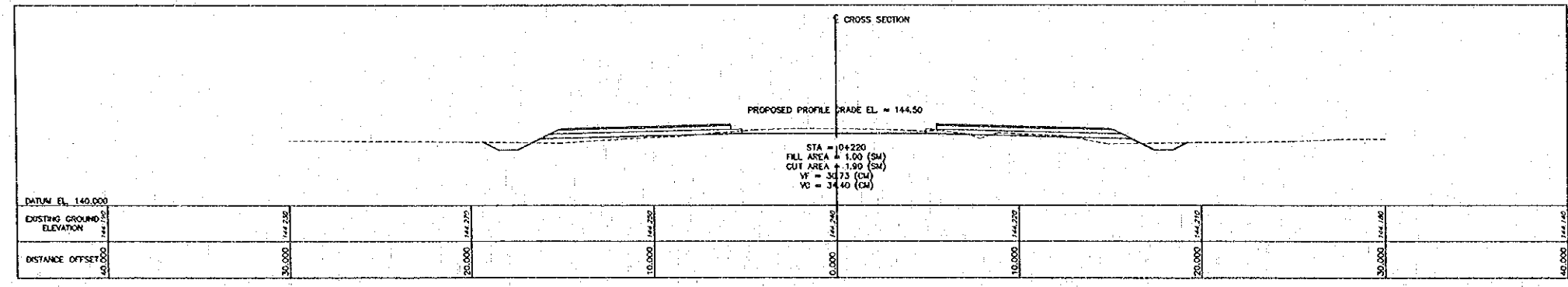
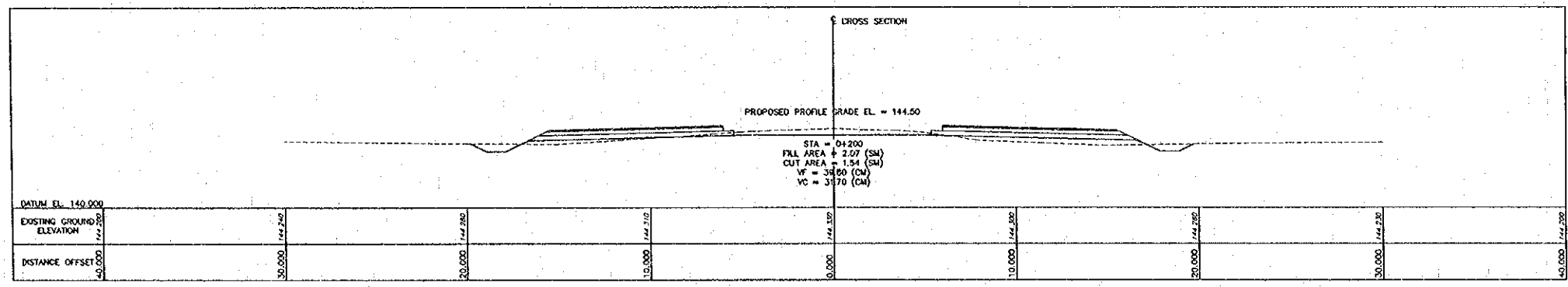
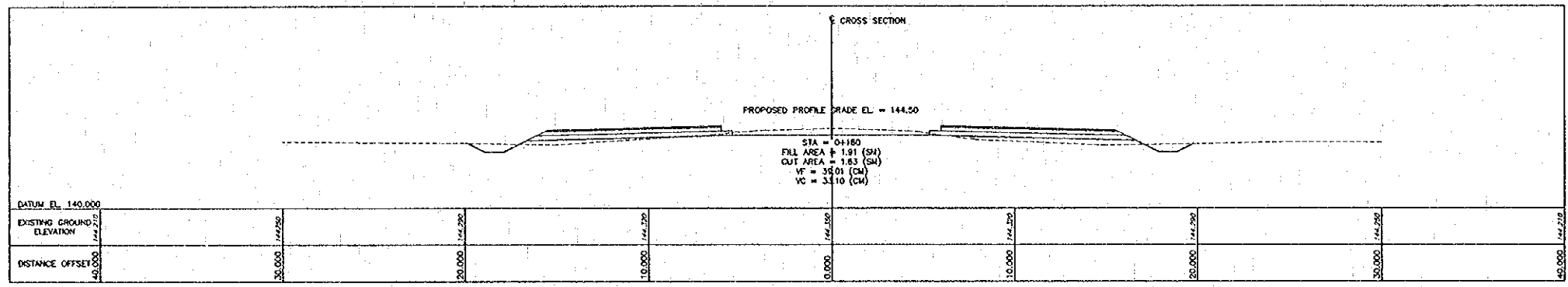
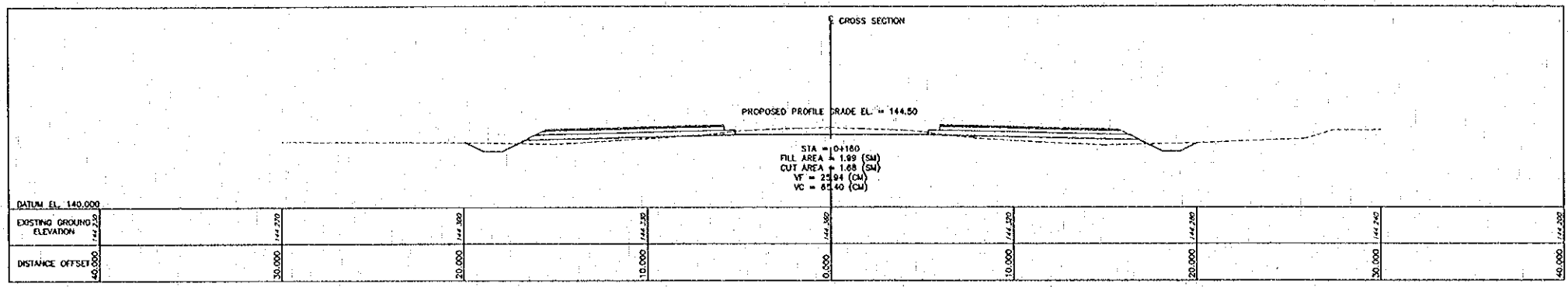
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11-1-01
DESIGN CHECK	T. Masuzono	<i>[Signature]</i>	11-1-01
SUBMITTED	A. Hiratori	<i>[Signature]</i>	21-1-01
APPROVED	S. Tamhobutra	<i>[Signature]</i>	22-1-01

DWG. TITLE: CROSS SECTION-2  
 STA. 0+080 TO STA. 0+140 SPUR LINE "A"

DATE OF ISSUE: 05/03/2000	
OWG. NO. R-C-12	SHEET NO. 32
OWG. STATUS	



Rev. Date: Nov. 14, Feb. 2000 - 1447.32

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

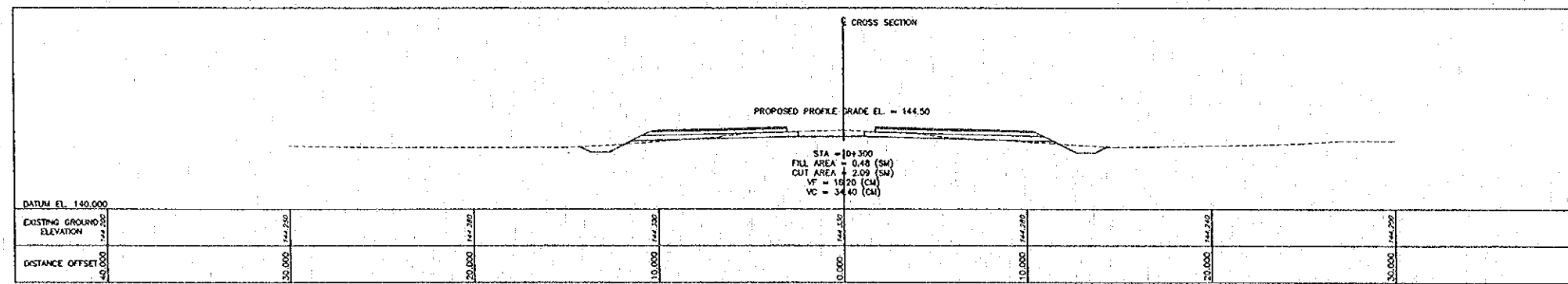
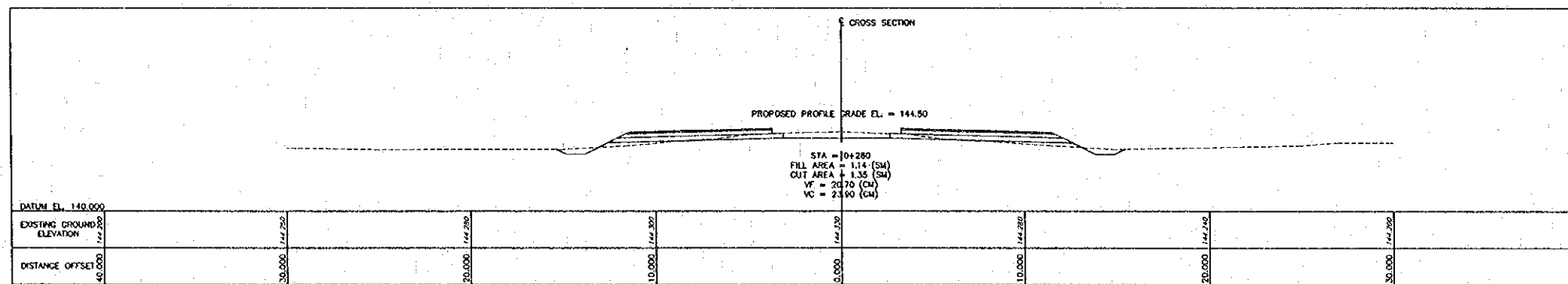
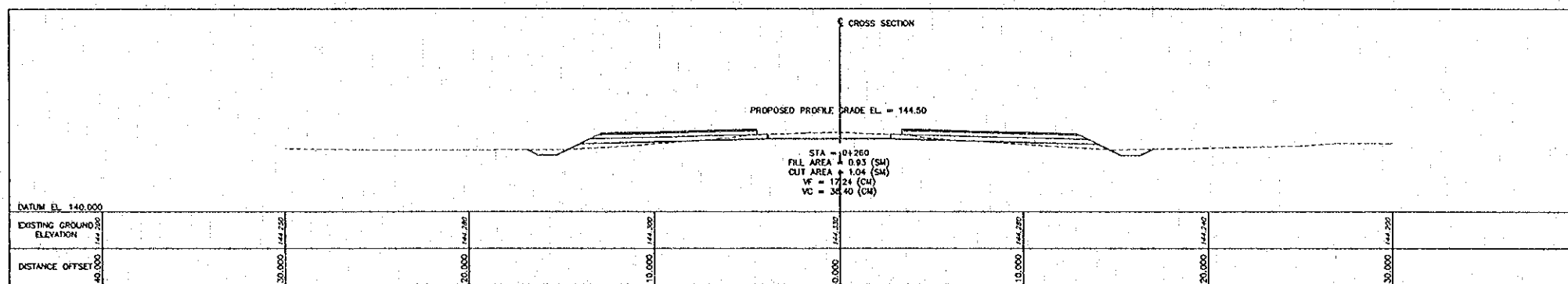
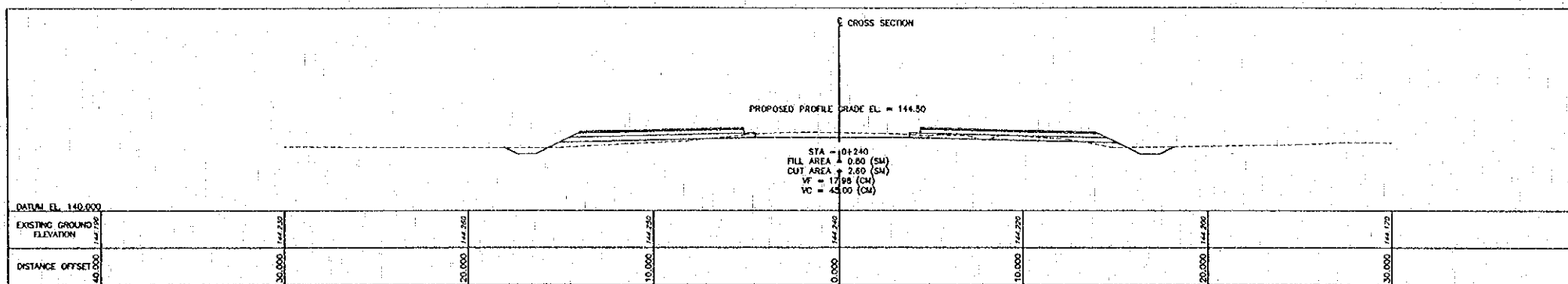
QUALITY RECORD	NAME	SIGNATURE	DATE	OWG. TITLE
DESIGN	H. Okita	<i>[Signature]</i>	11/05/00	
DESIGN CHECK	T. Morimoto	<i>[Signature]</i>	11/22/00	
SUBMITTED	A. Hirataki	<i>[Signature]</i>	11/23/00	
APPROVED	S. Temjebutra	<i>[Signature]</i>	02/03/01	

CROSS SECTION-3  
 STA. 0+160 TO STA. 0+220 SPUR LINE "A"

DATE OF ISSUE:  
05/03/2000



DWG. NO. R-C-13 SHEET NO. 33

DWG. STATUS







Proj 0614 Mon. 14 Feb 2000 - 14:49:29

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

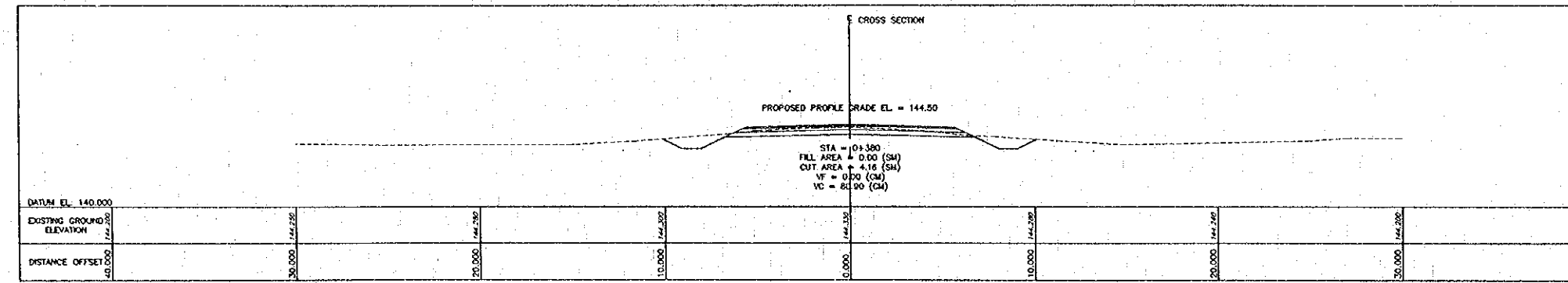
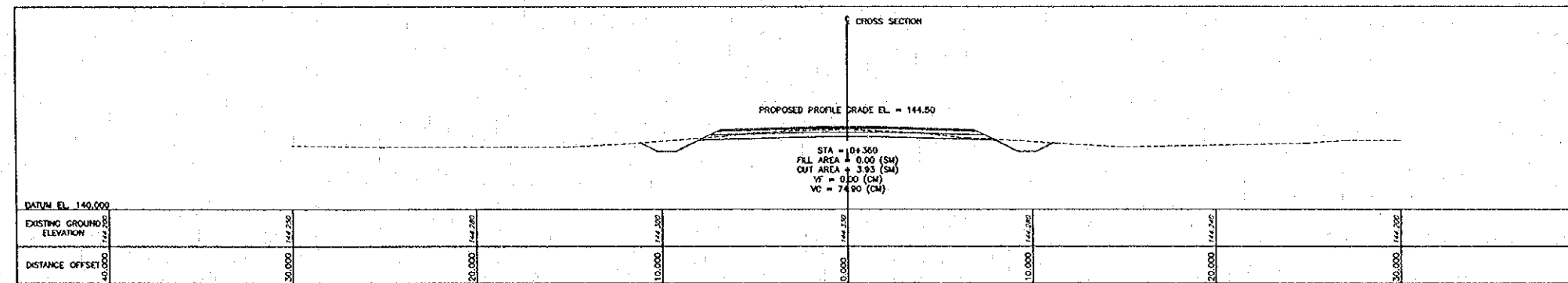
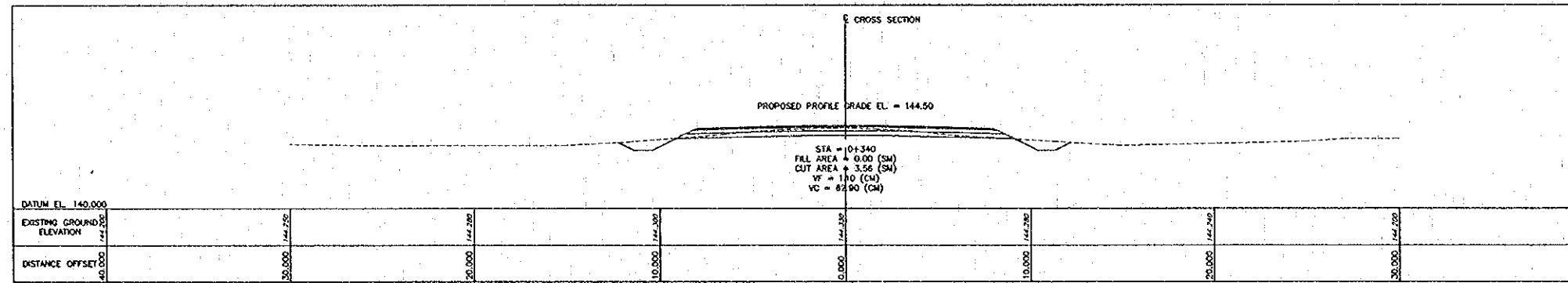
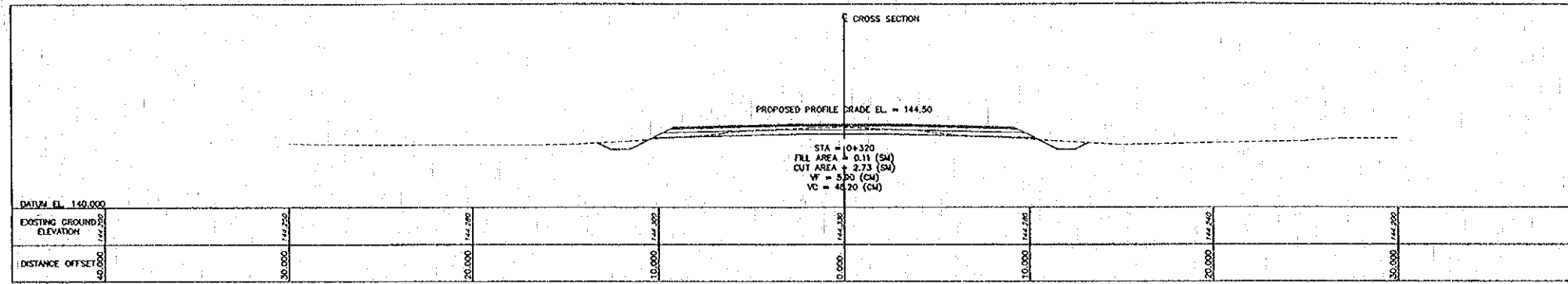
 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita		11/02/00
DESIGN CHECK	T. Masuzawa		18/02/00
SUBMITTED	A. Hiratani		21/02/00
APPROVED	S. Temyobutra		22/02/00

CROSS SECTION-4  
 STA. 0+240 TO STA. 0+300 SPUR LINE "A"

DATE OF ISSUE: 05/03/2000

DWG. NO. R-C-14 SHEET NO. 34  
 DWG. STATUS



Proj. date: Mar. 14, Feb. 2000 - 14.51.34

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

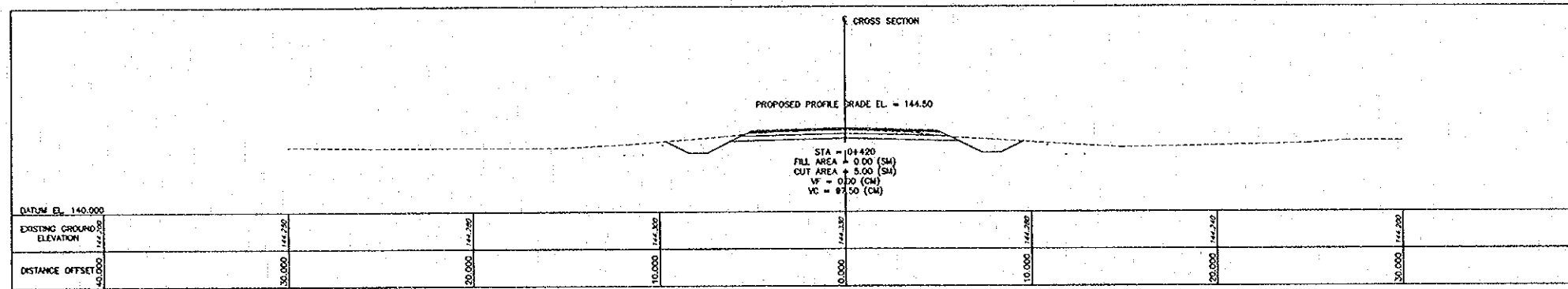
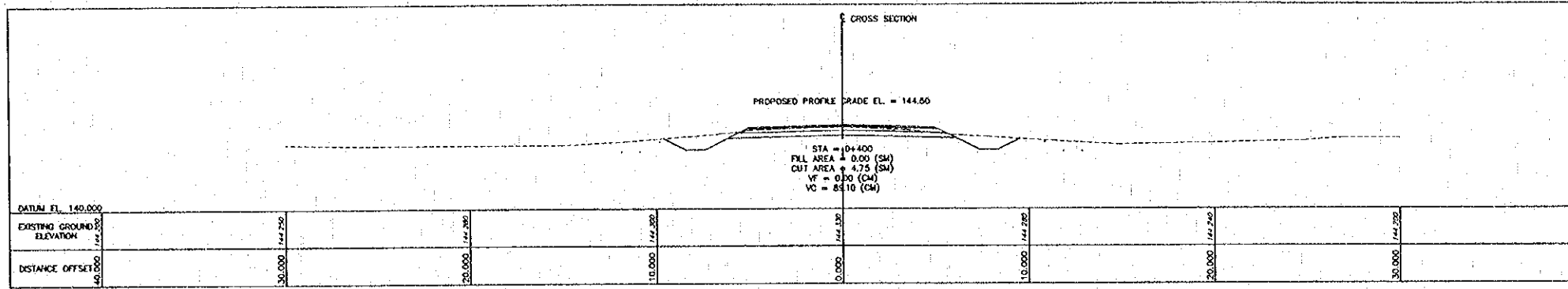
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	10-12-00
DESIGN CHECK	T. Morozawa	<i>[Signature]</i>	12-20-00
SUBMITTED	A. Haratani	<i>[Signature]</i>	01/06/01
APPROVED	S. Temiyabutra	<i>[Signature]</i>	21/02/00

DWG. TITLE: CROSS SECTION-5  
 STA. 0+320 TO STA. 0+380 SPUR LINE "A"

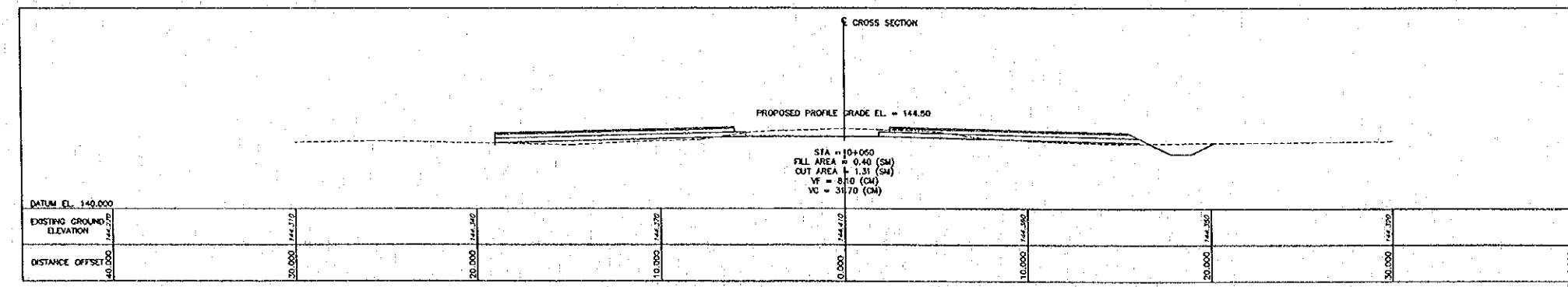
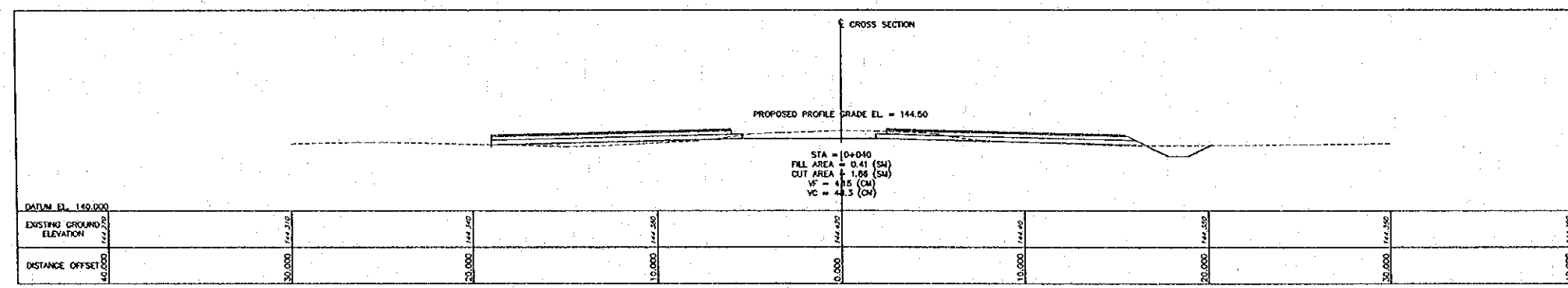
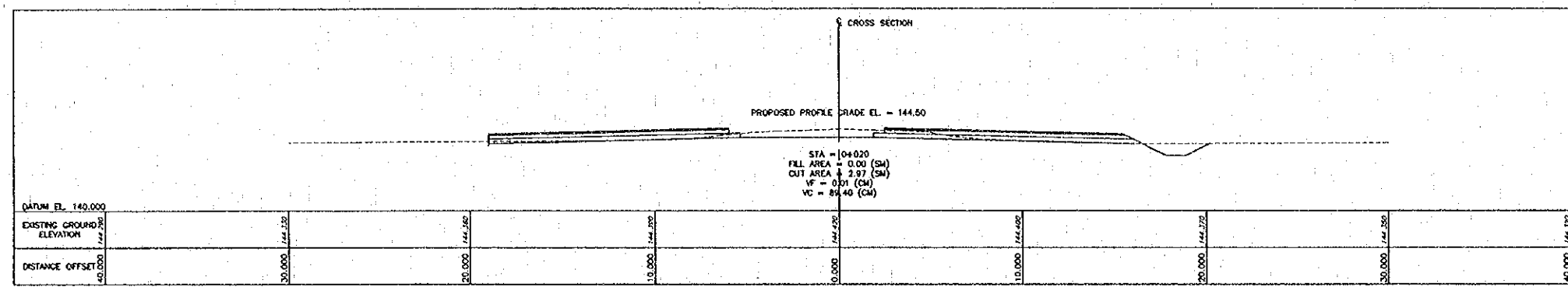
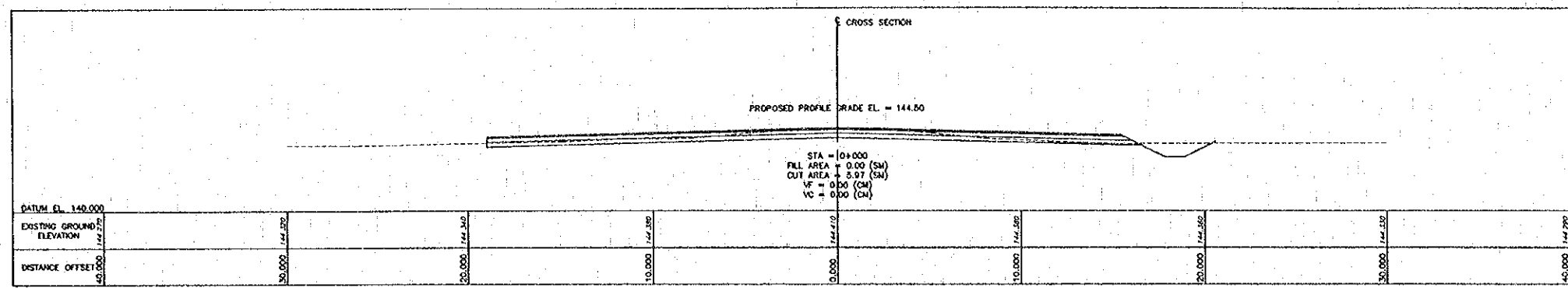
DATE OF ISSUE: 05/03/2000	
DWG. NO. R-C-15	SHEET NO. 35
DWG. STATUS	



Plot Date: Mon, 14 Feb 2000 - 14:53:14

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS			DESIGN	H. Orita	<i>[Signature]</i>	18-10-00	CROSS SECTION-6 STA. 0+400 TO STA. 0+420 SPUR LINE "A"
							DESIGN CHECK	T. Masutawa	<i>[Signature]</i>	17-12-00		
							SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/02/00		
							APPROVED	S. Temjyabutra	<i>[Signature]</i>	24/03/00		

DWG. NO.	SHEET NO.
R-C-16	36
DWG. STATUS	



Plot Date: Nov. 14, Feb. 2000 - 14:33:23

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM

**ORIENTAL CONSULTANTS CO., LTD.**

In association with

**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

LAO PEOPLE'S DEMOCRATIC REPUBLIC  
MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

KINGDOM OF THAILAND  
MINISTRY OF TRANSPORT AND COMMUNICATIONS  
DEPARTMENT OF HIGHWAYS

**THE SECOND MÈKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

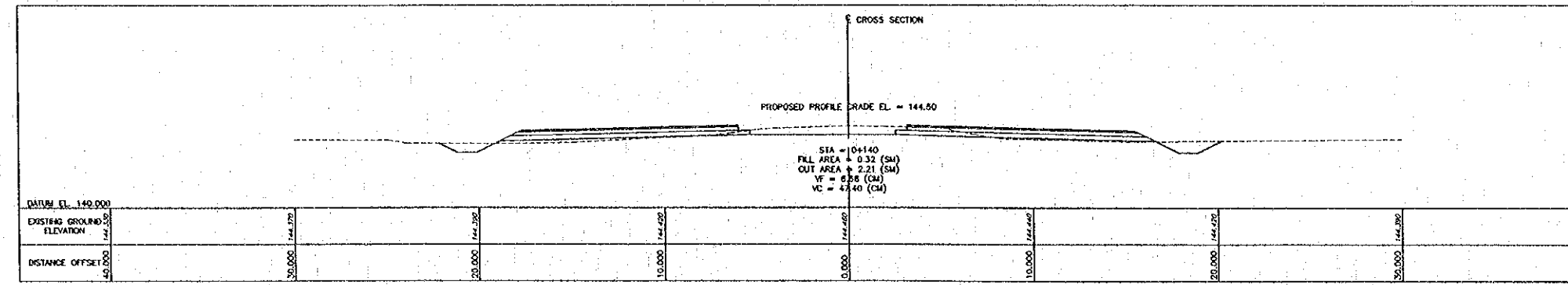
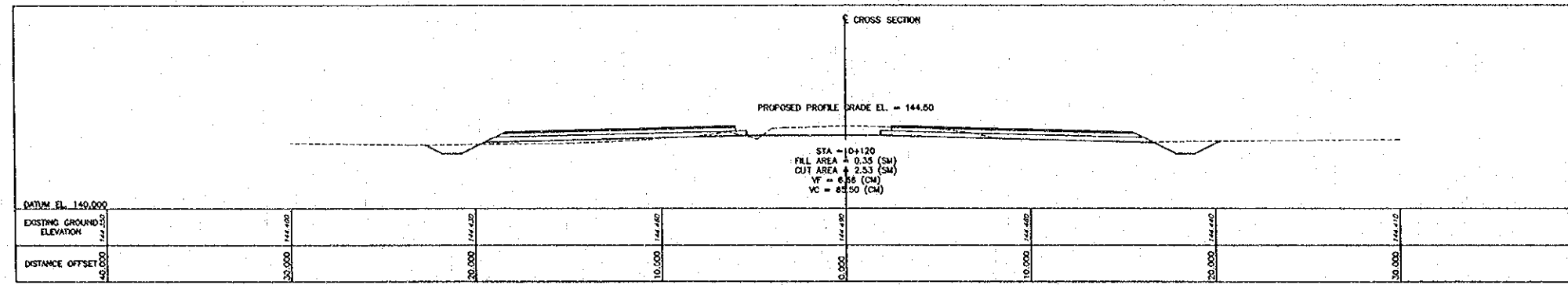
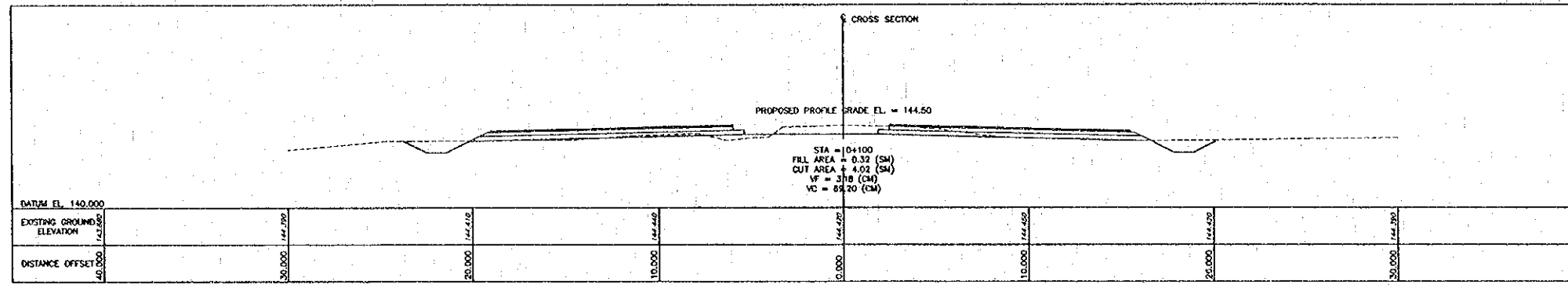
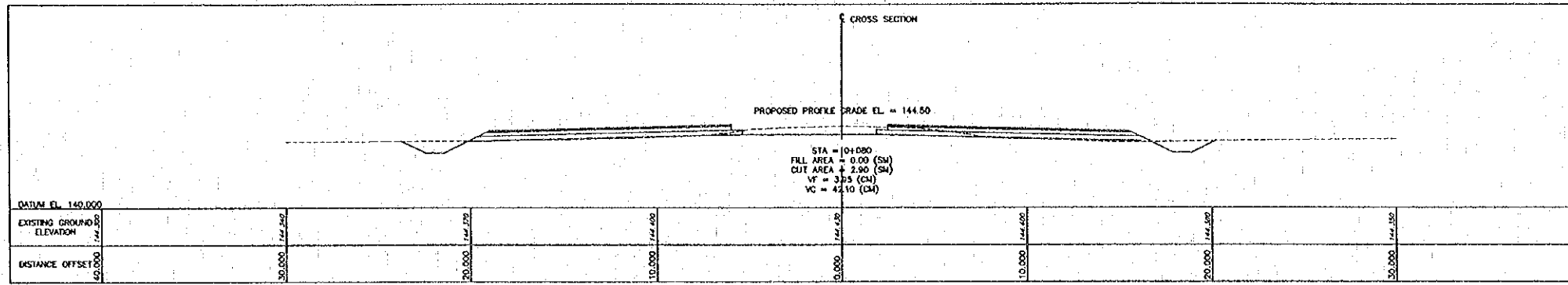
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/01/00
DESIGN CHECK	T. Masujima	<i>[Signature]</i>	12/14/00
SUBMITTED	A. Haretoni	<i>[Signature]</i>	2/11/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:

CROSS SECTION-1  
STA. 0+000 TO STA. 0+060 SPUR LINE "B"



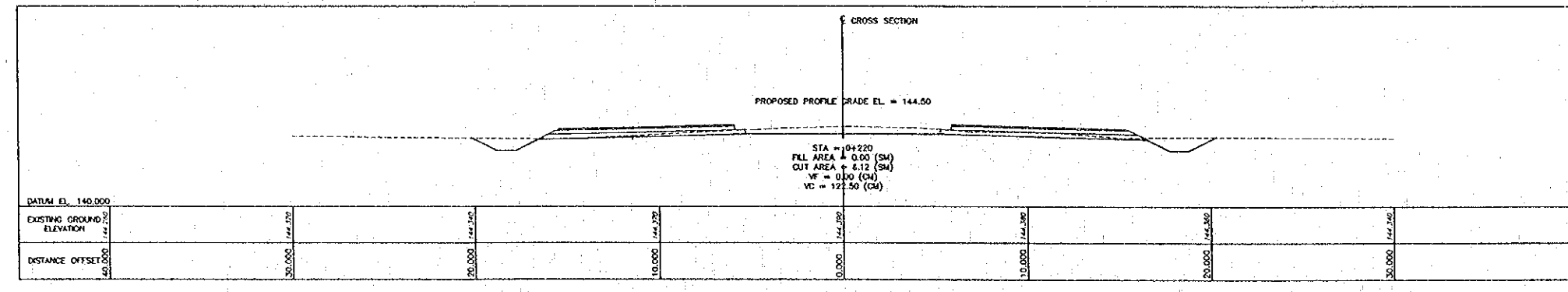
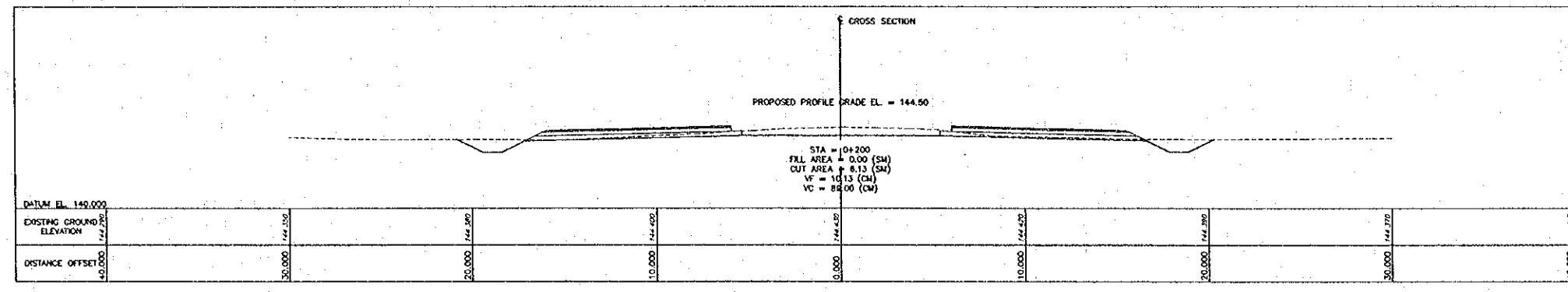
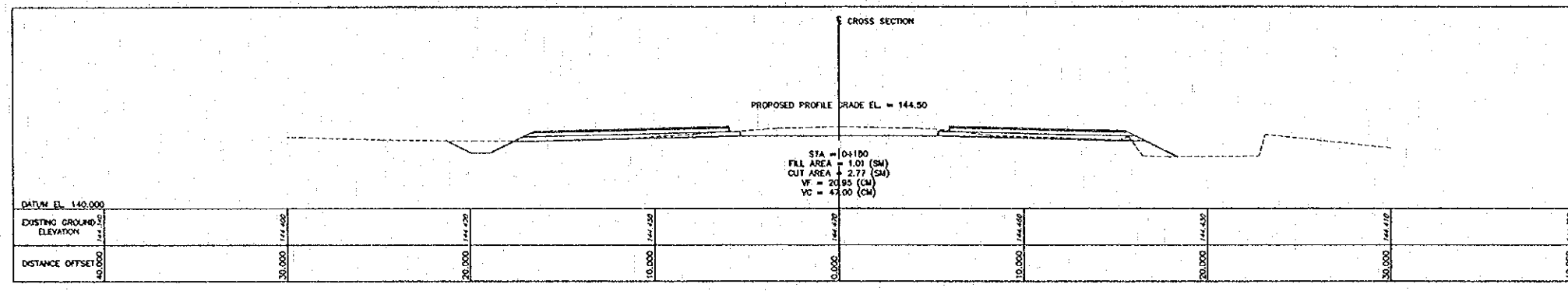
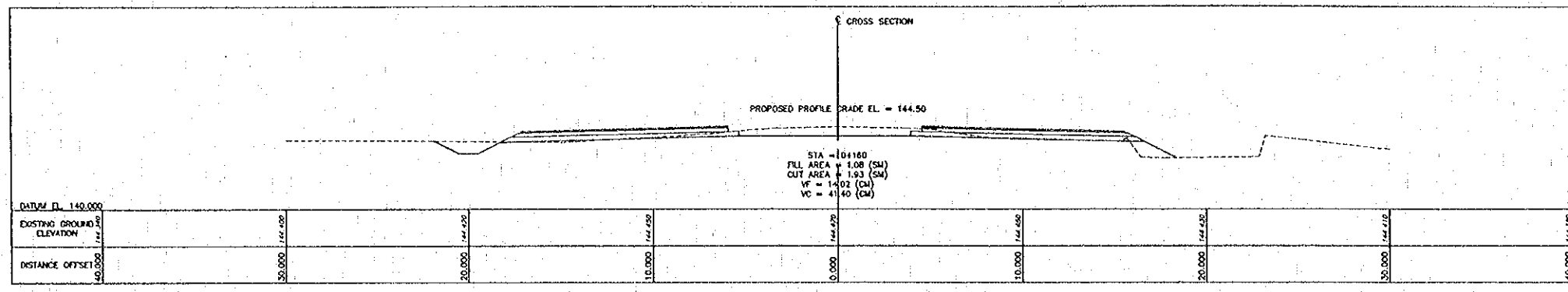
DATE OF ISSUE: 05/03/2000	
DWG. NO. R-C-17	SHEET NO. 37
DWG. STATUS	



Plot date: Mon, 14 Feb 2000 - 15:01:26

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				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Okita	<i>H. Okita</i>	11/10/00	CROSS SECTION-2 STA. 0+080 TO STA. 0+140 SPUR LINE "B"
						DESIGN CHECK	T. Marutawa	<i>T. Marutawa</i>	11/10/00	
						SUBMITTED	A. Hirahara	<i>A. Hirahara</i>	11/10/00	
						APPROVED	S. Tomyabutra	<i>S. Tomyabutra</i>	11/10/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. R-C-18	SHEET NO. 38
DWG. STATUS	



Plot date: Mon, 14 Feb 2000 - 15:05:45

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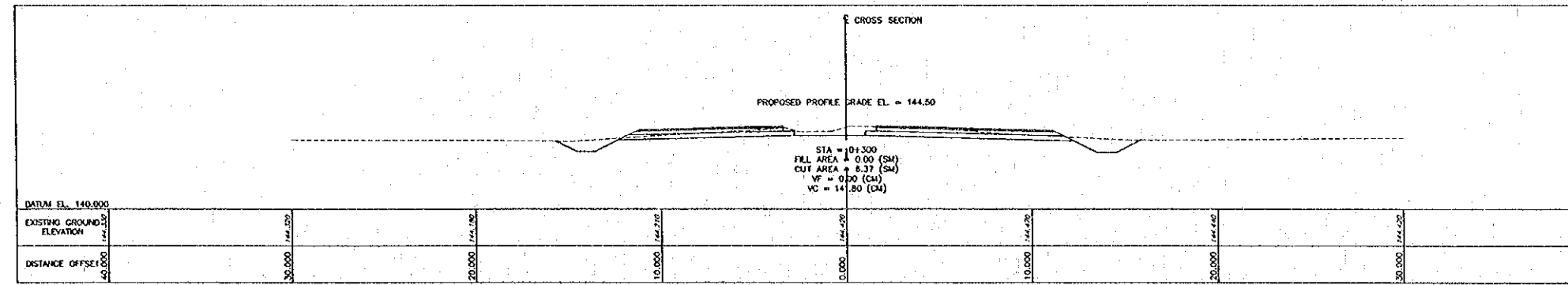
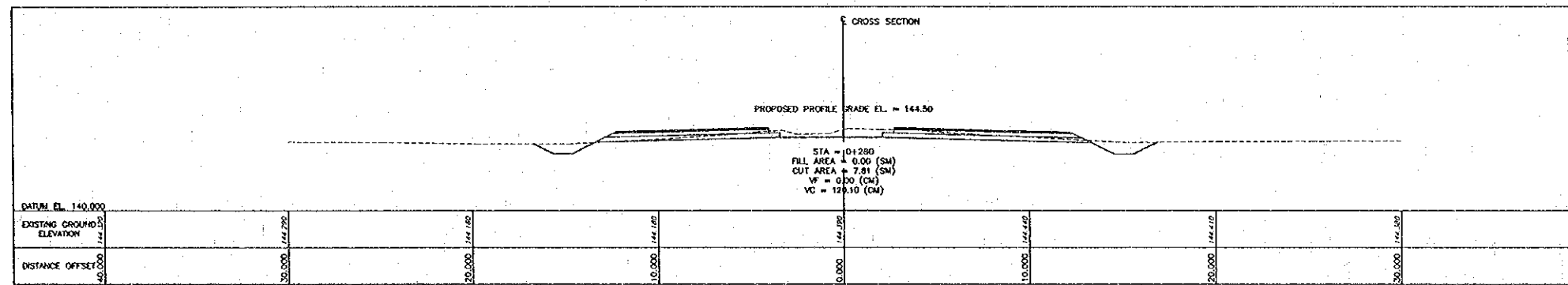
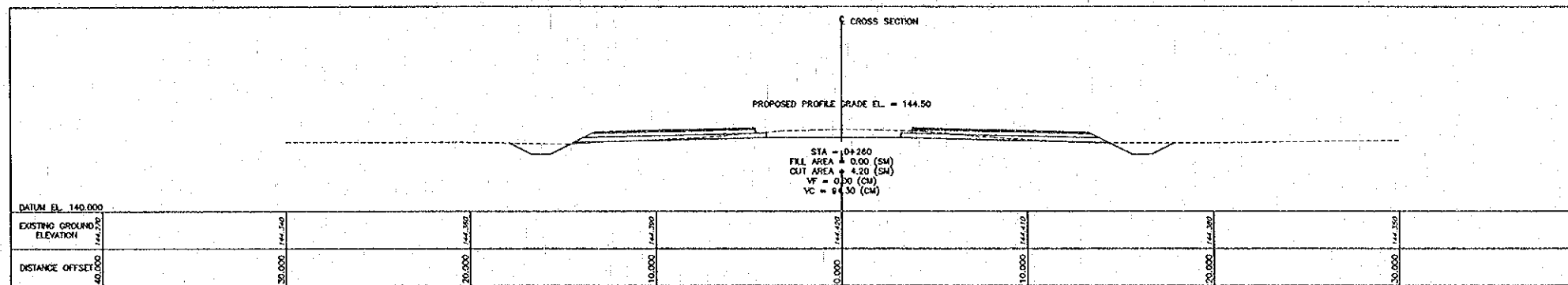
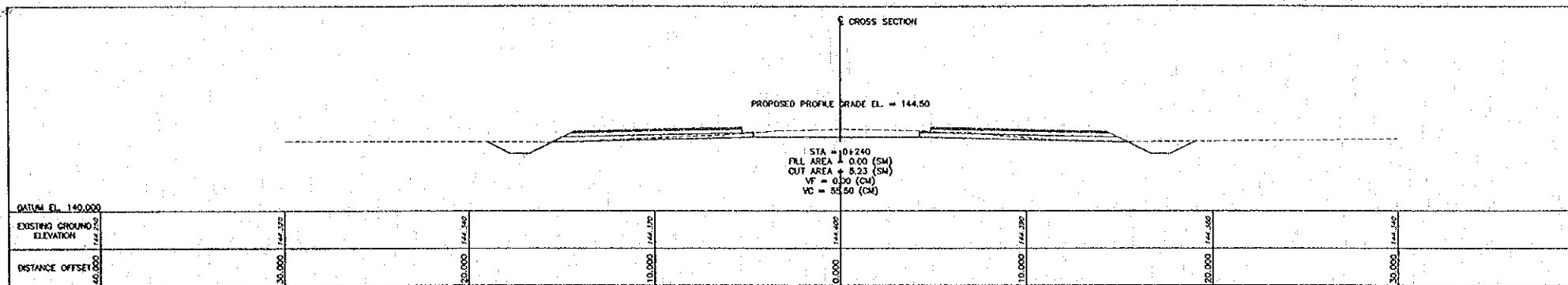
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Onita	<i>[Signature]</i>	11-03-00
DESIGN CHECK	T. Moritawa	<i>[Signature]</i>	11-03-00
SUBMITTED	A. Hirotsu	<i>[Signature]</i>	11-03-00
APPROVED	S. Terayabutra	<i>[Signature]</i>	02/03/00

DWG. TITLE:  
 CROSS SECTION-3  
 STA. 0+160 TO STA. 0+220 SPUR LINE "B"



Plot Date: Mar. 14, Feb. 2000 = 15:05:15

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

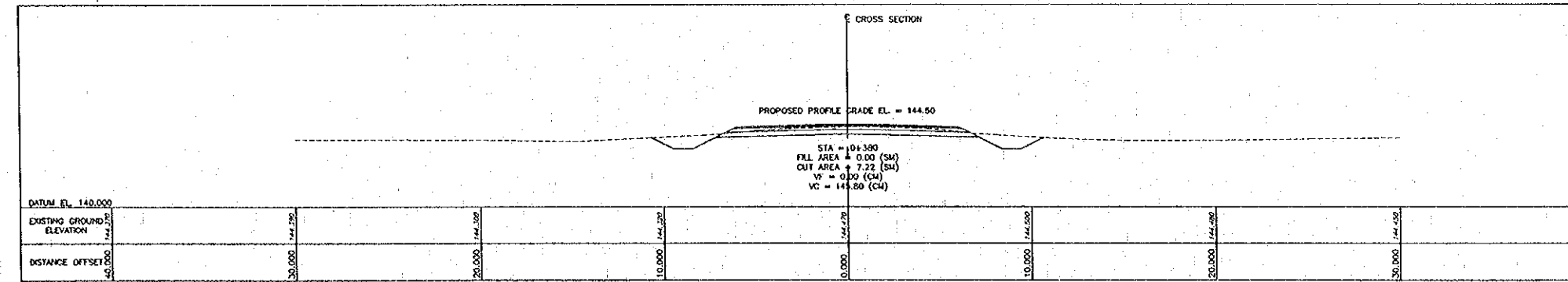
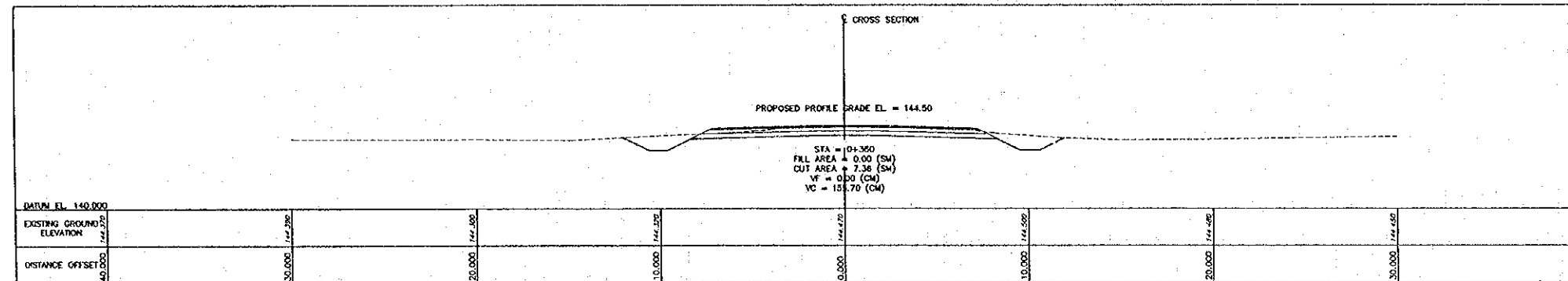
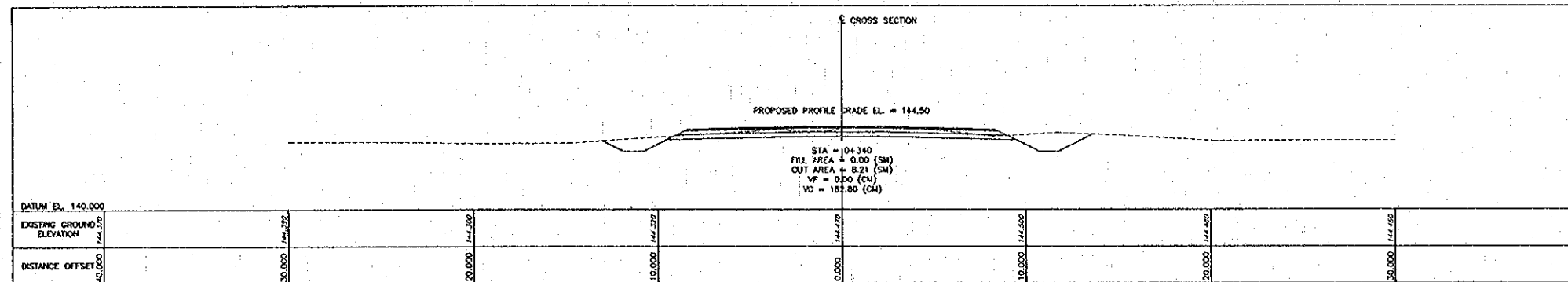
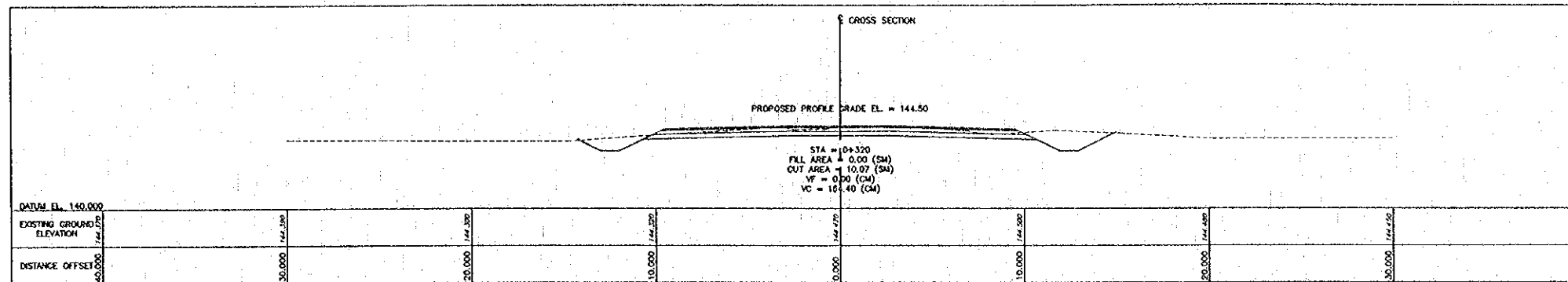
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	16/05/00
DESIGN CHECK	T. Matsuzawa	<i>[Signature]</i>	17/05/00
SUBMITTED	A. Hirokane	<i>[Signature]</i>	16/05/00
APPROVED	S. Terayabuta	<i>[Signature]</i>	22/05/00



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DATE OF ISSUE: 05/03/2000	
DWG. NO. R-C-20	SHEET NO. 40
DWG. STATUS	



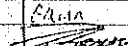
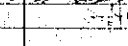
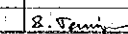

Plot date: Mon, 14 Feb 2000 - 15:10:25

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
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 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

 THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

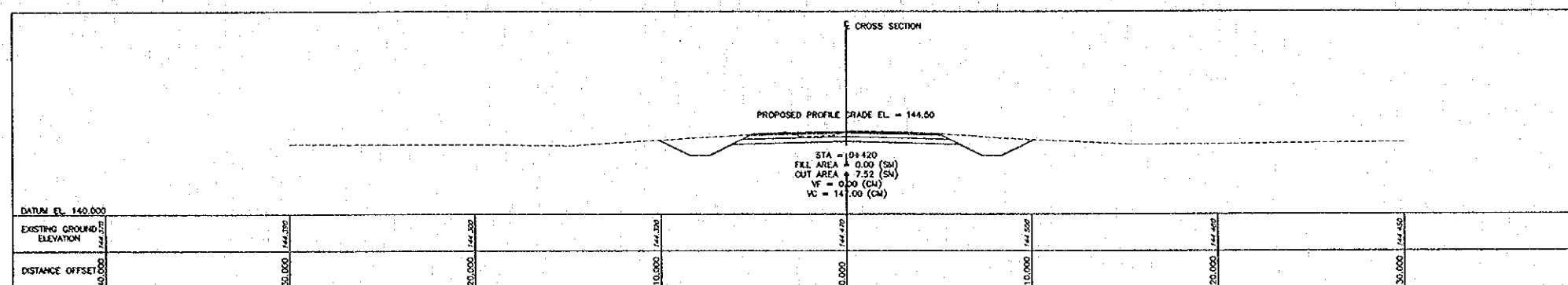
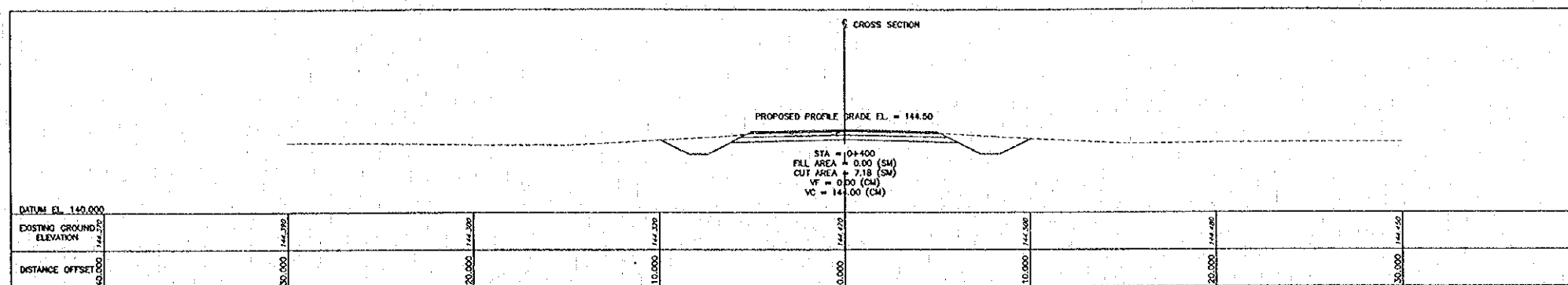
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita		11/12/00
DESIGN CHECK	T. Masuzawa		12/22/00
SUBMITTED	A. Hirotsu		2/2/00
APPROVED	S. Temyabutra		22/02/01

DWG. TITLE:  
 CROSS SECTION-5  
 STA. 0+320 TO STA. 0+380 SPUR LINE "B"

DATE OF ISSUE:  
05/03/2000

DWG. NO. R-C-21 SHEET NO. 41

DWG. STATUS



PROJ. DATE: MAR. 14, FEB. 2000 = 13:12:25  
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REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KORI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

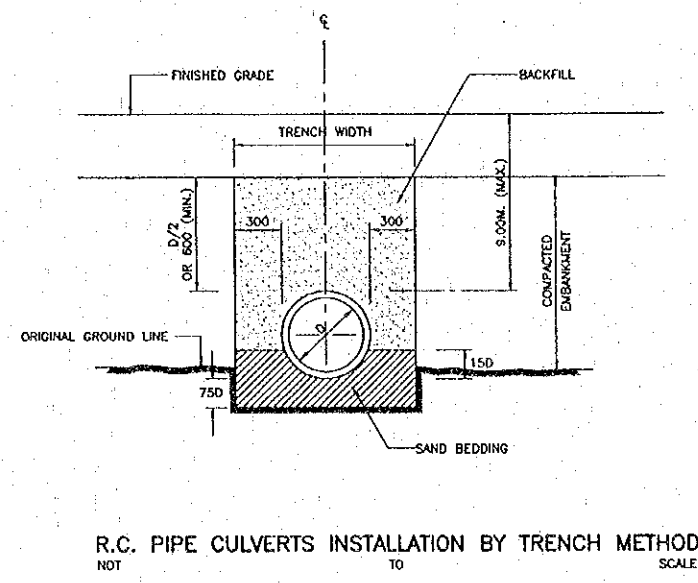
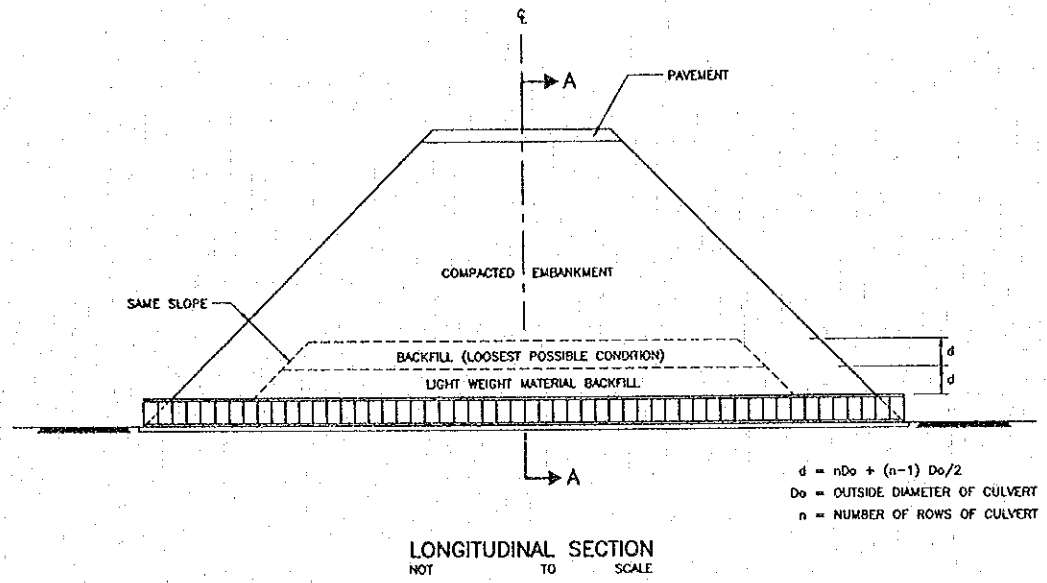
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
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SUBMITTED	A. Hirahara	<i>[Signature]</i>	04/03/00
APPROVED	S. Temyebutra	<i>[Signature]</i>	04/03/00

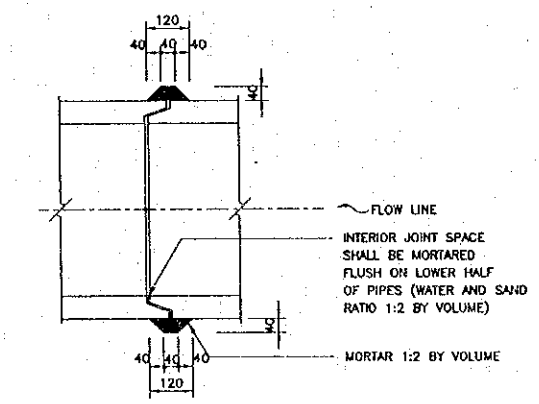
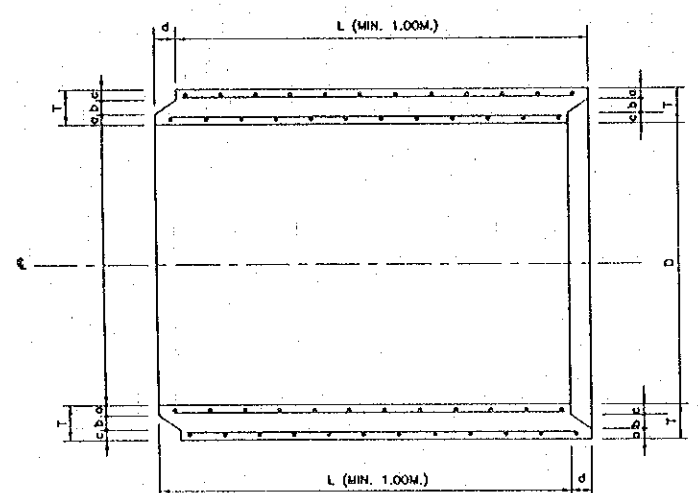
DWG. TITLE:  
**CROSS SECTION-6  
 STA. 0+400 TO STA. 0+420 SPUR LINE "B"**

**NOTES :**  
 REINFORCED CONCRETE CULVERT PIPE INSTALLATION  
 (MAX. FILL HEIGHT 9.00 M.)

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- A.) CONSTRUCTION METHODS WHEN FILL HEIGHT IS LESS THAN 1.2 M.
  1. THE PROJECTION METHODS SHALL BE EMPLOYED FOR PIPE INSTALLATION.
  2. THE PIPELINE LAYOUT SHALL BE SUITABLE FOR THE TERRAIN, THE EXISTING GROUND ALONG THE LINE OF CULVERT SHALL BE PREPARED TO THE SPECIFIED SLOPE.
  3. PIPE BEDDING SHALL BE AS SHOWN ON THE DRAWING AND SHALL DEPEND UPON PREVAILING SOIL CONDITIONS AND THE JUDGEMENT OF THE ENGINEER.
  4. AFTER THE PIPE HAS BEEN PLACED, THE SUBGRADE AND/OR PORTION OF PAVEMENT SECTION WHICH ARE TO BE LAID ALONG BOTH SIDES OF THE LINE WITHIN A DISTANCE OF 4 PIPE DIAMETERS BUT NOT LESS THAN 5.0 M. FROM CENTERLINE OF THE PIPE SHALL BE CONSTRUCTED, LIGHT WIGHT CONSTRUCTION EQUIPMENT USED FOR COMPACTION SHALL OPERATE IN A DIRECTION PERPENDICULAR TO CENTERLINE OF ROADWAY (OR PARALLEL TO PIPELINE) UNTIL THE BACKFILL HAS REACHED AN ELEVATION OF AT LEAST 30 CM. ABOVE THE TOP OF PIPE.
- B.) CONSTRUCTION METHODS WHEN FILL HEIGHT EXCEEDS 1.2 M.
  1. PIPE INSTALLATION SHALL BE BY TRENCH METHOD. SUBGRADE SHALL BE FIRST CONSTRUCTED TO AN ELEVATION D/2 OR AT LEAST 60 CM. OVER TOP OF PROPOSED PIPE. A TRENCH SHALL THEN BE EXCAVATED ALONG THE PROPOSED LINE AS SHOWN ON THE DRAWING, TRENCH WALLS SHALL HAVE A SMOOTH SURFACE AND SHALL BE CONSTRUCTED VERTICALLY.
  2. THE TRENCH BED SHALL BE PREPARED TO THE SPECIFIED SLOPE. BEDDING TYPE SHALL BE DEPENDING ON FOUNDATION SOIL AND AS DIRECTED BY THE ENGINEER.
  3. PIPE SHALL BE INSTALLED ACCORDING TO SIZES SHOWN ON THE DRAWINGS. BACKFILLING OF PIPE CULVERTS SHALL NOT BE PERMITTED UNTIL AT LEAST 48 HOURS HAVE ELAPSED AFTER JOINTS HAVE BEEN COMPLETED.
  4. BACKFILL SHALL BE PLACED TO THE SUBGRADE ELEVATION AS DESCRIBED IN NOTE 1 BACKFILL SHALL BE A SELECT MATERIAL AND SHALL REQUIRE THE APPROVAL OF THE ENGINEER. METHOD OF COMPACTION OF BACKFILL SHALL BE THE SAME AS REQUIRED FOR SUBGRADE COMPACTION EQUIPMENT SHALL BE APPROVED BY THE ENGINEER.



$d = nD_o + (n-1) D_o/2$   
 $D_o$  = OUTSIDE DIAMETER OF CULVERT  
 $n$  = NUMBER OF ROWS OF CULVERT



- NOTES :**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  2. REINFORCED CONCRETE PIPE CULVERT CLASSES 2 SHALL CONFORM TO TIS 128.
  3. CEMENT, STEEL REINFORCEMENT, AGGREGATES AND TEST METHODS USED FOR R.C. PIPE CULVERT SHALL CONFORM TO THE REQUIREMENT OF TIS. 128 OR TO THE DEPARTMENT OF HIGHWAYS STANDARDS.
    - 3.1 CEMENT CONTENT USED FOR CONCRETE MIX SHALL NOT BE LESS THAN 335 KILOGRAM PER CUBIC METER OF CONCRETE.
    - 3.2 CONCRETE COVER FOR SINGLE LAYER CIRCULAR REINFORCEMENT SHALL BE 0.35 TO 0.5 TIME OF WALL THICKNESS (MEASURED FROM INNER WALL).
    - 3.3 CONCRETE COVER FOR DOUBLE LAYERS CIRCULAR REINFORCEMENT SHALL BE 2.5 CM. IN AVERAGE BUT NOT LESS THAN 1.5 CM.
    - 3.4 LONGITUDINAL REINFORCEMENT SPACING FOR PIPE SIZE #50 CM. OR SMALLER SHALL BE A MINIMUM OF 4-#4 MM. BARS OR 8-#4 MM. BARS FOR PIPE #60 CM. OR LARGER.
    - 3.5 CIRCULAR REINFORCEMENT SPACING FOR PIPE SIZE #30 CM. TO #80 CM. SHALL BE 10 CM. OR LESS AND FOR PIPE SIZE #100 CM. TO #150 CM. SHALL BE 15 CM. OR LESS BUT NOT MORE THAN THEIR WALL THICKNESS.
  4. THE CULVERT WHICH HAVING TRANSVERSE REINFORCEMENT IN ELLIPTICAL CAGE AS SPECIFIED IN THE TIS. 128 SHALL NOT BE USED.
  5. CULVERT JOINTS SHALL BE MORTARED AS SHOWN ON THE DRAWING WITH CEMENT MORTAR (1:2 BY VOLUME).
  6. CULVERT LENGTH ( L ) SHALL BE MIN. 1.00M. UNLESS OTHERWISE SPECIFIED.

TABLE 1

R.C. PIPE CULVERT CLASS	INSIDE DIAMETER (D) (MM.)	WALL THICKNESS (T) (MM.)	MIN. CIRCULAR REINFORCEMENT (CM <sup>2</sup> /M)		CRUSHING LOAD TO PRODUCE 0.03 CM. CRACK WIDTH AND 30 CM CRACK LENGTH (KG./M.)	MAXIMUM CRUSHING LOAD (KG./M.)	ULTIMATE STRENGTH FOR 15x30 CM. CONCRETE CYLINDER AT 28 DAYS AGE (KG./CM <sup>2</sup> )	OVER FILL ON R.C. PIPE CULVERT NOT MORE THAN (METERS)
			INNER CAGE	OUTER CAGE				
2	600	75	5.7	-	6,120	9,180	280 (350)	10.0
	800	95	5.8	4.1	8,160	12,240		
	1200	125	8.9	6.8	12,240	18,360		

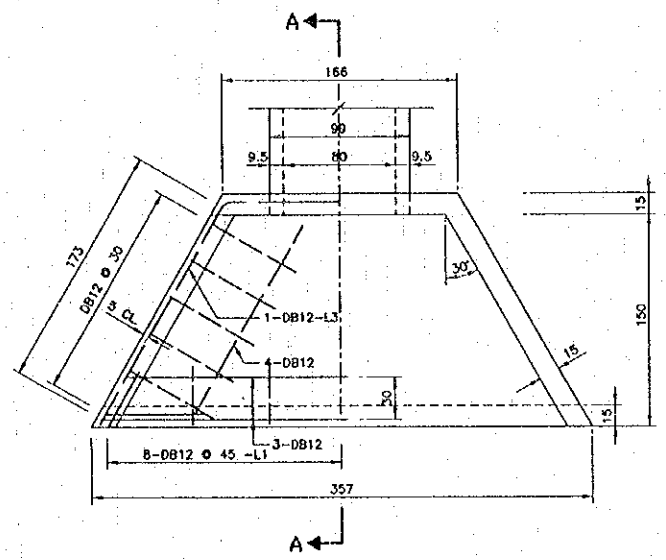
FIGURES IN PARENTHESIS ARE ULTIMATE STRENGTH FOR 15X15X15 CM. CONCRETE CUBE AT 28 DAYS AGE.

TABLE 2

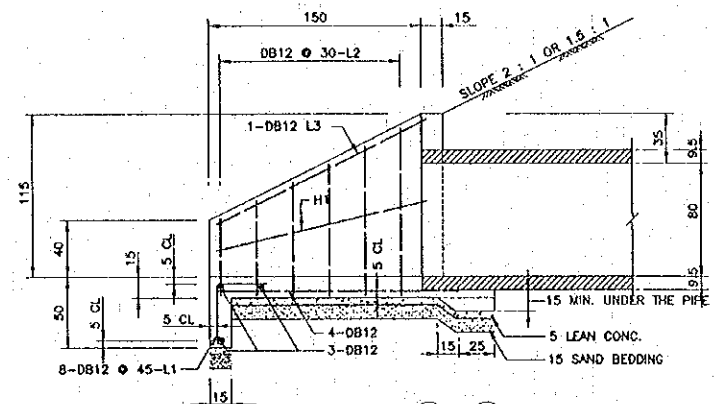
R.C. PIPE CULVERT CLASS	INSIDE DIAMETER (D) (MM.)	WALL THICKNESS (T) (MM.)	PIPE END DETAILS (MM.)			
			TONGUE & GROOVE TYPE			
			a	b	c	d
2	600	75	28	15	32	40
	800	95	38	15	42	45
	1200	125	48	25	52	50

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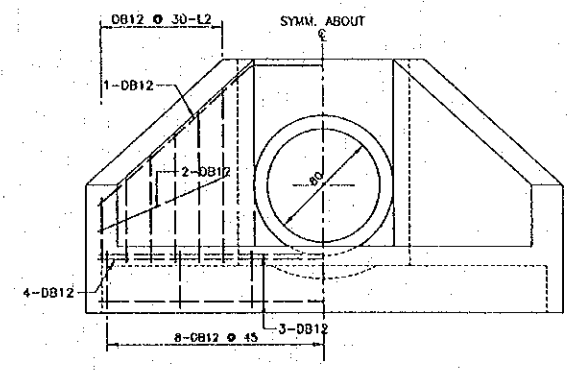
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QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:																								
DESIGN	H. Okita	<i>[Signature]</i>	15/02/00	R.C. PIPE CULVERT INSTALLATION																								
DESIGN CHECK	T. Moriyama	<i>[Signature]</i>	18/02/00																									
SUBMITTED	A. Hiratake	<i>[Signature]</i>	21/02/00																									
APPROVED	S. Tamiyabutra	<i>[Signature]</i>	22/02/00																									



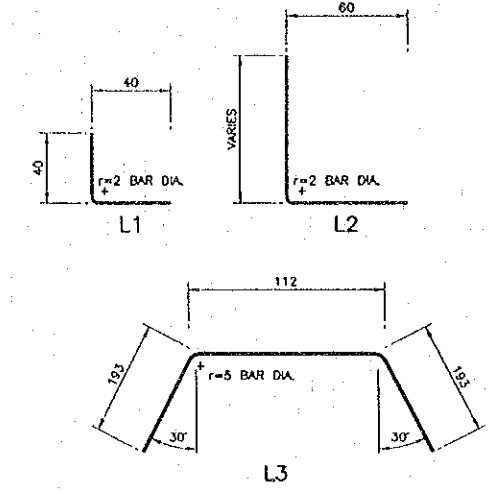
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SECTION (A) - (A)  
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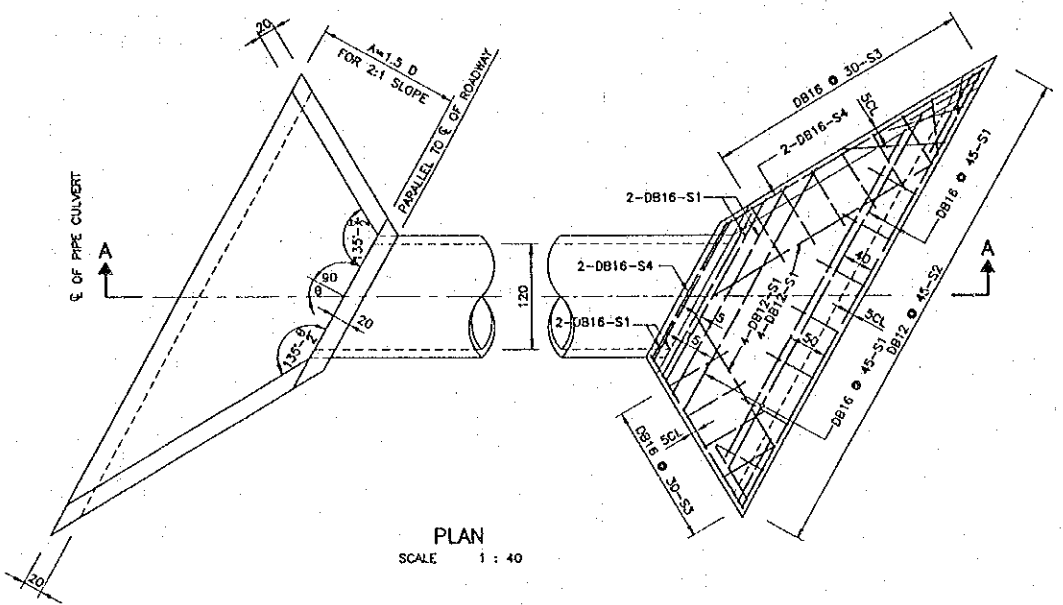


END VIEW  
 SCALE 1 : 25

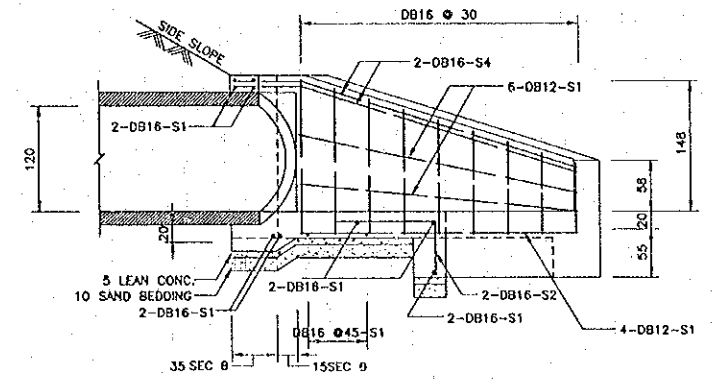


BAR BENDING DIAGRAMS  
 NOT TO SCALE

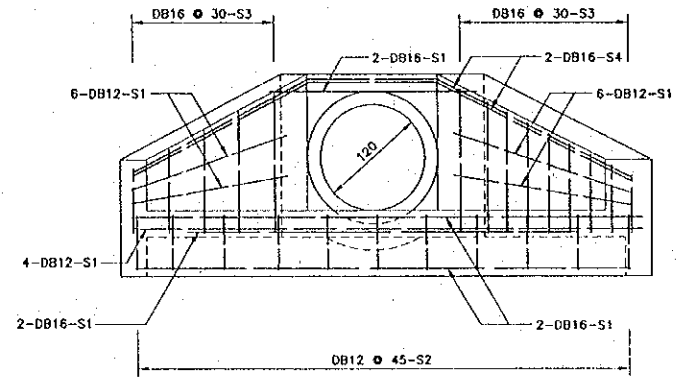
R.C. HEADWALL DETAIL FOR 80 CM. R.C.P. CULVERT



PLAN  
 SCALE 1 : 40

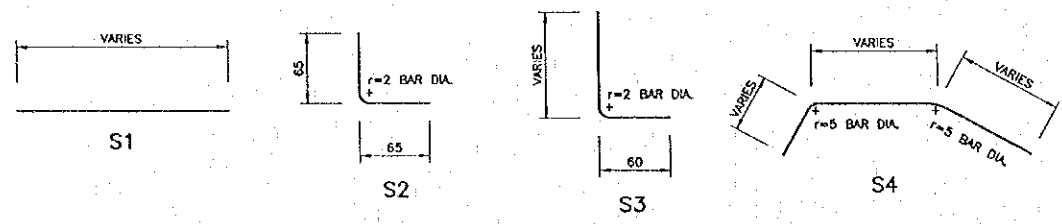


SECTION (A) - (A)  
 SCALE 1 : 40



END VIEW  
 SCALE 1 : 40

R.C. HEADWALL DETAIL FOR 120 CM. SKEW 14'6"32" R.C.P. CULVERT



BAR BENDING DIAGRAMS  
 NOT TO SCALE

NOTES :

1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
2. CONCRETE SHALL HAVE BE CLASS D (24 N/MM<sup>2</sup>)
3. REINFORCING STEEL SHALL BE DEFORMED BARS GRADE SD 295.
4. CLEAR CONCRETE COVER SHALL BE 4 CM. UNLESS OTHERWISE INDICATED.
5. LOCATION OF LAP SPLICE OF REBARS SHALL BE APPROVED BY THE ENGINEER.
6. LAP LENGTH SHALL NOT BE LESS THAN 24 BARS DIAMETER.
7. ALL CONCRETE EXPOSED CORNERS SHALL HAVE 2 CM. CHAMFER UNLESS OTHERWISE INDICATED.

PROJ. NO. 14-FEB-2000 - 15-1734

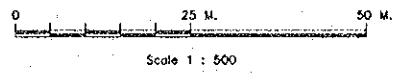
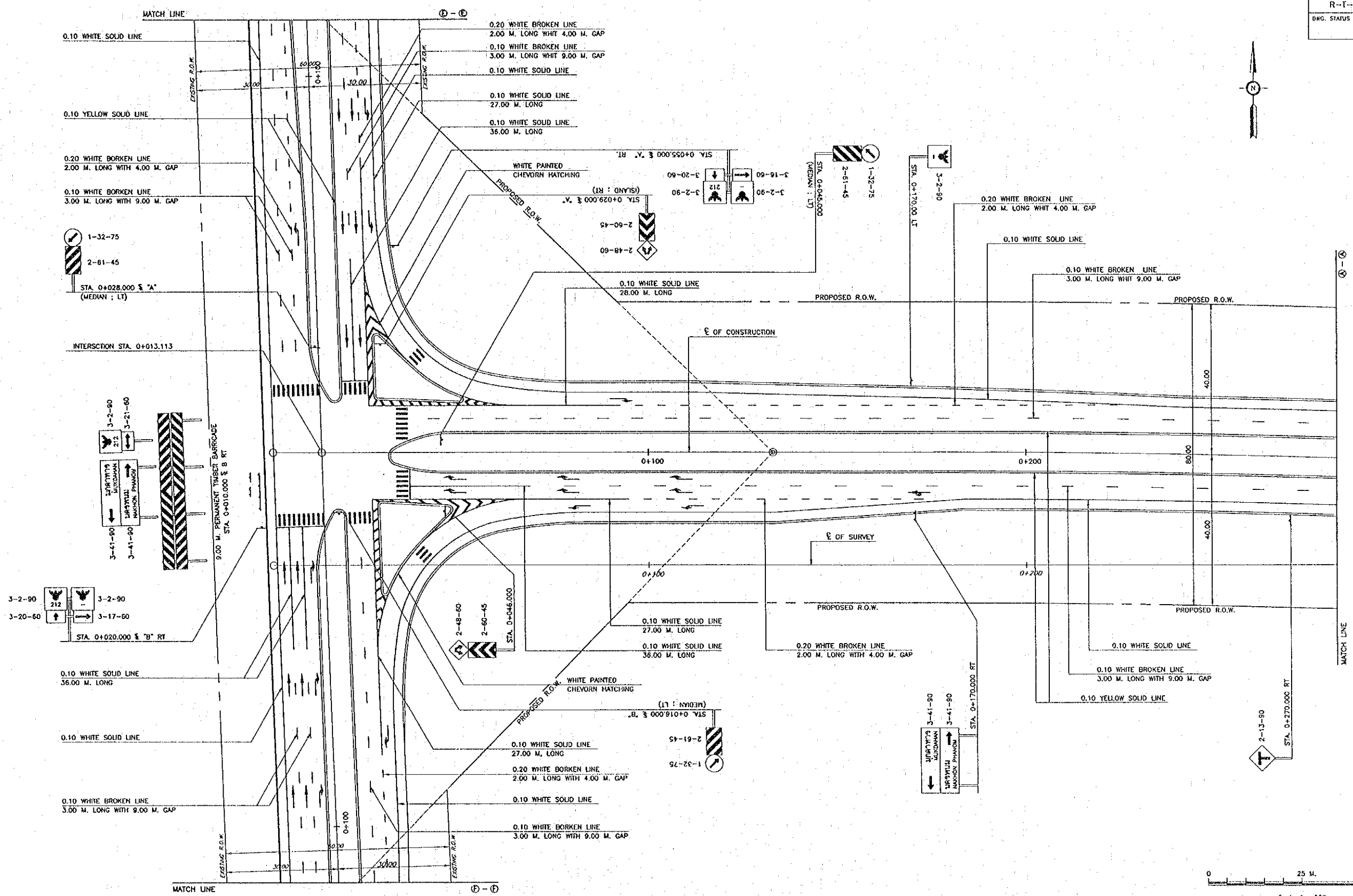
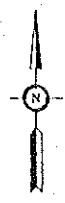
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	H. Osho	<i>[Signature]</i>	11/01/00	R.C. HEADWALL FOR R.C.P. CULVERT
DESIGN CHECK	T. Masutani	<i>[Signature]</i>	21/01/00	
SUBMITTED	A. Hirata	<i>[Signature]</i>	21/01/00	
APPROVED	S. Temiyabutra	<i>[Signature]</i>	21/01/00	



Proj. date: Mon. 14. Feb. 2000 = 15:21:57

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

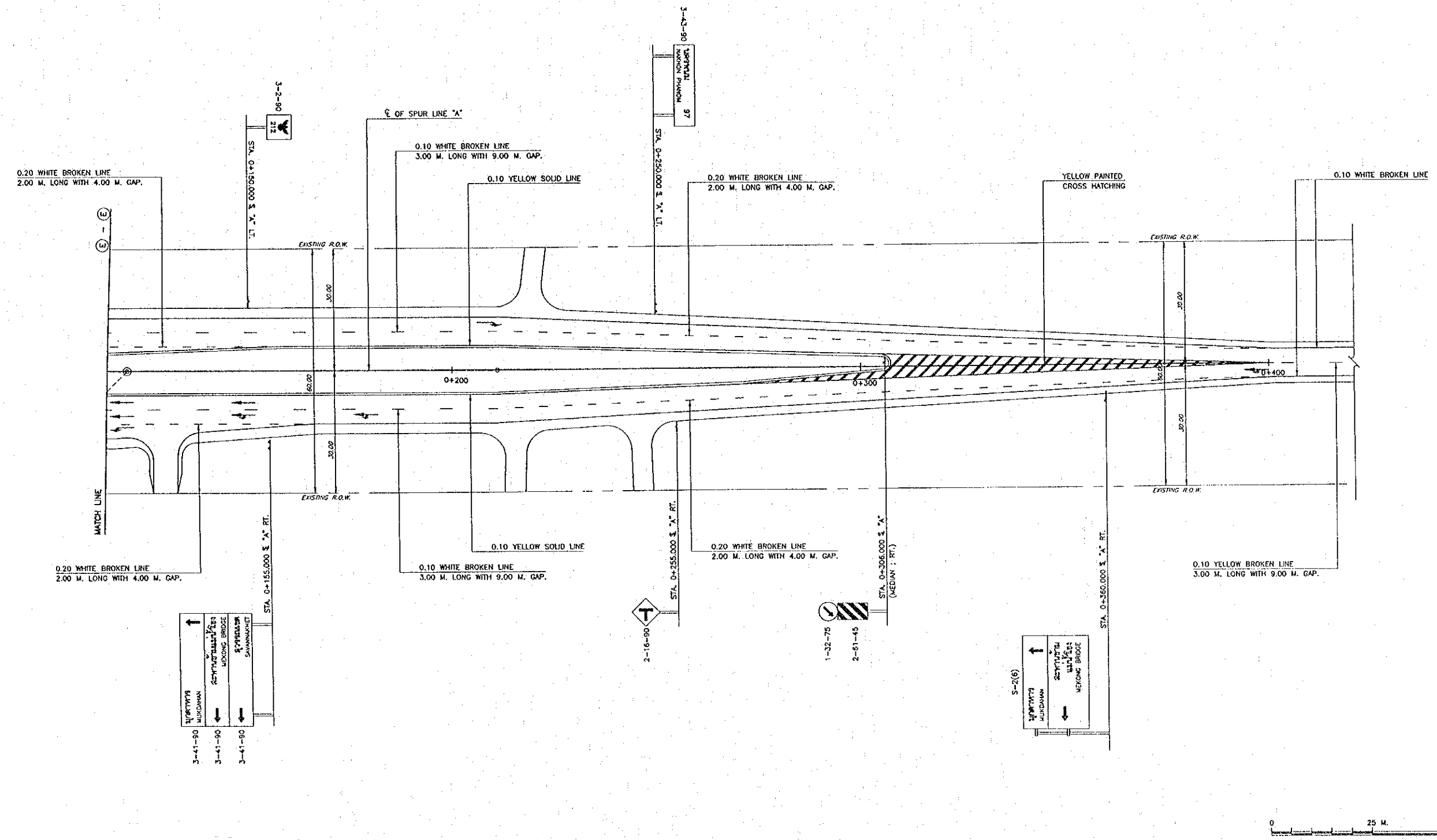
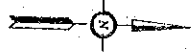
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/10/00
DESIGN CHECK	T. Matsuura	<i>[Signature]</i>	12/01/00
SUBMITTED	A. Hirokuni	<i>[Signature]</i>	12/02/00
APPROVED	S. Teriyabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN-1**



DATE OF ISSUE:		05/03/2000
DWG. NO.	R-T-2	SHEET NO. 45
DWG. STATUS		



Plot Date: Mon, 14 Feb 2000 15:30:48

REV.	DATE	DESCRIPTION	APPROVED

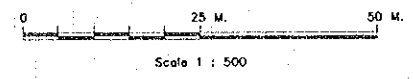
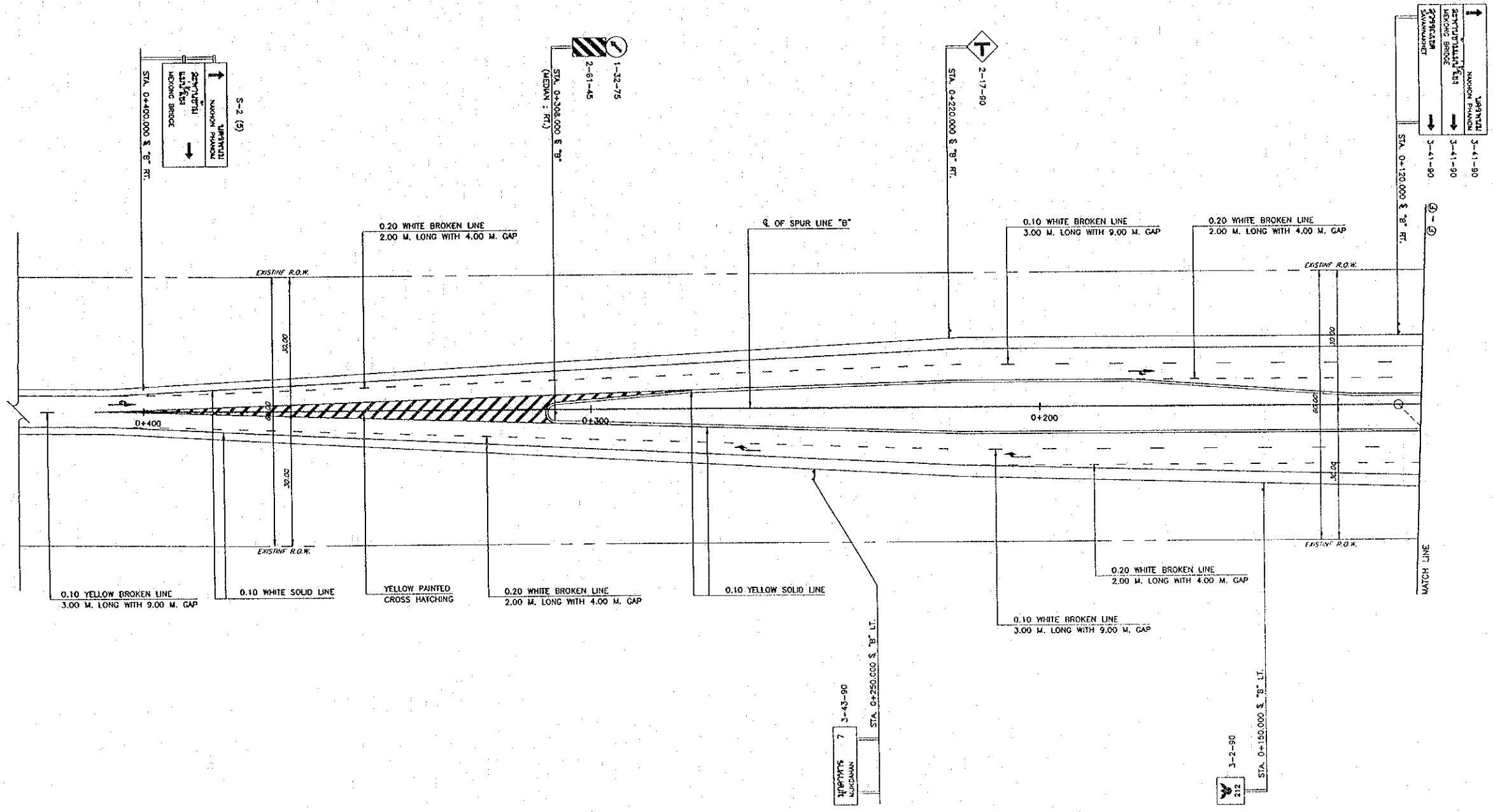
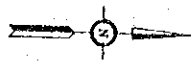
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	M. Oshio	<i>[Signature]</i>	11/12/99
DESIGN CHECK	T. Masutani	<i>[Signature]</i>	12/01/99
SUBMITTED	A. Hirofumi	<i>[Signature]</i>	21/02/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	24/02/00

DWG. TITLE:  
**TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN-2**



Plot date: Mon. 14 Feb 2000 - 16:06:20

REV.	DATE	DESCRIPTION	APPROVED

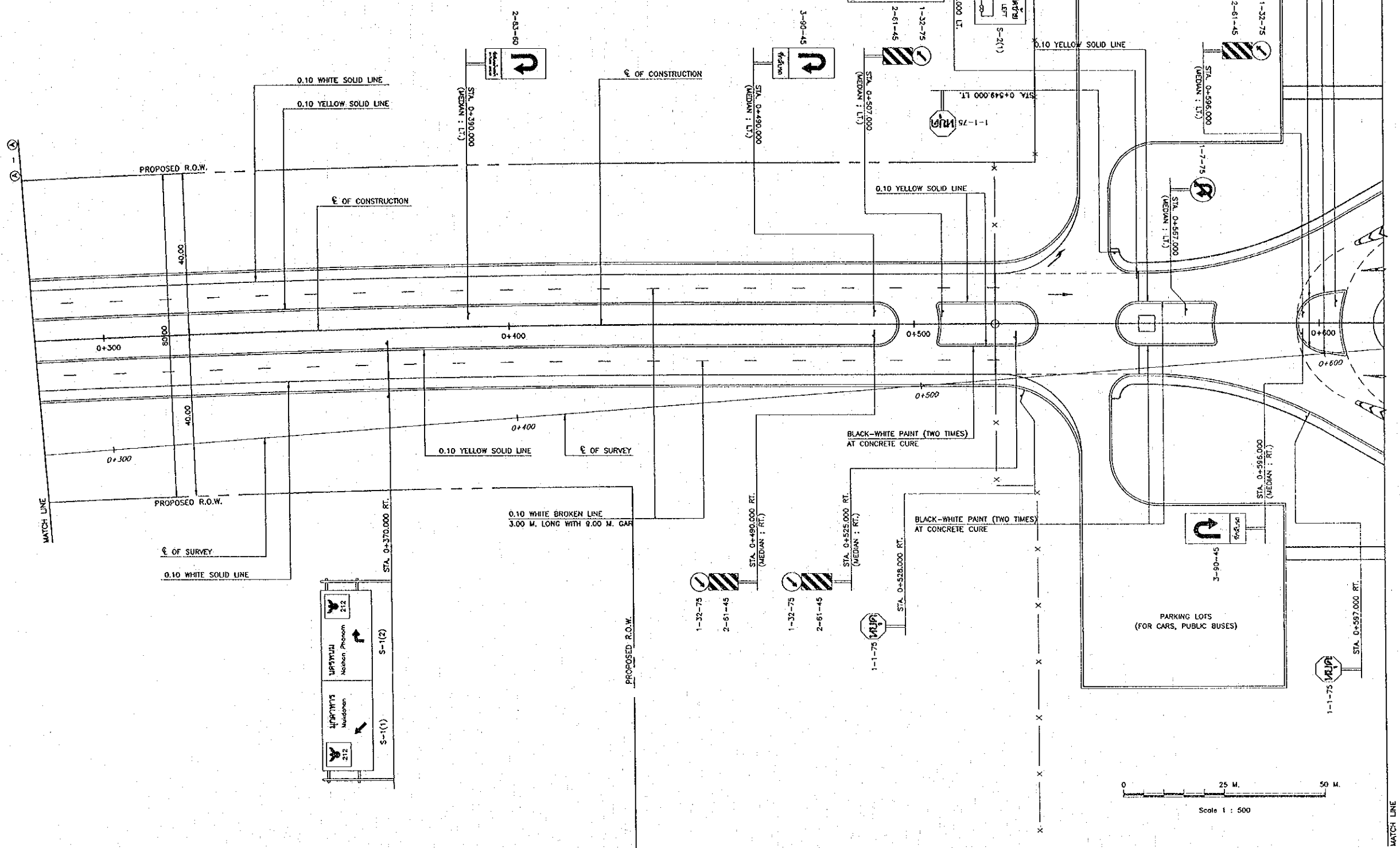
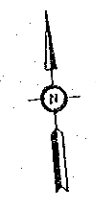
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	<i>[Signature]</i>	1/2/00
DESIGN CHECK	T. Masutawa	<i>[Signature]</i>	1/2/00
SUBMITTED	A. Hirotoni	<i>[Signature]</i>	1/2/00
APPROVED	S. Temjokultra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN-3**



Plot date: Mon, 14 Feb 2000 - 16:09:46

REV.	DATE	DESCRIPTION	APPROVED

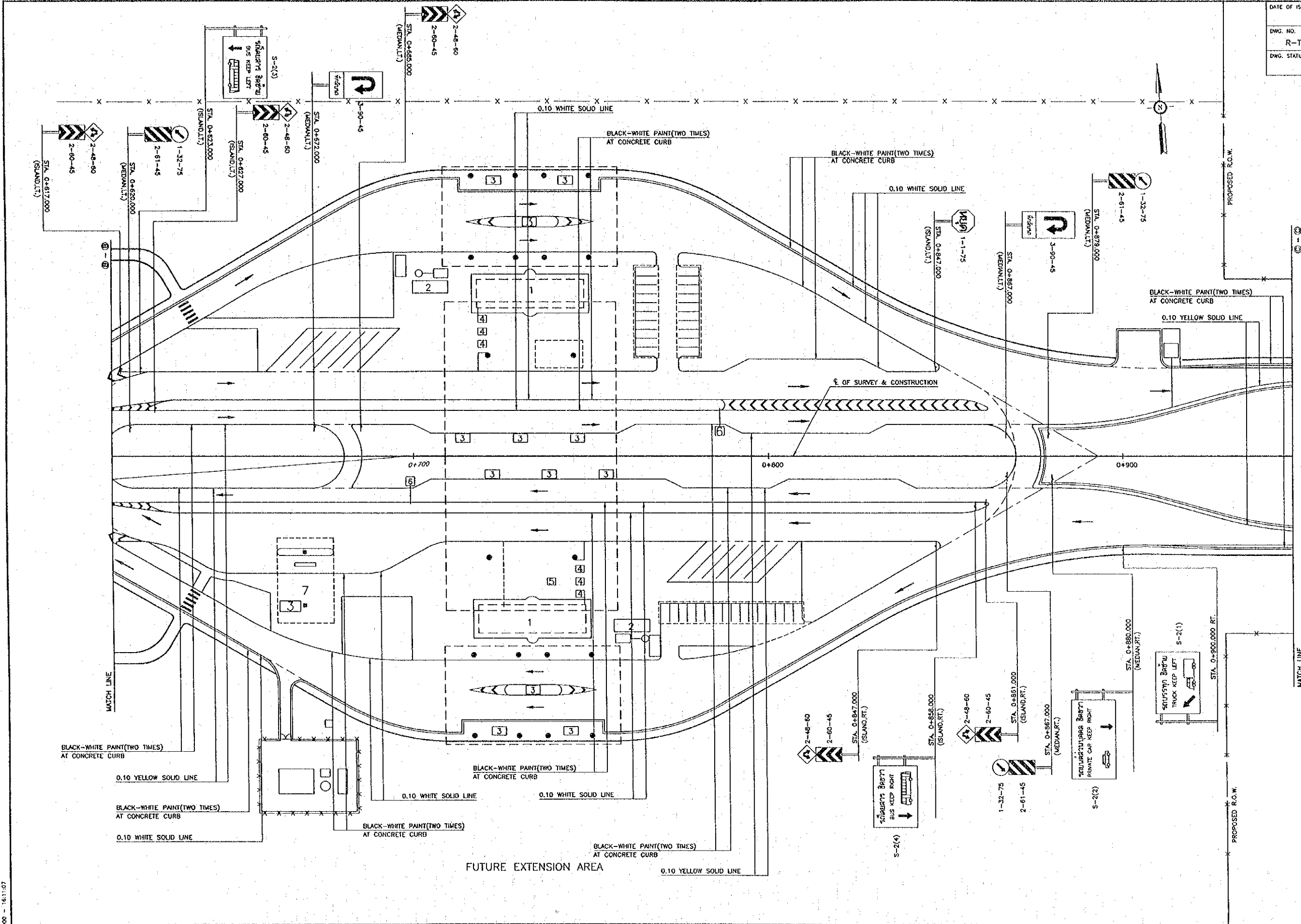
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Ohta	<i>[Signature]</i>	2/20/00
DESIGN CHECK	I. Morizono	<i>[Signature]</i>	2/20/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	2/20/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	2/20/00

DWG. TITLE: **TRAFFIC SIGN AND PAVEMENT MARKING-4 LAYOUT PLAN-4**



REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

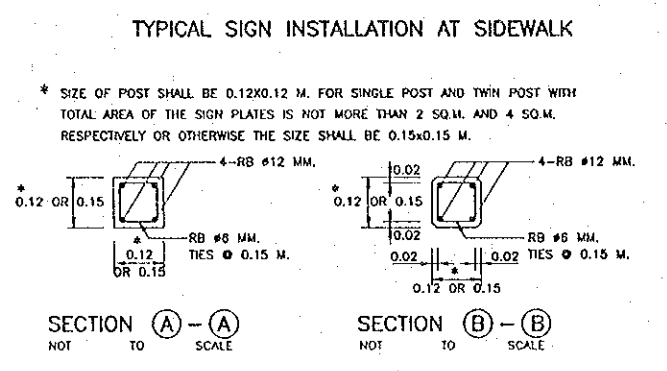
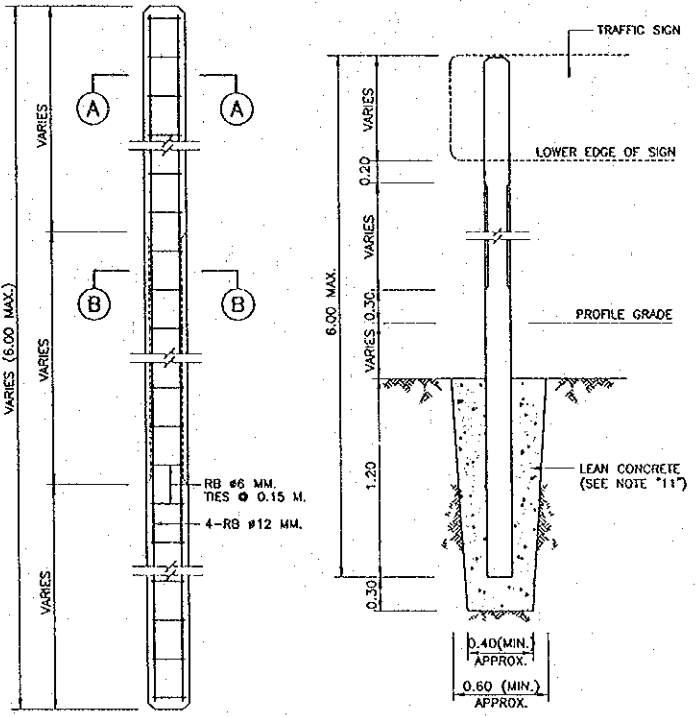
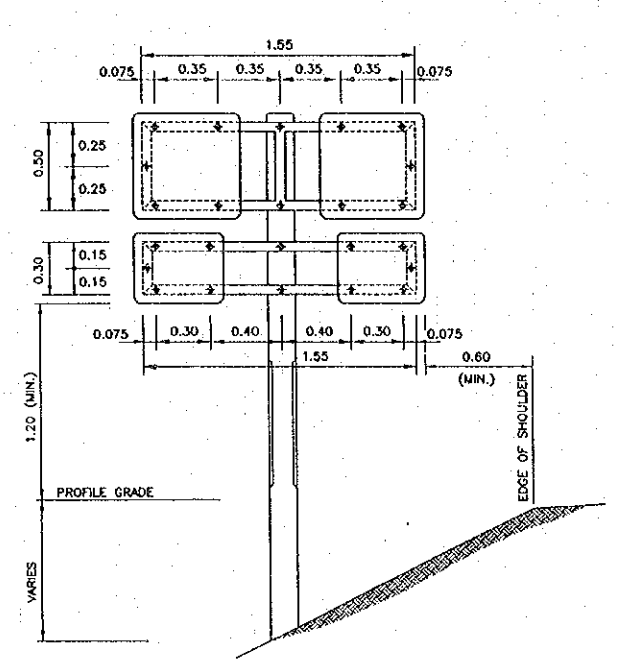
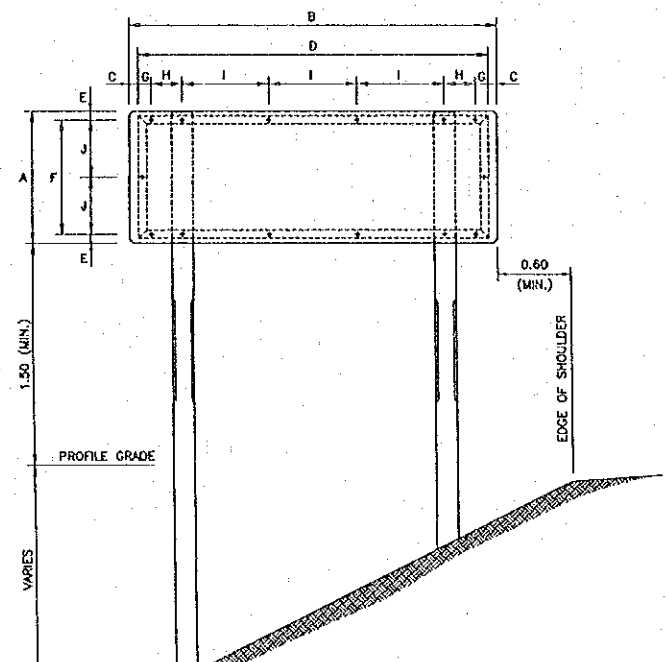
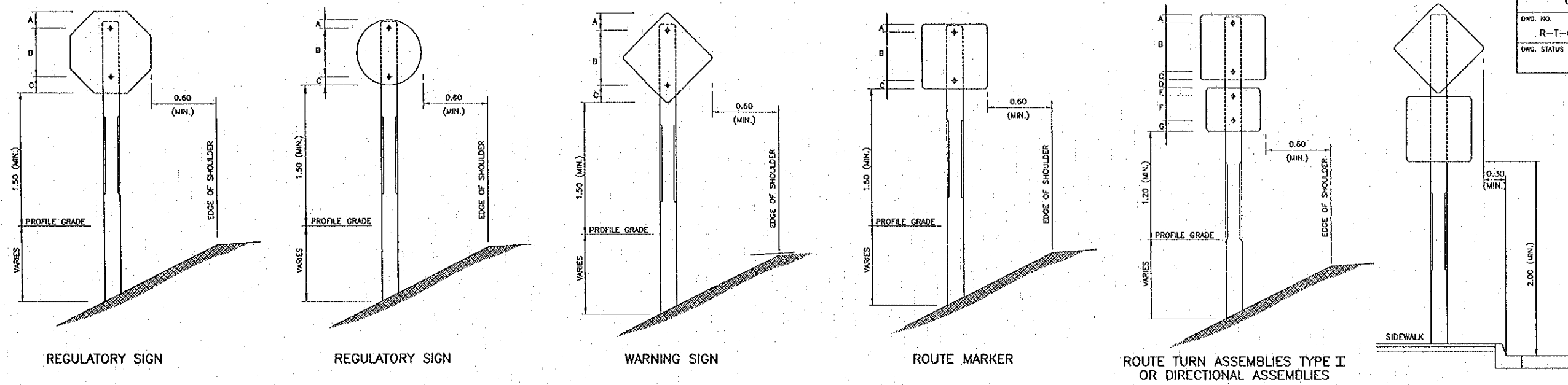
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

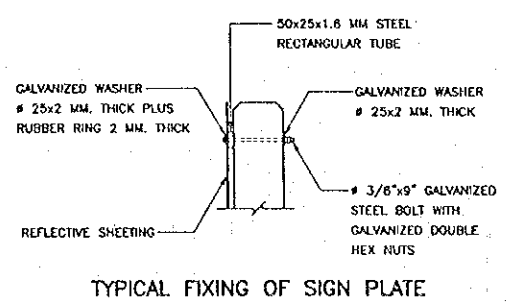
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	<i>[Signature]</i>	11/02/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	08/02/00
SUBMITTED	A. Hirofumi	<i>[Signature]</i>	01/02/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	20/02/00

DWG. TITLE:  
**TRAFFIC SIGN AND PAVEMENT MARKING LAYOUT PLAN-5**

Plot Date: Mon, 14 Feb 2000 16:11:07



- NOTES :**
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  - SIGN PLATE SHALL BE MADE OF 2 MM. THICK ALUMINIUM ALLOY.
  - ALUMINIUM ALLOY SIGN PLATE SHALL CONFORM TO TIS. 331
  - UNLESS OTHERWISE INDICATED, SIGN AND THEIR SUPPORTS SHALL BE OF THE SIZES, COLORS AND TYPES PRESCRIBED BY, AND SITE IN ACCORDANCE WITH THE RECOMMENDATIONS OF, THE DEPARTMENT'S TRAFFIC CONTROL DEVICE MANUAL, PART I ISSUED B.E. 2531
  - REFLECTIVE SHEETING SHALL CONFORM TO TIS.608 TYPE 1 (EFFICIENT OF RETRO-REFLECTION LEVEL 1)
  - SIGN FRAME SHALL BE MADE OF 50x25x1.6 MM. STEEL RECTANGULAR TUBING FRAME WELDED AND SMOOTHED IN PRIMING PAINT FOR FRAME SHALL BE RUST PREVENTIVE PAINT (RED LEAD BASED PRIMER FOR IRON AND STEEL SURFACED, TYPE 3) WHICH CONFORMS TO TIS.389; THE SUCCEEDING COATING SHALL BE PAINTED WITH BLACK METAL PAINT.
  - LENGTH OF SIGN POSTS AND POSITIONS OF HOLES STATED IN THE DRAWING ARE FOR THE MIN. SIZE ONLY THESE LENGTHS AND POSITION OF HOLES SHALL BE ADJUSTED DEPENDING ON SITE CONDITIONS.
  - PORTION OF CONCRETE POST FROM GROUND LINE TO THE ELEVATION OF 20 CM. ABOVE FINISHED ROADWAY PROFILE SHALL BE PAINTED IN BLACK AND ALL OTHER PART SHALL BE PAINTED IN WHITE.
  - BACK OF SIGN, CLOSE TO EDGE OF PAVEMENT SIDE, SHALL BE STAMPED WITH DEPTH NOT LESS THAN 0.5 MM.
  - CONCRETE SHALL HAVE BE CLASS E (18 N/MM<sup>2</sup>)
  - LEAN CONCRETE FOR SIGN POST BASE SHALL BE CLASS F (15 N/MM<sup>2</sup>)
  - CLEAR CONCRETE COVER SHALL BE 2.5 CM.
  - REINFORCING STEEL SHALL BE GRADE SR 235.



**TABLE I POSITION OF HOLES FOR FIXING SIGN PLATES TO SIGN POST**

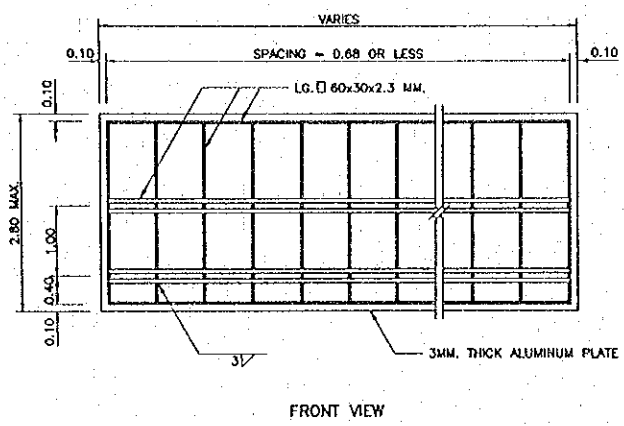
DIMENSION	REGULATORY SIGN SIZES (CM.)			WARNING SIGN SIZES (CM.)			ROUTE MARKER (CM.)			ROUTE TURN ASSEMBLIES TYPE I & TYPE II (CM.)		
	60	75	90	60	75	90	60	75	90	60	75	90
A	7.5	15	15	20	20	20	7.5	7.5	7.5	7.5	7.5	7.5
B	45	45	60	45	68.5	90	45	60	75	45	60	75
C	7.5	15	15	20	17.5	17.5	7.5	7.5	7.5	7.5	7.5	7.5
D							7.5	7.5	7.5	7.5	7.5	7.5
E							7.5	7.5	7.5	7.5	7.5	7.5
F							22.5	35	45	22.5	35	45
G							10	7.5	7.5	10	7.5	7.5

**TABLE II POSITION OF HOLES FOR FIXING SIGN PLATES TO SIGN POST**

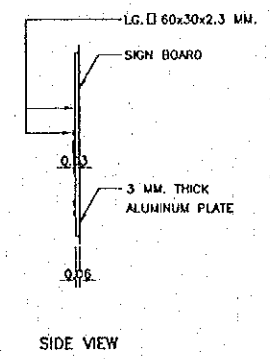
SIGN SIZE (CM.)		DIMENSION (CM.)										REMARKS
WIDTH	LENGTH	A	B	C	D	E	F	G	H	I	J	
75	210	5	200	5	65	7.5	17.5	50	32.5			DESTINATION WITH ARROW SIGN, THAI & ENGLISH WORDS
90	240	20	200	12.5	65	7.5	17.5	50	32.5			
60	210	5	200	5	50	7.5	17.5	50	25			DESTINATION WITH ARROW SIGN, THAI WORDS ONLY
75	240	20	200	12.5	50	7.5	17.5	50	25			
75	180	5	170	5	65	7.5	17.5	40	32.5			DESTINATION AND DISTANCE SIGN, THAI & ENGLISH WORDS
90	180	5	170	12.5	65	7.5	17.5	40	32.5			
60	180	5	170	5	50	7.5	17.5	40	25			DESTINATION AND DISTANCE SIGN, THAI ONLY
75	180	5	170	12.5	50	7.5	17.5	40	25			
65	180	5	170	5	55	7.5	17.5	40	27.5			TOWN & DISTRICT BOUNDARY SIGN, THAI & ENGLISH WORDS
80	180	5	170	12.5	55	7.5	17.5	40	27.5			

Proj. date: Mar. 14, Feb. 2000 - 1613207

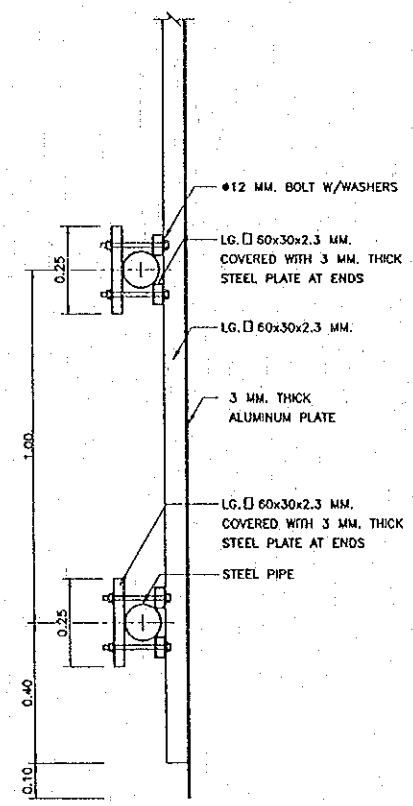
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	H. Gido		11/01/00	MINOR SIGN AND SIGN POST DETAILS
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Masuzawa		11/01/00	
						SUBMITTED	A. Hirotsu		11/01/00	
						APPROVED	S. Taniyabutra		11/01/00	



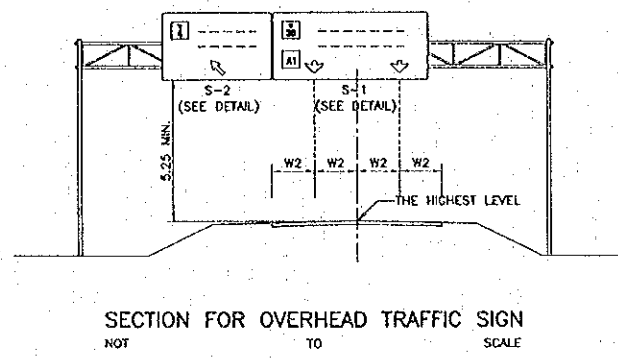
TYPICAL SIGN FRAME  
SCALE 1:50



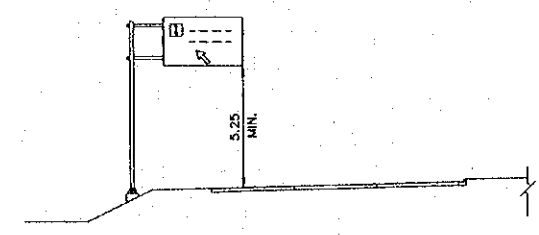
SIDE VIEW



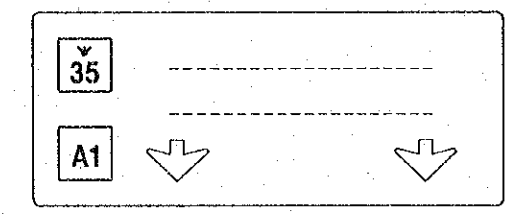
DETAIL 1  
SCALE 1:10



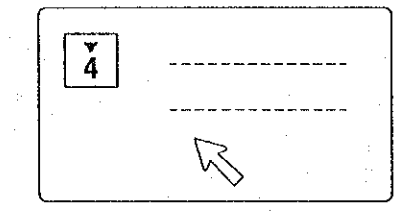
SECTION FOR OVERHEAD TRAFFIC SIGN  
NOT TO SCALE



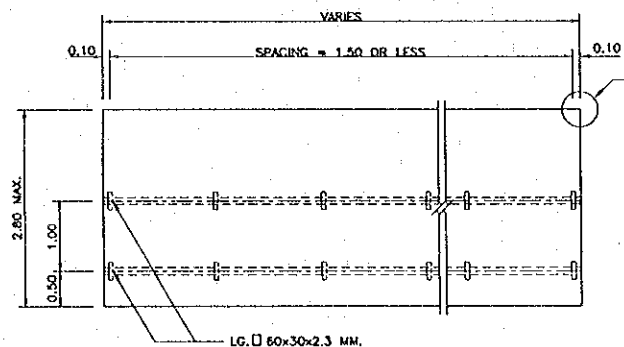
SECTION FOR OVERHANGING TRAFFIC SIGN  
NOT TO SCALE



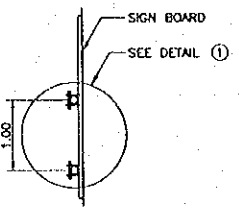
DETAIL "S-1"



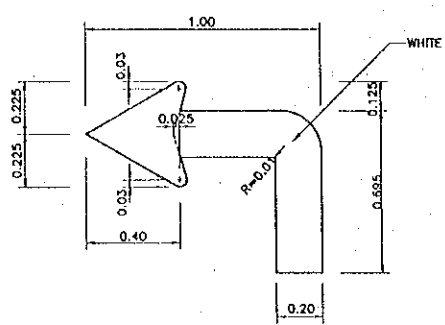
DETAIL "S-2"



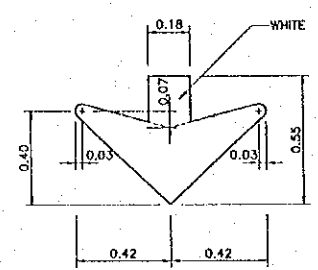
ERECTION FOR SIGN BOARD  
SCALE 1:50



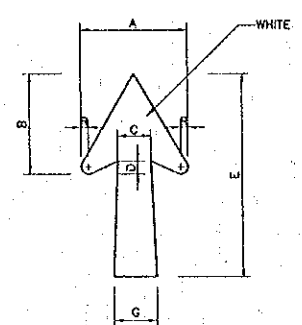
SIDE VIEW



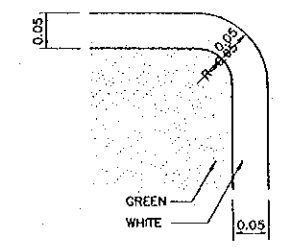
TURN OFF ARROW  
SCALE 1:15



VERTICAL DOWN ARROW  
SCALE 1:15

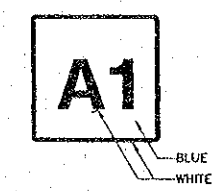
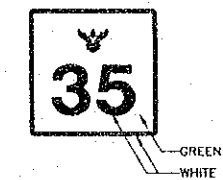
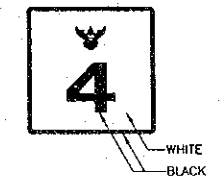


TURN OFF ARROW  
NOT TO SCALE



DETAIL 2  
SCALE 1:5

ALPHABET HEIGHT (CM.)	DIMENSION (CM.)						
	A	B	C	D	E	F	G
20	38	30	9	3	62	1.5	12
25-35	46	35	12	4	75	2	18
40	56	42	14	5	87	2.5	18

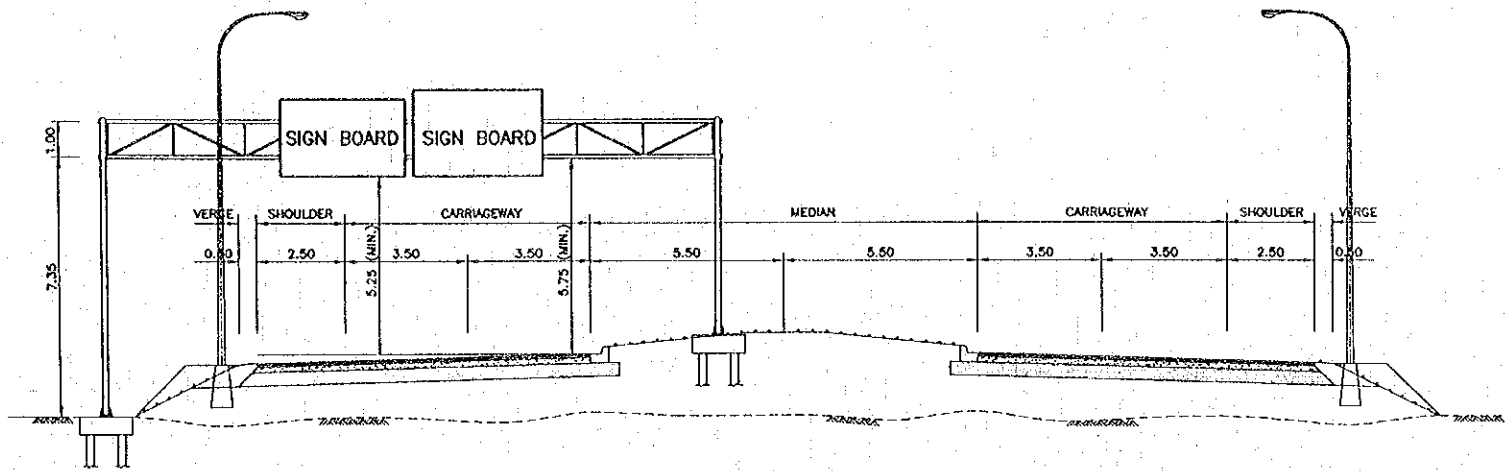


NOTES :

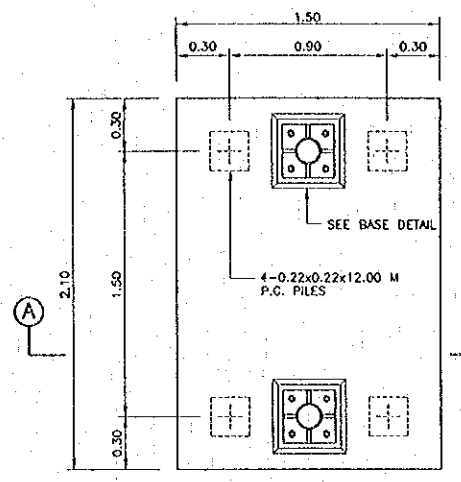
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
- LIGHT GAUGE STEEL (L.G.) OF SIGN FRAME SHALL BE CONNECTED TOGETHER WITH 3 MM. WELD.
- ALL STEEL AND BOLT ASSEMBLY SHALL BE GALVANIZED ZINC COATING SHALL NOT BE LESS THAN 550 GRAMS PER SQUARE METER.
- OVERHEAD SIGN BOARD SHALL BE OF ALUMINUM PLATE COVERED WITH REFLECTIVE SHEETING CONFORMED TO TIS 606 TYPE 2 (EFFICIENT OF RETRO-REFLECTION LEVEL 2)

Post date: Mon, 14 Feb 2000 - 15:15:30

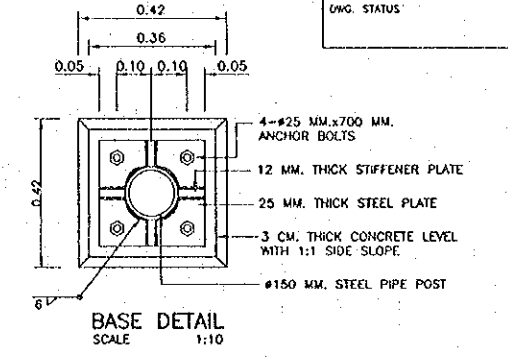
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.				DESIGN	H. Orita		11-02-01	OVERHEAD SIGN BOARD DETAILS
								DESIGN CHECK	T. Masuzawa		02-01	
								SUBMITTED	A. Hiratani		01-05	
								APPROVED	S. Teniyoburo		27/02/00	



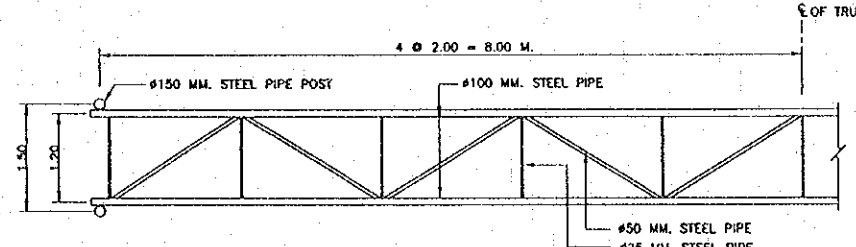
FRONT ELEVATION  
SCALE 1:100



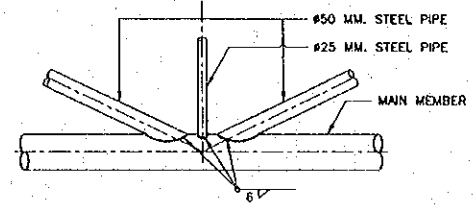
FOOTING PLAN  
SCALE 1:20



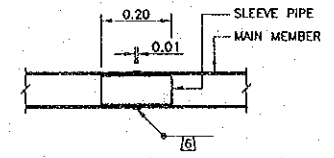
BASE DETAIL  
SCALE 1:10



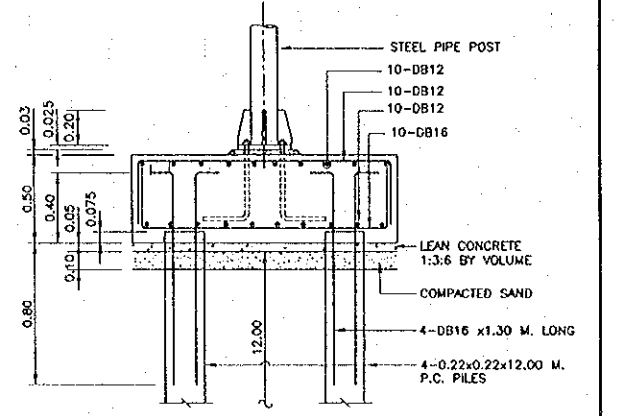
TRUSS PLAN  
SCALE 1:50



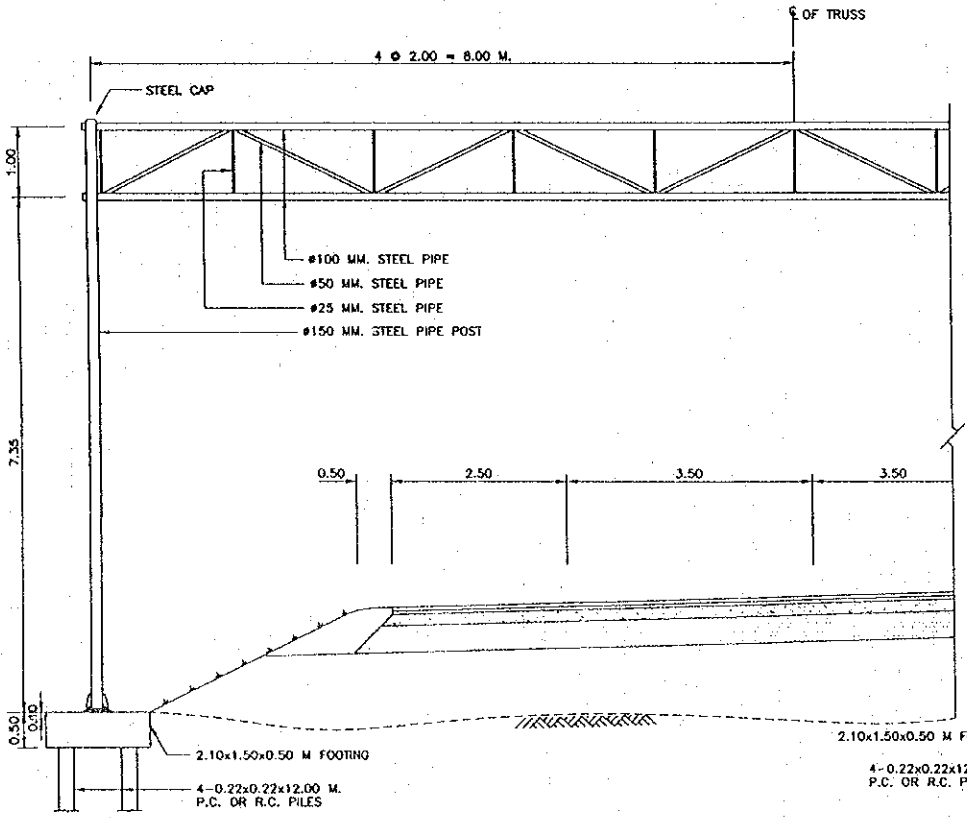
JOINT DETAIL  
SCALE 1:10



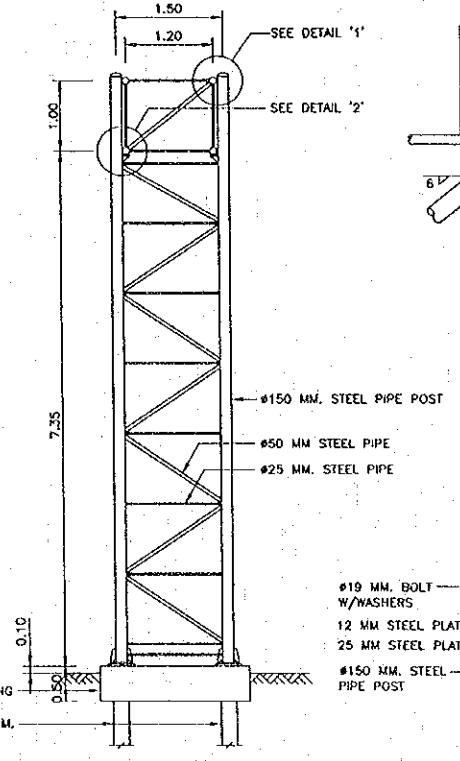
PIPE CONNECTION DETAIL  
SCALE 1:10



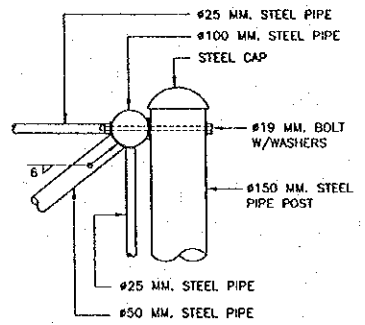
SECTION A - A  
SCALE 1:20



FRONT ELEVATION  
SCALE 1:50

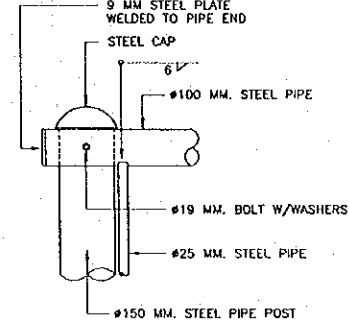


SIDE ELEVATION  
SCALE 1:50

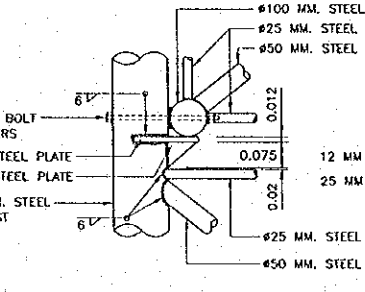


SIDE VIEW

DETAIL #1  
NOT TO SCALE

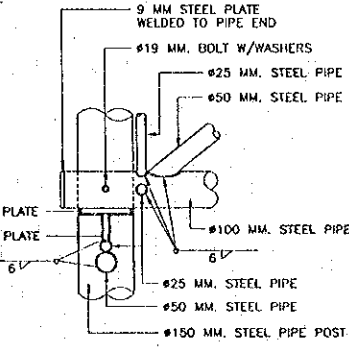


FRONT VIEW



SIDE VIEW

DETAIL #2  
NOT TO SCALE



FRONT VIEW

- NOTES:
- ALL DIMENSIONS ARE IN METERS EXCEPT WELDING SYMBOLS AND PIPE DIAMETER ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - CONCRETE SHALL HAVE BE CLASS D (24 N/MM<sup>2</sup>)
  - REINFORCING STEEL SHALL BE GRADE SR 235 FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BARS.
  - ALL HOLLOW STEEL SECTIONS, STEEL PIPES SHALL CONFORM TO IIS 107 GRADE HS 41  
 FOR #25 MM STEEL PIPE WT. 1.99 Kg/M  
 #50 MM STEEL PIPE WT. 4.11 Kg/M  
 #100 MM STEEL PIPE WT. 9.83 Kg/M  
 #150 MM STEEL PIPE WT. 17.82 Kg/M
  - VERTICAL PIPE POST SHALL BE CONNECTED AT UPPER PART.
  - ALL WELDING SHALL BE DONE WITH WELDING RODS WHICH CONFORM TO IIS 49 TYPE E 4202 x 13.
  - ALL STEEL SHALL BE GALVANIZED ZINC COATING SHALL NOT BE LESS THAN 550 GRAMS PER SQUARE METER.
  - SPREAD FOOTING SHALL BE USED FOR ALLOWABLE SOIL BEARING CAPACITY UNDER THE FOUNDATION MORE THAN 10 TON PER SQUARE METER.

File: 05/03/2000 - 16:20:53

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

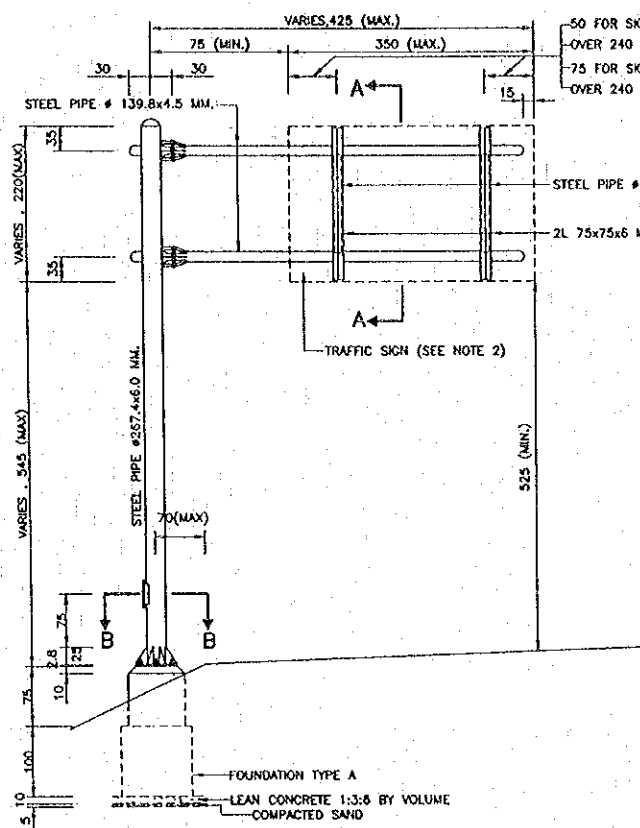
ORIENTAL CONSULTANTS CO., LTD.  
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

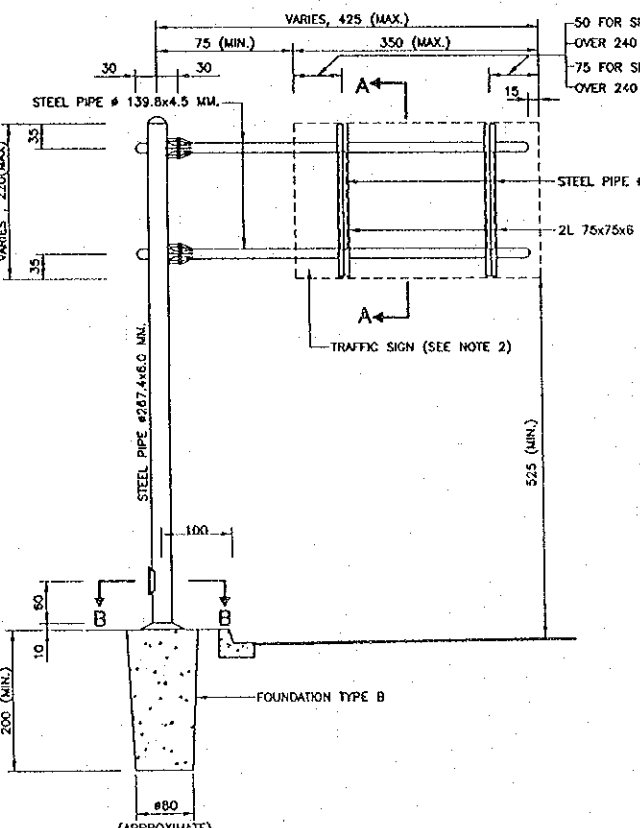
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Okada	<i>[Signature]</i>	11/12/00	STEEL FRAME FOR MOUNTING OVERHEAD SIGN SPAN 20.00 M. MAX.
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	12-02-00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>		
APPROVED	S. Temiyabutra	<i>[Signature]</i>	23/02/00	

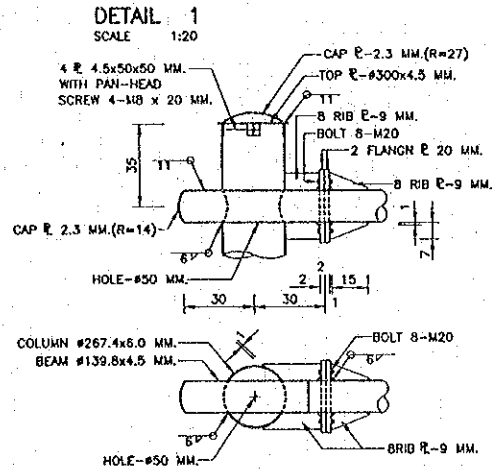
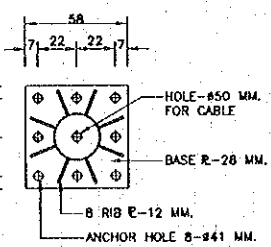
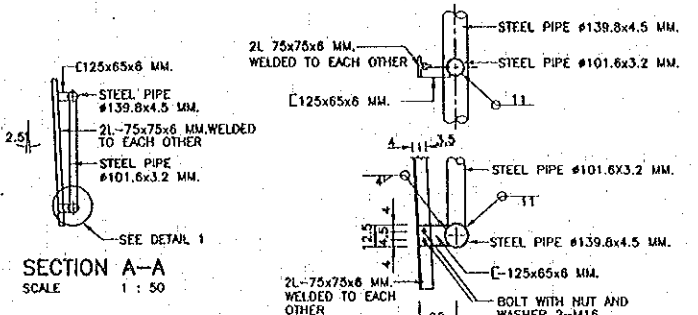
STEEL FRAME FOR MOUNTING OVERHEAD SIGN  
SPAN 20.00 M. MAX.



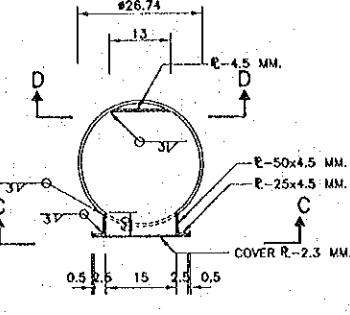
STEEL POLE FOR OVERHANGING TRAFFIC SIGN TYPE 1  
 SCALE 1 : 50



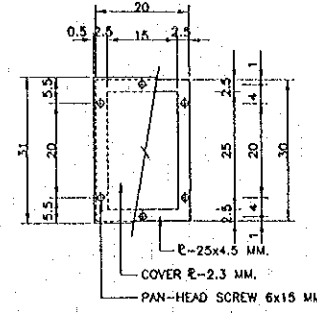
STEEL POLE FOR OVERHANGING TRAFFIC SIGN TYPE 2  
 SCALE 1 : 50



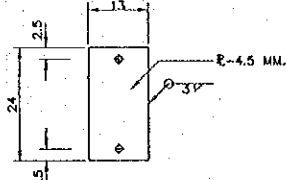
TOP OF STEEL POLE AND JOINT DETAIL  
 SCALE 1 : 15



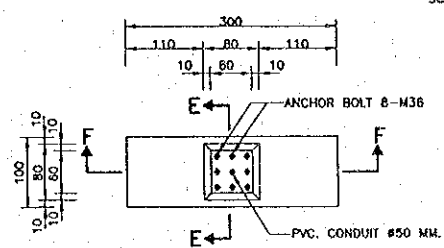
SECTION B-B  
 SCALE 1 : 7.5



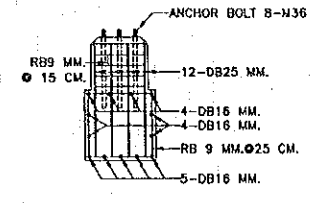
SECTION C-C  
 SCALE 1 : 7.5



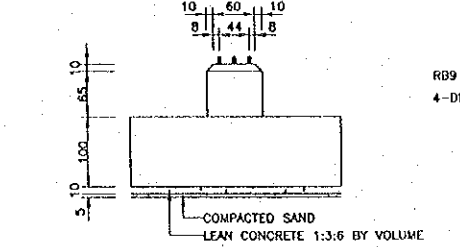
SECTION D-D  
 SCALE 1 : 7.5



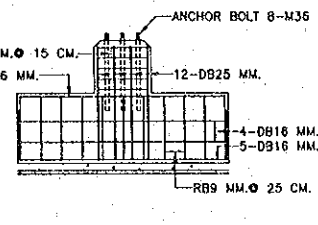
PLAN OF FOUNDATION TYPE A  
 SCALE 1 : 50



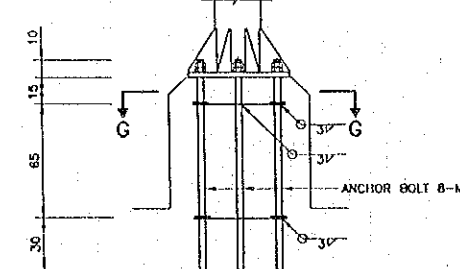
SECTION E-E  
 SCALE 1 : 50



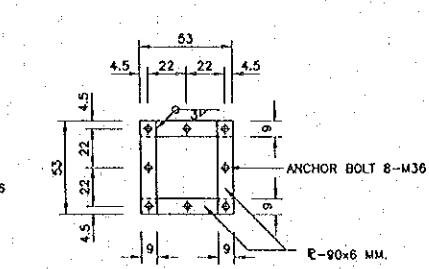
SIDE ELEVATION OF FOUNDATION TYPE A  
 SCALE 1 : 50



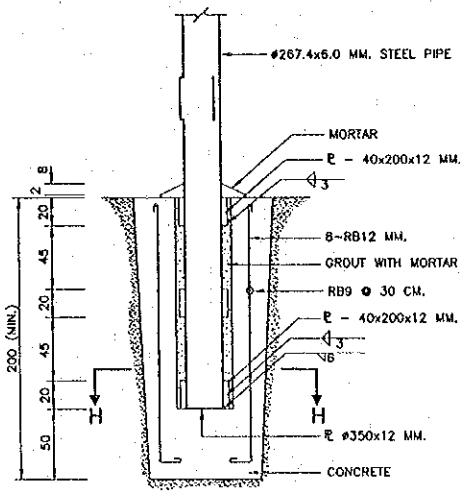
SECTION F-F  
 SCALE 1 : 50



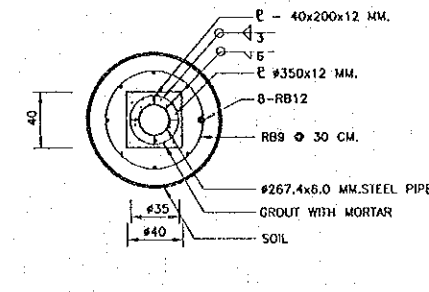
ANCHOR BOLT DETAIL  
 SCALE 1 : 20



SECTION G-G  
 SCALE 1 : 20



FOUNDATION TYPE B  
 SCALE 1 : 25



SECTION H-H  
 SCALE 1 : 25

- NOTES :
- DIMENSIONS FOR WELDING SYMBOLS ARE IN MILLIMETERS , ALL OTHER DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
  - THIS DRAWING SHALL BE USED FOR TRAFFIC SIGNS, WHERE THE AREA OF THE SIGN INCLUDING THE GAPS BETWEEN PLATES IS NOT MORE THAN 52,800 SQ.CM. THE MAXIMUM LENGTH AND WIDTH OF THE SIGN SHALL NOT EXCEED 350 CM. AND 200 CM, RESPECTIVELY.
  - THE FOUNDATION TYPE (A) SHALL BE USED IN A SIDE SLOPE AREA AND FOUNDATION TYPE (B) SHALL BE USED IN A SIDEWALK OR RAISED MEDIAN.
  - THE ALLOWABLE SOIL BEARING CAPACITY UNDER THE FOUNDATION TYPE (A) SHALL BE MORE THAN 5 TONS PER SQ.M. EMBANKMENT AROUND FOUNDATION TYPE (B) SHALL BE COMPACTED TO 90 % OF THE MAXIMUM STANDARD DRY DENSITY.
  - THE DIMENSIONS OF STEEL PIPE SHOWN ARE THE OUTER DIAMETER AND THE THICKNESS OF THE PIPE FOR EXAMPLE : #267.4x6.0 MM. MEANS THE OUTER DIAMETER OF THE PIPE IS 267.4 MM. AND THE THICKNESS IS 6.0 MM.
  - STEEL PIPE SHALL CONFORM TO ONE OF THE FOLLOWING SPECIFICATIONS.
    - TIS.107 GRADE H541
    - JIS. G3444 GRADE STK 41
    - ASTM. A 252-75 GRADE 2
  - STRUCTURAL STEEL SECTION SHALL CONFORM TO TIS 116 GRADE Fe 24.
  - STEEL PIPE, STRUCTURAL STEEL SECTION, STEEL PLATE, BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED. ZINC COATING SHALL NOT BE LESS THAN 550 GRAMS PER SQUARE METER.
  - ELECTRIC ARC WELDING WHICH CONFORMS TO AISC STANDARD SHALL BE USED FOR WELDING STEEL.
  - CONCRETE SHALL BE CLASS D (24 N/MM<sup>2</sup>)
  - MORTAR SHALL BE COMPRISED OF PORTLAND CEMENT AND SAND IN THE PROPORTION 1 TO 1
  - REINFORCING STEEL SHALL BE GRADE SR 235 FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BARS.
  - CANTILEVER BEAM SHALL BE INSTALLED PERPENDICULAR TO THE ROADWAY ALIGNMENT. CAMBER SHALL BE PROVIDED FOR BEAM DEFLECTION.
  - WHERE SIGN LIGHTING IS REQUIRED , THE ELECTRICAL COMPONENTS SHALL CONFORM TO THE ELECTRICITY SUPPLY AUTHORITY'S REQUIREMENTS AND REGULATIONS.

REV. DATE DESCRIPTION APPROVED PROJECT STUDY TEAM

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

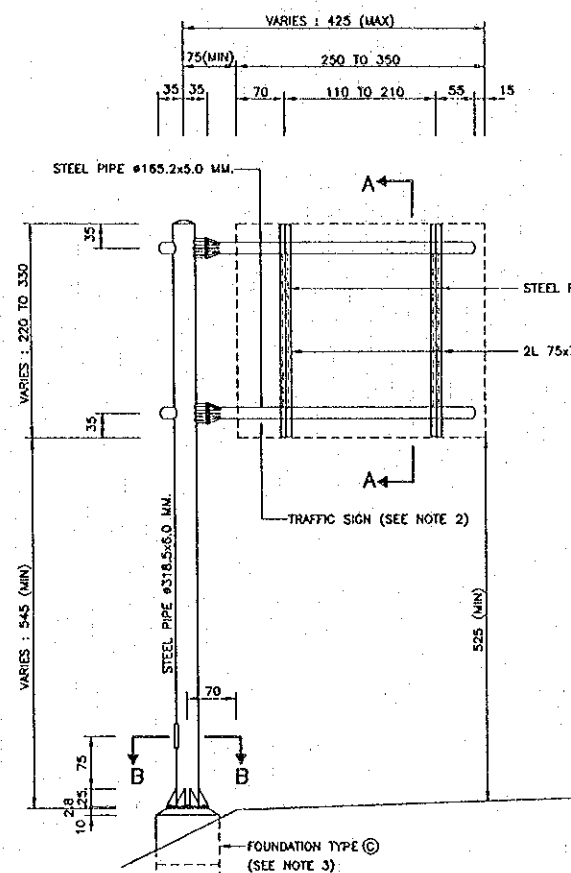
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

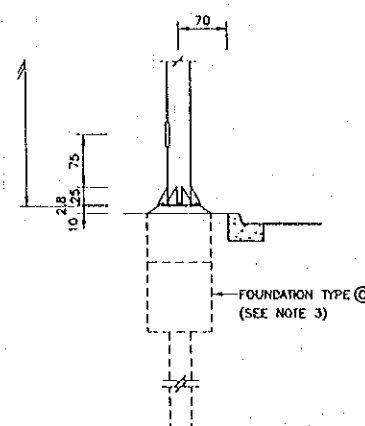
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Okita	<i>[Signature]</i>	18/02/00	STEEL POLE FOR OVERHANGING TRAFFIC SIGN-1 FOR SIGN PLATES NOT MORE THAN 52,800 SQ.CM.
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	17/02/00	
SUBMITTED	A. Horiuchi	<i>[Signature]</i>	17/02/00	
APPROVED	S. Temiyabuto	<i>[Signature]</i>	22/02/00	

STEEL POLE FOR OVERHANGING TRAFFIC SIGN-1  
 FOR SIGN PLATES NOT MORE THAN 52,800 SQ.CM.

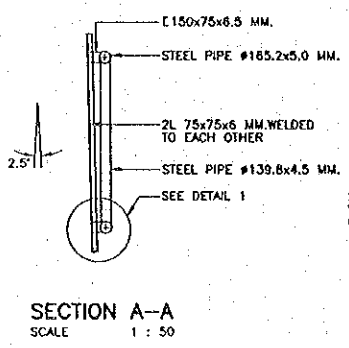




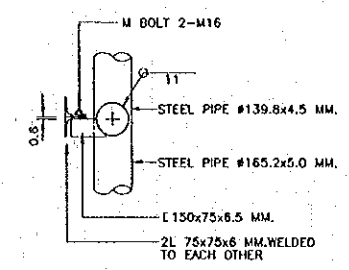
STEEL POLE FOR OVERHANGING TRAFFIC SIGN TYPE 3 AT SIDE SLOPE  
 SCALE 1 : 50



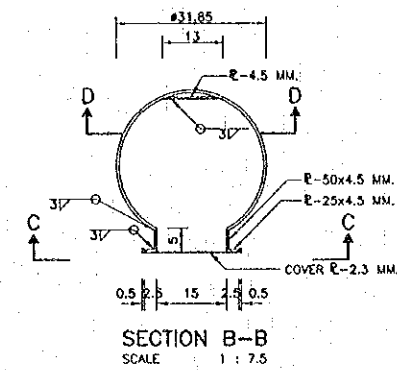
STEEL POLE FOR OVERHANGING TRAFFIC SIGN TYPE 3 AT SIDEWALK OR RAISED MEDIAN  
 SCALE 1 : 50



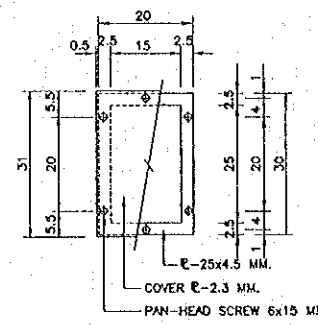
SECTION A-A  
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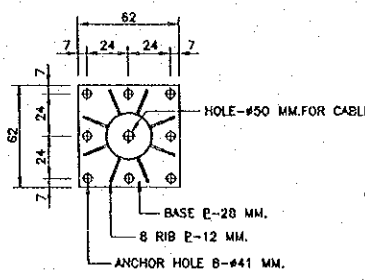
DETAIL 1  
 SCALE 1 : 15



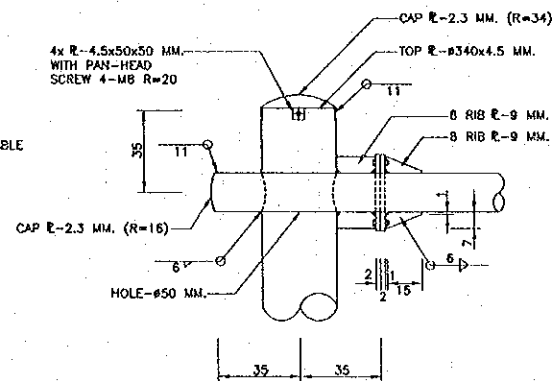
SECTION B-B  
 SCALE 1 : 7.5



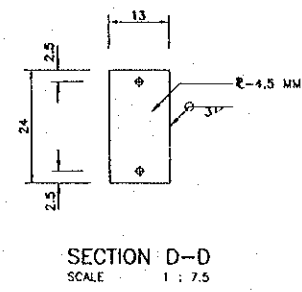
SECTION C-C  
 SCALE 1 : 7.5



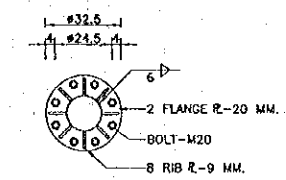
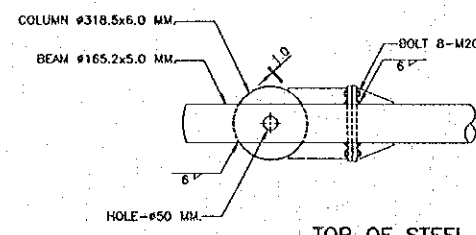
BASE OF STEEL POLE  
 SCALE 1 : 20



TOP OF STEEL POLE AND JOINT DETAIL  
 SCALE 1 : 15



SECTION D-D  
 SCALE 1 : 7.5



NOTES :

- DIMENSIONS FOR WELDING SYMBOLS ARE IN MILLIMETERS , ALL OTHER DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
- THIS DRAWING SHALL BE USED FOR TRAFFIC SIGNS , WHERE THE AREA OF THE SIGN IS NOT MORE THAN 108,000 SQ.CM THE MAXIMUM LENGTH AND WIDTH OF THE SIGN SHALL NOT EXCEED 350 CM. AND 330 RESPECTIVELY.
- IN CASE OF THE PILES SHALL NOT BE DRIVEN TO THE SOIL OR THE ALLOWABLE SOIL BEARING CAPACITY UNDER THE FOUNDATION MORE THAN 10 TON PER SQUARE METER.
- THE DIMENSIONS OF STEEL PIPE SHOWN ARE THE OUTER DIAMETER AND THE THICKNESS OF THE PIPE FOR EXAMPLE : #318.5x6.0 MM. MEANS THE OUTER DIAMETER OF THE PIPE IS 318.5 MM. AND THE THICKNESS IS 6.0 MM.
- STEEL PIPE SHALL CONFORM TO ONE OF THE FOLLOWING SPECIFICATIONS.
  - 5.1 TIS. 107 GRADE HS41
  - 5.2 JIS. G3444 GRADE STK41
  - 5.3 ASTM. A252-75 GRADE 2
- STRUCTURAL STEEL SECTION SHALL CONFORM TO TIS.116 GRADE F<sub>0</sub> 24
- STEEL PIPE, STRUCTURAL STEEL SECTION, STEEL PLATE, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED. ZINC COATING SHALL NOT BE LESS THAN 550 GRAMS PER SQUARE METER.
- ELECTRIC ARC WELDING WHICH CONFORMS TO AISC STANDARD SHALL BE USED FOR WELDING STEEL.
- CANTILEVER BEAM SHALL BE INSTALLED PERPENDICULAR TO THE ROADWAY ALIGNMENT. CAMBER SHALL BE PROVIDED FOR BEAM DEFLECTION.
- THIS DRAWING SHALL BE USED IN COMBINATION WITH DWG. NO. R-T-11.

Proj: 603: 000 - 14 Feb 2000 - 16.38:12

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
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 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEXONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

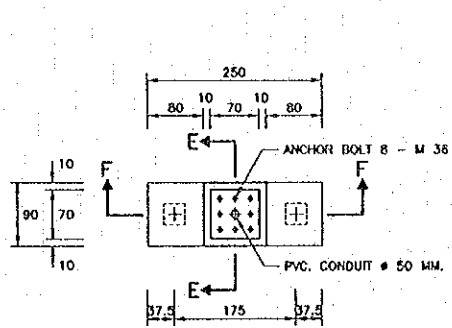
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Osho	<i>[Signature]</i>	1/12/00
DESIGN CHECK	T. Masuzono	<i>[Signature]</i>	2/2/00
SUBMITTED	A. Hirata	<i>[Signature]</i>	2/12/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	2/2/00

STEEL POLE FOR OVERHANGING TRAFFIC SIGN-2  
 FOR SIGN PLATES NOT MORE THAN 108,000 SQ.CM.-I

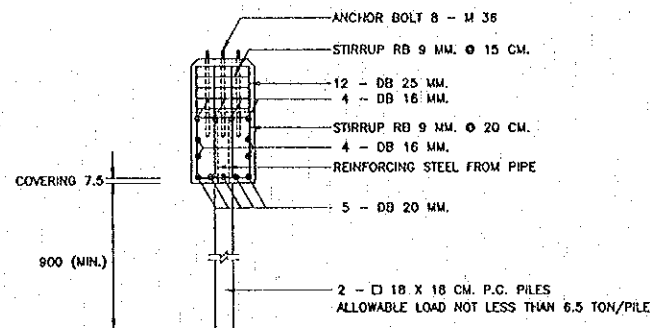
DATE OF ISSUE: 05/03/2000

DWG. NO. R-T-11 SHEET NO. 54

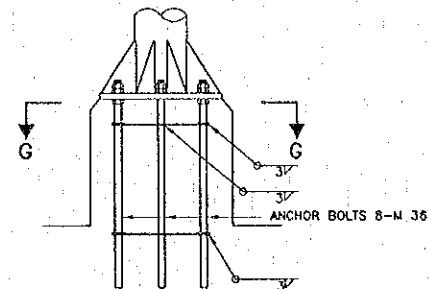
DWG. STATUS



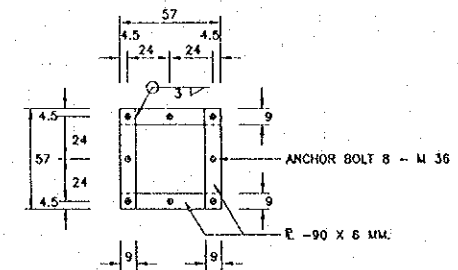
PLAN OF FOUNDATION TYPE C  
SCALE 1:50



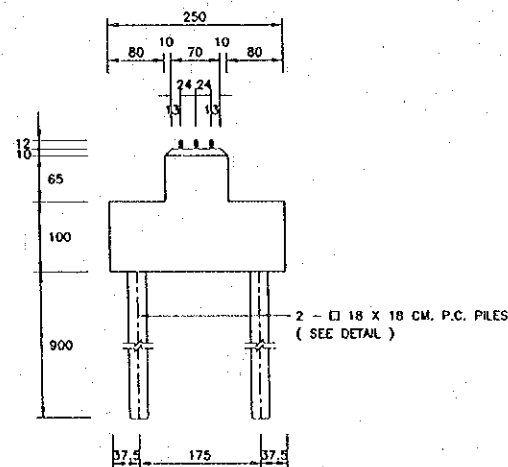
SECTION E - E  
SCALE 1:50



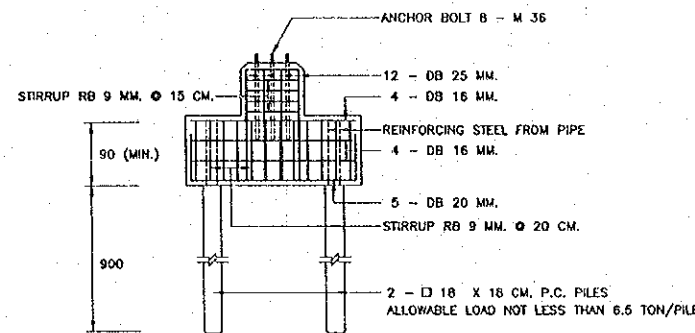
ANCHOR BOLT DETAIL  
SCALE 1:20



SECTION G - G  
SCALE 1:20



SIDE ELEVATION OF FOUNDATION TYPE C  
SCALE 1:50



SECTION F - F  
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
2. CONCRETE FOR PRESTRESS CONCRETE PILE SHALL BE CLASS A (40 N/MM<sup>2</sup>)
3. CONCRETE FOR FOUNDATION SHALL BE CLASS D (24 N/MM<sup>2</sup>)
4. REINFORCING STEEL BAR SHALL BE GRADE SD, 295
5. PRESTRESSING WIRE SHALL BE CONFORM TO TIS. 95.
6. NORMAL CLEAR CONCRETE COVER SHALL BE 7.5 CM.
7. THIS DRAWING SHALL BE USED IN COMBINATION WITH DWG. NO. R-T-10.

Plot Date: Mon, 14 Feb 2000 - 16:39:00

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

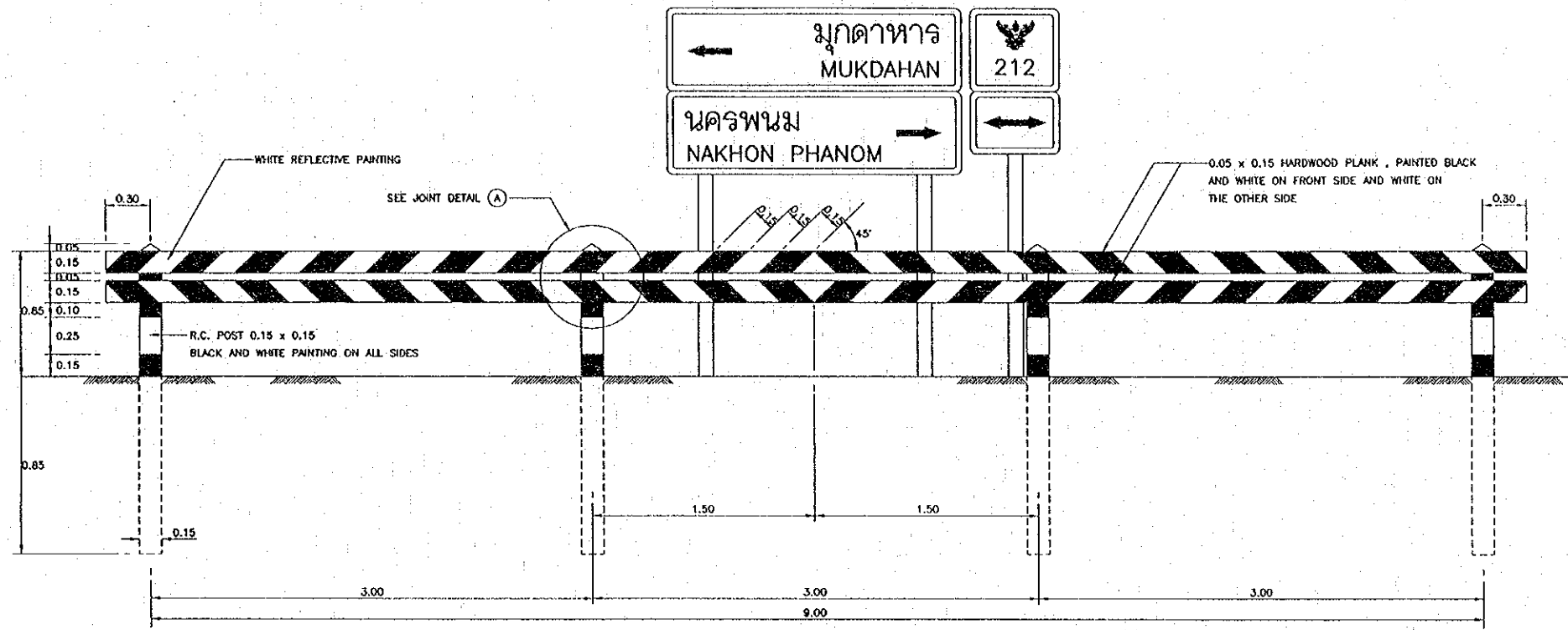
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

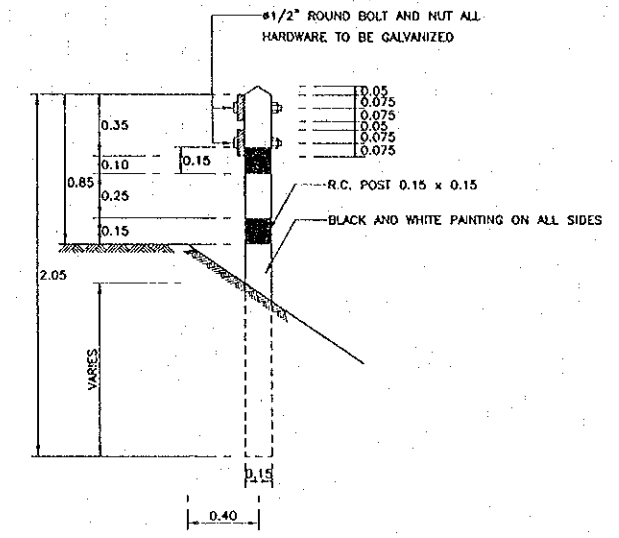
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Ohta	<i>[Signature]</i>	11/22/99
DESIGN CHECK	T. Matsuoka	<i>[Signature]</i>	12/22/99
SUBMITTED	A. Hirata	<i>[Signature]</i>	2/11/00
APPROVED	S. Temjaputra	<i>[Signature]</i>	2/22/00

DWG. TITLE:  
**STEEL POLE FOR OVERHANGING TRAFFIC SIGN-3**  
 FOR SIGN PLATE NOT MORE THAN 108,000 SQ.CM. - II

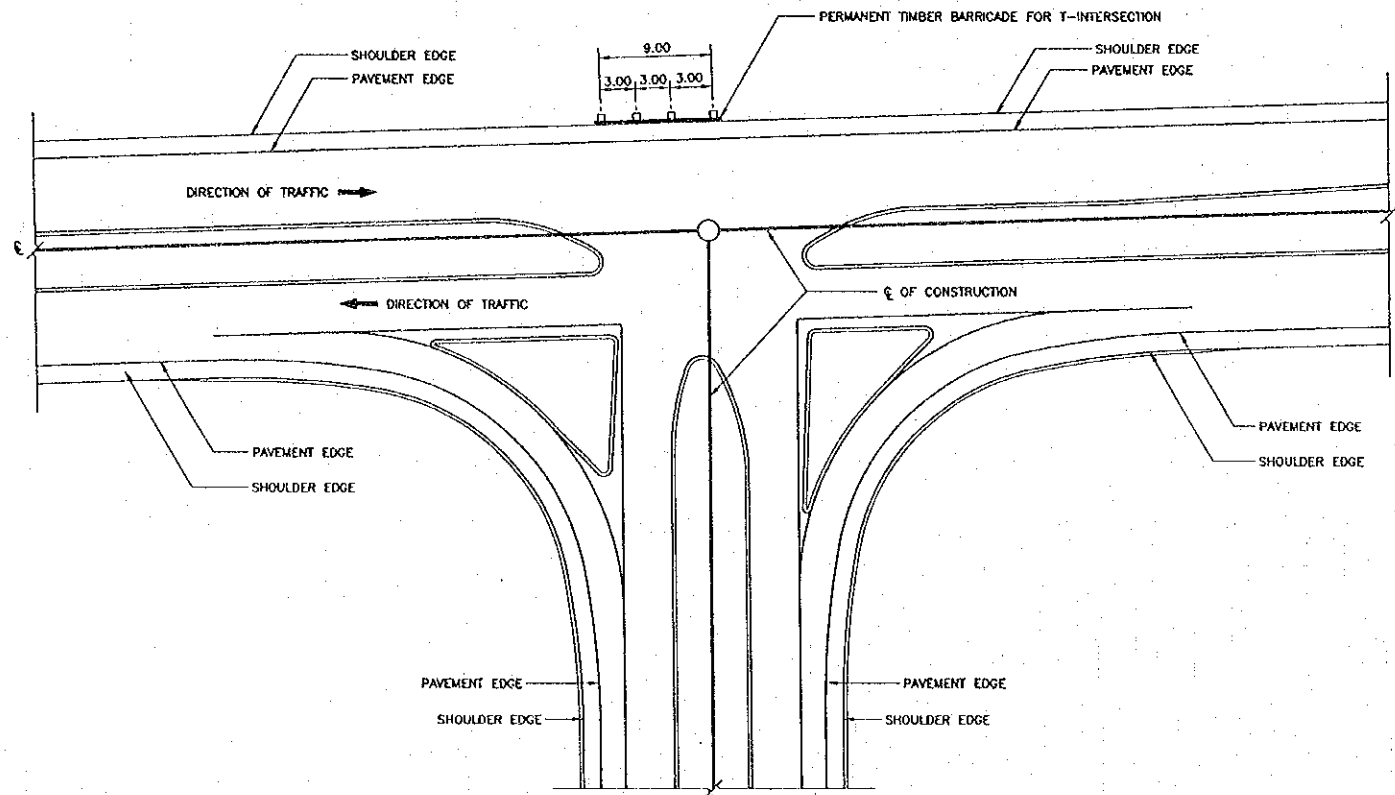
DATE OF ISSUE:		05/03/2000
DWG. NO.	R-T-12	SHEET NO. 55
DWG. STATUS		



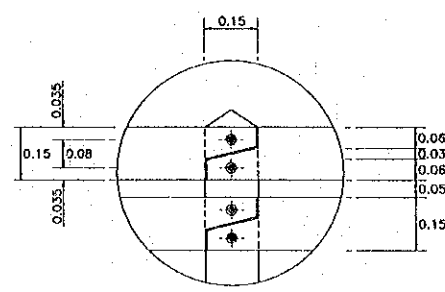
FRONT ELEVATION  
SCALE 1 : 20



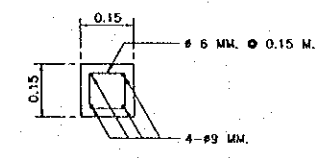
SIDE VIEW  
SCALE 1 : 20



PLAN  
NOT TO SCALE



JOINT DETAIL "A"  
SCALE 1 : 10

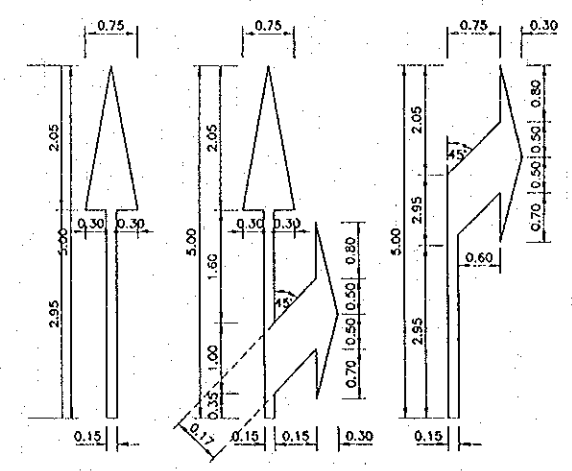
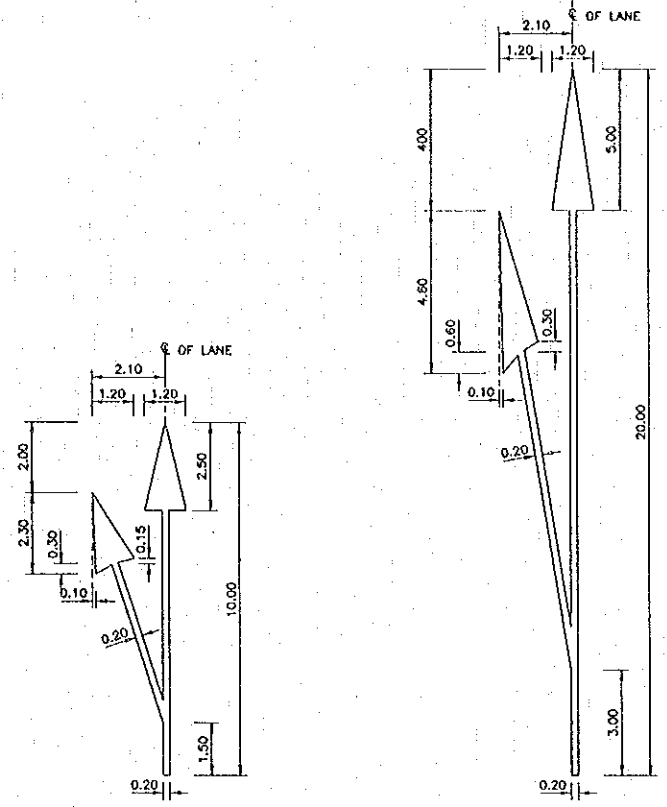
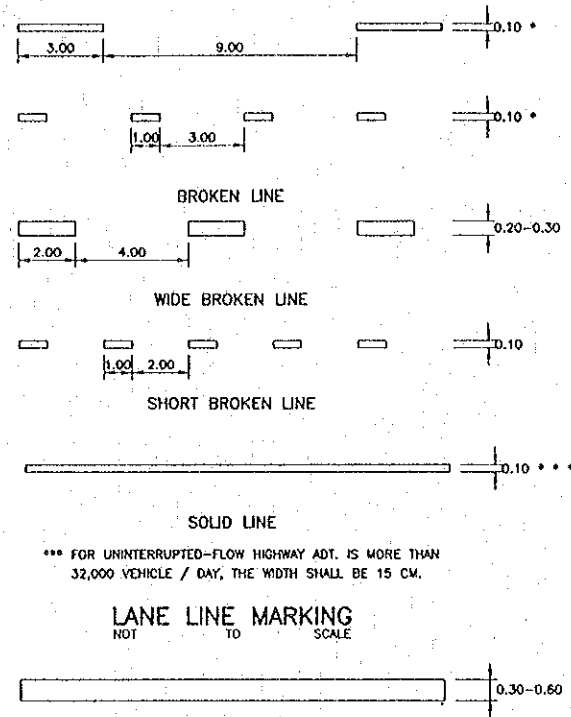
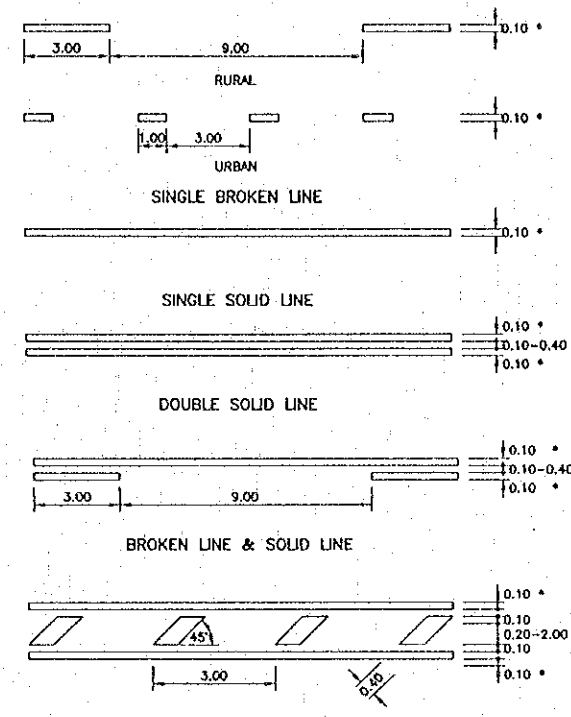


R.C. POST SECTION  
SCALE 1 : 10

NOTES :

1. DIMENSIONS ARE IN METERS UNLESS OTHERWISE
2. THIS DRAWING SHOWN THE DETAIL OF TIMBER BARRICADE ONLY, ACTUAL LOCATION OF BARRICADE SHALL BE AS INDICATED ON THE DETAIL OF INTERSECTION DRAWING OR AS DIRECTED BY THE ENGINEER.
3. ALL WOOD PORTION SHALL BE GIVEN ONE COAT OF PRIMING PAINT IN ACCORDANCE WITH TIS. 357 AND TO FIELD COATS OF GLOSS ENAMEL PAINT IN ACCORDANCE WITH TIS. 327 WHITE PAINT IN THE LAST COATING SHALL BE REFLECTORIZED.
4. R.C. POST SHALL BE GIVEN TWO COATS OF PAINT IN ACCORDANCE WITH TIS. 327
5. ALL TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL OF TRAFFIC CONTROL DEVICES AS PUBLISHED BY THE DEPARTMENT OF HIGHWAYS 1988, THE SPECIFICATIONS, THE SPECIAL PROVISIONS AND THE DRAWINGS.
6. CONCRETE SHALL BE CLASS F (15 N/MM<sup>2</sup>)
7. REINFORCING STEEL SHALL BE GRADE SR 235.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION		DESIGN	H. Okiro		16/12/00	PERMANENT TIMBER BARRICADE FOR T-INTERSECTION
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN CHECK	T. Masuzawa		18/01/00	
							SUBMITTED	A. Hiratani		21/01/00	
							APPROVED	S. Temyabutra		21/02/00	



DOUBLE LINE WITH CROSS HATCHING  
 \* STANDARD WIDTH IS 10 CM, THE ADJUSTED WIDTH SHALL CONFORM TO THE TABLE.  
 CENTER LINE MARKINGS  
 \*\* STANDARD WIDTH IS 10 CM, FOR UNINTERRUPTED-FLOW HIGHWAY WITH ADT. IS MORE THAN 32,000 VEHICLE/DAY, THE WIDTH SHALL BE 15 CM.  
 EDGE LINE MARKINGS

\*\*\* FOR UNINTERRUPTED-FLOW HIGHWAY ADT. IS MORE THAN 32,000 VEHICLE / DAY, THE WIDTH SHALL BE 15 CM.  
 LANE LINE MARKING  
 STOP LINE MARKING  
 GIVEWAY LINE MARKING

AT BEGINNING OF TAPER FOR DECELERATION LANE, FOR NORMAL INSTALLATION  
 AT BEGINNING OF TAPER FOR DECELERATION LANE, FOR DIVIDED HIGHWAY

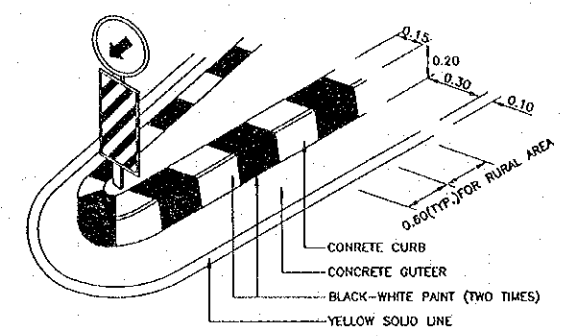
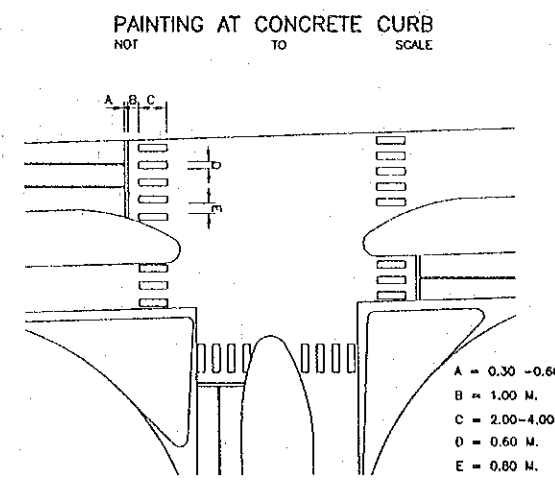
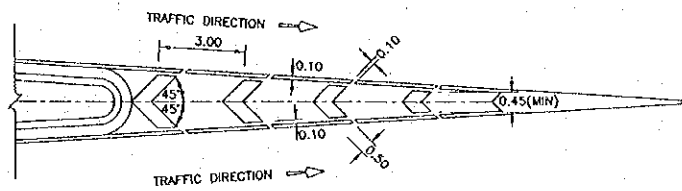
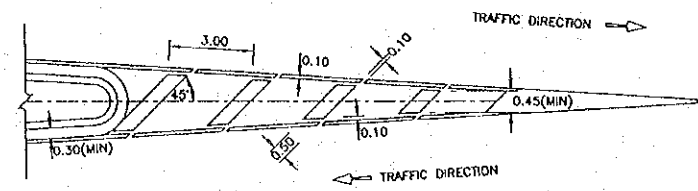


TABLE : WIDTH OF CENTER LINE MARKING  
 A. TWO-LANE HIGHWAY  
 (NUMBERS ARE IN CENTIMETERS)

ADT. (VEHICLE / DAY)	WIDTH OF TRAVELED WAY (METERS)					
	5.00	5.50	6.00	6.50	7.00	MORE THAN 7.00
LESS THAN 500	7	7	10	10	10	10
MORE THAN 500	10	10	10	10	10	10
MORE THAN 4000	10	10	15	15	15	15
MORE THAN 8000	10	10	15	15	15	20

B. MULTILANE UNDIVIDED HIGHWAY (DOUBLE SOLID LINE)  
 (NUMBERS ARE IN CENTIMETERS)

ADT. (VEHICLE / DAY)	WIDTH OF TRAVELED WAY (METERS)		
	LESS THAN 14.00(1)	14.00	MORE THAN 14.00
MORE THAN 8000	WIDTH 10 GAP 10	WIDTH 10 GAP 10	WIDTH 10 GAP 10
MORE THAN 16000	WIDTH 10 GAP 10	WIDTH 15 GAP 15	WIDTH 15 GAP 15-80 (2)
MORE THAN 32000	WIDTH 15 GAP 15	WIDTH 20 GAP 20	WIDTH 20 GAP 20-80(2)



REMARKS: (1) FOR ULTIMATE STAGE WHICH THE TRAVELED WAY WIDTH IS LESS THAN 13.00 METERS, THE CENTER LINE MARKINGS SHALL BE TWO-LANE HIGHWAY FORMAT.  
 (2) IF WIDTH OF GAP IS MORE THAN 40 CM, THE CENTER LINE MAKING SHALL BE DOUBLE LINE WITH CROSS HATCHING FORMAT.

