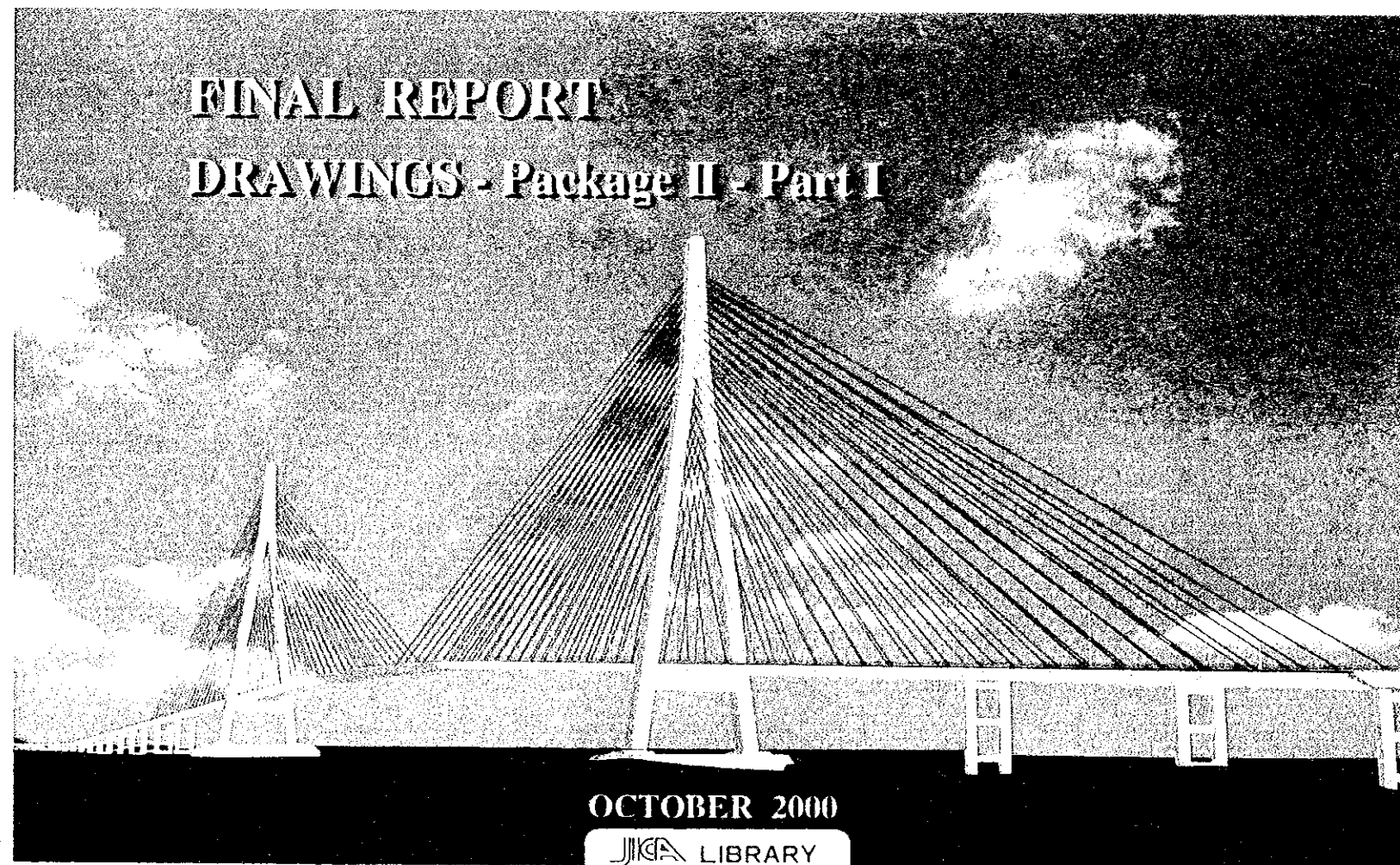


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY OF TRANSPORT
SOCIALIST REPUBLIC OF VIET NAM

THE DETAILED DESIGN
ON
THE CAN THO BRIDGE CONSTRUCTION
IN
SOCIALIST REPUBLIC OF VIET NAM



NIPTON KOGI CO. LTD.

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY OF TRANSPORT
SOCIALIST REPUBLIC OF VIET NAM

**THE DETAILED DESIGN
ON
THE CAN THO BRIDGE CONSTRUCTION
IN
SOCIALIST REPUBLIC OF VIET NAM**

FINAL REPORT

DRAWINGS - Package II - Part I

OCTOBER 2000

NIPPON KOEI CO., LTD.



1161223 (1)

**THE DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT
IN SOCIALIST REPUBLIC OF VIET NAM**

CAN THO BRIDGE CONSTRUCTION PROJECT

PACKAGE 2

CABLE STAYED BRIDGE

OCTOBER - 2000

NIPPON KOEI Co., Ltd.

in association with

TRANSPORT ENGINEERING DESIGN INC. SOUTH

DRAWING LIST (1)

DRAWING No.	DRAWING TITLE
GENERAL	
P2/GE/0010	DRAWING LIST (1)
P2/GE/0020	DRAWING LIST (2)
P2/GE/0030	DRAWING LIST (3)
P2/GE/0040	LOCATION MAP
P2/GE/0050	GENERAL VIEW (1)
P2/GE/0060	GENERAL VIEW (2)
P2/GE/0070	STRUCTURAL NOTE
P2/GE/0080	COORDINATE OF CABLE STAYED BRIDGE
SUPERSTRUCTURE-1 (PRECAST BOX GIRDER)	
P2/CS/0010	DETAIL OF PRECAST SEGMENT (1)
P2/CS/0011	DETAIL OF PRECAST SEGMENT (2)
P2/CS/0012	DETAIL OF PRECAST SEGMENT (3)
P2/CS/0013	DETAIL OF PRECAST SEGMENT (4)
P2/CS/0020	ARRANGEMENT OF SEGMENT (1)
P2/CS/0030	ARRANGEMENT OF SEGMENT (2)
P2/CS/0040	ARRANGEMENT OF SEGMENT (3)
P2/CS/0050	ARRANGEMENT OF SEGMENT (4)
P2/CS/0060	ARRANGEMENT OF SEGMENT (5)
P2/CS/0070	ARRANGEMENT OF SEGMENT (6)
P2/CS/0080	ARRANGEMENT OF SEGMENT (7)
P2/CS/0090	ARRANGEMENT OF SEGMENT (8)
P2/CS/0100	PC TENDON ARRANGEMENT OF GIRDER (1)
P2/CS/0110	PC TENDON ARRANGEMENT OF GIRDER (2)
P2/CS/0120	PC TENDON ARRANGEMENT OF GIRDER (3)
P2/CS/0130	PC TENDON ARRANGEMENT OF GIRDER (4)
P2/CS/0140	PC TENDON ARRANGEMENT OF GIRDER (5)
P2/CS/0150	PC TENDON ARRANGEMENT OF GIRDER (6)
P2/CS/0160	PC TENDON ARRANGEMENT OF GIRDER (7)
P2/CS/0170	PC BAR ARRANGEMENT OF GIRDER (1)
P2/CS/0180	PC BAR ARRANGEMENT OF GIRDER (2)
P2/CS/0190	PC BAR ARRANGEMENT OF GIRDER (3)
P2/CS/0200	PC BAR ARRANGEMENT OF GIRDER (4)
P2/CS/0210	PC BAR ARRANGEMENT OF GIRDER (5)
P2/CS/0220	PC BAR ARRANGEMENT OF GIRDER (6)
P2/CS/0230	TRANSVERSE PRESTRESSING (1)
P2/CS/0240	TRANSVERSE PRESTRESSING (2)
P2/CS/0250	TRANSVERSE PRESTRESSING (3)
P2/CS/0260	TRANSVERSE PRESTRESSING (4)
P2/CS/0270	TRANSVERSE PRESTRESSING (5)
P2/CS/0280	TRANSVERSE PRESTRESSING (6)
P2/CS/0290	TRANSVERSE PRESTRESSING (7)
P2/CS/0300	BAR ARRANGEMENT SCHEDULE OF SEGMENT
P2/CS/0310	BAR ARRANGEMENT OF SEGMENT TYPE-1 (1)
P2/CS/0320	BAR ARRANGEMENT OF SEGMENT TYPE-1 (2)
P2/CS/0330	BAR ARRANGEMENT OF SEGMENT TYPE-1 (3)
P2/CS/0340	BAR ARRANGEMENT OF SEGMENT TYPE-2 (1)
P2/CS/0350	BAR ARRANGEMENT OF SEGMENT TYPE-2 (2)
P2/CS/0360	BAR ARRANGEMENT OF SEGMENT TYPE-2 (3)



DRAWING No.	DRAWING TITLE
SUPERSTRUCTURE-1 (PRECAST BOX GIRDER)	
	CONTINUED
P2/CS/0370	BAR ARRANGEMENT OF SEGMENT TYPE-3 (1)
P2/CS/0380	BAR ARRANGEMENT OF SEGMENT TYPE-3 (2)
P2/CS/0390	BAR ARRANGEMENT OF SEGMENT TYPE-3 (3)
P2/CS/0400	BAR ARRANGEMENT OF SEGMENT TYPE-4 (1)
P2/CS/0410	BAR ARRANGEMENT OF SEGMENT TYPE-4 (2)
P2/CS/0420	BAR ARRANGEMENT OF SEGMENT TYPE-4 (3)
P2/CS/0430	BAR ARRANGEMENT OF SEGMENT TYPE-5 (1)
P2/CS/0440	BAR ARRANGEMENT OF SEGMENT TYPE-5 (2)
P2/CS/0450	BAR ARRANGEMENT OF SEGMENT TYPE-5 (3)
P2/CS/0460	BAR ARRANGEMENT OF SEGMENT TYPE-6 (1)
P2/CS/0470	BAR ARRANGEMENT OF SEGMENT TYPE-6 (2)
P2/CS/0480	BAR ARRANGEMENT OF SEGMENT TYPE-6 (3)
P2/CS/0490	BAR ARRANGEMENT OF SEGMENT TYPE-7 (1)
P2/CS/0500	BAR ARRANGEMENT OF SEGMENT TYPE-7 (2)
P2/CS/0510	BAR ARRANGEMENT OF SEGMENT TYPE-7 (3)
P2/CS/0520	BAR ARRANGEMENT OF SEGMENT TYPE-8 (1)
P2/CS/0530	BAR ARRANGEMENT OF SEGMENT TYPE-8 (2)
P2/CS/0540	BAR ARRANGEMENT OF SEGMENT TYPE-8 (3)
P2/CS/0550	BAR ARRANGEMENT OF SEGMENT TYPE-9 (1)
P2/CS/0560	BAR ARRANGEMENT OF SEGMENT TYPE-9 (2)
P2/CS/0570	BAR ARRANGEMENT OF SEGMENT TYPE-9 (3)
P2/CS/0580	BAR ARRANGEMENT OF SEGMENT TYPE-10 (1)
P2/CS/0590	BAR ARRANGEMENT OF SEGMENT TYPE-10 (2)
P2/CS/0600	BAR ARRANGEMENT OF SEGMENT TYPE-10 (3)
P2/CS/0610	BAR ARRANGEMENT OF SEGMENT TYPE-11 (1)
P2/CS/0620	BAR ARRANGEMENT OF SEGMENT TYPE-11 (2)
P2/CS/0630	BAR ARRANGEMENT OF SEGMENT TYPE-11 (3)
P2/CS/0640	BAR ARRANGEMENT OF SEGMENT TYPE-12 (1)
P2/CS/0650	BAR ARRANGEMENT OF SEGMENT TYPE-12 (2)
P2/CS/0660	BAR ARRANGEMENT OF SEGMENT TYPE-12 (3)
P2/CS/0670	BAR ARRANGEMENT OF SEGMENT TYPE-13 (1)
P2/CS/0680	BAR ARRANGEMENT OF SEGMENT TYPE-13 (2)
P2/CS/0690	BAR ARRANGEMENT OF SEGMENT TYPE-13 (3)
P2/CS/0700	DETAIL OF ANCHORAGE FOR GIRDER (1)
P2/CS/0710	DETAIL OF ANCHORAGE FOR GIRDER (2)
P2/CS/0720	BAR ARRANGEMENT OF ANCHORAGE FOR GIRDER(1)
P2/CS/0730	BAR ARRANGEMENT OF ANCHORAGE FOR GIRDER(2)
P2/CS/0740	BAR ARRANGEMENT OF DIAPHRAGM (1)
P2/CS/0750	BAR ARRANGEMENT OF DIAPHRAGM (2)
P2/CS/0760	BAR ARRANGEMENT OF DIAPHRAGM (3)
P2/CS/0770	BAR ARRANGEMENT OF DIAPHRAGM (4)
P2/CS/0780	ANCHORAGE FOR STAY CABLE ON GIRDER (1)
P2/CS/0790	ANCHORAGE FOR STAY CABLE ON GIRDER (2)
P2/CS/0800	ANCHORAGE FOR STAY CABLE ON GIRDER (3)
P2/CS/0810	BAR ARRANGEMENT OF ANCHORAGE

PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOBİ CO.,LTD.	NAME	S. Kiguchi	K. Matsumoto	CABLE STAYED BRIDGE GENERAL DRAWING LIST (1)	P2/GE/0010
				SIGNATURE	<i>S. Kiguchi</i>	<i>K. Matsumoto</i>		
				DATE	20/9/2000	29/9/2000		

DRAWING LIST (2)

DRAWING No.	
SUPERSTRUCTURE-2	
(STEEL BOX GIRDER)	
P2/CS/1010	GENERAL ARRANGEMENT OF STEEL GIRDER (1)
P2/CS/1020	GENERAL ARRANGEMENT OF STEEL GIRDER (2)
P2/CS/1030	GENERAL ARRANGEMENT OF STEEL GIRDER (3)
P2/CS/1040	GENERAL ARRANGEMENT OF STEEL GIRDER (4)
P2/CS/1050	GENERAL ARRANGEMENT OF STEEL GIRDER (5)
P2/CS/1060	DETAIL OF STEEL GIRDER (1)
P2/CS/1070	DETAIL OF STEEL GIRDER (2)
P2/CS/1080	DETAIL OF STEEL GIRDER (3)
P2/CS/1090	DETAIL OF STEEL GIRDER (4)
P2/CS/1100	DETAIL OF STEEL GIRDER (5)
P2/CS/1110	DETAIL OF STEEL GIRDER (6)
P2/CS/1120	DETAIL OF STEEL GIRDER (7)
P2/CS/1130	DETAIL OF STEEL GIRDER (8)
P2/CS/1140	DETAIL OF STEEL GIRDER (9)
P2/CS/1150	DETAIL OF STEEL GIRDER (10)
P2/CS/1160	DETAIL OF STEEL GIRDER (11)
P2/CS/1170	DETAIL OF STEEL GIRDER (12)
P2/CS/1180	DETAIL OF STEEL GIRDER (13)
P2/CS/1190	DETAIL OF STEEL GIRDER (14)
P2/CS/1200	DETAIL OF STEEL GIRDER (15)
P2/CS/1210	DETAIL OF STEEL GIRDER (16)
P2/CS/1220	DETAIL OF STEEL GIRDER (17)
P2/CS/1230	DETAIL OF STEEL GIRDER (18)
P2/CS/1240	DETAIL OF CONNECTION GIRDER (1)
P2/CS/1250	DETAIL OF CONNECTION GIRDER (2)
P2/CS/1260	DETAIL OF CONNECTION GIRDER (3)
P2/CS/1270	DETAIL OF CONNECTION GIRDER (4)
P2/CS/1280	DETAIL OF CONNECTION GIRDER (5)
STAY CABLE	
P2/CS/2010	ARRANGEMENT OF STAY CABLE (1)
P2/CS/2020	ARRANGEMENT OF STAY CABLE (2)
P2/CS/2030	DETAIL OF STAY CABLE (1)
P2/CS/2040	DETAIL OF STAY CABLE (2)
P2/CS/2050	DETAIL OF STAY CABLE (3)
P2/CS/2060	ARRANGEMENT OF DAMPING DEVICE
P2/CS/2070	DETAIL OF DAMPING DEVICE



