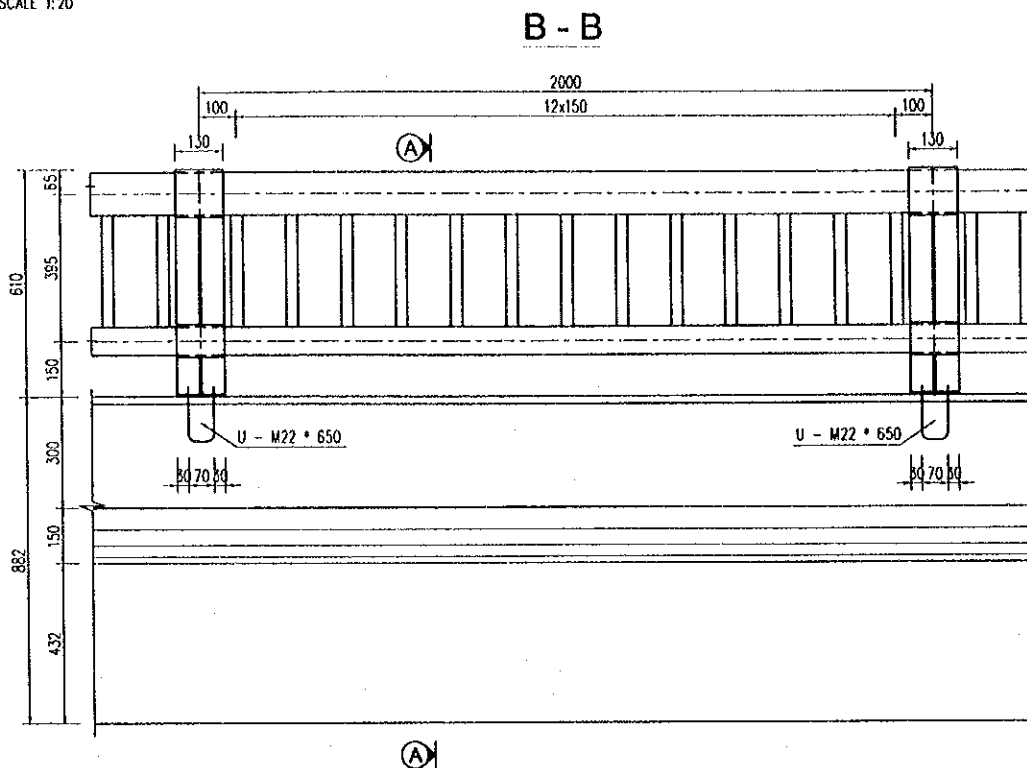
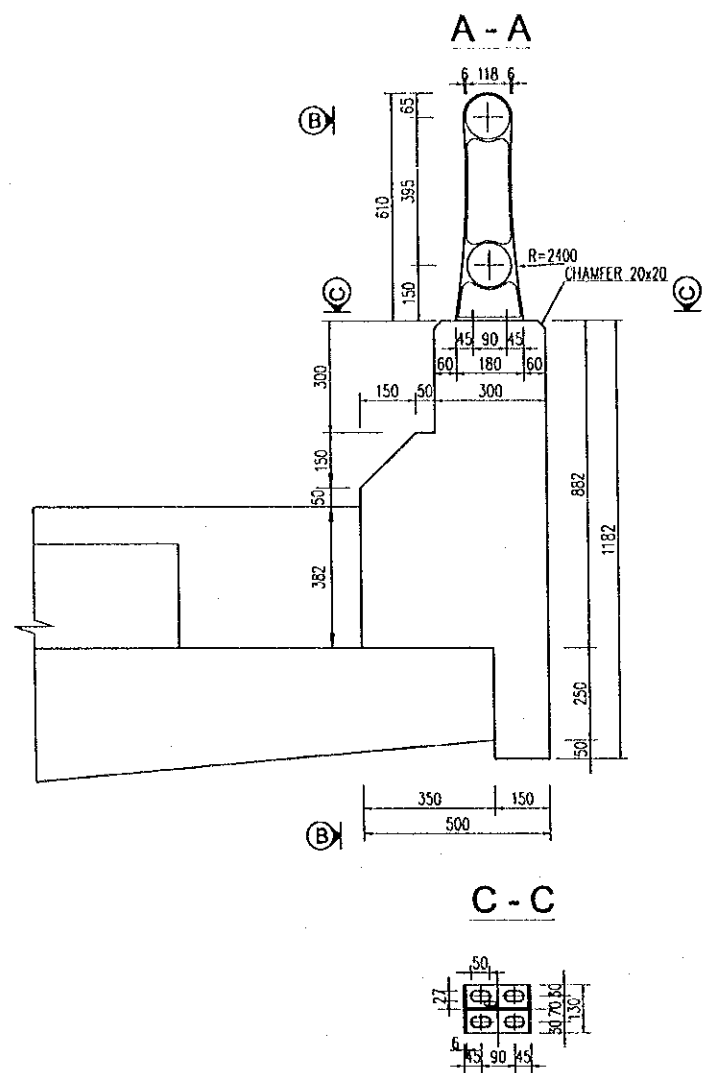


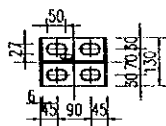
## V. MISCELLANEOUS

### DETAIL OF PARAPET AND RAILING

SCALE 1:20



### C - C



### QUANTITY OF RAILING (PER 10M LONG)

ITEM	SIZE	MATERIAL	UNIT WEIGHT	QUANTITY	UNIT	WEIGHT(KG)	REMARK
POST	610*180*130	FCD-450	18.1	5	EACH	90.5	GALVANIZING
UPPER RAIL	114.3*3.5T	STK-400	19.5	10	M	195.0	
BOTTOM RAIL	76.3*2.5T	STK-400	5.77	10	M	57.7	
CONNECTION	490*300	STK-400	2.13	1.67	EACH	3.6	
	67.5*300	STK-400	1.4	1.67	EACH	2.3	
ANCHO BOLT	M22. 650	SS-400	2.9	20	EACH	58.0	
VERTICAL MEMBER	F86*32*300	SS-400	2.09	65	EACH	135.9	

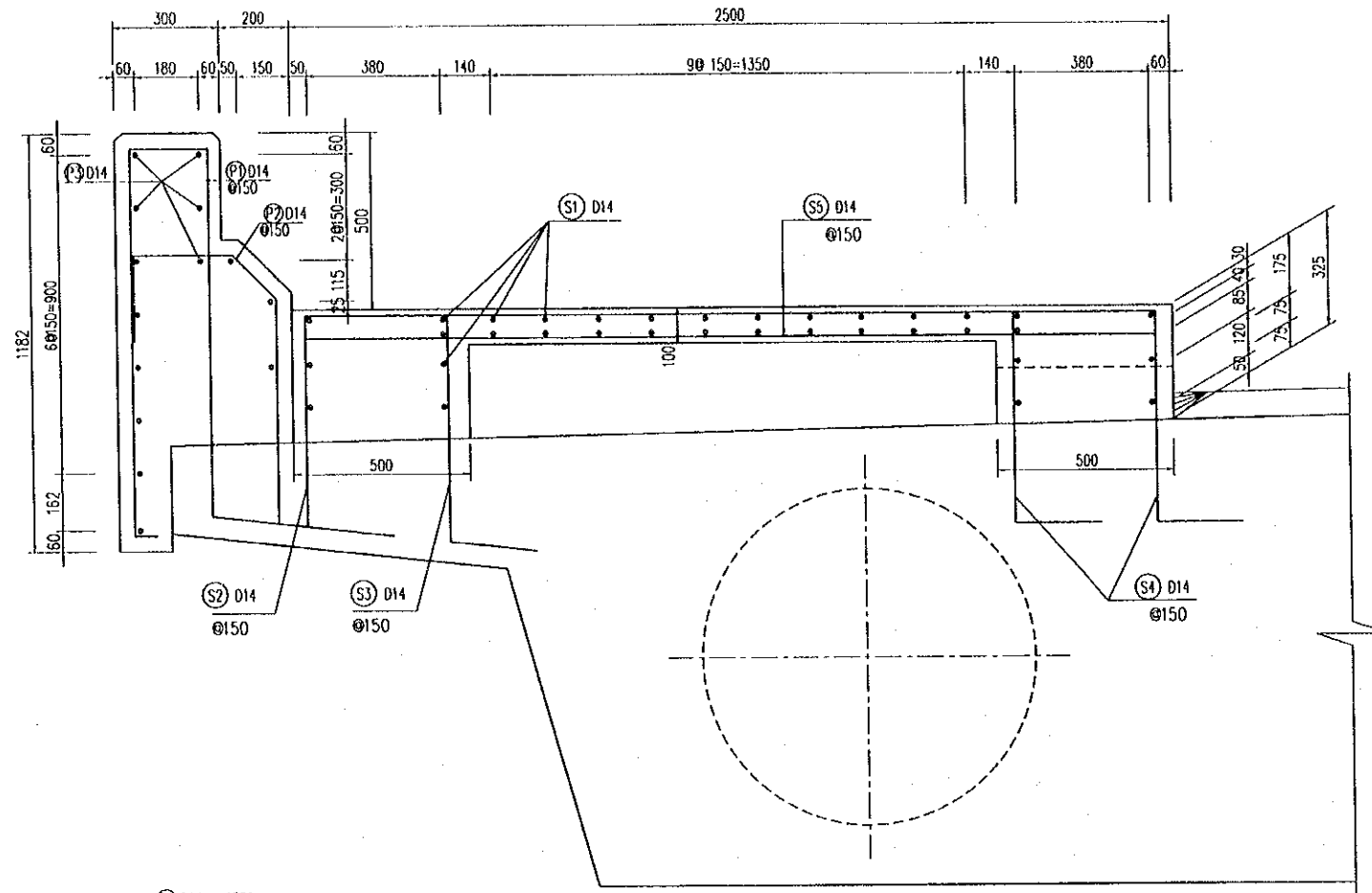
### NOTES:

- FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.
- UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANISED FOLLOWED BY SPECIFICATION PAINT PROTECTION SYSTEM.

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	NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	INTERCHANGE 3 FLYOVER BRIDGE MISCELLANEOUS PARAPET, RAILING AND SIDE WALK DETAILS - SHEET1	P3/BR8/0560
				SIGNATURE	SIGNATURE	SIGNATURE		
				DATE	DATE	DATE		

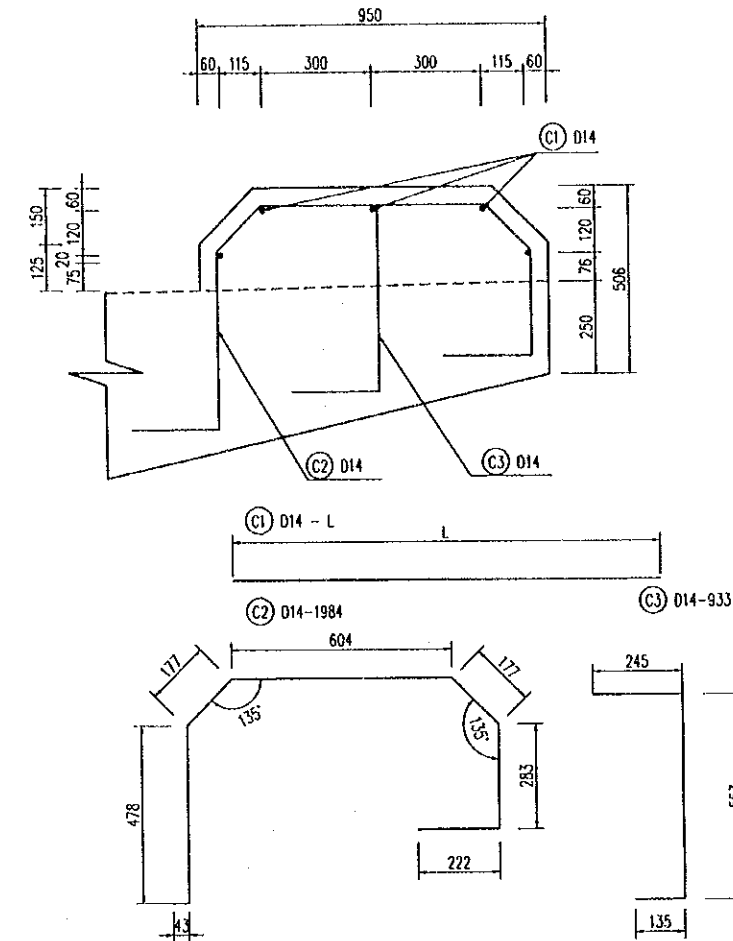
### DETAIL OF PARAPET AND SIDE WALK

SCALE 1:20



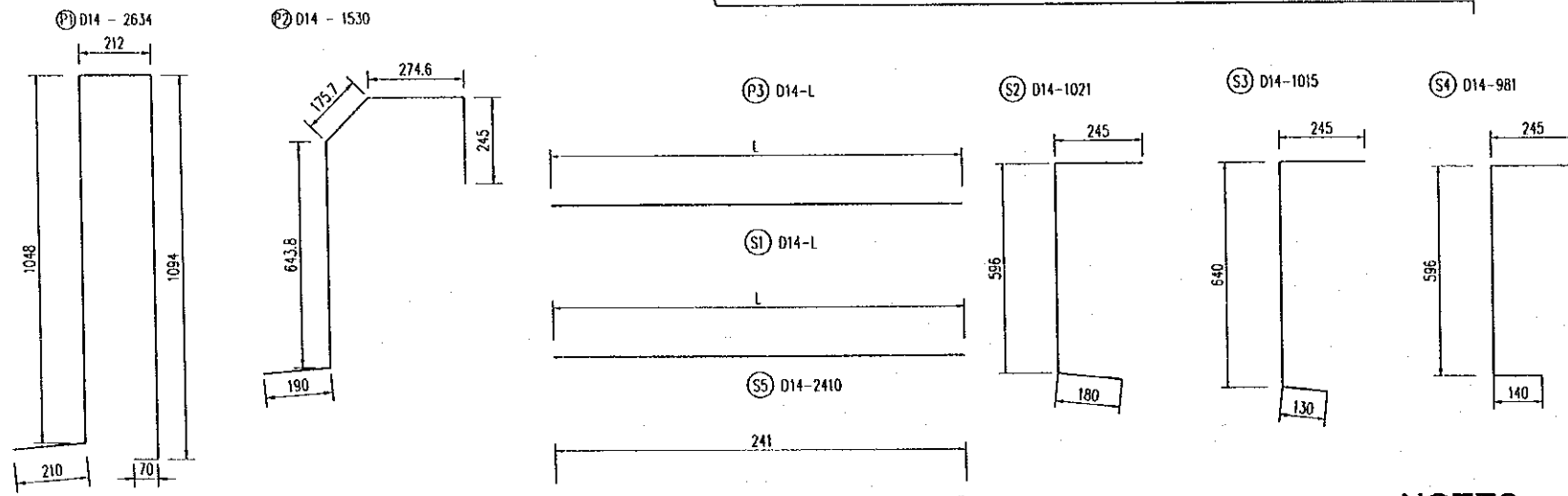
### DETAIL OF PARAPET MIDDLE

SCALE 1:20



### LIST OF REINFORCEMENT (PER 10M LONG)

TYPE	DIAMETER (mm)	LENGTH (mm)	NUMBER	U. WEIGHT (kg/m)	WEIGHT (kg)
P1	14	2634	68	1.208	216.4
P2	14	1453	68	1.208	119.4
P3	14	10000	14	1.208	169.1
S1	14	10000	34	1.208	410.7
S2	14	1021	68	1.208	83.9
S3	14	1015	68	1.208	83.4
S4	14	981	136	1.208	161.2
S5	14	2410	40	1.208	116.5
C1	14	10000	5	1.208	60.4
C2	14	1984	68	1.208	163.0
C3	14	933	68	1.208	76.7
TOTAL : D14 :				1660.4 kg	
				CONCRETE :	11.4 m <sup>3</sup>



### NOTES

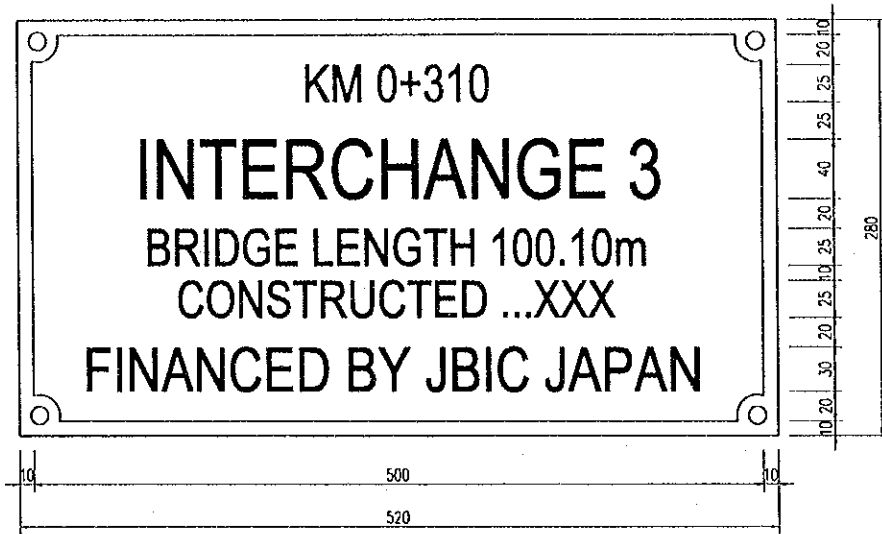
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.