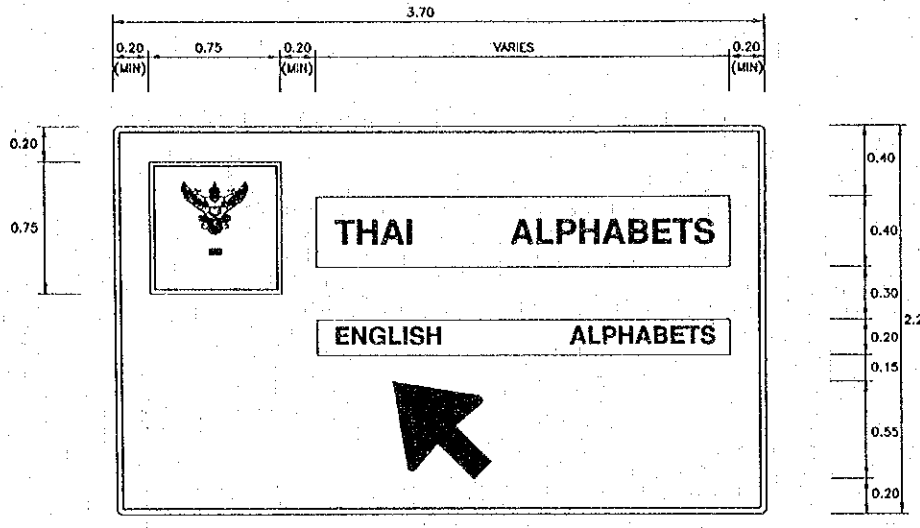
CROSS HATCHING MARKING

CHEVRON HATCHING MARKING

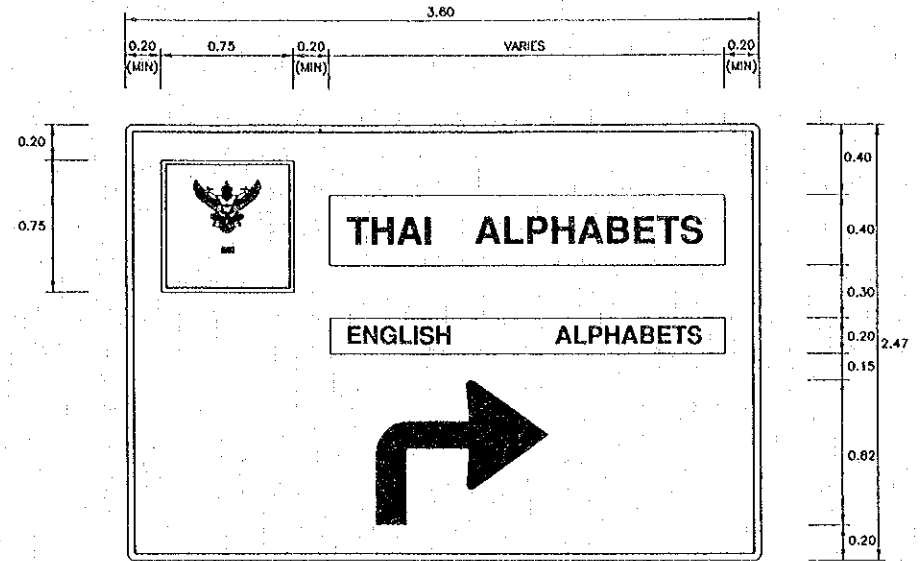
NOTES :  
 1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.

Part 01: Rev. 14 Feb 2000 - 164437

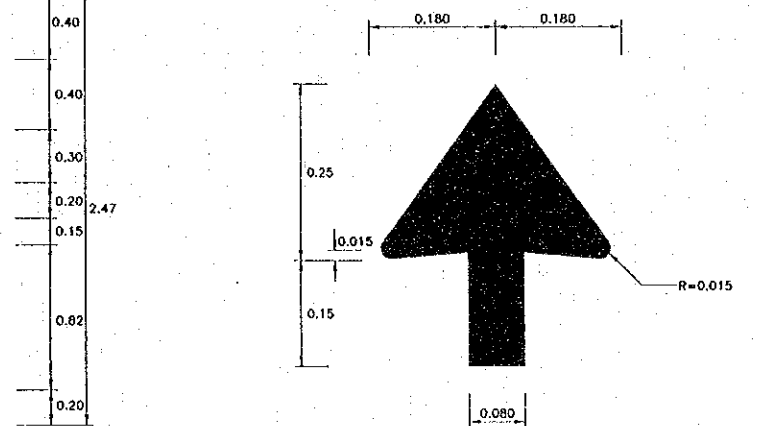
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Ohta	[Signature]	11/12/00	MARKING DETAILS
						DESIGN CHECK	T. Mutsura	[Signature]	12/22/00	
						SUBMITTED	A. Hirata	[Signature]	11/17/00	
						APPROVED	S. Temyabutra	[Signature]	02/12/00	



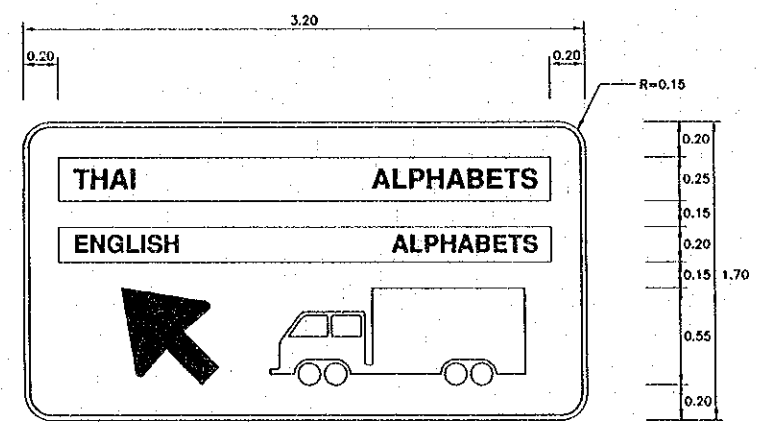
OVERHEAD SIGN S-1(1)



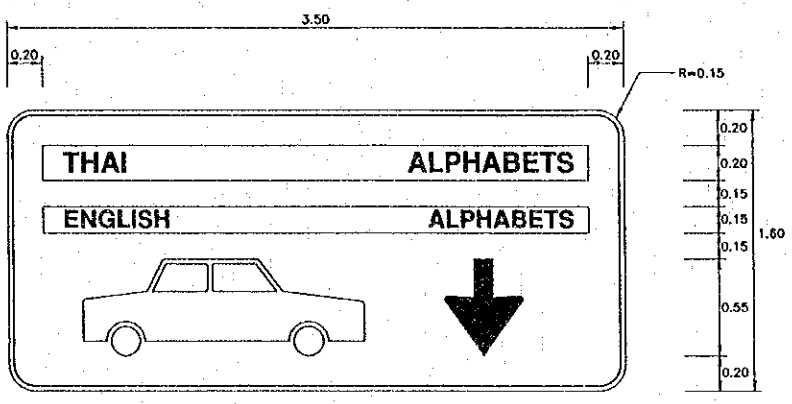
OVERHEAD SIGN S-1(2)



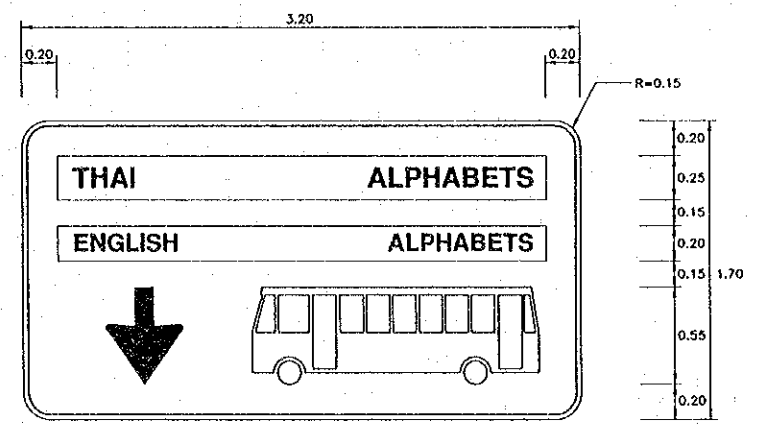
ARROW DIMENSIONS  
 USED IN S-2(5) ; S-2(6)



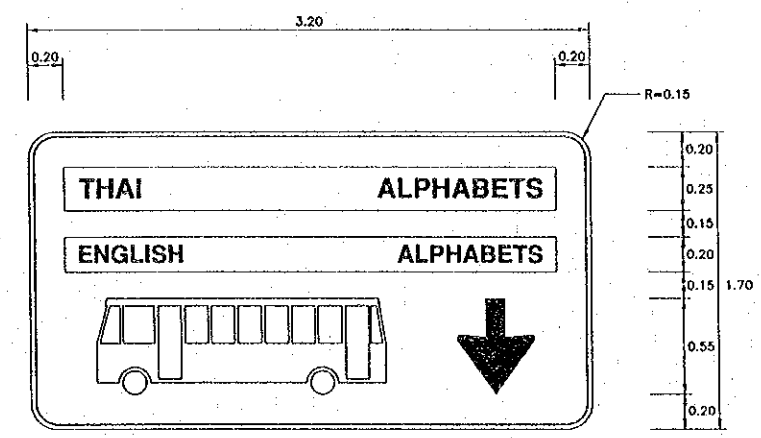
OVERHANGING SIGN S-2(1)



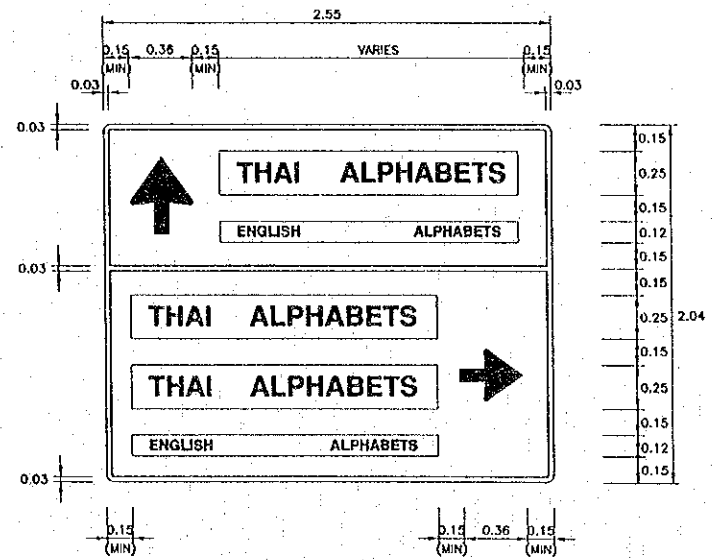
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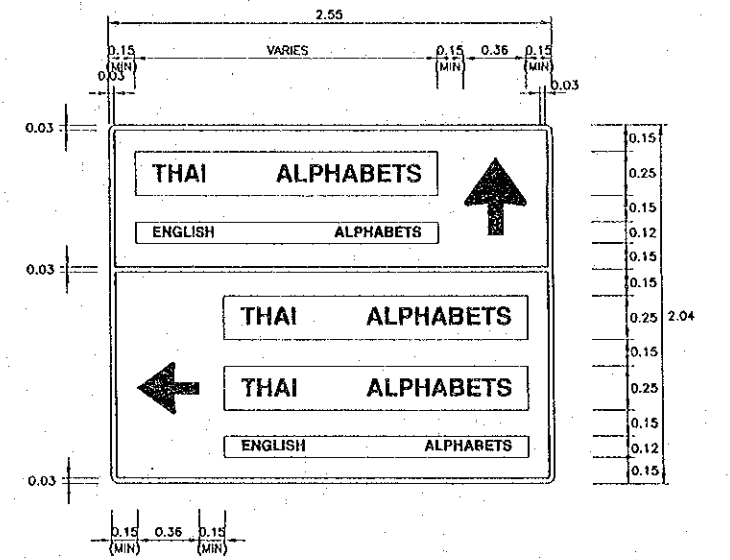
OVERHANGING SIGN S-2(3)



OVERHANGING SIGN S-2(4)



OVERHANGING SIGN S-2(5)



OVERHANGING SIGN S-2(6)

NOTES :  
 1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.

Plot Date: Mon, 14 Feb 2000 - 16:54:21

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOREI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11-02-00
DESIGN CHECK	T. Matsuura	<i>[Signature]</i>	12-00-00
SUBMITTED	A. Hirata	<i>[Signature]</i>	01/03/00
APPROVED	S. Terayama	<i>[Signature]</i>	21/03/00

DWG. TITLE:  
 TRAFFIC SIGN AND SIGN BOARD DETAILS



1-1-75



1-7-75



1-32-75



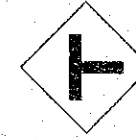
2-46-60



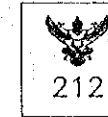
2-13-90



2-16-90



2-17-90



3-2-90



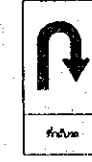
2-60-45



2-61-45



2-83-60



3-90-45



3-17-60



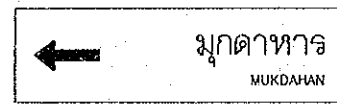
3-20-60



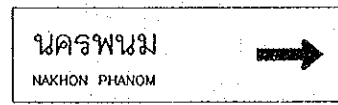
3-16-60



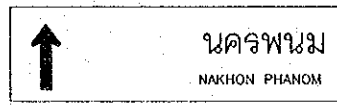
3-21-60



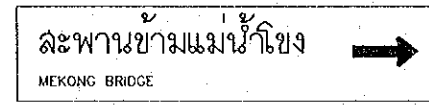
3-41-90 (1)



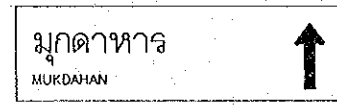
3-41-90 (2)



3-41-90 (3)



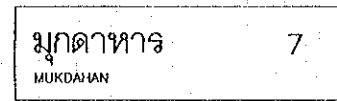
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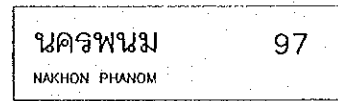
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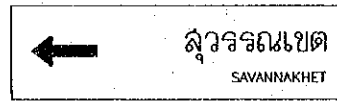
3-41-91 (6)



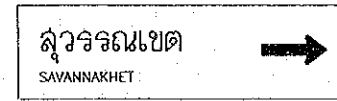
3-43-90 (1)



3-43-90 (2)



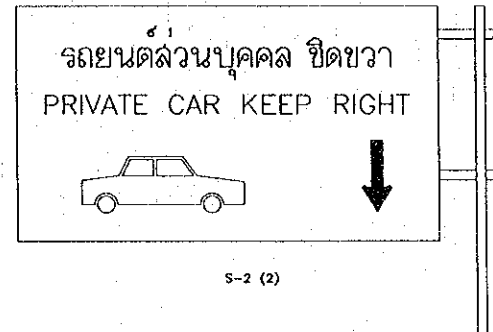
3-41-90 (7)



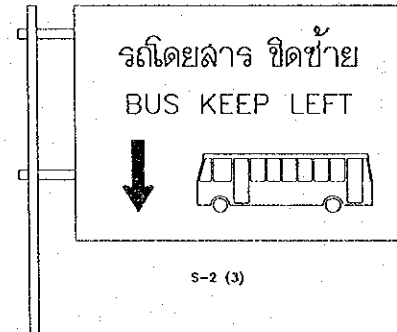
3-41-90 (8)



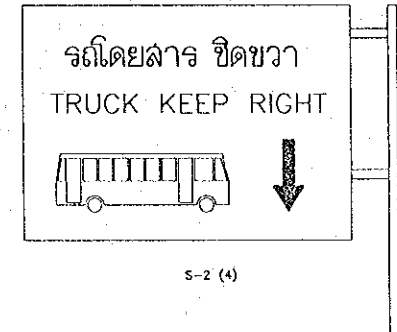
S-2 (1)



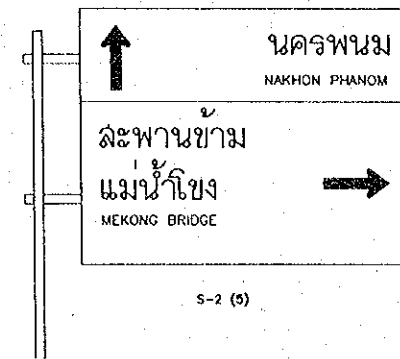
S-2 (2)



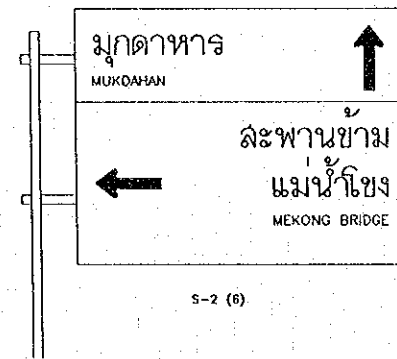
S-2 (3)



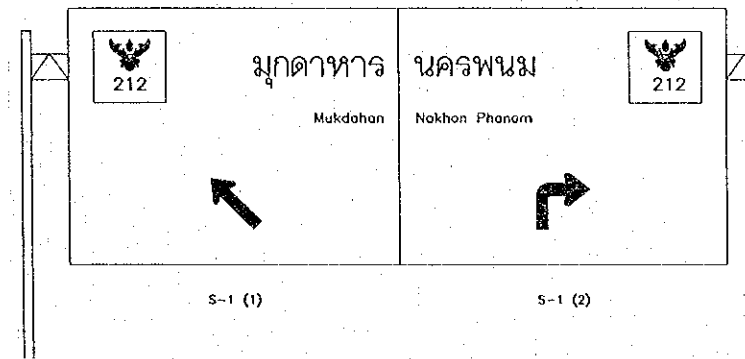
S-2 (4)



S-2 (5)



S-2 (6)



S-1 (1)

S-1 (2)

Plot Date: Mon, 14 Feb 2000 16:52:44

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

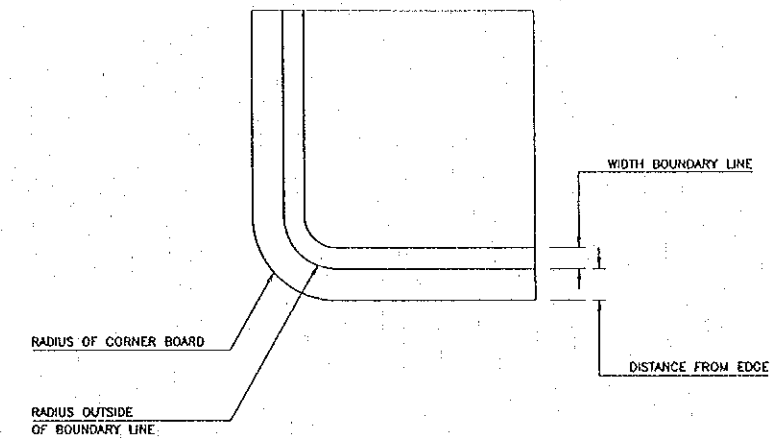
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Ohta	<i>[Signature]</i>	2/2/00
DESIGN CHECK	T. Morizono	<i>[Signature]</i>	2/2/00
SUBMITTED	A. Hiratake	<i>[Signature]</i>	2/2/00
APPROVED	S. Temiyabutra	<i>[Signature]</i>	2/2/00

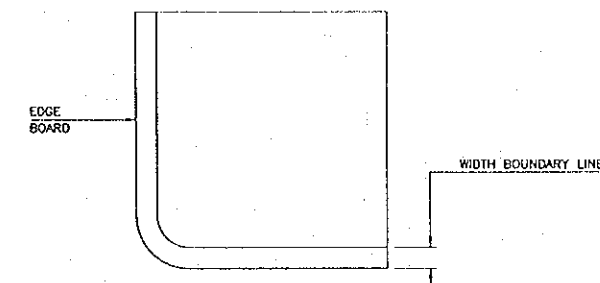
DWG. TITLE: TRAFFIC SIGN AND SIGN FACE DETAILS

SIGN CODE	SIZE (CM. x CM.)	STANDARD BOUNDARY LINE				REQUIREMENT OF COLORS-REFLECTION			HEIGHT OF TEXT	
		DISTANCE FROM EDGE (CM.)	WIDTH BOUNDARY LINE (CM.)	RADIUS OF CORNER BOARD (CM.)	RADIUS OUTSIDE OF BOUNDARY LINE (CM.)	BACKGROUND	WORDING AND/OR SYMBOL	BOUNDARY LINE OR CROSS LINE	THAI (CM.)	ENGLISH (CM.)
1-1-75	75 x 75	-	5.0	-	-	RED - REF	WHITE - REF	WHITE - REF	25	-
1-7-75	ø 75	-	5.0	-	-	WHITE - REF	BLACK - NON REF	RED - REF	-	-
1-32-75	ø 75	-	5.0	-	-	WHITE - REF	BLACK - NON REF	RED - REF	-	-
2-13-90	90 x 90	1.8	2.4	5.4	3.6	YELLOW - REF	BLACK - NON REF	BLACK - NON REF	-	-
2-16-90	90 x 90	1.8	2.4	5.4	3.6	YELLOW - REF	BLACK - NON REF	BLACK - NON REF	-	-
2-17-90	90 x 90	1.8	2.4	5.4	3.6	YELLOW - REF	BLACK - NON REF	BLACK - NON REF	-	-
2-48-60	60 x 60	1.2	1.6	3.6	2.4	YELLOW - REF	BLACK - NON REF	BLACK - NON REF	-	-
2-83-60	60 x 100	1.2	1.6	3.6	2.4	YELLOW - REF	BLACK - NON REF	BLACK - NON REF	5	5
2-60-45	45 x 75	0.9	1.2	0.9	8.1	YELLOW - REF	BLACK - NON REF	-	-	-
2-81-45	45 x 75	0.9	1.2	0.9	8.1	YELLOW - REF	BLACK - NON REF	-	-	-
3-2-90	90 x 90	1.8	2.4	18.0	16.2	WHITE - REF	BLACK - NON REF	BLACK - NON REF	-	35
3-16-60	75 x 60	1.2	1.6	3.6	2.4	WHITE - REF	BLACK - NON REF	BLACK - NON REF	-	-
3-17-60	75 x 60	1.2	1.6	3.6	2.4	WHITE - REF	BLACK - NON REF	BLACK - NON REF	-	-
3-20-60	75 x 60	1.2	1.6	3.6	2.4	WHITE - REF	BLACK - NON REF	BLACK - NON REF	-	-
3-21-60	75 x 60	1.2	1.6	3.6	2.4	WHITE - REF	BLACK - NON REF	BLACK - NON REF	-	-
3-41-90 (1)	240 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-41-90 (2)	240 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-41-90 (3)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-41-90 (4)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	20	10
3-41-90 (5)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-41-90 (6)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	20	10
3-41-90 (7)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-41-90 (8)	350 x 90	1.8	2.4	5.4	3.6	WHITE - REF	BLACK - NON REF	BLACK - NON REF	25	12.5
3-43-90 (1)	240 x 90	1.8	2.4	5.4	3.6	WHITE - REF	WHITE - REF	WHITE - REF	25	12.5
3-43-90 (2)	240 x 90	1.8	2.4	5.4	3.6	WHITE - REF	WHITE - REF	WHITE - REF	2.6	12.5
3-90-45	45 x 75	-	1.50	2.25	2.25	BLUE - REF	WHITE - REF	WHITE - REF	5	-
OVERHEAD	SEE DETAIL	SEE DETAIL	SEE DETAIL	SEE DETAIL	SEE DETAIL	GREEN - REF	WHITE - REF	WHITE - REF	SEE DETAIL	SEE DETAIL
OVERHANGING	SEE DETAIL	SEE DETAIL	SEE DETAIL	SEE DETAIL	SEE DETAIL	GREEN - REF	WHITE - REF	WHITE - REF	SEE DETAIL	SEE DETAIL

REMARK : REF - REFLECTION



TYPE I FOR USED WARNING SIGNS & GUIDE SIGNS



TYPE II FOR USED REGULATORY SIGNS & GUIDE SIGNS (BLUE BOARD)

STANDARD BOUNDARY  
 NOT TO SCALE

HEIGHT OF SYMBOL = 20 CM.

HEIGHT OF NUMBER = 25

HEIGHT OF NUMBER = 25

Plot Date: Mon, 14 Feb 2000 16:58:36

REV.	DATE	DESCRIPTION	APPROVED

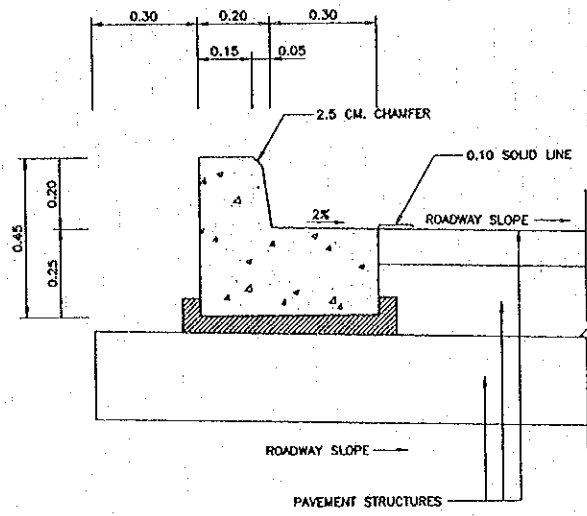
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

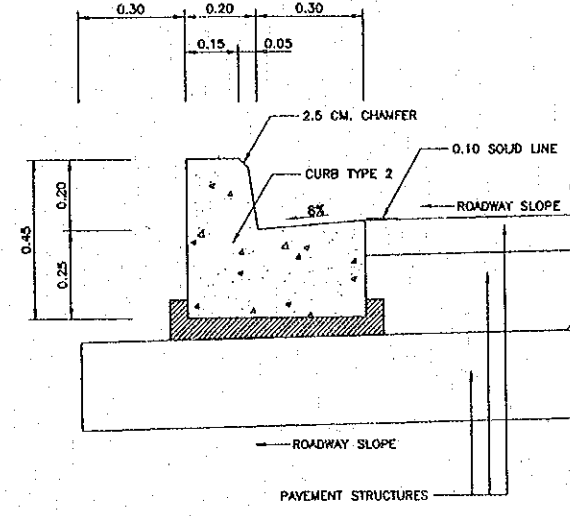
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	16/11/99
DESIGN CHECK	T. Masutomo	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hirota	<i>[Signature]</i>	27/01/00
APPROVED	S. Tensyabutra	<i>[Signature]</i>	22/02/00

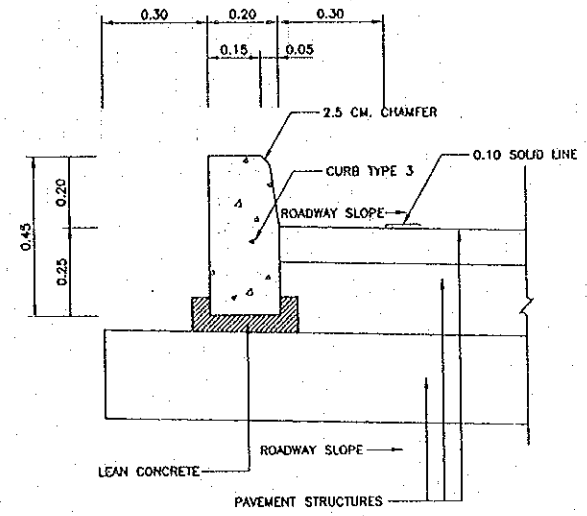
DWG. TITLE: TRAFFIC SIGN AND SIGN LIST



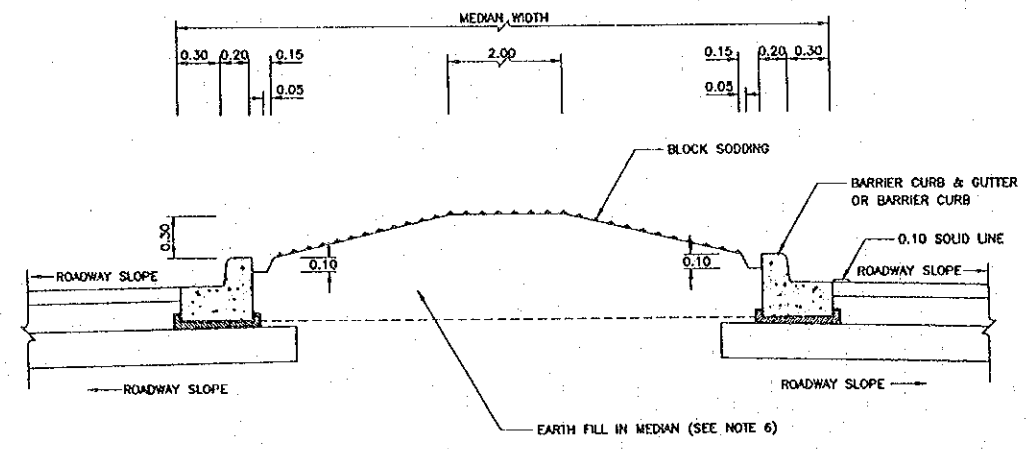
BARRIER CURB AND GUTTER TYPE 1  
 SCALE 1 : 10



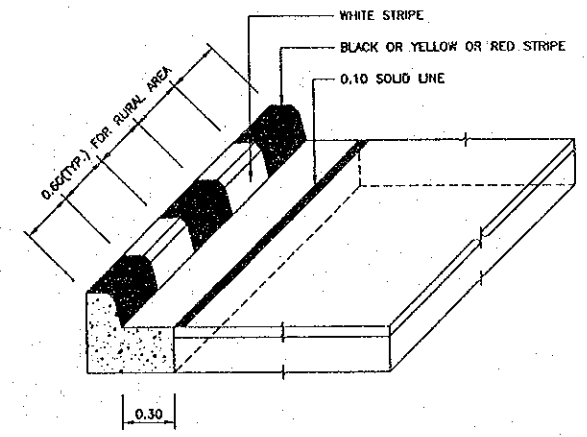
BARRIER CURB AND GUTTER TYPE 2  
 SCALE 1 : 10



BARRIER CURB TYPE 3  
 SCALE 1 : 10



DETAIL OF CURB AND GUTTER OR CURB AT RAISED MEDIAN  
 SCALE 1 : 25



CURB MARKING DETAIL  
 NOT TO SCALE

NOTES :

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
2. CONCRETE SHALL BE CLASS E (18 N/MM<sup>2</sup>)
3. REINFORCING STEEL SHALL BE GRADE SR 235
4. 40x40x4 CM. CONCRETE SLAB SHALL CONFORM TO TIS.378
5. WHITE, BLACK, YELLOW AND RED PAINTS SHALL BE GLOSS ENAMEL PAINT AND CONFORM TO TIS.327
6. EARTH FILL IN MEDIAN SHALL BE TOP SOIL.
7. FILL UNDER SIDEWALK SHALL BE THE SAME MATERIAL AS EMBANKMENT AND COMPACTED TO 90% (MIN.) STANDARD PROCTOR (DOH - T107)
8. LOCATION FOR CURB MARKING SHALL BE AS SHOWN ON PLAN OR DIRECTED BY THE ENGINEER.
9. JOINT IN CONCRETE CURB & CURB AND GUTTER SHALL BE SPACED AT 10.00 M. INTERVAL, THE WIDTH OF THE JOINT IS 1 CM. AND FILLED WITH MORTAR 1:3 (PORTLAND CEMENT : SAND) BY VOLUME.

Plot date: Mon, 14 Feb 2000 - 17:01:22

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

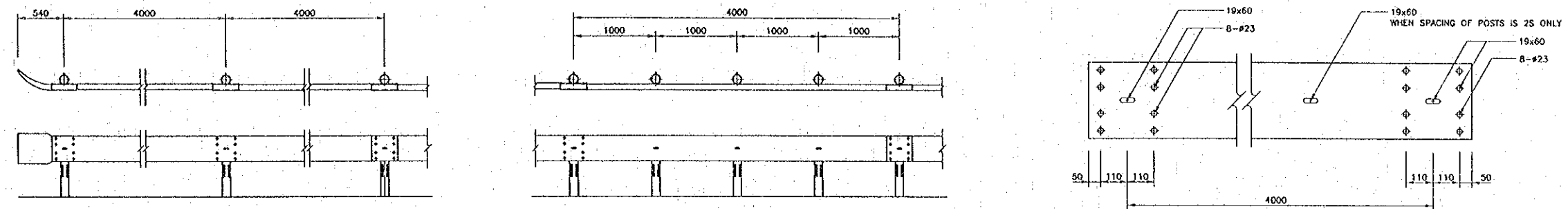
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	11/02/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	12/01/00
SUBMITTED	A. Hirotsu	<i>[Signature]</i>	11/12/00
APPROVED	S. Terayobu	<i>[Signature]</i>	12/02/00

DWG. TITLE: CURB AND GUTTER





NOTES:

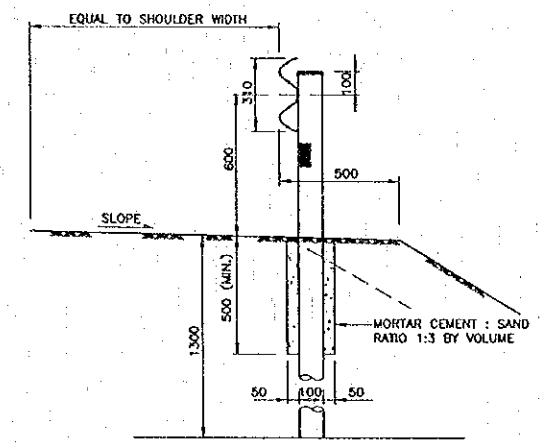
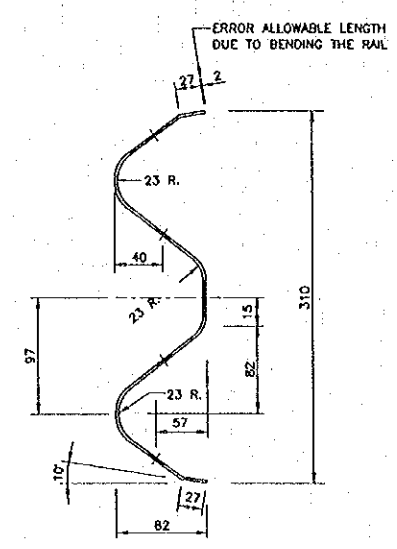
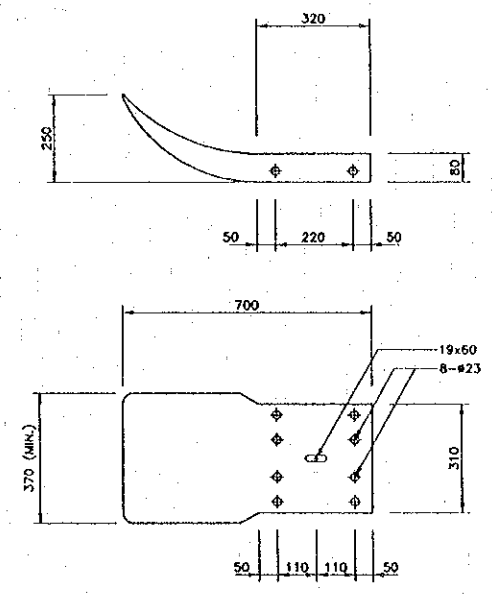
- ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- GUARDRAIL SHALL CONFORM TO THE FOLLOWING REQUIREMENT :  
 2.1 STEEL RAIL SHALL BE MADE FROM STEEL OF THICKNESS NOT LESS THAN THE MINIMUM THICKNESS SPECIFIED FOR EACH CLASS OF RAIL AND SHALL BE GALVANIZED WITH THE MINIMUM WEIGHT OF ZINC COATING ACCORDING TO THE TYPE OF RAIL AS SPECIFIED IN TABLE BELOW:

RAIL		MIN. RAIL THICKNESS (MILLIMETER)	MIN. WEIGHT OF ZINC COATING (GRAMS PER SQUAREMETER)
CLASS	TYPE		
1	1	3.2	550

2.2 MECHANICAL PROPERTIES OF RAIL :

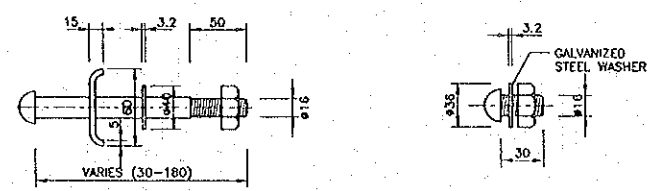
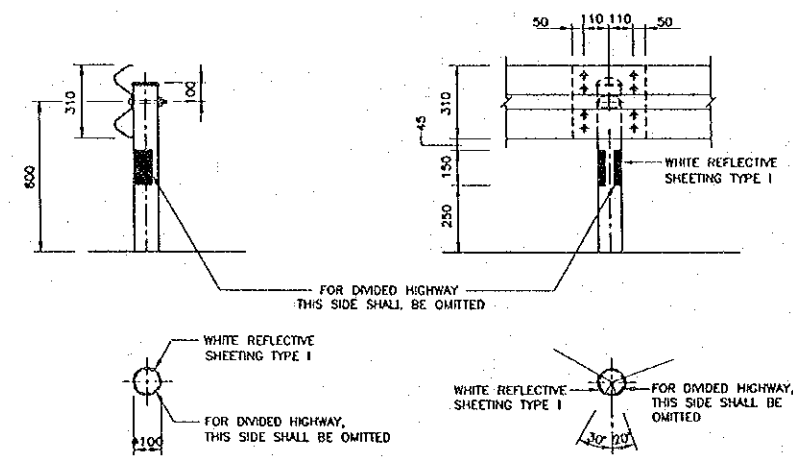
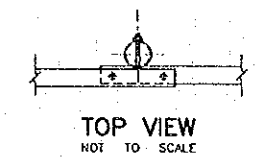
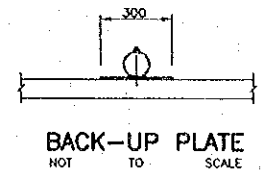
RAIL CLASS	RAIL TYPE	MIN. ULTIMATE TENSILE STRENGTH (KG/MM <sup>2</sup> )	MIN. PERCENTAGE OF ELONGATION	MAX. DEFLECTION	
				MAX. LOAD TRAFFIC FACE UP (KG.)	MAX. LOAD TRAFFIC FACE DOWN (KG.)
1	1	41	21	910	720

- POST SHALL BE GALVANIZED STANDARD STEEL PIPE
- THE GALVANIZING OF BOLTS, NUTS, WASHERS AND SIMILAR THREADED FASTENERS SHALL BE IN ACCORDANCE WITH TIS. 171 CLASS 5.8.
- UNLESS OTHERWISE SPECIFIED ON THIS DRAWING, GUARDRAIL SHALL BE IN ACCORDANCE WITH TIS. 248
- REFLECTIVE SHEETING SHALL CONFORM TO TIS. 608 TYPE I. (EFFICIENT OF RETRO- REFLECTION LEVEL I)



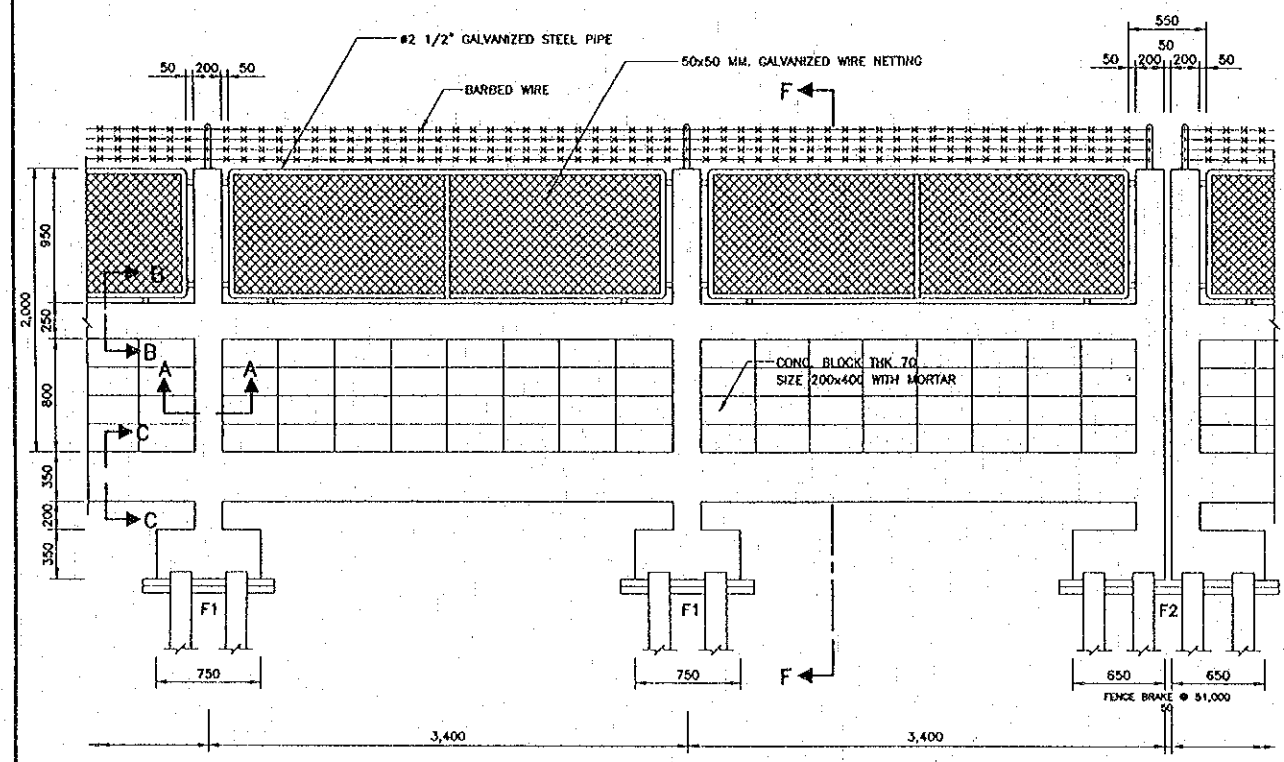
TERMINAL SECTION  
 SCALE 1 : 10

RAIL SECTION  
 SCALE 1 : 3

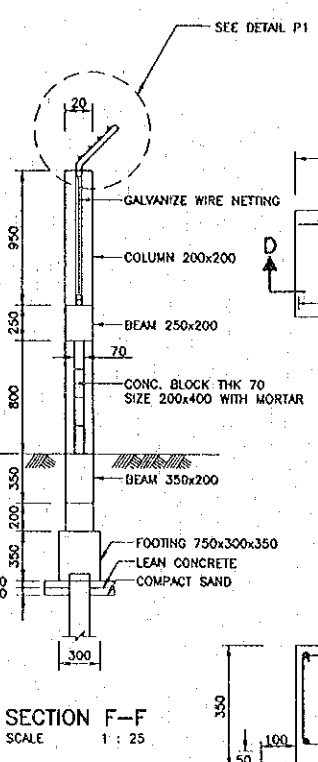


Proj. date: Mar. 14, Feb. 2000 - 17:05:21

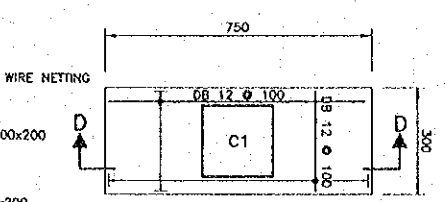
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	H. Ohta			06/05/00	GUARDRAIL
								DESIGN CHECK	T. Masuzawa			11/06/00	
								SUBMITTED	A. Hiratake			11/06/00	
								APPROVED	S. Temyabutra			21/05/00	



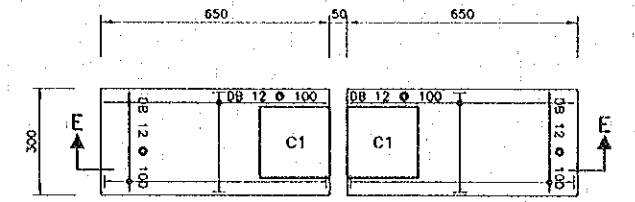
ELEVATION  
SCALE 1 : 25



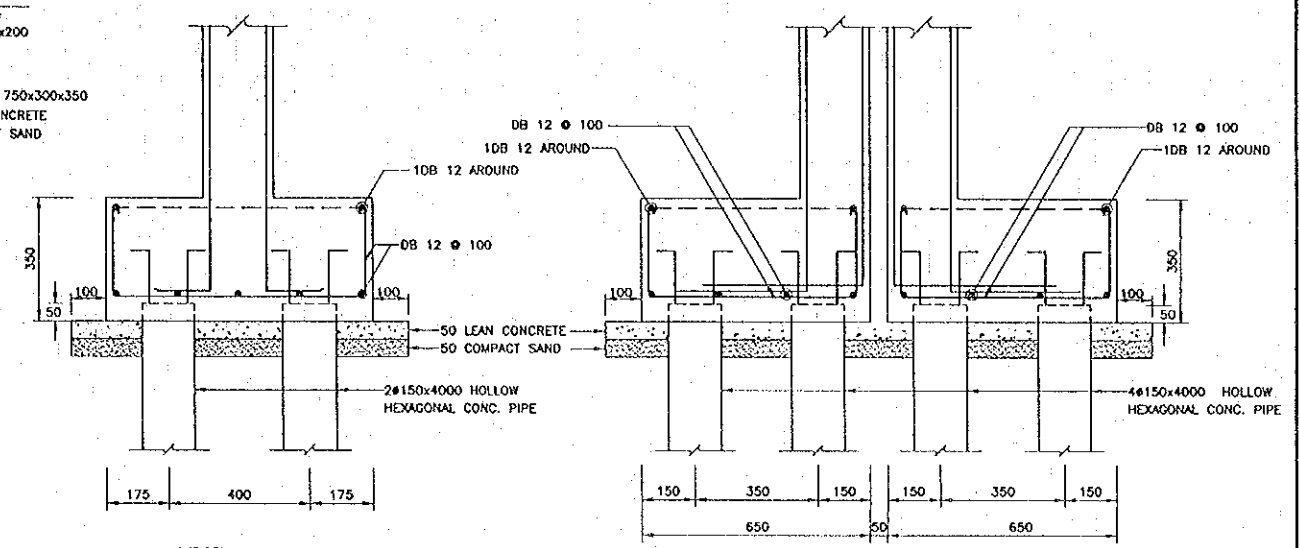
SECTION F-F  
SCALE 1 : 25



DETAIL F1  
SCALE 1 : 10

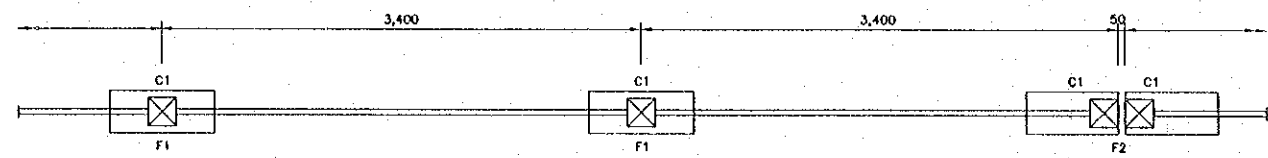


DETAIL F2  
SCALE 1 : 10

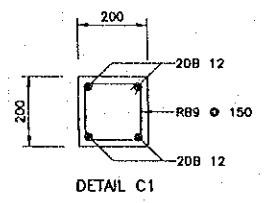


SECTION D-D  
SCALE 1 : 10

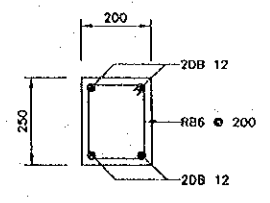
SECTION E-E  
SCALE 1 : 10



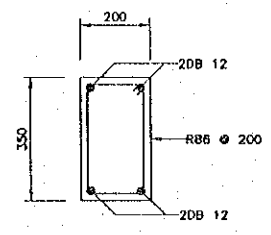
PLAN  
SCALE 1 : 25



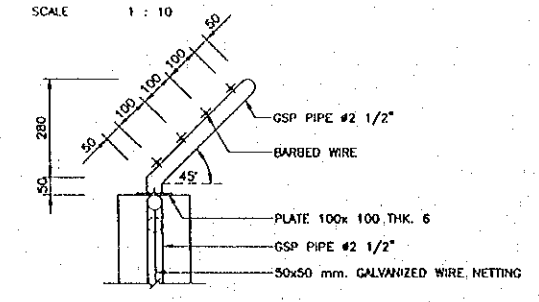
DETAIL C1  
SCALE 1 : 10



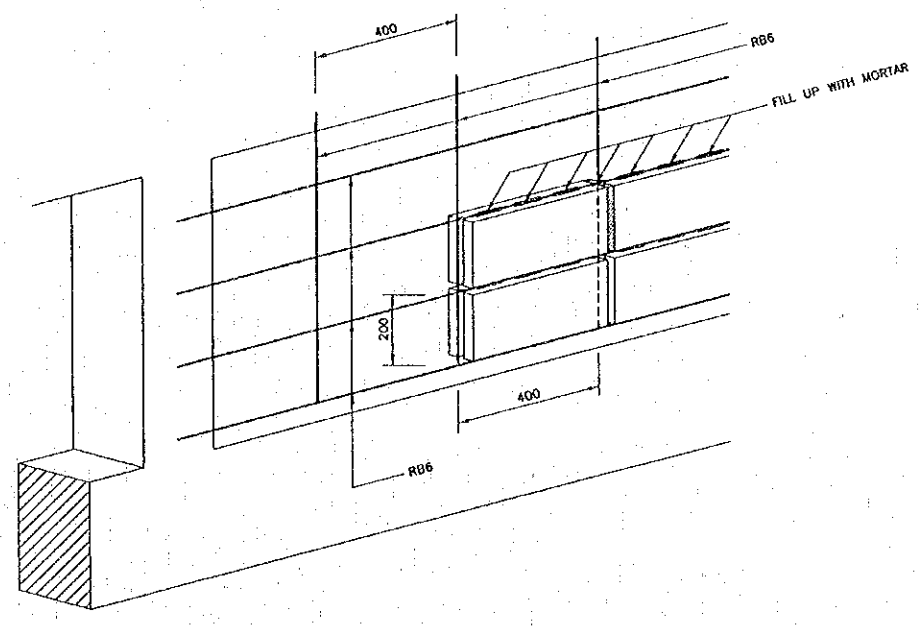
SECTION B-B  
SCALE 1 : 10



SECTION C-C  
SCALE 1 : 10



DETAIL P1  
SCALE 1 : 10



DETAIL OF INSTALLATION CONCRETE BLOCK METHOD  
SCALE 1 : 10

- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - IN GENERAL, THE EXISTING GROUND LEVEL IS UNULATE, FENCE SHALL BE CONSTRUCTED INSTEP, THE LENGTH OF EACH STEP BE SUBJECT TO APPROVAL BY THE ENGINEER.
  - GENERAL NOTES
    - HEXAGONAL REINFORCEMENT CONCRETE PILE LENGTH SHALL NOT BE LESS 4.00 M.
    - CONCRETE SHALL BE CLASS D (24 N/MM<sup>2</sup>)
    - REINFORCING STEEL SHALL BE GRADE SR 235 FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BAR.
    - CONCRETE BLOCK SHALL BE CONFORM TO TIS. 60
    - STEEL PIPE SHALL BE GALVANIZED.
    - WIRE NETTING SHALL BE GALVANIZED AS SPECIFIED BY TIS. 208.

Proj. date: Mon, 14 Feb 2000 - 17:10:02

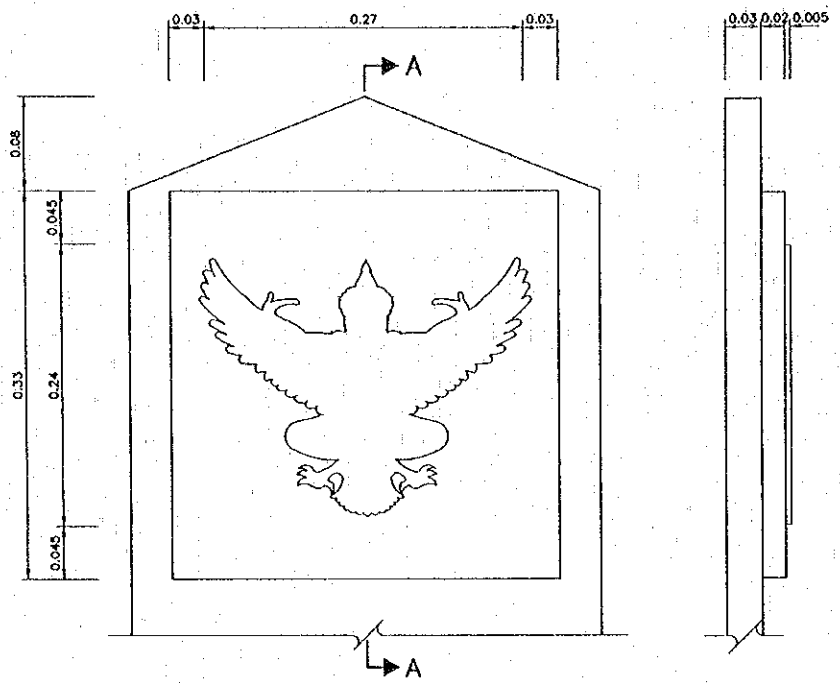
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MUKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

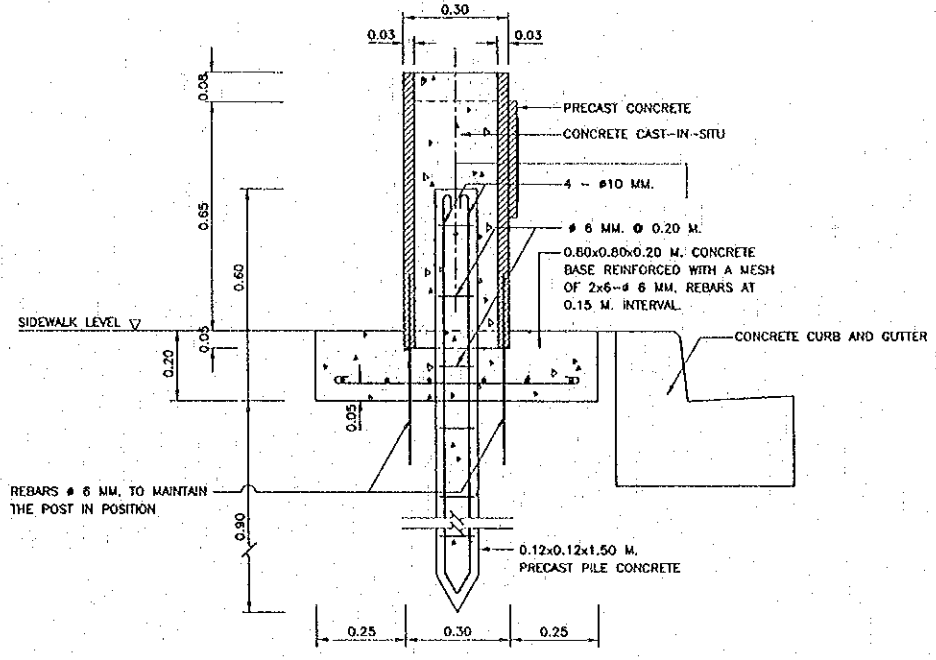
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Orito	<i>[Signature]</i>	11/12/00	FENCE DETAILS
DESIGN CHECK	F. Mesutong	<i>[Signature]</i>	11/12/00	
SUBMITTED	A. Hirotsu	<i>[Signature]</i>	11/12/00	
APPROVED	S. Terajubutro	<i>[Signature]</i>	11/12/00	

- NOTES :**
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  - KILOMETER STONE SHALL BE PAINTED WHITE WITH ALL INSCRIPTIONS PAINTED BLACK AND WITH THE GARUDA FRAME PAINTED IN GREY LINE OF 1 CENTIMETER.
  - CONSTRUCTION METHOD**  
 ALL KILOMETER POST SHALL BE PRECAST IN SEPARATE PARTS AND INSTALLED INPLACE OR BY PRECASTING THE WHOLE UNIT AS SPECIFIED IN THE DRAWING WITH THE ENGINEER'S APPROVAL.
  - WHERE PENETRATION CANNOT BE ACHIEVED FOR PILING THE KILOMETER POST MAY BE ERECTED WITHOUT PILING WHEN APPROVED BY THE ENGINEER.
  - ALL INSCRIPTIONS SHOWN IN THIS DRAWING ARE SET UP FOR EXAMPLE PURPOSES ONLY.
  - THE KILOMETER STONE SHALL BE PLACED AT 1 KILOMETER INTERVAL AT 0.50 M. FROM EDGE OF LEFT SHOULDER OR AT 0.65 M. FROM CURB.
  - CONCRETE SHALL BE CLASS E (18 N/MM<sup>2</sup>).
  - REINFORCING STEEL SHALL BE GRADE SR 235.

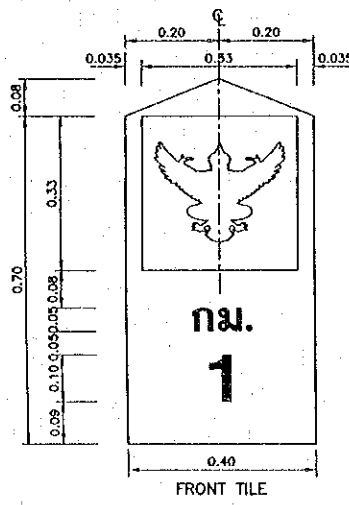


**ELEVATION OF GARUDA**  
SCALE 1 : 3

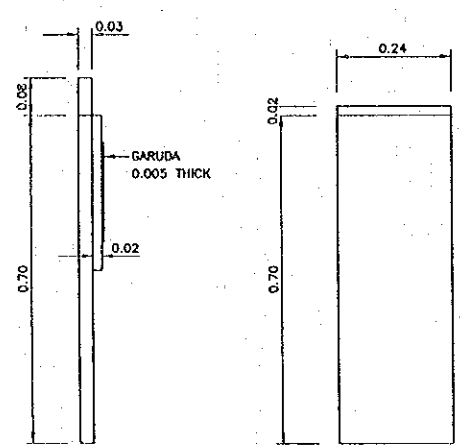
**SECTION A - A**  
SCALE 1 : 3



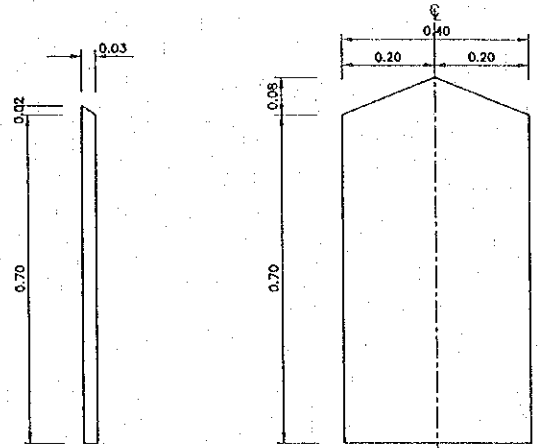
**GENERAL DETAIL AT SIDEWALK AND VILLAGE SECTION**  
SCALE 1 : 10



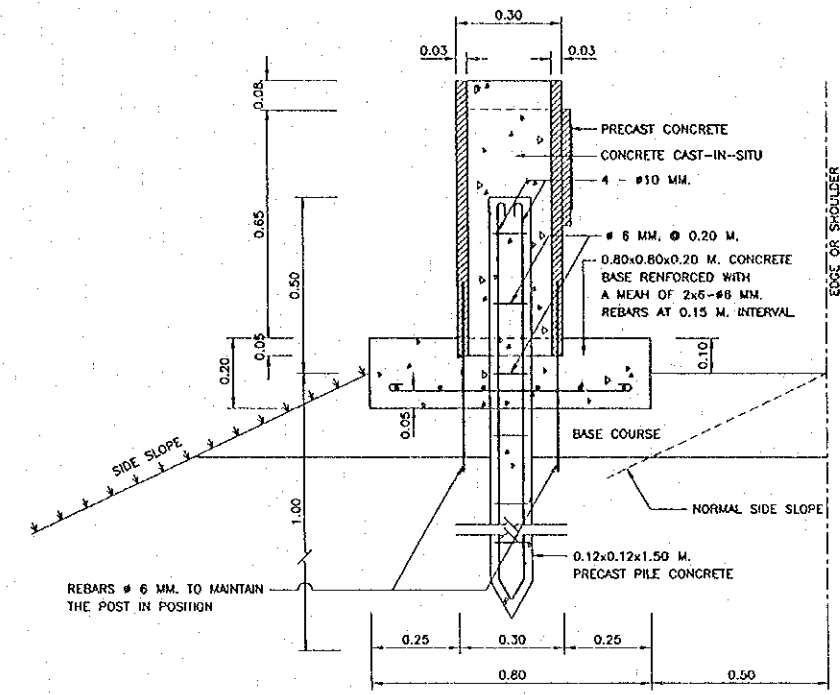
**FRONT TILE**



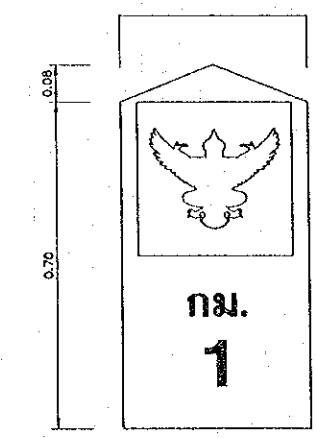
**SIDE TILE**  
**TILE DETAIL**  
SCALE 1 : 7.5



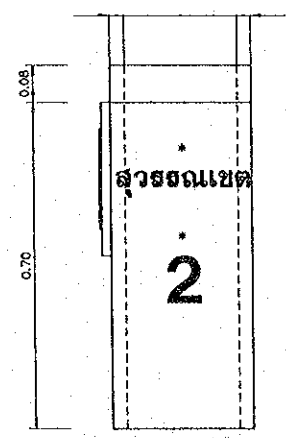
**BACK TILE**



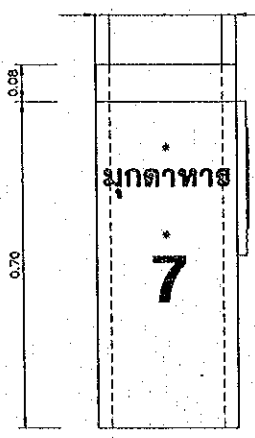
**GENERAL DETAIL AT SHOULDER**  
SCALE 1 : 10



**FRONT VIEW**

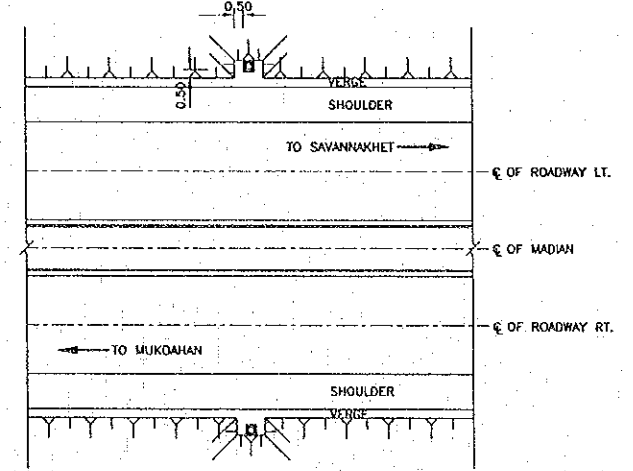


**SIDE VIEW**  
**KILOMETER STONE**  
SCALE 1 : 7.5

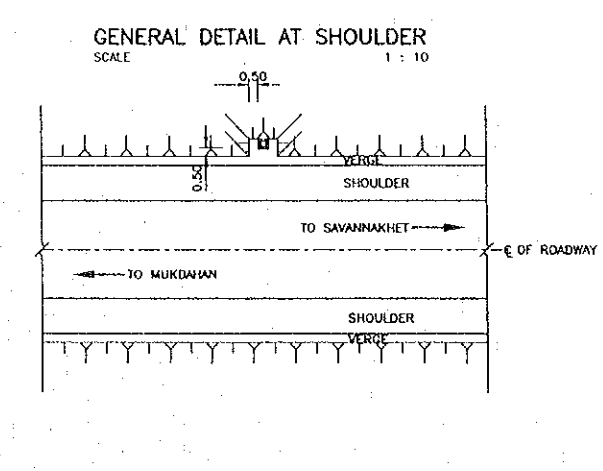


**SIDE VIEW**

\* THE LETTERS MAY BE TWO DESTINATIONS.



**FOR DIVIDED HIGHWAY**



**FOR TWO - LANE HIGHWAY**

**P L A N**

Plot date: Mon. 14 Feb. 2000 - 17:12:40

REV.	DATE	DESCRIPTION	APPROVED

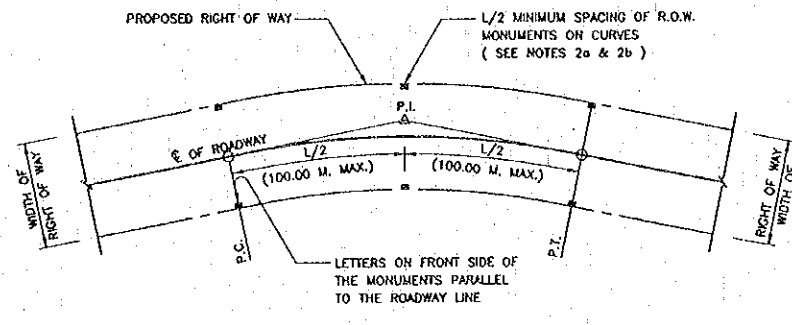
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

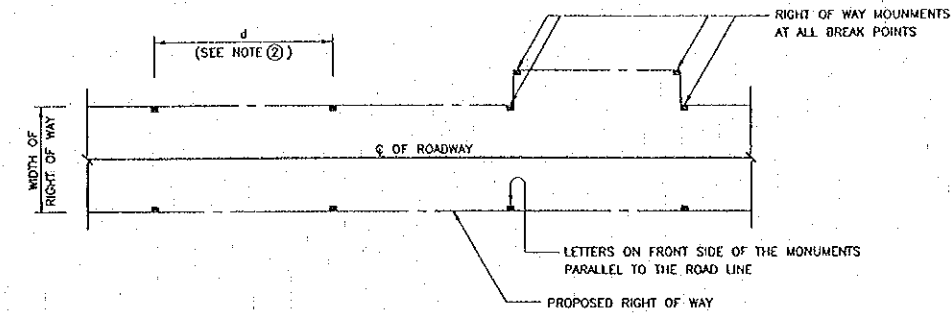
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	[Signature]	15/02/00
DESIGN CHECK	T. Masuzono	[Signature]	18/02/00
SUBMITTED	A. Hirata	[Signature]	21/2/00
APPROVED	S. Temjebutra	[Signature]	21/2/00

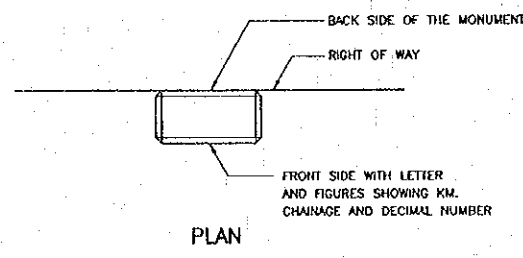
DWG. TITLE:  
**KILOMETER STONE**



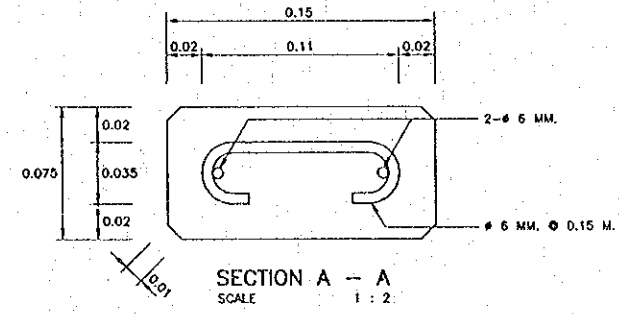
R.O.W. MONUMENT IN HORIZONTAL CURVES  
 NOT TO SCALE



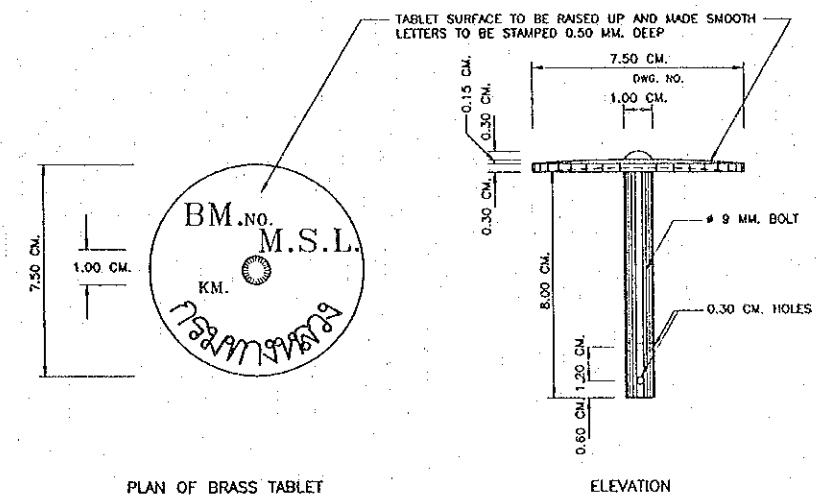
R.O.W. MONUMENT IN STRAIGHT LINE  
 NOT TO SCALE



PLAN



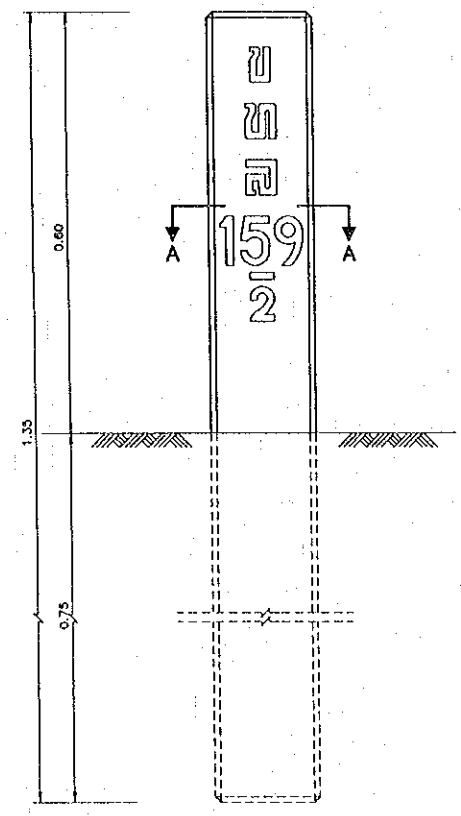
SECTION A - A  
 SCALE 1 : 2



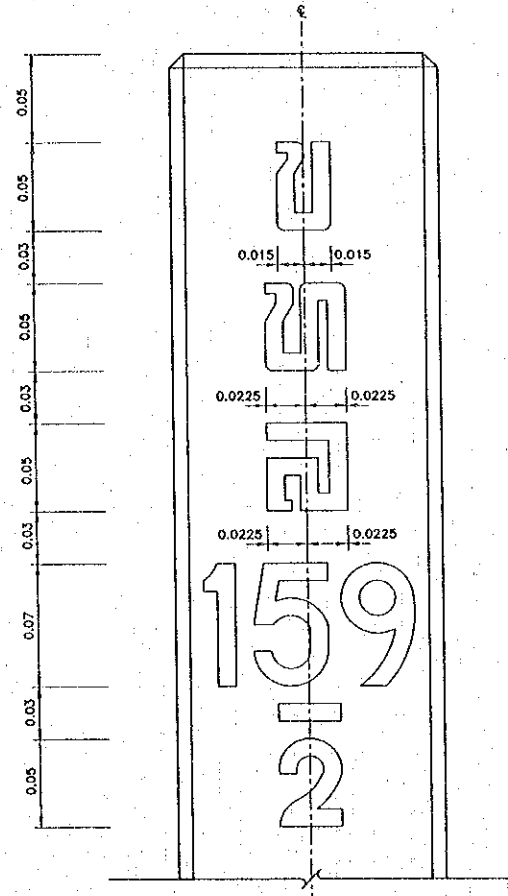
PLAN OF BRASS TABLET

ELEVATION

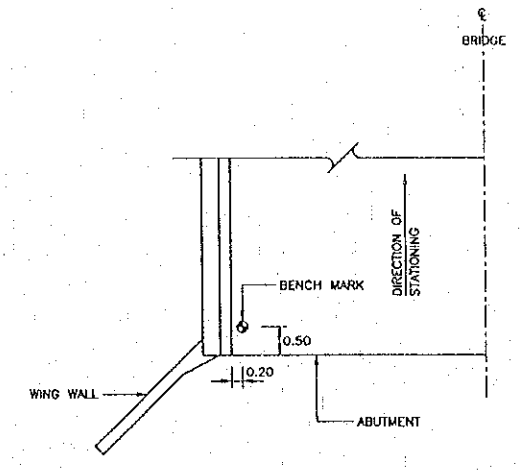
BENCH MARK DETAILS  
 NOT TO SCALE



FRONT ELEVATION  
 RIGHT OF WAY MONUMENT  
 SCALE 1 : 5



STANDARD LETTERS & FIGURES  
 SCALE 1 : 2



BENCH MARK LOCATION DETAIL ON BRIDGE  
 NOT TO SCALE

- NOTES :
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  - LOCATION OF R.O.W. MONUMENTS SHALL BE AS SHOWN ON THE PLAN AND SHALL BE SPECIFIED AS FOLLOWS :  
 a) RURAL (RICE FIELD, WOOD AND ETC.)  $d = 100$  M.  
 b) URBAN (TOWNS AND VILLAGES)  $d = 25$  M.  
 c) AT ALL BREAK POINTS OF R.O.W.  
 d) AT P.C., P.T. AND MIDDLE POINT OF HORIZONTAL CURVE
  - PAINTING OF R.O.W. POSTS.  
 a) POSTS, WHITE  
 b) LETTERS & FIGURES, BLACK
  - BLACK AND WHITE PAINTS MUST BE GLOSS ENAMEL PAINTS IN ACCORDANCE WITH TIS. 327 AND SHALL BE APPLIED IN 2-LAYERS.
  - LETTERS ARE DEPRESSED 1 CM. INTO THE CONCRETE.
  - POSTS SHALL BE ERECTED TRULY VERTICAL.
  - SIZES OF LETTERS AND FIGURES SHALL BE IN ACCORDANCE WITH DOT'S TRAFFIC CONTROL MANUAL AND THE DRAWING.
  - CONCRETE SHALL BE CLASS E (18 N/MM<sup>2</sup>)
  - REINFORCING STEEL SHALL BE GRADE SR 235.

Post. date: Mar. 14, Feb. 2000 - 171334

REV.	DATE	DESCRIPTION	APPROVED

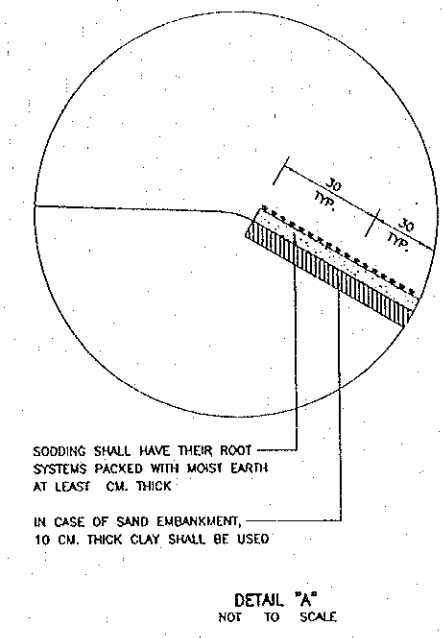
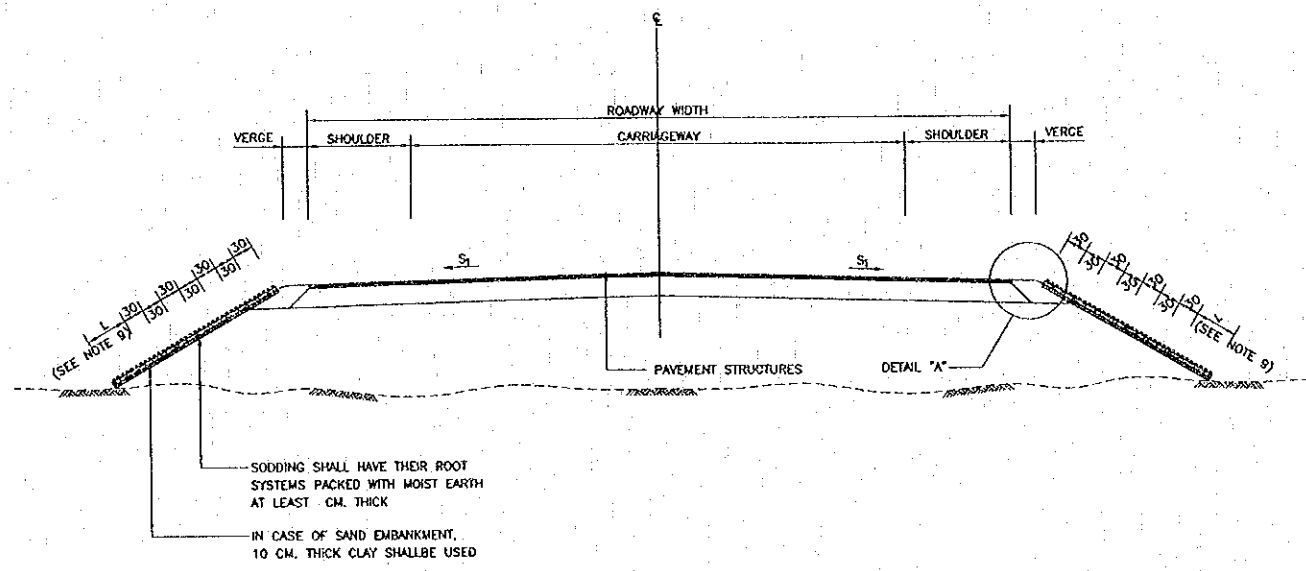
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

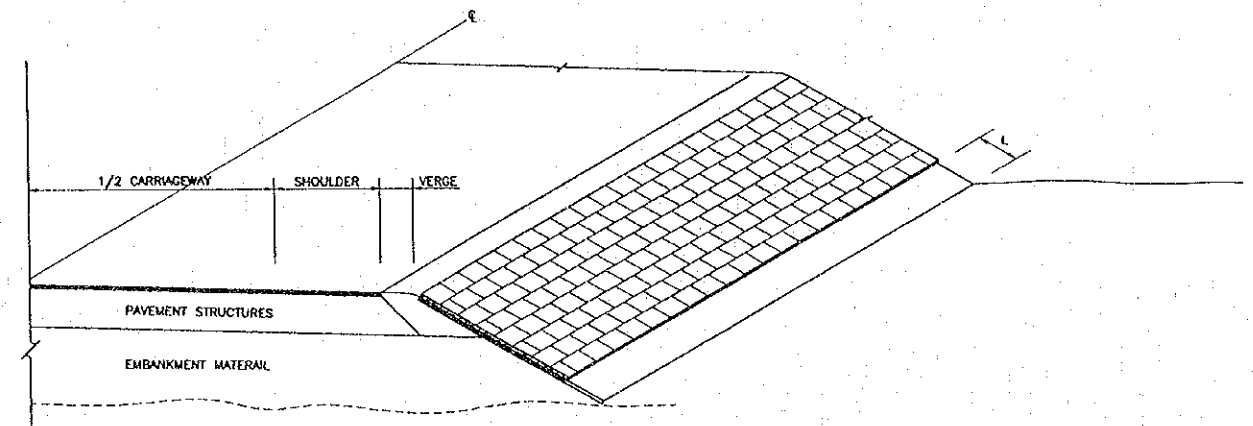
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Ohta	<i>H. Ohta</i>	12/01/00
DESIGN CHECK	T. Masutomo	<i>T. Masutomo</i>	12/01/00
SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	01/02/00
APPROVED	S. Tamyabutra	<i>S. Tamyabutra</i>	2/03/00

DWG. TITLE: RIGHT OF WAY MONUMENT & BENCH MARK



SODDING SHALL HAVE THEIR ROOT SYSTEMS PACKED WITH MOIST EARTH AT LEAST 4 CM. THICK  
 IN CASE OF SAND EMBANKMENT, 10 CM. THICK CLAY SHALL BE USED



ISOMETRIC DIAGRAM BLOCK SODDING  
 NOT TO SCALE

NOTES :

GENERAL

1. ALL DIMENSION ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
2. THE ENGINEER SHALL DECIDE WHETHER OR NOT TO PROVIDE SODDING FOR SLOPE PROTECTION GENERALLY EMBANKMENTS COMPOSED OF SANDY OR SILTY MATERIALS WILL REQUIRE SODDING, CUT SLOPE WILL NOT NORMALLY BE SODDED AND THEN ONLY AT THE DIRECTION OF THE ENGINEER
3. WHERE THE SIDE SLOPE MATERIAL IS NOT SUITABLE FOR GROWING GRASS, ORGANIC TOP SOIL APPROXIMATELY 10 CM. THICK SHALL BE PLACED ON THE SIDE SLOPES AND LIGHTLY COMPACTED TO THE SATISFACTION OF THE ENGINEER, THOROUGHLY MOISTENED WITH WATER AND SODDING PLACED.
4. WHERE THE SIDE SLOPE MATERIAL IS SUITABLE FOR GRASS, THE FOLLOWING PROCEDURES SHALL APPLY AFTER THE ROADWAY FORMATION IS CONSTRUCTED TO THE ELEVATION AS SHOWN ON THE DRAWING AND THE SIDE SLOPE HAS BEEN SHAPED AS REQUIRED, THE SIDE SLOPE MATERIAL SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 5 CM, THOROUGHLY MOISTENED WITH WATER AND SODDING PLACED.
5. THE TYPE OF GRASS USED SHALL BE A LOCAL SPECIES WHICH GROWS RAPIDLY THE ENGINEER SHALL DECIDE IN THE FIELD WHETHER TOP SOIL IS REQUIRED AND WHICH TYPE OF GRASS SHALL BE USED THE WORK SHALL BE COMPLETED TO THE DETAILS AS SPECIFIED ON THE DRAWING.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE GRASS UNTIL THE END OF THE MAINTENANCE PERIOD.

BLOCK SODDING

7. BLOCK SODDING OBTAINED FROM PLANTED GROUND FOR PLACING SHALL HAVE THEIR ROOT SYSTEM PACKED WITH MOIST EARTH AT LEAST 4 CM. THICK AND HAVE A MINIMUM SIZE OF APPROXIMATELY 30 X 30 CM. THE SODDING SHALL BE PLACED ON THE SIDE SLOPES WITHIN 48 HOURS AFTER REMOVAL FROM BORROW AREA
8. SODDING SHALL BE LAID IN STAGGERED ROWS PARALLEL TO ROADWAY ALIGNMENT AS SHOWN ON THE DRAWING EACH BLOCK SHALL BE STAGGERED ONE HALF ITS LENGTH AND BE FIRMLY BUTTED AGAINST THE PREVIOUS BLOCK(S)
9. THE LENGTH OF "L" SHALL BE DIRECTED BY THE ENGINEER WHICH ABOVE EXISTING GROUND APPROXIMATELY 30 CM. OR NO EROSION POSITION
10. PLANTED BLOCK SHALL BE PLACED AND LIGHTLY COMPACTED ON THE DESIGNATED AREAS AND THE LONGITUDINAL INTERSTICES SEALED WITH TOP SOIL THE PLANTED SODS SHALL BE WATERED DAILY UNTIL THEY HAVE ROOTED AND HAVE ESTABLISHED THEMSELVES IN THE NEW AREAS

Plot date: Mon, 14 Feb 2000 - 17:16:28

REV.	DATE	DESCRIPTION	APPROVED

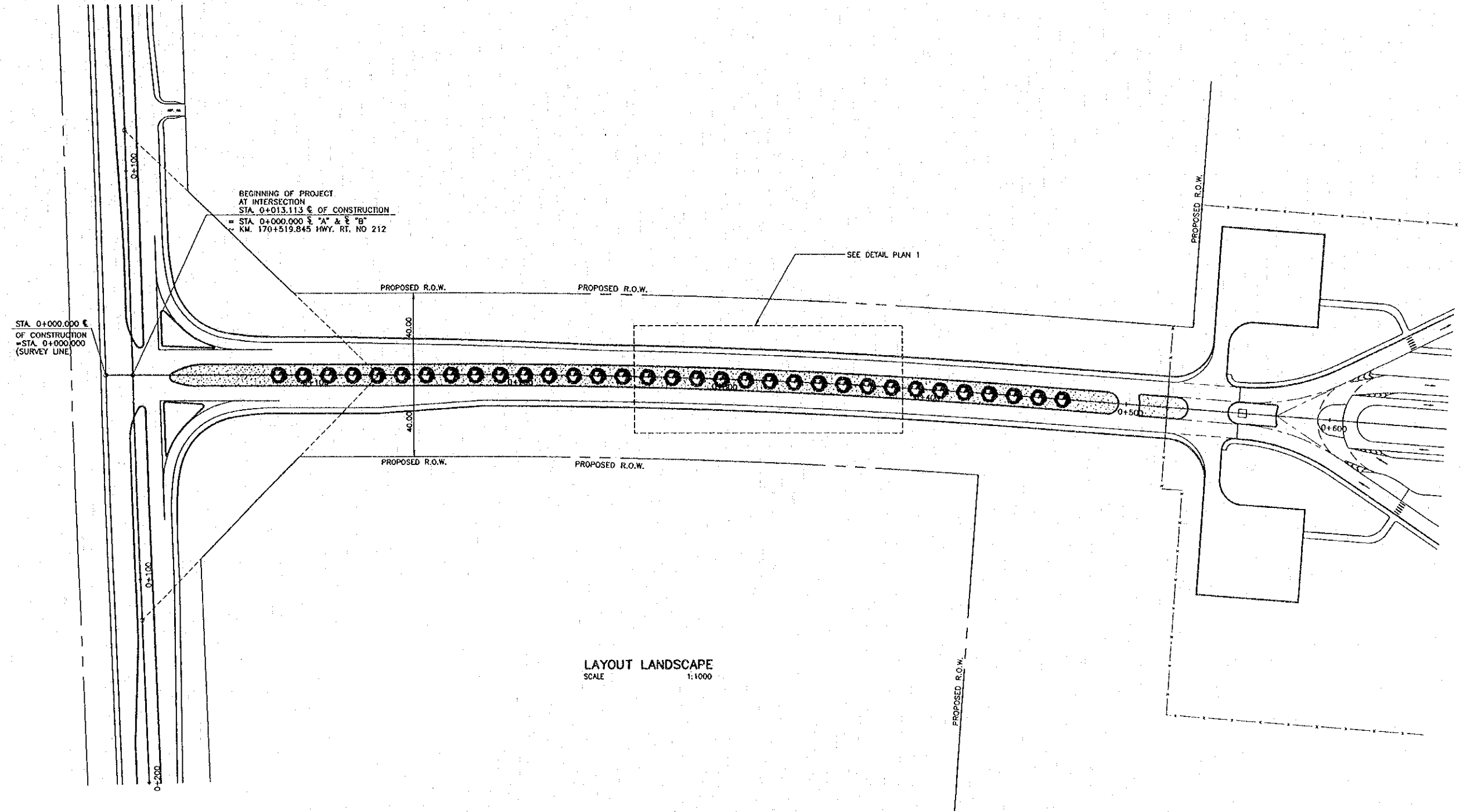
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT



QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Oshio	<i>[Signature]</i>	16-12-99	SODDING DETAILS
DESIGN CHECK	T. Masutomo	<i>[Signature]</i>	18-01-00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-01-00	
APPROVED	S. Temiyabutra	<i>[Signature]</i>	21-02-00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. R-MI-7	SHEET NO. 66
DWG STATUS	







Plot Date: Mon, 14 Feb 2000 17:18:10  
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REV.	DATE	DESCRIPTION	APPROVED

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 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

   
 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

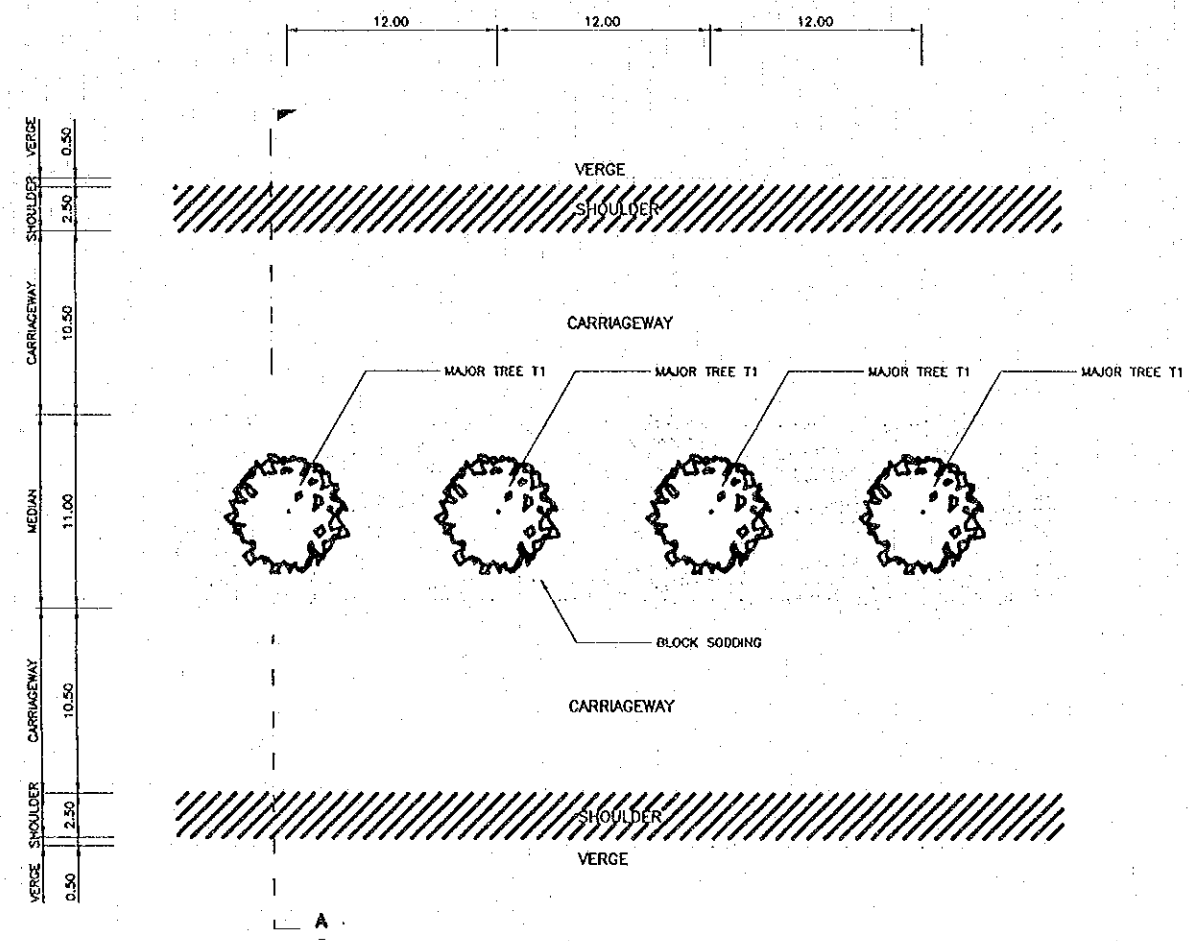
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	M. Osho		11/15/00	LANDSCAPE-1
DESIGN CHECK	T. Masutawa		11/22/00	
SUBMITTED	A. Hiratani		11/27/00	
APPROVED	S. Taniyabutra		2/22/01	

LANDSCAPE-1

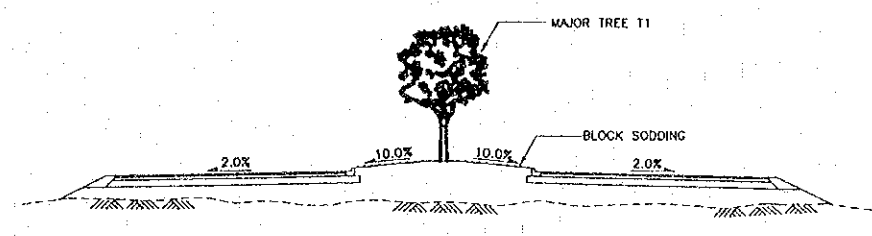
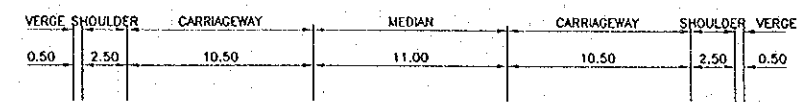
DATE OF ISSUE: 05/03/2000

DWG. NO. R-MI-B SHEET NO. 67


DWG. STATUS



DETAIL PLAN 1  
SCALE 1:200





SECTION A-A  
SCALE 1:200

PLANT LEGEND				
FORM	MARK	THAI NAME	FAMILY NAME ( BOTANICAL )	SCIENTIFIC NAME ( COMMON )
	T1	พญาสัตตบรรณ, สล	CAESALPINIACEAE	Cassia fistula L. (Golden Shower)
	DIAMETER	Ø 2"-3"		
	SPACING	12 m.		
	CHARACTERISTIC	MAJOR TREE		

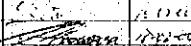
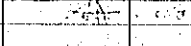
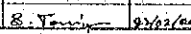

Plot Date: Mon, 14 Feb 2000 - 17:21:24

REV.	DATE	DESCRIPTION	APPROVED

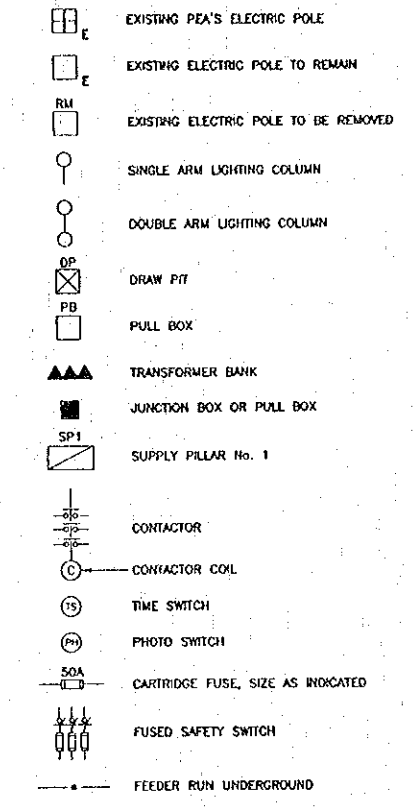
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 THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

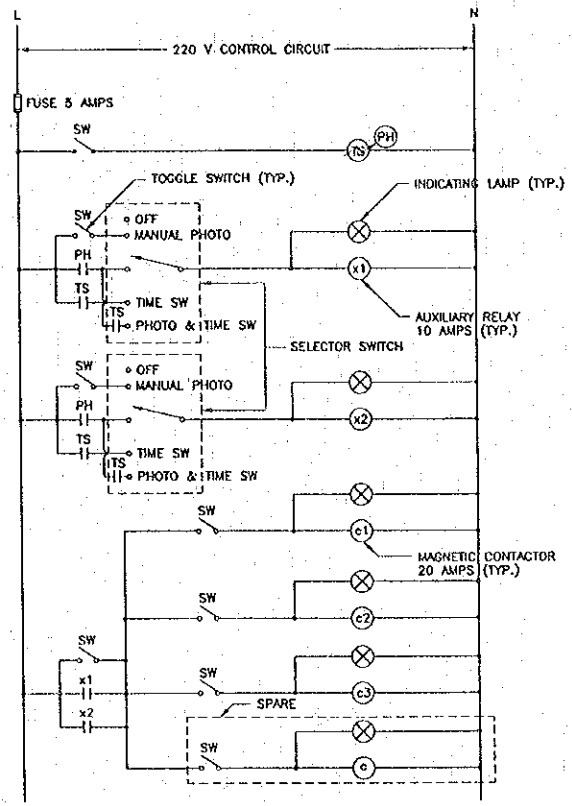
DUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	H. Orita		2/12/00	LANDSCAPE-2
DESIGN CHECK	T. Masutomo		2/22/00	
SUBMITTED	A. Hsiolane		2/22/00	
APPROVED	S. Tanyabutra		2/22/00	

EXTERIOR ELECTRICAL SYMBOLS



ABBREVIATIONS

PEA	PROVINCIAL ELECTRICITY AUTHORITY
NIC	NOT IN THIS CONTRACT
C	CONDUIT
DOH	DEPARTMENT OF HIGHWAYS
SP	SUPPLY PILLAR
WP	WEATHERPROOF
AFG	ABOVE FINISHED GRADE
CH	CHAINAGE
JB	JUNCTION BOX
EC	EMPTY CONDUIT
HPS	HIGH PRESSURE SODIUM
DWG	DRAWING
DP	DRAWPIT
CL	CENTERLINE
TOT	TELEPHONE ORGANIZATION OF THAILAND
GRSC	GALVANIZED RIGID STEEL CONDUIT
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
EXO	EXOTHERIC WELD
PCD	PERIPHERICAL CENTER DIAMETER
HM	HIGH MAST
BC	BARE COPPER CONDUCTOR
SF	SOFFIT LANTERN
CL OF CONSTR.	CENTERLINE OF CONSTRUCTION
CTL	CONTROL LONE

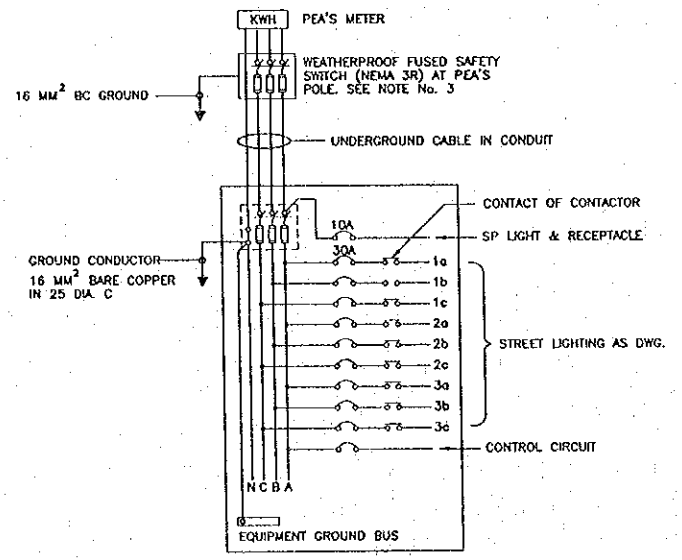
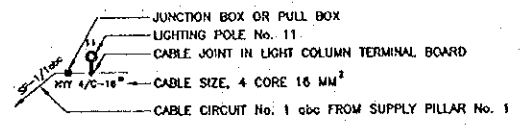


TYPICAL CONTACTOR CIRCUIT

- CONTROL SELECTOR SWITCH POSITION
- OFF - SWITCH OFF ALL LUMINARIES
  - MANUAL - MANUALLY SWITCH ON/OFF ALL LUMINARIES
  - PHOTO - ALL LUMINARIES BE SWITCHED ON/OFF BY PHOTOCELL CONTROL
  - TIME SW - ALL LUMINARIES BE SWITCHED ON/OFF BY PROGRAMMABLE TIMER SWITCH CONTROL
  - PHOTO & TIME SW - ALL LUMINARIES BE SWITCHED ON/OFF BY BOTH PHOTOCELL AND TIMER SWITCH CONTROL

NOTES:

- ALL DIMENSIONS ARE SHOWN IN METERS UNLESS OTHERWISE INDICATED.
- THE PEA SHALL BE RESPONSIBLE FOR REMOVAL AND RELOCATION OF ALL EXISTING ELECTRIC POLES AND LINES, HIGH VOLTAGE, LOW VOLTAGE, OVERHEAD AND UNDERGROUND WITHIN BOUNDARY OF RIGHT OF WAYS IN THIS CONTRACT.
- THE PEA SHALL ARRANGE POWER SUPPLY FOR THE SUPPLY PILLARS. THE CONTRACTOR SHALL COORDINATE WITH THE PEA FOR LOCATION. HE SHALL PROVIDE THE INCOMING SERVICE CABLE FROM SUPPLY PILLARS TO PEA'S METERING POLE WITH FUSIBLE SAFETY SWITCH, SERVICE HEAD AND SLACK CABLES READY FOR PEA'S CONNECTIONS.
- EXACT LOCATION OF SUPPLY PILLARS SHALL BE AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.
- ALL POWER CABLES SHALL BE COPPER, 0.6/1 KV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE (IEC 502 STANDARD)
- ALL CONDUITS SHALL BE HIGH DENSITY POLYETHYLENE CONDUITS UNLESS OTHERWISE INDICATED.
- ALL WIRING CROSS UNDER ROADWAY OR PAVEMENT SHALL BE RUN IN HIGH DENSITY POLYETHYLENE CONDUITS REINFORCED CONCRETE ENCASED EXTENDED 1.50 M. BEYOND PAVEMENT NUMBER OF CONDUITS SHALL BE AS REQUIRED.
- ALL WIRING ON, IN OR UNDER STRUCTURE SHALL BE RUN IN UPVC CONDUITS.
- ALL DRAWINGS SHALL BE TYPE "B" UNLESS OTHERWISE INDICATED THE EXACT LOCATION SHALL BE AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.
- FOR SIMPLICITY, THE DIAGRAM OF SUPPLY PILLARS AS SHOWN IN STREET LIGHTING DIAGRAMS IN OTHER DRAWINGS ARE INCOMPLETE, REFER TO TYPICAL DIAGRAM IN THIS DWG.



TYPICAL DIAGRAM OF SUPPLY PILLAR

Proj. Date: Mon, 14 Feb 2000 - 17:20:24

REV.	DATE	DESCRIPTION	APPROVED

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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

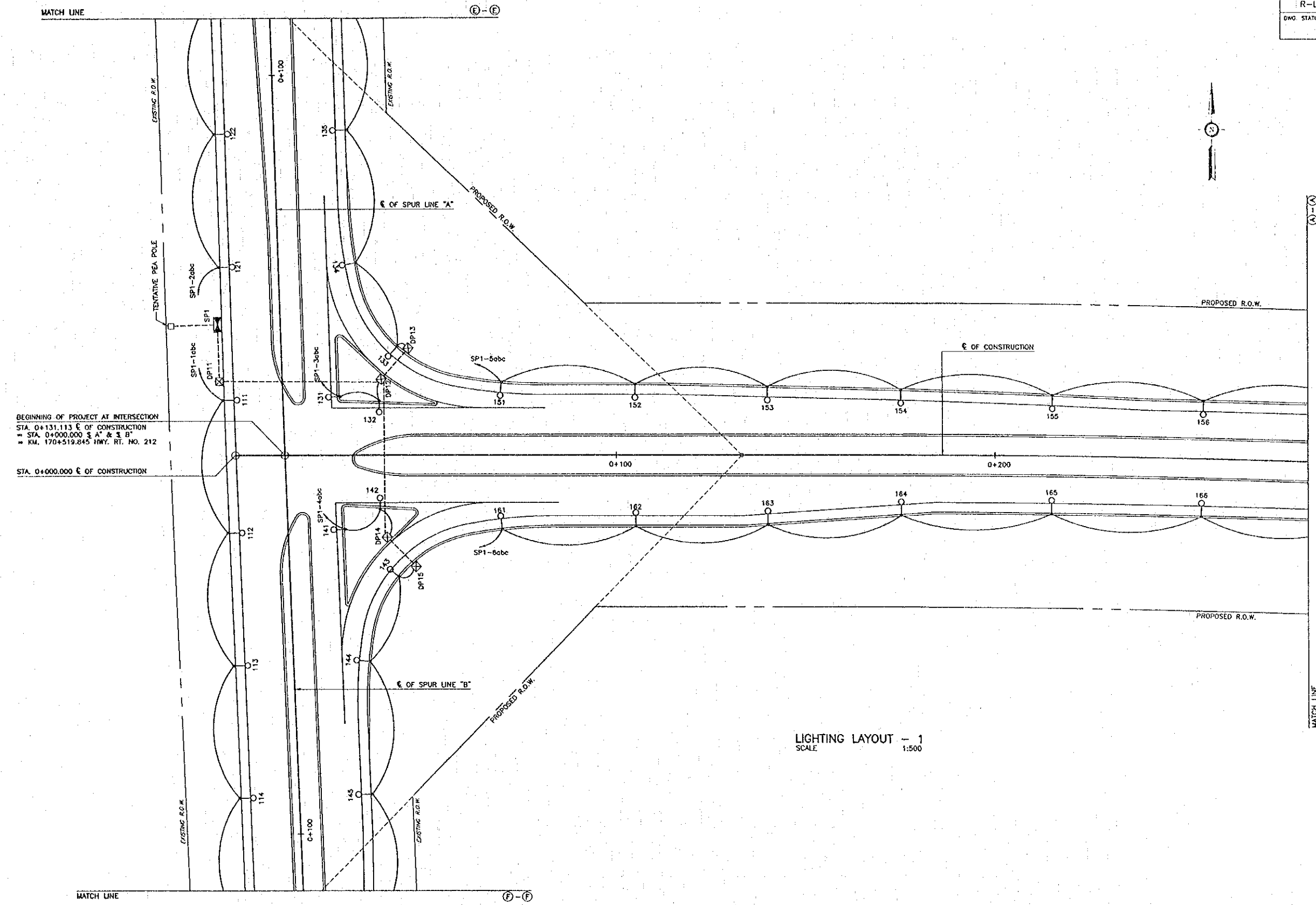
THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takahashi	<i>[Signature]</i>	18-02-00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	17-02-00
SUBMITTED	A. Hiratsuki	<i>[Signature]</i>	21-02-00
APPROVED	S. Femyebutra	<i>[Signature]</i>	22-02-00

DWG. TITLE: ELECTRICAL SYMBOLS AND ABBREVIATIONS



DATE OF ISSUE: 05/03/2000	
DWG. NO. R-L-2	SHEET NO. 69
DWG. STATUS	



BEGINNING OF PROJECT AT INTERSECTION  
 STA. 0+131.113 € OF CONSTRUCTION  
 = STA. 0+000.000 S A' & S B'  
 = KM. 170+519.845 HWY. RT. NO. 212

STA. 0+000.000 € OF CONSTRUCTION

LIGHTING LAYOUT - 1  
 SCALE 1:500

Plot code: Main, 14 Feb 2000 - 17:31:43

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM

**ORIENTAL CONSULTANTS CO., LTD.**

In association with

**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

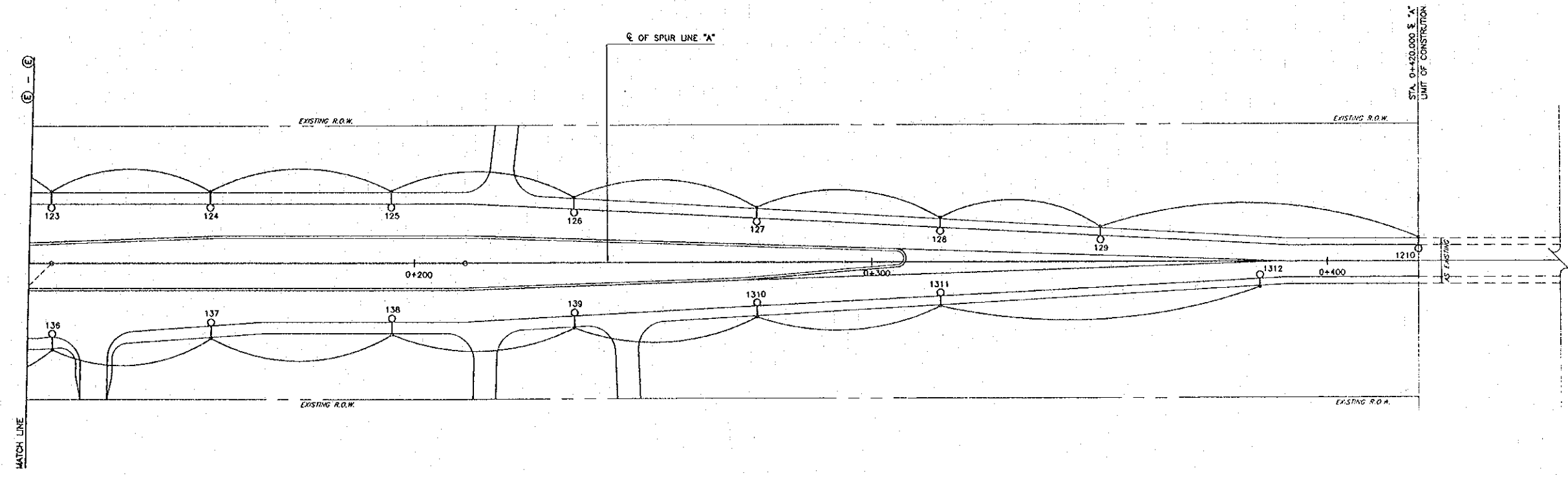
KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	T. Takobushi	<i>T. Takobushi</i>	16.01.00	LIGHTING LAYOUT-1 AT INTERSECTION HWY. RT. NO. 212
DESIGN CHECK	J. Masuzawa	<i>J. Masuzawa</i>	16.01.00	
SUBMITTED	A. Hirahara	<i>A. Hirahara</i>	16.01.00	
APPROVED	S. Terayabutra	<i>S. Terayabutra</i>	20/02/00	

LIGHTING LAYOUT-1  
 AT INTERSECTION HWY. RT. NO. 212

DATE OF ISSUE: 05/03/2000	
DWG. NO. R-L-3	SHEET NO. 70
DWG. STATUS	



LIGHTING LAYOUT - 2  
SCALE 1:500

PLOT DATE: MAR. 14, FEB. 2000 = 173631

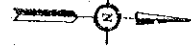
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
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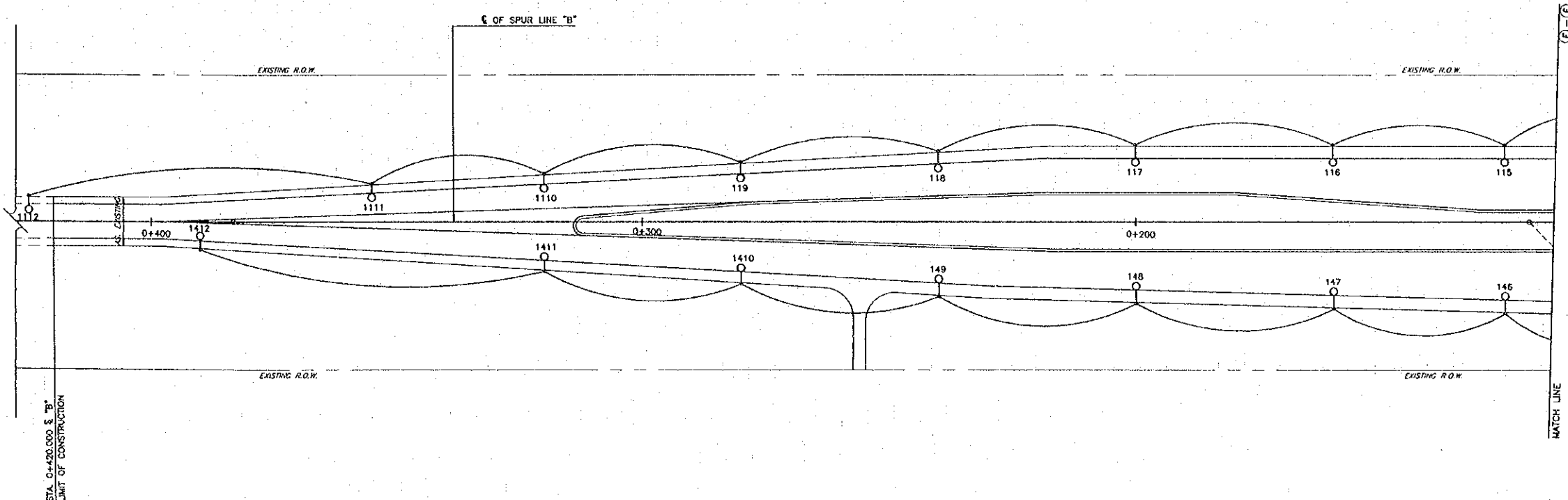
JAPAN INTERNATIONAL COOPERATION AGENCY  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
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THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Takahashi		16-02-99	LIGHTING LAYOUT-2 AT INTERSECTION HWY. RT. NO. 212 & "A"
DESIGN CHECK	T. Masuzawa		16-02-99	
SUBMITTED	A. Hidetani		16-02-99	
APPROVED	S. Taniyabutra		22-02-00	





DATE OF ISSUE: 05/03/2000	
DWG. NO. R-L-4	SHEET NO. 71
DWG. STATUS	



LIGHTING LAYOUT - 3  
SCALE 1:500

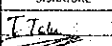
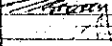
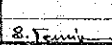

Plot Date: Mon, 14 Feb 2000 - 17:48:27

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 **ORIENTAL CONSULTANTS CO., LTD.**  
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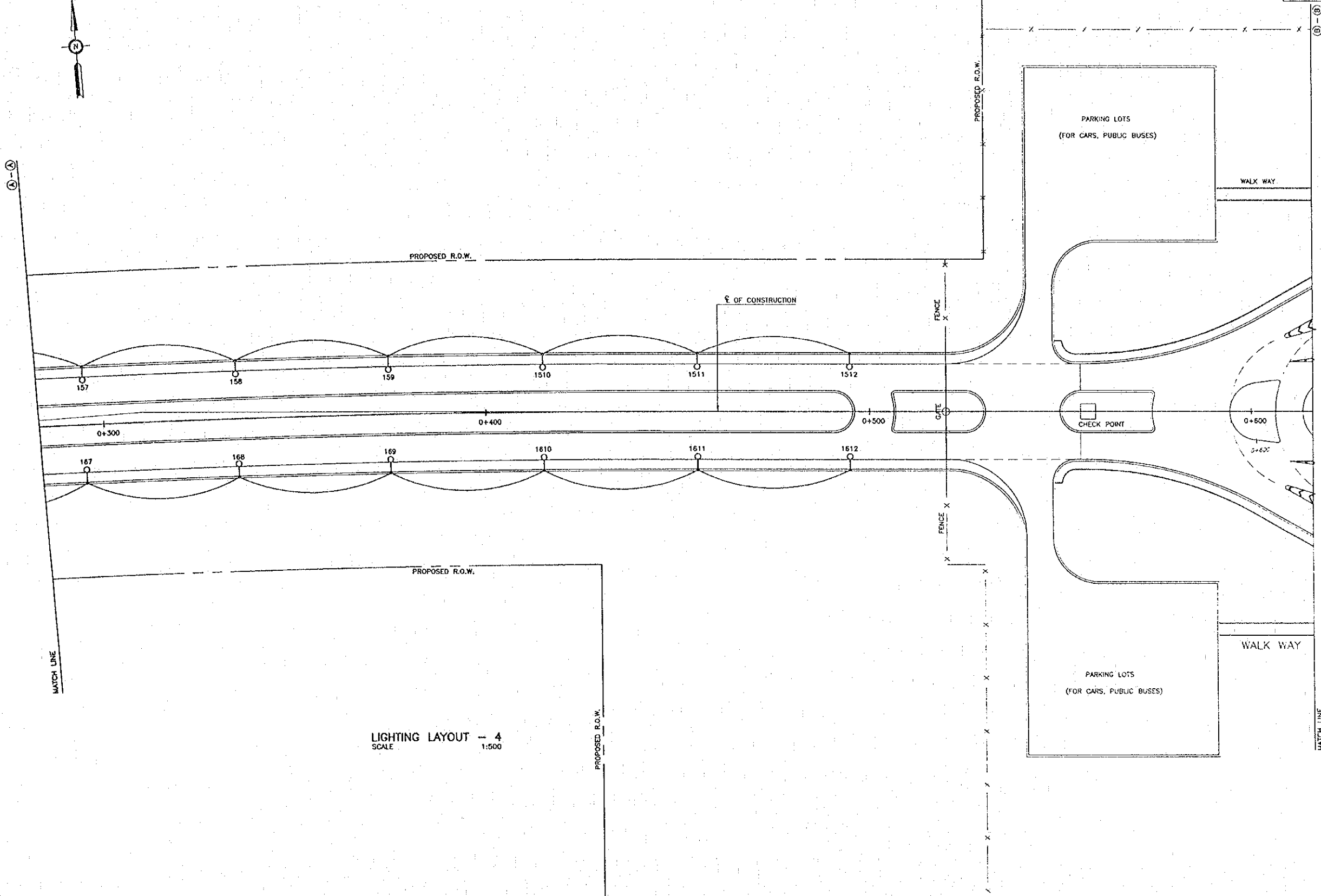
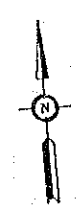
 **JAPAN INTERNATIONAL COOPERATION AGENCY**  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
**MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION**  
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**DEPARTMENT OF HIGHWAYS**

   
**THE SECOND MEKONG INTERNATIONAL BRIDGE**  
**CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Yokoobashi		16/01/00
DESIGN CHECK	T. Masuzawa		18/01/00
SUBMITTED	A. Hirakawa		21/01/00
APPROVED	S. Temiyabutra		23/02/00

DWG. TITLE:  
**LIGHTING LAYOUT-3**  
 AT INTERSECTION HWY. RT. NO. 212 & "B"



DATE OF ISSUE: 05/03/2000	
DWG. NO. R-L-5	SHEET NO. 72
DWG. STATUS	



LIGHTING LAYOUT - 4  
SCALE 1:500


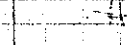
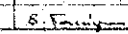

Plot date: Fri, 14 Jun 2000 - 10:31:49

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
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**DEPARTMENT OF HIGHWAYS**

  
**THE SECOND MEKONG**  
**INTERNATIONAL BRIDGE**  
**CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Tanabunang		10/07/2000
DESIGN CHECK	T. Maruizawa		11/02/00
SUBMITTED	A. Hexton		11/25/00
APPROVED	S. Temvattana		22/02/00

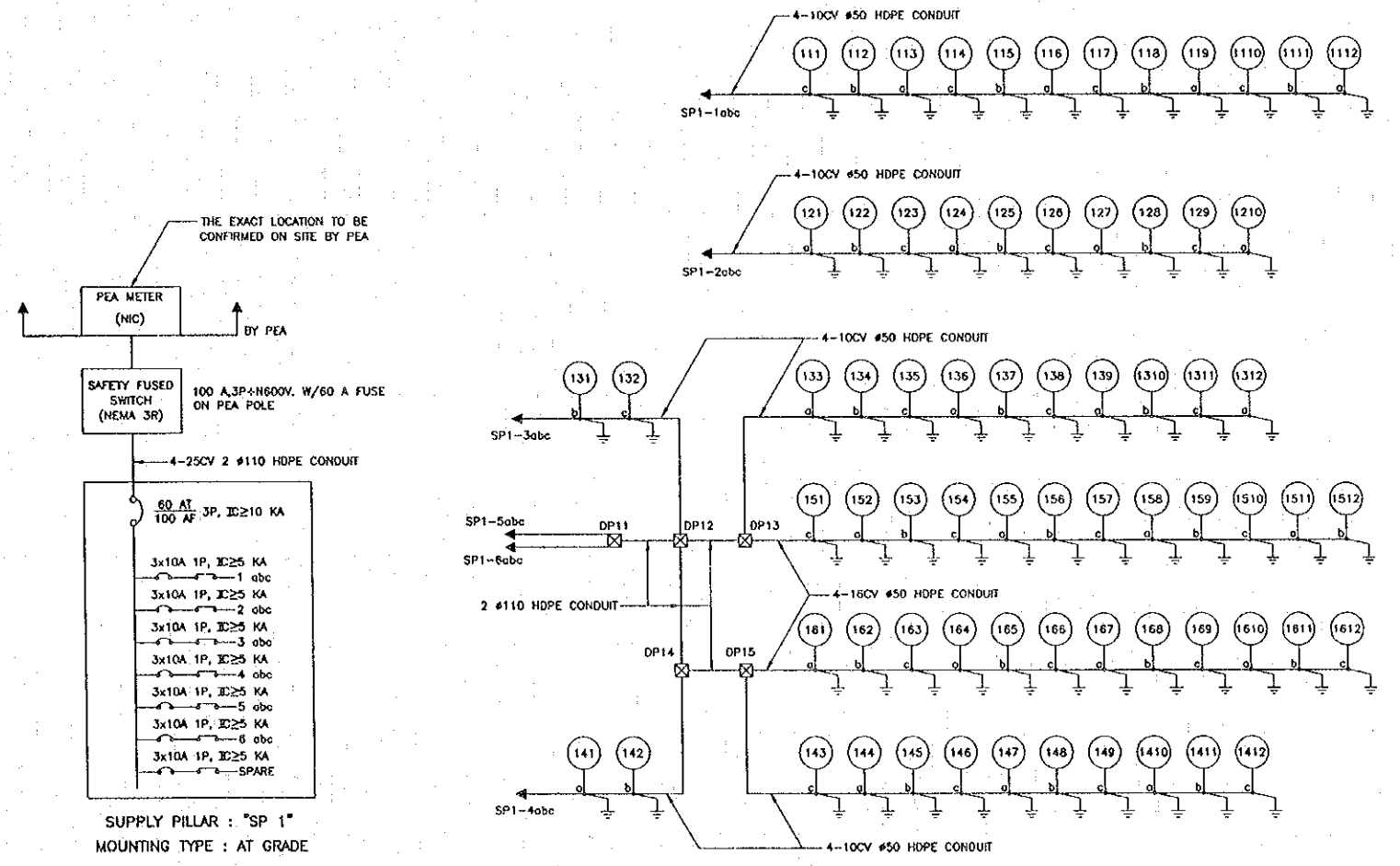
DWG. TITLE:  
**LIGHTING LAYOUT-4**  
 CONNECTING ROAD TO BORDER CONTROL FACILITY

LIGHTING COLUMN SCHEDULE

COLUMN NUMBER	STA.	ROAD	COLUMN HEIGHT	COLUMN TYPE	MOUNTING TYPE	ARM LENGTH (M.)	LANTERN TYPE	LAMP TYPE	REMARK
SP1	0+035.000	SPUR LINE "A"	-	PILLAR	GRADE	-	-	-	TOTAL LOAD 30 KVA
111	0+015.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
112	0+020.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
113	0+055.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
114	0+090.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
115	0+125.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
116	0+160.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
117	0+200.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
118	0+240.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
119	0+280.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1110	0+320.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1111	0+355.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1112	0+425.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
121	0+050.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
122	0+085.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
123	0+120.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
124	0+155.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
125	0+195.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
126	0+235.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
127	0+275.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
128	0+315.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
129	0+350.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1210	0+420.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
131	0+015.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
132	0+038.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
133	0+043.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
134	0+050.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
135	0+085.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
136	0+120.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
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138	0+195.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
139	0+235.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1310	0+275.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1311	0+315.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1312	0+385.000	SPUR LINE "A"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
141	0+020.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
142	0+038.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
143	0+043.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
144	0+055.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
145	0+090.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
146	0+125.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
147	0+160.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
148	0+200.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
149	0+240.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1410	0+280.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1411	0+320.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1412	0+390.000	SPUR LINE "B"	10	SINGLE	M-2	2.50	CO	1x250 HPS	
151	0+070.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
152	0+105.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
153	0+140.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
154	0+175.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
155	0+215.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
156	0+255.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
157	0+295.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
158	0+335.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
159	0+375.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1510	0+415.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1511	0+455.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1512	0+495.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
161	0+070.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	

COLUMN NUMBER	STA.	ROAD	COLUMN HEIGHT	COLUMN TYPE	MOUNTING TYPE	ARM LENGTH (M.)	LANTERN TYPE	LAMP TYPE	REMARK
162	0+105.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
163	0+140.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
164	0+175.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
165	0+215.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
166	0+255.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
167	0+295.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
168	0+335.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
169	0+375.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1610	0+415.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1611	0+455.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	
1612	0+495.000	€ OF CONSTR.	10	SINGLE	M-2	2.50	CO	1x250 HPS	

DATE OF ISSUE: 05/03/2000  
 ENG. NO. R-L-6 SHEET NO. 73  
 DWG. STATUS

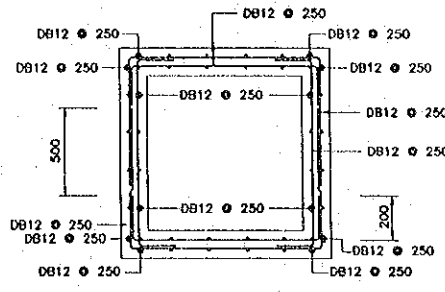
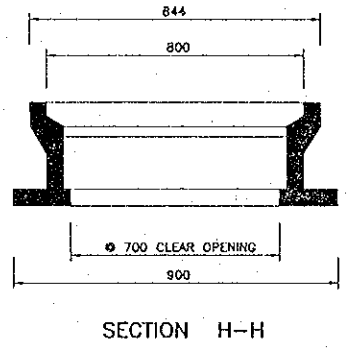
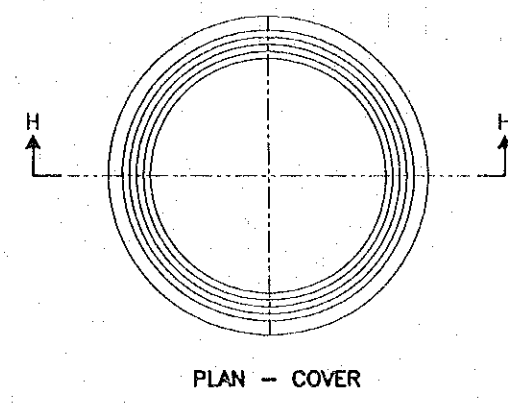
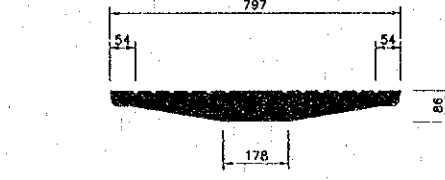
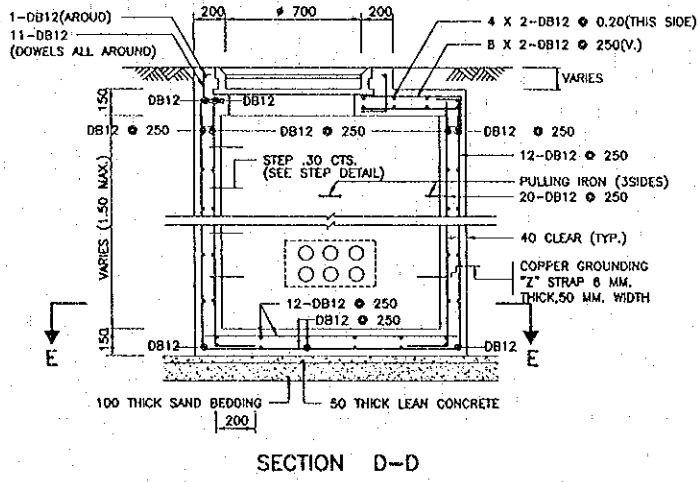
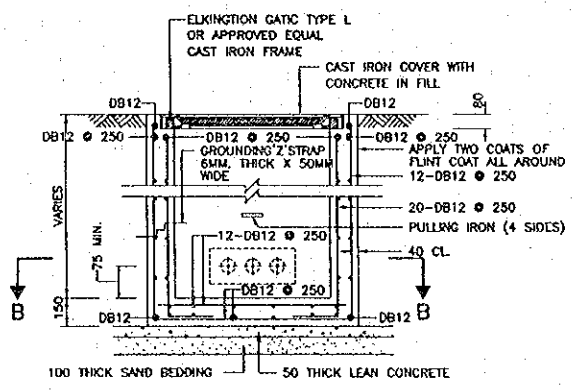
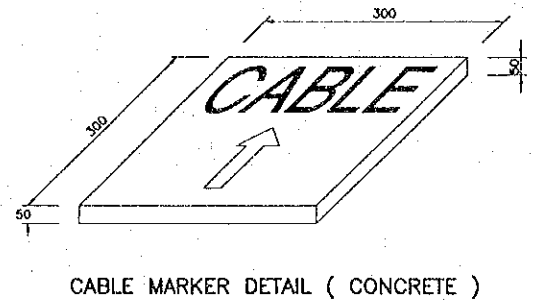
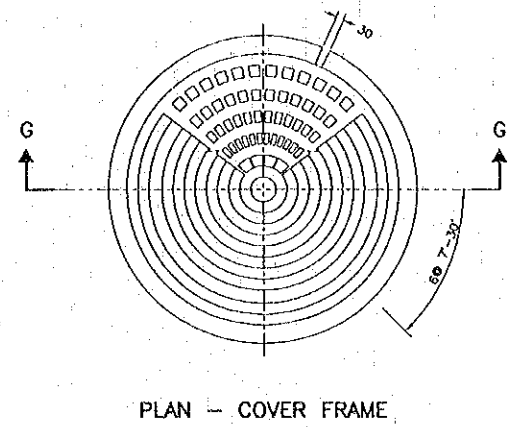
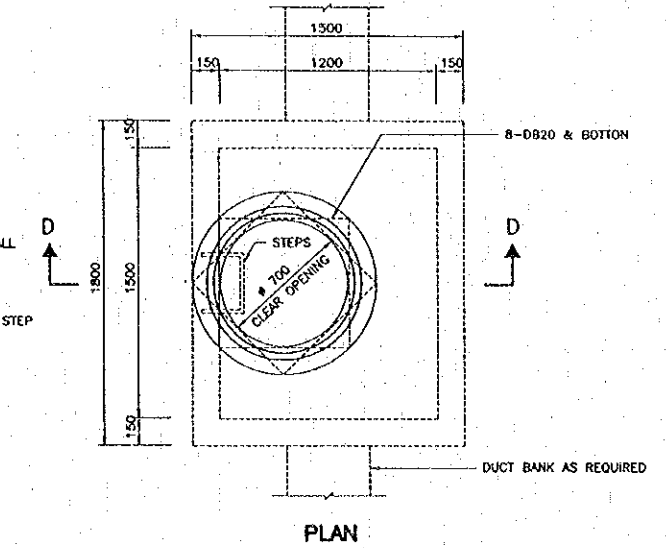
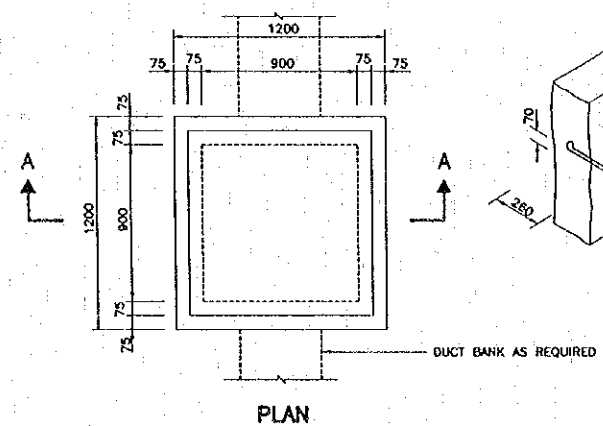


SINGLE LINE DIAGRAM (SP1)

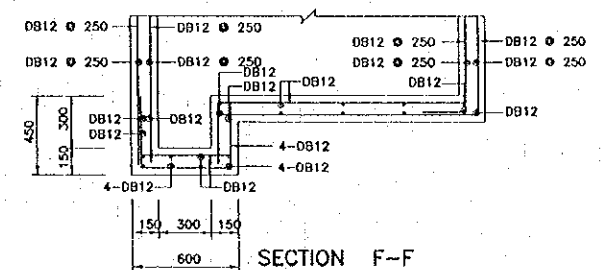
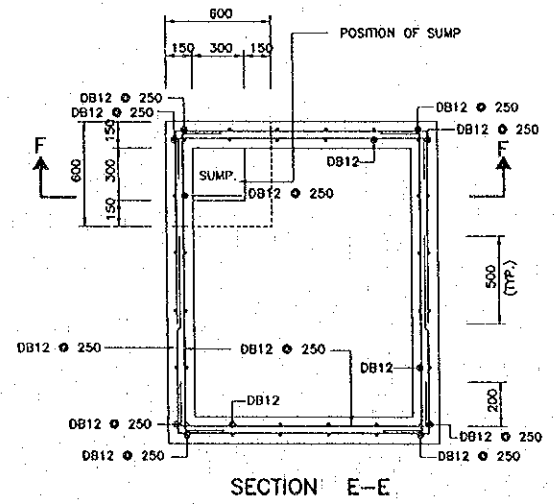
Print Date: Mon, 14 Feb 2000 16:02:32

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Takobunh	<i>[Signature]</i>	16.02.00	SINGLE LINE DIAGRAM AND LIGHTING COLUMN
						DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	17.02.00	
						SUBMITTED	A. Hirani	<i>[Signature]</i>	21.02.00	
						APPROVED	S. Teriyabutra	<i>[Signature]</i>	23.02.00	





DRAWPIT TYPE B DETAILS  
 SCALE 1 : 20



DRAWPIT TYPE A DETAILS  
 SCALE 1 : 20

- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - CONCRETE SHALL BE CLASS D (24N/MM<sup>2</sup>) UNLESS OTHERWISE SHOWN.
  - REINFORCING STEEL BARS SHALL BE GRADE SD295.

Prof. Issa: Rev. 14 Feb 2000 - 18:19:26

REV.	DATE	DESCRIPTION	APPROVED

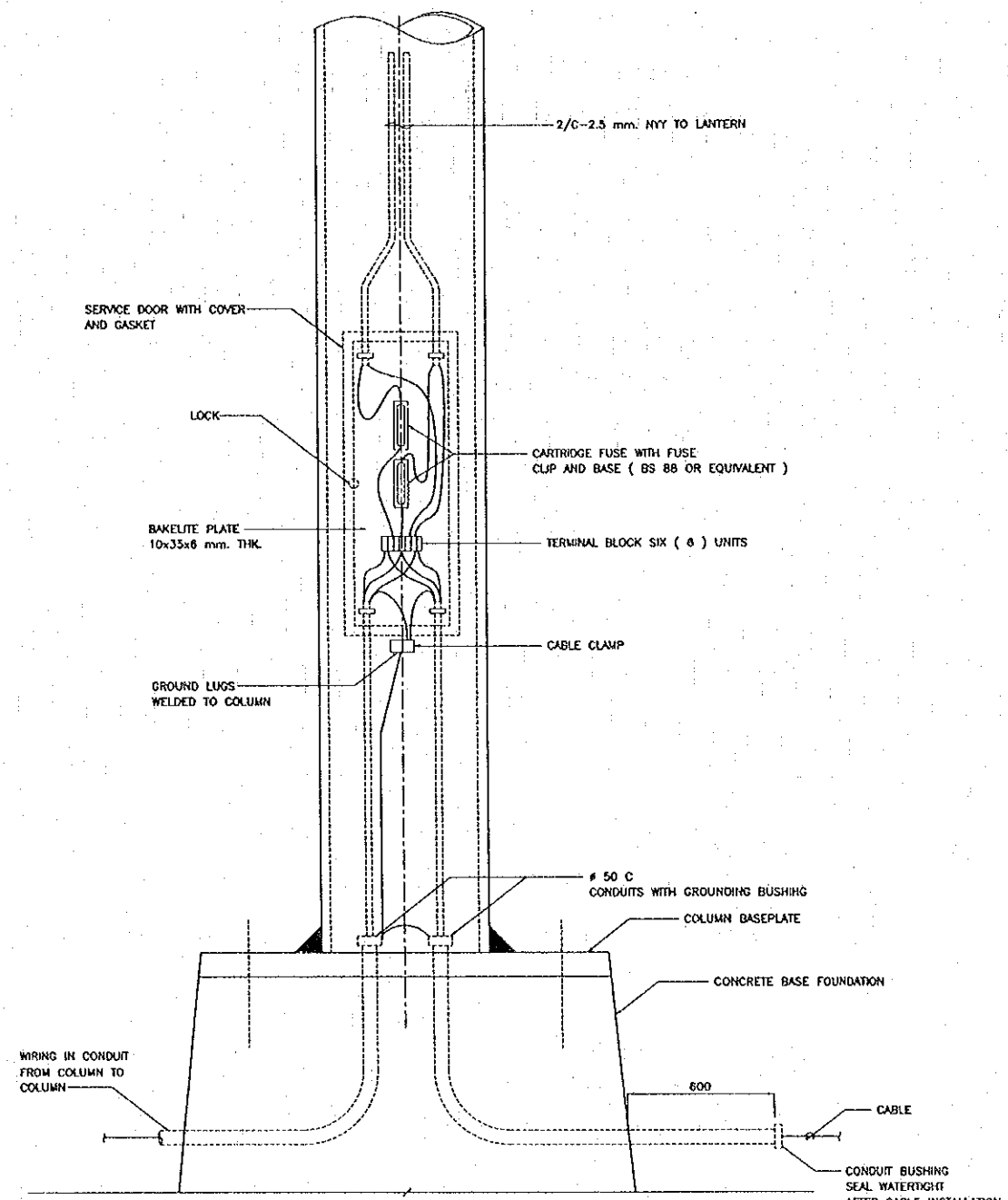
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

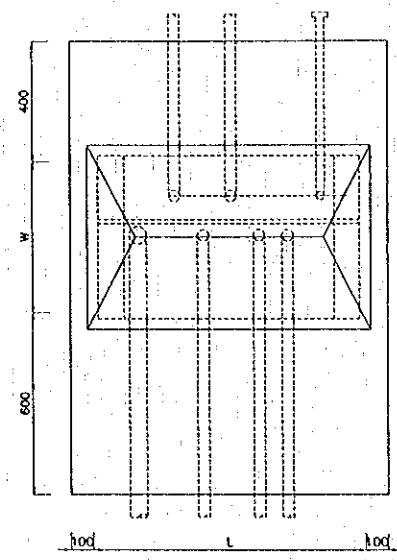
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	T. Takabushi	<i>T. Takabushi</i>	16/02/00	DRAWPITS
DESIGN CHECK	T. Masutoko	<i>T. Masutoko</i>	18/02/00	
SUBMITTED	A. Hirakawa	<i>A. Hirakawa</i>	21/02/00	
APPROVED	S. Terayabutra	<i>S. Terayabutra</i>	22/02/00	

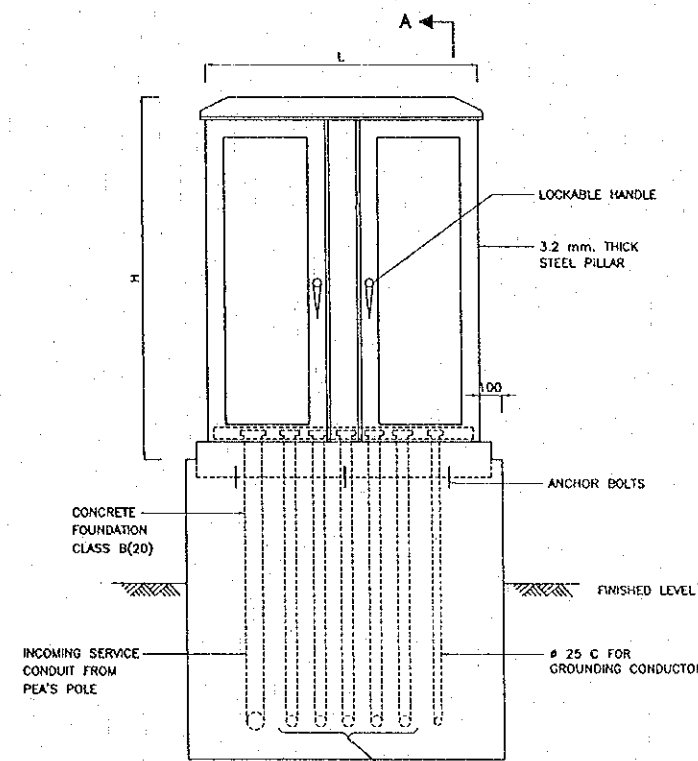
DATE OF ISSUE: 05/03/2000	
DWG. NO. R-L-9	SHEET NO. 76
DWG STATUS	



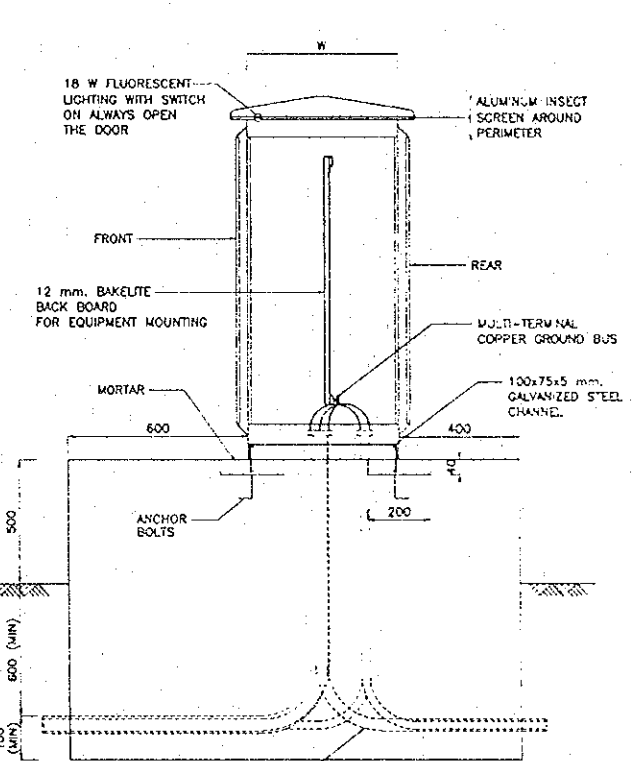
TYPICAL ELECTRICAL CONNECTION IN LIGHTING COLUMN  
NOT TO SCALE



PLAN SUPPLY PILLAR  
NOT TO SCALE



ELEVATION  
NOT TO SCALE



SECTION "A"  
NOT TO SCALE

SUPPLY CONDUITS, SIZE AND NUMBER TO SUIT THE WIRING DIAGRAM AND SPARE TWO EXTRA # 50 mm. CONDUITS FOR EACH PILLAR.

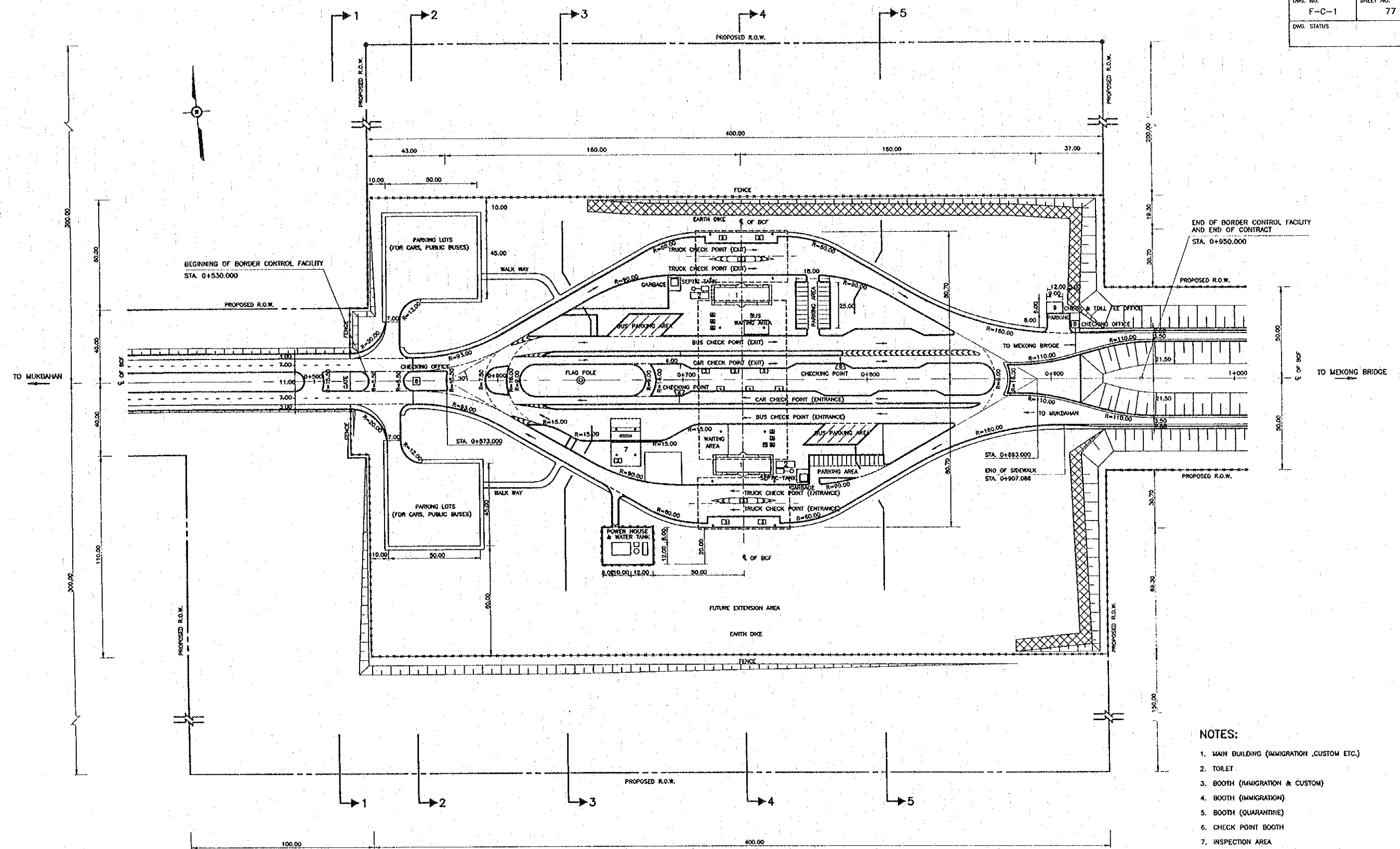
- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE SUPPLY PILLAR TO ACCOMMODATE ALL EQUIPMENT INSTALLED AND ALLOW FOR USABLE SPACE FOR FUTURE ADDITION, REFERRED TO THE SPECIFICATIONS.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS</p>	<table border="1"> <tr> <th>QUALITY RECORD</th> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> <tr> <td>DESIGN</td> <td>T. Tokobu</td> <td><i>T. Tokobu</i></td> <td>16/02/00</td> </tr> <tr> <td>DESIGN CHECK</td> <td>T. Morisawa</td> <td><i>T. Morisawa</i></td> <td>18/02/00</td> </tr> <tr> <td>SUBMITTED</td> <td>A. Hirata</td> <td><i>A. Hirata</i></td> <td>21/02/00</td> </tr> <tr> <td>APPROVED</td> <td>S. Taniguchi</td> <td><i>S. Taniguchi</i></td> <td>22/02/00</td> </tr> </table>	QUALITY RECORD	NAME	SIGNATURE	DATE	DESIGN	T. Tokobu	<i>T. Tokobu</i>	16/02/00	DESIGN CHECK	T. Morisawa	<i>T. Morisawa</i>	18/02/00	SUBMITTED	A. Hirata	<i>A. Hirata</i>	21/02/00	APPROVED	S. Taniguchi	<i>S. Taniguchi</i>	22/02/00	DWG. TITLE
	QUALITY RECORD	NAME	SIGNATURE	DATE																							
	DESIGN	T. Tokobu	<i>T. Tokobu</i>	16/02/00																							
	DESIGN CHECK	T. Morisawa	<i>T. Morisawa</i>	18/02/00																							
	SUBMITTED	A. Hirata	<i>A. Hirata</i>	21/02/00																							
APPROVED	S. Taniguchi	<i>S. Taniguchi</i>	22/02/00																								
			ORIENTAL CONSULTANTS CO., LTD.																								
			In association with																								
			NIPPON KORI CO., LTD.																								

LIGHTING COLUMN CONNECTION AND SUPPLY PILLAR

Doc. date: Fri, 14 Jun 2000 10:40:44





LAYOUT PLAN  
SCALE 1 : 1,000

- NOTES:
1. MAIN BUILDING (IMMIGRATION, CUSTOM ETC.)
  2. TOILET
  3. BOOTH (IMMIGRATION & CUSTOM)
  4. BOOTH (IMMIGRATION)
  5. BOOTH (QUARANTINE)
  6. CHECK POINT BOOTH
  7. INSPECTION AREA
  8. CHECKING OFFICE
  9. CHECK & TOLL FEE OFFICE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED

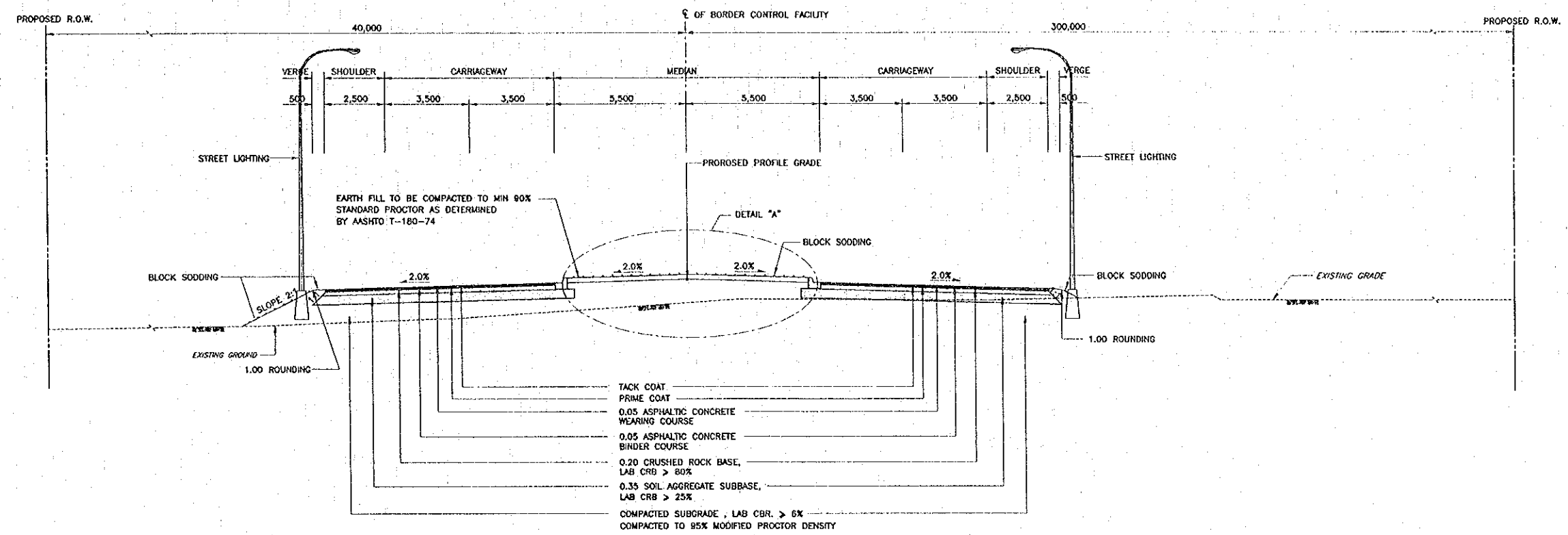
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

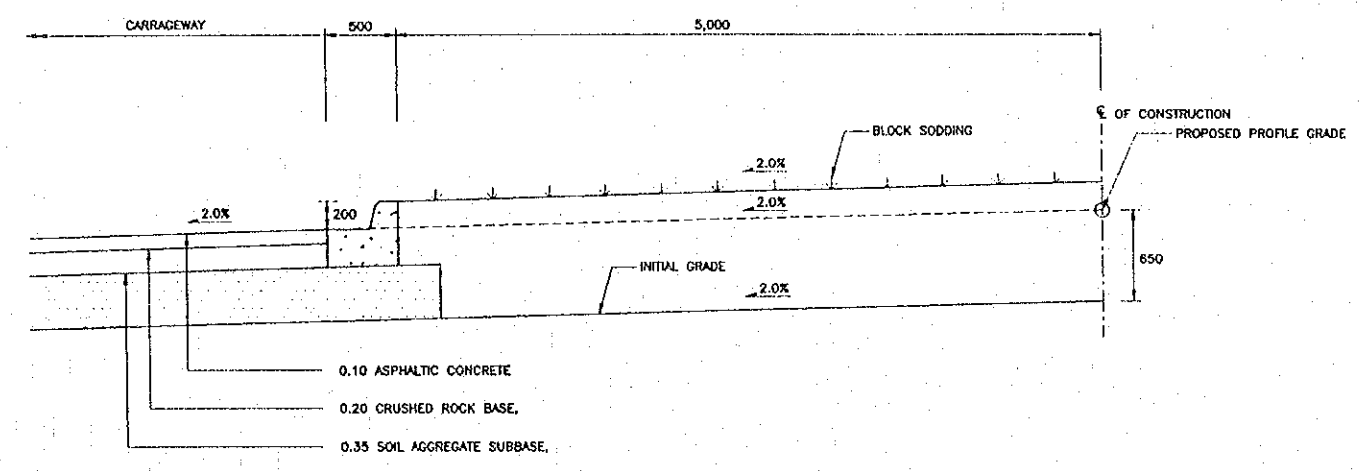
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	M. Orito	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/02/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE GENERAL LAYOUT OF BCF**



SECTION 1 - 1  
SCALE 1 : 100

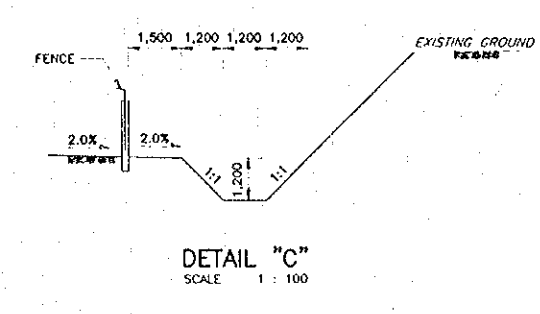
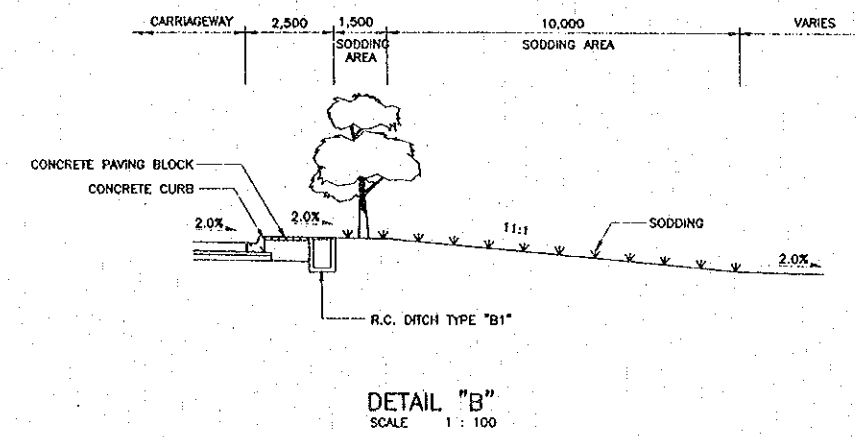
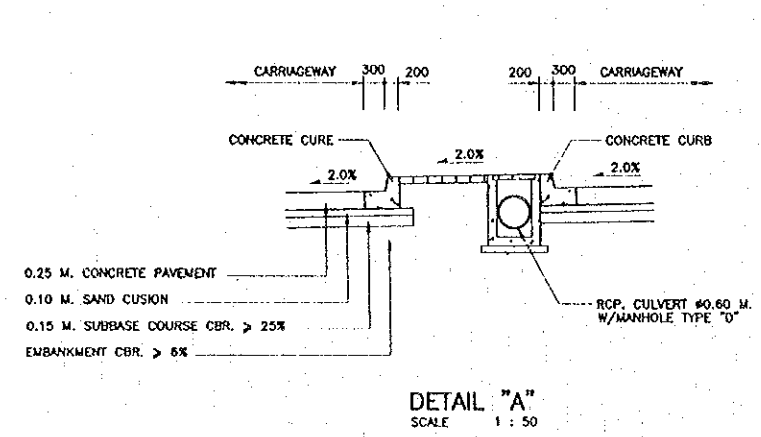
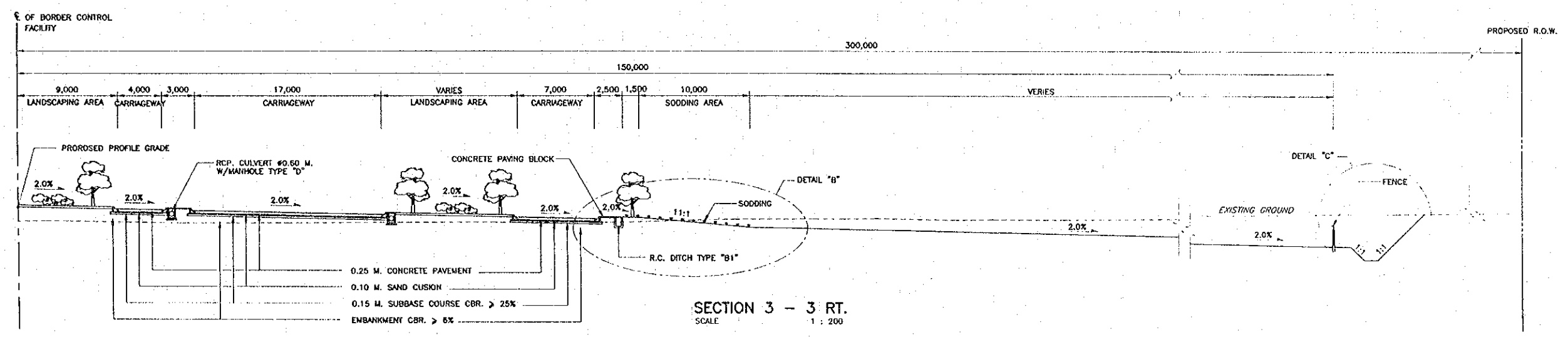
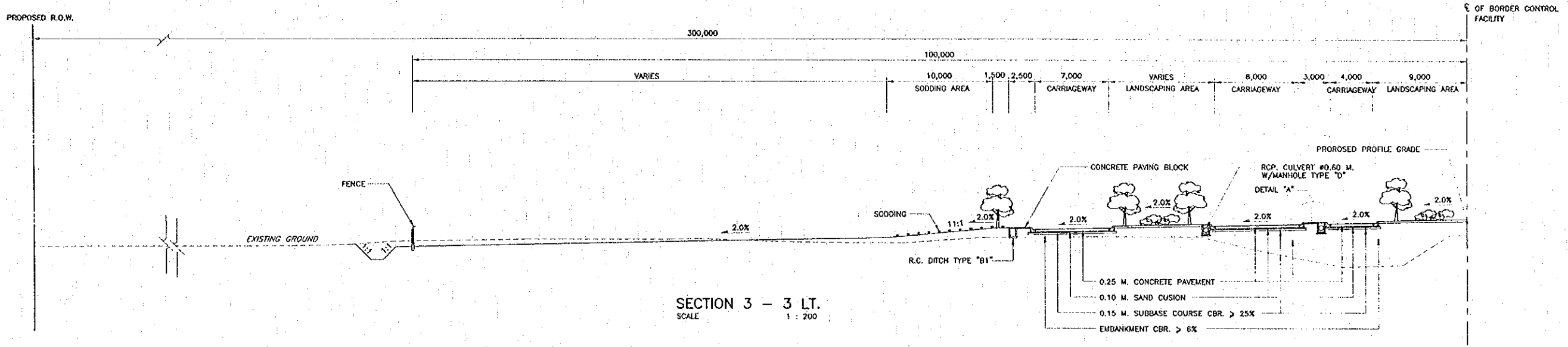


DETAIL "A"  
SCALE 1 : 25

NOTE  
DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	M. Ohta	<i>M. Ohta</i>	16/04/00	BORDER CONTROL FACILITIES THAILAND SIDE CROSS SECTION - 1
						DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	17/04/00	
						SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	21/04/00	
						APPROVED	S. Taniyabutra	<i>S. Taniyabutra</i>	22/04/00	





NOTE  
 DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED

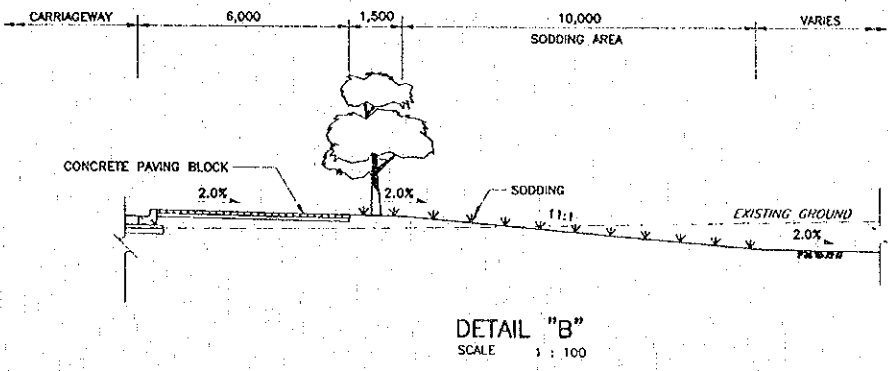
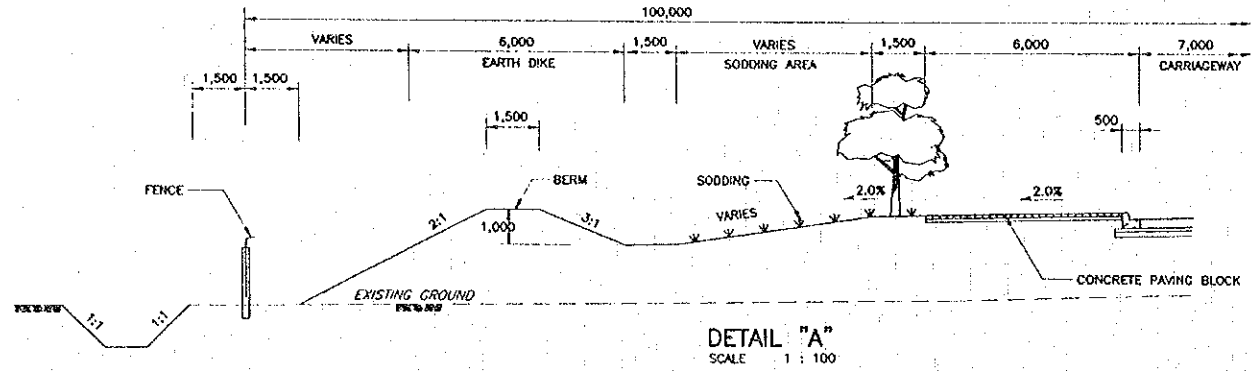
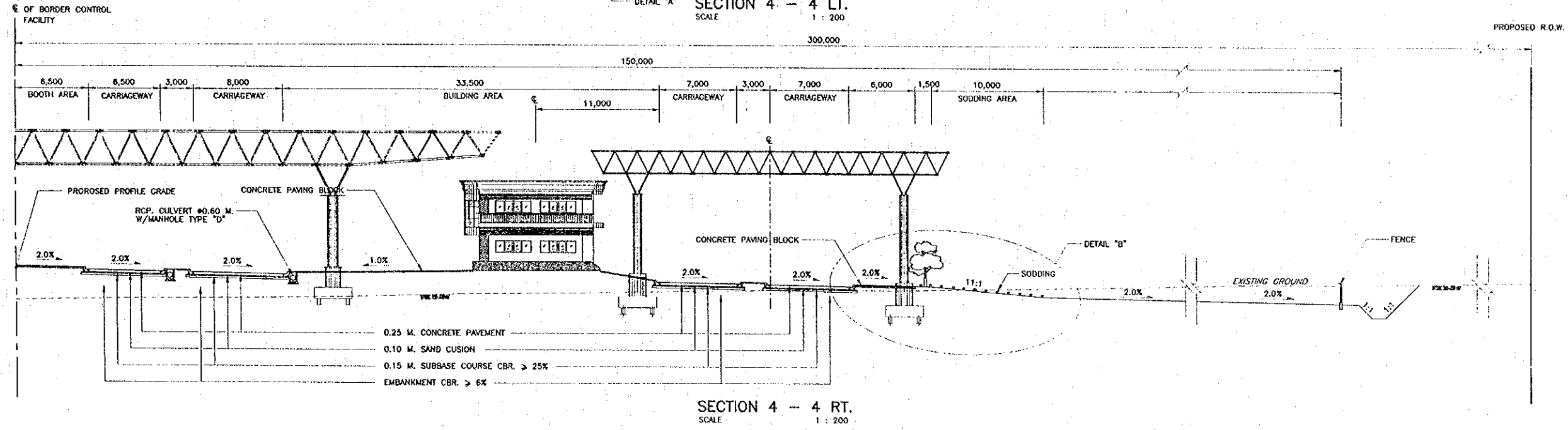
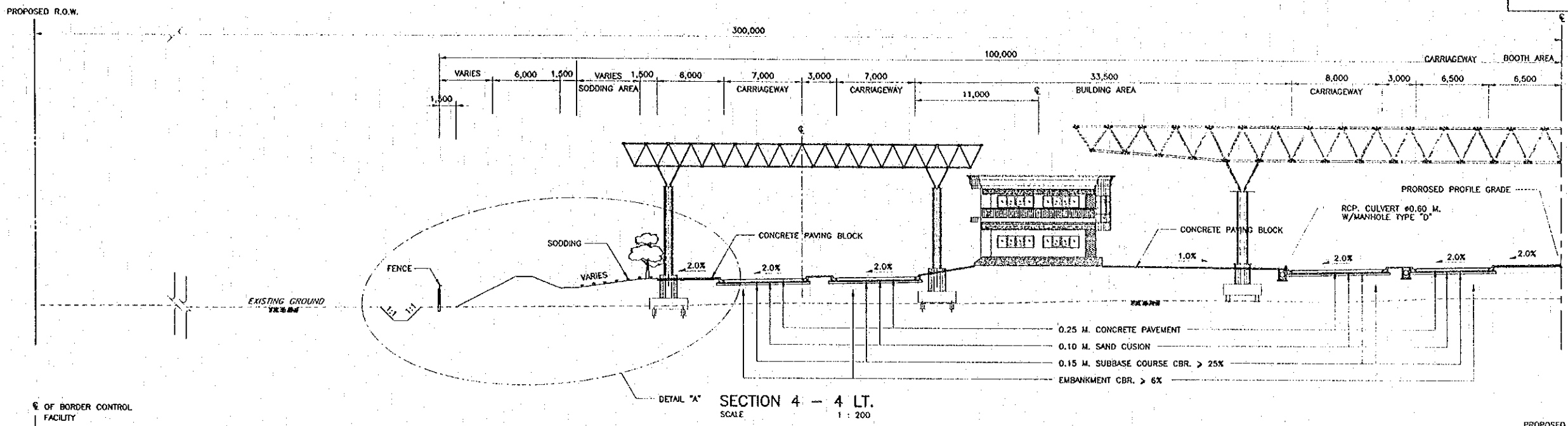
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	16/04/00
DESIGN CHECK	T. Masutomo	<i>[Signature]</i>	18/05/00
SUBMITTED	A. Hirahara	<i>[Signature]</i>	21/02/00
APPROVED	S. Temiyabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 CROSS SECTION - 3



NOTE  
 DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED

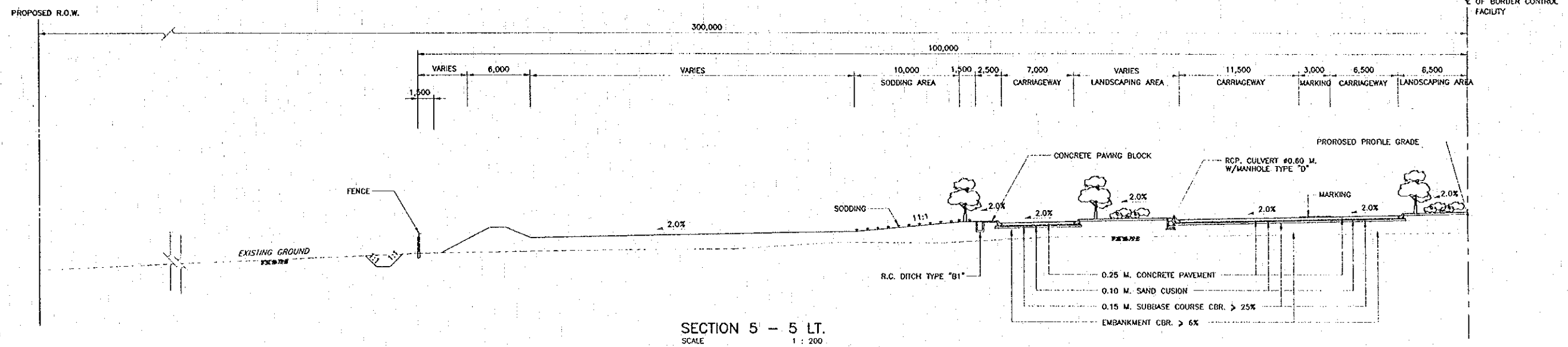
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

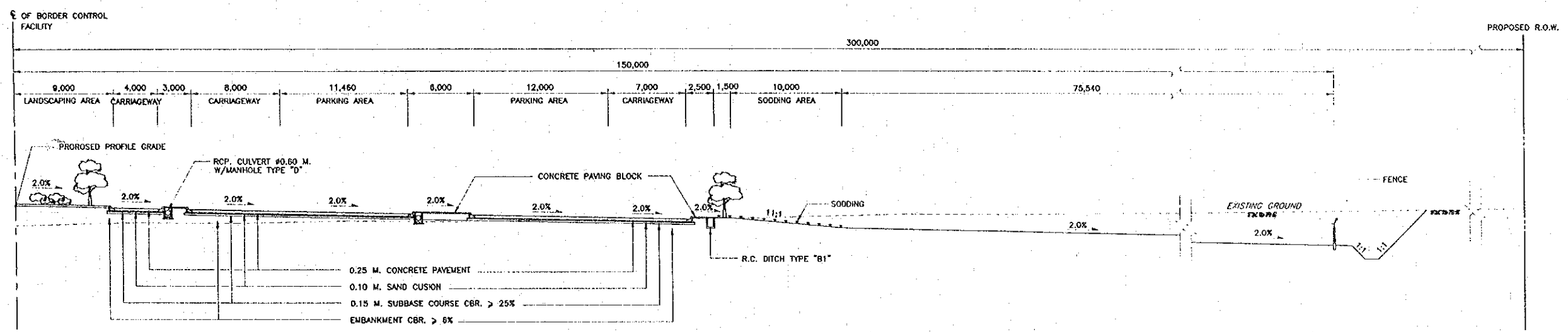
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Onito	<i>[Signature]</i>	11/02/00
DESIGN CHECK	T. Morozawa	<i>[Signature]</i>	12-02-00
SUBMITTED	A. Hirohata	<i>[Signature]</i>	21/02/00
APPROVED	S. Terajabutra	<i>[Signature]</i>	24/02/00

DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 CROSS SECTION - 4



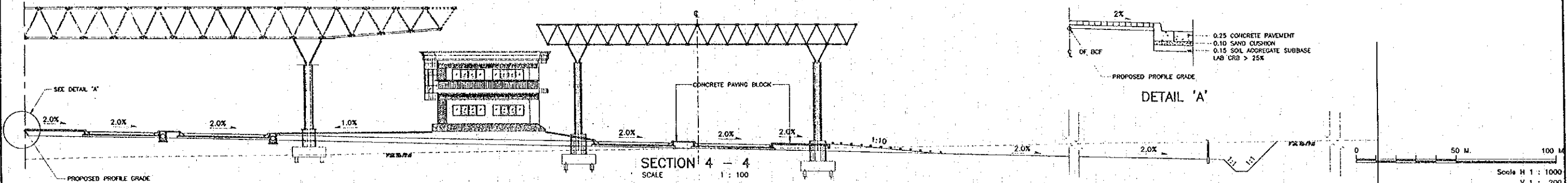
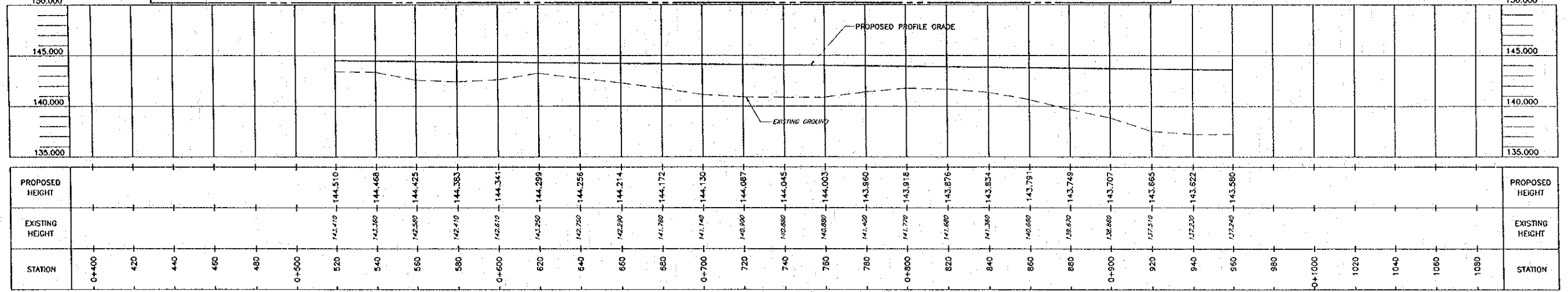
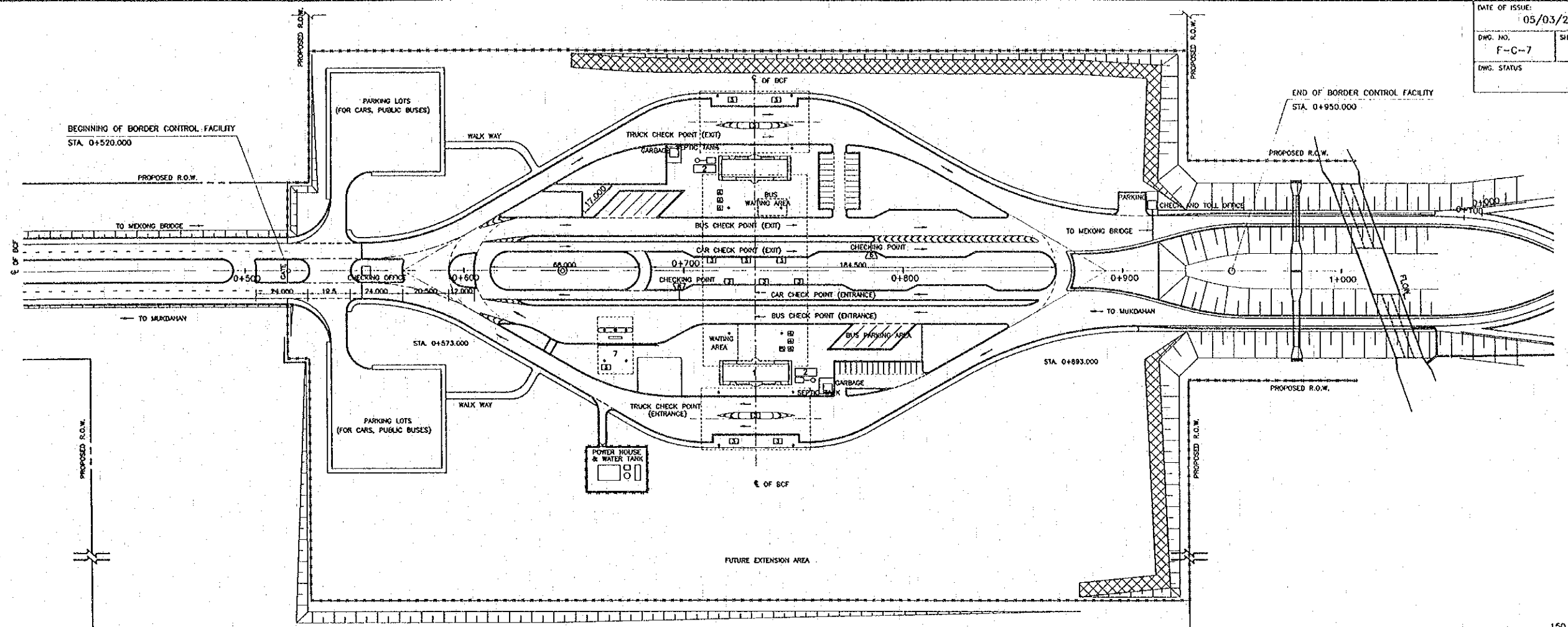
SECTION 5 - 5 LT.  
 SCALE 1 : 200



SECTION 5 - 5 RT.  
 SCALE 1 : 200

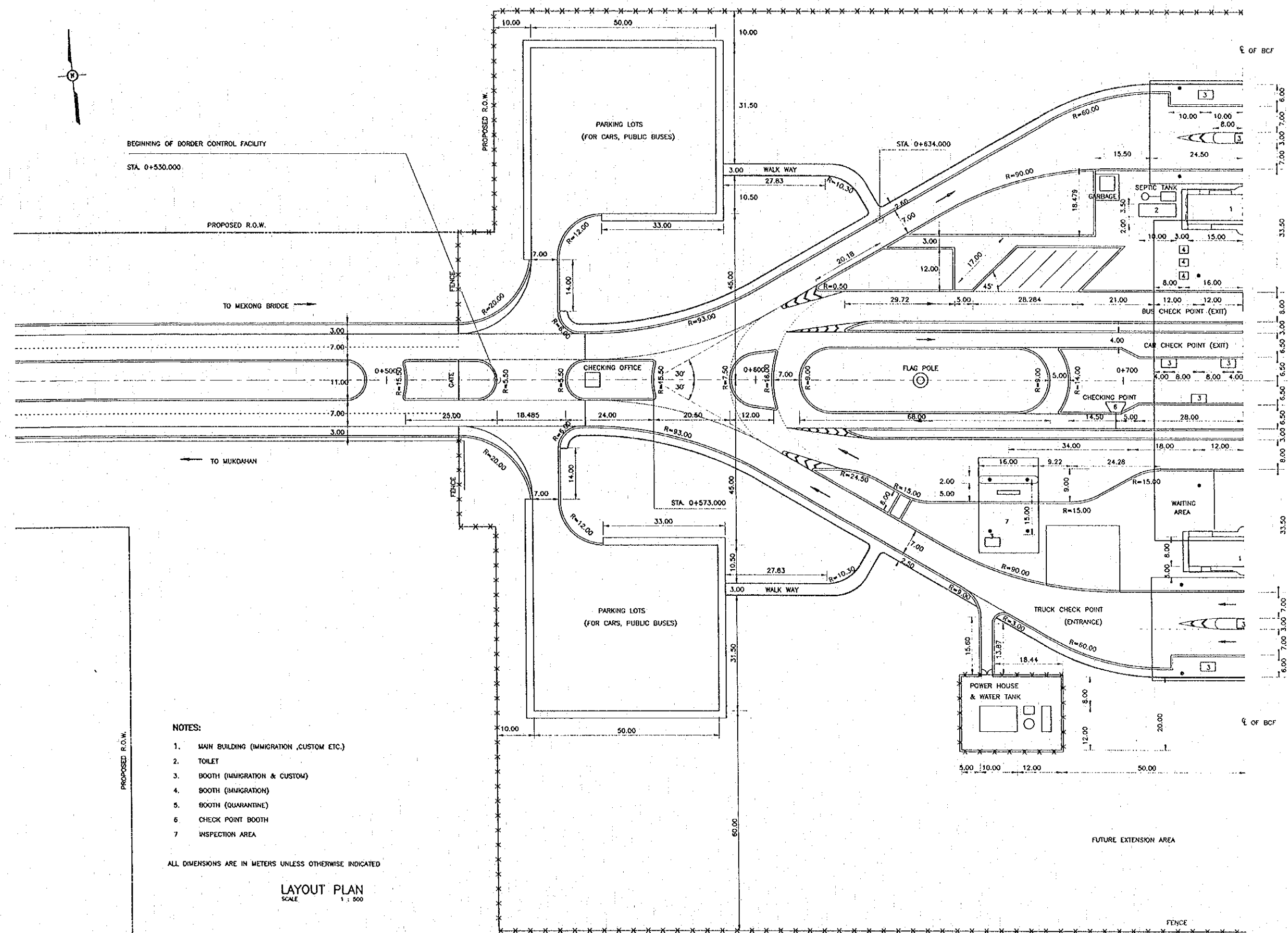
NOTE  
 DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THAILAND	LAO	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION			DESIGN	H. Orito	<i>[Signature]</i>	11/20/00	BORDER CONTROL FACILITIES THAILAND SIDE CROSS SECTION - 5
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS			DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	11/20/00	
								SUBMITTED	A. Nishitani	<i>[Signature]</i>	11/20/00	
								APPROVED	S. Terajubutra	<i>[Signature]</i>	11/20/00	



REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.					DESIGN	R. Orita		01/01/00	BORDER CONTROL FACILITIES THAILAND SIDE LONGITUDINAL PROFILE
								DESIGN CHECK	T. Masutawa		11/02/00		
								SUBMITTED	A. Hirakawa		11/12/00		
								APPROVED	S. Tamayabutra		22/02/00		

1:5000 - 1:1000, 1:500 - 1:200, 1:100 - 1:50



**NOTES:**

1. MAIN BUILDING (IMMIGRATION ,CUSTOM ETC.)
2. TOILET
3. BOOTH (IMMIGRATION & CUSTOM)
4. BOOTH (IMMIGRATION)
5. BOOTH (QUARANTINE)
6. CHECK POINT BOOTH
7. INSPECTION AREA

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED

**LAYOUT PLAN**  
 SCALE 1 : 500

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

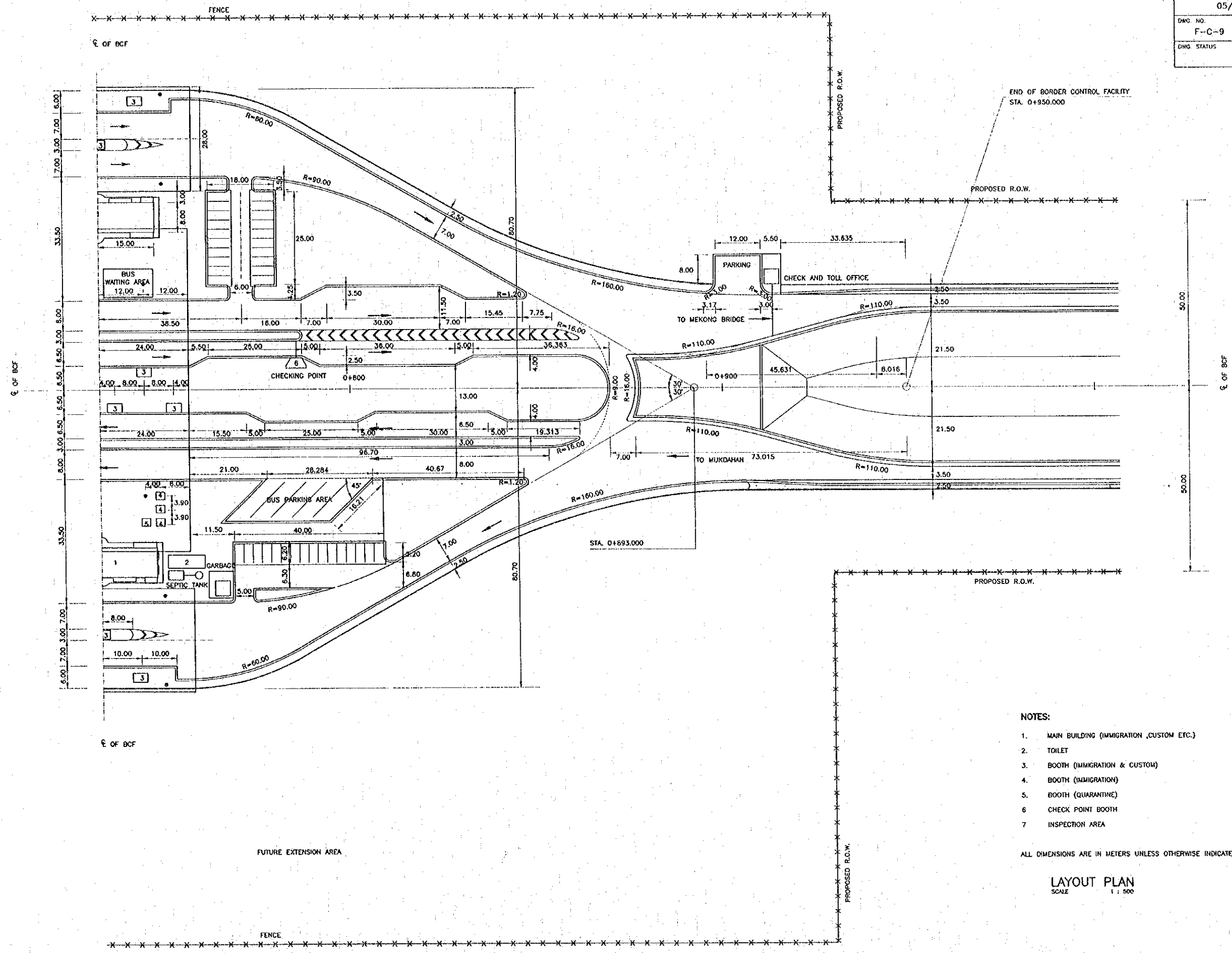
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Orito	<i>[Signature]</i>	05/03/00	BORDER CONTROL FACILITIES THAILAND SIDE GEOMETRIC LAYOUT-1
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	05/03/00	
SUBMITTED	A. Horiuchi	<i>[Signature]</i>	05/03/00	
APPROVED	S. Terayabutra	<i>[Signature]</i>	05/03/00	

**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 GEOMETRIC LAYOUT-1**

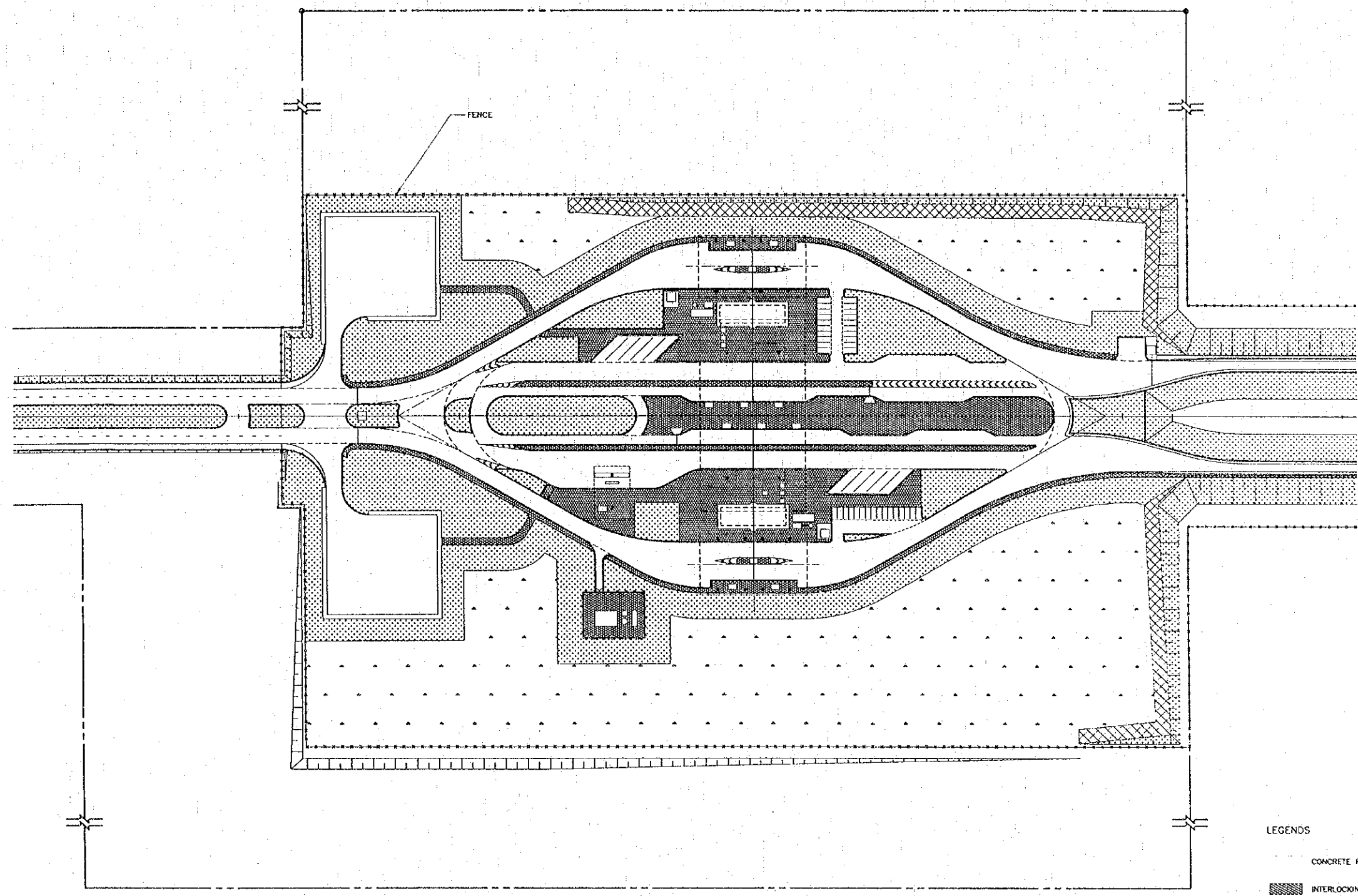




- NOTES:
1. MAIN BUILDING (IMMIGRATION, CUSTOM ETC.)
  2. TOILET
  3. BOOTH (IMMIGRATION & CUSTOM)
  4. BOOTH (IMMIGRATION)
  5. BOOTH (QUARANTINE)
  6. CHECK POINT BOOTH
  7. INSPECTION AREA
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED

LAYOUT PLAN  
 SCALE 1 : 500

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOGI CO., LTD.	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	H. Okita	<i>[Signature]</i>	14/02/00	BORDER CONTROL FACILITIES THAILAND SIDE GEOMETRIC LAYOUT-2
							DESIGN CHECK	I. Morizawa	<i>[Signature]</i>	17/02/00		
							SUBMITTED	A. Hattori	<i>[Signature]</i>	17/02/00		
							APPROVED	S. Temyabuba	<i>[Signature]</i>	24/02/00		



- LEGENDS
- CONCRETE PAVEMENT
  - INTERLOCKING BLOCK PAVEMENT
  - LANDSCAPING AREA BLOCK SODDING
  - LANDSCAPING AREA LAND LEVELLING
  - DIKE

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

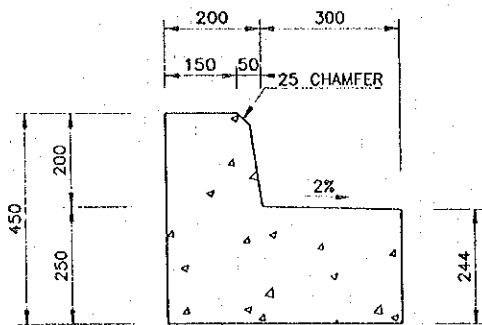
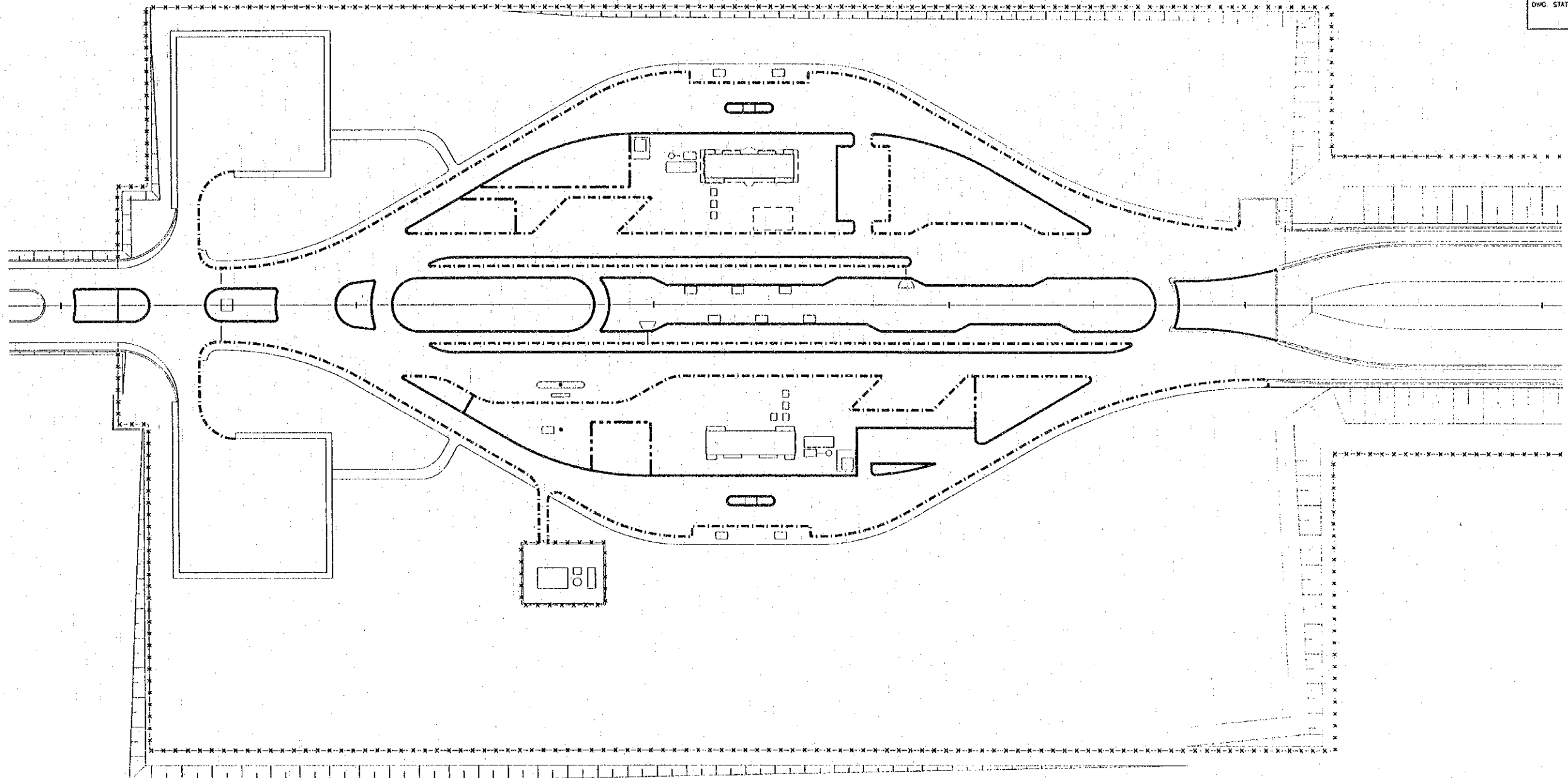
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
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 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

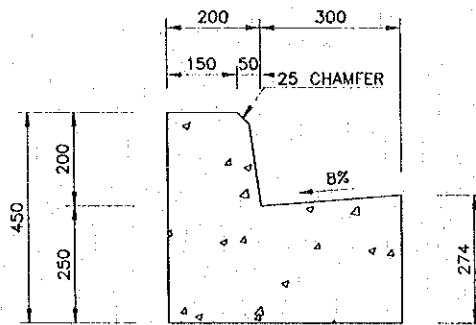
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Okita	<i>[Signature]</i>	11/07/98	BORDER CONTROL FACILITIES THAILAND SIDE GENERAL LAYOUT OF EXTERNAL FINISHING
DESIGN CHECK	T. Masutawa	<i>[Signature]</i>	11/07/98	
SUBMITTED	A. Heatori	<i>[Signature]</i>	11/07/98	
APPROVED	S. Temyabutra	<i>[Signature]</i>	02/03/00	

**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 GENERAL LAYOUT OF EXTERNAL FINISHING**

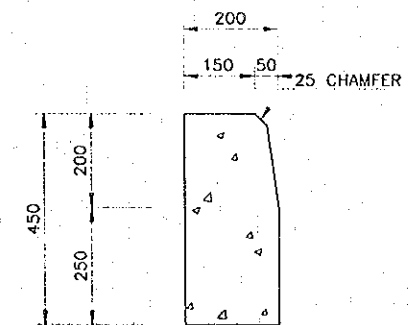
DATE OF ISSUE: 05/03/2000	
DWG. NO. F-C-11	SHEET NO. 87
DWG. STATUS	



**CURB TYPE 1**  
SCALE 1 : 7.5



**CURB TYPE 2**  
SCALE 1 : 7.5



**CURB TYPE 3**  
SCALE 1 : 7.5

- LEGENDS
- CURB TYPE 1
  - CURB TYPE 2
  - CURB TYPE 3

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOEI CO., LTD.**

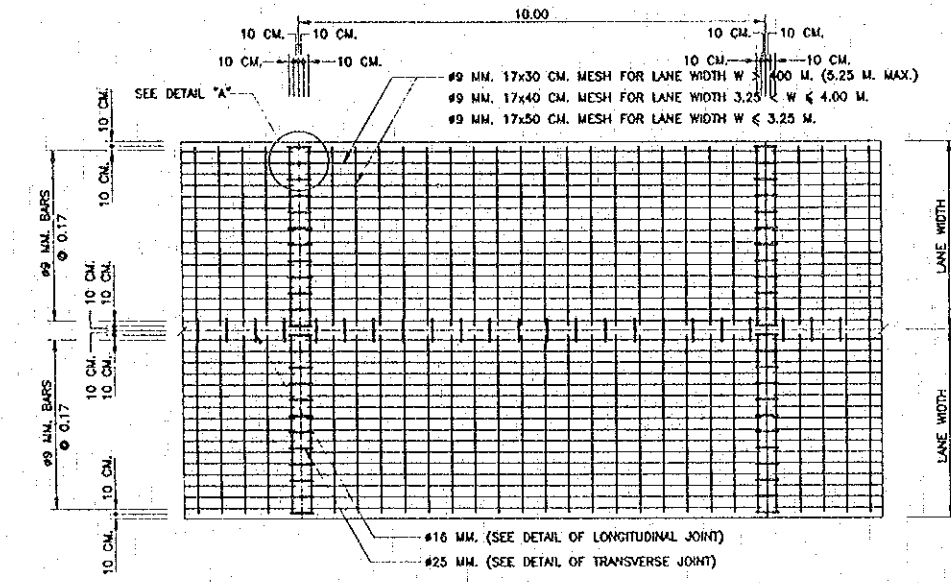
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

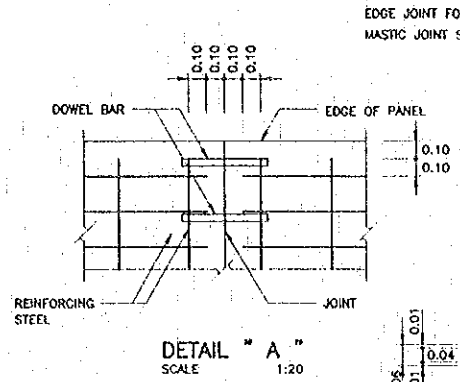
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	18/02/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hirohara	<i>[Signature]</i>	18/02/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE CURB LAYOUT**

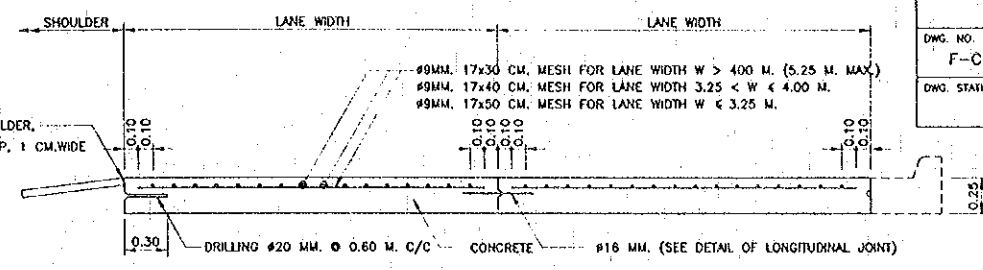
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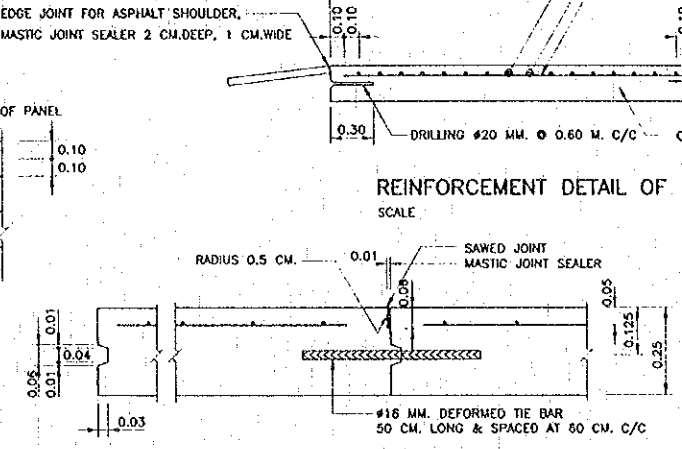
PLAN OF REINFORCED CONCRETE PAVEMENT SCALE 1:75



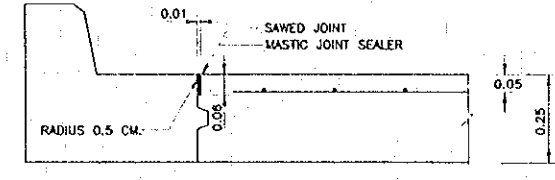
DETAIL "A" SCALE 1:20



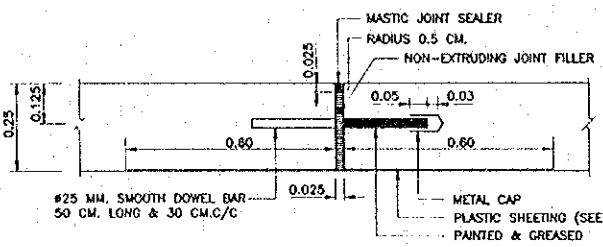
REINFORCEMENT DETAIL OF CONCRETE PAVEMENT CROSS-SECTION SCALE 1:20



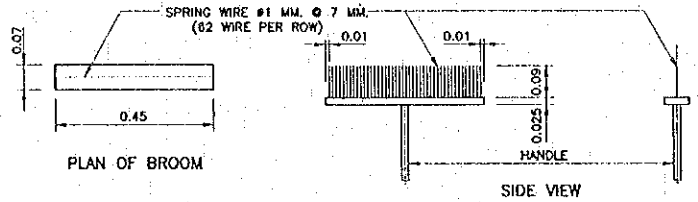
DETAIL OF LONGITUDINAL JOINT SCALE 1:10



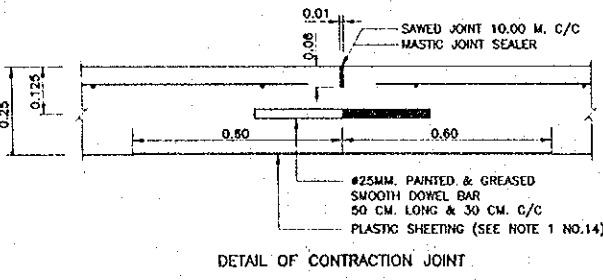
DETAIL OF DUMMY JOINT SCALE 1:10



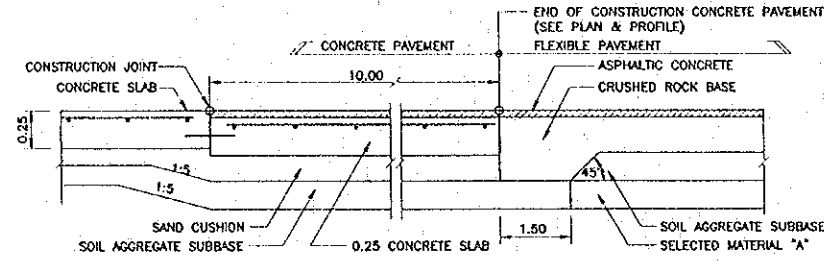
DETAIL OF EXPANSION JOINT



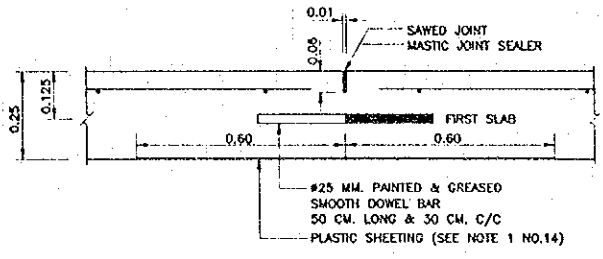
DETAIL OF BROOM SURFACE CONCRETE PAVEMENT SCALE 1:10



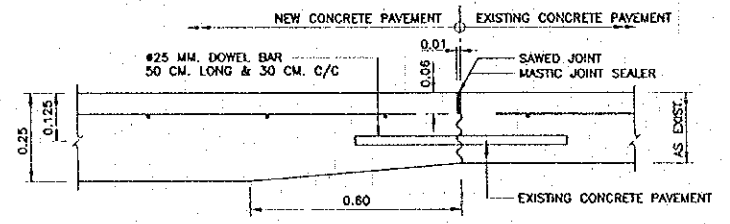
DETAIL OF CONTRACTION JOINT



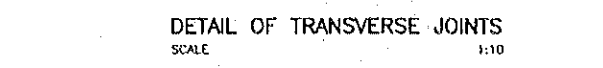
DETAIL OF JOINT BETWEEN CONCRETE PAVEMENT & FLEXIBLE PAVEMENT SCALE



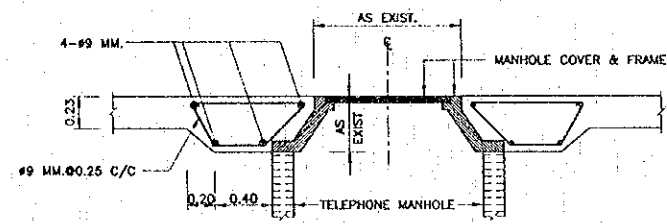
DETAIL OF CONSTRUCTION JOINT



DETAIL OF TRANSVERSE JOINT BETWEEN NEW AND EXISTING CONCRETE PAVEMENT SCALE 1:10



DETAIL OF TRANSVERSE JOINTS SCALE 1:10



EDGE DETAIL OF CONCRETE PAVEMENT AT TELEPHONE MANHOLE SCALE

NOTES 1 :

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
- EXPANSION JOINT SHALL BE CONSTRUCTED AT THE INTERVAL OF 350 METERS. IF THE LAST INTERVAL IS LESS THAN 350 METERS, THE INTERVALS SHALL BE AVERAGED BUT BETWEEN 300 AND 350 METERS.
- EXPANSION JOINT SHALL BE PROVIDED AT THE OUTER EDGE OF BOTH SIDES OF THE BOX CULVERT CROSSING.
- MASTIC JOINT SEALER SHALL BE OF THE HOT POURED ELASTIC TYPE CONFORMING TO TIS. 479.
- JOINT FILLER SHALL CONFORM TO THE AASHTO M. 213-74 OR ASTM. D1751-73 SPECIFICATION.
- CONCRETE SHALL BE CLASS C ( $27N/mm^2$ ) UNLESS OTHERWISE SHOWN.
- REINFORCING STEEL SHALL CONFORM GRADE SR FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BAR.
- WELDED WIRE CAN BE USED IN PLACE OF BAR MESH. (SEE NOTE 2)
- CONCRETE PAYER SHALL BE REQUIRED FOR CONCRETE POURING. IN CASE OF NECESSARY POURING CONCRETE BY MAN-POWER, CONCRETE SHALL BE POURED ONLY GAP SPACE NOT MORE THAN 30.00 METERS LONG.
- ALL JOINTS EXCEPT EXPANSION JOINT SHALL BE MADE BY SLOT CUTTING MACHINE ONLY. FOAM SHEET, PLYWOOD, TIMBER OR MATERIAL OF THE SAME TYPE SHALL NOT BE ALLOWED.
- BROOMING CONCRETE SURFACE WITH A BROOM OF THE STANDARD TYPE SPECIFIED SHALL BE REQUIRED. THE DIRECTION OF BROOMING SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAFFIC FROM ONE EDGE OR JOINT TO THE OTHER. ONE PHASE OF BROOM SURFACE SHALL PROPERLY OVERLAP WITH ANOTHER. CONCRETE BROOM SURFACE SHALL NOT BE OVER 3 MM. DEPTH. THE SURFACE SHALL BE FREE FROM PORES, HOLES OR LUMPS OF COARSE AGGREGATE OVER THE SURFACE.
- BROOMING SURFACE CONCRETE SHALL CORRESPOND TO THE FIGURE.
- PREPARATION OF JOINT FOR MASTIC JOINT SEALER.
  - 13.1 THE JOINT SHALL BE CLEANED WITH A BLOWER TO GET RID OF ALL KINDS OF DIRT THE JOINT SHALL BE COMPLETELY DRY.
  - 13.2 PRIMER SHALL BE APPLIED TO THE JOINT WITH A BRUSH OR SPRAYER THE JOINT SHALL BE LET DRY BEFORE THE POURING OF MASTIC JOINT SEALER WHICH HAS BEEN BOILED AND DISSOLVED BY MEANS OF HEAT CONDUCTIVITY TO THE SPECIFIED TEMPERATURE.
  - 13.3 JOINTS SHALL BE CUT AND MASTIC JOINT SEALER SHALL BE DROPPED AS SOON AS POSSIBLE.
  - 13.4 MASTIC JOINT SEALER SHALL BE DROPPED WITH JOINT SEALANT APPLYING MACHINE.
- PLASTIC SHEET USED IN CONSTRUCTION SHALL HAVE THE FOLLOWING REQUIREMENTS :
  - 14.1 THICKNESS OF 0.07 MM. WITH A TOLERANCE OF NOT MORE THAN 7% SHALL BE REQUIRED.
  - 14.2 WIDTH SHALL NOT BE LESS THAN 1.20 M.
  - 14.3 IT SHALL BE COLOURLESS, TRANSPARENT AND WATERPROOF, FREE FROM POROUS AREA, TURN AREA AND BUSTERING AREA WHICH ARE VISIBLE BY NAKED EYE. EDGE SHALL BE STRAIGHT.
  - 14.4 CONTINUOUS LENGTH SHALL BE REQUIREMENT TO THE WIDTH OF TRAFFIC LANES. CONNECTION ALLOWED AT LONGITUDINAL JOINTS WITH NOT LESS THAN 20 CM. OVERLAPPING SHALL BE REQUIRED.