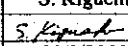
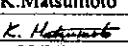
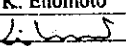
DRAWING No.		DRAWING TITLE
PYLON		
P2/CS/3010	GENERAL ARRANGEMENT OF PYLON (1)	
P2/CS/3020	GENERAL ARRANGEMENT OF PYLON (2)	
P2/CS/3030	GENERAL ARRANGEMENT OF PYLON (3)	
P2/CS/3040	GENERAL ARRANGEMENT OF PYLON (4)	
P2/CS/3050	GENERAL ARRANGEMENT OF PYLON (5)	
P2/CS/3060	GENERAL ARRANGEMENT OF PYLON (6)	
P2/CS/3070	GENERAL ARRANGEMENT OF PYLON (7)	
P2/CS/3080	GENERAL ARRANGEMENT OF PYLON (8)	
P2/CS/3090	GENERAL ARRANGEMENT OF PYLON (9)	
P2/CS/3100	BAR ARRANGEMENT OF PYLON (1)	
P2/CS/3110	BAR ARRANGEMENT OF PYLON (2)	
P2/CS/3120	BAR ARRANGEMENT OF PYLON (3)	
P2/CS/3130	BAR ARRANGEMENT OF PYLON (4)	
P2/CS/3140	BAR ARRANGEMENT OF PYLON (5)	
P2/CS/3150	BAR ARRANGEMENT OF PYLON (6)	
P2/CS/3160	BAR ARRANGEMENT OF PYLON (7)	
P2/CS/3170	BAR ARRANGEMENT OF PYLON (8)	
P2/CS/3180	BAR ARRANGEMENT OF PYLON (9)	
P2/CS/3190	BAR ARRANGEMENT OF PYLON (10)	
P2/CS/3200	BAR ARRANGEMENT OF PYLON (11)	
P2/CS/3210	BAR ARRANGEMENT OF PYLON (12)	
P2/CS/3220	BAR ARRANGEMENT OF PYLON (13)	
P2/CS/3230	PC-STEEL ARRANGEMENT OF PYLON	
P2/CS/3240	STRUCTURAL STEEL OF PYLON (1)	
P2/CS/3250	STRUCTURAL STEEL OF PYLON (2)	
P2/CS/3260	STRUCTURAL STEEL OF PYLON (3)	
P2/CS/3270	STRUCTURAL STEEL OF PYLON (4)	
P2/CS/3280	STRUCTURAL STEEL OF PYLON (5)	
SUB-STRUCTURE		
P2/CS/4010	PILE CAP OF NORTHERN PYLON	
P2/CS/4020	PILE CAP OF SOUTHERN PYLON (1)	
P2/CS/4030	PILE CAP OF SOUTHERN PYLON (2)	
P2/CS/4040	BAR ARRANGEMENT OF PILE CAP (1)	
P2/CS/4050	BAR ARRANGEMENT OF PILE CAP (2)	
P2/CS/4060	BAR ARRANGEMENT OF PILE CAP (3)	
P2/CS/4070	BAR ARRANGEMENT OF PILE CAP (4)	
P2/CS/4080	BAR ARRANGEMENT OF PILE CAP (5)	
P2/CS/4090	BAR ARRANGEMENT OF PILE CAP (6)	
P2/CS/4100	BAR ARRANGEMENT OF PILE CAP (7)	
P2/CS/4110	BAR ARRANGEMENT OF PILE CAP (8)	
P2/CS/4120	BAR ARRANGEMENT OF PILE CAP (9)	
P2/CS/4130	BAR ARRANGEMENT OF PILE CAP (10)	
P2/CS/4140	BAR ARRANGEMENT OF PILE CAP (11)	
P2/CS/4150	BAR ARRANGEMENT OF PILE CAP (12)	
P2/CS/4160	BAR ARRANGEMENT OF PILE CAP (13)	
P2/CS/4170	BAR ARRANGEMENT OF PILE CAP (14)	

PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	 NIPPON KOEI CO.,LTD.	NAME S. Kiguchi SIGNATURE <i>S. Kiguchi</i> DATE 20/9/2000	NAME K. Matsumoto SIGNATURE <i>K. Matsumoto</i> DATE 29/9/2000	NAME K. Enomoto SIGNATURE <i>K. Enomoto</i> DATE 5/10/2000	CABLE STAYED BRIDGE GENERAL DRAWING LIST (2)	P2/CS/0020

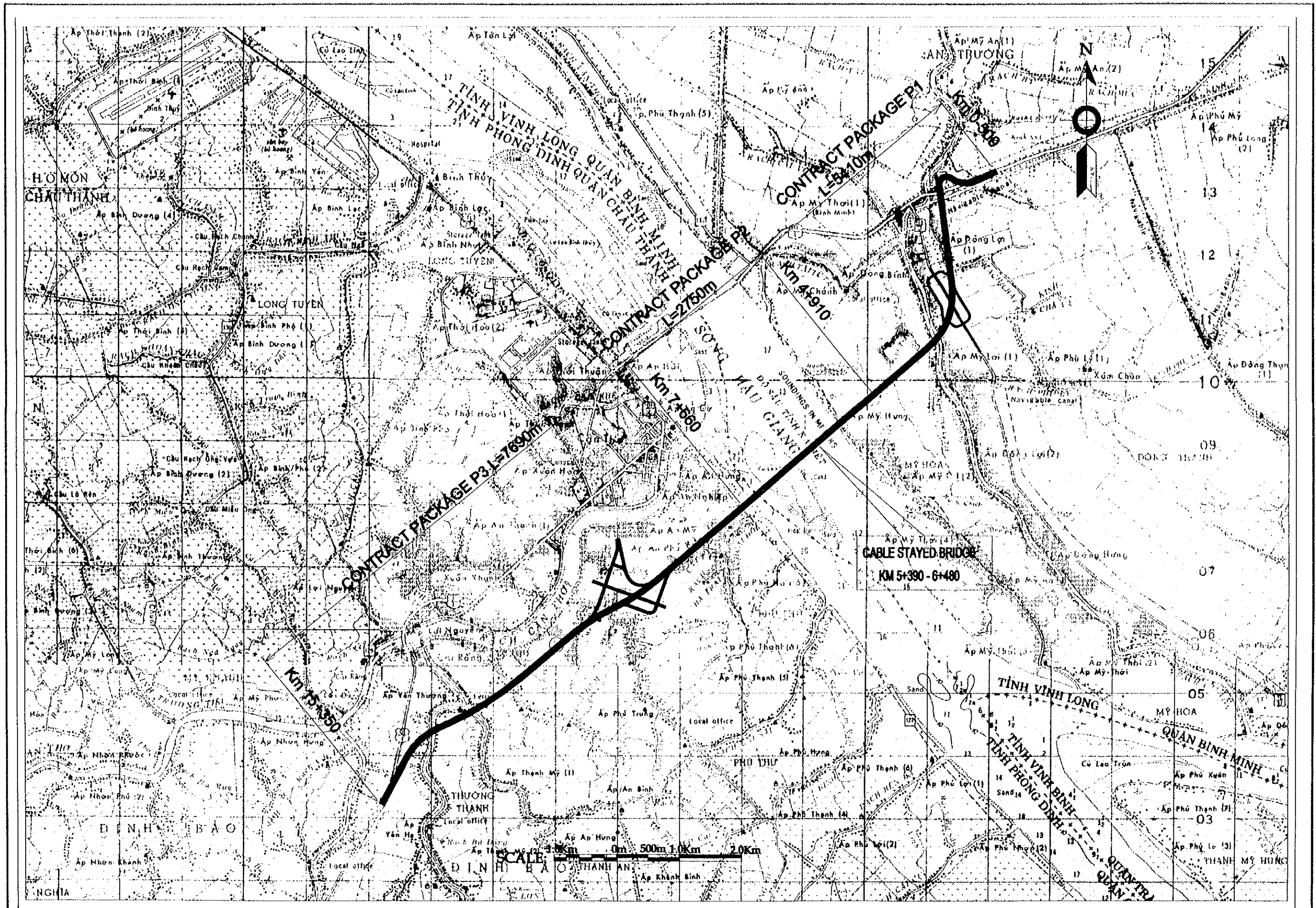
DRAWING LIST (3)



DRAWING No.	DRAWING TITLE	
	SUB-STRUCTURE	CONTINUED
P2/CS/4180	BAR ARRANGEMENT OF PILE CAP (15)	
P2/CS/4190	BAR ARRANGEMENT OF PILE CAP (16)	
P2/CS/4200	BAR ARRANGEMENT OF PILE CAP (17)	
P2/CS/4210	BAR ARRANGEMENT OF PILE CAP (18)	
P2/CS/4220	BAR ARRANGEMENT OF PILE CAP (19)	
P2/CS/4230	BAR ARRANGEMENT OF PILE CAP (20)	
P2/CS/4240	DETAIL OF PILE	
P2/CS/4250	BAR ARRANGEMENT OF PILE	
P2/CS/4260	GENERAL VIEW OF PIER No.12	
P2/CS/4270	REINFORCEMENT ARRANGEMENT OF PIER No.12 (SHEET 1)	
P2/CS/4280	REINFORCEMENT ARRANGEMENT OF PIER No.12 (SHEET 2)	
P2/CS/4290	DETAILED REINFORCEMENT BARS OF PIER No.12	
P2/CS/4300	BORED CAST - IN - SITU PILE D=1500mm, L=81.0m	
P2/CS/4310	GENERAL VIEW OF PIER No.13	
P2/CS/4320	REINFORCEMENT ARRANGEMENT OF PIER No.13 (SHEET 1)	
P2/CS/4330	REINFORCEMENT ARRANGEMENT OF PIER No.13 (SHEET 2)	
P2/CS/4340	DETAILED REINFORCEMENT BARS OF PIER No.13	
P2/CS/4350	BORED CAST - IN - SITU PILE D=1500mm, L=82.0m	
P2/CS/4360	GENERAL VIEW OF PIER No.14	
P2/CS/4370	REINFORCEMENT ARRANGEMENT OF PIER No.14 (SHEET 1)	
P2/CS/4380	REINFORCEMENT ARRANGEMENT OF PIER No.14 (SHEET 2)	
P2/CS/4390	DETAILED REINFORCEMENT BARS OF PIER No.14	
P2/CS/4400	BORED CAST - IN - SITU PILE D=1500mm, L=82.0m	
P2/CS/4410	GENERAL VIEW OF PIER No.15	
P2/CS/4420	REINFORCEMENT ARRANGEMENT OF PIER No.15 (SHEET 1)	
P2/CS/4430	REINFORCEMENT ARRANGEMENT OF PIER No.15 (SHEET 2)	
P2/CS/4440	REINFORCEMENT ARRANGEMENT OF PIER No.15 (SHEET 3)	
P2/CS/4450	REINFORCEMENT ARRANGEMENT OF PIER No.15 (SHEET 4)	
P2/CS/4460	REINFORCEMENT ARRANGEMENT OF PIER No.15 (SHEET 5)	
P2/CS/4470	DETAILED REINFORCEMENT BARS OF PIER No.15	
P2/CS/4480	BORED CAST - IN - SITU PILE D=2000mm, L=76.0m	
P2/CS/4490	GENERAL VIEW OF PIER No.16	
P2/CS/4500	REINFORCEMENT ARRANGEMENT OF PIER No.16 (SHEET 1)	
P2/CS/4510	REINFORCEMENT ARRANGEMENT OF PIER No.16 (SHEET 2)	
P2/CS/4520	REINFORCEMENT ARRANGEMENT OF PIER No.16 (SHEET 3)	
P2/CS/4530	REINFORCEMENT ARRANGEMENT OF PIER No.16 (SHEET 4)	
P2/CS/4540	REINFORCEMENT ARRANGEMENT OF PIER No.16 (SHEET 5)	
P2/CS/4550	DETAILED REINFORCEMENT BARS OF PIER No.16	
P2/CS/4560	BORED CAST - IN - SITU PILE D=2000mm, L=76.0m	
P2/CS/4570	GENERAL VIEW OF PIER No.17	
P2/CS/4580	REINFORCEMENT ARRANGEMENT OF PIER No.17 (SHEET 1)	
P2/CS/4590	REINFORCEMENT ARRANGEMENT OF PIER No.17 (SHEET 2)	
P2/CS/4600	REINFORCEMENT ARRANGEMENT OF PIER No.17 (SHEET 3)	
P2/CS/4610	REINFORCEMENT ARRANGEMENT OF PIER No.17 (SHEET 4)	
P2/CS/4620	REINFORCEMENT ARRANGEMENT OF PIER No.17 (SHEET 5)	
P2/CS/4630	DETAILED REINFORCEMENT BARS OF PIER No.17	
P2/CS/4640	BORED CAST - IN - SITU PILE D=2000mm, L=76.0m	

DRAWING No.	DRAWING TITLE	
	MISCELLANEOUS	
P2/CS/5010	DETAIL OF BEARING (1)	
P2/CS/5020	DETAIL OF BEARING (2)	
P2/CS/5030	DETAIL OF BEARING (3)	
P2/CS/5040	DETAIL OF BEARING (4)	
P2/CS/5050	DETAIL OF EXPANSION JOINT	
P2/CS/5060	DETAIL OF HAND RAILING	
P2/CS/5070	DETAIL OF PRECAST CURB (1)	
P2/CS/5080	DETAIL OF PRECAST CURB (2)	
P2/CS/5090	DETAIL OF CENTRAL PRECAST RESERVE (1)	
P2/CS/5100	DETAIL OF CENTRAL PRECAST RESERVE (2)	
P2/CS/5110	LAYOUT OF DRAINAGE (1)	
P2/CS/5120	LAYOUT OF DRAINAGE (2)	
P2/CS/5130	LAYOUT OF DRAINAGE (3)	
P2/CS/5140	DETAIL OF DRAINAGE FACILITY (1)	
P2/CS/5150	DETAIL OF DRAINAGE FACILITY (2)	
P2/CS/5160	ROAD LIGHTING	
P2/CS/5170	ROAD LIGHTING LAYOUT (1)	
P2/CS/5180	ROAD LIGHTING LAYOUT (2)	
P2/CS/5190	ROAD LIGHTING LAYOUT (3)	
P2/CS/5200	ROAD LIGHTING LAYOUT (4)	
P2/CS/5210	POWER RECEIVING SYSTEM	
P2/CS/5220	DETAIL OF POWER RECEIVING SYSTEM	
P2/CS/5230	OBSTRUCTION LIGHTING AND LIGHTNING ROAD	
P2/CS/5240	PERMANENT NAVIGATIONAL BRIDGE LIGHT AND	
P2/CS/5250	DETAIL OF LADDER ON PYLON (1)	
P2/CS/5260	DETAIL OF LADDER ON PYLON (2)	
P2/CS/5270	DETAIL OF LADDER ON PYLON (3)	
P2/CS/5280	DETAIL OF LADDER ON PYLON (4)	
P2/CS/5290	DETAIL OF LADDER ON PYLON (5)	
	REFERENCE	
P2/CS/6010	CONSTRUCTION SEQUENCE (1)	
P2/CS/6020	CONSTRUCTION SEQUENCE (2)	
P2/CS/6030	CONSTRUCTION SEQUENCE (3)	
P2/CS/6040	TEMPORARY SUPPORT	
P2/CS/6050	CONCRETE PLACING STEP OF PILE CAP	
P2/CS/6060	TEMPORARY NAVIGATION MARKER BUOYS SYSTEM	
P2/CS/6070	ENGINEER'S AND CONTRACTOR'S ACCOMMANDATION, LOCATION MAP	
P2/CS/6080	ENGINEER'S AND CONTRACTOR'S ACCOMMANDATION, LAYOUT	
P2/CS/6090	ARRANGEMENT OF ENGINEER'S ACCOMMANDATION	
P2/CS/6100	ENGINEER'S OFFICE IN CONSTRUCTION YARD	