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.	T. Kametani	K. Matsumoto	K. Enomoto	INTERCHANGE 3 FLYOVER BRIDGE MISCELLANEOUS PARAPET, RAILING AND SIDE WALK DETAILS - SHEET2	P3/BR8/0570
				NAME				
				SIGNATURE				
				DATE	20/9/2000	29/9/2000	5/10/2000	

DETAIL OF BRIDGE NAME PLAQUE

SCALE 1:5

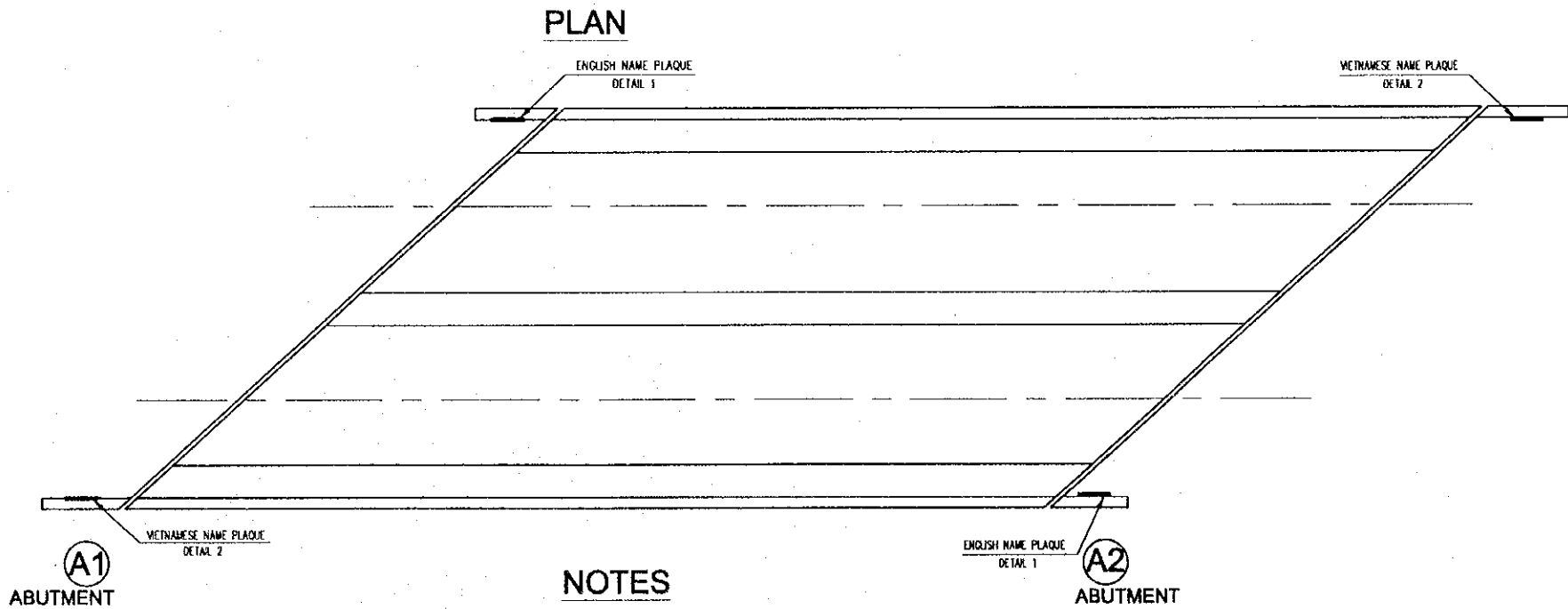
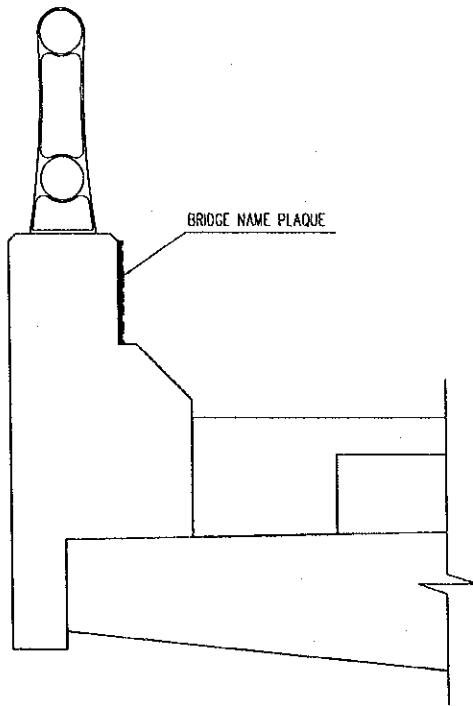
DETAIL 1



DETAIL 2



LOCATION OF NAME PLAQUE



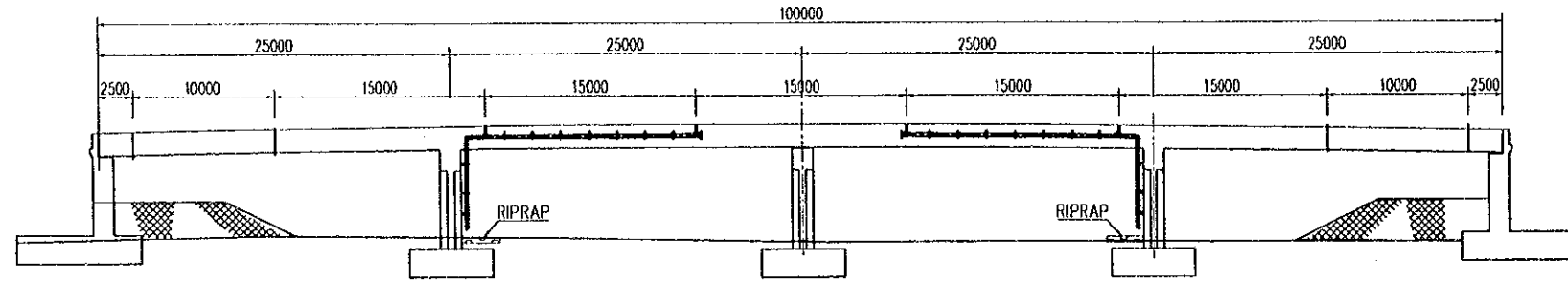
NOTES

1. FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.
  2. MATERIAL SHALL BE BRONZE.
  3. THE DATE TO BE ENTERED AGAINST CONSTRUCTED SHALL BE AS INSTRUCTED BY THE ENGINEER.
  4. ONE PLATE SHALL BE WRITTEN IN ENGLISH AND ONE IN VIETNAMESE.
- THE EXACT FIXING LOCATIONS TO BE INSTRUCTED BY THE ENGINEER.

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 KOBI CO.,LTD.	NAME: T. Kamelani SIGNATURE: <i>T. Kamelani</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	INTERCHANGE 3 FLYOVER BRIDGE MISCELLANEOUS BRIDGE NAME PLAQUE	P3/BR8/0580

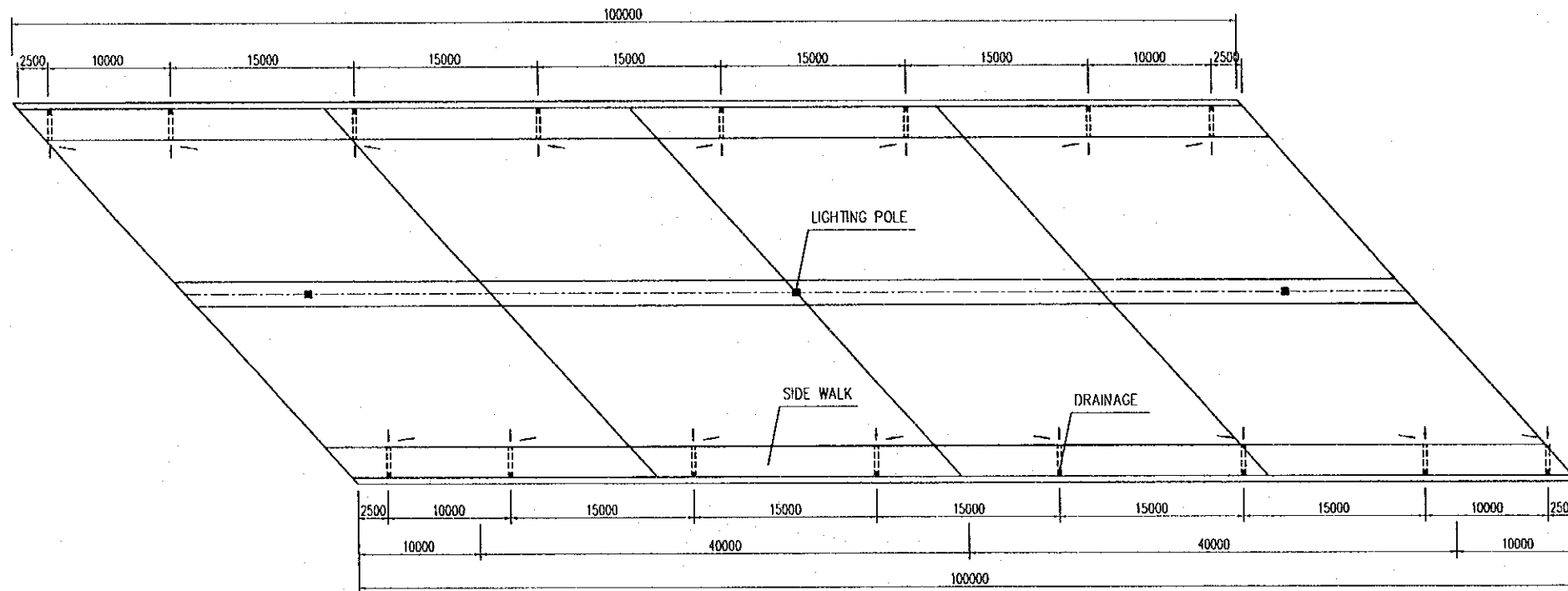
### SIDE ELEVATION

SCALE 1:500



### PLAN

SCALE 1: 500



### NOTES

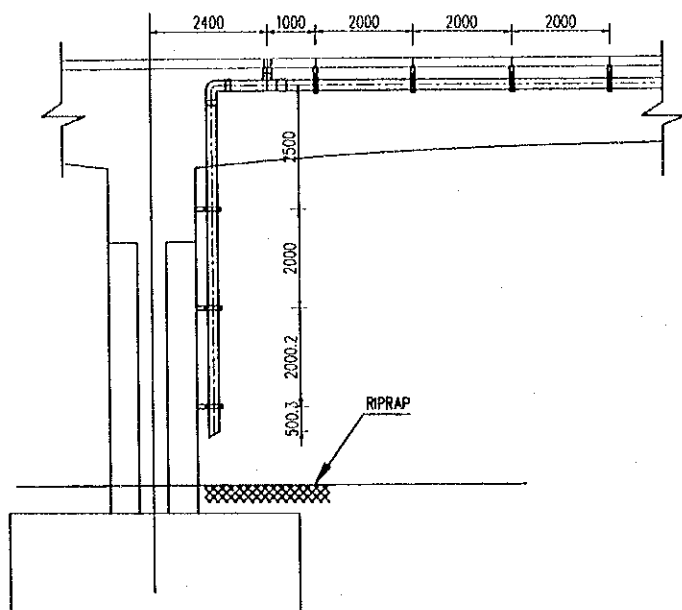
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.

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 T. Kametani SIGNATURE <i>T. Kametani</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	INTERCHANGE 3 FLYOVER BRIDGE MISCELANEOUS DRAINAGE AND LIGHTING POLE LAYOUT	P3/BR8/0590

# DRAINAGE DETAILS

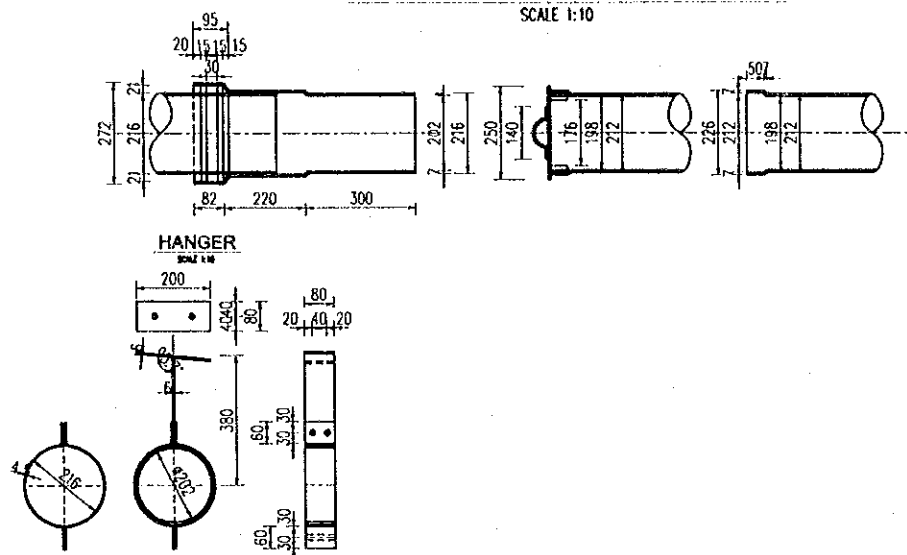
## DRAINAGE AT ABUTEMENT

SCALE 1:150



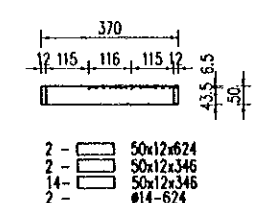
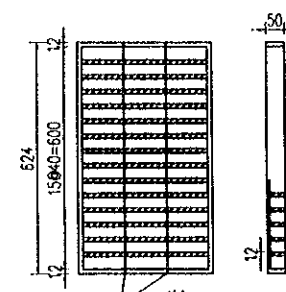
## EXPANSION PIPE JOINT

SCALE 1:10



## SCREEN

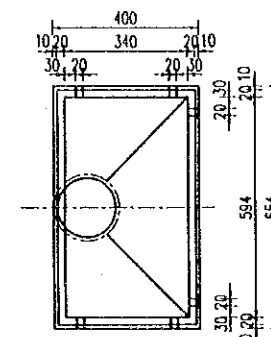
SCALE 1:20



- 2 - 50x12x624
- 2 - 50x12x346
- 14 - 50x12x346
- 2 - #14-624

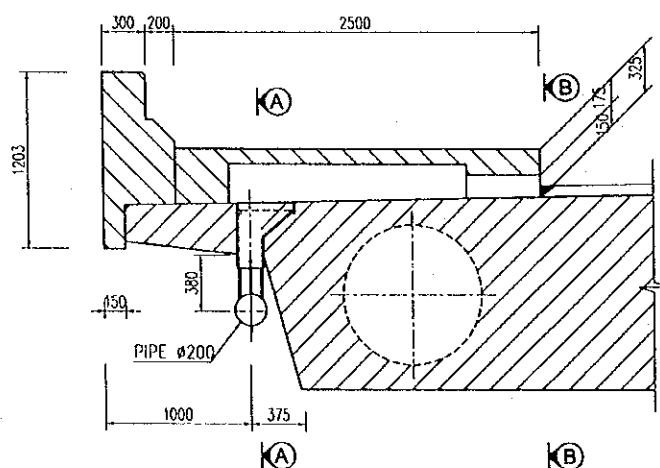
## DRAIN BOX

SCALE 1:20



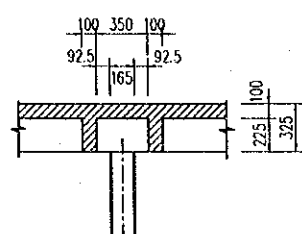
## LOCATION OF DRAIN

SCALE 1:50



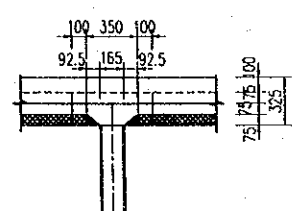
## SECTION A - A

SCALE 1:50



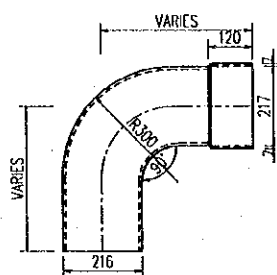
## SECTION B - B

SCALE 1:50



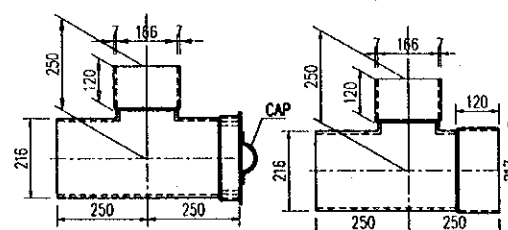
## BEND PIPE (Ø 200mm)

SCALE 1:20



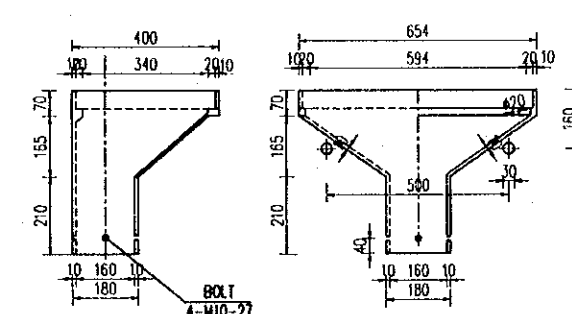
## TEES (Ø=200mm)

(STYLE 1) SCALE 1:20  
(STYLE 2) SCALE 1:20



## DECK DRAIN

SCALE 1:20



## NOTES

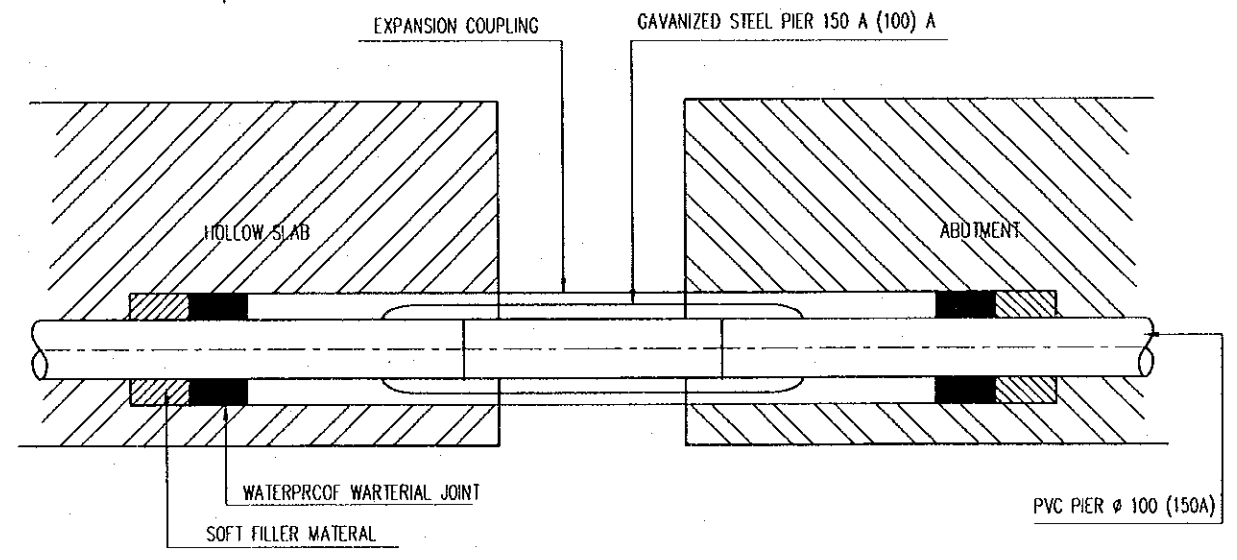
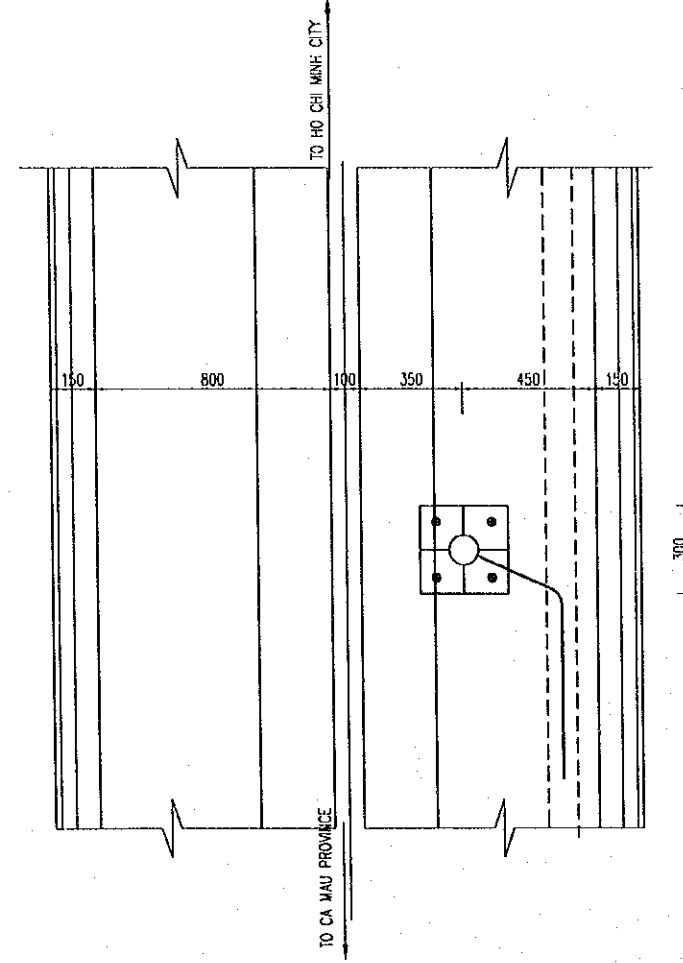
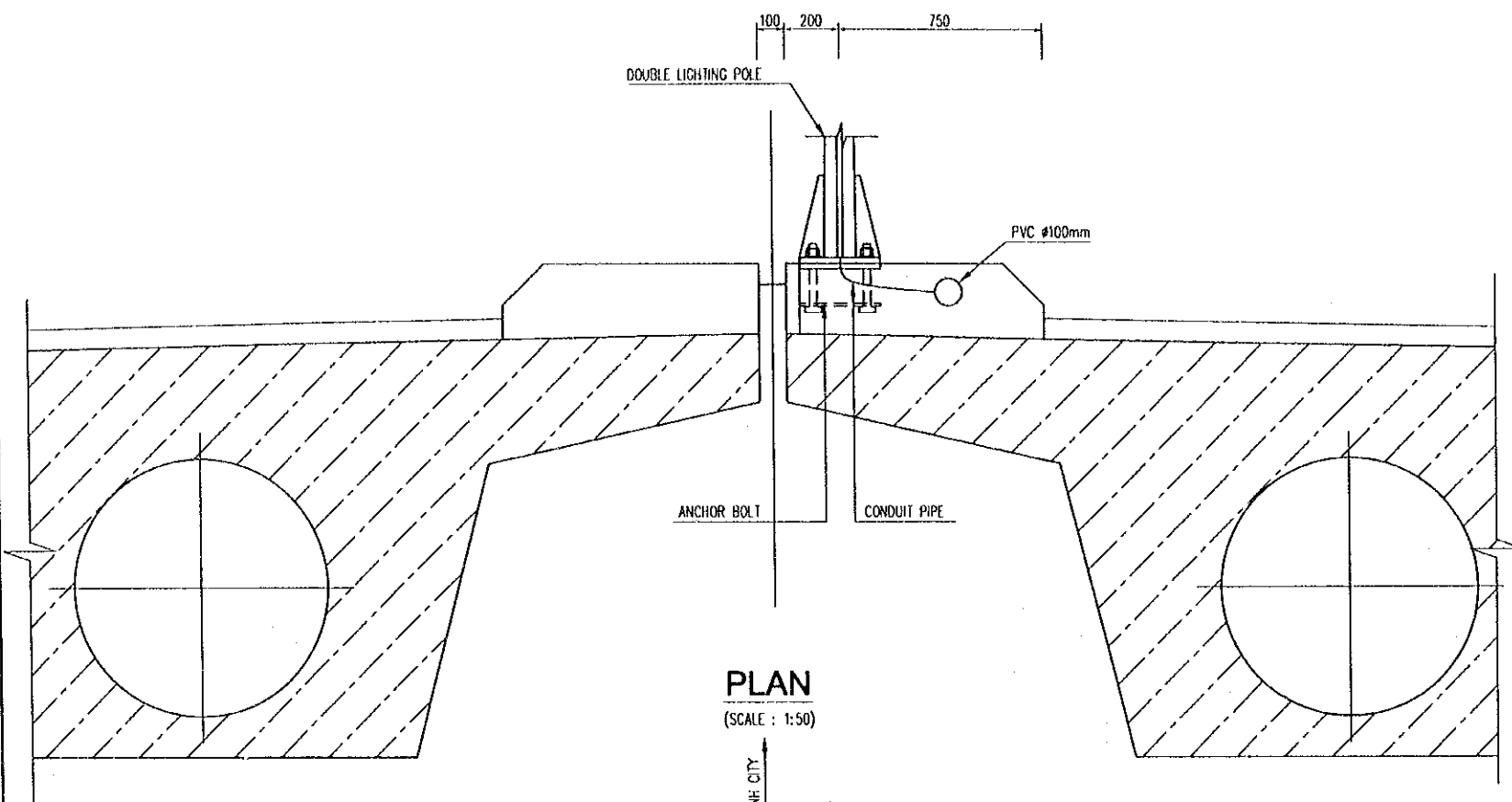
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.