NOTES 2 :

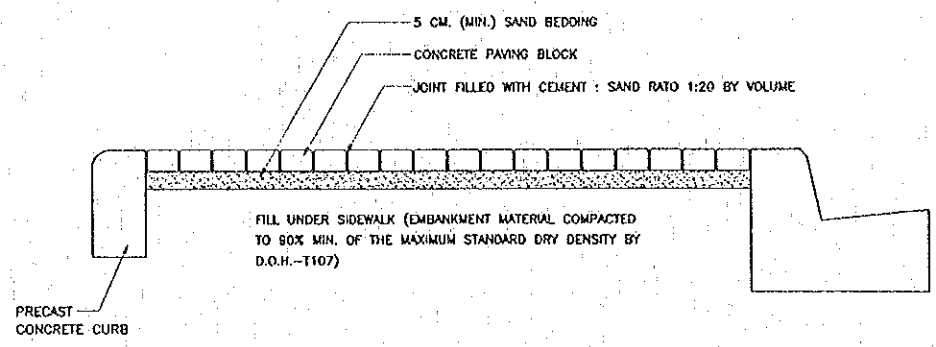
- BAR MESH 9 MM. AS SHOWN IN THIS DRAWING SHALL BE REPLACED BY WELDED STEEL WIRE WITH PROPERTIES CONFORMING TO STANDARD SPECIFICATION FOR WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT, AASHTO DESIGNATION M 55 - 75 (ASTM. DESIGNATION A 185 - 73). BEFORE USING WELDED STEEL WIRE FABRIC, THE SAMPLES SHALL BE SENT TO MATERIAL AND RESEARCH DIVISION DOH, FOR APPROVING.
- MINIMUM SIZE OF WIRE TO BE USED SHALL NOT BE LESS THAN STANDARD WIRE AASHTO DESIGNATION M 32 - 78 (ASTM DESIGNATION A 82 - 76) SIZE NUMBER #. 12 AT NOMINAL DIAMETER OF 3.15 MM. AND NOMINAL AREA OF  $0.007 CM^2$ . WIRE TO BE USED SHALL HAVE YIELD STRENGTH OF NOT LESS THAN  $65,000 lb/inch^2$  (PSI).
- LAP SPLICES OF BAR MESH SHALL NOT BE LESS THAN 40 TIMES OF WIRE DIAMETER AND NOT LESS THAN SPACING OF CROSS WIRE + 5 CM.
- QUANTITY OF STEEL WIRE FABRIC CALCULATED FROM NOMINAL AREA AND SPACING IN EACH DIRECTION SHALL CONFORM TO THE FOLLOWING REQUIREMENT :
  - 4.1 LONGITUDINAL STEEL (STEEL BETWEEN TRANSVERSE JOINT) SHALL HAVE THE MINIMUM AREA OF  $1.642 CM^2/M$ .
  - 4.2 TRANSVERSE STEEL :
    - 4.2.1 MINIMUM OF  $0.492 CM^2/M$ . SHALL REQUIRED IF SPACE BETWEEN LONGITUDINAL JOINT OR FREE EDGE IS MEASURED AT 3.00 M.
    - 4.2.2 MINIMUM OF  $0.534 CM^2/M$ . SHALL REQUIRED IF SPACE BETWEEN LONGITUDINAL JOINT OR FREE EDGE IS MEASURED AT 3.25 M.
    - 4.2.3 MINIMUM OF  $0.575 CM^2/M$ . SHALL REQUIRED IF SPACE BETWEEN LONGITUDINAL JOINT OR FREE EDGE IS MEASURED AT 3.50 M.
- QUANTITY OF WELDED STEEL WIRE FABRIC SPECIFIED REFERS TO QUANTITY OF WELDED STEEL WIRE FABRIC MEASURED AGAINST AVERAGE SPACE LENGTH OF 1 METER FROM THE TOTAL SPACE LENGTH BETWEEN JOINT OR FREE EDGE.
- WELDING POINTS SHALL BE ADEQUATELY STRONG AND SHALL NOT COME OFF DURING TRANSPORTATION OR PLACING. HOWEVER, THEY SHALL NOT BE SUBJECT TO REJECTION IF COMING OFF DURING CONSTRUCTION WITH WHATEVER REASON EXCEPT THAT DISCONNECTED POINTS EXCEED 1% OF ALL WELDING POINTS. IF ROLLED OVER, DISCONNECTED POINTS SHALL NOT EXCEED 1% OF ALL POINTS IN THE AREA OF  $14 M^2$ . DISCONNECTED POINTS FOR ONE WELDED STEEL WIRE FABRIC SHALL NOT EXCEED HALF OF ALL ALLOWABLE DISCONNECTED WELDING POINTS.
- WELDED STEEL WIRE FABRIC SHEET SHALL BE SMOOTH NOT ROLL OR TWIST ALL DIRECTIONS, WHILE BEING PLACED DURING CONSTRUCTION.
- CLEAR CONCRETE COVER SPACE OF WELDED STEEL WIRE FABRIC SHALL CONFORM TO BAR MESH SPECIFICATION IN THIS DRAWING.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

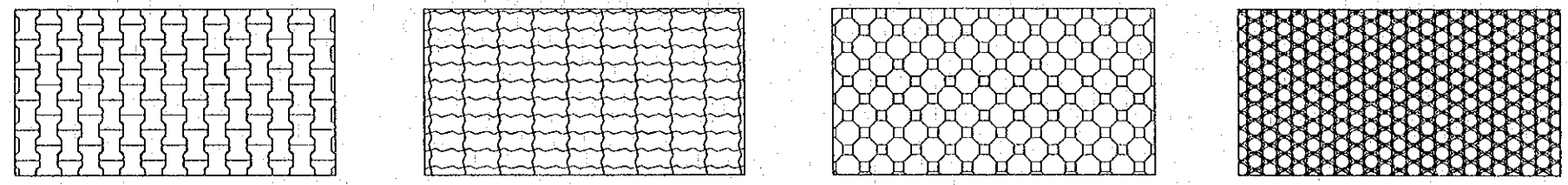
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	H. Orita		16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE 25 CM. CONCRETE PAVEMENT
DESIGN CHECK	T. Muzumoto		28/02/00	
SUBMITTED	A. Hirafuji		1/03/00	
APPROVED	S. Tenmyoibutra		22/02/00	



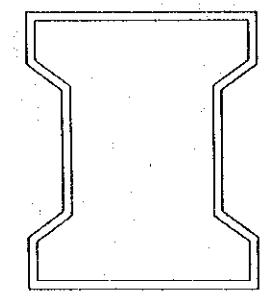
CROSS SECTION  
 SCALE 1:10

PROPERTIES OF SAND BEDDING AND JOINT FILLING SAND

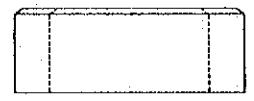
SIEVE SIZE mm.	% PASSING	
	SAND BEDDING	JOINTING SAND
9.52	100	-
4.75	95 - 100	-
2.36	80 - 100	100
1.18	50 - 85	90 - 100
0.60	25 - 60	60 - 90
0.30	10 - 30	30 - 60
0.15	5 - 15	15 - 30
0.075	0 - 5	10 - 20



SHAPE AND ARRANGEMENT OF CONCRETE PAVING BLOCK  
 NOT TO SCALE

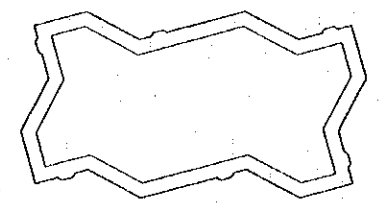


TOP VIEW



SIDE VIEW

CONCRETE PAVING BLOCK BEHATON SHAPE  
 NOT TO SCALE

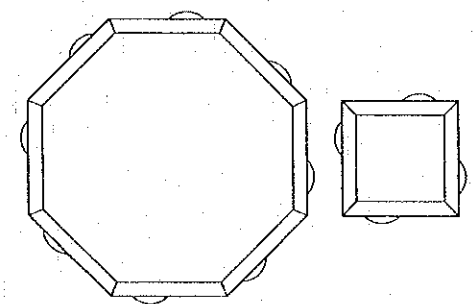


TOP VIEW



SIDE VIEW

CONCRETE PAVING BLOCK UNI-PAVE SHAPE  
 NOT TO SCALE

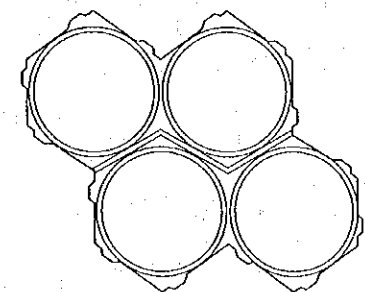


TOP VIEW



SIDE VIEW

CONCRETE PAVING BLOCK OCTA-CUBE SHAPE  
 NOT TO SCALE



TOP VIEW



SIDE VIEW

CONCRETE PAVING BLOCK DYWIDAG SHAPE  
 NOT TO SCALE

NOTES :

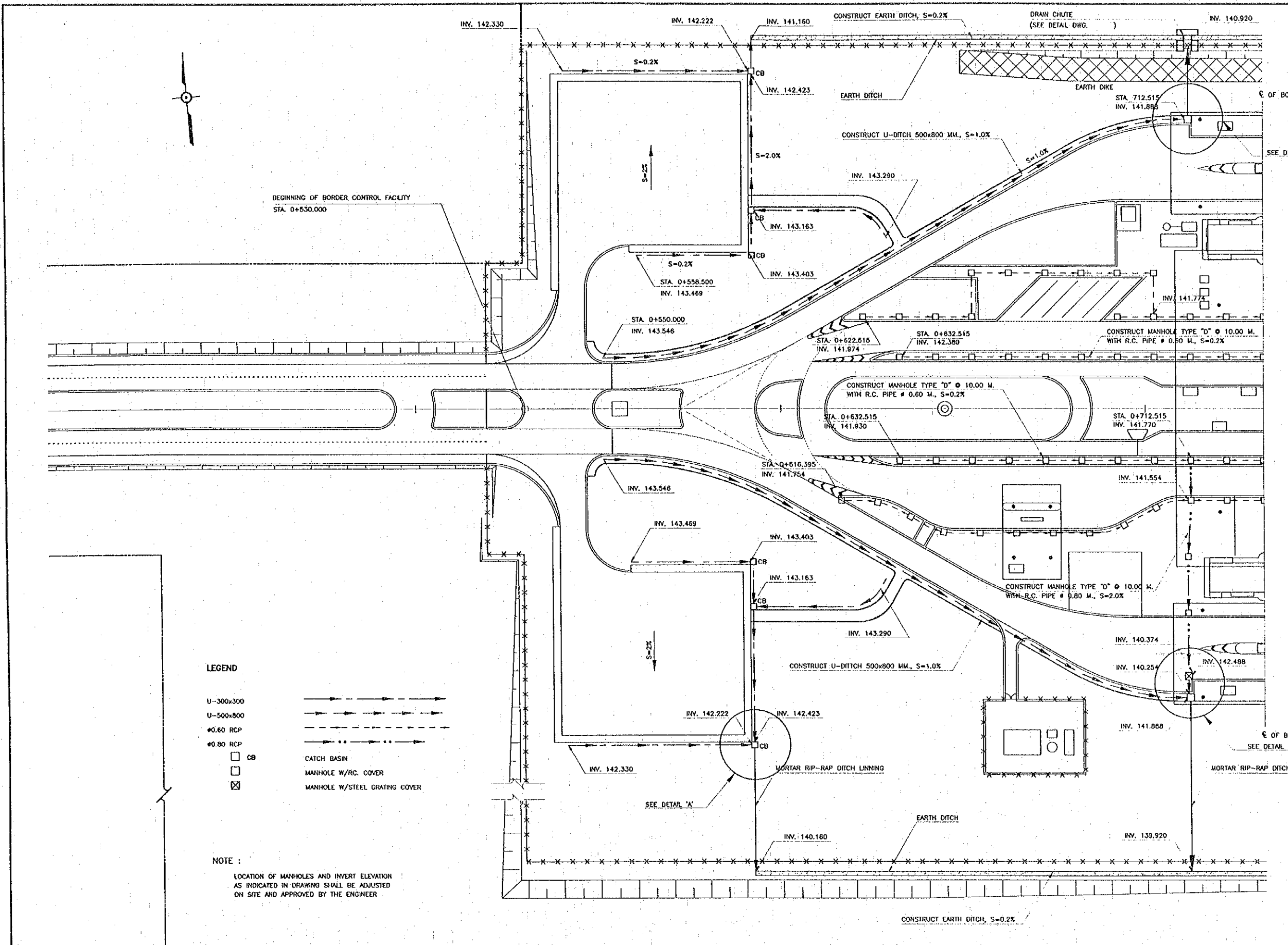
- ALL DIMENSIONS ARE IN METERS OR OTHERWISE INDICATED.
- SHAPE AND ARRANGEMENT SHALL BE SPECIFIED IN THE DRAWINGS OR DIRECTED BY THE ENGINEERS.
- COST OF CONCRETE PAVING BLOCK SHALL INCLUDE SAND BEDDING, JOINT FILLING, AND PRECAST CONCRETE CURB.
- CONCRETE PAVING BLOCK SHALL CONFORM TO TIS. 827
- JOINT SHALL BE FILLED WITH CEMENT : SAND RATIO 1:20 BY VOLUME.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	DESIGN	H. Okita	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CONCRETE PAYMENT BLOCK
					DESIGN CHECK	T. Motuwara	<i>[Signature]</i>	18/02/00	
					SUBMITTED	A. Hraotani	<i>[Signature]</i>	21/02/00	
					APPROVED	S. Temyabutra	<i>[Signature]</i>	22/02/00	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
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 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

DATE OF ISSUE: 05/03/2000  
 DWG. NO. F-C-14 SHEET NO. 90  
 DWG. STATUS



**LEGEND**

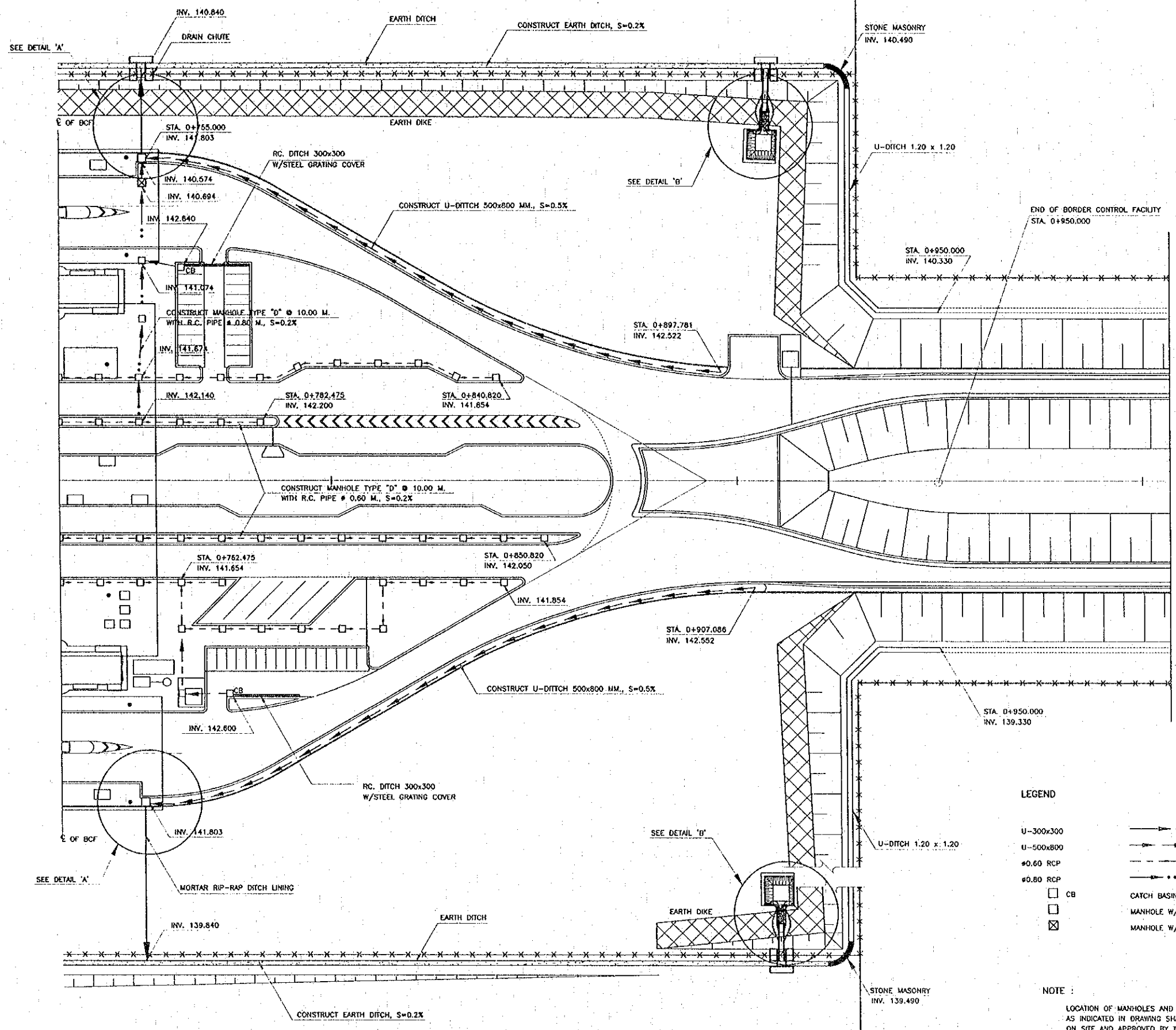
U-300x300  
 U-500x600  
 Ø0.60 RCP  
 Ø0.80 RCP  
 □ CB  
 □ MANHOLE W/R.C. COVER  
 ⊗ MANHOLE W/STEEL GRATING COVER

→ CATCH BASIN  
 → MANHOLE W/R.C. COVER  
 → MANHOLE W/STEEL GRATING COVER

**NOTE :**  
 LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	THAILAND	PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KORI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Okita	<i>[Signature]</i>	14/02/00	BORDER CONTROL FACILITIES THAILAND SIDE DRAINAGE LAYOUT - 1
							DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18/02/00		
							SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00		
							APPROVED	S. Temjubsatra	<i>[Signature]</i>	22/02/00		

DATE OF ISSUE: 05/03/2000	
ORG. NO. F-C-15	SHEET NO. 91
DWG. STATUS	



**LEGEND**

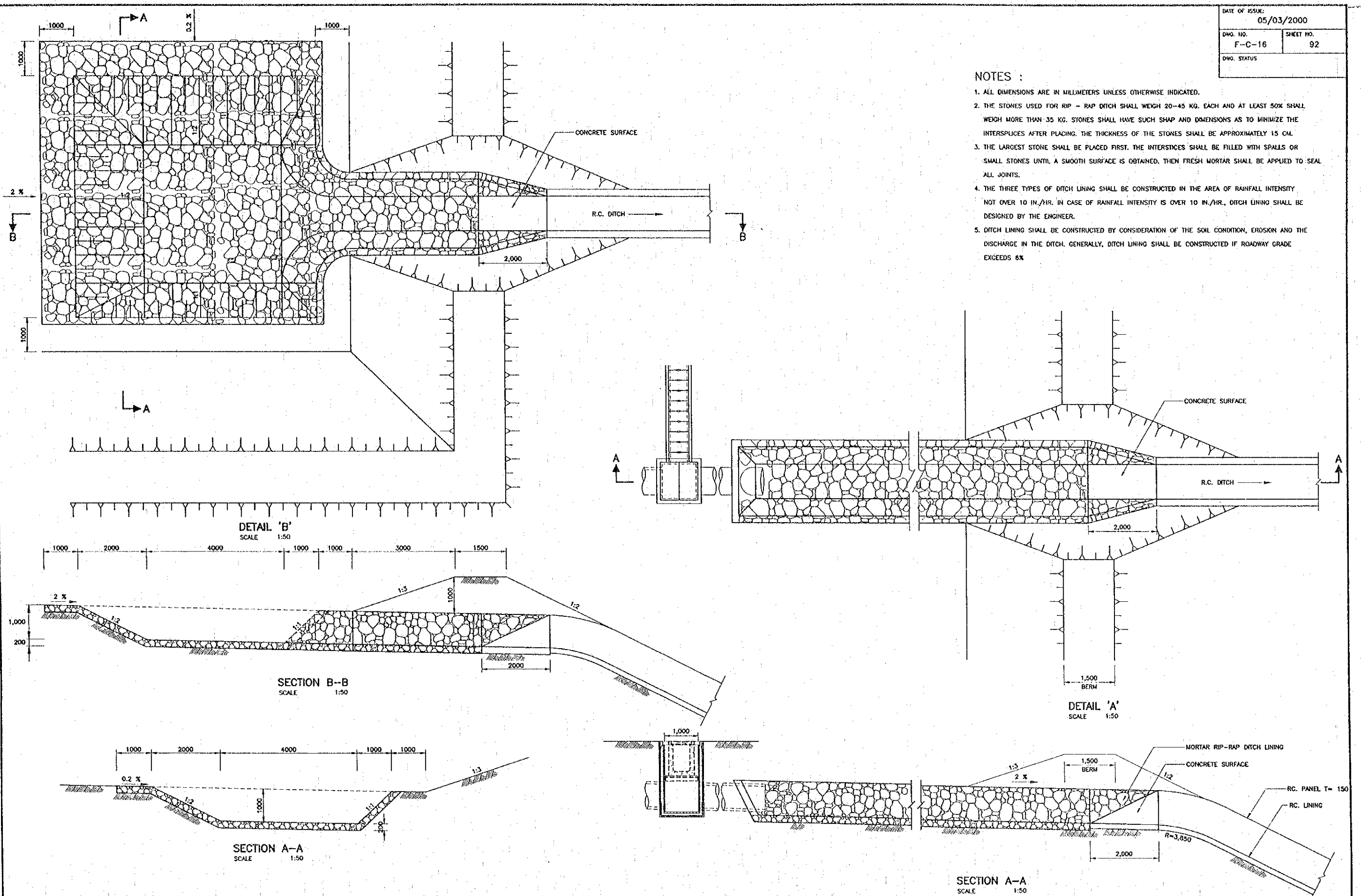
U-300x300	→→→→→
U-500x800	→→→→→
Ø0.60 RCP	→→→→→
Ø0.80 RCP	→→→→→
□ CB	CATCH BASIN
□	MANHOLE W/R.C. COVER
⊠	MANHOLE W/STEEL GRATING COVER

**NOTE :**  
LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Ohta	<i>H. Ohta</i>	18/2/00	BORDER CONTROL FACILITIES THAILAND SIDE DRAINAGE LAYOUT - 2
						DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	18/2/00	
						SUBMITTED	A. Hatanaka	<i>A. Hatanaka</i>	18/2/00	
						APPROVED	S. Tamgabutra	<i>S. Tamgabutra</i>	22/02/00	

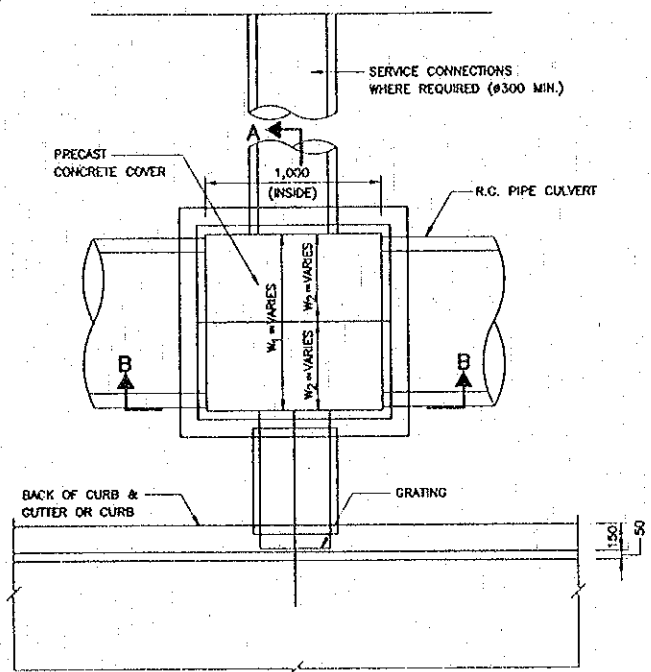
NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THE STONES USED FOR RIP - RAP DITCH SHALL WEIGH 20-45 KG. EACH AND AT LEAST 50% SHALL WEIGH MORE THAN 35 KG. STONES SHALL HAVE SUCH SHAP AND DIMENSIONS AS TO MINIMIZE THE INTERSPACES AFTER PLACING. THE THICKNESS OF THE STONES SHALL BE APPROXIMATELY 15 CM.
3. THE LARGEST STONE SHALL BE PLACED FIRST. THE INTERSTICES SHALL BE FILLED WITH SPALLS OR SMALL STONES UNTIL A SMOOTH SURFACE IS OBTAINED. THEN FRESH MORTAR SHALL BE APPLIED TO SEAL ALL JOINTS.
4. THE THREE TYPES OF DITCH LINING SHALL BE CONSTRUCTED IN THE AREA OF RAINFALL INTENSITY NOT OVER 10 IN./HR. IN CASE OF RAINFALL INTENSITY IS OVER 10 IN./HR. DITCH LINING SHALL BE DESIGNED BY THE ENGINEER.
5. DITCH LINING SHALL BE CONSTRUCTED BY CONSIDERATION OF THE SOIL CONDITION, EROSION AND THE DISCHARGE IN THE DITCH. GENERALLY, DITCH LINING SHALL BE CONSTRUCTED IF ROADWAY GRADE EXCEEDS 6%.

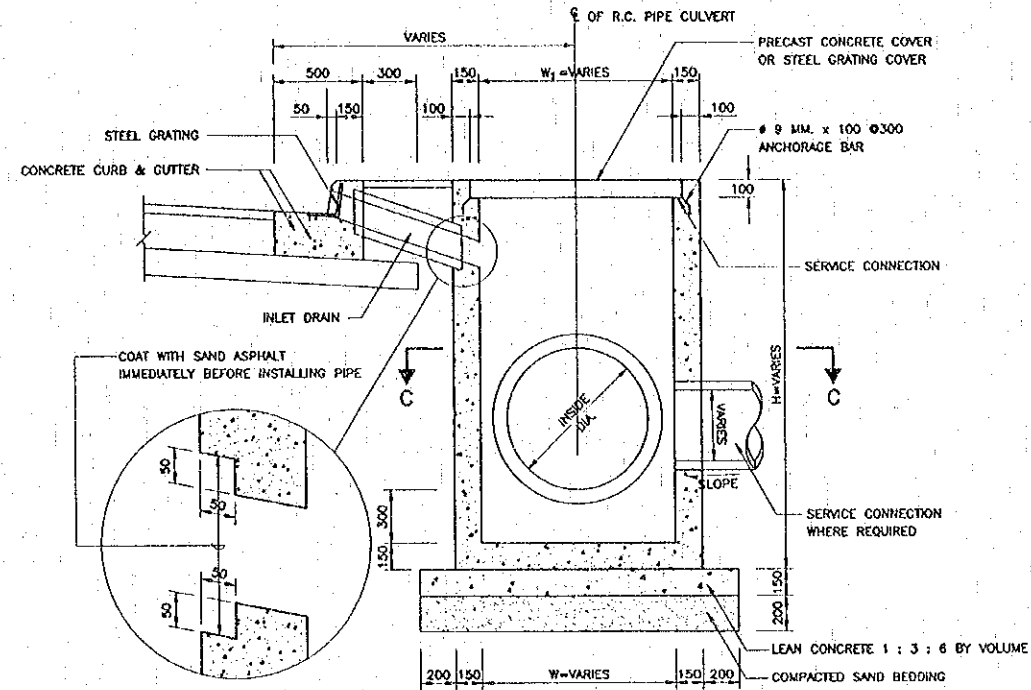


REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	DESIGN	H. Okita	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF 'A' AND 'B'
				JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN CHECK	T. Masutani	<i>[Signature]</i>	17/02/00	
				KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	SUBMITTED	A. Hirakani	<i>[Signature]</i>	21/02/00	
					APPROVED	S. Teriyabutra	<i>[Signature]</i>	22/02/00	

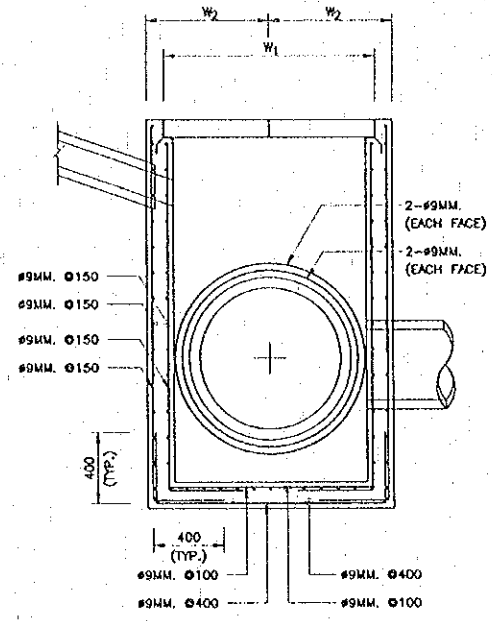




PLAN OF MANHOLE TYPE "D"  
 SCALE 1 : 20



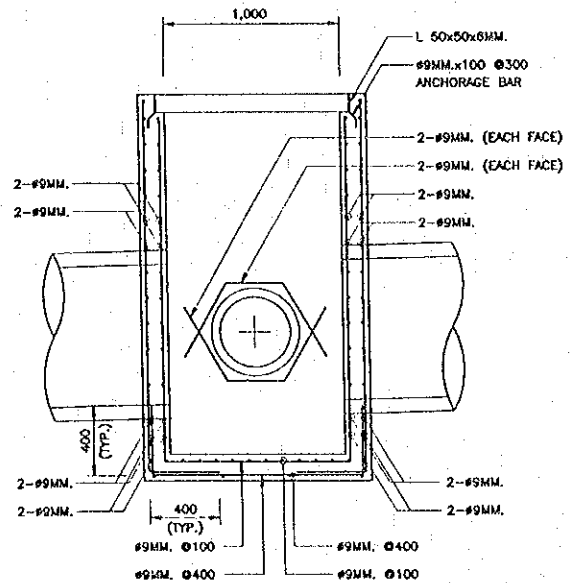
SECTION A - A  
 SCALE 1 : 20



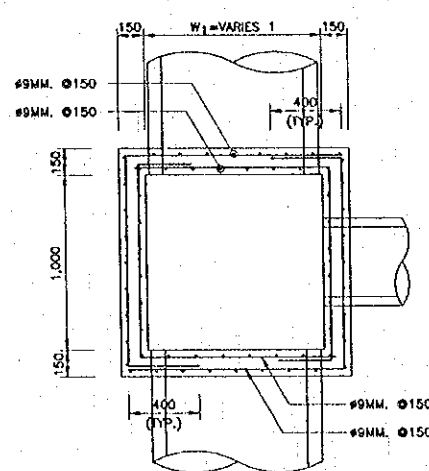
SECTION A - A  
 SCALE 1 : 20

TABLE I

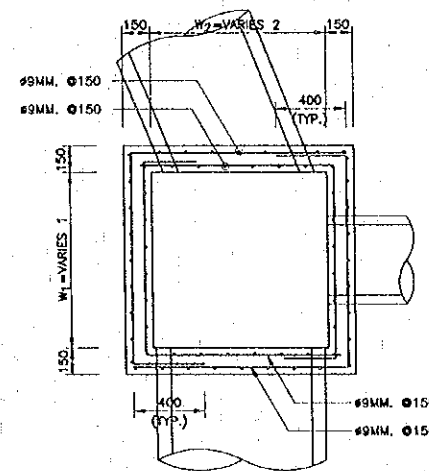
INSIDE DIA. OF R.C. PIPE CULVERT	DIMENSIONS		
	W1	W2	H
Ø 800	800	440	VARIES
Ø 800	1,000	540	VARIES
Ø 1,000	1,250	665	VARIES
Ø 1,200	1,500	790	VARIES



SECTION B - B  
 SCALE 1 : 20



NORMAL SECTION C - C  
 SCALE 1 : 20



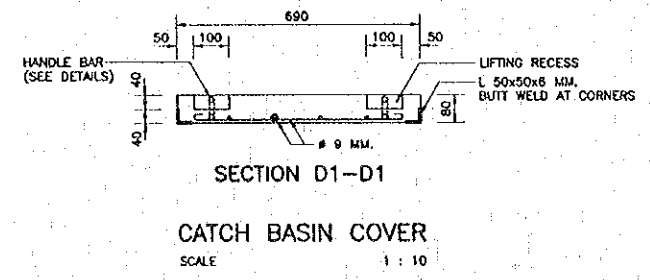
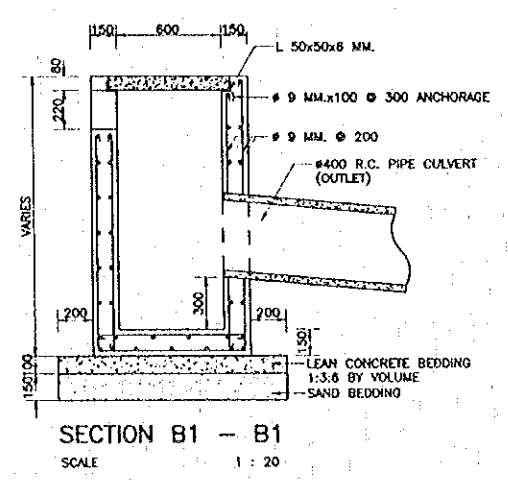
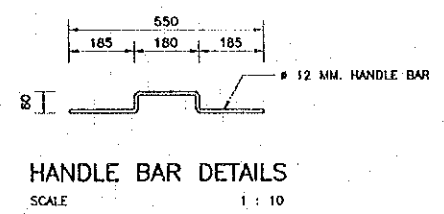
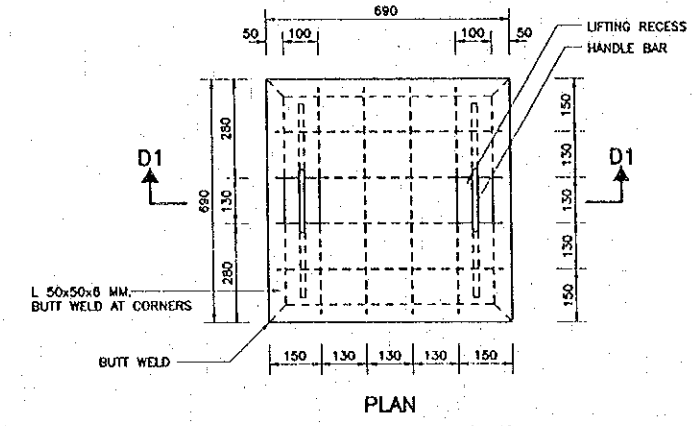
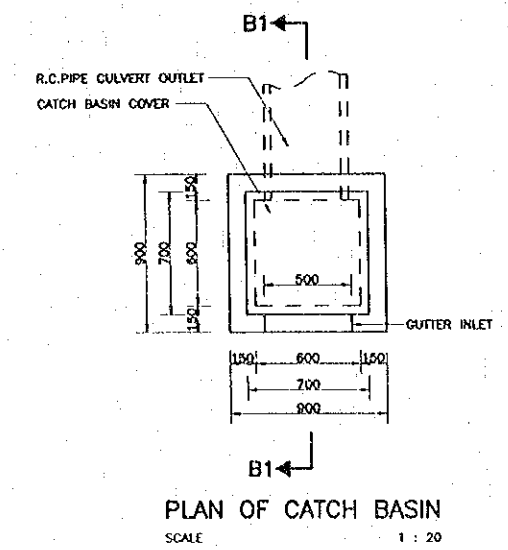
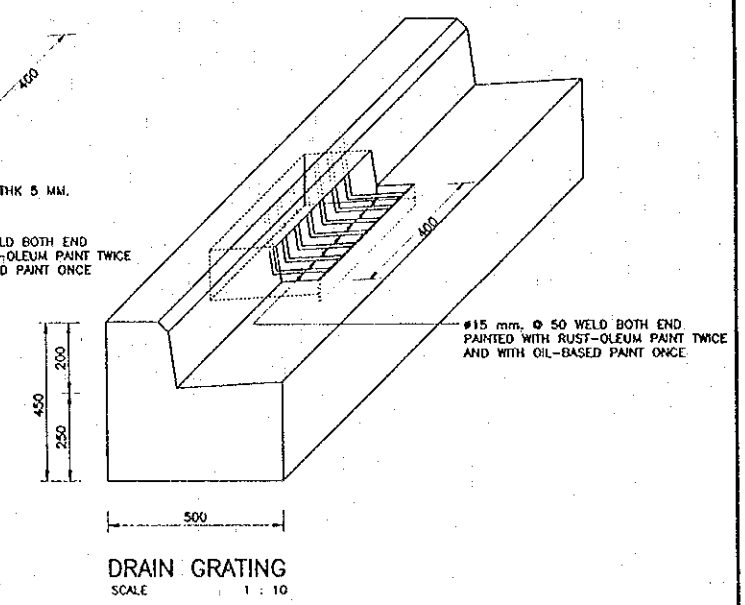
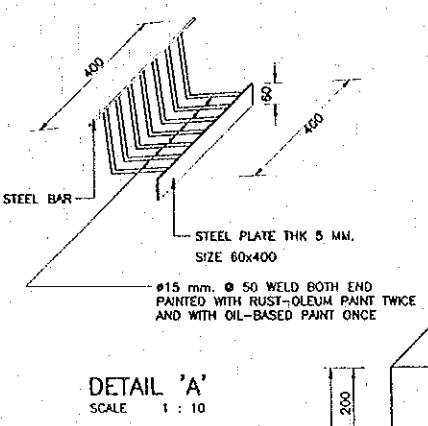
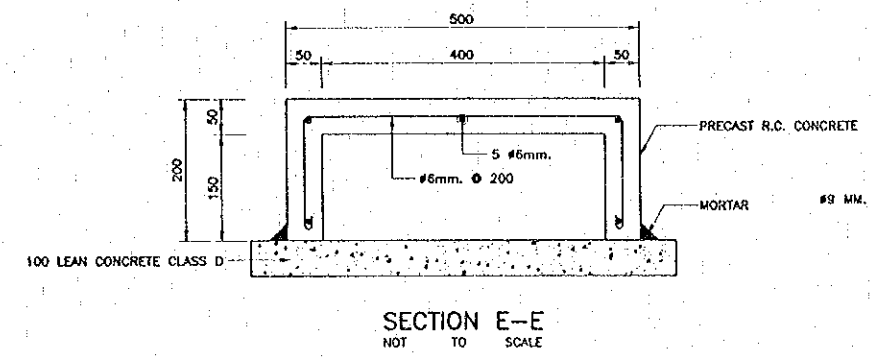
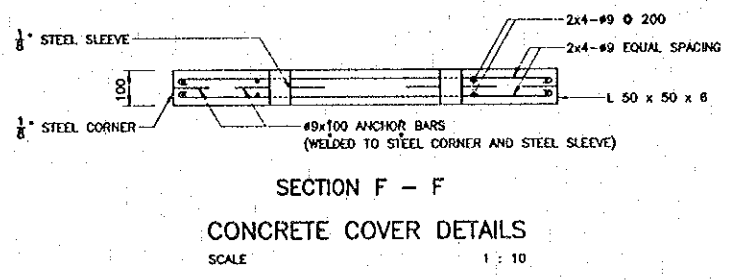
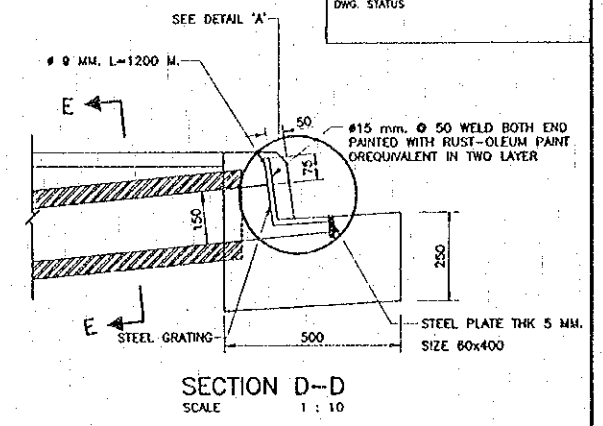
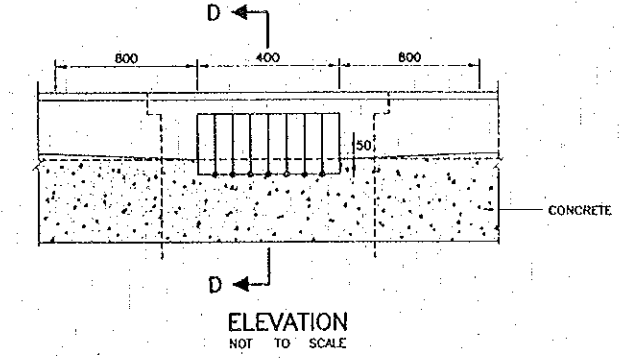
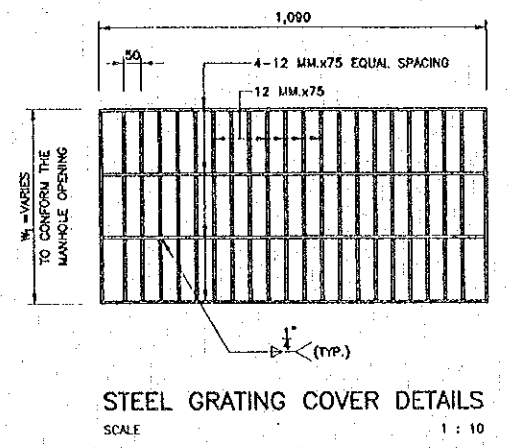
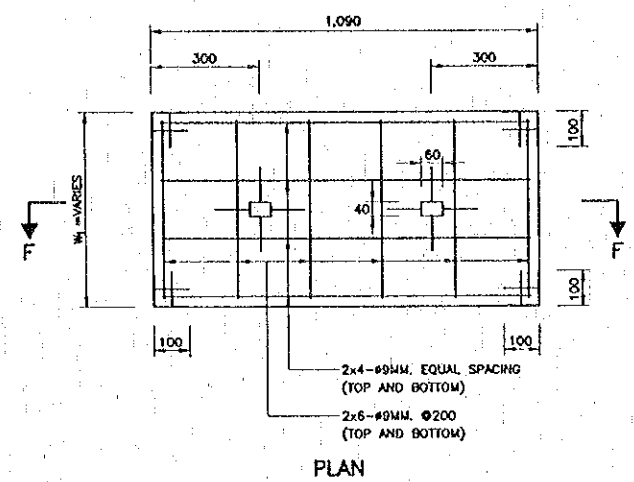
SKEW SECTION C - C  
 SCALE 1 : 20

NOTE :

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 210 KSC. FOR 15x15x15 CM. CUBE AT 28 DAYS AN APPROXIMATE MIX DESIGN PER CUBIC METER IS SUGGESTED AS FOLLOWS :  
 PORTLAND CEMENT TYPE 1 350 KG. (MHL.)  
 SAND 0.43 m<sup>3</sup>  
 CRUSHED ROCK OR GRAVEL 0.86 m<sup>3</sup>  
 CONCRETE SLUMP 10 CM. (MAX.)
- REINFORCING STEEL SHALL CONFORM TO TIS. 20 GRADE SR 24
- STRUCTURAL STEEL SHALL CONFORM TO TIS. 116 GRADE F6 30
- STRUCTURAL STEEL AND PLATE STEEL SHALL BE PAINTED WITH RUST-OLEUM PAINT OR EQUIVALENT TWICE AND OIL PAINT ONCE.
- CLEAR CONCRETE COVER SHALL BE 3 CM.
- MANHOLE SIZE SHALL VARY ACCORDING TO THE SIZE OF R.C. PIPE CULVERT (SEE TABLE I)
- MANHOLES SHALL BE ARRANGED AT 10.00 M. (TYP.) INTERVAL OR AS DIRECTED BY THE ENGINEER.
- W 1 SHALL BE DEPENDED ON THE FIGURES SHOWN IN TABLE I
- W 2 SHALL BE SO DETERMINED THAT THE DISTANCE BETWEEN OUTER EDGE OF THE MANHOLE AND OUTER SURFACE OF THE PIPE SHALL BE MAINTAINAL TO BE ATLEAST 15 CM. ON THE OUTER SURFACE OF THE MANHOLE.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DRG. TITLE:
				JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Okita	<i>H. Okita</i>	16/01/00	BORDER CONTROL FACILITIES THAILAND SIDE MANHOLE DETAILS - 1
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	DESIGN CHECK	T. Matsuzawa	<i>T. Matsuzawa</i>	18/01/00	
					SUBMITTED	A. Hirata	<i>A. Hirata</i>	17/02/00	
					APPROVED	S. Tanayabutra	<i>S. Tanayabutra</i>	27/02/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. F-C-1B	SHEET NO. 94
DWG. STATUS	



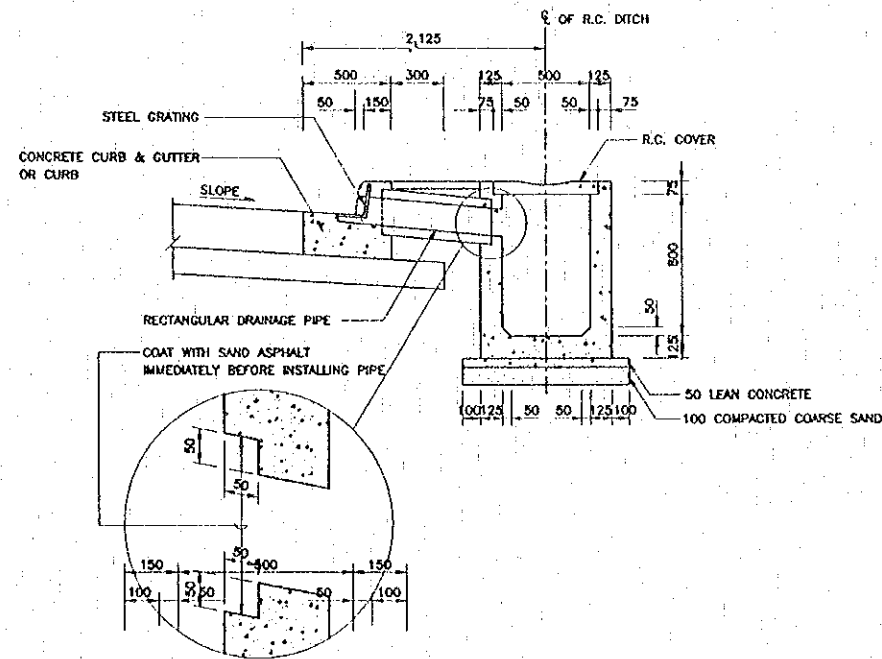
- NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 210 KSC. FOR 15x15x15 CM. CUBE AT 28 DAYS AN APPROXIMATE MIX DESIGN PER CUBIC METER IS SUGGESTED AS FOLLOWS :
 

PORTLAND CEMENT TYPE 1	350 KG. (MIN.)
SAND	0.43 M <sup>3</sup>
CRUSHED ROCK OR GRAVEL	0.86 M <sup>3</sup>
CONCRETE SLUMP	10 CM. (MAX.)
  - REINFORCING STEEL SHALL CONFORM TO TIS. 20 GRADE SR 24
  - STRUCTURAL STEEL SHALL CONFORM TO TIS. 116 GRADE F<sub>o</sub> 30
  - FLAT PLATE STEEL SHALL CONFORM TO TIS. 55 GRADE SR 24
  - STRUCTURAL STEEL AND PLATE STEEL SHALL BE PAINTED WITH RUST-OLEUM PAINT OR EQUIVALENT TWICE AND OIL PAINT ONCE.
  - CLEAR CONCRETE COVER SHALL BE 3 CM.
  - MANHOLE SIZE SHALL VARY ACCORDING TO THE SIZE OF R.C. PIPE CULVERT (SEE TABLE 1)
  - MANHOLES SHALL BE ARRANGED AT 10.00 M. (TYP.) INTERVAL OR AS DIRECTED BY THE ENGINEER.

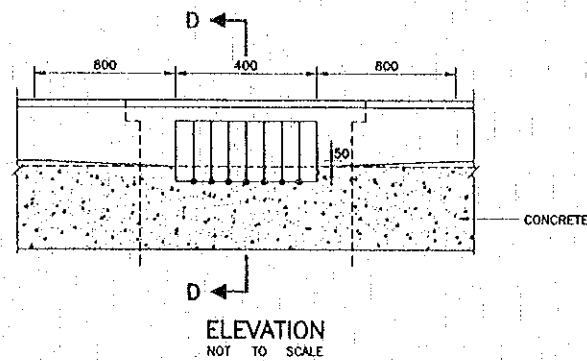
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	H. Okita	<i>[Signature]</i>	18/2/00	BORDER CONTROL FACILITIES THAILAND SIDE MANHOLE DETAILS - 2
						DESIGN CHECK	T. Moritowa	<i>[Signature]</i>	21/2/00	
						SUBMITTED	A. Hironaka	<i>[Signature]</i>	22/2/00	
						APPROVED	S. Terayabutra	<i>[Signature]</i>	22/2/00	

DATE OF ISSUE: 05/03/2000

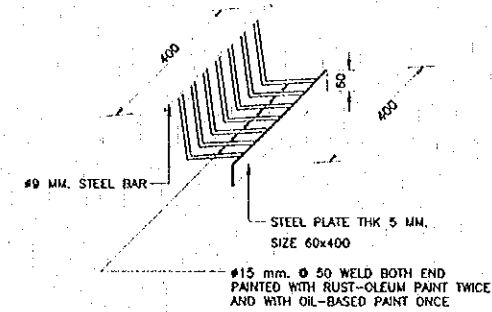
DWG. NO. F-C-19 SHEET NO. 95  
 DWG. STATUS



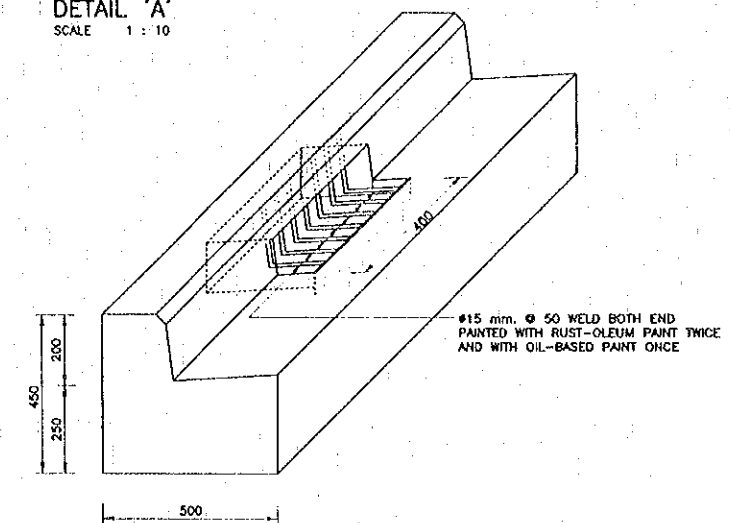
SECTION A - A  
 SCALE 1 : 20



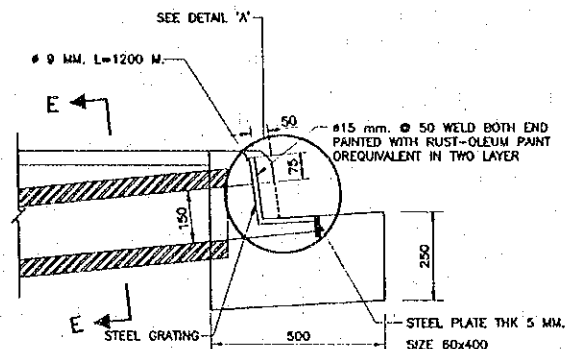
ELEVATION  
 NOT TO SCALE



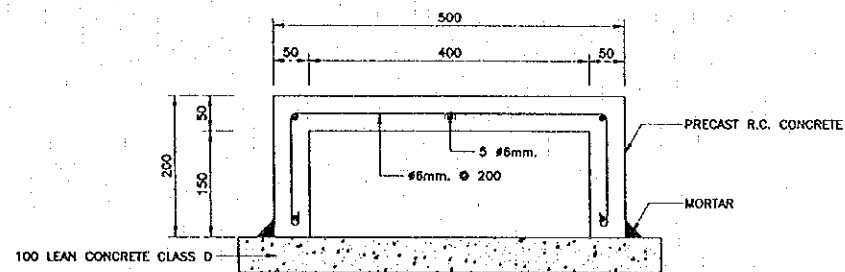
DETAIL 'A'  
 SCALE 1 : 10



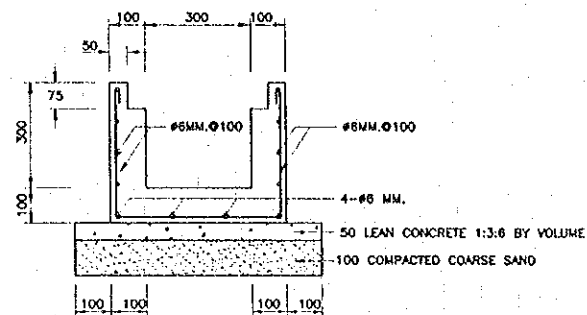
DRAIN GRATING  
 SCALE 1 : 10



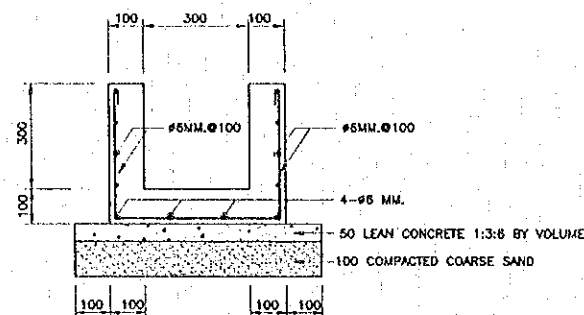
SECTION D-D  
 SCALE 1 : 10



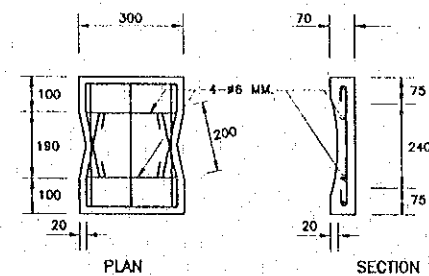
SECTION E-E  
 NOT TO SCALE



SECTION OF R.C. DITCH TYPE "B"  
 AT CONNECTION WITH WALKWAY  
 SCALE 1 : 10



SECTION OF R.C. DITCH TYPE "B"  
 SCALE 1 : 10



R.C. COVER OF R.C. DITCH TYPE "B"  
 SCALE 1 : 10

NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- CONCRETE FOR R.C. DITCH TYPE "B1" AND TYPE "B2" SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 210 KSC. FOR 15x15x15 CM. CUBE AT 28 DAYS. AN APPROXIMATE MIX DESIGN PER CUBIC METER IS SUGGESTED AS FOLLOWS:
 

PORTLAND CEMENT TYPE 1	350	KG. (MIN.)
SAND	0.43	M <sup>3</sup>
CRUSHED ROCK OR GRAVEL	0.86	M <sup>3</sup>
CONCRETE SLUMP	10	CM. (MAX.)
- LAP LENGTH SHALL NOT BE LESS THAN 40 BAR DIAMETERS.
- CLEAR CONCRETE COVER SHALL BE 3 CM. UNLESS OTHERWISE INDICATED.
- JOINT IN R.C. DITCH TYPE "B1" AND TYPE "B2" SHALL BE SPACED AT 10.00 M. INTERVAL WIDTH OF THE JOINT IS 1 CM. AND FILLED WITH MORTAR (PORTLAND CEMENT : SAND) RATIO 1:3 BY VOLUME.
- R.C. DITCH TYPE "B1" AND TYPE "B2" CROSS DRAW AT CONNECTION ROAD SHALL BE PRECAST 1 M. LONG. WIDTH OF THE JOINT IS 1 CM. AND FILLED WITH MORTAR (PORTLAND CEMENT : SAND) RATIO 1:3 BY VOLUME.
- FLAT PLATE STEEL CONFORM TO TIS. 55 GRADE SR 24.

REV.	DATE	DESCRIPTION	APPROVED

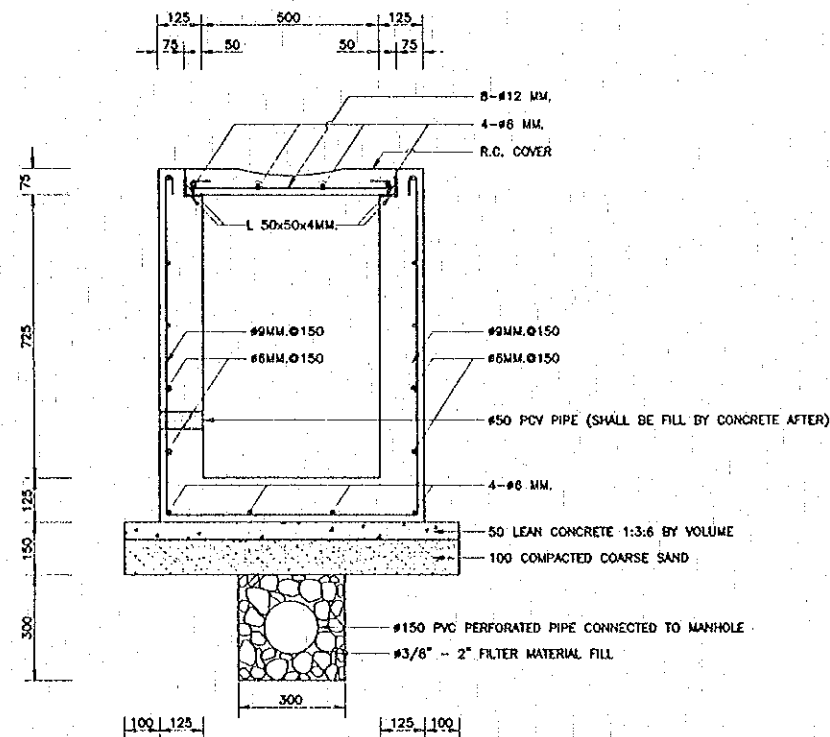
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

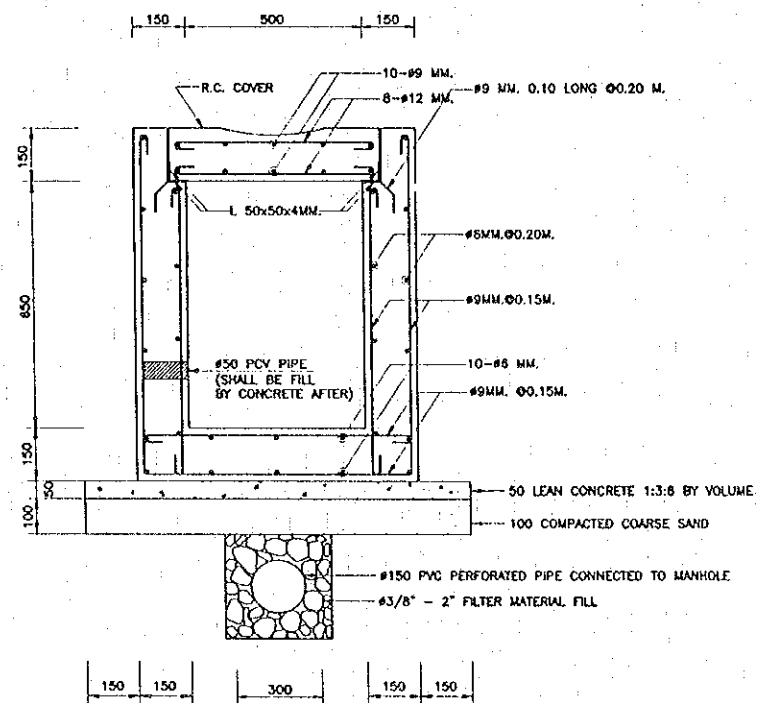
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Okita	<i>[Signature]</i>	14/01/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/02/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	22/02/00

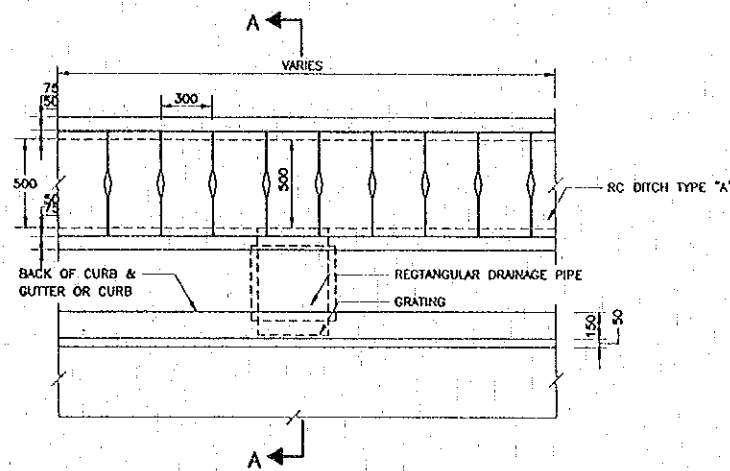
DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 RC DITCH DETAILS -- 1



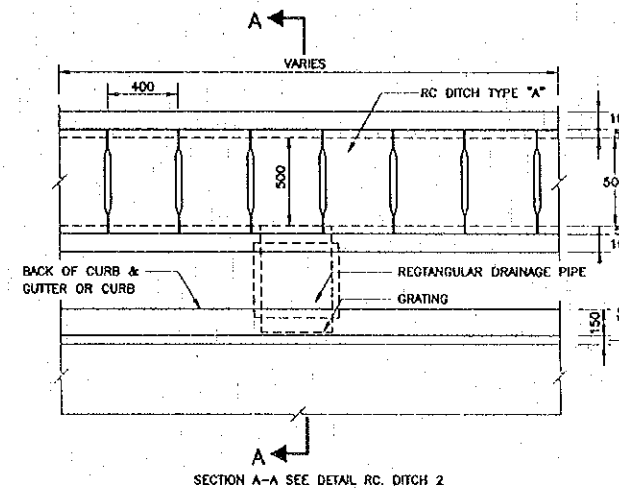
SECTION OF R.C. DITCH TYPE "B1"  
 SCALE 1 : 10



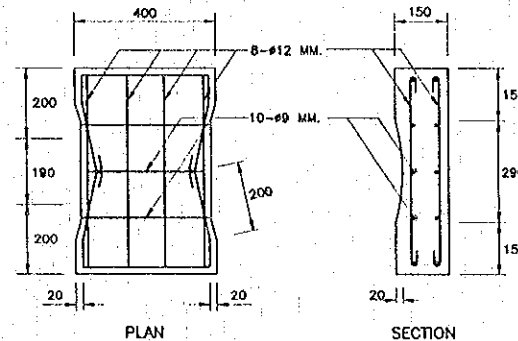
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 SCALE 1 : 10



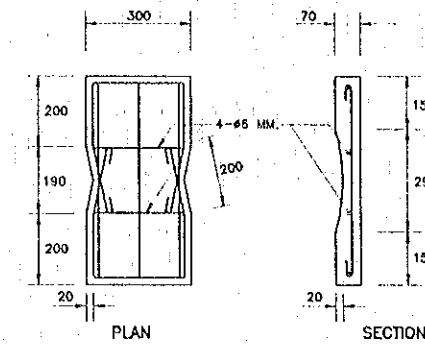
PLAN OF RC DITCH TYPE "B1"  
 SCALE 1 : 20



PLAN OF RC DITCH TYPE B2  
 SCALE 1 : 20



R.C. COVER OF R.C. DITCH TYPE B2  
 SCALE 1 : 10



R.C. COVER OF R.C. DITCH TYPE "B1"  
 SCALE 1 : 10

NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- CONCRETE FOR R.C. DITCH TYPE "B1" AND TYPE "B2" SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 210 KSC. FOR 15x15x15 CM. CUBE AT 28 DAYS. AN APPROXIMATE MIX DESIGN PER CUBIC METER IS SUGGESTED AS FOLLOWS:
 

PORTLAND CEMENT TYPE 1	350	KG. (MIN.)
SAND	0.43	M <sup>3</sup>
CRUSHED ROCK OR GRAVEL	0.86	M <sup>3</sup>
CONCRETE SLUMP	10	CM. (MAX.)
- LAP LENGTH SHALL NOT BE LESS THAN 40 BAR DIAMETERS.
- CLEAR CONCRETE COVER SHALL BE 3 CM. UNLESS OTHERWISE INDICATED.
- JOINT IN R.C. DITCH TYPE "B1" AND TYPE "B2" SHALL BE SPACED AT 10.00 M. INTERVAL WIDTH OF THE JOINT IS 1 CM. AND FILLED WITH MORTAR (PORTLAND CEMENT : SAND) RATIO 1:3 BY VOLUME.
- R.C. DITCH TYPE "B1" AND TYPE "B2" CROSS DRAIN AT CONNECTION ROAD SHALL BE PRECAST 1 M. LONG. WIDTH OF THE JOINT IS 1 CM. AND FILLED WITH MORTAR (PORTLAND CEMENT : SAND) RATIO 1:3 BY VOLUME.
- FLAT PLATE STEEL CONFORM TO TIS. 55 GRADE SR 24.

REV.	DATE	DESCRIPTION	APPROVED

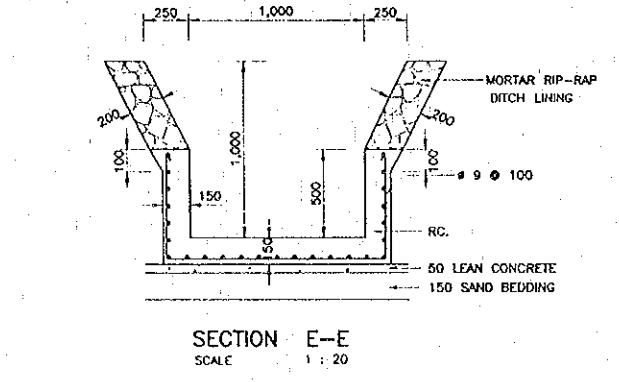
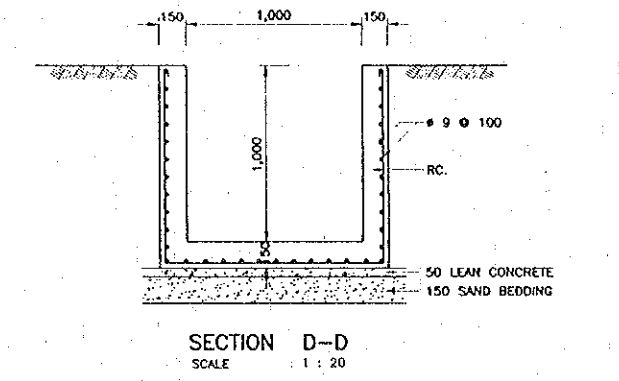
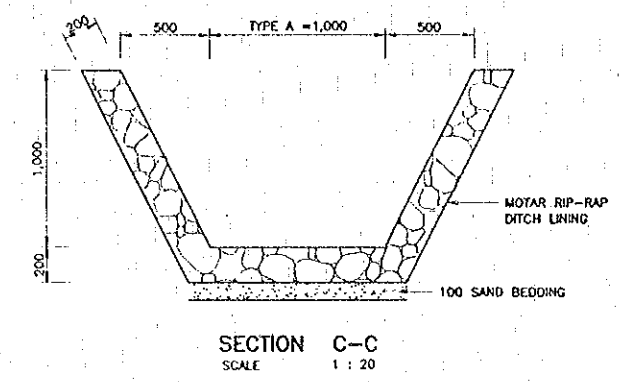
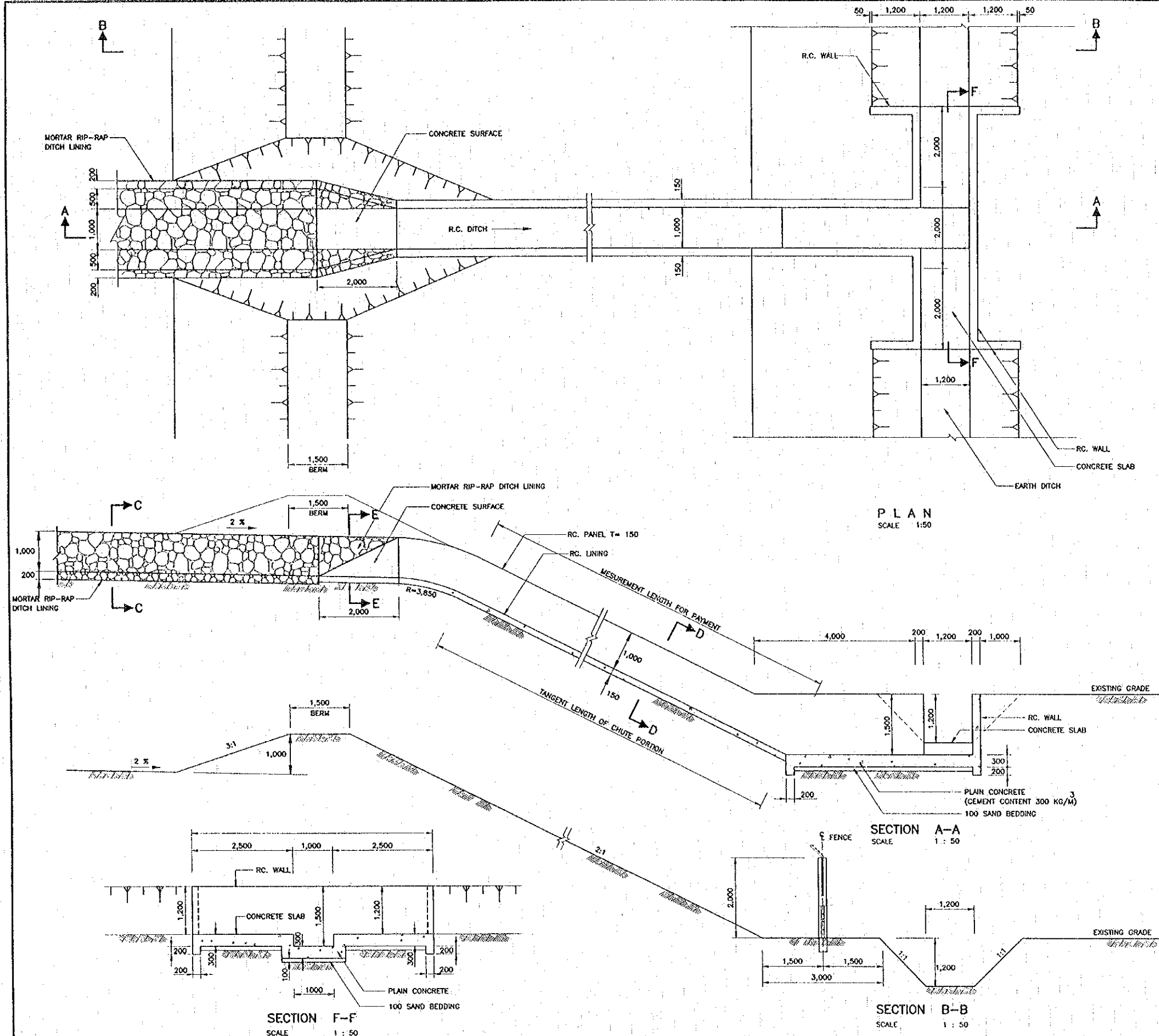
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Okita	<i>H. Okita</i>	16/05/00	BORDER CONTROL FACILITIES THAILAND SIDE RC DITCH DETAILS - 2
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	17-07-00	
SUBMITTED	A. Hironaka	<i>A. Hironaka</i>	21/01/00	
APPROVED	S. Terayababu	<i>S. Terayababu</i>	21/02/00	

BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 RC DITCH DETAILS - 2



- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  2. REINFORCING STEEL SHALL BE PLAIN ROUND BARS CONFORMING TO TIS 20 GRADE SR 24 .
  3. CONCRETE MIX SHALL BE 1:2:4 BY VOLUME. CONCRETE SLUMP TEST SHALL NOT BE EXCEED 10 CM.
  4. THE STONES USED FOR RIP-RAP DITCH LINING SHALL WEIGH 20-45 KG. EACH AND AT LEAST 50% SHALL WEIGH MORE THAN 35 KG. STONES SHALL HAVE SUCH SHAPE AND DIMENSIONS AS TO MINIMIZE THE INTERSPICES AFTER PLACING. THE THICKNESS OF STONES SHALL BE APPROXIMATELY 15 CM.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.

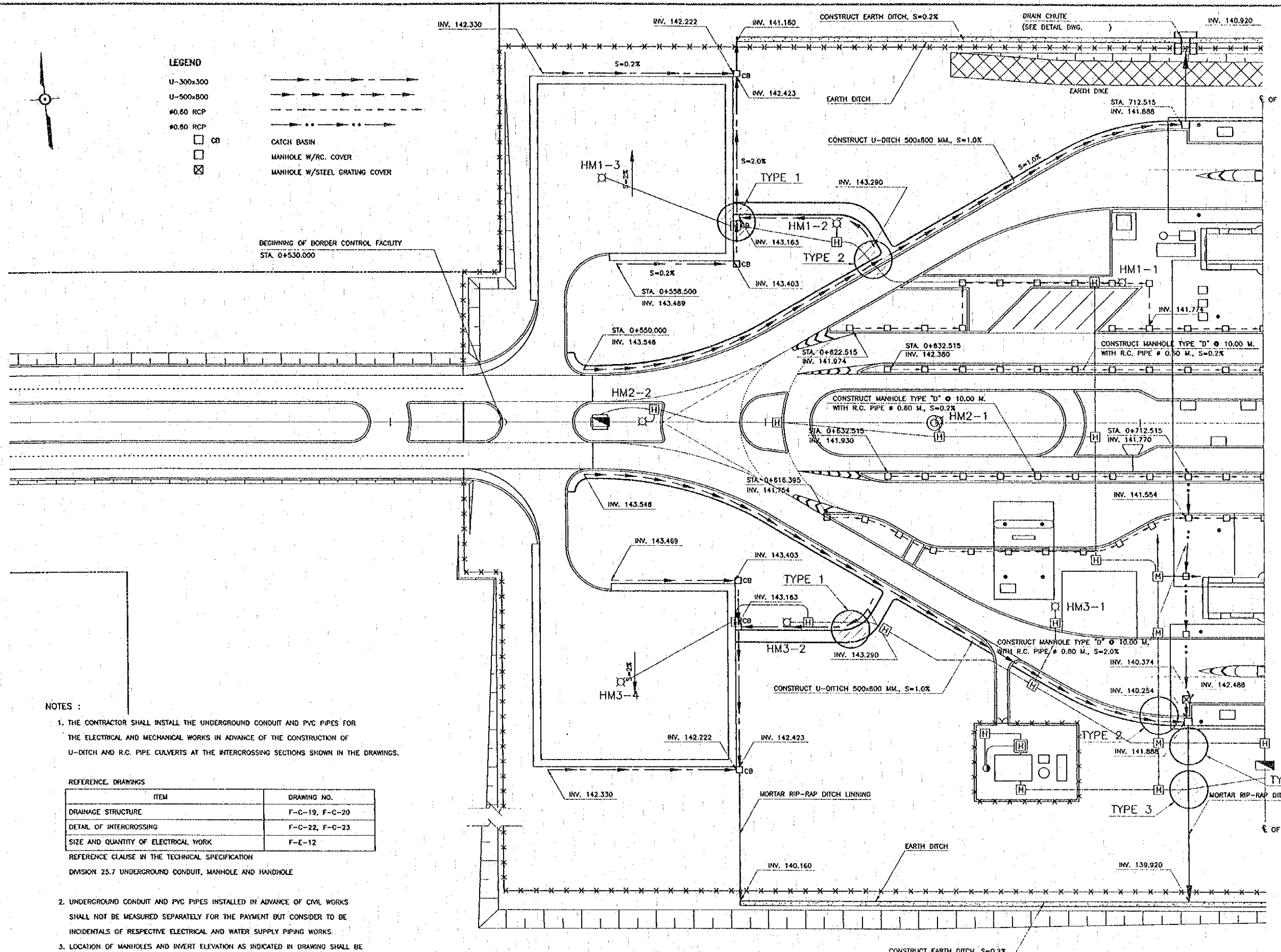
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	H. Orita	<i>[Signature]</i>	20/01/00	BORDER CONTROL FACILITIES THAILAND SIDE DRAIN CHUTE.
DESIGN CHECK	T. Matsuura	<i>[Signature]</i>	20/01/00	
SUBMITTED	A. Hiragane	<i>[Signature]</i>	20/01/00	
APPROVED	S. Tanayabutra	<i>[Signature]</i>	22/02/00	

**LEGEND**

- U-300x300
- U-500x800
- Ø0.60 RCP
- Ø0.60 RCP
- CB
- CATCH BASIN
- MANHOLE W/R.C. COVER
- MANHOLE W/STEEL GRATING COVER



**NOTES :**

1. THE CONTRACTOR SHALL INSTALL THE UNDERGROUND CONDUIT AND PVC PIPES FOR THE ELECTRICAL AND MECHANICAL WORKS IN ADVANCE OF THE CONSTRUCTION OF U-DITCH AND R.C. PIPE CULVERTS AT THE INTERCROSSING SECTIONS SHOWN IN THE DRAWINGS.

**REFERENCE DRAWINGS**

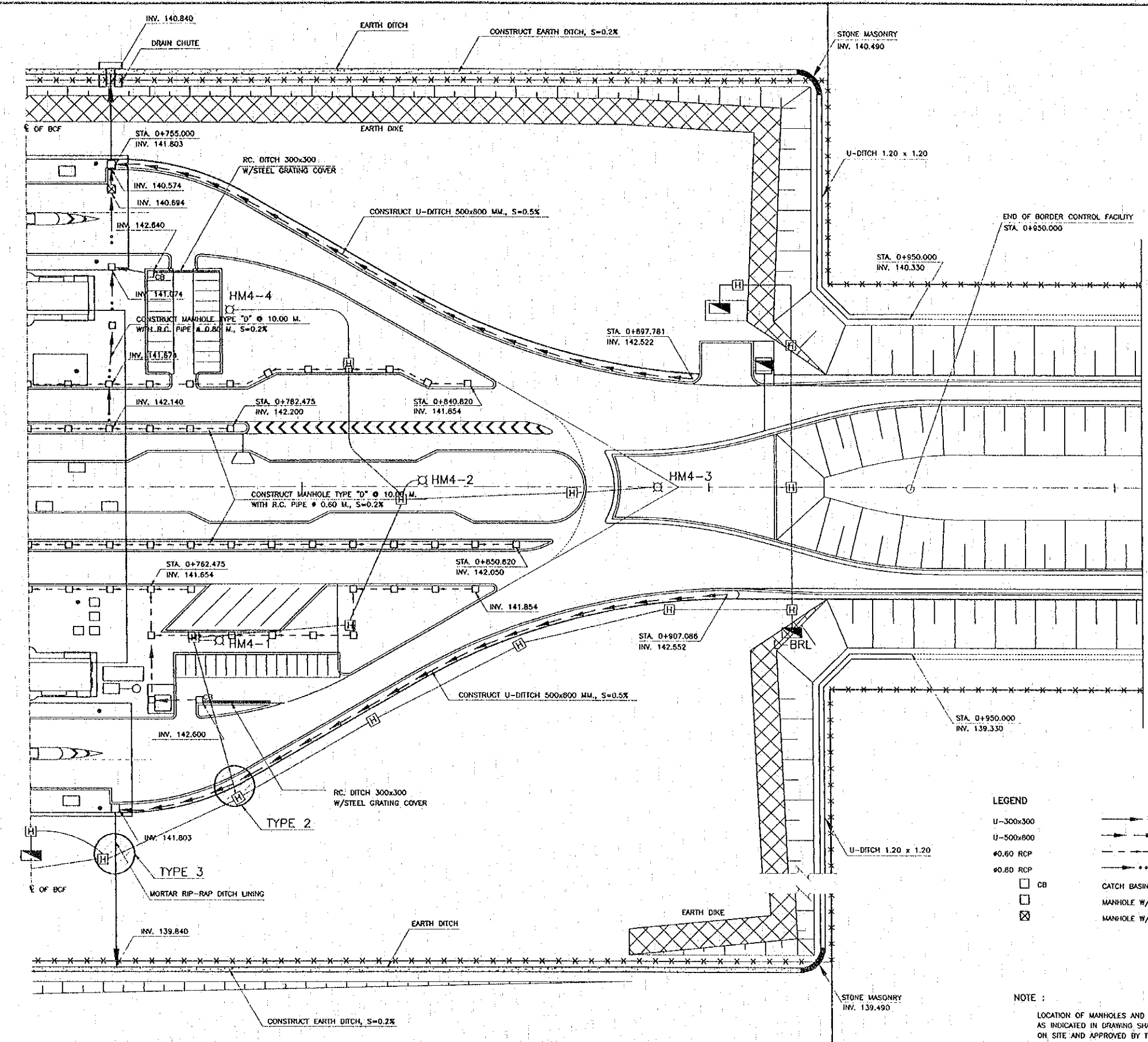
ITEM	DRAWING NO.
DRAINAGE STRUCTURE	F-C-19, F-C-20
DETAIL OF INTERCROSSING	F-C-22, F-C-23
SIZE AND QUANTITY OF ELECTRICAL WORK	F-E-12

REFERENCE CLAUSE IN THE TECHNICAL SPECIFICATION  
 DIVISION 25.7 UNDERGROUND CONDUIT, MANHOLE AND HANDHOLE

2. UNDERGROUND CONDUIT AND PVC PIPES INSTALLED IN ADVANCE OF CIVIL WORKS SHALL NOT BE MEASURED SEPARATELY FOR THE PAYMENT BUT CONSIDER TO BE INCIDENTALS OF RESPECTIVE ELECTRICAL AND WATER SUPPLY PIPING WORKS.
3. LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY          LAO PEOPLE'S DEMOCRATIC REPUBLIC          MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION          KINGDOM OF THAILAND          MINISTRY OF TRANSPORT AND COMMUNICATIONS          DEPARTMENT OF HIGHWAYS</p>	QUALITY RECORD DESIGN H. Osho DESIGN CHECK T. Morizawa SUBMITTED A. Hretani APPROVED S. Tamiyabura	NAME SIGNATURE DATE	DWG. TITLE BORDER CONTROL FACILITIES THAILAND SIDE LOCATION OF INTERCROSSING SECTIONS BETWEEN DRAINAGE WORKS AND ELECTRICAL WORKS (1)
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DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
F-C-23	99
DWG. STATUS	

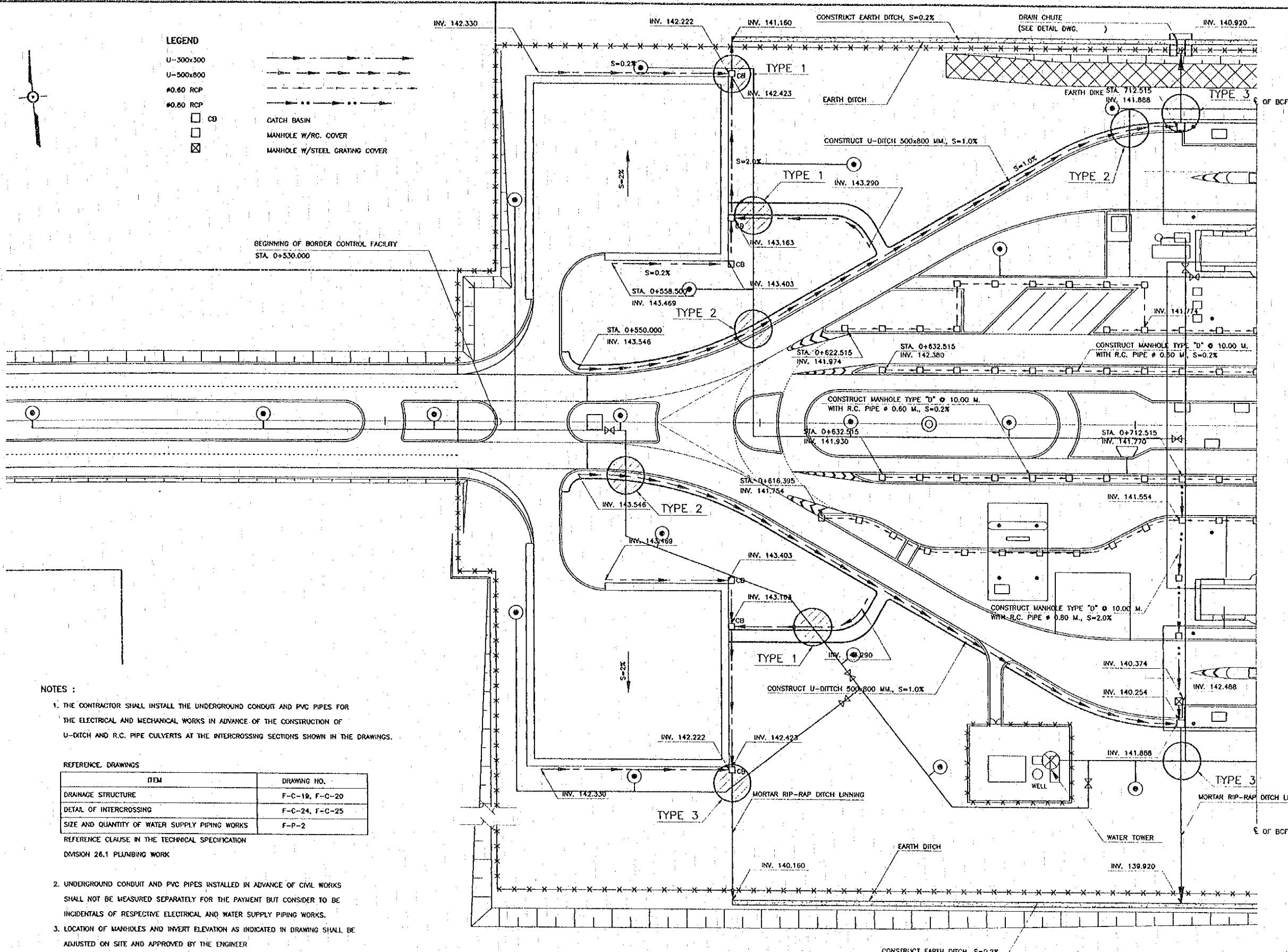
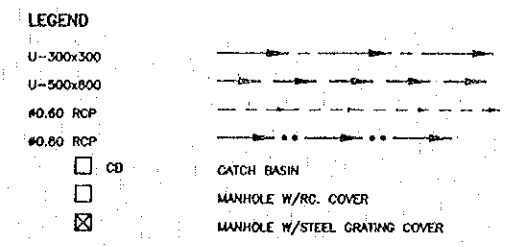


LEGEND

U-300x300	→→→→→
U-500x800	→→→→→
Ø.60 RCP	→→→→→
Ø.80 RCP	→→→→→
□ CB	CATCH BASIN
□	MANHOLE W/R.C. COVER
⊗	MANHOLE W/STEEL GRATING COVER

NOTE :  
 LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Takobushi	<i>[Signature]</i>	18/02/00	BORDER CONTROL FACILITIES THAILAND SIDE LOCATION OF INTERCROSSING SECTIONS BETWEEN DRAINAGE WORKS AND ELECTRICAL WORKS (2)
						DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18/02/00		
						SUBMITTED	A. Hvitani	<i>[Signature]</i>	18/02/00		
						APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00		



- NOTES :**
- THE CONTRACTOR SHALL INSTALL THE UNDERGROUND CONDUIT AND PVC PIPES FOR THE ELECTRICAL AND MECHANICAL WORKS IN ADVANCE OF THE CONSTRUCTION OF U-DITCH AND R.C. PIPE CULVERTS AT THE INTERCROSSING SECTIONS SHOWN IN THE DRAWINGS.
  - UNDERGROUND CONDUIT AND PVC PIPES INSTALLED IN ADVANCE OF CIVIL WORKS SHALL NOT BE MEASURED SEPARATELY FOR THE PAYMENT BUT CONSIDER TO BE INCIDENTALS OF RESPECTIVE ELECTRICAL AND WATER SUPPLY PIPING WORKS.
  - LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

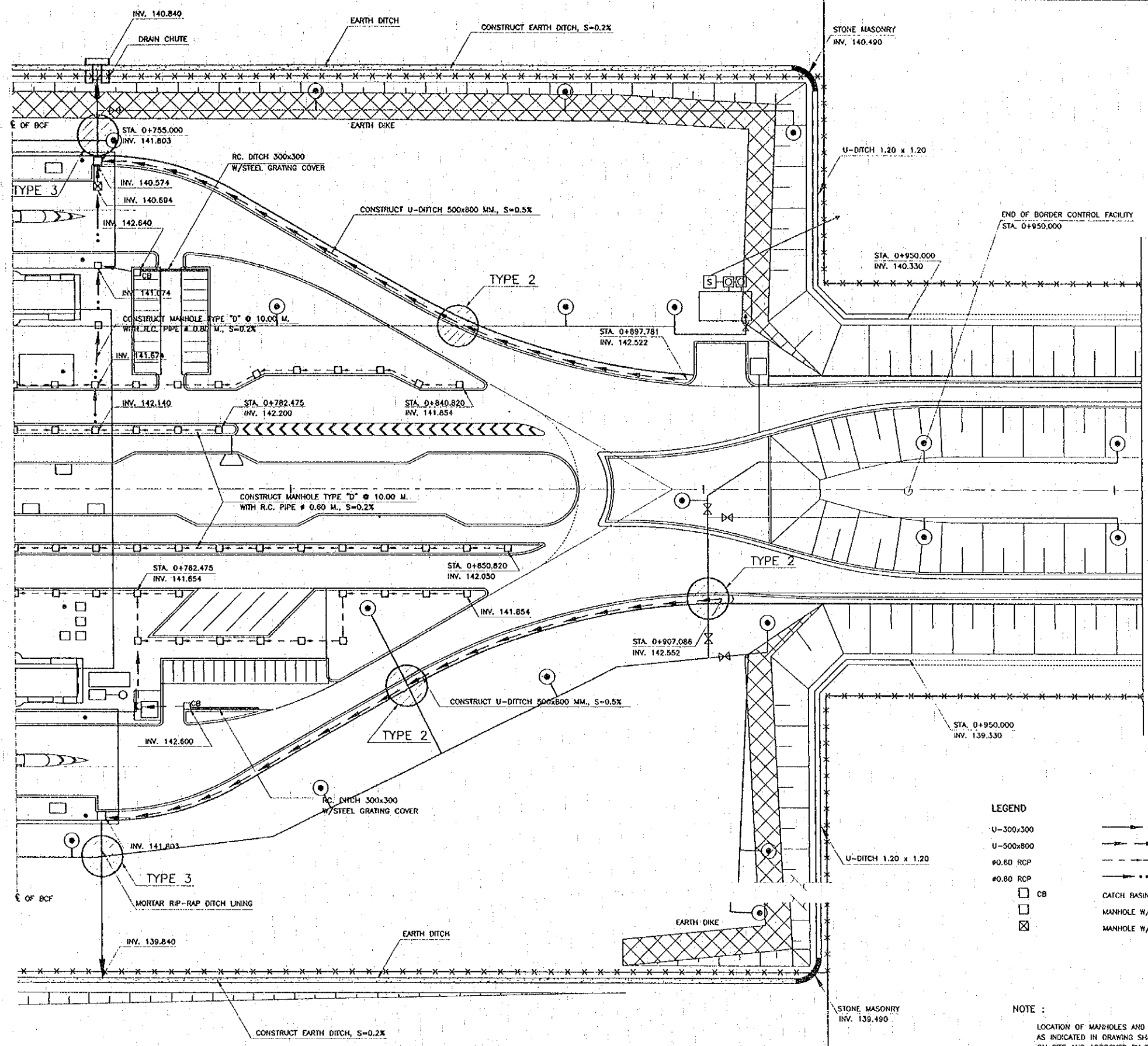
**REFERENCE DRAWINGS**

ITEM	DRAWING NO.
DRAINAGE STRUCTURE	F-C-19, F-C-20
DETAIL OF INTERCROSSING	F-C-24, F-C-25
SIZE AND QUANTITY OF WATER SUPPLY PIPING WORKS	F-P-2

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY          LAO PEOPLE'S DEMOCRATIC REPUBLIC          MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION          KINGDOM OF THAILAND          MINISTRY OF TRANSPORT AND COMMUNICATIONS          DEPARTMENT OF HIGHWAYS</p>	QUALITY RECORD DESIGN H. Orita DESIGN CHECK T. Masuzawa SUBMITTED A. Healani APPROVED S. Tanyabutra	NAME SIGNATURE DATE	DWG. TITLE: <b>BORDER CONTROL FACILITIES          THAILAND SIDE          LOCATION OF INTERCROSSING SECTIONS BETWEEN DRAINAGE WORKS          AND WATER SUPPLY PIPES (1)</b>
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DATE OF ISSUE		05/03/2000	
DWG. NO.	F-C-25	SHEET NO.	101
DWG. STATUS			

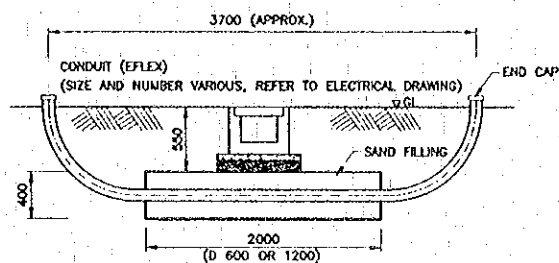


**LEGEND**

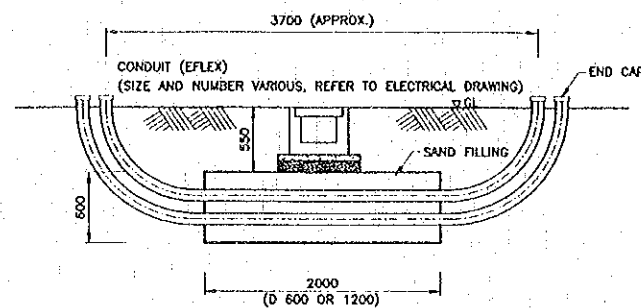
U-300x300	→→→→→
U-500x800	→→→→→
ø0.60 RCP	→→→→→
ø0.80 RCP	→→→→→
□ CB	CATCH BASIN
□	MANHOLE W/RC COVER
⊗	MANHOLE W/STEEL GRATING COVER

**NOTE :**  
 LOCATION OF MANHOLES AND INVERT ELEVATION AS INDICATED IN DRAWING SHALL BE ADJUSTED ON SITE AND APPROVED BY THE ENGINEER

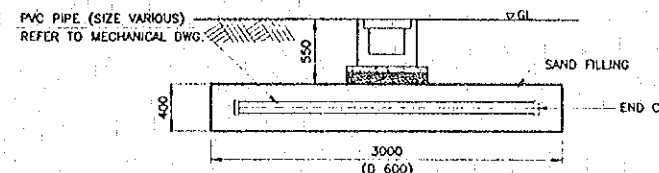
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Takahashi	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE LOCATION OF INTERCROSSING SECTIONS BETWEEN DRAINAGE WORKS AND WATER SUPPLY PIPES (2)
						DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hiratake	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Temjombutra	<i>[Signature]</i>	22/02/00	



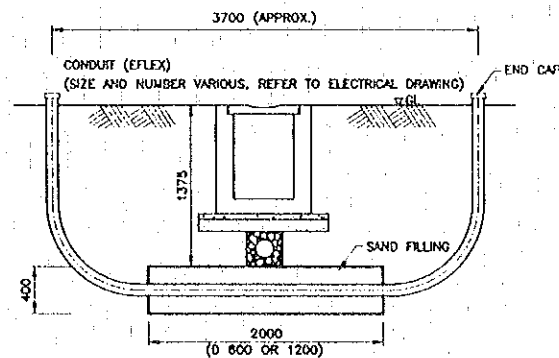
TYPE 1 (1 STEP) FOR CONDUIT  
SCALE 1 : 30



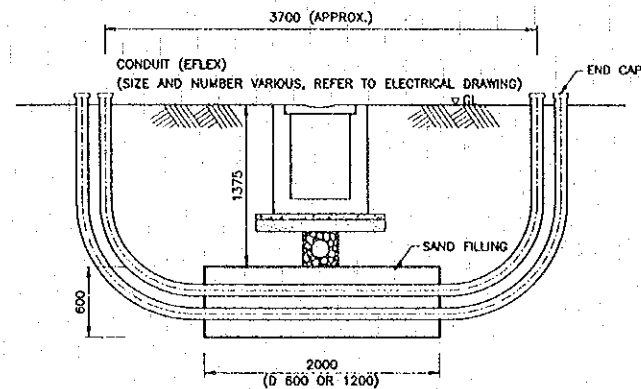
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SCALE 1 : 30



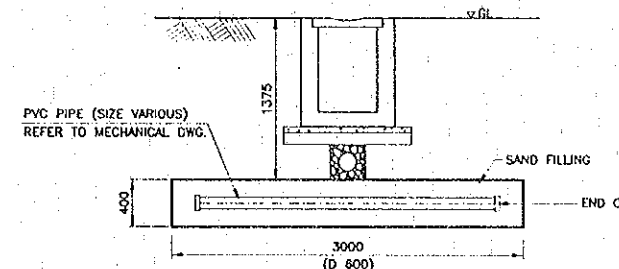
TYPE 1 FOR WATER SUPPLY PIPE  
SCALE 1 : 30



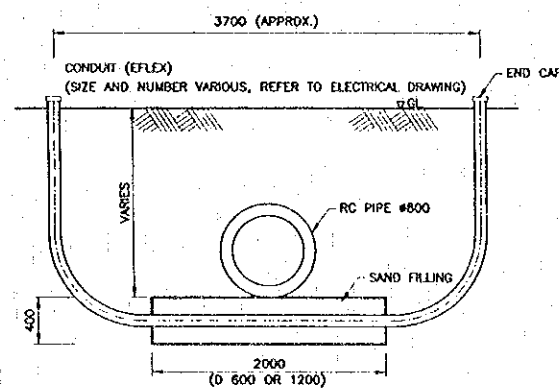
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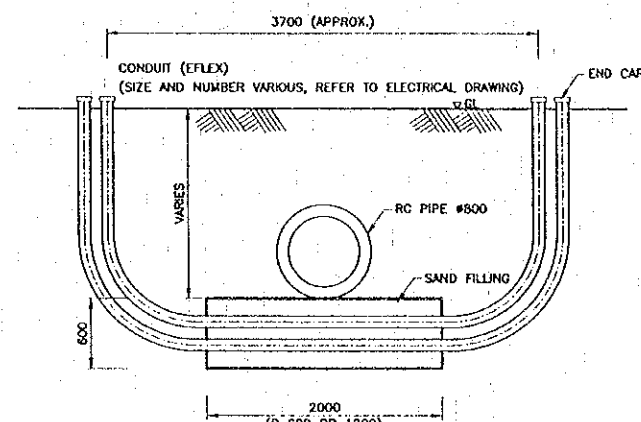
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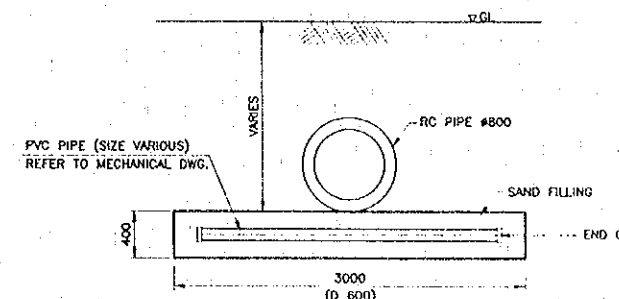
TYPE 2 FOR WATER SUPPLY PIPE  
SCALE 1 : 30



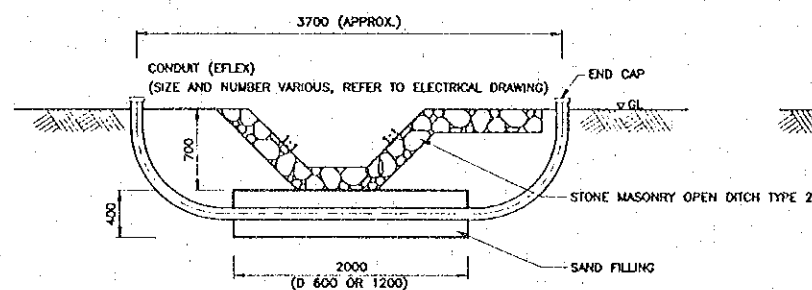
TYPE 3 (1 STEP) FOR CONDUIT  
SCALE 1 : 30



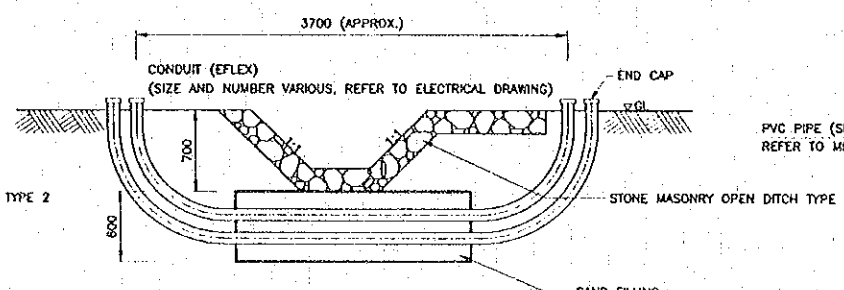
TYPE 3 (2 STEP) FOR CONDUIT  
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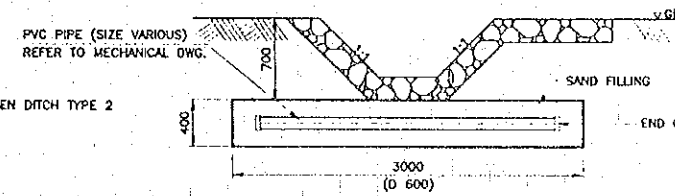
TYPE 3 FOR WATER SUPPLY PIPE  
SCALE 1 : 30



TYPE 4 (1 STEP) FOR CONDUIT  
SCALE 1 : 30



TYPE 4 (2 STEP) FOR CONDUIT  
SCALE 1 : 30



TYPE 4 FOR WATER SUPPLY PIPE  
SCALE 1 : 30

NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THE DRAWING SHALL BE USED IN CONJUNCTION WITH THE OTHER DETAILED DRAWINGS.

REV.	DATE	DESCRIPTION	APPROVED

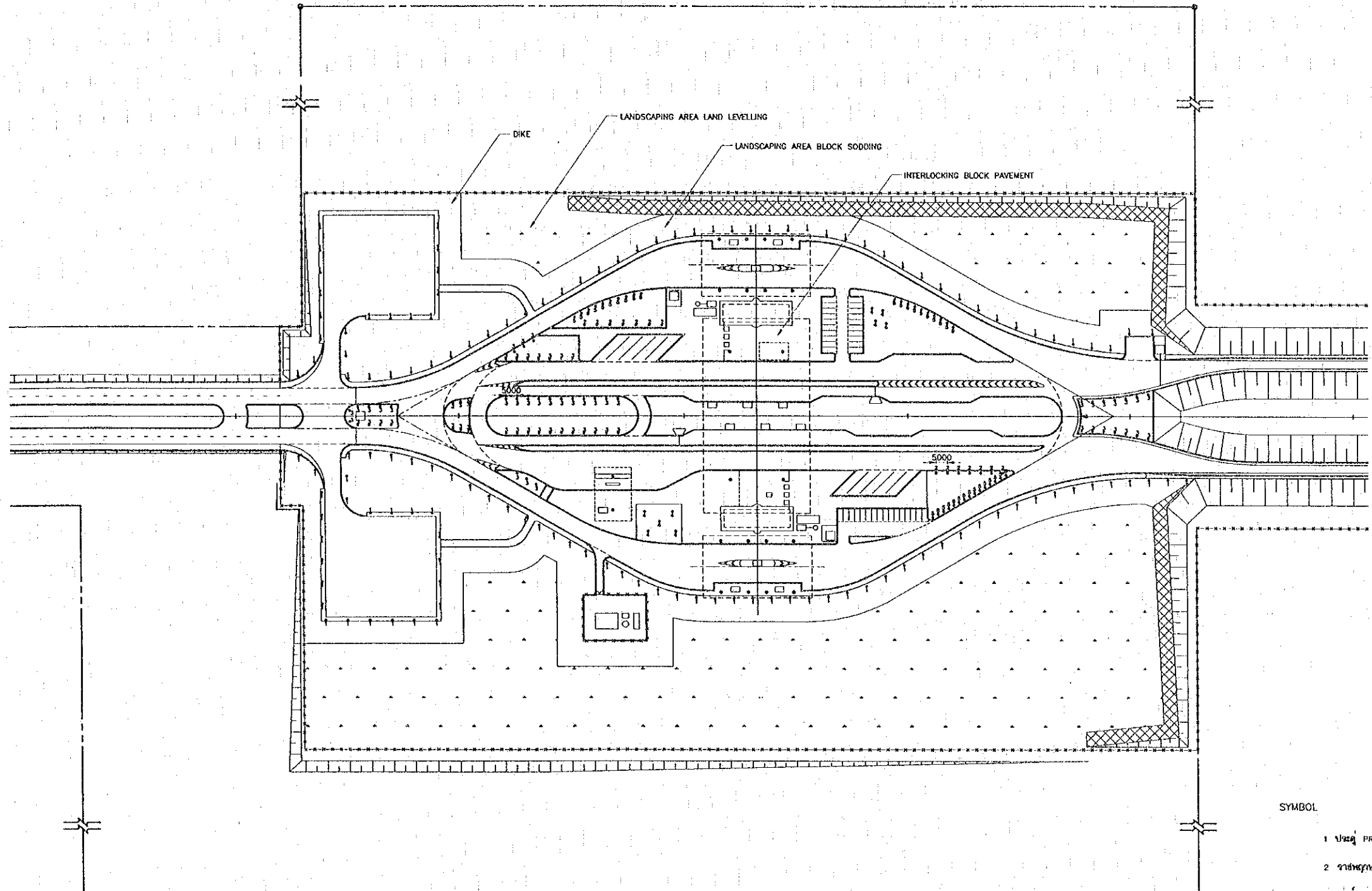
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**MIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	<i>[Signature]</i>	16/2/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	17/2/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	17/2/00
APPROVED	S. Temiyabutra	<i>[Signature]</i>	22/2/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE INTERCROSSING SECTION DETAILS**



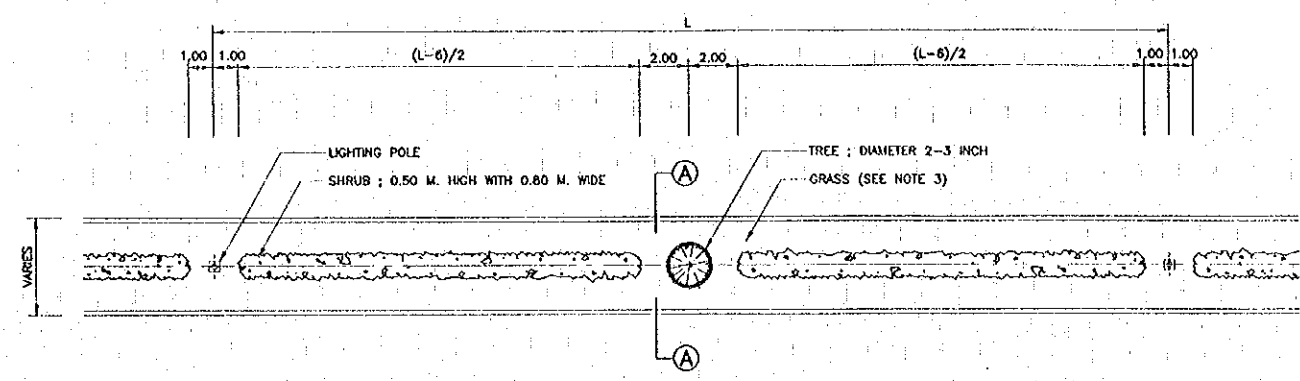
SYMBOL

- 1 ป่ารก PRADOOBAN
- 2 ไร่หญ้า (แดง) RAJCHAPRUK
- 3 ไร่หญ้า PALM KUA
- 4 ไร่หญ้า KALAPRAPRUK
- 5 ไร่หญ้า SONGBADARN

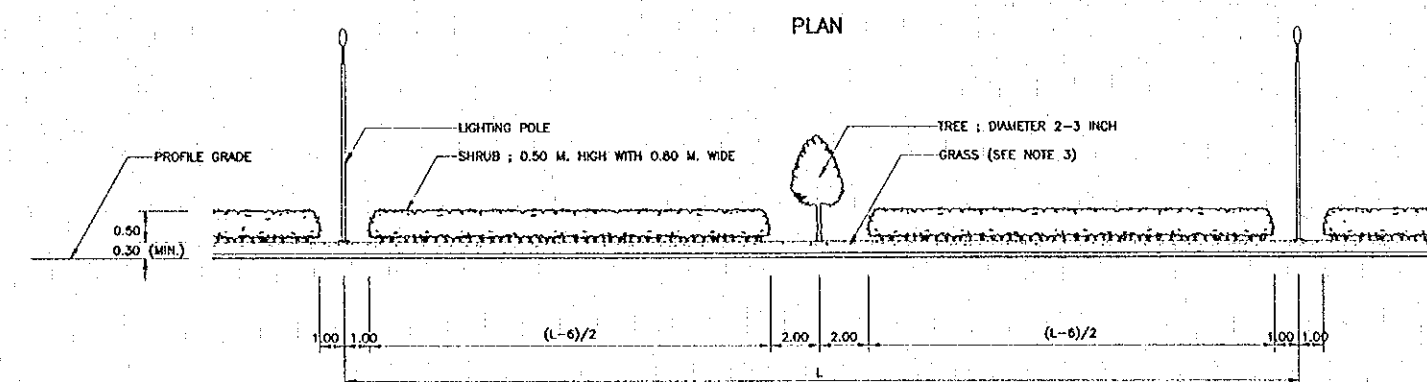
REMARK :

DETAIL GRASSING IN MEDIANS SEE DOH STAND AND DWG. NO.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD DESIGN: H. Okita DESIGN CHECK: T. Motosawa SUBMITTED: A. Hironaka APPROVED: S. Taniyabura	NAME: H. Okita SIGNATURE: [Signature] DATE: 14/01/00	NAME: T. Motosawa SIGNATURE: [Signature] DATE: 17/01/00	NAME: A. Hironaka SIGNATURE: [Signature] DATE: 17/01/00	NAME: S. Taniyabura SIGNATURE: [Signature] DATE: 21/02/00	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.								BORDER CONTROL FACILITIES THAILAND SIDE LAYOUT OF LANDSCAPING WORK

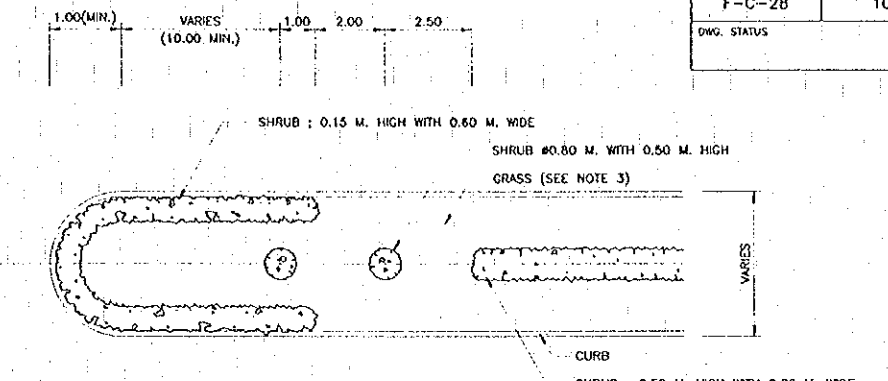


PLAN

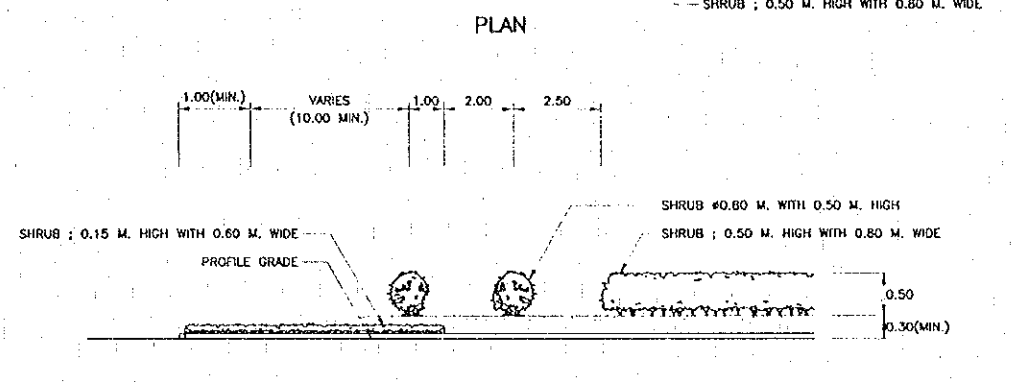


PROFILE

DETAIL OF PLANTING AT MEDIAN  
 NOT TO SCALE

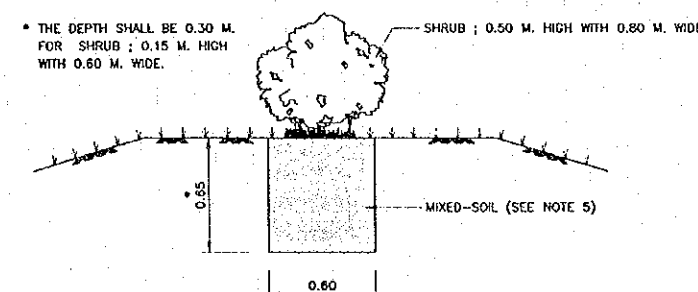


PLAN

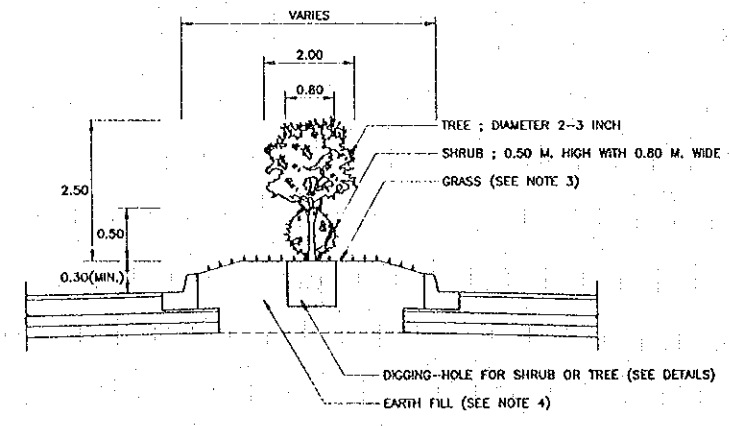


PROFILE

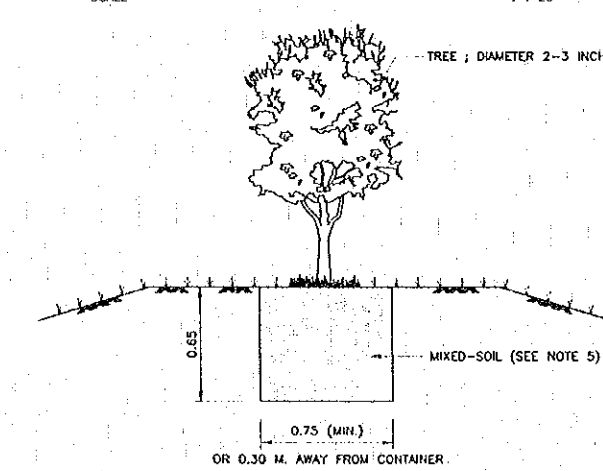
BEGINNING OF MEDIAN  
 NOT TO SCALE



DETAIL OF DIGGING-HOLE FOR SHRUB  
 SCALE 1:20








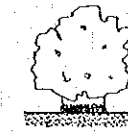
SECTION A-A  
 NOT TO SCALE



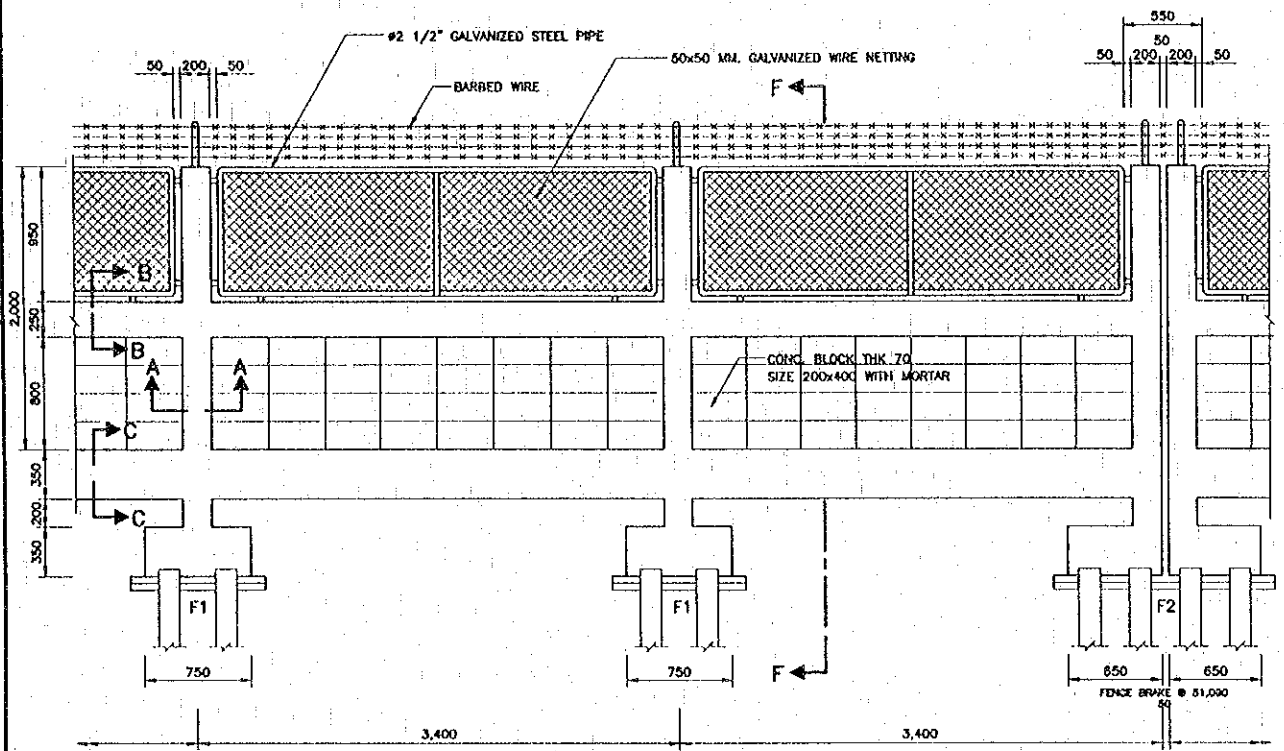
DETAIL OF DIGGING-HOLE FOR TREE  
 SCALE 1:20

- NOTES :
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  2. TREE AND SHRUB SHALL BE DIRECTED BY ENGINEERS OR OTHERWISE INDICATED IN DRAWINGS.
  3. GRASS SHALL BE HUALNQH GRASS OR OTHERWISE INDICATED IN DRAWINGS.
  4. EARTH FILL IN MEDIAN SHALL BE ORGANIC TOPSOIL THAT BE SUITABLE FOR GROWING GRASS.
  5. MIXED-SOIL SHALL BE THE PROPORTION OF SOIL : FERTILIZER : SAND EQUAL TO 4 : 3 : 2 BY VOLUME.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PLANTS UNTIL THE END PERIOD AS SPECIFIED IN THE SPECIAL PROVISIONS.

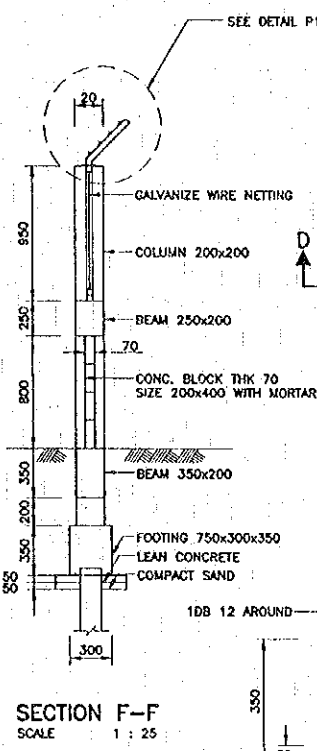
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	H. Okita T. Morizawa A. Hiratani S. Temiyabutra	<i>[Signatures]</i>	16/03/00 18/02/00 22/02/00 23/03/00	BORDER CONTROL FACILITIES THAILAND SIDE PLANTING AND GRASSING IN MEDIANS

PLANT LEGEND				
FORM	MARK	THAI NAME	FAMILY NAME ( BOTANICAL )	SCIENTIFIC NAME ( COMMON )
	T1	PRADOOBAN	PTEROCARPUS INDICUS	
	DIAMETER	2-3 INCH.		
	SPACING	10 m.		
	CHARACTERISTIC	MEDIUM PLANT		
	T2	RAICHAPRUK	CAESALPINIACEAE	GOLDEN SHOWER , INDIAN LABURNUM
	DIAMETER	2-3 INCH.		
	SPACING	5 m.		
	CHARACTERISTIC	TALL PLANT		
	T3	PLAM KUA	PALMAE	ROYAL PALM
	DIAMETER	2-3 INCH.		
	SPACING	5 m.		
	CHARACTERISTIC	TALL PLANT		
	T4	KALAPRAPRUK	CAESALPINIACEAE	SCRAMBLED EGGS
	DIAMETER	2-3 INCH.		
	SPACING	5 m.		
	CHARACTERISTIC	MEDIUM PLANT		
	T5	SONGBADARN	ZOYSIA MATRELLA L.MERR	
	DIAMETER	2-3 INCH.		
	SPACING	3 m.		
	CHARACTERISTIC	MEDIUM PLANT		
	T3	SHRUB	GENUS LXORA	LXORA RUBRA
	DIAMETER	0.5 INCH.		
	SPACING	0.5 m.		
	CHARACTERISTIC	SMALL PLANT		
NOTE :				

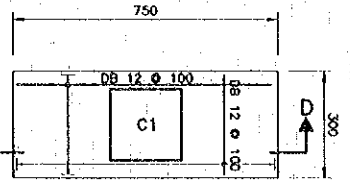




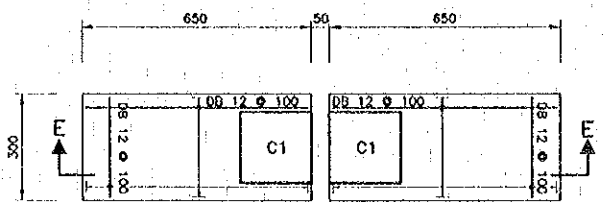
ELEVATION  
SCALE 1 : 25



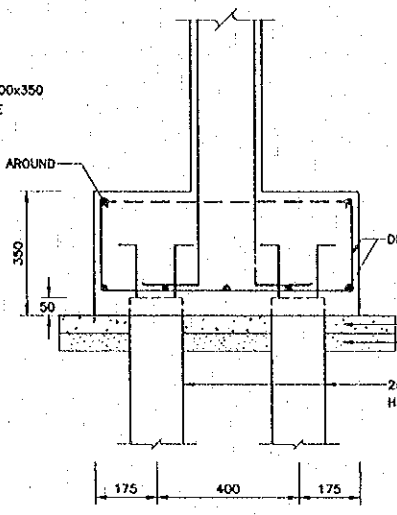
SECTION F-F  
SCALE 1 : 25



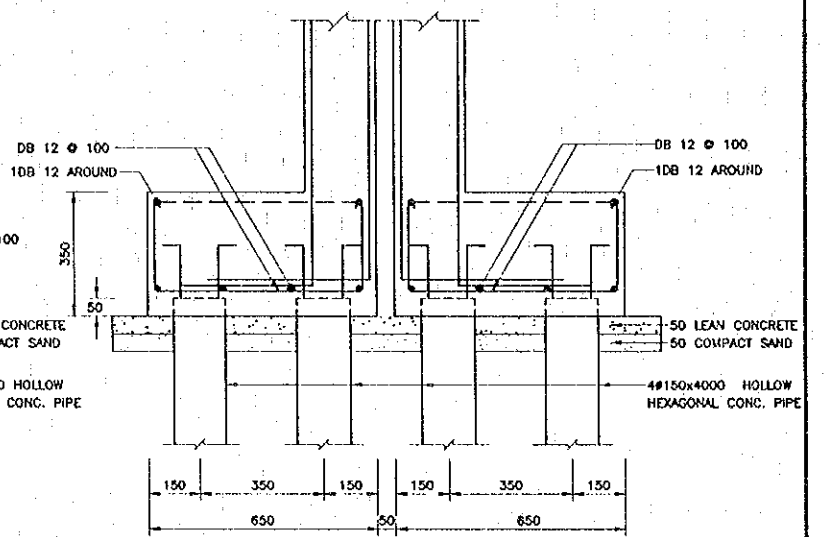
DETAIL F1  
SCALE 1 : 10



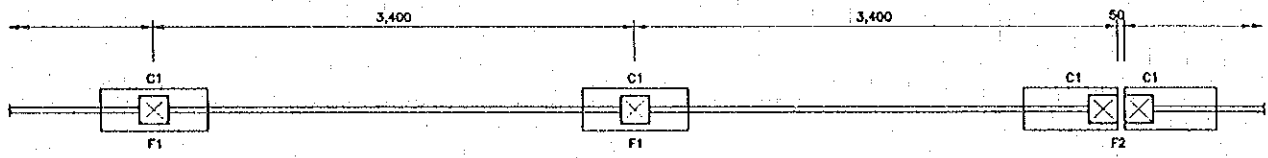
DETAIL F2  
SCALE 1 : 10



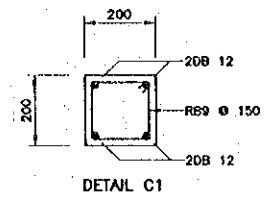
SECTION D-D  
SCALE 1 : 10



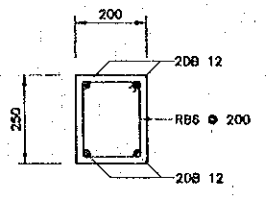
SECTION E-E  
SCALE 1 : 10



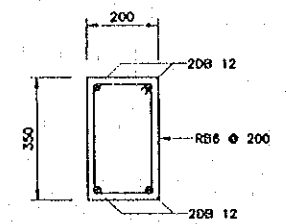
PLAN  
SCALE 1 : 25



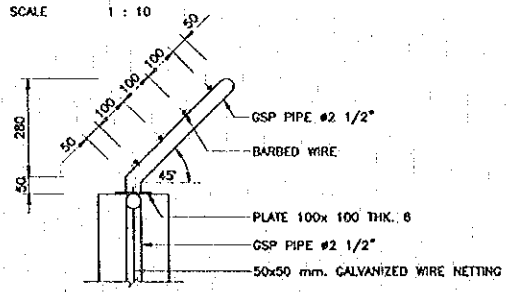
DETAIL C1  
SCALE 1 : 10



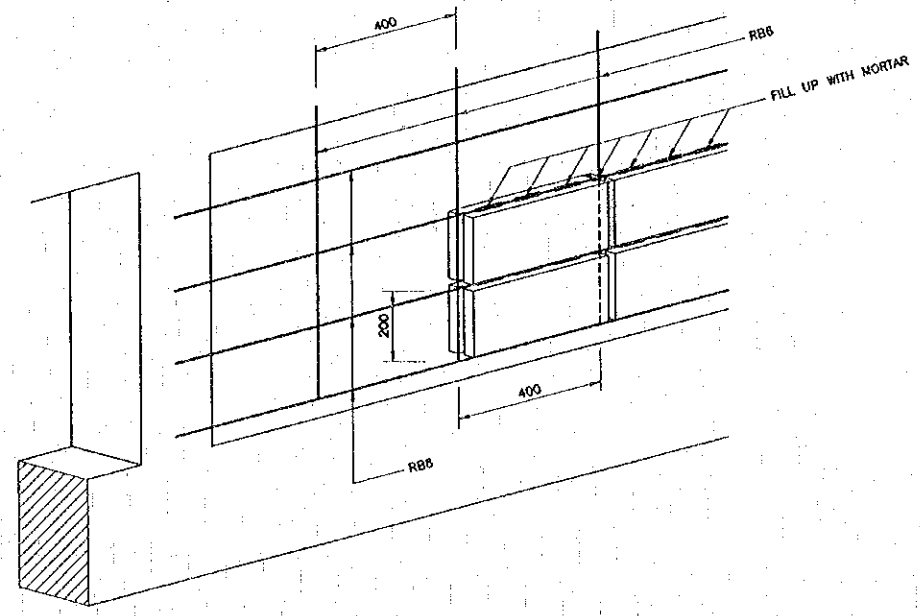
SECTION B-B  
SCALE 1 : 10



SECTION C-C  
SCALE 1 : 10



DETAIL P1  
SCALE 1 : 10

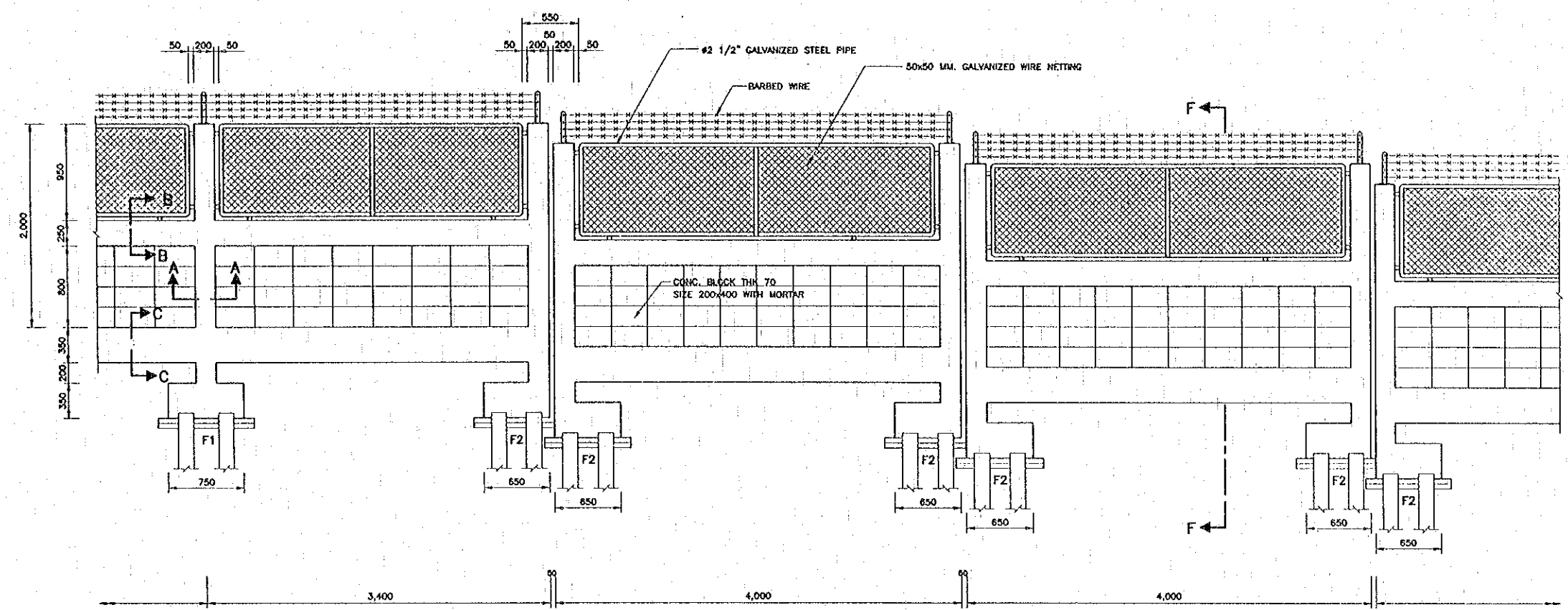


DETAIL OF INSTALLATION CONCRETE BLOCK METHOD  
SCALE 1 : 10

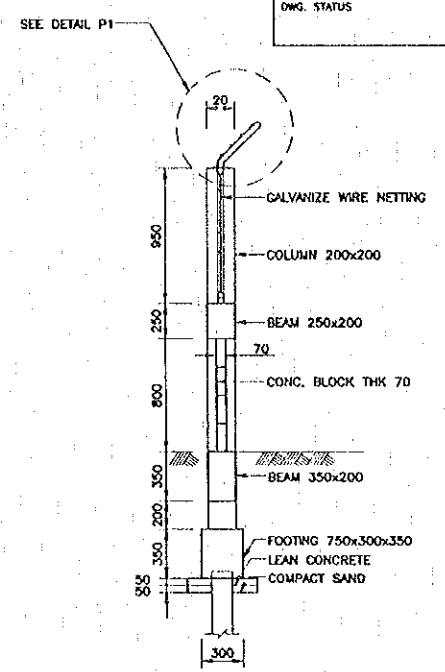
- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - IN GENERAL, THE EXISTING GROUND LEVEL IS UNDULATE, FENCE SHALL BE CONSTRUCTED INSTEP, THE LENGTH OF EACH STEP BE SUBJECT TO APPROVAL BY THE ENGINEER.
  - GENERAL NOTES
    - HEXAGONAL REINFORCEMENT CONCRETE PILE LENGTH SHALL NOT BE LESS 4.00 M.
    - CONCRETE SHALL BE CLASS D (24 N/MM<sup>2</sup>)
    - REINFORCING STEEL SHALL BE GRADE SR 235 FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BAR.
    - CONCRETE BLOCK SHALL BE CONFORM TO TIS. 60
    - STEEL PIPE SHALL BE GALVANIZED.
    - WIRE NETTING SHALL BE GALVANIZED AS SPECIFIED BY TIS. 208.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.					DESIGN	H. Okita	<i>H. Okita</i>	18/01/00	BORDER CONTROL FACILITIES THAILAND SIDE FENCE DETAILS - 1
								DESIGN CHECK	T. Morozawa	<i>T. Morozawa</i>	21/01/00		
								SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	22/01/00		
								APPROVED	S. Tamiyobutra	<i>S. Tamiyobutra</i>	22/01/00		

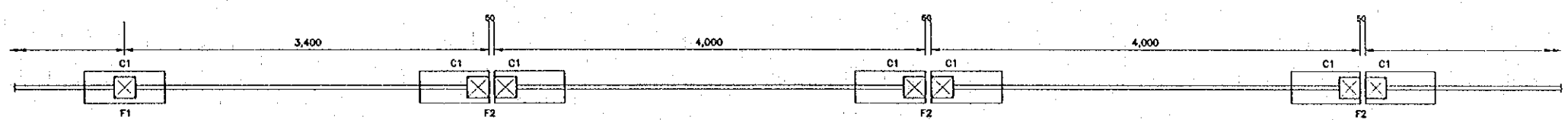
DATE OF ISSUE 05/03/2000	
DWG. NO. F-C-32	SHEET NO. 108
DWG. STATUS	



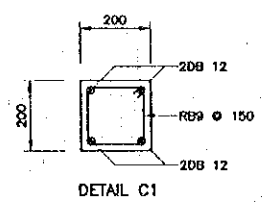
ELEVATION  
SCALE 1 : 25



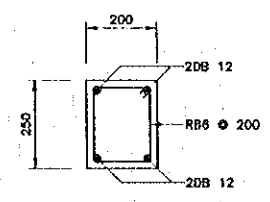
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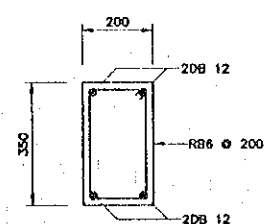
PLAN  
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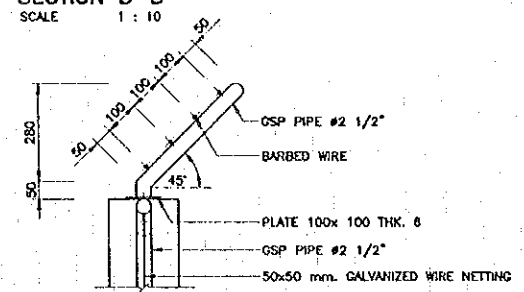
DETAIL C1  
SCALE 1 : 10



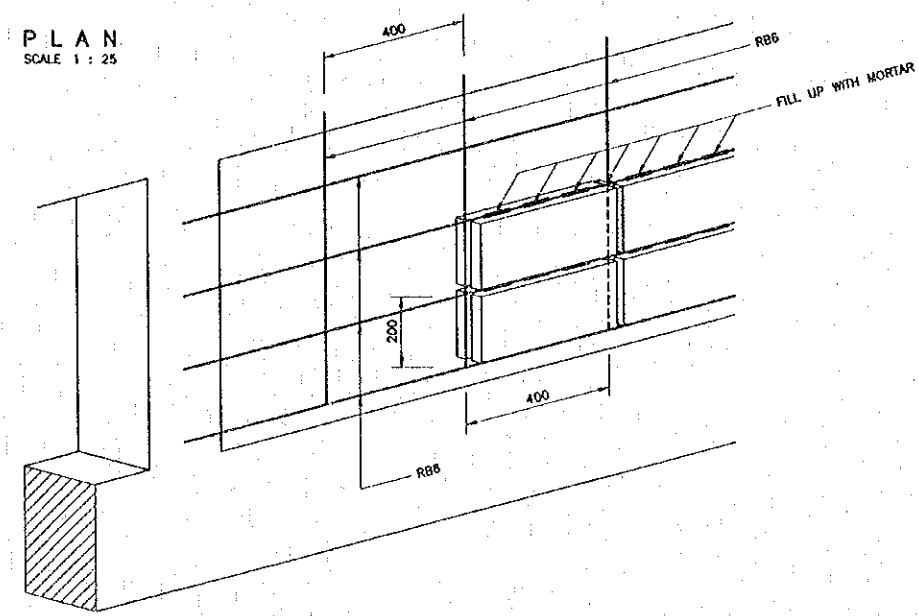
SECTION B-B  
SCALE 1 : 10



SECTION C-C  
SCALE 1 : 10



DETAIL P1  
SCALE 1 : 10

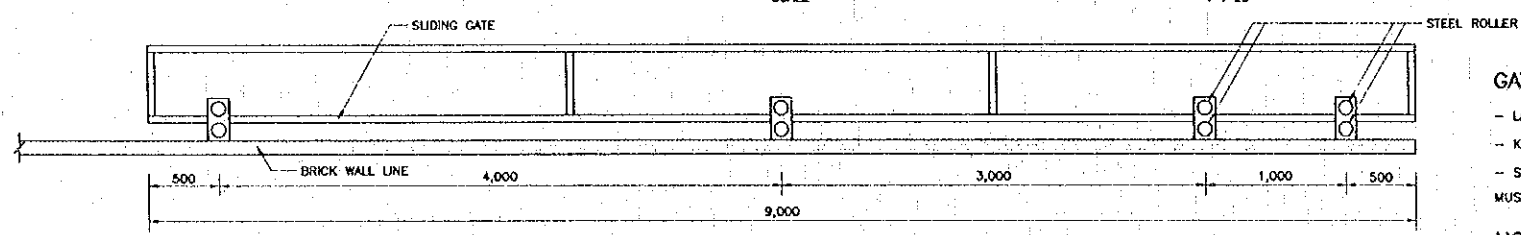
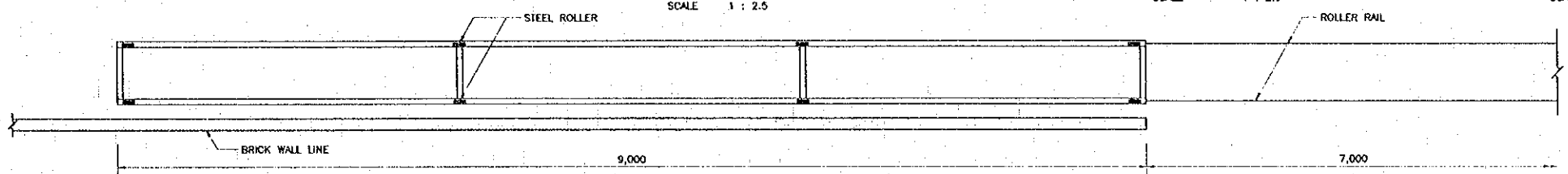
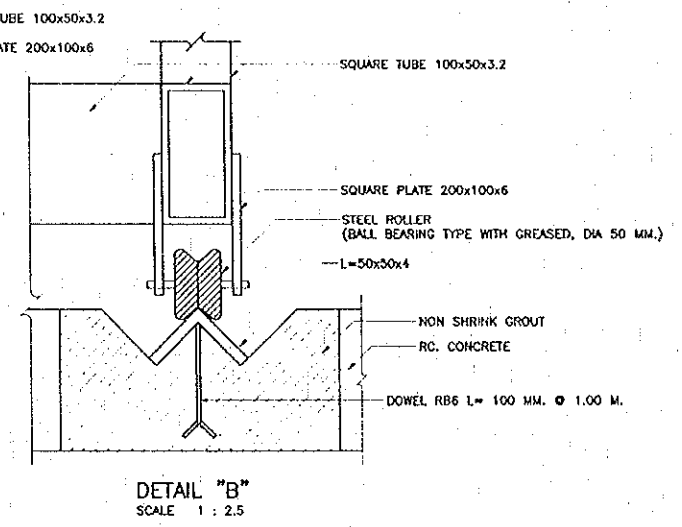
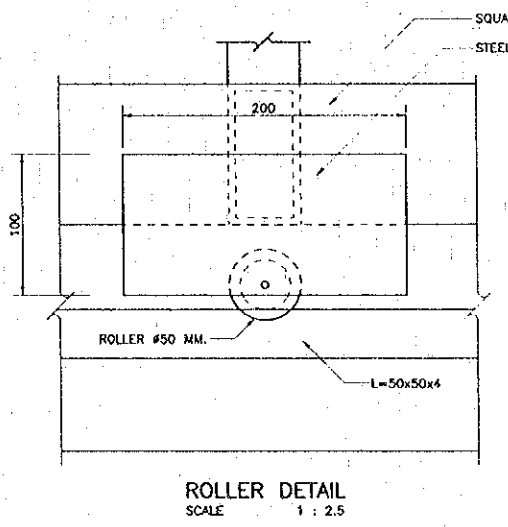
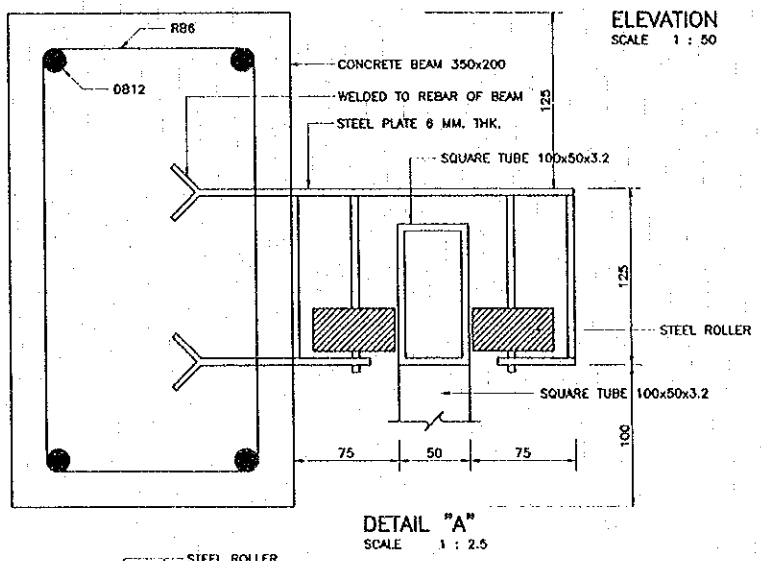
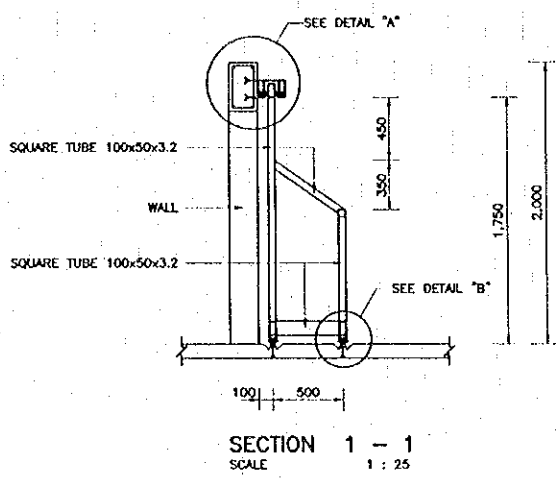
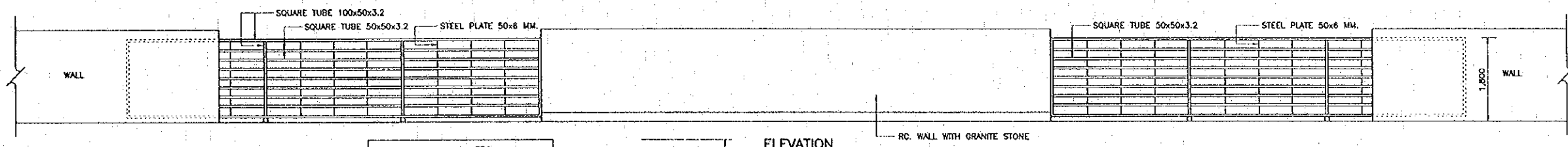
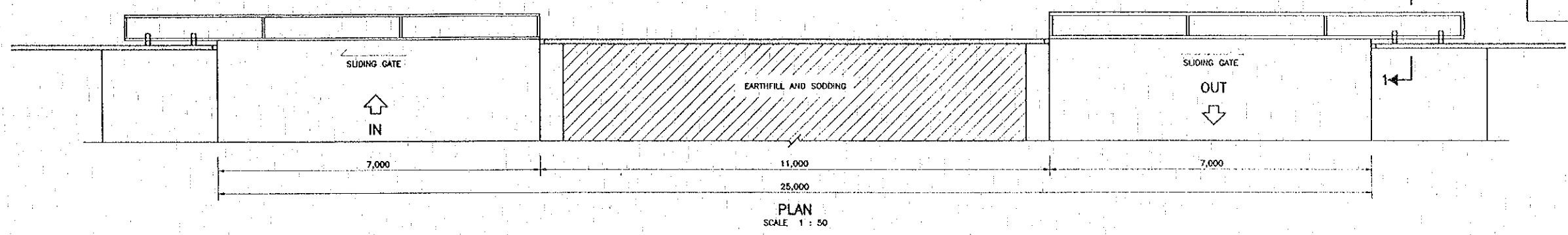


DETAIL OF INSTALLATION CONCRETE BLOCK METHOD  
SCALE 1 : 10

- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - IN GENERAL, THE EXISTING GROUND LEVEL IS UNULATE. FENCE SHALL BE CONSTRUCTED INSTEP, THE LENGTH OF EACH STEP BE SUBJECT TO APPROVAL BY THE ENGINEER.
  - GENERAL NOTES
    - HEXAGONAL REINFORCEMENT CONCRETE PILE LENGTH SHALL NOT BE LESS 4.00 M.
    - CONCRETE SHALL BE CLASS D (24 N/MM<sup>2</sup>)
    - REINFORCING STEEL SHALL BE GRADE SR 235 FOR ROUND BARS AND GRADE SD 295 FOR DEFORMED BAR.
    - CONCRETE BLOCK SHALL BE CONFORM TO TIS. 60
    - STEEL PIPE SHALL BE GALVANIZED.
    - WIRE NETTING SHALL BE GALVANIZED AS SPECIFIED BY TIS. 208.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	H. Orito	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE FENCE DETAILS - 2
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hirata	<i>[Signature]</i>	11/02/00	
						APPROVED	S. Tanayabutra	<i>[Signature]</i>	23/02/00	





**MATERIALS**  
 MATERIALS, USED IN THE WORK, SHALL CONFORM TO SIZE AND WEIGHT SPECIFIED ON THE DRAWINGS, AND MEET THE FOLLOWING REQUIREMENTS OF THOSE HEREINAFTER SPECIFIED UNDER THE PARTICULAR ITEM :

(1) STRUCTURAL SHAPES, PLATES AND BAR TIS STANDARD 116  
 UNLESS OTHERWISE NOTED "STRUCTURAL STEEL SECTION"

(2) STEEL TUBE TIS STANDARD 107  
 "HOLLOW STEEL SECTION FOR GENERAL STRUCTURAL PURPOSE"

(3) WELDING ROD TIS STANDARD 49  
 "MILD STEEL COVERED ARC WELDING ELECTRODES"

**GATE ACCESSORIES**  
 - LATCH  
 - KEY HANGER  
 - STEEL ROLLER (BALL BEARING TYPE WITH GREASED, DIA 50 MM.)  
 MUST FOLLOW THE SPECIFICATION OF SUPPLIER

**NOTE**  
 DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED

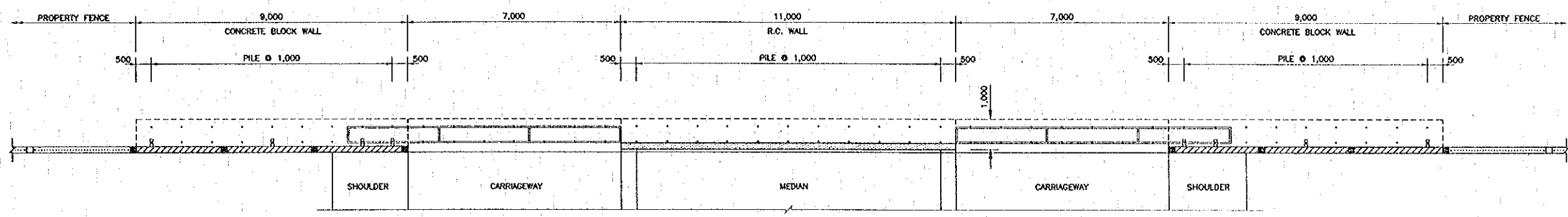
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**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

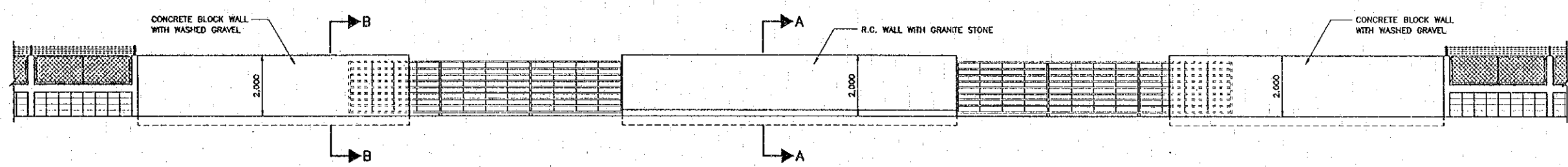
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	<i>[Signature]</i>	16/01/00
DESIGN CHECK	F. Mousawa	<i>[Signature]</i>	16/02/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	17/01/00
APPROVED	S. Tamgabutra	<i>[Signature]</i>	22/02/00

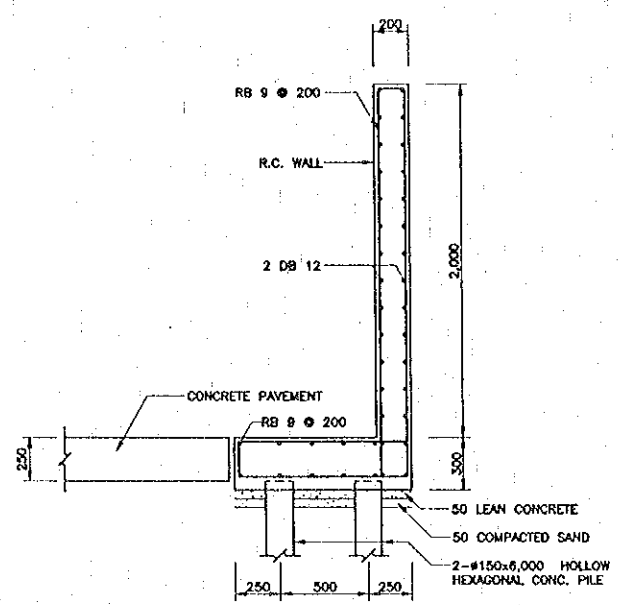
**BORDER CONTROL FACILITIES THAILAND SIDE BORDER MAIN GATE DETAILS**



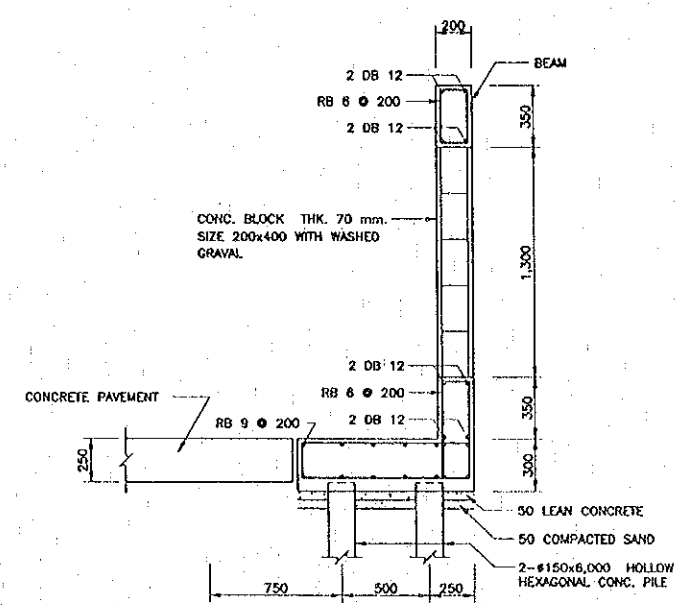
P L A N  
 SCALE 1 : 75



E L E V A T I O N  
 SCALE 1 : 75



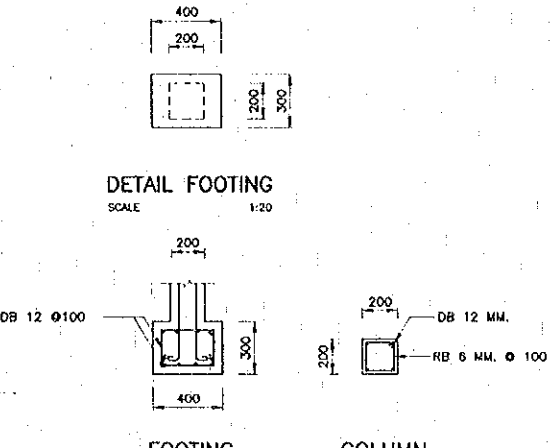
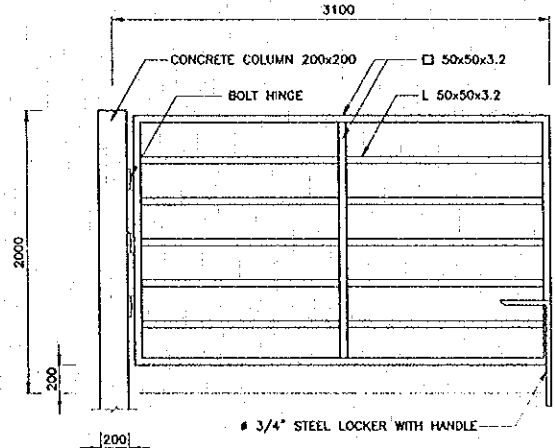
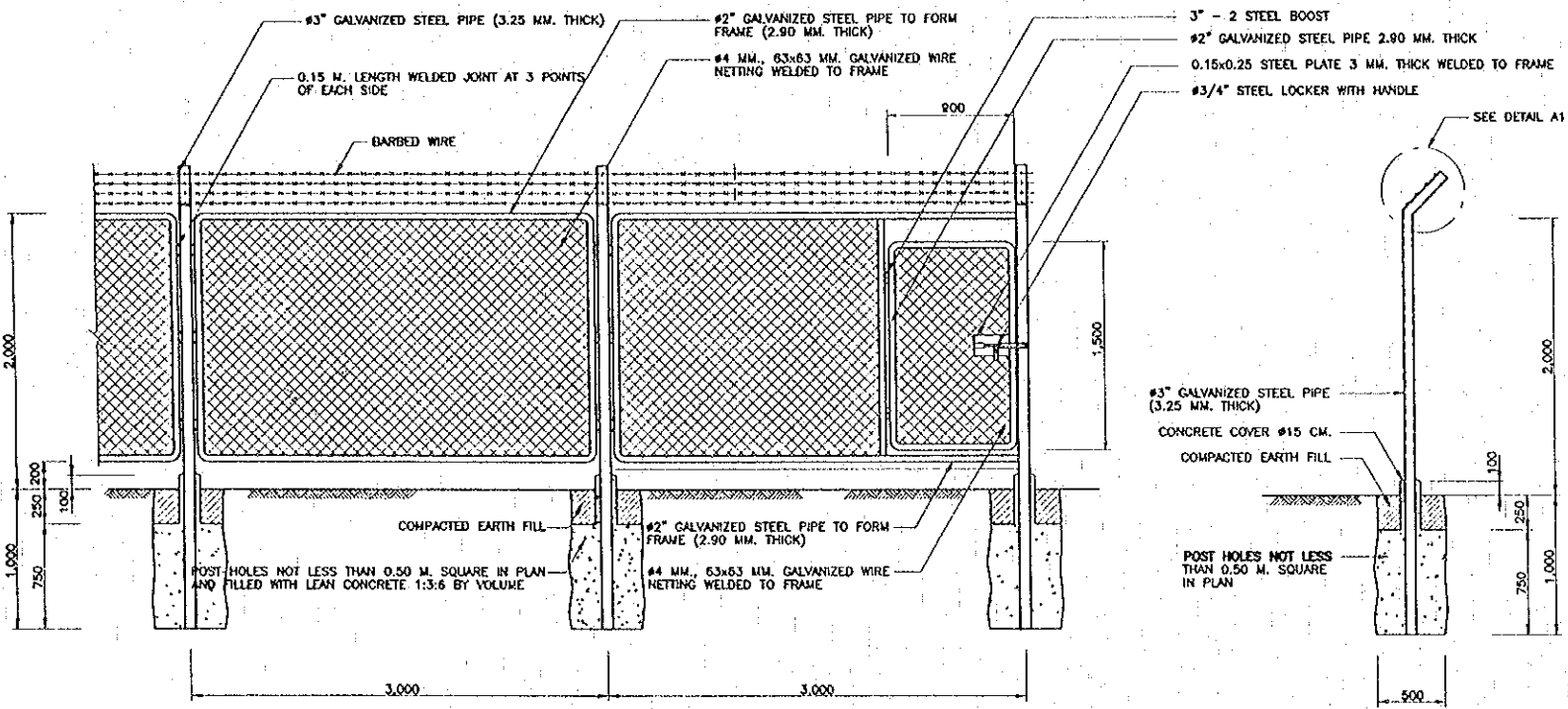
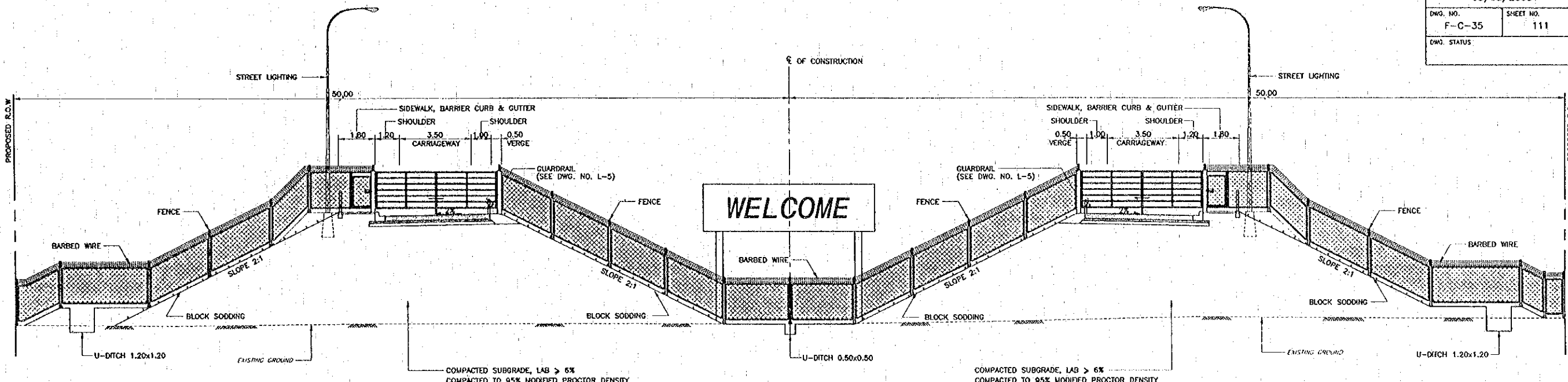
SECTION A-A  
 SCALE 1 : 20