PROJECT NAME DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	IMPLEMENTATION AGENCY  JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	EXECUTING AGENCY SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	JICA STUDY TEAM  NIPPON KOEI CO.,LTD.	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE CABLE STAYED BRIDGE GENERAL DRAWING LIST (3)	DWG NO. P2/GE/0030	
				NAME	S. Kiguchi	K. Matsumoto			K. Enomoto
				SIGNATURE					
				DATE	20/9/2000	29/9/2000	5/10/2000		

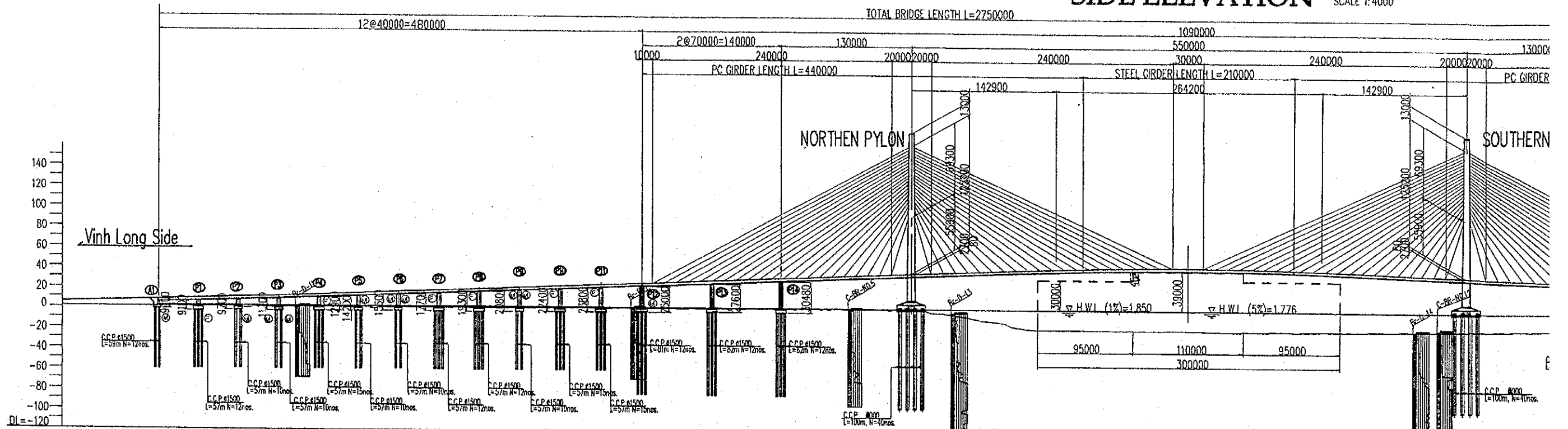
I. GENERAL



PROJECT NAME DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	IMPLEMENTATION AGENCY  JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	EXECUTING AGENCY SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	JICA STUDY TEAM  NIPPON KOEI CO.,LTD.	PREPARED BY NAME: S. Kiguchi SIGNATURE: <i>S. Kiguchi</i> DATE: 20/9/2000	CHECKED BY NAME: K. Matsumoto SIGNATURE: <i>K. Matsumoto</i> DATE: 29/9/2000	APPROVED BY NAME: K. Enomoto SIGNATURE: <i>K. Enomoto</i> DATE: 5/10/2000	DRAWING TITLE CABLE STAYED BRIDGE GENERAL LOCATION MAP	DWG NO. P2/GE/0040
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SIDE ELEVATION

SCALE 1:4000

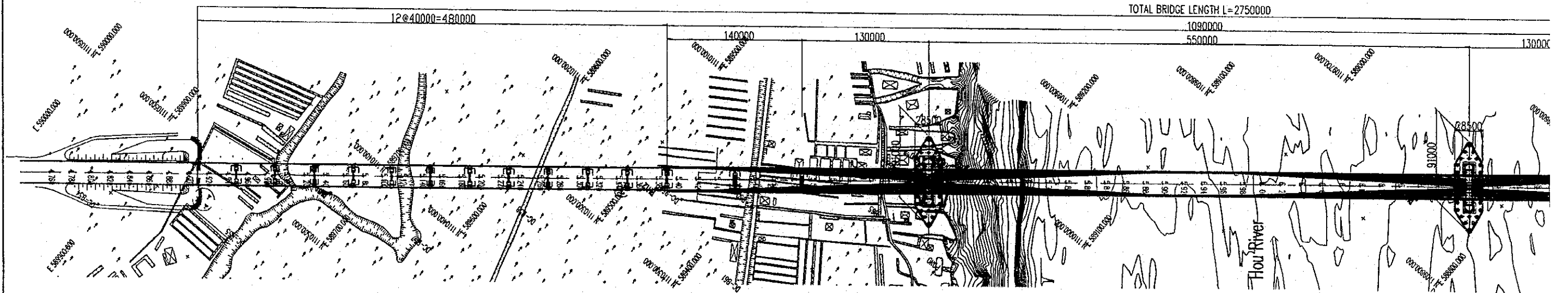


GRADE	L=2.637m																				L=4.000m																			
DESIGN LEVELS	7.534	7.538	9.110	10.278	10.572	11.284	11.000	14.200	14.600	16.200	17.800	18.200	18.400	21.000	22.200	22.600	24.200	25.800	26.200	31.400	34.200	38.000	38.200	41.598	42.122	44.022	44.247	44.400	44.400	44.022	43.972	41.598	41.598	37.000	36.600					
EXISTING HEIGHT	1.09	1.09	0.81	0.55	0.33	0.80	0.74	0.63	0.62	0.73	0.73	0.72	0.75	0.82	0.98	0.94	1.12	1.14	1.11	1.26	1.58	1.34	1.47	1.52	-2.59	-17.45	-17.54	-17.59	-17.82	-17.55	-18.22	-17.97	-17.56	-17.37	-16.35	-16.35				
DISTANCE	44.9000	490000	493000	497000	500000	503000	507000	510000	513000	516000	519000	522000	525000	528000	531000	534000	537000	540000	543000	546000	549000	552000	555000	558000	561000	564000	567000	570000	573000	576000	579000	582000	585000	588000	591000	594000	597000			
CHAINAGE	44.9000	490000	493000	497000	500000	503000	507000	510000	513000	516000	519000	522000	525000	528000	531000	534000	537000	540000	543000	546000	549000	552000	555000	558000	561000	564000	567000	570000	573000	576000	579000	582000	585000	588000	591000	594000	597000			
CURVE ELEMENT																																								

Vinh Long Side

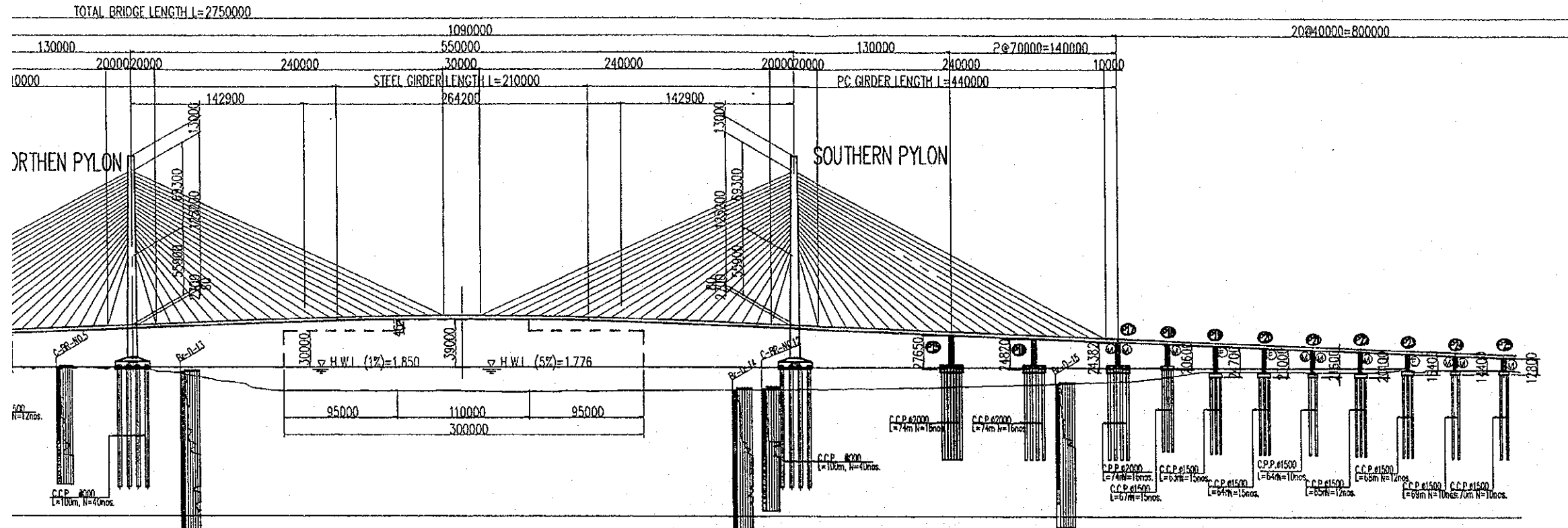
PLAN

SCALE 1:2000

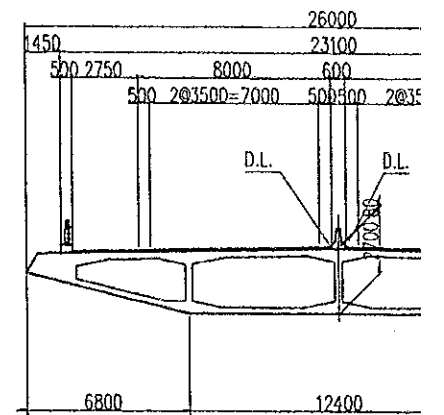


GENERAL VIEW (1/2)