<b>PROJECT NAME</b>	<b>IMPLEMENTATION AGENCY</b>	<b>EXECUTING AGENCY</b>	<b>JICA STUDY TEAM</b>	<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>	<b>DRAWING TITLE</b>	<b>DWG NO.</b>
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: T. Kametani SIGNATURE: [Signature] DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: [Signature] DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: [Signature] DATE: 5/10/2000	INTERCHANGE 3 FLYOVER BRIDGE MISCELANEOUS DRAINAGE DETAILS	P3/BR8/0600

**CROSS SECTION**

(SCALE : 1:25)

**DETAILS OF LIGHTING POLES' BASE**



**NOTES**

1. FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.
2. ANCHOR BOLTS AND CONDUIT PIPES SHALL BE PLACED PRIOR TO CASTING CONCRETE
3. DETAILS OF PULL-BOX SHALL BE SHOWN IN THE SHOP DRAWING TO BE SUBMITTED FOR THE ENGINEER'S APPROVAL




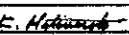
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOBI CO.,LTD.	NAME T. Kametani SIGNATURE <i>T. Kametani</i> DATE 20/9/2000	K. Matsumoto <i>K. Matsumoto</i> 29/9/2000	K. Enomoto <i>K. Enomoto</i> 5/10/2000	INTERCHANGE 3 FLYOVER BRIDGE MISCELLANEOUS BASE DETAIL OF LIGHTING POLES	P3/BR8/0610

### QUANTITY TABLE OF MISCELLANEOUS WORKS

A- PARAPET, SIDE WALK				
	CONCRETE CLASS E		m <sup>3</sup>	224
	REINFORCEMENT	D14	kg	33241
B- RAILING				
			m	236
C- LIGHTING				
	LIGHTING POLES		poles	3
	PVC PILE #100mm		m	100
D- DRAINAGE				
	DRAINAGE		set	16
	PVC PILE #200mm		m	88

### NOTES

1. FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR8/0030.

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	T. Kametani	K. Matsumoto	INTERCHANGE 3 FLYOVER BRIDGE MISCELLANEOUS QUANTITY TABLE OF MISCELLANEOUS WORKS	P3/BR8/0620
				SIGNATURE				
				DATE	20/9/2000	29/9/2000		
						K. Enomoto		





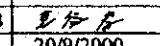

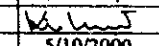
**P3/BR9 INTERCHANGE WITH  
NH.91B RAMP D**

# I. GENERAL

# DRAWING LIST



No.	CODE	DRAWING NAME
<b>I</b>		
<b>GENERAL</b>		
1	P3/BR9/0010	DRAWING LIST
2	P3/BR9/0020	ABBREVIATIONS AND SYMBOLS
3	P3/BR9/0030	STRUCTURAL NOTES
4	P3/BR9/0040	LOCATION MAP
5	P3/BR9/0050	COORDINATES OF BRIDGE
6	P3/BR9/0060	GENERAL VIEW - SHEET 1
7	P3/BR9/0070	GENERAL VIEW - SHEET 2
8	P3/BR9/0080	QUANTITY TABLE OF BRIDGE
<b>II</b>		
<b>SUPERSTRUCTURE</b>		
9	P3/BR9/0090	GIRDER LAYOUT - SHEET 1
10	P3/BR9/0100	GENERAL VIEW OF "I" GIRDER L=28.0M (FOR RIGHT SPAN).
11	P3/BR9/0110	GENERAL VIEW OF "I" GIRDER L=28.0M (FOR LEFT SPAN).
12	P3/BR9/0120	GENERAL VIEW OF "I" GIRDER L=37.0M.
13	P3/BR9/0130	TENDONS ARRANGEMENT OF "I" GIRDER L=28.0M (FOR RIGHT SPAN).
14	P3/BR9/0140	TENDONS ARRANGEMENT OF "I" GIRDER L=28.0M (FOR LEFT SPAN).
15	P3/BR9/0150	TENDONS ARRANGEMENT OF "I" GIRDER L=37.0M.
16	P3/BR9/0160	TENDONS ARRANGEMENT OF DIAPHRAGMS.
17	P3/BR9/0170	REINFORCEMENT OF "I" GIRDER L=28.0M (FOR RIGHT SPAN)
18	P3/BR9/0180	REINFORCEMENT OF "I" GIRDER L=28.0M (FOR LEFT SPAN)
19	P3/BR9/0190	REINFORCEMENT OF "I" GIRDER L=37.0M
20	P3/BR9/0200	REINFORCEMENT OF DIAPHRAGMS
21	P3/BR9/0210	DECK SLAB REINFORCEMENT - SHEET 1
22	P3/BR9/0220	DECK SLAB REINFORCEMENT - SHEET 2
23	P3/BR9/0230	DECK SLAB REINFORCEMENT - SHEET 3
24	P3/BR9/0240	DETAILS OF BEARINGS.
25	P3/BR9/0250	DETAILS OF EXPANSION JOINTS
26	P3/BR9/0280	QUANTITY TABLE OF SUPERSTRUCTURE

No.	CODE	DRAWING NAME
<b>III</b>		
<b>ABUTMENTS</b>		
27	P3/BR9/0270	GENERAL VIEW OF ABUTMENTS A1 & A2
28	P3/BR9/0280	ABUTMENTS A1 & A2 - RC PILE □450 - L=40.0m - SHEET 1
29	P3/BR9/0290	ABUTMENTS A1 & A2 - RC PILE □450 - L=40.0m - SHEET 2
30	P3/BR9/0300	REINFORCEMENT OF ABUTMENT A1 - SHEET 1
31	P3/BR9/0310	REINFORCEMENT OF ABUTMENT A1 - SHEET 2
32	P3/BR9/0320	REINFORCEMENT OF ABUTMENT A1 - SHEET 3
33	P3/BR9/0330	REINFORCEMENT OF ABUTMENT A2 - SHEET 1
34	P3/BR9/0340	REINFORCEMENT OF ABUTMENT A2 - SHEET 2
35	P3/BR9/0350	REINFORCEMENT OF ABUTMENT A2 - SHEET 3
36	P3/BR9/0360	EARTHWORKS SLOPE PROTECTION - SHEET 1
37	P3/BR9/0370	EARTHWORKS SLOPE PROTECTION - SHEET 2
38	P3/BR9/0380	DETAILS OF APPROACH SLAB - SHEET 1
39	P3/BR9/0390	DETAILS OF APPROACH SLAB - SHEET 2
40	P3/BR9/0400	QUANTITY TABLE OF ABUTMENTS
<b>IV</b>		
<b>PIERS</b>		
41	P3/BR9/0410	GENERAL VIEW OF PIERS P1 & P2
42	P3/BR9/0420	PIERS P1 & P2 - RC PILE □450 - L=40.0m - SHEET 1
43	P3/BR9/0430	PIERS P1 & P2 - RC PILE □450 - L=40.0m - SHEET 2
44	P3/BR9/0440	REINFORCEMENT OF PIERS P1 & P2 - SHEET 1
45	P3/BR9/0450	REINFORCEMENT OF PIERS P1 & P2 - SHEET 2
46	P3/BR9/0460	PIER PROTECTION
47	P3/BR9/0470	QUANTITY TABLE OF PIERS
<b>V</b>		
<b>MISCELLANEOUS</b>		
48	P3/BR9/0480	DETAILS OF PARAPET AND RAILINGS
49	P3/BR9/0490	BRIDGE NAME PLAQUE
50	P3/BR9/0500	DRAINAGE AND LIGHTING POLES LAYOUT
51	P3/BR9/0510	DETAILS OF DRAINAGE ON BRIDGE
52	P3/BR9/0520	DETAILS OF LIGHTING POLE BASES
53	P3/BR9/0530	QUANTITY TABLE OF MISCELLANEOUS WORKS

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: T. Kametani SIGNATURE:  DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE:  DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE:  DATE: 5/10/2000	RAMPWAY "D" BRIDGE-INTERCHANGE 3 GENERAL DRAWING LIST	P3/BR9/0010

## ABBREVIATIONS AND SYMBOLS

A	PARAMETER OF CLOTHOID CURVE	I.P	POINT OF INTERSECTION
@	AT	KG	KILOGRAM
ABUT	ABUTMENT	KM	KILOMETER
AC	ASPHALT CONCRETE	KPH	KILOMETER PER HOUR
APPR	APPROACH	L	LEGNTH OF CURVE WITH SPIRAL
ASPH	ASPHALT	LC	LENGTH OF CIRCULAR CURVE
&	AND	LS	LENGTH OF SPIRAL CURVE
A > B	A IS LARGER THAN B	LVC	LENGTH OF VERTICAL CURVE
BOR	BORING	LN.M	LINEAR METER
BR	BRIDGE	M	METER
BX	BOX CULVERT	M <sup>2</sup>	SQUARE METER
C	CUT	M <sup>3</sup>	CUBIC METER
CTC	CENTER TO CENTER	MAX	MAXIMUM
CL	CENTERLINE	MIN	MINIMUM
CM	CENTIMETER	MOV	MOVABLE
CONC	CONCRETE	N.G.L	NATURAL GROUND LEVEL
CONST	CONSTRUCTION	OV	OVER BRIDGE
CONT	CONTINUOUS	%	PERCENT
C.S	CIRCULAR CURVE TO SPIRAL CURVE	P	PIPE CULVERT
CU.M	CUBIC METER	PC	BEGINNING POINT OF SIMPLE CURVE
DIA or $\phi$	DIAMETER	PE.W	PARAPET WALL
DC	DRAINAGE CATCHBASIN	P.C	PRESTRESSED CONCRETE
DI	DRAINAGE INLET	P/C	PRE - CAST
DL	DATUM LINE	PH	PLAN HEIGHT
DO	DRAINAGE OUTLET	P.I	POINT OF INTERSECTION FOR HORIZONTAL ALIGNMENT
DS	DRAINAGE SIDEDITCH	PT	END OF POINT OF SIMPLE CURVE
DW	MORTARED RUBBLE PAVED WATERWAY	PC	PLATE COVER
E.P	END POINT	R	RADIUS OF CIRCULAR CURVE
E.V	MIDDLE ORDINATE VERTICAL CURVE	R.C	REINFORCED CONCRETE
EL	ELEVATION	R.O.W	RIGHT OF WAY
EQ	EQUAL	RW	RETAINING WALL
EXC	EXCAVATION	S.C	SPIRAL CURVE TO CIRCULAR CURVE
EXP	EXPANSION	S.P	SLOPE PROTECTION
F	FILL	S.P.P	STEEL PIPE PILE
FG	FINISHED GRADE	SQ	SQUARE
FIX	FIXED	SQ.M	SQUARE METER
FR	FRONTAGE ROAD	S.T	SPIRAL CURVE TO TANGENT
FTOF	FACE TO FACE	STA	STATION
G.F	GUARD FENCE	SM	STONE MASONRY
GR	GUARD RAIL	T	THICKNESS
GIR	GIRDER	T.S	TANGENT TO SPIRAL
H	HEIGHT	T.L	TANGENT LENGTH OF CIRCULAR CURVE
D.F.W.L	DATUM FLOODED WATER LEVEL	To	TANGENT LENGTH OF SPIRAL
HWY	HIGHWAY	V	DESIGN SPEED IN KPH
i	GRADIENT	W	WIDTH
I.C	INTERCHANGE	X	EASTING COORDINATE IN METERS

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	 <b>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</b>	<b>SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT</b>	 <b>NIPPON KOEI CO.,LTD.</b>	NAME	T. Kametani	K. Matsumoto	K. Enomoto	<b>RAMPWAY "D" BRIDGE - INTERCHANGE 3 GENERAL ABBREVIATIONS AND SYMBOLS</b>	<b>P3/BR9/0020</b>
				SIGNATURE	<i>T. Kametani</i>	<i>K. Matsumoto</i>	<i>K. Enomoto</i>		
				DATE	20/9/2000	29/9/2000	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 MILLIMETRES UNLESS OTHERWISE INDICATED.
- 1.4. THE ELEVATION SYSTEM IS REFERED 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
  - PEDESTRIAN LOAD : 3.6 kN/M<sup>2</sup> - AASHTO LRFD 1998
  - BASIC WIND VELOCITY : 160 KM/H - AASHTO LRFD 1998
  - LATERAL SEISMIC RESPONSE COEFFICIENT : 0.12
  - VESSEL IMPACT : VIETNAMESE HIGHWAY BRIDGES STANDARDS 1979
  - TEMPERATURE RANGE : 17.7°C TO 36.7°C
  - UNIFORM TEMPERATURE : ±10°C
  - TEMPERATURE DIFFERENTIAL : 5°C

## 3. CONCRETE

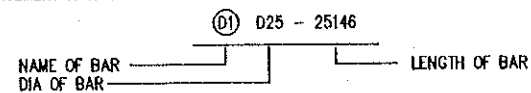
- 3.1. UNLESS OTHERWISE INDECATED CONCRETE SHALL BE OF THE FOLLOWING GRADES BASED ON 28 DAY CYLINDER STRENGTH  $f_c$ :

CONCRETE CLASS	STRENGTH $f_c$ MPa	KIND OF STRUCTURE IN USE
B	40	PC BOX GIRDER, I-GIRDER
C	35	HOLLOW SLAB
D	30	IN-SITU DECK SLAB, BORED PILE
E	24	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. REINFORCEMENT (CONTINUED)

- 4.6. REINFORCEMENTS INDECATED 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
- 4.7. UNLESS OTHERWISE INDECATED 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

- 5.1. NOMINAL DIAMETER, YIELD AND TENSILE STRENGTH OF PRESTRESSED TENDON ARE SPECIFIED AS FOLLOWS:

UTILIZATION	NOMINAL DIAMETER (mm)	TENSILE STRENGTH (MPa)	YIELD STRENGTH (MPa)	JACKING FORCE (kN)
INTERNAL CABLE	12512.7	1860	1675	1650
TRANSVERSE CABLE	3512.7	1860	1675	415

- 5.2. PRESTRESSED TENDONS SHALL BE FORMED FROM THE STRANDS OF 12.7mm DIAMETER MADE BY 7 LOW RELAXATION WIRES GRADE 270 CORRESPONDING WITH ASTM A416M. THE ACTUAL TENDON SIZES AND INITIAL PRESTRESSED FORCE ARE GIVEN ON THE DETAIL DRAWINGS.
- 5.3. PRESTRESSED SYSTEMS TO BE ADOPTED SHALL BE IN ACCORDANCE WITH THE ENGINEER'S APPROVAL.
- 5.4. DUCTS FOR INTERNAL TENDONS SHALL BE SEMI-RIGID GALVANISED SHEATHING UNLESS OTHERWISE NOTED AND SHALL BE RIGIDLY SUPPORTED AT NOT MORE THAN 750mm FROM CENTRES.
- 5.5. THE METHOD TO FIX THE DUCTS AND THE METHOD OF JOINTING AND SEALING OF DUCTS AT CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE ENGINEER'S APPROVAL.
- 5.6. TENDON PROFILES ARE SPECIFIED TO THE CENTER OF SHEATHING. THE TENDON ARE TO BE PLACED TO SMOOTH PROFILES PASSING THROUGH THE SPECIFIED POINTS.
- 5.7. EACH TENDON SHALL BE KEPT STRAIGHT FOR A MINIMUM LENGTH OF 1000mm FROM ANCHORAGE FACES.
- 5.8. GROUTING POINTS SHALL BE PROVIDED AT ALL CROWN POINTS, SAG POINTS, ANCHORAGES AND DEVIATORS.