SECTION B-B  
 SCALE 1 : 20

NOTE  
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	H. Okita	<i>[Signature]</i>	2/2/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN GATE WALL DETAILS
						DESIGN CHECK	T. Morozawa	<i>[Signature]</i>	2/2/00		
						SUBMITTED	A. Wiratani	<i>[Signature]</i>	2/2/00		
						APPROVED	S. Temyabutra	<i>[Signature]</i>	20/02/00		



- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - CONSTRUCTION LOCATION OF FENCE IS SHOWN ON LAYOUT PLAN WHERE THE FENCE SHALL NOT BE OBSTRUCTED TRAFFIC, WHEN ACCIDENT ARE OCCURED TO THE FENCES.
  - CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 180 KSC. FOR 15x15x15 CM. CUBE AT 28 DAYS. AN APPROXIMATE MIX DESIGN PER CUBIC METER IS SUGGESTED AS FOLLOWS
 

PORTLAND CEMENT TYPE I	320 KG. (MIN.)
SAND	0.43 M <sup>3</sup>
CRUSHED ROCK OR GRAVEL	0.86 M <sup>3</sup>
CONCRETE SLUMP	10 CM. (MAX.)
  - REINFORCING STEEL SHALL CONFORM TO TIS. 20 GRADE 'SR. 24.
  - WIRE NETTING SHALL BE GALVANIZED AS SPECIFIED BY TIS. 208.
  - STRAINED BARBED WIRE SHALL BE GALVANIZED AS SPECIFIED BY TIS. 76.
  - #2" AND #3" STEEL PIPE SHALL BE GALVANIZED.
  - THE COST OF FENCE SHALL INCLUDED THE COST OF 0.90x1.50 M. EXIT-ENTRANCE OF FENCE GATE, AND ITS FOUNDATION.
  - LOCATION OF EXIT-ENTRANCE OF FENCE GATE SHALL BE AS DIRECTED BY THE ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED

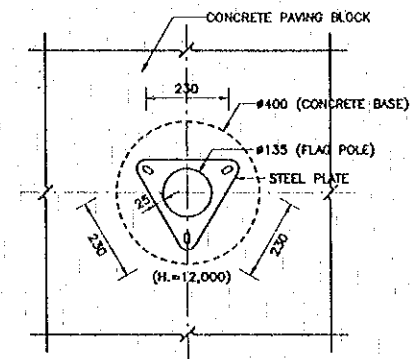
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

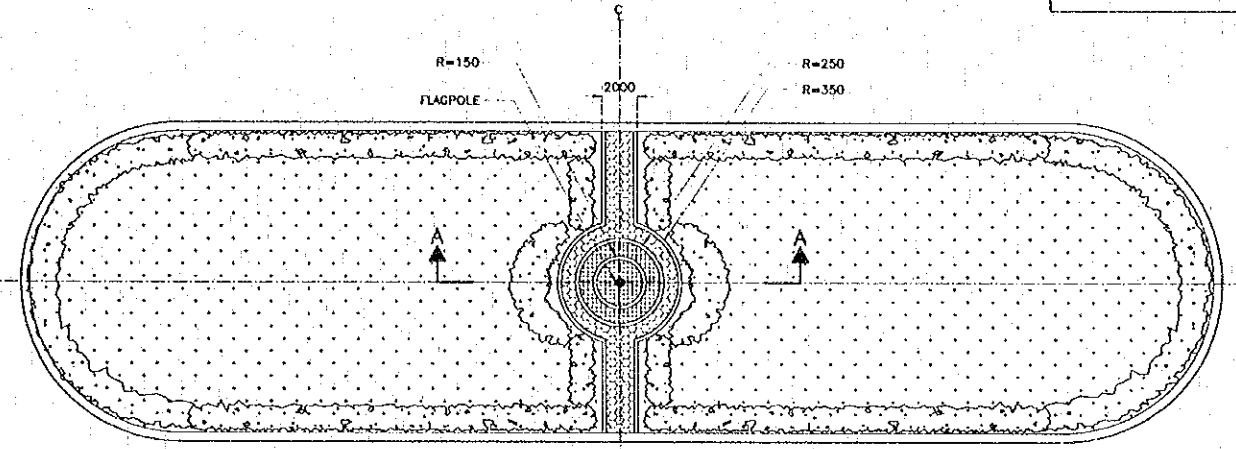
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALIFY RECORD	NAME	SIGNATURE	DATE
DESIGN	H. Orita	<i>[Signature]</i>	16/03/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	02/04/00
SUBMITTED	A. Hrotien	<i>[Signature]</i>	21/04/00
APPROVED	S. Tamyabutra	<i>[Signature]</i>	22/02/00

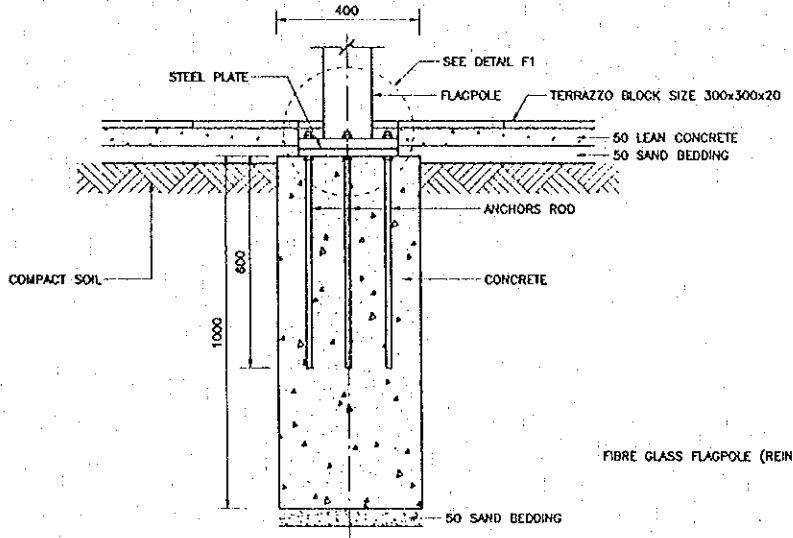
DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 MINOR GATE DETAILS



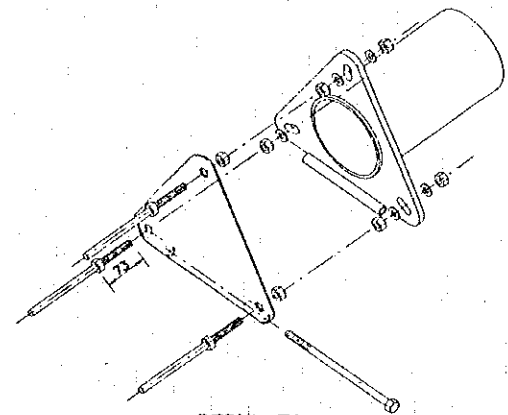
BASE OF FLAG POLE PLAN  
 SCALE 1:10



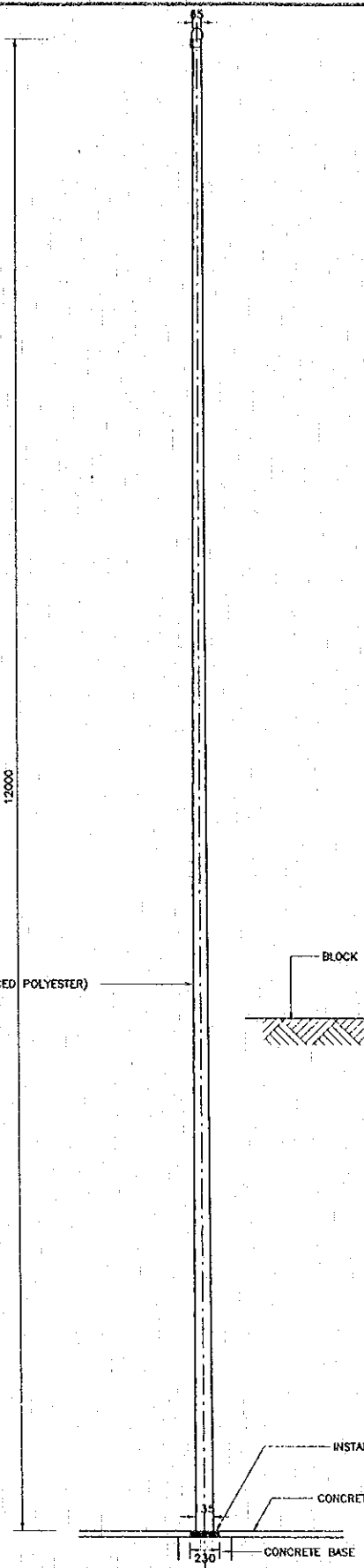
FLAG POLE PLAN  
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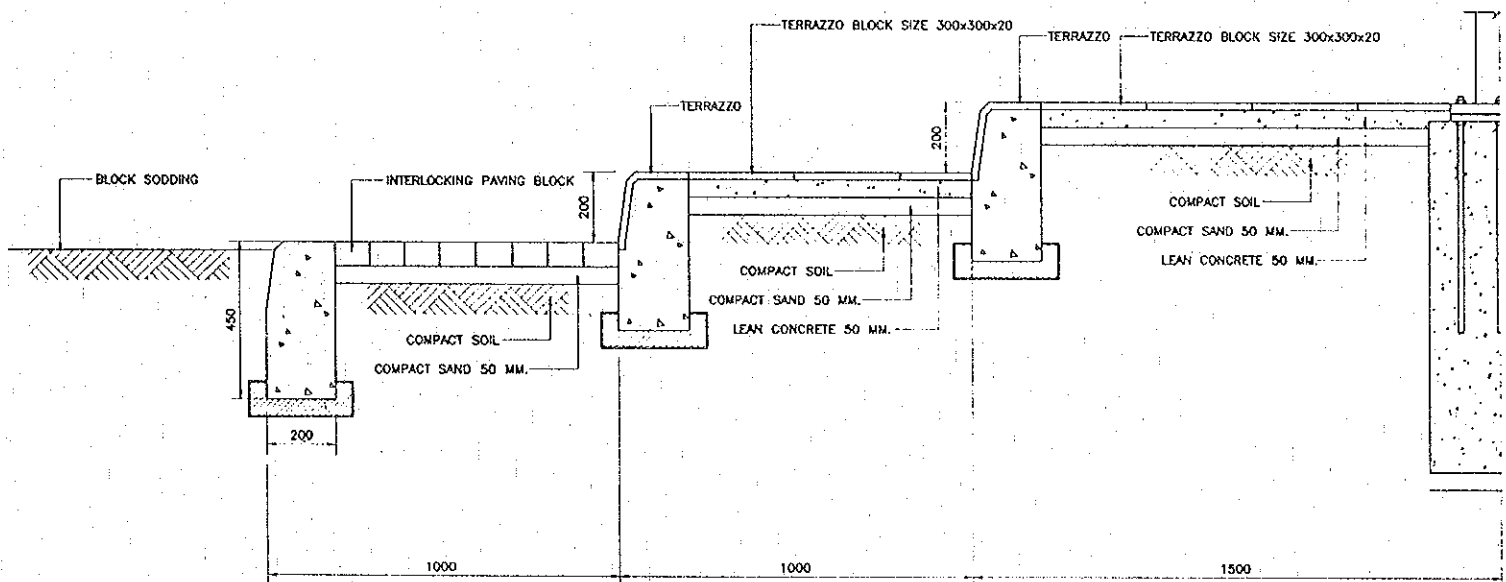
FIXING FOUNDATION  
 SCALE 1:10



DETAIL F1  
 NOT TO SCALE



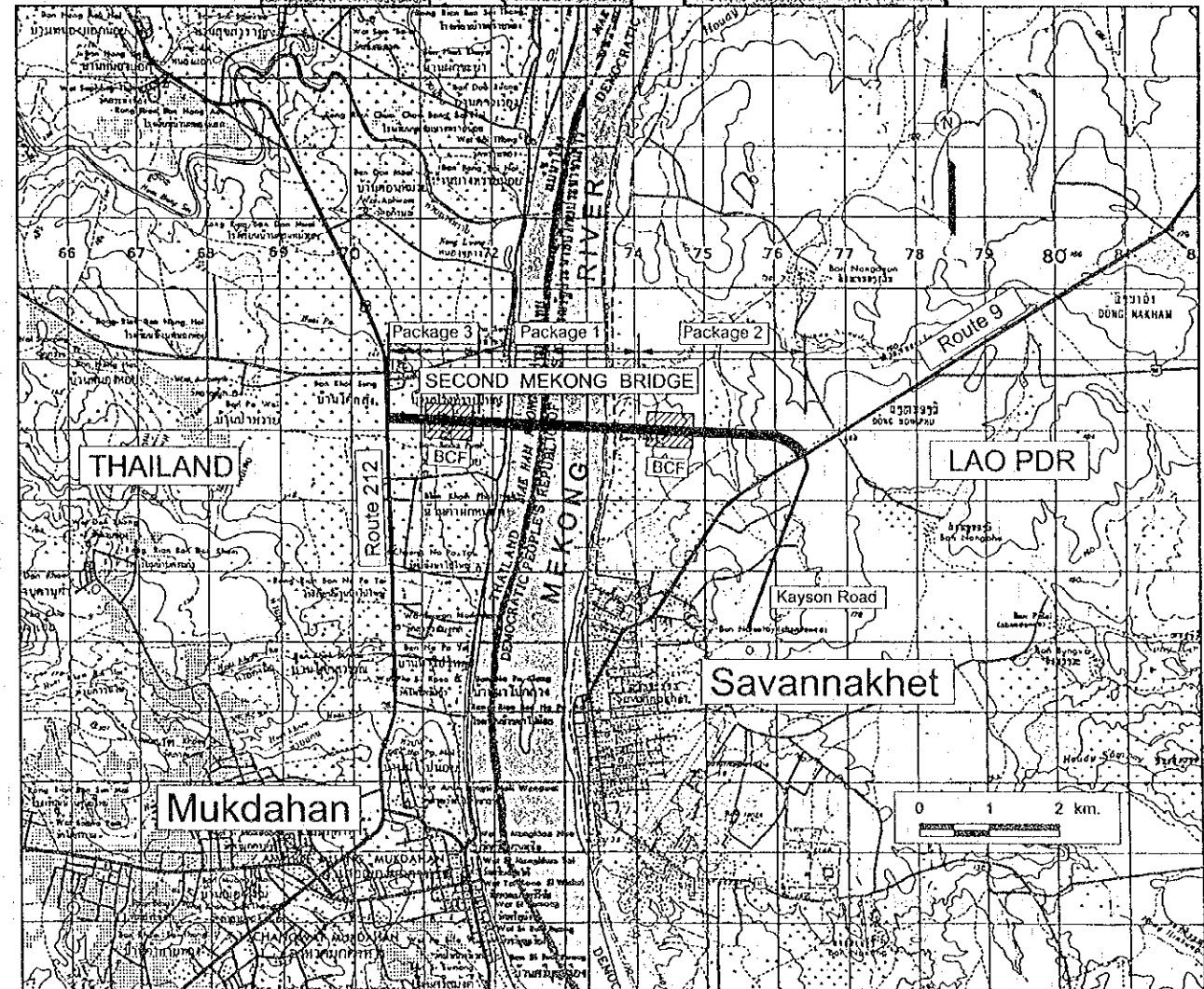
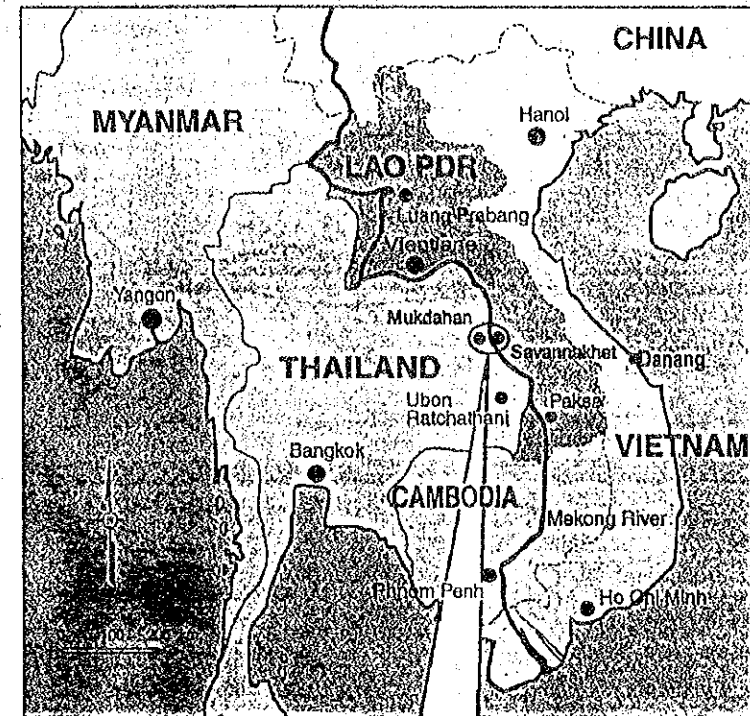
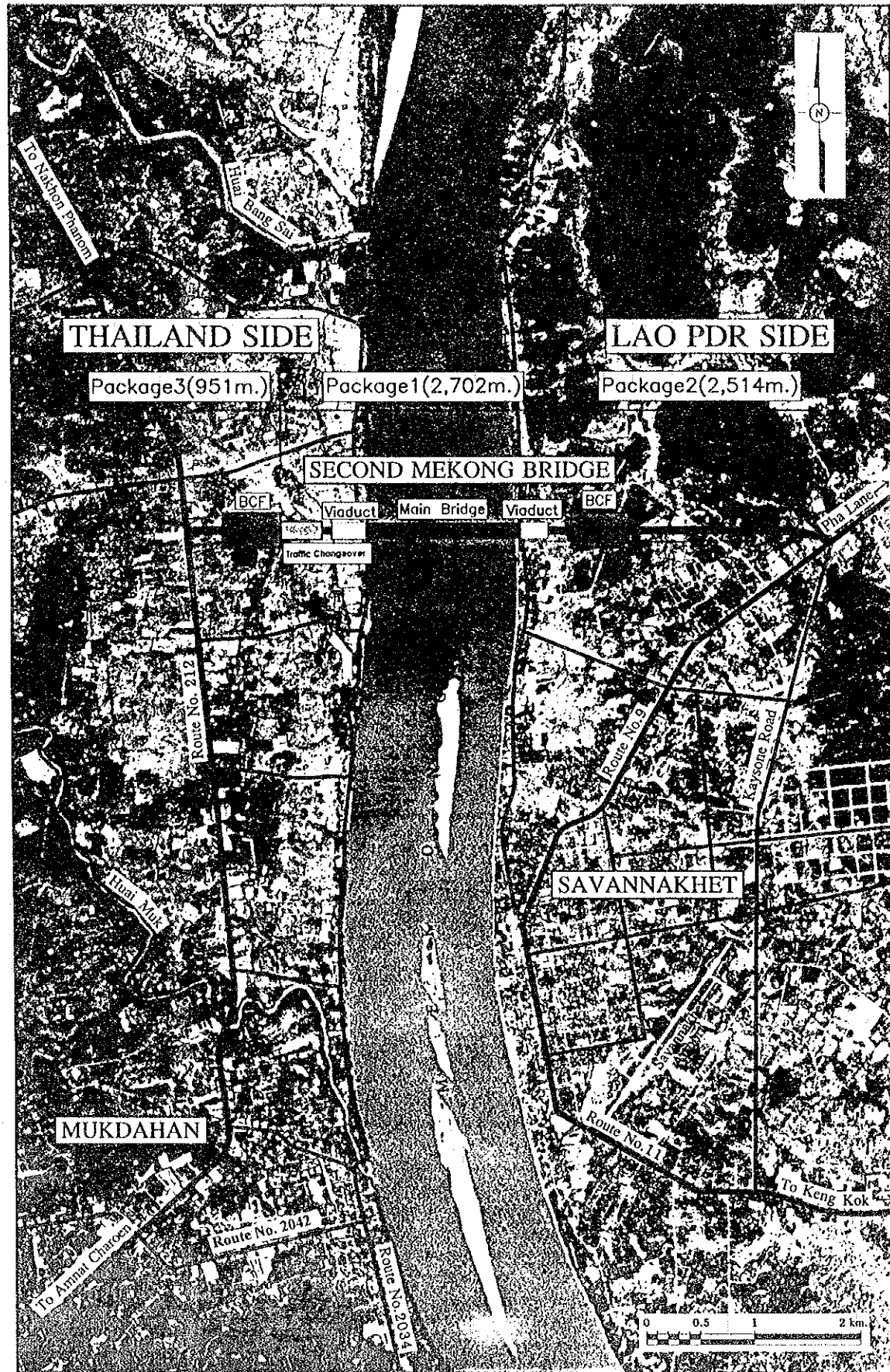
FLAG POLE ELEVATION  
 SCALE 1:25



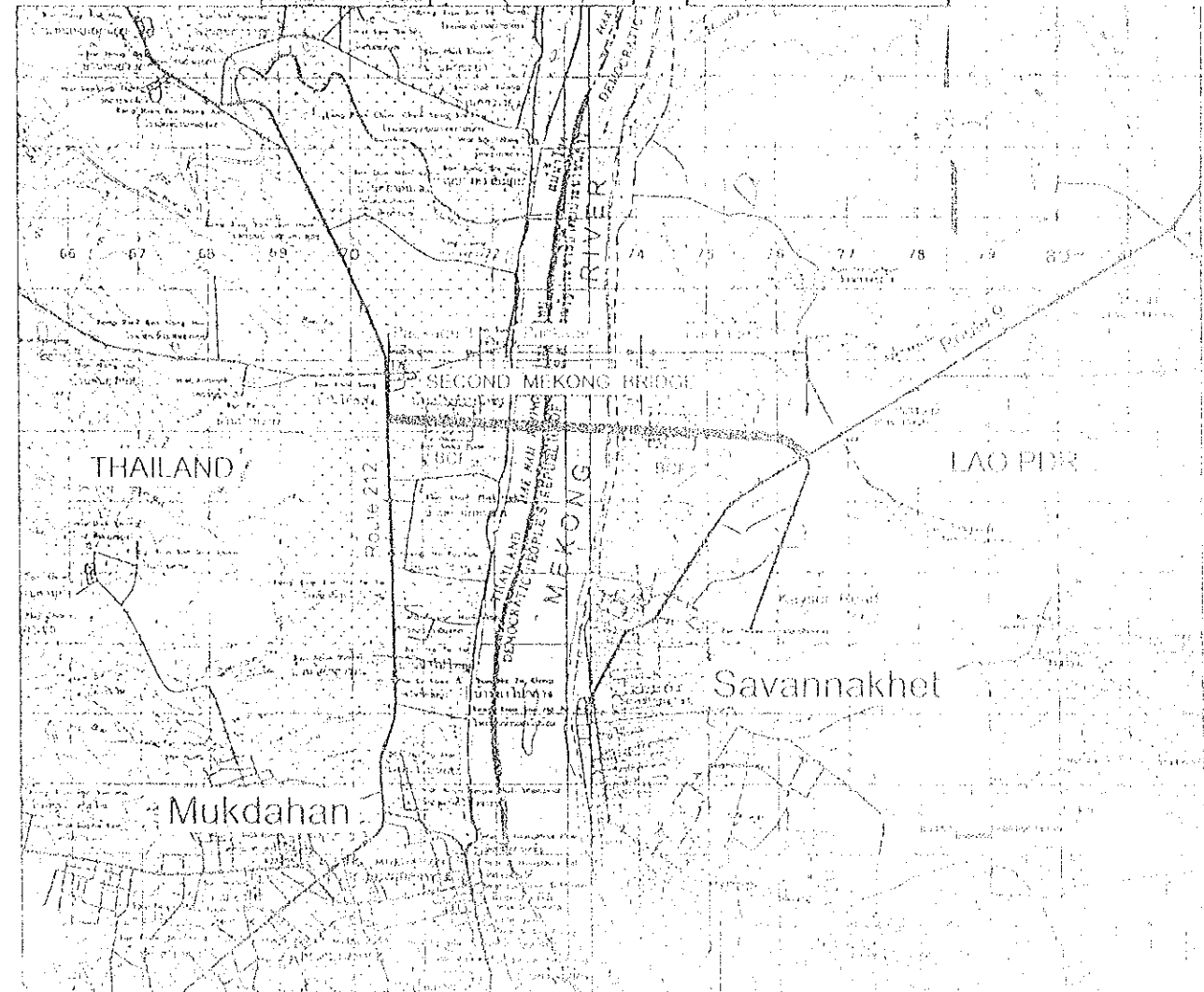
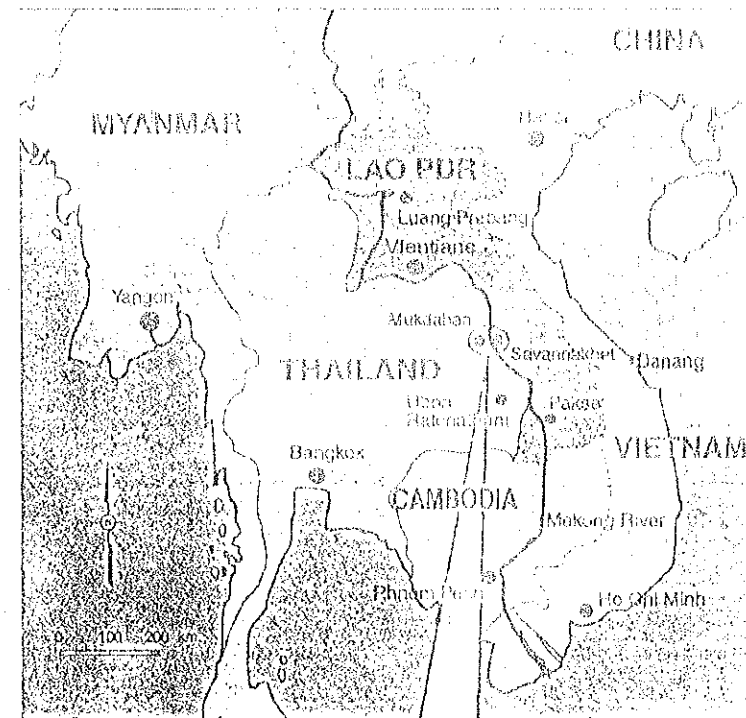
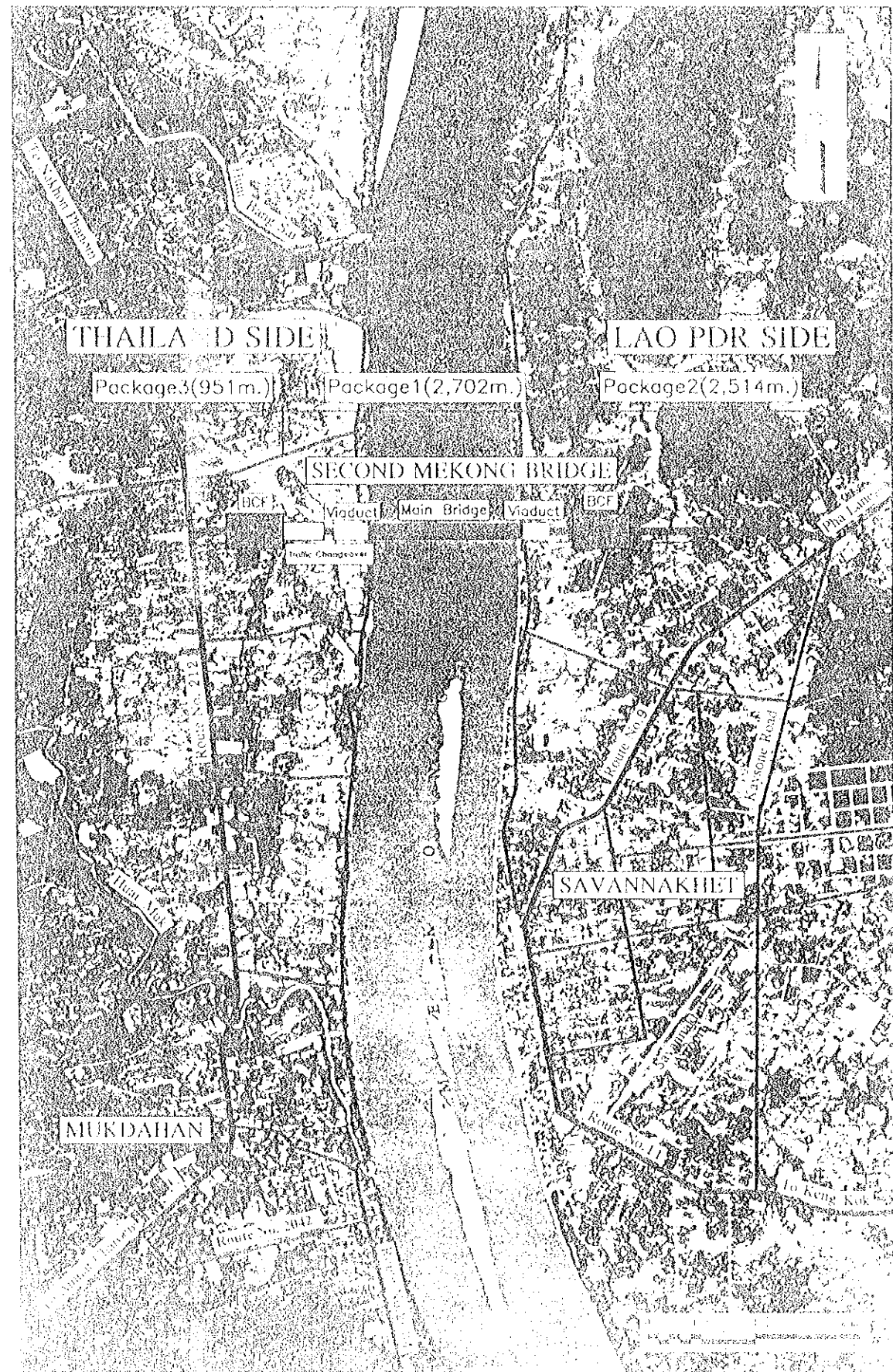
DETAIL OF SECTION A-A  
 SCALE 1:10


- NOTE
- 1) MATERIAL : FIBERGLASS - HIGH MECHANICAL STRENGTH COMBINED WITH FLEXIBILITY AND LOW WEIGHT.  
 - NON CONDUCTIVE, NO EARTHING  
 - COLOUR SURFACE GET COAT, PROVIDING A GLOSSY, WEATHER RESISTANT SURFACE FINISH.
  - 2) INSTALLATION  
 - FOR GROUND INSTALLATION APPLIED TO A FROST-FREE DEPTH OF 1.0-2.0 M.  
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.


REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	DESIGN	H. Orita	<i>[Signature]</i>	14/01/00	BORDER CONTROL FACILITIES THAILAND SIDE FLAG POLE DETAILS
				JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN CHECK	T. Mochizuki	<i>[Signature]</i>	18/02/00	
				KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/02/00	
				THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	APPROVED	S. Tamiyabutra	<i>[Signature]</i>	24/02/00	




REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Maritaka T. Masuzawa A. Hiratori S. Terayabutra	   	2/2/00 4/2/00 4/2/00 2/2/00	BORDER CONTROL FACILITIES THAILAND SIDE LOCATION MAP

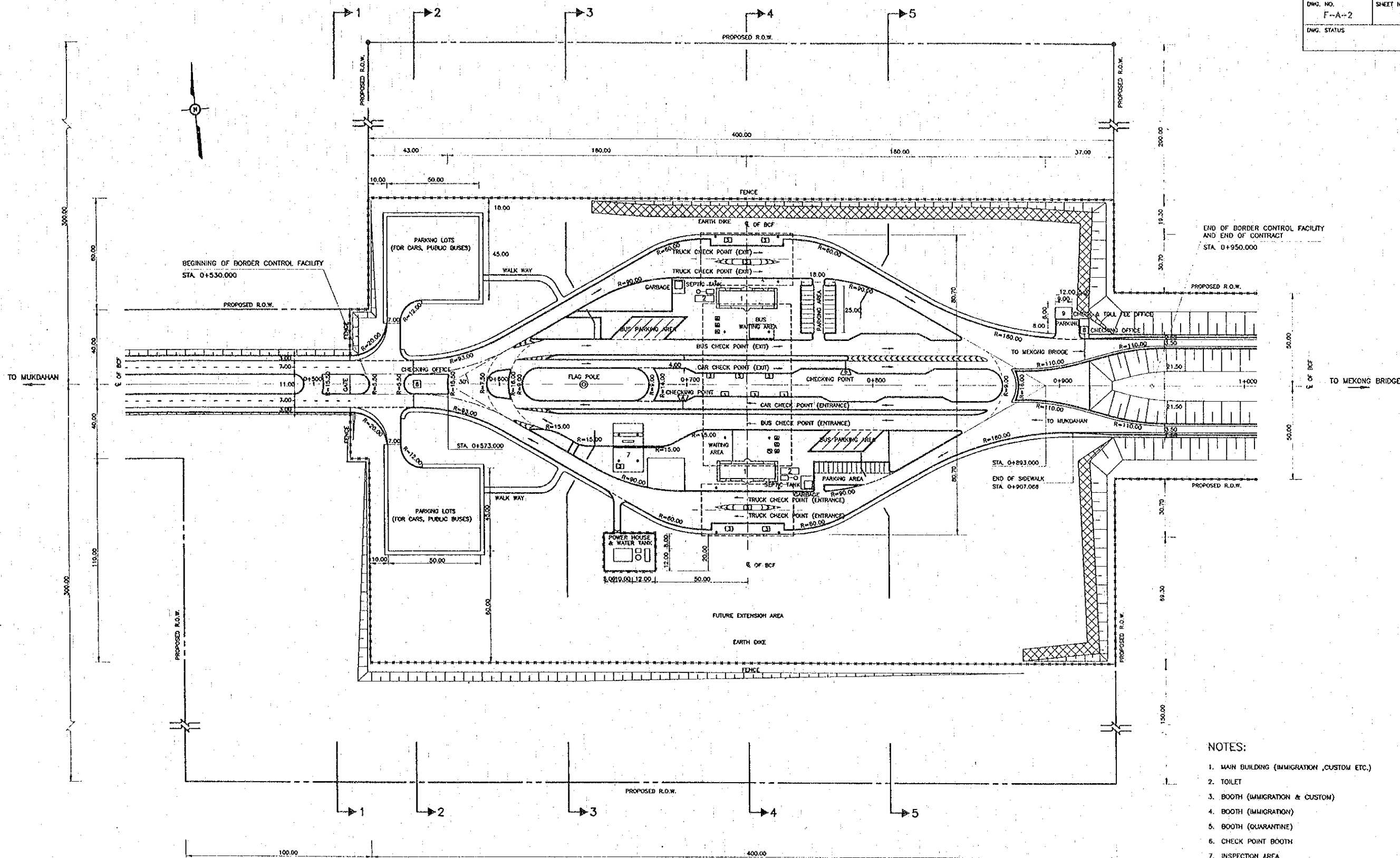



**KIJIMA ENGINEERING CO., LTD.**  
 1-1-1, HAKOJIMA, 5-CHOME  
 MIYAKO, NAGASAKI 851, JAPAN


**JAPAN INTERNATIONAL COOPERATION AGENCY**  
 1-1-1, HAKOJIMA, 5-CHOME  
 MIYAKO, NAGASAKI 851, JAPAN  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
**KINGDOM OF THAILAND**  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS


**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

**BOEHRINGER MANNHEIM**  
 1234567890



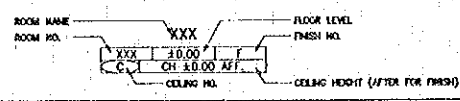
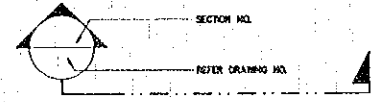
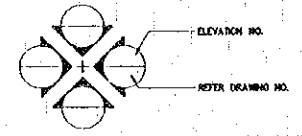
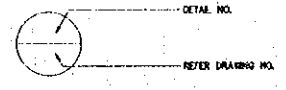
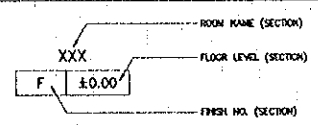
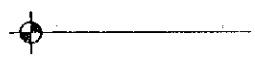

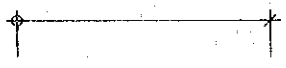
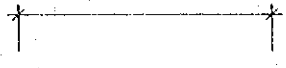
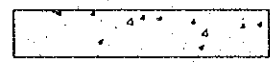
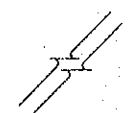
LAYOUT PLAN  
 SCALE 1:1000

- NOTES:
1. MAIN BUILDING (IMMIGRATION, CUSTOM ETC.)
  2. TOILET
  3. BOOTH (IMMIGRATION & CUSTOM)
  4. BOOTH (IMMIGRATION)
  5. BOOTH (QUARANTINE)
  6. CHECK POINT BOOTH
  7. INSPECTION AREA
  8. CHECKING OFFICE
  9. CHECK & TOLL FEE OFFICE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morloka	<i>[Signature]</i>	16/09/00	BORDER CONTROL FACILITIES THAILAND SIDE LAYOUT PLAN
							DESIGN CHECK	T. Meezama	<i>[Signature]</i>	17/02/00	
							SUBMITTED	A. Hirulani	<i>[Signature]</i>	22/02/00	
							APPROVED	S. Tanyabutra	<i>[Signature]</i>	27/02/00	

LIST OF SYMBOLS

	ROOM NO. (PLAN)
	SECTION
	ELEVATION
	DETAIL
	ROOM NO. (ELEVATION AND SECTION)
	LEVEL (ELEVATION AND SECTION)
	CENTER LINE TO CENTER LINE
	CENTER LINE TO OUTSIDE DIMENSION
	OUTSIDE DIMENSION TO OUTSIDE DIMENSION
	CONCRETE (SECTION)
	BRAKE LINE

LIST OF MATERIALS

1 FLOOR

1.1 VINYL TILE "FUTURE DESIGN "SAND" TYPE" 300 x 300 x 2.0 mm. DYNOFLEX

1.2 VINYL SKIRTING 1.6 x 100 mm. DYNOFLEX

1.3 TILES

1.3.1 CERAMIC TILE 44021 TABAC 200 x 200 x 5 CAMPANA

1.3.2 100 x 100 x13 mm. GF-101 KENZAI

1.3.3 PORCELAIN TILE 300 x 300 x 8

1.4 TERRAZZO

1.4.1 TERRAZZO CAST IN PLACE

1.4.2 BRASS DIVIDER

1.5 PAVING BLOCK TERRASTONE 101 400 x 400 x 35 mm. BKK TERRASSO

1.6 STAIRNOSING BRASS STAIR NOSING W/ PVC STRIP

2 WALL

2.1 PAINTING

2.1.1 EXTERIOR - ACRYLIC EMULSION "JOTHAN , PARMASTIC"

2.1.2 INTERIOR - ACRYLIC EMULSION "JOTHAN , PARMASTIC"

2.1.3 WOOD DOOR VANISH "JOTHAN , PARMASTIC"

2.1.4 WOOD DOOR JAMB VANISH "JOTHAN , PARMASTIC"

2.1.5 GYPSUM CEILING - EMULSION "JOTHAN , PARMASTIC"

2.1.6 PARAPET - TEXTURE PAINT "JOTHAN , PARMASTIC"

2.2 DOOR & WINDOW FRAME ALUMINIUM ANOLOCK FINISH ASIA ALUMINIUM

2.3 GLAZING COOLGREY GFL6 6 mm. THK. THAI ASAH

2.4 WOOD DOOR JAMB 2" x 4" HARD WOOD ( TENG WOOD ) FOR GENERAL DOOR AND 2"x 5" HARD WOOD ( TENG WOOD ) FOR TOILET DOOR

2.6 WOOD DOOR 3.5 mm. THK. PLY WOOD DOOR THAI BANGNA

2.7 TILES

2.7.1 MOSAIC TILE 44021 TABAC 25 x 25 x 5

2.7.2 CERAMIC TILE 44021 TABAC 200 x 200 x 5 CAMPANA

2.7.3 PORCELAIN TILE 227 x 60 x 12 mm. GF-206 KENZAI

3 CEILING

3.1 METAL STUD (WHITE COLOR) "T-BAR SYSTEM" CMC

3.2 CEILING BOARD

3.2.1 GYPSUM BD. : (MOISTURE RESISTANCE TYPE ) 600 X 600 X 9 mm. ELEPHANT

3.2.2 ACOUSTIC BOARD : ST-721 FISSURED 600 x 1200 x 15 mm. SQUARE EDGE TYPE NITTOBO

3.3 THERMAL INSULATION : FIBERGLASS INSULATION 50mm. THK. DENSITY 48 kg/m<sup>3</sup> MICRO FIBER

4 MISCELLANEOUS

4.1 WATER PROOFING : POLYVINYL CHLORIDE WATER PROOFING MEMBRANE 2.0 mm.THK.

4.2 MOISTUER BARRIER SHEET : POLYETHYLENE MEMBRANE 0.08 mm.THK.

4.3 VENETIAN BLINDE : 25 mm. LUXAFLEX

4.4 SANITARY WARES & TOILET ACESSORIES COTTO

NOTES :

- ALL BRAND NAME SHOWN ON THE DRAWINGS SHALL BE TENTATIVE ONLY, OF WHICH FINAL SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.
- ALL FINISHES SHALL CONFORM TO THE REQUIREMENTS STATED IN THE TECHNICAL SPECIFICATIONS.

C:\CHANYANA\SUB\BORDER\THAI SIDE\F-A-3.dwg

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	A. Morikita		16/01/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE--SYMBOLS AND MATERIALS FOR ALL BUILDINGS
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Masuzawa		17/01/00	
						SUBMITTED	A. Hirataki		21/01/00	
						APPROVED	S. Tanjavalabura		22/02/00	



NO.	ROOM NAME BUILDING OFFICE DEPARTURE SIDE	FLOOR FINISHING	WALL FINISHING	CEILING FINISHING
<b>CUSTOM SECTION 1<sup>st</sup> FLOOR</b>				
CD-101	CUSTOM OFFICE	F2	△	⊙
CD-102	COMPUTER ROOM	F2	△	⊙
CD-103	STORE ROOM	F2	△	⊙
CD-104	LABOUR CONTROL OFFICE	F2	△	⊙
CD-105	MEN TOILET	F2	△△	⊙
CD-106	WOMEN TOILET	F2	△△	⊙
CD-107	BCF. SERVICE ROOM	F2	△	⊙
CD-108	PANTRY	F2	△	⊙
CD-109	CORRIDOR	F2	△	⊙
CD-110	STAIR HALL	F2	△	⊙
CD-111	STORE ROOM (STAIR)	F2	△	⊙
<b>2<sup>nd</sup> FLOOR</b>				
CD-201	DIRECTOR ROOM	F2	△	⊙
CD-202	GUEST ROOM	F2	△	⊙
CD-203	VP. ROOM	F2	△	⊙
CD-204	VP. TOILET	F2	△△	⊙
CD-205	MEETING ROOM	F2	△	⊙
CD-206	NIGHT STAFF ROOM	F2	△	⊙
CD-207	NIGHT STAFF TOILET	F2	△△	⊙
CD-208	BCF. MAINT. OFFICE	F2	△	⊙
CD-209	CORRIDOR	F2	△	⊙
CD-210	STAIR HALL	F2	△	⊙
<b>ROOF</b>				
CD-301	ROOF FLOOR	F2		
<b>IMMIGRATION SECTION 1<sup>st</sup> FLOOR</b>				
ID-101	IMMIGRATION OFFICE	F2	△	⊙
ID-102	COMPUTER ROOM	F2	△	⊙
ID-103	STORE ROOM	F2	△	⊙
ID-104	MEN TOILET	F2	△△	⊙
ID-105	WOMEN TOILET	F2	△△	⊙
ID-106	PANTRY	F2	△	⊙
ID-107	BCF. MAINT. OFFICE	F2	△	⊙
ID-108	STORE ROOM	F2	△	⊙
ID-109	CORRIDOR	F2	△	⊙
ID-110	STAIR HALL	F2	△	⊙
<b>2<sup>nd</sup> FLOOR</b>				
ID-201	DIRECTOR ROOM	F2	△	⊙
ID-202	GUEST ROOM	F2	△	⊙
ID-203	UTILITY ROOM	F2	△	⊙
ID-204	VP. ROOM	F2	△	⊙
ID-205	VP. TOILET	F2	△△	⊙
ID-206	MEETING ROOM	F2	△	⊙
ID-207	NIGHT STAFF ROOM	F2	△	⊙
ID-208	NIGHT STAFF TOILET	F2	△△	⊙
ID-209	CORRIDOR	F2	△	⊙
ID-210	STAIR HALL	F2	△	⊙
<b>ROOF</b>				
ID-301	ROOF FLOOR	F2		

NO.	ROOM NAME BUILDING OFFICE ARRIVAL	FLOOR FINISHING	WALL FINISHING	CEILING FINISHING
<b>CUSTOM SECTION 1<sup>st</sup> FLOOR</b>				
CA-101	CUSTOM OFFICE	F2	△	⊙
CA-102	COMPUTER ROOM	F2	△	⊙
CA-103	STORE ROOM	F2	△	⊙
CA-104	TRAVEL INFORMATION	F2	△	⊙
CA-105	MEN TOILET	F2	△△	⊙
CA-106	WOMEN TOILET	F2	△△	⊙
CA-107	SERVICE ROOM	F2	△	⊙
CA-108	PANTRY	F2	△	⊙
CA-109	CORRIDOR	F2	△	⊙
CA-110	STAIR HALL	F2	△	⊙
CA-111	STORE ROOM (STAIR)	F2	△	⊙
<b>2<sup>nd</sup> FLOOR</b>				
CA-201	DIRECTOR ROOM	F2	△	⊙
CA-202	GUEST ROOM	F2	△	⊙
CA-203	VP. ROOM	F2	△	⊙
CA-204	VP. TOILET	F2	△△	⊙
CA-205	MEETING ROOM	F2	△	⊙
CA-206	NIGHT STAFF ROOM	F2	△	⊙
CA-207	NIGHT STAFF TOILET	F2	△△	⊙
CA-208	INSURANCE OFFICE	F2	△	⊙
CA-209	CORRIDOR	F2	△	⊙
CA-210	STAIR HALL	F2	△	⊙
<b>ROOF</b>				
CA-301	ROOF FLOOR	F2		
<b>IMMIGRATION SECTION 1<sup>st</sup> FLOOR</b>				
IA-101	IMMIGRATION OFFICE	F2	△	⊙
IA-102	COMPUTER ROOM	F2	△	⊙
IA-103	HEALTH / QUARANTINE OFFICE	F2	△	⊙
IA-104	MEN TOILET	F2	△△	⊙
IA-105	WOMEN TOILET	F2	△△	⊙
IA-106	STORE ROOM	F2	△	⊙
IA-107	CORRIDOR	F2	△	⊙
IA-108	STAIR HALL	F2	△	⊙
<b>2<sup>nd</sup> FLOOR</b>				
IA-201	DIRECTOR ROOM	F2	△	⊙
IA-202	GUEST ROOM	F2	△	⊙
IA-203	VP. ROOM	F2	△	⊙
IA-204	VP. TOILET	F2	△△	⊙
IA-205	PANTRY	F2	△	⊙
IA-206	MEETING ROOM	F2	△	⊙
IA-207	NIGHT STAFF ROOM (I)	F2	△	⊙
IA-208	NIGHT STAFF TOILET (I)	F2	△△	⊙
IA-209	NIGHT STAFF ROOM (O)	F2	△	⊙
IA-210	NIGHT STAFF TOILET (O)	F2	△△	⊙
IA-211	CORRIDOR	F2	△	⊙
IA-212	STAIR HALL	F2	△	⊙
<b>ROOF</b>				
IA-301	ROOF FLOOR	F2		

FINISHING SCHEDULE				
MARK	DESCRIPTION	SIZE	BRAND	REMARK
F1	TERAZZO CASE IN PLACE			DIMMER SHALL BE BRASS
F2	VINYL TILE	300 x 300 x 2mm.	DYNOFLEX	"FUTURE DESIGN "SAND" SKIRTING SHALL BE VINYL
F3	CERAMIC TILE	200 x 200	CAMPANA	44021 TABAC
F4	GRANITE TILE	100 x 100	KENZAI	
F5	CONC. STEELL TROWEL			
F6	WASHED GRAVEL			
C1	T-BAR ACOUSTIC CEILING BOARD	600x1200x15 mm.	NITTOBO	ST-721 FISSURED W/ METAL FRAME "T-BAR SYSTEM"
C2	T-BAR GYPSUM BOARD, (MOISTURE RESISTANCE TYPE)	600x600x9 mm.	ELPHANT	
C3	T-BAR GYPSUM BOARD	600x600x9 mm.	ELPHANT	
C4	ALUMINIUM SPANDREL	100 mm.		
C5	CEMENT PLASTER W/PAIN			
A1	PLASTER W/PAIN			
A2	CERAMIC TILE (INTERIOR)	200 x 200	CAMPANA	
A3	CERAMIC TILE (EXTERIOR)	227 x 60 x 12	KENZAI	
A4	WASHED GRAVEL			

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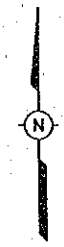
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOEI CO., LTD.**

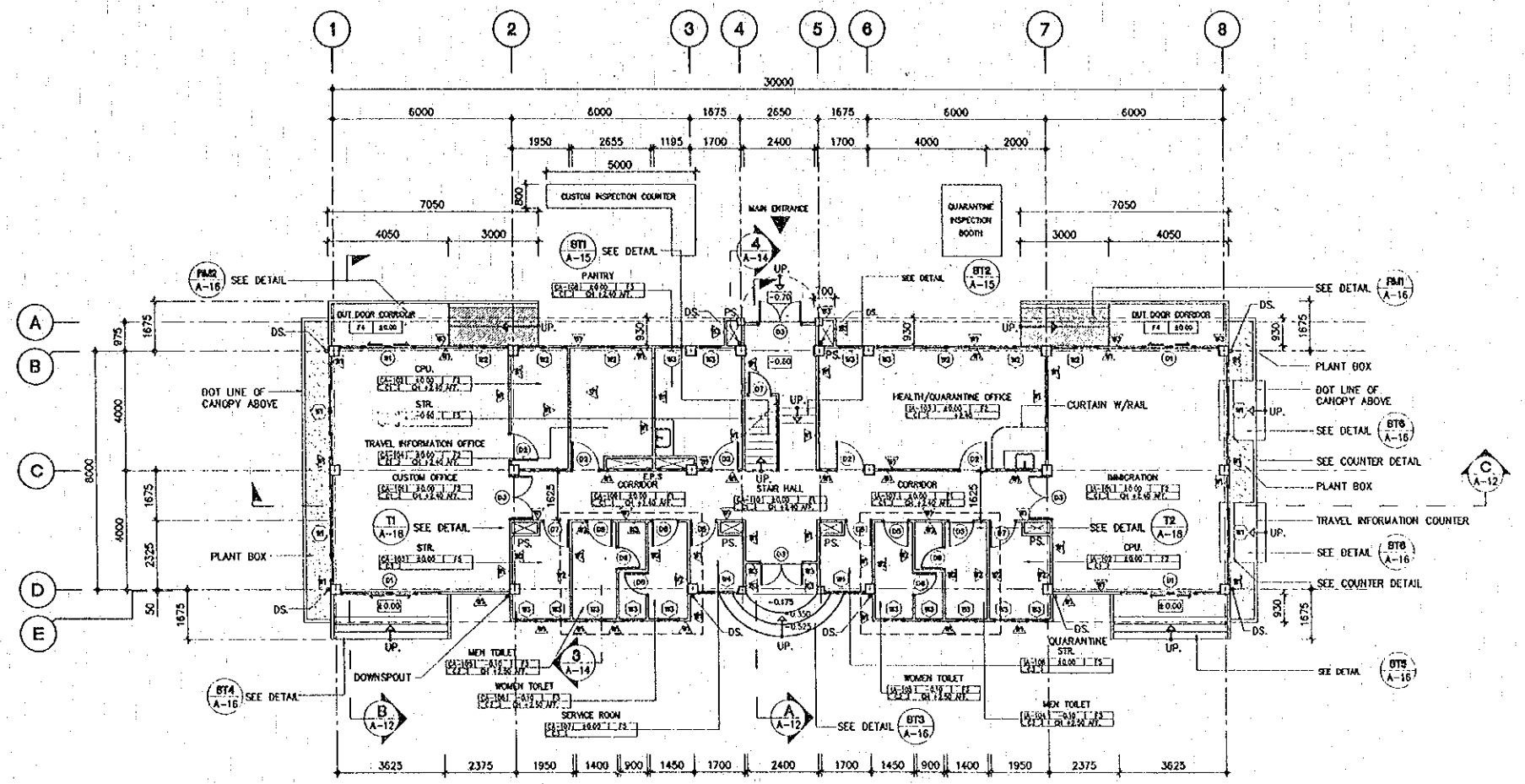
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT**

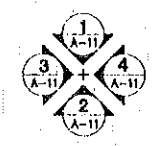
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Worakha	<i>[Signature]</i>	6-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-FINISH SCHEDULE
DESIGN CHECK	T. Meevong	<i>[Signature]</i>	10-02-00	
SUBMITTED	A. Worakha	<i>[Signature]</i>	10-02-00	
APPROVED	S. Tanjyabutra	<i>[Signature]</i>	2-10-00	



← PASSENGER FLOW





1<sup>st</sup> FLOOR PLAN  
SCALE 1:100



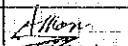
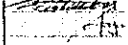
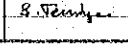

NOTES :  
DS. : DOWNSPOUT PVC. #100

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 **ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
 **NIPPON KOEI CO., LTD.**

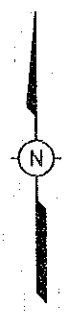
 **JAPAN INTERNATIONAL COOPERATION AGENCY**  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
**KINGDOM OF THAILAND**  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

  
**THE SECOND MERONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

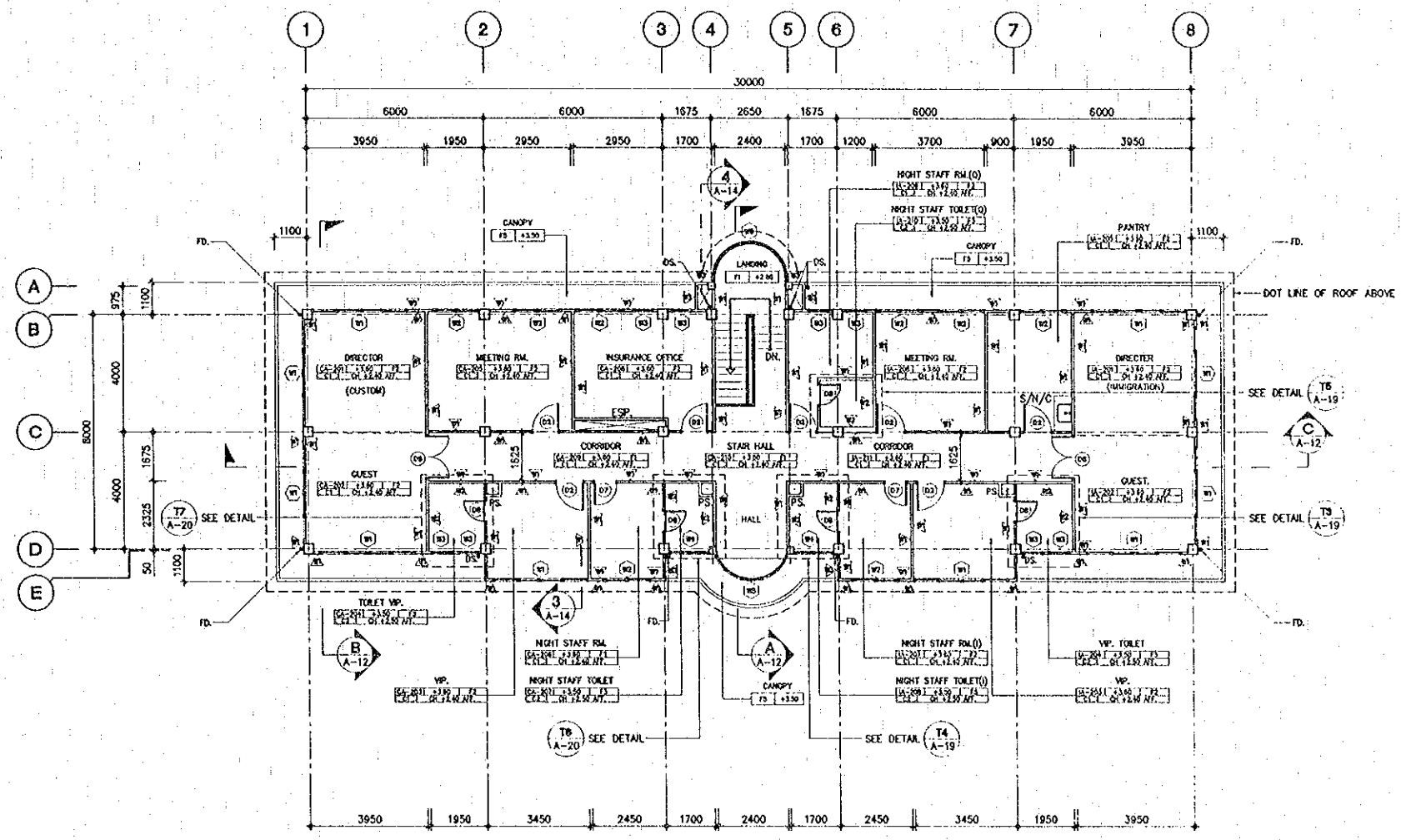
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa		16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL-1 <sup>st</sup> FLOOR PLAN
DESIGN CHECK	T. Morizawa		16/02/00	
SUBMITTED	A. Hiratani		17/02/00	
APPROVED	S. Tanjaputra		27/03/00	

**BORDER CONTROL FACILITIES**  
**THAILAND SIDE**  
 MAIN OFFICE : ARRIVAL-1<sup>st</sup> FLOOR PLAN

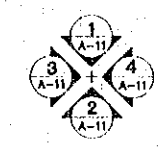
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← PASSENGER FLOW



2<sup>nd</sup> FLOOR PLAN  
 SCALE 1:100

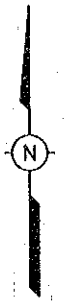


NOTES :  
 DS. : DOWNSPOUT PV. φ100  
 FD. : FLOOR DRAIN φ100

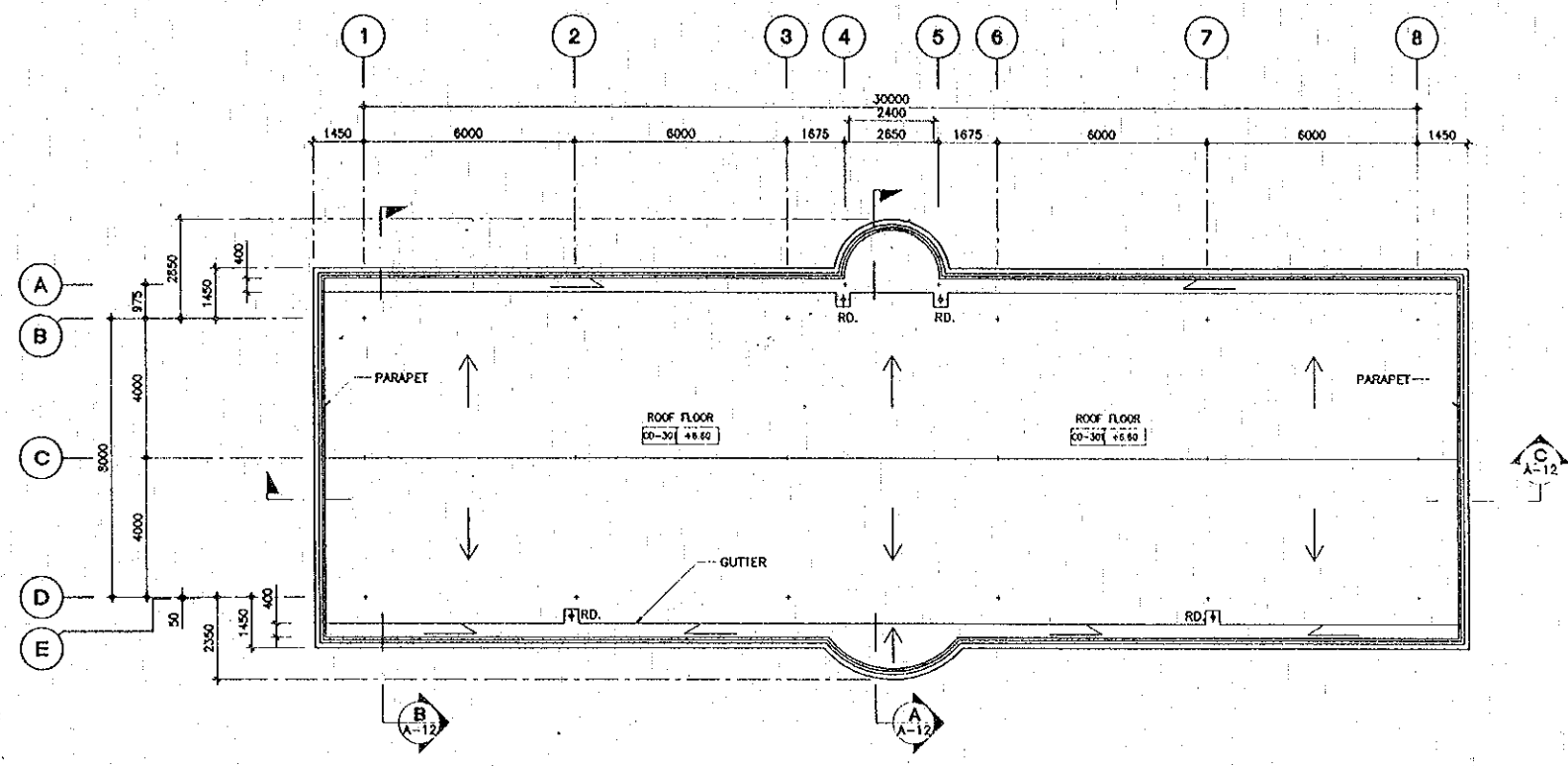
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Morioka T. Matsuura A. Hirakawa S. Taniguchi	<i>[Signatures]</i>	16-02-00 16-02-00 16-01-00 16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL-2 <sup>nd</sup> FLOOR PLAN

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DATE OF ISSUE: 05/03/2000	
DWG. NO. F-A-7	SHEET NO. 119
DWG. STATUS	



← PASSENGER FLOW

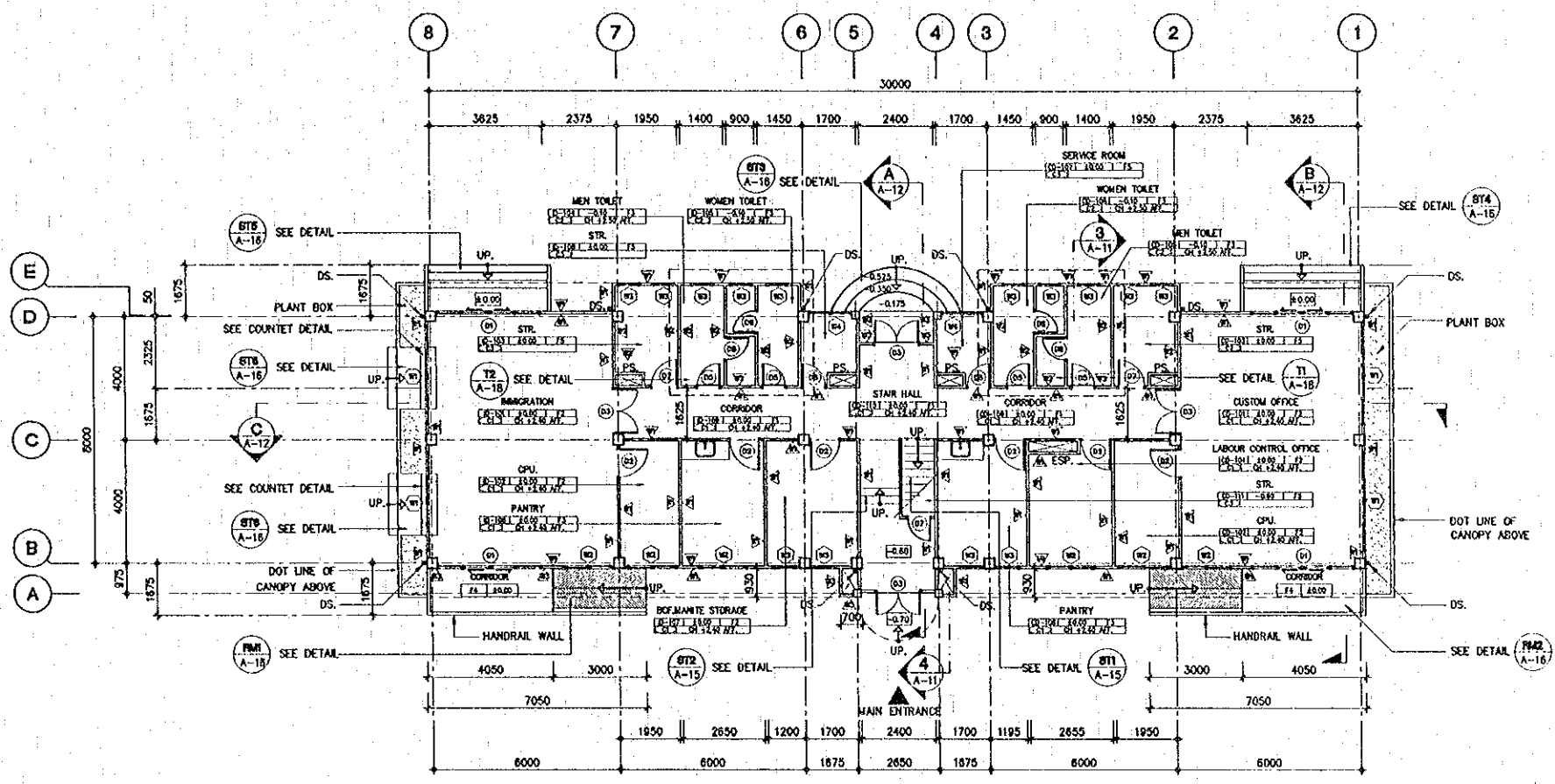


**ROOF FLOOR PLAN**  
SCALE 1:100



- NOTES :
1. ROOF SLAB SHALL SLOPE 1:150 TO DRAINAGE
  2. RD. : ROOF DRAIN C.I. #100

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM			JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
										DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00	
										DESIGN CHECK	T. Manuwa	<i>[Signature]</i>	18/02/00	
										SUBMITTED	A. Hiratani	<i>[Signature]</i>	22/02/00	
										APPROVED	S. Tamyabura	<i>[Signature]</i>	22/02/00	



PASSENGER FLOW →

1<sup>st</sup> FLOOR PLAN  
 SCALE 1:100



NOTES :  
 DS. : DOWNSPOUT PVC. #100

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOKI CO., LTD.**

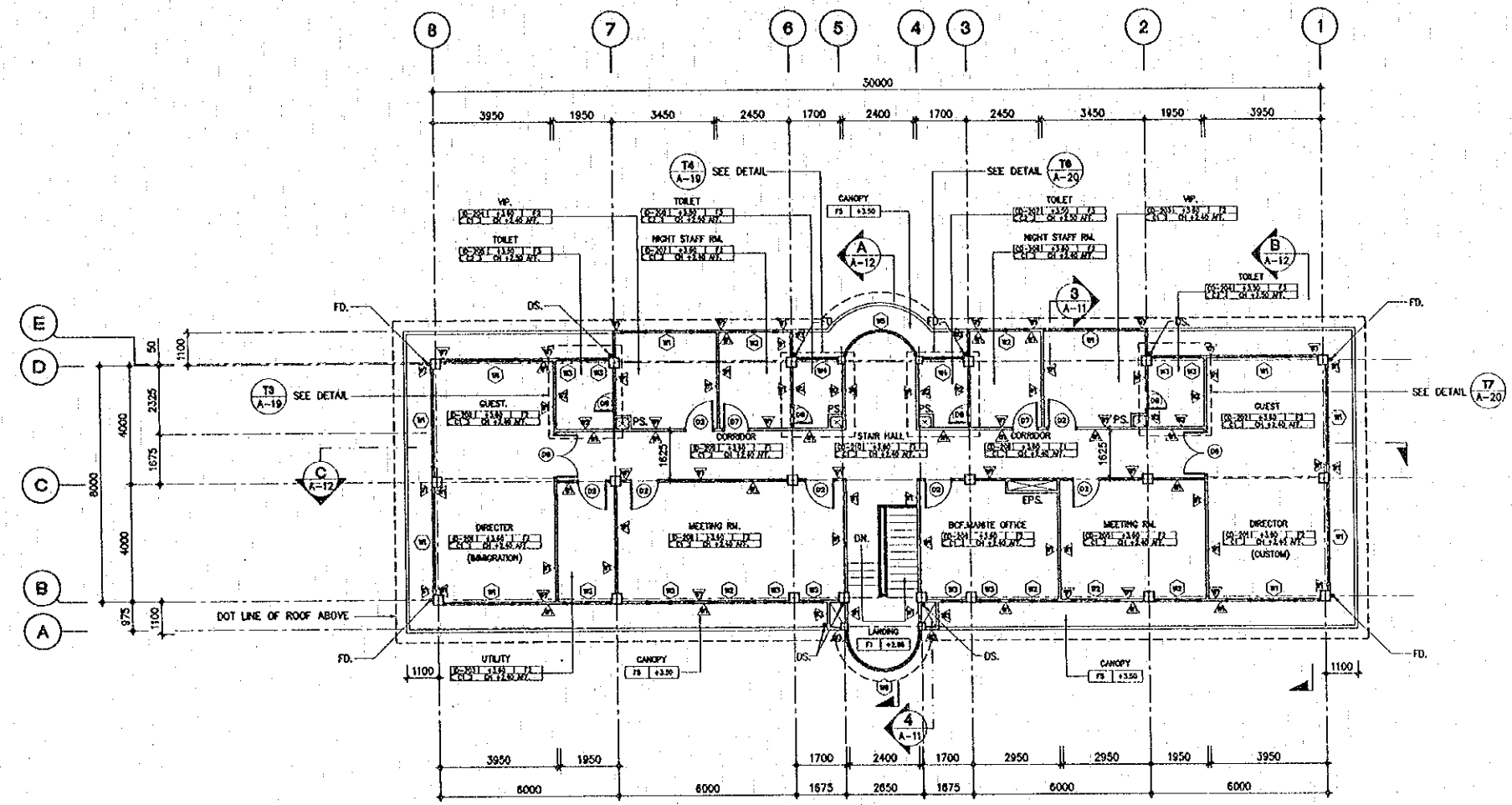
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Moeurava	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00
APPROVED	S. Tanjyabutra	<i>[Signature]</i>	23/02/00

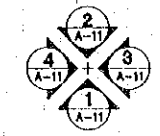
DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
 MAIN OFFICE : DEPARTURE-1<sup>st</sup> FLOOR PLAN

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PASSENGER FLOW →

2<sup>nd</sup> FLOOR PLAN  
SCALE 1:100



NOTES :  
DS. : DOWNSPOUT PVC. #100  
FD. : FLOOR DRAIN #100

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

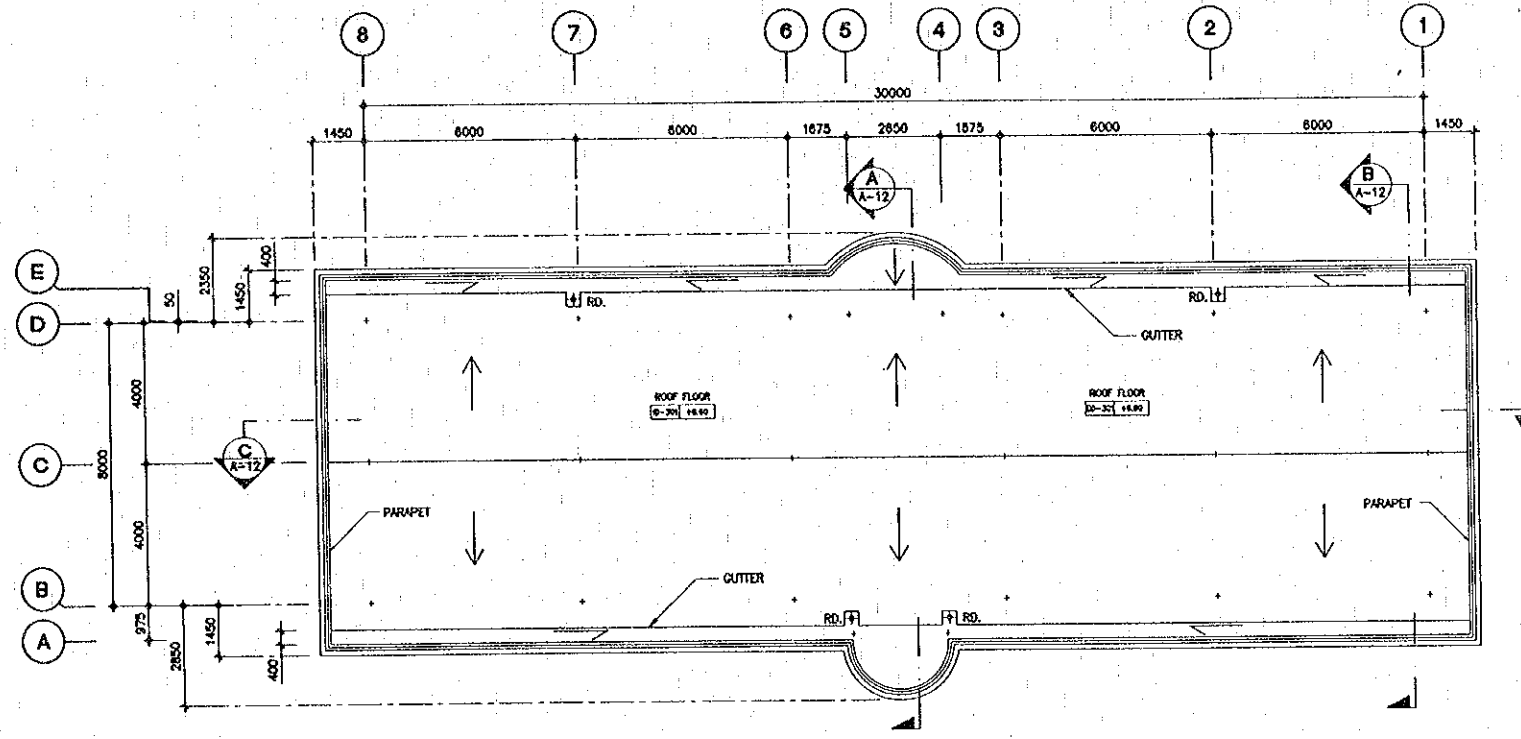
JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	16-Dec-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : DEPARTURE-2 <sup>nd</sup> FLOOR PLAN
DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18-Dec-00	
SUBMITTED	A. Hirozumi	<i>[Signature]</i>	01-Jan-01	
APPROVED	S. Tamayabutra	<i>[Signature]</i>	27-Feb-01	

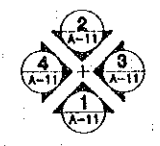
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DATE OF ISSUE: 05/03/2000	
DWG. NO. F-A-10	SHEET NO. 122
DWG. STATUS	



PASSENGER FLOW →



ROOF FLOOR PLAN  
SCALE 1:100



- NOTES :
1. ROOF SLAB SHALL SLOPE 1:100 TO DRAINAGE
  2. RD. : ROOF DRAIN C : 1:100


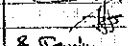
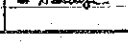

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REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

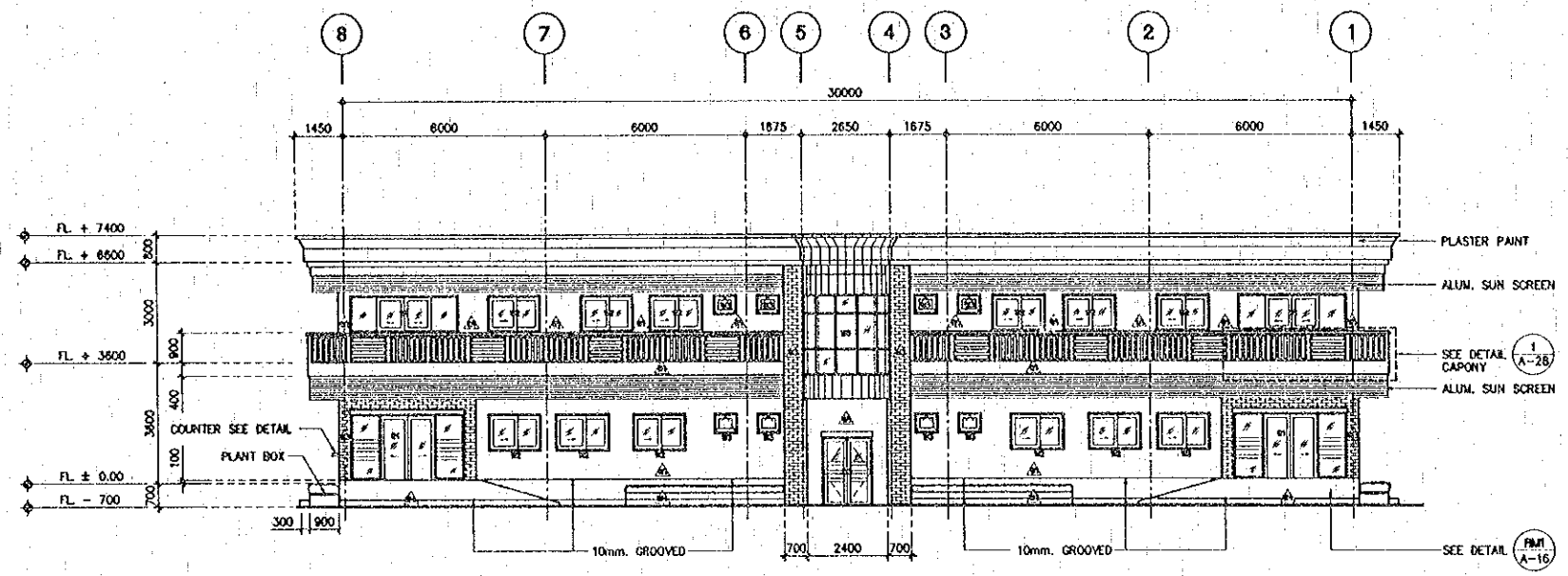
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

   
 THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

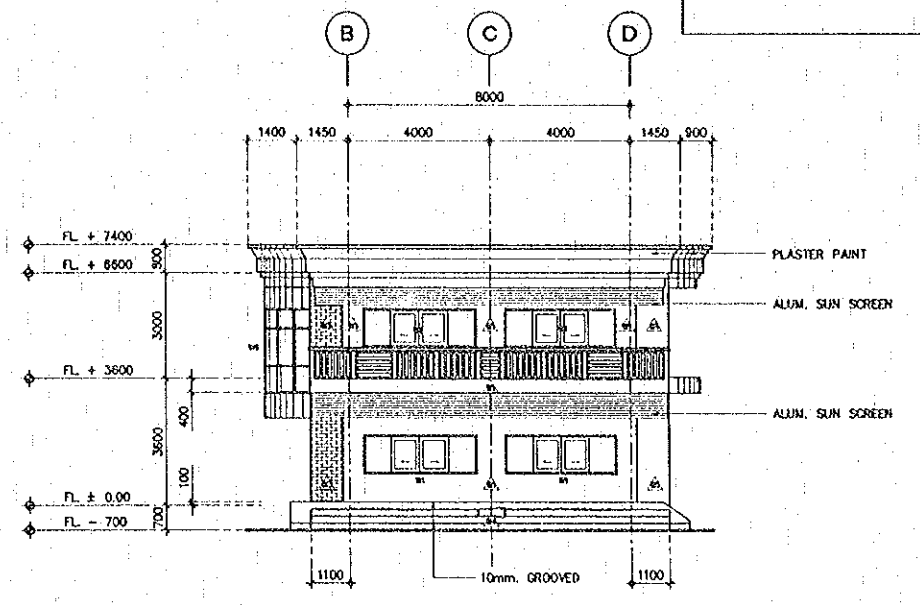
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa		16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : DEPARTURE-ROOF PLAN
DESIGN CHECK	T. Hasegawa		18-02-00	
SUBMITTED	A. Kitatani		21/02/00	
APPROVED	S. Terayabutra		22/02/00	

BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 MAIN OFFICE : DEPARTURE-ROOF PLAN

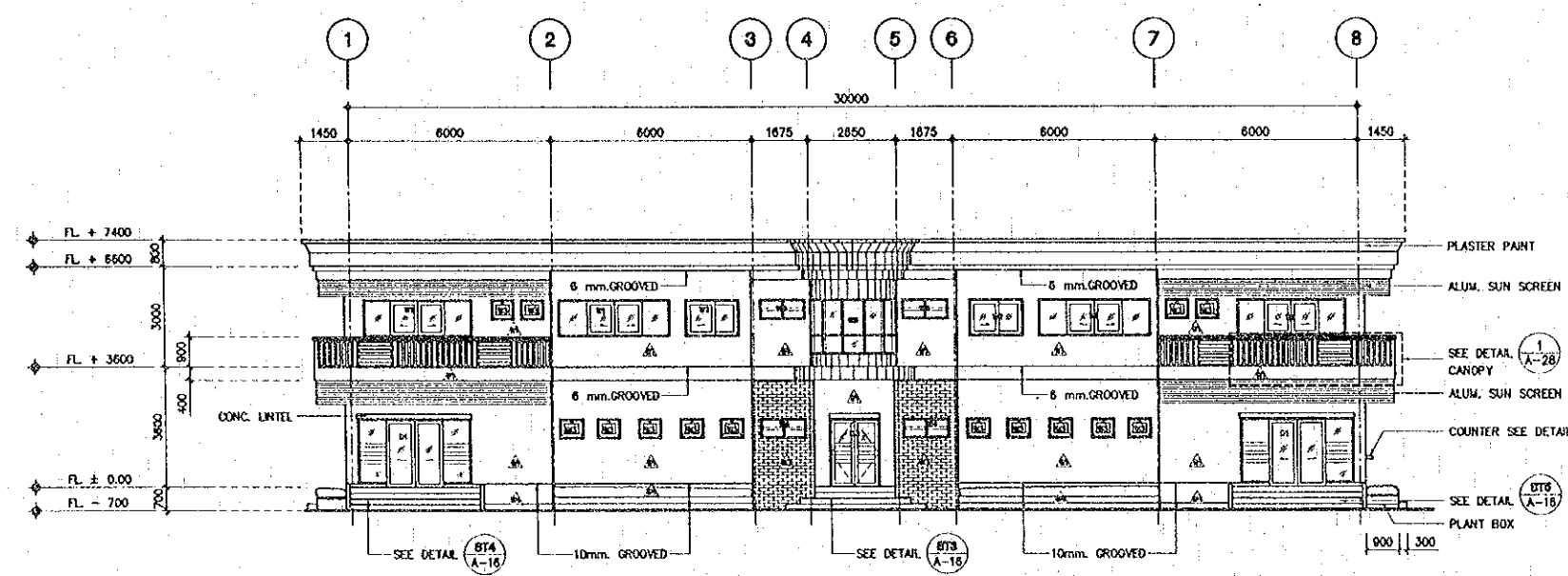
DATE OF ISSUE: 05/03/2000  
 DWG. NO. F-A-11 SHEET NO. 123  
 DWG. STATUS



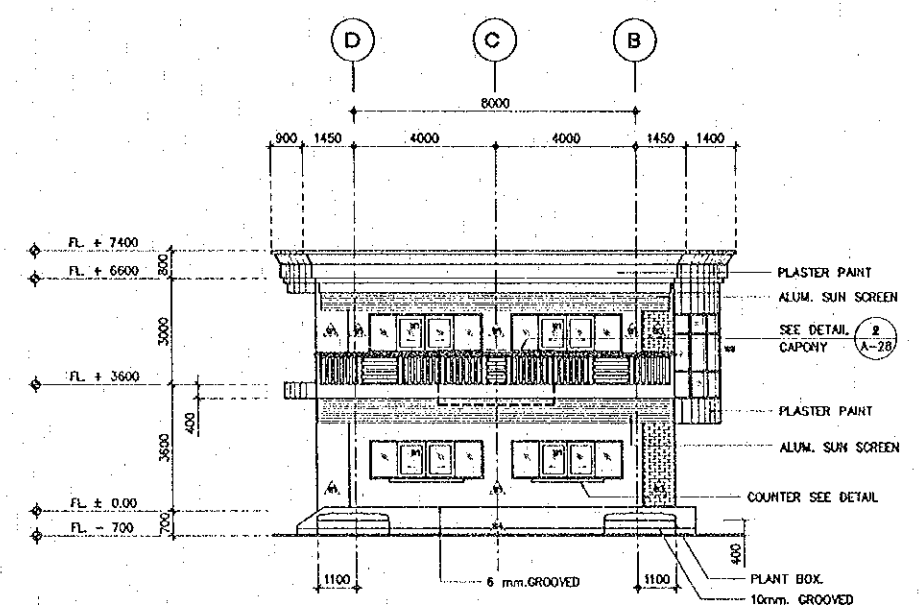
ELEVATION 1  
 SCALE 1:100



ELEVATION 3  
 SCALE 1:100



ELEVATION 2  
 SCALE 1:100

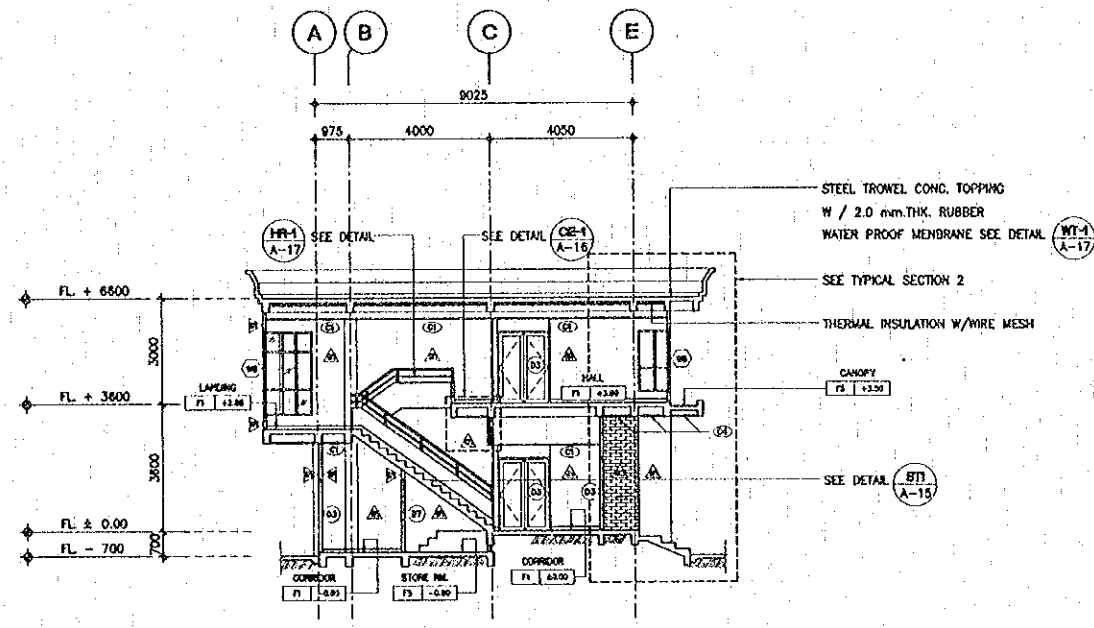


ELEVATION 4  
 SCALE 1:100

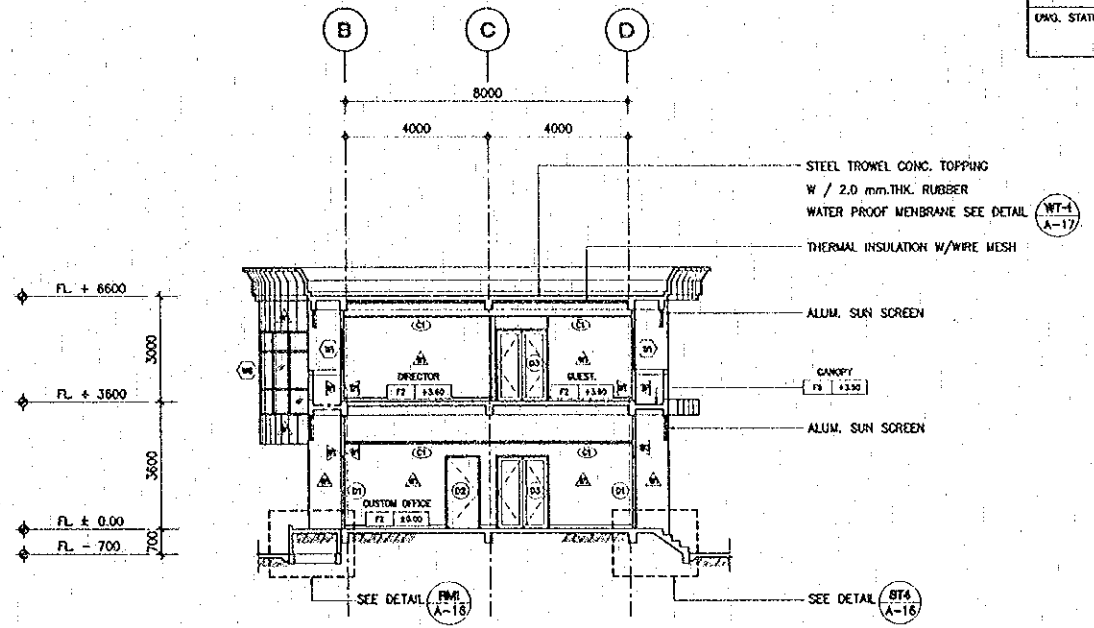
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	16-01-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-ELEVATION 1,2,3 AND 4
						DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18-02-00	
						SUBMITTED	A. Hirata	<i>[Signature]</i>	21-02-00	
						APPROVED	S. Tamayaburo	<i>[Signature]</i>	24-02-00	

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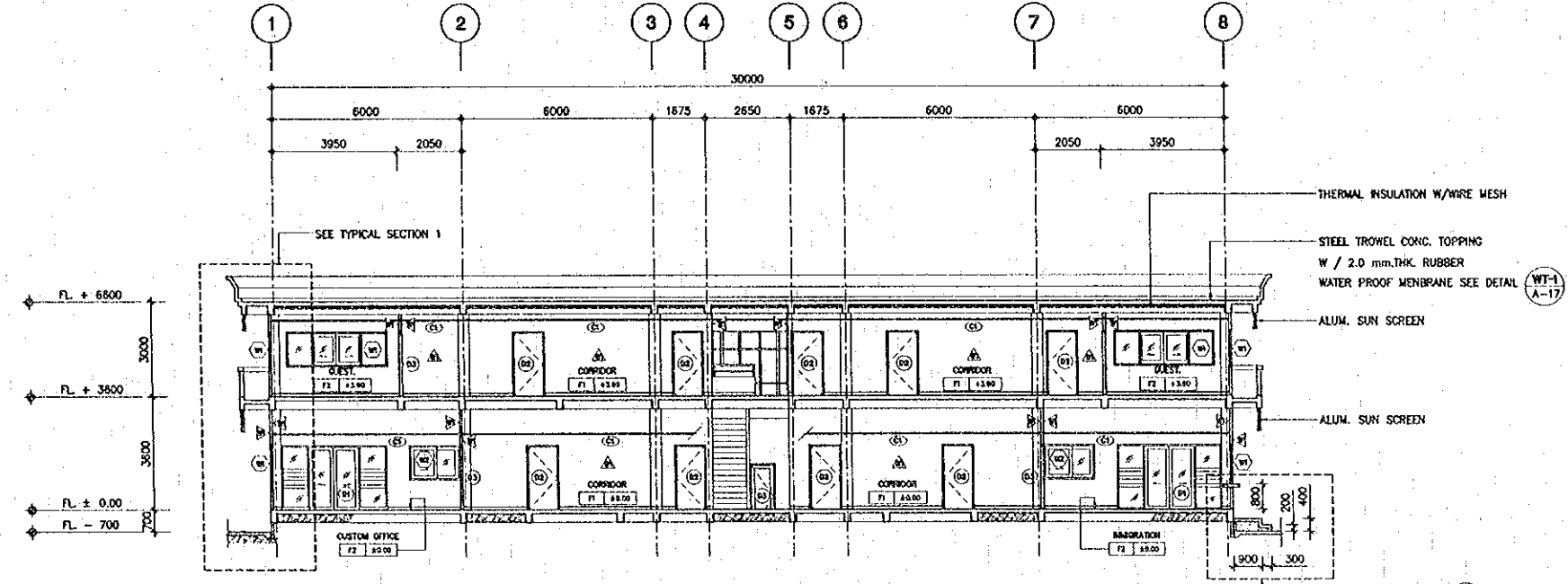




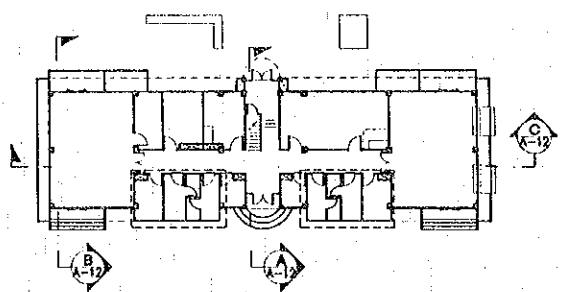
SECTION A-A  
 SCALE 1:100



SECTION B-B  
 SCALE 1:100



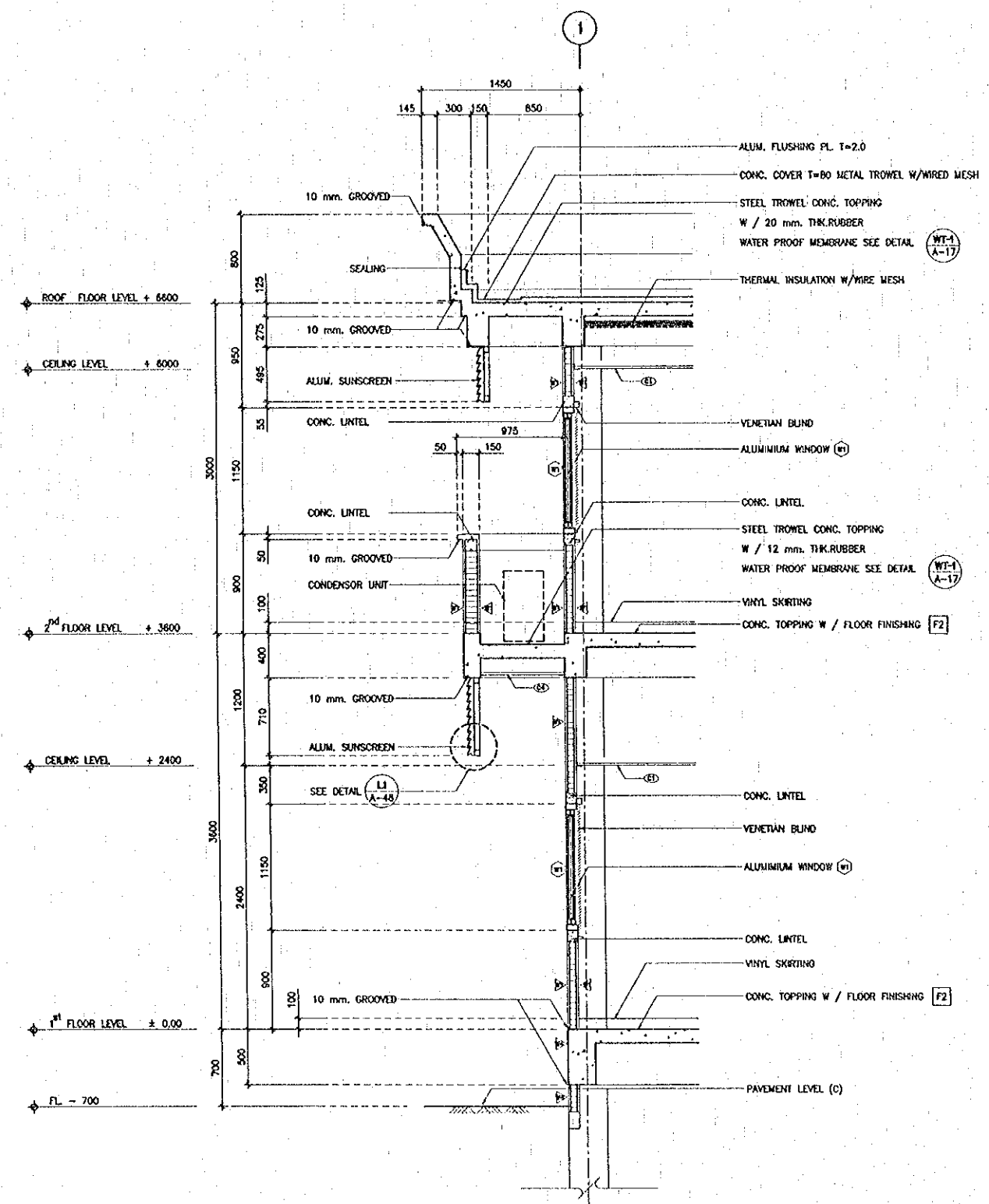
SECTION C-C  
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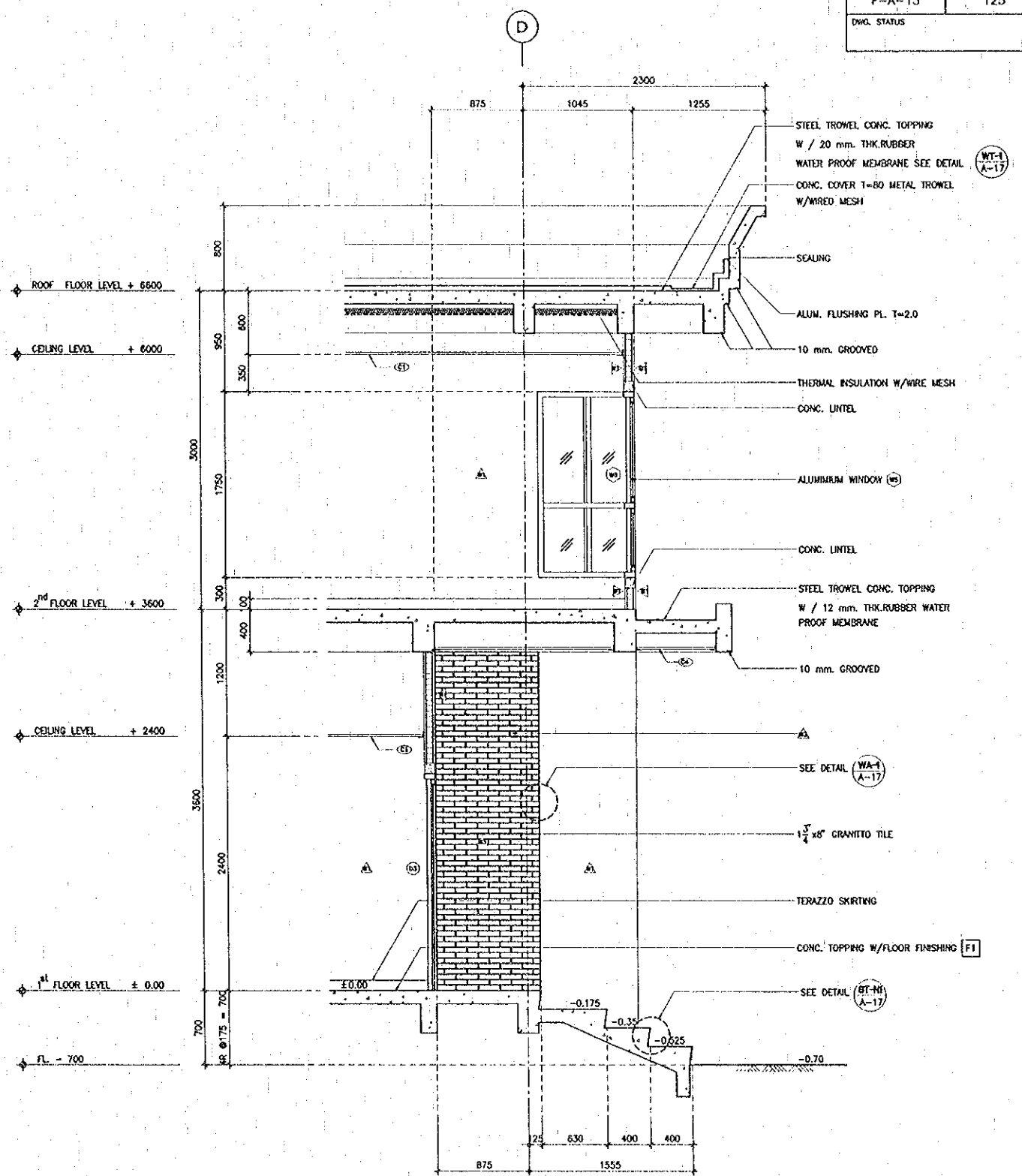
KEY PLAN  
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REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DRG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morikita	<i>[Signature]</i>	11/20/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-SECTION A-A, B-B AND C-C
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Moeuzawa	<i>[Signature]</i>	11/20/00		
						SUBMITTED	A. Hirahara	<i>[Signature]</i>	11/20/00		
						APPROVED	S. Taniyabutra	<i>[Signature]</i>	11/20/00		

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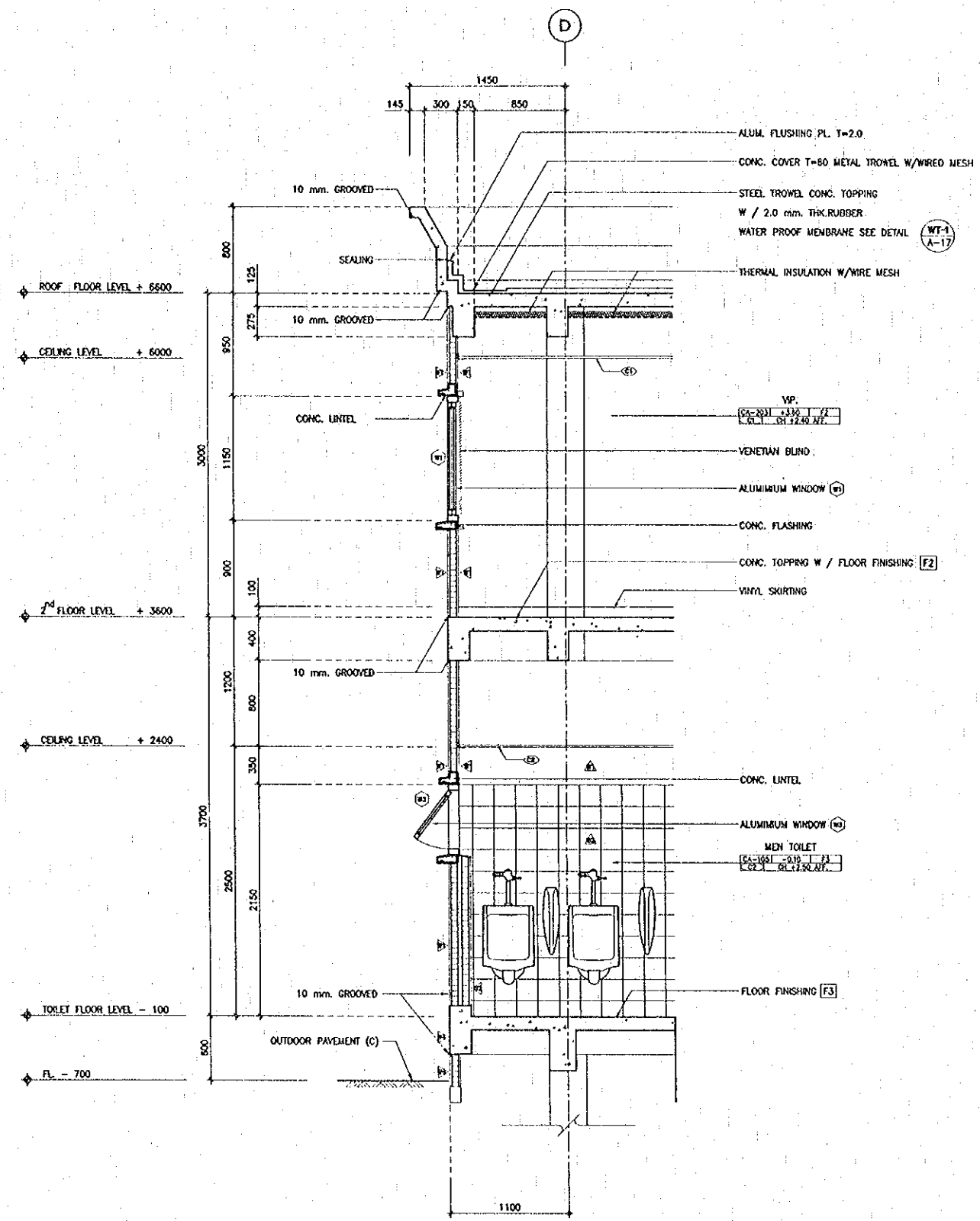
TYPICAL SECTION 1  
 SCALE 1:25



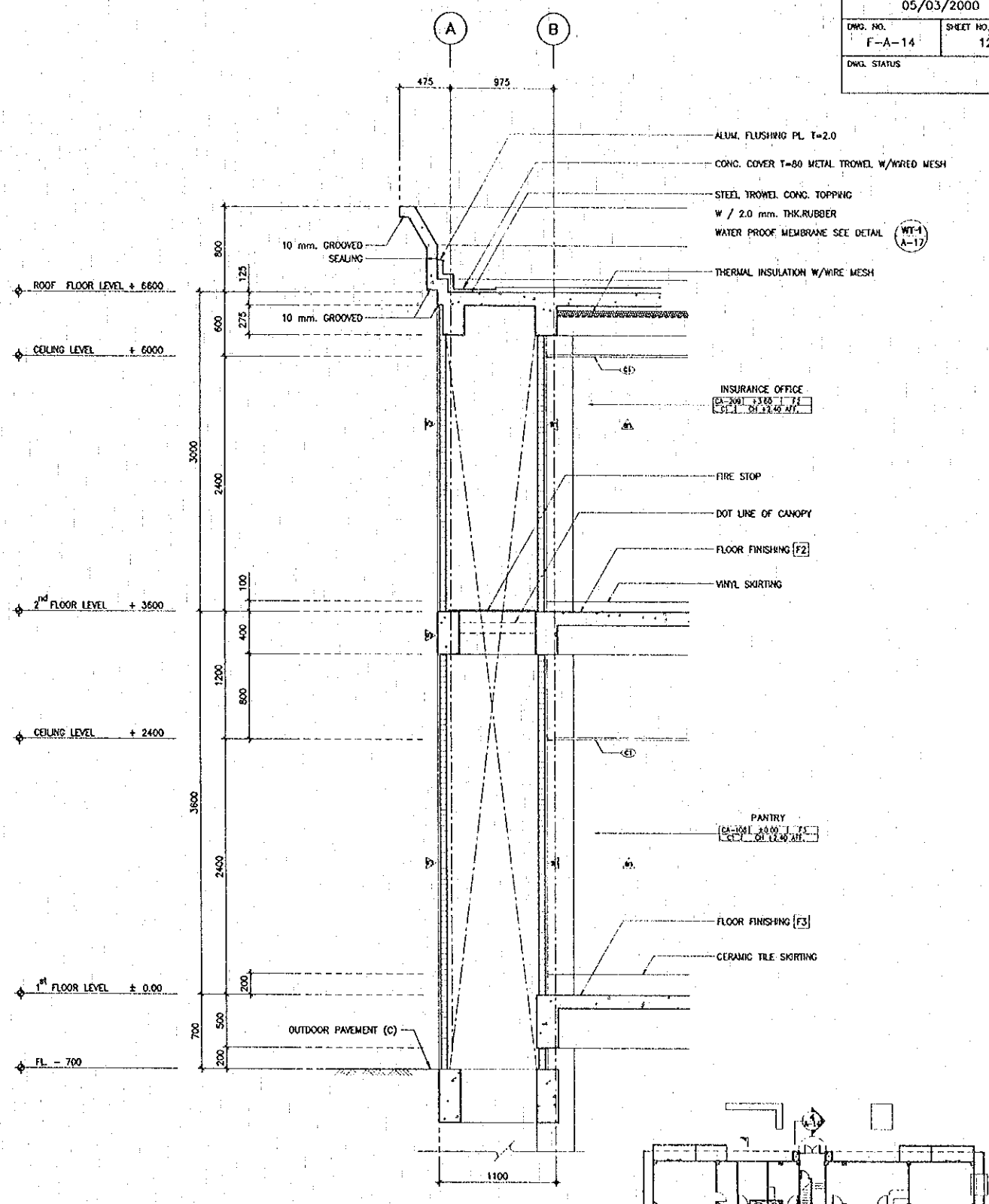
TYPICAL SECTION 2  
 SCALE 1:25

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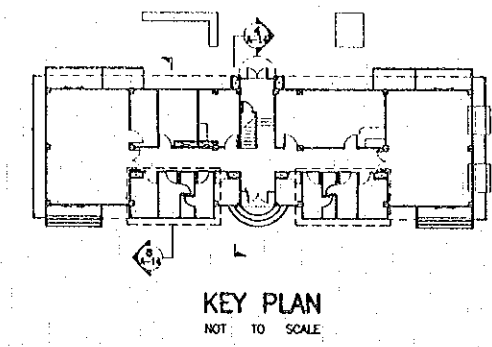
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY		QUALITY RECORD		NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION		DESIGN		A. Morikawa	<i>[Signature]</i>	11-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL DEPARTURE-TYPICAL SECTION 1 AND 2
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN CHECK		T. Mutsaers	<i>[Signature]</i>	18-02-00	
							SUBMITTED		A. Hirakawa	<i>[Signature]</i>	21-02-00	
							APPROVED		S. Tambyajatra	<i>[Signature]</i>	22-02-00	



TYPICAL SECTION 3  
 SCALE 1:25



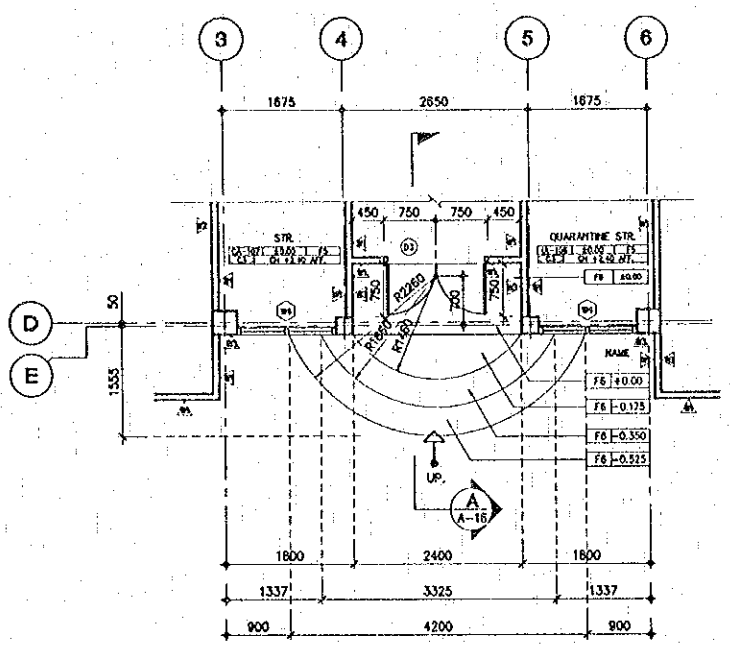
TYPICAL SECTION 4  
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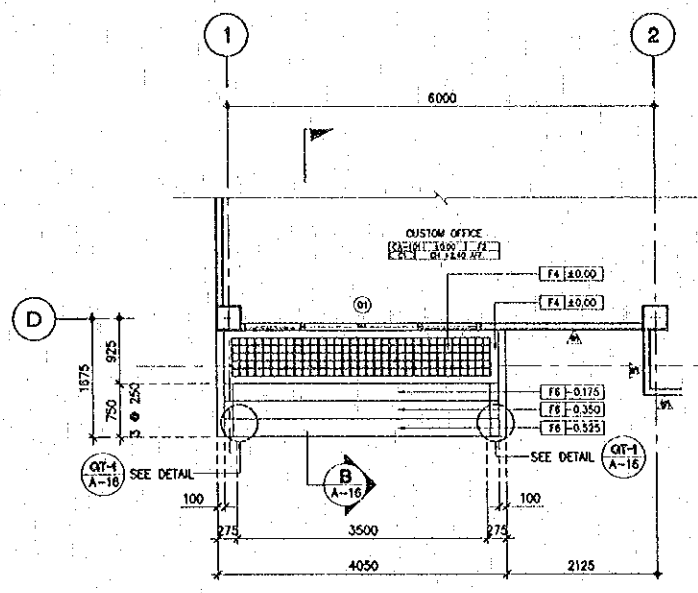
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NEIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikawa	<i>[Signature]</i>	18/02/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-TYPICAL SECTION 3 AND 4
						DESIGN CHECK	T. Moeuzova	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hironori	<i>[Signature]</i>	18/02/00	
						APPROVED	S. Tanjibudha	<i>[Signature]</i>	23/02/00	

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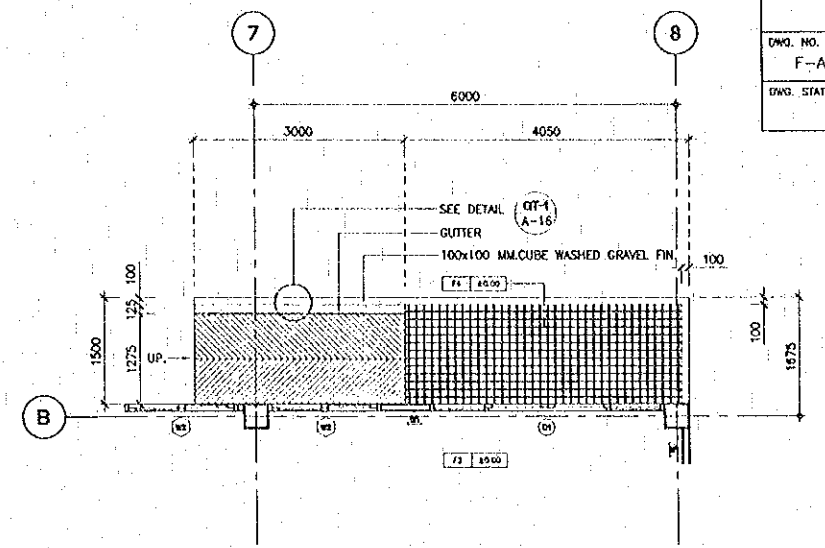




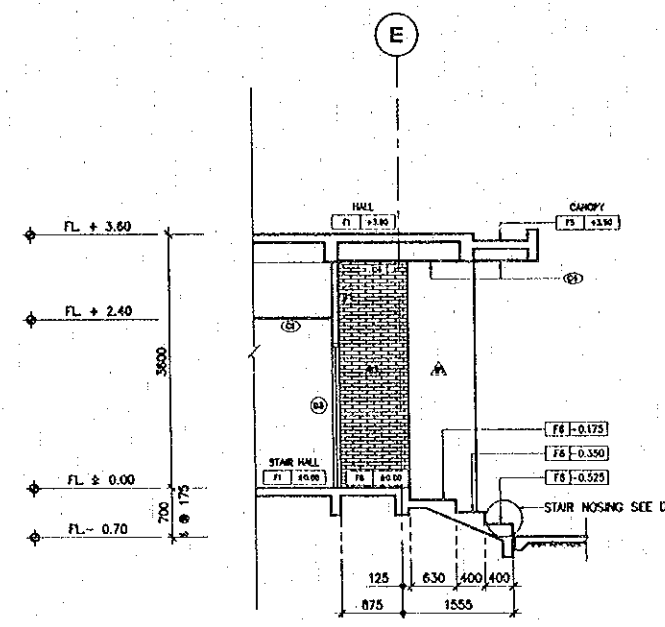
PLAN ST.3  
SCALE 1:50



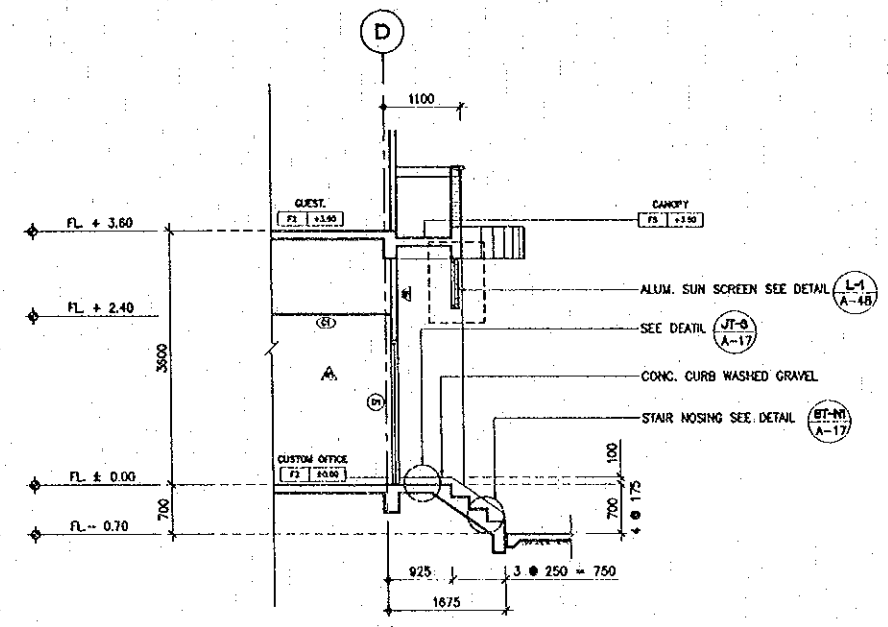
PLAN ST.4 AND ST.5  
SCALE 1:50



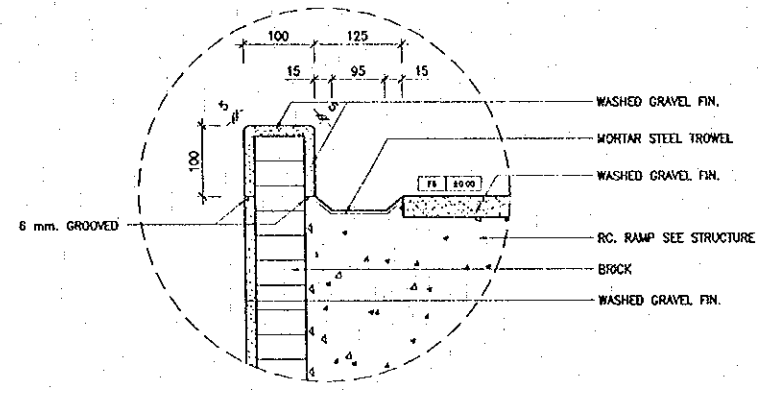
PLAN RAMP RM1 (RM2)  
SCALE 1:50



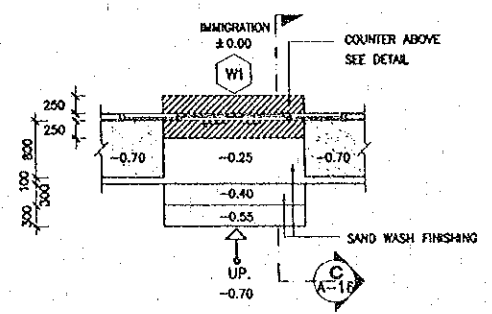
SECTION A-A (ST.3)  
SCALE 1:50



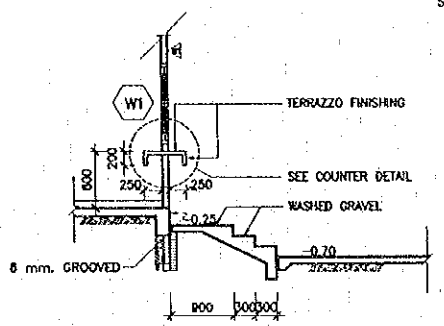
SECTION B-B (ST.4 AND ST.5)  
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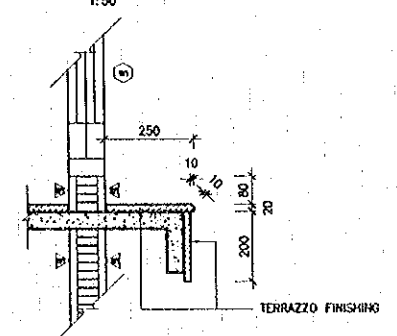
DETAIL GT-1  
SCALE 1:5



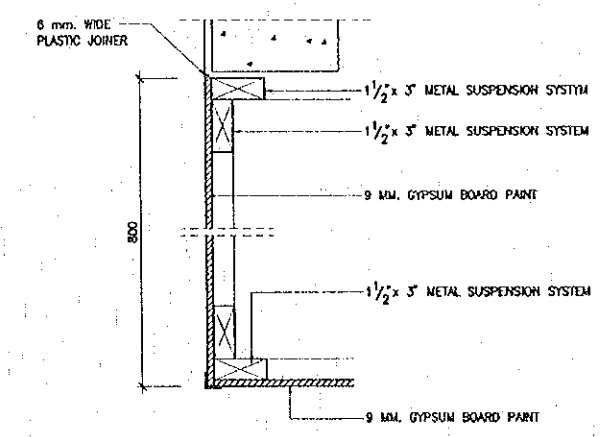
PLAN ST.6  
SCALE 1:50



SECTION C-C  
SCALE 1:50



COUNTER DETAIL  
SCALE 1:10

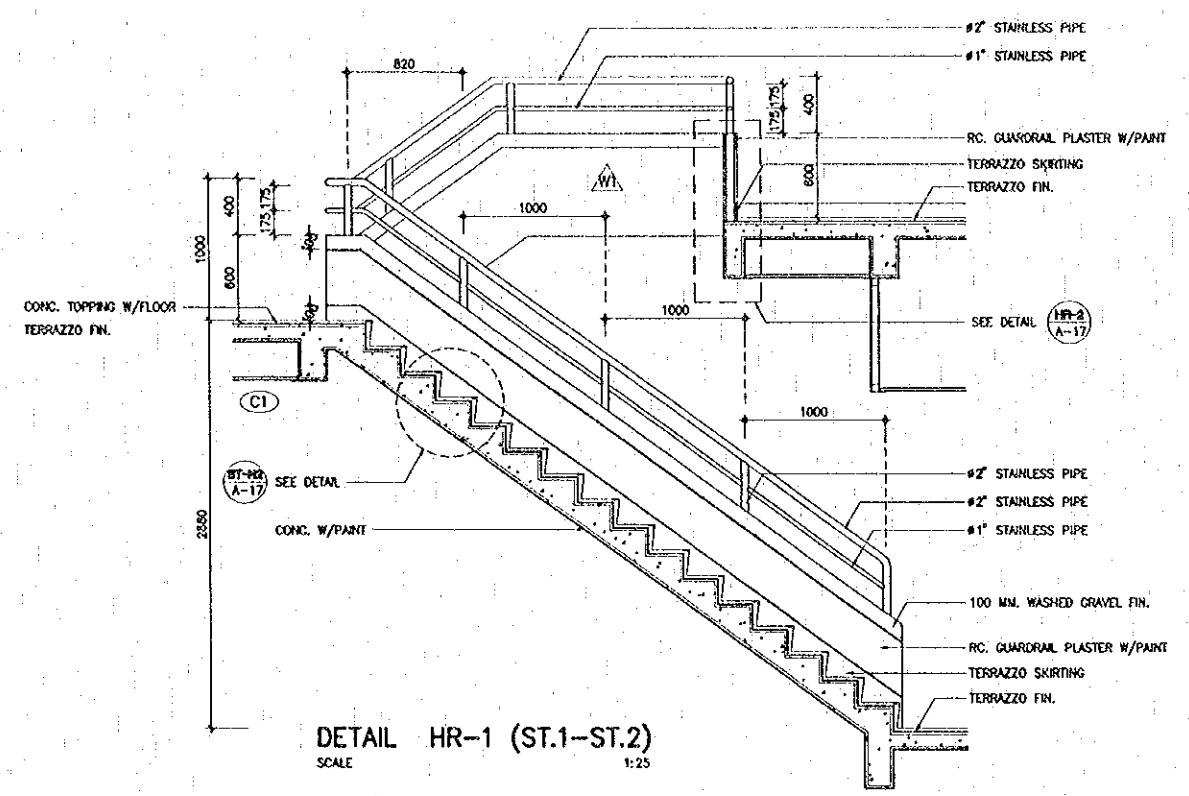


DETAIL CE-1  
SCALE 1:5

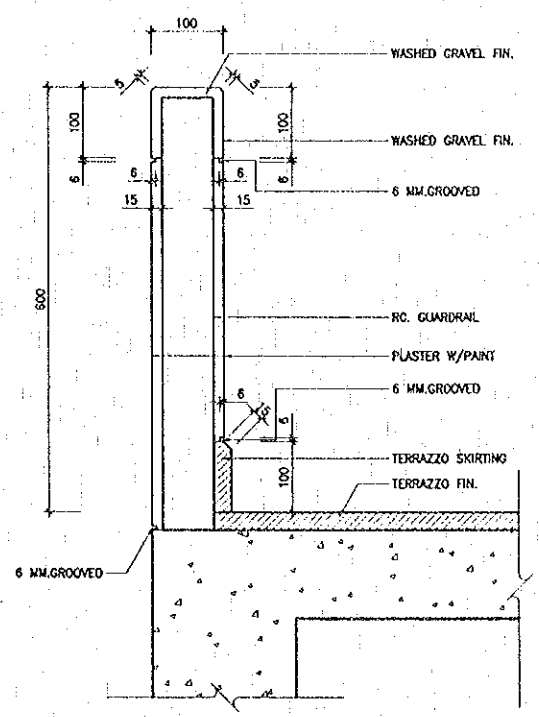
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MÈKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MÈKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morfako	<i>[Signature]</i>	1-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-STAIR DETAILS FOR ST.3, ST.4, ST.5, ST.6, RAMP DETAILS AND CUNTER DETAILS
							DESIGN CHECK	T. Morizono	<i>[Signature]</i>	10-02-00		
							SUBMITTED	A. Hiratani	<i>[Signature]</i>	2/10/00		
							APPROVED	S. Tambyabutra	<i>[Signature]</i>	20/02/00		

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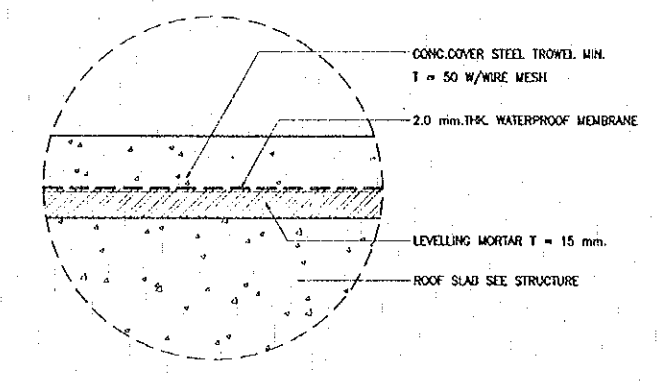
DATE OF ISSUE	
05/03/2000	
DWG. NO.	SHEET NO.
F-A-17	129
DWG. STATUS	



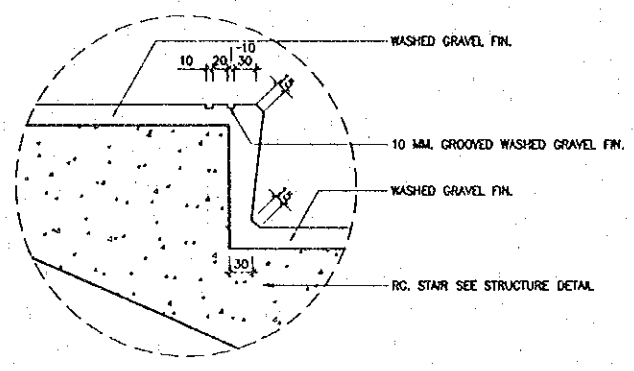
**DETAIL HR-1 (ST.1-ST.2)**  
SCALE 1:25



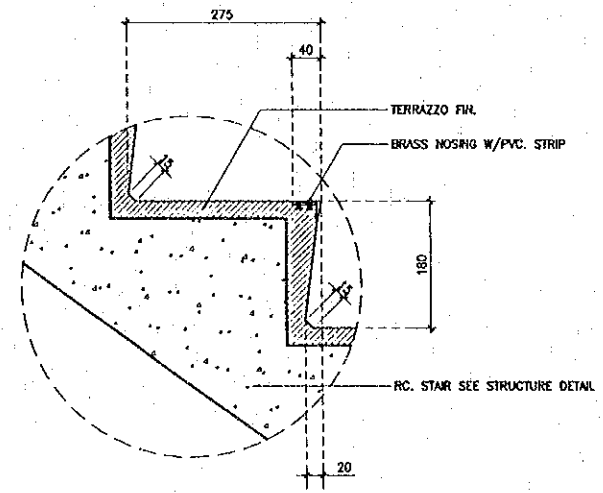
**DETAIL HR-2**  
SCALE 1:5



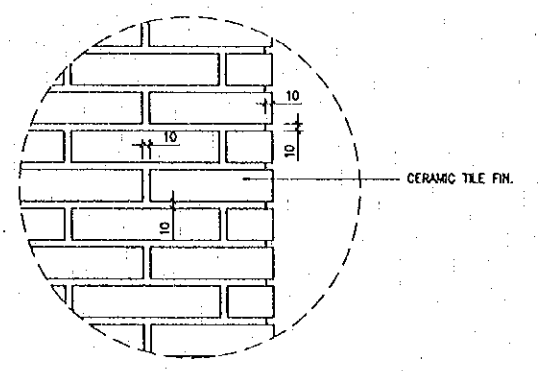
**DETAIL WT-1 (ROOF)**  
NOT TO SCALE



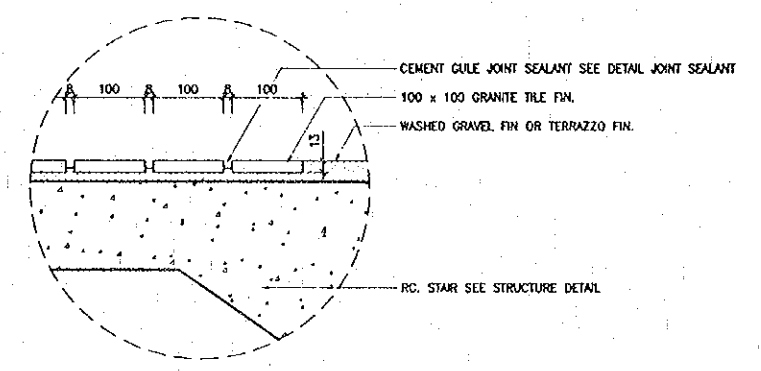
**DETAIL ST-N1**  
SCALE 1:5



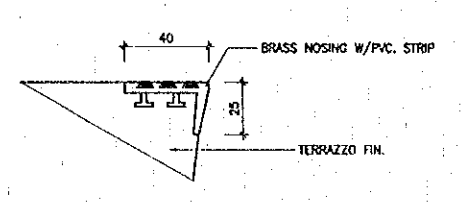
**DETAIL ST-N2**  
SCALE 1:5



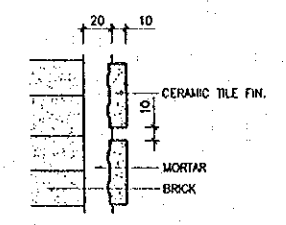
**DETAIL WA-1**  
SCALE 1:5



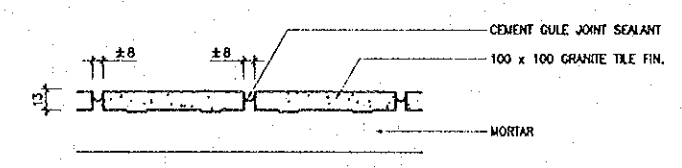
**DETAIL JT-3 (ST.4, ST.5)**  
SCALE 1:5



**DETAIL OF NOSING PVC.**  
NOT TO SCALE



**DETAIL GROOVED**  
NOT TO SCALE



**DETAIL JOINT SEALANT**  
NOT TO SCALE

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIIPPON KORI CO., LTD.**

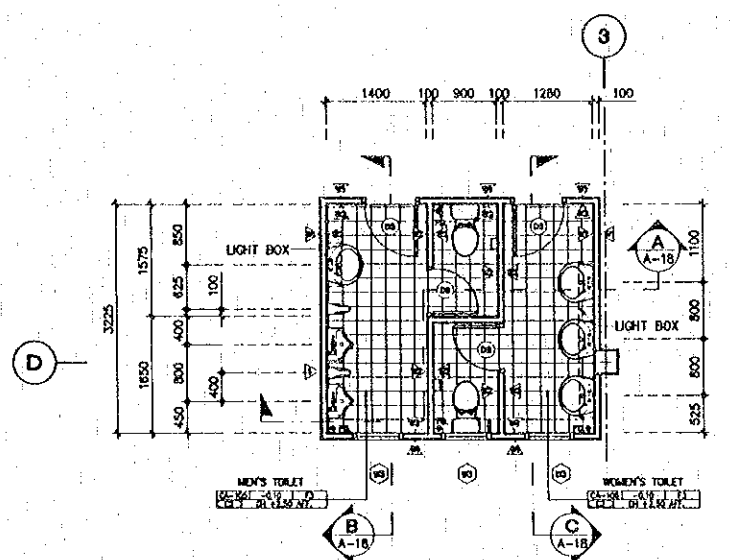
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

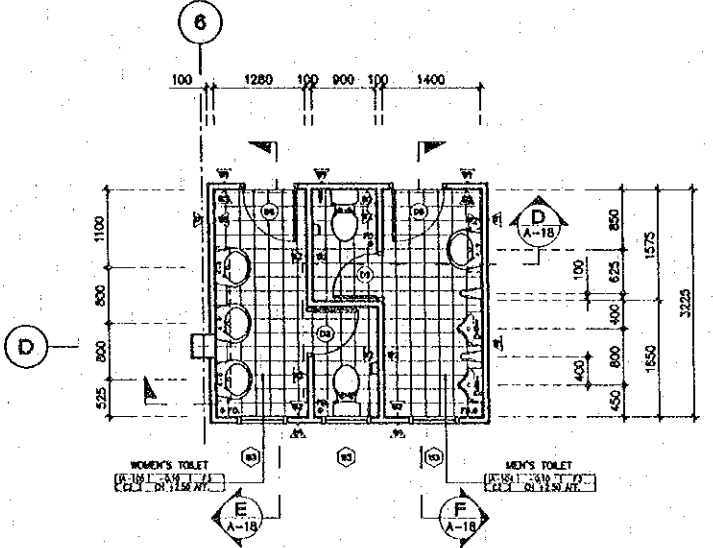
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikita	<i>[Signature]</i>	15/02/00
DESIGN CHECK	T. Mousazawa	<i>[Signature]</i>	17/02/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	17/02/00
APPROVED	S. Terayabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
 MAIN OFFICE : ARRIVAL AND DEPARTURE-STAIR DETAILS AND TYPICAL DETAILS

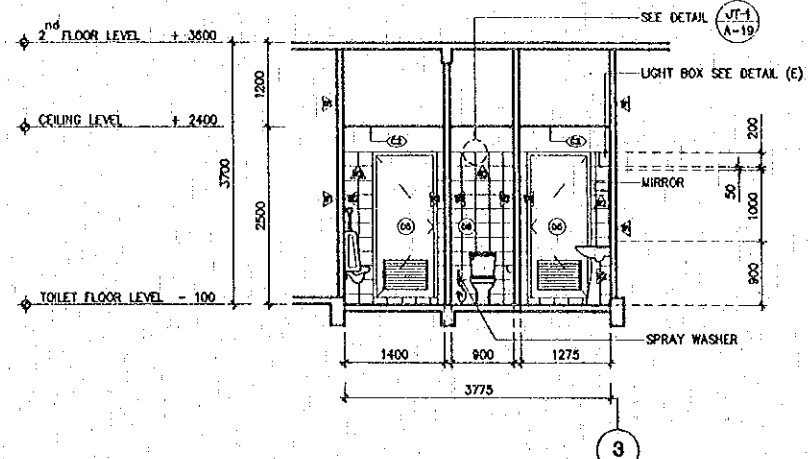
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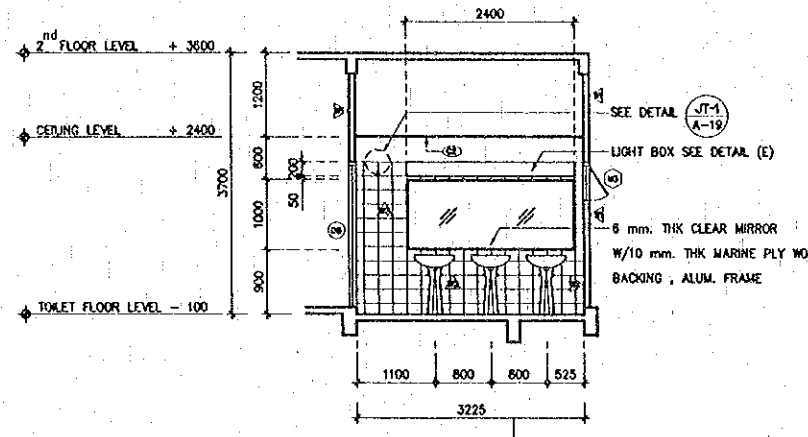
PLAN  
 DETAILS TOILET  
 SCALE 1:50



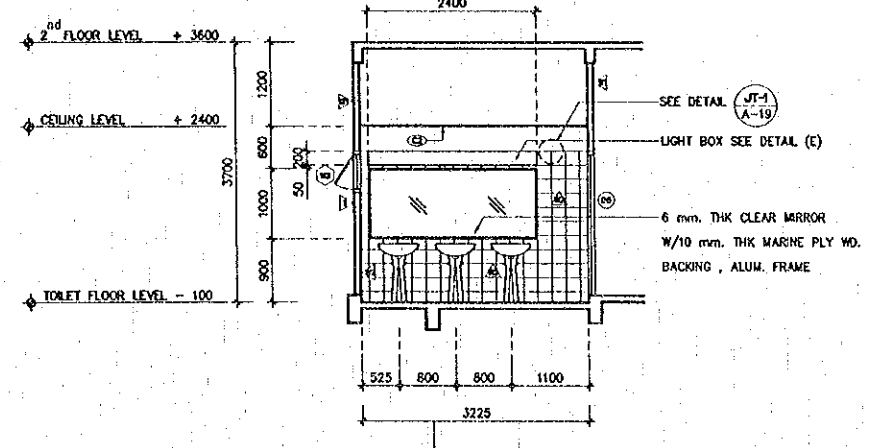
PLAN  
 DETAILS TOILET  
 SCALE 1:50



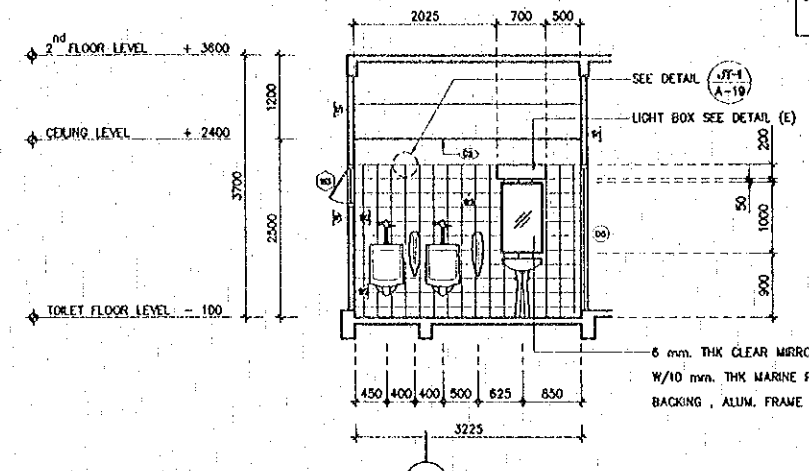
SECTION A  
 SCALE 1:50



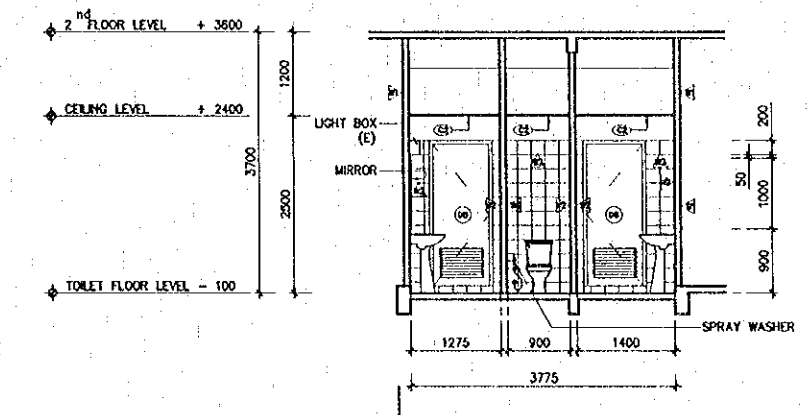
SECTION C  
 SCALE 1:50



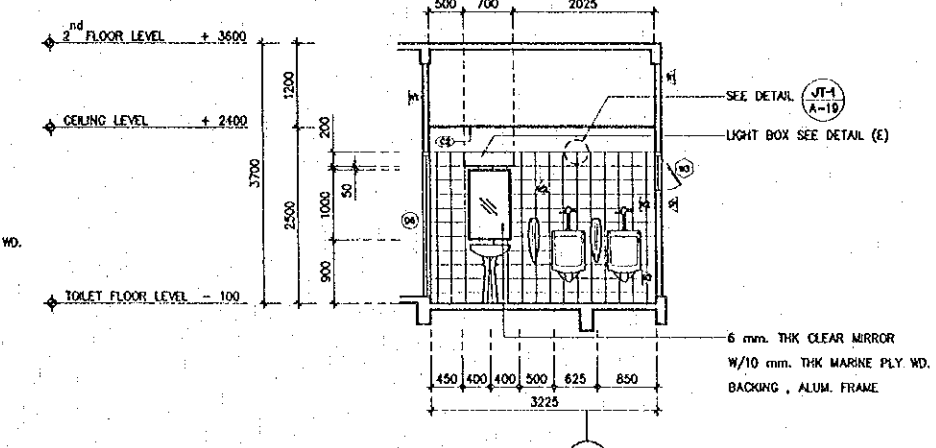
SECTION E  
 SCALE 1:50



SECTION B  
 SCALE 1:50



SECTION D  
 SCALE 1:50



SECTION F  
 SCALE 1:50

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REV.	DATE	DESCRIPTION	APPROVED

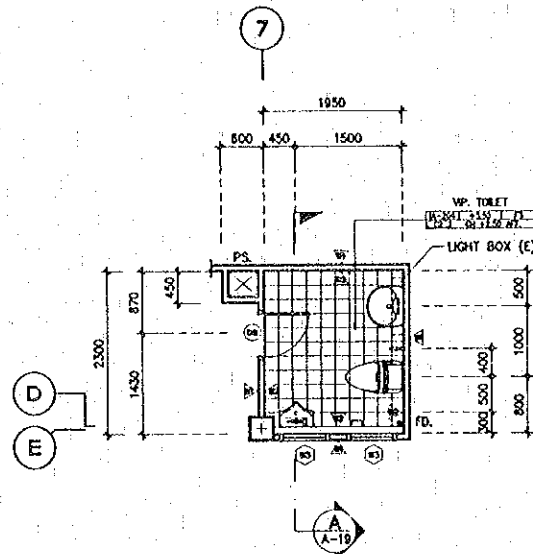
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

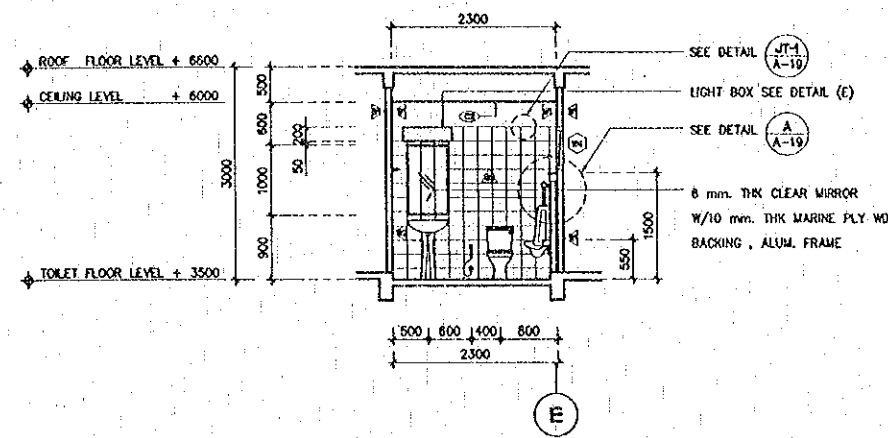
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/02/00
APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00

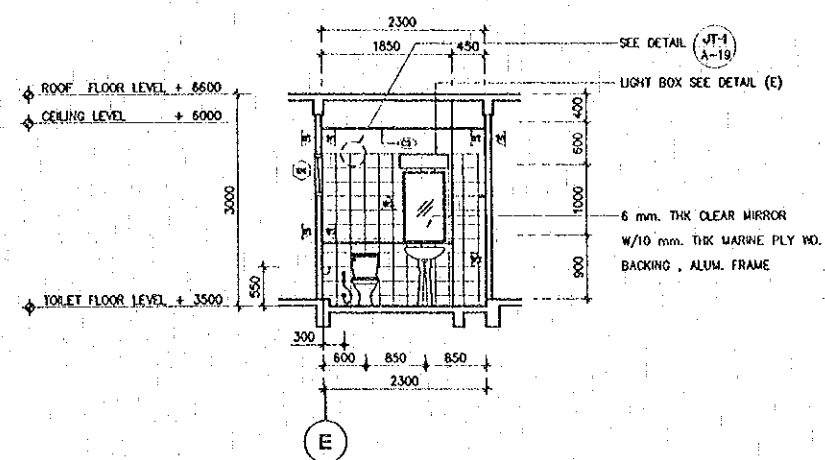
DWG. TITLE: BORDER CONTROL FACILITIES THAILAND SIDE  
 MIAN OFFICE : ARRIVAL AND DEPARTURE-TOILET DETAILS FOR T1 AND T2



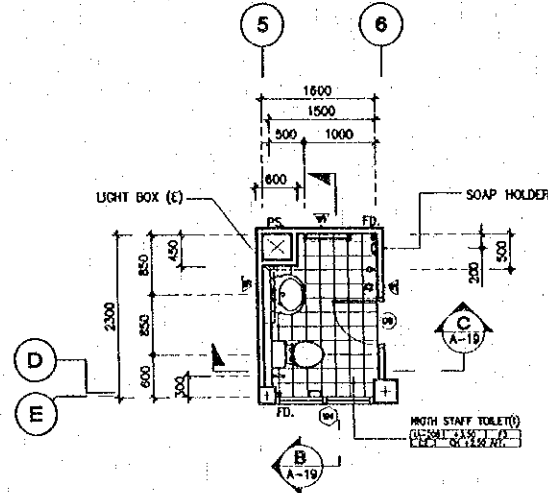
DETAILS TOILET T3 A-19 SCALE 1:50



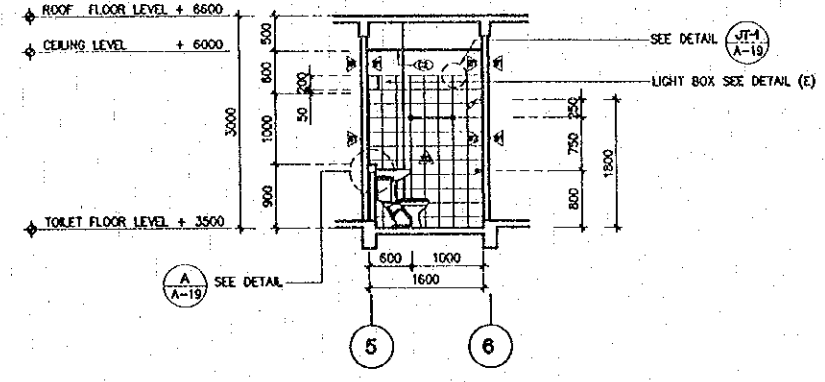
SECTION A T3 A-19 SCALE 1:50



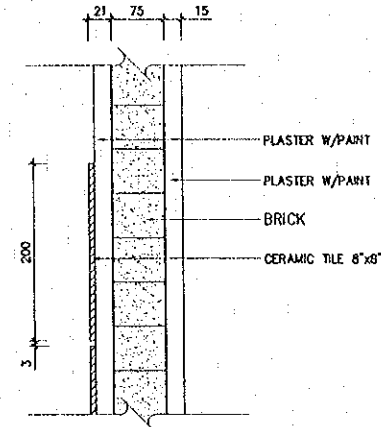
SECTION B T4 A-19 SCALE 1:50



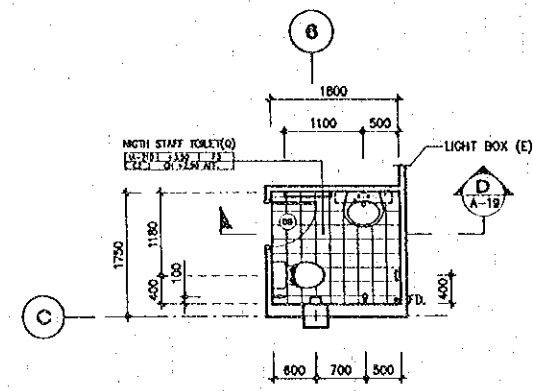
DETAILS TOILET T4 A-19 SCALE 1:50



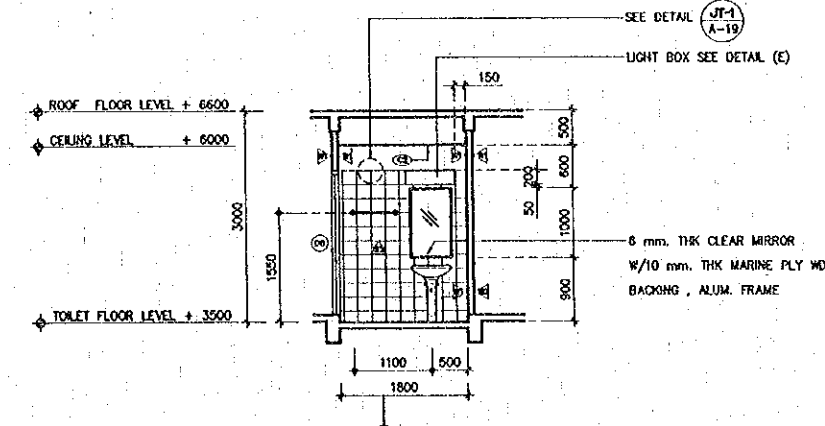
SECTION C T4 A-19 SCALE 1:50



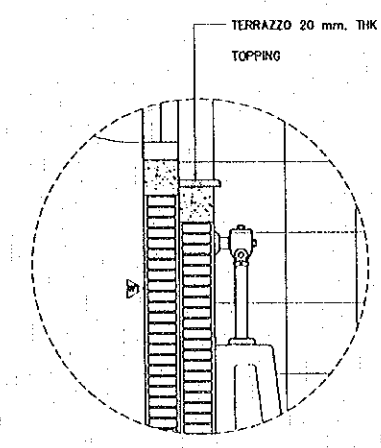
DETAIL JT-1 SCALE 1:5



DETAILS TOILET T5 A-19 SCALE 1:50



SECTION D T5 A-19 SCALE 1:50

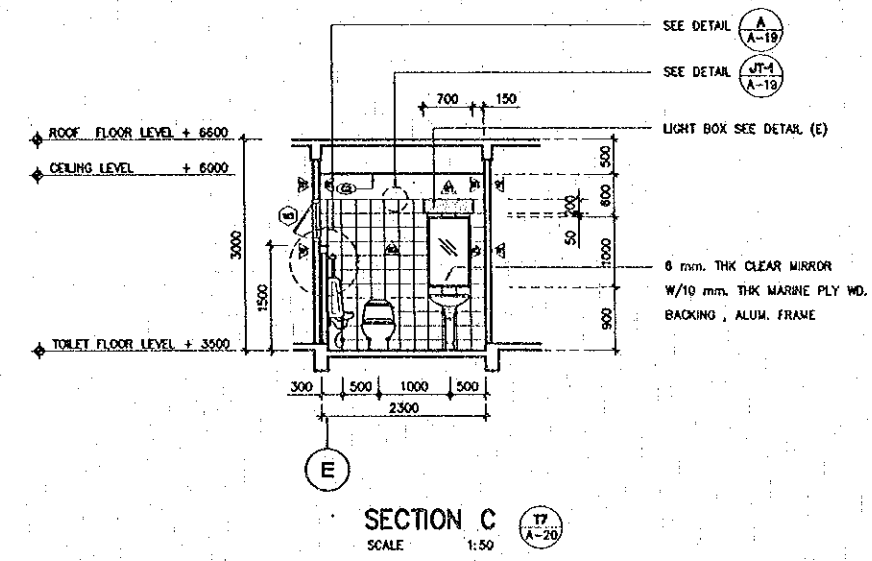
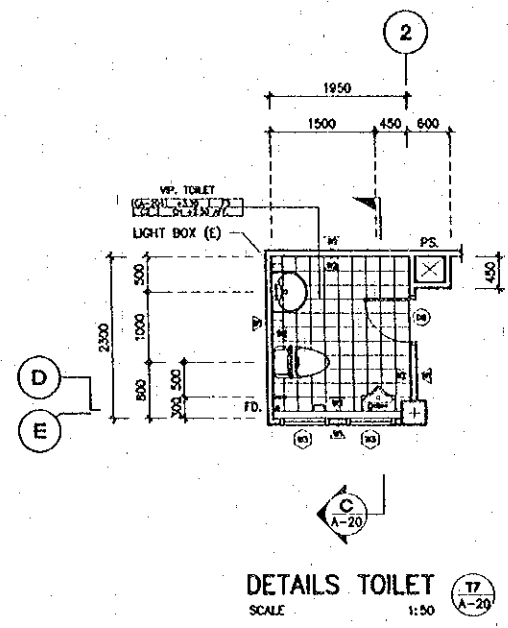
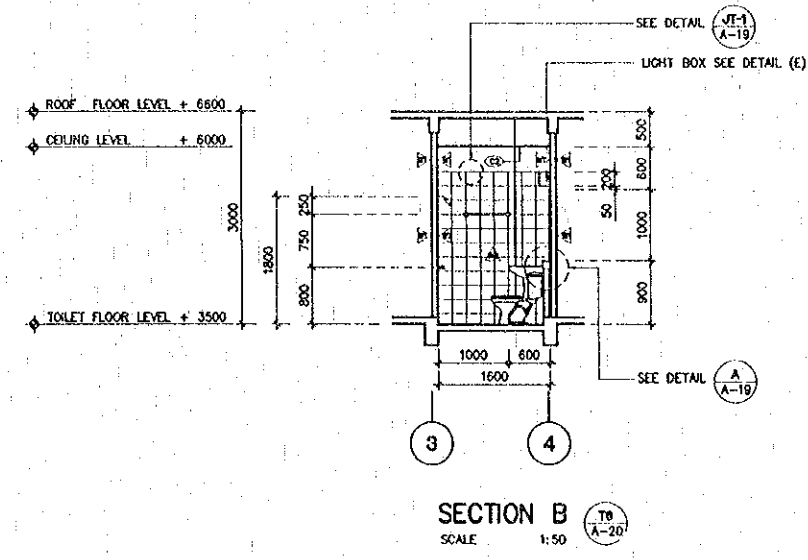
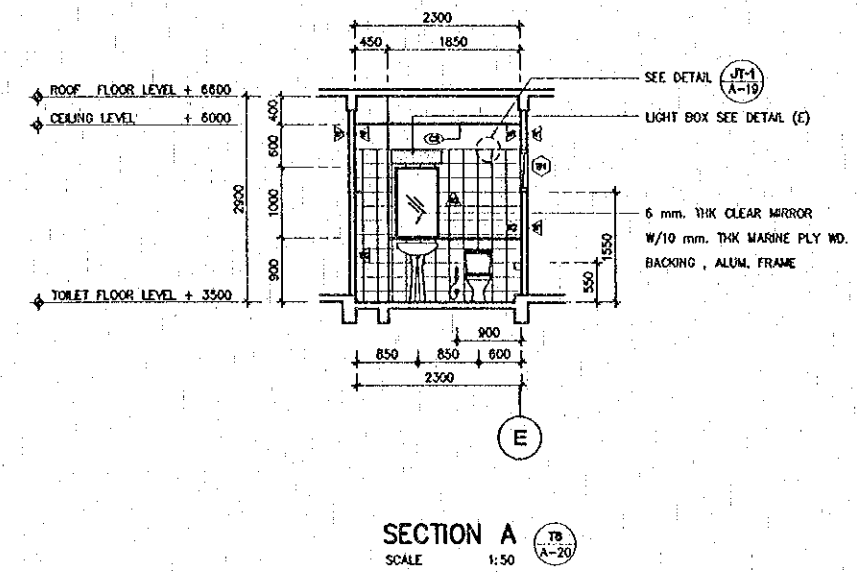
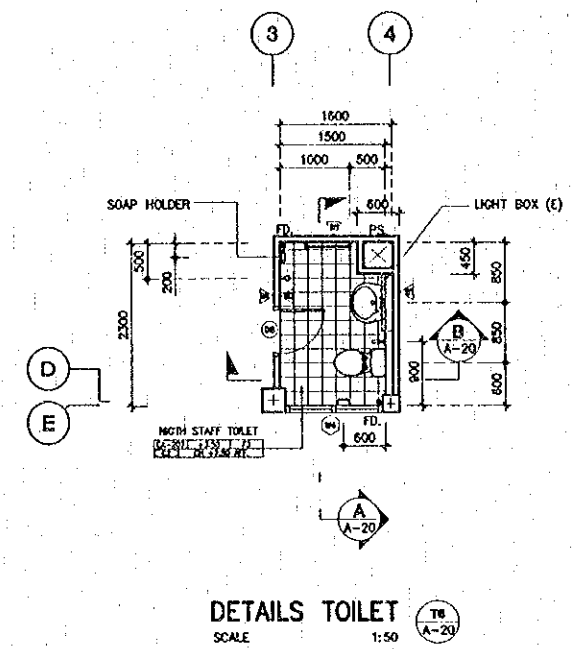


DETAIL A A-19 SCALE 1:10

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REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	THAILAND	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morisaka	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE--TOILET DETAILS FOR T3, T4 AND T5
							DESIGN CHECK	T. Moezono	<i>[Signature]</i>	18-02-00		
							SUBMITTED	A. Hirakori	<i>[Signature]</i>	21-02-00		
							APPROVED	S. Tanjyabutra	<i>[Signature]</i>	21-02-00		





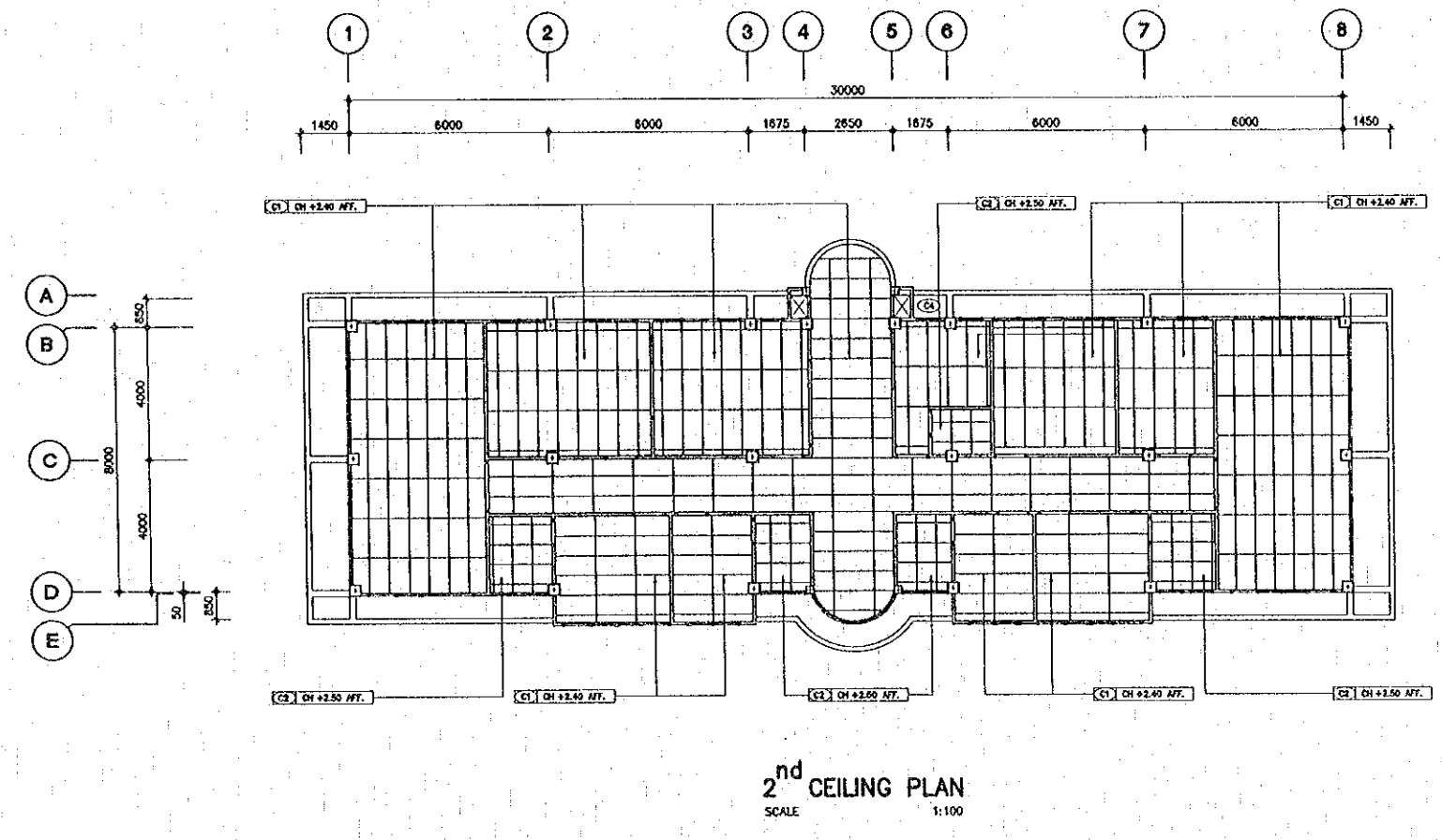
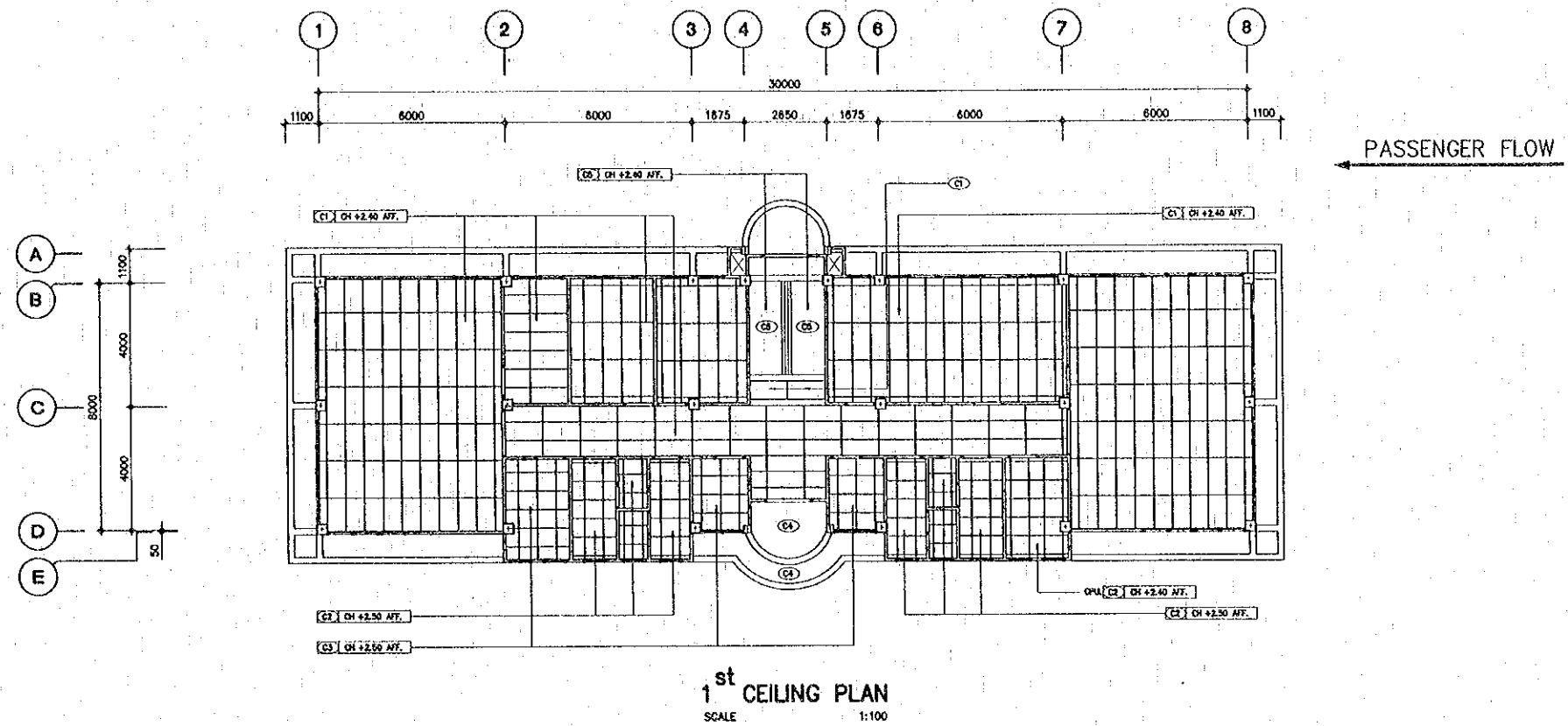
SANITARY WARES & ACCESSORIES SCHEDULE (M)		
LIST	DESCRIPTION	TOILET NUMBER
TOILET	COTTO C 186 TANYA	T1, T2, T4, T5 AND T8
	COTTO C 104 ONE PIECE TOILET	T3 AND T7
LAVATORY	COTTO C 012 KENSINGTON 22/PEDESTAL	T1, T2, T4, T5 AND T6
	COTTO SC 033 LAVATORY & PEDESTAL	T3 AND T7
URINALS	COTTO C 303 SANTANA	T1, T2, T3 AND T7
	COTTO SC 038 DIVISION	T1 AND T2
SPRAY WASHER	COTTO CT 660	T1, T2, T3, T4, T5, T6 AND T7
TISSUE HOLDER	COTTO C 819	T1, T2, T3, T4, T6, AND T7
TOWEL BAR	COTTO CT 783	T4 AND T5
SOAP HOLDER	COTTO C 805	T4 AND T6
SHOWER	COTTO S5 PRIMA FIXED SHOWER	T4, T5 AND T6

- NOTES :
- ALL BRAND NAME SHOWN ABOVE SHALL BE TENTATIVE. THE FINAL BRAND SHALL BE SUBJECT TO THE ENGINEERS APPROVAL
  - BUILDING WORK SHALL COVER : MIRROR VINYL SHOWER CURTAIN AND RAIL

C:\Drawing\Sanitary\BORDER\_Plan\_SSD\F-A-20.dwg

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	6-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-TOILET DETAILS FOR T6, T7 AND ACCESSORIES SCHEDULE (M)
						DESIGN CHECK	T. Mawleena	<i>[Signature]</i>	18-02-00	
						SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Tanyasubtra	<i>[Signature]</i>	22/02/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. F-A-21	SHEET NO. 133
DWG. STATUS:	



- ⊗ = 600 x 600 x 9 mm. T-BAR GYPSUM BOARD
- ⊙ = ALUM. SPANDREL
- ⊖ = PLASTER W/PAINT

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REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

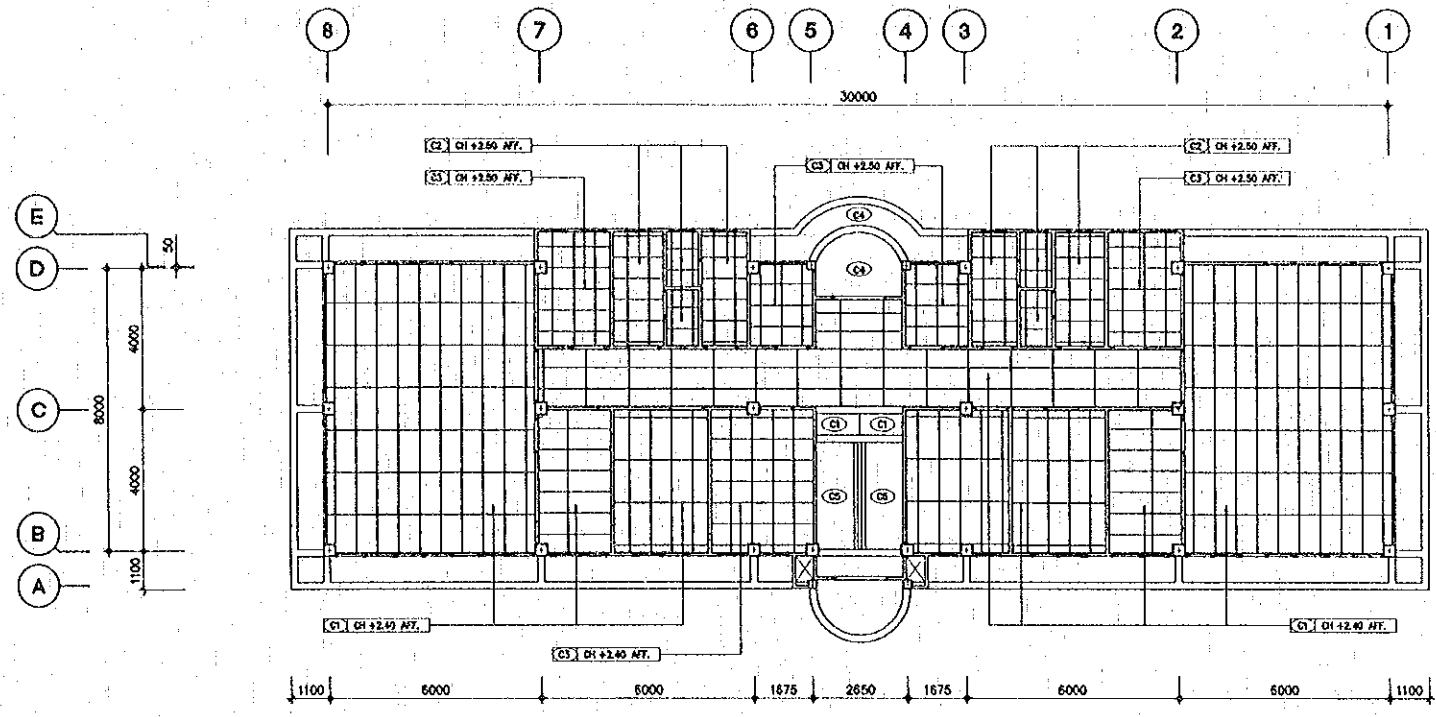
ORIENTAL CONSULTANTS CO., LTD.  
in association with  
NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
LAO PEOPLE'S DEMOCRATIC REPUBLIC  
MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
KINGDOM OF THAILAND  
MINISTRY OF TRANSPORT AND COMMUNICATIONS  
DEPARTMENT OF HIGHWAYS

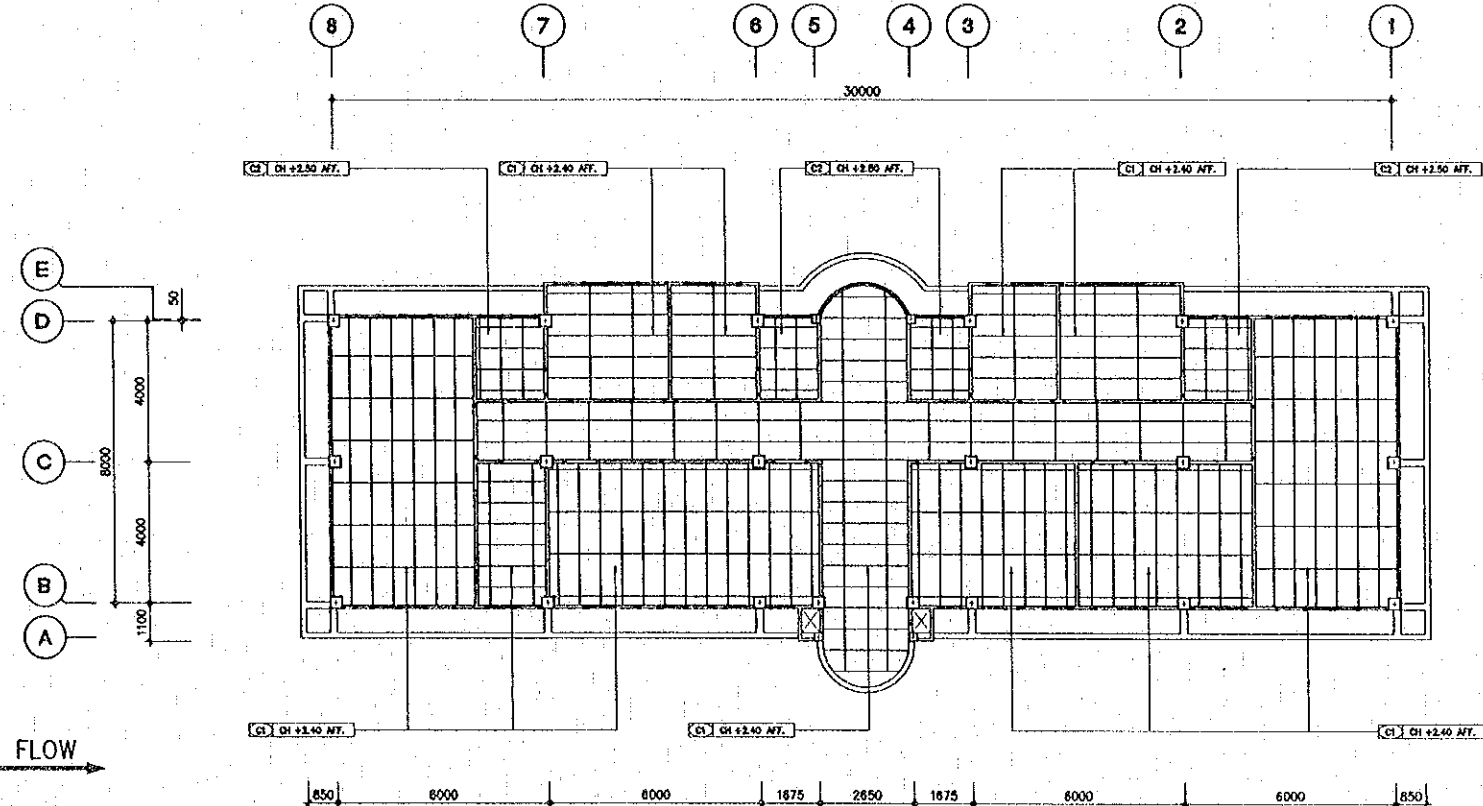
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikita	<i>[Signature]</i>	12-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL-1 <sup>st</sup> AND 2 <sup>nd</sup> CEILING PLAN
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	12-01-00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	01/01/01	
APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. F-A-22	SHEET NO. 134
DWG. STATUS	



1<sup>st</sup> CEILING PLAN  
SCALE 1:100



2<sup>nd</sup> CEILING PLAN  
SCALE 1:100

PASSENGER FLOW →

- (C1) = 600 x 600 x 9 mm. T-BAR GYPSUM BOARD
- (C2) = ALUM. SPANDREL
- (C3) = PLASTER W/PAINF

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REV.	DATE	DESCRIPTION	APPROVED

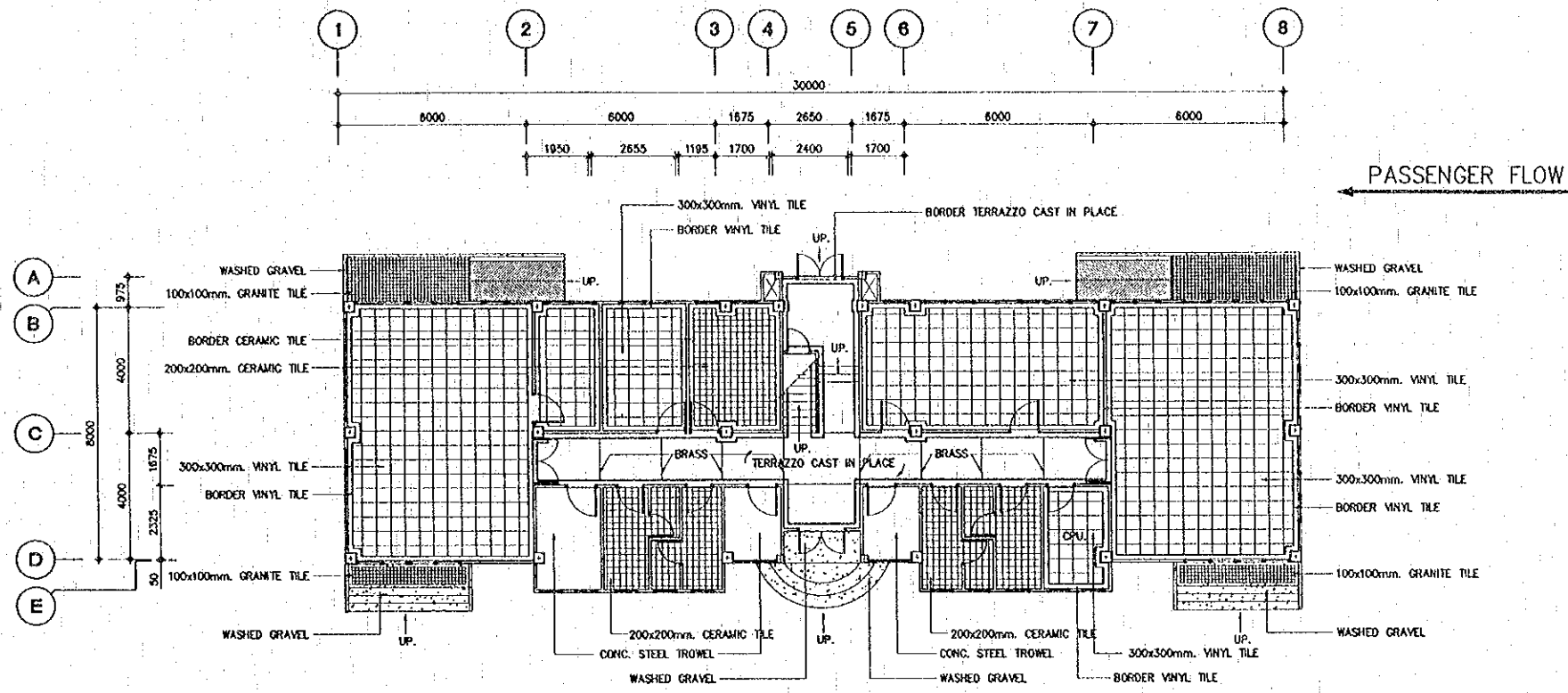
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

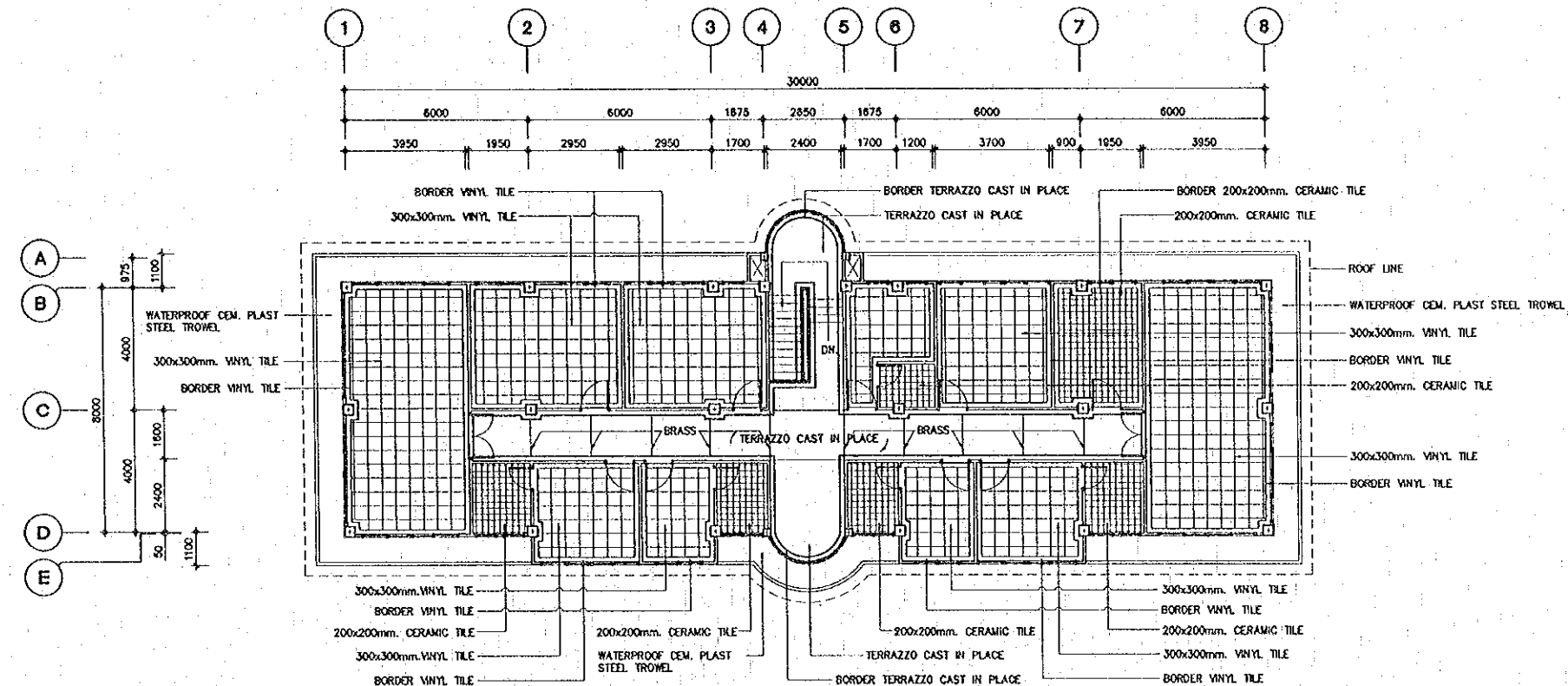
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Niyotani	<i>[Signature]</i>	4/03/00
APPROVED	S. Tamiyabura	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
 MAIN OFFICE : DEPARTURE-1<sup>st</sup> AND 2<sup>nd</sup> CEILING PLAN



1<sup>st</sup> FINISHING FLOOR PLAN  
 SCALE 1:100



2<sup>nd</sup> FINISHING FLOOR PLAN  
 SCALE 1:100

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Hirofusa	<i>[Signature]</i>	4/20/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : ARRIVAL-1 <sup>st</sup> AND 2 <sup>nd</sup> FINISHING FLOOR PLAN
DESIGN CHECK	T. Maekizawa	<i>[Signature]</i>	4/20/00	
SUBMITTED	A. Hirofusa	<i>[Signature]</i>	4/20/00	
APPROVED	S. Tamiyabutra	<i>[Signature]</i>	4/20/00	



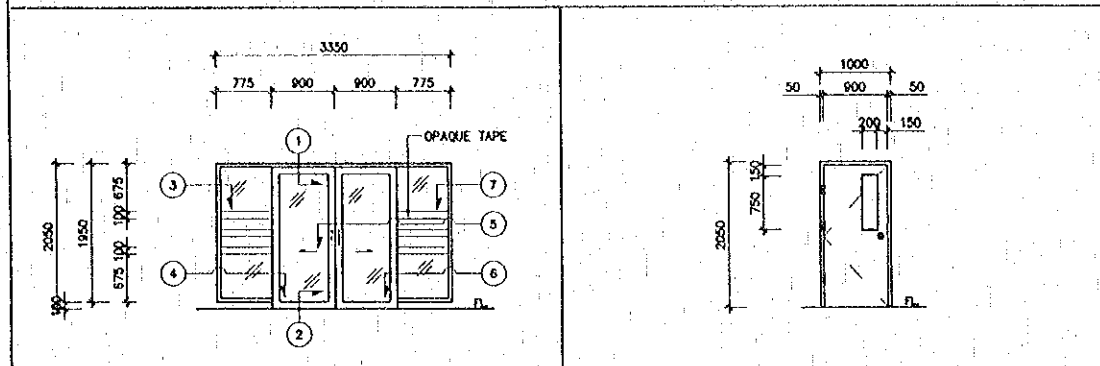
### DOOR AND WINDOW HARDWARE REQUIREMENTS