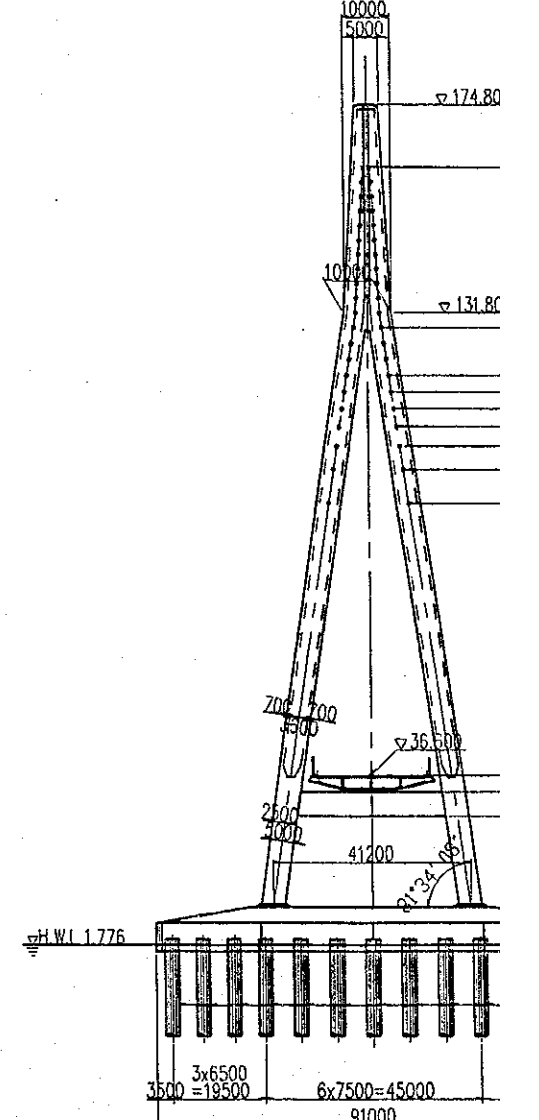
SIDE ELEVATION SCALE 1:4000



PC BOX GIR

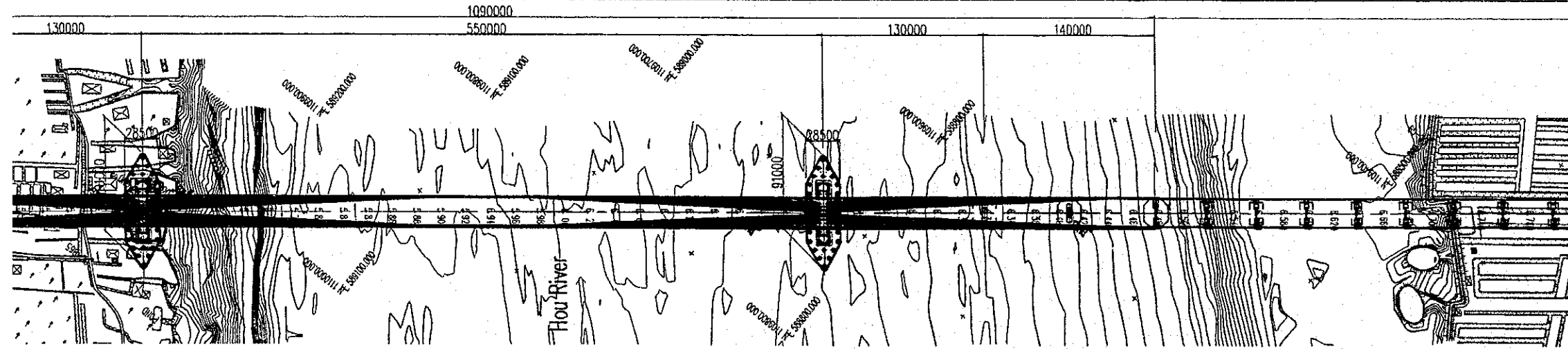


PYLON (NORTHERN, SOUTH) FRONT ELEVATION



PLAN SCALE 1:2000

TOTAL BRIDGE LENGTH L=2750000



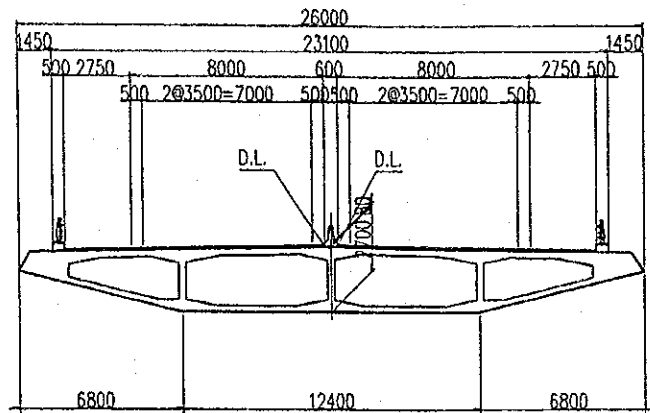
Can Tho Side

PROJECT NAME	IMPLEMENTATION AGENCY	SOC
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MIN MY THU

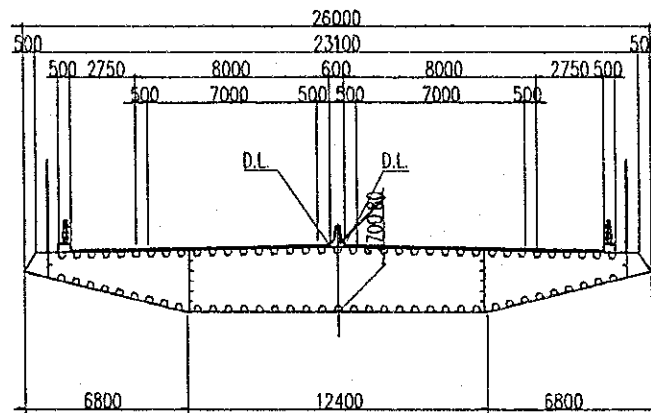
SUPERSTRUCTURE SCALE 1:300

MAIN BRIDGE

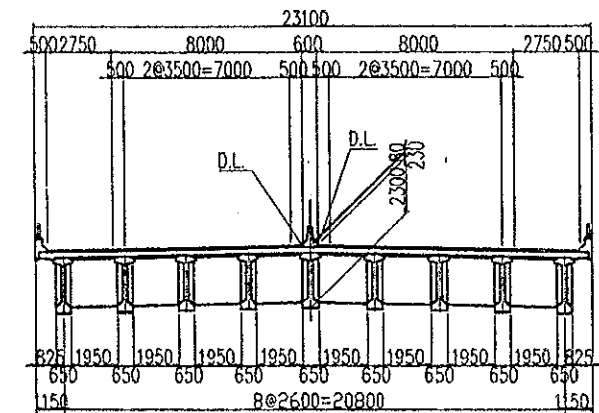
PC BOX GIRDER



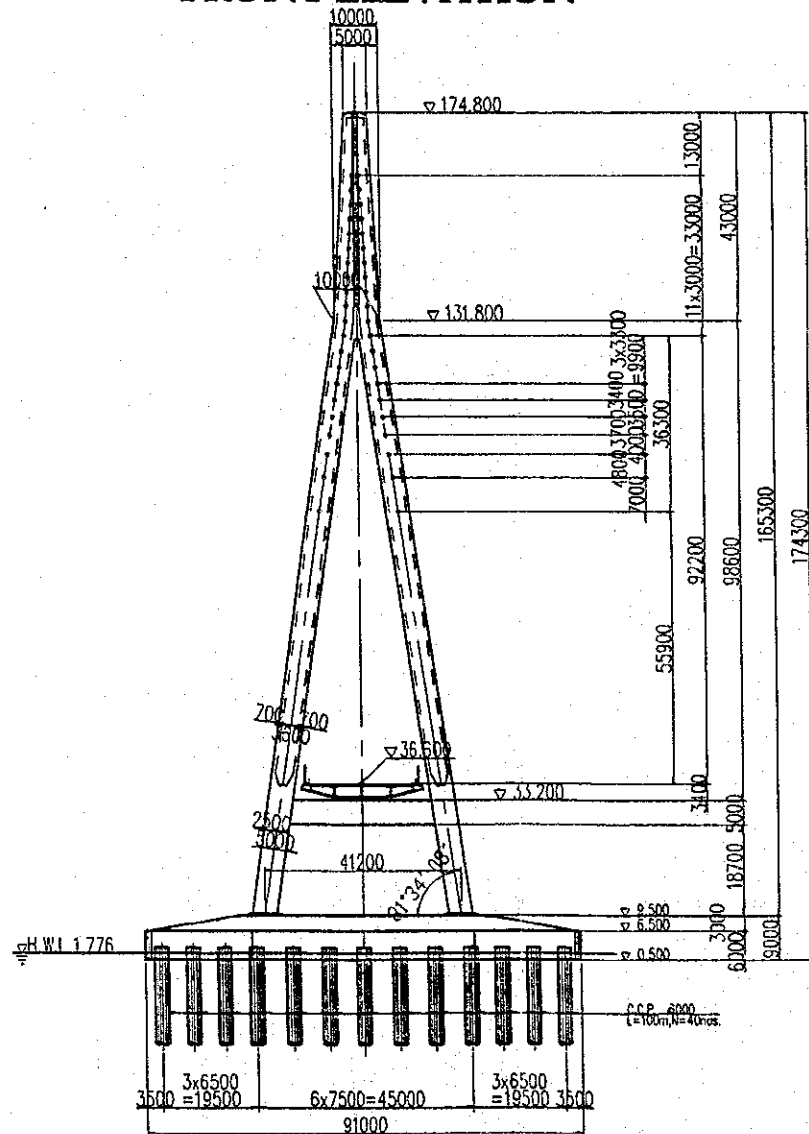
STEEL BOX GIRDER



APPROACH BRIDGE CONNECTED PC I GIRDER

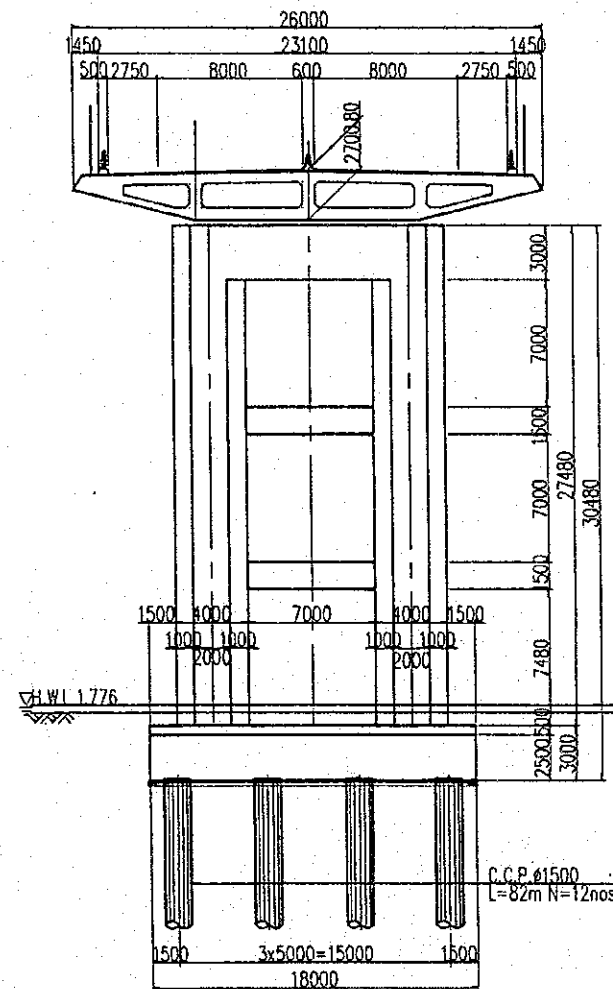


PYLON (NORTHERN, SOUTHERN) FRONT ELEVATION SCALE 1:1500

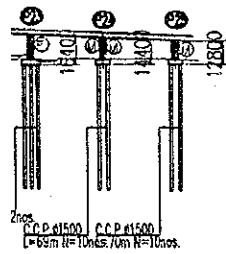
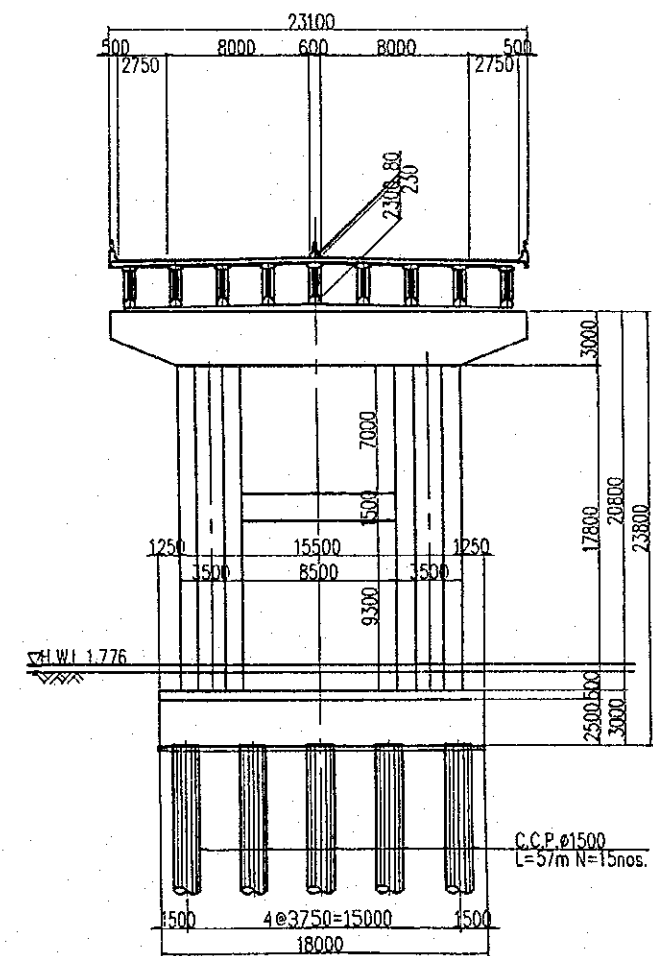


SUBSTRUCTURE SCALE 1:400

MAIN BRIDGE (P14)

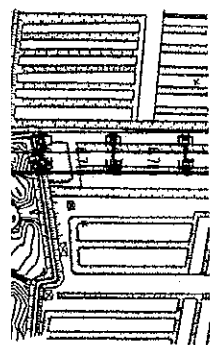


APPROACH BRIDGE (P11)



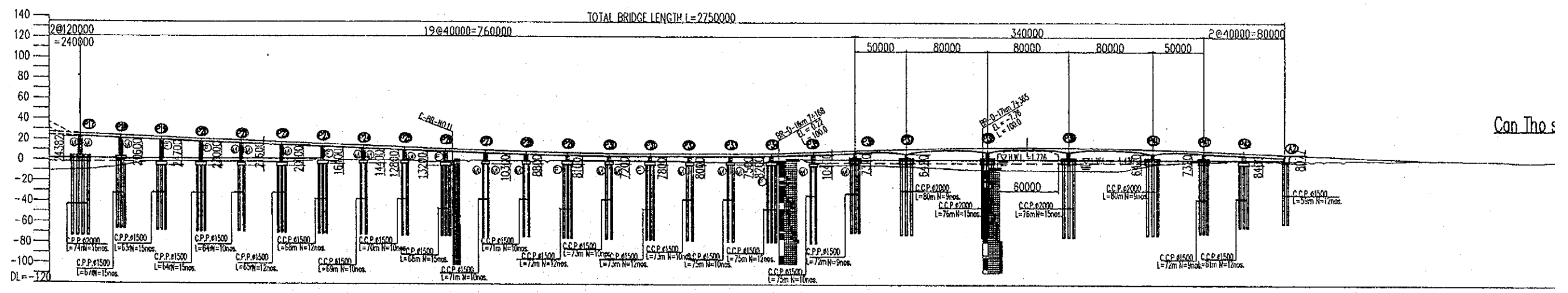
16.200	14.600	13.000
0.46	0.30	0.26
5-720.0/720.000	5-750.0/750.000	5-800.0/800.000

Can Tho Side



PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOEI CO.,LTD.	S. Kiguchi	K. Matsumoto	K. Enomoto	CABLE STAYED BRIDGE GENERAL GENERAL VIEW (1)	P2/CE/0050
				NAME				
				SIGNATURE				
				DATE	20/9/2000	29/9/2000	5/10/2000	

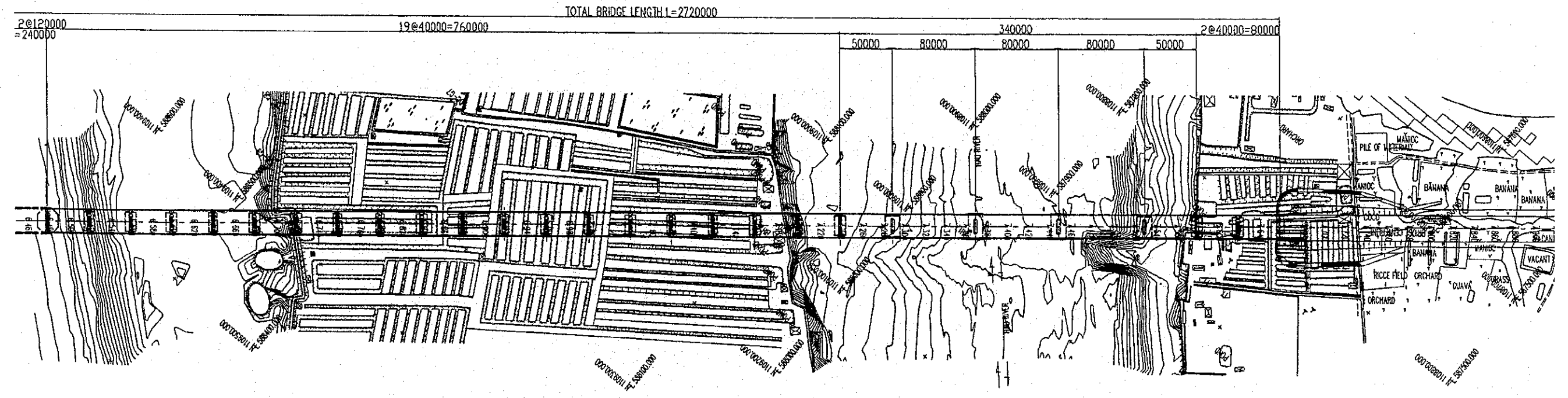
SIDE ELEVATION SCALE 1:4000



Can Tho

GRADE																																																																																																														
DESIGN LEVELS	25.800	25.800	24.200	22.600	21.000	19.400	17.800	17.000	16.200	14.600	13.000	11.400	10.203	9.543	8.982	7.771	7.372	7.158	7.100	7.100	7.102	7.500	7.500	8.800	10.400	12.200	12.488	13.800	13.988	14.000	13.800	12.988	12.200	10.400	9.900	8.800	7.200	5.500	1.779																																																																							
EXISTING HEIGHT	-9.55	-7.91	-5.80	-1.21	-1.18	-1.43	-1.53	-0.75	0.46	0.30	0.26	-1.08	0.13	0.14	0.51	0.35	0.07	0.13	-0.29	-0.62	-1.19	-1.29	-1.0	0.24	-1.14	-3.88	-4.74	-5.31	-7.84	-8.23	-8.33	-8.88	-8.70	-3.21	1.56	0.45	0.800	1.20	1.00	0.95	1.59	-0.73																																																																				
DISTANCE	64480.0	64000.0	65200.0	65900.0	66000.0	66400.0	67000.0	67200.0	67600.0	68000.0	68000.0	68350.0	68800.0	69000.0	69200.0	69500.0	69800.0	70000.0	70200.0	70400.0	70600.0	70800.0	71000.0	71100.0	71200.0	71500.0	71600.0	71800.0	71900.0	72000.0	72100.0	72200.0	72300.0	72400.0	72500.0	72600.0	72700.0	72800.0	72900.0	73000.0	73100.0	73200.0	73300.0	73400.0	73500.0	73600.0	73700.0	73800.0	73900.0	74000.0	74100.0	74200.0	74300.0	74400.0	74500.0	74600.0	74700.0	74800.0	74900.0	75000.0	75100.0	75200.0	75300.0	75400.0	75500.0	75600.0	75700.0	75800.0	75900.0	76000.0	76100.0	76200.0	76300.0	76400.0	76500.0	76600.0	76700.0	76800.0	76900.0	77000.0	77100.0	77200.0	77300.0	77400.0	77500.0	77600.0	77700.0	77800.0	77900.0	78000.0	78100.0	78200.0	78300.0	78400.0	78500.0	78600.0	78700.0	78800.0	78900.0	79000.0	79100.0	79200.0	79300.0	79400.0	79500.0	79600.0	79700.0	79800.0	79900.0	80000.0
CHAINAGE	64480.0	64500.0	64520.0	64540.0	64560.0	64580.0	64600.0	64620.0	64640.0	64660.0	64680.0	64700.0	64720.0	64740.0	64760.0	64780.0	64800.0	64820.0	64840.0	64860.0	64880.0	64900.0	64920.0	64940.0	64960.0	64980.0	65000.0	65020.0	65040.0	65060.0	65080.0	65100.0	65120.0	65140.0	65160.0	65180.0	65200.0	65220.0	65240.0	65260.0	65280.0	65300.0	65320.0	65340.0	65360.0	65380.0	65400.0	65420.0	65440.0	65460.0	65480.0	65500.0	65520.0	65540.0	65560.0	65580.0	65600.0	65620.0	65640.0	65660.0	65680.0	65700.0	65720.0	65740.0	65760.0	65780.0	65800.0	65820.0	65840.0	65860.0	65880.0	65900.0	65920.0	65940.0	65960.0	65980.0	66000.0																																	
CURVE ELEMENT																																																																																																														