## 6. WATERPROOF

- 6.1. ALL REINFORCED CONCRETE SURFACES IN CONTACT WITH BACKFILL SHALL BE COATED WITH TWO COATS OF BITUMINOUS MEMBRANE.
- 6.2. THE BRIDGE DECK SHALL BE WATERPROOFED WITH APPROVED PROPRIETARY WATERPROOFING SYSTEM IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

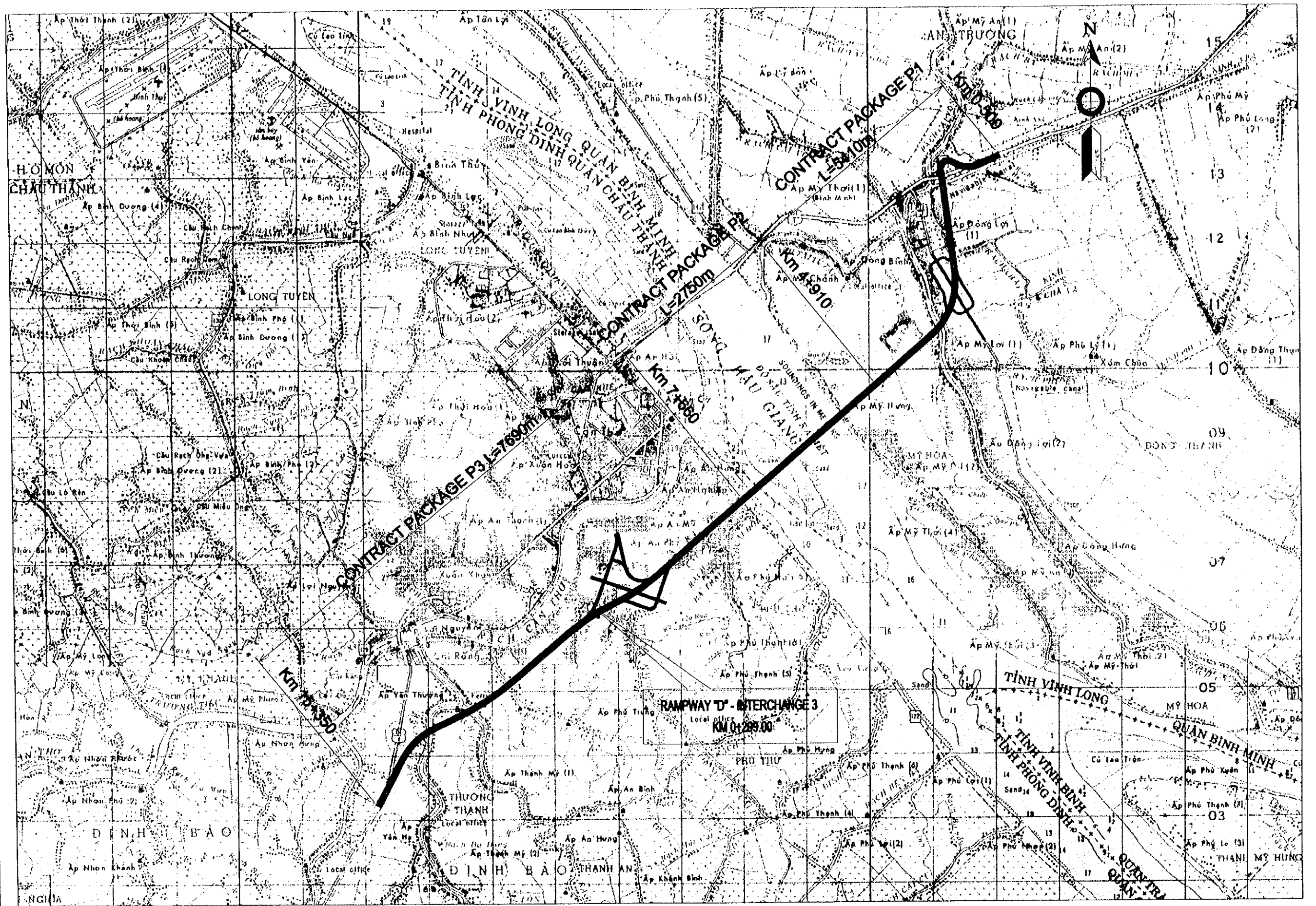
## 7. SUPERSTRUCTURE

- 7.1. SUPERSTRUCTURE IS DESIGNED ON THE BASIS OF CONSTRUCTION SEQUENCE DETAILED ON THE DRAWINGS. ANY CHANGES TO THE CONSTRUCTION SEQUENCE WILL REQUIRE A RE-DESIGN OF THE BRIDGE.
- 7.2. THE SUPERSTRUCTURE DESIGN IS BASED ON THE USE OF INTERNAL PRESTRESSING WITH THE FOLLOWING PARAMETERS:

COEFFICIENT OF FRICTION - 1/RAD	0.25
WOBBLE FACTOR K - 1/m (FOR INTERNAL ONLY)	0.004
DRAW-IN	5 mm
RELATIVE HUMIDITY	85%

- 7.3. ANCHOR BAR SHALL BE CONFORMING TO THE REQUIREMENTS OF SS400 OF JIS G3101.

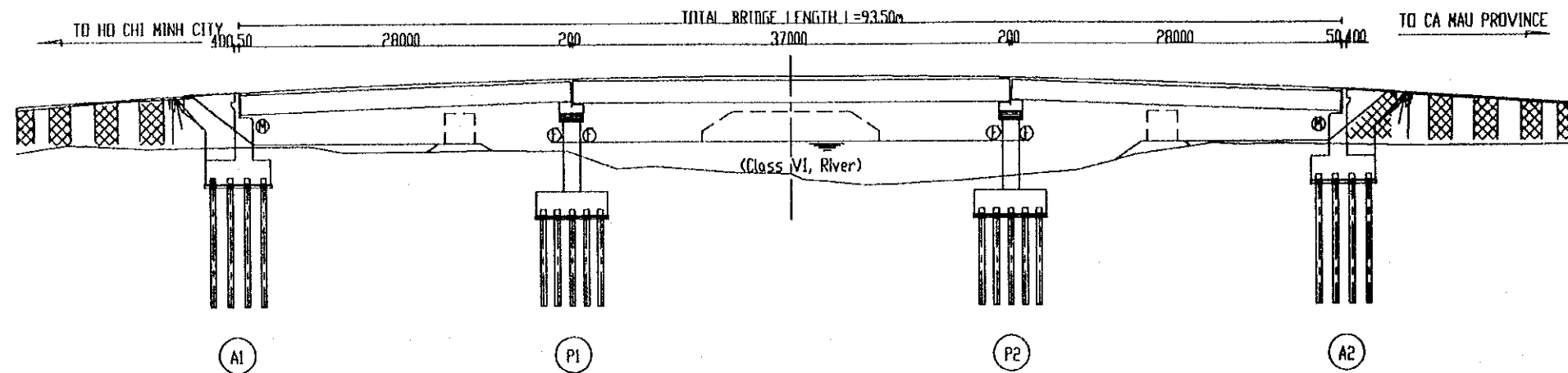
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO., LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY "D" BRIDGE - INTERCHANGE 3 GENERAL STRUCTURAL NOTES	P3/BR9/0030
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		



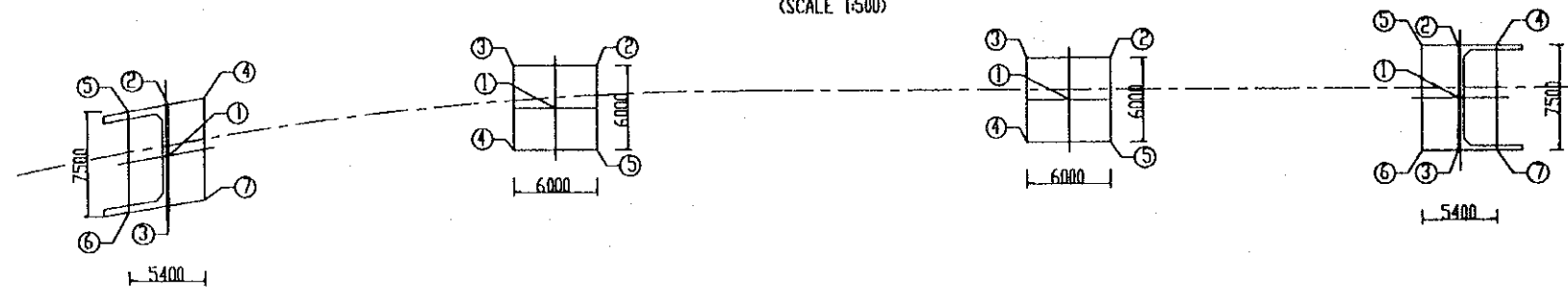
**RAMPWAY "D" - INTERCHANGE 3**  
 Local office  
 KM 0+285.00

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 T. Kametani SIGNATURE <i>T. Kametani</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	RAMPWAY "D" BRIDGE - INTERCHANGE 3 LOCATION MAP	P3/BR9/0040

**SIDE ELEVATION**  
(SCALE 1:500)



**PLAN**  
(SCALE 1:500)



**COORDINATES TABLE**

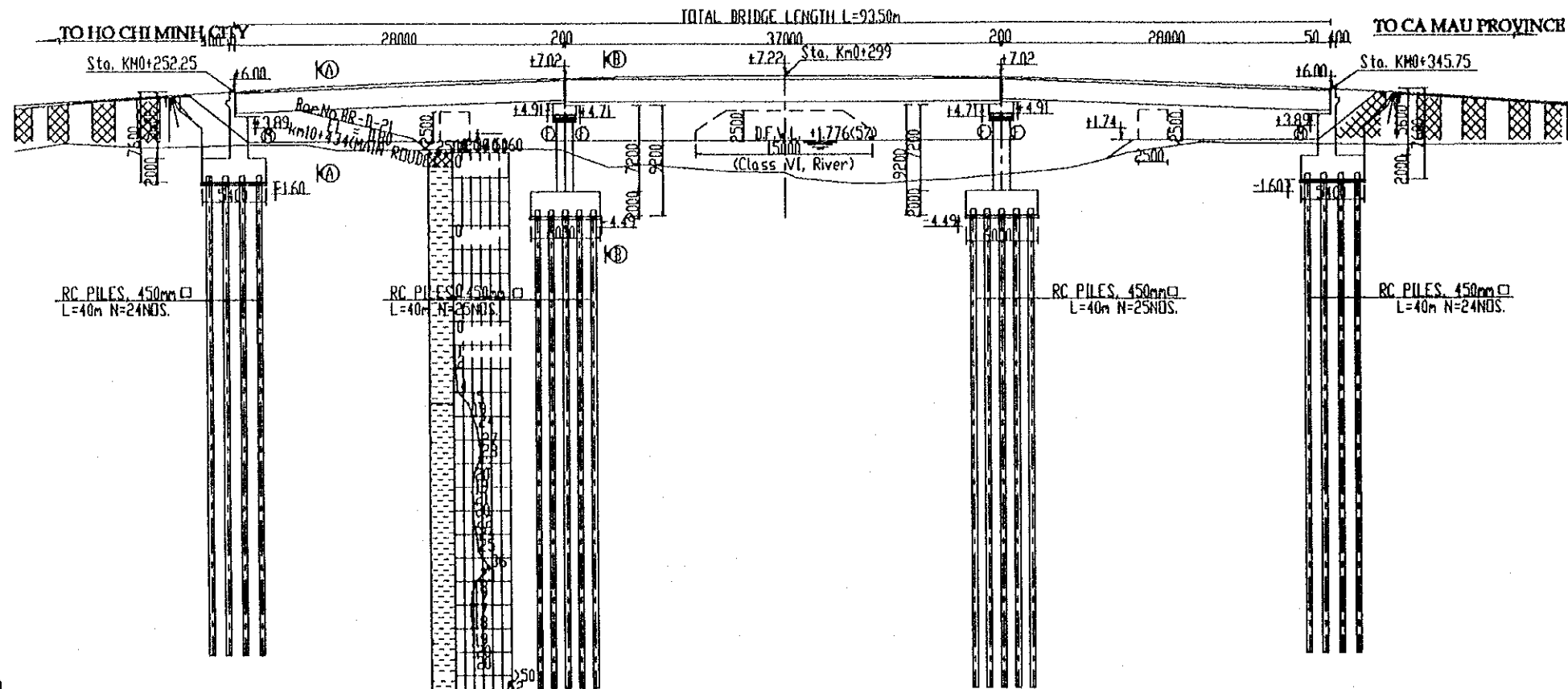
POINT	A1		P1		P2		A2	
	N	E	N	E	N	E	N	E
1	1107244.500	585462.114	1107223.085	600574.207	1107197.511	585416.761	1107178.405	585396.088
2	1107241.810	585464.780	1107218.828	585443.587	1107193.254	585416.576	1107175.637	585398.644
3	1107247.190	585459.448	1107222.901	585447.994	1107197.327	585420.982	1107181.147	585393.555
4	1107239.781	585463.236	1107227.307	585443.921	1107201.733	585416.910	1107173.738	585396.587
5	1107244.079	585466.505	1107223.235	585439.515	1107197.661	585412.503	1107177.403	585400.553
6	1107249.458	585461.174					1107182.911	585395.463
7	1107245.160	585457.905					1107179.246	585391.497

**NOTE**

- FOR STANDARD STRUCTURE NOTE SEE DRAWING No.P3/BR9/0030
- SYMBOLS  
 (1): FIXED BEARING  
 (2): MOVABLE BEARING

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.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY'D BRIDGE-INTERCHANGE 3 GENERAL COORDINATES OF BRIDGE	P3/BR9/0030
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

**SIDE ELEVATION**  
(SCALE 1:500)



DATUM LEVEL -45.00

GRADIENT	VERTICAL CURVE R = 900m L = 108.00m																																				
SUPERELEVATION	-2%																																				
DESIGN LEVELS	6.003																																				
GROUND LEVELS	233.52	237.74	240.00	243.28	244.58	250.00	252.71	258.31	261.07	266.32	270.03	277.22	278.36	280.00	284.20	287.35	294.50	298.00	300.00	305.14	307.59	310.39	313.28	320.00	323.15	325.93	328.32	334.66	335.82	337.45	340.00	344.23	346.66	352.38	356.20	360.00	365.45
CHAINAGE	233.52	237.74	240.00	243.28	244.58	250.00	252.71	258.31	261.07	266.32	270.03	277.22	278.36	280.00	284.20	287.35	294.50	298.00	300.00	305.14	307.59	310.39	313.28	320.00	323.15	325.93	328.32	334.66	335.82	337.45	340.00	344.23	346.66	352.38	356.20	360.00	365.45

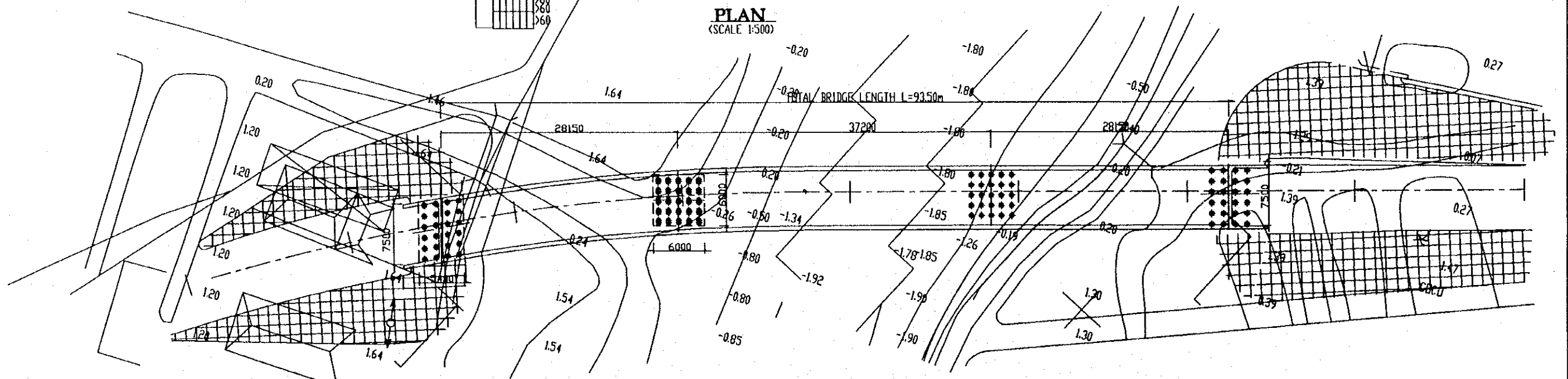
**NOTES**

1. FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BRS/0030  
2. ELEVATIONS ARE IN METERS IN REFERENCE TO THE NATIONAL DATUM LEVEL.

3. SYMBOLS :

- ⊙ FIXED BEARING
- ⊕ MOVABLE BEARING

**PLAN**  
(SCALE 1:500)



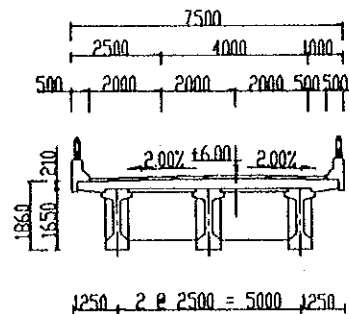
PROJECT NAME DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	IMPLEMENTATION AGENCY JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	EXECUTING AGENCY SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	JICA STUDY TEAM NIPPON KOEI CO., LTD.	PREPARED BY T. Kametani	CHECKED BY K. Matsumoto	APPROVED BY K. Enomoto	DRAWING TITLE RAMPWAY "D" BRIDGE-INTERCHANGE 3 GENERAL GENERAL VIEW SHEET 1	DWG. NO. P3/BRS/0060
				SIGNATURE <i>T. Kametani</i>	SIGNATURE <i>K. Matsumoto</i>	SIGNATURE <i>K. Enomoto</i>		
				DATE 20/9/2000	DATE 29/9/2000	DATE 5/10/2000		



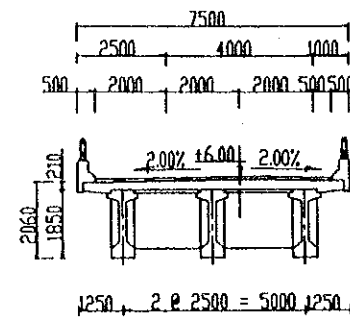
# TYPICAL SECTIONS FOR SUPERSTRUCTURE

(SCALE 1:200)

## SIDE SPAN



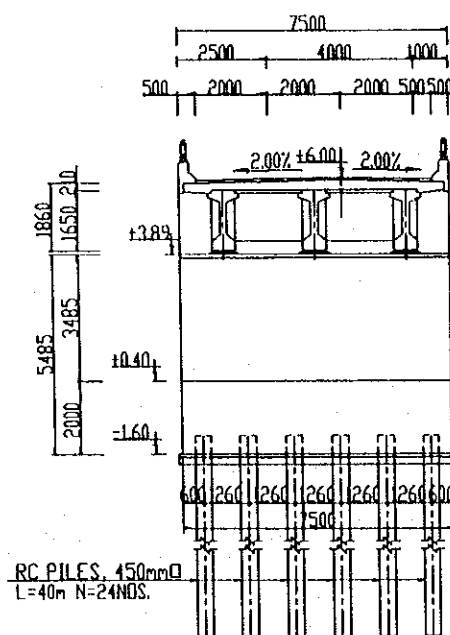
## MIDDLE SPAN



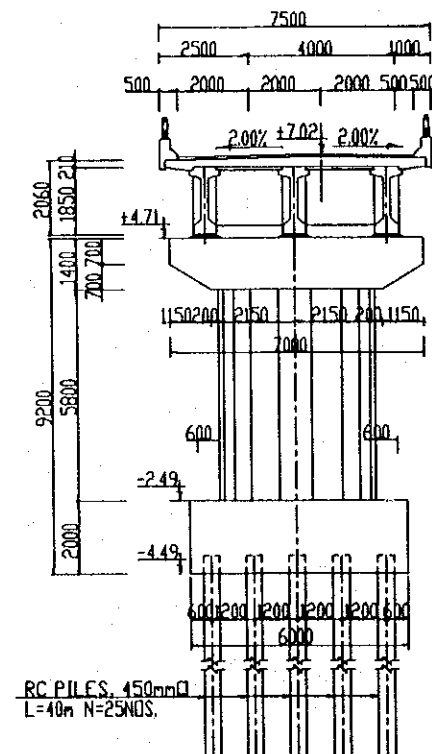
## CROSS SECTIONS

(SCALE 1:200)