GROUP	HARDWARE CODES	FUNCTION / DESCRIPTION	FINISHING / DUTY	REMARKS
DOOR KNOB LOCK SET	L1	BOTH SIDE S/S KNOB FOR GENERAL ROOM.	S/S DOOR KNOB W/B PINS CYLINDER KEY ON ONESIDE W/BUTTON ON OPPOSITE SIDE	POSSE F 300 - SS
	L2	BOTH SIDE S/S KNOB FOR TOILET ROOM.	S/S DOOR KNOB W/PUSH BUTTON INSIDE LOCKS OUT SIDE KNOB EMERGENCY OPENING FORM OUT SIDE	POSSE C 330 - SS
	L3	BOTH SIDE S/S KNOB FOR STORAGE ROOM.	S/S DOOR KNOB W/KEY LOCK FROM OUTSIDE , OPEN BY KNOB ALLTIME INSIDE	POSSE C 362 - SS
	L4	HANDLE LOCK FOR ALUM. SLIDING DOOR	HANDLE FLUSH LOCK W/KEY	RELIANCE NO. A-1A-2A-3
	L5	LOCKSET FOR ALUM. SWING DOOR	DEAD LOCK W/KEY ON ONE SIDE , BUTTON ON OPPOSITE SIDE	ALPHA NO. 5128
	L8	HANDLE LOCKSET FOR ALUM. TOP HUNG WINDOW	HANDLE LOCK W/KEY	TRUTH 25-70
HINGE	H1	S/S HINGE FOR WOODEN DOOR	4"x3"x2.5 mm. BALL BEARING HEAVY DUTY TYPE	NAGOYA
	H2	S/S HINGE FOR TOP HUNG ALUM. WINDOW	18" S/S HINGE	LEAF BRAND
	H3			
	H4			
	H5			
	H6			
	H7			
DOOR STOPPER	B1	DOOR STOPPER FOR GENERAL ROOM	MAGNETIC DOOR STOPPER	NAGOYA NO. 99
	B2	DOOR STOPPER & HOOK FOR TOILET	BRASS DOOR STOPPER W/RUBBER BUMPER	NAGOYA NO. 30
	B3			
	B4			
	B5			
	B6			
	B7			
BOLT	BT1	FLUSH BOLT FOR WOODEN DOOR	6" S/S FLUSH BOLT	RYOBI RB - 002 W
	BT2	BOLT FOR ALUM. DOOR		
	BT3			
	BT4			
	BT5			
	BT6			
	BT7			
OTHER	SL1	SLIDING SET FOR ALUM. DOOR	BALL BEARING DOOR HANGER	DELMAR D-SOONA
	CL1	DOOR CLOSER FOR ALUM. SWING DOOR	HOLD OPEN AT 90°	NEW STAR NO. 630
		MOSQUITO NET FOR ALUM. WINDOW		

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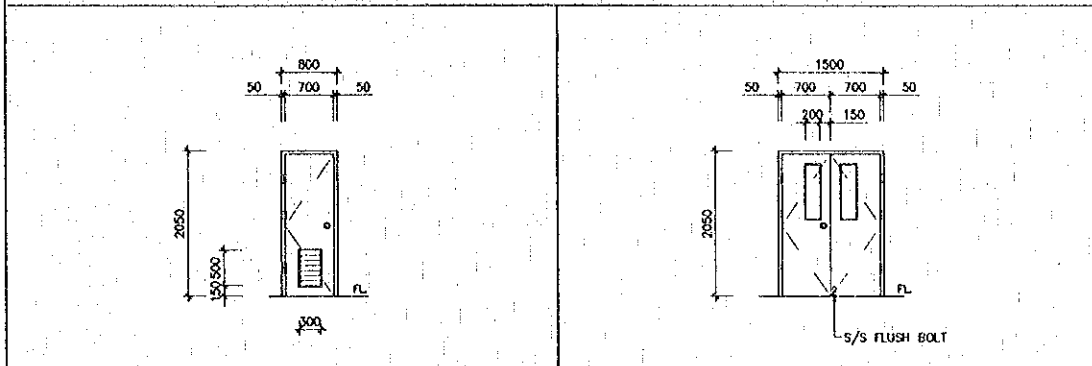
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM		<table border="1" style="width: 100%; font-size: small;"> <tr> <th>QUALITY RECORD</th> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> <tr> <td>DESIGN</td> <td>A. Moroka</td> <td><i>[Signature]</i></td> <td>11/02/00</td> </tr> <tr> <td>DESIGN CHECK</td> <td>T. Moeuzawa</td> <td><i>[Signature]</i></td> <td>11/02/00</td> </tr> <tr> <td>SUBMITTED</td> <td>A. Hiratani</td> <td><i>[Signature]</i></td> <td>11/01/00</td> </tr> <tr> <td>APPROVED</td> <td>S. Tammyabure</td> <td><i>[Signature]</i></td> <td>05/03/00</td> </tr> </table>	QUALITY RECORD	NAME	SIGNATURE	DATE	DESIGN	A. Moroka	<i>[Signature]</i>	11/02/00	DESIGN CHECK	T. Moeuzawa	<i>[Signature]</i>	11/02/00	SUBMITTED	A. Hiratani	<i>[Signature]</i>	11/01/00	APPROVED	S. Tammyabure	<i>[Signature]</i>	05/03/00	DWG. TITLE: <b>BORDER CONTROL FACILITIES</b> THAILAND SIDE MAIN OFFICE : ARRIVAL AND DEPARTURE-DOOR AND WINDOW HARDWARE SCHEDULE
QUALITY RECORD	NAME	SIGNATURE	DATE																								
DESIGN	A. Moroka	<i>[Signature]</i>	11/02/00																								
DESIGN CHECK	T. Moeuzawa	<i>[Signature]</i>	11/02/00																								
SUBMITTED	A. Hiratani	<i>[Signature]</i>	11/01/00																								
APPROVED	S. Tammyabure	<i>[Signature]</i>	05/03/00																								

DOOR SCHEDULE

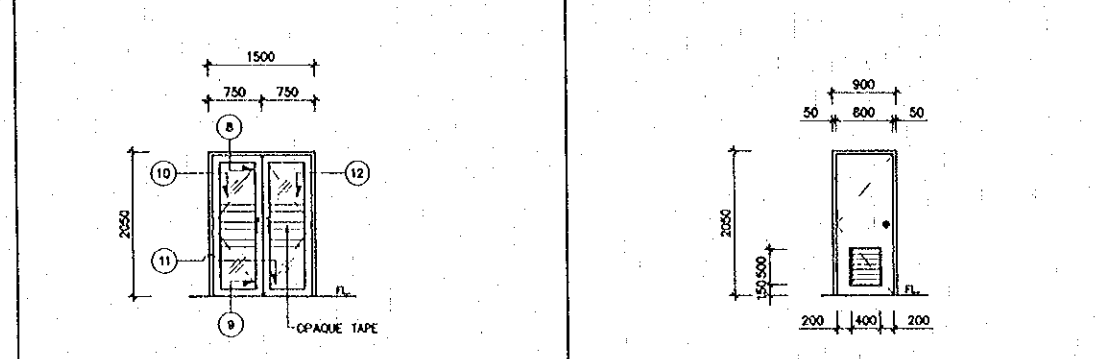


DOOR NO.		01	DOOR NO.		02
MATERIAL	DOOR JAMB	ALUM. JAMB	MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB
	DOOR PANEL			DOOR PANEL	900x2,000x35 mm. TEAK PLY WD.
	LOUVER			LOUVER	
HARDWARE	GLASS PANEL	8 mm THK. COOL GRAY GLASS	GLASS PANEL	4 mm THK. CLEAR GLASS	
	LOCK SET	L4 1 SET	LOCK SET	L1 1 SET	
	HINGES		HINGES	H1 3 SETS	
	DOOR CLOSER		DOOR CLOSER		
	DOOR STOPPER		DOOR STOPPER	B1 1 SET	
	BOLT		BOLT		
	PANIC DEVICE		PANIC DEVICE		
	HANDLE	ALUM. HANDLE 2 SET.	HANDLE		
	ROLLER SET		ROLLER SET		
	SLIDING SET	SL1 1 SET	SLIDING SET		
SWING SET		SWING SET			
OTHERS		OTHERS			

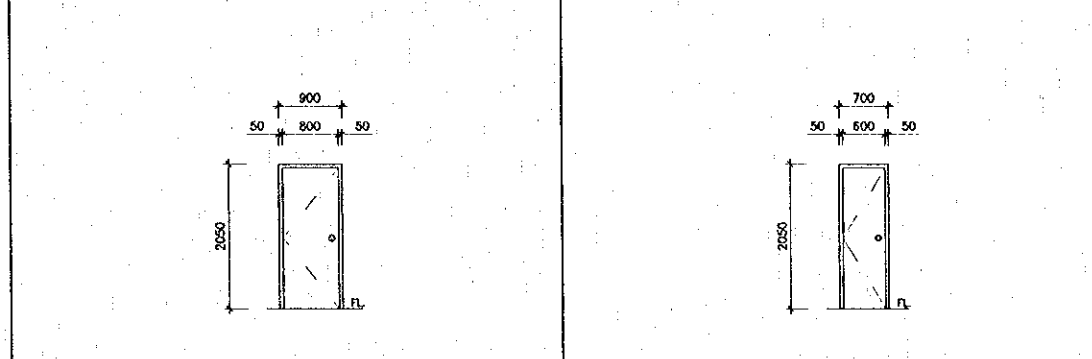
DOOR SCHEDULE



DOOR NO.		03	DOOR NO.		04
MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB	MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB
	DOOR PANEL	700x2,000x35 mm. TEAK PLY WD. (MOISTURE RESISTANCE)		DOOR PANEL	700x2,000x35 mm. TEAK PLY WD.
	LOUVER	TEAK WD. LOUVERS		LOUVER	
HARDWARE	GLASS PANEL		GLASS PANEL	4 mm THK. CLEAR GLASS	
	LOCK SET	L2 1 SET	LOCK SET	L1 1 SET	
	HINGES	H1 3 SETS	HINGES	H1 8 SETS	
	DOOR CLOSER		DOOR CLOSER		
	DOOR STOPPER	B2 1 SET	DOOR STOPPER	B1 2 SET	
	BOLT		BOLT	BT1 2 SETS	
	PANIC DEVICE		PANIC DEVICE		
	HANDLE		HANDLE		
	ROLLER SET		ROLLER SET		
	SLIDING SET		SLIDING SET		
SWING SET		SWING SET			
OTHERS		OTHERS			



DOOR NO.		05	DOOR NO.		06
MATERIAL	DOOR JAMB	ALUM. JAMB	MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB
	DOOR PANEL			DOOR PANEL	800x2,000x35 mm. TEAK PLY WD. (MOISTURE RESISTANCE)
	LOUVER			LOUVER	TEAK WD. LOUVERS.
HARDWARE	GLASS PANEL	8 mm THK. COOL GRAY GLASS	GLASS PANEL		
	LOCK SET	LS 1 SET	LOCK SET	L2 1 SET	
	HINGES		HINGES	H1 3 SETS	
	DOOR CLOSER	CL1 2 SET.	DOOR CLOSER		
	DOOR STOPPER		DOOR STOPPER		
	BOLT	BT1 1 SET	BOLT		
	PANIC DEVICE		PANIC DEVICE		
	HANDLE	ALUM. HANDLE 2 SET	HANDLE		
	ROLLER SET		ROLLER SET		
	SLIDING SET		SLIDING SET		
SWING SET		SWING SET			
OTHERS		OTHERS			



DOOR NO.		07	DOOR NO.		08
MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB	MATERIAL	DOOR JAMB	2"x4" HARD WD. JAMB
	DOOR PANEL	800x2,000x35 mm. TEAK PLY WD.		DOOR PANEL	800x2,000x35 mm. TEAK PLY WD. (MOISTURE RESISTANCE)
	LOUVER			LOUVER	
HARDWARE	GLASS PANEL		GLASS PANEL		
	LOCK SET	L3 1 SET	LOCK SET	L2 1 SET	
	HINGES	H1 3 SETS	HINGES	H1 3 SETS	
	DOOR CLOSER		DOOR CLOSER		
	DOOR STOPPER	B1 1 SETS	DOOR STOPPER		
	BOLT		BOLT		
	PANIC DEVICE		PANIC DEVICE		
	HANDLE		HANDLE		
	ROLLER SET		ROLLER SET		
	SLIDING SET		SLIDING SET		
SWING SET		SWING SET			
OTHERS		OTHERS			

- LEGENDS  
 (1) - (24) = TYPICAL DETAILS (1)  
 (25) - (34) = TYPICAL DETAILS (2)  
 (35) - (45) = TYPICAL DETAILS (3)  
 (46) - (47) = TYPICAL DETAILS (2)

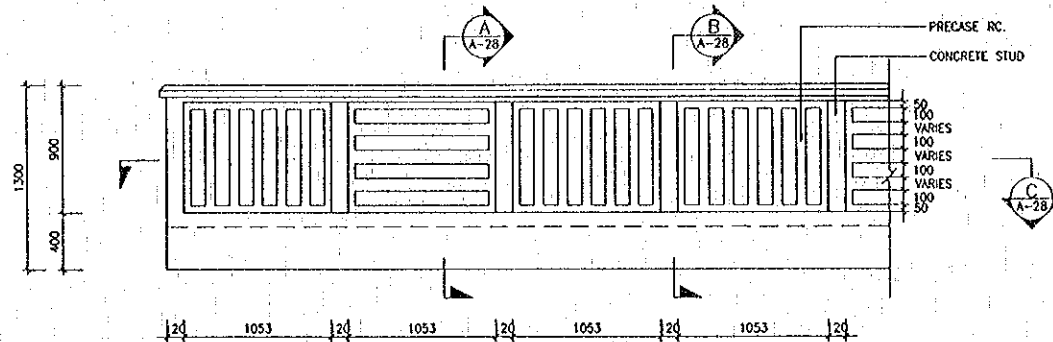
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REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	05-02-00	BORDER CONTROL FACILITIES THAILAND SIDE
						DESIGN CHECK	T. Morimoto	<i>[Signature]</i>	05-02-00	MIAN OFFICE : ARRIVAL AND DEPARTURE-DOOR DETAILS
						SUBMITTED	A. Hirakani	<i>[Signature]</i>	05-02-00	
						APPROVED	S. Tanayabutra	<i>[Signature]</i>	05-02-00	

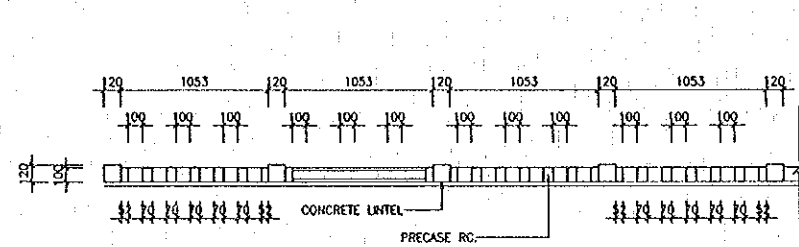




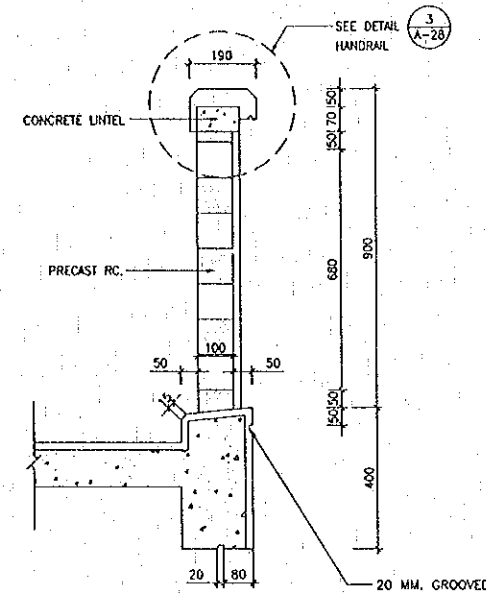
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05/03/2000	
DWG. NO.	SHEET NO.
F-A-28	140
DWG. STATUS	



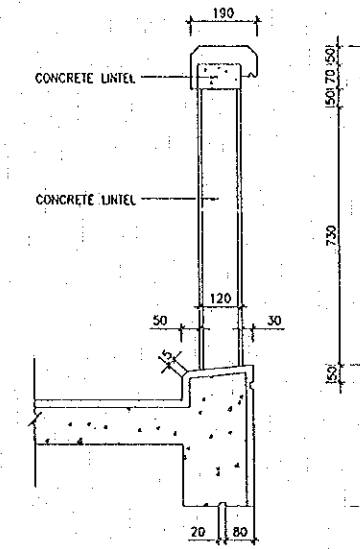
DETAIL 1  
SCALE 1:25



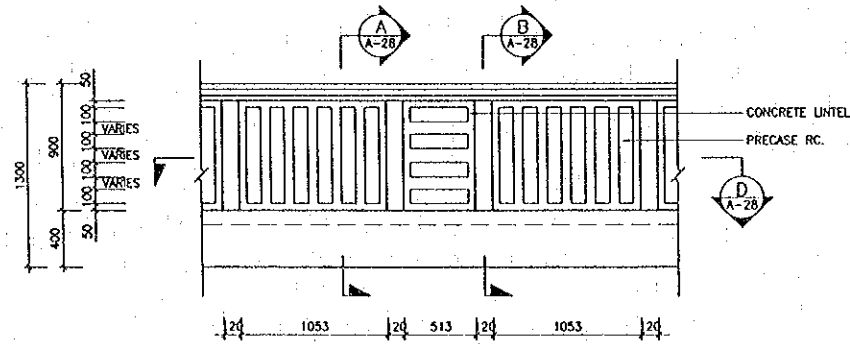
SECTION C  
SCALE 1:25



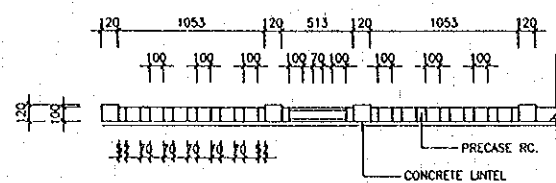
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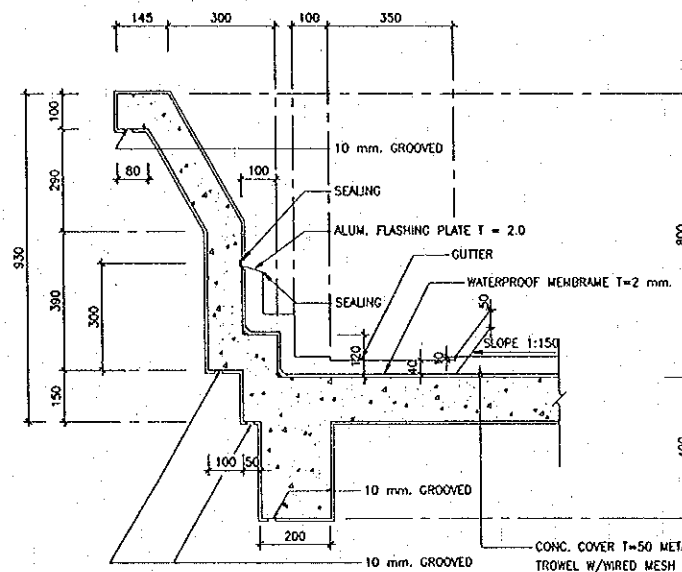
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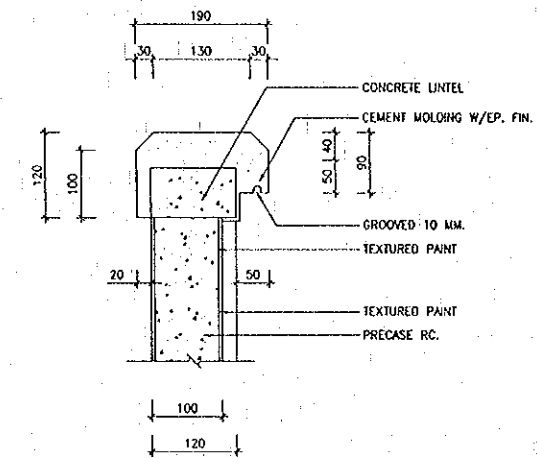
DETAIL 2  
SCALE 1:25



SECTION D  
SCALE 1:25



PARAPET DETAILS  
SCALE 1:10



HANDRAIL  
DETAIL 3  
SCALE 1:5

REV.	DATE	DESCRIPTION	APPROVED

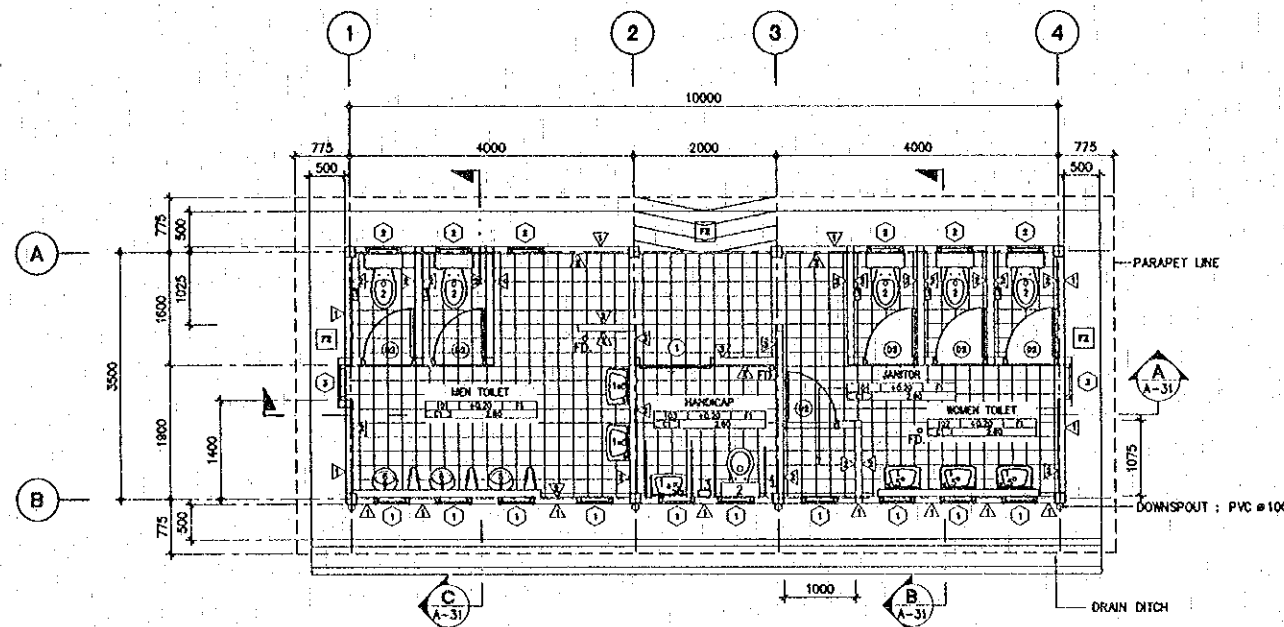
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

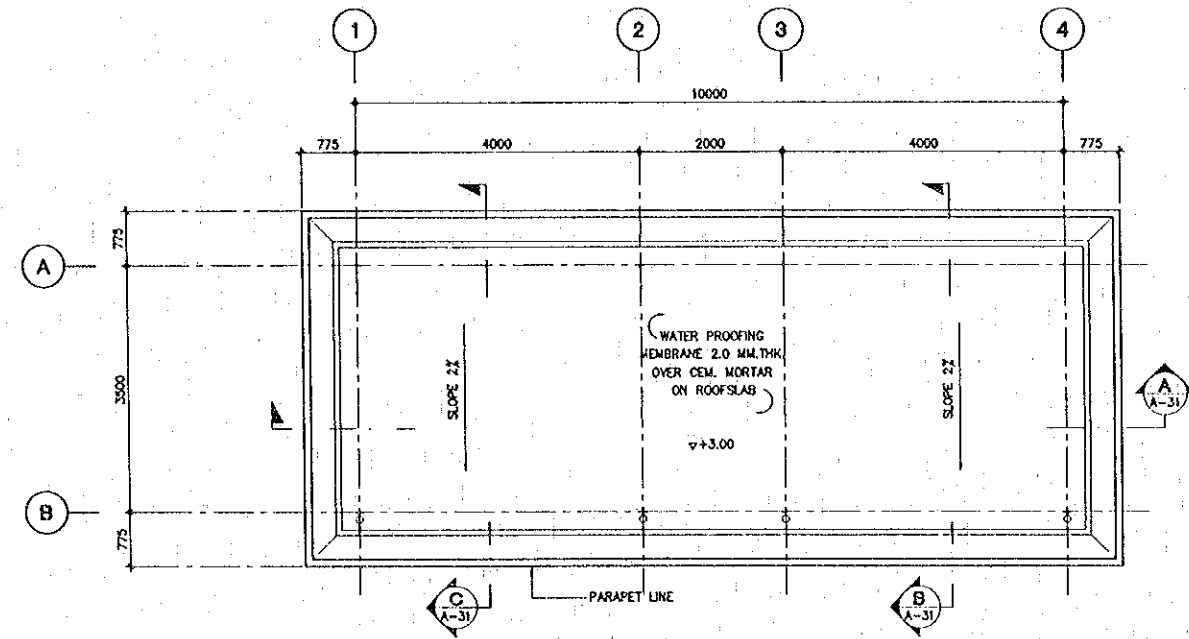
**THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morioka	<i>[Signature]</i>	21/03/00
DESIGN CHECK	F. Masuzawa	<i>[Signature]</i>	21/03/00
SUBMITTED	A. Kitatani	<i>[Signature]</i>	21/03/00
APPROVED	S. Temyobutra	<i>[Signature]</i>	2/06/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 MAIN OFFICE : ARRIVAL AND DEPARTURE-CANOPY  
 AND HANDRAIL DETAILS**



GROUND FLOOR PLAN  
 SCALE 1:50



ROOF PLAN  
 SCALE 1:50

NO.	MARK	WALL FINISHING/FLOOR FINISHING		NOTE
		MATERIAL	FINISHING	
101,102,103,104	WALL (A)	HOLLOW BLOCK	PLASTER & PAINT	
	WALL (B)	TILE 200x200 mm.		
	WALL (C)	WASHED GRAVEL		
	WALL (D)	CERAMIC TILE		
	CEILING (E)	9 mm. THK. GYPSUM B. (MOISTURE RESISTANT) OR T-BAR (600x1200) W/EMULSION PAINT		
	FLOOR (F)	TILE 200x200 mm.		
FLOOR (G)	CEM. PLAST. W/GROOVE			

- NOTES :
- TILE SHALL BE CAMPAHA (44039) VENICE TYPE OR APPROVED EQUAL
  - CEILING SHALL BE ELEPHANT BRAND "MOISTURE-RESISTANT TYPE" OR APPROVED EQUAL

MARK	TOILET EQUIPMENT SCHEDULE
1 LAVATORY	L-1530.5 GENEVA wallung washbasin
2 WATER CLOSET	L-2126.0-700 OBJECT. two pieces DUAL FLUSH
3 PAPER HOLDER	L-7261.0 UNIVERSAL Paper Holder (Small)
4 SPRAY WASHER	CT 686
5 MIRROR	"THIN ASAH" ALUMINIUM FRAME
6 URINAL	L-4005.0

- NOTES :
- ALL BRAND NAME SHOWN ON THE DRAWINGS SHALL BE TENTATIVE ONLY, OF WHICH FINAL SHALL BE SUBJECT TO THE ENGINEERS APPROVAL
  - ALL TOILET FIXTURE SHALL BE LAUFEN OR APPROVED EQUAL
  - ALL TOILET EQUIPMENT AND ACCESSORIES BE COTTO OR APPROVED EQUAL

REV.	DATE	DESCRIPTION	APPROVED

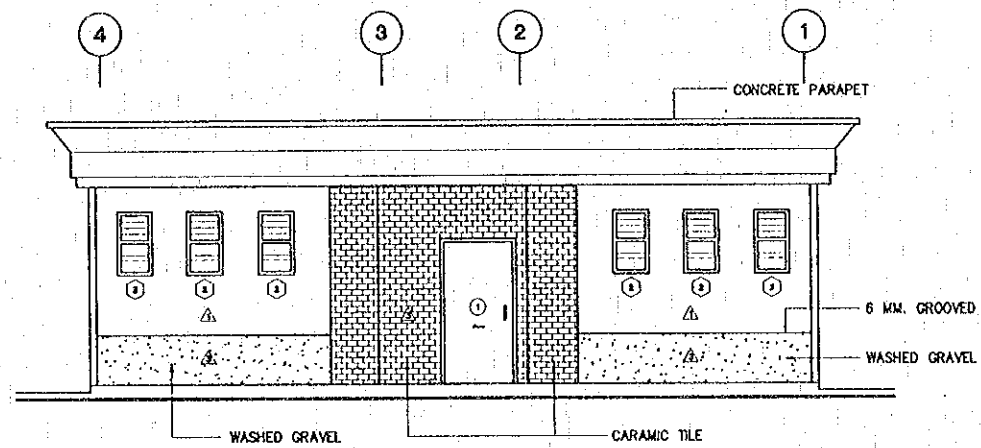
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

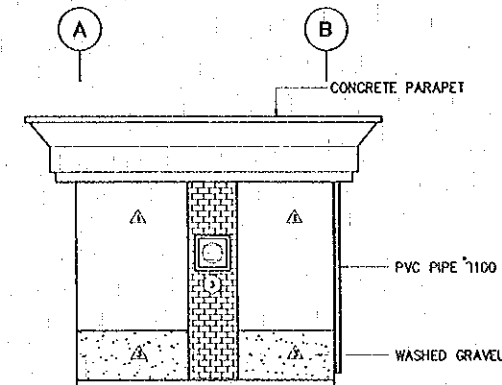
THE SECOND MEXONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	A. Morikawa	<i>A. Morikawa</i>	14-02-00	BORDER CONTROL FACILITIES THAILAND SIDE PUBLIC TOILET : PLAN, FINISH & EQUIPMENT
DESIGN CHECK	T. Mochizawa	<i>T. Mochizawa</i>	18-02-00	
SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	21/02/00	
APPROVED	S. Tanjyabutra	<i>S. Tanjyabutra</i>	22/02/00	

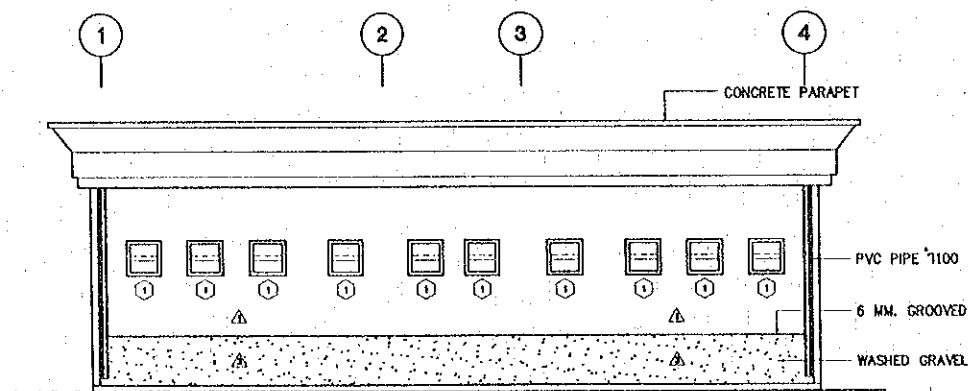
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 PUBLIC TOILET : PLAN, FINISH & EQUIPMENT



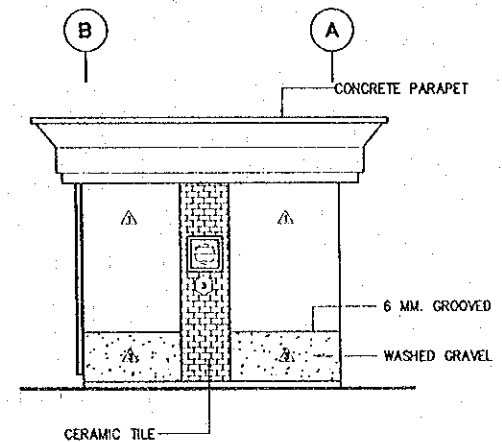
**ELEVATION 1**  
SCALE 1:50



**ELEVATION 2**  
SCALE 1:50



**ELEVATION 3**  
SCALE 1:50



**ELEVATION 4**  
SCALE 1:50

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REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

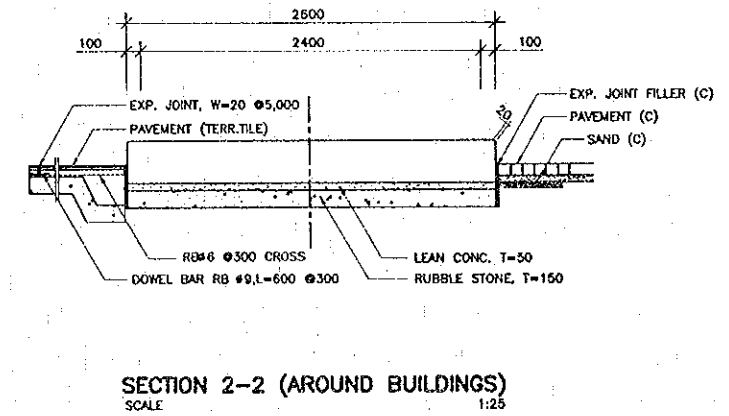
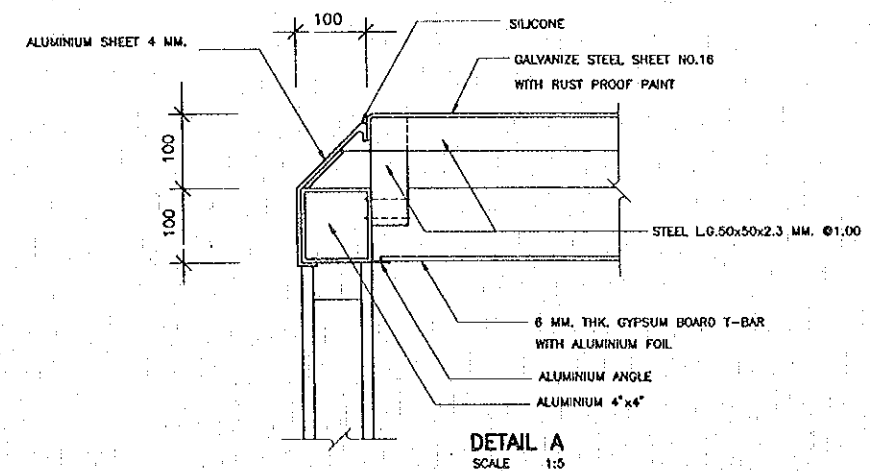
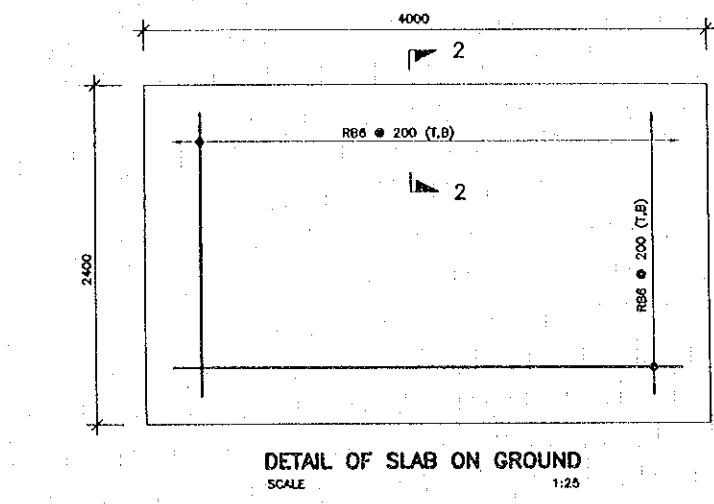
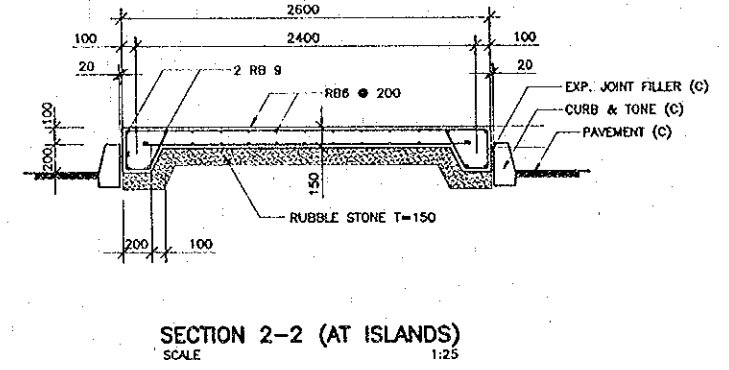
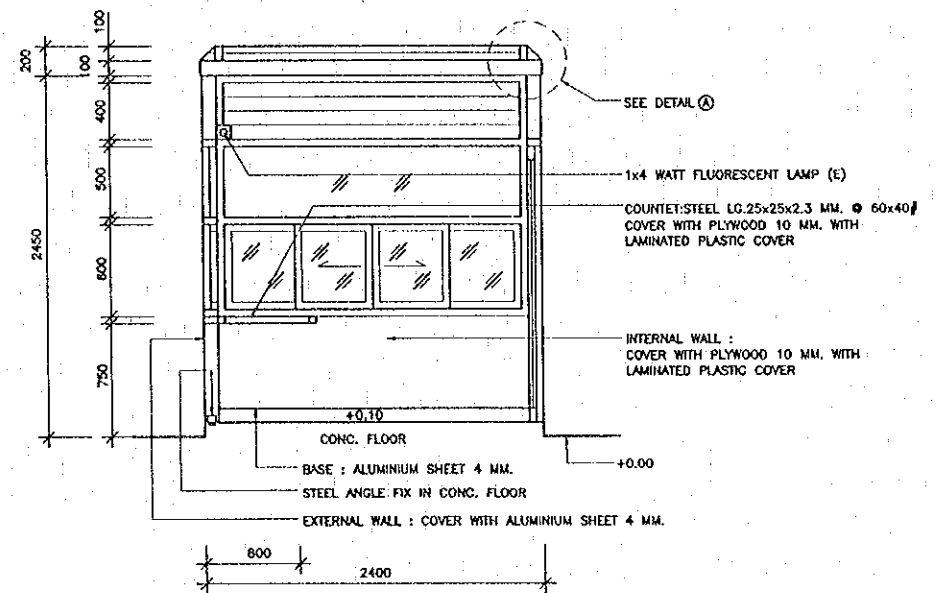
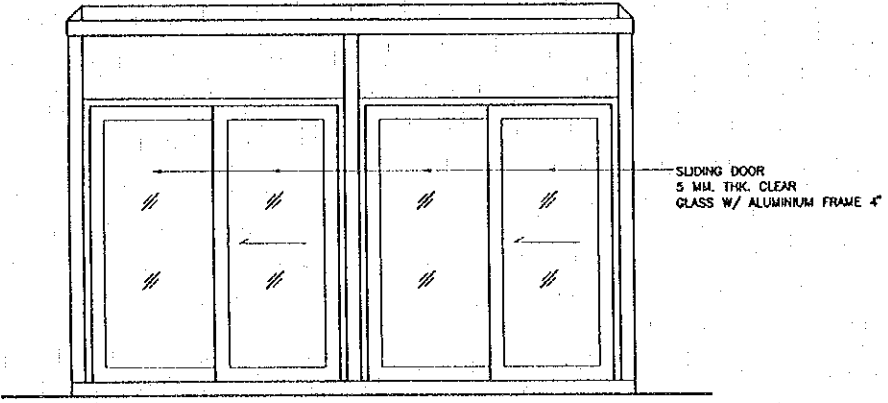
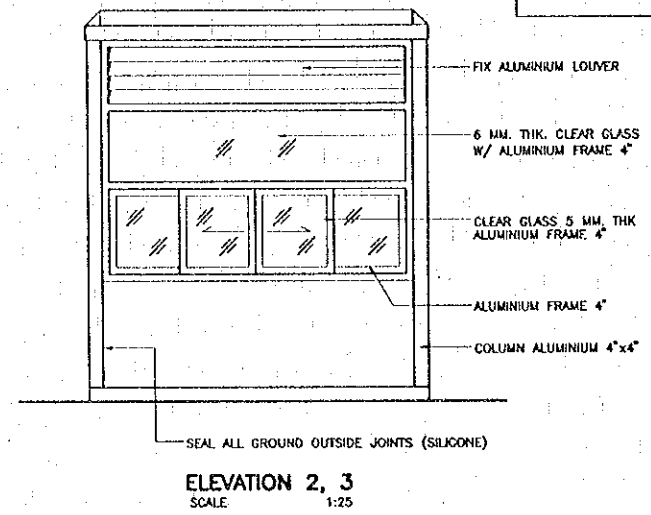
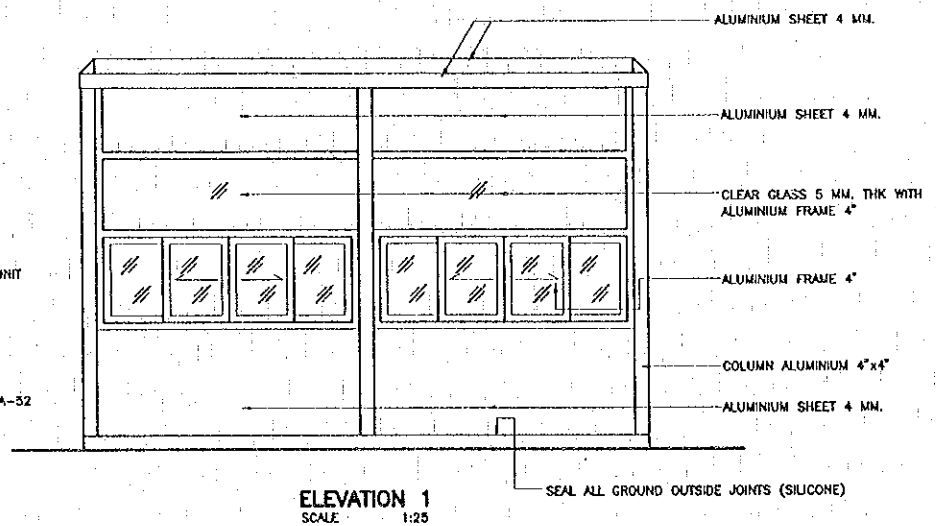
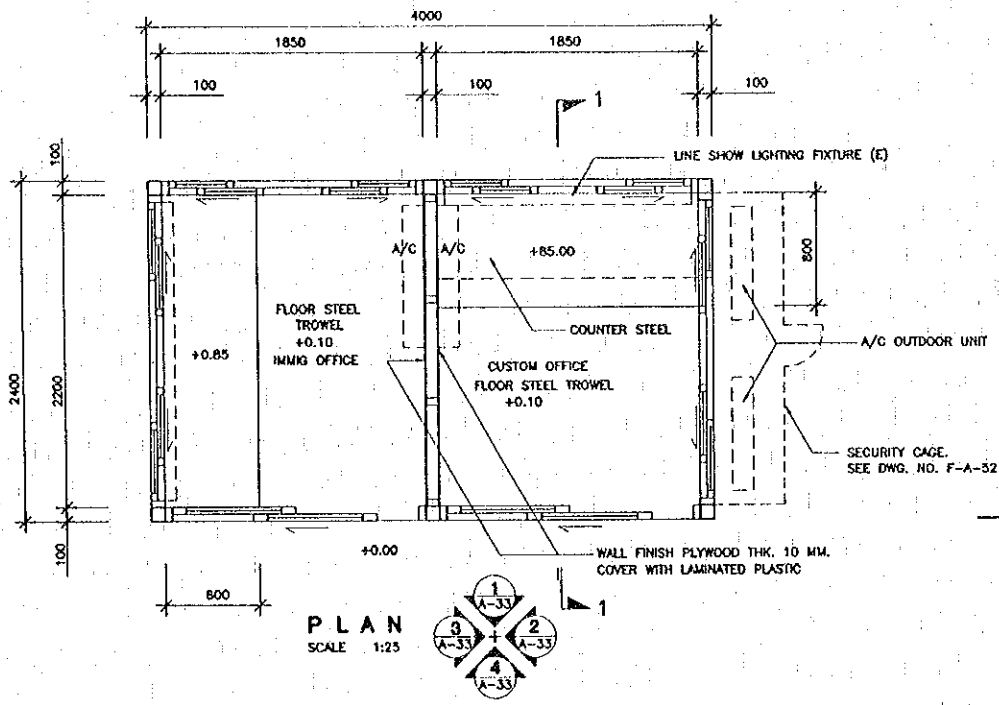
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Mokuizawa	<i>[Signature]</i>	17/02/00
SUBMITTED	A. Hirataki	<i>[Signature]</i>	21/02/00
APPROVED	S. Tanjibudra	<i>[Signature]</i>	23/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
 PUBLIC TOILET : ELEVATION 1, 2, 3 AND 4







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REV.	DATE	DESCRIPTION	APPROVED

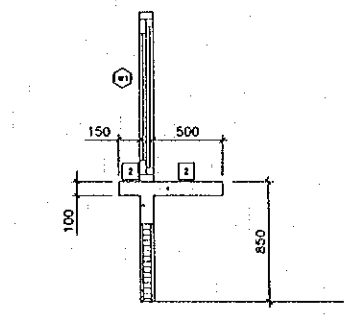
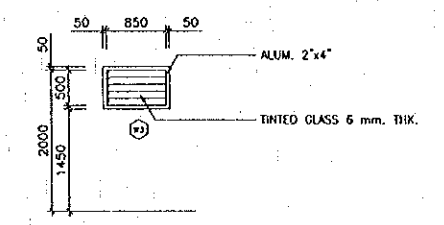
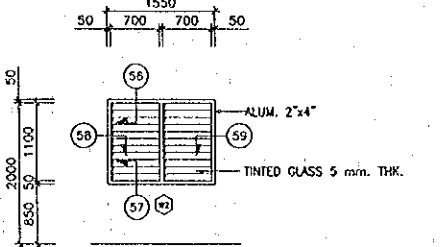
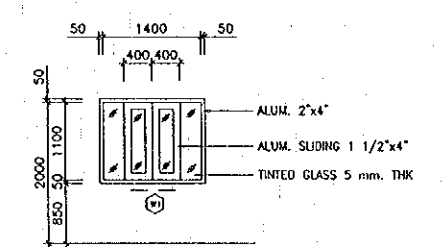
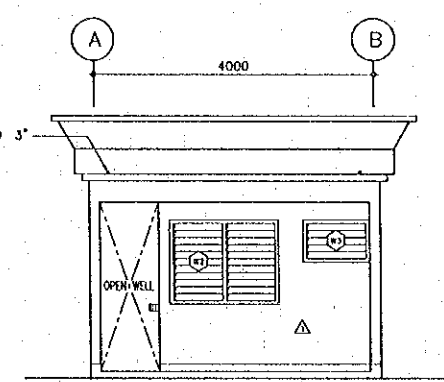
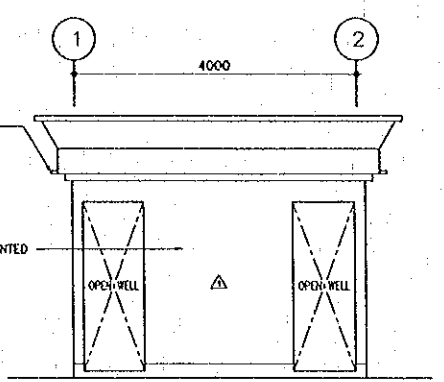
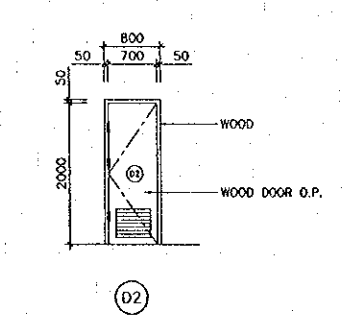
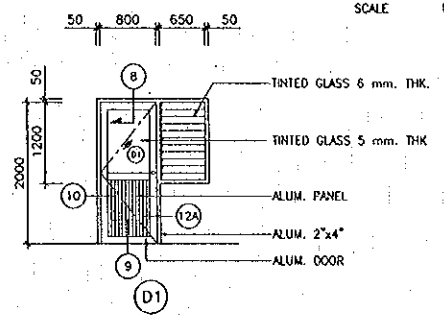
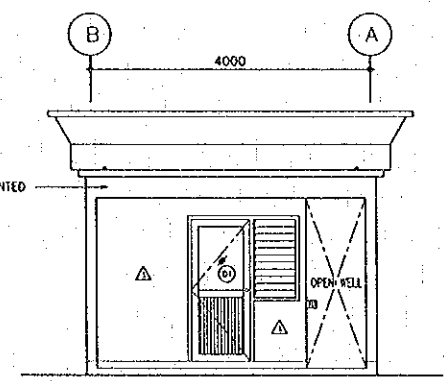
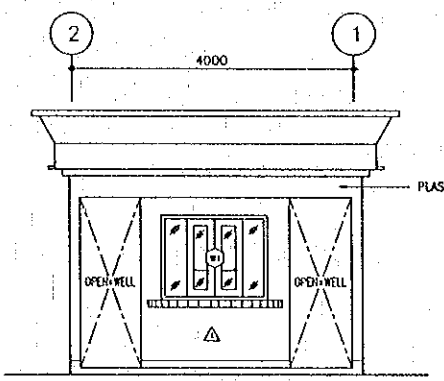
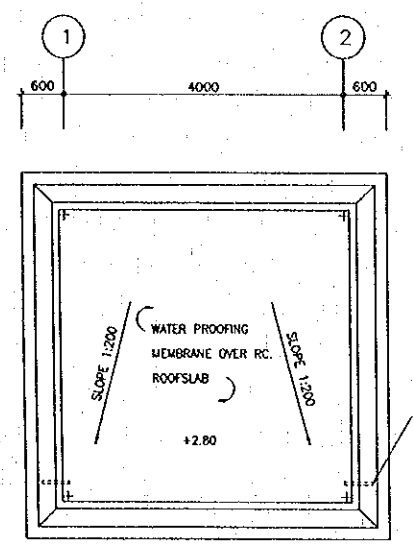
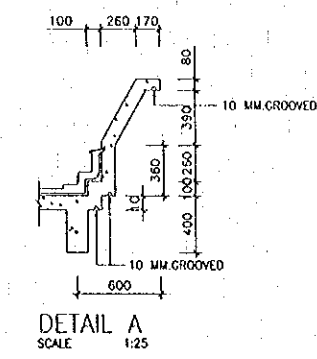
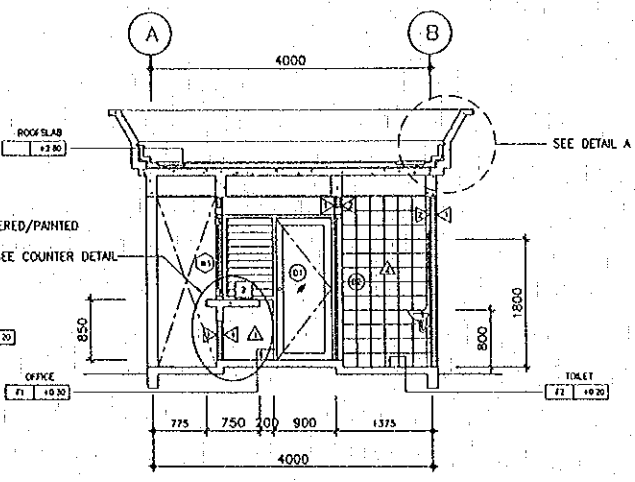
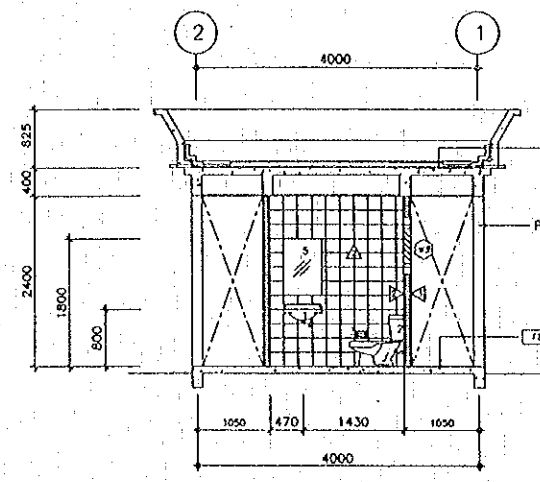
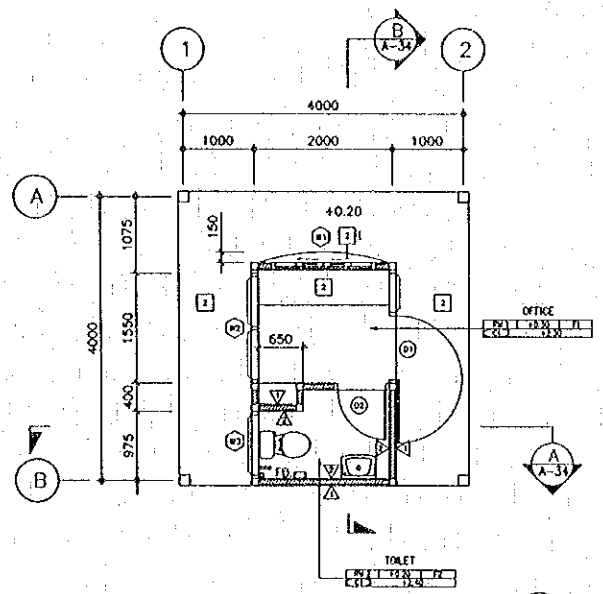
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Moricha	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE BOOTH (IMMIGRATION & QUARANTINE) : PLAN, ELEVATION, SECTION AND DETAILS
DESIGN CHECK	T. Nansuaree	<i>[Signature]</i>	18/02/00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00	
APPROVED	S. Tanayabutra	<i>[Signature]</i>	22/02/00	

BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 BOOTH (IMMIGRATION & QUARANTINE) :  
 PLAN, ELEVATION, SECTION AND DETAILS



NO.	ROOM NAME	MARK	WALL FINISHING/FLOOR FINISHING		NOTE
			MATERIAL	FINISHING	
RM.1	OFFICE	WALL Δ	HOLLOW BLOCK	PLASTER & PAINT	
		CEILING ⓐ	9 mm. THK. GYPSUM B. (MOISTURE RESISTANT) ON T-BAR (600x1200) W/EMULSION PAINT		
		FLOOR ⓑ	CONCRETE STEEL TROWEL		
RM.2	TOILET	WALL Δ	HOLLOW BLOCK	TILE 200x200 mm. (CAMPANA)	
		CEILING ⓐ	9 mm. THK. GYPSUM B. (MOISTURE RESISTANT) ON T-BAR (600x1200) W/EMULSION PAINT		
		FLOOR ⓑ	TILE 200x200 mm.		

NOTES:  
 1. TILE SHALL BE CAMPANA (44039) VENICE TYPE OR EQUIVALENT APPROVED  
 2. CEILING SHALL BE ELEPHANT BRAND "MOISTURE-RESISTANT TYPE" OR EQUIVALENT APPROVED

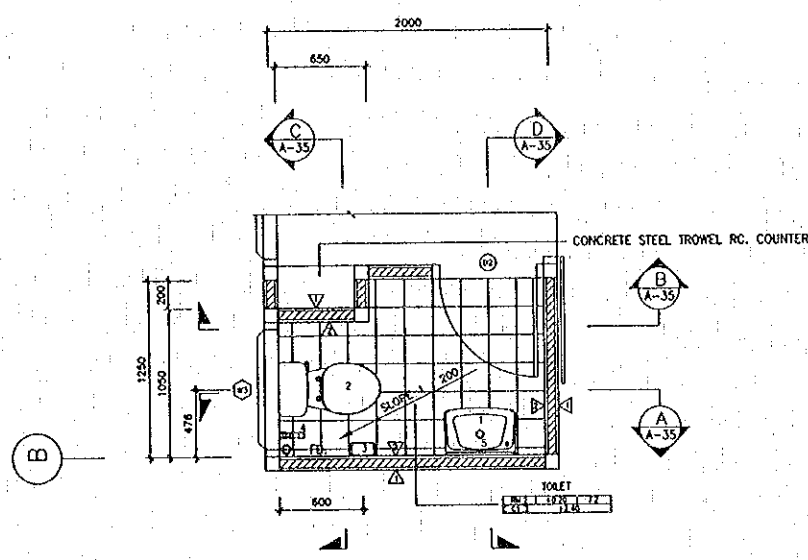
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

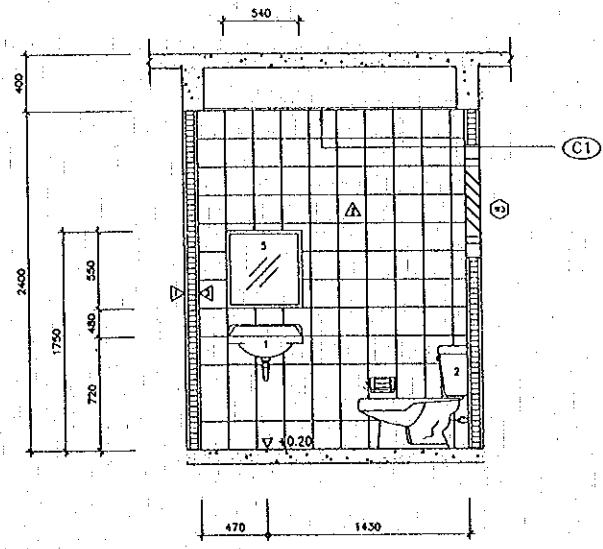
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
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 KINGDOM OF THAILAND  
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 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

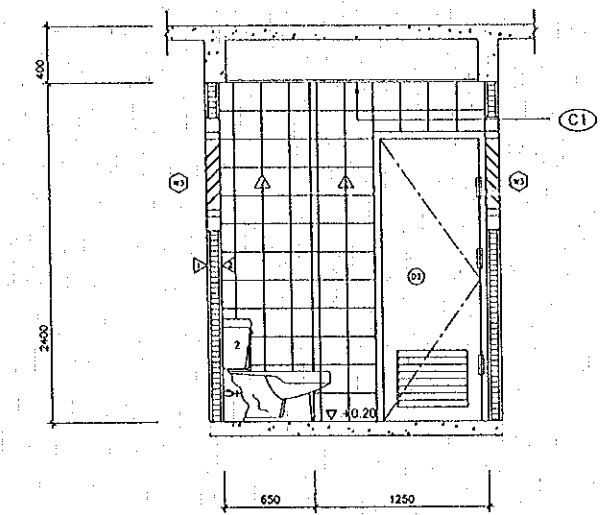
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morisako	<i>[Signature]</i>	28/11/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECKING OFFICES : 1 <sup>ST</sup> , ROOF FLOOR PLAN, ELEVATION & SECTION, FINISHING
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	28/11/00	
SUBMITTED	A. Kratonk	<i>[Signature]</i>	2/05/00	
APPROVED	S. Temyobutra	<i>[Signature]</i>	2/05/00	



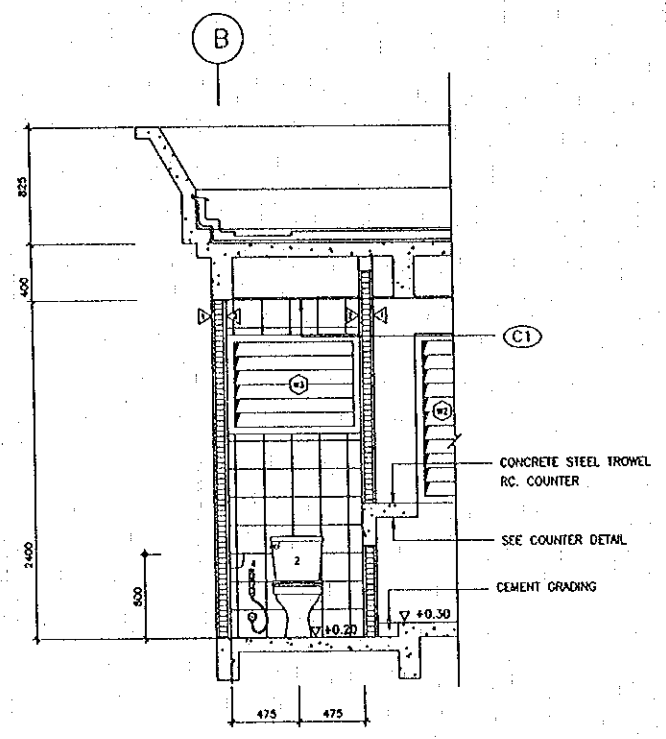
TOILET DETAILS  
SCALE 1:25



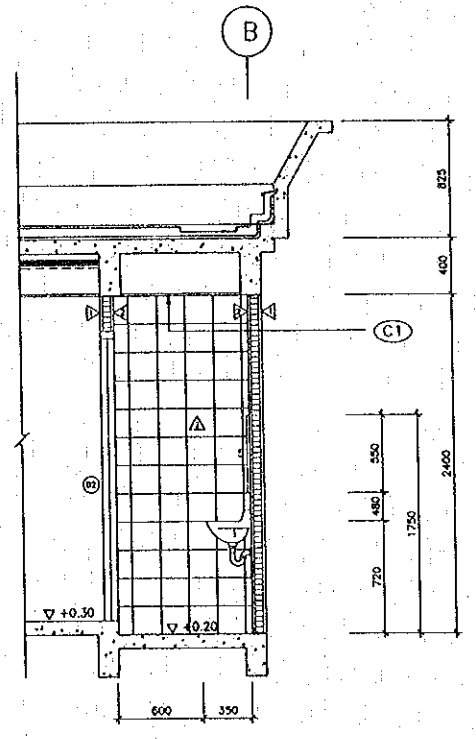
SECTION A  
SCALE 1:25



SECTION B  
SCALE 1:25



SECTION C  
SCALE 1:25



SECTION D  
SCALE 1:25

MARK	TOILET EQUIPMENT SCHEDULE
1 LAVATORY	L-1530.5 GENEVA WALLNUNG WASHBASIN
2 WATER CLOSET	L-2126.0-700 OBJECT. TWO PIECES DUAL FLUSH
3 PAPER HOLDER	L-7261.0 UNIVERSAL PAPER HOLDER (SMALL)
4 SPRAY WASHER	CT 666
5 MIRROR	"THAI ASAHI" ALUMINIUM FRAME

NOTES :

- 1) ALL TOILET FIXTURE SHALL BE LAUFEN
- 2) ALL TOILET EQUIPMENT AND ACCESSORIES SHALL BE COTTO OR APPROVED EQUAL

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

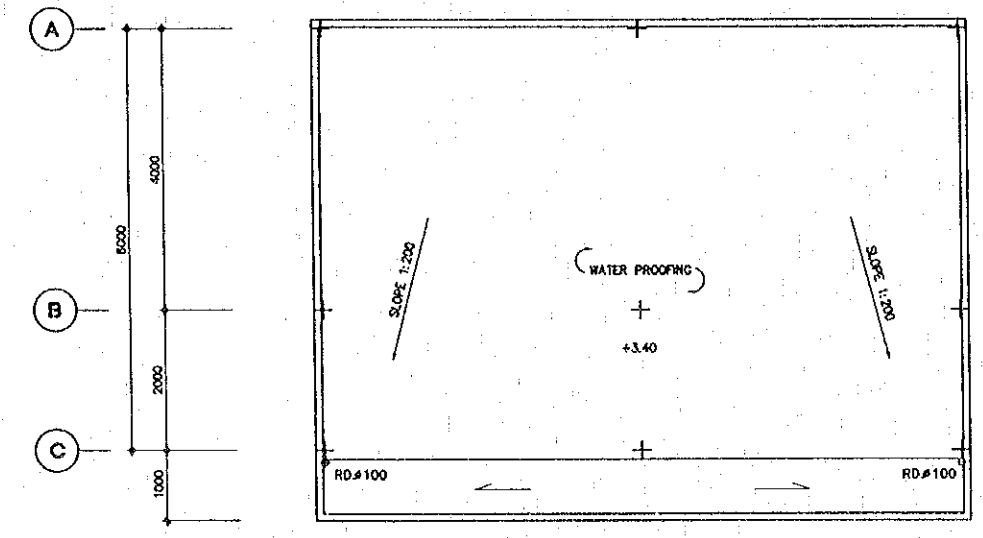
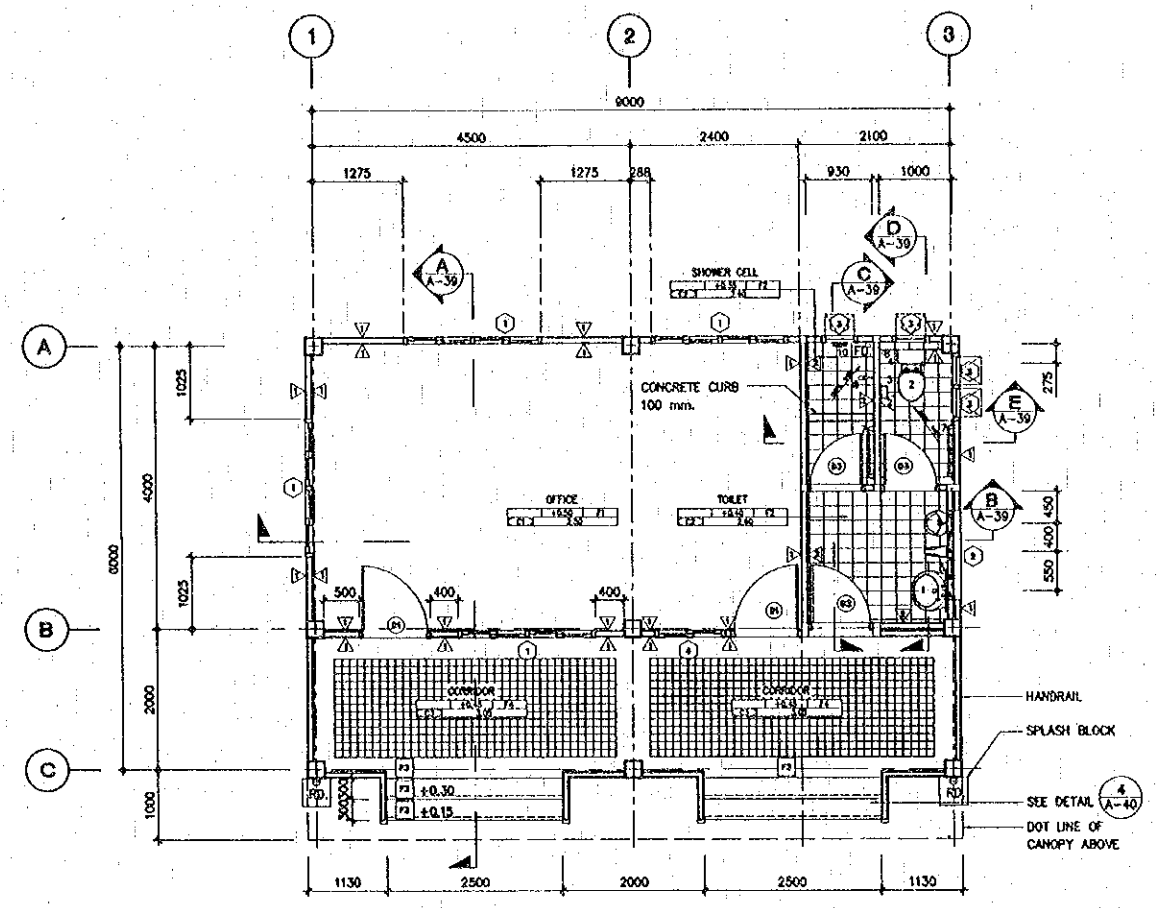
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	23-01-00	BORDER CONTROL FACILITIES THAILAND SIDE CHECKING OFFICE : TOILET DETAILS AND TOILET EQUIPMENT SCHEDULE
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	23-01-00	
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	27-01-00	
APPROVED	S. Tomyabutra	<i>[Signature]</i>	27-01-00	







LIST OF MATERIALS

- 1 FLOOR
  - 1.1 VINYL TILE "FUTURE DESIGN "SAND" TYPE" 300 x 300 x 2.0 mm. DYNOFLEX
  - 1.2 VINYL SKIRTING 1.6 x 100 mm. DYNOFLEX
  - 1.3 TILES
    - 1.3.1 CERAMIC TILE 44021 TABAC 200 x 200 x 5 CAMPANA
    - 1.4 STAIRNOSE BRASS STAIR NOSE W/ PVC STRIP
- 2 WALL
  - 2.1 PAINTING
    - 2.1.1 EXTERIOR - ACRYLIC EMULSION "JOTHAN , PARMASTIC"
    - 2.1.2 INTERIOR - ACRYLIC EMULSION "JOTHAN , PARMASTIC"
    - 2.1.3 WOOD DOOR VANISH "JOTHAN , PARMASTIC"
    - 2.1.4 WOOD DOOR JAMB VANISH "JOTHAN , PARMASTIC"
    - 2.1.5 GYPSUM CEILING - EMULSION "JOTHAN , PARMASTIC"
    - 2.1.6 PARAPET - TEXTURE PAINT "JOTHAN , PARMASTIC"
  - 2.2 DOOR & WINDOW FRAME ALUMINIUM ANODOK FINISH ASIA ALUMINIUM
  - 2.3 GLAZING COOLGREY DEL6 5 mm. THK. THAI ASANI
  - 2.4 WOOD DOOR JAMB 2" x 4" HARD WOOD ( TENG WOOD ) FOR GENERAL DOOR AND 2" x 5" HARD WOOD ( TENG WOOD ) FOR TOILET DOOR
  - 2.5 WOOD DOOR 3.5 mm. THK. PLY WOOD DOOR THAI BANGNA
  - 2.6 TILES
    - 2.6.1 CERAMIC TILE 44021 TABAC 200 x 200 x 5 CAMPANA
- 3 CEILING
  - 3.1 CEILING BOARD
    - 3.1.1 GYPSUM BD. ( MOISTURE RESISTANCE TYPE ) 600 X 600 X 9 mm. ELEPHANT
    - 3.1.2 ACOUSTIC BOARD : ST-721 FISSURED 600 x 1200 x 15 mm. SQUARE EDGE TYPE HITTOBO
    - 3.1.3 THERMAL INSULATION : FIBERGLASS INSULATION 50mm. THK. DENSITY 48 kg/m MICRO FIBER
- 4 MISCELLANEOUS
  - 4.1 WATER PROOFING : POLYVINYL CHLORIDE WATER PROOFING RUBBER MEMBRANE 2.0 mm. THK. YONG THAI RUBBER
  - 4.4 SANITARY WARES & TOILET ACCESSORIES COTTO

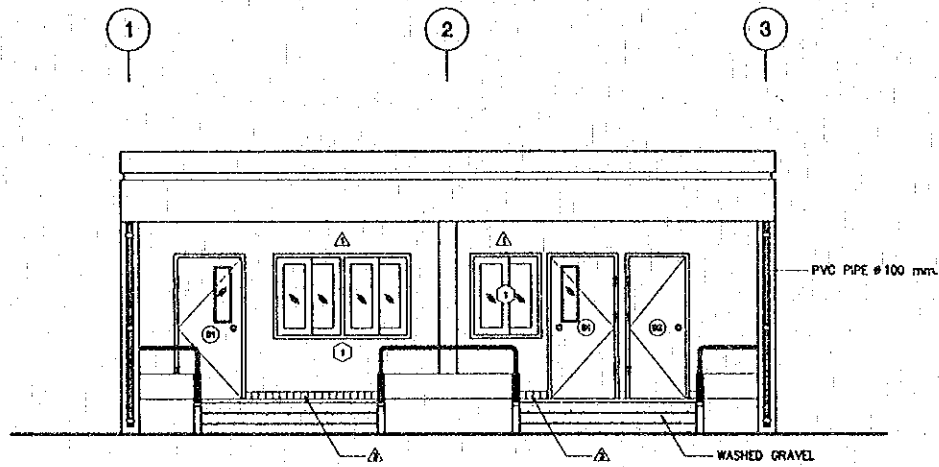
FINISHING SCHEDULE

MARK	DESCRIPTION	SIZE	BRAND	REMARK
1	VINYL TILE	300 x 300 x 2	DYNOFLEX	
2	CERAMIC TILE	200 x 200 x 5	CAMPANA	
3	WASHED GRAVEL			
4	GRANITE TILE	100 x 100 x 5	KENZAI	
5	T-BAR ACOUSTIC CEILING BOARD	600x1200x15 mm.	NITTOBO	
6	T-BAR GYPSUM BOARD. (MOISTURE RESISTANCE TYPE)	600x600x9 mm.	ELPHANT	
7	CEMENT PLASTER W/PAINT			
8	PLASTER W/PAINT			
9	CERAMIC TILE	200 x 200	CAMPANA	
10	GRANITE TILE	100 x 100	KENZAI	

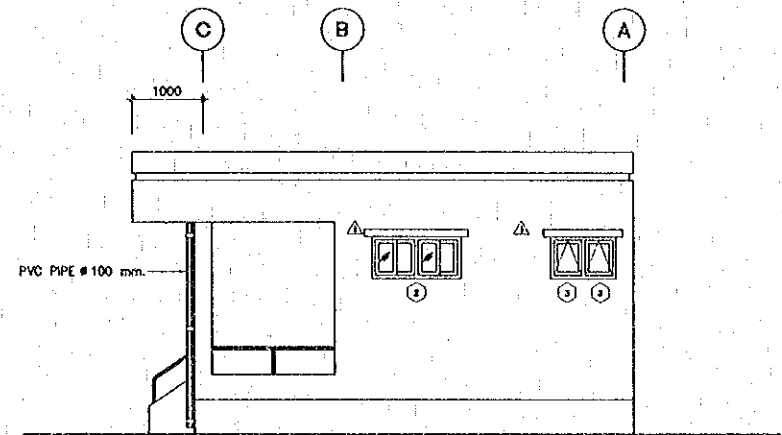
NOTES :  
 1. ALL BRAND NAME SHOWN ON THE DRAWING SHALL BE TENTATIVE ONLY, OF WHICH FINAL SHALL BE DETERMINED BY THE ENGINEER  
 2. ALL THE REQUIREMENTS STATED IN THIS SPECIFICATIONS SHALL BE SUBJECT TO THE ENGINEERS APPROVAL.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECK & TOOL EFF OFFICE (1) : PLAN, ROOF PLAN, MATERIALS AND FINISH SCHEDULE
						DESIGN CHECK	T. Mookdara	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hirozumi	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Tanjyabutra	<i>[Signature]</i>	22/02/00	

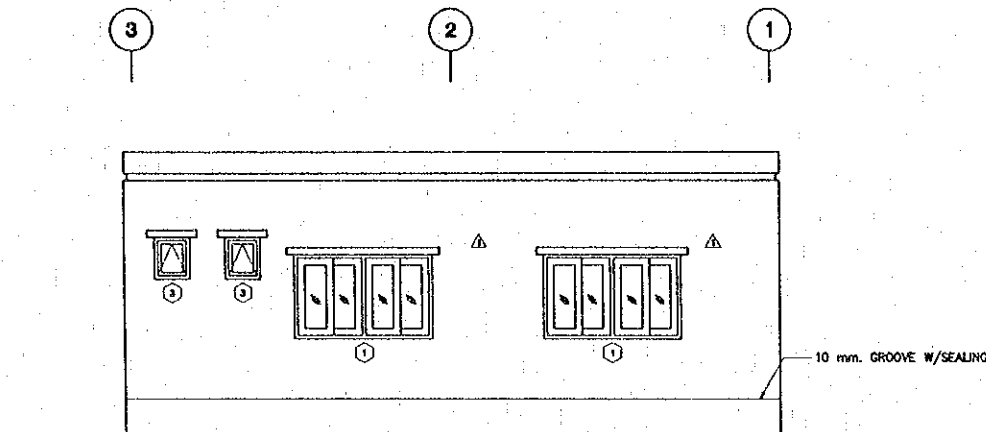
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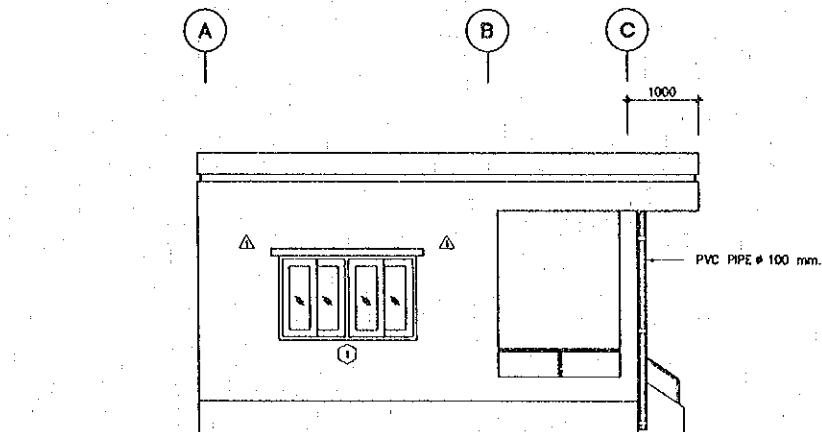
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ELEVATION 3  
SCALE 1:50



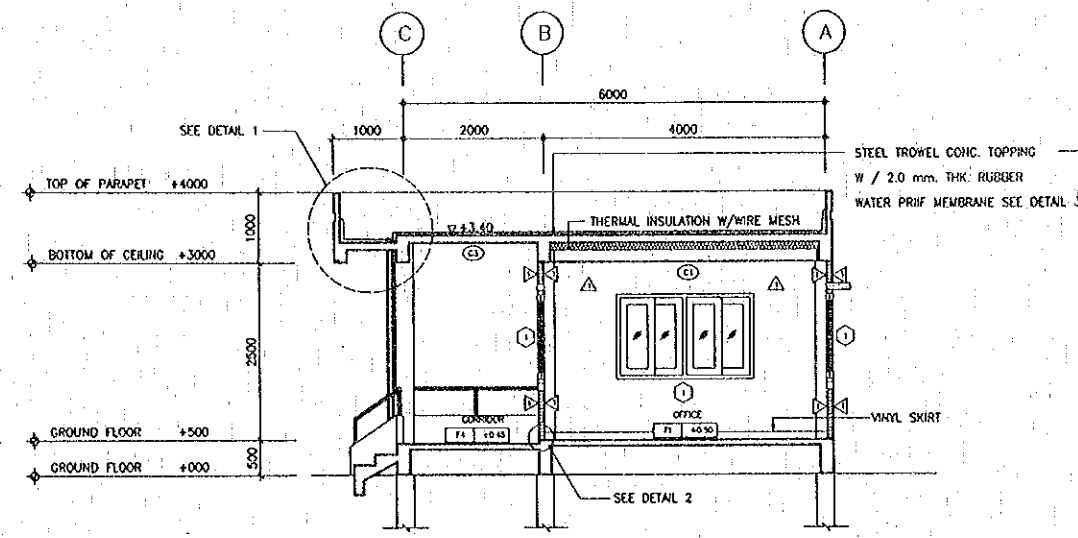
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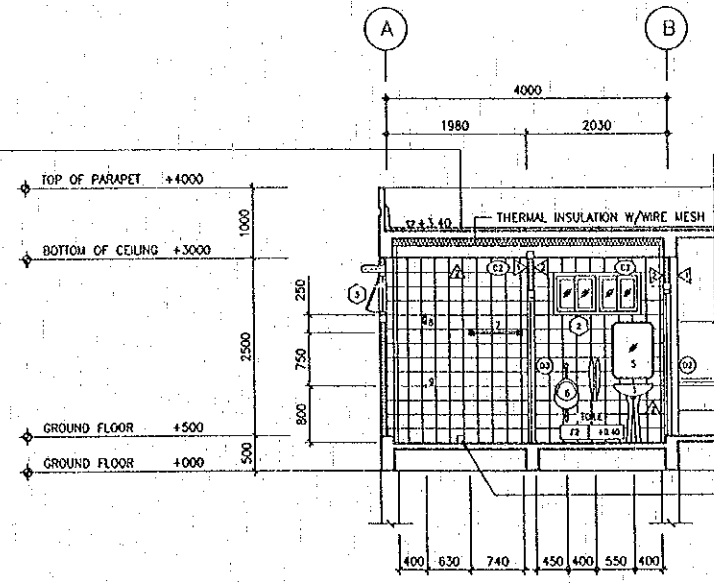
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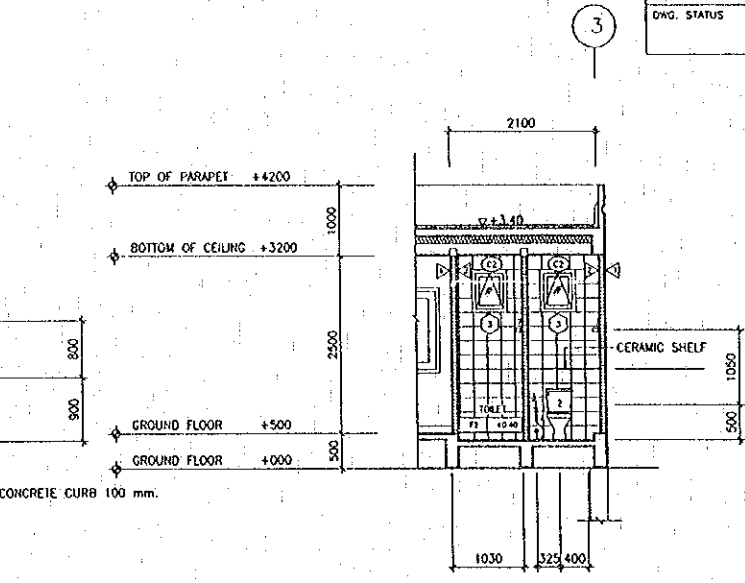
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOZI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECK & TOLL FEE OFFICE (2) : ELEVATION 1, 2, 3 AND 4
					KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Moruzono	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hiratani	<i>[Signature]</i>	18/02/00	
						APPROVED	S. Tanyasubtra	<i>[Signature]</i>	27/02/00	



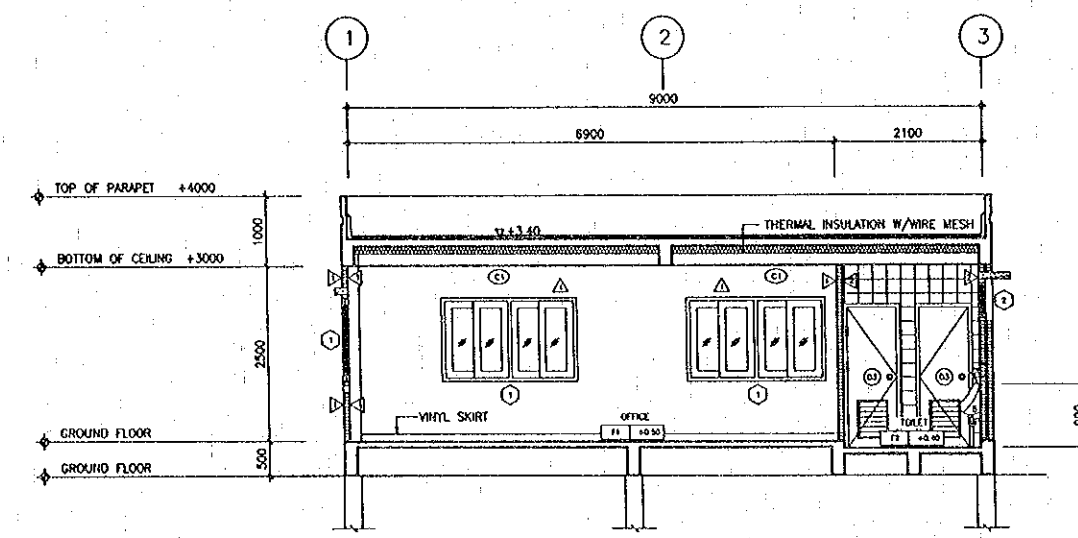
SECTION A  
SCALE 1:50



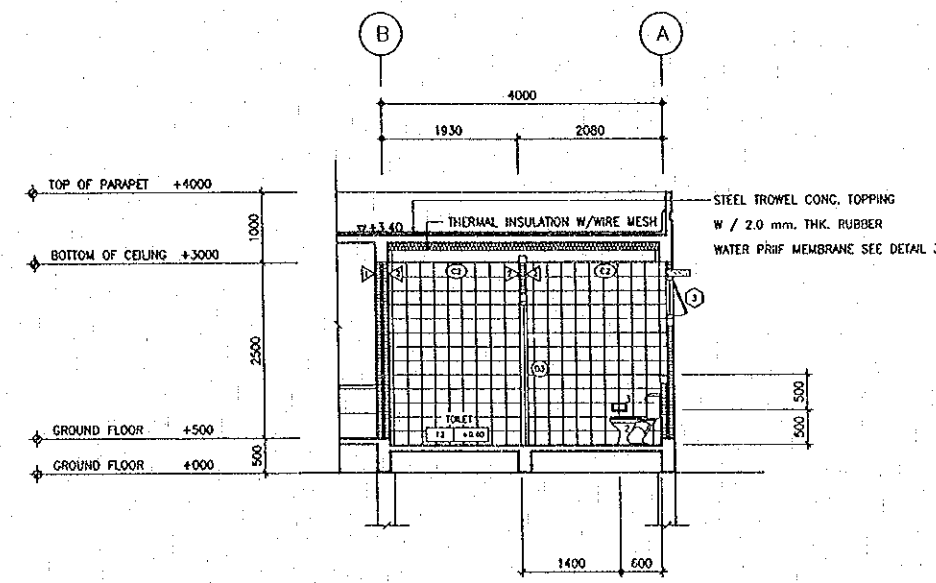
SECTION C  
SCALE 1:50



SECTION E  
SCALE 1:50

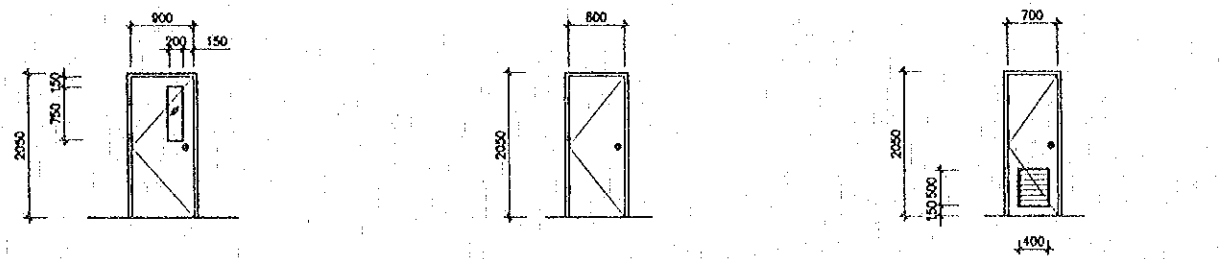


SECTION B  
SCALE 1:50



SECTION D  
SCALE 1:50

SANITARY WARES & ACCESSORIES SCHEDULE			
NO.	LIST	DESCRIPTION	REMARK
1	LAVATORY	COTTO C 012 KENSINGTON 22/PEDESTAL	
2	TOILET	COTTO C 186 TARYA	
3	TISSUE HOLDER	COTTO C 819	
4	SPRAY WASHER	COTTO CT 656	
5	MIRROR	COTTO CLASSIC MIRROR MC103 MOHA SIZE 600 x 800 mm.	
6	URINALS	COTTO C 307 VENUS COTTO C 306 DIVISION	
7	TOWEL BAR	COTTO C 812	
8	SHOWER	TOTO TS 601	
9	FAUCET	COTTO CT 190 STOP VALE	
10	SOAP HOLDER	COTTO C 805	

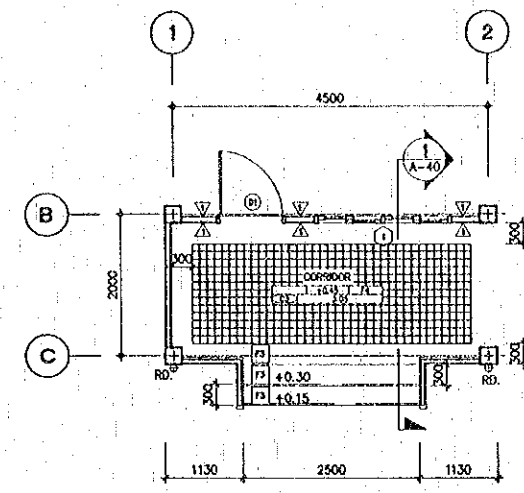


DOOR NO.	D1
DOOR JAMB	2"x4" HARD WD. JAMB
DOOR PANEL	800x2,000x35 mm. TEAK PLY WD.
GLASS PANEL	4 mm THK. CLEAR GLASS
LOCK SET	L1 1 SET
HINGES	H1 3 SET
DOOR STOPPER	B1 1 SET

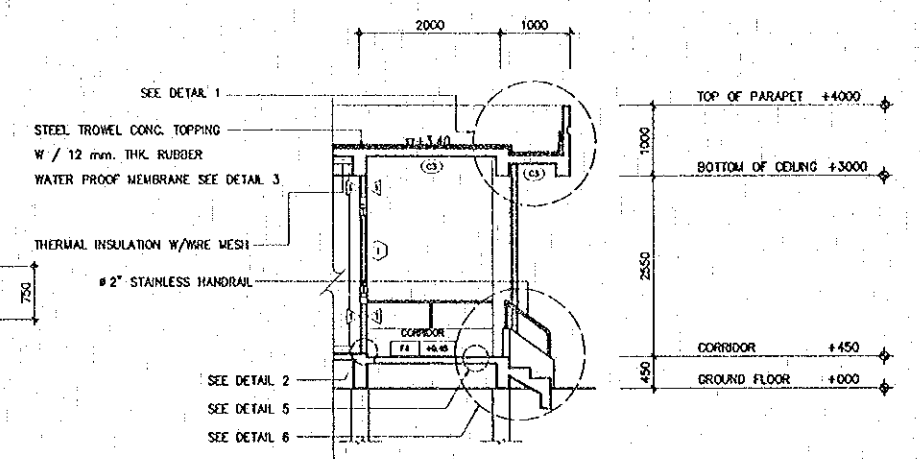
DOOR NO.	D2
DOOR JAMB	2"x4" HARD WD. JAMB
DOOR PANEL	800x2,000x35 mm. TEAK PLY WD. (moisture resistance)
LOCK SET	L3 1 SET
HINGES	H1 3 SET
DOOR STOPPER	B1 1 SET

DOOR NO.	D3
DOOR JAMB	2"x4" HARD WD. JAMB
DOOR PANEL	700x2,000x35 mm. TEAK PLY WD. (moisture resistance)
LOCK SET	L4 1 SET
HINGES	H1 3 SET
DOOR STOPPER	B2 1 SET

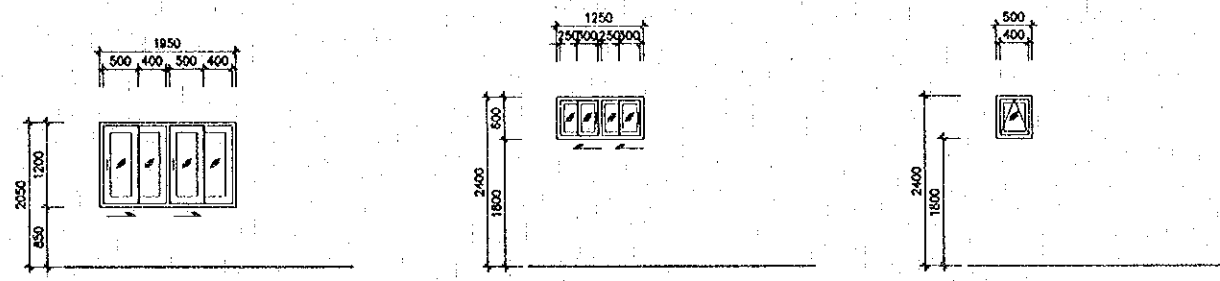
**DOOR DETAILS**  
SCALE 1:50



**STAIR DETAIL 4**  
SCALE 1:50



**SECTION 1**  
SCALE 1:50

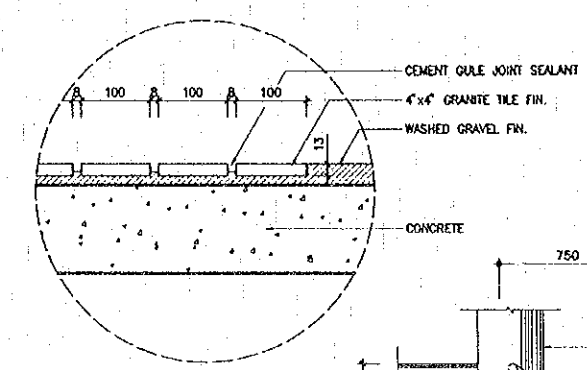


WINDOW NO.	W1
WINDOW JAMB	ALUM. JAMB
GLASS PANEL	6 mm THK. COOL GRAY GLASS
LOCK SET	FLUSH LOCK
SLIDING SET	ROLLER

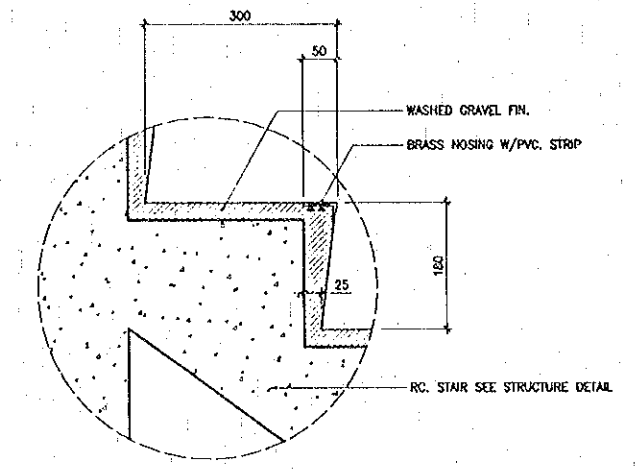
WINDOW NO.	W2
WINDOW JAMB	ALUM. JAMB
GLASS PANEL	6 mm THK. COOL GRAY GLASS
LOCK SET	FLUSH LOCK
SLIDING SET	ROLLER

WINDOW NO.	W3
WINDOW JAMB	ALUM. JAMB
GLASS PANEL	6 mm THK. COOL GRAY GLASS
LOCK SET	L6 1 SET
HINGES	H2 2 SET

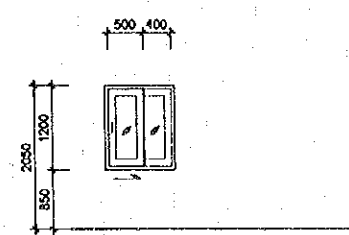
**WINDOW DETAILS**  
SCALE 1:50



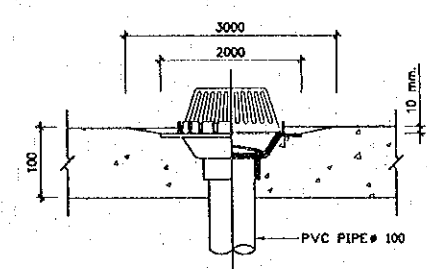
**DETAIL 5**  
SCALE 1:5



**DETAIL 7**  
SCALE 1:5

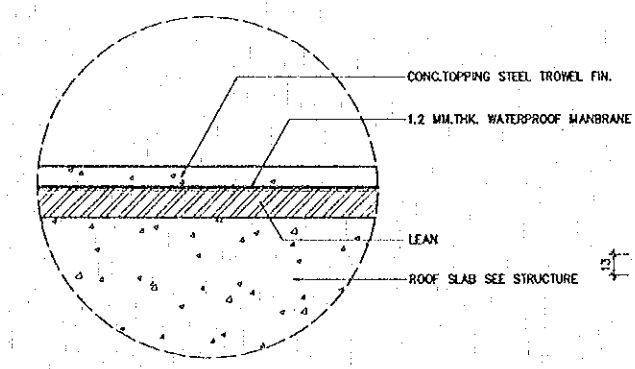


WINDOW NO.	W4
WINDOW JAMB	ALUM. JAMB
GLASS PANEL	6 mm THK. COOL GRAY GLASS
LOCK SET	FLUSH LOCK
SLIDING SET	ROLLER

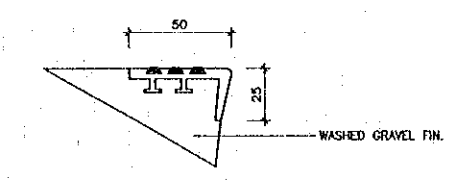


**DETAIL 6**  
SCALE 1:20

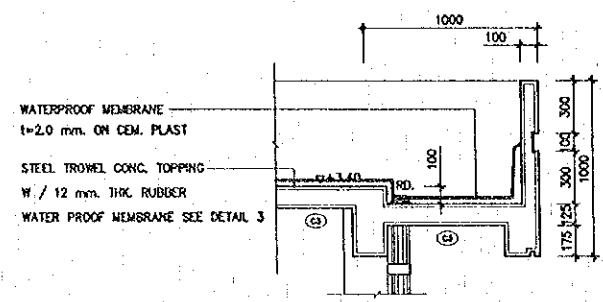
**ROOF DRAIN**  
SCALE 1:10



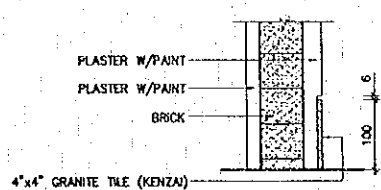
**DETAIL 3**  
SCALE 1:5



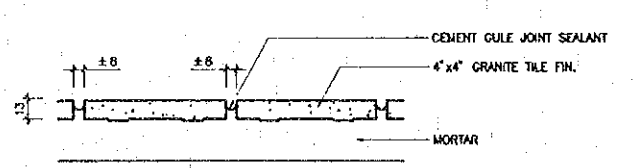
**DETAIL NOSING PVC.**  
SCALE 10



**DETAIL 1**  
SCALE 1:20



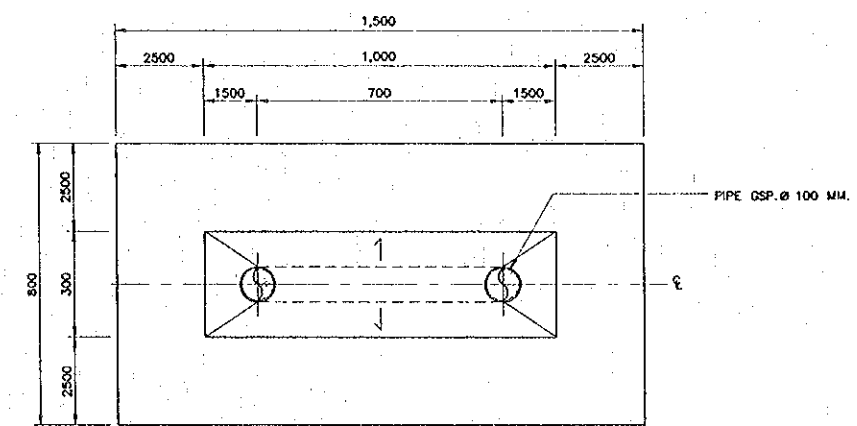
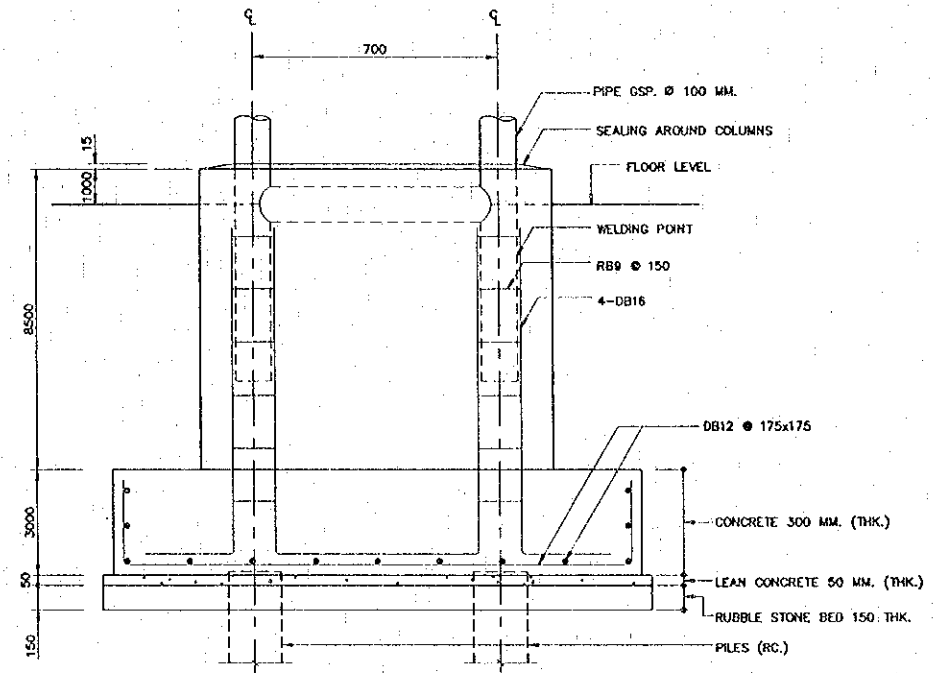
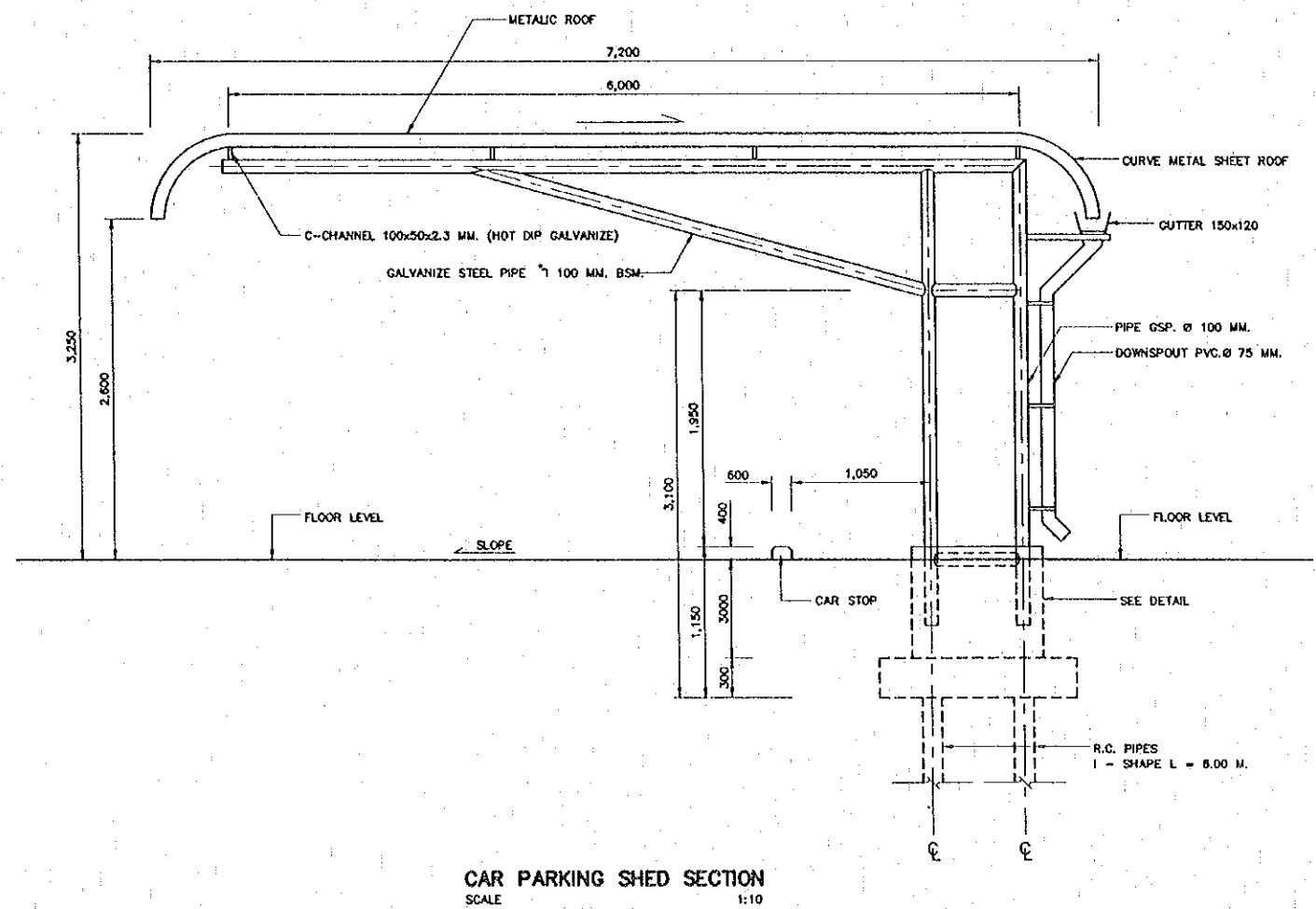
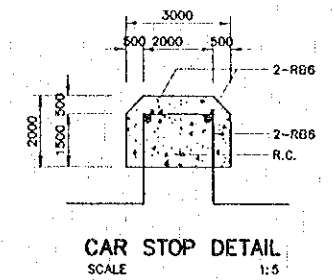
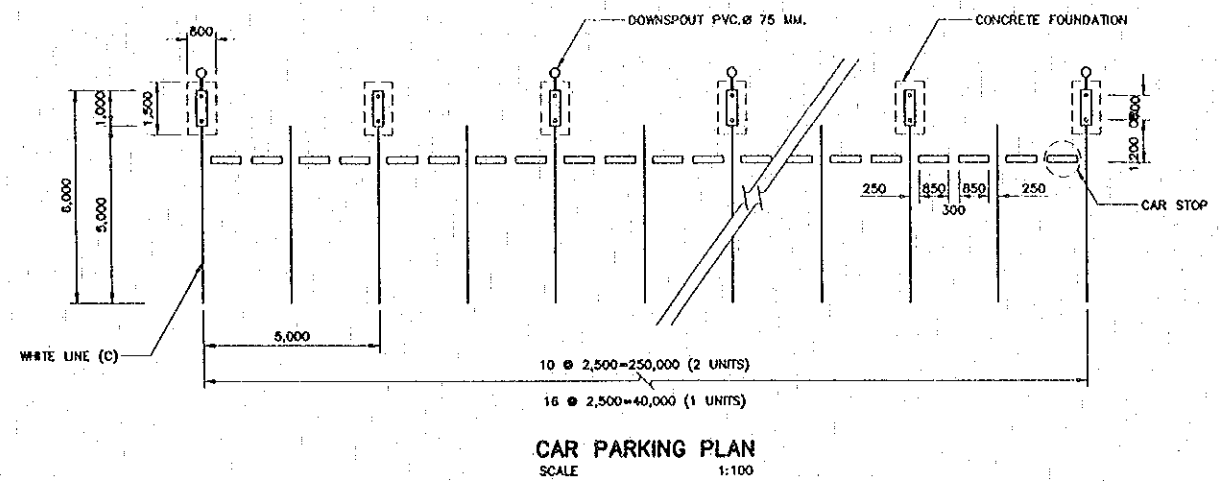
**DETAIL 2**  
SCALE 1:5



**DETAIL JOINT SEALANT**  
SCALE 10

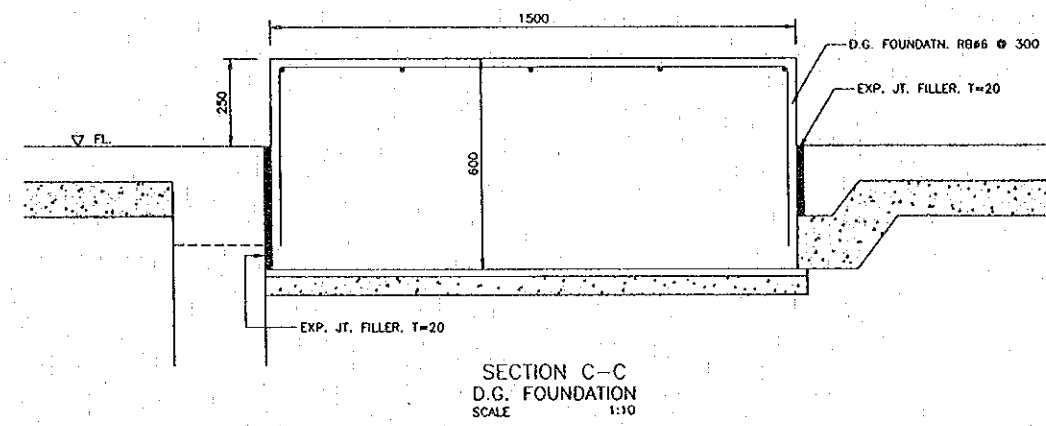
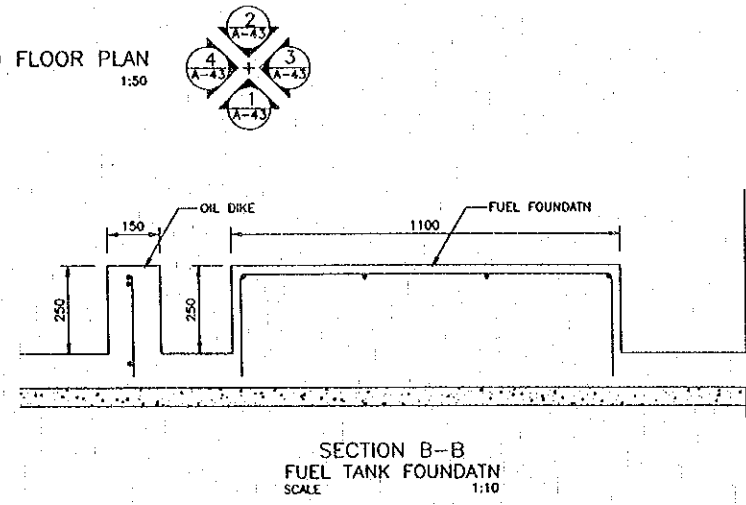
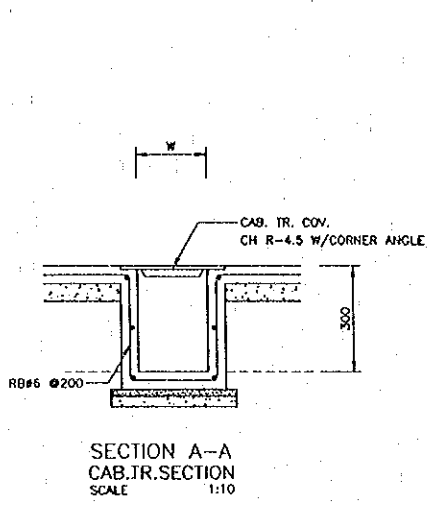
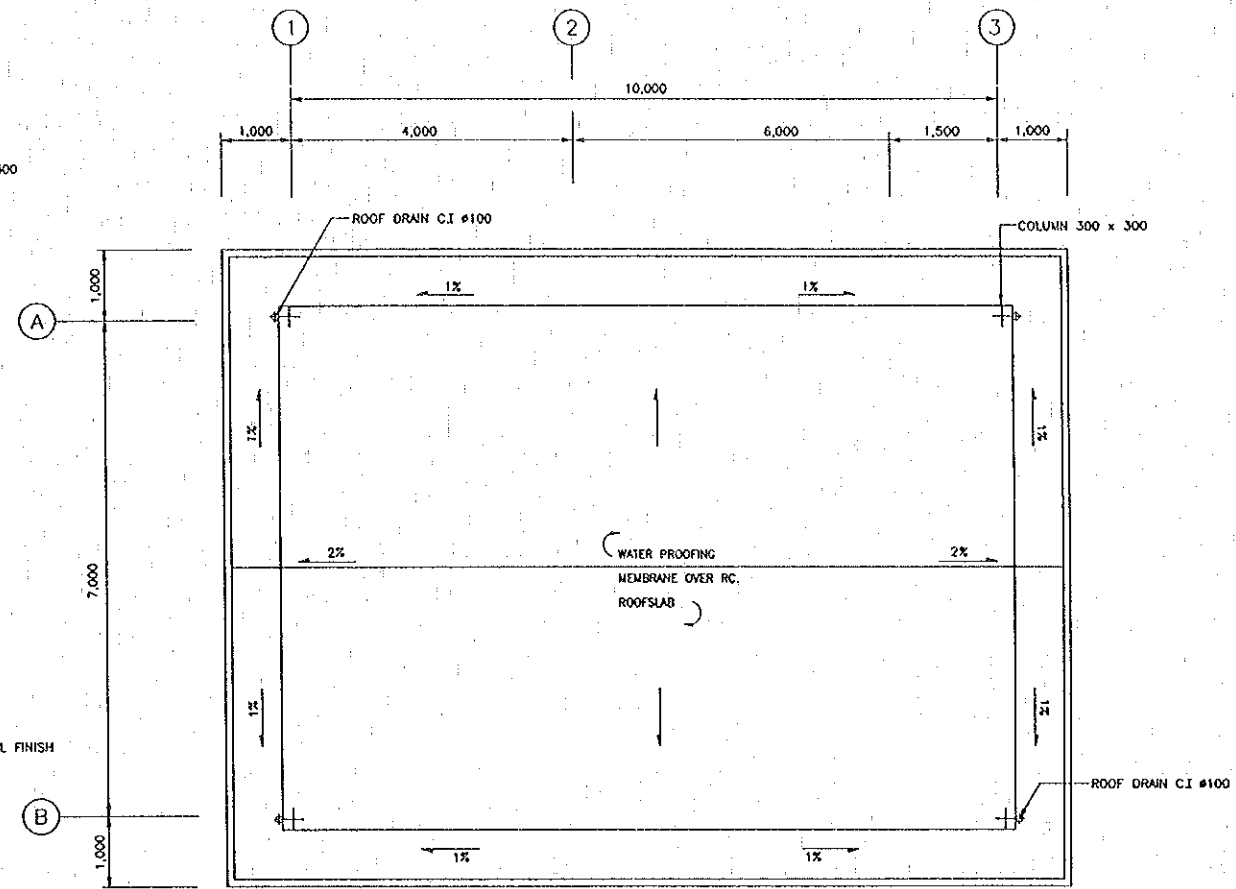
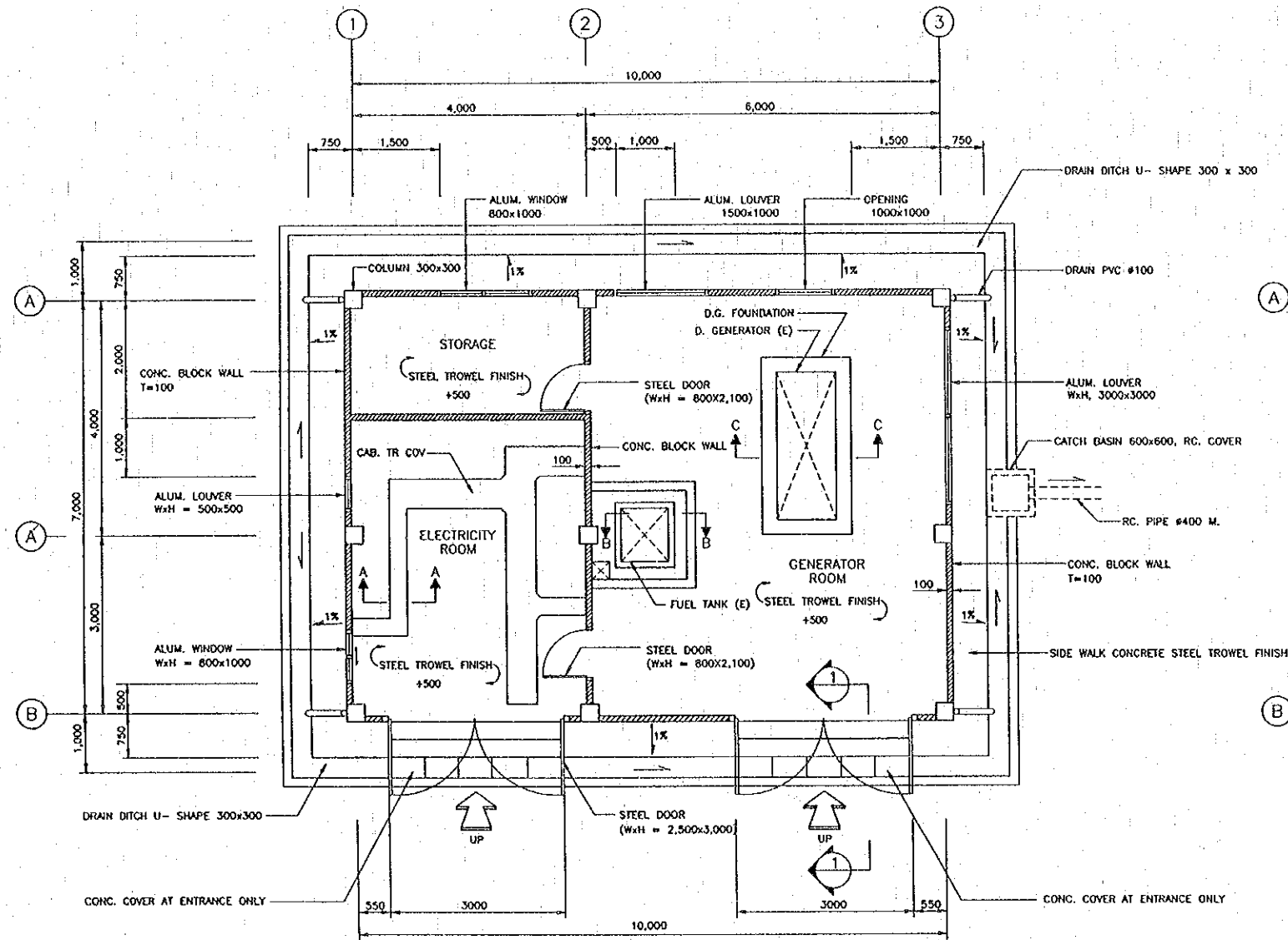
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikawa	[Signature]	6/2/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECK & TOLL FEE OFFICE (4) : DOOR & WINDOW DETAILS, TYPICAL DETAILS
						DESIGN CHECK	T. Manozawa	[Signature]	8/2/00	
						SUBMITTED	A. Hiratani	[Signature]	21/02/00	
						APPROVED	S. Terayabutra	[Signature]	22/02/00	

C:\CHAYANASUB\BORDER\THAI\5001-A-40-04.dwg



C:\CHART\AA\SUB\BORDER\THAI SIDE\F-A-41.DWG

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.		KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morikita	<i>[Signature]</i>	11-02-00	BORDER CONTROL FACILITIES THAILAND SIDE OFFICE'S PARKING SHED : PLAN, ELEVATION & DETAIL SECTION
								DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18-02-00		
								SUBMITTED	A. Hirataki	<i>[Signature]</i>	21-02-00		
								APPROVED	S. Tanjyabutra	<i>[Signature]</i>	22-02-00		



NOTES:  
ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED.

REV.	DATE	DESCRIPTION	APPROVED

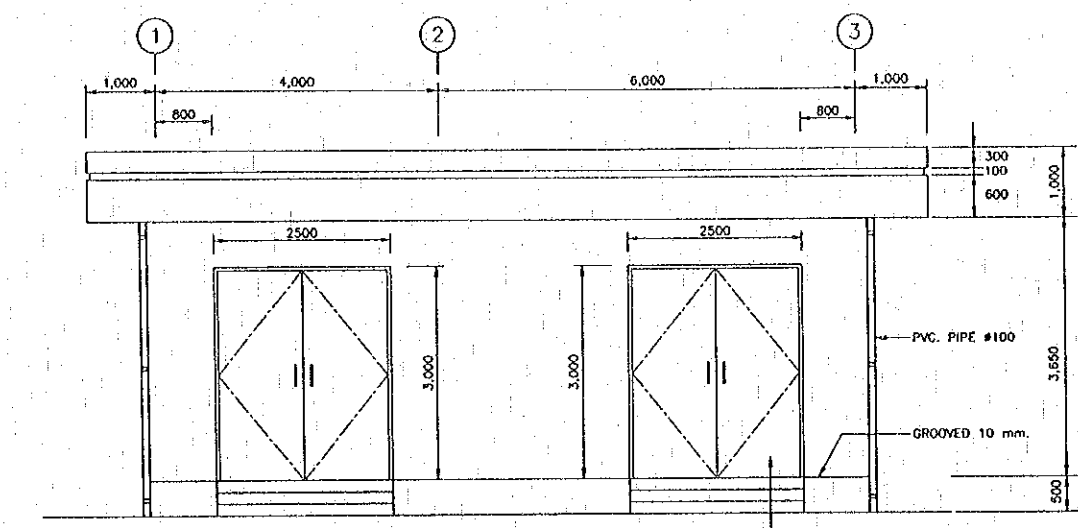
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

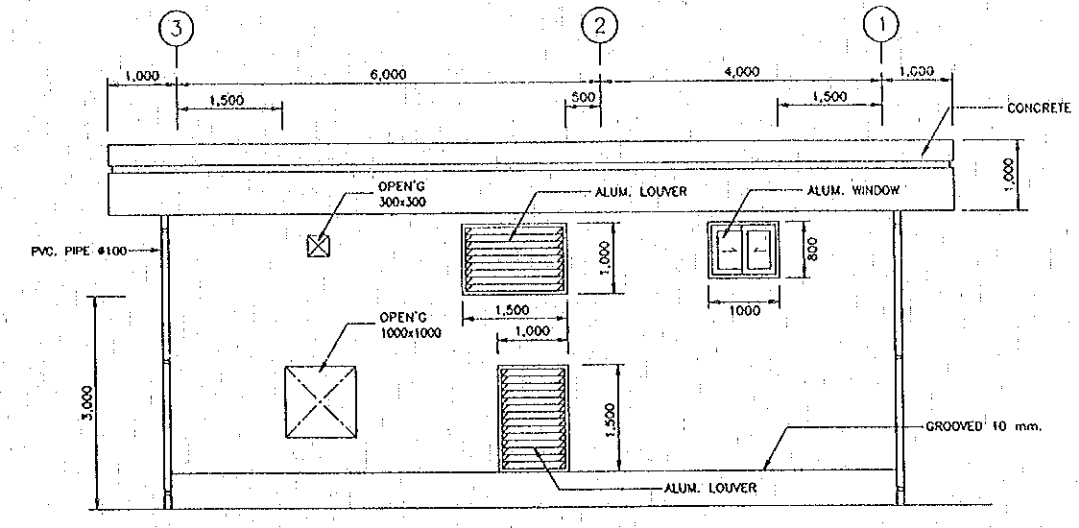
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morioka	<i>[Signature]</i>	23/05/00	BORDER CONTROL FACILITIES THAILAND SIDE POWER HOUSE (1) : PLAN
DESIGN CHECK	T. Mesuzawa	<i>[Signature]</i>	21/05/00	
SUBMITTED	A. Igarashi	<i>[Signature]</i>	27/05/00	
APPROVED	S. Tembyoburo	<i>[Signature]</i>	2/06/00	

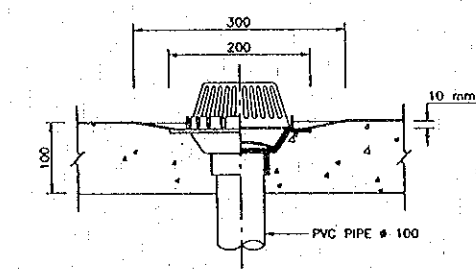
**BORDER CONTROL FACILITIES THAILAND SIDE POWER HOUSE (1) : PLAN**



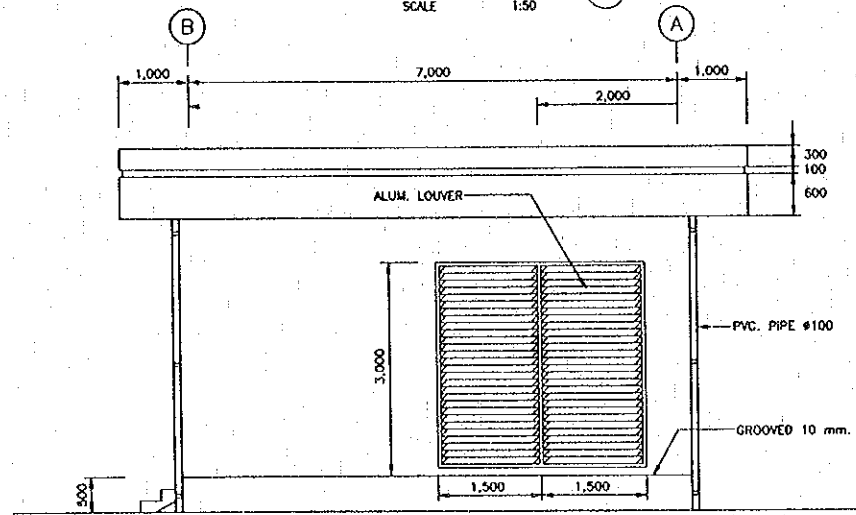
ELEVATION  
SCALE 1:50



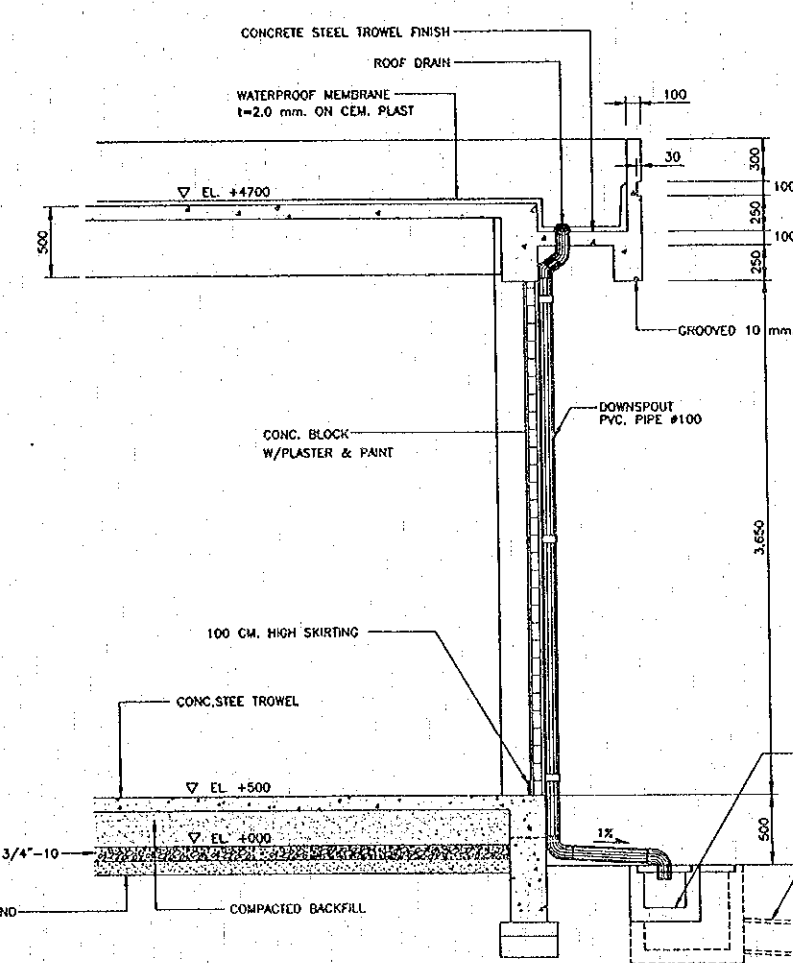
ELEVATION  
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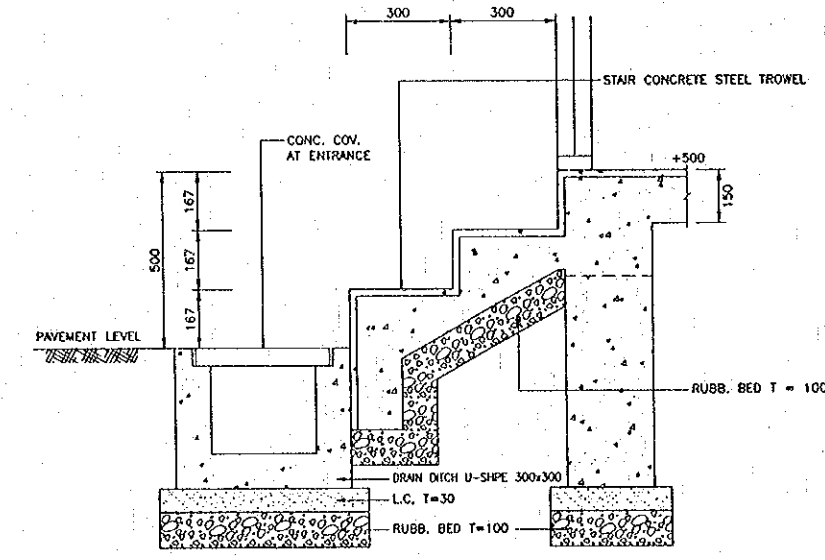
ROOF DRAIN  
SCALE 1:10



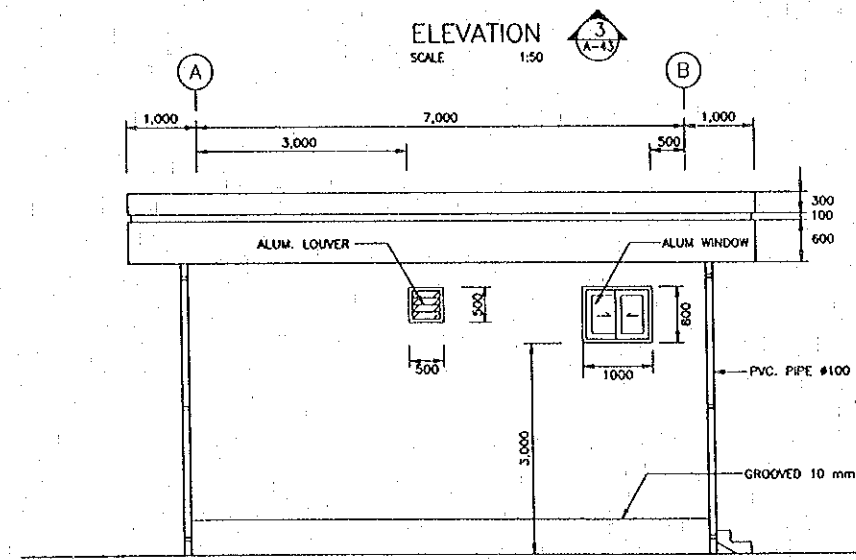
ELEVATION  
SCALE 1:50



SECTION  
SCALE 1:25



SECTION 1  
SCALE 1:10



ELEVATION  
SCALE 1:50

- NOTES :
- 1.) ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  - 2.) ALL ALUM. LOUVER AND WINDOW SHALL BE PROVIDED WITH INSECT SCREENS.

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

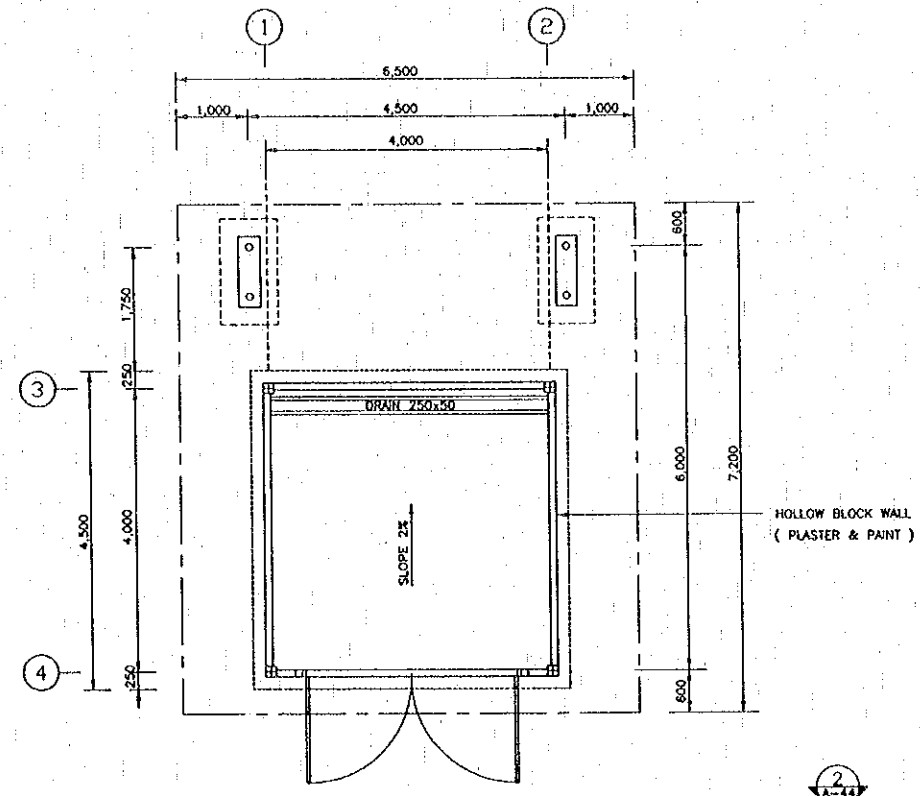
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

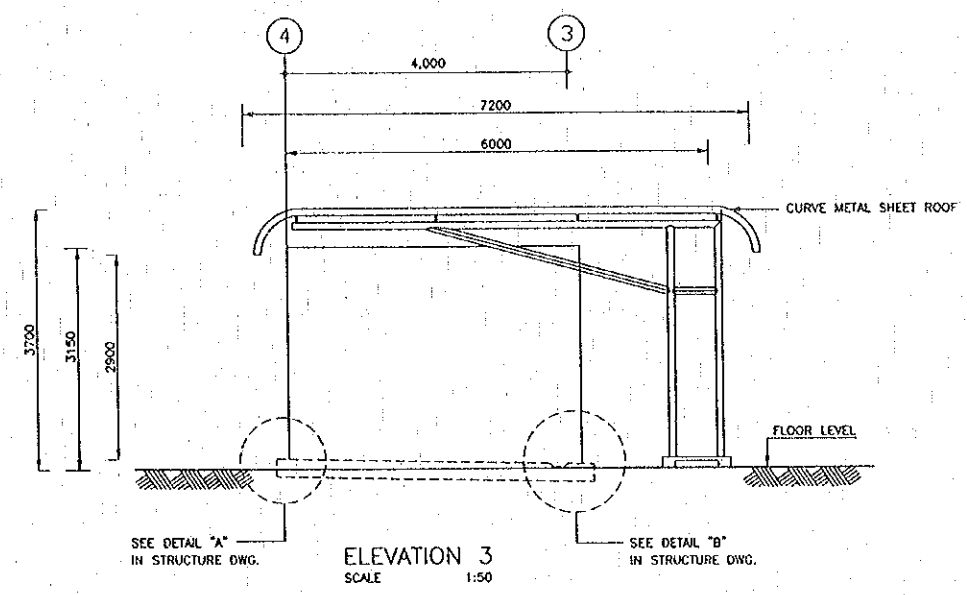
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikita	<i>[Signature]</i>	27-05-00	BORDER CONTROL FACILITIES THAILAND SIDE POWER HOUSE (2) : ELEVATION AND DETAIL SECTION
DESIGN CHECK	T. Masuoka	<i>[Signature]</i>	28-05-00	
SUBMITTED	A. Kitani	<i>[Signature]</i>	28-05-00	
APPROVED	S. Teiyabutra	<i>[Signature]</i>	28-05-00	



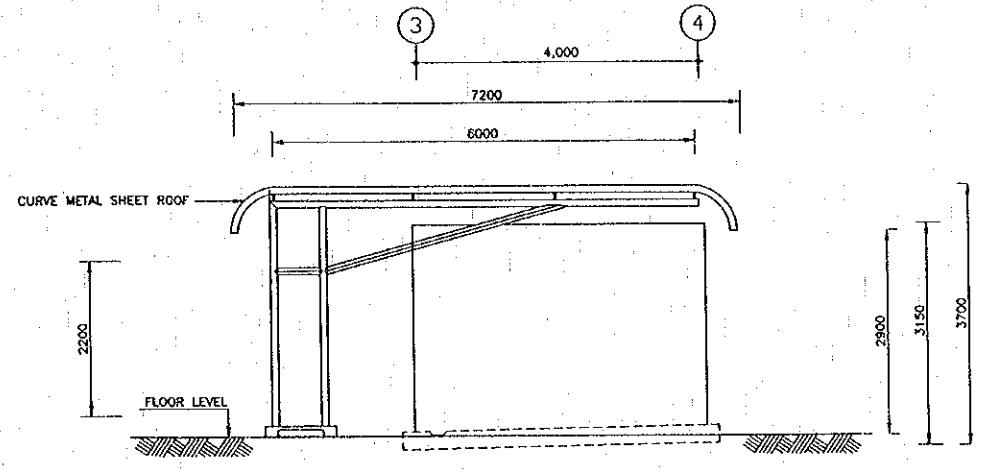
DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
F-A-44	156
DWG. STATUS	



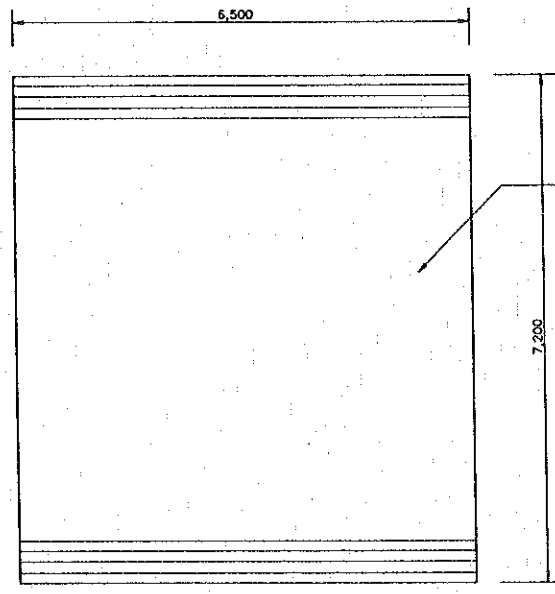
PLAN VIEW  
SCALE 1:50



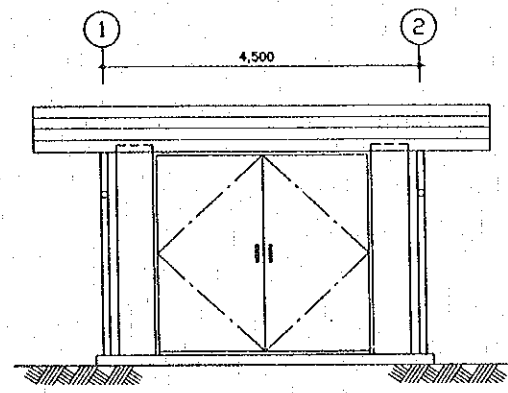
ELEVATION 3  
SCALE 1:50



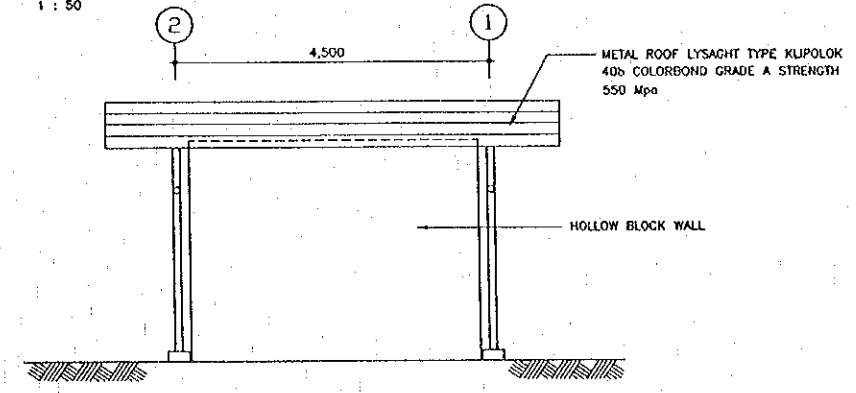
ELEVATION 4  
SCALE 1:50



ROOF PLAN  
SCALE 1:50



ELEVATION 1  
SCALE 1:50



ELEVATION 2  
SCALE 1:50

- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
  2. ALL ELEVATIONS ARE IN MILLIMETERS REFERRING TO ARCHITECTURAL DWG.

REV.	DATE	DESCRIPTION	APPROVED

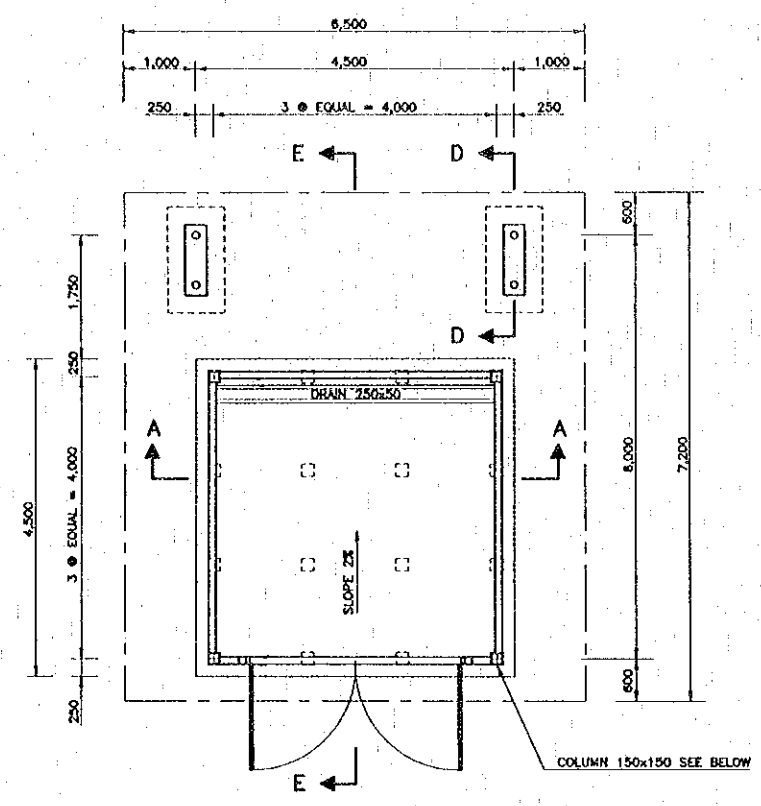
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

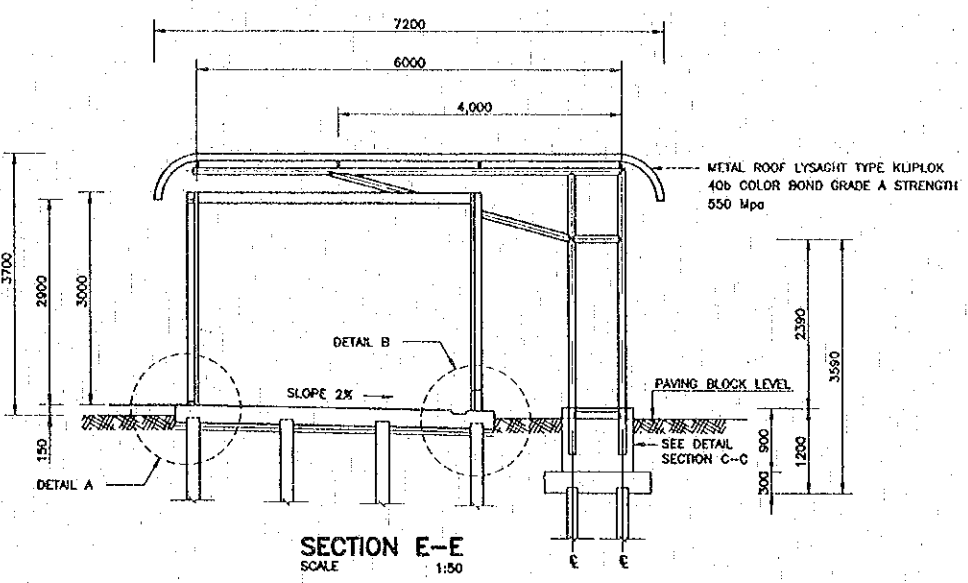
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>A. Morikawa</i>	23/03/00
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	28/07/00
SUBMITTED	A. Hirotsu	<i>A. Hirotsu</i>	27/07/00
APPROVED	S. Temiyabura	<i>S. Temiyabura</i>	2/11/00

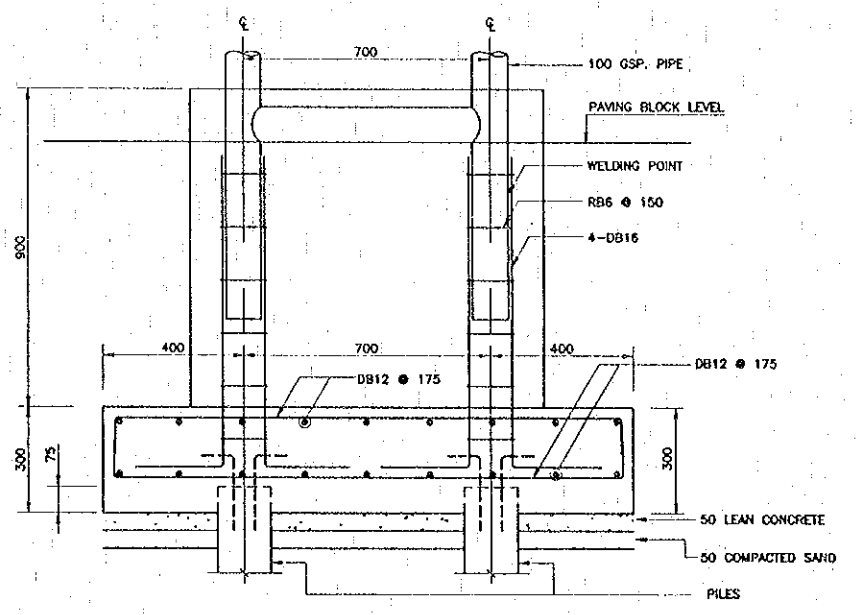
DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
**GARBAGE DISPOSAL SHED (1) : PLAN, ELEVATION**



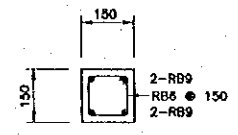
DETAIL PLAN  
SCALE 1:50



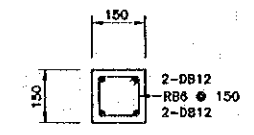
SECTION E-E  
SCALE 1:50



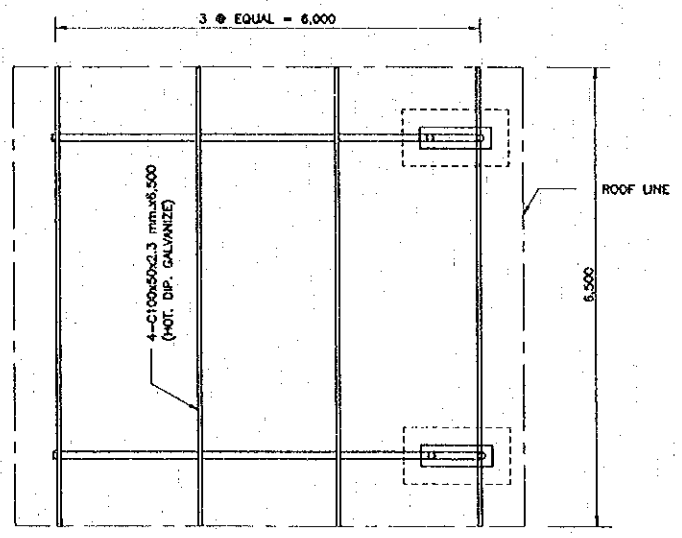
SECTION D-D  
SCALE 1:10



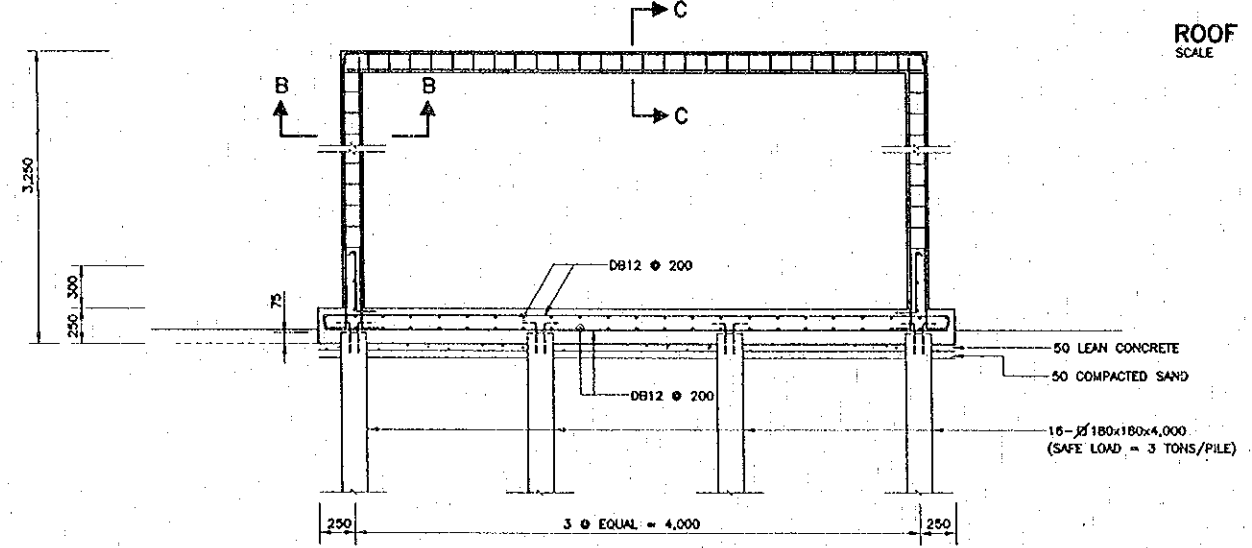
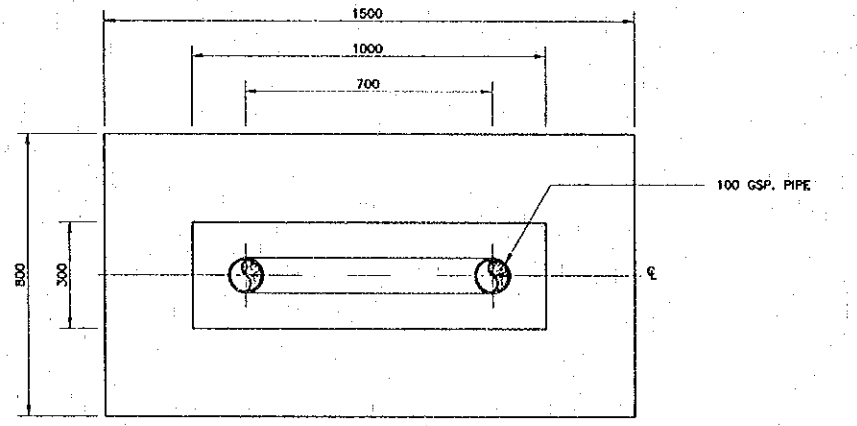
SECTION B-B  
SCALE 1:10



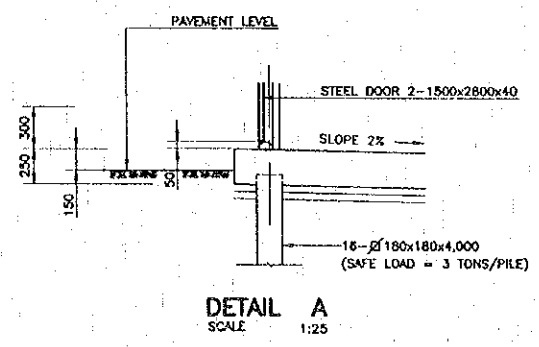
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SCALE 1:10



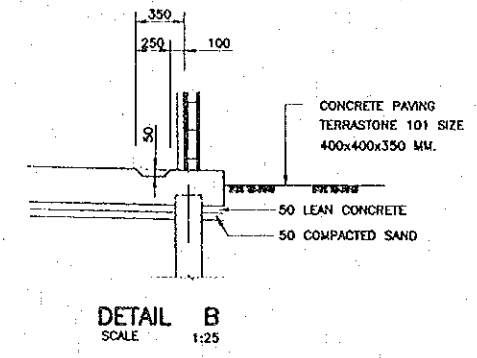
ROOF FRAMING PLAN  
SCALE 1:50



STRUCTURAL SECTION A-A  
SCALE 1:25



DETAIL A  
SCALE 1:25



DETAIL B  
SCALE 1:25

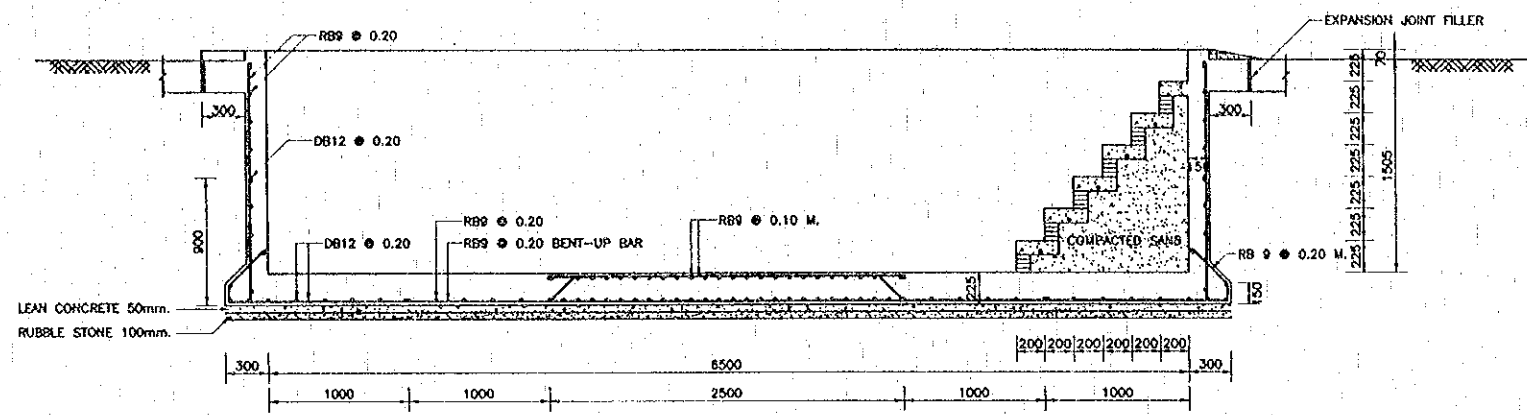
- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
  2. ALL ELEVATIONS ARE IN MILLIMETERS REFERRING TO ARCHITECTURAL DWG.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morkka	<i>[Signature]</i>	4-01-00	BORDER CONTROL FACILITIES THAILAND SIDE GARBAGE DISPOSAL SHED(Z) : STRUCTURAL DETAILS
											DESIGN CHECK	T. Moeuzawa	<i>[Signature]</i>	3/1/00		
											SUBMITTED	A. Hrotani	<i>[Signature]</i>	3/1/00		
											APPROVED	S. Tamyobutra	<i>[Signature]</i>	22/03/00		

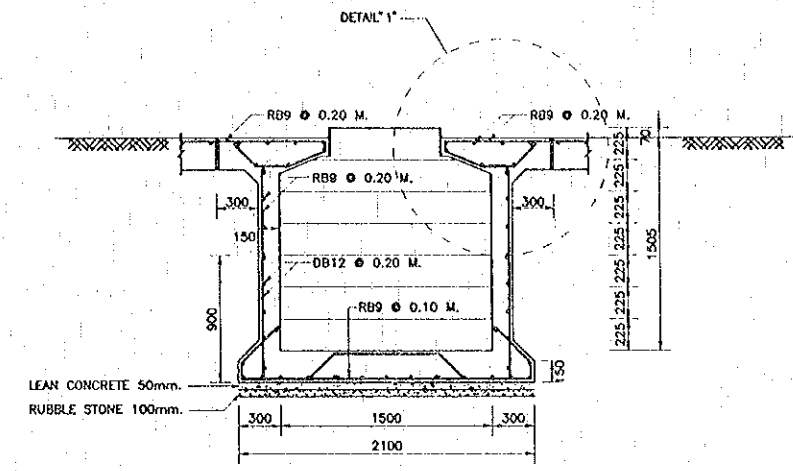
DATE OF ISSUE: 05/03/2000

DWG. NO. F-A-46 SHEET NO. 158

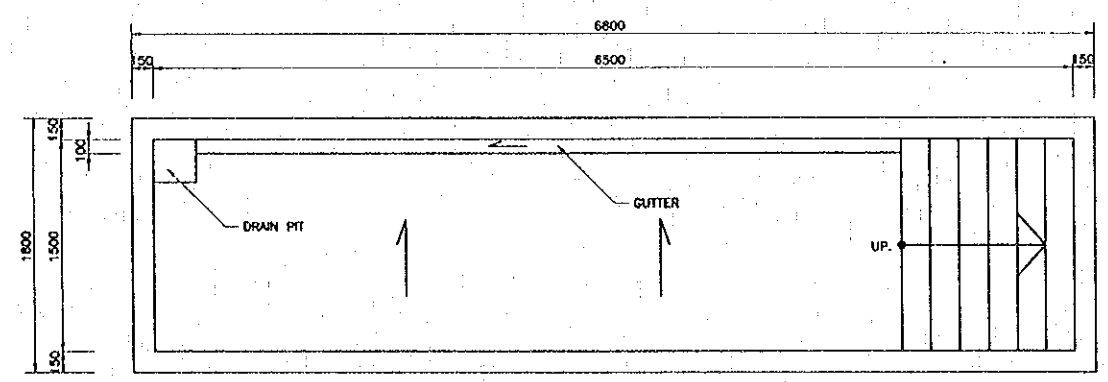
DWG. STATUS



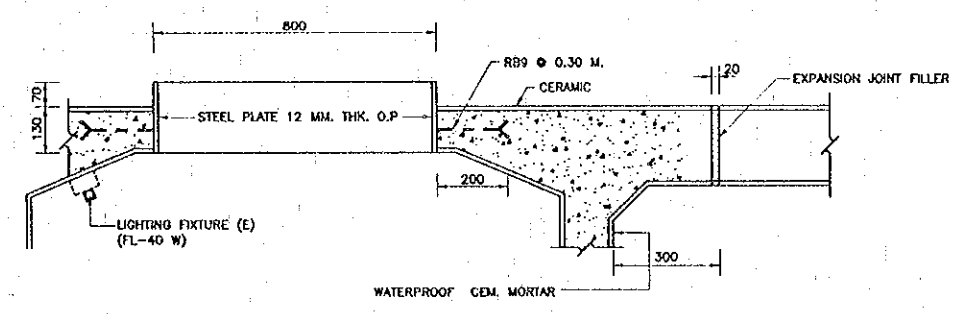
SECTION A - A  
SCALE 1:25



SECTION B - B  
SCALE 1:25



UNDER GROUND FLOOR PLAN  
SCALE 1:25



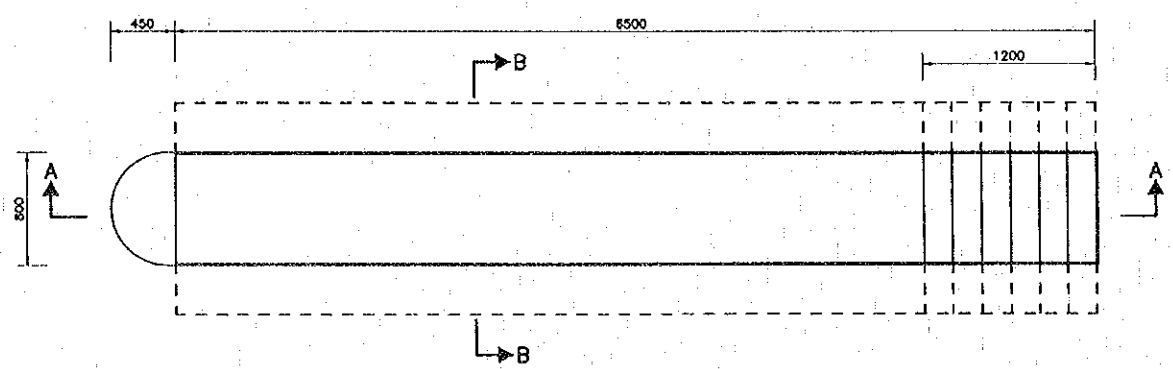
DETAIL "1"  
SCALE 1:10

NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
2. LIGHTING FIXTURE 1 x 4 WATT 2 SETS
3. PLUG 2 SETS

WATERPROOF FLINCOAT

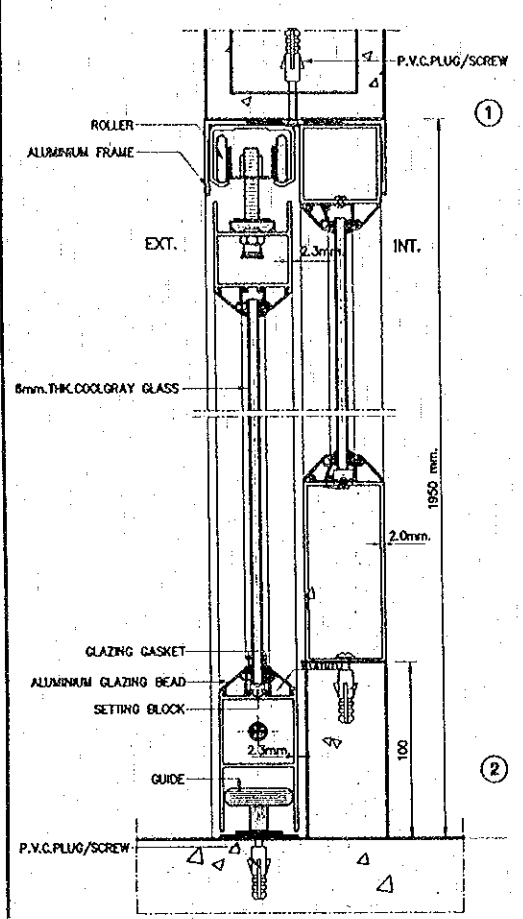
1. EXTERNAL PLASTER WITH WATERPROOF AGENT.
2. PAINT FLINCOAT NO.1 2 COATED BY VERTICAL DIRECTION.
3. PAINT FLINCOAT NO.1 1 COATED BY HORIZONTAL DIRECTION.
4. BEFORE BACKFILLING, COMPLETE CHECK FOR LEAKAG OF WATER SHALL BE MADE.



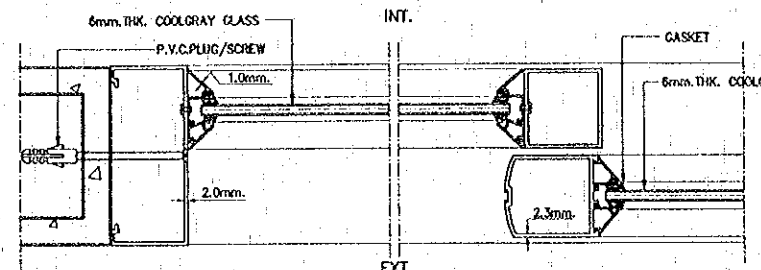
FLOOR PLAN  
SCALE 1:25

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morikita	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE VEHICLE INSPECTION PIT : DETAILS
								DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18-02-00		
								SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-02-00		
								APPROVED	S. Tanjyabutra	<i>[Signature]</i>	22-02-00		

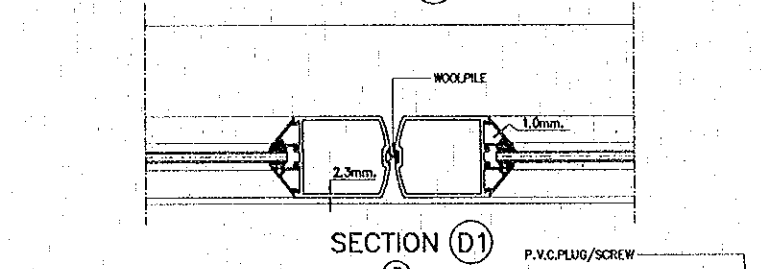
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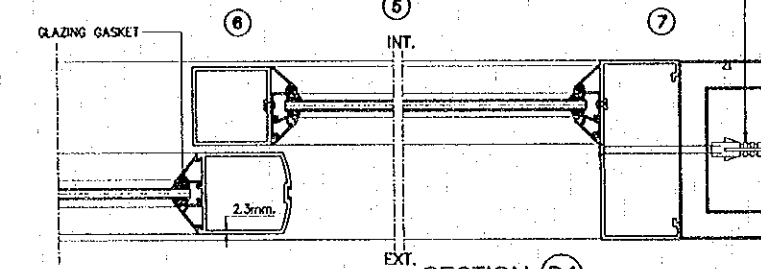
SECTION D1



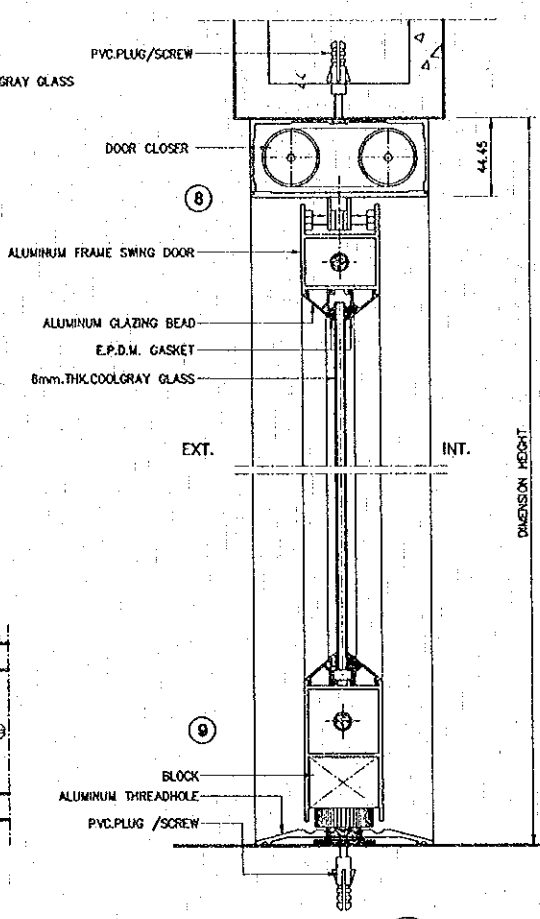
SECTION D1



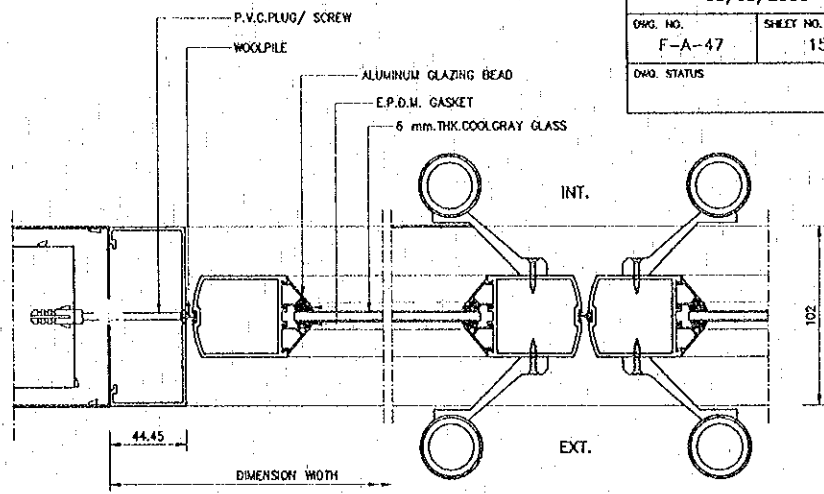
SECTION D1



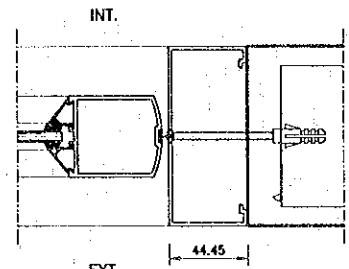
SECTION D1



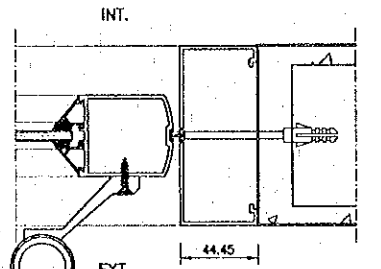
SECTION D3



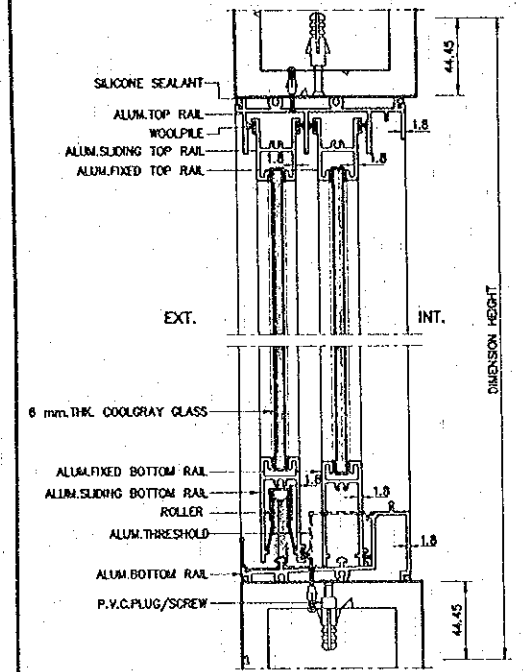
SECTION D3



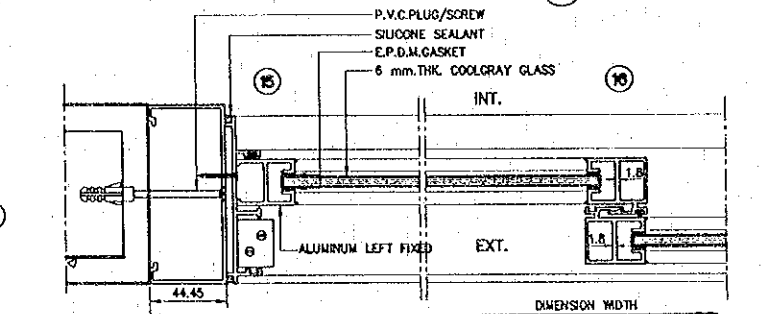
SECTION D3



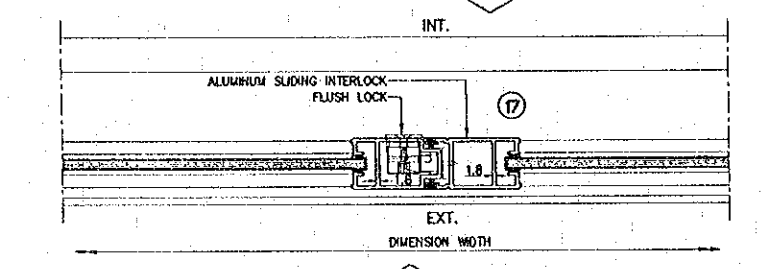
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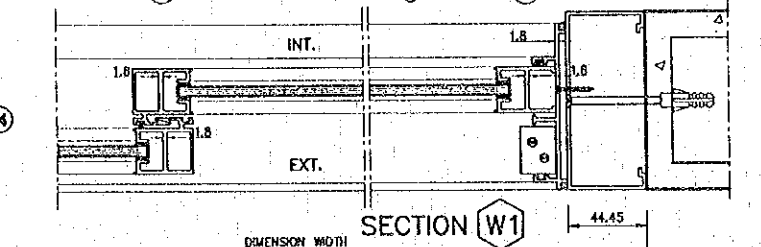
SECTION W1



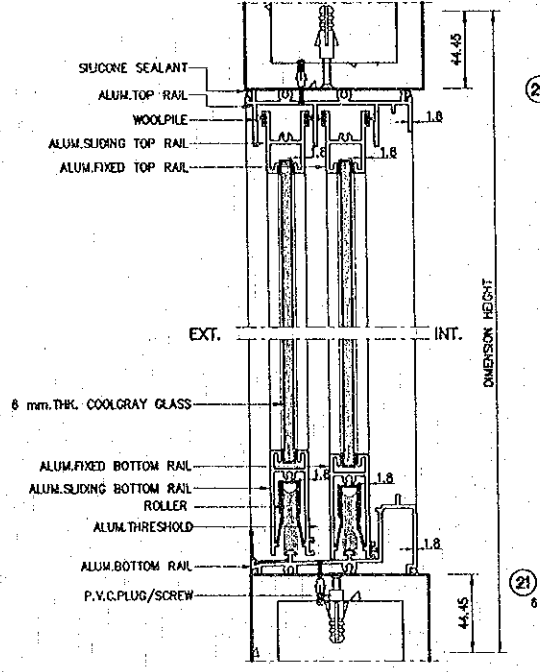
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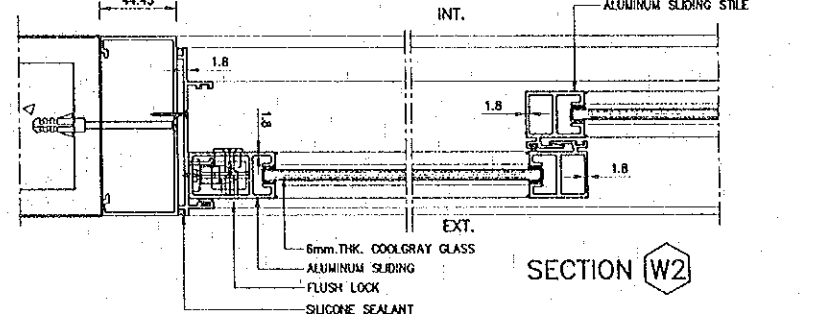
SECTION W1



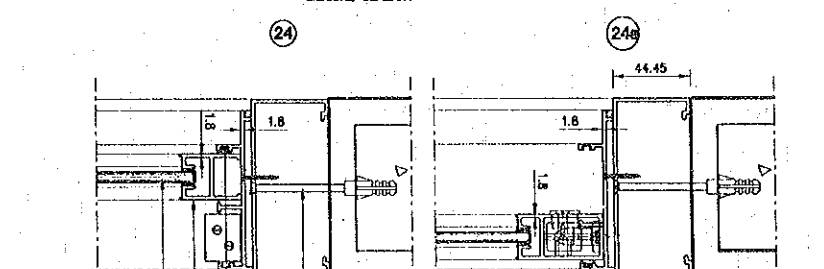
SECTION W1



SECTION W2



SECTION W2



SECTION W2

NOTES :  
 THIS DRAWING SHOWS MANUFACTURE'S STANDARD DETAILS, HOWEVER  
 ALL MARGINAL WINDOWS SHALL BE PROVIDED AND SEALING WITH WINDOW  
 FLASHING FRAMES AS SHOWN ON THE SEPERATE SHEET.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

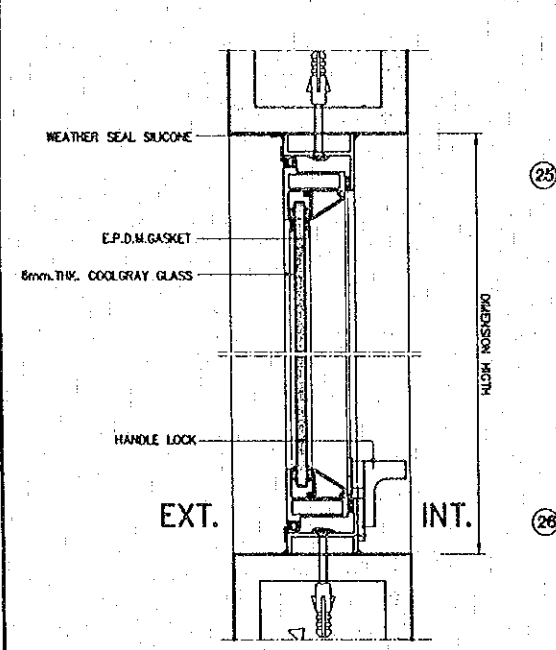
ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOGI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

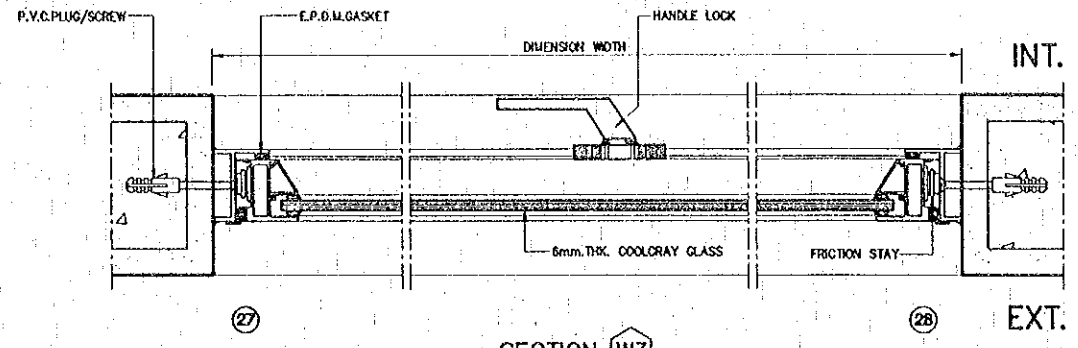
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Moriska	<i>[Signature]</i>	6/2/00	BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING ; TYPICAL DETAILS (1)
DESIGN CHECK	T. Manuwara	<i>[Signature]</i>	18/2/00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	11/6/00	
APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00	

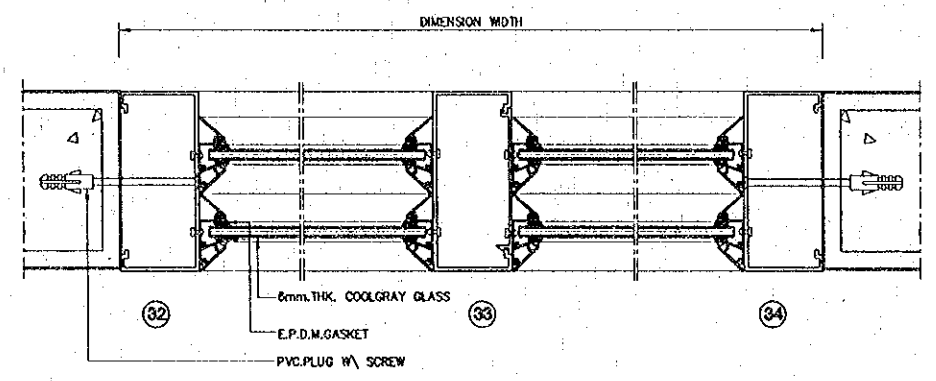
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 FOR ALL BUILDING ; TYPICAL DETAILS (1)



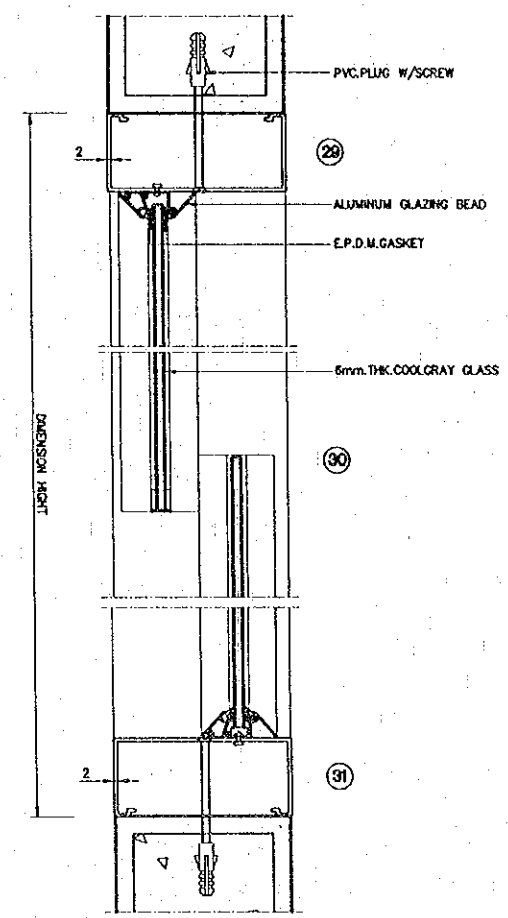
SECTION W3



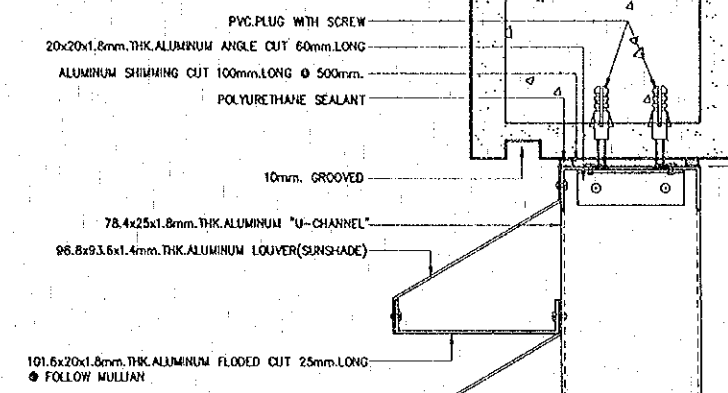
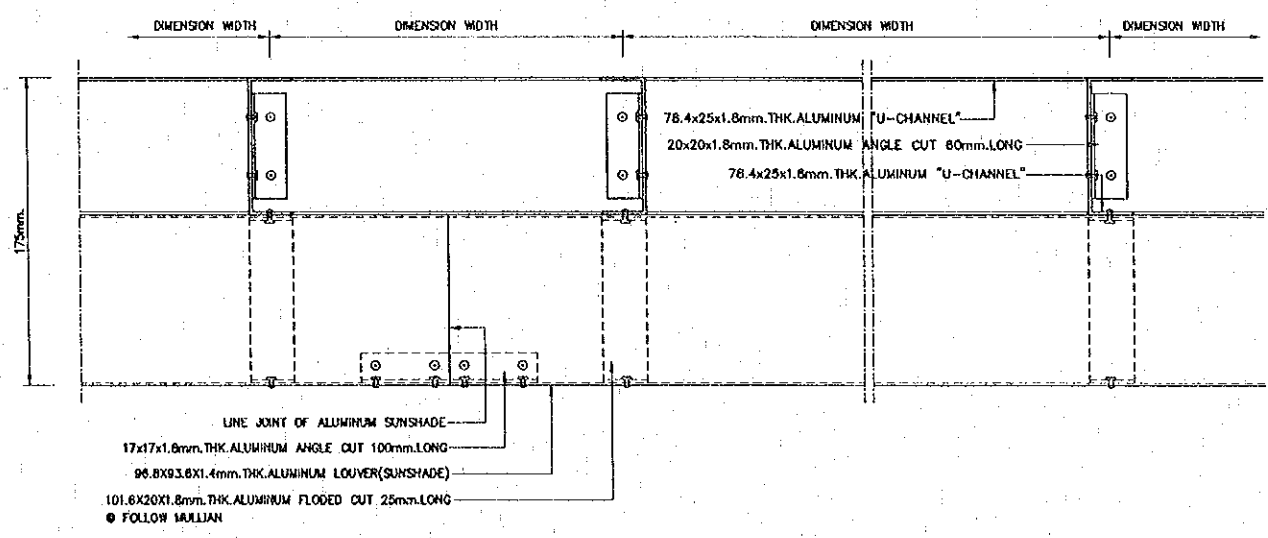
SECTION W3



SECTION W4



SECTION W4



ALUMINIUM SUNSCREEN

DETAIL L-1  
SCALE NTC

NOTES :  
 THIS DRAWING SHOWS MANUFACTURE'S STANDARD DETAILS. HOWEVER ALL MARGINAL WINDOWS SHALL BE PROVIDED AND SEALING WITH WINDOW FLASHING FRAMES AS SHOWN ON THE SEPERATE SHEET.