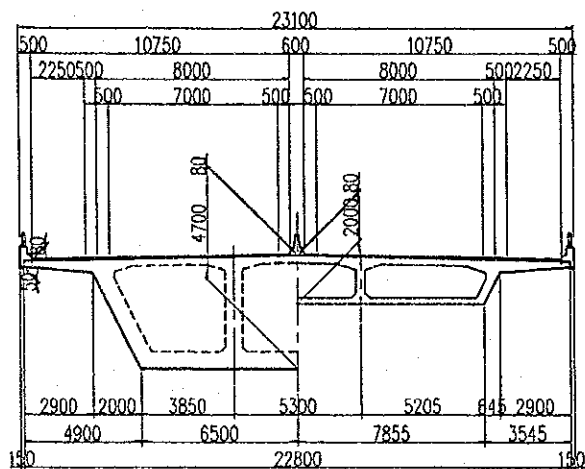
PLAN SCALE 1:2000



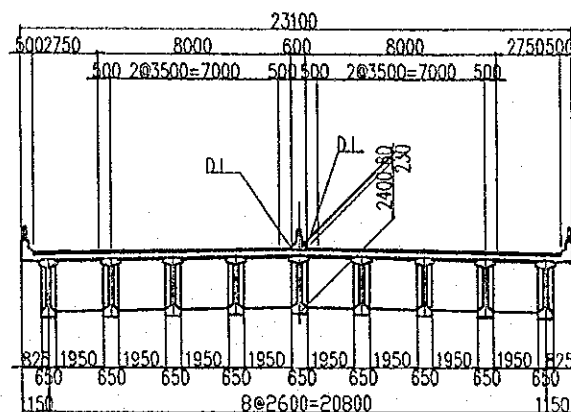
GENERAL VIEW (2/2)

SUPERSTRUCTURE SCALE 1:300

MAIN BRIDGE OF SUB-STREAM PC BOX GIRDER



APPROACH BRIDGE PC BOX GIRDER



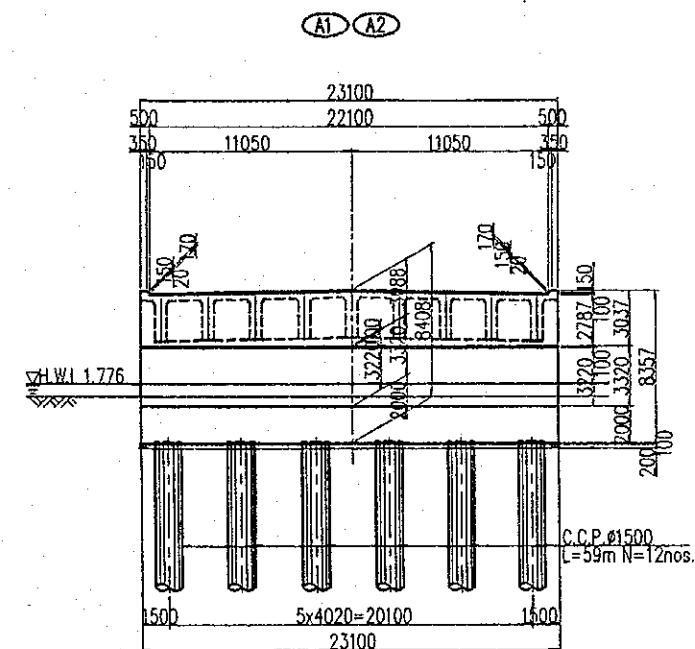
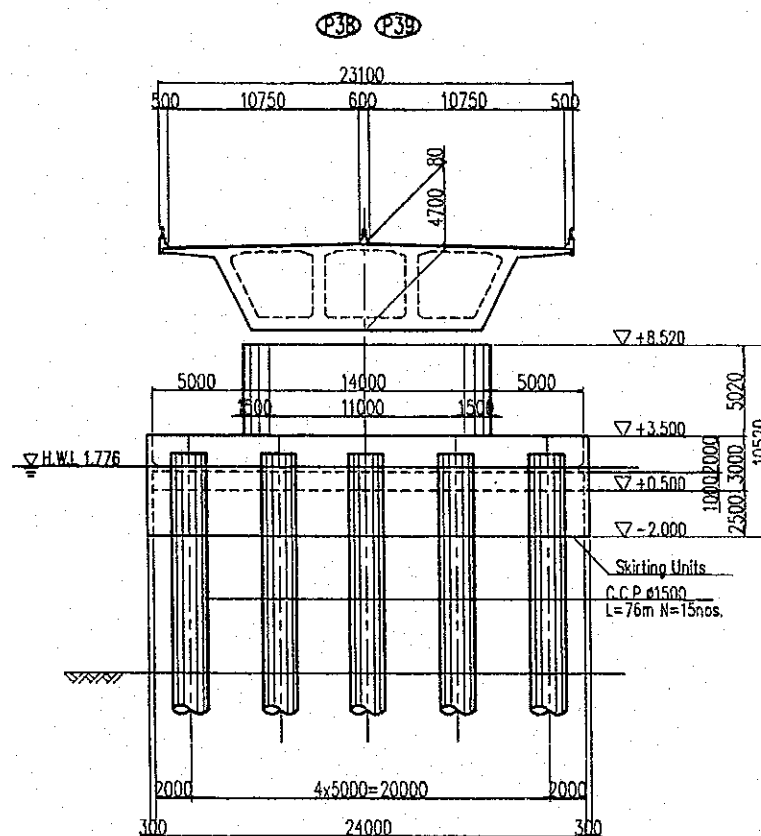
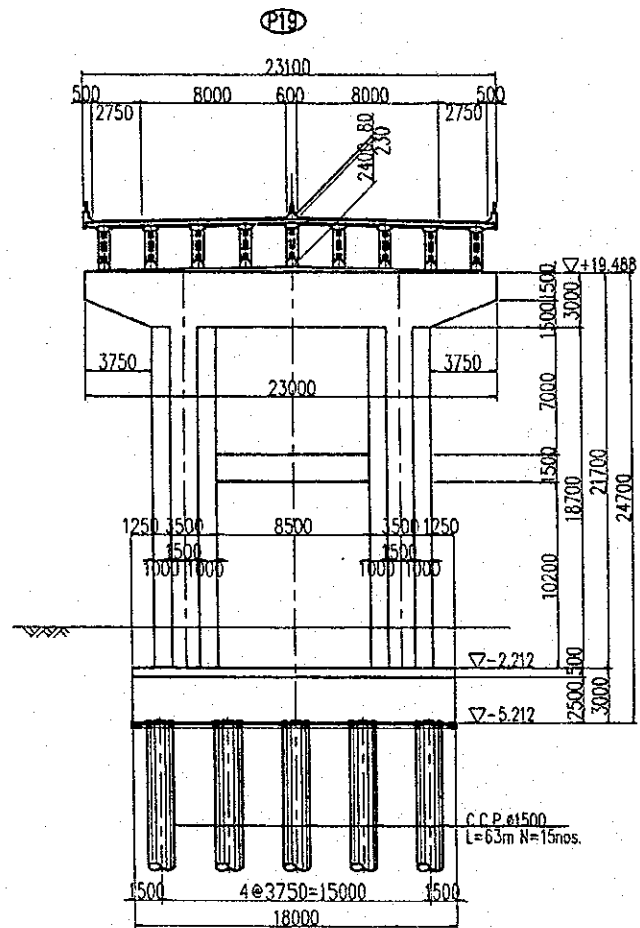
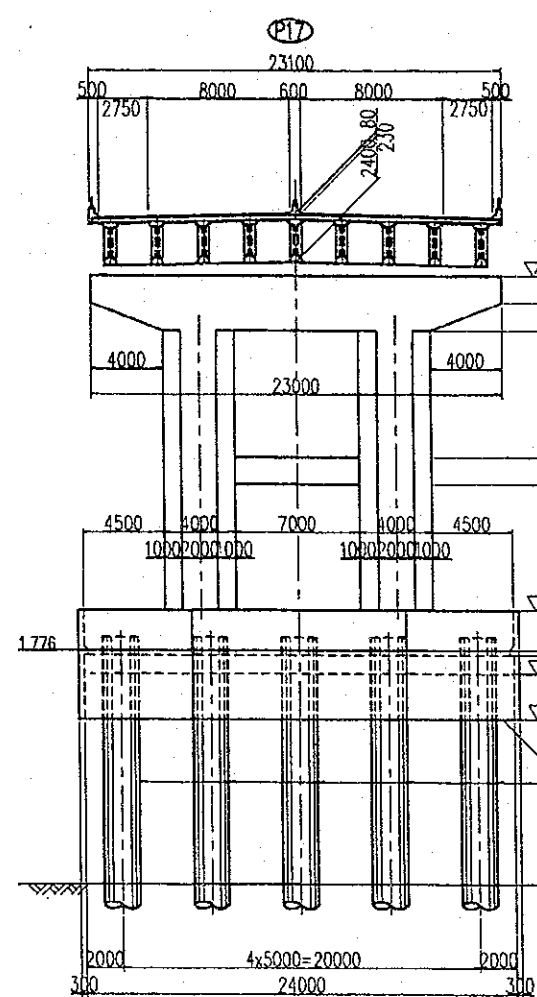
DESIGN CRITERIA

TYPE	HYBRID CABLE STAYED BRIDGE
TOTAL BRIDGE LENGTH	L=1090.000m
SPAN	2@70m+130m+550m+130m+2@70m
WIDTH	CARRIAGE WAY WIDTH=21.5m (10.75m+10.75m)
LIVE LOAD	B-LIVE LOAD
IMPACT COEFFICIENT	i=20/(L+50)
SEISMIC DATE	Kh=0.12
ANGLE OF SKEW	90° 00' 00"
RADIUS OF CURVATURE	R=∞
LONGITUDINAL SLOPE	4.0% ↘ 4.0% V.C.L.=320m

MATERIALS

CONCRETE	GIRDER	$\sigma_{ck}=50\text{MPa}$
	PYLON	$\sigma_{ck}=40\text{MPa}$
	PILECAP OF PYLON	$\sigma_{ck}=30\text{MPa}$
	SUBSTRUCTURE	$\sigma_{ck}=25\text{MPa}$
PC STEEL	BORED PILE	$\sigma_{ck}=30\text{MPa}$
	GIRDER	12S15.2B(SWPR7B), PC Bar Dia. 32mm
STEEL	STAY CABLE	15.2B (SWPR7B)
	GIRDER	SS400, SMA400, SMA490

SUBSTRUCTURE SCALE 1:400



PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO., LTD.	NAME	S. Kiguchi	K. Matsumoto	CABLE STAYED BRIDGE GENERAL GENERAL VIEW (2)	P2/GE/0060
				SIGNATURE	<i>S. Kiguchi</i>	<i>K. Matsumoto</i>		
				DATE	20/9/2000	29/9/2000		
				APPROVED BY	<i>K. Enomoto</i>	5/10/2000		

STRUCTURAL NOTES

1. GENERAL

- 1.1. UNLESS OTHERWISE NOTED THESE NOTES ARE APPLIED TO ALL DRAWINGS.
- 1.2. THE SCALE INDICATED IN DRAWINGS IS FOR 'A3' SIZE.
- 1.3. ALL CHAINAGES, COORDINATES, ELEVATIONS ARE IN METRES.
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
- 1.4. THE ELEVATION SYSTEM IS REFERRED TO THE MEAN SEA DATUM ELEVATION AT HONDAU - DO SON.
COORDINATE REFER TO THE NATIONAL GRID SYSTEM.

2. DESIGN CRITERIA & LOADS

- 2.1. DESIGN STANDARDS:
 - AASHTO 1998 - LRFD BRIDGE DESIGN SPECIFICATIONS
 - AASHTO GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF SEGMENTAL CONCRETE BRIDGES
 - JAPANESE HIGHWAY AND BRIDGE STANDARDS 1996
 - VIETNAMESE HIGHWAY BRIDGES STANDARDS 1979
- 2.2. DESIGN LOADS:
 - B_LOADING IN ACCORDANCE WITH JAPANESE CODE
 - BASIC WIND VELOCITY : 160 KM/H - AASHTO LRFD 98
 - LATERAL SEISMIC RESPONSE COEFFICIENT : 0.12
 - UNIFORM TEMPERATURE : 15°C
 - TEMPERATURE DIFFERENTIAL : 5°C

3. CONCRETE

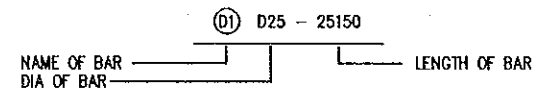
- 3.1. UNLESS OTHERWISE INDICATED CONCRETE SHALL BE OF THE FOLLOWING GRADES BASED ON 28 DAY CYLINDER STRENGTH f_c :

CONCRETE CLASS	STRENGTH f_c MPa	KIND OF STRUCTURE IN USE
A	50	PRE-CAST CONCRETE PC BOX GIRDER
B	40	PYLON, PC BOX GIRDER, I-GIRDER
C	35	DIAPHRAGM FOR PC-I GIRDER
D	30	IN-SITU DECK SLAB, BORED PILE, PILECAP OF PYLON
E	25	PIER, ABUTMENT, PILE CAP, RETAINING WALL, PARAPET, BARRIER, KERB
G	15	LEAN CONCRETE

- 3.2. WHEREVER FORMS ARE NOT USED REINFORCED CONCRETE SHALL BE PLACED AGAINST 100mm MINIMUM THICKNESS LEAN CONCRETE.
- 3.3. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 20x20mm UNLESS OTHERWISE NOTED.
- 3.4. ALL CONSTRUCTION JOINTS ARE TO BE LOCATED AS SHOWN ON THE DRAWINGS OR AS ENGINEER'S APPROVAL.

4. REINFORCEMENT

- 4.1. REINFORCEMENT SHALL BE DEFORMED, EXCEPT THAT PLAIN BARS OR PLAIN WIRE MAY BE USED FOR SPIRALS, HOOPS, AND WIRE FABRIC.
- 4.2. REINFORCEMENT SHALL BE SD390 OR EQUIVALENT. PLAIN ROUND BAR WITH $f_y(\min)$ 250 MPa AND HIGH YIELD DEFORMED BARS WITH YIELD STRENGTH NOT LESS THAN $f_y(\min)$ 390 MPa SHALL BE USED.
- 4.3. REINFORCEMENT IS NOTED ON THE DRAWINGS AS FOLLOWS:



- 4.4. ALL REINFORCEMENTS ARE SHOWN AS _____
- 4.5. SPLICES IN ADJACENT BARS SHALL BE STAGGERED EXCEPT WHERE NOTED ON THE DRAWINGS.
SPLICES OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY ONLY BE MADE WITH THE ENGINEER'S APPROVAL.
- 4.6. MINIMUM SPLICE LENGTH SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998.
- 4.7. STANDARD HOOKS AND MINIMUM BEND DIAMETER SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998.

4. REINFORCEMENT (CONTINUED)

- 4.8. REINFORCEMENTS INDICATED AS RANDOM LENGTH MAY BE LAP SPLICED AS NECESSARY SUBJECT TO THE FOLLOWING CONDITIONS:
 - A) LAP SPLICES IN ADJACENT BARS SHALL BE STAGGERED
 - B) MINIMUM LAP LENGTHS SHALL BE IN ACCORDANCE WITH AASHTO LRFD 1998, EXCEPT BORED PILE SHALL BE 40 BAR DIAMETERS
 - C) NOT MORE THAN ONE BAR PER LINE IS TO BE SHORTER THAN 12 METRES FOR ANY DIAMETER
- 4.9. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, THE MINIMUM COVER TO ANY REINFORCEMENT SHALL BE AS FOLLOWS:
 - 75mm BORED PILE, RETAINING WALL & ABUTMENT
 - 50mm PILE CAP, DECK SLAB, PIER & ABUTMENT, PARAPET, KERB, APPROACH SLAB, etc...
 - TOLERANCE ON COVER IS +/-5mm

5. PRESTRESSING TENDON.

NOMINAL DIAMETER YIELD AND TENSILE STRENGTH OF PRESTRESSING TENDON ARE SPECIFIED, AS FOLLOWS:

UTILISATION	NOMINAL DIAMETER (mm)	YIELD STRENGTH (MPa)	ULTIMATE STRENGTH (MPa)	JACKING FORCE (kN)	REMARKS
PC-I GIRDER	3S12.7	1670	1860	418	
PC-I GIRDER	12S12.7	1670	1860	1674	
PC-BOX GIRDER	4S15.2	1670	1860	784	
PC-BOX GIRDER	12S15.2	1670	1860	2352	
PC-BOX GIRDER	19S15.2	1670	1860	3475	JIS G 3536
PC-BOX GIRDER	PC Bar 32mm	930	1180	560	JIS G 3109

- 5.1 HIGH TENSILE STEEL STRAND WITH LOW RELAXATION, DIAMETER OF 12.7 mm AND 15.2 mm SHALL BE WELD FREE AND STRESS RELIEVED AFTER STANDING AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 416-90a, UN-COATED SEVEN WIRE FOR PRESTRESSED CONCRETE.