### A-A (ABUTMENT A1)



### B-B (PIER P1)



### NOTES

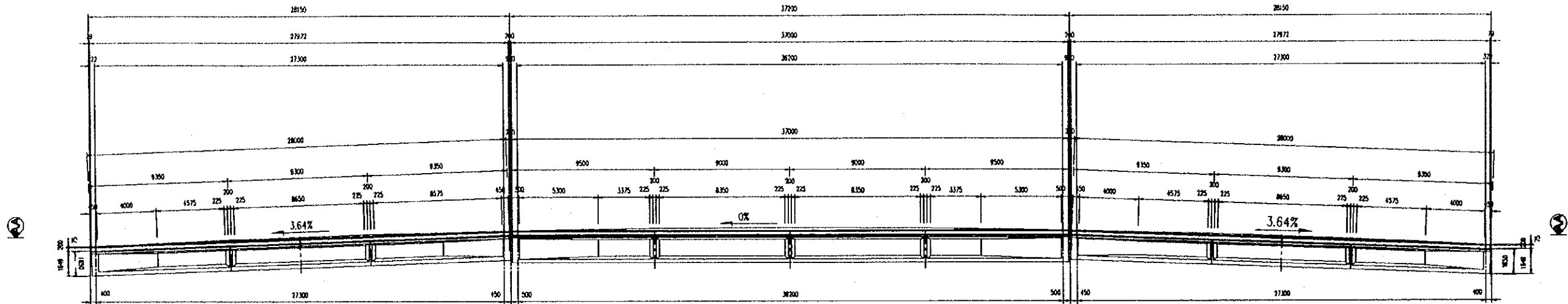
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NQP3/BR9/0030

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 KORI CO.,LTD.	NAME T. Kametani SIGNATURE <i>T. Kametani</i> DATE 20/9/2000	K. Matsumoto <i>K. Matsumoto</i> 29/9/2000	K. Enomoto <i>K. Enomoto</i> 5/10/2000	RAMPWAY'D'BRIDGE-INTERCHANGE 3 GENERAL GENERAL VIEW-SHEET 2	P3/BR9/0070

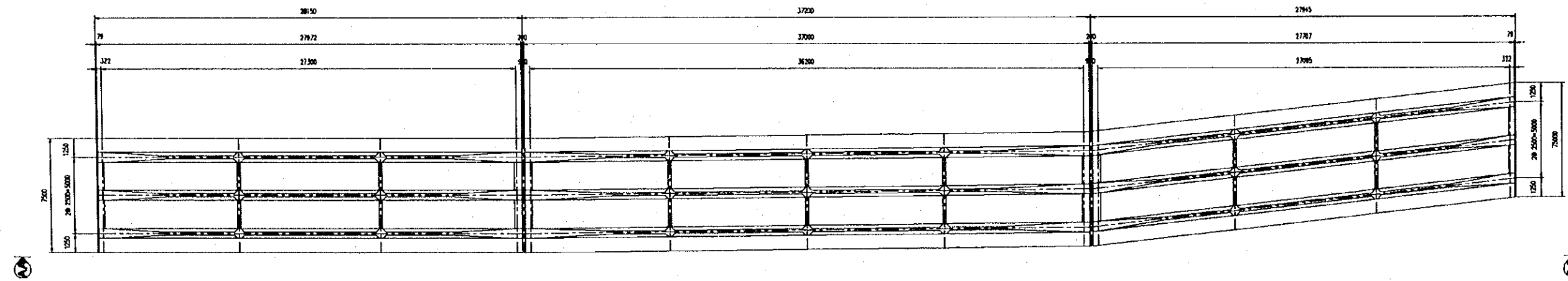


## **II. SUPERSTRUCTURE**

**SECTION 1 - 1**  
(SCALE 1 : 300)



**SECTION 2 - 2**  
(SCALE 1 : 300)

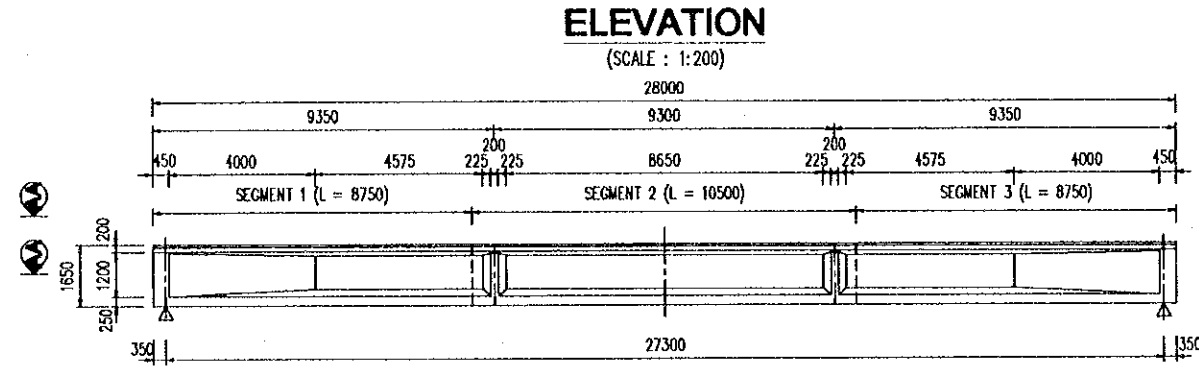


**NOTES :**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

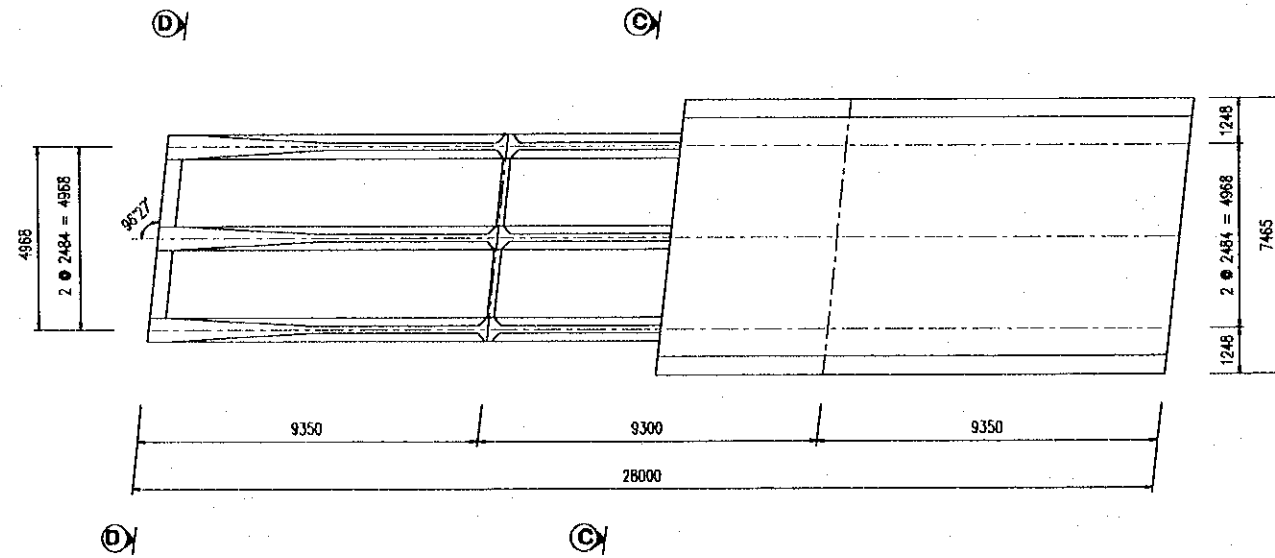
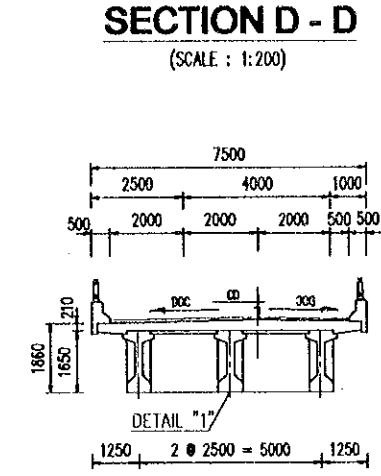
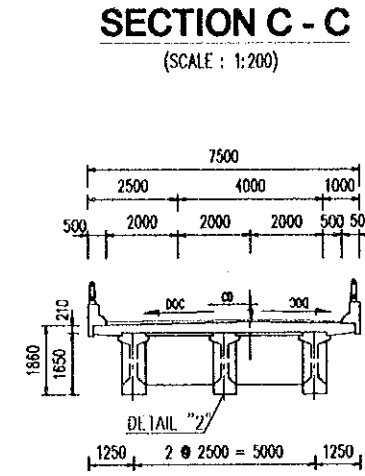
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	NAME: T. Kametani SIGNATURE: <i>T. Kametani</i> DATE: 20/9/2000	R. Matsumoto <i>R. Matsumoto</i> 29/9/2000	K. Enomoto <i>K. Enomoto</i> 5/10/2000	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE GIRDER LAYOUT	P3/BR9/0090

**DETAIL OF SUPERSTRUCTURE FOR RAMPWAY "D" BRIDGE**  
(Ls = 27.3M)

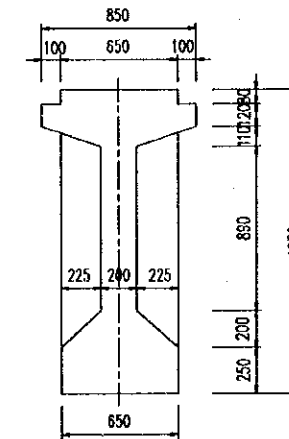


**1/2 SECTION A - A**  
(SCALE : 1:200)

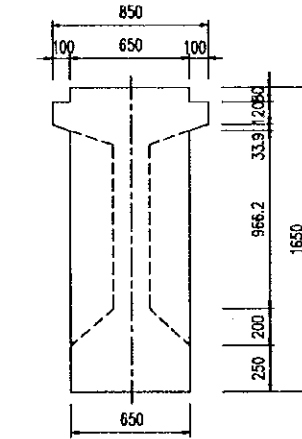
**1/2 SECTION B - B**  
(SCALE : 1:200)



**DETAIL "1"**  
(SCALE : 1:40)



**DETAIL "2"**  
(SCALE : 1:40)

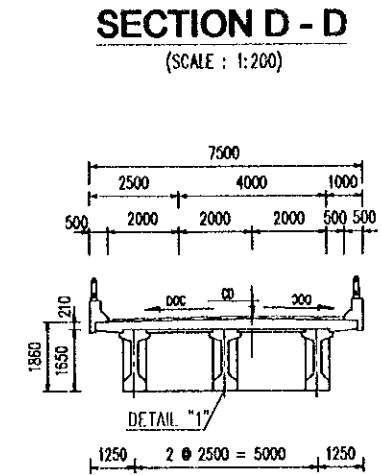
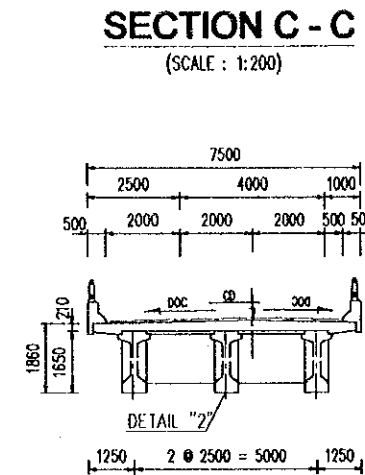
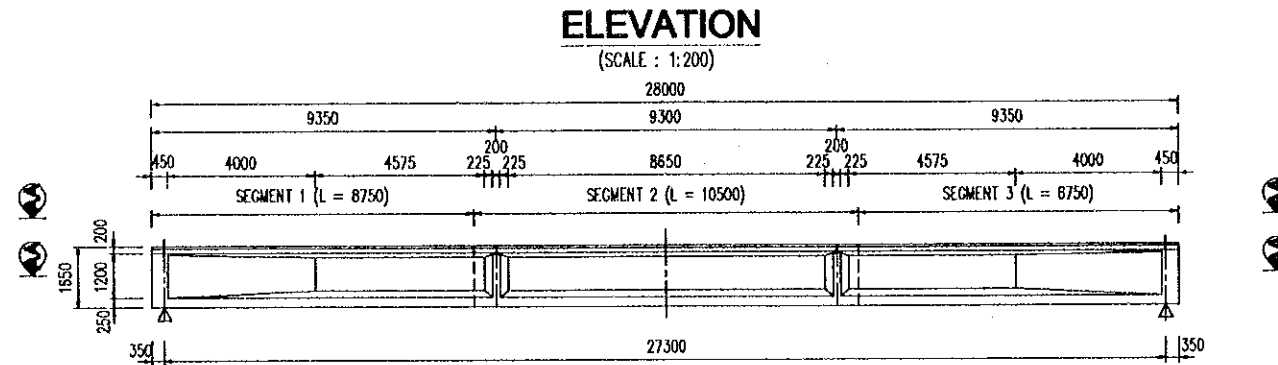


**NOTES :**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

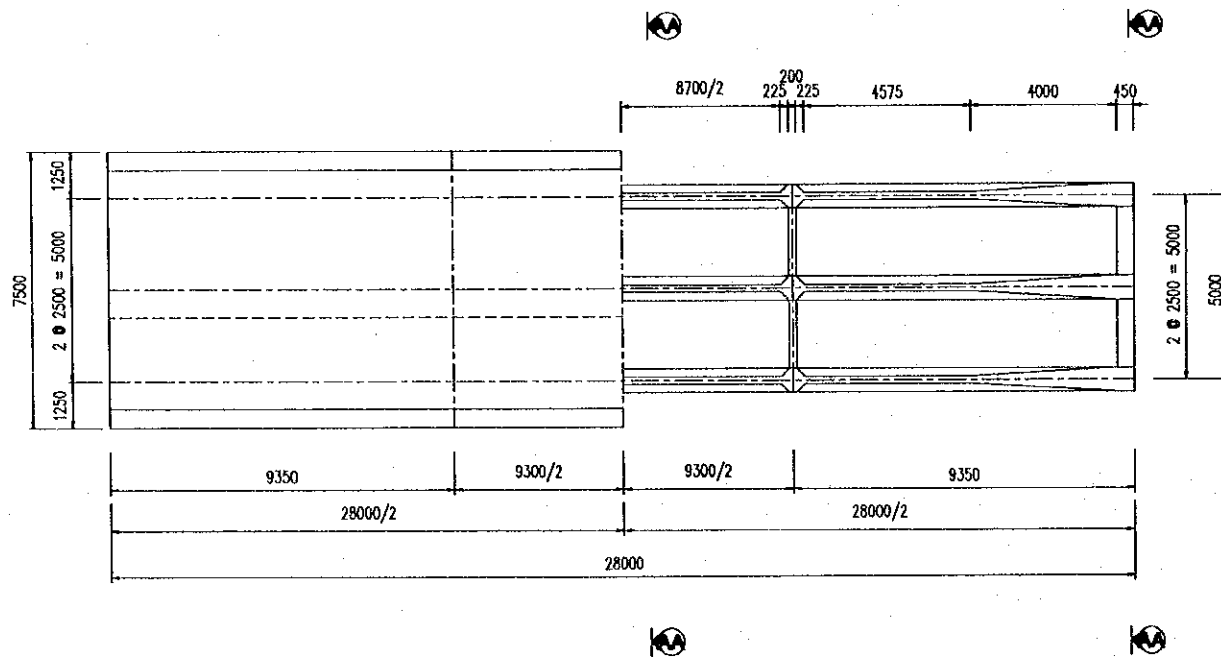
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NK NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE GENERAL VIEW OF 'T' GIRDER L = 28M (FOR RIGHT SPAN)	P3/BR9/0100
				NAME				
				SIGNATURE				
				DATE	20/9/2000	29/9/2000	5/10/2000	

**DETAIL OF SUPERSTRUCTURE FOR RAMPWAY 'D' BRIDGE**  
(Ls = 27.3M)

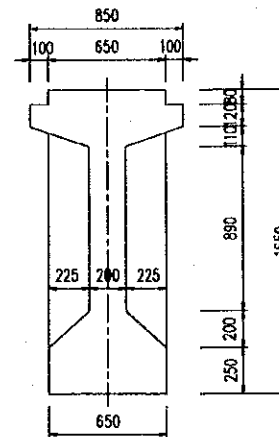


**1/2 SECTION A - A**  
(SCALE : 1:200)

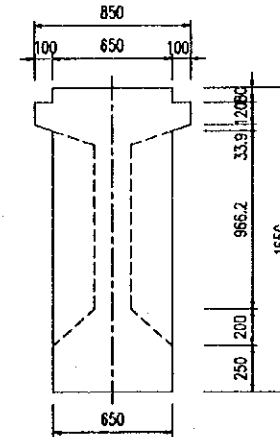
**1/2 SECTION B - B**  
(SCALE : 1:200)



**DETAIL "1"**  
(SCALE : 1:40)



**DETAIL "2"**  
(SCALE : 1:40)



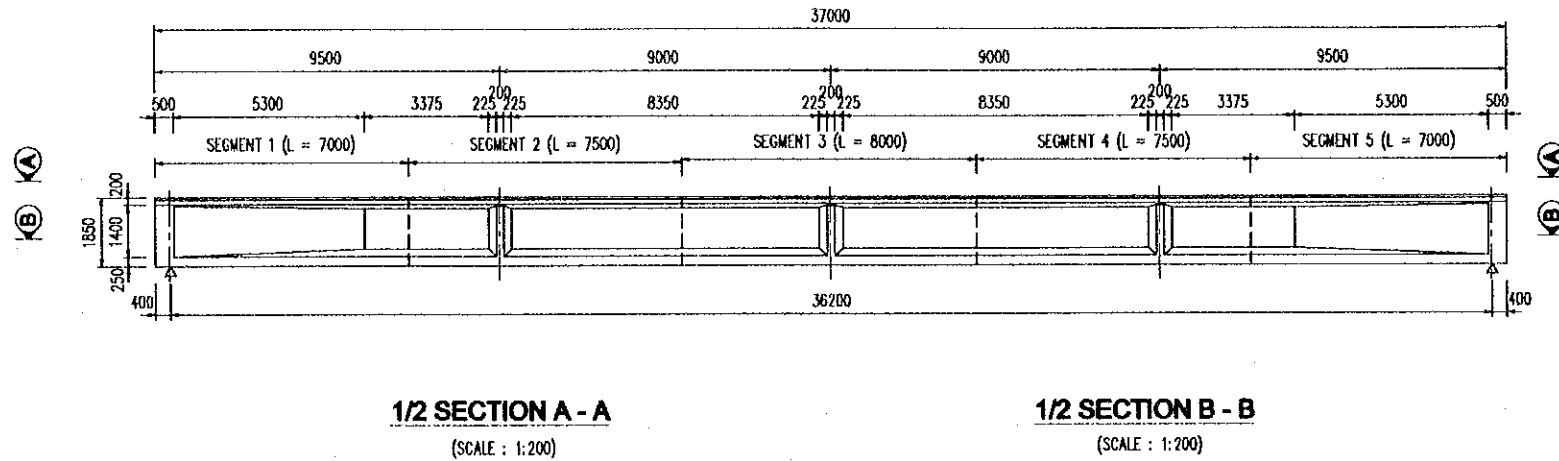
**NOTES :**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