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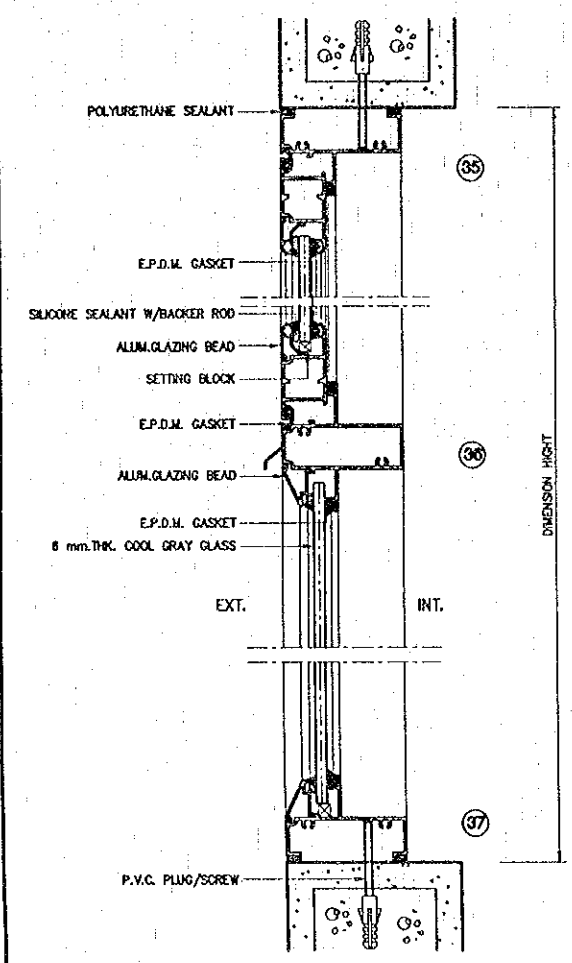
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

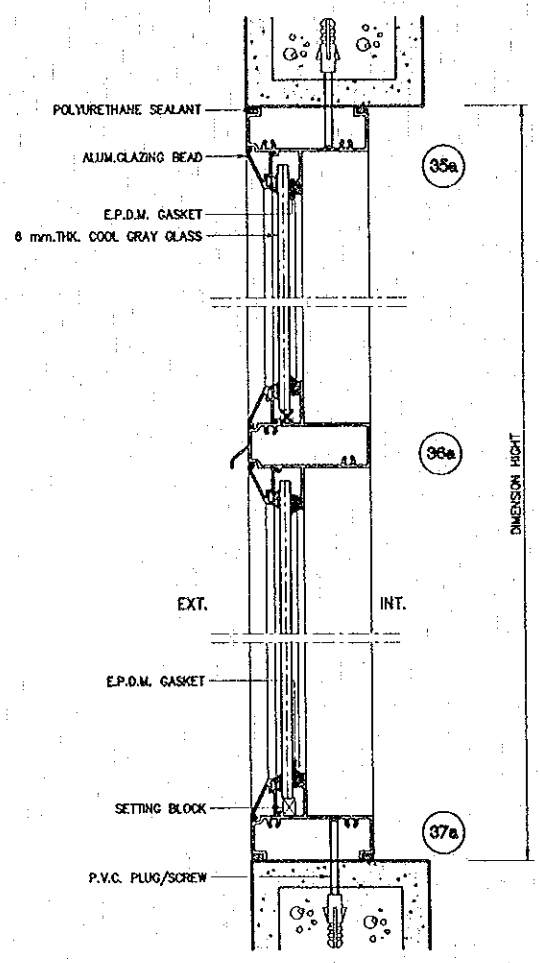
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

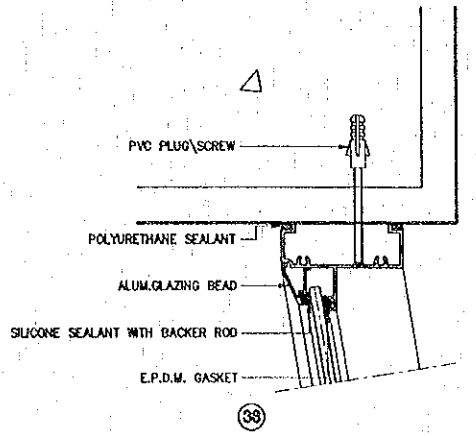
QUALITY RECORD	NAME	SIGNATURE	DATE	DRG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING : TYPICAL DETAILS (2)
DESIGN CHECK	T. Moriyama	<i>[Signature]</i>	18-02-00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00	
APPROVED	S. Tamayabutsu	<i>[Signature]</i>	27/02/00	



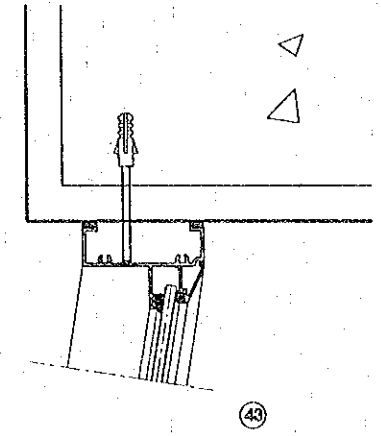
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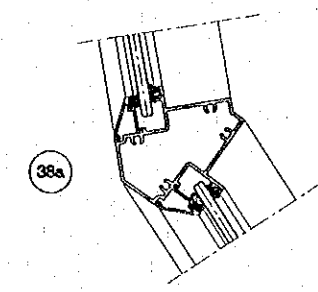
SECTION W5



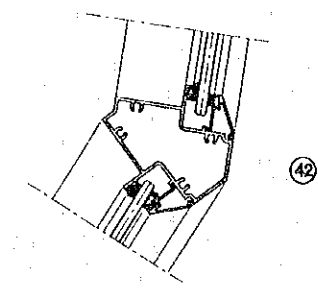
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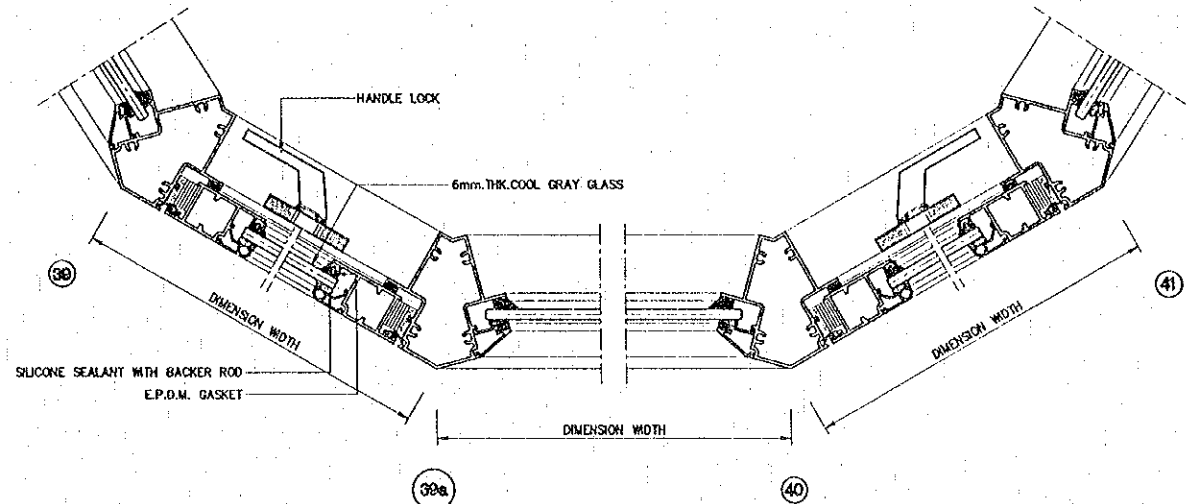
43



38a



42



SECTION W6

NOTES :  
 THIS DRAWING SHOWS MANUFACTURE'S STANDARD DETAILS, HOWEVER ALL MARGINAL WINDOWS SHALL BE PROVIDED AND SEALING WITH WINDOW FLASHING FRAMES AS SHOWN ON THE SEPERATE SHEET.

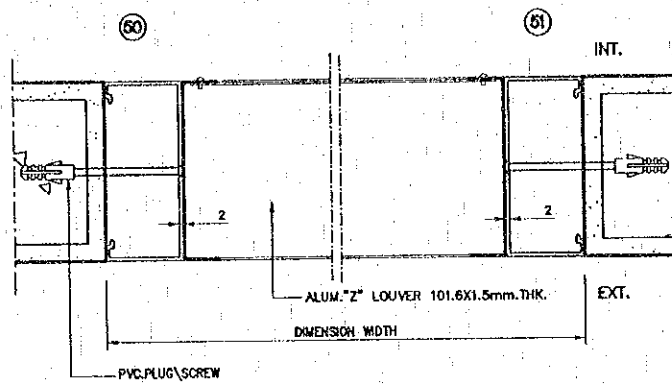
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	DESIGN	A. Morioke	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING : TYPICAL DETAILS (3)
					DESIGN CHECK	T. Morozawa	<i>[Signature]</i>	18/02/00	
					SUBMITTED	A. Hironaka	<i>[Signature]</i>	21/02/00	
					APPROVED	S. Tomyabutra	<i>[Signature]</i>	22/02/00	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

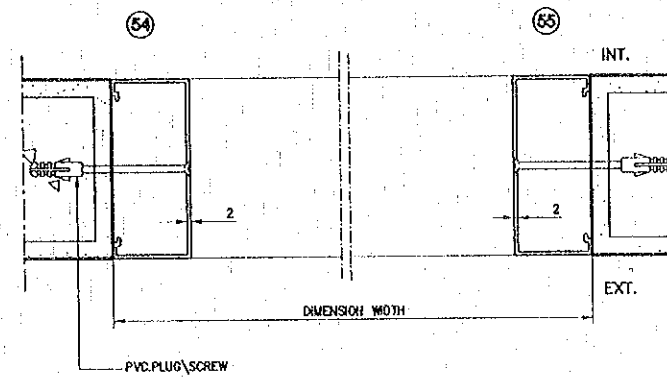
THE SECOND MEKONG INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

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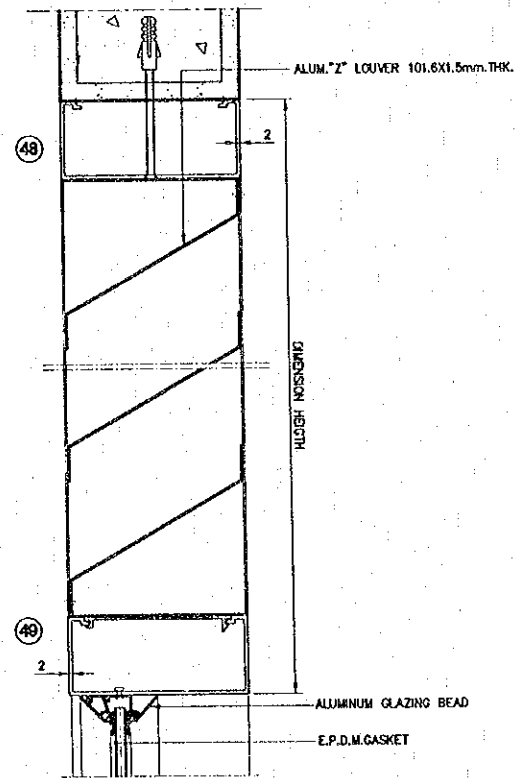
DATE OF ISSUE: 05/03/2000	
DWG. NO. F-A-50	SHEET NO. 162
DWG. STATUS:	



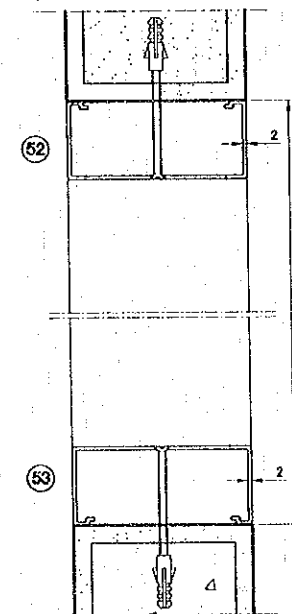
PUBLIC TOILET W2



PUBLIC TOILET W3



PUBLIC TOILET W2

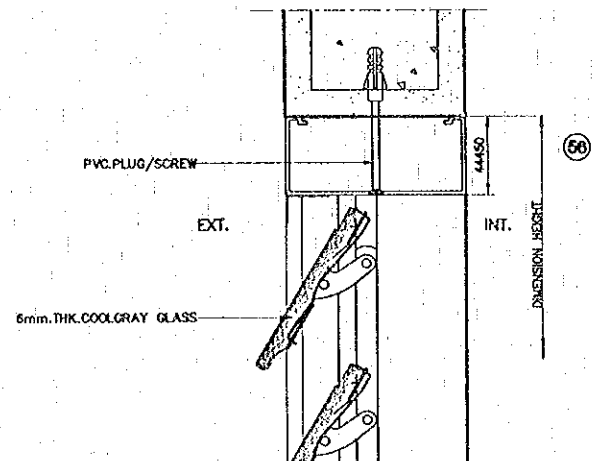


PUBLIC TOILET W3

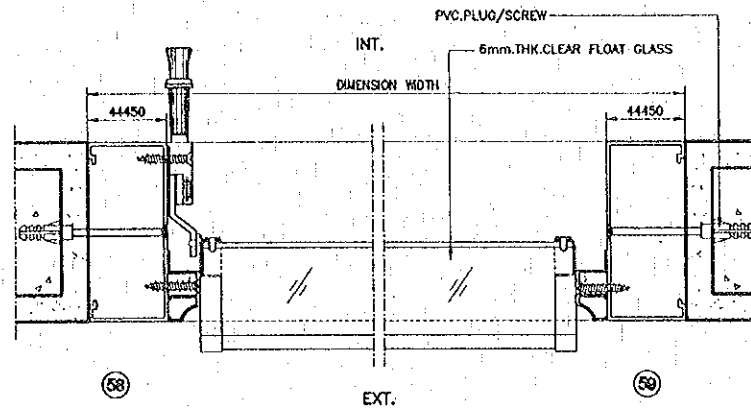
NOTES :  
 THIS DRAWING SHOWS MANUFACTURE'S STANDARD DETAILS, HOWEVER  
 ALL MARGINAL WINDOWS SHALL BE PROVIDED AND SEALING WITH WINDOW  
 FLASHING FRAMES AS SHOWN ON THE SEPERATE SHEET.

C:\CHANGKAM\SHR\BORDER\THAN\SOE\Y-A-50.dwg

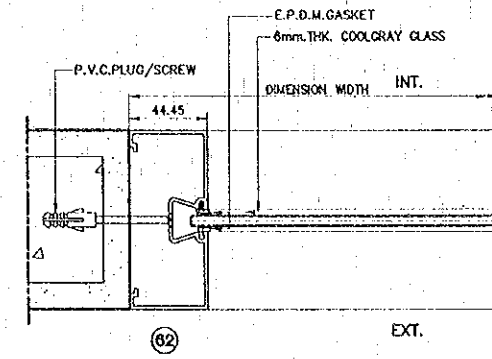
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY		THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT		QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION		KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morkha	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING : TYPICAL DETAILS (4)
									DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18-02-00	
									SUBMITTED	A. Hiroaki	<i>[Signature]</i>	21-02-00	
									APPROVED:	S. Tamyobutra	<i>[Signature]</i>	23-02-00	



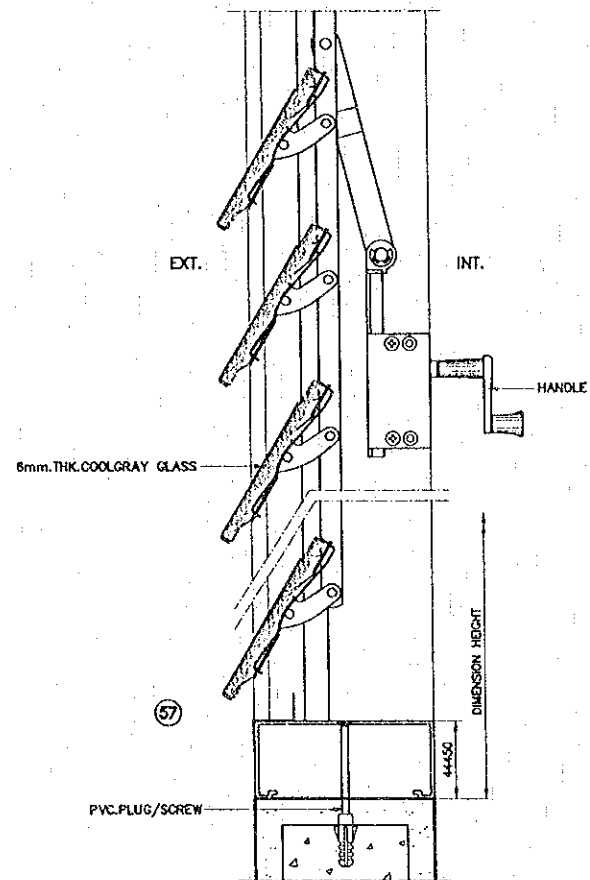
CHECKING OFFICE  
 CHECK & TOLL OFFICE (W2)



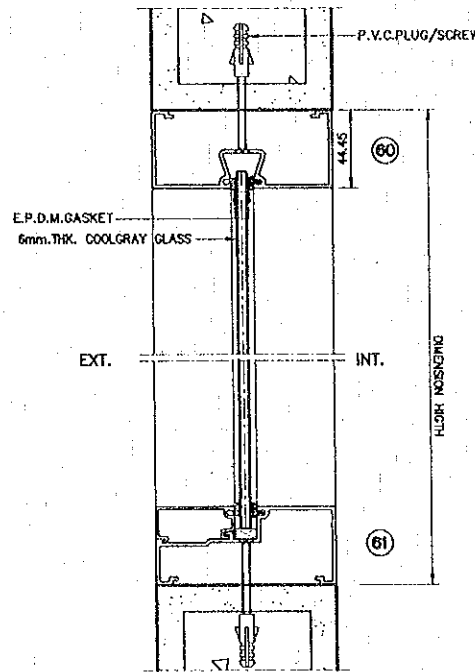
CHECKING OFFICE  
 CHECK & TOLL OFFICE (W2)



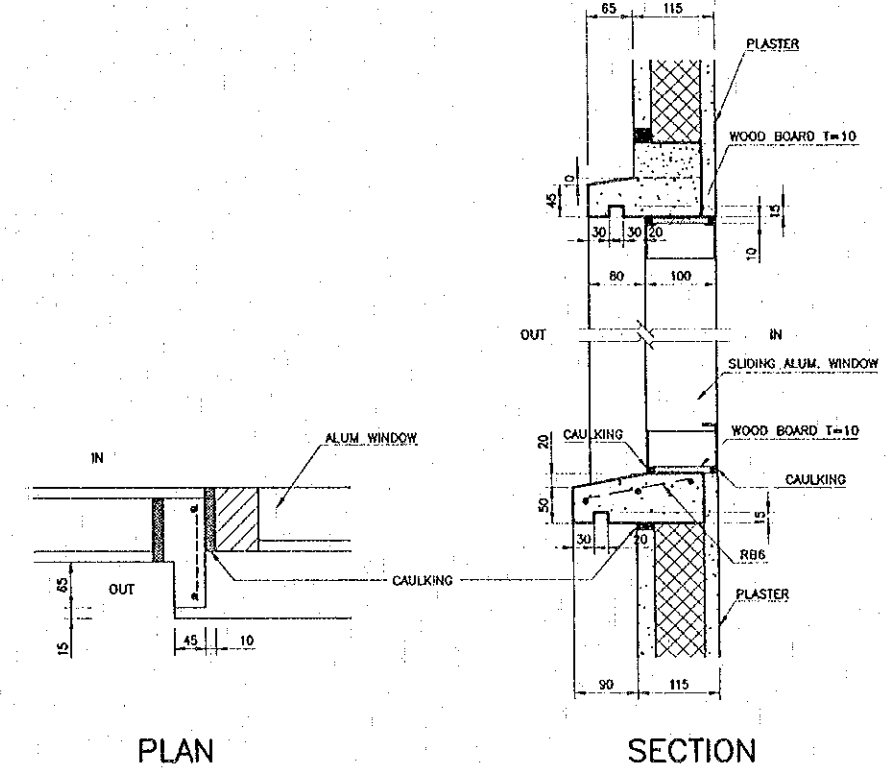
CHECK POINT (D1)



CHECKING OFFICE  
 CHECK & TOLL OFFICE (W2)



CHECK POINT (D1)



PLAN SECTION

WINDOW FLASHING FRAMES

NOTES :  
 THIS DRAWING SHOWS MANUFACTURE'S STANDARD DETAILS, HOWEVER ALL MARGINAL WINDOWS SHALL BE PROVIDED WITH WINDOW FLASHING FRAMES AS SHOWN ON ABOVE.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

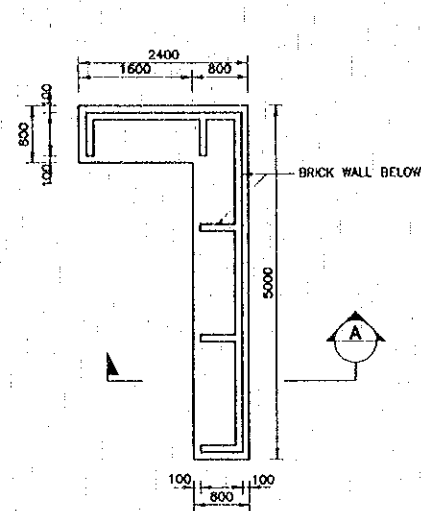
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

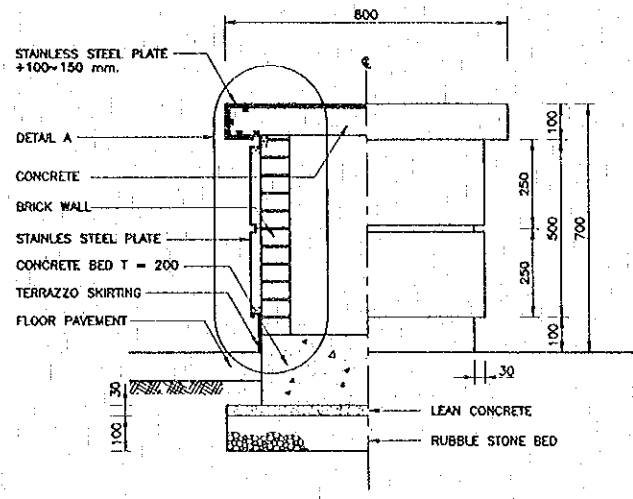
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	16.02.00	BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING : TYPICAL DETAILS (5)
DESIGN CHECK	T. Maezawa	<i>[Signature]</i>	18.01.00	
SUBMITTED	A. Itrotan	<i>[Signature]</i>	21.01.00	
APPROVED	S. Tensyabutra	<i>[Signature]</i>	22.02.00	

BORDER CONTROL FACILITIES THAILAND SIDE FOR ALL BUILDING : TYPICAL DETAILS (5)

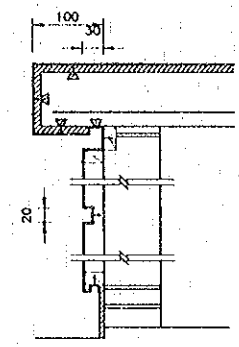




CHECKING COUNTER PLAN  
 SCALE 1:50

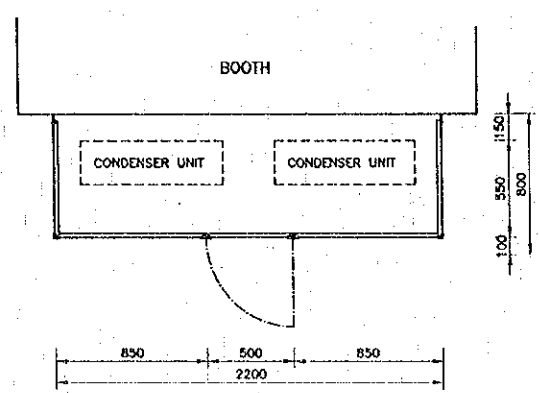


SECTION A-A FRONT ELEVATION

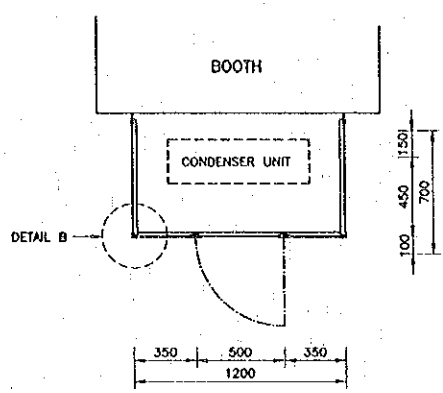


DETAIL A  
 SCALE 1:5

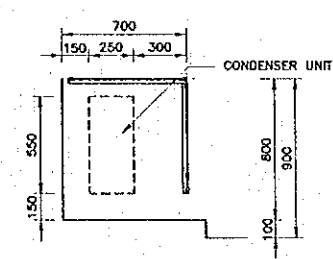
CHECKING COUNTER DETAILS  
 SCALE 1:10



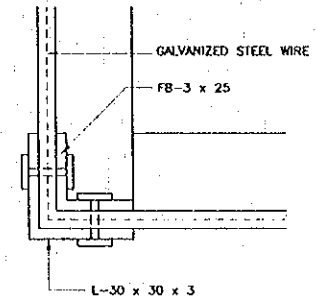
PLAN



PLAN



SECTION



DETAIL B  
 SCALE 1:1

SECURITY CAGE DETAILS  
 SCALE 1:20

- NOTES :
1. DIMENSION AFFIXED (\*) SHALL BE TENTATIVE, WHICH SHALL BE DETERMINED BY THE ENGINEER
  2. ALL STEEL MATERIAL SHALL BE GALVANIZED
  3. THE ACCESS DOOR SHALL BE PROVIDED WITH PAD & LOCK

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REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morlokia	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MISCELLANEOUS DETAILS
DESIGN CHECK	T. Mawazawa	<i>[Signature]</i>	17-02-00	
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-03-00	
APPROVED	S. Tanyabutra	<i>[Signature]</i>	22-03-00	

STRUCTURAL NOTES

DESIGN STANDARD

STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AASHTO-1996  
 THE STRUCTURAL DESIGN SHALL BE BASED ON THE FOLLOWING CODES:  
 REINFORCED CONCRETE STRUCTURES: AMERICAN CONCRETE INSTITUTE (ACI 318) OR THE ENGINEERING OF THAILAND (ET) STANDARD  
 STEEL STRUCTURES: AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) OR THE ENGINEERING INSTITUTE OF THAILAND (ET) STANDARD

LOAD

DEAD LOAD AND LIVE LOAD SHALL BE CALCULATED IN ACCORDANCE WITH THE ET CODE OR AMERICAN SOCIETY OF CIVIL ENGINEER (ASCE)

CONCRETE

CLASS OF CONCRETE AND SPECIFIED CYLINDER COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS:

ORDINARY REINFORCED CONCRETE	$f_c' = 240 \text{ KG/CM}^2$
LEAN CONCRETE	$f_c' = 150 \text{ KG/CM}^2$

TYPE OF REINFORCING STEEL

HIGH YIELD DEFORMED BARS GRADE SD 40 ACCORDING TO TIS 24-2527 SHALL BE USED FOR ALL BARS WHOSE DIAMETER IS 12 MM. OR GREATER UNLESS OTHERWISE NOTED.  
 MILD STEEL ROUND BARS GRADE SR 24 ACCORDING TO TIS 20-2527 SHALL BE USED FOR BARS WHOSE DIAMETER IS 9 MM. OR SMALLER UNLESS OTHERWISE NOTED.

CUTTING

BARS SHALL BE SHEARED, FLAME CUTTING SHALL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.

ANCHORAGE LENGTH

THE ANCHORAGE LENGTH OF STRAIGHT DEFORMED BARS SHALL BE AT LEAST 40 TIMES OF BAR DIAMETERS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

SPLICING

REINFORCING BARS SHALL BE SPLICED BY LAPS.  
 LAP LENGTH SHALL BE EQUAL TO 40 TIMES OF DIAMETERS OF LARGER BAR, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.  
 SPLICING OF BARS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER.  
 BARS DRAWN IN FULL LENGTH (ALSO CALLED CONTINUOUS BARS) SHALL HAVE AS FEW SPLICES AS POSSIBLE.  
 NO MORE THAN 1 BAR IN 3 SHALL BE SPLICED AT THE SAME SECTION, EXCEPT WHERE SHOWN ON THE DRAWINGS.

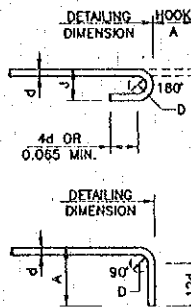
BENDING

BARS SHALL BE COLD BENT AROUND A PIN WITH THE FOLLOWING MINIMUM DIAMETER (D) IN RELATION TO THE DIAMETER OF THE BAR (d):  
 $a = 6d$  FOR RB9, DB10, DB12, DB16, DB20, DB25  
 $a = 8d$  FOR DB28, DB32

HOOKS

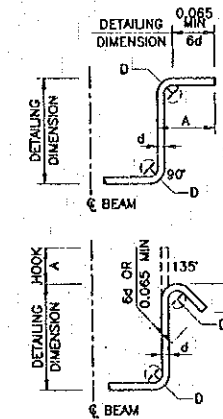
ALL HOOKS, IF NOT SHOWN ON THE DRAWING, SHALL COMPLY WITH ACI STANDARD HOOK AS SET FORTH BELOW:

MAIN REINFORCING BAR HOOK DIMENSIONS (IN METER)



BAR SIZE	180° HOOK		90° HOOK
	A	J	A
RB9	0.12	0.08	0.15
DB10	0.12	0.08	0.20
DB12	0.15	0.10	0.20
DB16	0.20	0.13	0.25
DB20	0.24	0.15	0.30
DB25	0.30	0.20	0.40
DB28	0.40	0.28	0.50
DB32	0.45	0.32	0.55

STIRRUP AND TIE HOOK DIMENSIONS (IN METER)



BAR SIZE	135° HOOK		90° HOOK
	A	H APPROX	A
RB6	0.05	0.05	0.06
RB9	0.09	0.08	0.09
DB10	0.10	0.10	0.10
DB12	0.12	0.10	0.12
DB16	0.16	0.15	0.16
DB20	0.20	0.18	0.20
DB25	0.25	0.22	0.25

SPACING

CLEAR HORIZONTAL DISTANCE BETWEEN BARS OR PAIR OF BARS SHALL BE AT LEAST 40 MM.  
 CLEAR VERTICAL DISTANCE BETWEEN INDIVIDUAL BARS SHALL BE AT LEAST 25 MM.  
 CLEAR VERTICAL DISTANCE BETWEEN PAIR OF BARS SHALL BE AT LEAST 40 MM.

CONCRETE COVER

UNLESS NOTED ON THE DRAWINGS THE FOLLOWING MINIMUM CONCRETE COVER (FROM FACE OF CONCRETE TO FACE OF BAR) SHALL BE PROVIDED:

BOTTOM OF ALL PILE CAPS.	9 CM.
SIDE AND TOP OF PILE CAPS.	4 CM.
SIDE AND TOP OF ALL COLUMNS	4 CM.
TOP OF ALL SLABS.	4 CM.
BOTTOM OF ALL SLABS.	2.5 CM.
TOP OF STAIRS AND STAIR SLABS.	2.5 CM.
SIDE AND BOTTOM OF STAIRS AND STAIR SLABS.	2.5 CM.

CHAMFERING

ALL EXPOSED CONCRETE CORNERS SHALL BE 2.0 CM. CHAMFER UNLESS OTHERWISE NOTED.

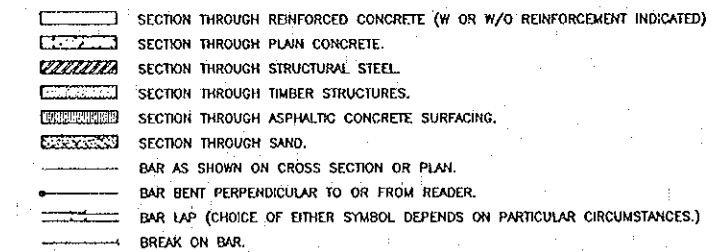
CONCRETE EXPOSED TO SEA WATER OR ALKALINE

- PILE, FOUNDATION AND PIER EXPOSED TO SEA WATER SHALL BE PRODUCED BY USING OF CEMENT TYPE II. THE CLEAR DISTANCE FROM THE FACE OF THE CONCRETE TO THE NEAREST FACE OF REINFORCEMENT (CLEAR COVER) SHALL NOT BE LESS THAN 10 CM. THE CONSTRUCTION JOINT SHALL NOT BE PERMITTED WITHIN THE RANGE OF SEA WATER LEVEL FLUCTUATION BETWEEN LOWEST AND HIGHEST LEVEL AS DETERMINED BY THE ENGINEER. THE SEA WATER SHALL NOT COME IN DIRECT CONTACT WITH CONCRETE FOR A PERIOD OF NOT EARLIER THAN 30 DAYS AT THIS PORTION.
- DEPOSITING CONCRETE UNDER WATER CLASS 5.1.4.5 (f) OF THE SPECIFICATIONS SHALL BE OBSERVED BY THE ENGINEER DURING OPERATION.

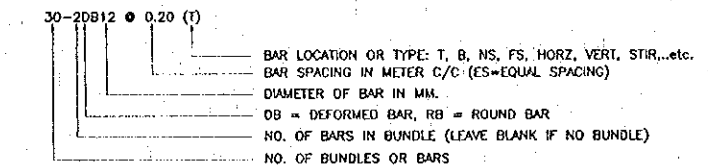
STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHAPES AND PLATES, UNLESS SPECIFIED ON THE DRAWINGS, SHALL BE OF STRUCTURAL STEEL GRADE CONFORMING TO THE REQUIREMENTS STATED IN THE SPECIFICATIONS, WITH A MINIMUM YIELD STRENGTH OF 2500 KG/CM<sup>2</sup>.
- ALL STRUCTURAL STEEL PREFABRICATED WORKS INCLUDING THEIR FASTENERS SHALL BE GALVANIZED AS MENTIONED IN THE SPECIFICATIONS. THE WEIGHT OF ZINC COATING SHALL NOT BE LESS THAN 1,100 GRAMS/M<sup>2</sup>.
- ALL ANCHOR BOLTS SHALL BE GALVANIZED ONLY AT THE EXPOSED PORTIONS.
- ALL WELDING SYMBOLS ARE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS).
- SIZE, INCREMENT LENGTH AND PITCH OF WELD SHOWN ARE IN MILLIMETERS.

STRUCTURAL SYMBOLS



BAR IDENTIFICATION



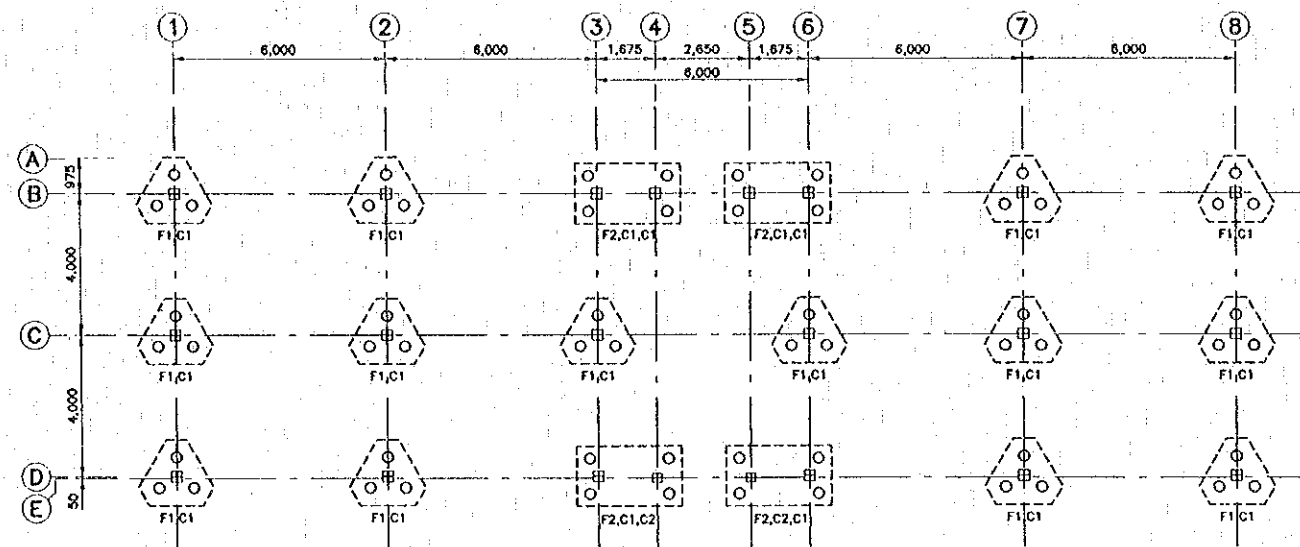
PILING

- ALL PIPE MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE REQUIREMENTS STATED IN THE SPECIFICATIONS.
- THE ALLOWABLE BEARING CAPACITY OF THE PILE SHALL BE AS SHOWN ON THE DRAWINGS.
- THE LENGTH OF PILES SHOWN ON THE DRAWINGS SHALL BE TENTATIVE. THE FINAL LENGTH SHALL BE DETERMINED BY THE ENGINEER.

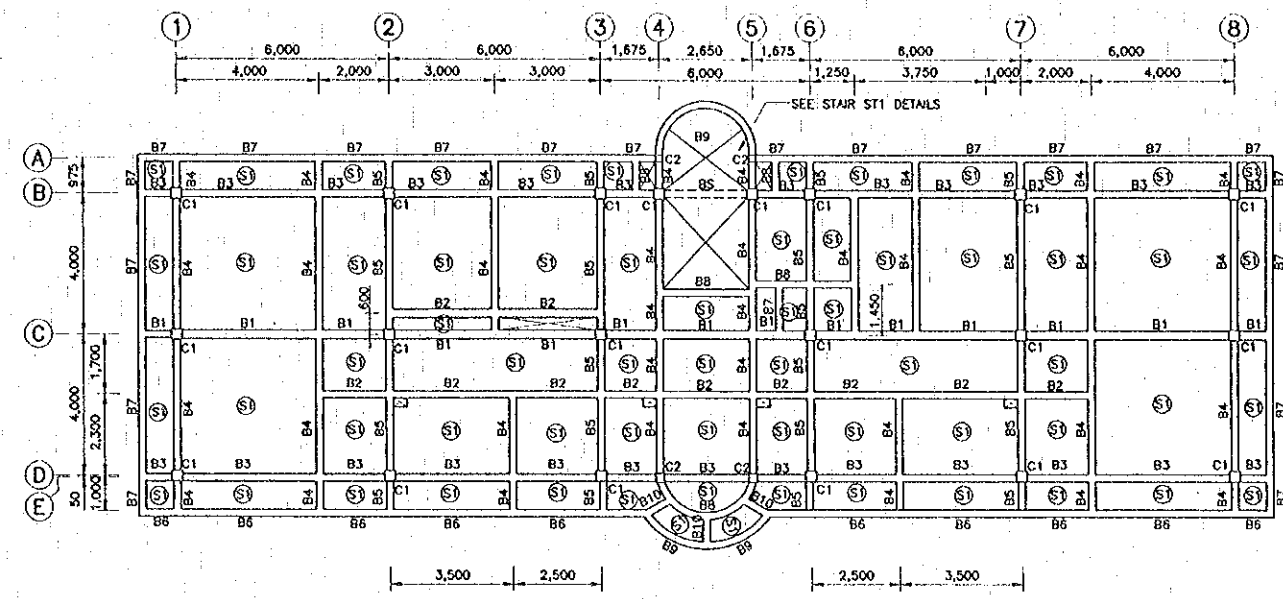
FOUNDATION

- THE FOUNDATIONS SHOWN ARE DESIGNED ON THE BASIS OF THE ASSUMED SOIL BEARING CAPACITY 20 T/M<sup>2</sup>.
- THE FINAL DIMENSIONS, DEPTH AND TREATMENT OF FOUNDATIONS SHALL BE DETERMINED BY THE ENGINEER ON THE BASIS OF THE RESULT OF THE SUPPLEMENTAL GEOLOGICAL SURVEY.

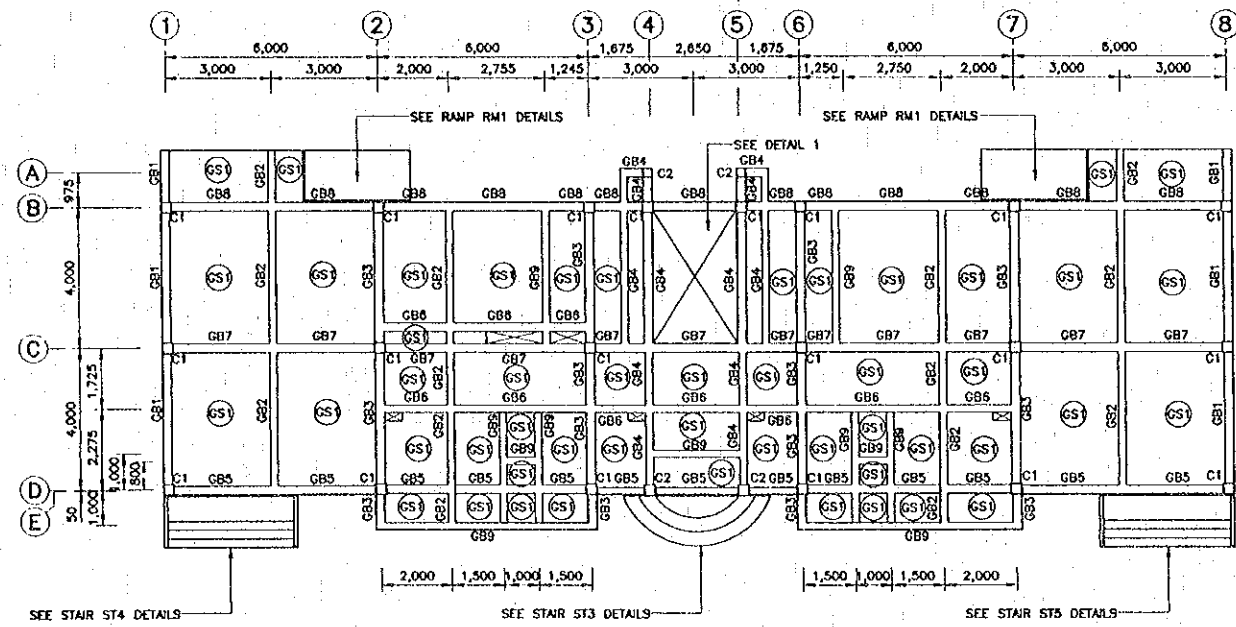
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				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morikita	[Signature]	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE STRUCTURAL NOTE
							DESIGN CHECK	T. Maekawa	[Signature]	18/02/00		
							SUBMITTED	A. Hiratani	[Signature]	21/02/00		
							APPROVED	S. Tomyabutra	[Signature]	22/02/00		



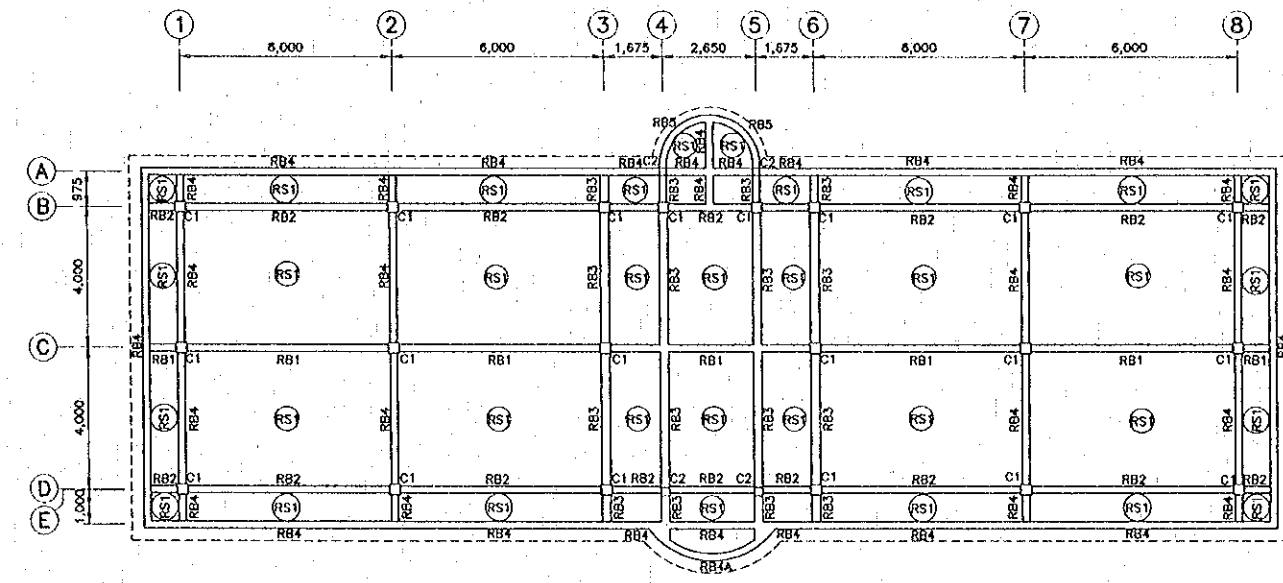
PILE PLAN  
SCALE 1:100



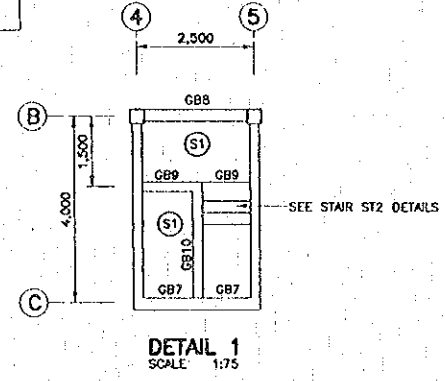
SECOND FLOOR COLUMN, BEAM AND SLAB PLAN  
SCALE 1:100



FIRST FLOOR FOOTING, COLUMN, BEAM AND SLAB PLAN  
SCALE 1:100



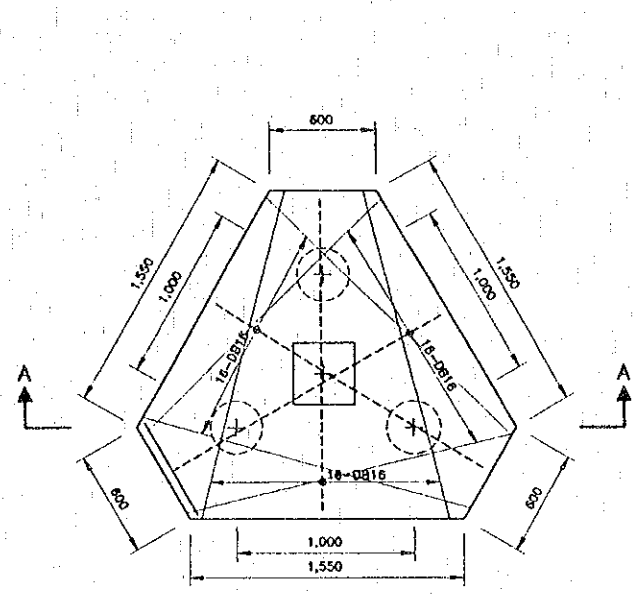
ROOF FLOOR COLUMN, BEAM SLAB AND PARAPET PLAN  
SCALE 1:100



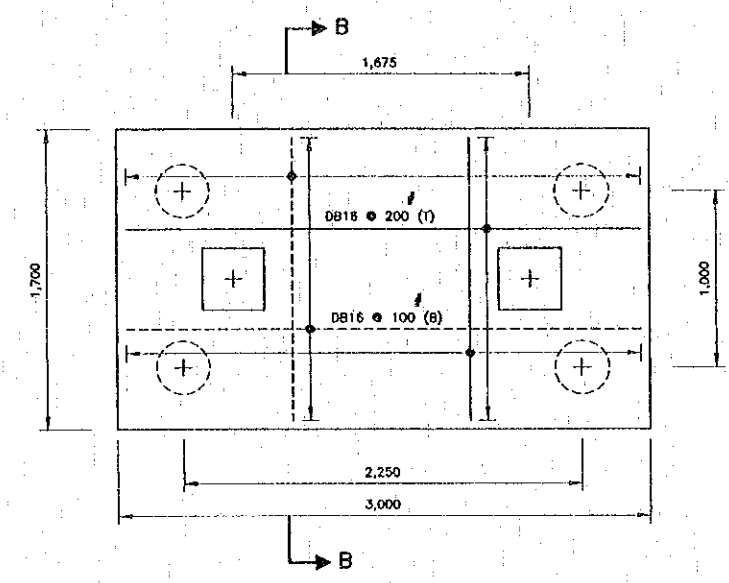
DETAIL 1  
SCALE 1:75

- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
  2. ALL ELEVATIONS AND DETAILS SHALL BE REFERRED TO ARCHITECTURAL DWGS.

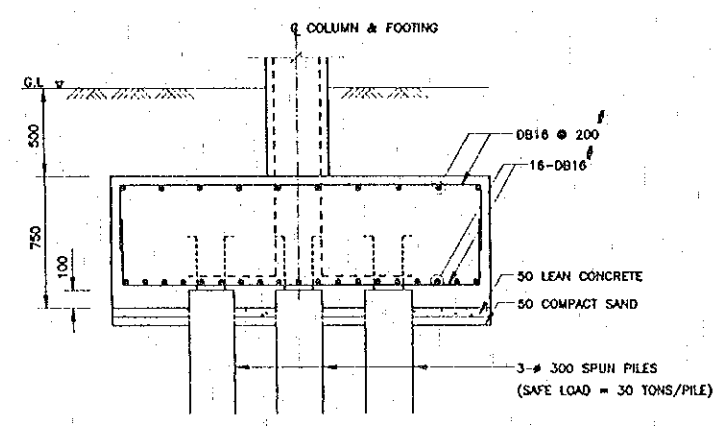
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.		KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morikita	<i>[Signature]</i>	18-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : FOOTING, BEAM AND SLAB PLAN
								DESIGN CHECK	T. Matsuzawa	<i>[Signature]</i>	18-02-00		
								SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00		
								APPROVED	S. Taniyabutra	<i>[Signature]</i>	22/02/00		



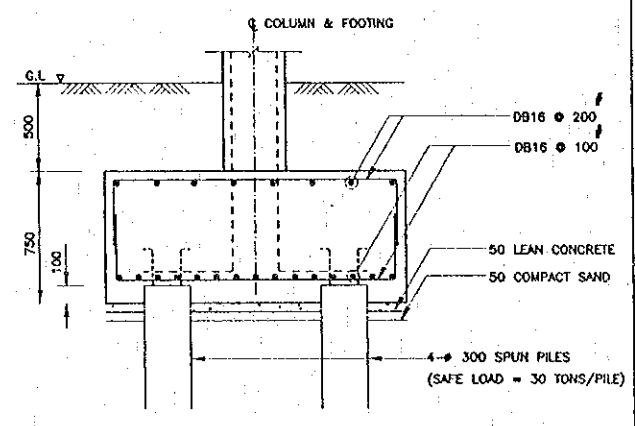
FOOTING F1  
SCALE 1:20



FOOTING F2  
SCALE 1:20



SECTION A-A  
SCALE 1:20



SECTION B-B  
SCALE 1:20

- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
  2. ALL ELEVATIONS ARE IN METERS REFERRING TO ARCHITECTURAL DWG.

COLUMN TYPE	C1	C2
EL.+6.600 TO EL.+3.600		
BELOW EL.+3.600		

COLUMNS  
NOT TO SCALE

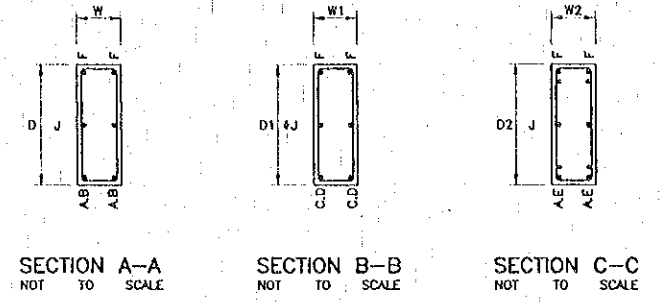
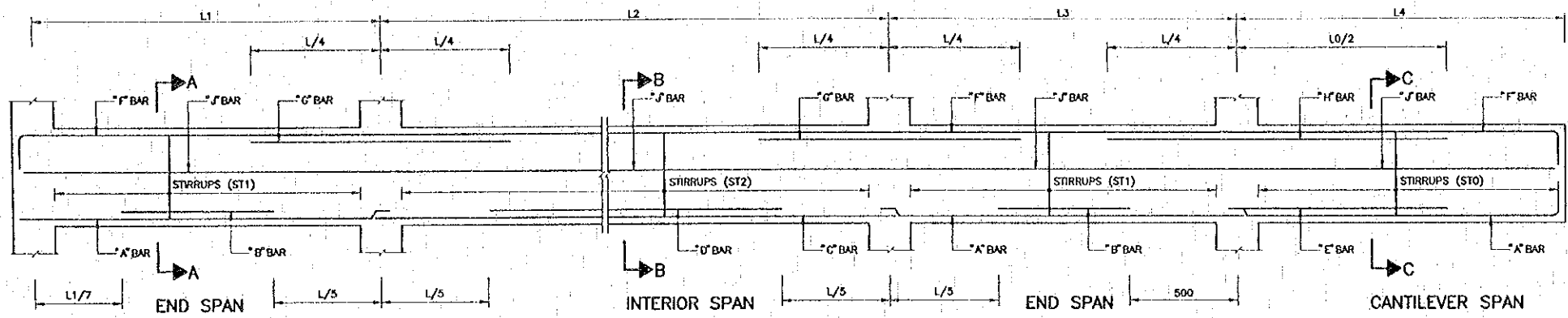
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

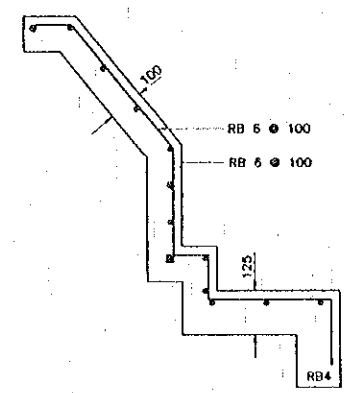
QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	10-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : COLUMN AND FOOTING DETAILS
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	10-02-00	
SUBMITTED	A. Hirokuni	<i>[Signature]</i>	11/02/00	
APPROVED	S. Tanyabutra	<i>[Signature]</i>	21/02/00	



L = LONGER SPAN OF THE ADJACENT SPANS  
**TYPICAL BEAM DETAILS**  
 NOT TO SCALE

**BEAM SCHEDULE FOR MAIN OFFICE**

MARK	TOP ELEVATION (MM.)	SIZE (MM.)						BOTTOM BAR					TOP BAR				STIRRUPS			REMARK	
		W	D	W1	D1	W2	D2	"A" BAR	"B" BAR	"C" BAR	"D" BAR	"E" BAR	"F" BAR	"G" BAR	"H" BAR	"J" BAR	ST0	ST1	ST2		
GB1	+0.00	250	500	250	500	250	500	2-DB20	-	2-DB20	-	-	2-DB20	-	-	-	RB9@150	RB9@150	RB9@150		
GB2	+0.00	200	450	200	450	200	450	2-DB16	-	2-DB16	-	-	2-DB20	-	-	-	RB9@150	RB9@150	RB9@150		
GB3	+0.00	250	500	250	500	250	500	3-DB20	-	3-DB20	-	-	3-DB16	-	-	-	RB9@150	RB9@150	RB9@150		
GB4																				SEE DWG. NO. MOB-ST-04	
GB5	+0.00	250	500	250	500	-	-	2-DB20	1-DB20	2-DB20	1-DB20	-	2-DB25	DB25	-	-	-	RB9@100	RB9@100		
GB6	+0.00	200	450	200	450	-	-	2-DB20	-	2-DB20	-	-	2-DB20	-	-	-	-	RB9@150	RB9@150		
GB7																				SEE DWG. NO. MOB-ST-04	
GB8																				SEE DWG. NO. MOB-ST-04	
GB9	+0.00	200	450	200	450	-	-	2-DB20	-	2-DB20	-	-	2-DB16	-	-	-	-	RB9@150	RB9@150		
GB10	+0.00	200	400	-	-	-	-	2-DB16	-	-	-	-	2-DB16	-	-	-	-	RB9@150	-		
B1	+3.60	250	500	250	500	200	400	2-DB16	-	2-DB25	-	-	2-DB25	2-DB25	2-DB25	-	RB9@150	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-05	
B2	+3.60	200	400	200	400	-	-	2-DB20	-	2-DB20	-	-	3-DB20	-	-	-	-	RB9@100	RB9@100		SEE DWG. NO. MOB-ST-05
B3	+3.60	200	400	200	400	200	400	3-DB20	-	3-DB20	-	-	3-DB20	-	-	-	RB9@150	RB9@150	RB9@150	SEE DWG. NO. MOB-ST-05	
B4	+3.60	200	400	200	400	200	400	3-DB20	-	3-DB20	-	-	3-DB20	-	-	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-05	
B5	+3.60	200	400	200	400	200	400	3-DB20	-	3-DB20	-	-	2-DB16	-	-	-	RB9@100	RB9@100	RB9@100		
B6	+3.60	200	400	200	400	200	400	3-DB20	-	3-DB20	-	-	2-DB20	DB20	-	-	RB9@150	RB9@150	RB9@150	SEE DWG. NO. MOB-ST-04	
B7	+3.60	200	400	200	400	200	400	2-DB16	-	2-DB16	-	-	2-DB16	-	-	-	RB9@150	RB9@150	RB9@150		
B8	+3.60	200	400	200	400	200	400	2-DB16	-	2-DB16	-	-	2-DB16	-	-	-	RB9@150	RB9@150	RB9@150	SEE DWG. NO. MOB-ST-06	
B9	+3.60	200	400	200	400	200	400	3-DB20	-	3-DB20	-	-	2-DB20	-	-	-	RB9@150	RB9@150	RB9@150	SEE DWG. NO. MOB-ST-06	
B10	+3.60	200	300	200	300	200	300	2-DB16	-	-	-	-	2-DB16	-	-	-	RB9@150	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-06	
RB1	+6.60	200	400	200	400	200	400	2-DB20	DB20	2-DB20	DB20	-	2-DB20	DB20	DB20	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-07	
RB2	+6.60	200	400	200	400	200	400	2-DB20	-	2-DB20	-	-	2-DB20	DB20	-	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-07	
RB3	+6.60	250	400	250	400	250	400	2-DB20	-	2-DB20	-	-	2-DB25	DB25	DB25	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-07	
RB4	+6.60	200	400	200	400	200	400	2-DB16	-	2-DB16	-	-	2-DB16	-	-	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-08	
RB4'	+6.60	200	400	200	400	200	400	2-DB16	DB16	2-DB16	DB16	-	2-DB16	DB16	DB16	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-08	
RB5	+6.60	200	400	200	400	200	400	2-DB20	-	2-DB20	-	-	2-DB20	-	-	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-08	
RB6	+6.60	200	400	200	400	200	400	2-DB20	-	2-DB20	-	-	2-DB20	-	-	-	RB9@100	RB9@100	RB9@100	SEE DWG. NO. MOB-ST-08	

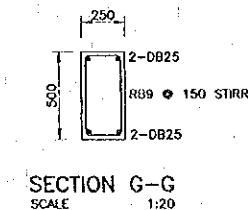
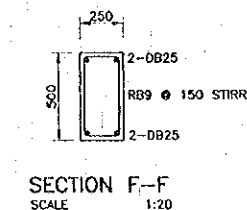
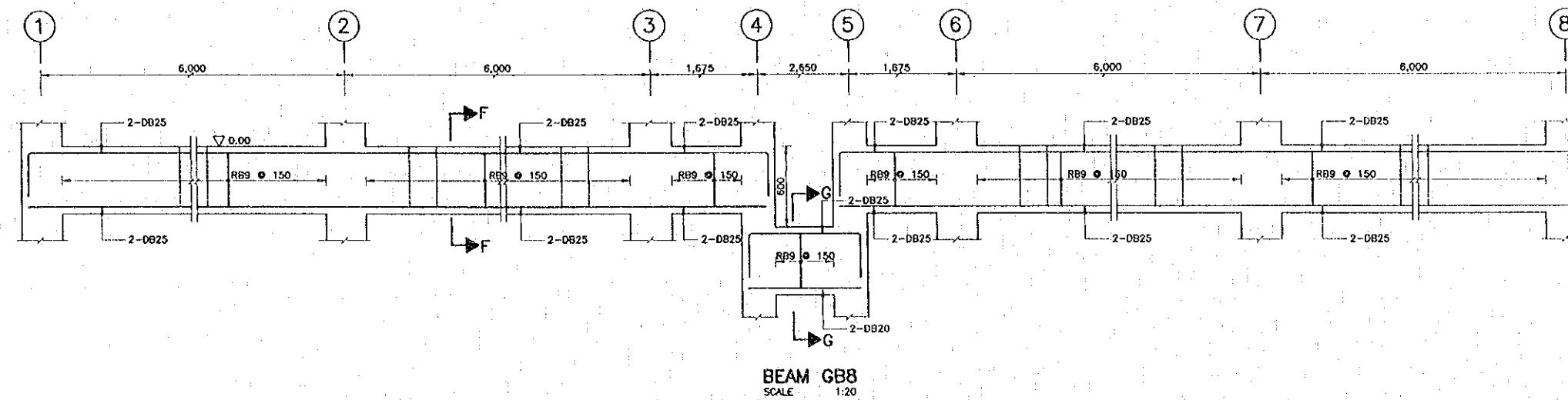
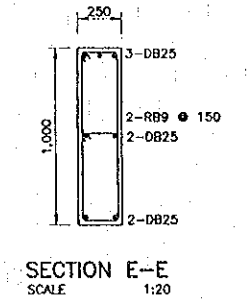
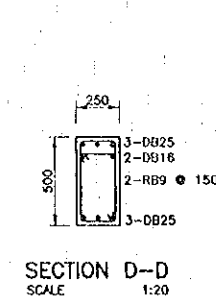
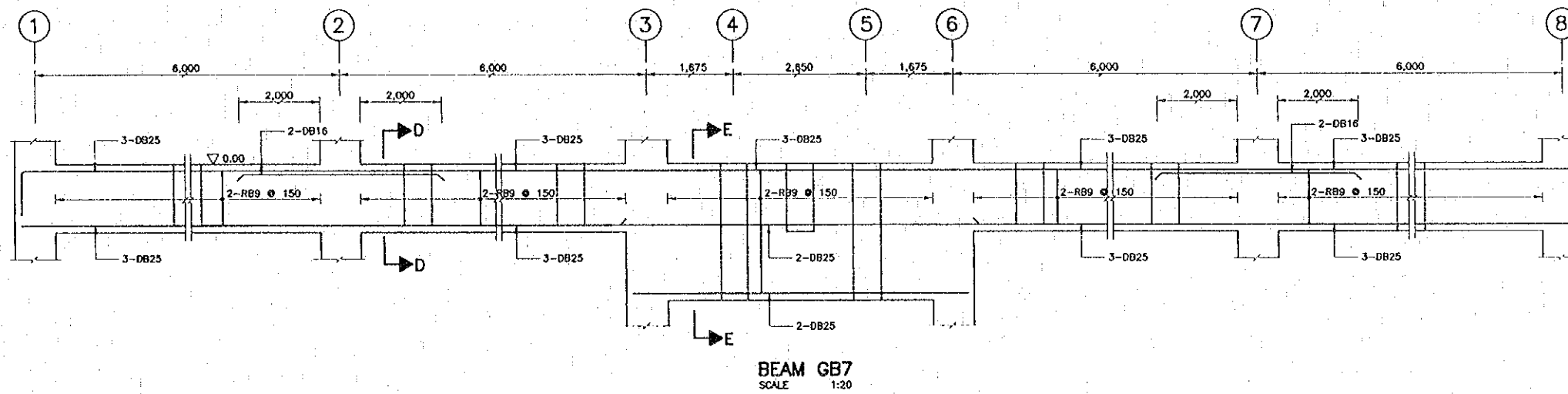
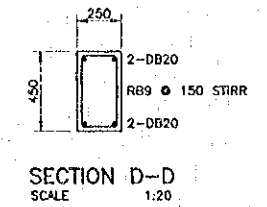
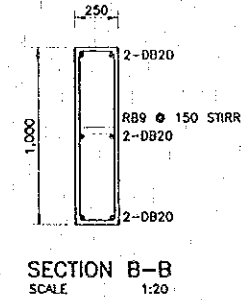
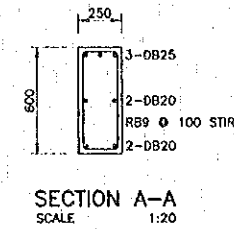
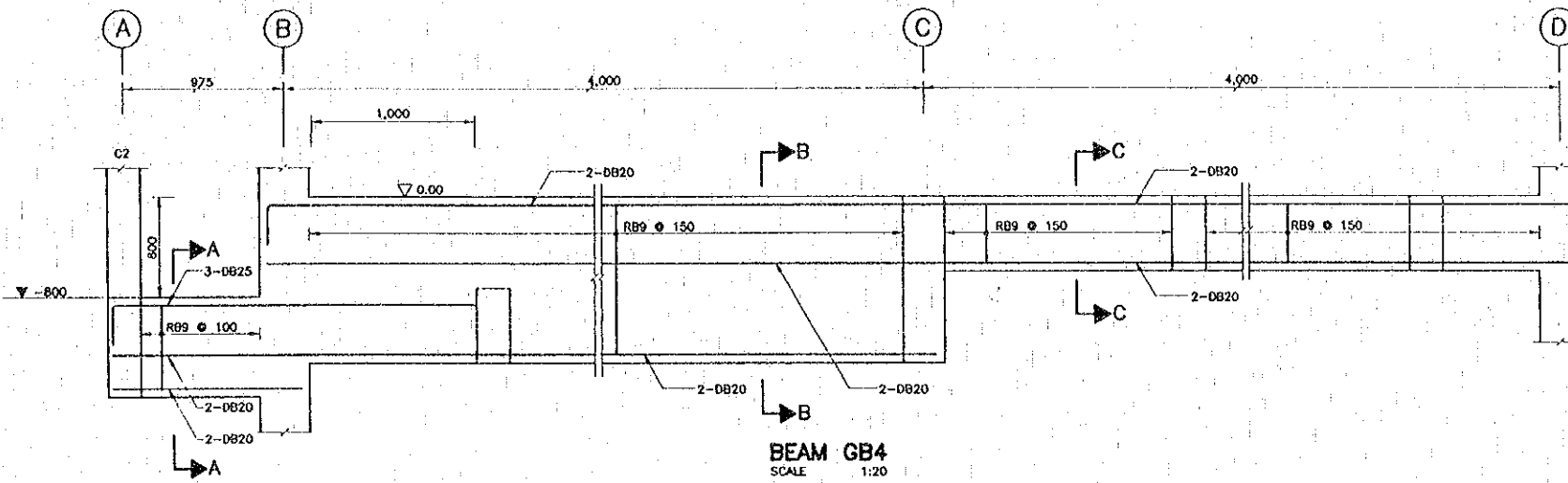


**REINFORCED CONCRETE WALL DETAIL**  
 SCALE 1:10  
 (ALL DIMENSION ARE REFERING TO ARCHITECTURE DRAWING)

- NOTES :
- ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED. NO DIMENSION SHALL BE SCALED.
  - ALL ELEVATIONS ARE IN METERS REFERING TO ARCHITECTURAL DWGS.
  - STANDARD 90° BEND SHALL CONFORM TO GENERAL NOTES P21-S03.
  - LAP SPICES FOR TOP BAR SHALL BE PLACED AT MIDDLE OF SPAN, FOR BOTTOM BAR SHALL BE PLACED AT SUPPORT (WHEN NECESSARY)

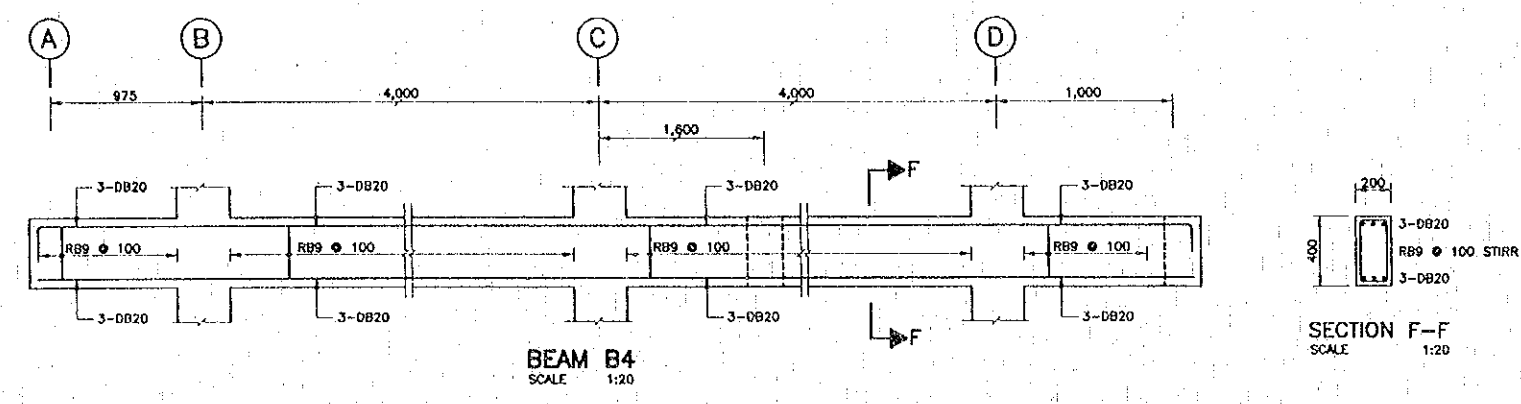
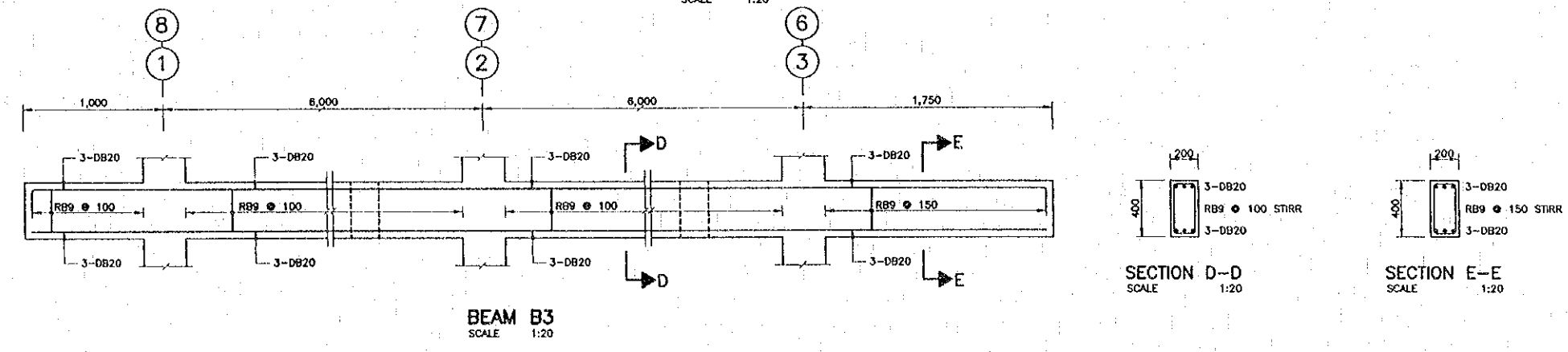
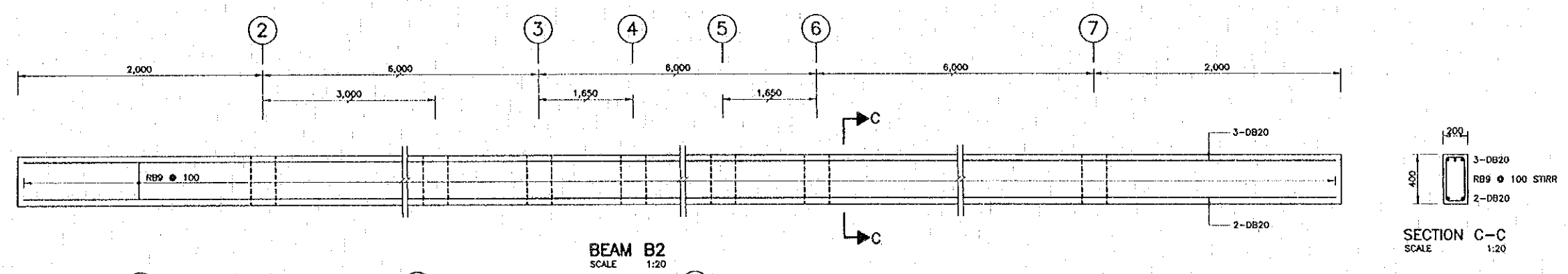
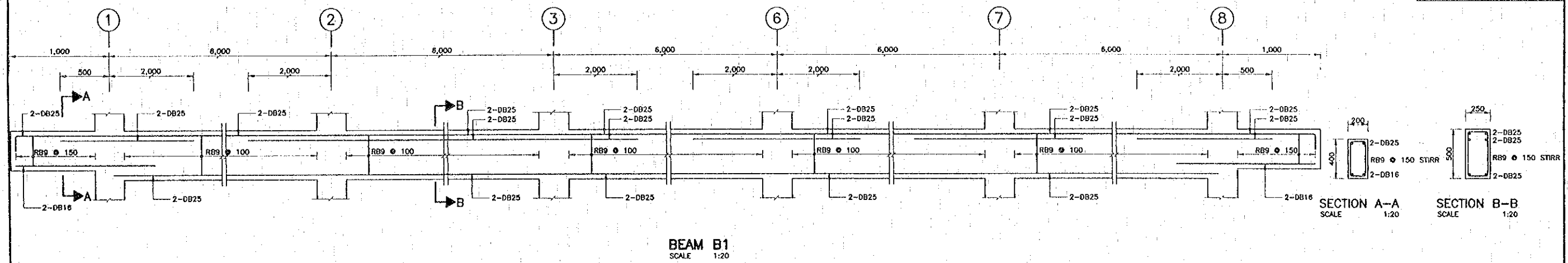
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				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	16/03/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : BEAM SCHEDULE
						DESIGN CHECK	T. Masuzono	<i>[Signature]</i>	18/03/00	
						SUBMITTED	A. Hirohara	<i>[Signature]</i>	21/03/00	
						APPROVED	S. Tamayabutra	<i>[Signature]</i>	23/03/00	

DATE OF ISSUE		05/03/2000	
DWG. NO.	F-S-5	SHEET NO.	169
DWG. STATUS			



NOTES :  
1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Moritaka	<i>[Signature]</i>	11-07-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : BEAM DETAILS-1
						DESIGN CHECK	T. Morizawa	<i>[Signature]</i>	18-01-00	
						SUBMITTED	A. Hirataki	<i>[Signature]</i>	11-07-00	
						APPROVED	S. Taniyobitara	<i>[Signature]</i>	22/02/00	

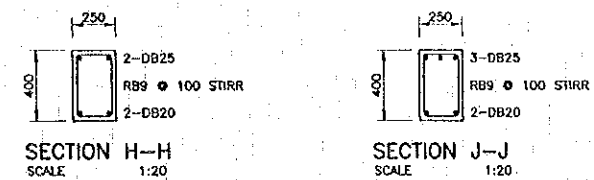
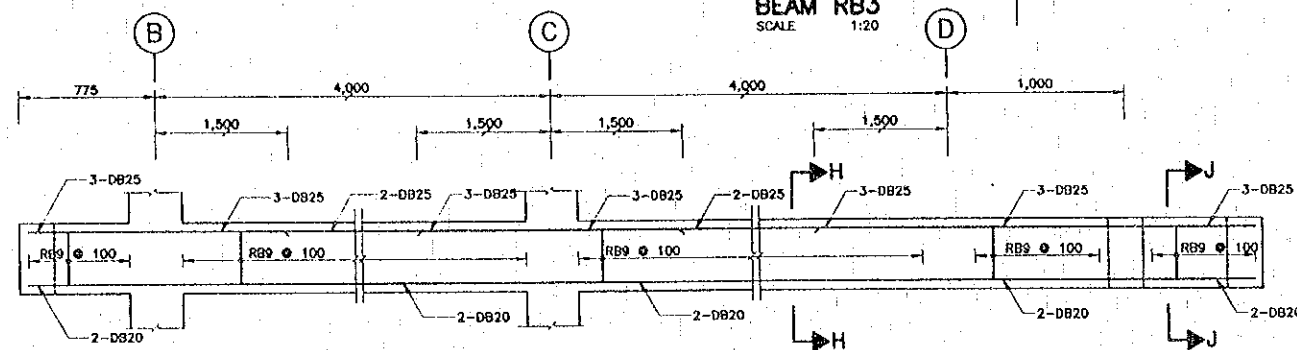
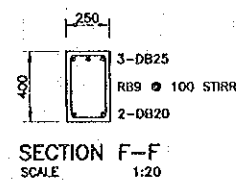
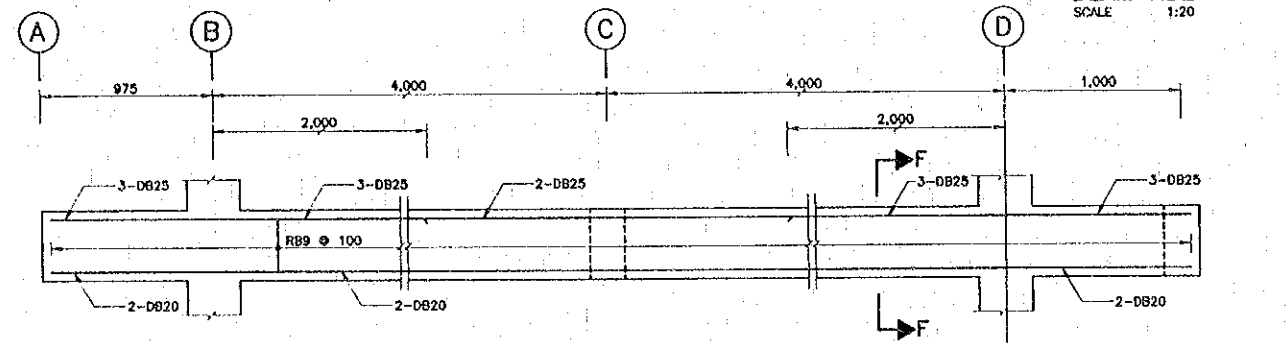
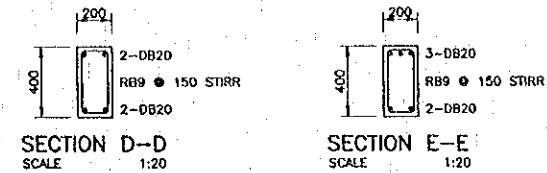
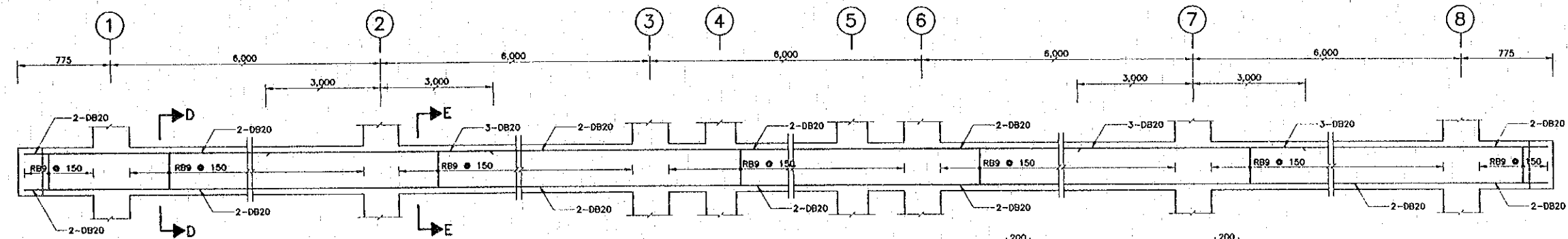
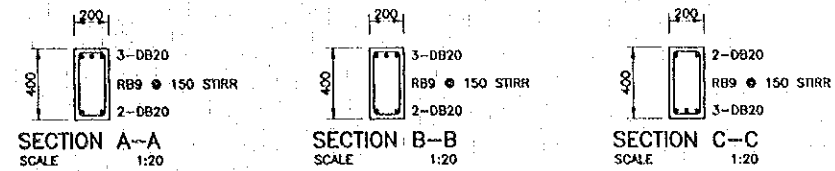
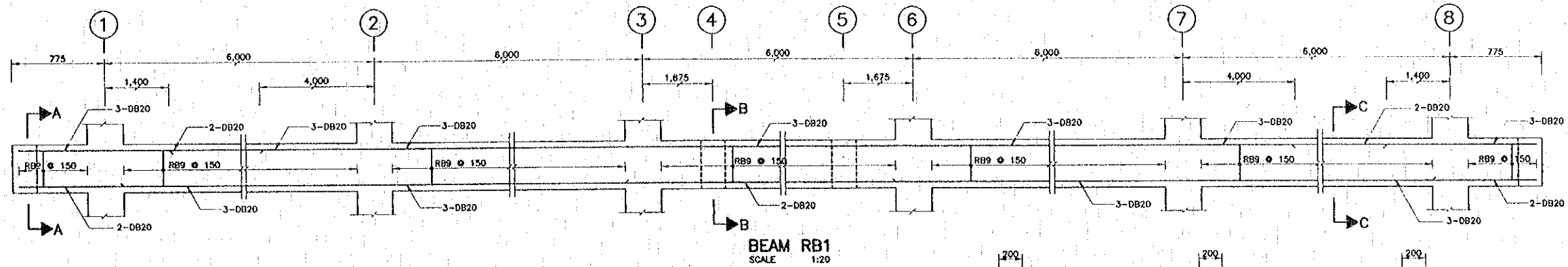


NOTES:  
 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS			DESIGN	A. Horikawa	<i>[Signature]</i>	05/03/00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : BEAM DETAILS-2
							DESIGN CHECK	T. Maevorova	<i>[Signature]</i>	05/03/00		
							SUBMITTED	A. Hirataki	<i>[Signature]</i>	05/03/00		
							APPROVED	S. Tamayabutra	<i>[Signature]</i>	05/03/00		







NOTES :  
 1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

REV.	DATE	DESCRIPTION	APPROVED

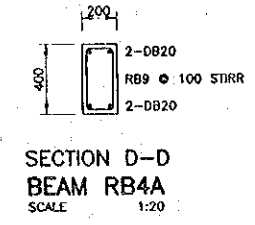
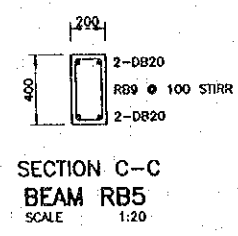
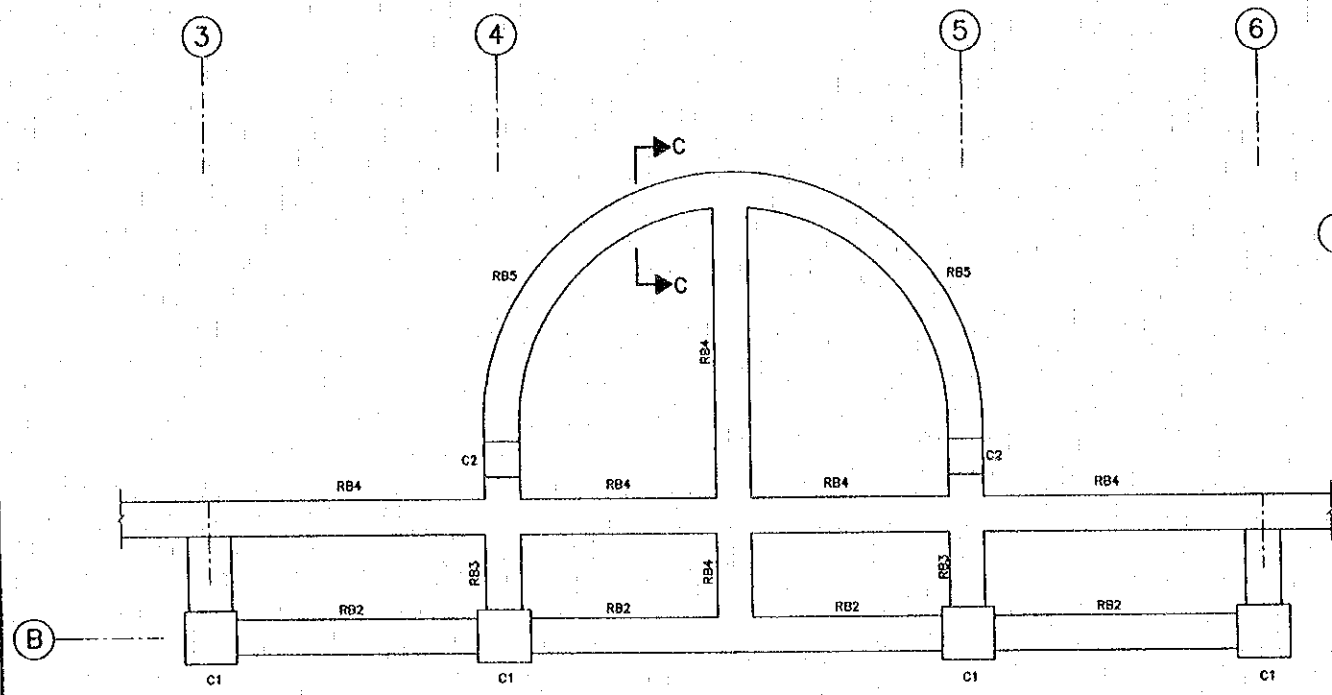
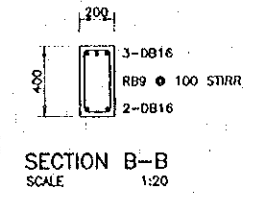
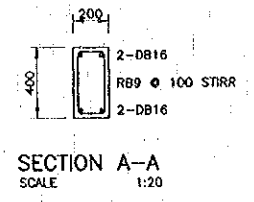
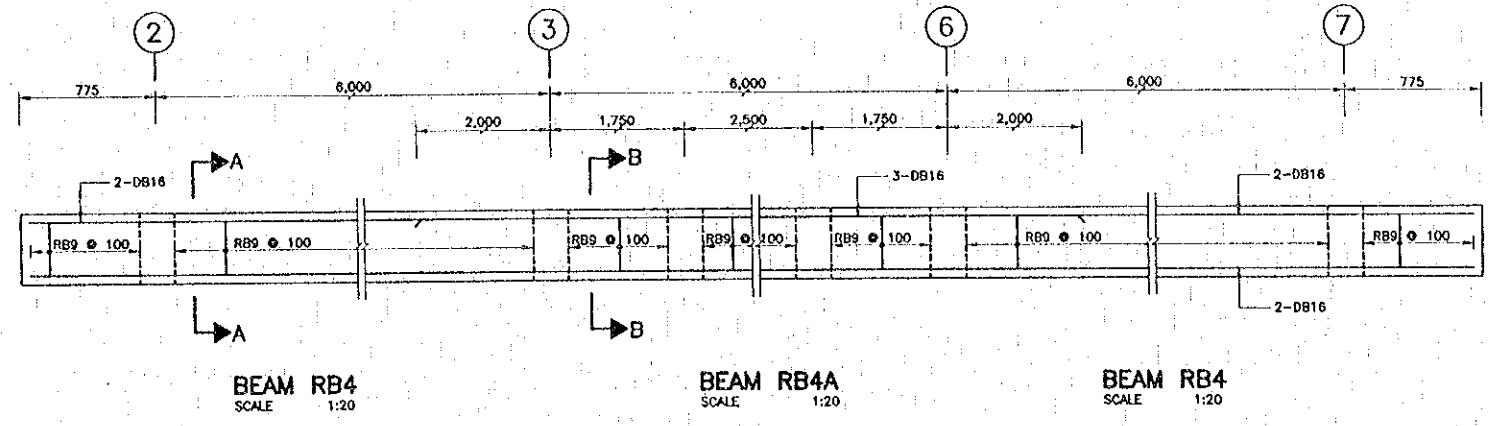
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

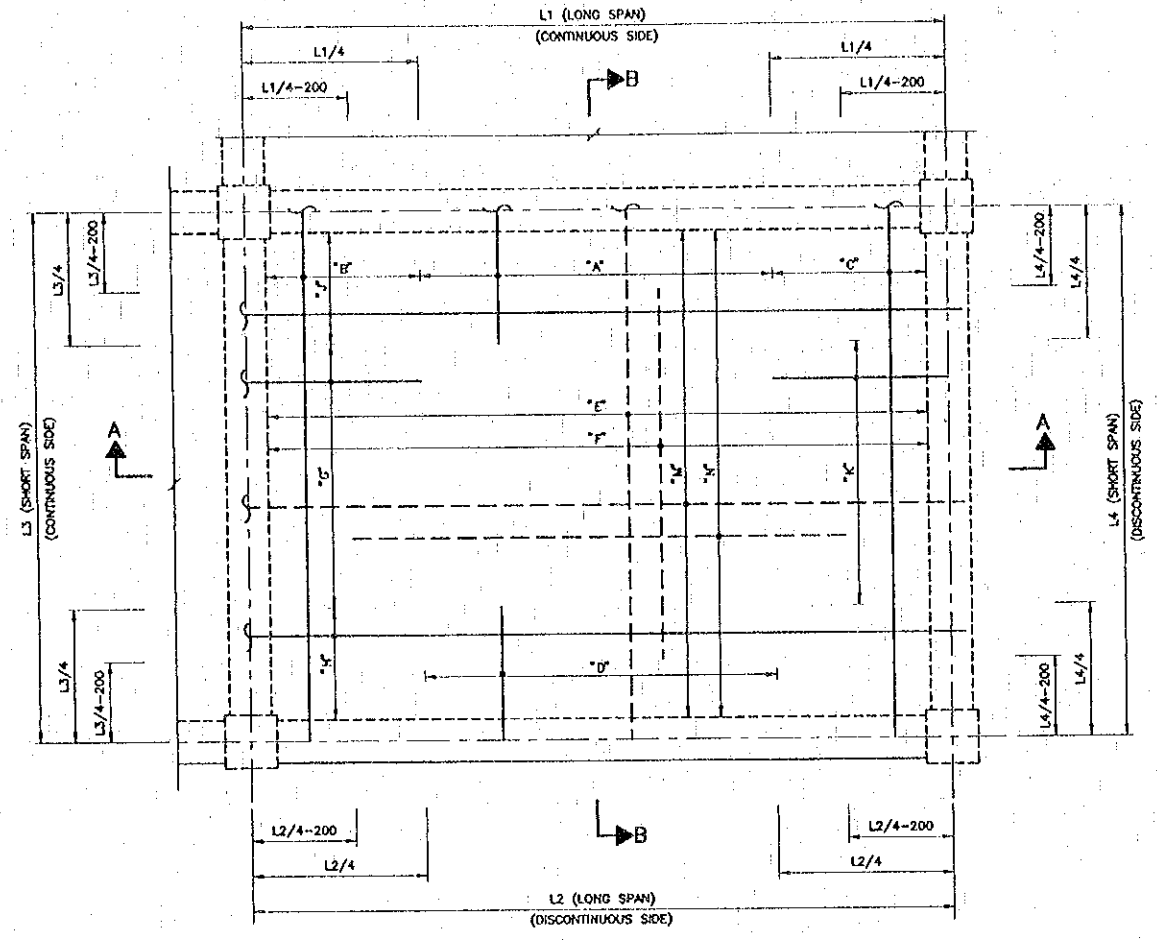
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Marloka	<i>[Signature]</i>	16-02-00
DESIGN CHECK	T. Namsuana	<i>[Signature]</i>	18-02-00
SUBMITTED	A. Kiatonai	<i>[Signature]</i>	21-02-00
APPROVED	S. Temyabutra	<i>[Signature]</i>	23-02-00

DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 MAIN OFFICE : BEAM DETAILS-4

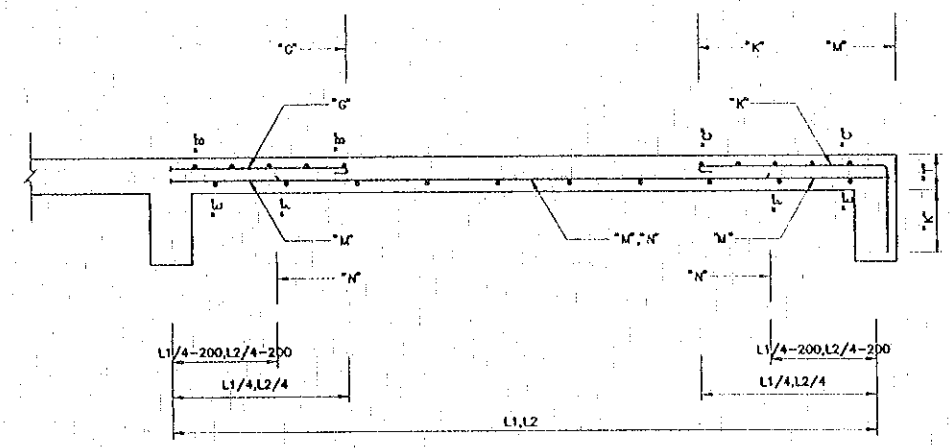


NOTES :  
 1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.  
 2. ALL ELEVATIONS ARE IN METERS REFERING TO ARCHITECTURAL DWGS.

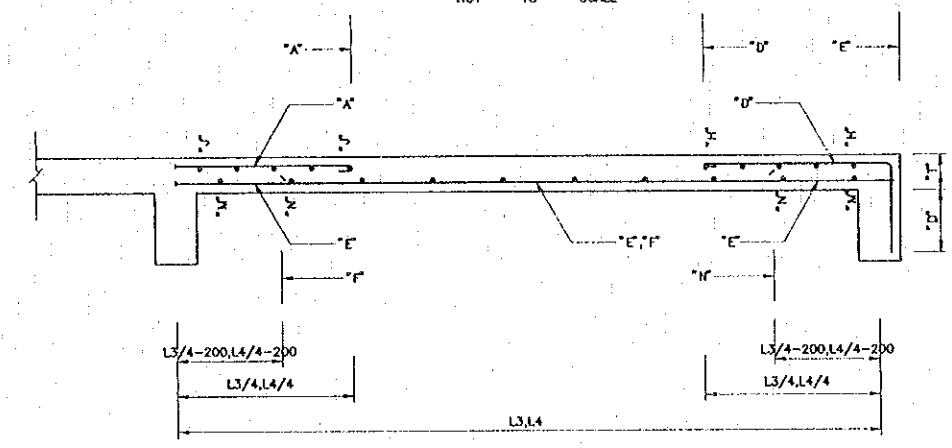
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.					DESIGN	A. Morfoka	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : BEAM DETAILS-5
								DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	16-02-00		
								SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-02-00		
								APPROVED	S. Tanjyokoro	<i>[Signature]</i>	21-02-00		



TYPICAL SLAB DETAIL  
NOT TO SCALE

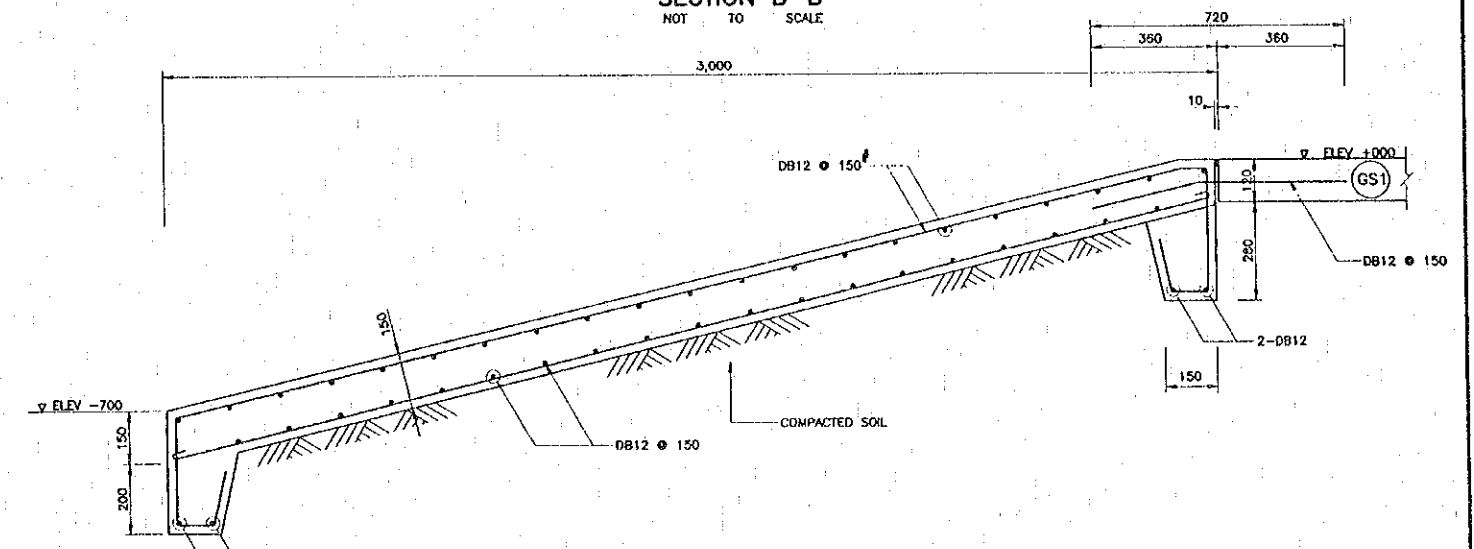


SECTION A-A  
NOT TO SCALE



SECTION B-B  
NOT TO SCALE

SLAB REINFORCEMENT				
ITEM	SLAB GS1	SLAB S1	SLAB RS1	REMARK
L1	900-4000	1200-6000	900-6000	
L2	900-4000	1200-6000	900-6000	
L3	900-4000	1200-6000	900-6000	
L4	900-4000	1200-6000	900-6000	
T	120	120	120	
*A*	RB9@200	RB9@200	RB9@150	
*B*	RB9@200	RB9@200	RB9@150	
*C*	RB9@200	RB9@200	RB9@150	
*D*	RB9@200	RB9@200	RB9@150	
E	RB9@200	RB9@200	RB9@150	
F	-	-	-	
G	RB9@200	RB9@200	RB9@150	
H	RB9@200	RB9@200	RB9@150	
J	RB9@200	RB9@200	RB9@150	
K	RB9@200	RB9@200	RB9@150	
M	RB9@200	RB9@200	RB9@150	
*N*	-	-	-	



RAMP RM1 DETAILS  
SCALE 1:10

- NOTES :
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED. NO DIMENSIONS SHALL BE SCALED.
  - TOP BAR SHALL HAVE NO LAP SPLICES, BOTTOM BAR MAY HAVE LAP SPLICES AT SUPPORT ONLY AS NECESSARY.
  - FOR ADJACENT SLABS HAVING DIFFERENT IN SIZE AND/OR NUMBER (SPACING) OF BARS ; TOP BAR SHALL BE LARGER BARS SIZE AND/OR LARGER NUMBER (SMALLER SPACING) OF ADJACENT SLABS ; BOTTOM BARS MAY USE STANDARD DEVELOPMENT LENGTH AS NECESSARY.
  - FOR ELEVATION AND LIMIT OF SLAB, SEE STRUCTURAL PLANS AND ARCHITECTURAL DRAWINGS.

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

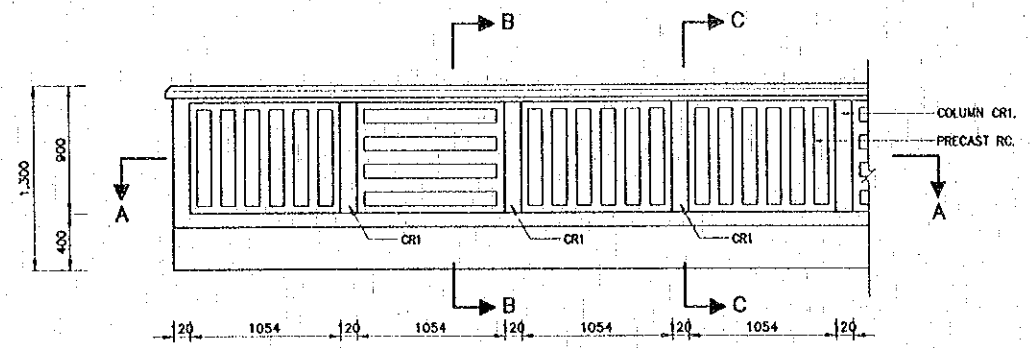
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	16-02-00
DESIGN CHECK	T. Mochizuki	<i>[Signature]</i>	18-02-00
SUBMITTED	A. Hirotsugu	<i>[Signature]</i>	21-02-00
APPROVED	S. Taniyabutra	<i>[Signature]</i>	23/02/00

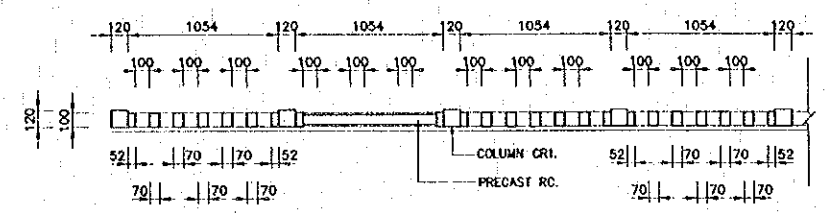
DWG. TITLE:  
**BORDER CONTROL FACILITIES**  
 THAILAND SIDE  
 MAIN OFFICE : SLAB SCHEDULE, TYPICAL SLAB AND RAMP DETAILS



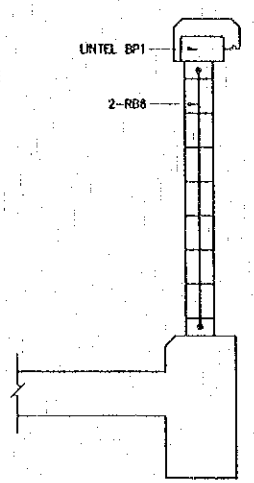




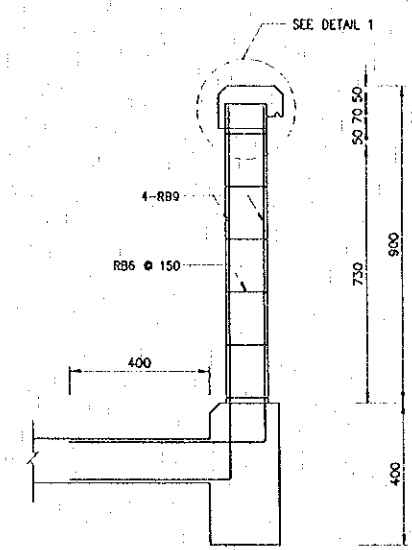
CANOPY  
SCALE 1:25



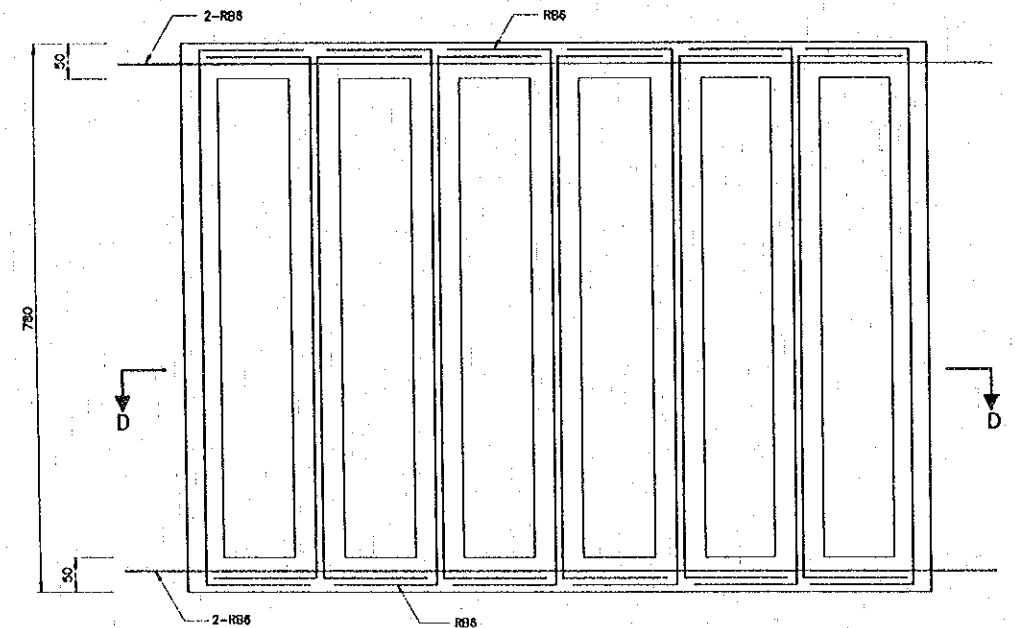
SECTION A-A  
SCALE 1:25



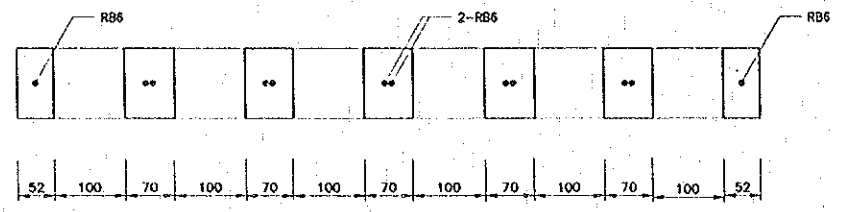
SECTION B-B  
SCALE 1:10



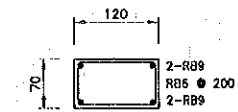
SECTION C-C  
SCALE 1:10



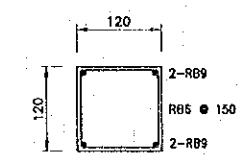
PRECAST RC. REINFORCEMENT  
SCALE 1:5



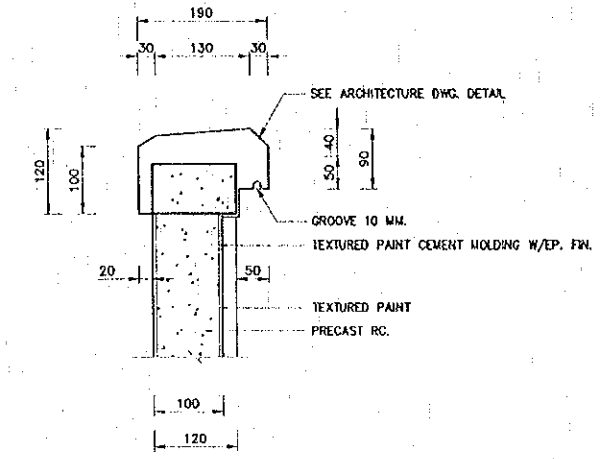
SECTION D-D  
SCALE 1:5



LINTEL BP1  
SCALE 1:5

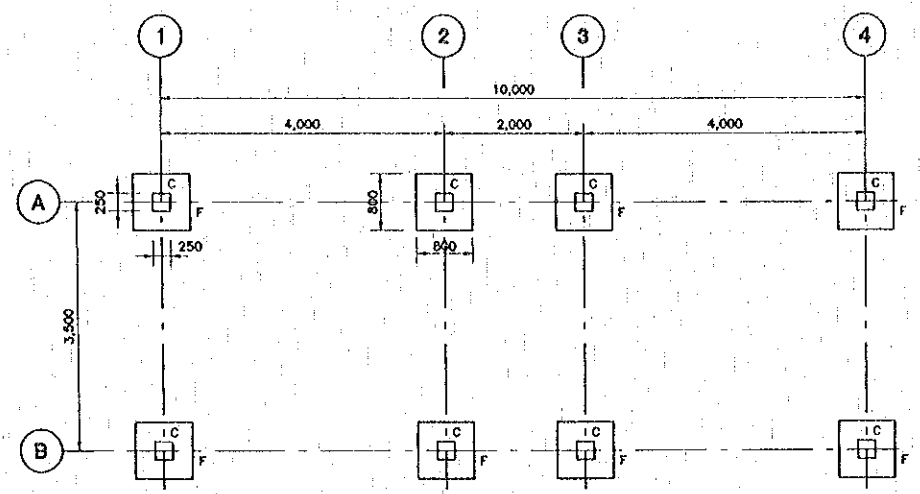


COLUMN CR1  
SCALE 1:5

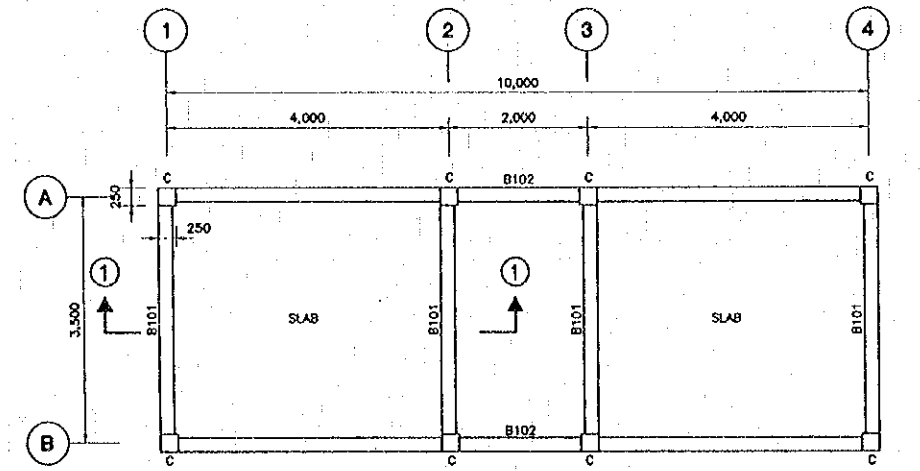


HANDRAIL  
DETAIL 1  
SCALE 1:5

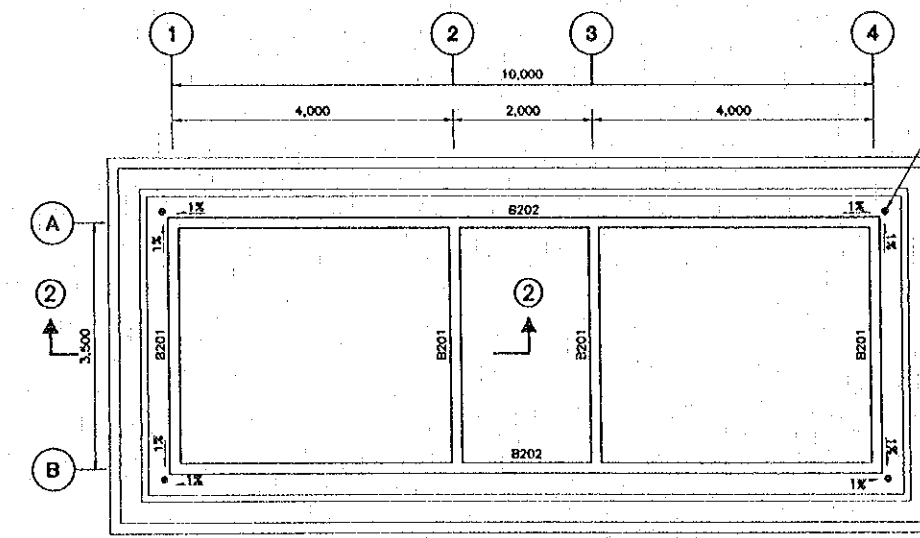
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morikita	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE MAIN OFFICE : CANOPY REINFORCEMENT DETAILS
						DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	18-02-00		
						SUBMITTED	A. Hirotsu	<i>[Signature]</i>	17/02/00		
						APPROVED	S. Tansyabutra	<i>[Signature]</i>	22/02/00		



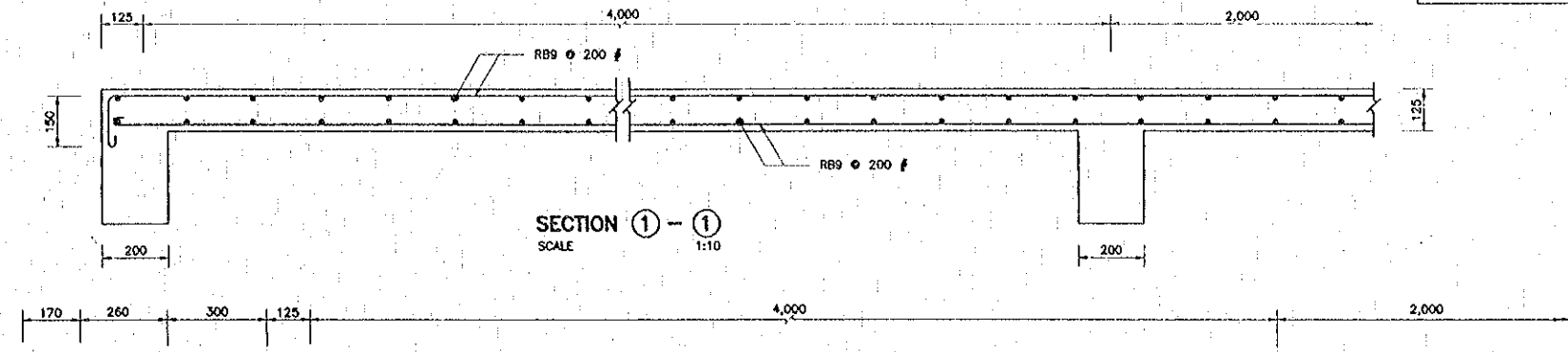
FOOTING, COLUMN PLAN  
SCALE 1:50



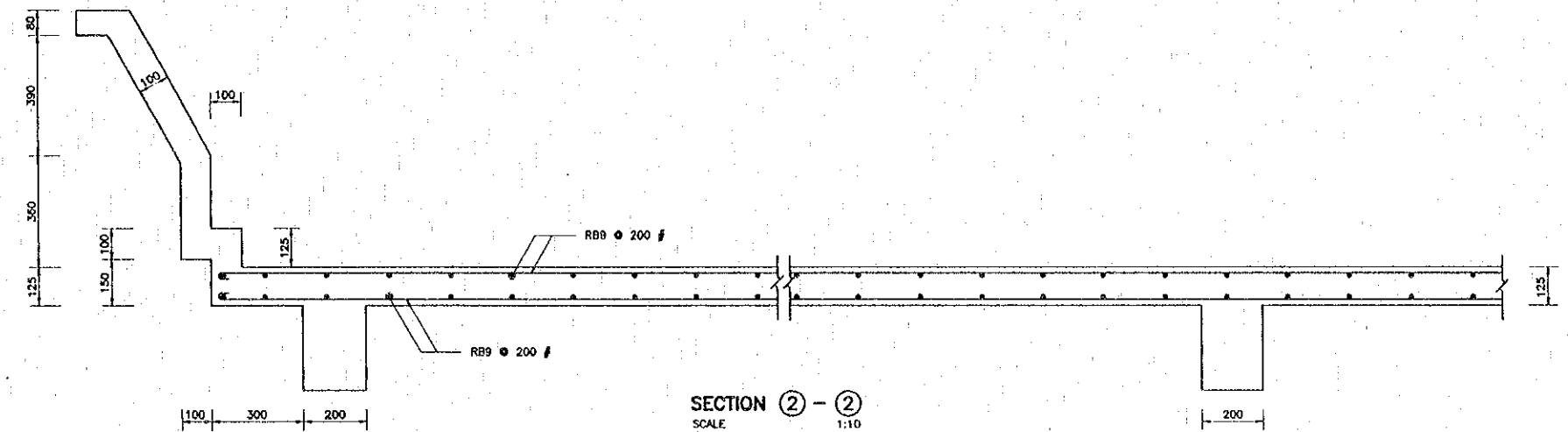
FIRST FLOOR BEAM, SLAB & COLUMN PLAN  
SCALE 1:50



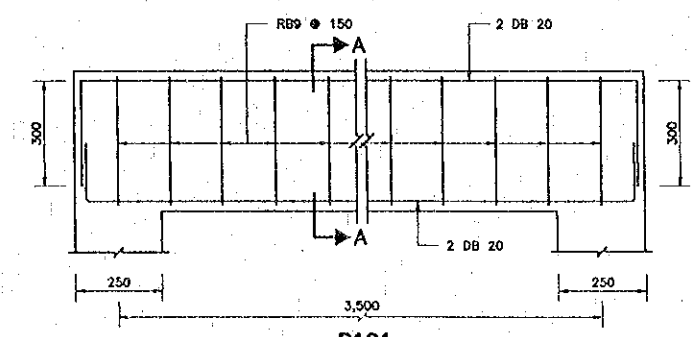
ROOF BEAM & SLAB PLAN  
SCALE 1:50



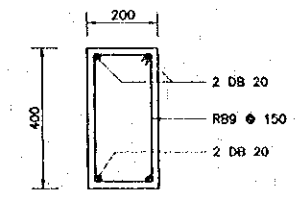
SECTION 1-1  
SCALE 1:10



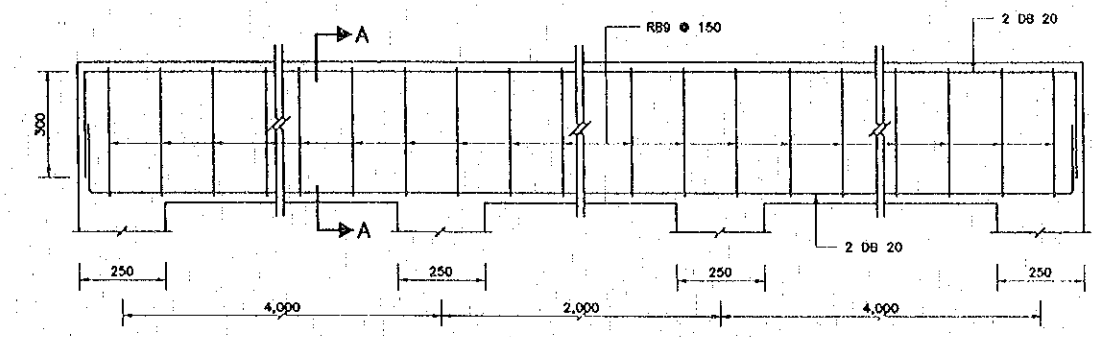
SECTION 2-2  
SCALE 1:10



B101  
SCALE 1:10



SECTION A-A  
SCALE 1:10



B102  
SCALE 1:10

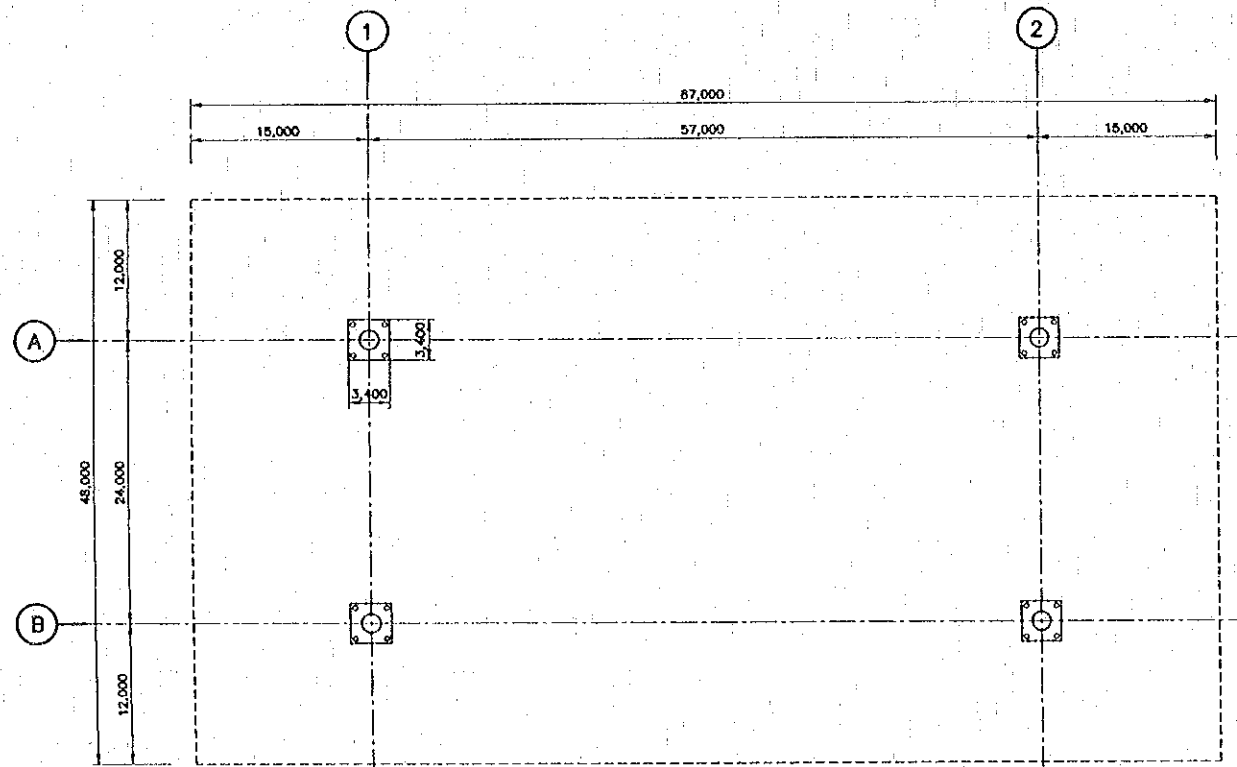
NOTE :  
 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED  
 2. SOIL UNDER THE FOOTING SHALL HAVE A MINIMUM ALLOWABLE BEARING CAPACITY OF 10 TONS/M<sup>2</sup>

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWO. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	A. Morkha	[Signature]	11-02-00	
										DESIGN CHECK	T. Mousurea	[Signature]	11-02-00	
										SUBMITTED	A. Hiptani	[Signature]	11-03-00	
										APPROVED	S. Tamyabutra	[Signature]	12/02/00	

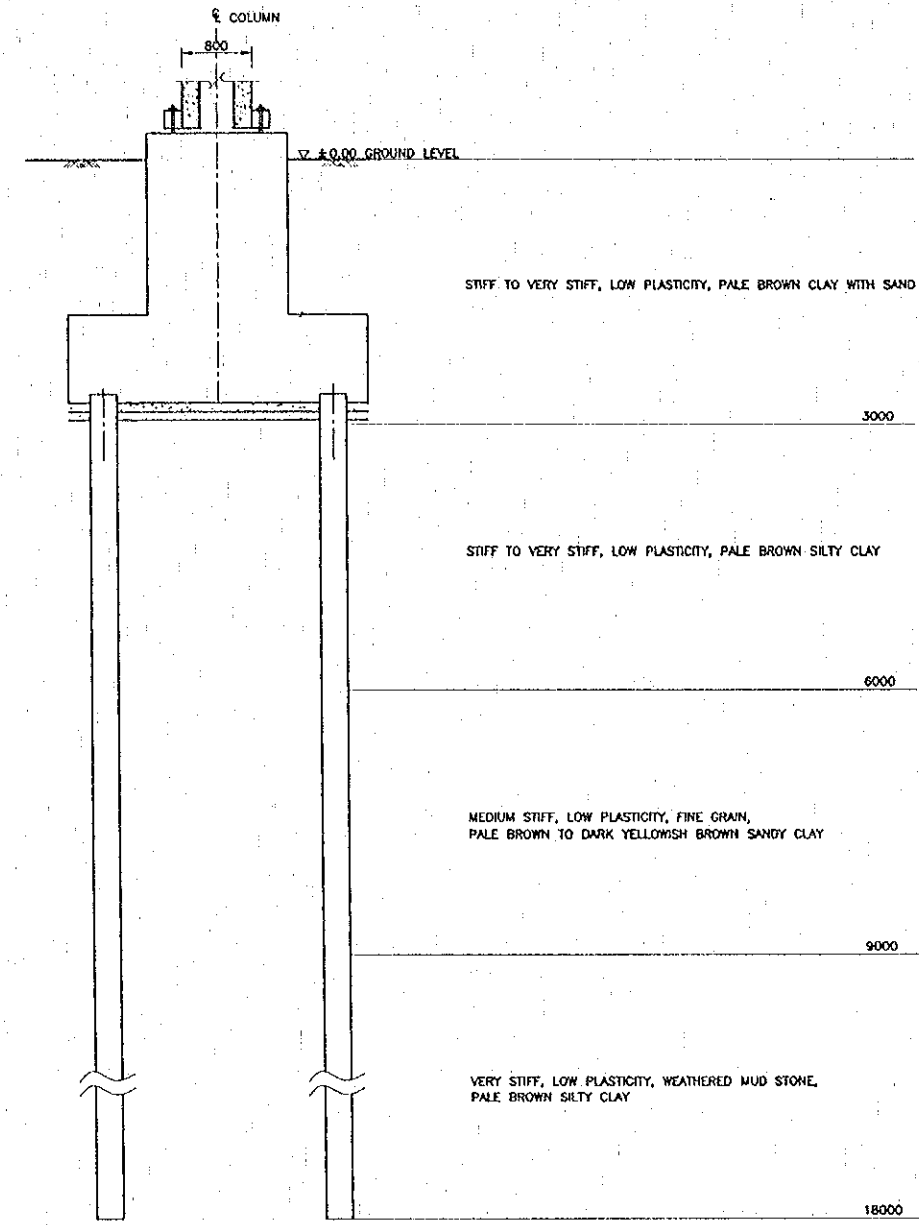
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 PUBLIC TOILET : STRUCTURE DETAILS - 1







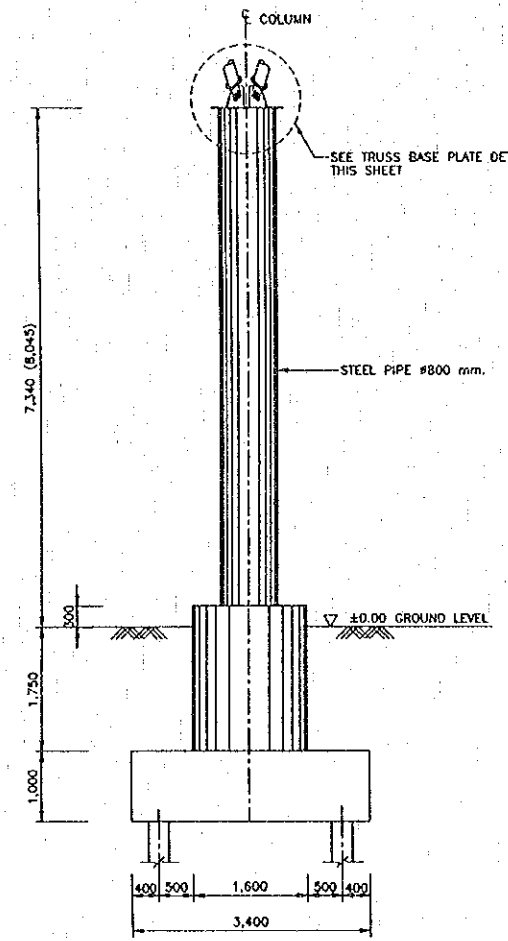
**FOUNDATION & PILE PLAN**  
SCALE 1:300



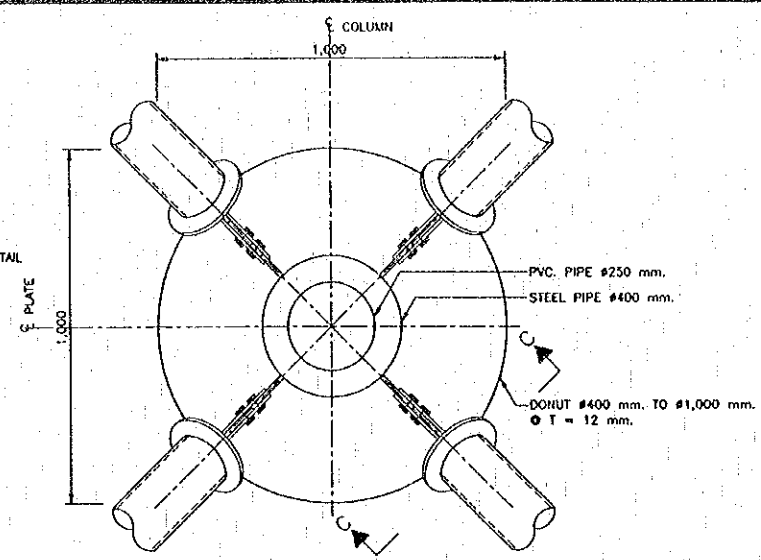
**GROUND FOUNDATION LAYERS**  
SCALE 1:40

NOTE :  
 1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.  
 2. THE LENGTH OF PILE SHOWN SHALL BE TENTATIVE, THE FINAL LENGTH SHALL BE DETERMINED BY THE ENGINEER.

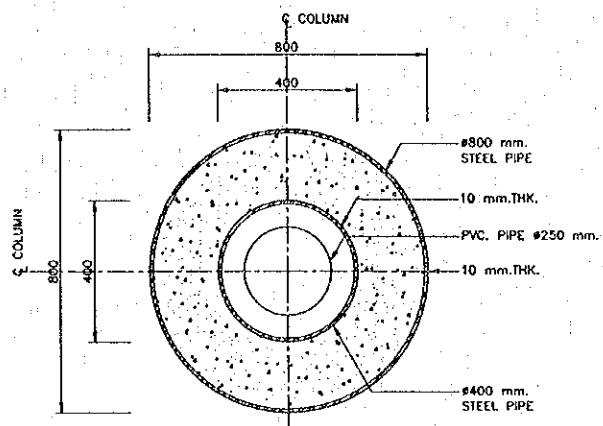
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00	<b>BORDER CONTROL FACILITIES</b> THAILAND SIDE INSPECTION ROOF - TYPE 1 (1) PILING LAYOUT
						DESIGN CHECK	T. Mousitong	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00	



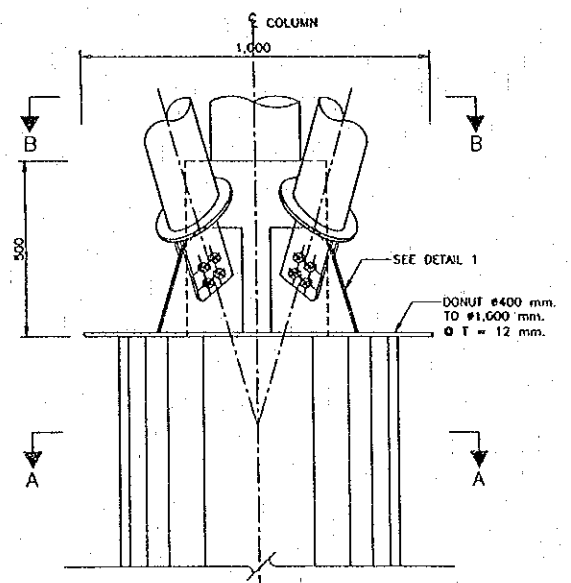
COLUMN  
SCALE 1:50



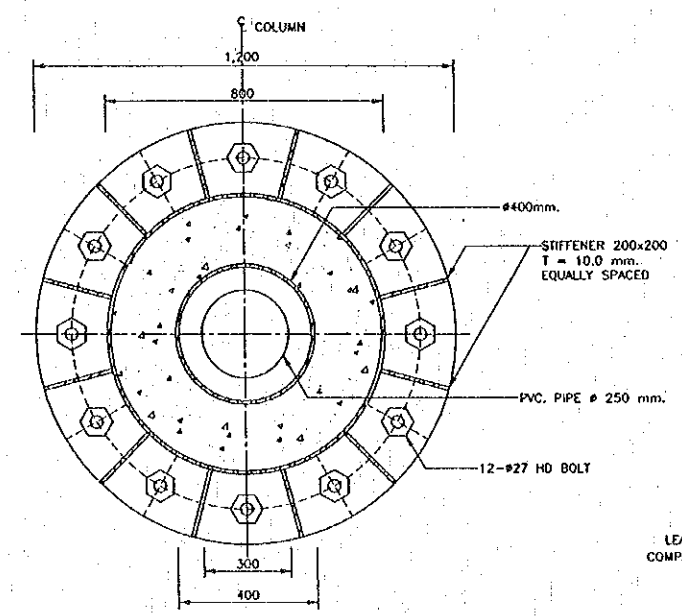
SECTION B-B  
SCALE 1:10



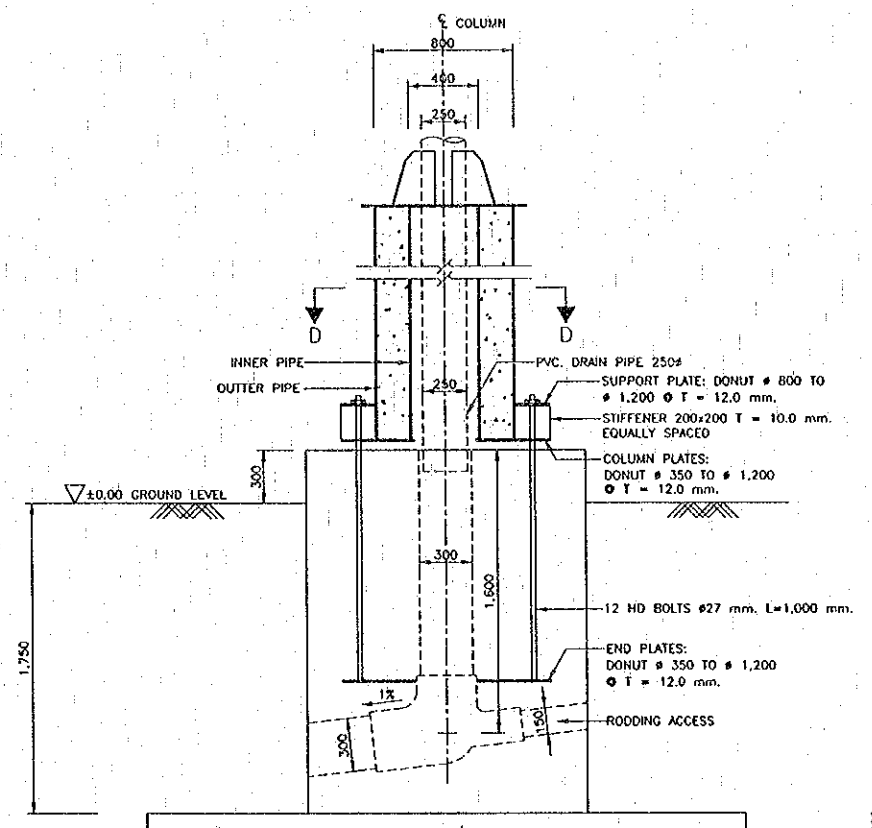
SECTION A-A  
SCALE 1:10



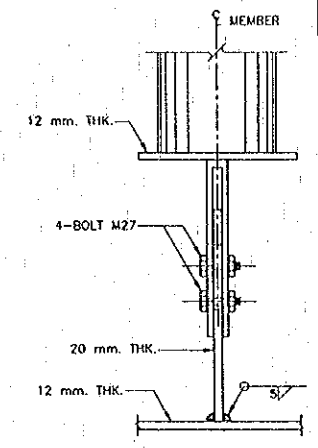
TRUSS BASE PLATE DETAIL  
SCALE 1:10



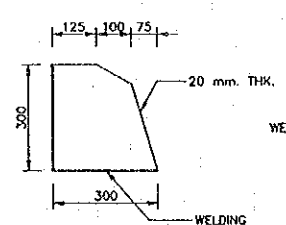
SECTION D-D  
SCALE 1:10



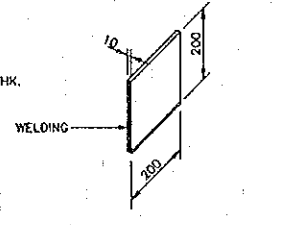
DETAIL OF HOLDING DOWN BOLT SYSTEM  
SCALE 1:20



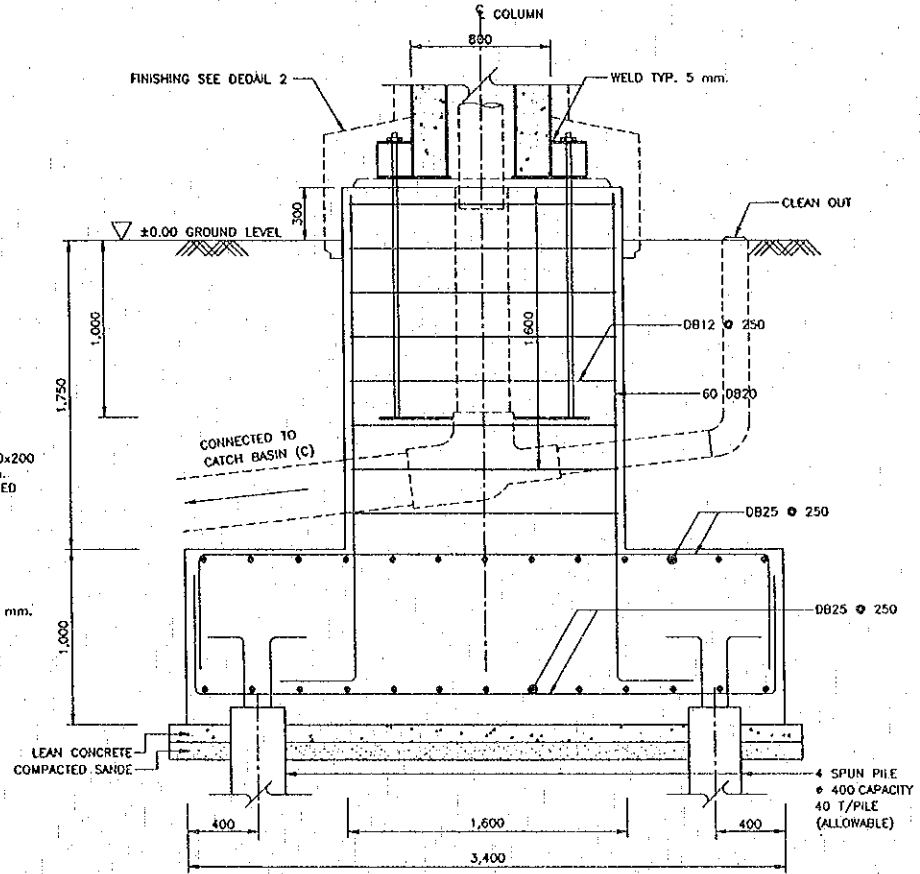
SECTION C-C  
SCALE 1:5



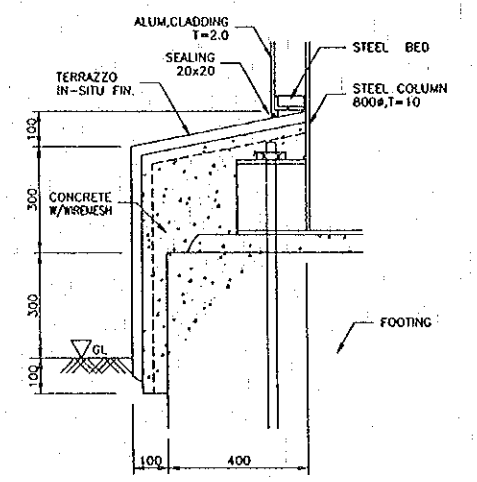
DETAIL 1  
SCALE 1:10



STIFFENER DETAIL  
SCALE 1:10



FOOTING DETAIL  
SCALE 1:20



DETAIL 2 (FINISH OF COLUMN)  
SCALE 1:10

- NOTES:  
 1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.  
 2. ALL FILLET WELDS MIN. 5 mm.  
 3. STRUCTURE STEEL PIPE = 4,000 KSC. REINFORCEMENT STEEL = 4,000 KSC.

REV.	DATE	DESCRIPTION	APPROVED

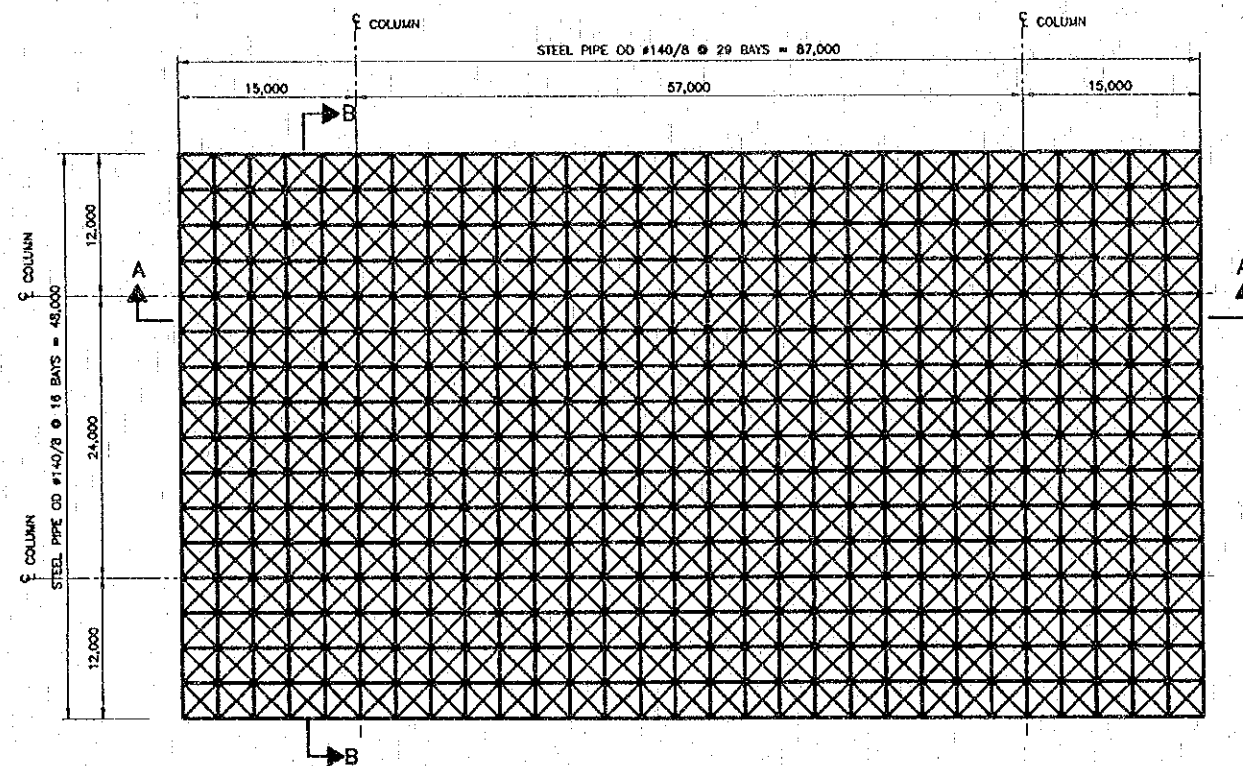
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

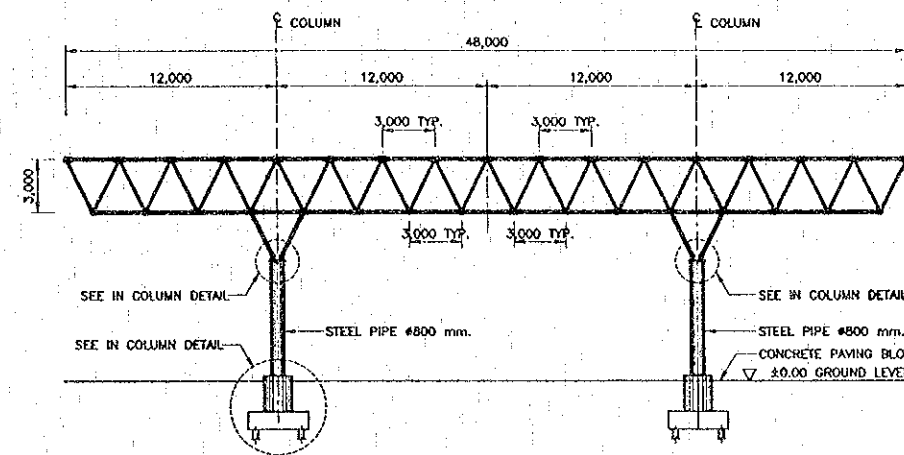
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	23-05-00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 1 (2) FOUNDATION AND COLUMN DETAIL
DESIGN CHECK	T. Muzutawa	<i>[Signature]</i>	24-05-00	
SUBMITTED	A. Kitroni	<i>[Signature]</i>	27/05/00	
APPROVED	S. Temyabutra	<i>[Signature]</i>	01/06/00	

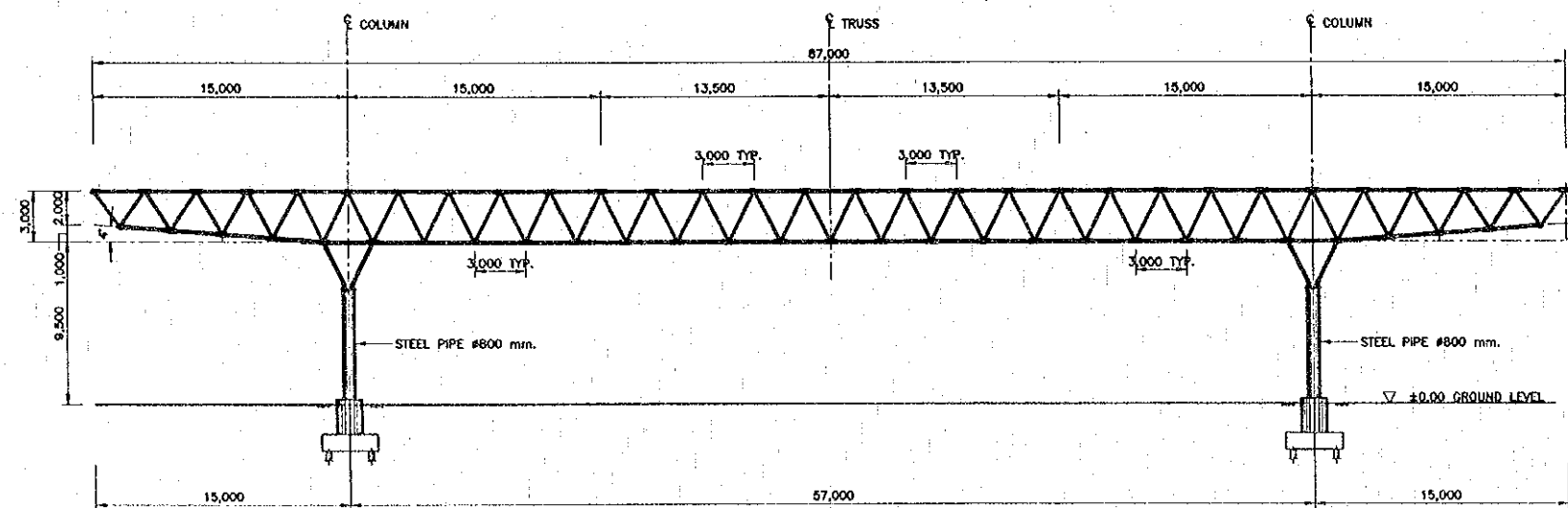
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF - TYPE 1 (2)  
 FOUNDATION AND COLUMN DETAIL



TYPE 1 INSPECTION ROOF TRUSS PLAN  
 SCALE 1:300



SECTION B-B  
 SCALE 1:200



SECTION A-A  
 SCALE 1:200

NOTES :

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
2. STRUCTURAL STEEL PIPE = 4,000 KSC.
3. USE CORRUGATED ROOF SHEET 0.5 mm THK. ON PURLINS.
4. INSTALLATION DETAIL OF STEEL ROOF SHEET SHALL BE SUBMITTED BY THE SUPPLIER AND APPROVED BY THE ENGINEER
5. TABLE OF PIPE SIZE.
 

LOCATION	SIZE
UPPER CHORD	140x8 mm.
LOWER CHORD	140x8 mm.
WEB (DIAGONAL)	140x8 mm.
COLUMN SUPPORT	168x8 mm.
6. THE STRUCTURE WELDING USE "FILLET WELD" LEG SIZE EQUAL OR MORE THAN THICKNESS OF STRUCTURE BUT NOT LESS THAN 5 mm.
7. OPEN ENDS OF STEEL PIPE SHOULD BE CLOSED WITH 10 mm WELDED END PLATES.
8. ALL BOLTS HSFG M24 O.N.O. COMPLYING TO BS4360 GRADE END DISTANCES MIN. 3D.

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

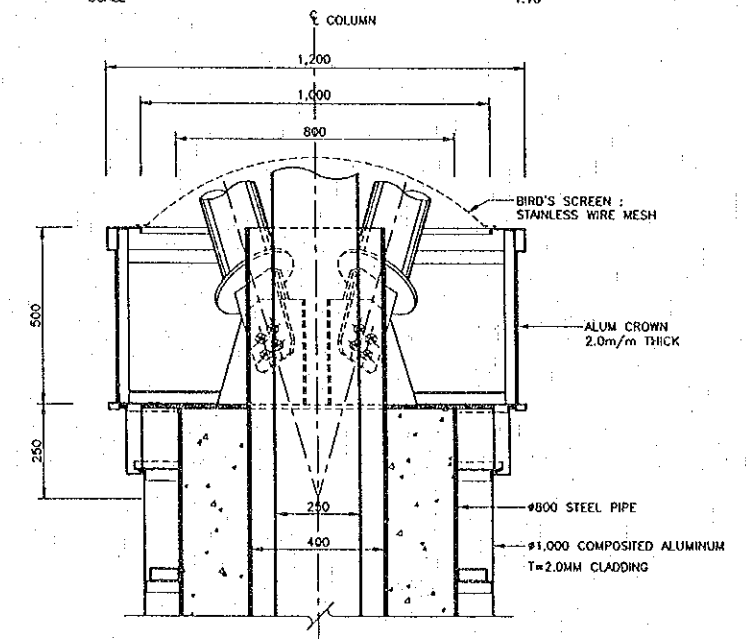
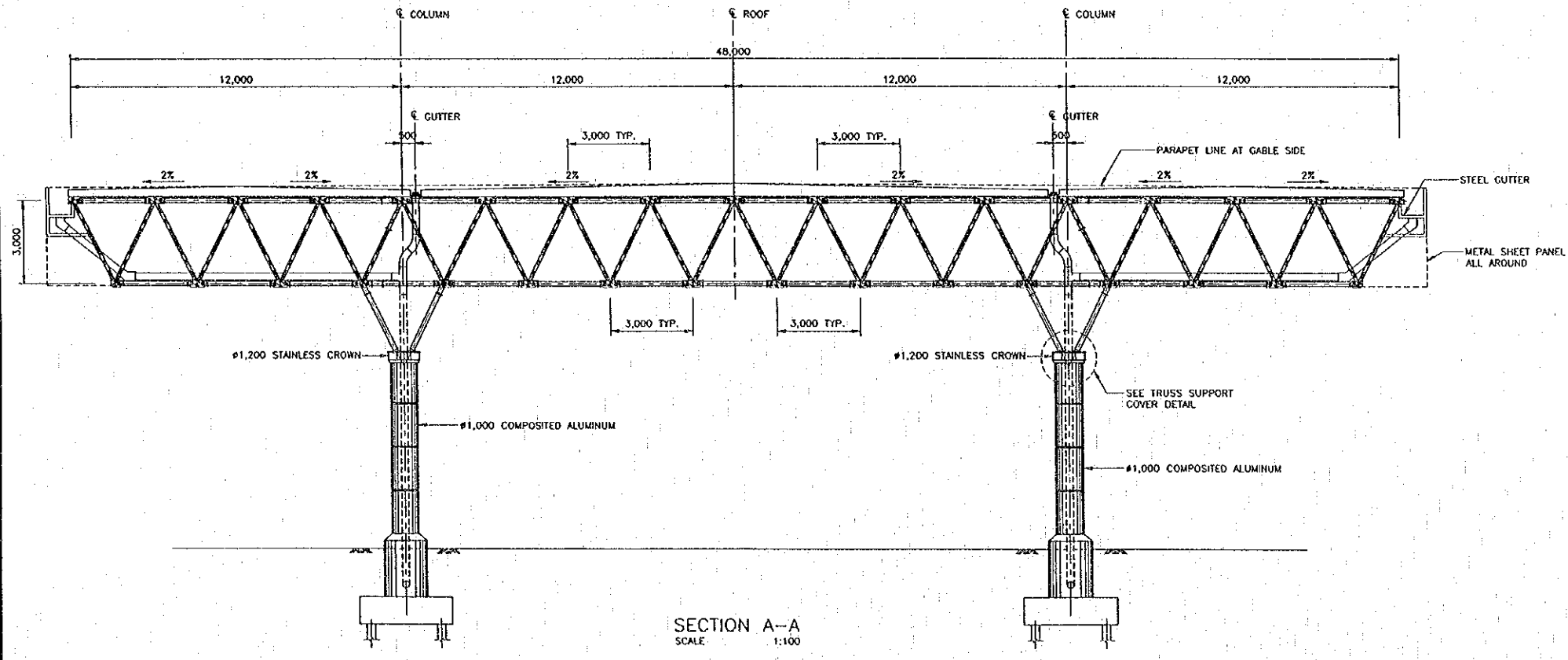
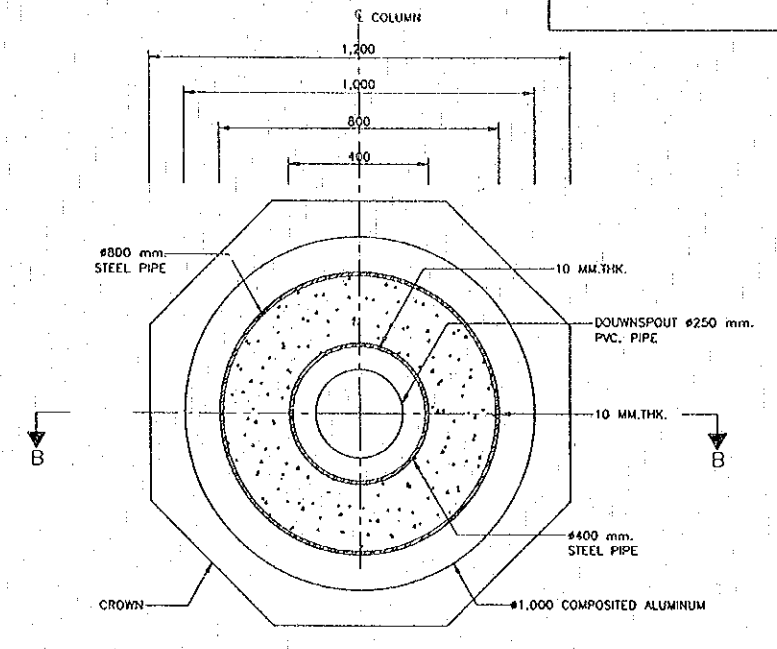
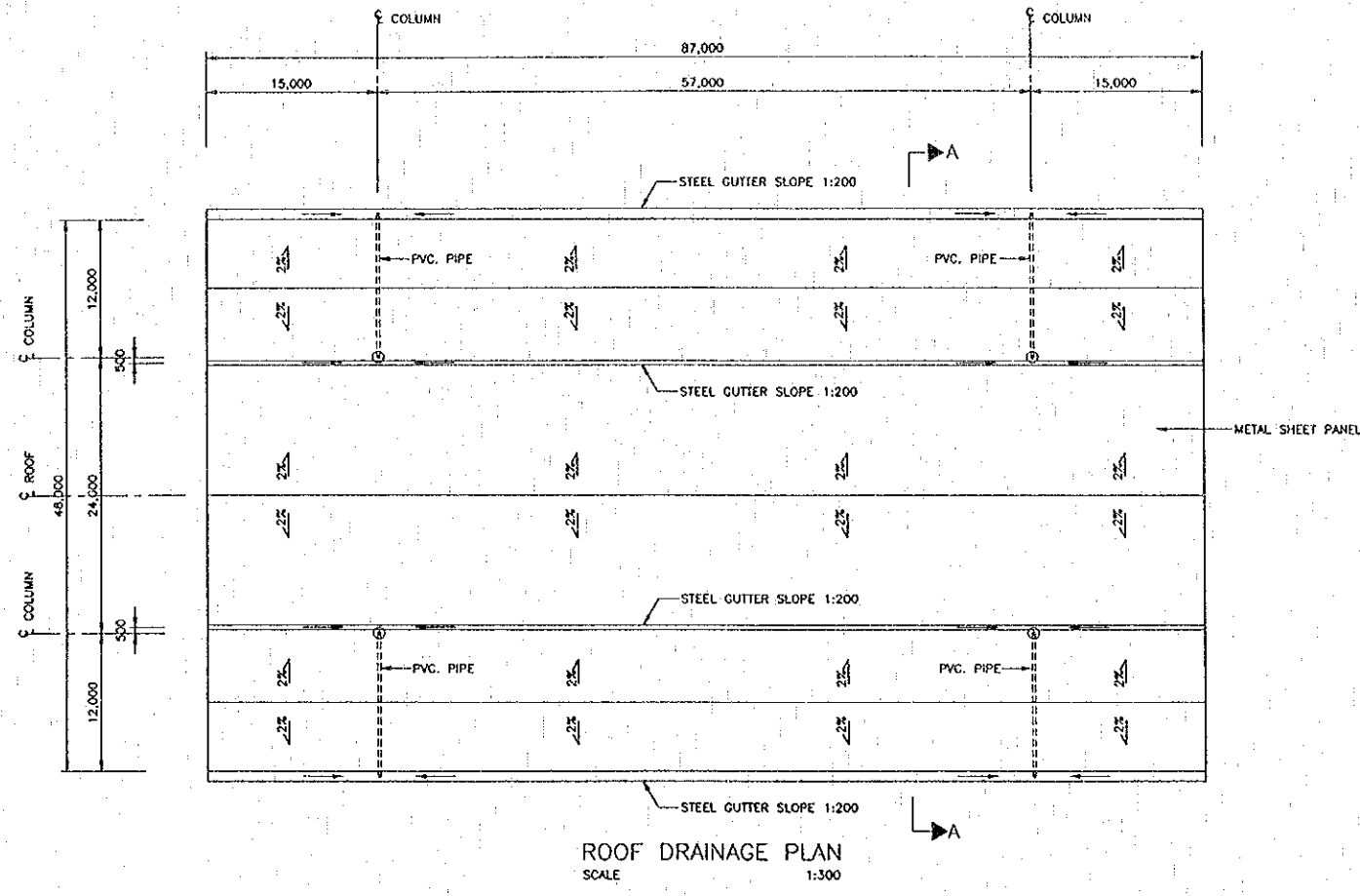
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Mochizuki	<i>[Signature]</i>	18/02/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00
APPROVED	S. Temyabutra	<i>[Signature]</i>	22/02/00

BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF - TYPE 1 (3)  
 PLAN & ELEVATION





DATE OF ISSUE:	
DWG. NO. F-S-21	SHEET NO. 185
DWG. STATUS	



- NOTES:
- ALL DIMENSION ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  - SLOPE OF SHEETING AND PURLINS AND CONNECTING DETAILS PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.
  - INSTALLATION DETAIL OF ROOF AND GUTTER SHALL BE PROVIDED BY THE SUPPLIER AND APPROVED BY THE ENGINEER.
  - ROOF SHEETING SHALL BE CORRUGATED METAL SHEET ON PURLINS WITH SLOPE MIN. 2% AS PER BHP SPECIFICATION (KLIP-LOK 700 HITEN) OR EQUIVALENT  
 DEPTH OF METAL SHEET 39 MM.  
 SHEET THICKNESS INCLUDE COATED 0.53 MM.  
 PURLIN SPACING (MAX.) 1,800 MM.  
 CONNECTION DETAILS OF PURLINS AND SHEETING SHOULD BE PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED

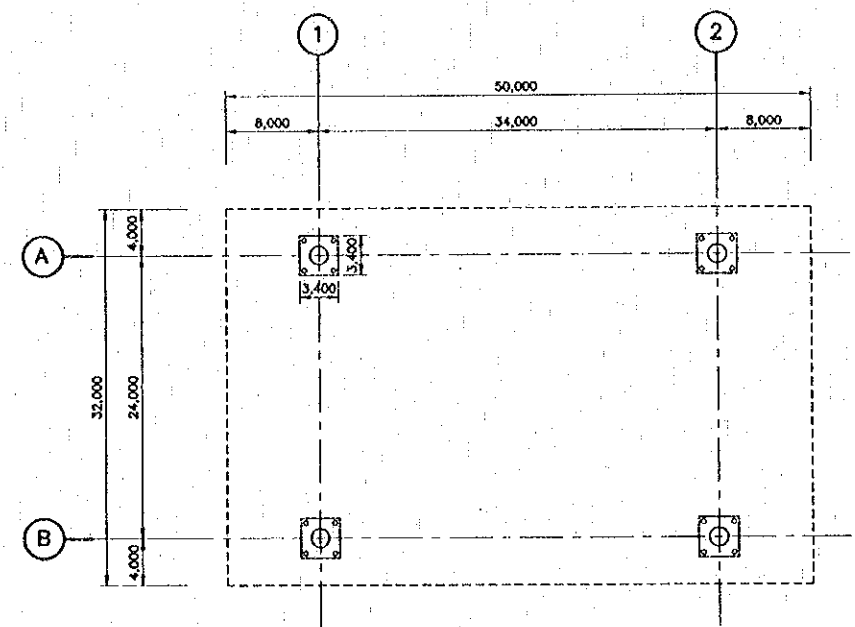
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

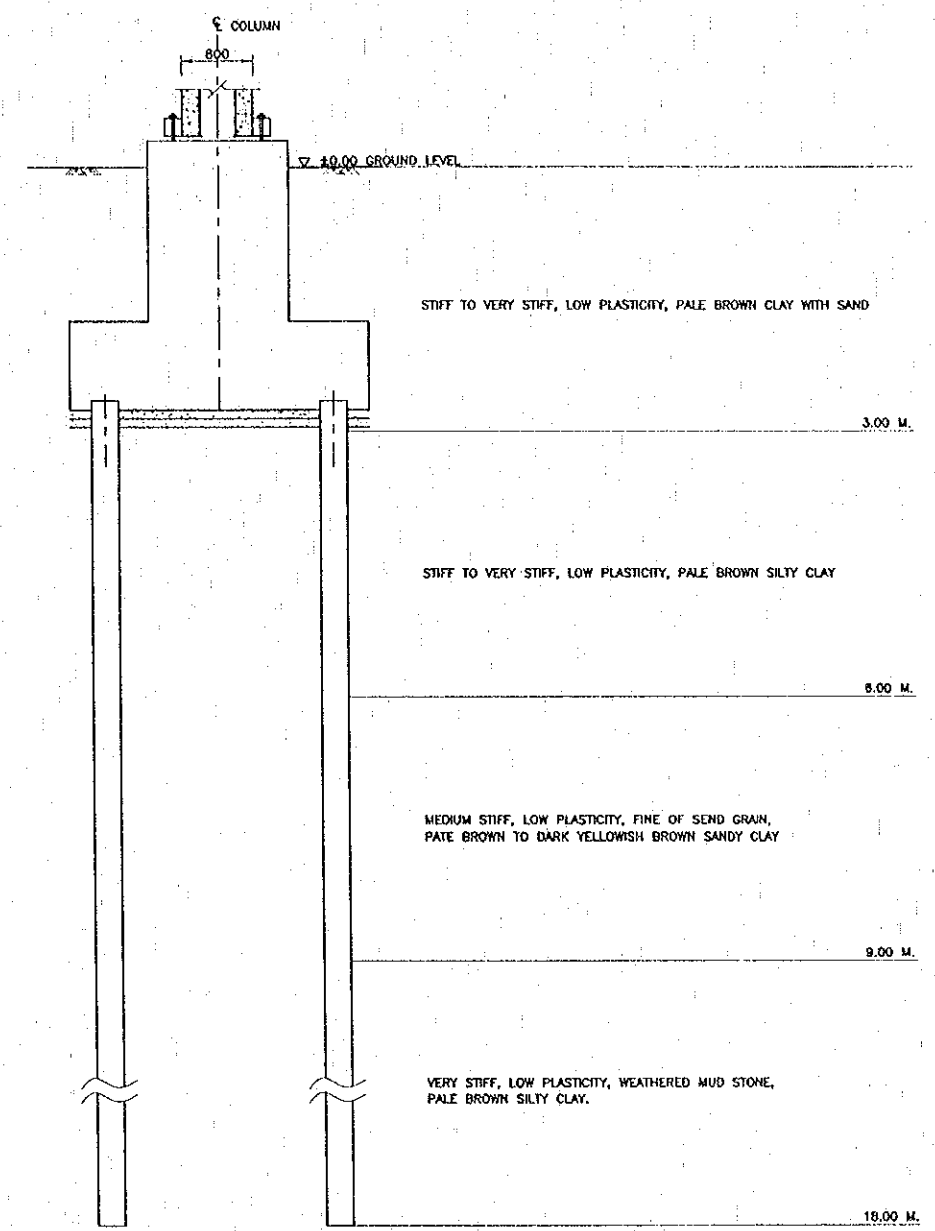
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>A. Morikawa</i>	23-05-00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 1 (6) DRAINAGE PLAN & ELEVATION
DESIGN CHECK	T. Masutani	<i>T. Masutani</i>	24-05-00	
SUBMITTED	A. Hirakawa	<i>A. Hirakawa</i>	27-05-00	
APPROVED	S. Temyabutra	<i>S. Temyabutra</i>	27-05-00	





**FOUNDATION & PILE PLAN**  
 SCALE 1:300

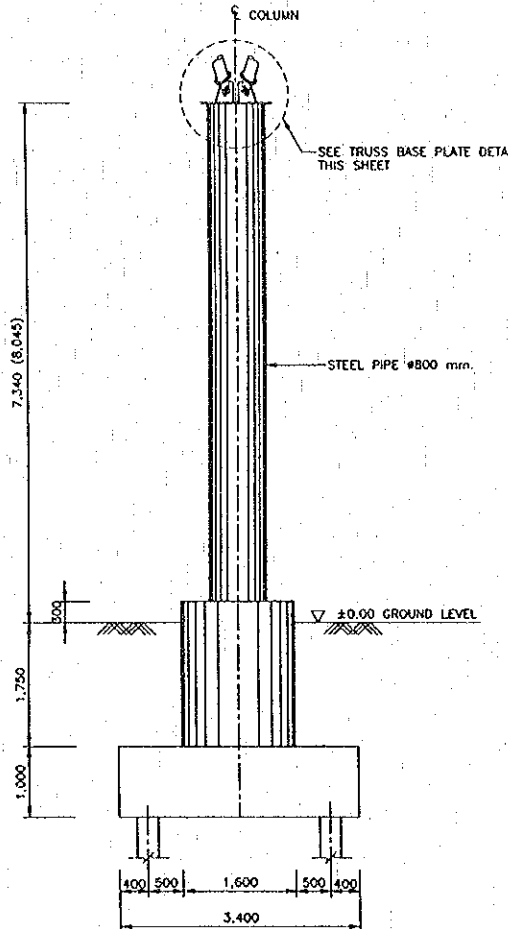


**GROUND FOUNDATION LAYERS**  
 SCALE 1:40

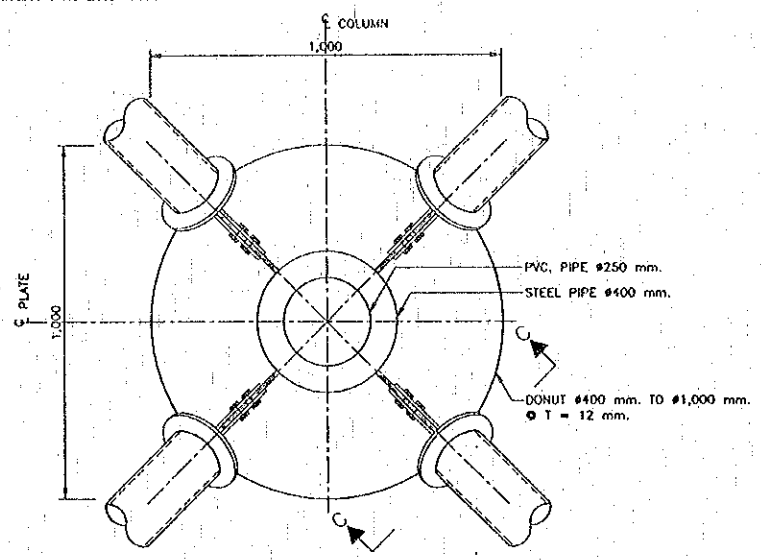
NOTE:  
 1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.  
 2. THE LENGTH OF PILE SHOWN SHALL BE TENTATIVE, THE FINAL LENGTH SHALL BE DETERMINED BY THE ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Morikita T. Morozono A. Kitahara S. Tanjyabutra	<i>[Signatures]</i>	16/02/00 18/02/00 21/02/00 22/02/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 2 (1) PILING LAYOUT

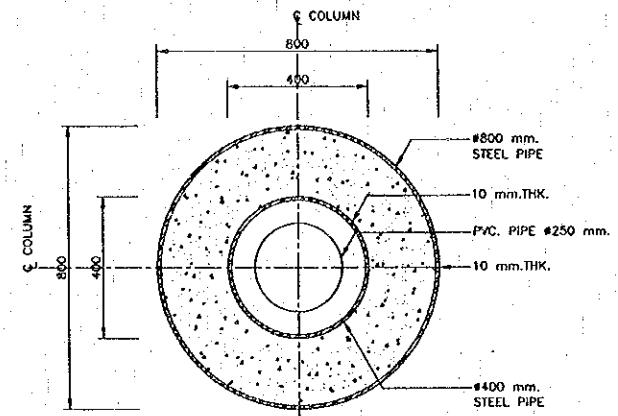




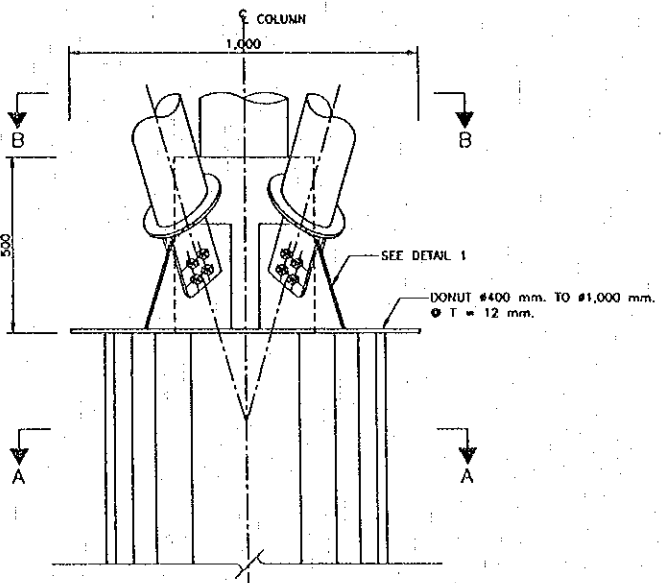
COLUMN  
SCALE 1:50



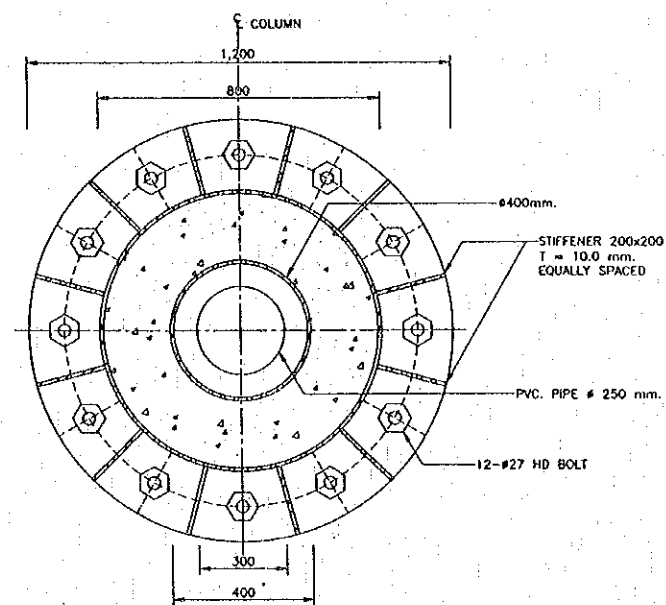
SECTION B-B  
SCALE 1:10



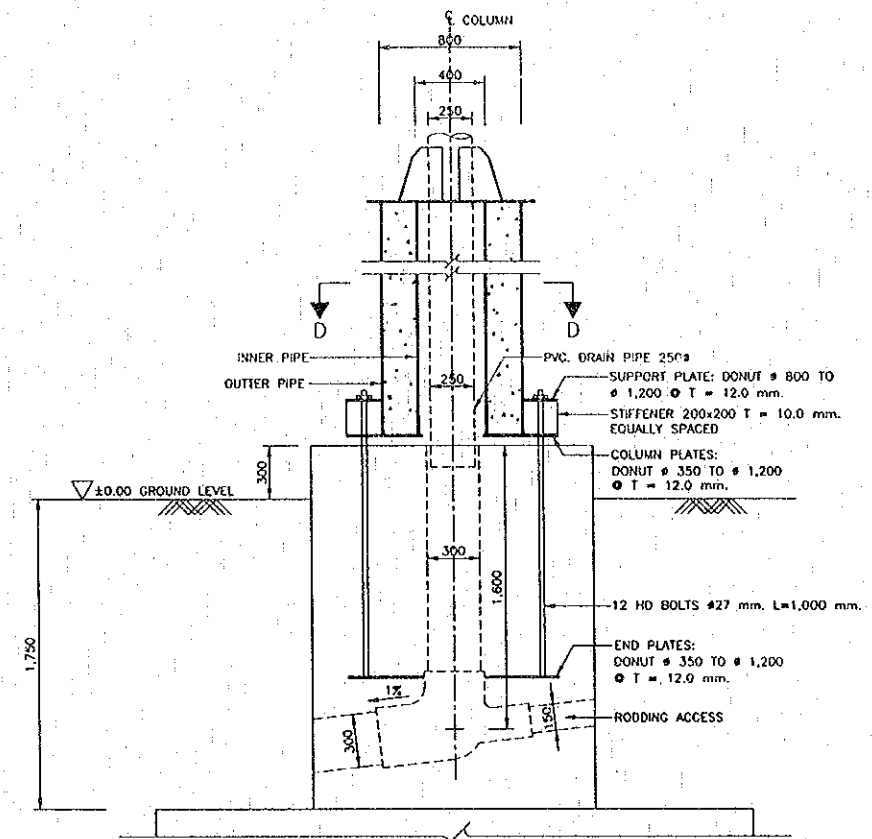
SECTION A-A  
SCALE 1:10



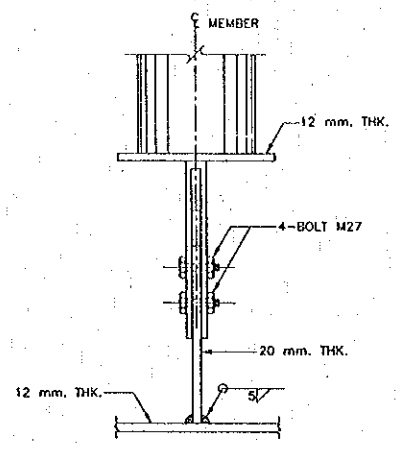
TRUSS BASE PLATE DETAIL  
SCALE 1:10



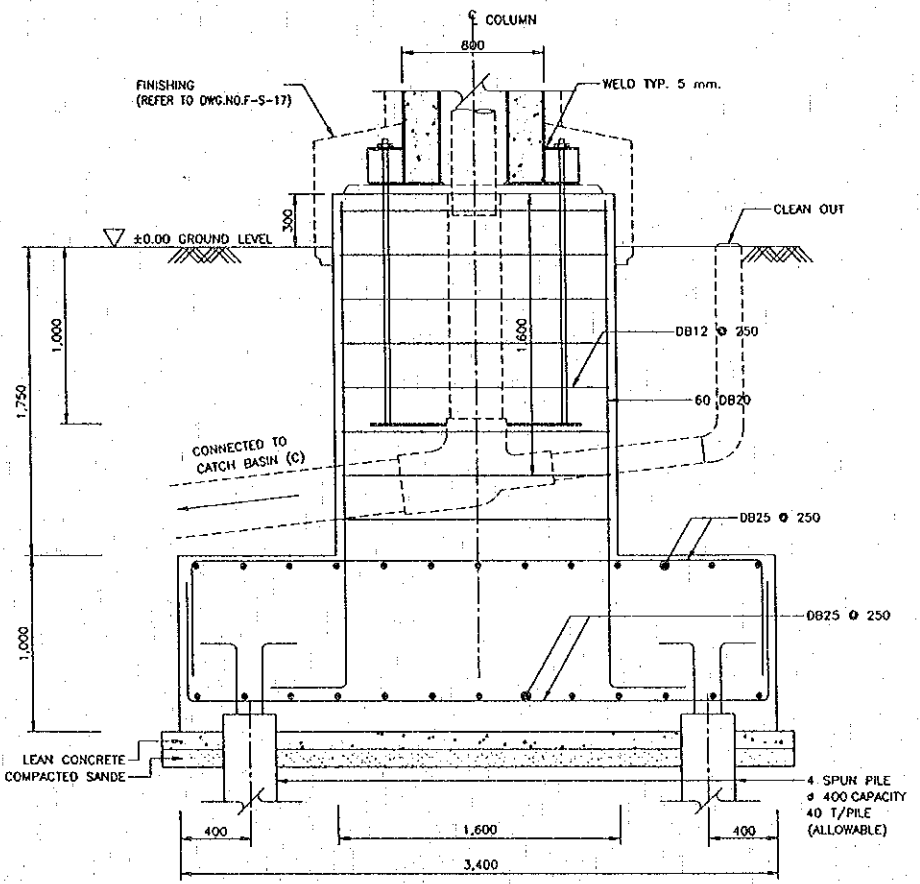
SECTION D-D  
SCALE 1:10



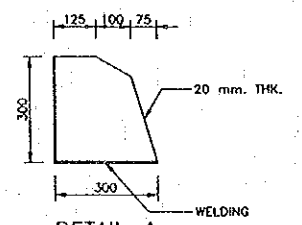
DETAIL OF HOLDING DOWN BOLT SYSTEM  
SCALE 1:20



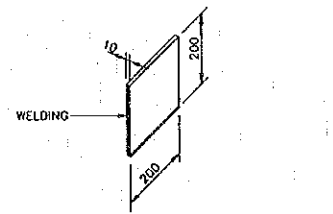
SECTION C-C  
SCALE 1:5



FOOTING DETAIL  
SCALE 1:20



DETAIL 1  
SCALE 1:10



STIFFENER DETAIL  
SCALE 1:10

- NOTES:
1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
  2. ALL FILLET WELDS MIN. 5 mm.
  3. STRUCTURE STEEL PIPE = 4,000 KSC. REINFORCEMENT STEEL = 4,000 KSC.