6. STRUCTURAL STEEL

6.1 STEEL GIRDER

GRADE		MINIMUM YIELD POINT OR MINIMUM YIELD STRENGTH (MPa)				MINIMUM TENSILE STRENGTH (MPa)	REMARKS
		THICKNESS OF STEEL					
		16	16-24	40-70	70-1		
ROLLED STEELS FOR GENERAL STRUCTURE	SS400	245	235	215	215	400 - 510	JIS G 3101
	SM400A	245	235	215	215	400 - 510	JIS G 3106
ROLLED STEELS FOR WELDED STRUCTURE	SM490YA	365	355	335	325	490 - 610	JIS G 3106
	SM490YB	365	355	335	325	490 - 610	JIS G 3106
HOT-ROLLED ATMOSPHERIC CORROSION RESISTING STEELS FOR WELDED STRUCTURE	SMA400AW	245	235	215	215	400 - 510	JIS G 3114
	SMA400CW	245	235	215	215	400 - 510	JIS G 3114
	SMA490AW	365	355	335	325	490 - 610	JIS G 3114
	SMA490CW	365	355	335	325	490 - 610	JIS G 3114
	SMA570W	460	450	430	420	570 - 720	JIS G 3114
HIGH STRENGTH HEXAGON BOLT FOR FRICTION GRIP TYPE (H.T.B)	F10TW		900			1000 - 1200	JIS B 1186 TYPE WEARING BOLTS
HIGH STRENGTH TENSION CONTROL BOLT FOR FRICTION GRIP TYPE (T.C.B)	S10TW		900			1000 - 1200	JIS B 1186 TYPE WEARING BOLTS
STAINLESS STEEL NUT	SUS304						JIS B 1181
PIPE	STK400		235			400	JIS G 3444

6.2 STEEL PIPE FOR HYBRID PIPES

GRADE	MINIMUM YIELD POINT OR MINIMUM YIELD STRENGTH (MPa)	MINIMUM TENSILE STRENGTH (MPa)	REMARKS
SKK 490	315	490	JIS A 5525

7. ANCHORAGES AND DUCTS

- 7.1 ALL PRESTRESSING SYSTEM AND ANCHORAGE ASSEMBLIES SHALL BE SUPPLIED FROM SAME APPROVED MANUFACTURE.
- 7.2 ALL ANCHORAGES SHALL BE DESIGNED FOR THE ACTUAL TYPE OF TENDON TO BE EMPLOYED.
THEY SHALL HAVE A PAST RECORDS OF USE ON SIMILAR WORK, DEMONSTRATING PROPER FUNCTIONING AND DURABILITY.
- 7.3 ANCHORAGE DETAILS FOR EXTERNAL TENDONS SHOULD PROVIDE COMPLETE REMOVABILITY OF THE TENDON AT ANY STAGE OF THE DESIGN LIFE OF THE STRUCTURE WITHOUT MODIFICATION OR DAMAGE TO THE STRUCTURE.
THE PRESTRESSING SYSTEM SHOULD HAVE THE ABILITY TO REPLACE THE REMOVED TENDON VIA THE SAME ANCHORAGE CASTING WITHIN THE DIAPHRAGM SEGMENT OF THE SPAN.
- 7.4 CEMENT GROUT SHALL NOT BE APPLIED AS A CORROSION PROTECTION IN THE EXTERNAL LONGITUDINAL TENDONS OF THE PC BOX SEGMENTS.
EXTERNAL TENDONS SHALL HAVE A MINIMUM TWO LEVEL PROTECTION TO GUARD AGAINST CORROSION SUCH AS A ZINC COATING AND A PROTECTIVE FILLER GREASE COMPOUND OR AN EQUIVALENT APPROVED PROTECTION SYSTEM.
- 7.5 DUCTING FOR INTERNAL TENDONS SHALL BE FULLY COMPATIBLE WITH THE PROPOSED PRESTRESSING SYSTEM.
THE DUCTING SHALL FORM AN AIRTIGHT AND WATERTIGHT BARRIER TO THE TENDONS AND SHALL BE FABRICATED FROM CORRUGATED GALVANIZED SHEET STEEL OR SEMI-RIGID CONDUIT.
- 7.6 DUCTING FOR EXTERNAL TENDONS SHALL BE FORMED FROM SMOOTH, RIGID PIPE MADE OF HIGH DENSITY POLYETHYLENE CONFORMING TO THE MATERIAL REQUIREMENTS OF ASTM D3350 AND MANUFACTURED IN ACCORDANCE WITH ASTM D2447, ASTM F714 OR ASTM D2239.

8. STAY CABLES

- 8.1 THE STRAND FOR THE STAY CABLE SHALL BE 15.2mm DIAMETER SEVEN WIRE STRAND CONFORMING TO THE REQUIREMENTS OF AASHTO M203 (ASTM A416M), GRADE 270 (GUARANTEED ULTIMATE TENSILE STRENGTH 1,860 MPa), LOW-RELAXATION GRADE, OR EQUIVALENT. IN ADDITION, THE STRAND SHALL BE:
 - (a) FACTORY GALVANIZED
 - (b) COATED WITH HIGH DENSITY POLYETHYLENE (HDPE), AND
 - (c) PROVIDED WITH A PROTECTIVE FILLER INSIDE THE INTERSTICES BETWEEN THE CORE WIRE AND THE OUTER WIRES AND AROUND THE OUTER WIRES.
- 8.2 FOR STAY CABLES THE ALLOWABLE TENSILE STRESS SHALL BE 0.45 Fpu FOR STATIC LOADS, AND 0.56 Fpu DURING CONSTRUCTION. (Note: Fpu = DESIGN VALUE OF GUARANTEED ULTIMATE TENSILE STRENGTH) THE STAY CABLE SHALL BE STRESSED USING STRAND-BY-STRAND CABLE INSTALLATION.
- 8.3 PERMANENT VIBRATION CONTROL DEVICES (SUCH AS VISCOSITY TYPE OF VIBRATION DAMPER, AND / OR RAIN VIBRATION DAMPER etc.) SHALL BE INSTALLED CONFORMING TO THE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS.

9. APPROACH VIADUCT

- 9.1 INDICATED BEARING LEVELS ON THE DRAWINGS ARE APPROXIMATE LEVELS.
THE CONTRACTOR SHALL CALCULATE AND SET UP THE FINISHED LEVEL ACCURATELY FOR EACH BEARING.

10. MAIN BRIDGE

- 10.1 THE DESIGN OF THE MAIN BRIDGE IS BASED ON THE ASSUMPTION THAT THE BALANCED CANTILEVER METHOD OF CONSTRUCTION WILL BE USED WITH THE FOLLOWING CONSTRUCTION LOADING CONDITIONS:
 - WEIGHT OF ELECTION NOSE 1960 kN
 - AN ASYMMETRIC SEQUENCE OF SEGMENT CASTING, OUT OF BALANCE BY NO MORE THAN ONE SEGMENT
- 10.2 THE MAIN BRIDGE IS DESIGNED ON THE BASIS OF THE CONSTRUCTION SEQUENCE DETAILED ON THE DRAWINGS. ANY CHANGE TO THE CONSTRUCTION SEQUENCE AS SHOWN ON THE DRAWINGS WILL REQUIRE A REDESIGN OF THE BRIDGE.
- 10.3 HIGH TENSILE STEEL BAR SHALL BE STRESS RELIEVED AND SHALL CONFORM TO THE REQUIREMENTS OF "JIS G 3109" OR EQUIVALENT.

	INTERNAL TENDONS
COEF. OF FRICTION (μ) PER RADIAN	0.25
WOBBLE FACTOR (K) RADIAN PER METER	0.002
PULL - IN	9mm
RELATIVE HUMIDITY	85%

STRAND FOR NON-GROUT EXTERNAL POST-TENSIONING SHALL CONFORM TO JIS G 3536 SWPR7B LONGITUDINAL PC BAR SHALL CONFORM TO JIS G 3109 GRADE B SBPR 930/1180.

- 10.4 THE LEVELS GIVEN ON THE DRAWINGS ARE FINISHED LEVELS AFTER 70 YEAR CREEP AND SHRINKAGE EFFECTS HAVE TAKEN PLACE. THE CONTRACTOR SHALL DETERMINE THE PRE CAMBER TO WHICH THE DECK SEGMENTS SHALL BE SET TO ENSURE FINISHED LEVELS ARE ACHIEVED.
THE PRE-CAMBER SHALL TAKE INTO CONSIDERATION THE CANTILEVER METHOD OF CONSTRUCTION AND ANY ANTICIPATED MOVEMENT OF FALSE WORK AND FOUNDATIONS.
- 10.5 PRE-CAST BOX SEGMENT SHALL BE FABRICATED BY THE METHOD OF SHORT LINE MATCH CASTING UNDER THE GEOMETRIC CONTROL.
- 10.6 RUBBER BEARING ON THE MAIN PIER SHALL HAVE A FUNCTION OF FORCE DISPERSION AND SHEAR SPRING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.

11. ACCESSORIES

- 11.1 THE FOLLOWING ACCESSORIES AS SHOWN IN THE DRAWINGS ARE TO BE USED SUBJECT TO ENGINEERING'S APPROVAL.

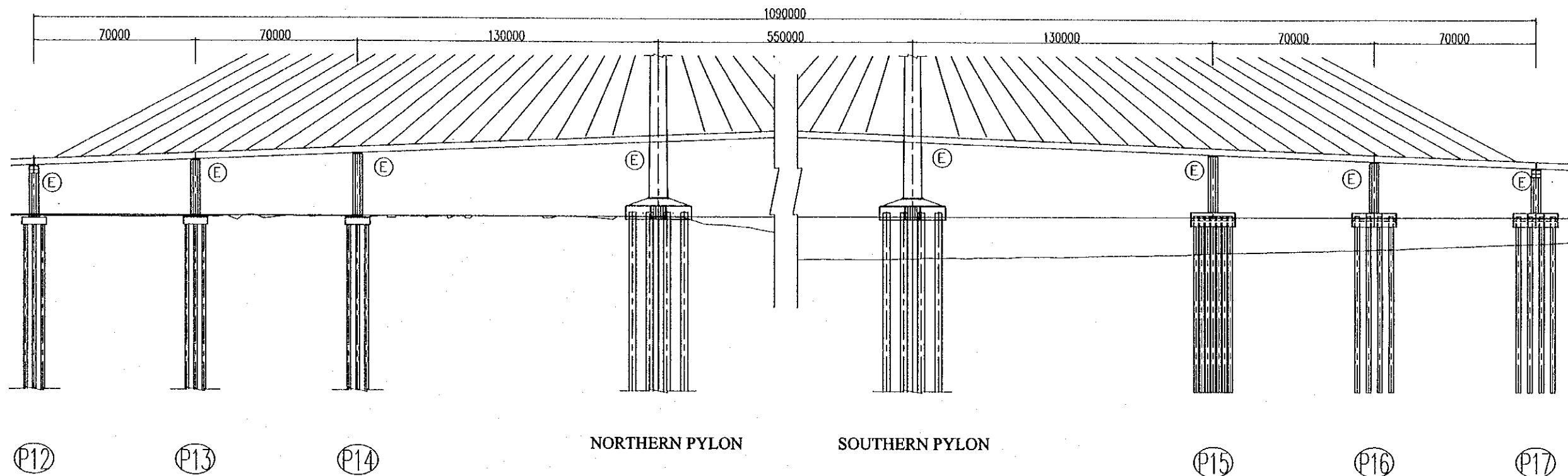
ACCESSORIES	DRAWING NO.
ANCHORAGE OF STAY CABLE	P2/CS/2030 & 2040
P.E PIPE FOR STAY CABLE	P2/CS/2050
DAMPING DEVICE OF STAY CABLE	P2/CS/2060 & 2070
BEARINGS	P2/CS/5010, 5020, 5030 & 5040
EXPANSION JOINT	P2/CS/5050
HANDRAILING	P2/CS/5060
ROAD LIGHTING	P2/CS/5160
OBSTRUCTION LIGHTING AND LIGHTING RODS	P2/CS/5230
NAVIGATIONAL BRIDGE LIGHT AND MARKER BUOYS	P2/CS/5240

PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOEI CO.,LTD.	NAME S. Kiguchi SIGNATURE <i>S. Kiguchi</i> DATE 20/9/2000	NAME K. Matsumoto SIGNATURE <i>K. Matsumoto</i> DATE 29/9/2000	NAME K. Enomoto SIGNATURE <i>K. Enomoto</i> DATE 5/10/2000	CABLE STAYED BRIDGE GENERAL STRUCTURAL NOTES	P2/GE/0070

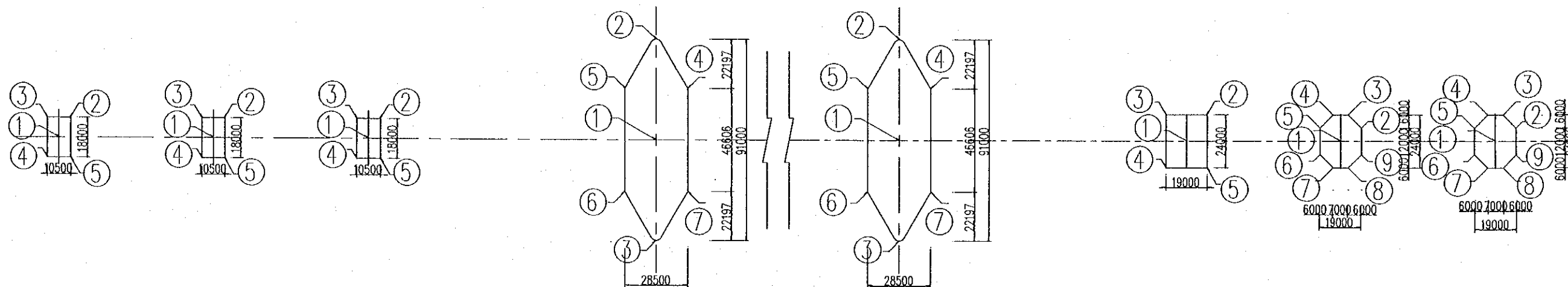
SIDE ELEVATION SCALE 1:2000

Vinh Long Side

Can Tho Side



PLAN SCALE 1:2000



COORDINATES TABLE

	P12		P13		P14		NORTHERN PYLON		SOUTHERN PYLON		P15		P16		P17	
	N	E	N	E	N	E	N	E	N	E	N	E	N	E	N	E
1	1110225.583	589472.872	1110181.325	589418.639	1110137.066	589364.406	1110054.872	589263.888	1109707.129	588837.572	1109624.935	588736.854	1109580.677	588682.621	1109536.419	588628.388
2	1110215.291	589474.495	1110171.032	589420.262	1110126.774	589366.029	1110019.621	589292.456	1109671.878	588866.340	1109609.632	588737.081	1109570.022	588679.054	1109525.764	588624.821
3	1110221.929	589482.630	1110177.671	589428.397	1110133.413	589374.164	1110090.124	589234.920	1109742.380	588808.804	1109621.645	588751.801	1109569.167	588687.496	1109524.909	588633.264
4	1110235.875	589471.249	1110191.617	589417.016	1110147.359	589362.783	1110027.809	589267.381	1109680.065	588841.265	1109640.239	588736.627	1109573.593	588692.920	1109529.335	588638.687
5	1110229.236	589463.114	1110184.978	589408.881	1110140.720	589354.648	1110045.828	589289.462	1109698.085	588863.346	1109628.226	588721.907	1109582.035	588693.775	1109537.777	588639.542
6							1110081.936	589259.994	1109734.193	588833.879			1109591.332	588686.188	1109547.074	588631.955
7							1110063.917	589237.914	1109716.174	588811.798			1109592.187	588677.745	1109547.929	588623.513
													1109587.761	588672.322	1109543.503	588618.089
													1109579.319	588671.467	1109535.061	588617.234

PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOBİ CO.,LTD.	NAME: S. Kiguchi SIGNATURE: <i>S. Kiguchi</i> DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: <i>K. Matsumoto</i> DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: <i>K. Enomoto</i> DATE: 5/10/2000	CABLE STAYED BRIDGE SUPER STRUCTURE COORDINATE OF STAYED CABLE BRIDGE	P2/GE/0080

II. SUPERSTRUCTURE - 1 (PRECAST BOX GIRDER)

DETAIL OF PRECAST SEGMENT (1)

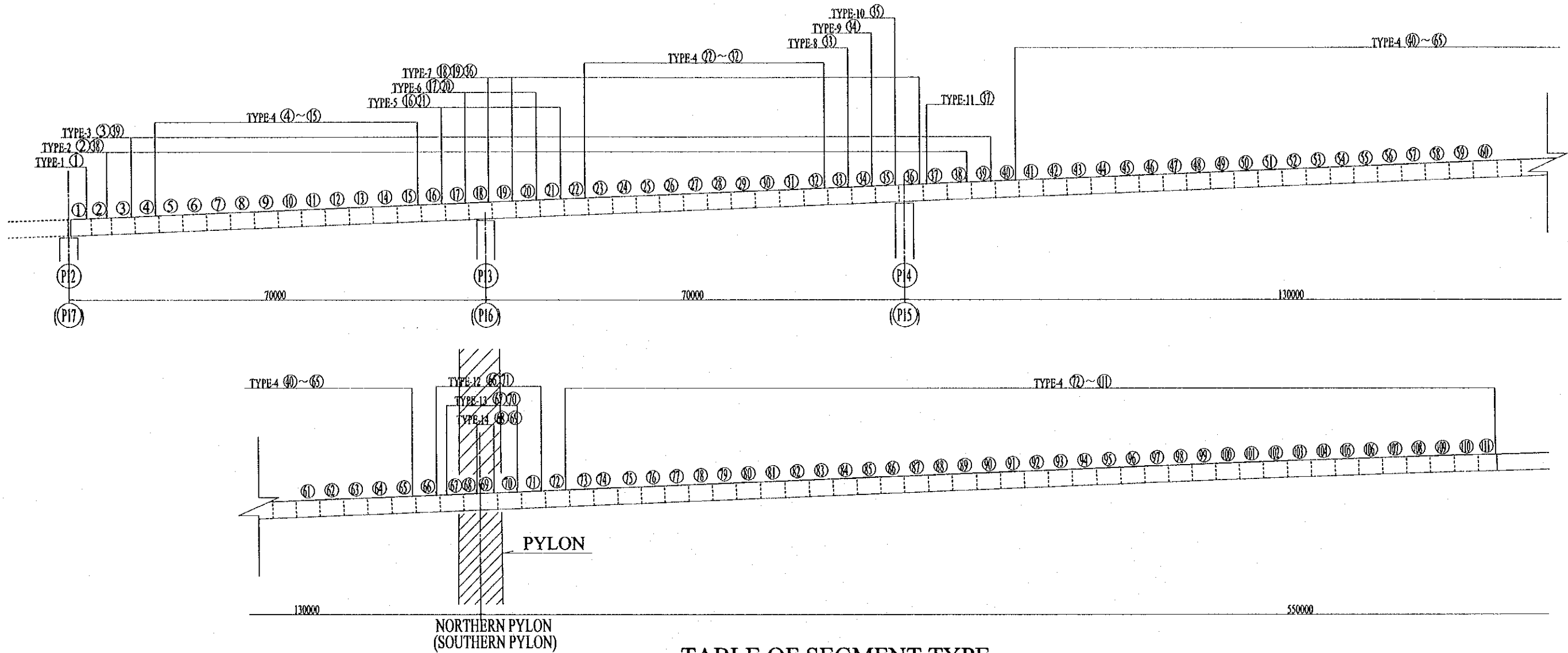


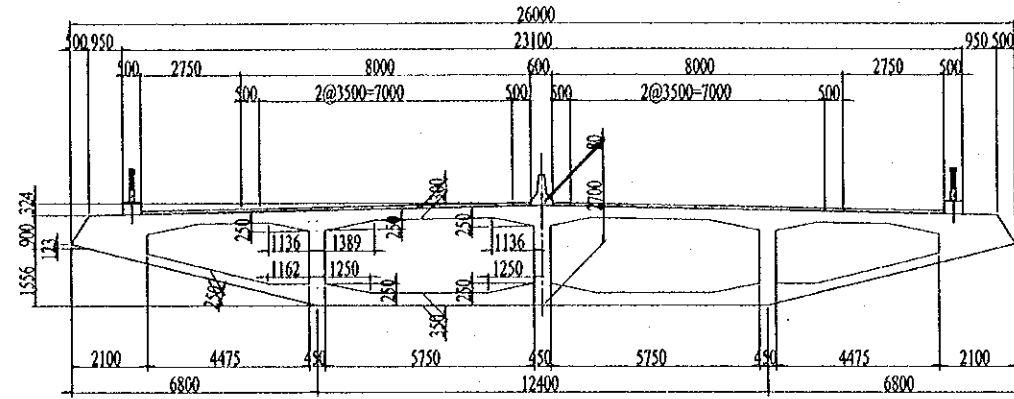
TABLE OF SEGMENT TYPE

SEGMENT NO.	SEGMENT TYPE	SEGMENT NO.	SEGMENT TYPE	SEGMENT NO.	SEGMENT TYPE	SEGMENT NO.	SEGMENT TYPE	SEGMENT NO.	SEGMENT TYPE	SEGMENT NO.	SEGMENT TYPE
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②	TYPE-2	②2	TYPE-4	④2	TYPE-4	⑥2	TYPE-4	⑧2	TYPE-4	⑩2	TYPE-4
③	TYPE-3	②3	TYPE-4	④3	TYPE-4	⑥3	TYPE-4	⑧3	TYPE-4	⑩3	TYPE-4
④	TYPE-4	②4	TYPE-4	④4	TYPE-4	⑥4	TYPE-4	⑧4	TYPE-4	⑩4	TYPE-4
⑤	TYPE-4	②5	TYPE-4	④5	TYPE-4	⑥5	TYPE-4	⑧5	TYPE-4	⑩5	TYPE-4
⑥	TYPE-4	②6	TYPE-4	④6	TYPE-4	⑥6	TYPE-12	⑧6	TYPE-4	⑩6	TYPE-4
⑦	TYPE-4	②7	TYPE-4	④7	TYPE-4	⑥7	TYPE-13	⑧7	TYPE-4	⑩7	TYPE-4
⑧	TYPE-4	②8	TYPE-4	④8	TYPE-4	⑥8	TYPE-14	⑧8	TYPE-4	⑩8	TYPE-4
⑨	TYPE-4	②9	TYPE-4	④9	TYPE-4	⑥9	TYPE-14	⑧9	TYPE-4	⑩9	TYPE-4
⑩	TYPE-4	③0	TYPE-4	⑤0	TYPE-4	⑦0	TYPE-13	⑧0	TYPE-4	⑩0	TYPE-4
⑪	TYPE-4	③1	TYPE-4	⑤1	TYPE-4	⑦1	TYPE-12	⑧1	TYPE-4	⑩1	TYPE-4
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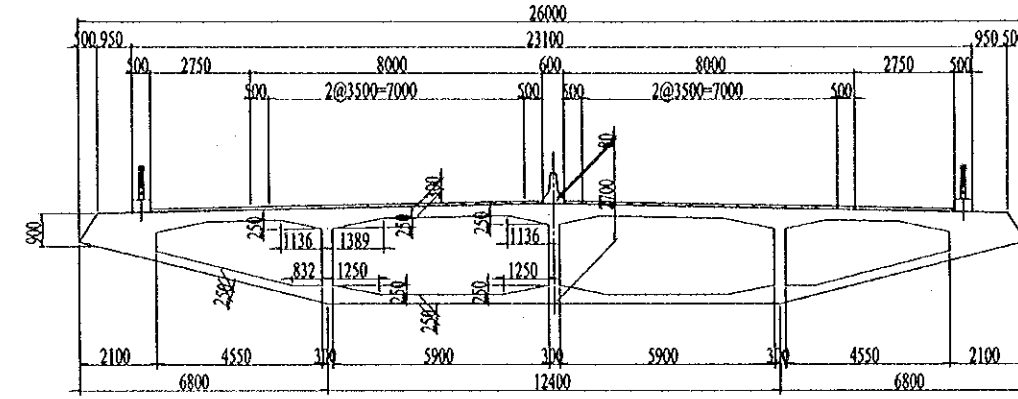
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO., LTD.	NAME: S. Kiguchi SIGNATURE: <i>S. Kiguchi</i> DATE: 20/9/2000	K. Matsumoto <i>K. Matsumoto</i> 29/9/2000	K. Enomoto <i>K. Enomoto</i> 5/10/2000	CABLE STAYED BRIDGE SUPER STRUCTURE DETAIL OF PRECAST SEGMENT (1)	P2/CS/0010

DETAIL OF PRECAST SEGMENT (2) SCALE 1 : 200

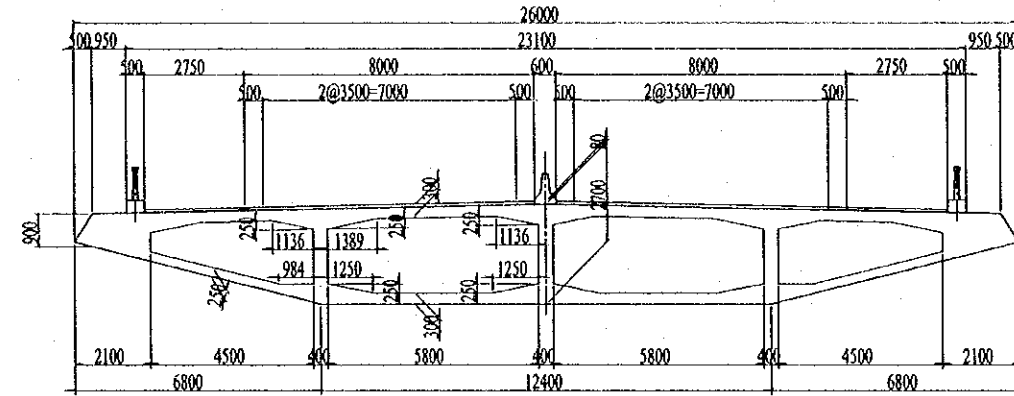
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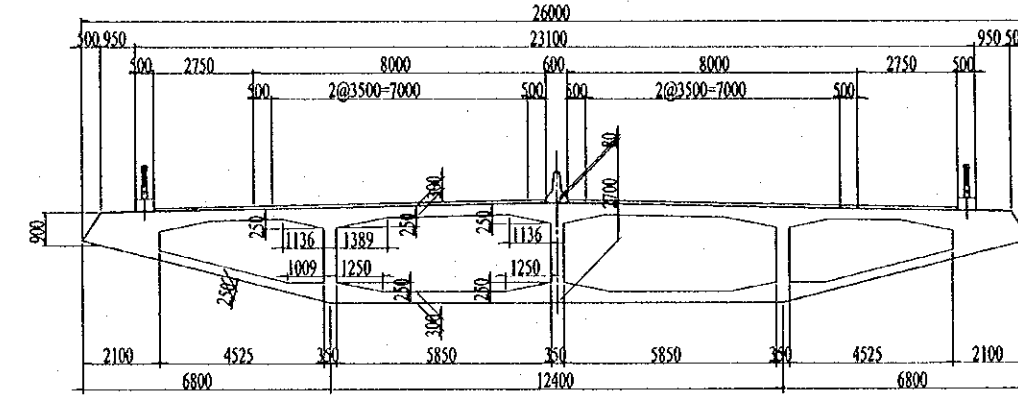
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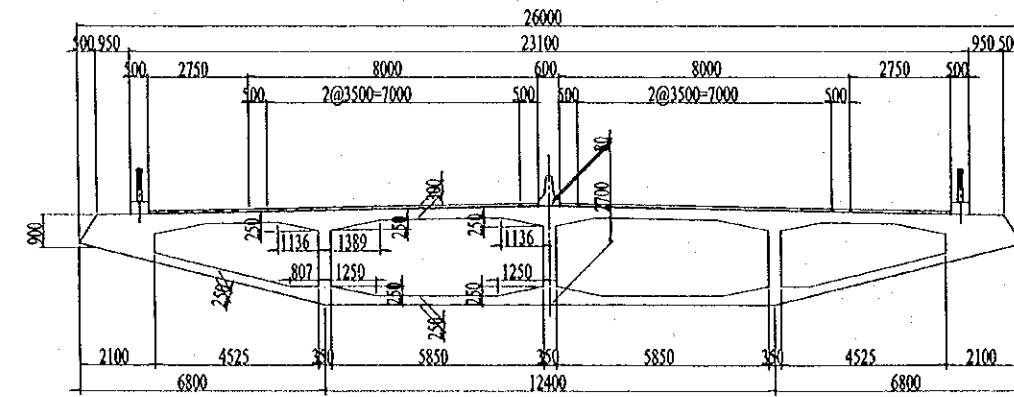
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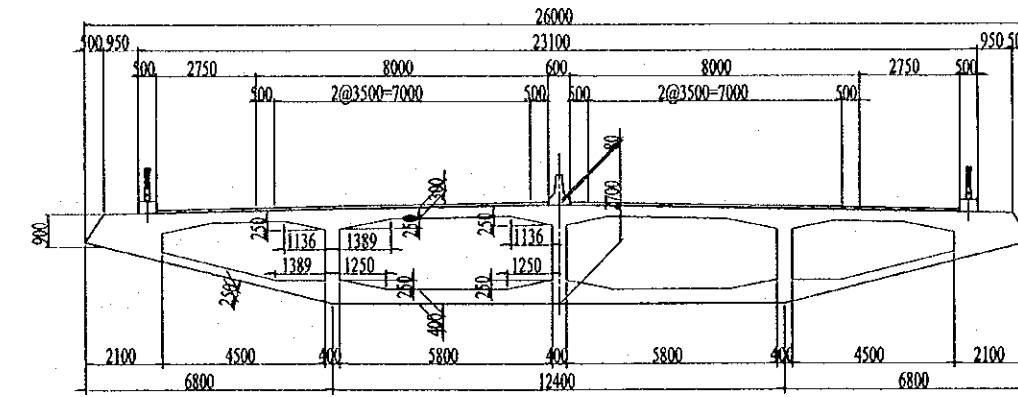
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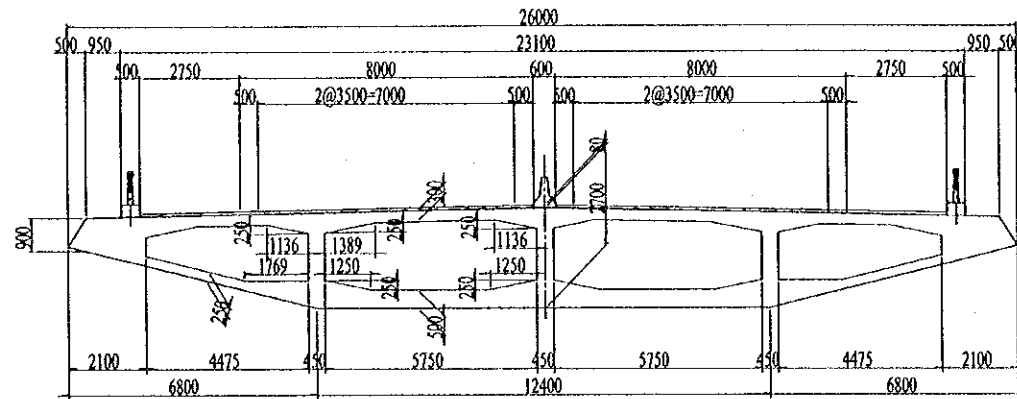
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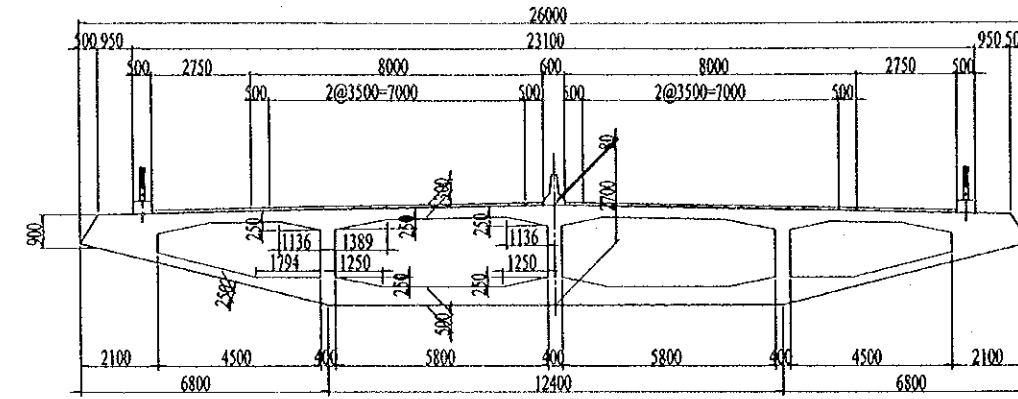
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	NAME	S. Kiguchi	K. Matsumoto	CABLE STAYED BRIDGE SUPER STRUCTURE DETAIL OF PRECAST SEGMENT (2)	P2/CS/0011
				SIGNATURE	<i>S. Kiguchi</i>	<i>K. Matsumoto</i>		
				DATE	20/9/2000	29/9/2000		
						 K. Enomoto 5/10/2000		