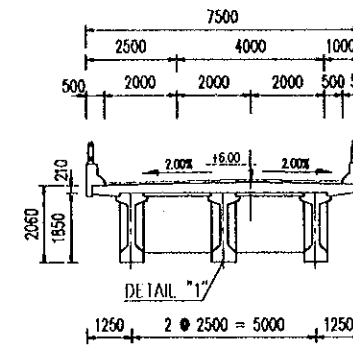
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE GENERAL VIEW OF T GIRDER L=28M(FOR LEFT SPAN)	P3/BR9/0110
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

# DETAIL OF SUPERSTRUCTURE FOR RAMPWAY "D" BRIDGE (Ls = 36.2M)

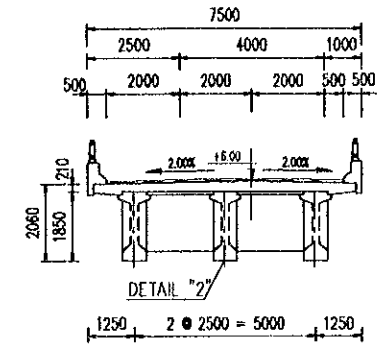
**ELEVATION**  
(SCALE : 1:200)



**SECTION C - C**  
(SCALE : 1:200)

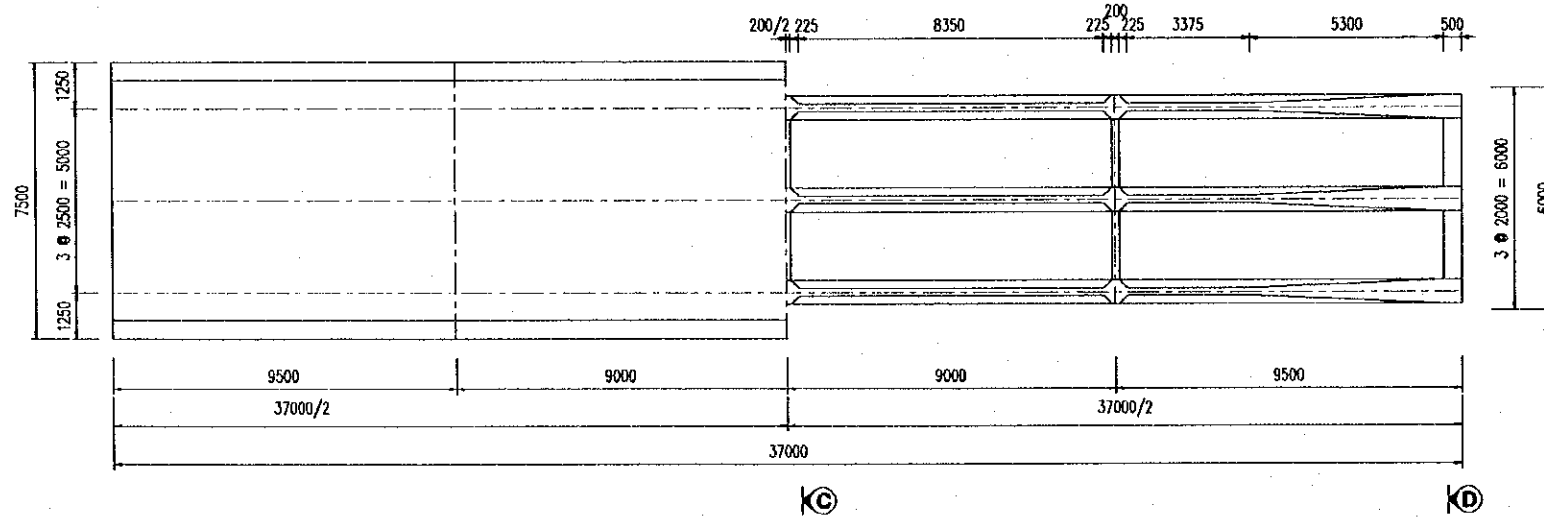


**SECTION D - D**  
(SCALE : 1:200)

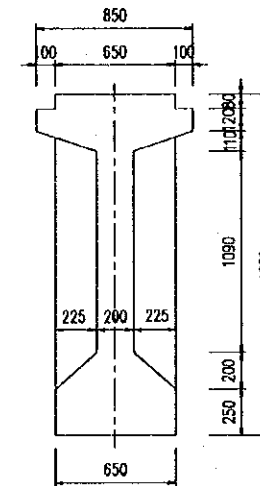


K C

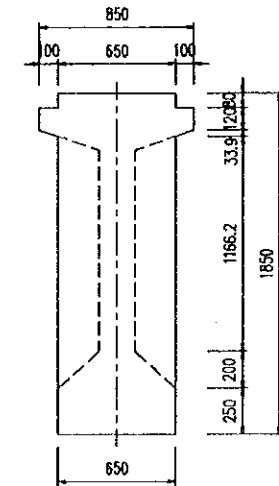
K D



**DETAIL "1"**  
(SCALE : 1:40)



**DETAIL "2"**  
(SCALE : 1:40)

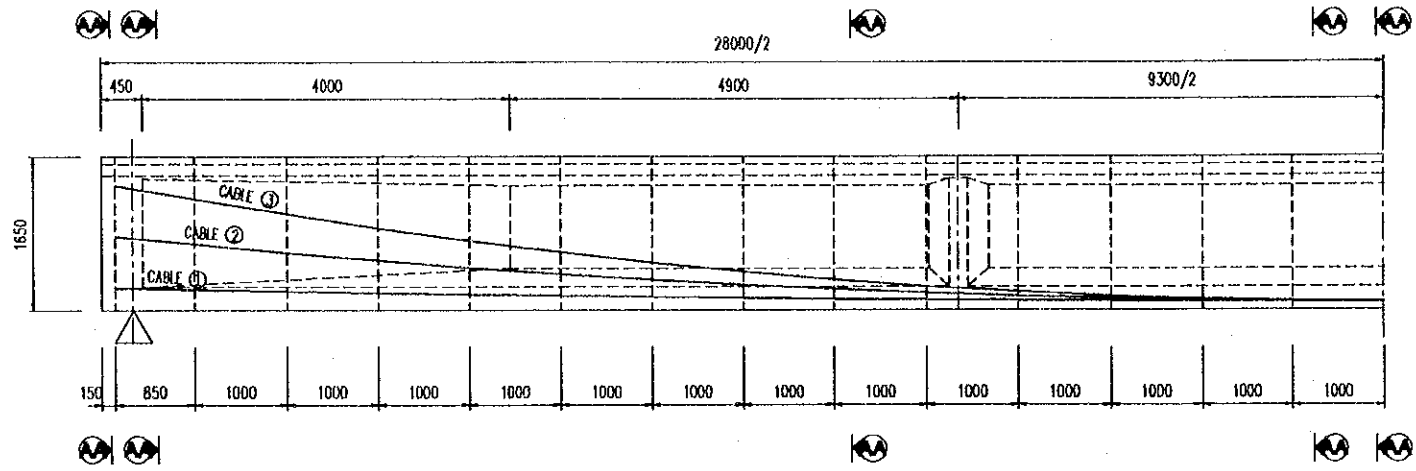


**NOTES :**

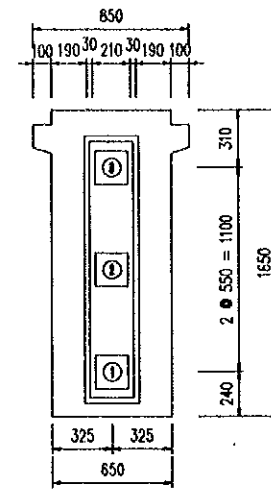
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

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	<b>JICA</b> JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	NAME: T. Kametani SIGNATURE: <i>T. Kametani</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	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE GENERAL VIEW OF "T" GIRDER L = 37M	P3/BR9/0120

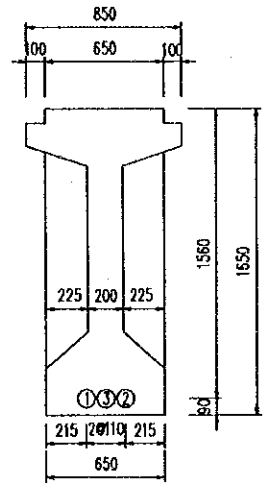
# PC CABLES ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 27.3M)



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



**SECTION E - E**  
(SCALE 1 : 40)



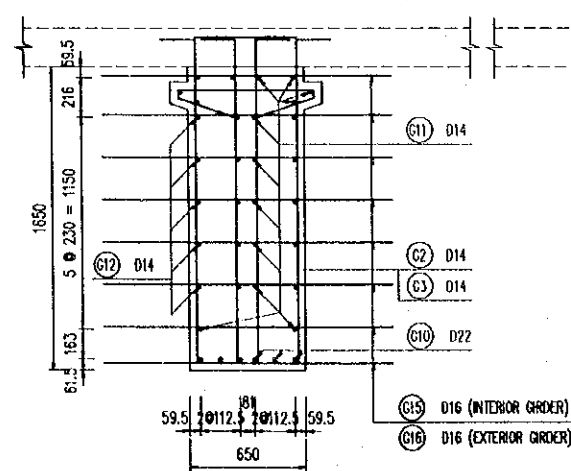
**POSITION OF CABLE CENTER FROM BOTTOM OF GIRDER**

L	15850	15000	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000
CABLE ①	240	223	203	185	169	154	140	129	118	110	103	97	93	91
CABLE ②	790	710	618	554	457	387	325	270	222	182	149	123	105	94
CABLE ③	1340	1197	1033	883	745	621	509	411	328	254	195	149	116	97

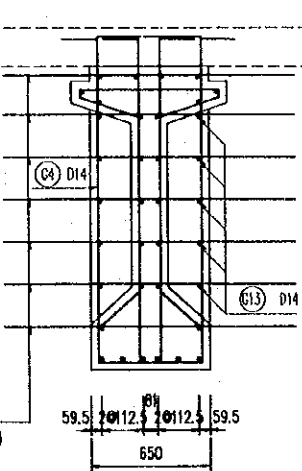
PC CABLE 12 S 12.7				(UNIT : MM)
CABLE No	L1	L2	2x Σ Li	α
①	1000	12851	27702	1°9'
②	1004	12869	27746	5°23'
③	1014	12910	27848	9°53'

WEIGHT = 83.3 x 9.29 kg/m = 773.8 kg  
 SHEATHING, Ø 80/85 : 83.3 M  
 ANCHORAGE : 6 SET  
 CEMENT GROUT IN SHEATHING : 0.42 M<sup>3</sup>  
 CONCRETE : 20.493 M<sup>3</sup>

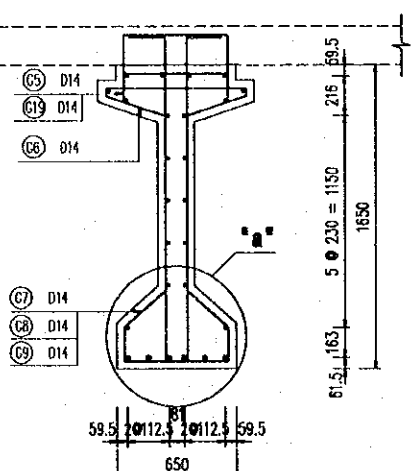
**SECTION B - B**  
(SCALE : 1:40)



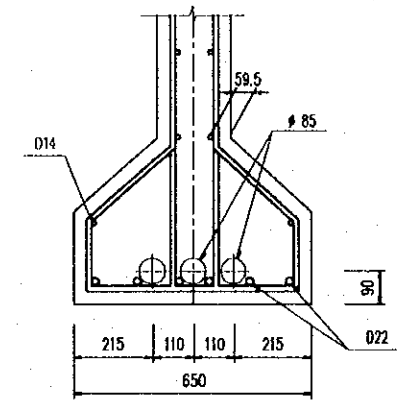
**SECTION C - C**  
(SCALE : 1:40)



**SECTION D - D**  
(SCALE : 1:40)



**DETAIL "a"**  
(SCALE 1:20)



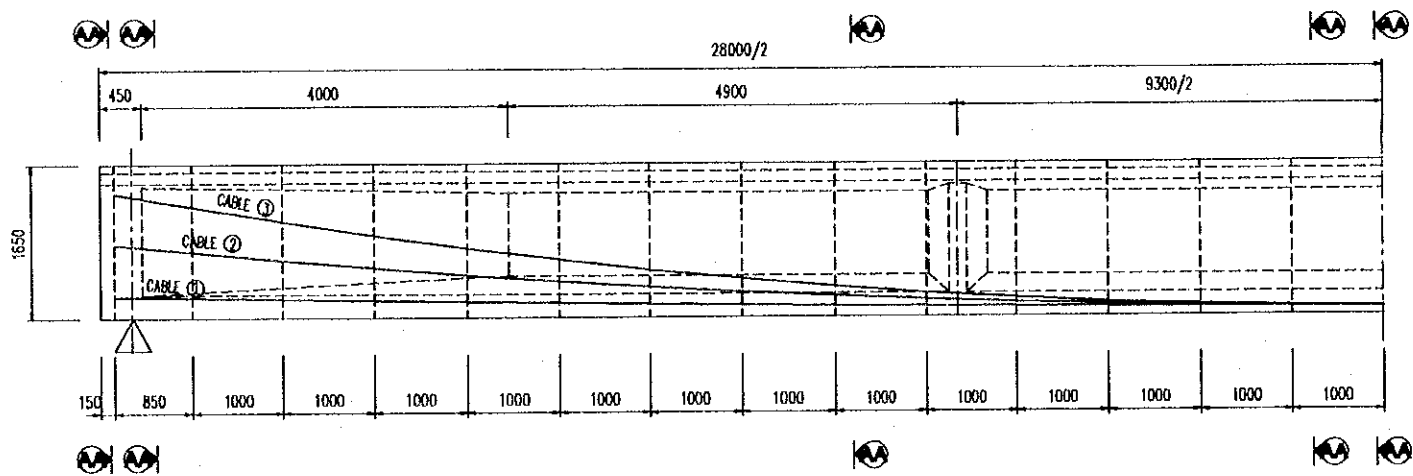
**NOTES :**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

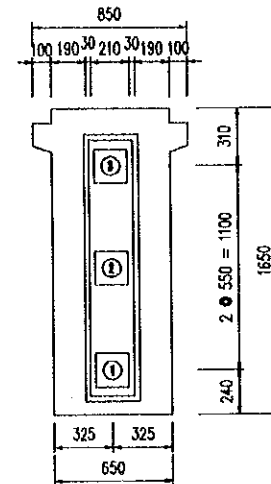
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NK) NIPPON KOEI CO.,LTD.	NAME: T. Kametani SIGNATURE: [Signature] DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: [Signature] DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: [Signature] DATE: 5/10/2000	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE TENDON ARRANGEMENT OF "D" GIRDER L=27.3M (FOR RIGHT SPAN)	P3/BR9/0130



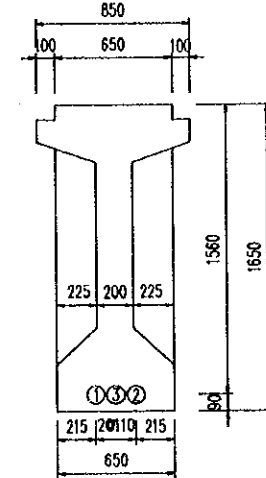
# PC CABLES ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 27.3M)



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



**SECTION E - E**  
(SCALE 1 : 40)



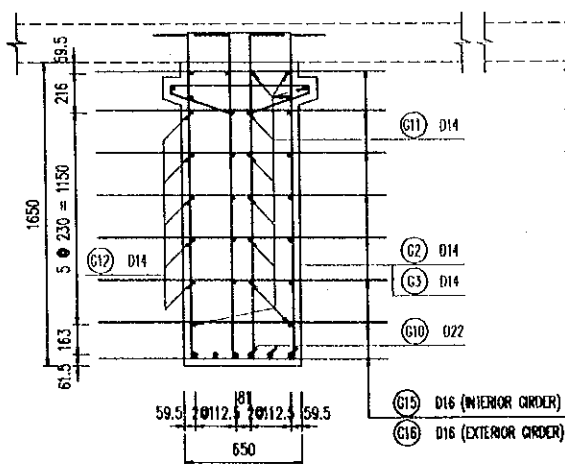
**POSITION OF CABLE CENTER FROM BOTTOM OF GIRDER**

L	13850	13000	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000
CABLE ①	240	223	203	185	169	154	140	129	118	110	103	97	93	91
CABLE ②	790	710	618	534	457	387	325	270	222	182	149	123	105	94
CABLE ③	1340	1197	1033	883	745	621	509	411	326	254	195	149	116	97

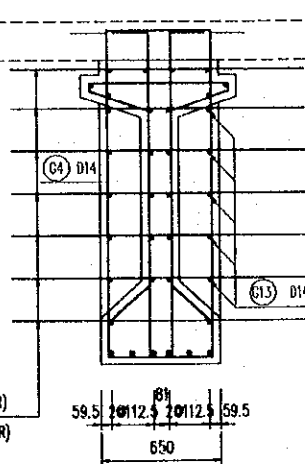
PC CABLE 12 S 12.7				(UNIT : MM)
CABLE No	L1	L2	2x Σ Li	α
①	1000	12851	27702	19°
②	1004	12869	27746	523°
③	1014	12910	27848	9°33'

WEIGHT = 83.3 x 9.29 kg/m = 773.8 kg  
 SHEATHING Ø 80/85 : 83.3 M  
 ANCHORAGE : 6 SET  
 CEMENT GROUT IN SHEATHING : 0.42 M3  
 CONCRETE : 20.493 M3

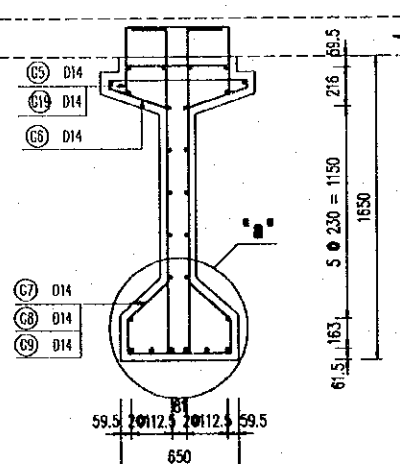
**SECTION B - B**  
(SCALE : 1:40)



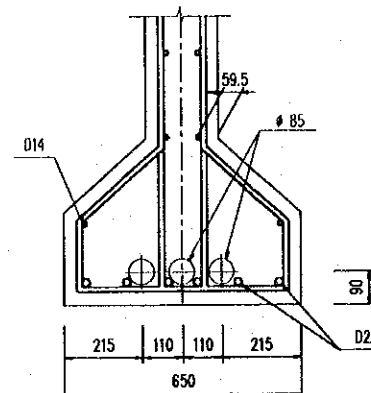
**SECTION C - C**  
(SCALE : 1:40)