REV.	DATE	DESCRIPTION	APPROVED

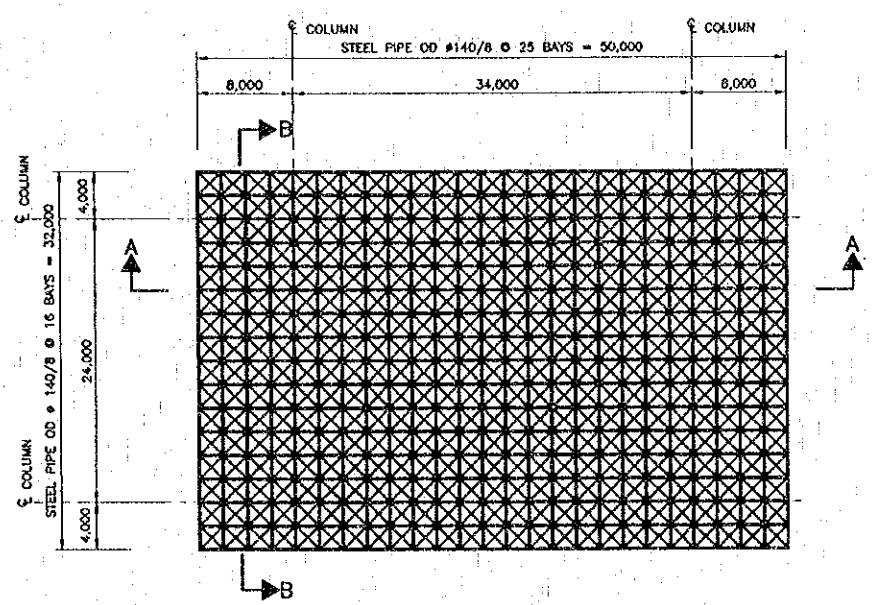
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In Association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
**LAO PEOPLE'S DEMOCRATIC REPUBLIC**  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
**KINGDOM OF THAILAND**  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

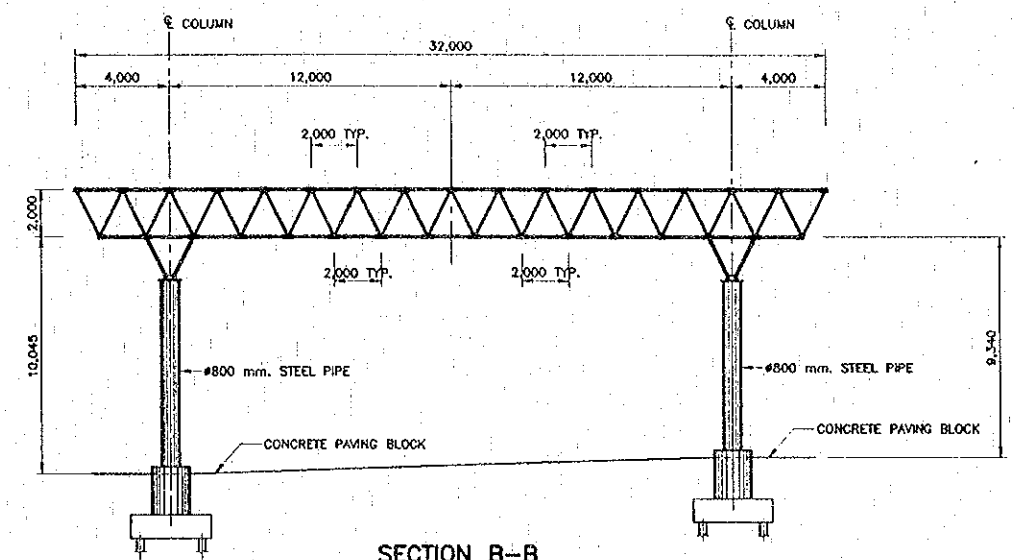
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Morikawa	<i>[Signature]</i>	21/11/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 2 (2) FOUNDATION AND COLUMN DETAIL
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	21/11/00	
SUBMITTED	A. Hirohara	<i>[Signature]</i>	21/11/00	
APPROVED	S. Taniyabutra	<i>[Signature]</i>	21/11/00	

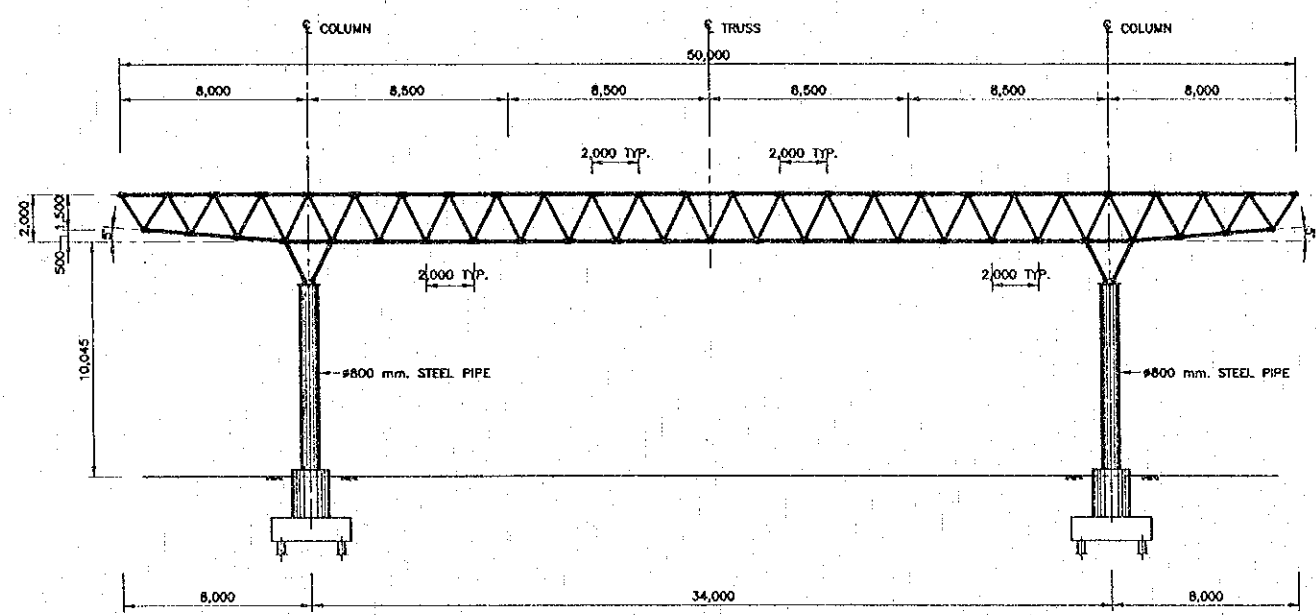
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF - TYPE 2 (2)  
 FOUNDATION AND COLUMN DETAIL



**TYPE 2 INSPECTION ROOF TRUSS PLAN**  
 SCALE 1:300



**SECTION B-B**  
 SCALE 1:150



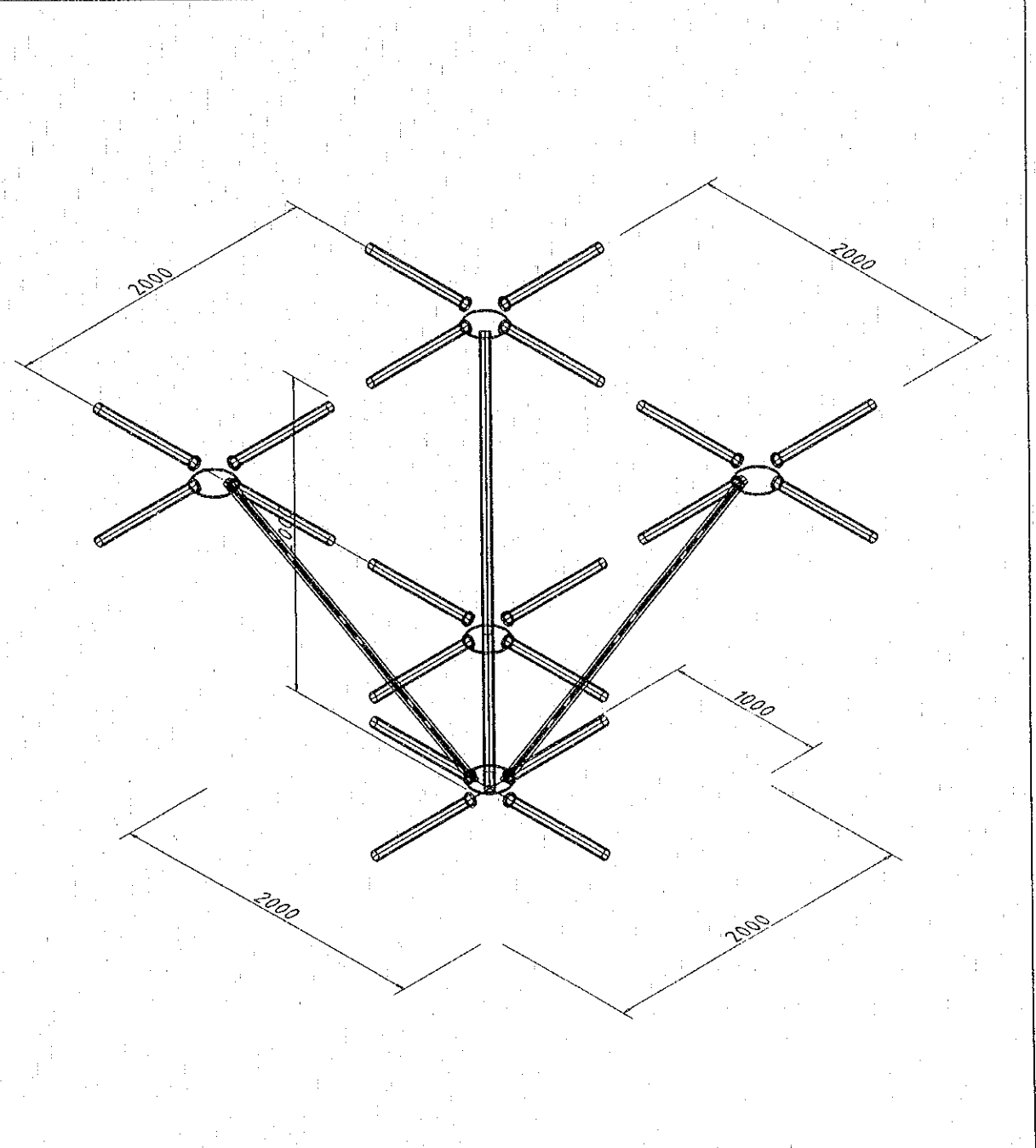
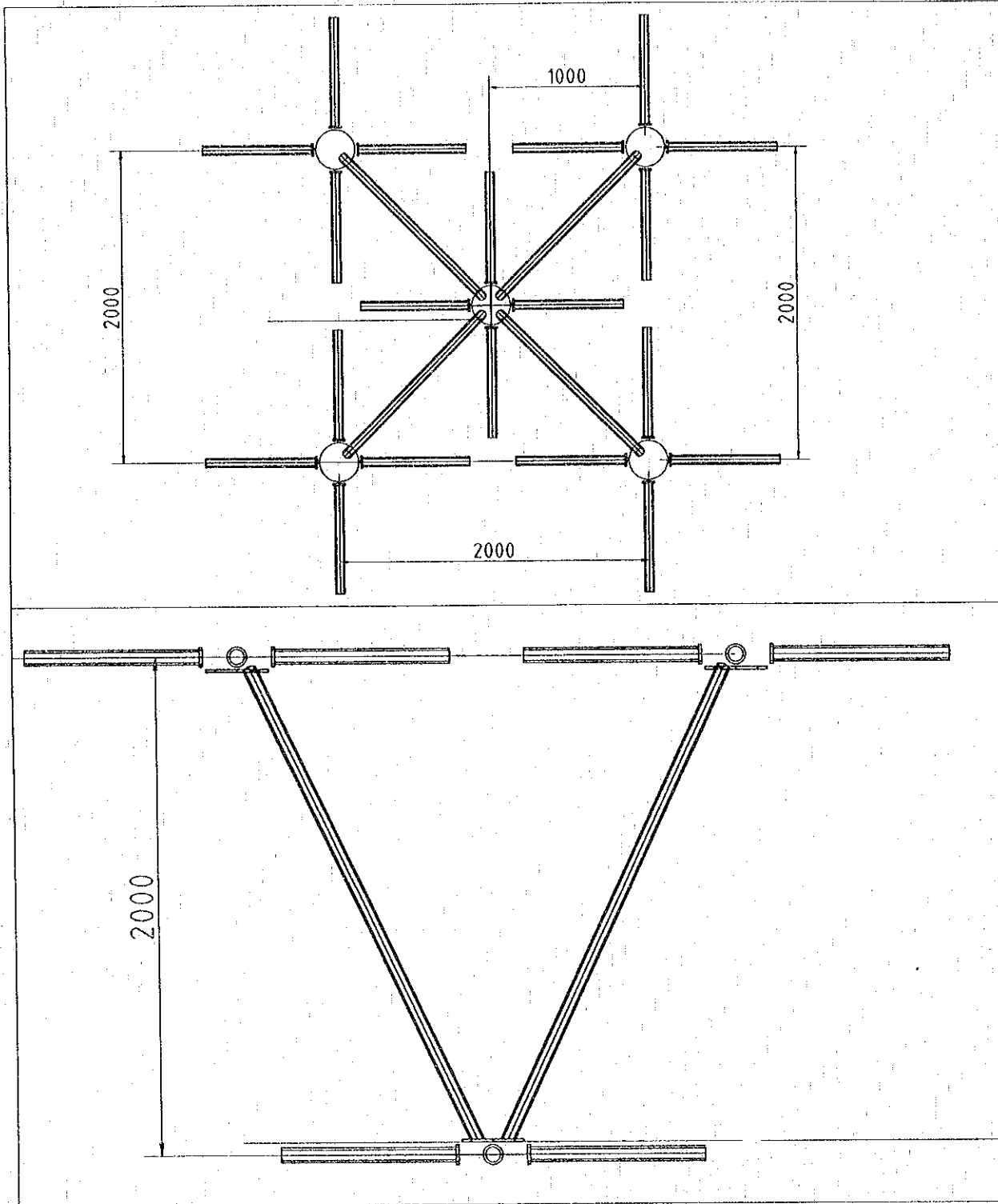
**SECTION A-A**  
 SCALE 1:150

**NOTES :**

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. STRUCTURAL STEEL PIPE = 4,000 KSC.
  3. USE CORRUGATED ROOF SHEET 0.5 mm THK. ON PURLINS.
  4. INSTALLATION DETAIL OF STEEL ROOF SHEET SHALL BE SUBMITTED BY THE SUPPLIER AND APPROVED BY THE ENGINEER
  5. TABLE OF PIPE SIZE.
- | LOCATION       | SIZE        |
|----------------|-------------|
| UPPER CHORD    | 89.1x5 mm.  |
| LOWER CHORD    | 89.1x5 mm.  |
| WEB (DIAGONAL) | 60.5x5 mm.  |
| COLUMN SUPPORT | 114.3x5 mm. |
6. THE STRUCTURE WELDING USE "FILLET WELD" LEG SIZE EQUAL OR MORE THAN THICKNESS OF STRUCTURE BUT NOT LESS THAN 5 mm.
  7. OPEN ENDS OF STEEL PIPE SHOULD BE CLOSED WITH 10 mm WELDED END PLATES.
  8. ALL BOLTS HSFG M24 O.N.O. COMPLYING TO BS4360 GRADE. END DISTANCES MIN. 30.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOZI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morioka	<i>[Signature]</i>	16/02/00	<b>BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 2 (3) PLAN &amp; ELEVATION</b>
						DESIGN CHECK	T. Moritawa	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hiratani	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Terayabutra	<i>[Signature]</i>	23/02/00	

DATE OF ISSUE:		05/03/2000
DWG. NO.	F-S-26	SHEET NO. 190
DWG. STATUS		



- NOTES:
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. WED (DIAGONAL) MEMBER SHOP WELDED TO CIRCULAR TOP AND BOTTOM PLATES WELDED ASSEMBLIES ERECTED AS PER CONSTRUCTION SCHEME.
  3. TOP AND BOTTOM MEMBERS BOLTED AT SITE WITH H5FG M24 BOLTS.

REV.	DATE	DESCRIPTION	APPROVED

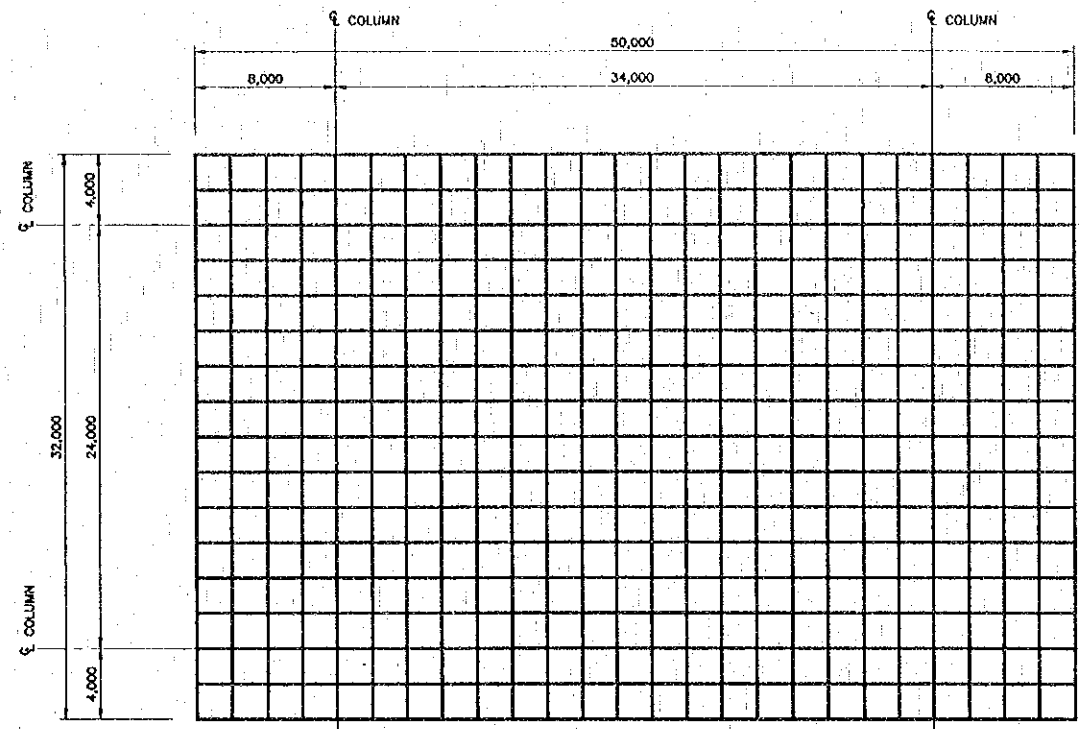
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

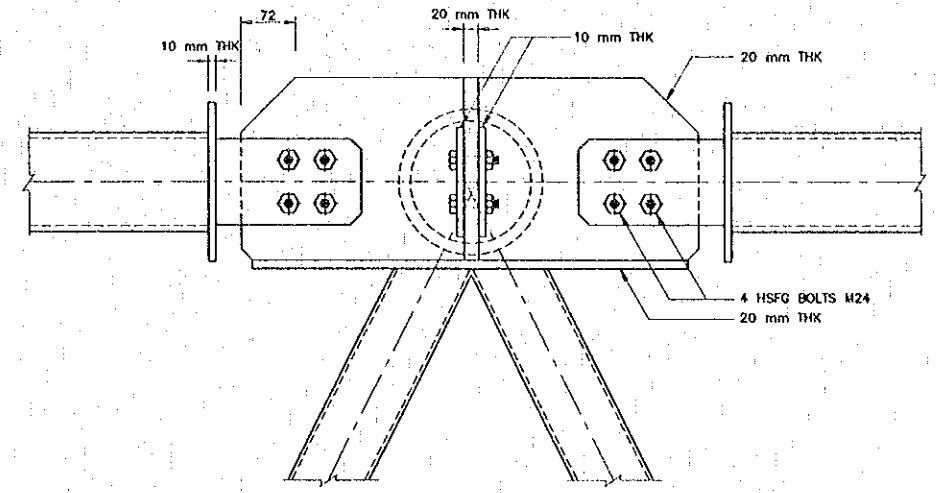
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morisaka	<i>[Signature]</i>	16/12/00
DESIGN CHECK	T. Mowurong	<i>[Signature]</i>	18/01/00
SUBMITTED	A. Hirafuji	<i>[Signature]</i>	21/11/00
APPROVED	S. Tamayabutra	<i>[Signature]</i>	22/03/01

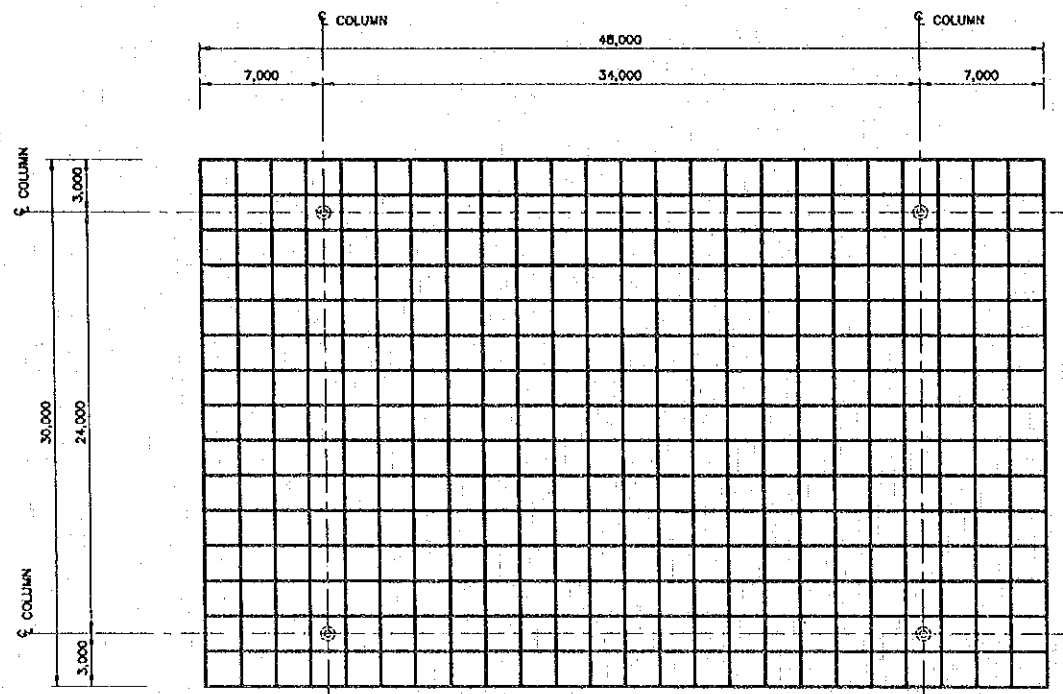
DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF -- TYPE 2 (4) 3D TRUSS MODULE**



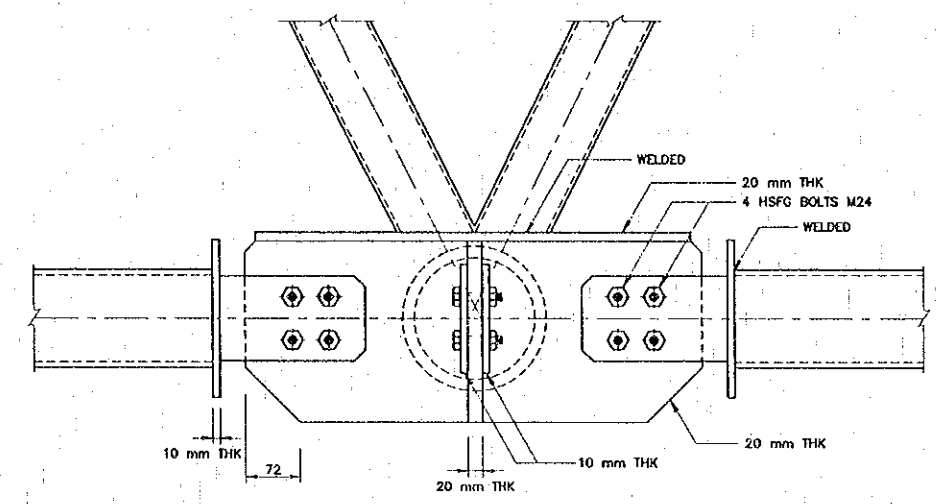
TOP CHORD LAYOUT  
 SCALE 1:200



CONNECTION DETAILS  
 NOT TO SCALE



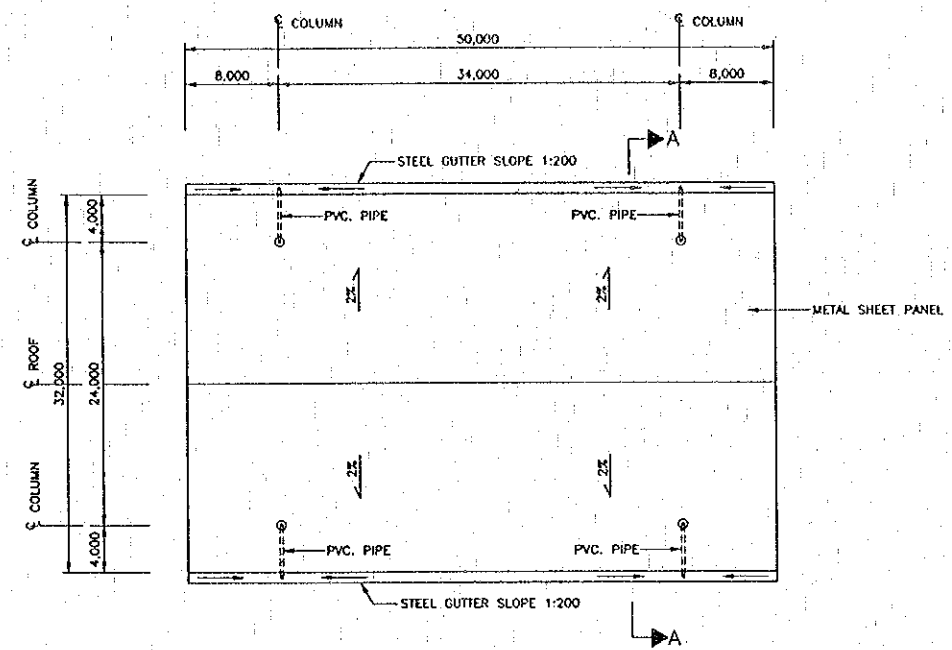
BOTTOM CHORD LAYOUT  
 SCALE 1:200



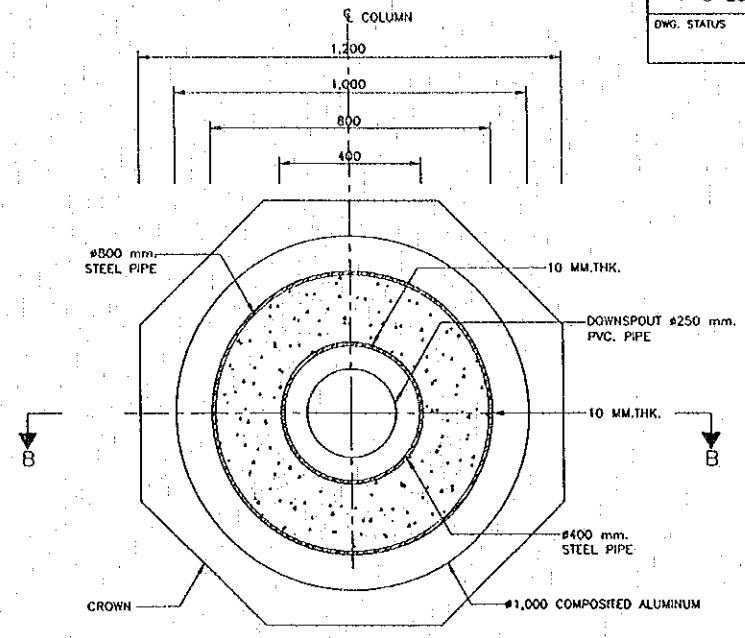
CONNECTION DETAILS  
 NOT TO SCALE

- NOTES :
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. BOLTS SHOULD BE APPROVED BY ENGINEER BEFORE INSTALLATION.
  3. ALL STEEL GRADE MIN 4,000 KSC.
  4. SHOP FILLET WELDS WITH MIN. h = 5 mm.

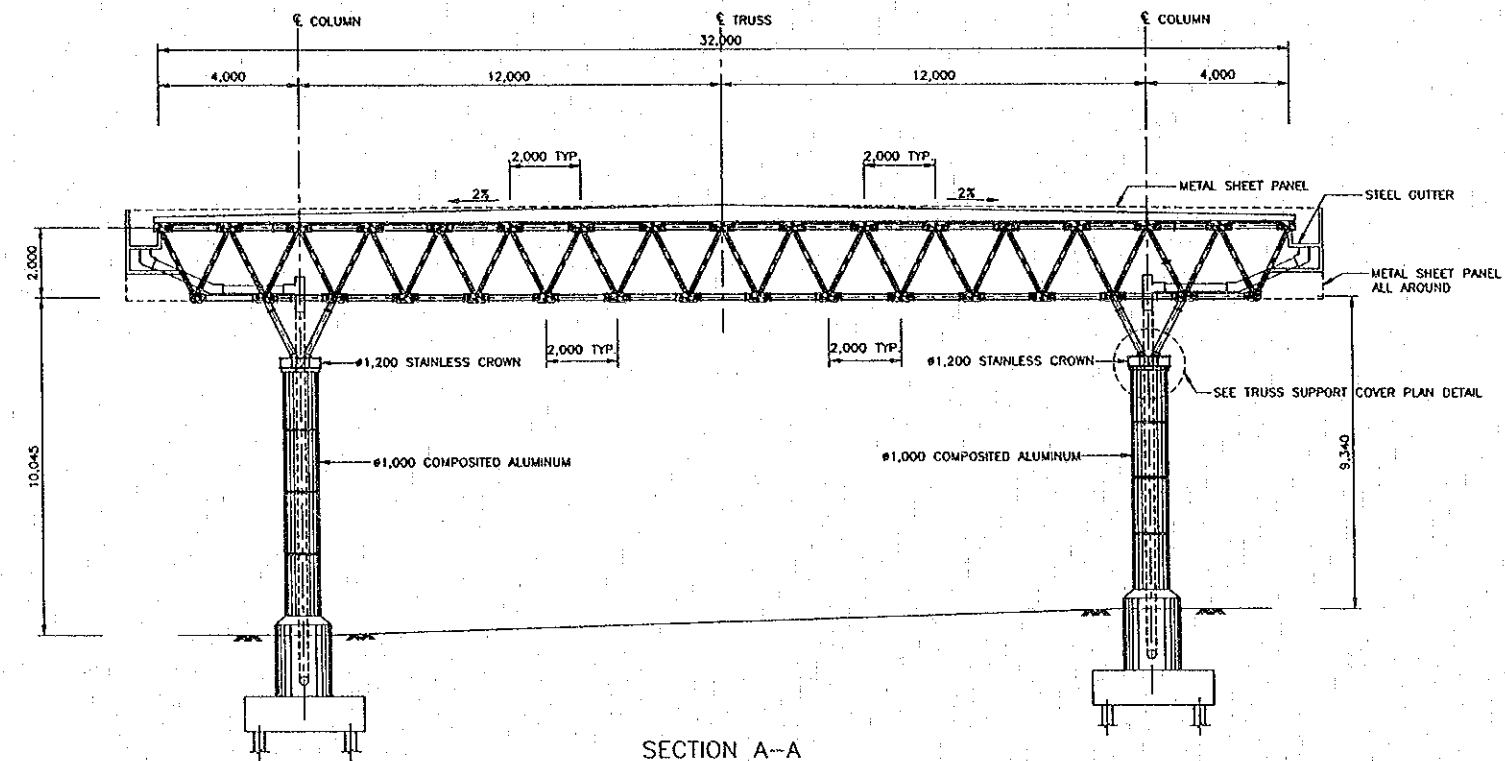
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY CHECKED	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Morikawa	<i>[Signature]</i>	16-02-00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 2 (5) TOP & BOTTOM CHORD LAYOUT
								DESIGN CHECK	T. Mokuizawa	<i>[Signature]</i>	18-02-00		
								SUBMITTED	A. Hiratani	<i>[Signature]</i>	21-02-00		
								APPROVED	S. Temyabutra	<i>[Signature]</i>	22-02-00		



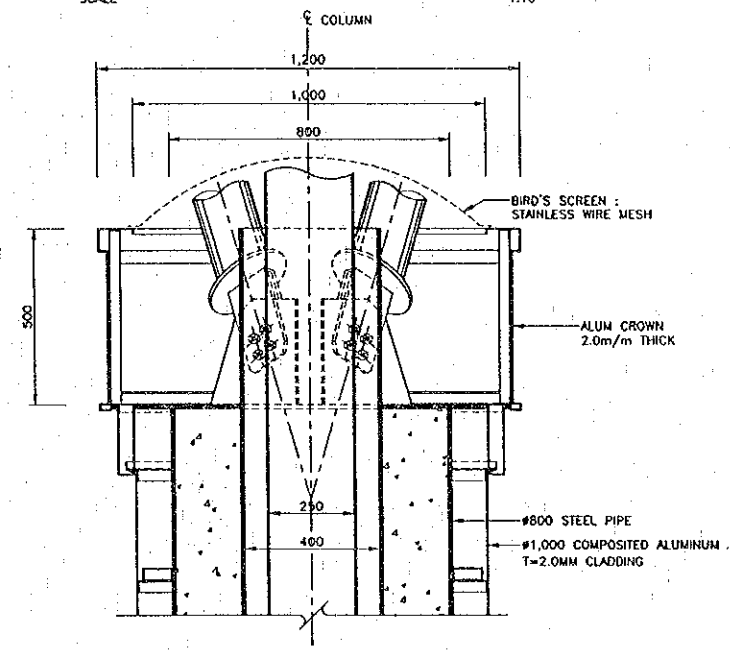
ROOF DRAINAGE PLAN  
 SCALE 1:300



TRUSS SUPPORT COVER PLAN DETAIL  
 SCALE 1:10



SECTION A-A  
 SCALE 1:100

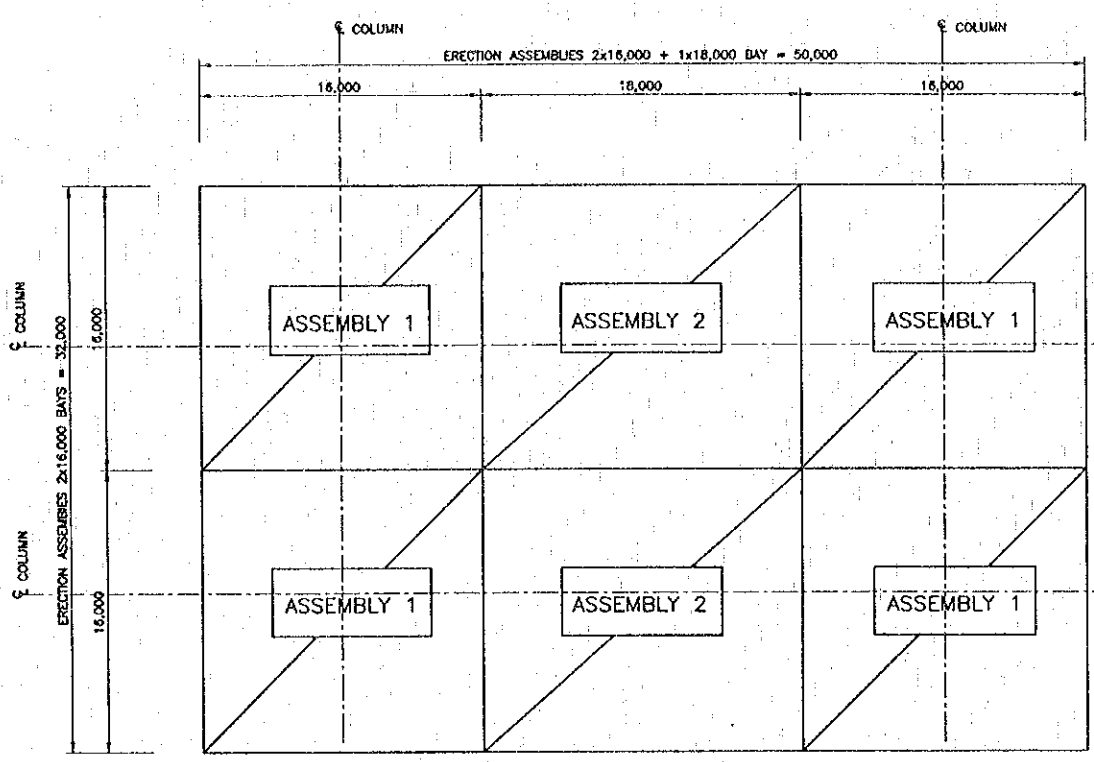


SECTION B-B  
 SCALE 1:10

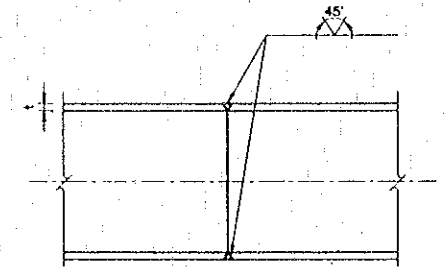
- NOTES:
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. SLOPE OF SHEETING AND PURLINS AND CONNECTING DETAILS PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.
  3. INSTALLATION DETAIL OF ROOF AND CUTTER SHALL BE PROVIDED BY THE SUPPLIER AND APPROVED BY THE ENGINEER.
  4. ROOF SHEETING SHALL BE CORRUGATED METAL SHEET ON PURLINS WITH SLOPE MIN. 2% AS PER BHP SPECIFICATION (KUP-LOK 406) OR EQUIVALENT.  
 DEPTH OF METAL SHEET 41 MM.  
 SHEET THICKNESS 0.53 MM.  
 PURLIN SPACING (MAX.) 1,800 MM.  
 CONNECTION DETAILS OF PURLINS AND SHEETING SHOULD BE PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	A. Mojsko	<i>[Signature]</i>	23/11/10	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF TYPE 2 (6) DRAINAGE PLAN & ELEVATION
								DESIGN CHECK	T. Mousudma	<i>[Signature]</i>	23/11/10		
								SUBMITTED	A. Hrotani	<i>[Signature]</i>	23/11/10		
								APPROVED	S. Temyabutra	<i>[Signature]</i>	23/11/10		

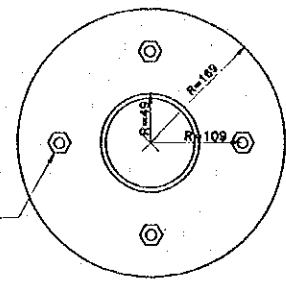
DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
F-S-29	193
DWG. STATUS	



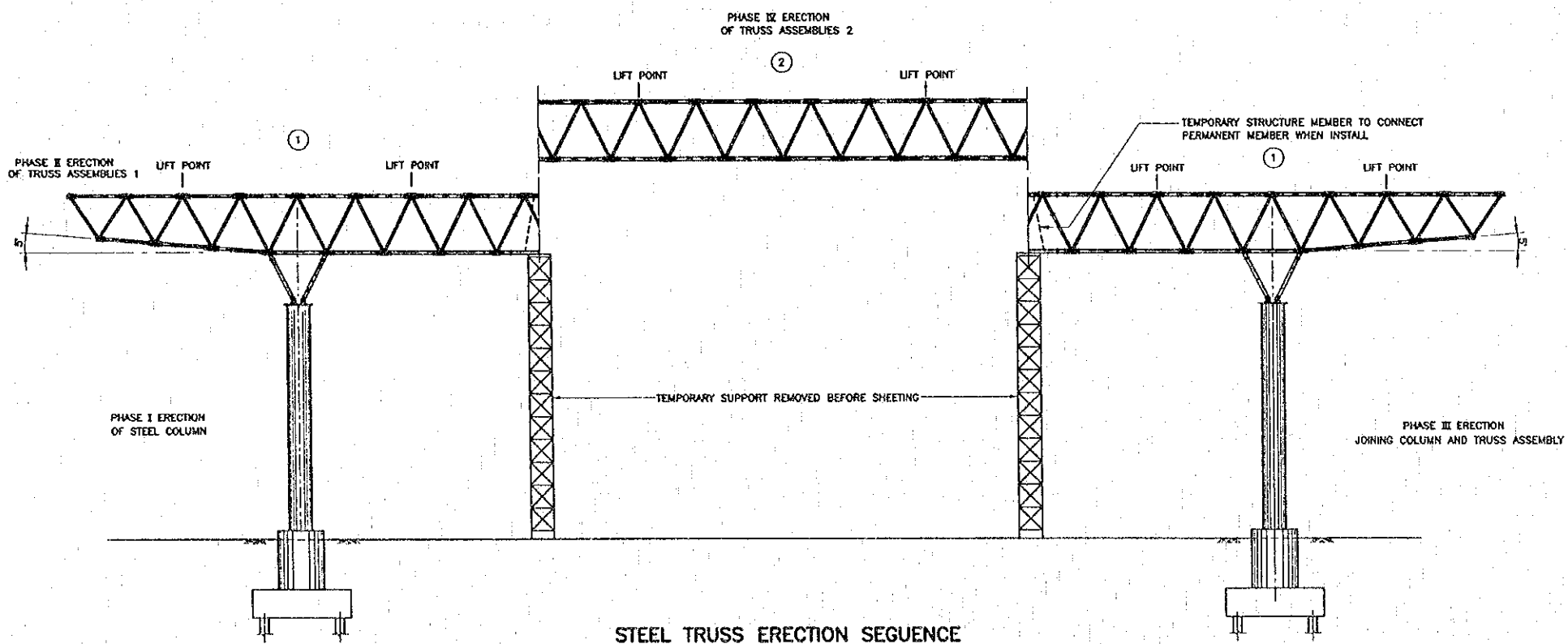
TYPE 2 INSPECTION ROOF TRUSS PLAN  
SCALE 1:200



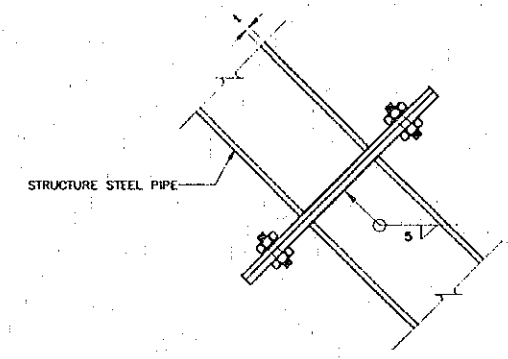
LONGITUDINAL SECTION OF MEMBER CONNECTION USING BUTT WELD  
SCALE 1:5



4 M16 BOLTS FOR SPLICE CONNECTION



STEEL TRUSS ERECTION SEQUENCE  
SCALE 1:100

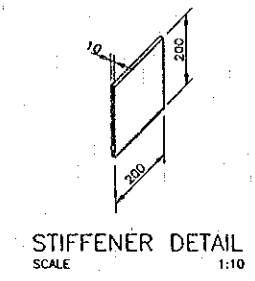
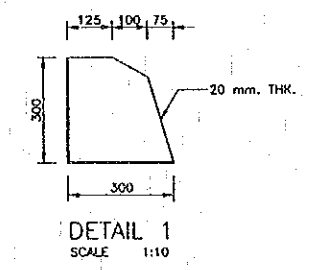
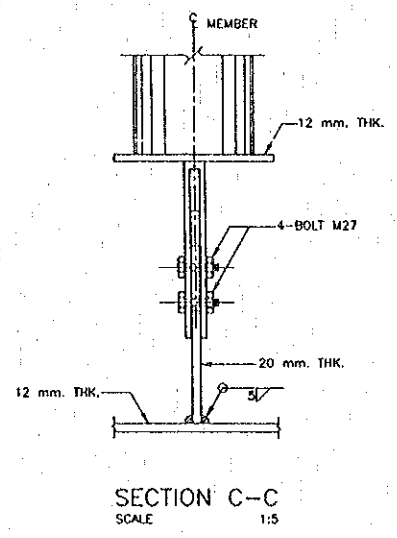
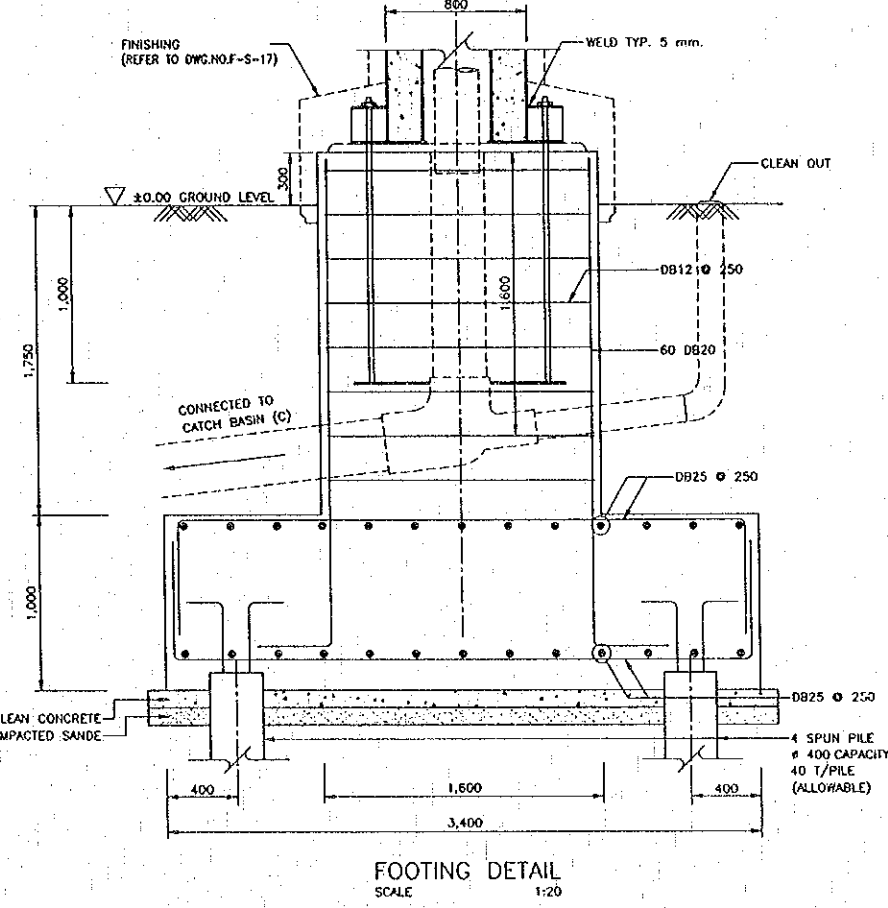
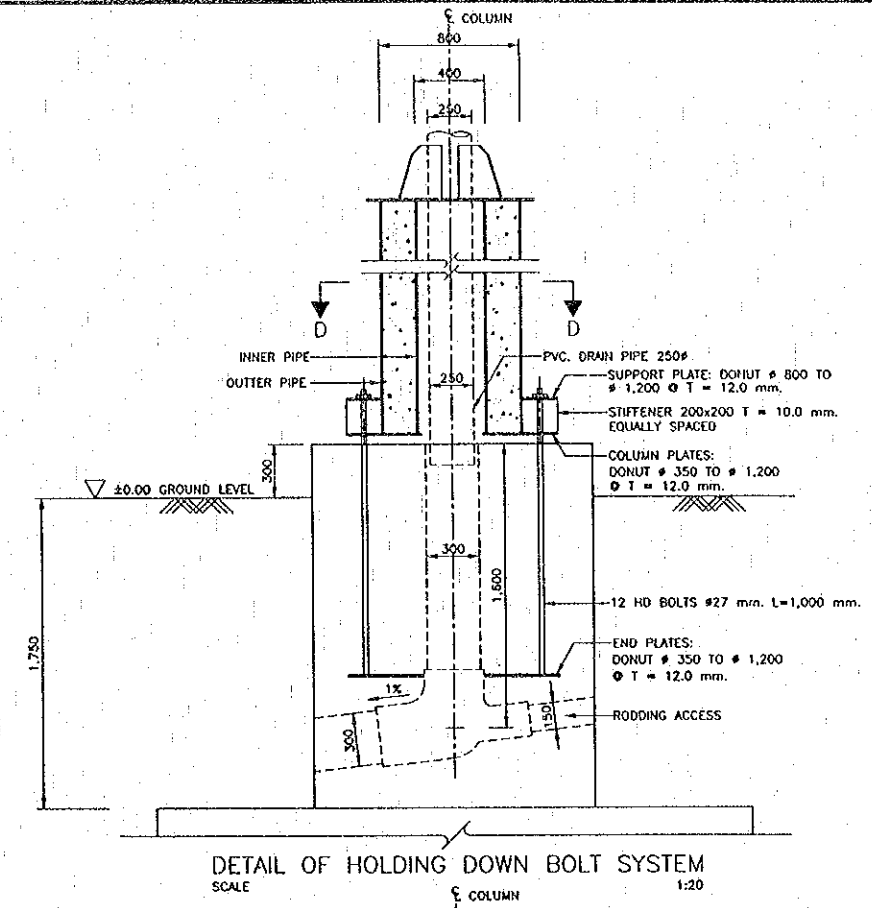
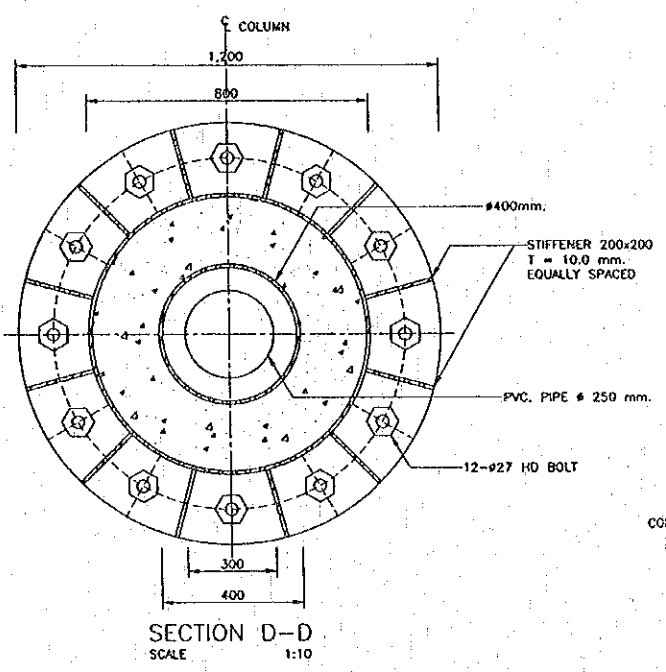
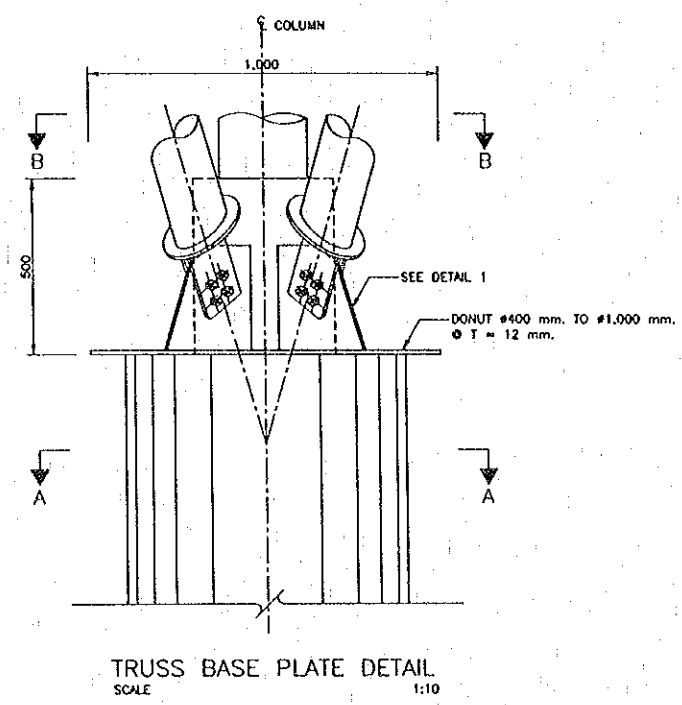
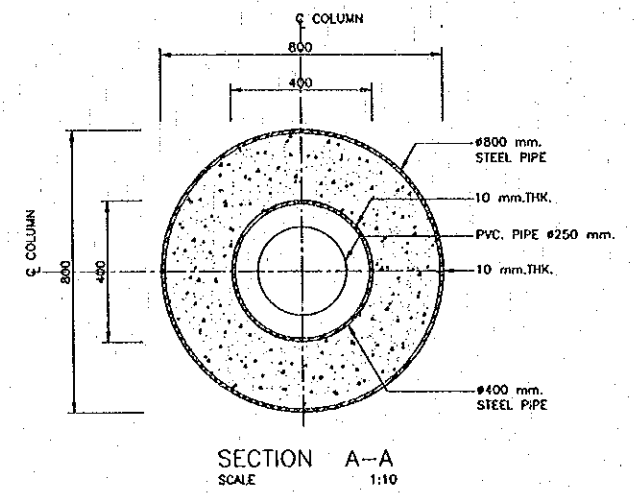
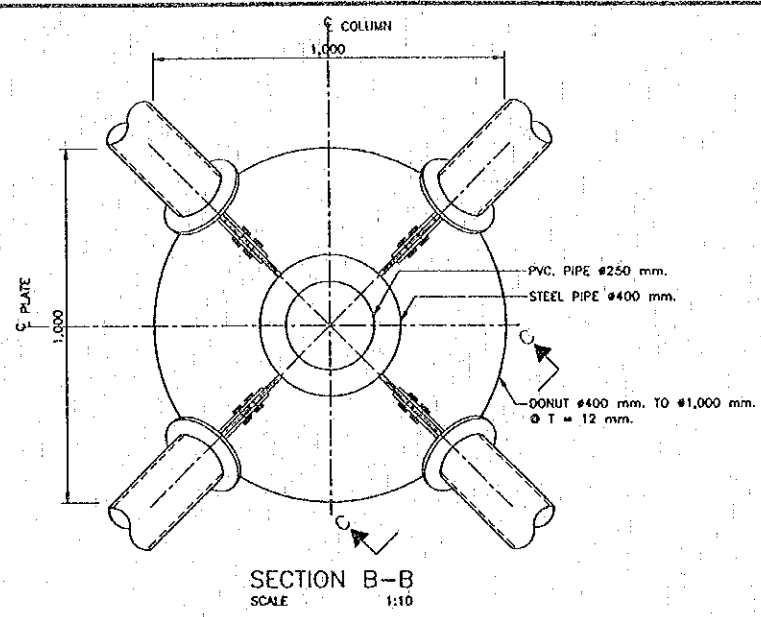
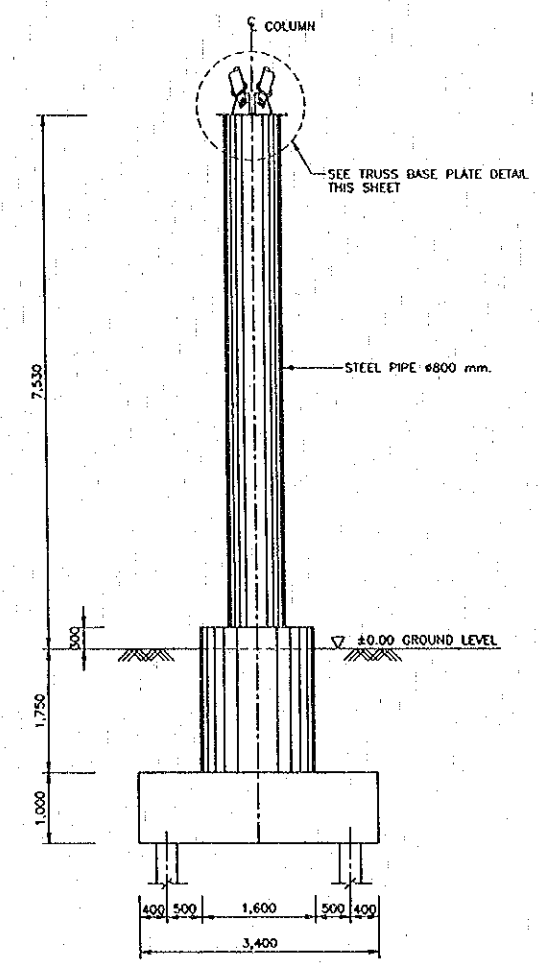


CONNECTION FIELD DETAIL  
SCALE 1:5

- NOTES :
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. ERECTION SCHEME SHOULD BE PRESENTED BY CONTRACTOR AND APPROVED BY ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	A. Morikawa	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 2 (7) CONSTRUCTION METHOD
				KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Mawzawa	<i>[Signature]</i>	16/02/00		
					SUBMITTED	A. Hirutani	<i>[Signature]</i>	16/02/00		
					APPROVED	S. Taniyabutra	<i>[Signature]</i>	22/02/00		



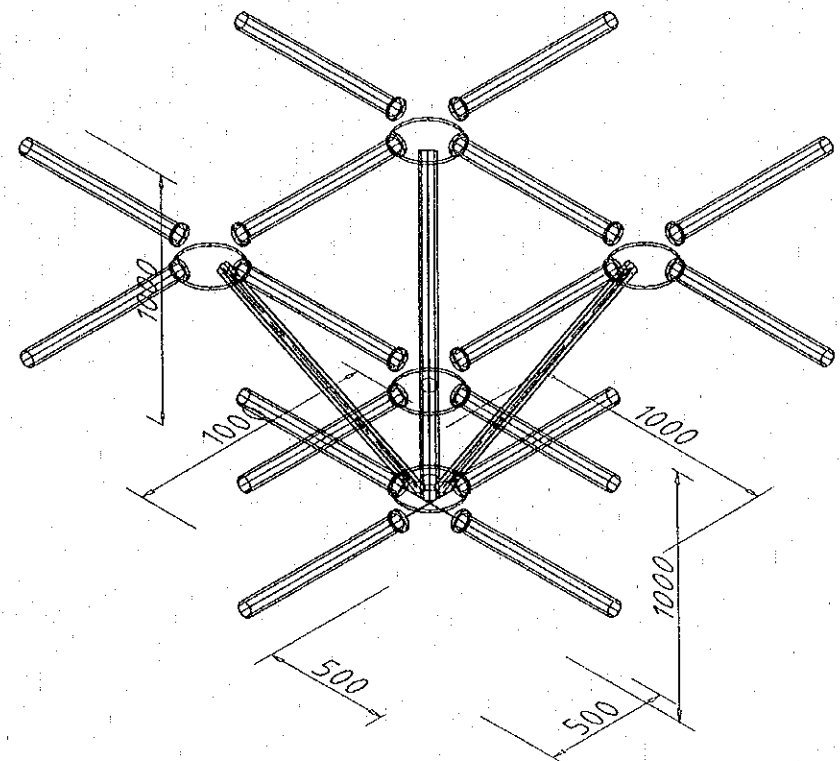
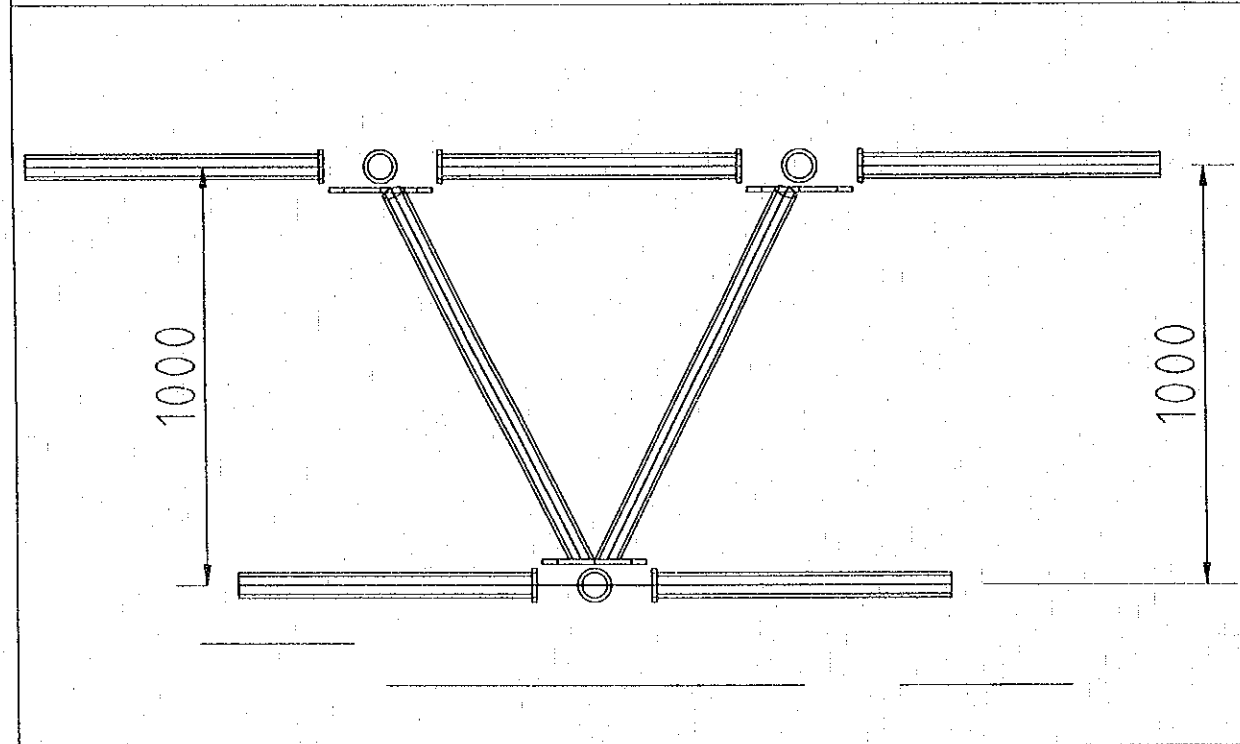
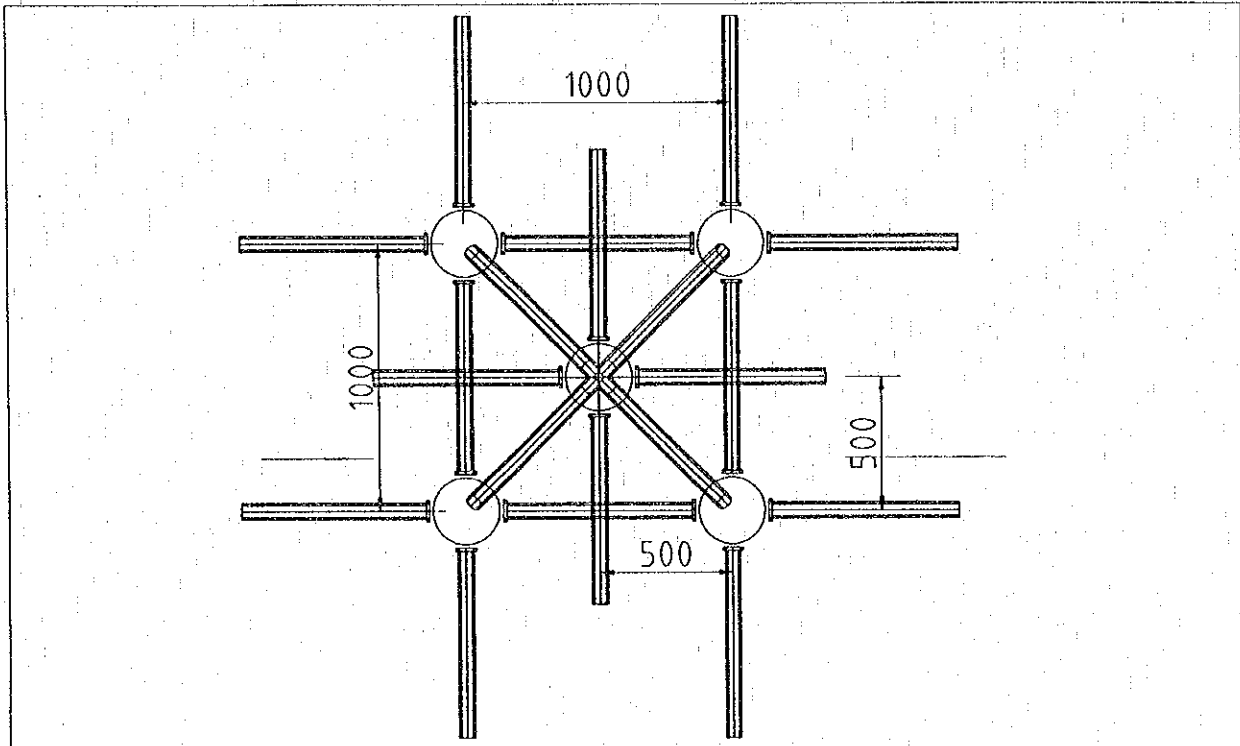


- NOTES:
1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
  2. ALL FILLET WELDS MIN. 5 mm.
  3. STRUCTURE STEEL PIPE = 4,000 KSC. REINFORCEMENT STEEL = 4,000 KSC.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikawa	<i>[Signature]</i>	21/05/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 3 (2) FOUNDATION AND COLUMN DETAIL
						DESIGN CHECK	T. Morizono	<i>[Signature]</i>	21/05/00	
						SUBMITTED	A. Hirakawa	<i>[Signature]</i>	21/05/00	
						APPROVED	S. Tamayabutra	<i>[Signature]</i>	21/05/00	







- NOTES:
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. WEB (DIAGONAL) MEMBER SHOP WELDED TO CIRCULAR TOP AND BOTTOM PLATES WELDED ASSEMBLIES ERRECTED AS PER CONSTRUCTION SCHEME.
  3. TOP AND BOTTOM MEMBERS BOLTED AT SITE WITH HSFG M24 BOLTS.

REV.	DATE	DESCRIPTION	APPROVED

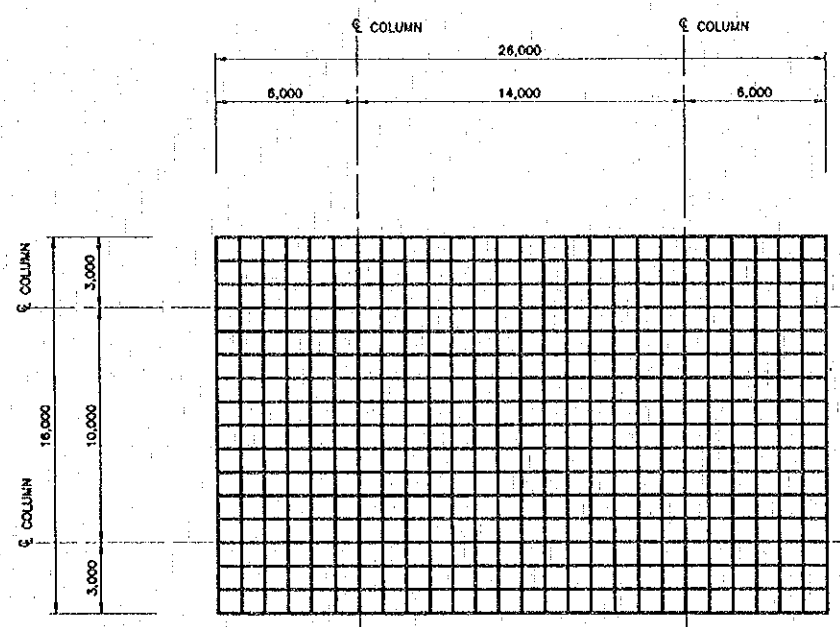
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

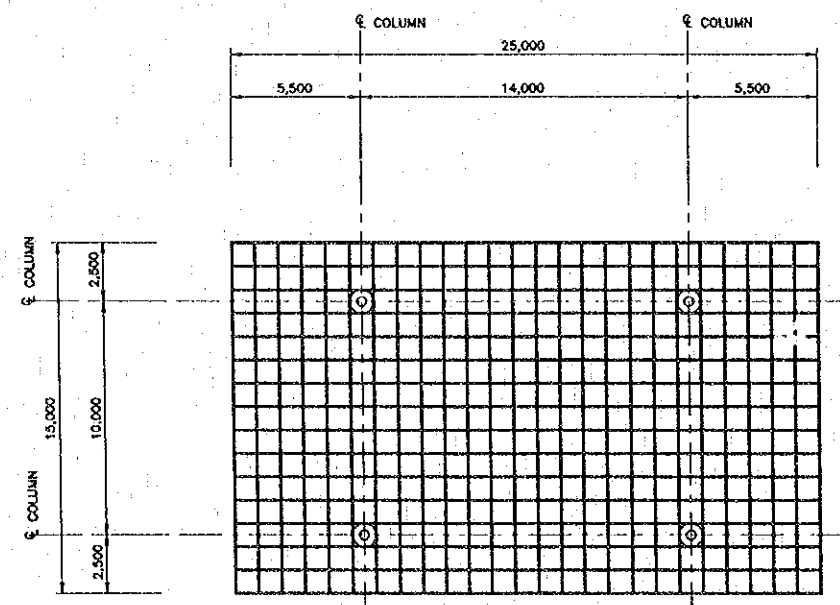
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morisaka	<i>[Signature]</i>	16/02/00
DESIGN CHECK	T. Morisaka	<i>[Signature]</i>	17/02/00
SUBMITTED	A. Hirotsuki	<i>[Signature]</i>	21/02/00
APPROVED	S. Terayobutra	<i>[Signature]</i>	27/02/00

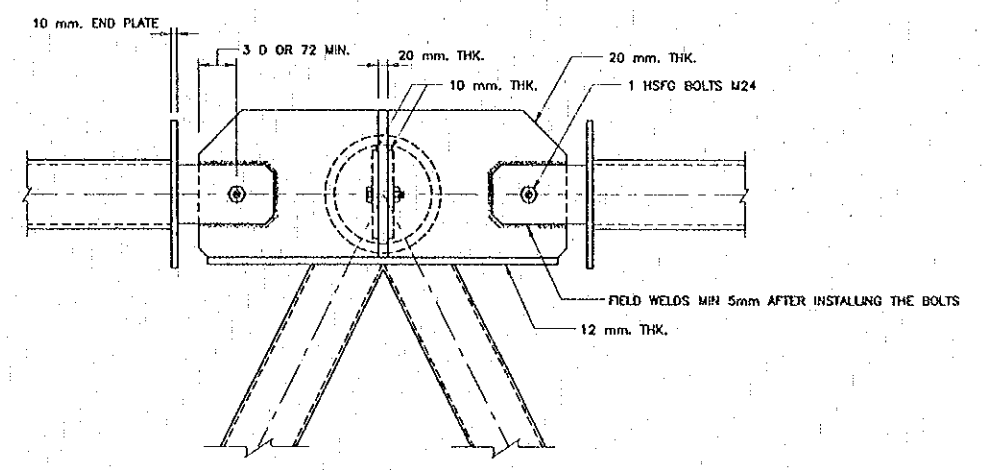
DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 3 (4) 3D TRUSS MODULE**



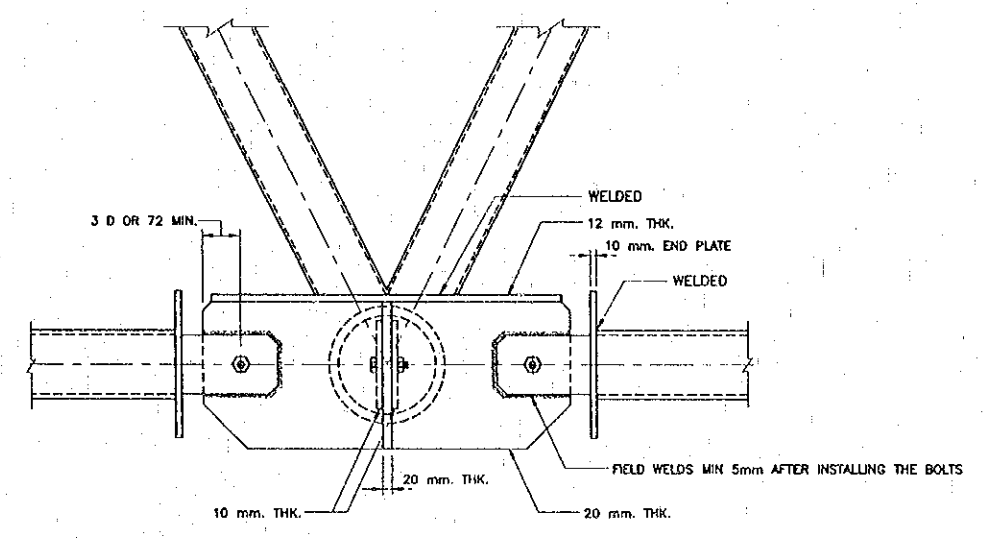
TOP CHORD LAYOUT  
 SCALE 1:150



BOTTOM CHORD LAYOUT  
 SCALE 1:150



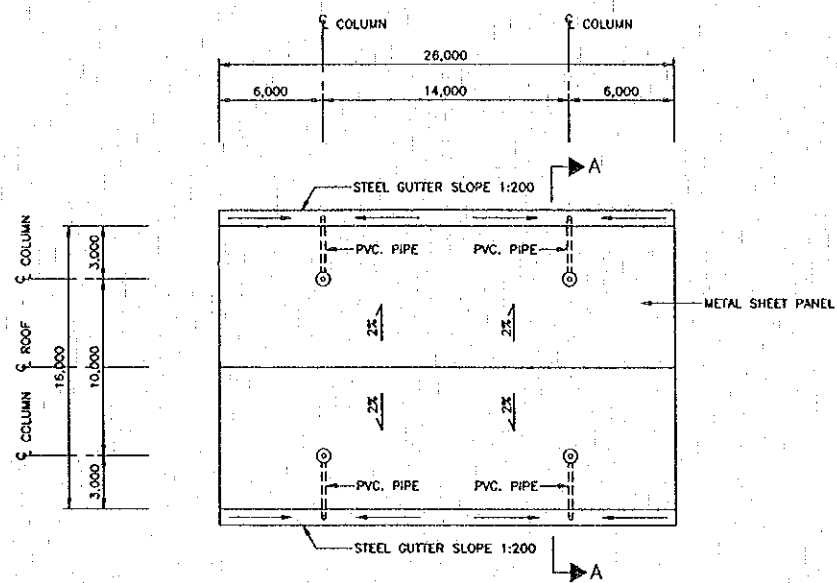
TOP CHORD CONNECTION DETAILS  
 NOT TO SCALE



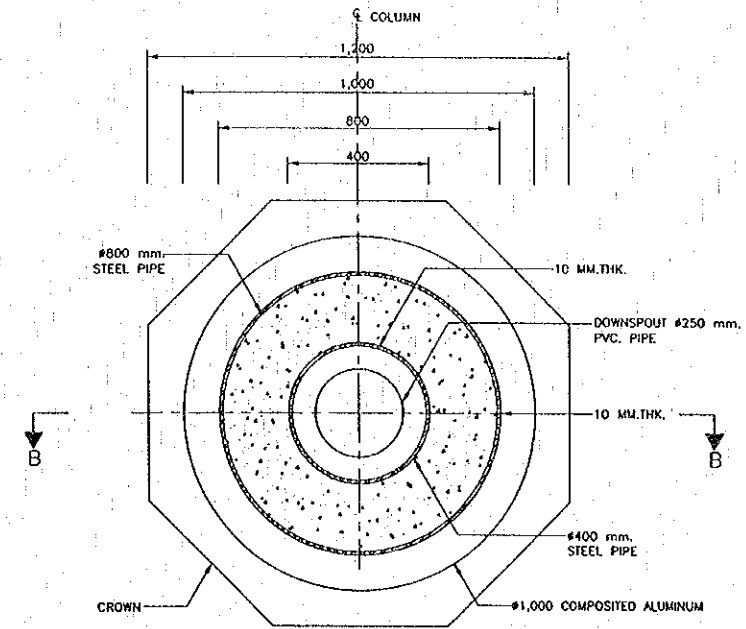
BOTTOM CHORD CONNECTION DETAILS  
 NOT TO SCALE

- NOTES:
1. ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  2. BOLTS SHOULD BE APPROVED BY ENGINEER BEFORE INSTALLATION.
  3. ALL BOLTS FIELD HSFG M24.
  4. ALL STEEL GRADE MIN. 4,000 KSC.
  5. SHOP FILLET WELDS WITH MIN. h = 5 mm.

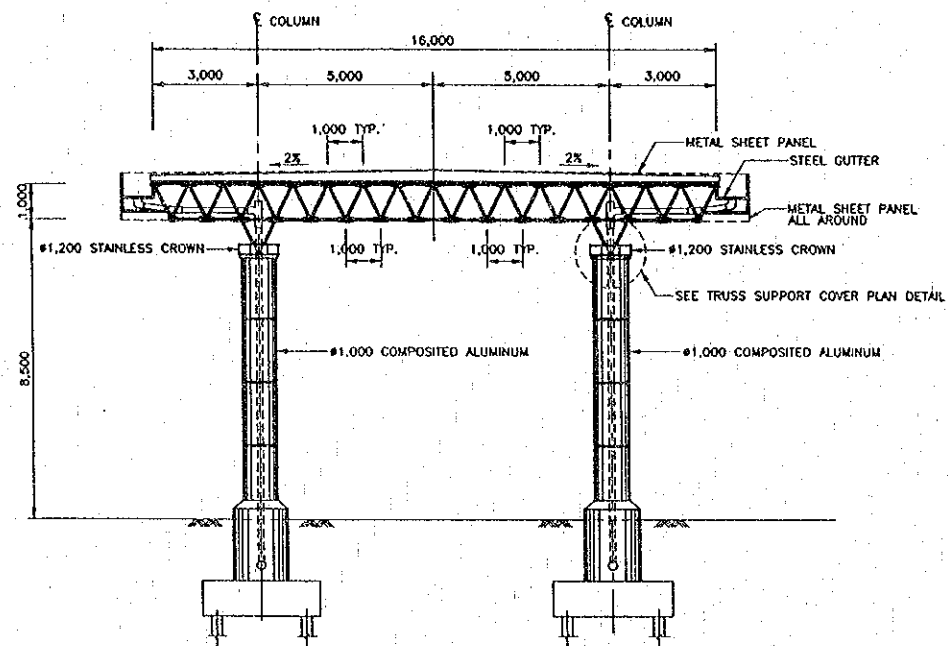
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.					DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 3 (5) TOP & BOTTOM CHORD LAYOUT
								DESIGN CHECK	T. Moerzono	<i>[Signature]</i>	18/02/00		
								SUBMITTED	A. Hirakani	<i>[Signature]</i>	21/02/00		
								APPROVED	S. Tamyobutra	<i>[Signature]</i>	23/02/00		



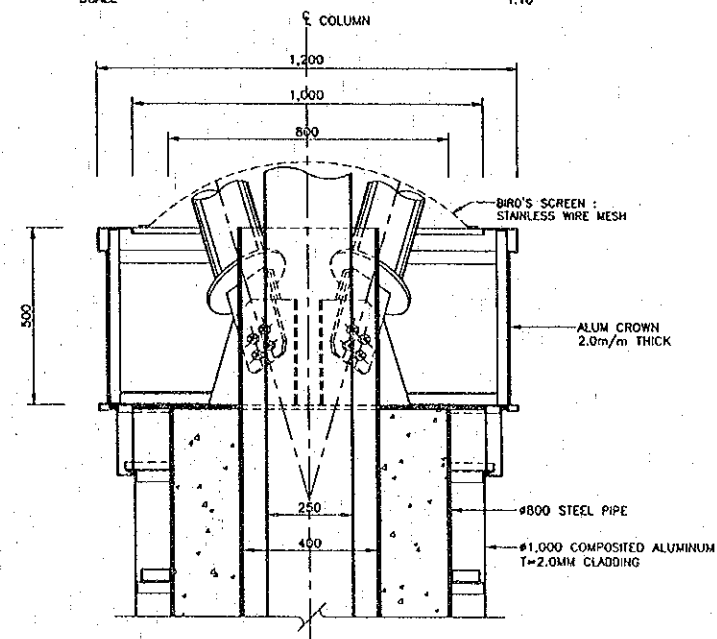
ROOF DRAINAGE PLAN  
 SCALE 1:200



TRUSS SUPPORT COVER PLAN DETAIL  
 SCALE 1:10



SECTION A-A  
 SCALE 1:100



SECTION B-B  
 SCALE 1:10

- NOTES:
- ALL DIMENSION SHOWN ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
  - SLOPE OF SHEETING AND PURLINS AND CONNECTING DETAILS, PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.
  - INSTALLATION DETAIL OF ROOF AND GUTTER SHALL BE PROVIDED BY THE SUPPLIER AND APPROVED BY THE ENGINEER.
  - ROOF SHEETING SHALL BE CORRUGATED METAL SHEET ON PURLINS WITH SLOPE MIN. 2% AS PER BHP SPECIFICATION (KUP-LOK 406) OR EQUIVALENT
 

DEPTH OF METAL SHEET	41 MM.
SHEET THICKNESS	0.53 MM.
PURLIN SPACING (MAX.)	1,800 MM.
- CONNECTION DETAILS OF PURLINS AND SHEETING SHOULD BE PROVIDED BY SUPPLIER AND APPROVED BY ENGINEER.

REV.	DATE	DESCRIPTION	APPROVED

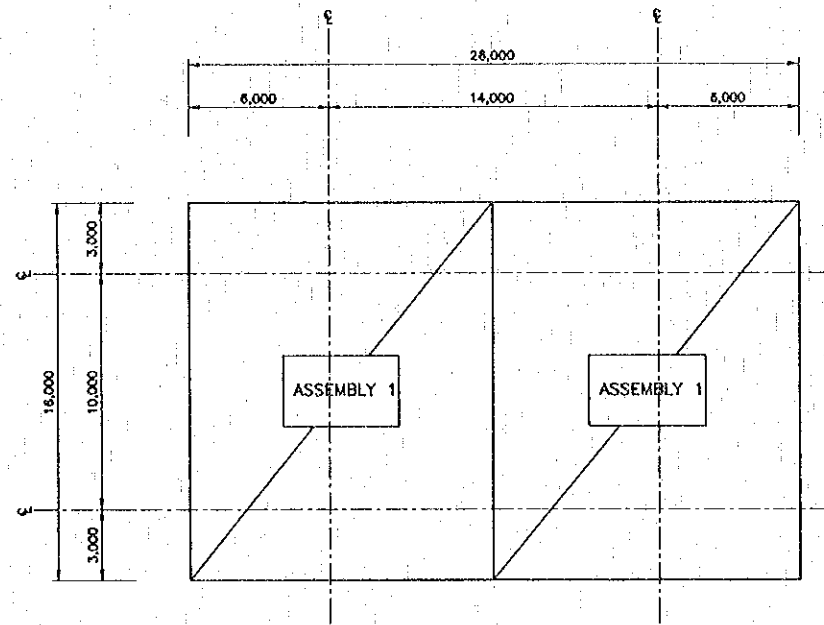
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

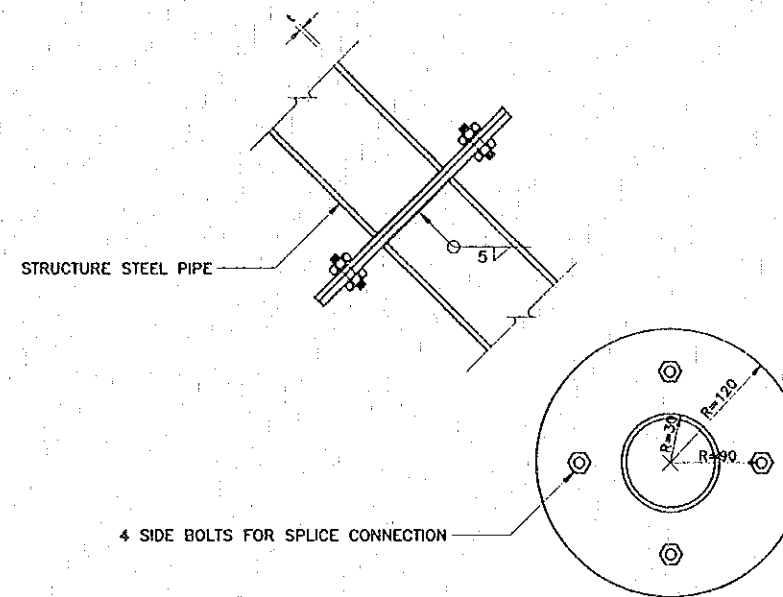
THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUANTITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	A. Worikro	<i>[Signature]</i>	23/05/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF TYPE 3 DRAINAGE PLAN & ELEVATION
DESIGN CHECK	I. Mutsaers	<i>[Signature]</i>	26/05/00	
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	27/05/00	
APPROVED	S. Tamiyaburo	<i>[Signature]</i>	27/05/00	

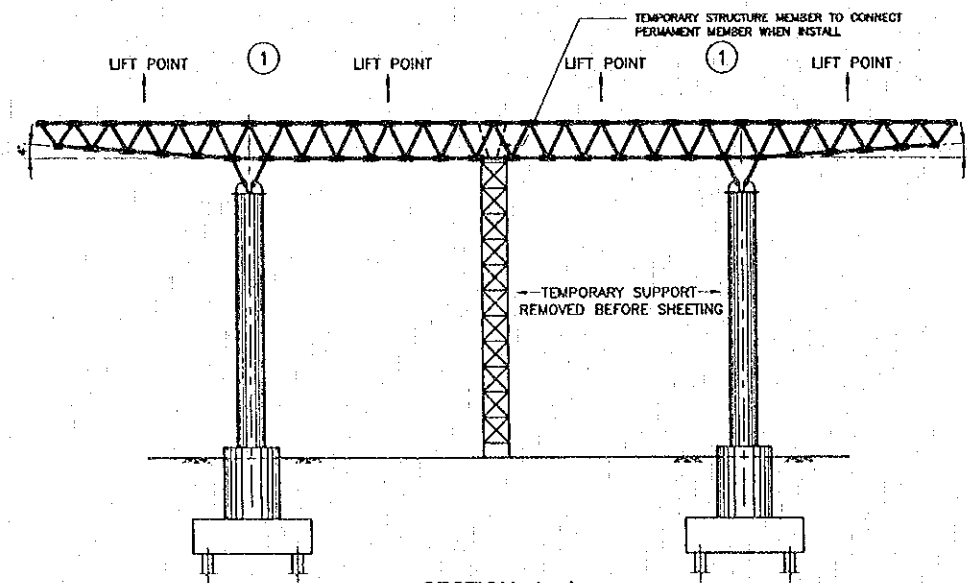
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF TYPE 3  
 DRAINAGE PLAN & ELEVATION



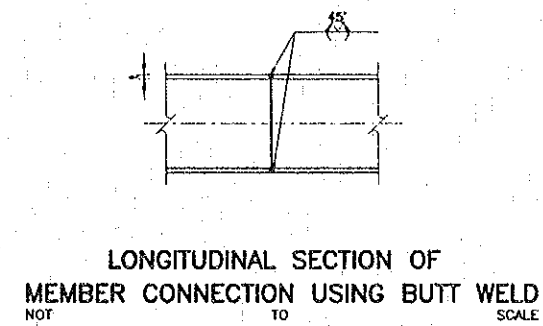
TYPE 3 INSPECTION ROOF TRUSS PLAN  
 SCALE 1:150



CONNECTION FIELD DETAIL  
 SCALE 1:5



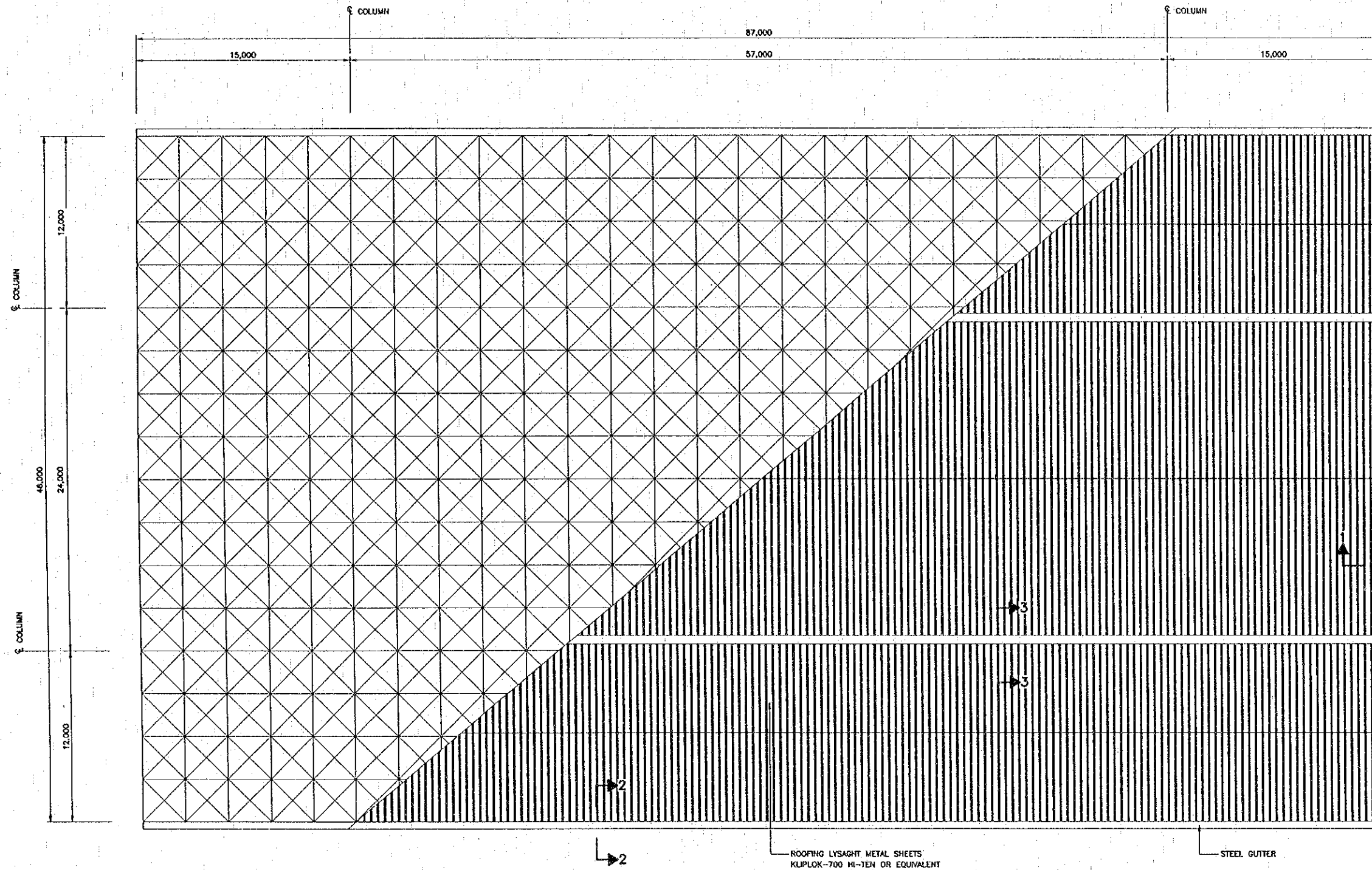
SECTION A-A  
 SCALE 1:100



LONGITUDINAL SECTION OF  
 MEMBER CONNECTION USING BUTT WELD  
 NOT TO SCALE

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikita	<i>[Signature]</i>	16/02/00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF - TYPE 3 (7) CONSTRUCTION METHOD
						DESIGN CHECK	T. Mizuzawa	<i>[Signature]</i>	18/02/00	
						SUBMITTED	A. Hirakani	<i>[Signature]</i>	21/02/00	
						APPROVED	S. Tanyabutra	<i>[Signature]</i>	22/02/00	

DATE OF ISSUE:		05/03/2000
DWG. NO.	F-S-37	SHEET NO. 201
DWG. STATUS		



INSPECTION ROOF TYPE 1  
SCALE 1:150

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIIPPON KOHI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

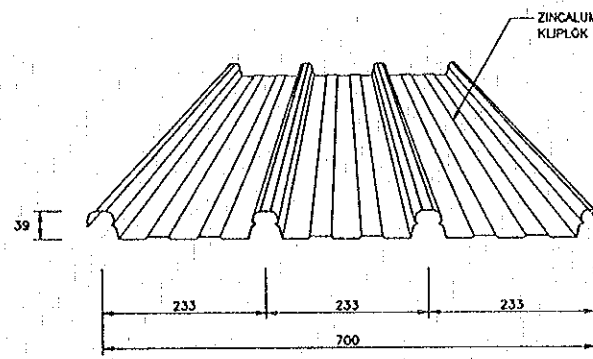
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	10/21/00
DESIGN CHECK	T. Maekawa	<i>[Signature]</i>	10/21/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	11/11/00
APPROVED	S. Tanjyabutra	<i>[Signature]</i>	22/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF TYPE 1 (1)  
 GUTTER DETAILS**

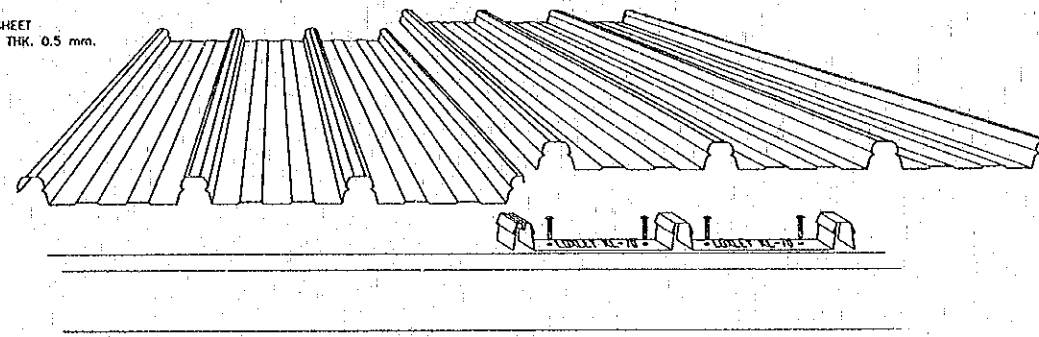
DATE: 3/1/00

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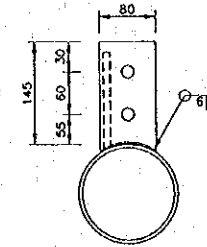
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DWG. NO. F-S-38	SHEET NO. 202
DWG. STATUS	



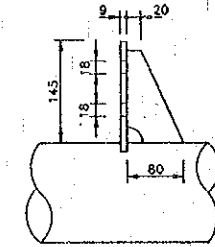
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SCALE 1:5



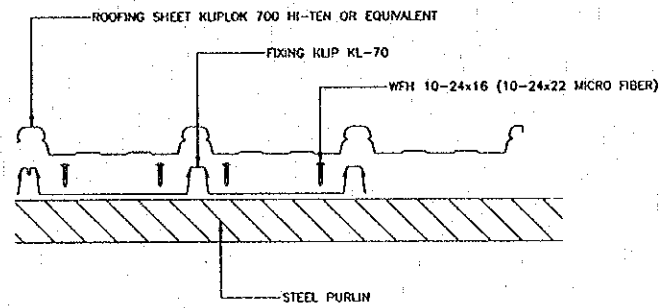
PERSPECTIVE  
SCALE 1:5



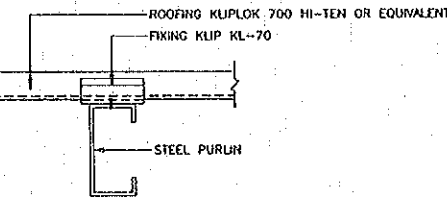
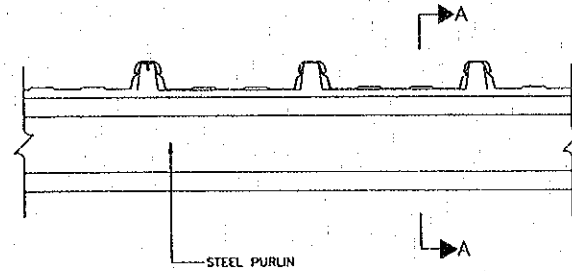
CLEAT ON END SPAN DETAIL  
SECTION SIZE 150 mm.  
SCALE 1:5



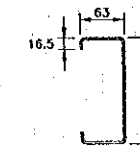
SECTION SIZE 150 mm.  
SCALE 1:5



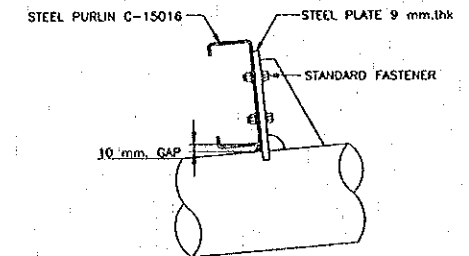
INSTALLATION STANDARD  
SCALE 1:5



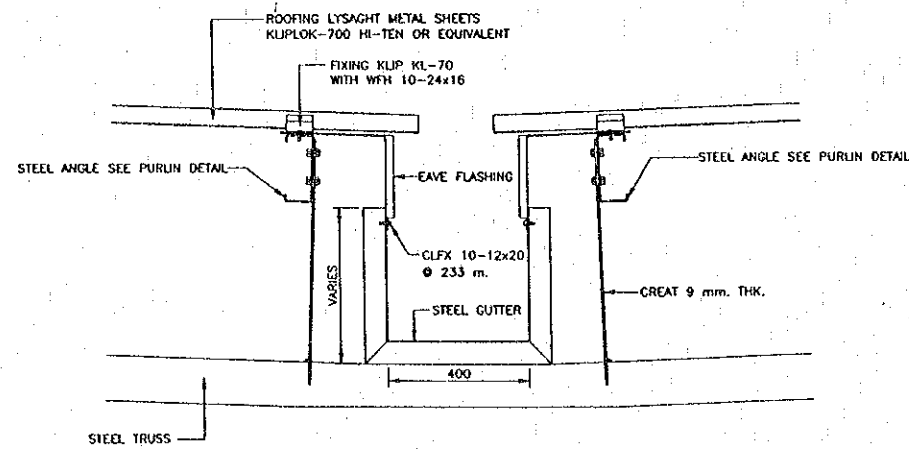
SECTION A-A  
SCALE 1:5



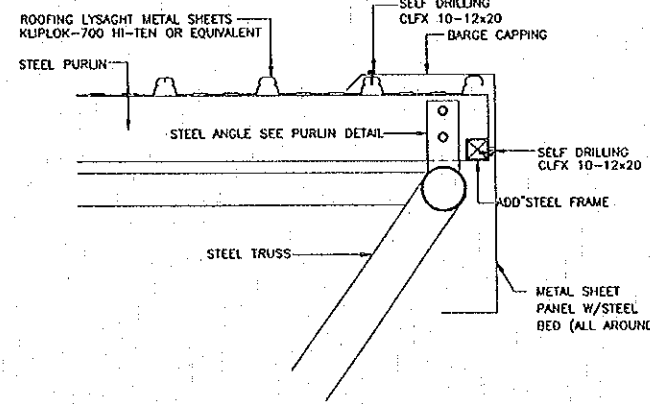
C-15016 SECTION DETAIL  
SCALE 1:5



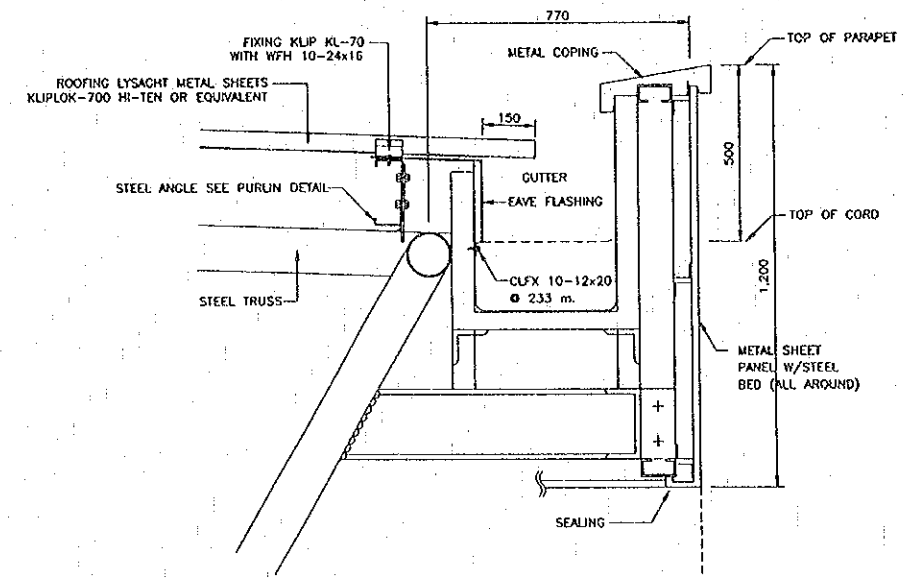
INSTALLATION ROOF PURLIN DETAIL  
SCALE 1:5



SECTION 3-3  
SCALE 1:10



SECTION 1-1  
SCALE 1:10



SECTION 2-2  
SCALE 1:10

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIIPPON KOEI CO., LTD.**

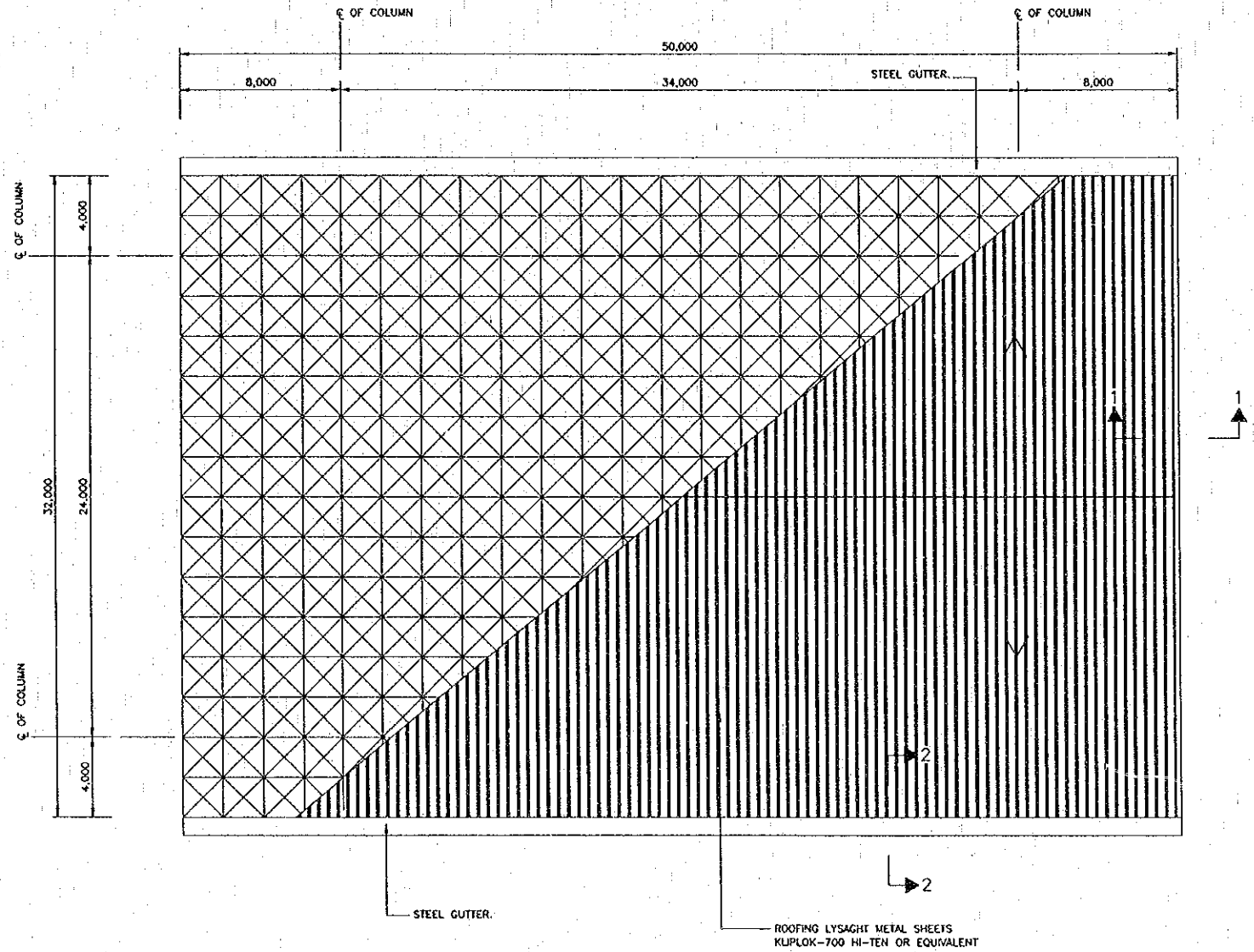
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikawa	<i>[Signature]</i>	23/05/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	24/05/00
SUBMITTED	A. Hiratani	<i>[Signature]</i>	27/05/00
APPROVED	S. Tamayabura	<i>[Signature]</i>	27/05/00

DWG. TITLE: **BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF TYPE 1 (2) GUTTER DETAILS**

DATE OF ISSUE	
DWG. NO. F-S-39	SHEET NO. 203
DWG. STATUS	



INSPECTION ROOF MEDIUM  
SCALE 1:150

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

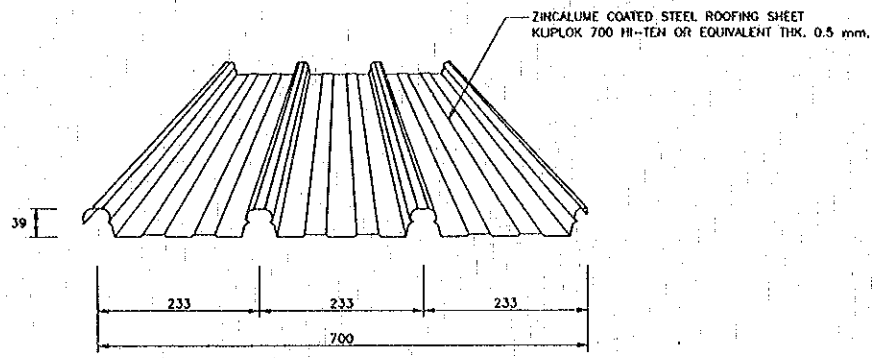
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

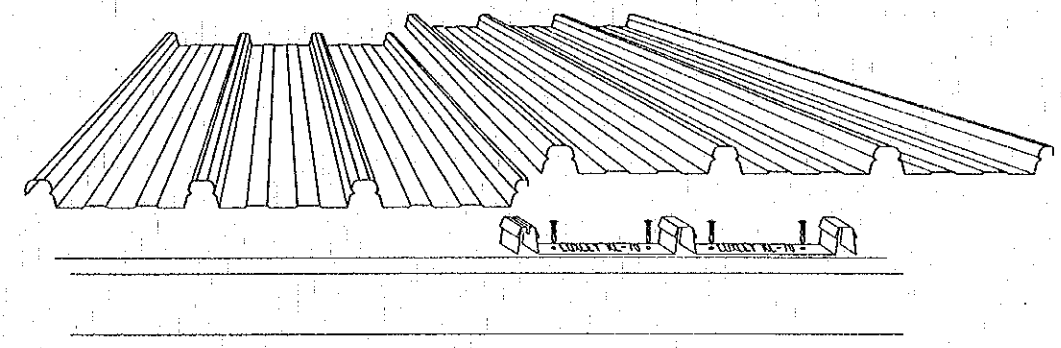
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikita	<i>[Signature]</i>	25/01/00
DESIGN CHECK	T. Moritaka	<i>[Signature]</i>	26/01/00
SUBMITTED	A. Ipratani	<i>[Signature]</i>	27/01/00
APPROVED	S. Tanjyabutra	<i>[Signature]</i>	2/02/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF TYPE 2 (1)  
 GUTTER DETAILS**

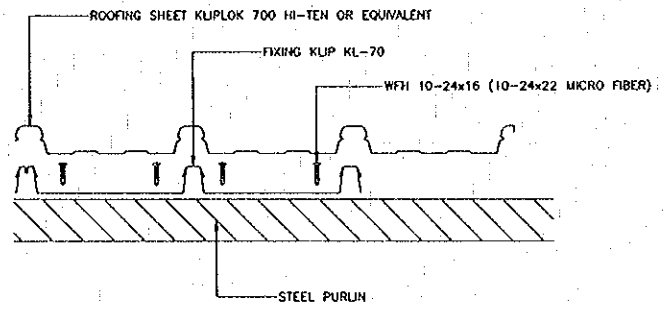




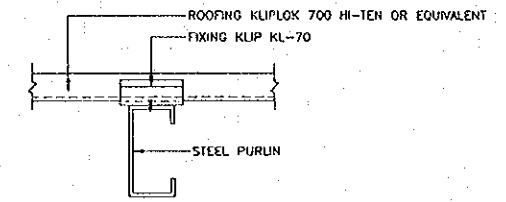
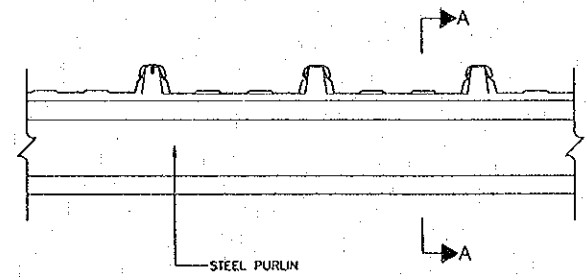
MATERIAL & FORMING SECTION  
 SCALE 1:5



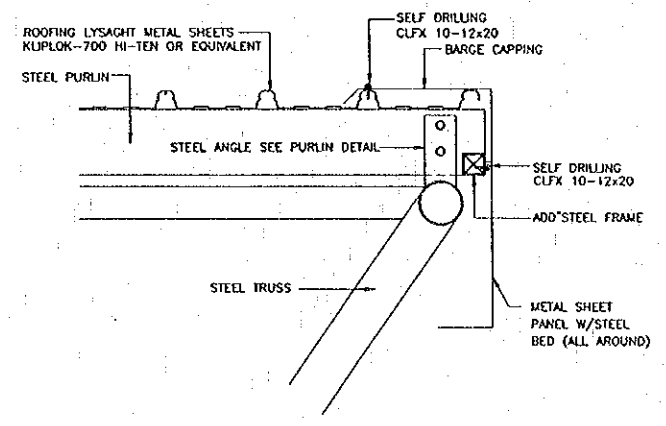
PERSPECTIVE  
 SCALE 1:5



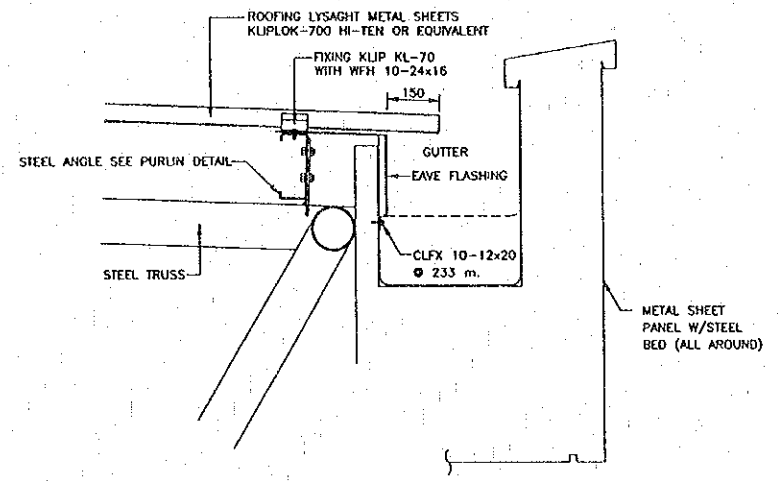
INSTALLATION STANDARD  
 SCALE 1:5



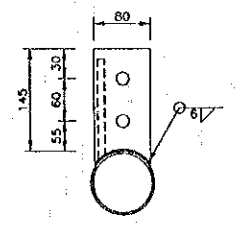
SECTION A-A  
 SCALE 1:5



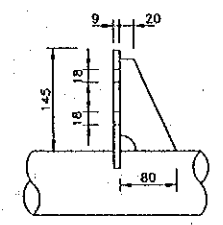
SECTION 1-1  
 SCALE 1:10



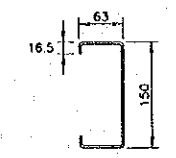
SECTION 2-2  
 SCALE 1:10



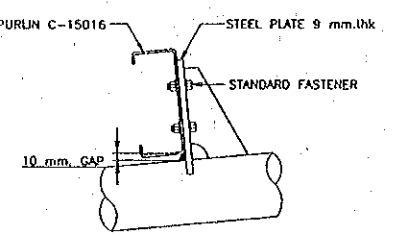
CLEAT ON END SPAN DETAIL  
 SECTION SIZE 150 mm.  
 SCALE 1:5



SECTION SIZE 150 mm.  
 SCALE 1:5



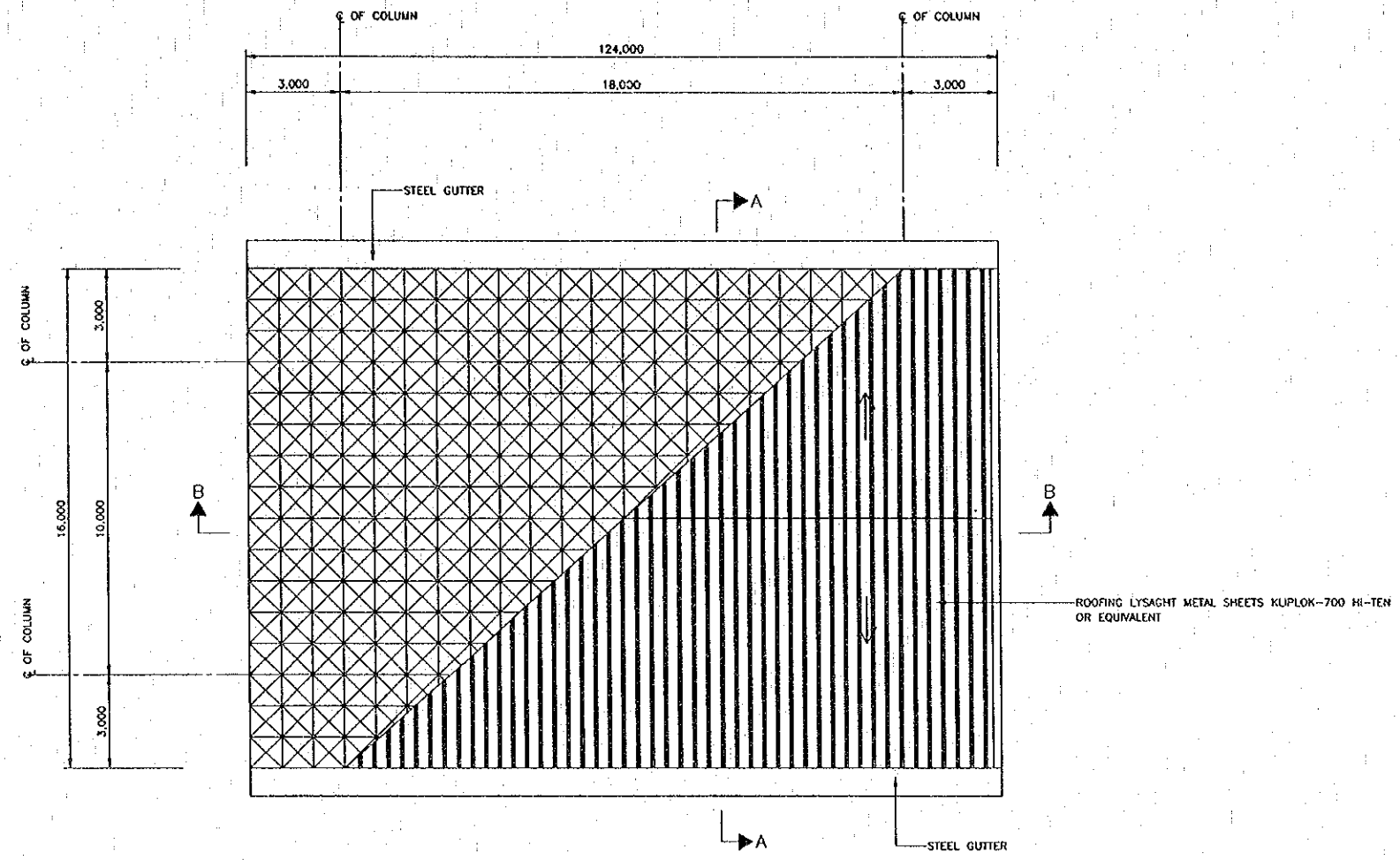
C-15016 SECTION DETAIL  
 SCALE 1:5



INSTALLATION ROOF PURLIN DETAIL  
 SCALE 1:5

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morioka	<i>[Signature]</i>	23.12.00	BORDER CONTROL FACILITIES THAILAND SIDE INSPECTION ROOF TYPE 2 (2) GUTTER DETAILS
						DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	24.01.00	
						SUBMITTED	A. Hironaka	<i>[Signature]</i>	24.02.00	
						APPROVED	S. Taniyabutra	<i>[Signature]</i>	24.02.00	

DATE OF ISSUE:	
DWG. NO. F-S-41	SHEET NO. 205
DWG. STATUS	



INSPECTION ROOF TYPE 3  
SCALE 1:100

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

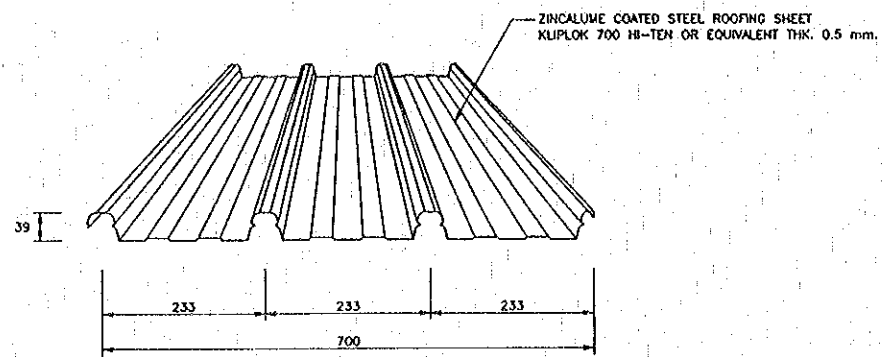
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

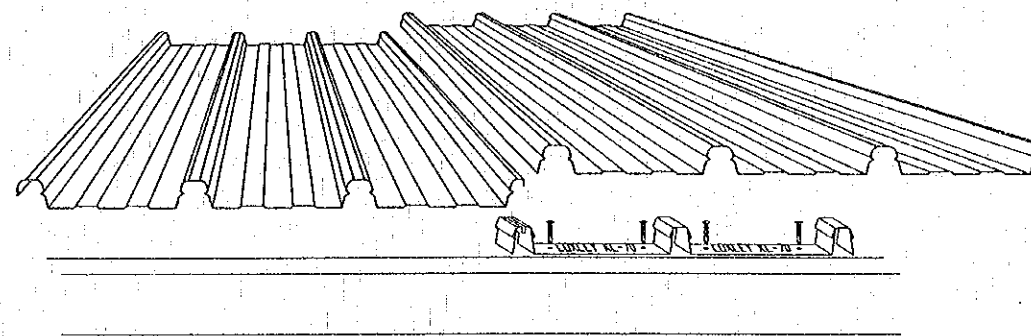
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morikita	<i>[Signature]</i>	23/05/00
DESIGN CHECK	T. Masuzawa	<i>[Signature]</i>	24/05/00
SUBMITTED	A. Hirakawa	<i>[Signature]</i>	27/05/00
APPROVED	S. Tomyabutra	<i>[Signature]</i>	2/06/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF TYPE 3 (1)  
 GUTTER DETAILS**

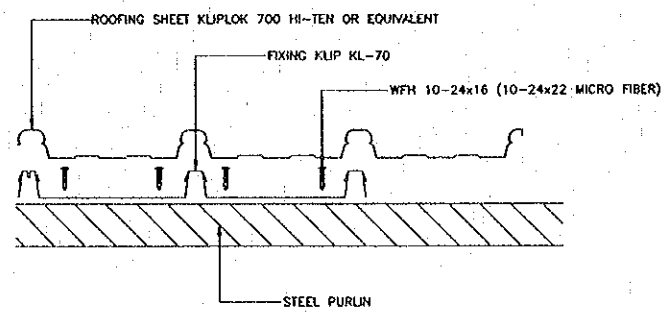
DATE OF ISSUE:	
DWG. NO. F-S-42	SHEET NO. 206
DWG. STATUS	



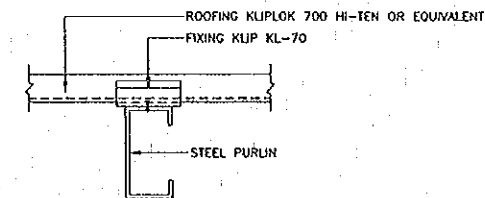
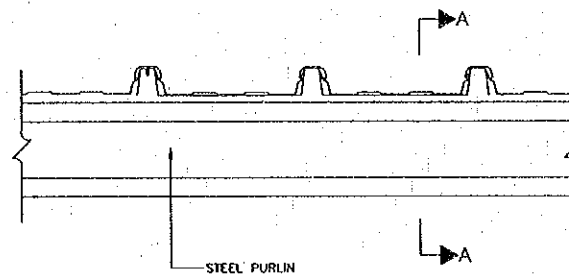
MATERIAL & FORMING SECTION  
SCALE 1:5



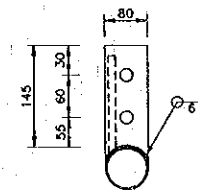
PERSPECTIVE  
SCALE 1:5



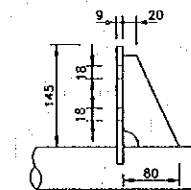
INSTALLATION STANDARD  
SCALE 1:5



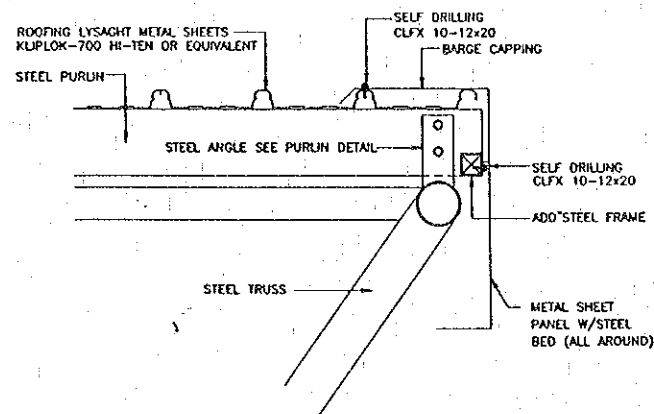
SECTION A-A  
SCALE 1:5



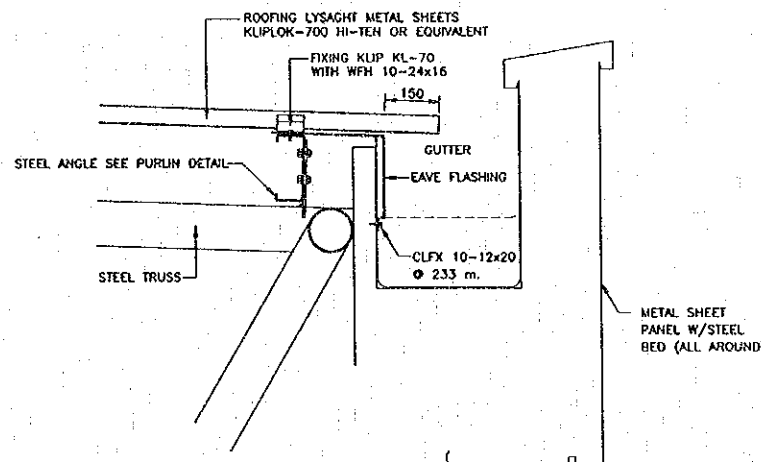
CLEFT ON END SPAN DETAIL  
SECTION SIZE 150 mm.  
SCALE 1:5



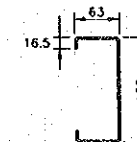
SECTION SIZE 150 mm.  
SCALE 1:5



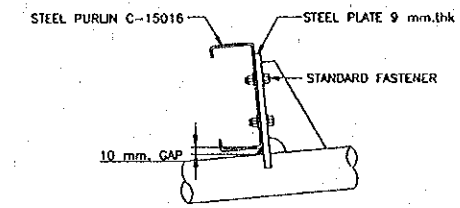
SECTION 1-1  
SCALE 1:10



SECTION 2-2  
SCALE 1:10



C-15016 SECTION DETAIL  
SCALE 1:5



INSTALLATION ROOF PURLIN DETAIL  
SCALE 1:5

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

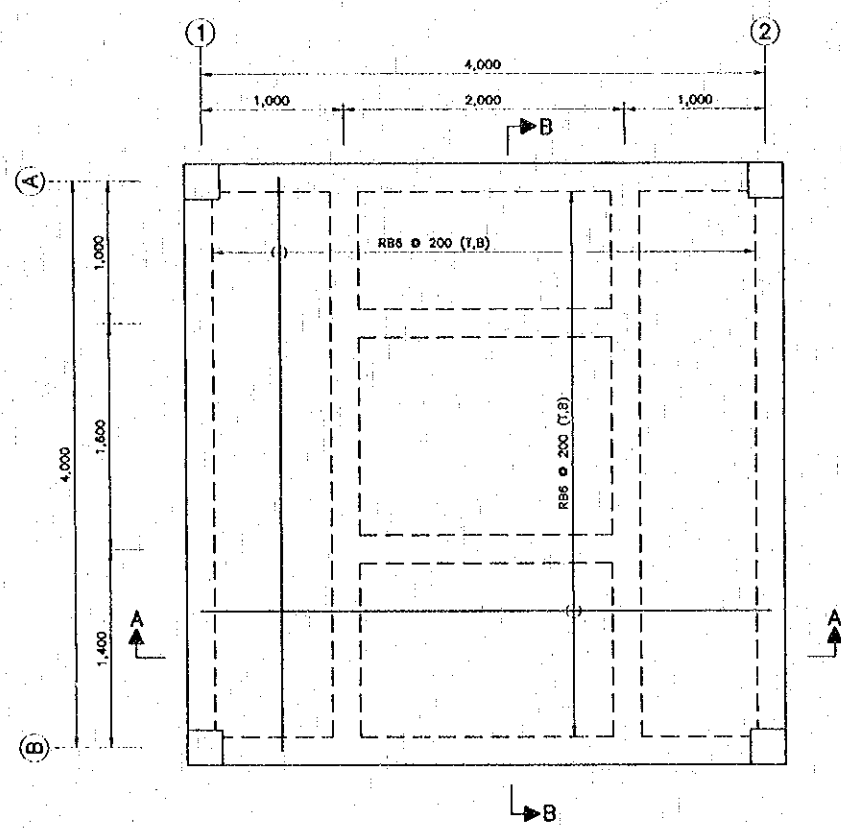
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

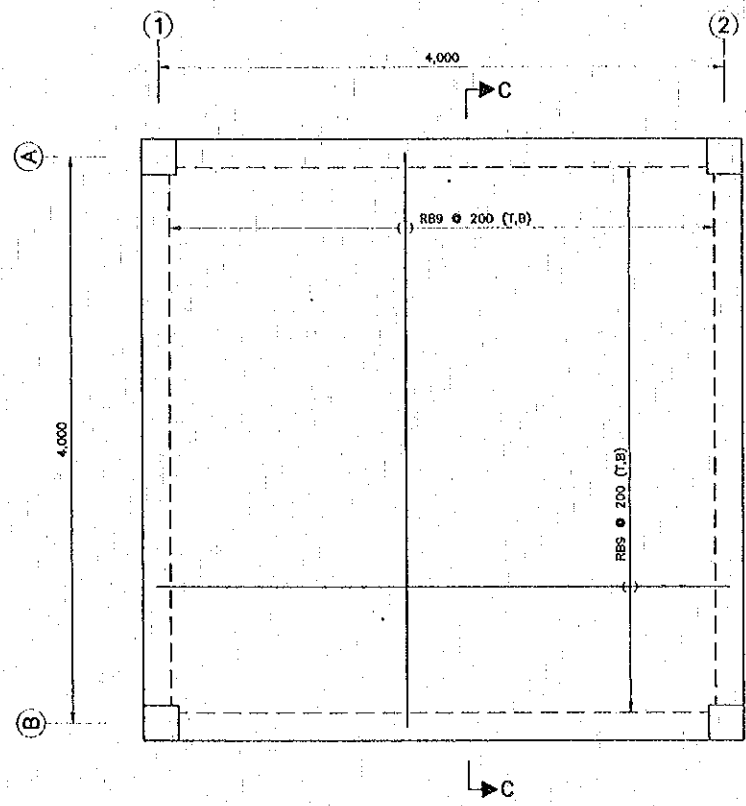
QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	A. Morioka	<i>A. Morioka</i>	21/05/01
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	21/05/01
SUBMITTED	A. Hirokuni	<i>A. Hirokuni</i>	21/05/01
APPROVED	S. Fanyabutra	<i>S. Fanyabutra</i>	2/06/02

DWG. TITLE:  
**BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 INSPECTION ROOF TYPE 2 (2)  
 GUTTER DETAILS**

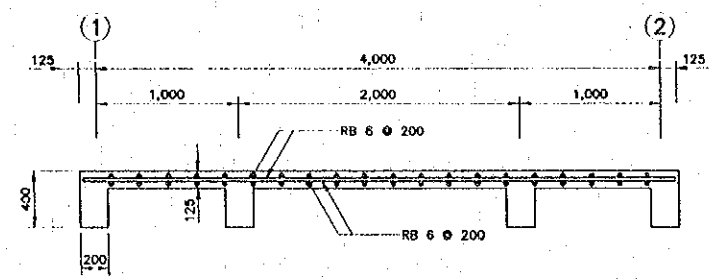
DATE OF ISSUE: 05/03/2000	
DWG. NO. F-S-43	SHEET NO. 207
DWG. STATUS	



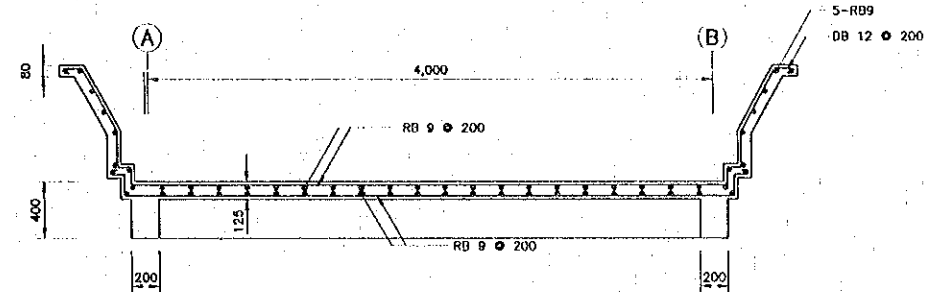
**FIRST FLOOR REINFORCEMENT**  
SCALE 1 : 25



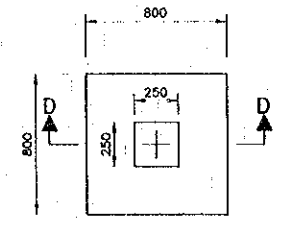
**ROOF FLOOR REINFORCEMENT**  
SCALE 1 : 25



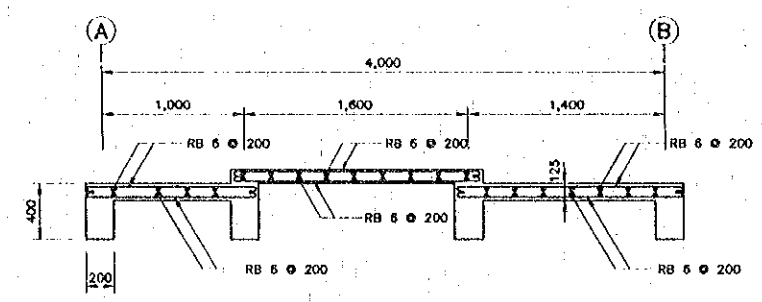
**SECTION A-A**  
SCALE 1 : 25



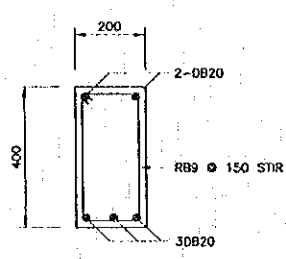
**SECTION C-C**  
SCALE 1 : 25



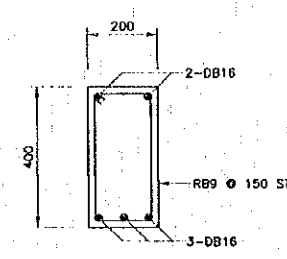
**FOOTING F1**  
SCALE 1 : 20



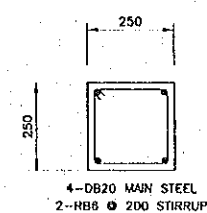
**SECTION B-B**  
SCALE 1 : 25



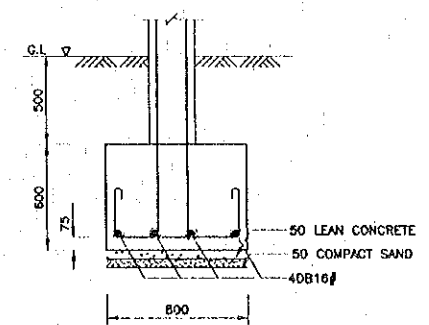
**BEAM GB1**  
SCALE 1 : 10



**BEAM RB1**  
SCALE 1 : 10



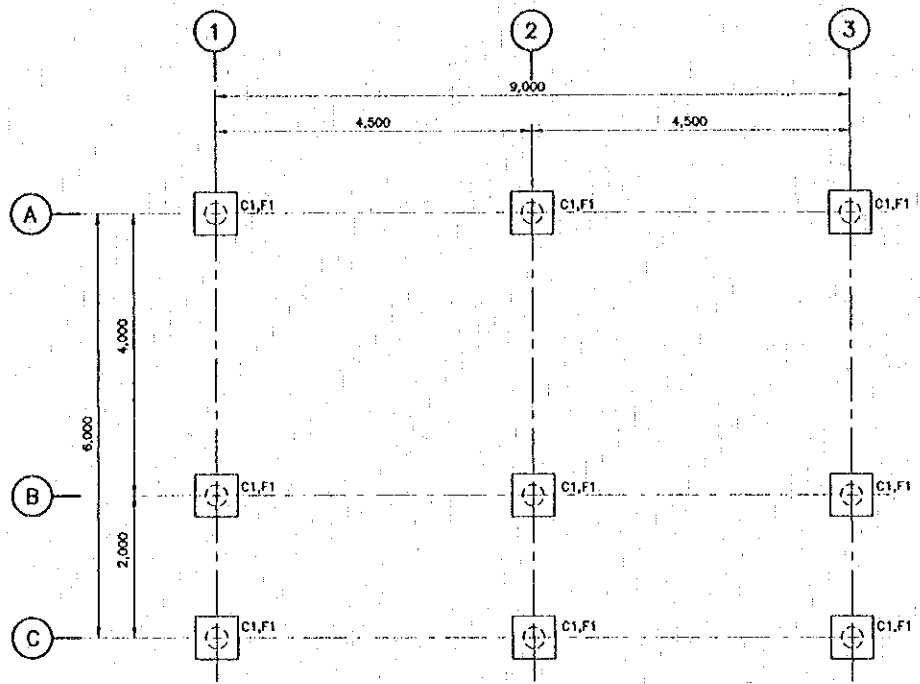
**COLUMN C1**  
SCALE 1 : 10



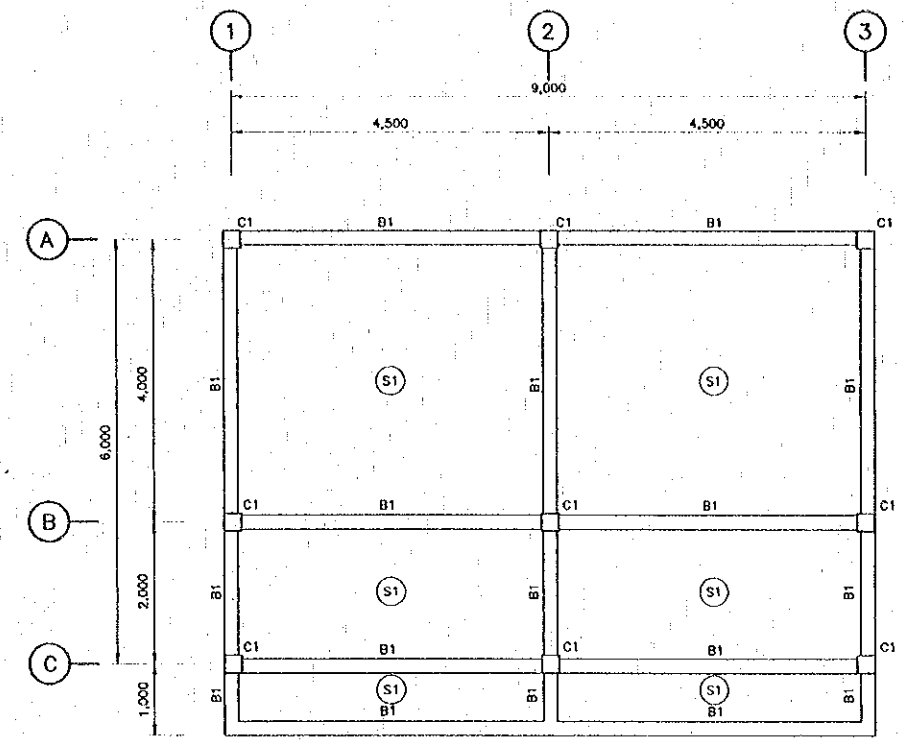
**SECTION A-A**  
SCALE 1 : 20

- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED
  2. ALL ELEVATIONS AND DETAILS ARE REFERRING TO ARCHITECTURAL DWG.
  3. SOIL UNDER THE FOOTING SHALL HAVE A MINIMUM ALLOW ABEL BEARING CAPACITY OF 10 TON/M<sup>2</sup>

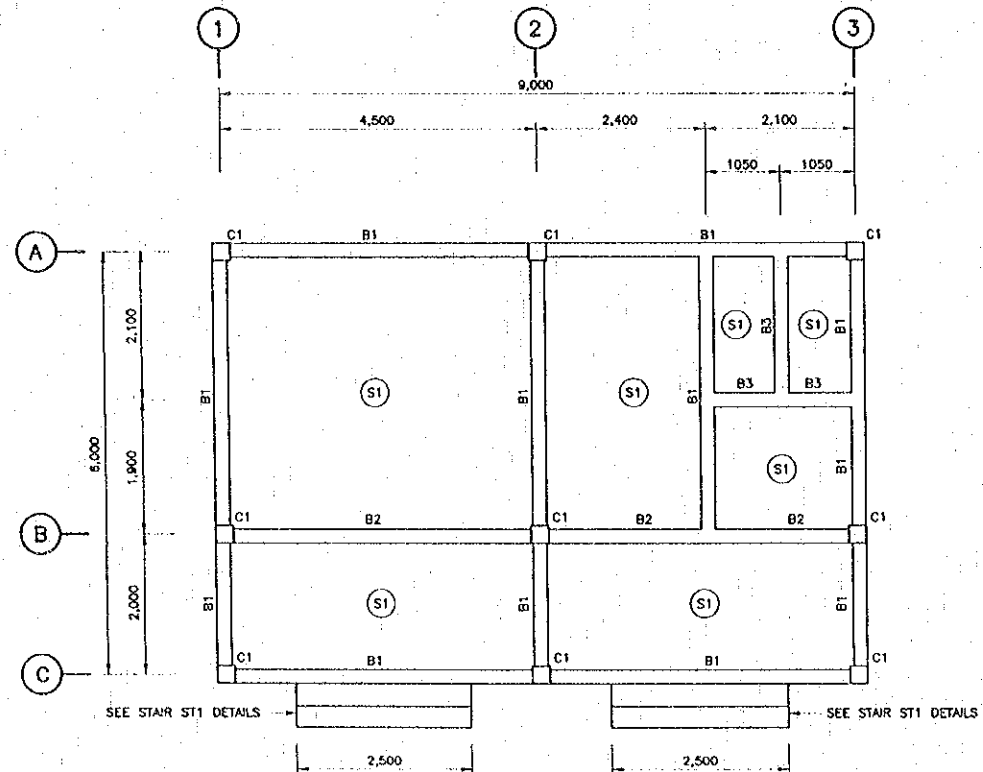
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. to association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Morikawa I. Moursawa A. Hirakawa S. Tamayabutra	<i>[Signatures]</i>	16/02/00 21/01/00 22/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECKING OFFICE : BEAM, COLUMN, FOOTING, AND SLAB REINFORCEMENT



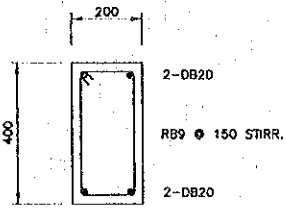
FOUNDATION PLAN  
 SCALE 1 : 50



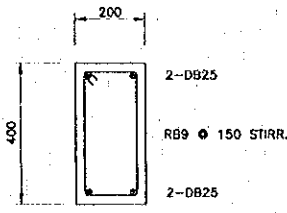
ROOF FLOOR COLUMN, BEAM SLAB PLAN  
 SCALE 1 : 50



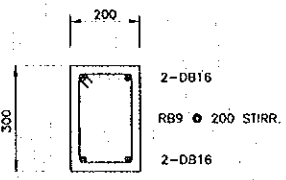
FIRST FLOOR FOOTING, COLUMN, AND SLAB PLAN  
 SCALE 1 : 50



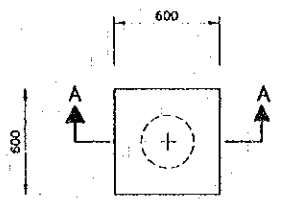
BEAM B1  
 SCALE 1 : 10



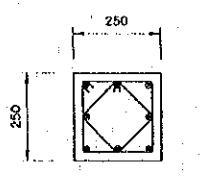
BEAM B2  
 SCALE 1 : 10



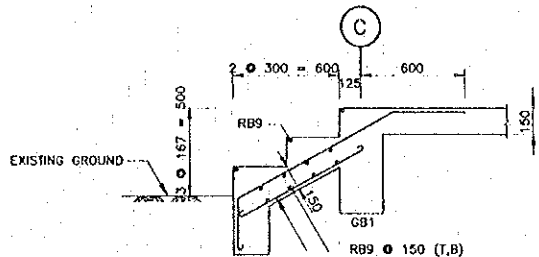
BEAM B3  
 SCALE 1 : 10



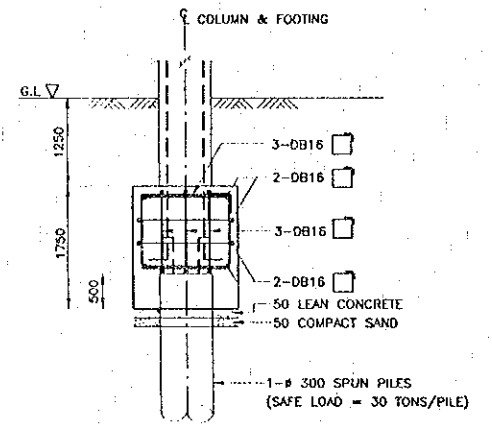
FOOTING F1  
 SCALE 1 : 20



COLUMN C1  
 SCALE 1 : 10



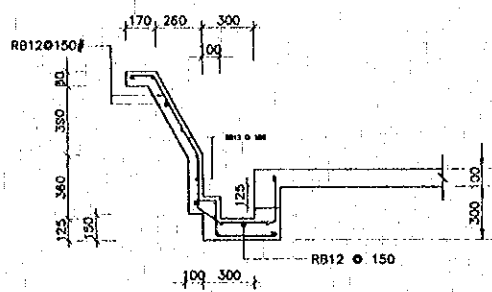
STAIR ST1  
 SCALE 1 : 20



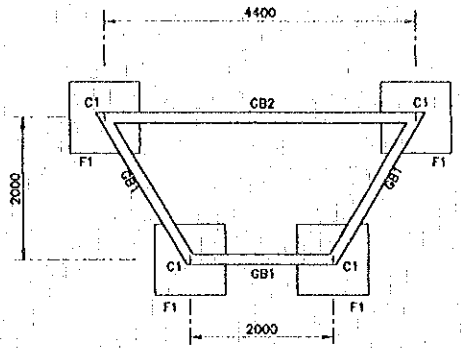
SECTION A-A  
 SCALE 1 : 20

NOTES:  
 1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED.  
 2. ALL ELEVATIONS AND DETAILS ARE REFERRING TO ARCHITECTURAL DWG.

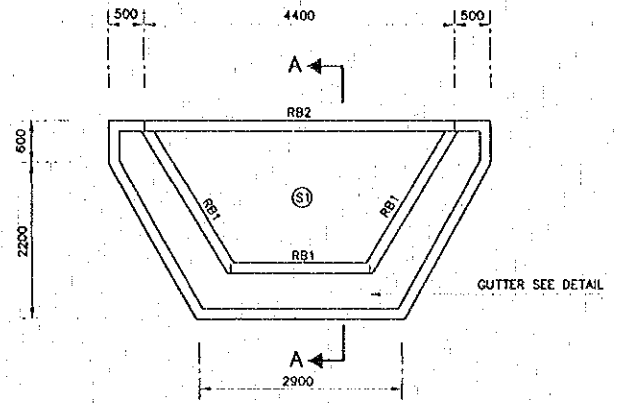
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Morikita T. Masuzawa A. Hengtan S. Terayabutra	<i>[Signatures]</i>	16/02/00 18/02/00 21/02/00 22/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECK AND TOLL FEE OFFICE : FOOTING, BEAM AND SLAB PLAN



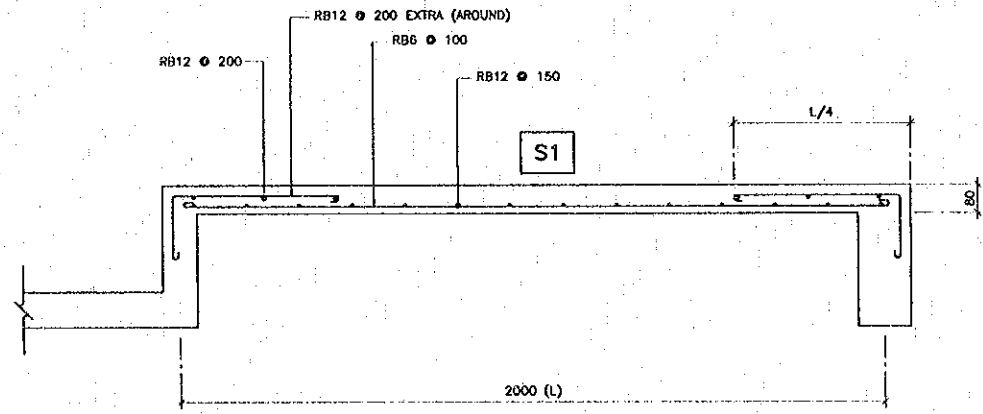
PARAPET DETAIL  
 SCALE 1:20



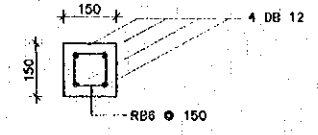
GRADE BEAM  
 SCALE 1:50



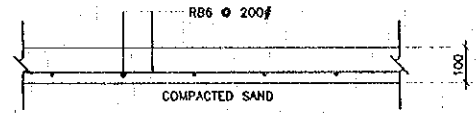
ROOF FRAME PLAN  
 SCALE 1:50



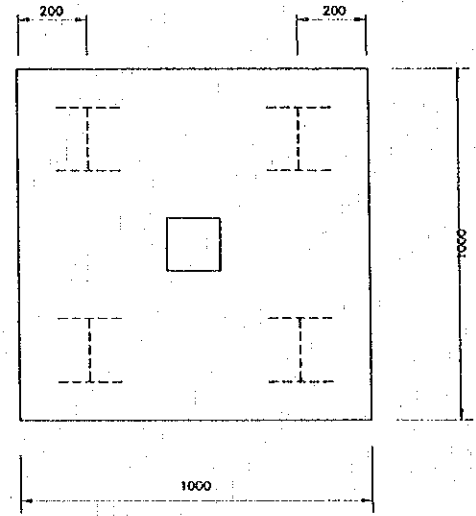
SECTION A-A  
 SCALE 1:10



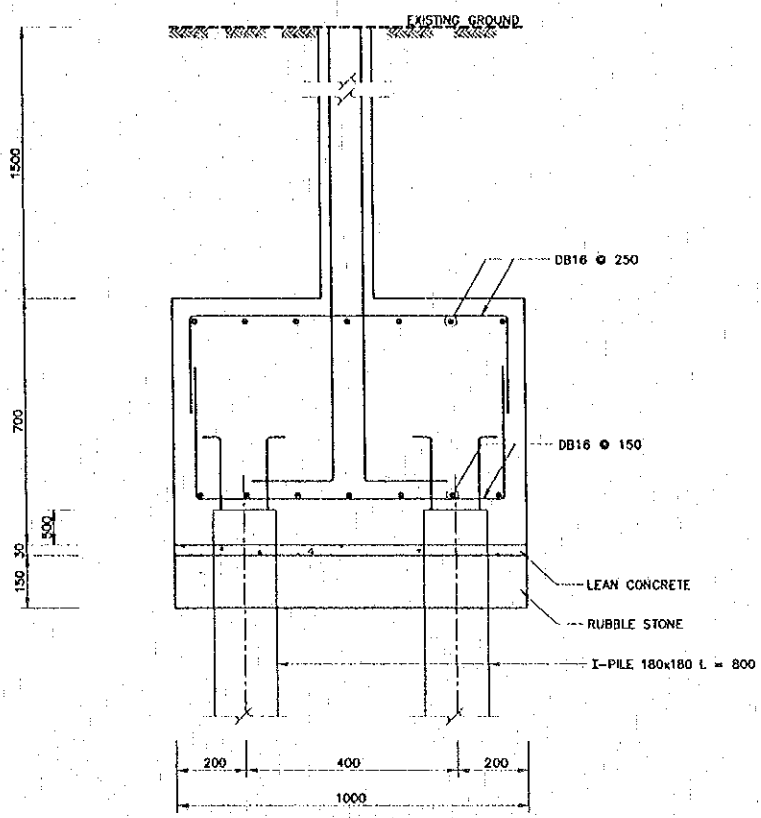
C1 DETAIL  
 SCALE 1:10



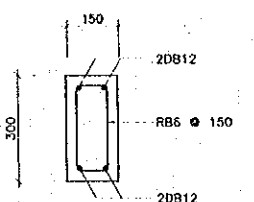
GS DETAIL  
 SCALE 1:10



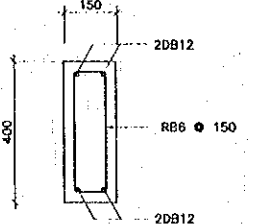
F1 DETAIL  
 SCALE 1:10



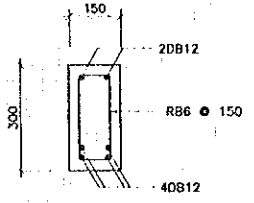
EXISTING GROUND  
 COMPACTED SOIL DENSITY NOT LESS THAN 95 %



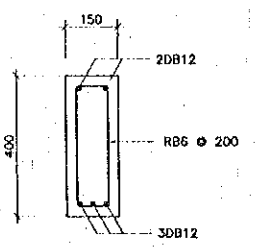
GB1 DETAIL  
 SCALE 1:10



RB1 DETAIL  
 SCALE 1:10



GB2 DETAIL  
 SCALE 1:10

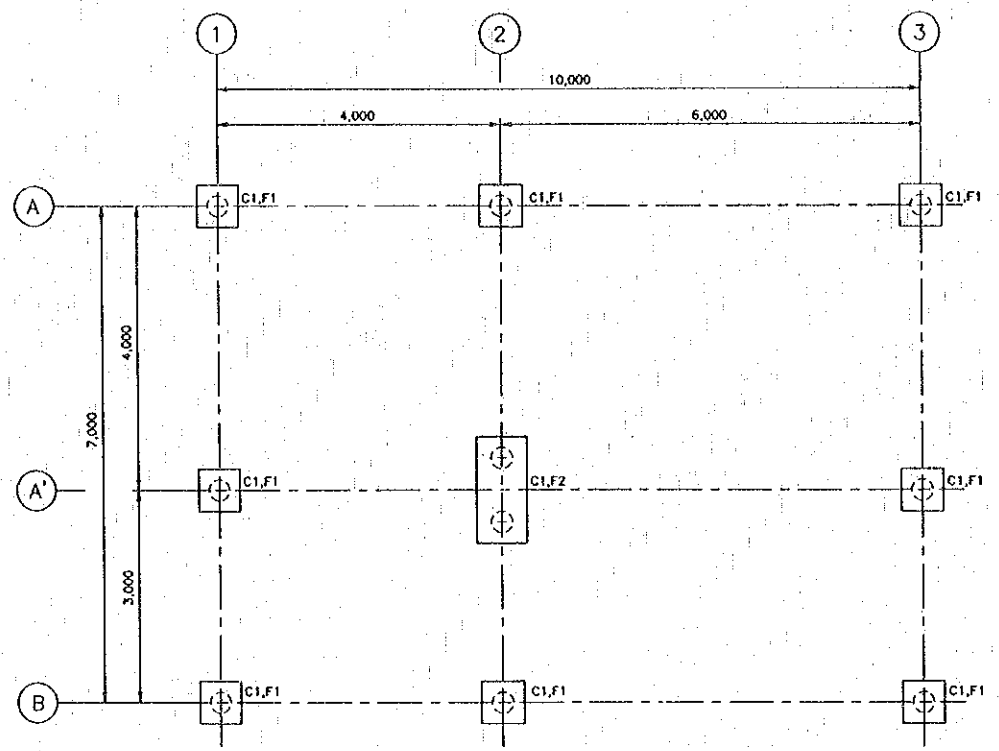


RB2 DETAIL  
 SCALE 1:10

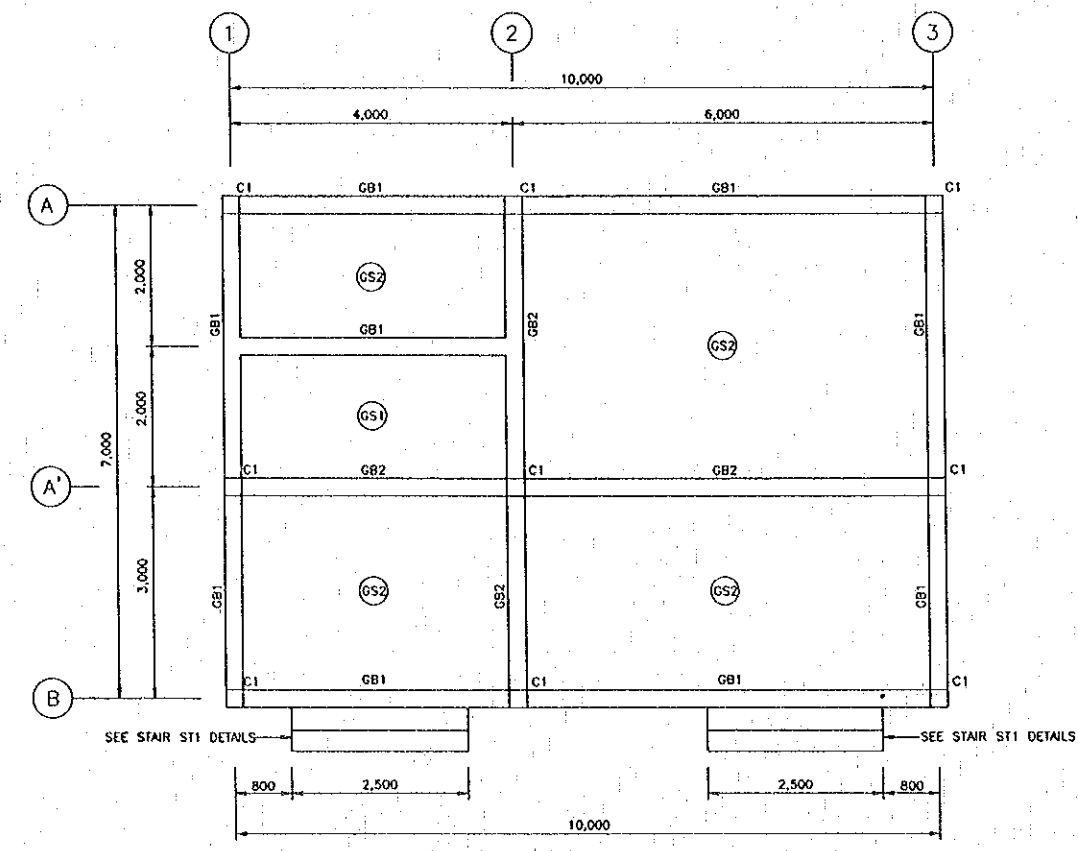
NOTES

1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED
2. ALL ELEVATIONS AND DETAILS ARE REFERRING TO ARCHITECTURAL DWG.
3. SOIL UNDER THE FOOTING SHALL HAVE A MINIMUM ALLOW ABEL BEARING CAPACITY OF 10 TON/M<sup>2</sup>

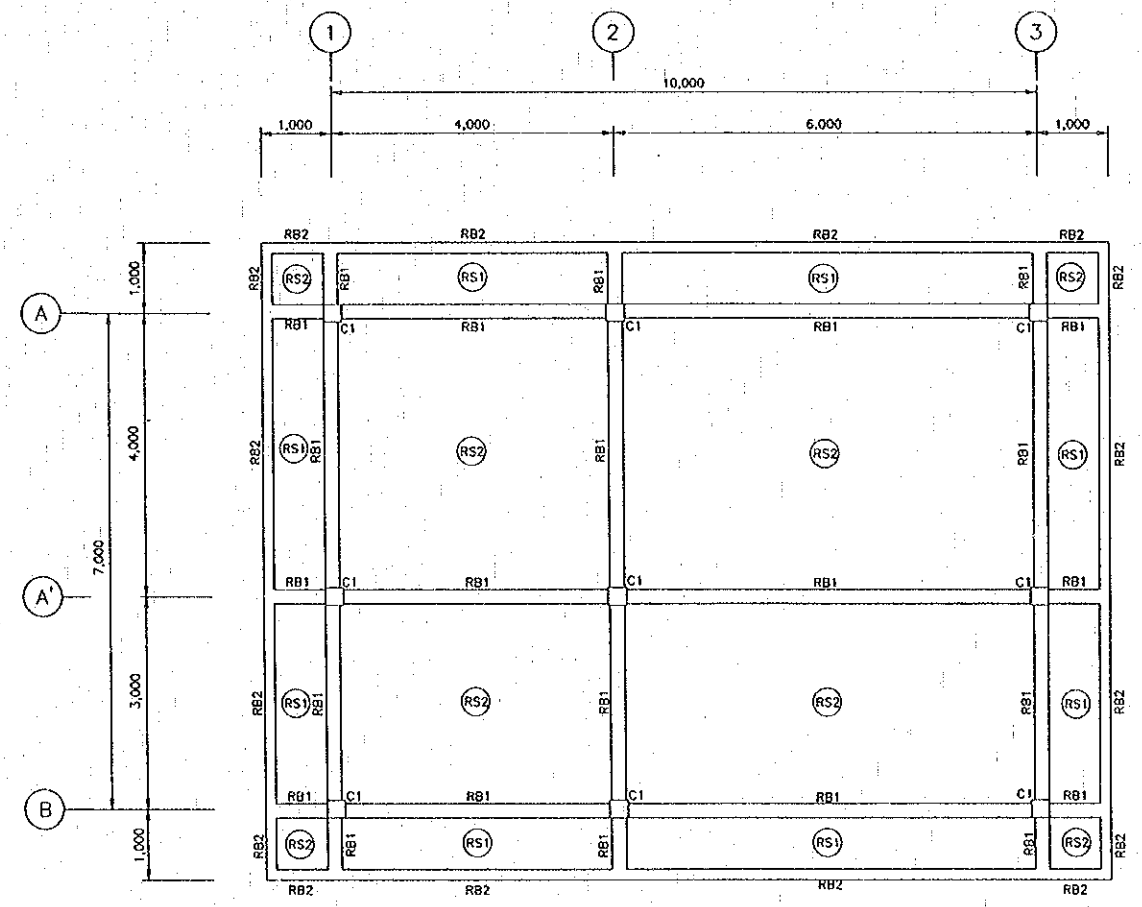
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	A. Marfaka T. Mokuwara A. Hirokuni S. Tamiyabutra	<i>[Signatures]</i>	16-02-00 18-02-00 21/04 22/02/00	BORDER CONTROL FACILITIES THAILAND SIDE CHECK POINT BOOTH : STRUCTURAL DETAILS



FOUNDATION PLAN  
SCALE 1 : 50



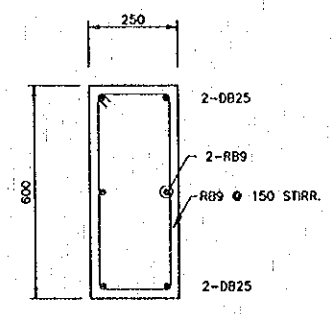
FIRST FLOOR FOOTING, COLUMN, AND SLAB PLAN  
SCALE 1 : 50



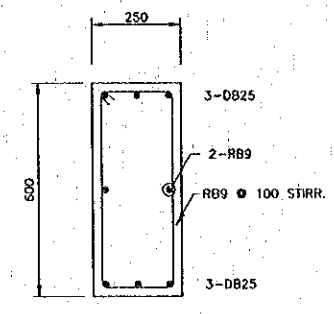
ROOF FLOOR COLUMN, BEAM SLAB PLAN  
SCALE 1 : 50

- NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE INDICATED.
  2. ALL ELEVATIONS AND DETAILS SHALL BE REFERRED TO ARCHITECTURAL DWG.

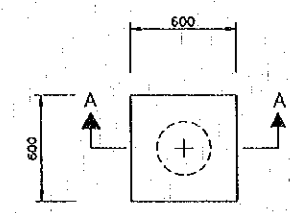
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	JICA JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	A. Morikawa	<i>[Signature]</i>	23/05/10	BORDER CONTROL FACILITIES THAILAND SIDE POWER HOUSE : FOOTING, BEAM AND SLAB PLAN
						DESIGN CHECK	T. Mavuzawa	<i>[Signature]</i>	27/05/10	
						SUBMITTED	A. Hirotsu	<i>[Signature]</i>	27/05/10	
						APPROVED	S. Tamiyabutra	<i>[Signature]</i>	27/05/10	



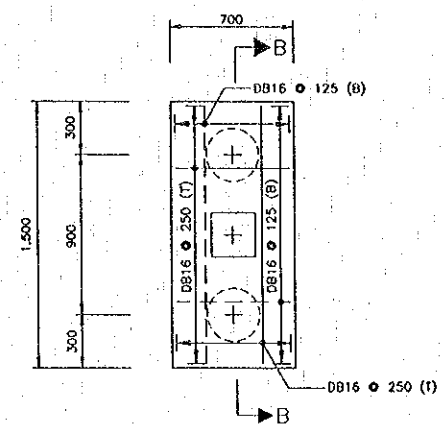
BEAM GB1  
SCALE 1 : 10



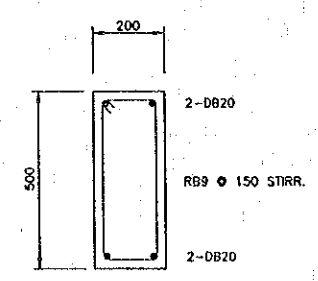
BEAM GB2  
SCALE 1 : 10



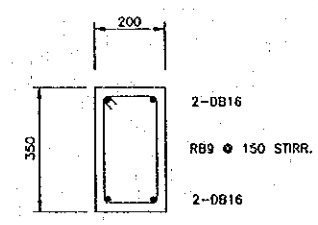
FOOTING F1  
SCALE 1 : 20



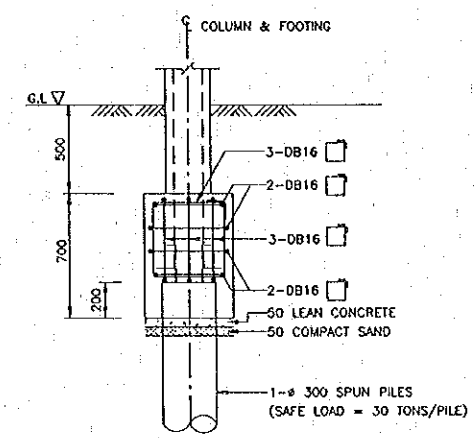
FOOTING F2  
SCALE 1 : 20



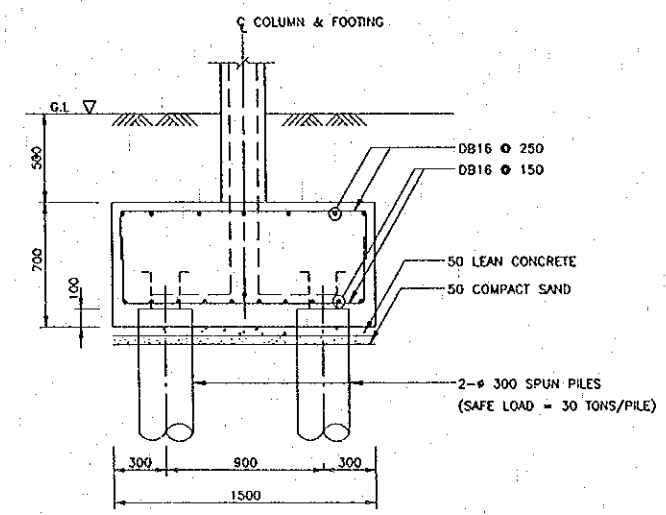
BEAM RB1  
SCALE 1 : 10



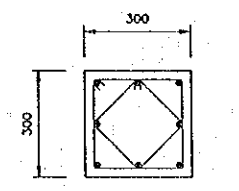
BEAM RB2  
SCALE 1 : 10



SECTION A-A  
SCALE 1 : 20

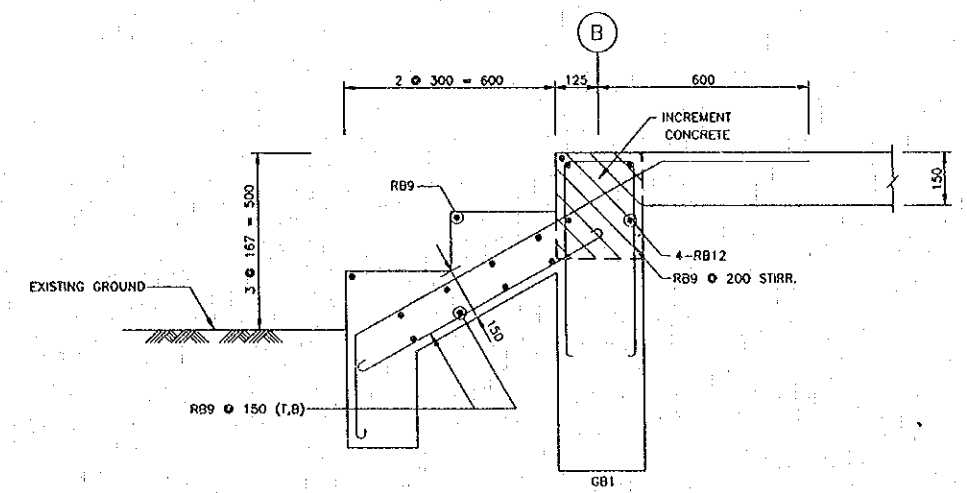


SECTION B-B  
SCALE 1 : 20



8-DB16 MAIN STEEL  
2-RB6 150 STIRRUP

COLUMN C1  
SCALE 1 : 10



STAIR ST1 DETAILS  
AND INCREMENT CONCRETE REINFORCEMENT  
SCALE 1 : 10

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
- ALL ELEVATIONS ARE IN METERS REFERRING TO ARCHITECTURAL DWG.
- REINFORCEMENT FOR SLABS :  
RS1 : RB9 200 TOP & BOTTOM, BOTH DIRECTION  
RS2 : RB9 150 TOP & BOTTOM, BOTH DIRECTION  
GS2 : RB9 200 TOP & BOTTOM, BOTH DIRECTION

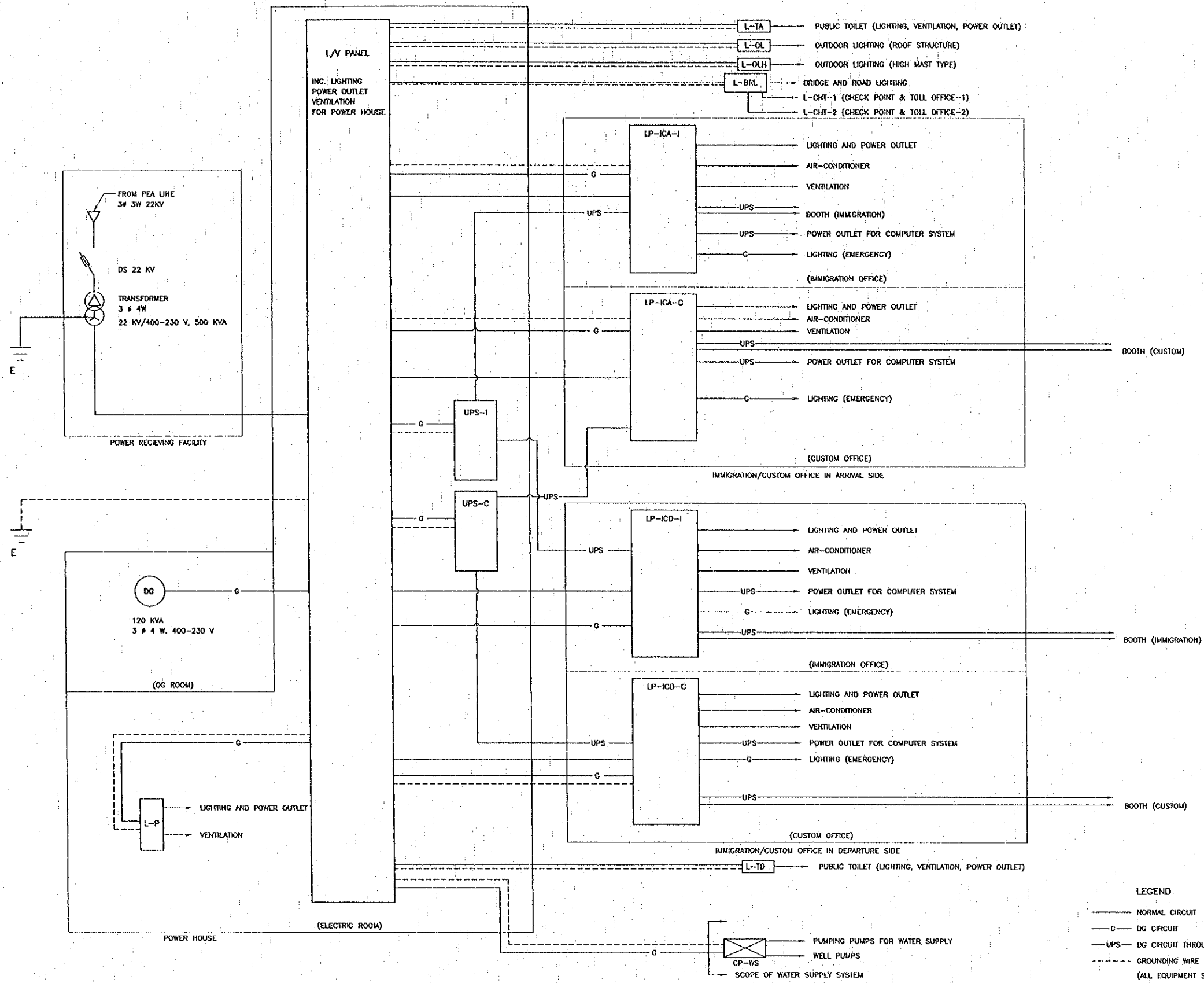
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	A. Morioka	<i>Alhori</i>	22/05/00	BORDER CONTROL FACILITIES THAILAND SIDE POWER HOUSE : BEAM, COLUMN AND FOOTING
				In association with	KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Moritawa	<i>T. Moritawa</i>	21/05/00	
				NIPPON KOEI CO., LTD.		SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	21/05/00	
						APPROVED	S. Tanjyabutra	<i>S. Tanjyabutra</i>	2/6/00	



GENERAL SPECIFICATION FOR UTILITY WORK

I ELECTRICAL WORK	II MECHANICAL WORK
<p><b>1. CONSTRUCTION ITEM</b></p> <ol style="list-style-type: none"> <li>(1) POWER RECEIVING FACILITY</li> <li>(2) EMERGENCY DIESEL GENERATOR</li> <li>(3) POWER DISTRIBUTION PANEL</li> <li>(4) EXTERNAL LIGHTING</li> <li>(5) CABLE AND WIRING</li> <li>(6) UNDER GROUND CONDUIT, MANHOLE AND HANDHOLE</li> <li>(7) CONDUITS, FITTINGS AND BOXES</li> <li>(8) LIGHTING AND POWER OUTLET SYSTEM</li> <li>(9) PRIVATE TELEPHONE SYSTEM</li> <li>(10) PUBLIC ANNOUNCING SYSTEM</li> <li>(11) TV SYSTEM</li> <li>(12) COMPUTER SYSTEM</li> <li>(13) GROUNDING</li> <li>(14) CML WORKS FOR UNDER GROUND CONDUIT</li> </ol> <p><b>2. GENERAL NOTES</b></p> <ol style="list-style-type: none"> <li>(1) ALL EXPENSES RELATED TO CONSTRUCTION AND PROCEDURES ON POWER DISTRIBUTION OBLIGATED TO THE ELECTRICITY AUTHORITY SHALL BE TOTALLY PAID BY CONTRACTOR.</li> <li>(2) ALL EXPENSES RELATED TO CONSTRUCTION AND PROCEDURES ON TELEPHONE LINE DISTRIBUTION OBLIGATED TO THE TELEPHONE AUTHORITY SHALL BE TOTALLY PAID BY CONTRACTOR.</li> <li>(3) POWER            RECEIVING : 3 PHASE 3 WIRE 22KV 50HZ (FROM PEA)            DISTRIBUTION : 3 PHASE 4 WIRE 380-220V 50HZ                              1 PHASE 2 WIRE 220V 50HZ</li> <li>(4) UNDER GROUND CONDUITS SHALL BE INSTALLED NOT LESS THAN 600mm BELOW F.G.L.</li> <li>(5) LIGHTING SWITCHES SHALL BE MOUNTED AT 120cm F.F.L UNLESS OTHERWISE INDICATED.</li> <li>(6) POWER OUTLETS SHALL BE MOUNTED AT 30cm EITHER ABOVE F.F.L OR ABOVE BENCH LEVEL AS APPROPRIATE UNLESS OTHERWISE INDICATED.</li> <li>(7) TELEPHONE OUTLETS SHALL BE LOCATED AT 30cm ABOVE F.F.L UNLESS OTHERWISE INDICATED.</li> <li>(8) THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS.</li> <li>(9) WALL MOUNTED POWER DISTRIBUTION PANELS SHALL HAVE 2 SPARE 1 INCH DIA. CONDUITS STORED TO ABOVE AN ACCESSIBLE CEILING FOR FUTURE PLAN.</li> <li>(10) THE CONTRACTOR SHALL PROVIDE CONDUIT AND OUTLET BOXES WITH PULL WIRE FOR COMPUTER SYSTEM.</li> <li>(11) LIGHTNING ELECTRODE SHALL NOT BE USED FOR ANY OTHER PURPOSES.</li> <li>(12) EXPENCES ON ELECTRICITY, WATER AND OTHER UTILITIES DURING CONSTRUCTION SHALL BE PAID BY THE CONTRACTOR.</li> <li>(13) DON'T SCALE FROM THE LAYOUT ELECTRICAL DRAWING.            THE WORK ACCORDING TO ARCHITECTURAL AND ELECTRICAL DETAILS.</li> </ol>	<p><b>1. CONSTRUCTION ITEM</b></p> <ol style="list-style-type: none"> <li>1-1 PLUMBING WORK</li> <li>(1) WATER SUPPLY SYSTEM</li> <li>(2) WASTE WATER DRAINAGE SYSTEM</li> <li>1-2 AIR CONDITIONING AND VENTILATION SYSTEM</li> <li>1-3 FIRE FIGHTING SYSTEM</li> <li>1-4 CML WORK FOR UNDER GROUND PIPE</li> </ol> <p><b>2. GENERAL NOTES</b></p> <ol style="list-style-type: none"> <li>(1) EXPENSES RELATED TO CONSTRUCTION AND PROCEDURES FOR WATER DISTRIBUTION OBLIGATED TO THE WATER AUTHORITY SHALL BE PAID BY THE CONTRACTOR.</li> <li>(2) WATER SOURCE : WELL (NEW CONSTRUCTION : SCOPE OF WORK)</li> <li>(3) UNDER GROUND PIPES SHALL BE INSTALLED NOT LESS THAN 1000mm BELOW F.G.L</li> <li>(4) THE PRESSURE CLASS OF PVC PIPES SHALL BE AS FOLLOWS.            FOR WATER SUPPLY : CLASS 13.5            OTHERS : CLASS 8.5</li> <li>(5) THE QUALITY OF DISCHARGING WATER TREATED BY SEPTIC TANK SHALL BE AS FOLLOWS.            BOD : UNDER 80mg            SS : UNDER 50mg</li> <li>(6) THE INVERT FOR DRAINAGE PIPE SHALL BE INSTALLED AT LESS THAN 30m OF INTERVAL.</li> <li>(7) AIR TEMPERATURE            MAXIMUM OUTDOOR : 40.6 °C            RECOMMENDED INDOOR : 28.0 °C</li> <li>(8) RECOMMENDED AIR VOLUME : 30m<sup>3</sup>/HR*man</li> <li>(9) ALL AIR CONDITIONER UNIT SHALL BE SPLIT TYPE.</li> <li>(10) EXPENCES ON ELECTRICITY, WATER AND OTHER UTILITIES DURING CONSTRUCTION SHALL BE PAID BY THE CONTRACTOR.</li> <li>(11) DON'T SCALE FROM THE LAYOUT MECHANICAL DRAWING.            THE WORK ACCORDING TO ARCHITECTURAL AND MECHANICAL DETAILS.</li> </ol>

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Tokobushi	<i>T. Tokobushi</i>	18.01.00	BORDER CONTROL FACILITIES THAILAND SIDE GENERAL SPECIFICATION FOR UTILITY WORK
						DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	18.02.00	
						SUBMITTED	A. Hirataki	<i>A. Hirataki</i>	18.02.00	
						APPROVED	S. Tamyabutra	<i>S. Tamyabutra</i>	22.02.00	

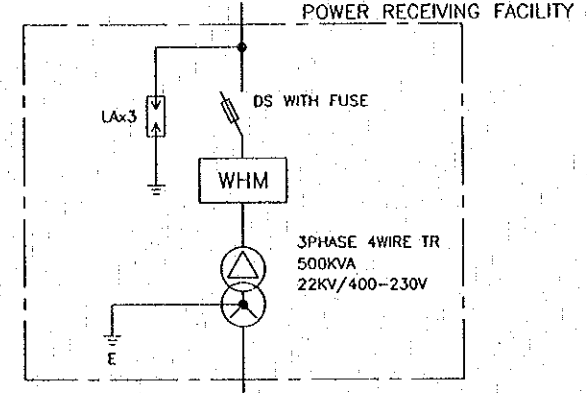


**LEGEND**  
 ——— NORMAL CIRCUIT  
 —G— DG CIRCUIT  
 —UPS— DG CIRCUIT THROUGH UPS  
 - - - - GROUNDING WIRE  
 (ALL EQUIPMENT SHELL BE GROUND UNDER 5Ω )

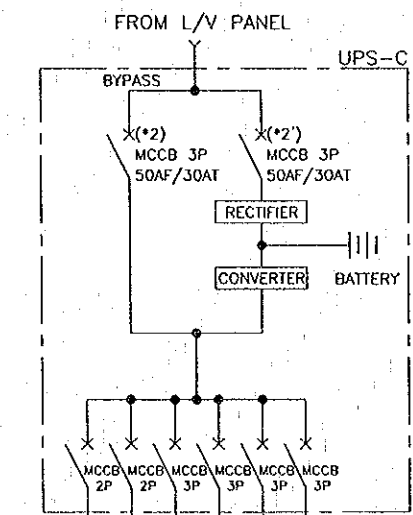
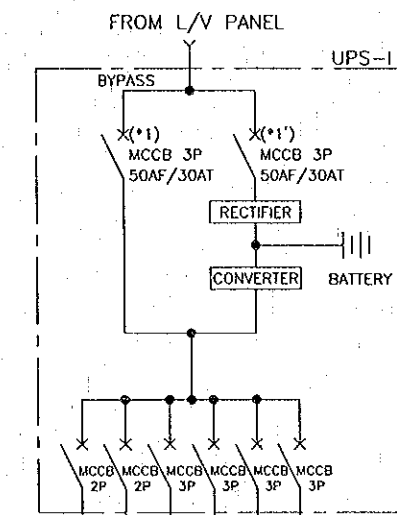
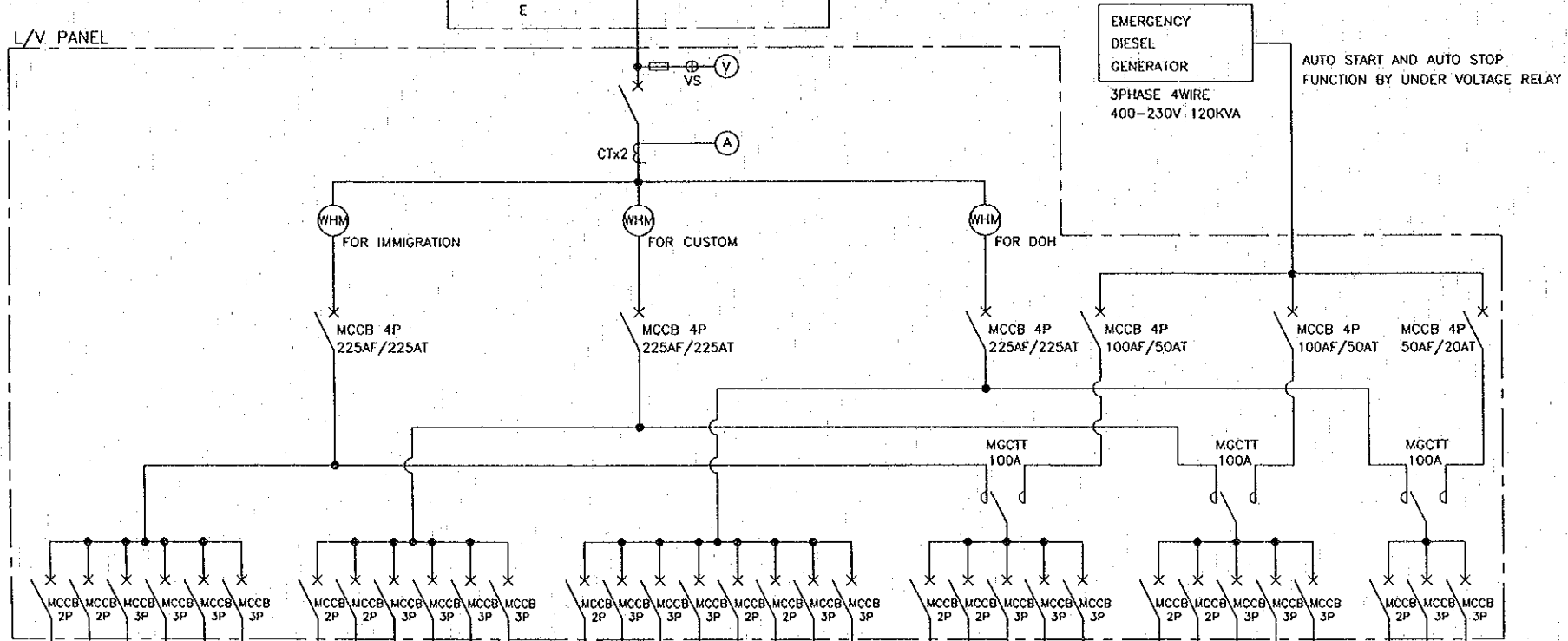
NOT TO SCALE

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOKI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Takobushi	<i>T. Takobushi</i>	9/01/01	BORDER CONTROL FACILITY THAILAND SIDE POWER SUPPLY SYSTEM
						DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	09/01/00	
						SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	01/01/00	
						APPROVED	S. Temjyabutra	<i>S. Temjyabutra</i>	22/01/00	

3PHASE 3WIRE 22KV 50HZ  
 FROM PEA



NOTE)  
 THE MCCB \*1 AND \*1' SHALL BE INTERLOCKED.  
 THE MCCB \*2 AND \*2' SHALL BE INTERLOCKED.



CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
I-N1	LP-ICA-I	23.56	225/150
I-N2	LP-ICD-I	26.06	225/150
I-N3	L-BA-I	23.40	50/50
I-N4	L-BD-I	21.06	50/50
-	SPARE	-	50/50
-	SPARE	-	50/50

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
C-N1	LP-ICA-C	26.08	225/150
C-N2	LP-ICD-C	25.18	225/150
C-N3	L-BA-C	23.40	50/50
C-N4	L-BD-C	21.06	50/50
-	SPARE	-	50/50
-	SPARE	-	50/50

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
O-N1	L-P	3.06	30/30
O-N2	L-OL	22.88	100/100
O-N3	L-OLH	72.00	150/150
O-N4	L-BRL	35.80	100/100
O-N5	L-TA	0.96	30/10
O-N6	L-YD	0.96	30/10
-	SPARE	-	50/50
-	SPARE	-	50/50

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
I-G1	LP-ICA-I	1.44	50/10
I-G2	LP-ICD-I	3.72	50/20
I-G3	UPS-I	21.00	50/50
-	SPARE	-	50/50
-	SPARE	-	50/50

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
C-G1	LP-ICA-C	3.96	50/20
C-G2	LP-ICD-C	1.44	50/10
C-G3	UPS-C	21.00	50/50
-	SPARE	-	50/50
-	SPARE	-	-

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
O-G1	L-P	0.24	30/10
O-G2	CP-WS	4.48	30/20
-	SPARE	-	30/30

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
I-U1	LP-ICA-I	1.00	50/10
I-U2	LP-ICD-I	1.00	50/10
I-U3	L-BA-I	5.00	50/50
I-U4	L-BD-I	4.50	50/50
-	SPARE	-	50/50
-	SPARE	-	50/50

CIRCUIT No.	LOAD NAME	LOAD (KVA)	AF/AT
C-U1	LP-ICA-C	1.00	50/50
C-U2	LP-ICD-C	1.00	50/50
C-U3	L-BA-C	5.00	50/20
C-U4	L-BD-C	4.50	50/20
-	SPARE	-	50/50
-	SPARE	-	50/50

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KORI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takahashi	<i>T. Inha</i>	27/01/00
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	27/01/00
SUBMITTED	A. Hirokuni	<i>A. Hirokuni</i>	27/01/00
APPROVED	S. Temjajabutra	<i>S. Temjajabutra</i>	27/01/00

BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 ONE LINE DIAGRAM

PANEL	ONE LINE	BRAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(A)	CIRCUIT	FACILITY	LOCATION
L-04-1 1 PHASE 200V 200V/100V 4/1.68 VA	MCCB 1 20 20	200	1	2	200	1	2	1.68	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	APVNA, BDC OFFICE BUILDING 1F MAIN/CONTROL OFFICE CPU

PANEL	ONE LINE	BRAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(A)	CIRCUIT	FACILITY	LOCATION
L-04-1 1 PHASE 200V 200V/100V 4/1.68 VA	MCCB 1 20 20	200	1	2	200	1	2	1.68	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1
	MCCB 1 20 20	200	1	2	200	1	2	0.00	0	LINEAGE	LINEAGE	BOOTH A1

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	DESIGN RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	T. Takahashi T. Masuzawa A. Hironaka S. Taniyama	<i>[Signatures]</i>	17.01.00 18.02.00 21.01.00 22.02.00	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF DISTRIBUTION PANEL (1)





PANEL	ONE LINE	BREAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(VA)	CIRCUIT	FACILITY	LOCATION
L-84-0 A0	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18	230	1	3	340	U	L-84-0-A1	BOOTH A1
						230	1	3	340	W	L-84-0-A2	BOOTH A2
						230	1	3	340	N	L-84-0-A3	BOOTH A3
						230	1	3	340	U	L-84-0-A4	BOOTH A4
						230	1	3	340	W	L-84-0-A5	BOOTH A5
						230	1	3	340	N	L-84-0-A6	BOOTH A6
						230	1	3	340	U	L-84-0-A7	BOOTH A7
						230	1	3	340	W	L-84-0-A8	BOOTH A8
						230	1	3	340	N	L-84-0-A9	BOOTH A9
						230	1	3	340	U	L-84-0-A10	BOOTH A10
						230	1	3	340	W	L-84-0-A11	BOOTH A11
						230	1	3	340	N	L-84-0-A12	BOOTH A12
L-84-0 A1	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18	230	1	3	340	U	L-84-0-A13	BOOTH A13
						230	1	3	340	W	L-84-0-A14	BOOTH A14
						230	1	3	340	N	L-84-0-A15	BOOTH A15
						230	1	3	340	U	L-84-0-A16	BOOTH A16
						230	1	3	340	W	L-84-0-A17	BOOTH A17
						230	1	3	340	N	L-84-0-A18	BOOTH A18
						230	1	3	340	U	L-84-0-A19	BOOTH A19
						230	1	3	340	W	L-84-0-A20	BOOTH A20
						230	1	3	340	N	L-84-0-A21	BOOTH A21
						230	1	3	340	U	L-84-0-A22	BOOTH A22
						230	1	3	340	W	L-84-0-A23	BOOTH A23
						L-84-0 A2	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18	230
230	1	3	340	W	L-84-0-A25							BOOTH A25
230	1	3	340	N	L-84-0-A26							BOOTH A26
230	1	3	340	U	L-84-0-A27							BOOTH A27
230	1	3	340	W	L-84-0-A28							BOOTH A28
230	1	3	340	N	L-84-0-A29							BOOTH A29
230	1	3	340	U	L-84-0-A30							BOOTH A30
230	1	3	340	W	L-84-0-A31							BOOTH A31
230	1	3	340	N	L-84-0-A32							BOOTH A32
230	1	3	340	U	L-84-0-A33							BOOTH A33
230	1	3	340	W	L-84-0-A34							BOOTH A34

PANEL	ONE LINE	BREAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(VA)	CIRCUIT	FACILITY	LOCATION
L-84-0 A0	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18	230	1	3	340	U	L-84-0-A1	BOOTH A0
						230	1	3	340	W	L-84-0-A2	BOOTH A0
						230	1	3	340	N	L-84-0-A3	BOOTH A0
						230	1	3	340	U	L-84-0-A4	BOOTH A0
						230	1	3	340	W	L-84-0-A5	BOOTH A0
						230	1	3	340	N	L-84-0-A6	BOOTH A0
						230	1	3	340	U	L-84-0-A7	BOOTH A0
						230	1	3	340	W	L-84-0-A8	BOOTH A0
						230	1	3	340	N	L-84-0-A9	BOOTH A0
						230	1	3	340	U	L-84-0-A10	BOOTH A0
						230	1	3	340	W	L-84-0-A11	BOOTH A0
						L-84-0 A1	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18	230
230	1	3	340	W	L-84-0-A13							BOOTH A1
230	1	3	340	N	L-84-0-A14							BOOTH A1
230	1	3	340	U	L-84-0-A15							BOOTH A1
230	1	3	340	W	L-84-0-A16							BOOTH A1
230	1	3	340	N	L-84-0-A17							BOOTH A1
230	1	3	340	U	L-84-0-A18							BOOTH A1
230	1	3	340	W	L-84-0-A19							BOOTH A1
230	1	3	340	N	L-84-0-A20							BOOTH A1
230	1	3	340	U	L-84-0-A21							BOOTH A1
230	1	3	340	W	L-84-0-A22							BOOTH A1
L-84-0 A2	1 PHASE 230V MCCB 3P 30M/100V 3.140 VA	MCCB	3	30	18							230
						230	1	3	340	W	L-84-0-A24	BOOTH A2
						230	1	3	340	N	L-84-0-A25	BOOTH A2
						230	1	3	340	U	L-84-0-A26	BOOTH A2
						230	1	3	340	W	L-84-0-A27	BOOTH A2
						230	1	3	340	N	L-84-0-A28	BOOTH A2
						230	1	3	340	U	L-84-0-A29	BOOTH A2
						230	1	3	340	W	L-84-0-A30	BOOTH A2
						230	1	3	340	N	L-84-0-A31	BOOTH A2
						230	1	3	340	U	L-84-0-A32	BOOTH A2
						230	1	3	340	W	L-84-0-A33	BOOTH A2

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 in association with  
**NIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

QUALITY RECORD  
 DESIGN T. Takahashi  
 DESIGN CHECK T. Masuzono  
 SUBMITTED A. Hironaka  
 APPROVED S. Temiyaburo

NAME	SIGNATURE	DATE	DWG. TITLE
T. Takahashi	<i>T. Takahashi</i>	2001.05.03	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF DISTRIBUTION PANEL (4)
T. Masuzono	<i>T. Masuzono</i>	2001.05.03	
A. Hironaka	<i>A. Hironaka</i>	2001.05.03	
S. Temiyaburo	<i>S. Temiyaburo</i>	2001.05.03	

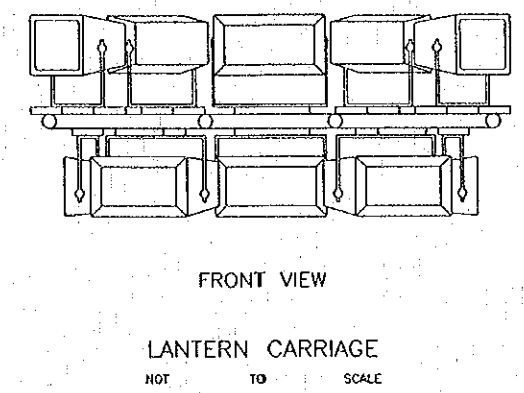
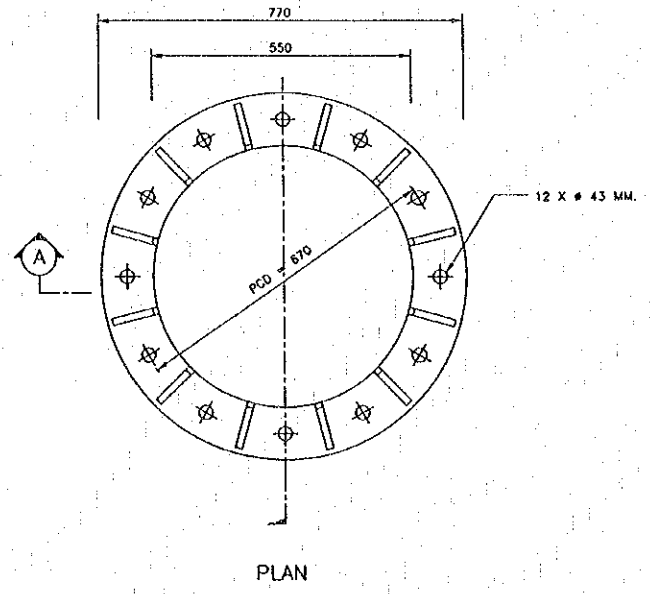
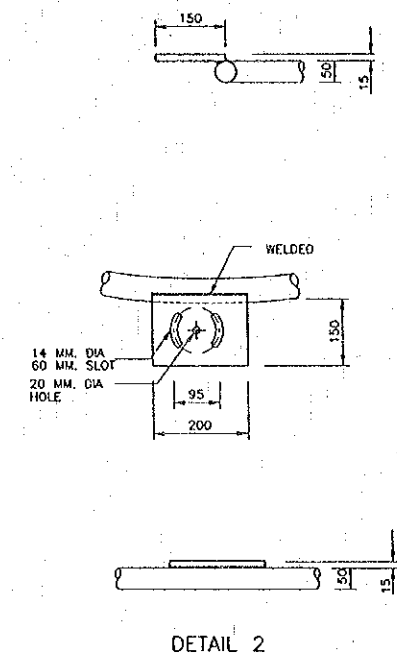
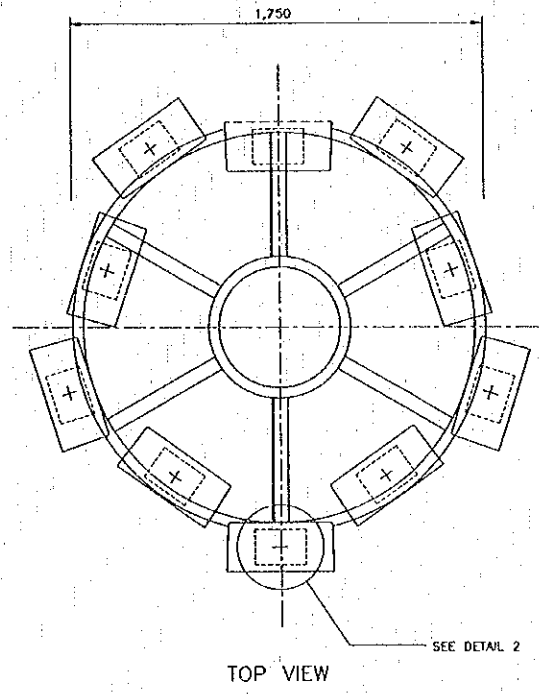
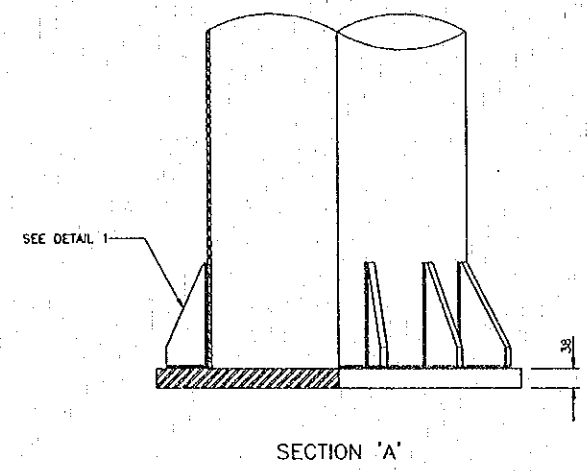
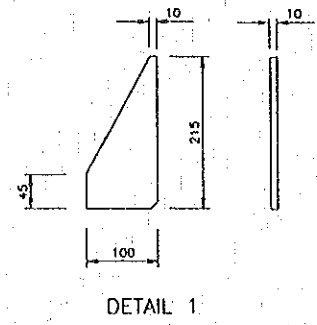
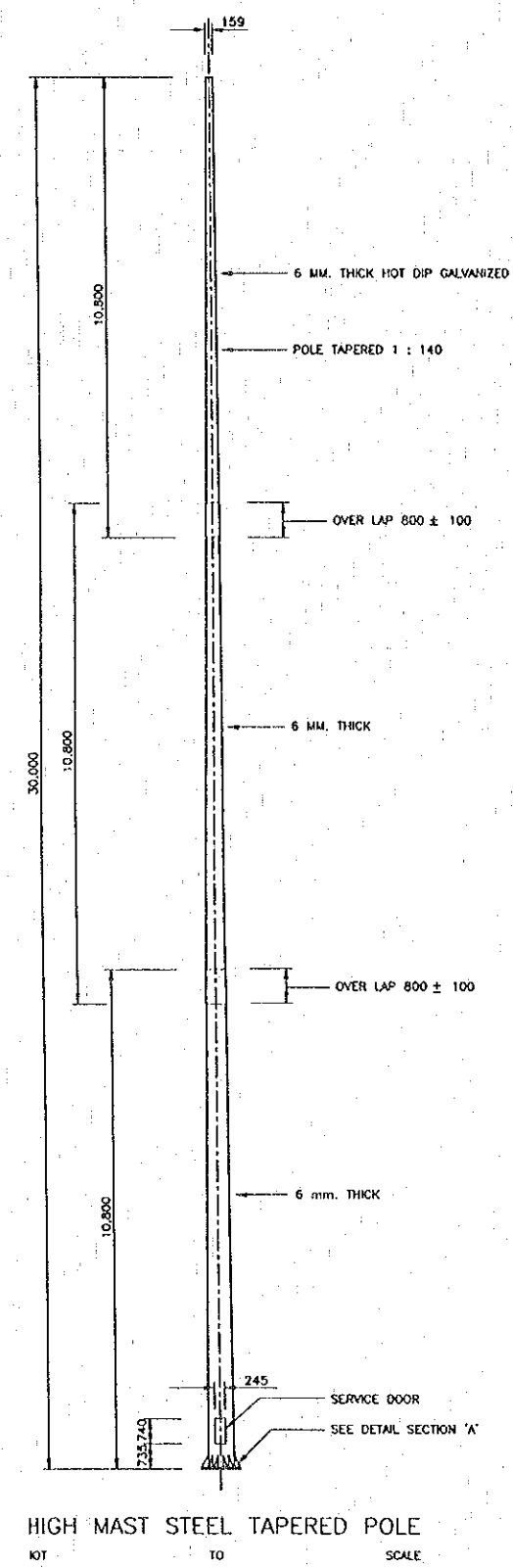
BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 DETAIL OF DISTRIBUTION PANEL (4)

PANEL	ONE LINE	BREAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(VA)	CIRCUIT	FACILITY	LOCATION
L-00-01	1 PHASE 230V 3W/4W 1,340 VA (0-01)	MCCB	1	30	30	230	1	1	1,340	U	L-00-01	ROOM 01
		MCCB	1	30	30	230	1	1	1,340	U	L-00-02	ROOM 02
		MCCB	1	30	30	230	1	1	1,340	U	L-00-03	ROOM 03
		MCCB	1	30	30	230	1	1	1,340	U	L-00-04	ROOM 04
		MCCB	1	30	30	230	1	1	1,340	U	L-00-05	ROOM 05
		MCCB	1	30	30	230	1	1	1,340	U	L-00-06	ROOM 06
		MCCB	1	30	30	230	1	1	1,340	U	L-00-07	ROOM 07
		MCCB	1	30	30	230	1	1	1,340	U	L-00-08	ROOM 08
		MCCB	1	30	30	230	1	1	1,340	U	L-00-09	ROOM 09
		MCCB	1	30	30	230	1	1	1,340	U	L-00-10	ROOM 10
		MCCB	1	30	30	230	1	1	1,340	U	L-00-11	ROOM 11
		MCCB	1	30	30	230	1	1	1,340	U	L-00-12	ROOM 12

PANEL	ONE LINE	BREAKER	POLE	AF	AT	VOLTAGE (V)	PHASE	WIRE	LOAD(VA)	CIRCUIT	FACILITY	LOCATION
L-00-02	1 PHASE 230V 3W/4W 1,340 VA	MCCB	1	30	30	230	1	1	1,340	U	L-00-13	ROOM 13
		MCCB	1	30	30	230	1	1	1,340	U	L-00-14	ROOM 14
		MCCB	1	30	30	230	1	1	1,340	U	L-00-15	ROOM 15
		MCCB	1	30	30	230	1	1	1,340	U	L-00-16	ROOM 16
		MCCB	1	30	30	230	1	1	1,340	U	L-00-17	ROOM 17
		MCCB	1	30	30	230	1	1	1,340	U	L-00-18	ROOM 18
		MCCB	1	30	30	230	1	1	1,340	U	L-00-19	ROOM 19
		MCCB	1	30	30	230	1	1	1,340	U	L-00-20	ROOM 20
		MCCB	1	30	30	230	1	1	1,340	U	L-00-21	ROOM 21
		MCCB	1	30	30	230	1	1	1,340	U	L-00-22	ROOM 22
		MCCB	1	30	30	230	1	1	1,340	U	L-00-23	ROOM 23
		MCCB	1	30	30	230	1	1	1,340	U	L-00-24	ROOM 24

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KORI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN DESIGN CHECK SUBMITTED APPROVED	T. Takahashi T. Masuzawa A. Harafuji S. Terajima	<i>[Signatures]</i>	18.01.00 19.01.00 21.01.00 22.01.00	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF DISTRIBUTION PANEL (5)

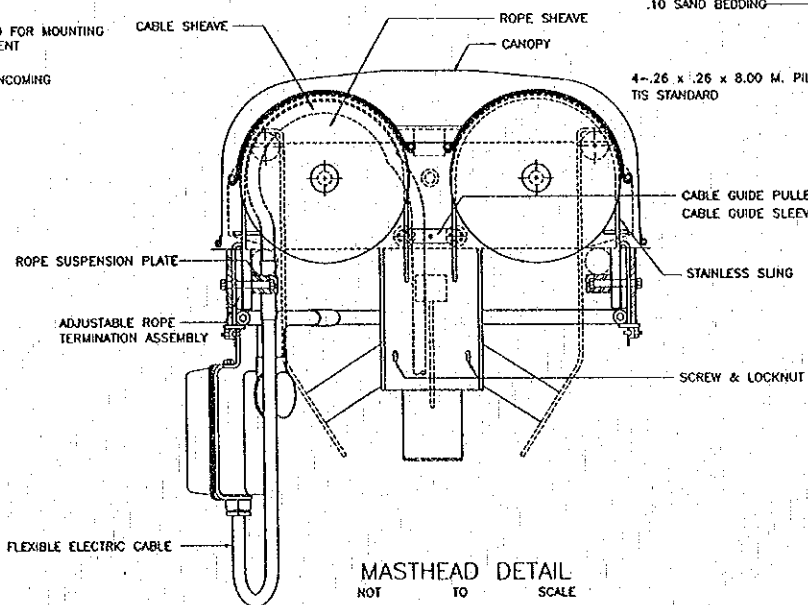
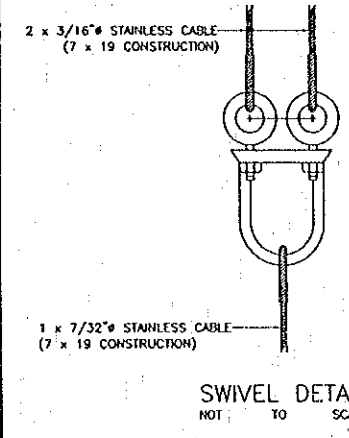
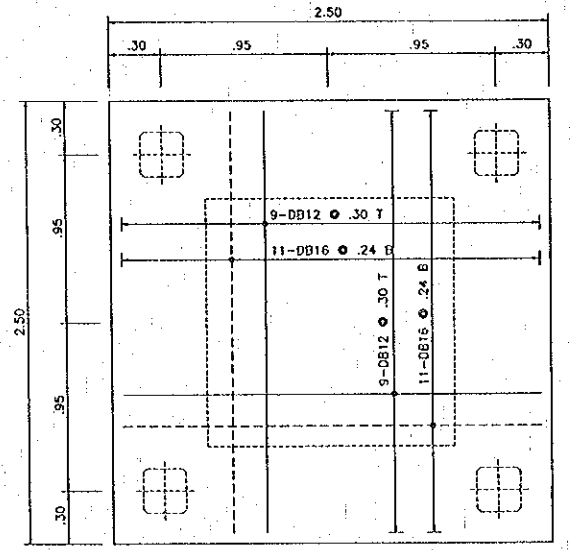
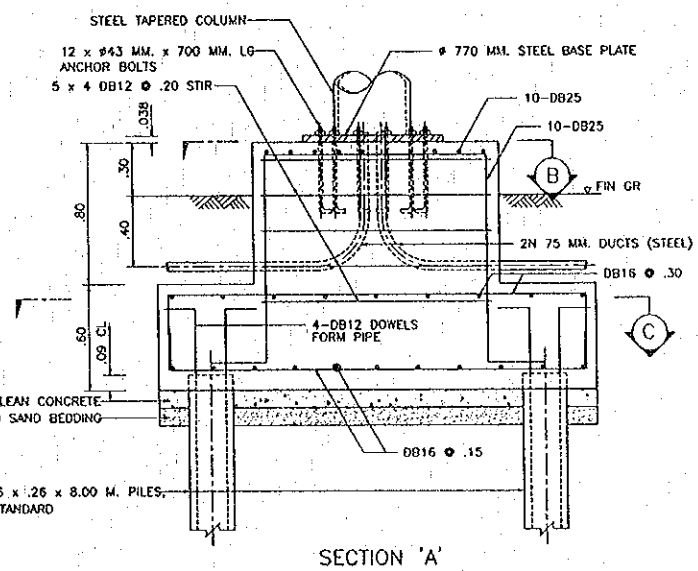
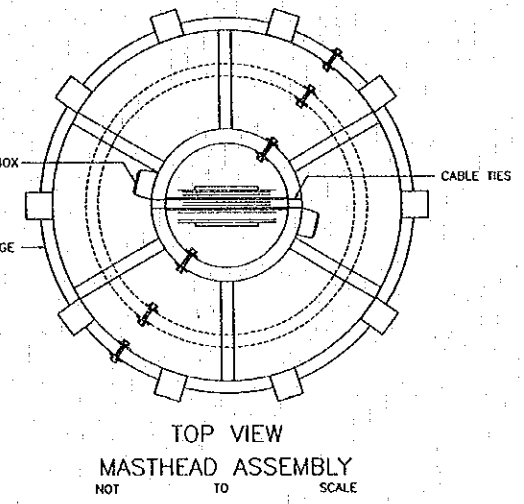
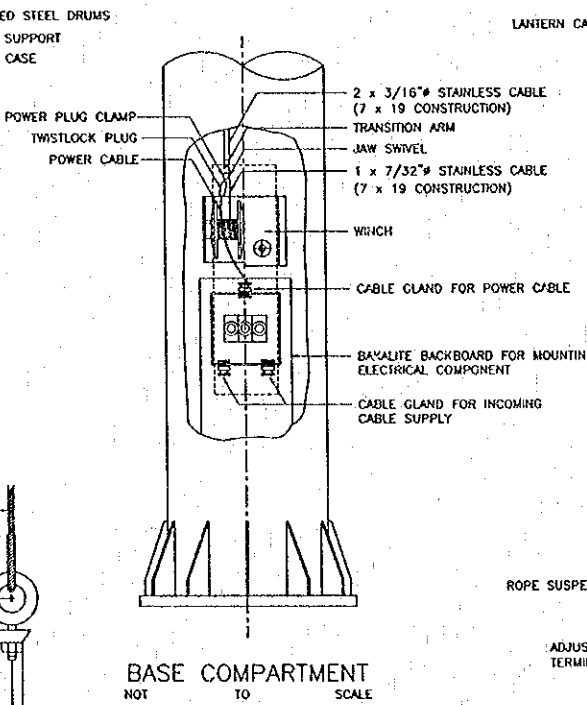
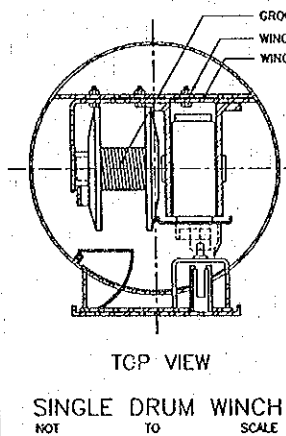
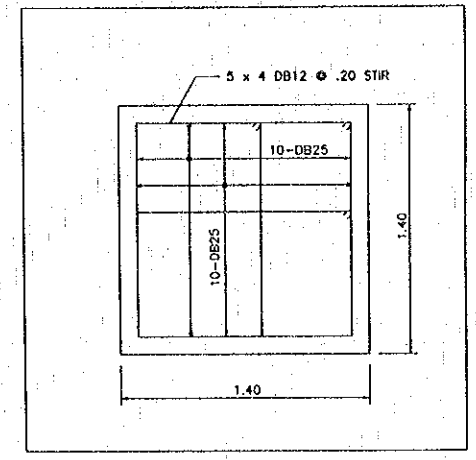
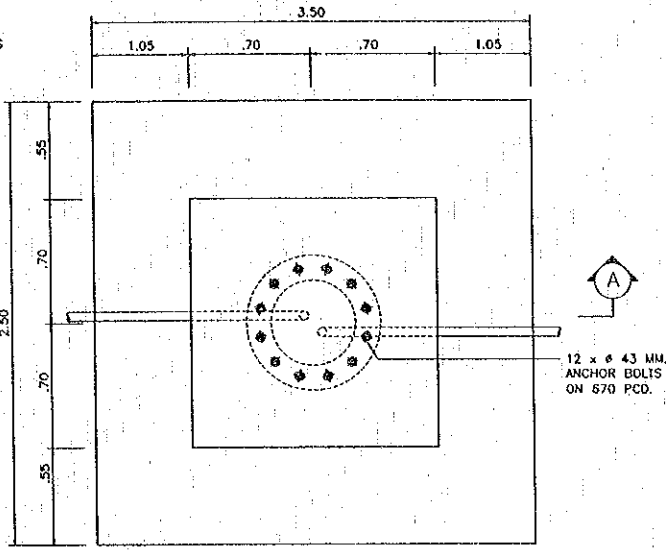
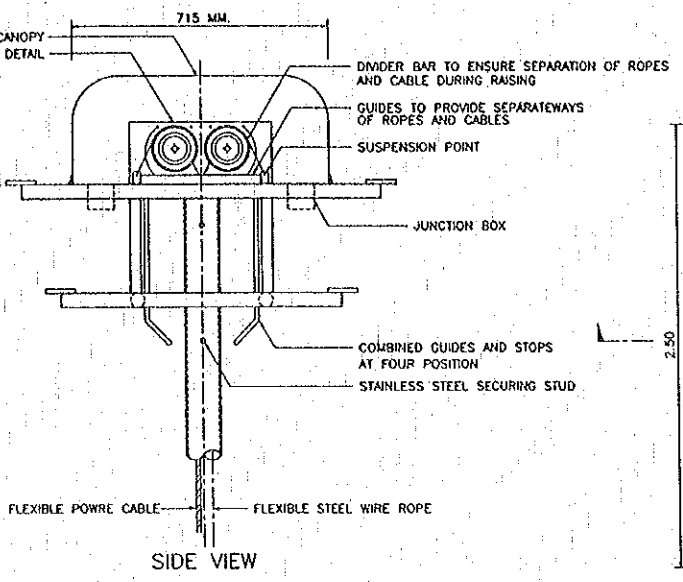
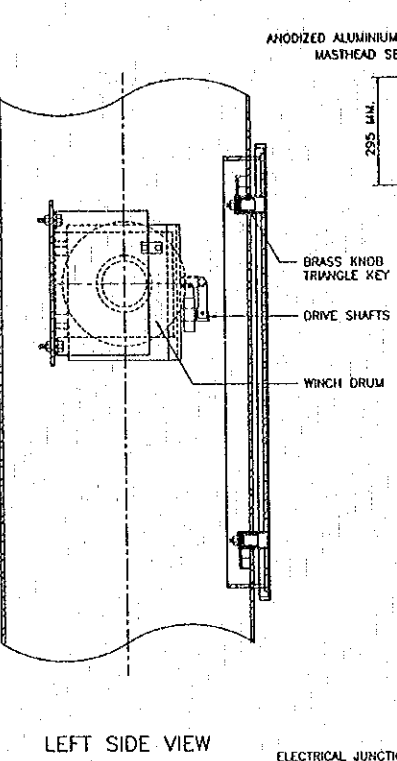
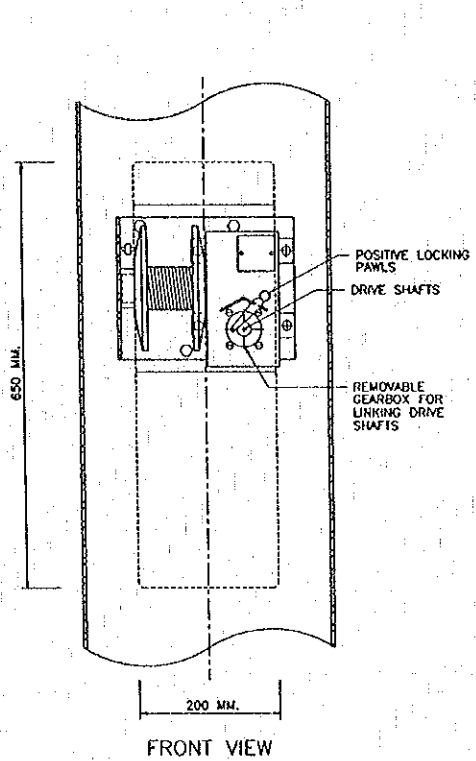




NOTE:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THE SPECIFICATION OF HIGH MAST LIGHTING SYSTEM SHALL BE FOLLOWED TO THE 'TECHNICAL SPECIFICATIONS NO.25.5.

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	T. Takahashi	[Signature]	23/05/00	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF HIGH MAST LIGHTING (1)
												DESIGN CHECK	T. Masuzawa	[Signature]	24/05/00	
												SUBMITTED	A. Hiratani	[Signature]	24/05/00	
												APPROVED	S. Temyabutra	[Signature]	2/06/00	



HIGH MAST FOUNDATION  
SCALE 1 : 20

- NOTE:
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
  - THE SPECIFICATION OF HIGH MAST LIGHTING SYSTEM SHALL BE FOLLOWED TO THE TECHNICAL SPECIFICATIONS NO.25.5.

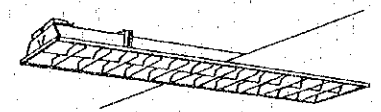
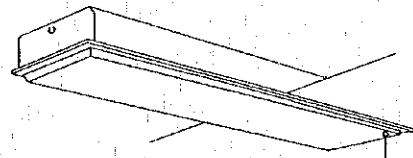
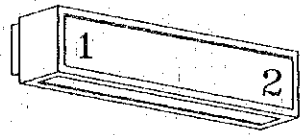
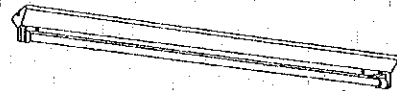
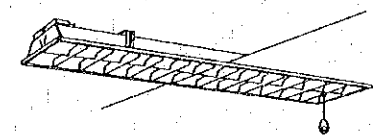
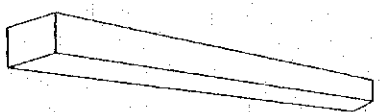
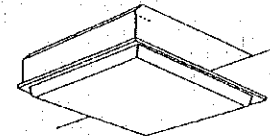
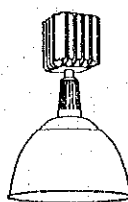

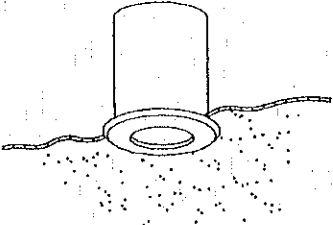
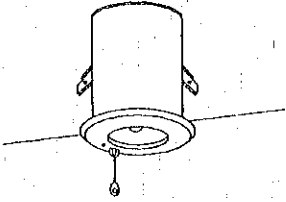

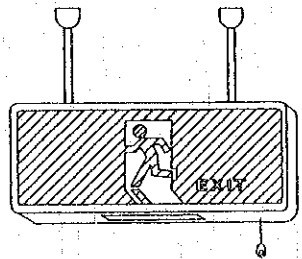
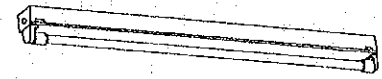
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM

ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Tokobushi	<i>T. Tokobushi</i>	22-15-00	BORDER CONTROL FACILITIES THAILAND SIDE DETAIL OF HIGH MAST LIGHTING (2)
DESIGN CHECK	T. Masutomo	<i>T. Masutomo</i>	24-07-00	
SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	27/05/00	
APPROVED	S. Tamayaburo	<i>S. Tamayaburo</i>	2/06/00	

 <p>FL 40W*2 W/LOUVER RECESSED</p>	 <p>FL 40W*2 W/COVER BT RECESSED</p>	 <p>FL 40W*1 W/BT WALL MOUNTED (STAIRWAY GUIDE)</p>	 <p>FL 40W*1 SURFACE MOUNTED W/BT</p>
 <p>FL 40W*2 W/LOUVER BT RECESSED</p>	 <p>FL 40W*1 WALL MOUNTED</p>	 <p>FL 20W*5 W/COVER RECESSED</p>	 <p>HIGHBAY HD. 250W*1 (SODIUM/MERCURY)</p>
 <p>FL 40W*2 RECESSED</p>	 <p>FL 18W*1 RECESSED (CEILING LIGHTING)</p>	 <p>FL 13W*1 W/BT RECESSED (EMERGENCY LIGHTING)</p>	
 <p>FL 40W*1 RECESSED</p>	 <p>FL 20W*1 W/BT SURFACE MOUNTED (EXIT LIGHTING)</p>	 <p>FL 40W*1 SURFACE MOUNTED WP</p>	

REV.	DATE	DESCRIPTION	APPROVED

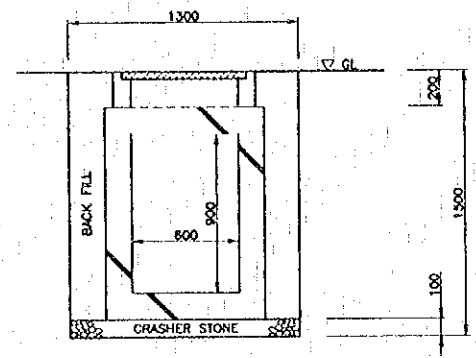
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

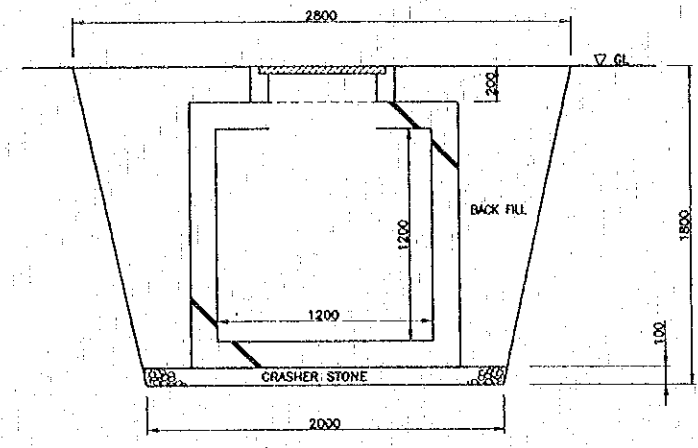
THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takobushi	<i>T. Takobushi</i>	11/05/00
DESIGN CHECK	I. Moutamad	<i>I. Moutamad</i>	11/06/00
SUBMITTED	A. Hirakani	<i>A. Hirakani</i>	11/06/00
APPROVED	S. Terahyaburo	<i>S. Terahyaburo</i>	22/02/00

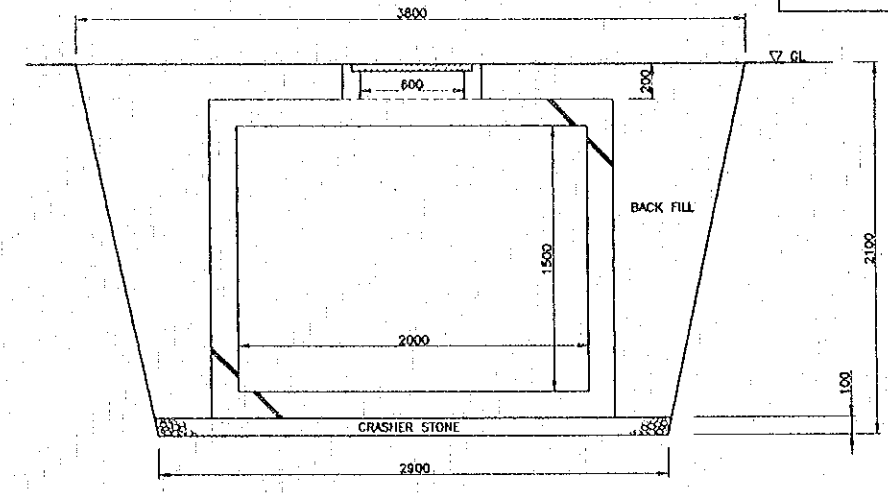
DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 FIGURE OF LIGHTING FIXTURE



MANHOLE (600x600x900)  
 SCALE 1:20

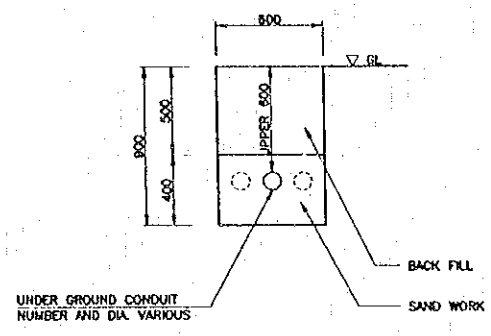


MANHOLE (1200x1200x1200)  
 SCALE 1:20



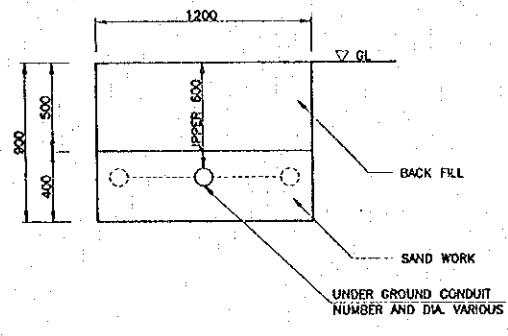
MANHOLE (1200x1200x1500)  
 SCALE 1:20

UNDERGROUND CONDUIT INSTALLATION  
 (CONNECTED TO H.H 600x600x600)  
 SCALE 1:20



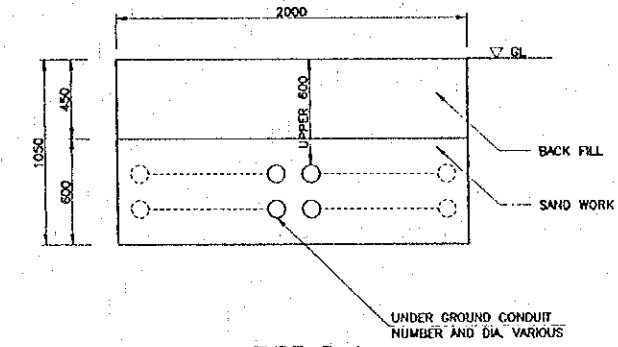
TYPE-1-1

UNDERGROUND CONDUIT INSTALLATION  
 (CONNECTED TO H.H 1200x1200x1200)  
 SCALE 1:20

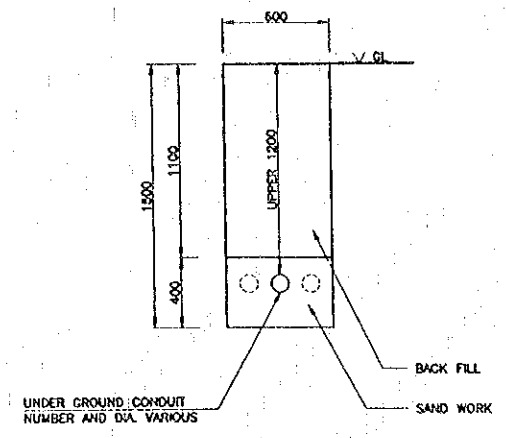


TYPE-2-1

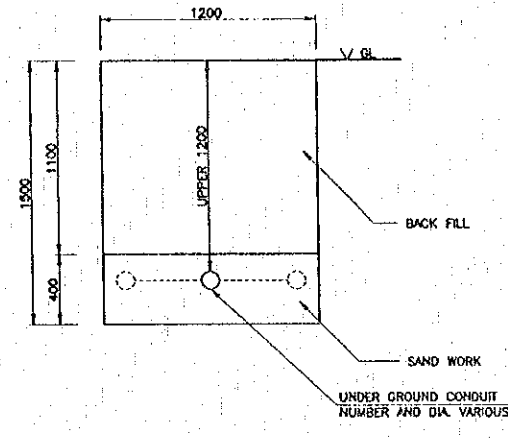
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 (CONNECTED TO H.H 2000x2000x1500)  
 SCALE 1:20



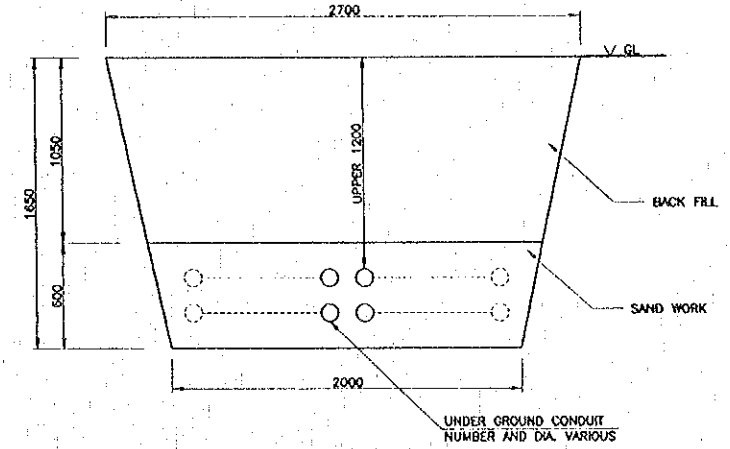
TYPE-3-1



TYPE-1-2  
 (ROAD CROSS SECTION)



TYPE-2-2  
 (ROAD CROSS SECTION)



TYPE-3-2  
 (ROAD CROSS SECTION)

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

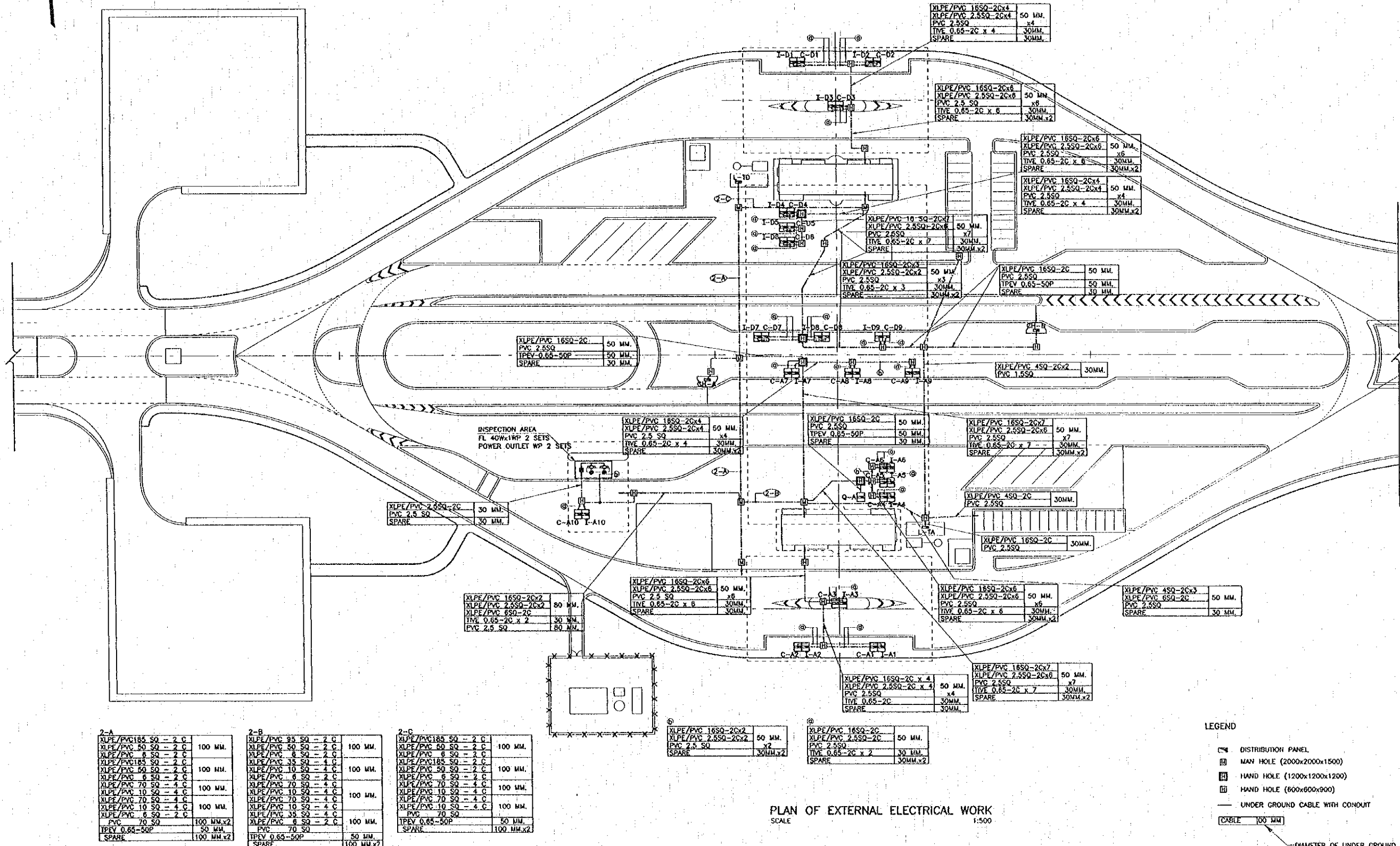
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG  
 INTERNATIONAL BRIDGE  
 CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Tokobushi	<i>T. Tokobushi</i>	18.01.00
DESIGN CHECK	T. Morizawa	<i>T. Morizawa</i>	18.01.00
SUBMITTED	A. Hasegawa	<i>A. Hasegawa</i>	21/1/00
APPROVED	S. Terayabara	<i>S. Terayabara</i>	21/02/00

DWG. TITLE:  
 BORDER CONTROL FACILITIES  
 THAILAND SIDE  
 DETAIL OF MANHOLE, HANDHOLE AND UNDERGROUND CONDUIT





2-A

XLPE/PVC 185 SQ - 2 C	
XLPE/PVC 50 SQ - 2 C	100 MM.
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 185 SQ - 2 C	100 MM.
XLPE/PVC 50 SQ - 2 C	
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 6 SQ - 2 C	
PVC 70 SQ	100 MM.x2
TPEV 0.65-50P	50 MM.
SPARE	100 MM.x2

2-B

XLPE/PVC 95 SQ - 2 C	
XLPE/PVC 50 SQ - 2 C	100 MM.
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 35 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 35 SQ - 4 C	
XLPE/PVC 6 SQ - 2 C	100 MM.
TPEV 0.65-50P	50 MM.
SPARE	100 MM.x2

2-C

XLPE/PVC 185 SQ - 2 C	
XLPE/PVC 50 SQ - 2 C	100 MM.
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 185 SQ - 2 C	100 MM.
XLPE/PVC 50 SQ - 2 C	
XLPE/PVC 6 SQ - 2 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
XLPE/PVC 70 SQ - 4 C	100 MM.
XLPE/PVC 10 SQ - 4 C	
PVC 70 SQ	100 MM.
TPEV 0.65-50P	50 MM.
SPARE	100 MM.x2

⑤

XLPE/PVC 16SQ-2Cx2	50 MM.
XLPE/PVC 2.5SQ-2Cx2	30MM.x2
PVC 2.5 SQ	
SPARE	

⑥

XLPE/PVC 16SQ-2C	50 MM.
XLPE/PVC 2.5SQ-2C	
PVC 2.5SQ	
TPEV 0.65-2C x 2	30 MM.
SPARE	30MM.x2

⑦

XLPE/PVC 16SQ-2Cx4	50 MM.
XLPE/PVC 2.5SQ-2Cx4	30MM.
PVC 2.5SQ	x4
TPEV 0.65-2C	30MM.
SPARE	30MM.

⑧

XLPE/PVC 16SQ-2Cx6	50 MM.
XLPE/PVC 2.5SQ-2Cx6	30MM.x2
PVC 2.5SQ	x6
TPEV 0.65-2C x 6	30MM.
SPARE	30MM.x2

- LEGEND
- DISTRIBUTION PANEL
  - MAN HOLE (2000x2000x1500)
  - HAND HOLE (1200x1200x1200)
  - HAND HOLE (600x600x900)
  - UNDER GROUND CABLE WITH CONDUIT
  - (CABLE) 100 MM
  - DIAMETER OF UNDER GROUND CONDUIT

PLAN OF EXTERNAL ELECTRICAL WORK  
 SCALE 1:500

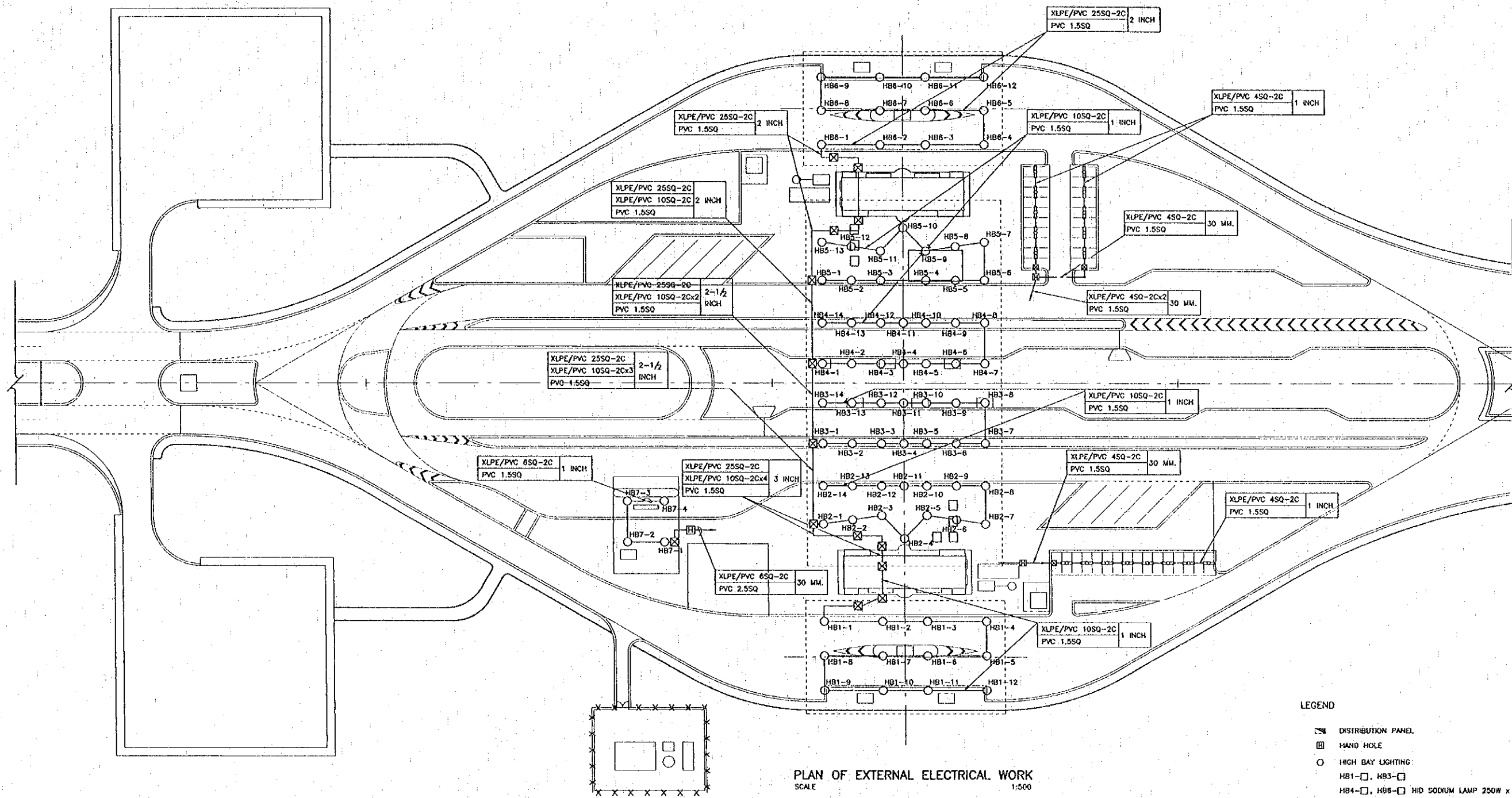
REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Tokobushil	<i>T. Tokobushil</i>	18-01-00	BORDER CONTROL FACILITIES THAILAND SIDE PLAN OF EXTERNAL ELECTRICAL WORK (2)
DESIGN CHECK	T. Morizawa	<i>T. Morizawa</i>	18-01-00	
SUBMITTED	A. Hirakawa	<i>A. Hirakawa</i>	18-01-00	
APPROVED	S. Taniguchi	<i>S. Taniguchi</i>	18-01-00	



PLAN OF EXTERNAL ELECTRICAL WORK  
SCALE 1:500

- LEGEND
- ▣ DISTRIBUTION PANEL
  - HAND HOLE
  - HIGH BAY LIGHTING
  - HB1-□, HB3-□
  - HB4-□, HB6-□ HID SODIUM LAMP 250W x 1
  - HB2-□, HB5-□ HID MERCURY LAMP 250W x 1
  - ⊕ FLUORESCENT LIGHTING 40W x 1 WP (SURFACE MOUNTED)
  - ⊗ PULL BOX
  - SURFACE MOUNTED CABLE WITH RIGID METAL CONDUIT
  - UNDER GROUND CABLE WITH CONDUIT
  - CABLE CONCEALED IN CEILING

REV.	DATE	DESCRIPTION	APPROVED

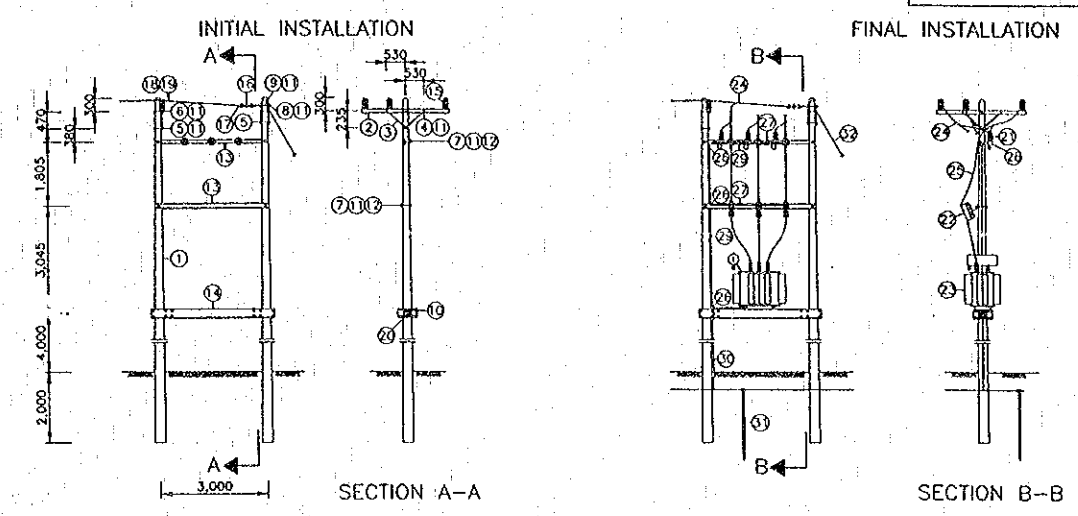
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIIPPON KOKI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

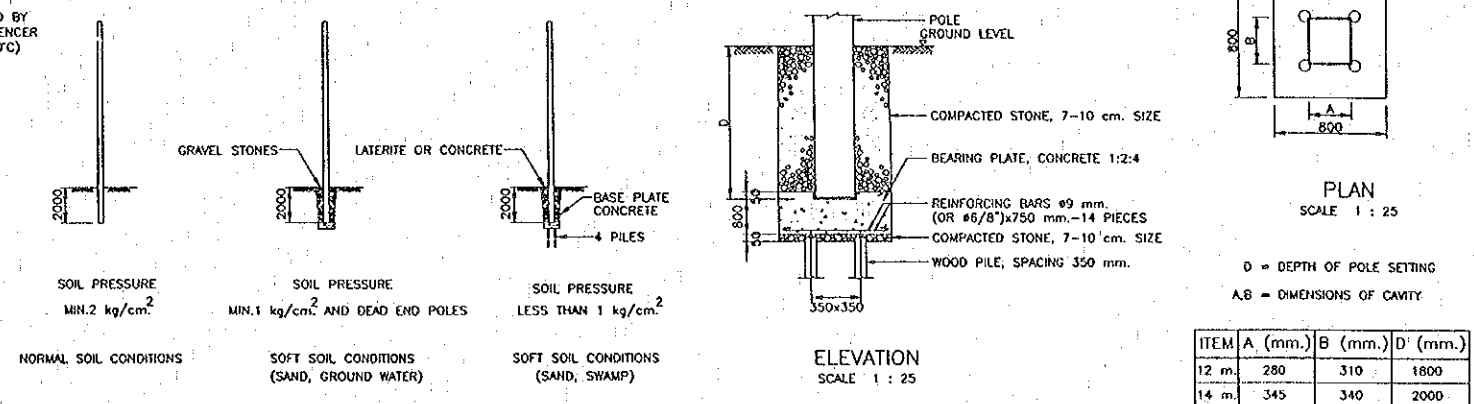
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Takobushi	<i>T. Takobushi</i>	17/01/00	BORDER CONTROL FACILITIES THAILAND SIDE PLAN OF EXTERNAL ELECTRICAL WORK (3)
DESIGN CHECK	T. Masutani	<i>T. Masutani</i>	18/01/00	
SUBMITTED	A. Heotani	<i>A. Heotani</i>	21/01/00	
APPROVED	S. Tenjyabutra	<i>S. Tenjyabutra</i>	22/02/00	

ASSEMBLY "K"  
 TRANSFORMER INSTALLATION ON PLATFORM AT DEAD-END

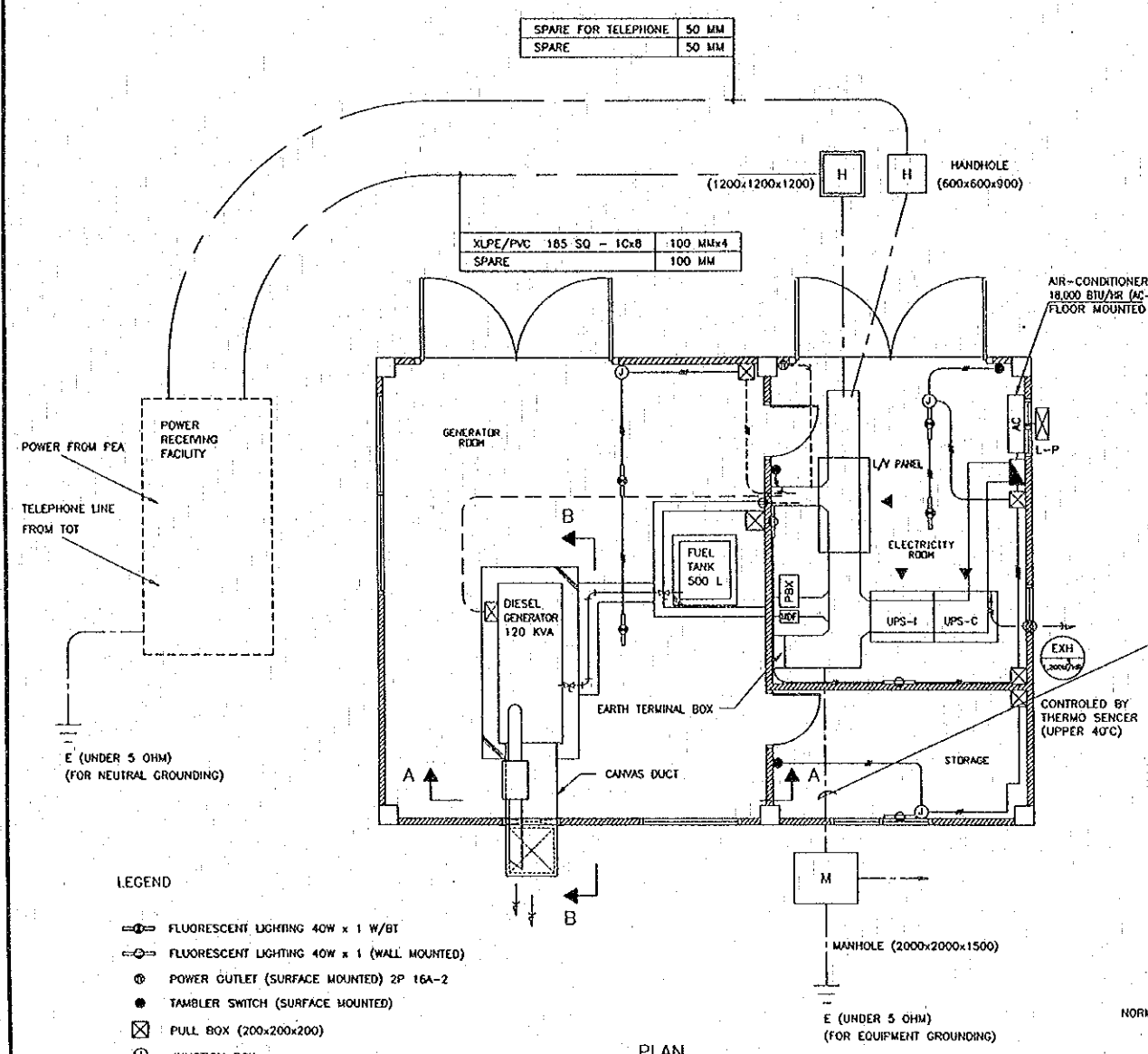


ASSEMBLY "N"  
 BURYING DEPTH AND FOUNDATION FOR H.T. POLES  
 POLES 22 KV 12 m.

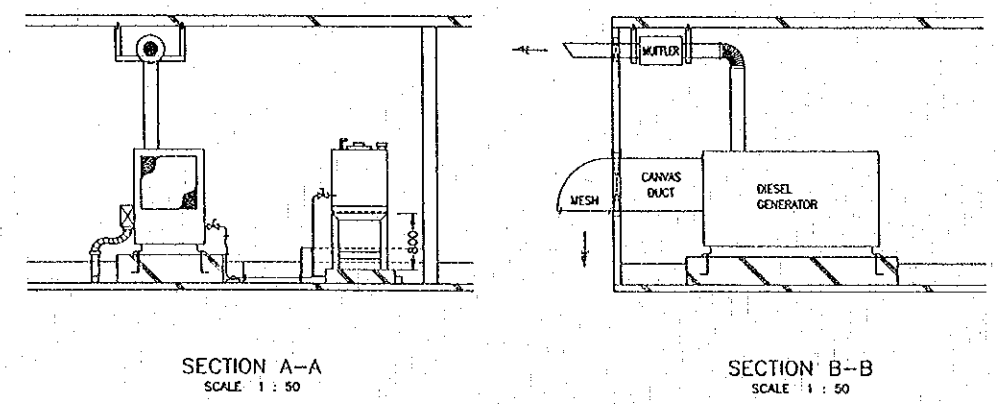


BILL OF MATERIAL		
ITEM	DESCRIPTION	REQ'D
1	POLE, CONCRETE 12 m. LONG	2
2	CROSSARM, SPUN PRESTRESSED CONCRETE, 100 x 100 x 2,500 mm.	3
3	BRACE, FLAT, FOR CROSSARM 30x6x760 mm.	6
4	BOLT, MACHINE, M 16 x 160 mm.	4
5	BOLT, MACHINE, M 16 x 200 mm.	2
6	BOLT, MACHINE, M 16 x 300 mm.	1
7	BOLT, MACHINE, M 16 x 350 mm.	4
8	BOLT, MACHINE, M 16 x 400 mm.	1
9	BOLT, DOUBLE ARMING ROUND EYE, M 16 x 400 mm.	3
10	BOLT, MACHINE, HEXAGON M 16 x 550 mm.	12
11	WASHER, SQUARE, FLAT 50 x 50 x 5 mm. HOLE #18 mm. DIN 436	27
12	WASHER, LOCK M 16 x DIN 127	4
13	BEAM, SPUN PRESTRESSED CONCRETE 100 x 100 x 3,200 mm.	2
14	PRESTRESSED CONCRETE BEAM 150 x 250 x 3,450 mm. FOR TRANSFORMER PLATFORM	2
15	INSULATOR, LINE POST TYPE, ANSI C 29.7 CLASS 57-2L	6
16	INSULATOR, SUSPENSION TYPE, EET-NEMA CLASS 52-1	9
17	CLAMP, STRAIN, FOR ACSR SIZE AS REQUIRED	3
18	TAPE, ARMOUR, AL 1 x 10 mm. LENGTH AS REQUIRED	
19	TIE WIRE, AL #4 mm. LENGTH AS REQUIRED	
20	MORTAR 1 : 3	50 kg.

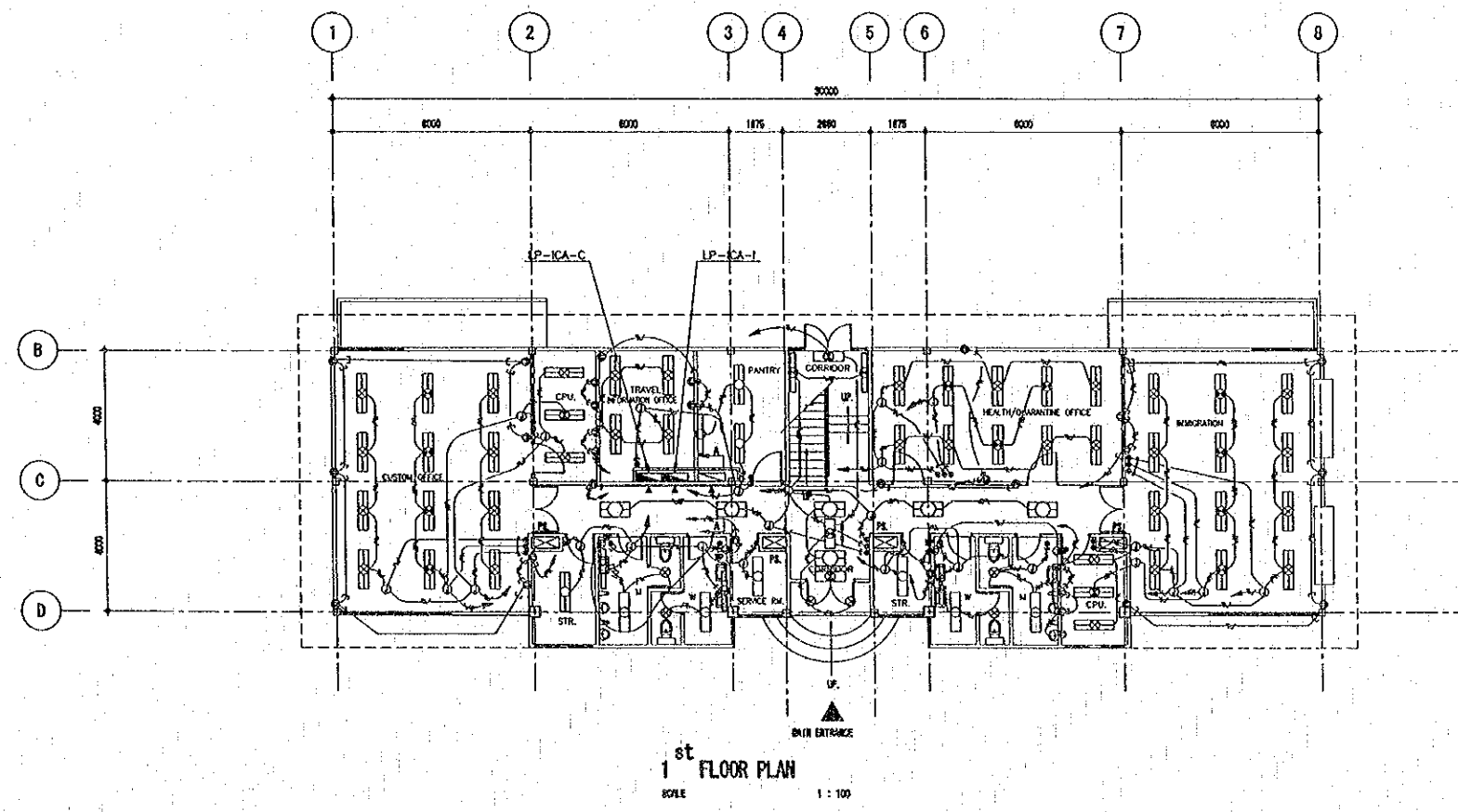
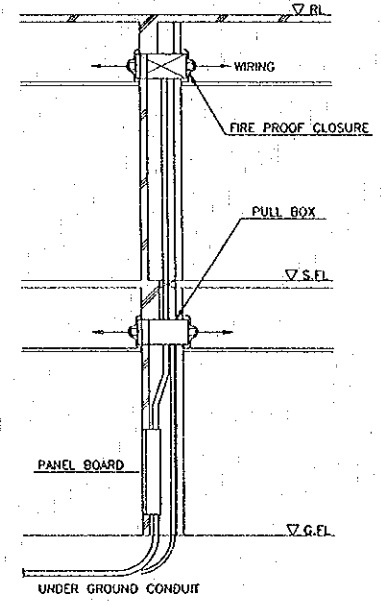
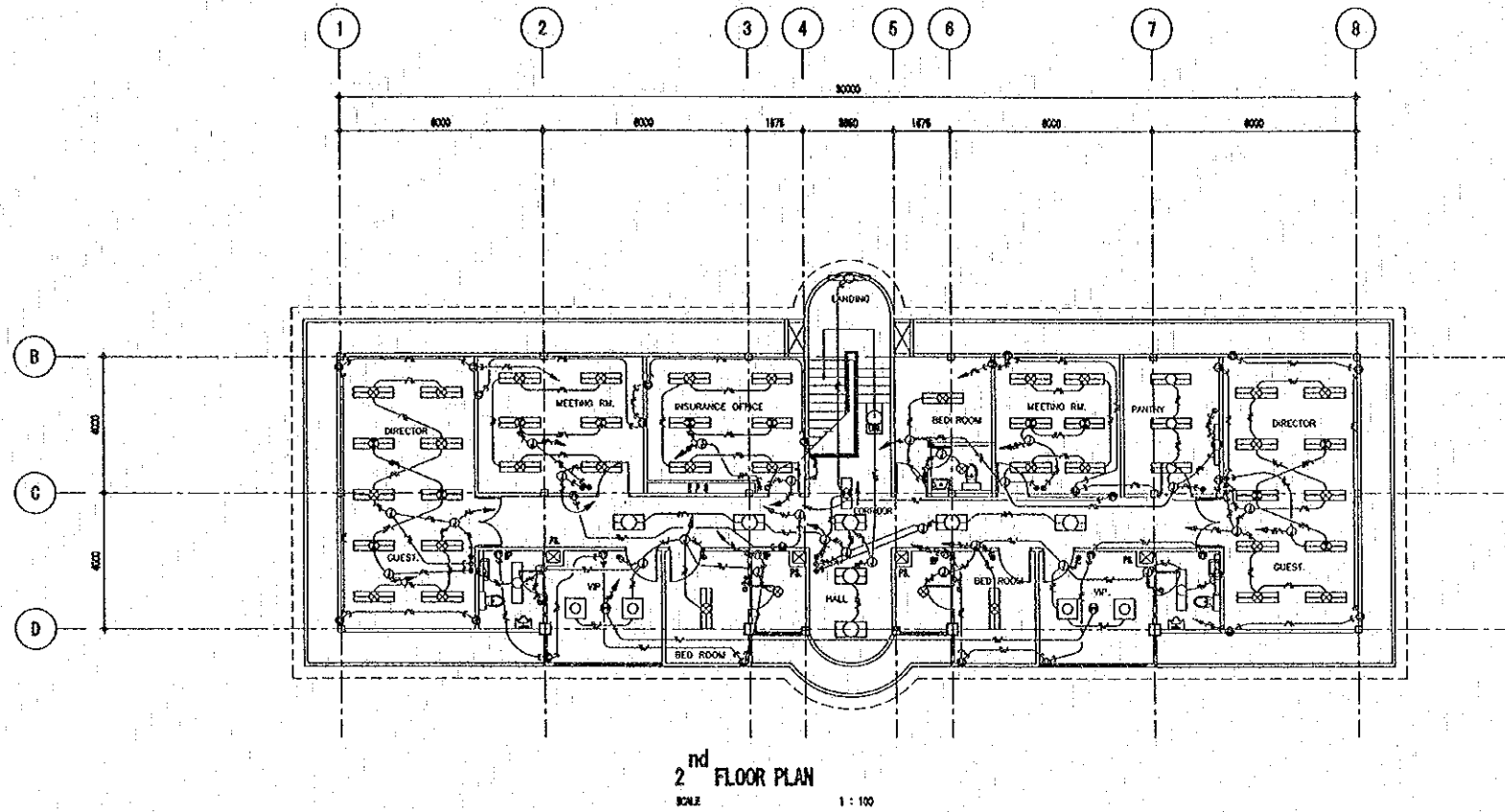
BILL OF MATERIAL		
ITEM	DESCRIPTION	REQ'D
21	LIGHTNING ARRESTER, 20-26 KV, 5KA	3
22	CUT-OUT, FUSE, OPENTYPE, SINGLE INSULATOR, DROP-OUT 22 KV, 100A	3
23	TRANSFORMER, 3#, 22 KV, 500 KVA	1
24	CONNECTOR, PARALLEL GROOVE, DOUBLE BOLE, AL 25-95 mm <sup>2</sup>	6
25	CONDUCTOR, AL 35 mm <sup>2</sup>	15 m.
26	CLAMP, SINGLE U-BOLT, M8 (WIRE ROPE CLIP)	4
27	WIRE, STEEL, SOLID, DIMETER 4 mm. (TIS. 71-2517)	5.5 m.
28	WASHER, SQUARE, CURVED 60 x 60 x 5 mm. HOLE #22 mm.	3
29	WIRE, STEEL STRANDED 50/7 DIN 48201 ST.II	30 m.
30	PIPE, S'LOR #20x2,500 mm. COMPLETE WITH FIXING ACCESSORIES	1
31	ROD, GROUND 60 x 60 x 5 mm., 2,000 mm. LONG	1
32	GUY ASSEMBLY G1	1



- LEGEND
- FLUORESCENT LIGHTING 40W x 1 W/BT
  - FLUORESCENT LIGHTING 40W x 1 (WALL MOUNTED)
  - POWER OUTLET (SURFACE MOUNTED) 2P 16A-2
  - TAMBLER SWITCH (SURFACE MOUNTED)
  - PULL BOX (200x200x200)
  - JUNCTION BOX
  - PVC 2.5 SQ x 3 (CONDUIT 1/2 INCH)
  - PVC 2.5 SQ x 4 (CONDUIT 3/4 INCH)
  - PVC 2.5 SQ x 6 (CONDUIT 3/4 INCH)
  - UNDER FLOOR WIRING W/CONDUIT

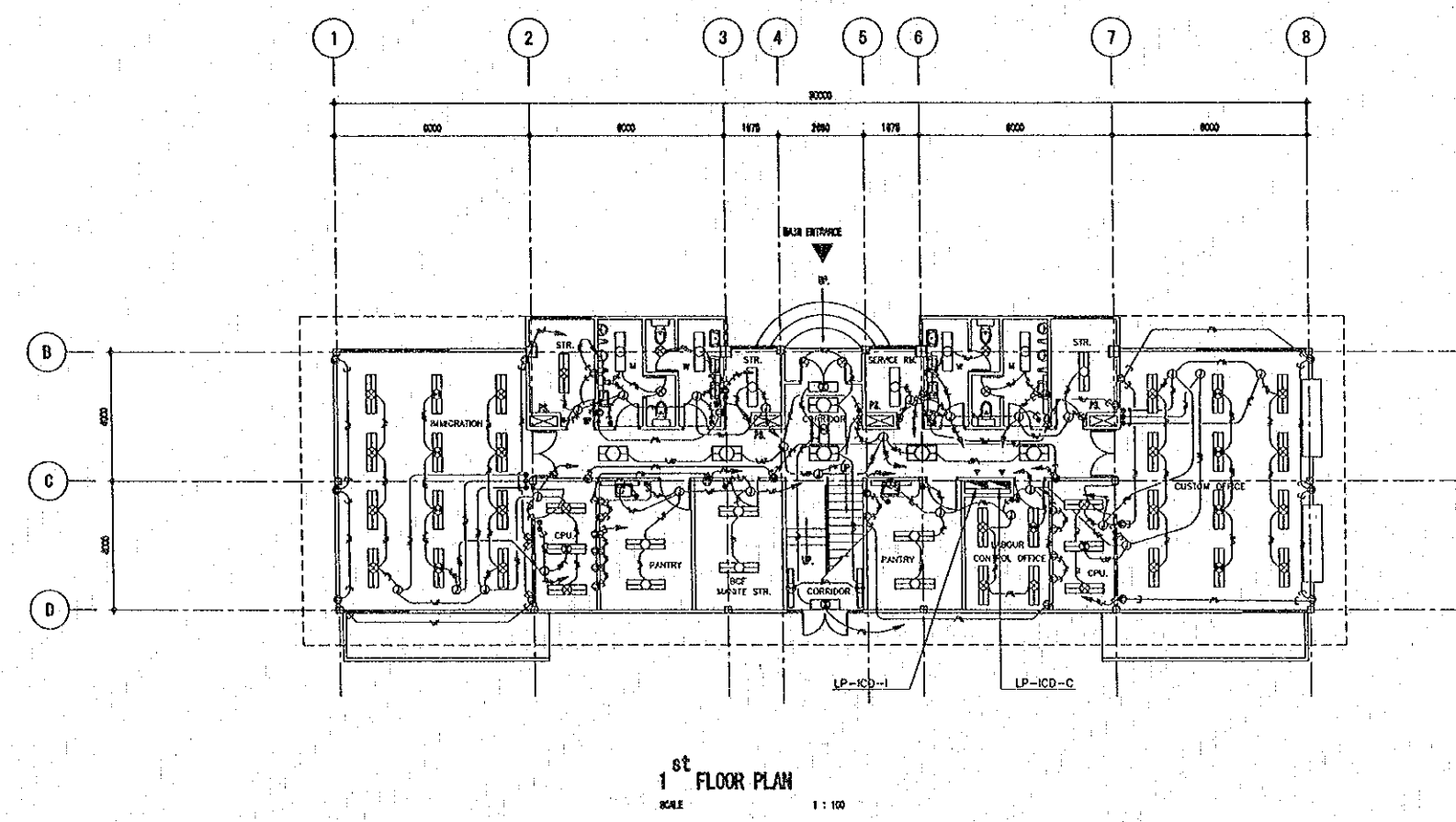
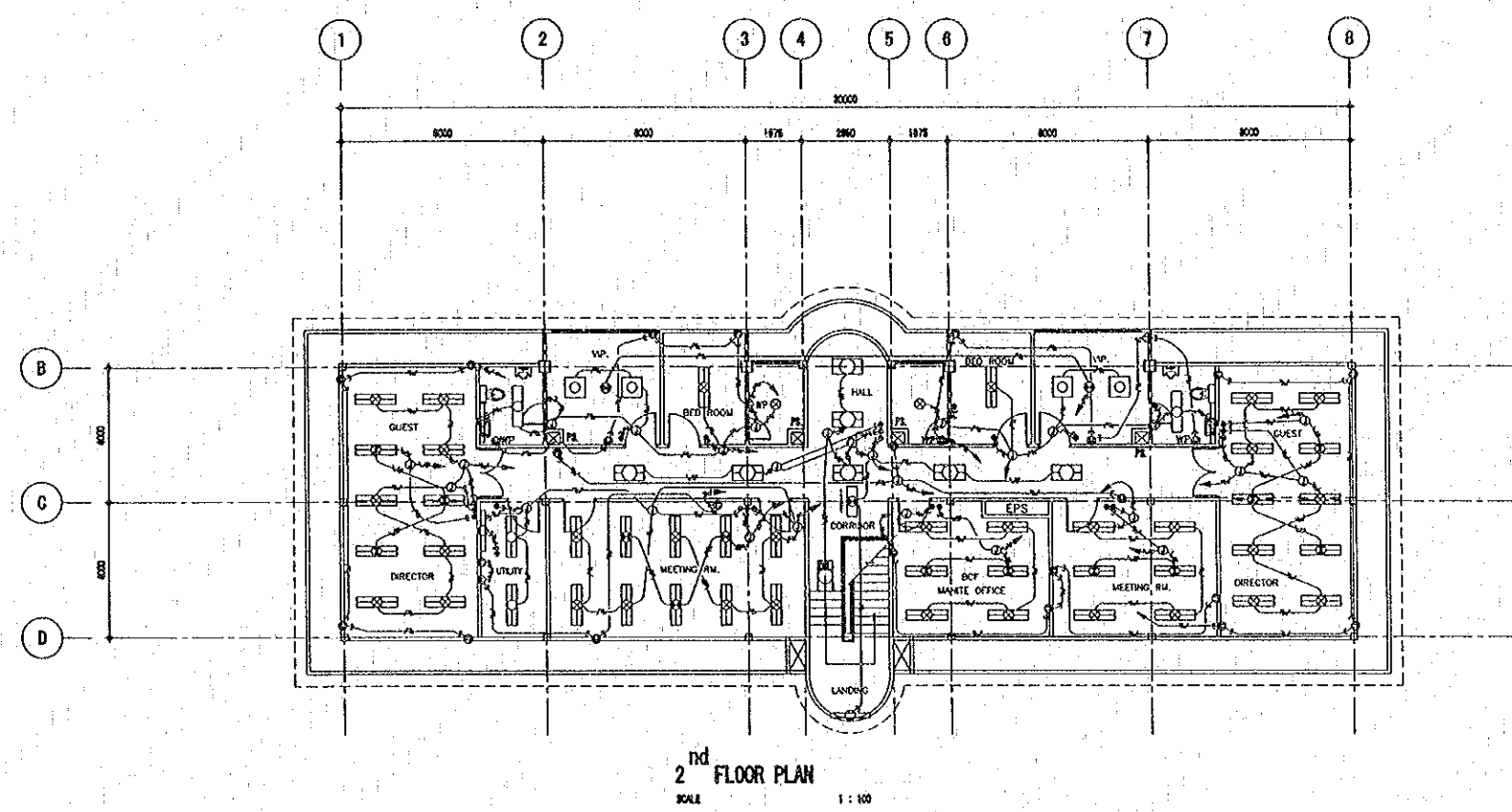






- LEGEND
- ☐ FLUORESCENT LIGHTING W/LOUVER 40W x 2 (RECESSED)
  - ☐ FLUORESCENT LIGHTING W/LOUVER, BT 40W x 2 (RECESSED)
  - ☐ FLUORESCENT LIGHTING 40W x 2 (RECESSED)
  - ☐ FLUORESCENT LIGHTING 40W x 1 (RECESSED)
  - ☐ FLUORESCENT LIGHTING W/COVER, BT 40W x 2 (RECESSED)
  - ☐ FLUORESCENT LIGHTING 40W x 1 (WALL MOUNTED)
  - ☐ CEILING LIGHTING FL 18W x 1 (RECESSED)
  - ☐ EXIT LIGHTING FL 20W x 1 (SURFACE MOUNTED)
  - ☐ STAIRWAY GUIDE LIGHTING FL 40W x 1 W/BT (WALL MOUNTED)
  - ☐ FLUORESCENT LIGHTING 20W x 5 W/COVER (RECESSED)
  - ☐ EMERGENCY LIGHTING FL 13W x 1 W/BT (RECESSED)
  - ⊕ POWER OUTLET 2P 16A-2
  - ⊕ POWER OUTLET 2P 16A-2 (WATER PROOF)
  - ⊕ TAMBLER SWITCH
  - ⊕ JUNCTION BOX
  - PVC/PVC 2.5 SQ-3C (CONCEALED IN CEILING)
  - PVC/PVC 2.5 SQ-4C (CONCEALED IN CEILING)
  - CABLE & WIRING IN WALL
  - 1 (ONE) CABLE : PFLEX-CD 22
  - 2 (TWO) CABLE : PFLEX-CD 28
  - 3 (THREE) CABLE : PFLEX-CD 36

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	JICA	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS		DESIGN	T. Tokaobushi	<i>T. Tokaobushi</i>	23-05-00	BORDER CONTROL FACILITIES THAILAND SIDE PLAN OF INTERNAL LIGHTING & POWER OUTLET IN MAIN OFFICE (ARRIVAL SIDE)
								DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	23-05-00		
								SUBMITTED	A. Krotani	<i>A. Krotani</i>	23-05-00		
								APPROVED	S. Temyabutra	<i>S. Temyabutra</i>	23-05-00		

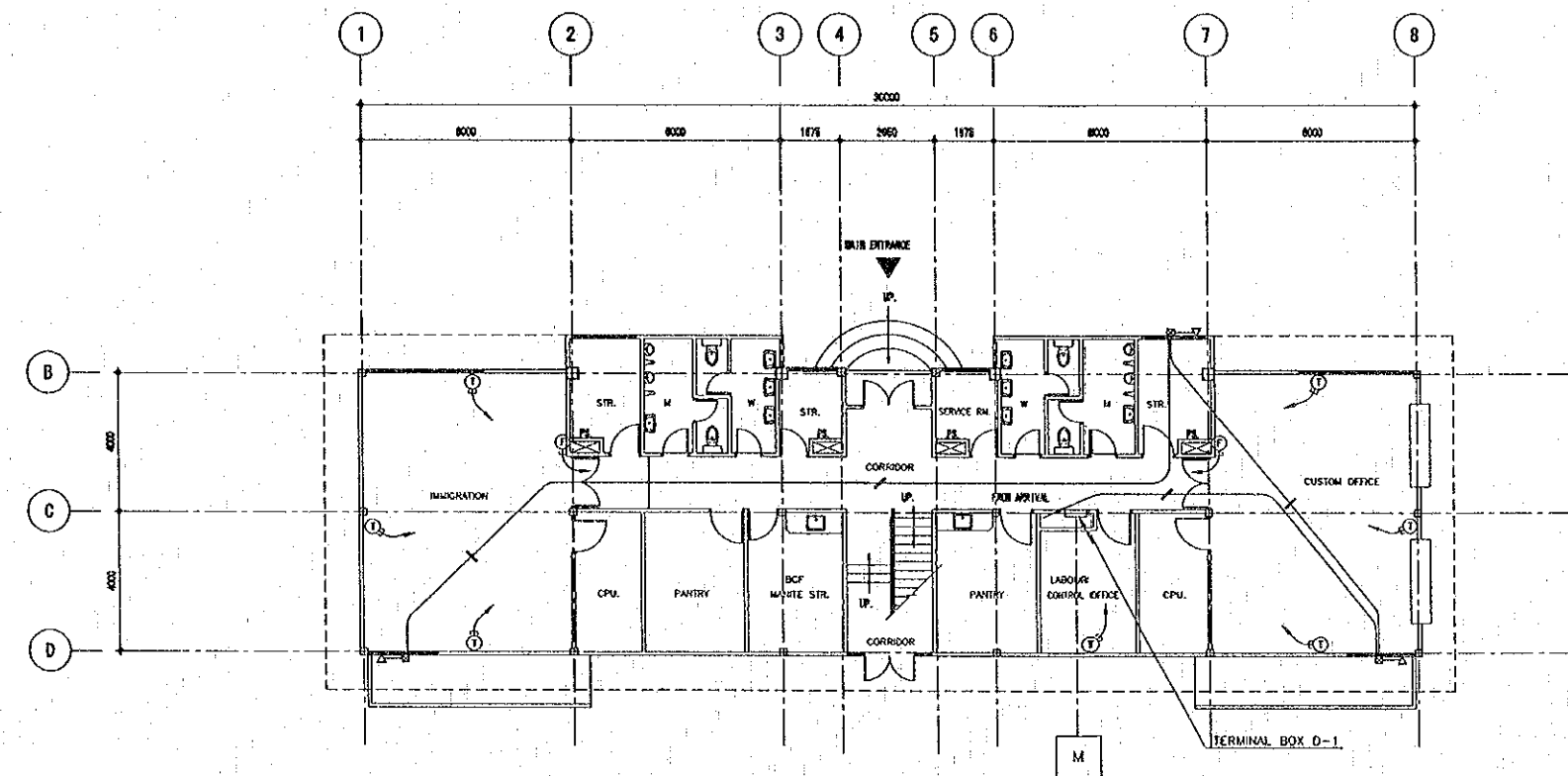
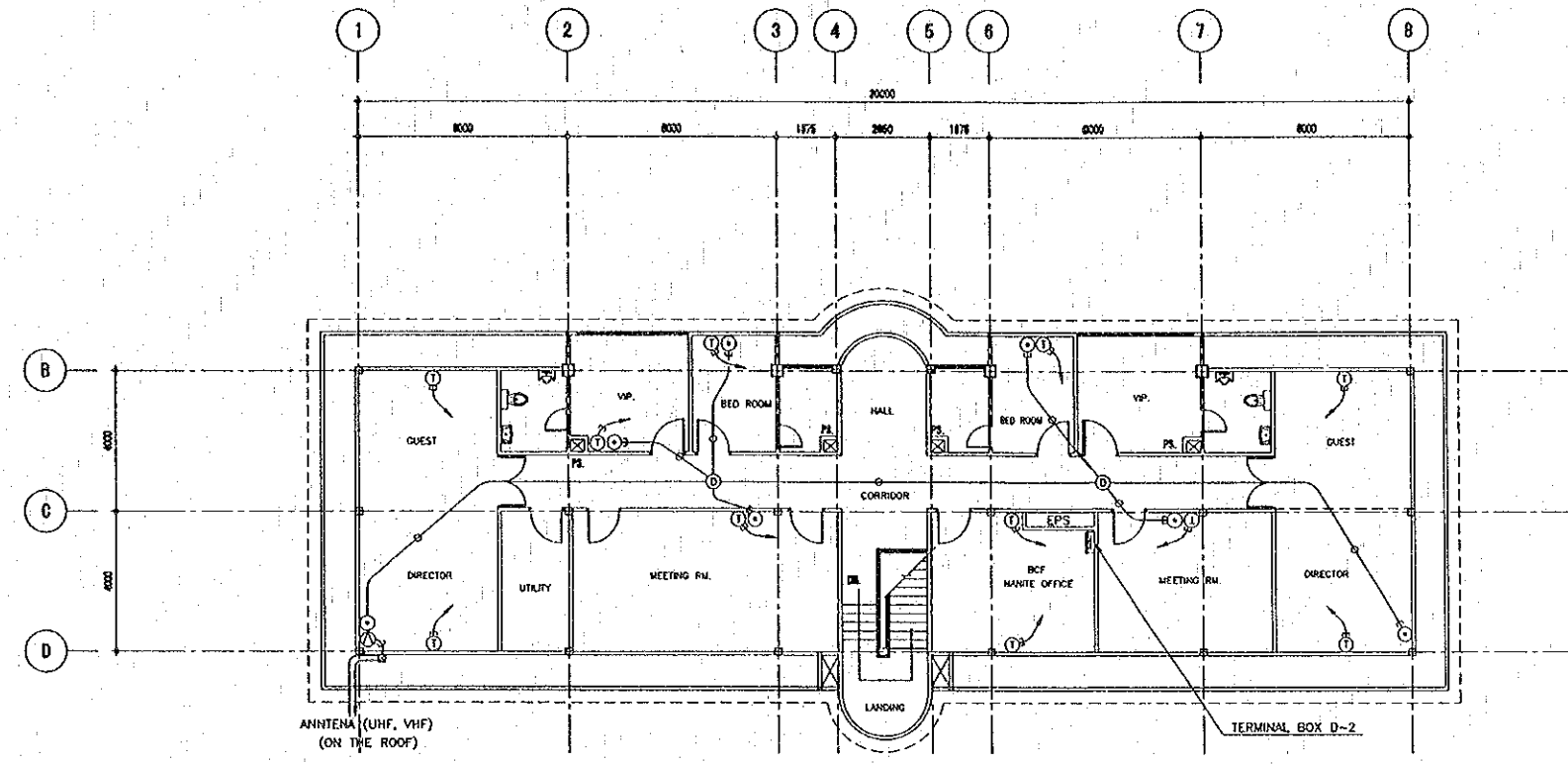


- LEGEND
- [Symbol] FLUORESCENT LIGHTING W/LOUVER 40W x 2 (RECESSED)
  - [Symbol] FLUORESCENT LIGHTING W/LOUVER, BT 40W x 2 (RECESSED)
  - [Symbol] FLUORESCENT LIGHTING 40W x 2 (RECESSED)
  - [Symbol] FLUORESCENT LIGHTING 40W x 1 (RECESSED)
  - [Symbol] FLUORESCENT LIGHTING W/COVER, BT 40W x 2 (RECESSED)
  - [Symbol] FLUORESCENT LIGHTING 40W x 1 (WALL MOUNTED)
  - [Symbol] CEILING LIGHTING FL 18W x 1 (RECESSED)
  - [Symbol] EXIT LIGHTING FL 20W x 1 (SURFACE MOUNTED)
  - [Symbol] STAIRWAY GUIDE LIGHTING FL 40W x 1 W/BT (WALL MOUNTED)
  - [Symbol] FLUORESCENT LIGHTING 20W x 5 W/COVER (RECESSED)
  - [Symbol] EMERGENCY LIGHTING FL 13W x 1 W/BT (RECESSED)
  - [Symbol] POWER OUTLET 2P 16A-2
  - [Symbol] POWER OUTLET 2P 16A-2 (WATER PROOF)
  - [Symbol] TAMBLER SWITCH
  - [Symbol] JUNCTION BOX
  - [Symbol] PVC/PVC 2.5 SQ-3C (CONCEALED IN CEILING)
  - [Symbol] PVC/PVC 2.5 SQ-4C (CONCEALED IN CEILING)
  - [Symbol] CABLE & WIRING IN WALL
  - 1 (ONE) CABLE : PFLEX-CD 22
  - 2 (TWO) CABLE : PFLEX-CD 28
  - 3 (THREE) CABLE : PFLEX-CD 36

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWO. TITLE
				ORIENTAL CONSULTANTS CO., LTD. in association with HIPPOON KOEI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Takasubashi	<i>T. Takasubashi</i>	23.05.00	BORDER CONTROL FACILITIES THAILAND SIDE PLAN OF INTERNAL LIGHTING & POWER OUTLET IN MAIN OFFICE (DEPARTURE SIDE)
						DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	24.05.00	
						SUBMITTED	A. Hirata	<i>A. Hirata</i>	27.05.00	
						APPROVED	S. Tamayabutra	<i>S. Tamayabutra</i>	2/06/00	

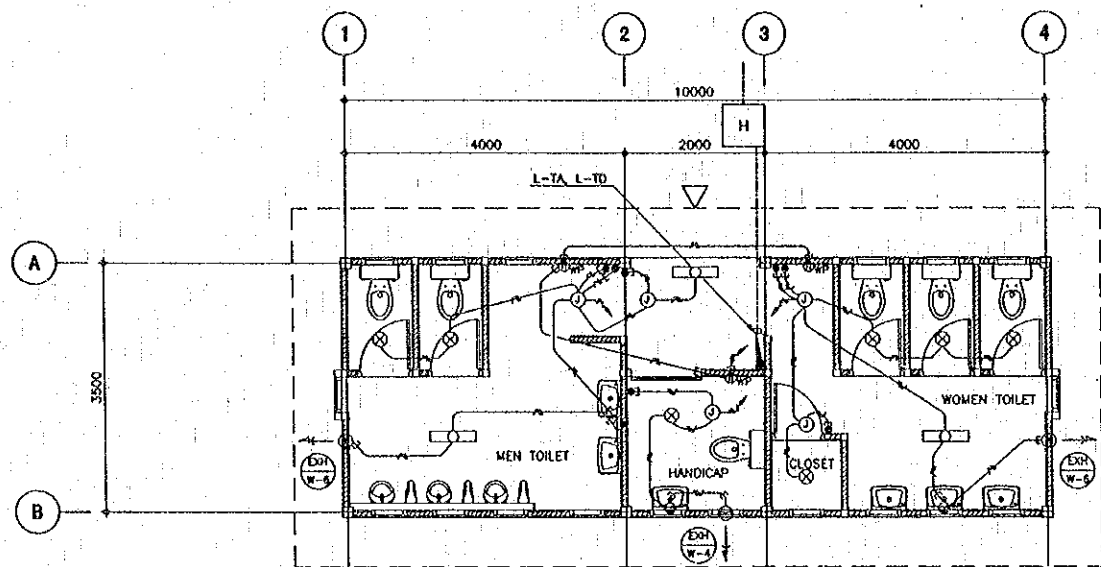




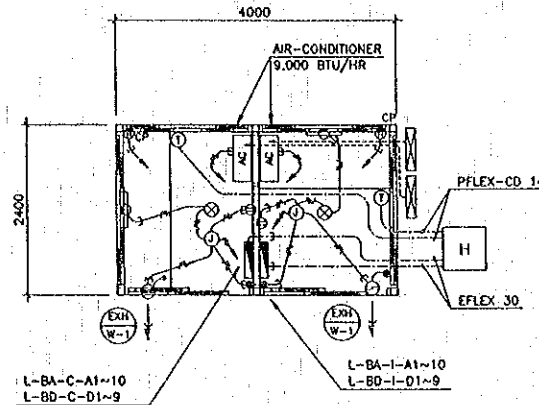


- LEGEND
- ① TELEPHONE OUTLET
  - ② FACSIMILE OUTLET
  - ③ SPEAKER (HORN TYPE 3W)
  - ④ TV OUTLET
  - TIVE 0.65MM-2C
  - AE 1.2MM-2C
  - COAXIAL CABLE (5C-7V)
  - ☒ PB (200x200x200) AND EMT 1/2 INCH
  - CABLE & WIRING IN WALL
  - 1 (ONE) CABLE : PFLEX-CD 22
  - 2 (TWO) CABLE : PFLEX-CD 28
  - 3 (THREE) CABLE : PFLEX-CD 36

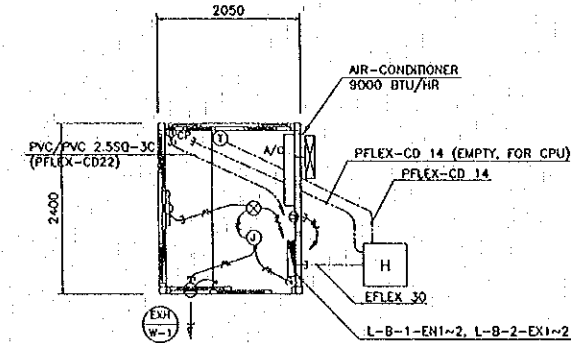
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. in association with NIPPON KOEI CO., LTD.	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Tokaoishi	<i>T. Tokaoishi</i>	23/03/00	BORDER CONTROL FACILITIES THAILAND SIDE PLAN OF TELEPHONE, TV AND PUBLIC ANNOUNCEMENTS SYSTEM IN MAIN OFFICE (DEPARTURE SIDE)
						DESIGN CHECK	T. Masuzono	<i>T. Masuzono</i>	24/03/00	
						SUBMITTED	A. Hiratake	<i>A. Hiratake</i>	28/03/00	
						APPROVED	S. Tamayutira	<i>S. Tamayutira</i>	28/03/00	



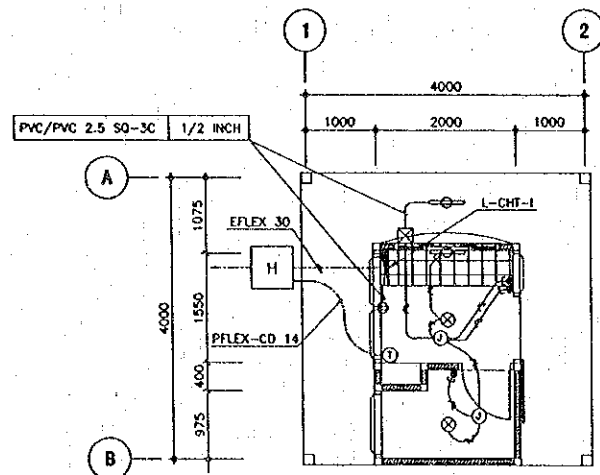
PUBLIC TOILETS  
 SCALE 1 : 50



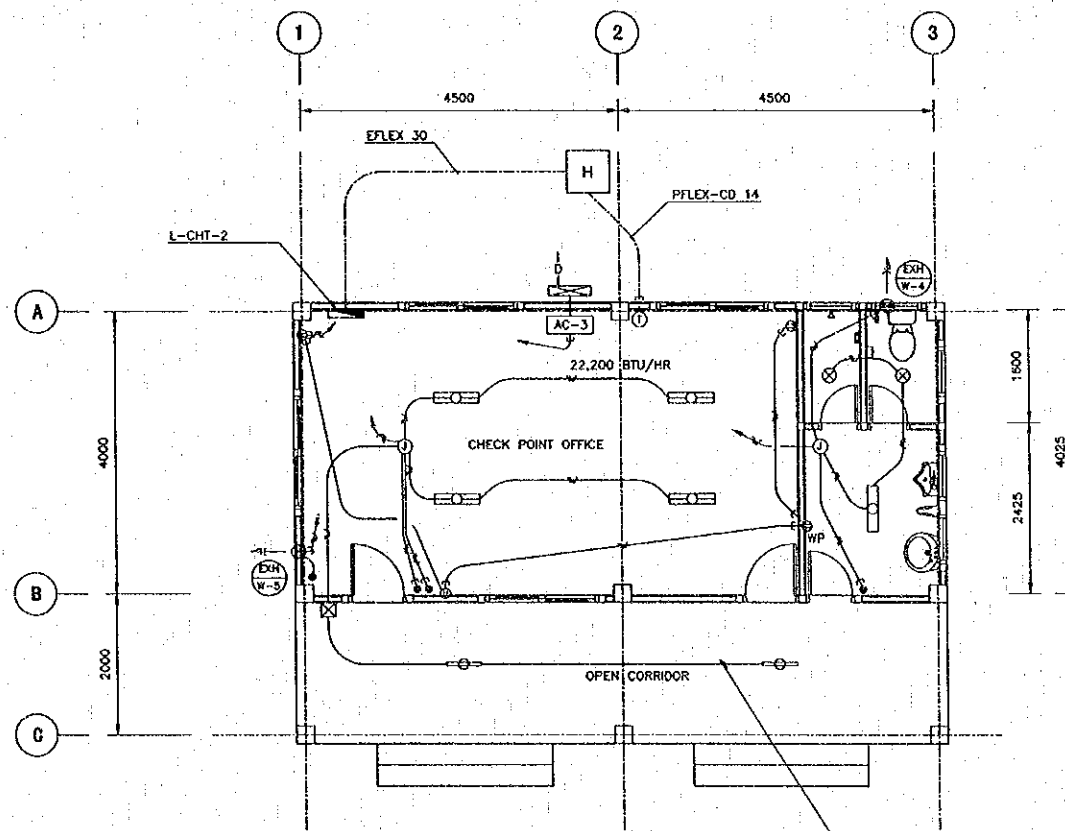
BOOTHS  
 SCALE 1 : 50



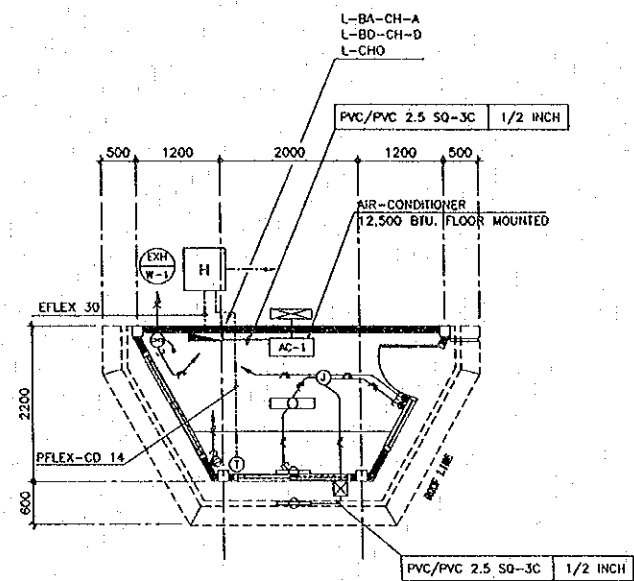
BOOTH FOR QUARANTINE  
 SCALE 1 : 50



CHECK POINT AND TOLL OFFICE-1  
 SCALE 1 : 50



CHECK POINT AND TOLL OFFICE 2  
 SCALE 1 : 50



CHECK POINT OFFICE  
 SCALE 1 : 50

LIST OF AIR-CONDITIONER

ITEM	SEPCIFICATION	COOLING CAPACITY (BTU/HR)
AC-1	SPRIT FLOOR MOUNTED TYPE	12,500
AC-2	SPRIT FLOOR MOUNTED TYPE	18,000
AC-3	SPRIT FLOOR MOUNTED TYPE	22,200

LEGEND

- DISTRIBUTION PANEL
- FLUORESCENT LIGHTING 40W x 1 (RECESSED)
- FLUORESCENT LIGHTING 40W x 1 (WALL MOUNTED)
- FLUORESCENT LIGHTING 40W x 1 WP (SURFACE MOUNTED)
- ⊗ CEILING LIGHTING FL 18W x 1 (RECESSED)
- ⊙ POWER OUTLET 2P 16A-2
- ⊙ POWER OUTLET 2P 16A-2 (WATER PROOF)
- ⊙ POWER OUTLET 2P 16A-2 (FOR COMPUTER)
- ⊙ TAMBLER SWITCH
- ⊙ JUNCTION BOX
- △ PVC/PVC 2.5 50-3C (CONCEALED IN CEILING)
- WIRING 1/2 UNDER GROUND CONDUIT
- ⊙ VENTILATION WALL MOUNTED 40M<sup>3</sup>/HR EXHAUST
- ⊙ VENTILATION WALL MOUNTED 370M<sup>3</sup>/HR EXHAUST
- ⊙ VENTILATION WALL MOUNTED 600M<sup>3</sup>/HR EXHAUST
- ⊙ TELEPHONE OUTLET
- ⊙ PB (200x200x200)

REV.	DATE	DESCRIPTION	APPROVED

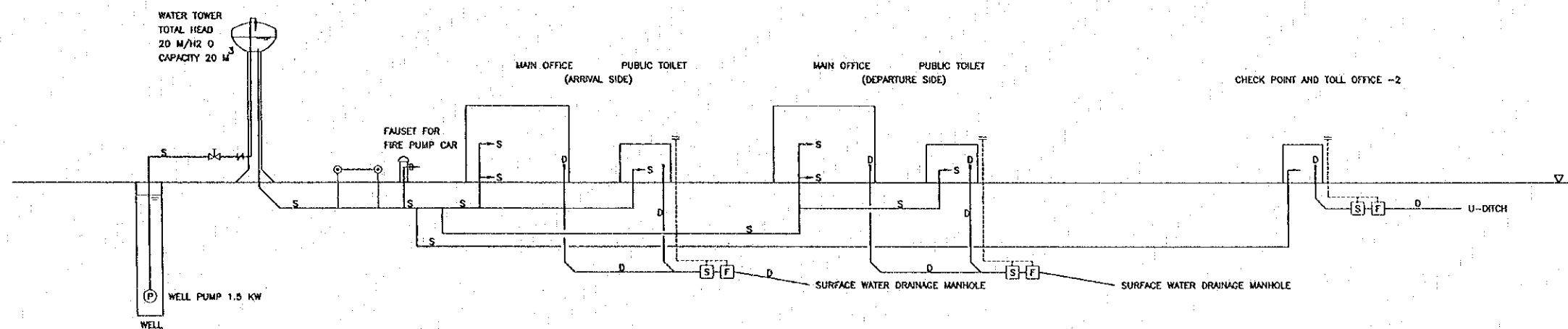
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takahashi	<i>T. Takahashi</i>	23-05-00
DESIGN CHECK	T. Murota	<i>T. Murota</i>	26-05-00
SUBMITTED	A. Hirotsu	<i>A. Hirotsu</i>	29-06-00
APPROVED	S. Tammyabutra	<i>S. Tammyabutra</i>	2-08-00

DWG. TITLE: BORDER CONTROL FACILITIES THAILAND SIDE  
 PLAN OF INTERNAL ELECTRICAL WORK IN PUBLIC TOILETS, BOOTHS, CHECK POINT AND TOLL OFFICE AND CHECK POINT OFFICE

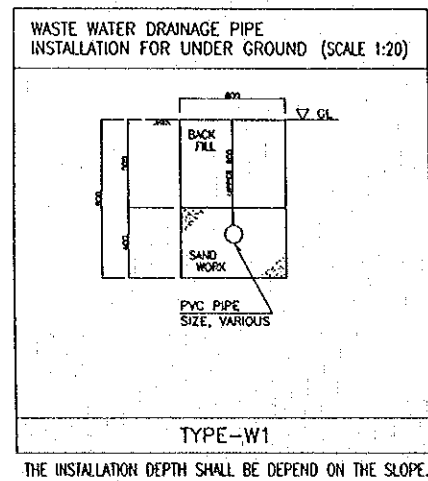
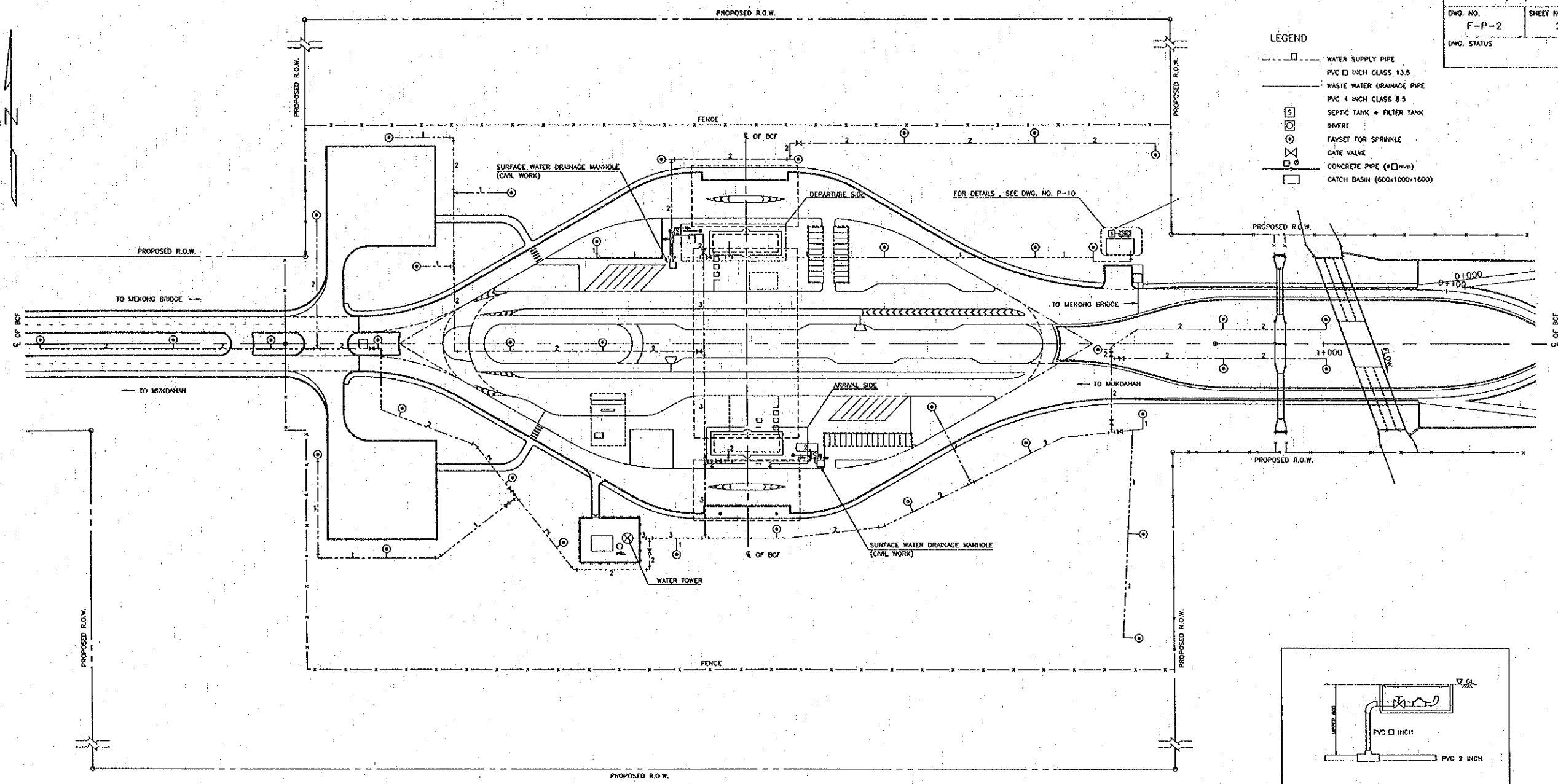


- [S] SEPTIC TANK
- [F] FILTER TANK
- ⊙ FAUSET FOR OUTDOOR SPRINKLE
- S— SUPPLY PIPE
- D— DRAIN PIPE
- — — VENT PIPE

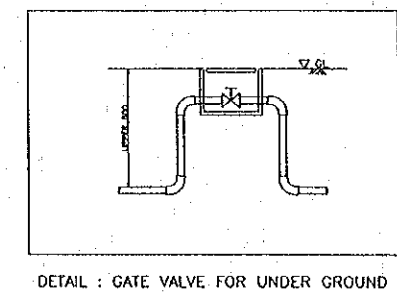
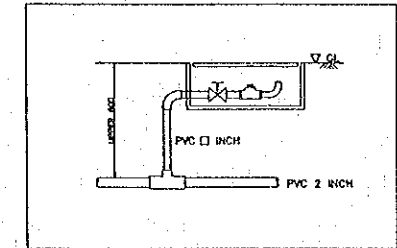
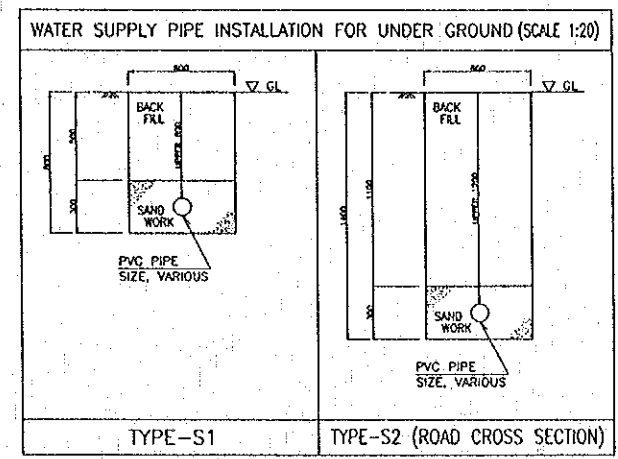
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOKI CO., LTD.	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	T. Takahashi	<i>T. Takahashi</i>	18-02-00	BORDER CONTROL FACILITIES THAILAND SIDE WATER SUPPLY AND WASTE WATER DRAINAGE SYSTEM
												DESIGN CHECK	T. Mochizuki	<i>T. Mochizuki</i>	18-02-00	
												SUBMITTED	A. Hirotsu	<i>A. Hirotsu</i>	18/02/00	
												APPROVED	S. Terayabara	<i>S. Terayabara</i>	18/02/00	

DATE OF ISSUE: 05/03/2000  
 DWG. NO. F-P-2 SHEET NO. 235  
 DWG. STATUS

- LEGEND**
- WATER SUPPLY PIPE
  - PVC 4 INCH CLASS 13.5
  - WASTE WATER DRAINAGE PIPE
  - PVC 4 INCH CLASS 8.5
  - SEPTIC TANK + FILTER TANK
  - INVERT
  - FAUSET FOR SPRINKLE
  - GATE VALVE
  - CONCRETE PIPE (ø□mm)
  - CATCH BASIN (600x1000x1600)



PLAN OF EXTERNAL PLUMBING WORK



SCALE 1 : 1000

REV.	DATE	DESCRIPTION	APPROVED

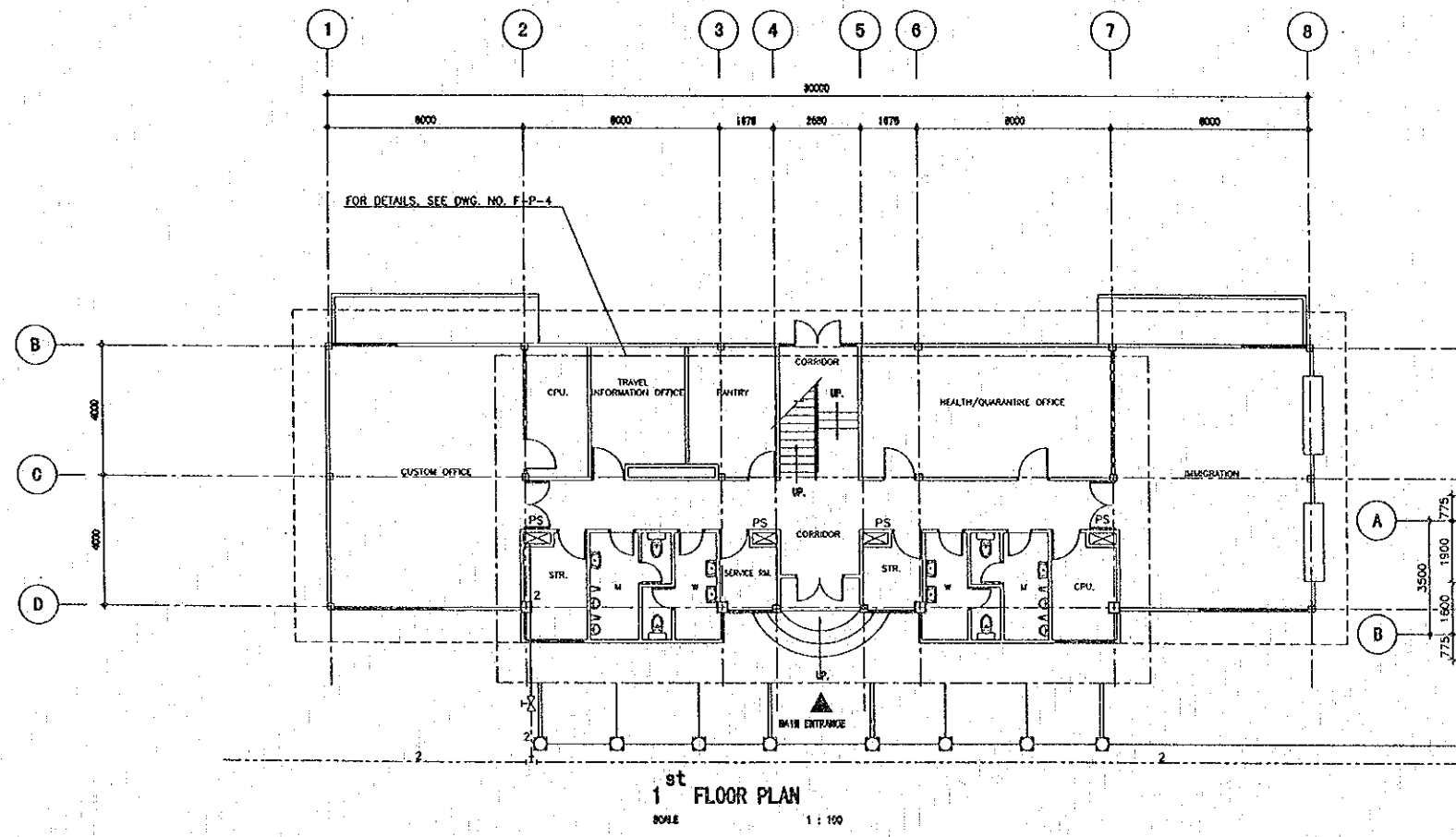
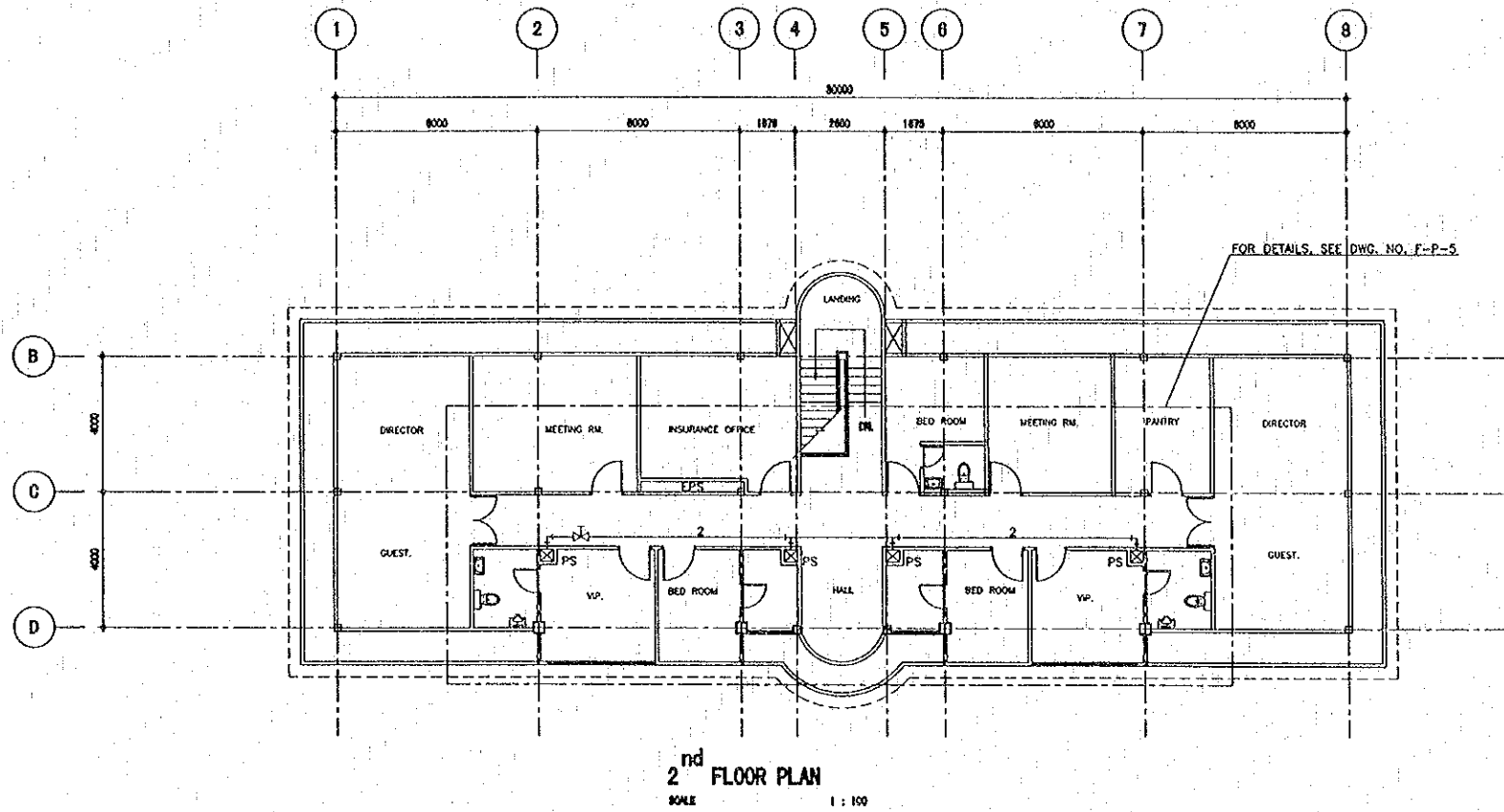
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

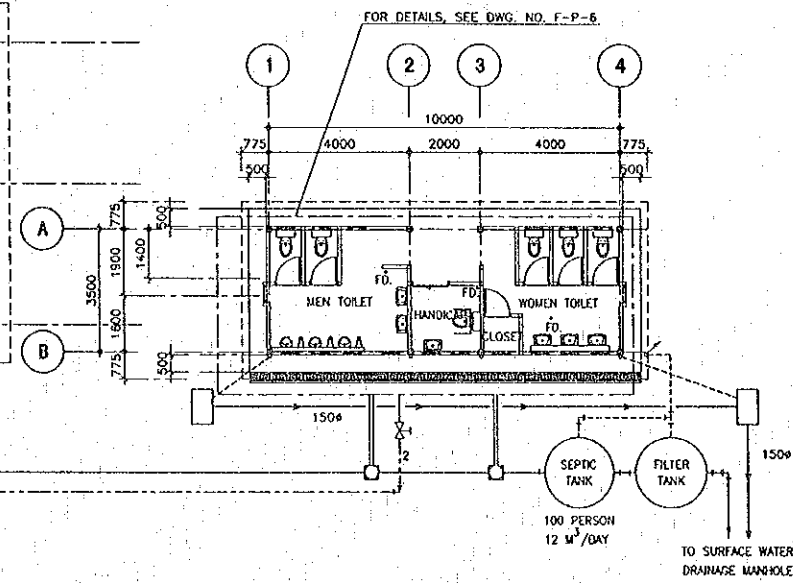
THE SECOND MERONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Takahashi	<i>T. Takahashi</i>	12/15/00	BORDER CONTROL FACILITIES THAILAND SIDE EXTERNAL PLUMBING WORK
DESIGN CHECK	T. Matsuura	<i>T. Matsuura</i>	2/01/00	
SUBMITTED	A. Ireland	<i>A. Ireland</i>	2/1/00	
APPROVED	S. Temyabutra	<i>S. Temyabutra</i>	2/08/00	





- LEGEND
- WATER SUPPLY PIPE (PVC CLASS 13.5 □ INCH)
  - - - VENT PIPE (PVC CLASS 8.5 2 INCH)
  - — — DRAINAGE PIPE (PVC CLASS 8.5 4 INCH)
  - INVERT (900x900x1200)
  - WATER SUPPLY PIPE (PVC CLASS 13.5 □ INCH)
  - ∅ CONCRETE PIPE (∅ □ mm)
  - CATCH BASIN (600x1000x1500)



REV.	DATE	DESCRIPTION	APPROVED

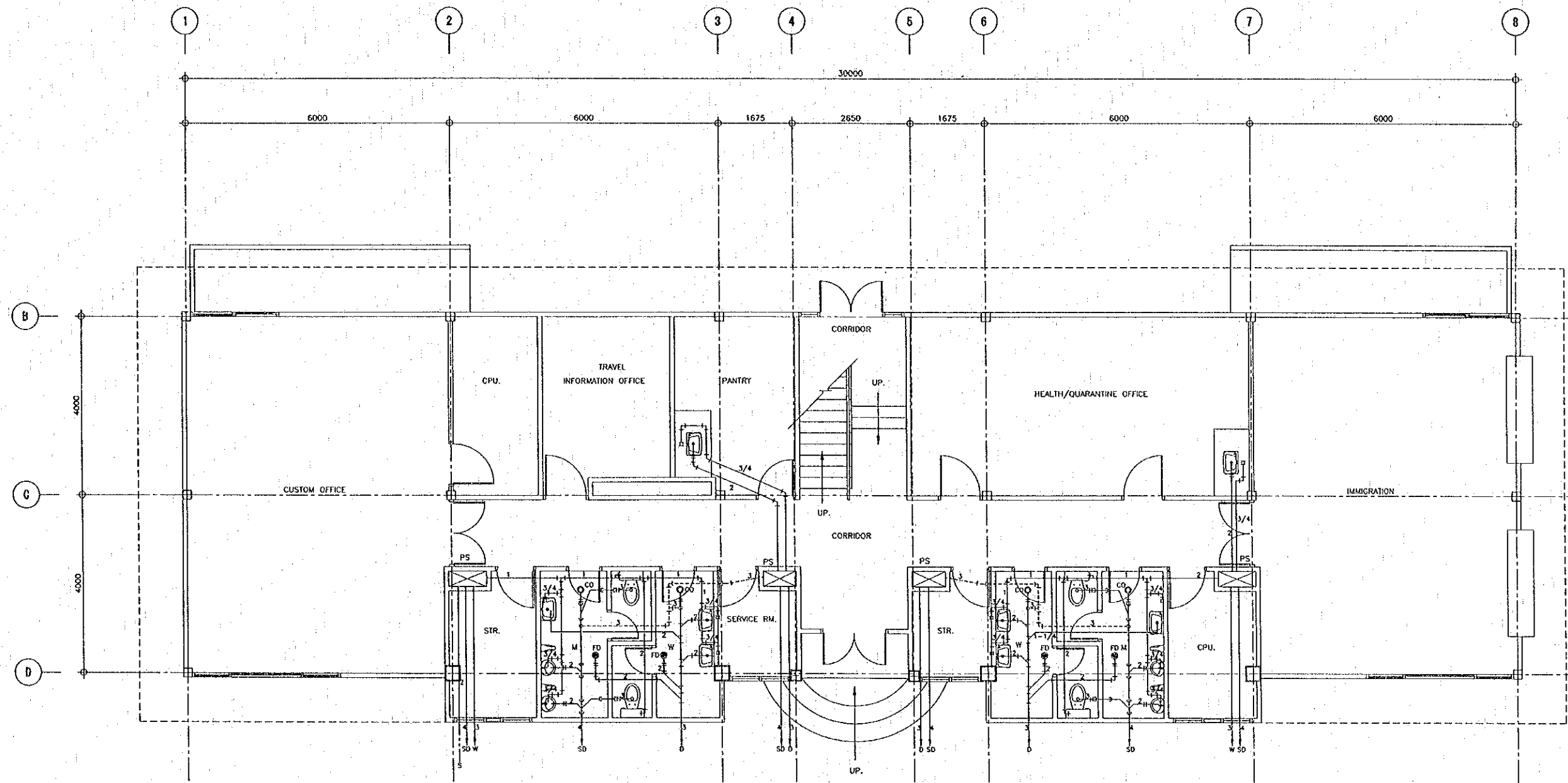
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
DESIGN	T. Takao bushi	<i>T. Takao bushi</i>	23-05-00	BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK IN MAIN OFFICE & PUBLIC TOILET (ARRIVAL SIDE)
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	24-05-00	
SUBMITTED	A. Hiratani	<i>A. Hiratani</i>	27-05-00	
APPROVED	S. Temiyabulnu	<i>S. Temiyabulnu</i>	2/06/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. F-P-4	SHEET NO. 237
DWG. STATUS	



▲  
MAIN ENTRANCE

1st FLOOR PLAN  
SCALE 1:50

LEGEND

- SUPPLY (PVC PIPE CLASS 13.5)
- SANITARY DRAIN (PVC PIPE CLASS 8.5)
- DRAIN (PVC PIPE CLASS 8.5)
- VENT (PVC PIPE CLASS 8.5)
- DIAMETER OF PIPE (□ INCH)
- SAFFON

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 in association with  
 NIPPON KOEI CO., LTD.

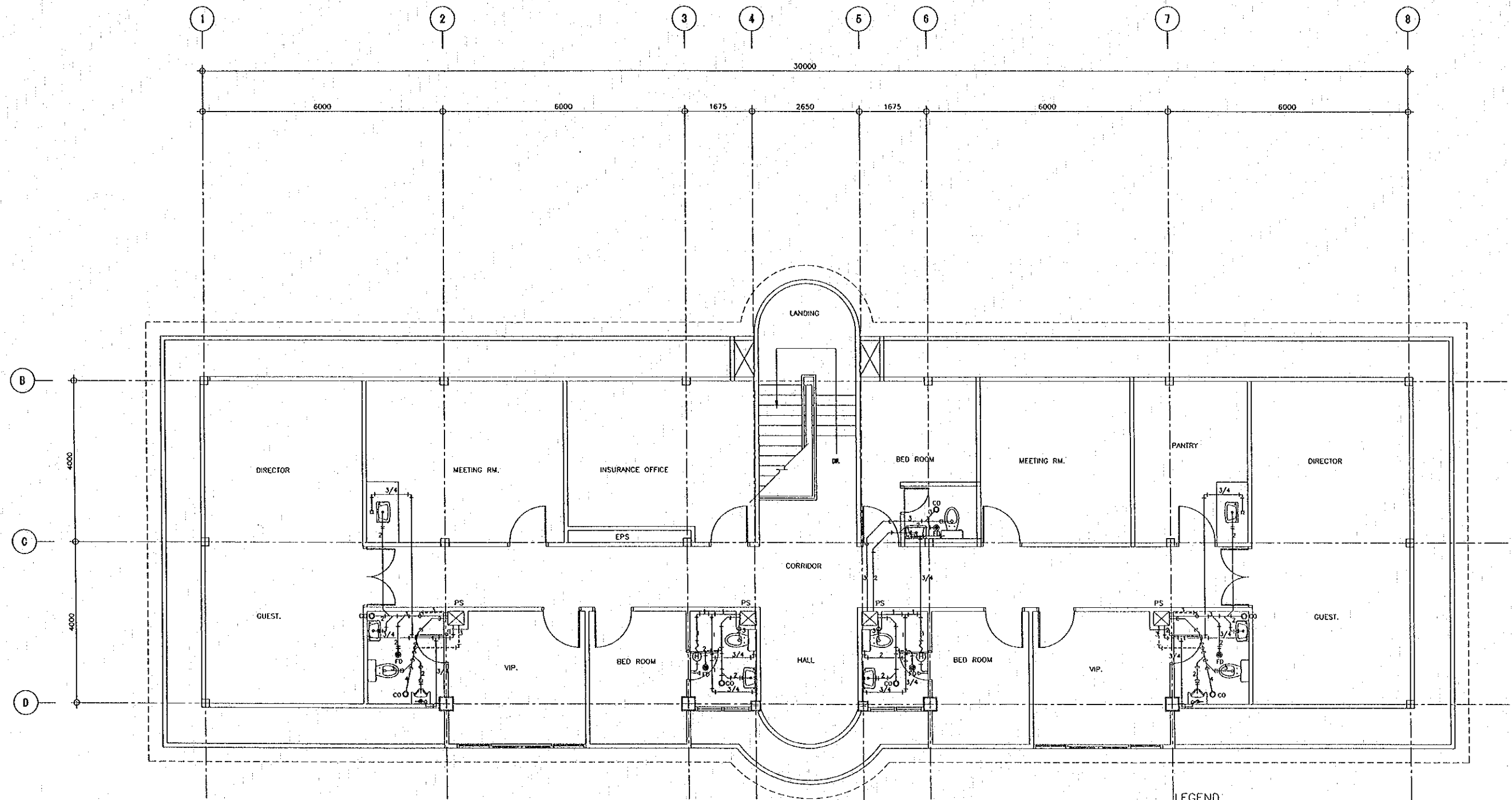
JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takobashi		11/03/00
DESIGN CHECK	T. Masuzawa		12/03/00
SUBMITTED	A. Hirahara		01/03/01
APPROVED	S. Tanyabutra		2/03/00

DWG. TITLE: BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK DETAIL (1) ARRIVAL SIDE

DATE OF ISSUE:	
05/03/2000	
DWG. NO.	SHEET NO.
F-P-5	238
DWG. STATUS	



2<sup>nd</sup> FLOOR PLAN  
SCALE 1:60

LEGEND

	SUPPLY (PVC PIPE CLASS 13.5)
	SANITARY DRAIN (PVC PIPE CLASS 8.5)
	DRAIN (PVC PIPE CLASS 8.5)
	VENT (PVC PIPE CLASS 8.5)
	DIAMETER OF PIPE (□ INCH)
	SAIFON

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

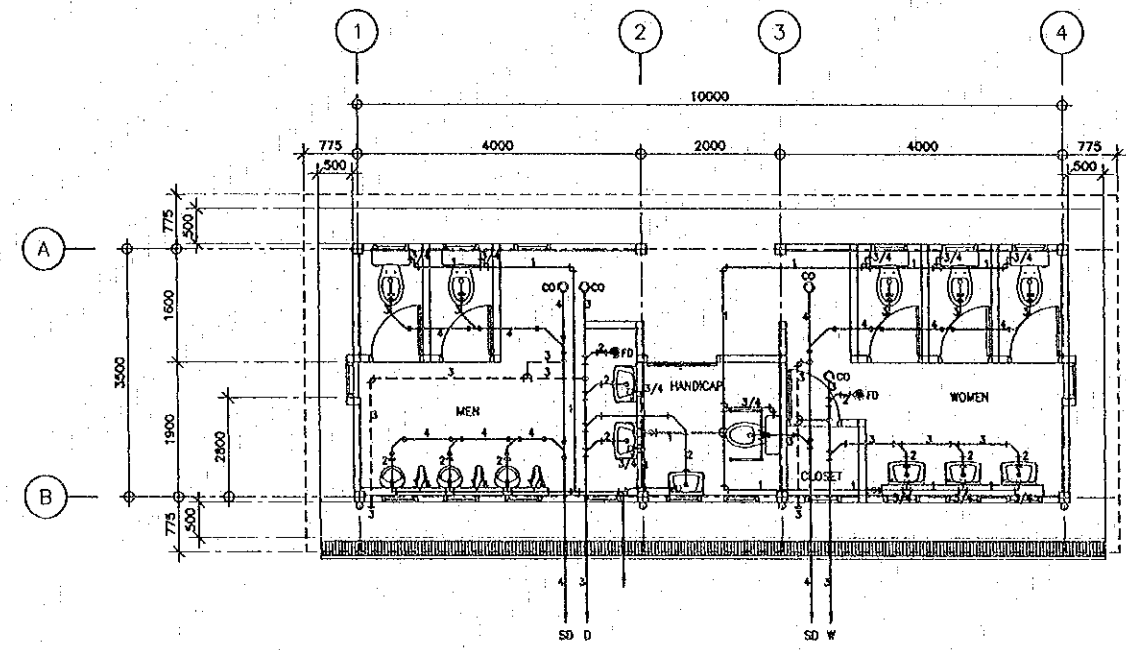
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takahashi	<i>T. Takahashi</i>	23/05/00
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	27/05/00
SUBMITTED	A. Horiuchi	<i>A. Horiuchi</i>	31/05/00
APPROVED	S. Temyabutra	<i>S. Temyabutra</i>	2/06/00

DWG. TITLE:  
**BORDER CONTROL FACILITIES THAILAND SIDE**  
**PLUMBING WORK DETAIL (2) ARRIVAL SIDE**

DATE OF ISSUE:		05/03/2000
DWG. NO.	F-P-6	SHEET NO. 239
DWG. STATUS		

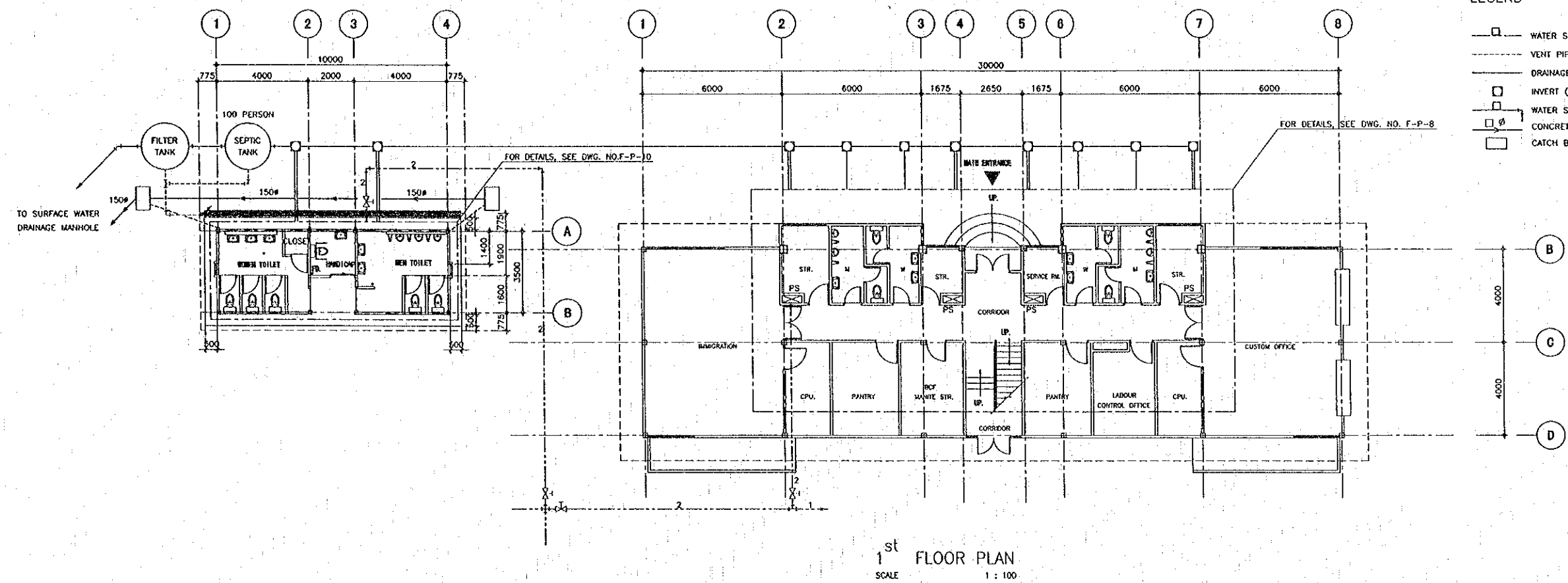
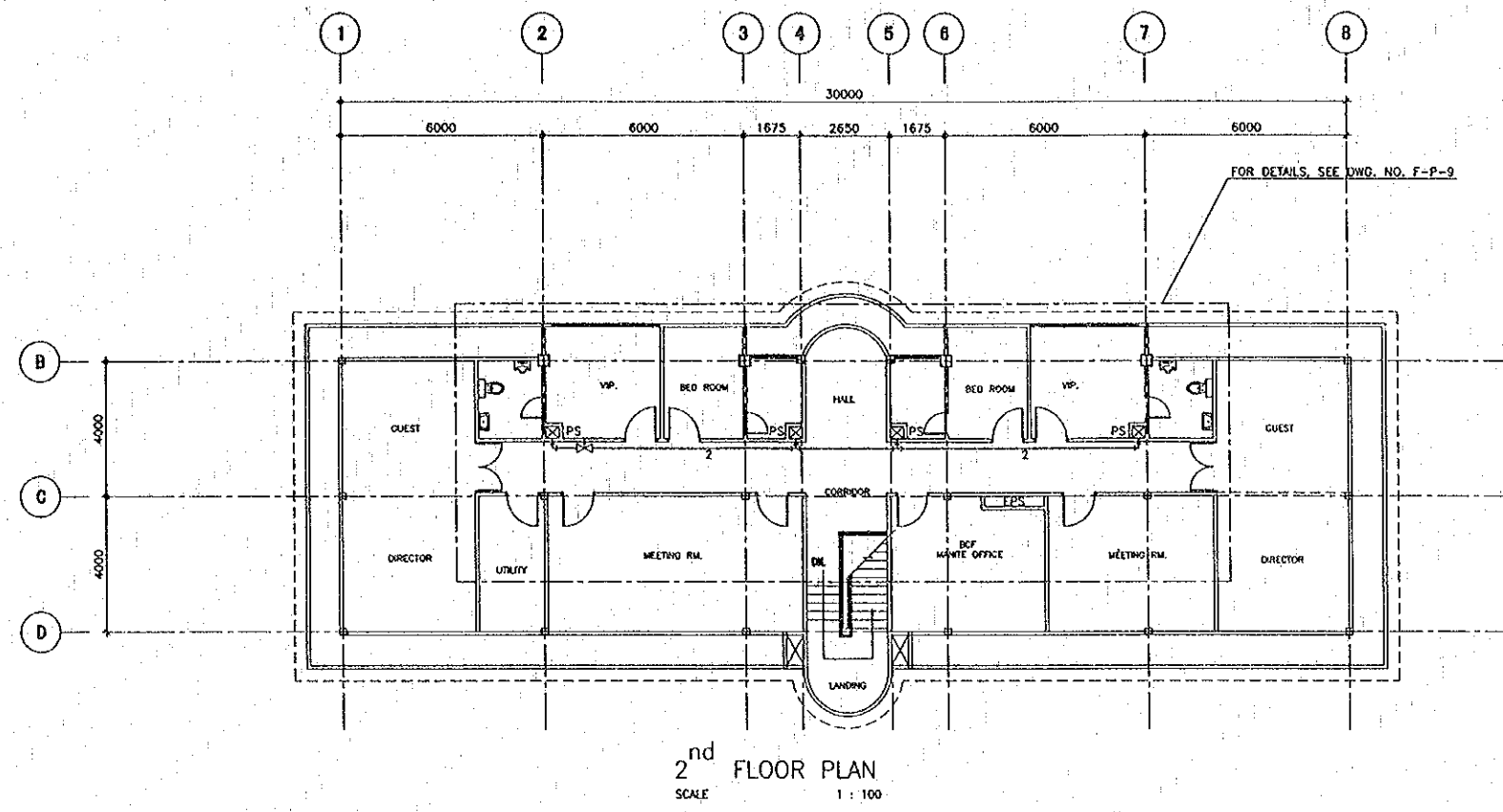


PUBLIC TOILET  
SCALE 1 : 50

LEGEND

- SUPPLY (PVC PIPE CLASS 13.5)
- SANITARY DRAIN (PVC PIPE CLASS 8.5)
- DRAIN (PVC PIPE CLASS 8.5)
- VENT (PVC PIPE CLASS 8.5)
- DIAMETER OF PIPE (□ INCH)
- SAFON

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	DESIGN	T. Takobunw	<i>T. Takobunw</i>	15-02-00	BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK DETAIL (3) ARRIVAL SIDE
				KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN CHECK	T. Mousitova	<i>T. Mousitova</i>	18-02-00		
					SUBMITTED	A. Hirani	<i>A. Hirani</i>	21/02/00		
					APPROVED	S. Tanjajubura	<i>S. Tanjajubura</i>	23/02/00		



- LEGEND
- WATER SUPPLY PIPE (PVC CLASS 13.5 □ INCH)
  - VENT PIPE (PVC CLASS 8.5 2 INCH)
  - DRAINAGE PIPE (PVC CLASS 8.5 4 INCH)
  - INVERT (900x900x1200)
  - WATER SUPPLY PIPE (PVC CLASS 13.5 □ INCH)
  - CONCRETE PIPE (φ □ mm)
  - CATCH BASIN (600x1000x1600)

REV.	DATE	DESCRIPTION	APPROVED

PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOKI CO., LTD.

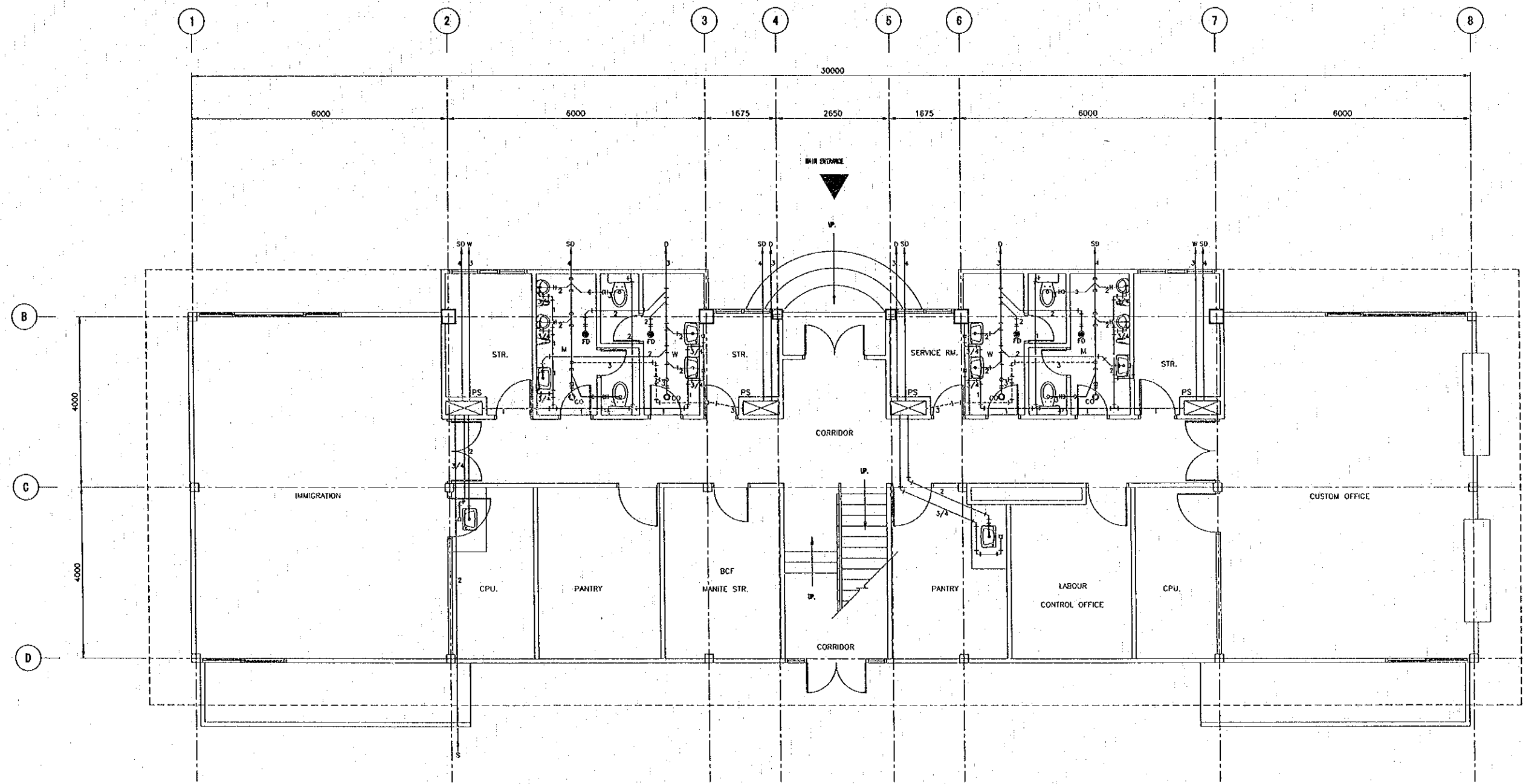
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takahashi	<i>T. Takahashi</i>	23-05-00
DESIGN CHECK	T. Matsuzawa	<i>T. Matsuzawa</i>	24-05-00
SUBMITTED	A. Hirota	<i>A. Hirota</i>	27-05-00
APPROVED	S. Tamayabara	<i>S. Tamayabara</i>	28-05-00

DWG. TITLE: BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK IN MAIN OFFICE & PUBLIC TOILET (DEPARTURE SIDE)

DATE OF ISSUE:		05/03/2000
DWG. NO.:	F-P-8	SHEET NO. 241
DWG. STATUS:		



1st FLOOR PLAN  
SCALE 1:40

LEGEND

	SUPPLY (PVC PIPE CLASS 13.5)
	SANITARY DRAIN (PVC PIPE CLASS 8.5)
	DRAIN (PVC PIPE CLASS 8.5)
	VENT (PVC PIPE CLASS 8.5)
	DIAMETER OF PIPE (□ INCH)
	SAFON

REV.	DATE	DESCRIPTION	APPROVED

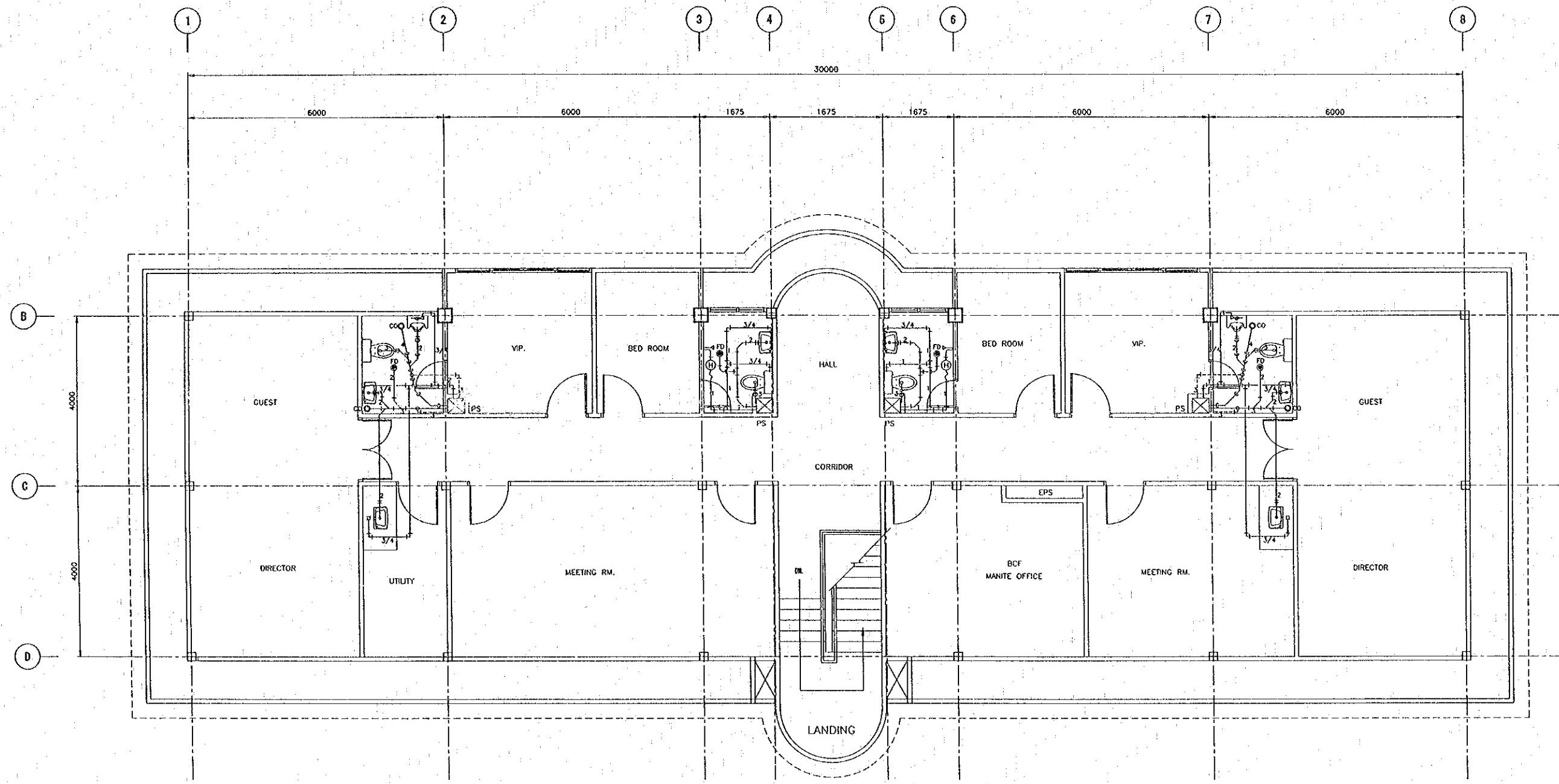
PROJECT STUDY TEAM  
 ORIENTAL CONSULTANTS CO., LTD.  
 In association with  
 NIPPON KOEI CO., LTD.

JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
DESIGN	T. Takobushi		23/05/00	BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK DETAIL (1) DEPARTURE SIDE
DESIGN CHECK	T. Masuzawa		24/05/00	
SUBMITTED	A. Hirotsu		24/05/00	
APPROVED	S. Temiyabutra		2/06/00	

DATE OF ISSUE: 05/03/2000	
DWG. NO. F-P-9	SHEET NO. 242
DWG. STATUS	



2<sup>nd</sup> FLOOR PLAN  
SCALE 1:40

LEGEND

- +— SUPPLY (PVC PIPE CLASS 13.5)
- +— SANITARY DRAIN (PVC PIPE CLASS 8.5)
- +— DRAIN (PVC PIPE CLASS 8.5)
- +— VENT (PVC PIPE CLASS 8.5)
- DIAMETER OF PIPE (□ INCH)
- +— SAIFON

REV.	DATE	DESCRIPTION	APPROVED

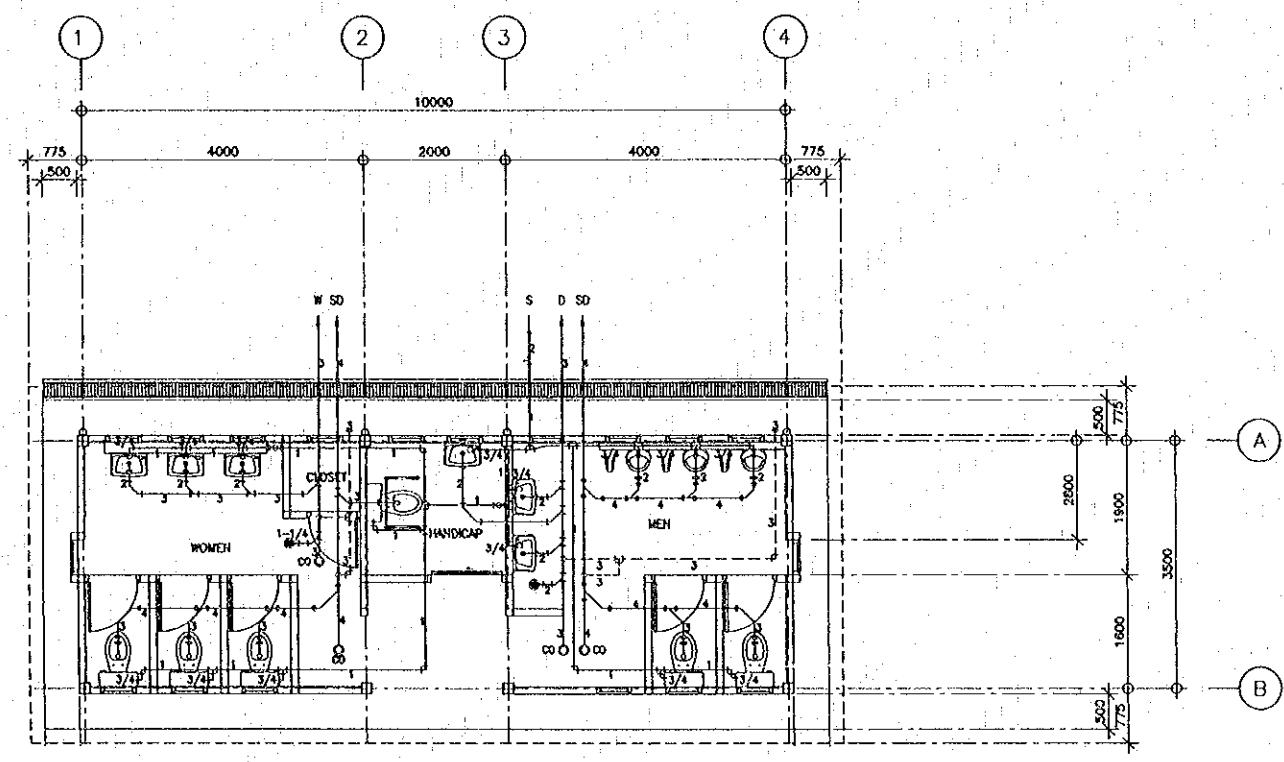
PROJECT STUDY TEAM  
**ORIENTAL CONSULTANTS CO., LTD.**  
 In association with  
**NIPPON KOEI CO., LTD.**

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 LAO PEOPLE'S DEMOCRATIC REPUBLIC  
 MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION  
 KINGDOM OF THAILAND  
 MINISTRY OF TRANSPORT AND COMMUNICATIONS  
 DEPARTMENT OF HIGHWAYS

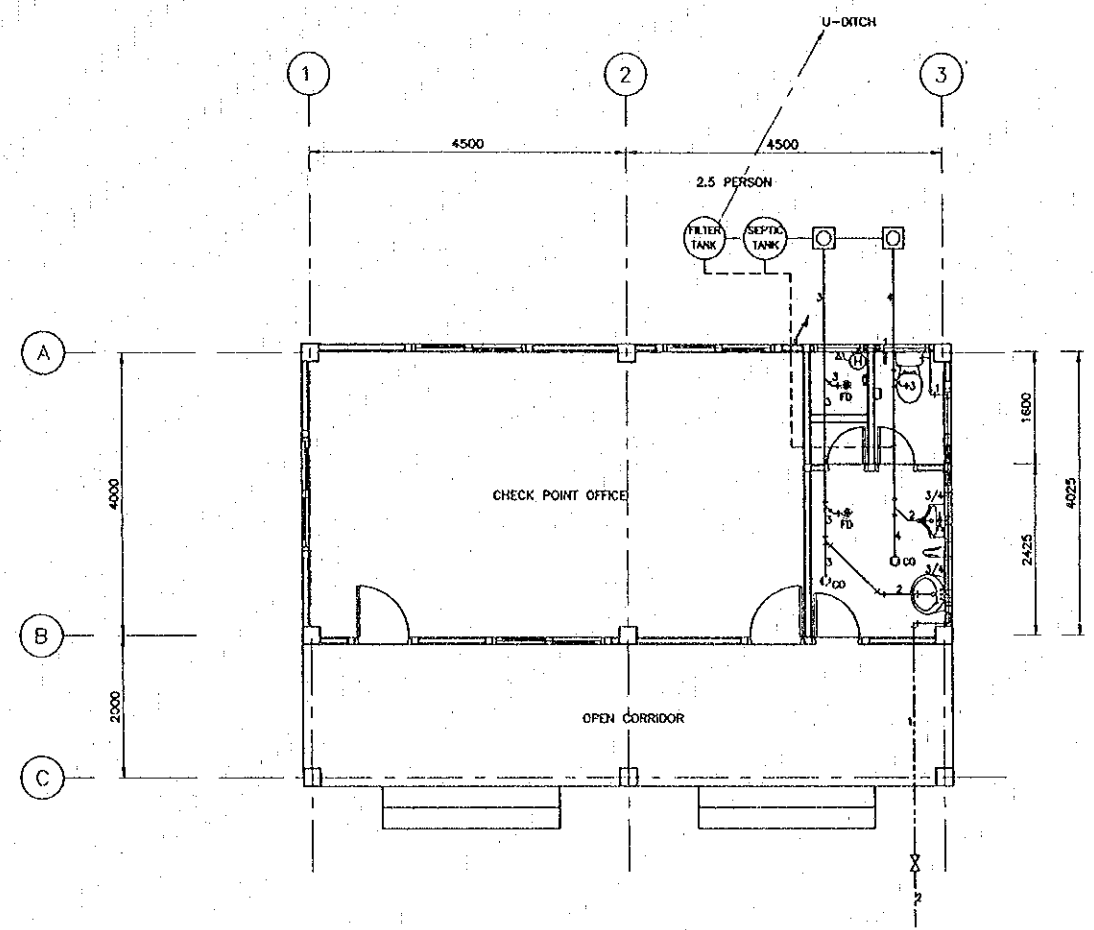
**THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

QUALITY RECORD	NAME	SIGNATURE	DATE
DESIGN	T. Takaoobushi	<i>T. Takaoobushi</i>	21-05-00
DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	21-05-00
SUBMITTED	A. Hirotoni	<i>A. Hirotoni</i>	21/05/00
APPROVED	S. Temyabutra	<i>S. Temyabutra</i>	21/05/00

DWG. TITLE: **BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK DETAIL (2) DEPARTURE SIDE**



**PUBLIC TOILET**  
 SCALE 1 : 50



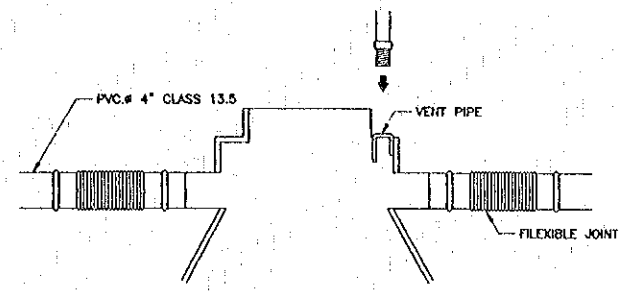
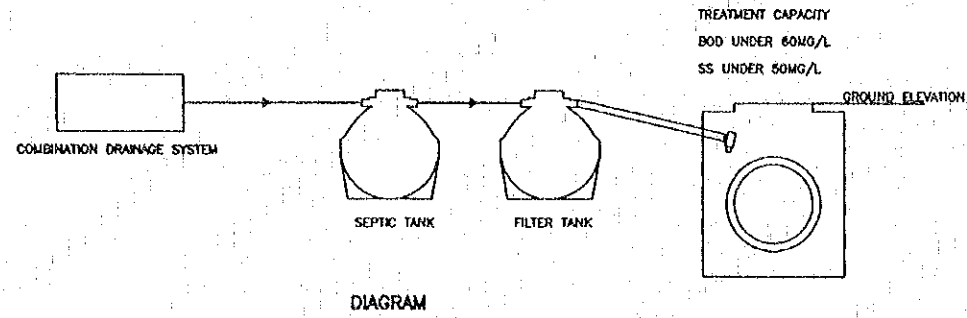
**CHECK POINT AND TOLL OFFICE 2**  
 SCALE 1 : 50

- LEGEND**
- SUPPLY (PVC PIPE CLASS 13.5)
  - SANITARY DRAIN (PVC PIPE CLASS 8.5)
  - DRAIN (PVC PIPE CLASS 8.5)
  - VENT (PVC PIPE CLASS 8.5)
  - DIAMETER OF PIPE (□ INCH)
  - SAIFON

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.		MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS			DESIGN	T. Tokaobashi	<i>T. Tokaobashi</i>	19/01/00	BORDER CONTROL FACILITIES THAILAND SIDE PLUMBING WORK DETAIL (3) DEPARTURE SIDE
								DESIGN CHECK	T. Masuzawa	<i>T. Masuzawa</i>	18/01/00		
								SUBMITTED	A. Hirakani	<i>A. Hirakani</i>	18/01/00		
								APPROVED	S. Tamiyobutra	<i>S. Tamiyobutra</i>	22/01/00		

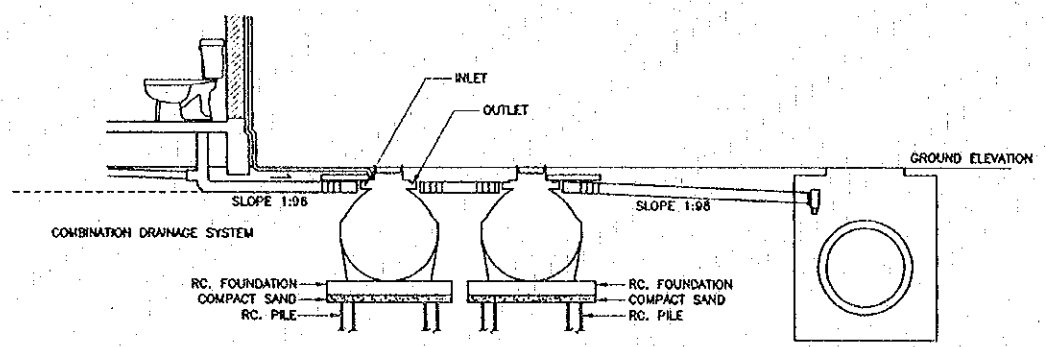






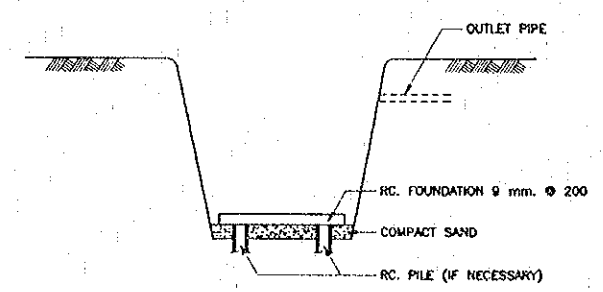
SEPTIC TANK

DETAIL OF THE CONNECTION OF INLET - OUTLET PIPE

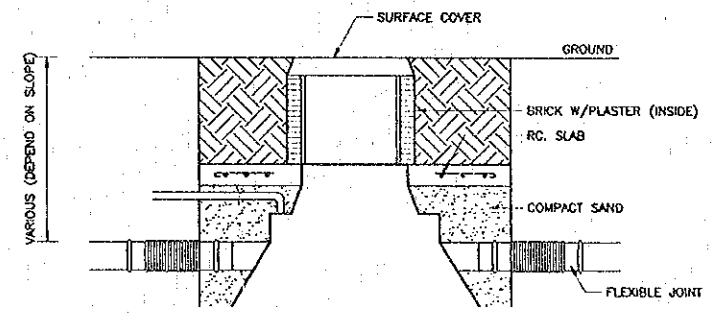


INSTALLATION

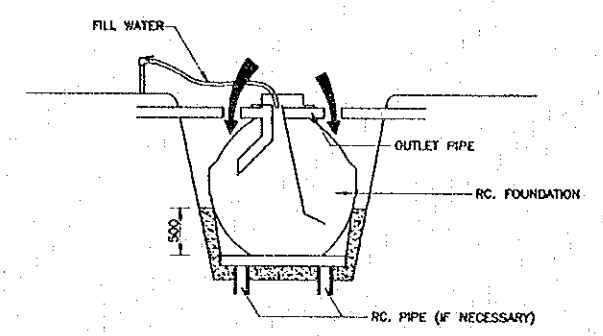
SURFACE WATER DRAIN PIPE AND MANHOLE DISCHARGE TO THE RIVER (CML WORK)



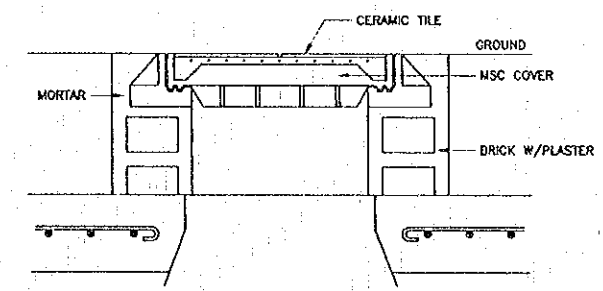
DETAIL OF DIGGING - HOLE FOR SEPTIC TANK



DETAIL OF SETTING THE TOP OF SEPTIC TANK IN POSITION



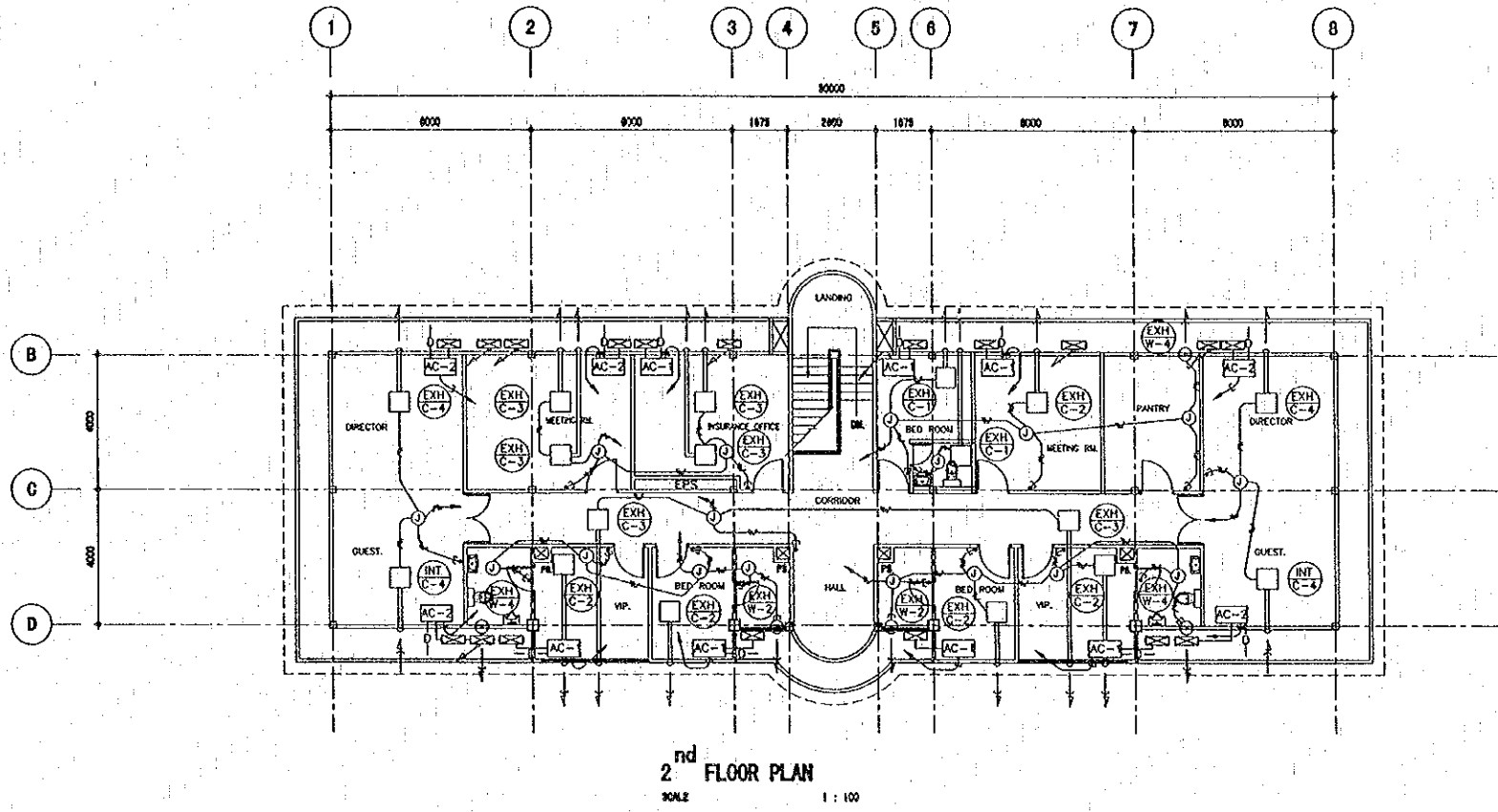
DETAIL OF THE INSTALLATION OF SEPTIC TANK



SEPTIC TANK

COVER INSTALLATION DETAIL

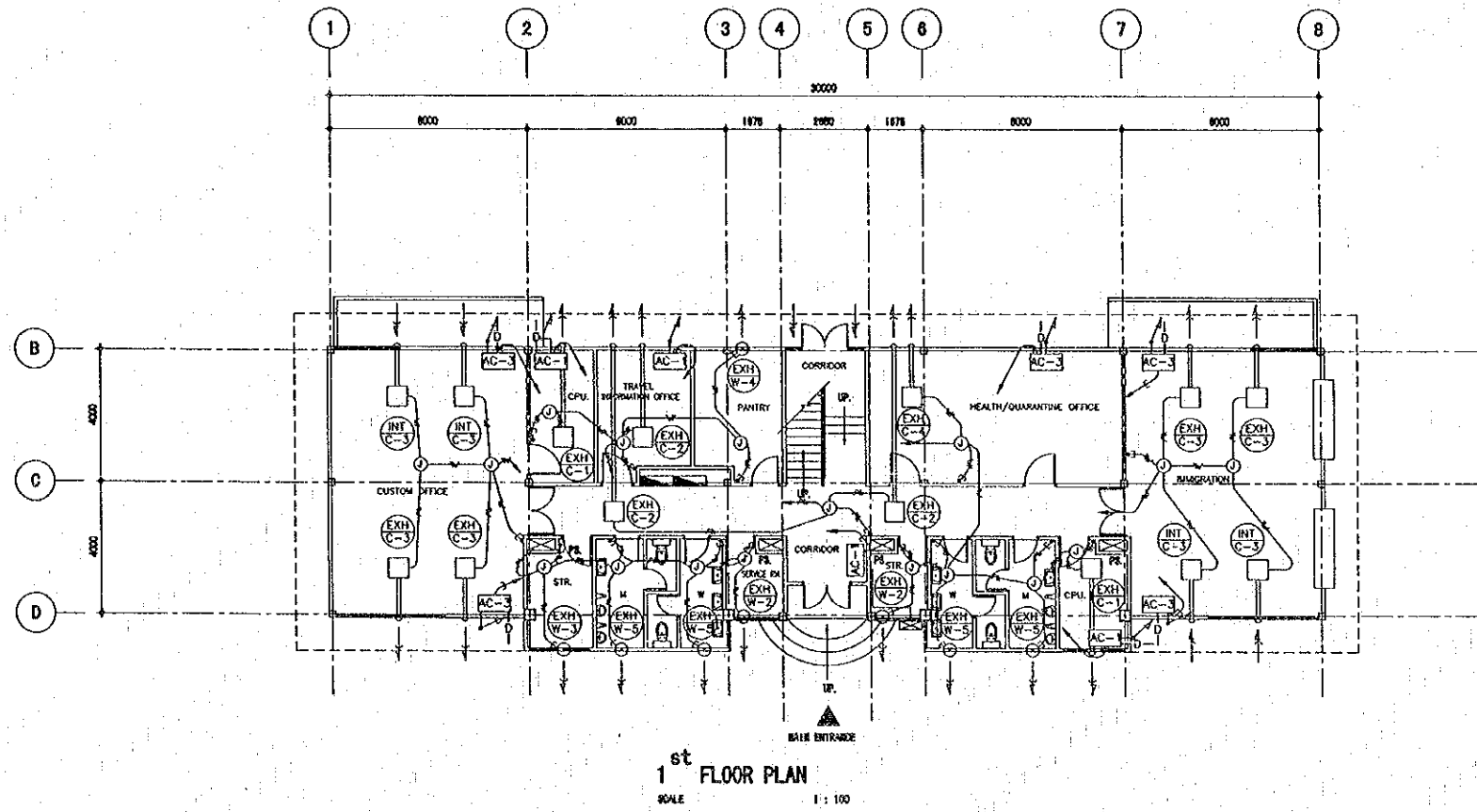
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE:
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOBİ CO., LTD.	JICA	LAO PEOPLE'S DEMOCRATIC REPUBLIC	MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION	KINGDOM OF THAILAND	MINISTRY OF TRANSPORT AND COMMUNICATIONS	DEPARTMENT OF HIGHWAYS	THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT	DESIGN	T. Tokobushi	[Signature]	11-02-00	BORDER CONTROL FACILITIES THAILAND SIDE WASTE WATER TREATMENT SYSTEM DETAILS
											DESIGN CHECK	T. Masuzawa	[Signature]	11-02-00		
											SUBMITTED	A. Hirotsu	[Signature]	11/02/00		
											APPROVED	S. Temyabutra	[Signature]	22/12/00		



- LEGEND**
- CONDENSATION UNIT FOR A/C
  - DRAIN PIPE
  - REFRIGERATOR PIPE AND CONTROL WIRE
  - TAMBLER SWITCH
  - PVC/PVC 2.5 SQ-3C (CONCEALED IN CEILING)
  - PVC/PVC 4 SQ-3C (CONCEALED IN CEILING)
  - CABLE IN WALL WITH CONDUIT (PFLEX-CD 22)
  - JUNCTION BOX

LIST OF AIR-CONDITIONER

ITEM	SEPCIFICATION	COOLING CAPACITY (BTU/HR)
AC-1	SPRIT FLOOR MOUNTED TYPE	12,500
AC-2	SPRIT FLOOR MOUNTED TYPE	18,000
AC-3	SPRIT FLOOR MOUNTED TYPE	22,200

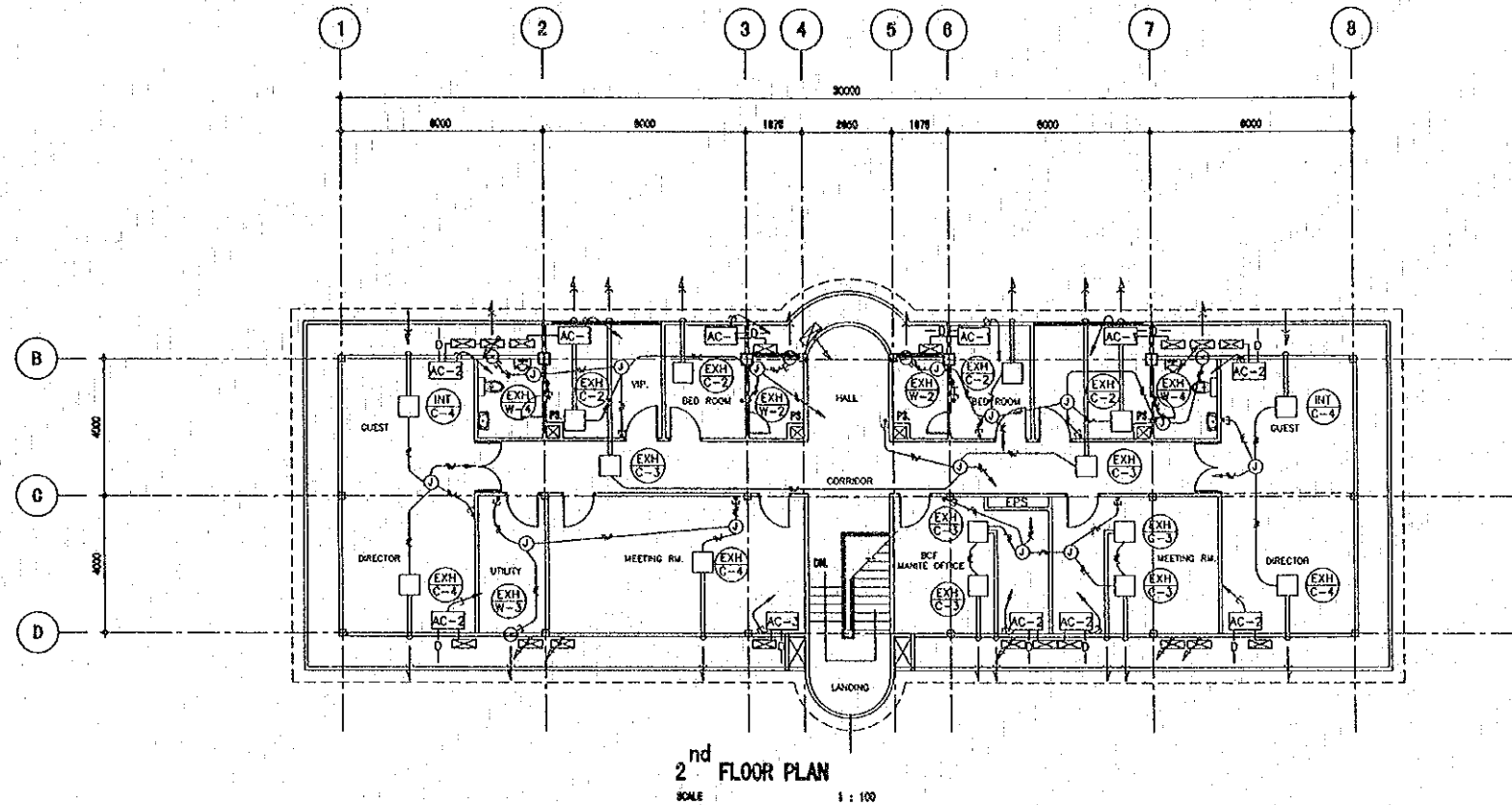


LIST OF VENTILATION

ITEM	SEPCIFICATION	VENTILATING VOLUME (M3/HR)
EXH C-1	CEILING MOUNTED TYPE EXHAUST	70
EXH C-2	CEILING MOUNTED TYPE EXHAUST	130
EXH C-3	CEILING MOUNTED TYPE EXHAUST	190
INT C-3	CEILING MOUNTED TYPE INTAKE	190
EXH C-4	CEILING MOUNTED TYPE EXHAUST	250
INT C-4	CEILING MOUNTED TYPE INTAKE	250
EXH C-5	CEILING MOUNTED TYPE EXHAUST	400
EXH W-1	WALL MOUNTED TYPE EXHAUST	40
EXH W-2	WALL MOUNTED TYPE EXHAUST	80
EXH W-3	WALL MOUNTED TYPE EXHAUST	130
EXH W-4	WALL MOUNTED TYPE EXHAUST	200
EXH W-5	WALL MOUNTED TYPE EXHAUST	370
EXH W-6	WALL MOUNTED TYPE EXHAUST	720

**NOTE**  
 ALL CONDENSATION UNIT FOR A/C SHALL BE INSTALLED ON THE UPSTAIR VERANDA

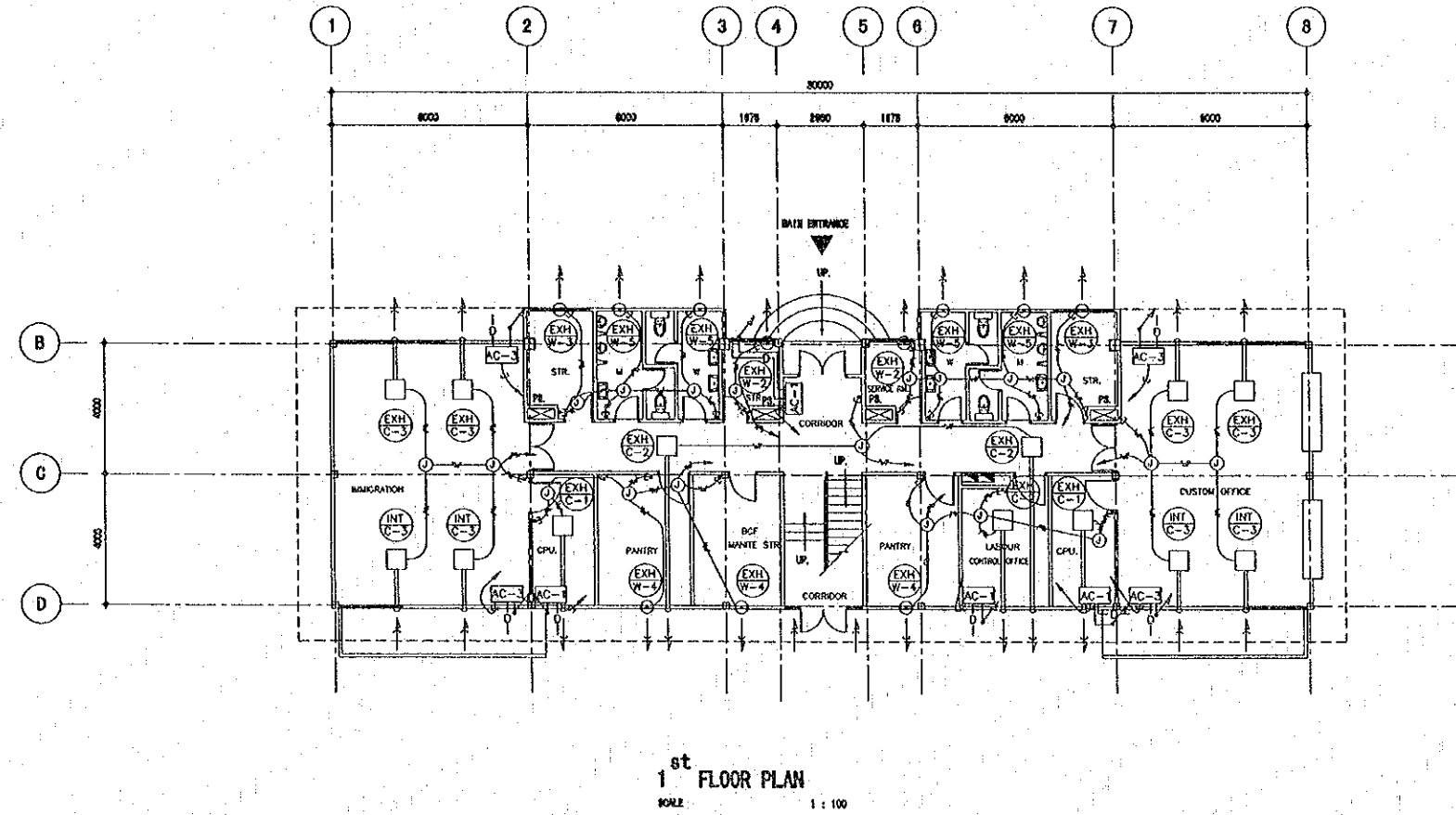
REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JAPAN INTERNATIONAL COOPERATION AGENCY LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	QUANTITY RECORD DESIGN DESIGN CHECK SUBMITTED APPROVED	NAME T. Takobushu T. Masuzawa A. Hirakani S. Taniyabutra	SIGNATURE 	DATE 2/13/00 2/15/00 2/16/00 2/08/00	DWG. TITLE: <b>BORDER CONTROL FACILITIES          THAILAND SIDE          PLAN OF AIR-CONDITIONER &amp; VENTILATION IN MAIN OFFICE          (ARRIVAL SIDE)</b>
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- LEGEND**
- CONDENSION UNIT FOR A/C
  - DRAIN PIPE
  - REFRIGERATOR PIPE AND CONTROL WIRE
  - TAMBLER SWITCH
  - PVC/PVC 2.5 SQ-3C (CONCEALED IN CEILING)
  - PVC/PVC 4 SQ-3C (CONCEALED IN CEILING)
  - CABLE IN WALL WITH CONDUIT (PFLEX-CD 22)
  - JUNCTION BOX

**LIST OF AIR-CONDITIONER**

ITEM	SEPCIFICATION	COOLING CAPACITY (BTU/HR)
AC-1	SPRIT FLOOR MOUNTED TYPE	12,500
AC-2	SPRIT FLOOR MOUNTED TYPE	18,000
AC-3	SPRIT FLOOR MOUNTED TYPE	22,200



**LIST OF VENTILATION**

ITEM	SEPCIFICATION	VENTILATING VOLUME (M <sup>3</sup> /HR)
EXH C-1	CEILING MOUNTED TYPE EXHAUST	70
EXH C-2	CEILING MOUNTED TYPE EXHAUST	130
EXH C-3	CEILING MOUNTED TYPE EXHAUST	190
INT C-3	CEILING MOUNTED TYPE INTAKE	190
EXH C-4	CEILING MOUNTED TYPE EXHAUST	250
INT C-4	CEILING MOUNTED TYPE INTAKE	250
EXH C-5	CEILING MOUNTED TYPE EXHAUST	400
EXH W-1	WALL MOUNTED TYPE EXHAUST	40
EXH W-2	WALL MOUNTED TYPE EXHAUST	80
EXH W-3	WALL MOUNTED TYPE EXHAUST	130
EXH W-4	WALL MOUNTED TYPE EXHAUST	200
EXH W-5	WALL MOUNTED TYPE EXHAUST	370
EXH W-6	WALL MOUNTED TYPE EXHAUST	720

**NOTE**  
 ALL CONDENSION UNIT FOR A/C SHALL BE INSTALLED ON THE UPSTAIR VERADA

REV.	DATE	DESCRIPTION	APPROVED	PROJECT STUDY TEAM	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	QUALITY RECORD	NAME	SIGNATURE	DATE	DWG. TITLE
				ORIENTAL CONSULTANTS CO., LTD. In association with NIPPON KOEI CO., LTD.	LAO PEOPLE'S DEMOCRATIC REPUBLIC MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION KINGDOM OF THAILAND MINISTRY OF TRANSPORT AND COMMUNICATIONS DEPARTMENT OF HIGHWAYS	DESIGN	T. Tokobushi		23/03/00	<b>BORDER CONTROL FACILITIES            THAILAND SIDE            PLAN OF AIR-CONDITIONER &amp; VENTILATION IN MAIN OFFICE            (DEPARTURE SIDE)</b>
						DESIGN CHECK	T. Masuzawa		24/03/00	
						SUBMITTED	A. Hiratani		27/03/00	
						APPROVED	S. Tanjavaltra		2/05/00	