DETAIL OF PRECAST SEGMENT (3) SCALE 1 : 200

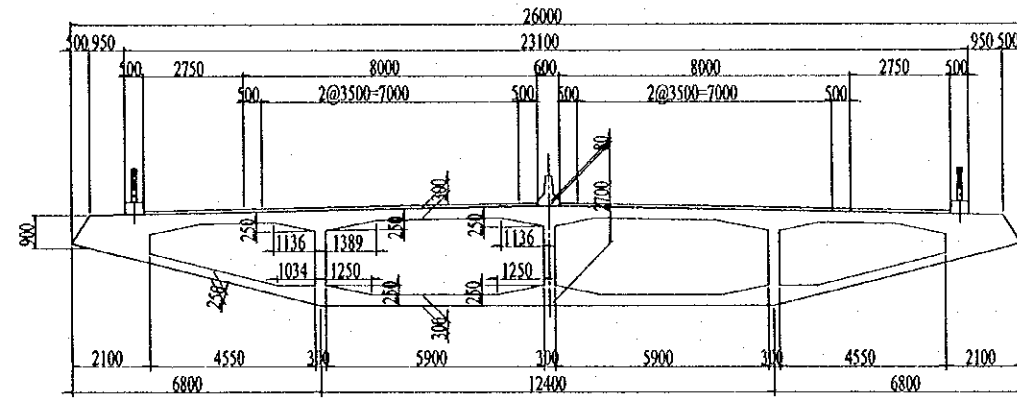
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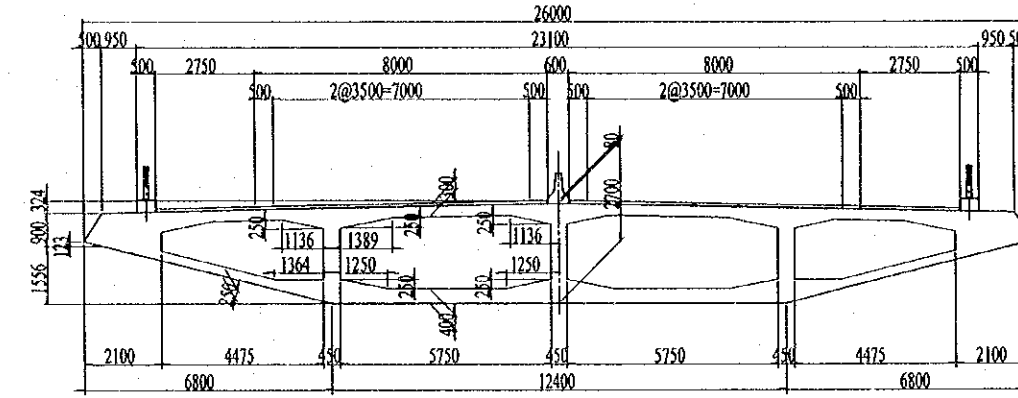
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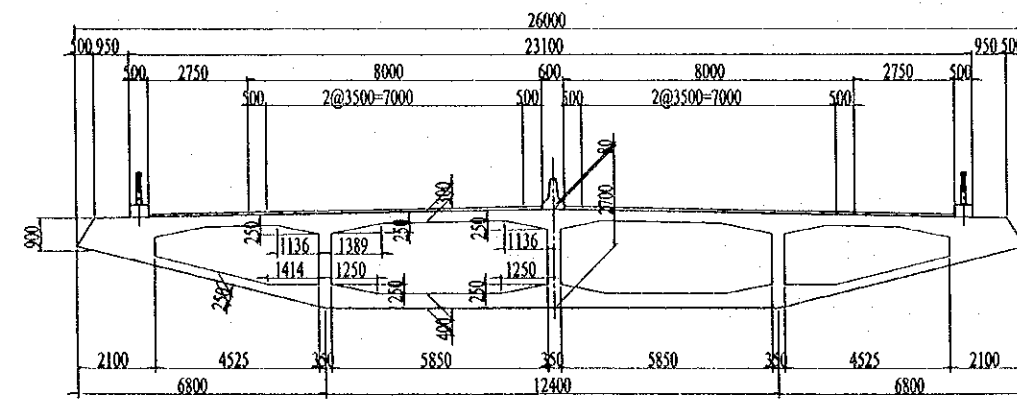
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TYPE-11



TYPE-9

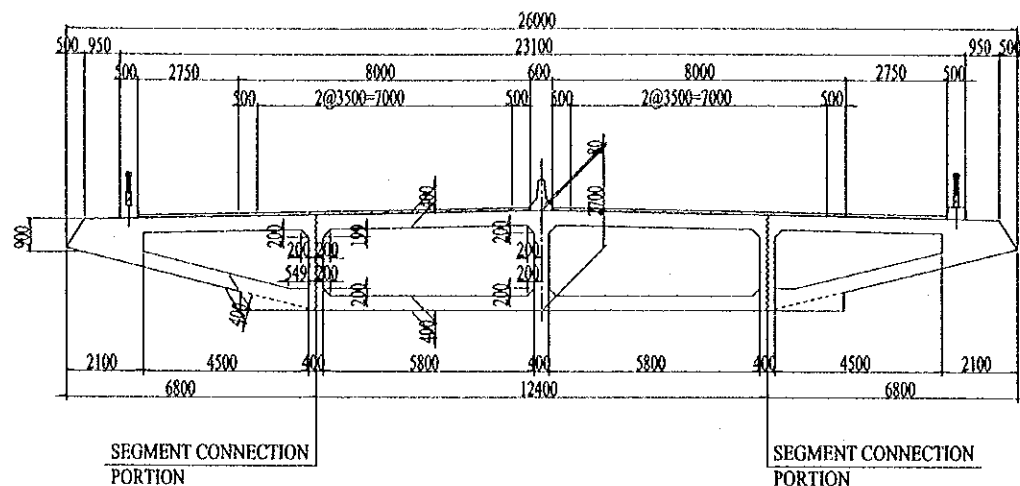


PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	NAME S. Kiguchi	NAME K. Matsumoto	NAME K. Enomoto	CABLE STAYED BRIDGE SUPER STRUCTURE DETAIL OF PRECAST SEGMENT (3)	P2/CS/0012
				SIGNATURE <i>S. Kiguchi</i>	SIGNATURE <i>K. Matsumoto</i>	SIGNATURE <i>K. Enomoto</i>		
				DATE 20/9/2000	DATE 29/9/2000	DATE 5/10/2000		

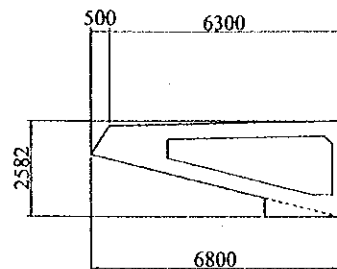
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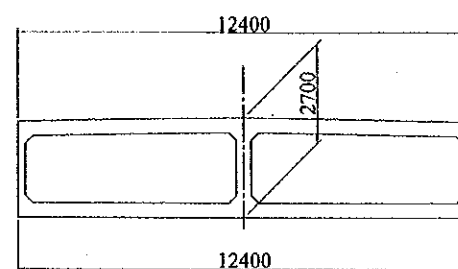
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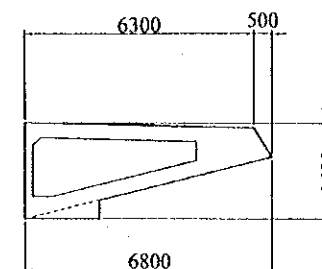
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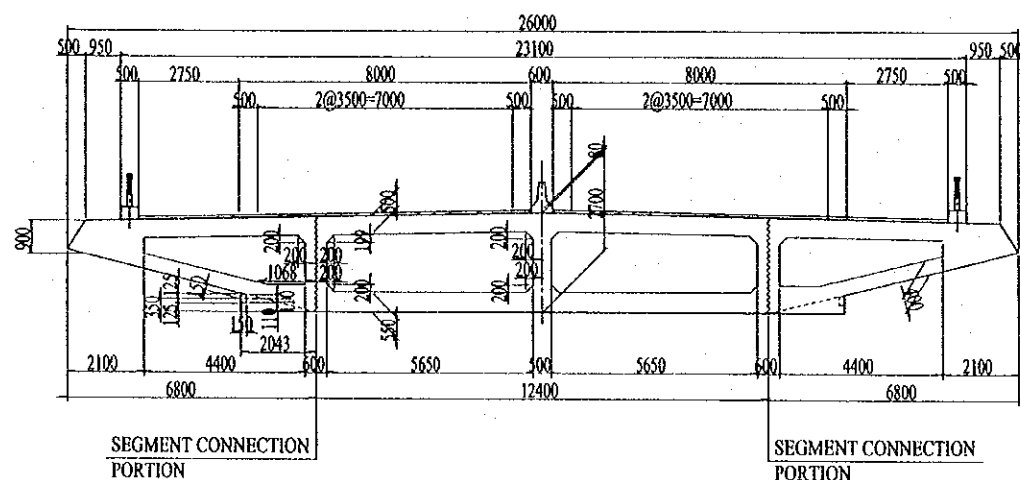
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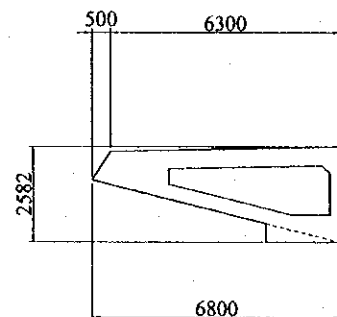
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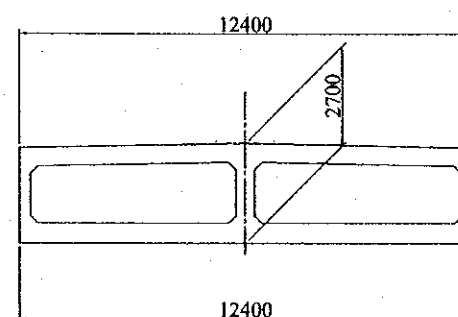
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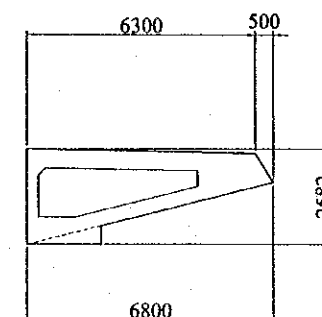
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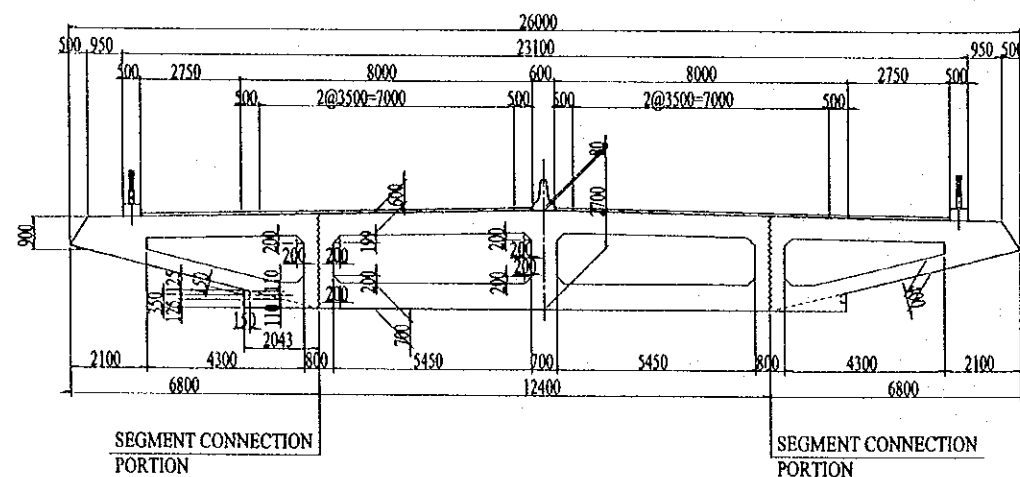
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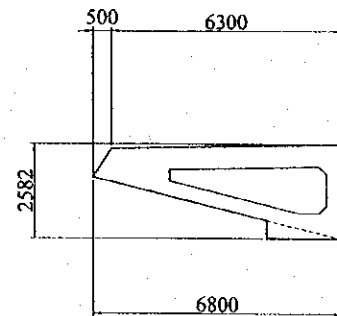
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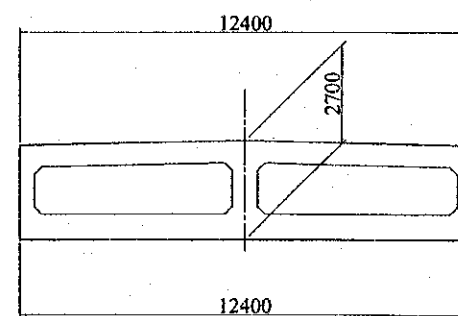
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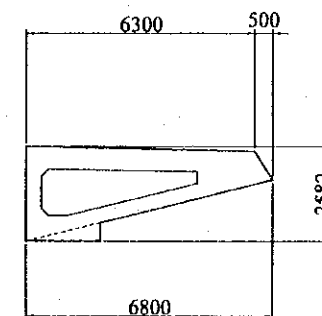
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TYPE-14-CL



TYPE-14-R



PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	S. Kiguchi	K. Matsumoto	K. Enomoto	CABLE STAYED BRIDGE SUPER STRUCTURE DETAIL OF PRECAST SEGMENT (4)	P2/CS/0013
				SIGNATURE	SIGNATURE	SIGNATURE		
				DATE	DATE	DATE		
				20/9/2000	29/9/2000	5/10/2000		