**SECTION D - D**  
(SCALE : 1:40)



**DETAIL "a"**  
(SCALE 1:20)

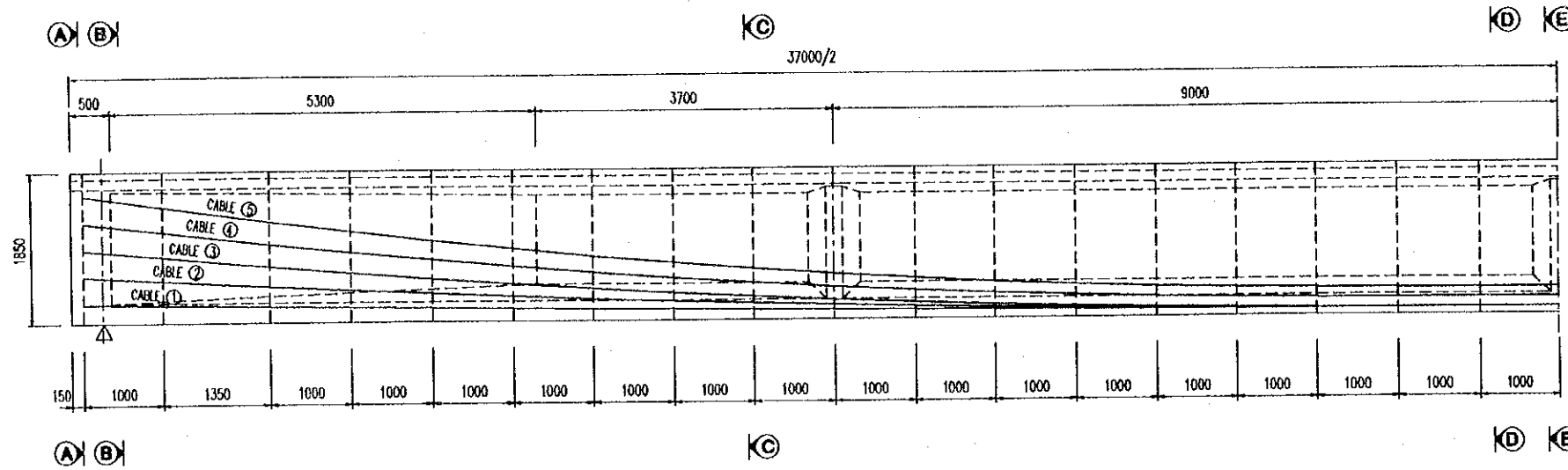


**NOTES :**

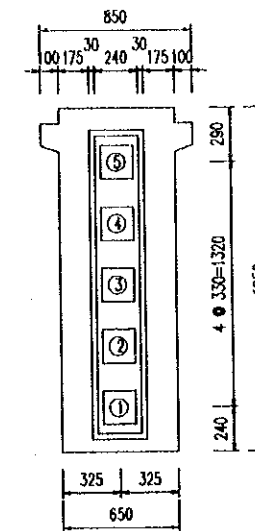
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

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	NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE TENDON ARRANGEMENT OF T GIRDER L-28A(FOR LEFT SPAN)	P3/BR9/0140
				NAME: T. Kametani	NAME: K. Matsumoto	NAME: K. Enomoto		
				SIGNATURE: [Signature]	SIGNATURE: [Signature]	SIGNATURE: [Signature]		
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

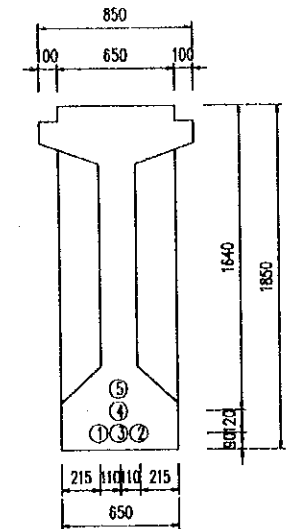
# PC CABLES ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 36.2M)



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



**SECTION E - E**  
(SCALE 1 : 40)



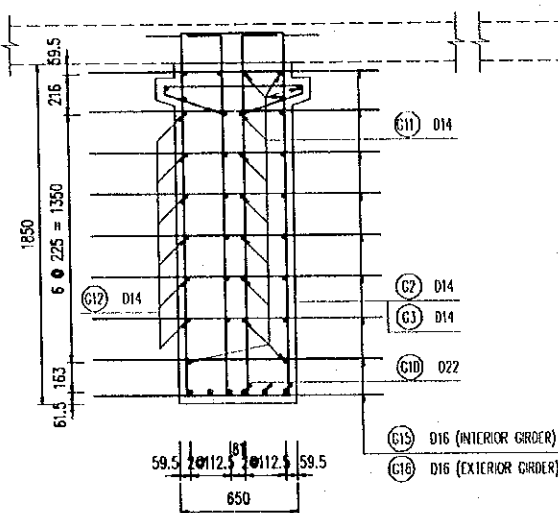
**POSITION OF CABLE CENTER FROM BOTTOM OF GIRDER**

L	18350	17350	16000	15000	14000	13000	12000	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000
CABLE ①	240	223	200	185	171	158	146	136	126	118	110	104	99	95	92	91	90	90
CABLE ②	570	515	443	395	350	308	270	236	205	178	155	135	119	106	97	92	90	90
CABLE ③	900	807	686	604	528	458	394	336	285	239	200	166	139	117	102	93	90	90
CABLE ④	1230	1112	961	857	762	673	593	520	455	398	348	306	271	245	225	214	210	210
CABLE ⑤	1560	1418	1235	1111	995	889	792	704	626	556	496	446	404	372	349	335	330	330

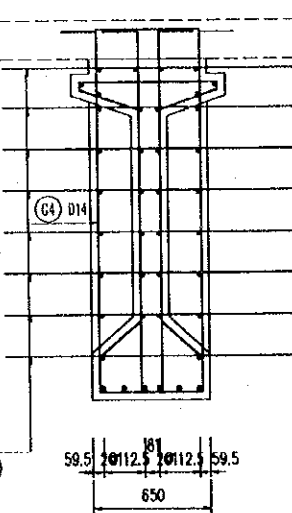
PC CABLE 12 S 12.7 (UNIT : MM)					
CABLE No	L1	L2	L3	2x L1	a
①	1000	15351	2000	36702	0°59'
②	1002	15355	2000	36714	2°52'
③	1004	15373	2000	36754	5°20'
④	1007	15385	2000	36784	6°42'
⑤	1010	15401	2000	36822	8°4'

WEIGHT = 183.78 x 9.29 kg/m = 1707.3 kg  
 SHEATHING Ø 80/85 : 183.78 M  
 ANCHORAGE : 10 SET  
 CEMENT GROUT IN SHEATHING : 0.923 M3  
 CONCRETE : 29.226 M3

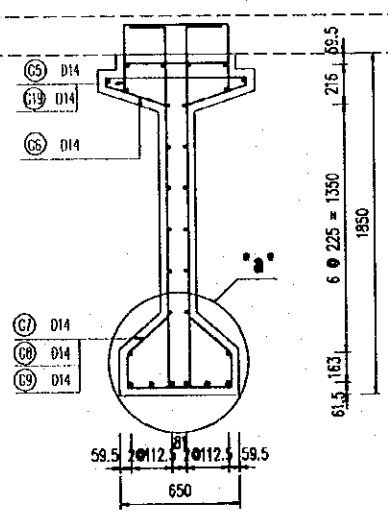
**SECTION B - B**  
(SCALE : 1:40)



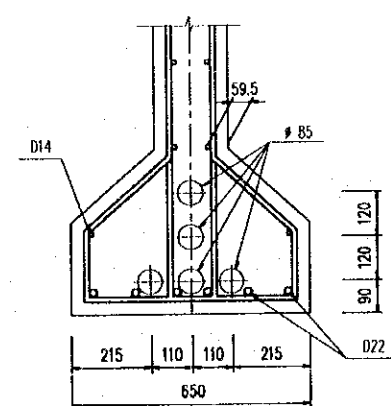
**SECTION C - C**  
(SCALE : 1:40)



**SECTION D - D**  
(SCALE : 1:40)



**DETAIL "a"**  
(SCALE 1:20)



**NOTES :**

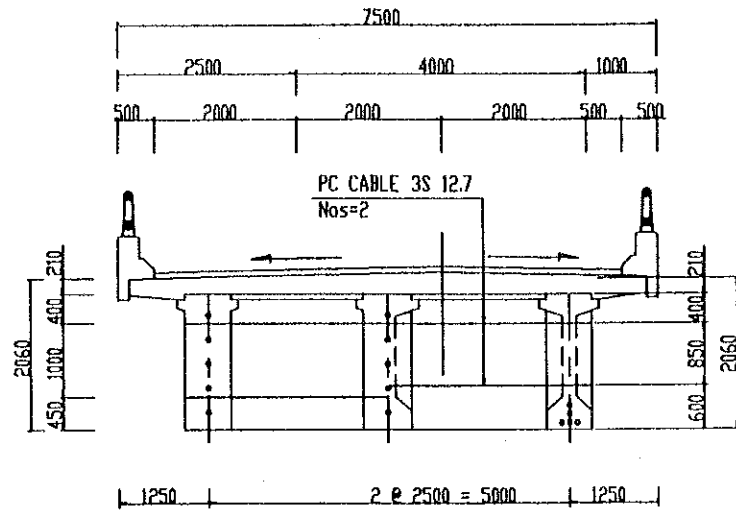
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

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	NIPPON KOEI CO., LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE TENDON ARRANGEMENT OF "T" GIRDER L-37M	P3/BR9/0150
				NAME: T. Kametani SIGNATURE: [Signature] DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: [Signature] DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: [Signature] DATE: 5/10/2000		

**SECTION OF "I" GIRDER L=37M**

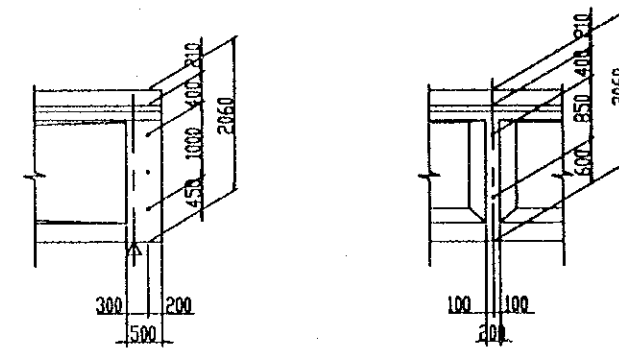
(SCALE 1 : 100)

**END DIPHRAGM      INTERMEDIATE DIPHRAGM**



**PROFILE**

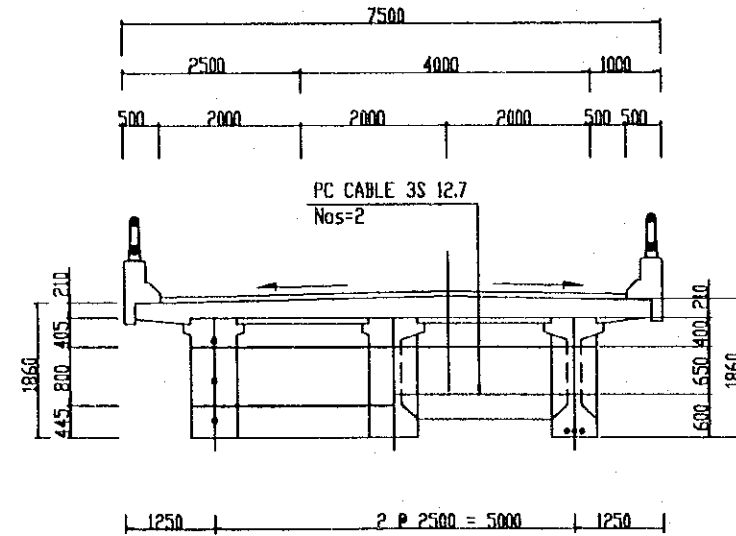
**END DIPHRAGM      INTERMEDIATE DIPHRAGM**



**SECTION OF "I" GIRDER L=28M**

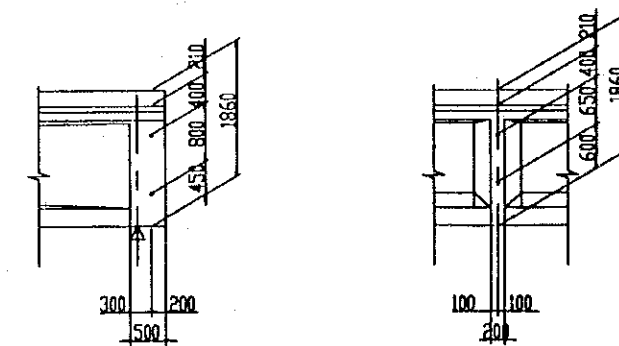
(SCALE 1 : 100)

**END DIPHRAGM      INTERMEDIATE DIPHRAGM**



**PROFILE**

**END DIPHRAGM      INTERMEDIATE DIPHRAGM**

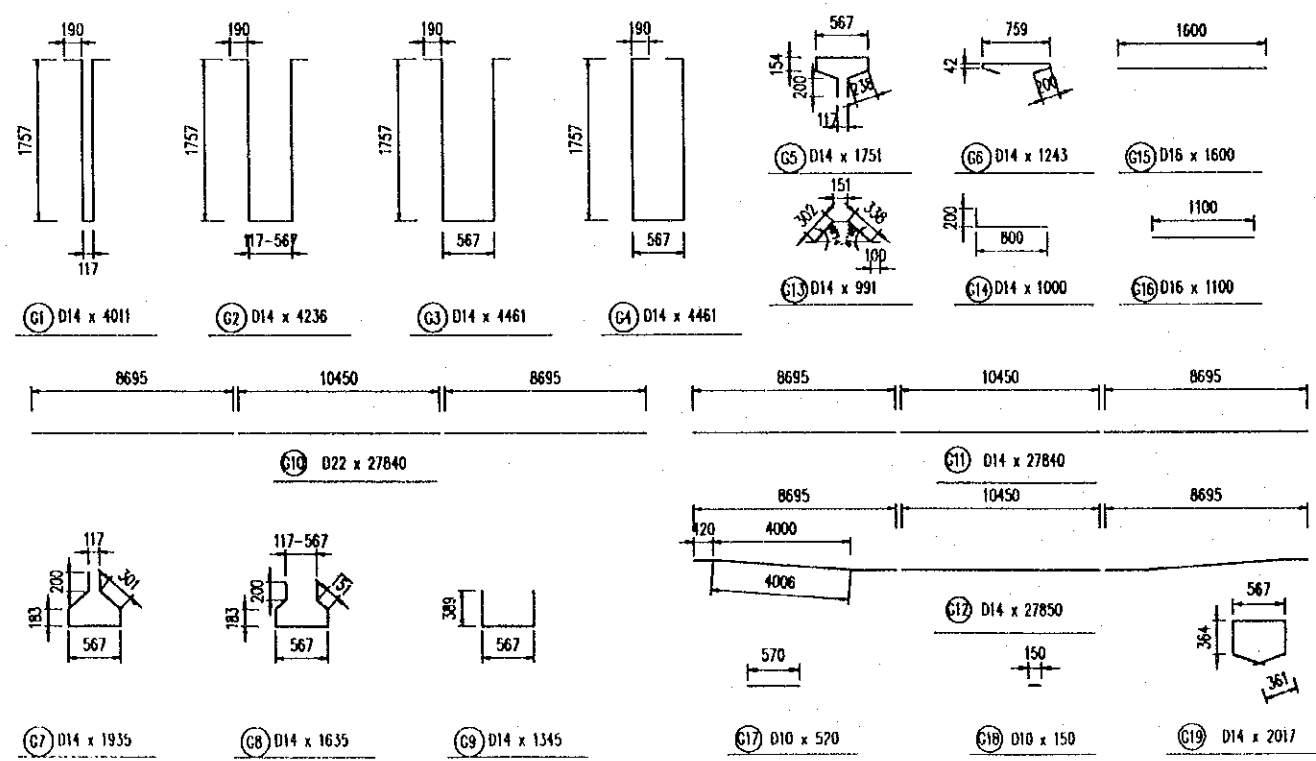
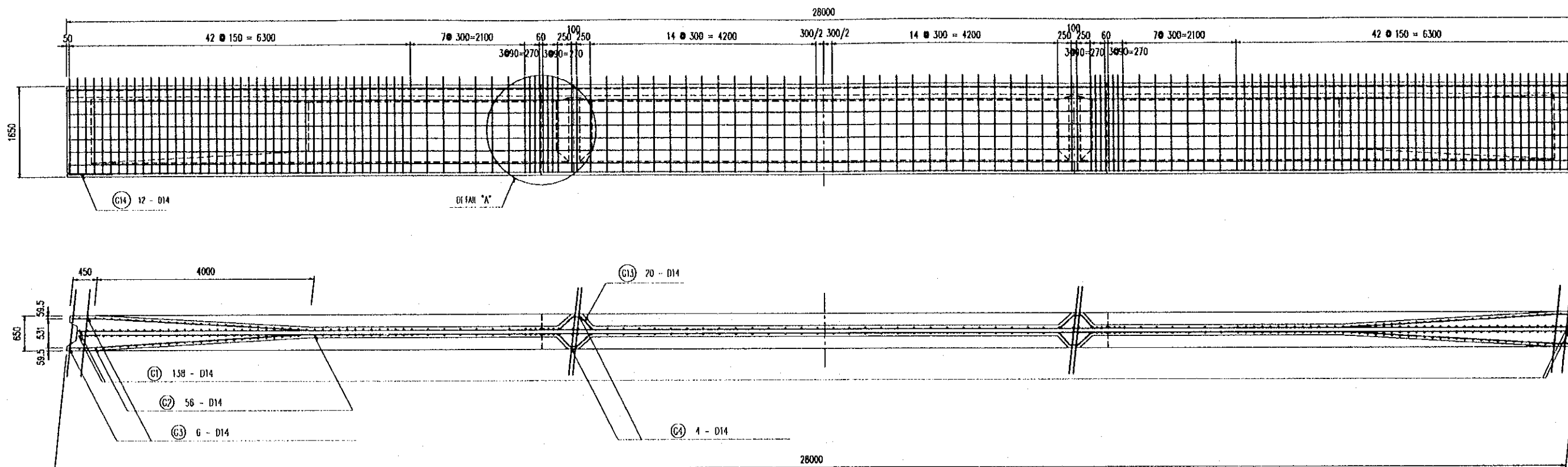


**TOTAL QUANTITY**

TOTAL WEIGHT OF PC CABLE 3S12.7 = 146.9 x 2.32 kg/m = 380.9 (kg)  
 SHEATHING Ø 50/55 : 146.9 M  
 ANCHORAGE : 52 SET  
 CEMENT GROUT IN SHEATHING : 288 M3

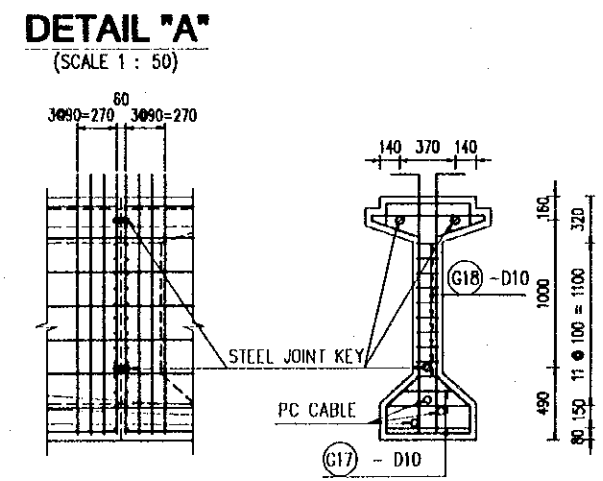
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	(NKK) NIPPON KOEI CO.,LTD.	NAME: T. Kamelani SIGNATURE: [Signature] DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: [Signature] DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: [Signature] DATE: 5/10/2000	RAMPWAY "D" BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE TENDON ARRANGEMENT OF DIAPHRAGMS	P3/889/0160

# BAR ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 27.3M)



BAR LIST (FOR 1 GIRDER)						
REIN. No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
G1	14	4011	138	1.208	668.6	
G2	14	4235	56	1.208	285.6	AVERAGE
G3	14	4461	6	1.208	32.3	
G4	14	4461	4	1.208	21.6	
G5	14	1751	148	1.208	313.1	
G6	14	1243	148	1.208	222.2	
G7	14	1935	86	1.208	201.0	
G8	14	1635	56	1.208	110.6	AVERAGE
G9	14	1345	6	1.208	9.7	
G10	22	27840	6	2.984	498.4	
G11	14	27840	20	1.208	672.6	
G12	14	27850	10	1.208	336.4	
G13	14	991	20	1.208	23.9	
G14	14	1000	12	1.208	14.5	
G15	16	1600	50	1.578	126.2	INTERIOR GIRDER
G16	16	1100	50	1.578	86.8	EXTERIOR GIRDER
G17	10	570	12	0.617	4.2	
G18	10	150	40	0.617	5.7	
G19	14	2017	138	1.208	336.4	
TOTAL			3883.1		(3843.7)	
D10			7.9		(7.9)	
D14			3250.5		(3250.5)	
D16			128.2		(86.8)	
D22			498.5		(498.5)	

STEEL JOINT KEY : 6 SET

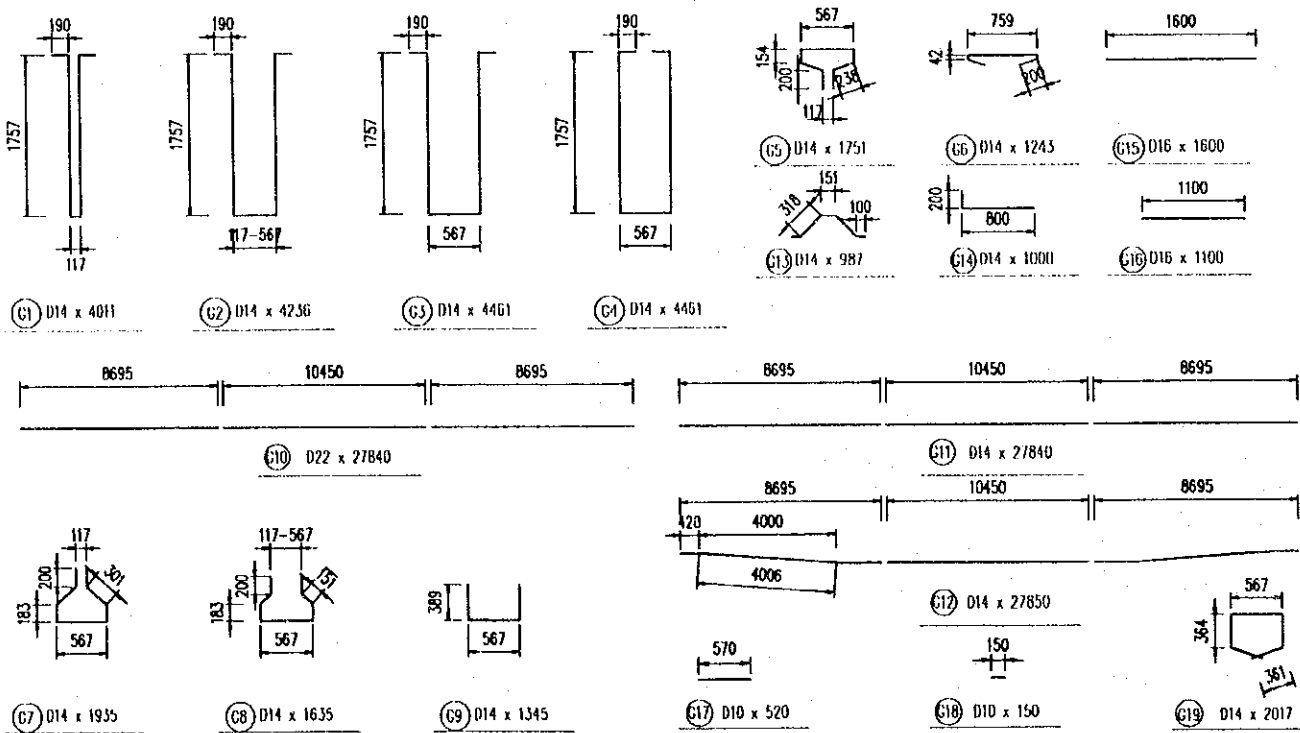
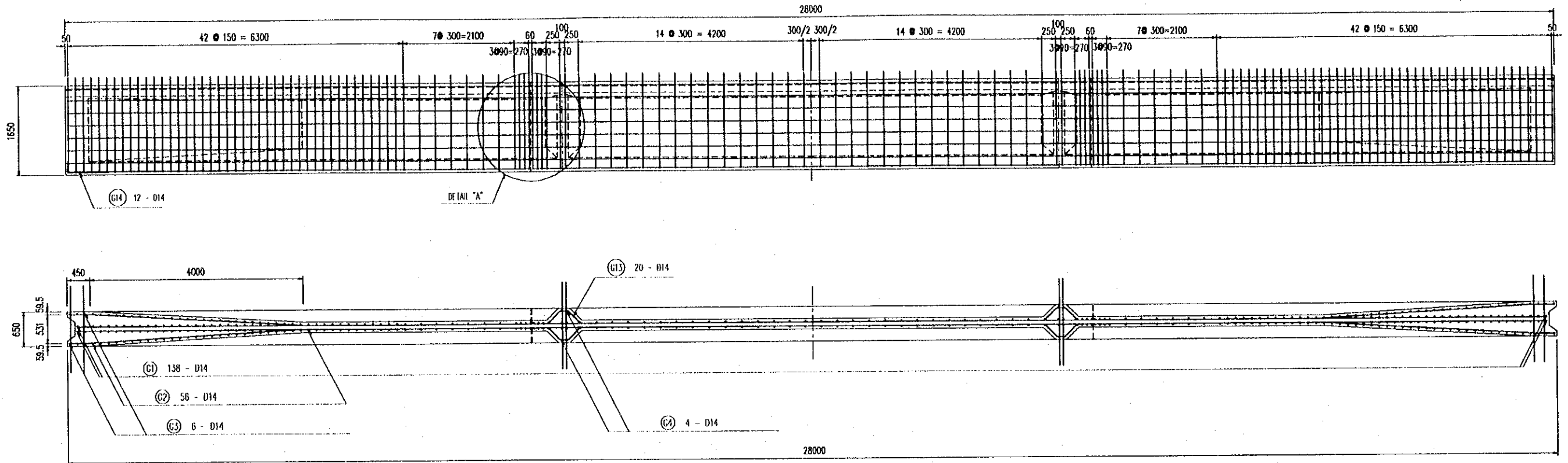


**NOTES :**

- FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.
- THE VALUE OF INSIDE ( ) ARE FOR EXTERIOR GIRDER.

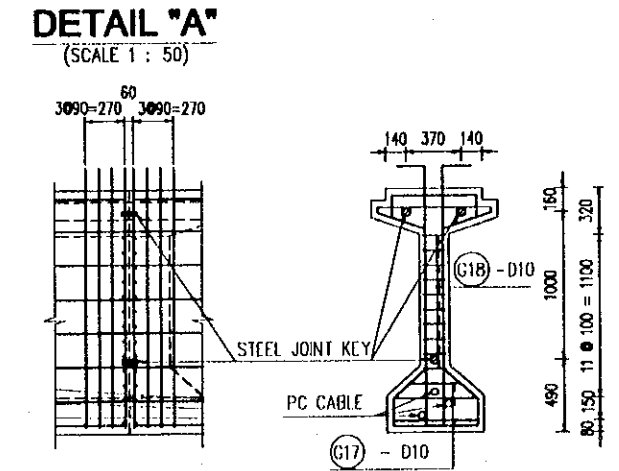
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NK NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE REINFORCEMENT OF T GIRDER L=20M FOR RIGHT SPAN	P3/BR9/0170
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

# BAR ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 27.3M)



BAR LIST (FOR 1 GIRDER)						
REIN. No	Ø (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
G1	14	4011	138	1.208	668.6	
G2	14	4236	56	1.208	286.6	AVERAGE
G3	14	4461	6	1.208	32.3	
G4	14	4461	4	1.208	21.6	
G5	14	1751	148	1.208	313.1	
G6	14	1243	148	1.208	272.2	
G7	14	1935	86	1.208	201.0	
G8	14	1635	56	1.208	110.6	AVERAGE
G9	14	1345	6	1.208	9.7	
G10	22	27840	6	2.984	498.4	
G11	14	27840	20	1.208	672.6	
G12	14	27850	10	1.208	338.4	
G13	14	987	20	1.208	23.8	
G14	14	1000	12	1.208	14.5	
G15	16	1800	50	1.570	126.2	INTERIOR ORDER
G16	16	1100	50	1.578	86.8	EXTERIOR ORDER
G17	10	570	12	0.617	4.2	
G18	10	150	40	0.617	3.7	
G19	14	2017	138	1.208	336.4	
TOTAL			3883.2		(3843.7)	
	D10		7.9		(7.9)	
	D14		3250.6		(3250.6)	
	D16		126.2		(86.8)	
	Ø22		498.5		(498.5)	

STEEL JOINT KEY : 6 SET

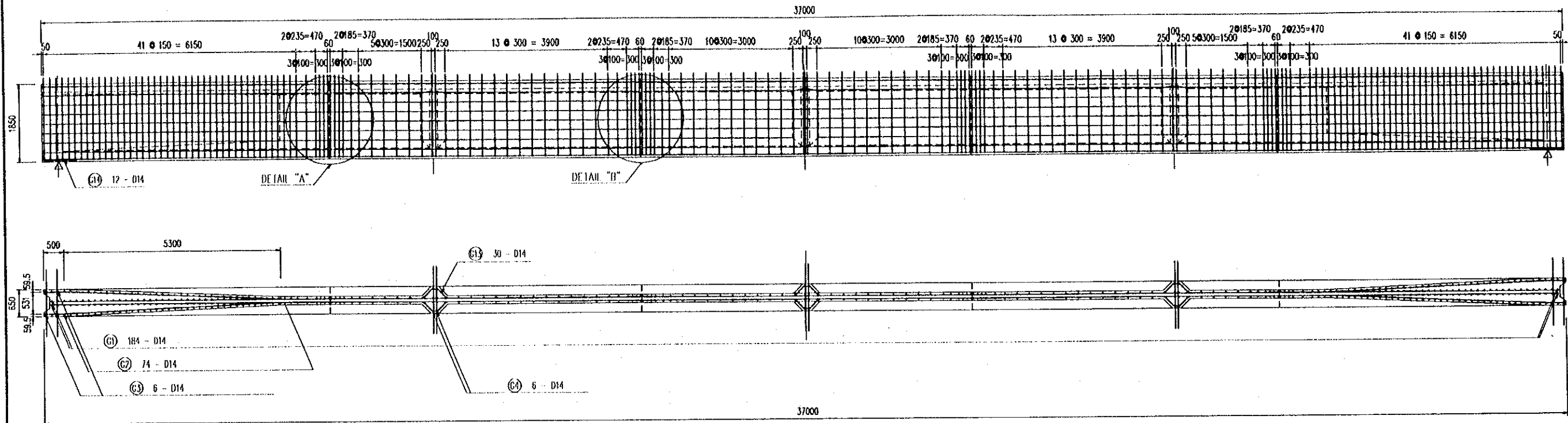


**NOTES:**

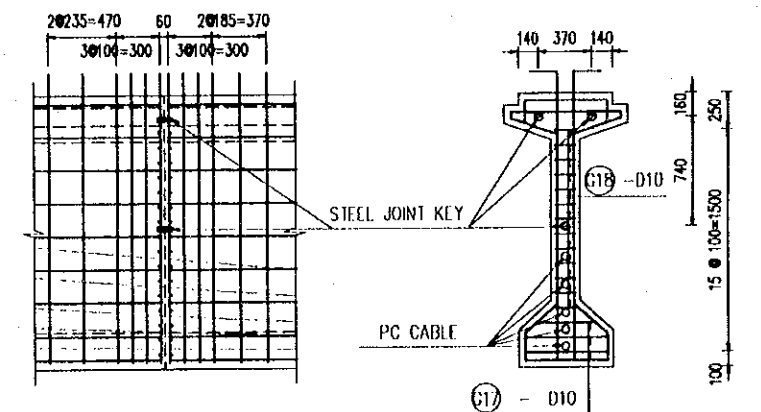
- FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.
- THE VALUE OF INSIDE ( ) ARE FOR EXTERIOR GIRDER.

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.	T. Kametani	K. Matsumoto	K. Enomoto	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE REINFORCEMENT OF "I" GIRDER L = 28M (FOR LEFT SPAN)	P3/BR9/0180
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

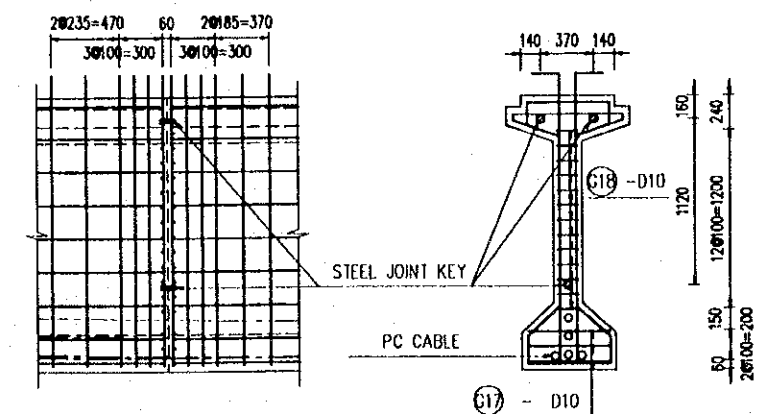
# BAR ARRANGEMENT OF GIRDER FOR RAMPWAY "D" BRIDGE (Ls = 36.2M)



**DETAIL "A"**  
(SCALE 1 : 50)



**DETAIL "B"**  
(SCALE 1 : 50)



BAR LIST (FOR 1 GIRDER)						
REINF No	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARKS
C1	14	4411	184	1.208	980.4	
C2	14	4636	74	1.208	414.4	AVERAGE
C3	14	4861	6	1.208	35.2	
C4	14	4861	6	1.208	35.2	
C5	14	1751	196	1.208	414.6	
C6	14	1245	196	1.208	294.3	
C7	14	1935	122	1.208	285.2	
C8	14	1635	74	1.208	146.2	AVERAGE
C9	14	1345	6	1.208	9.7	
C10	22	36740	6	2.984	657.8	
C11	14	36740	22	1.208	976.4	
C12	14	36750	12	1.208	532.7	
C13	14	987	30	1.208	35.8	
C14	14	1000	12	1.208	14.5	
C15	16	1600	74	1.578	186.8	INTERIOR ORDER
C16	16	1100	74	1.578	128.4	EXTERIOR ORDER
C17	10	570	24	0.617	8.4	
C18	10	150	104	0.617	9.6	
C19	14	2017	184	1.208	448.5	
TOTAL			5487.3		(5428.9)	
D10			18.1		(18.1)	
D14			4624.6		(4624.6)	
D16			186.8		(128.4)	
D22			657.8		(657.8)	

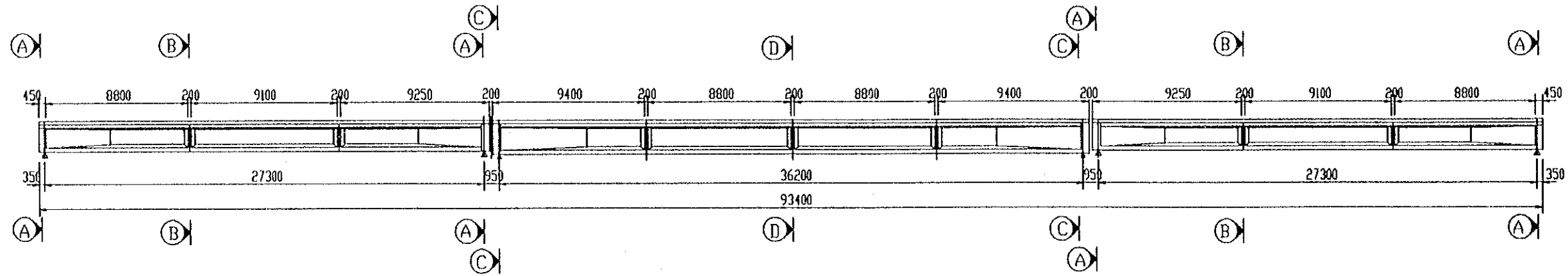
STEEL JOINT KEY : 12 SET

**NOTES :**

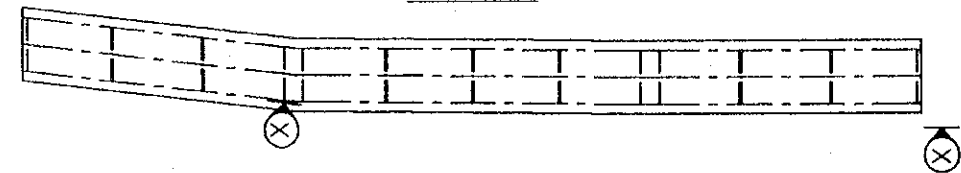
1. FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.
2. THE VALUE OF INSIDE ( ) ARE FOR EXTERIOR GIRDER.

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: T. Kamelani SIGNATURE: [Signature] DATE: 20/9/2000	K. Matsumoto [Signature] 29/9/2000	K. Enomoto [Signature] 5/10/2000	RAMWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE REINFORCEMENT OF "T" GIRDER L - 37M	P3/BR9/0190

PROFILE X-X  
SCALE 1:300

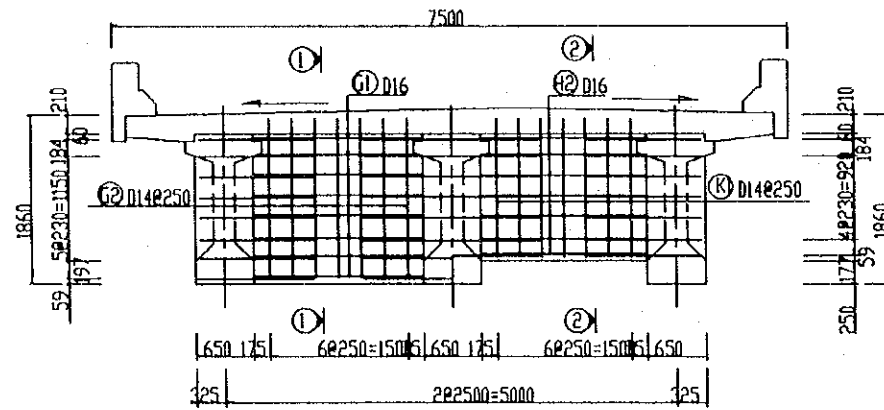


KEY PLAN



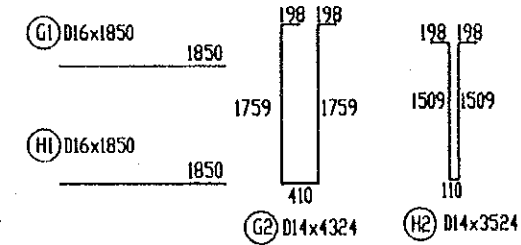
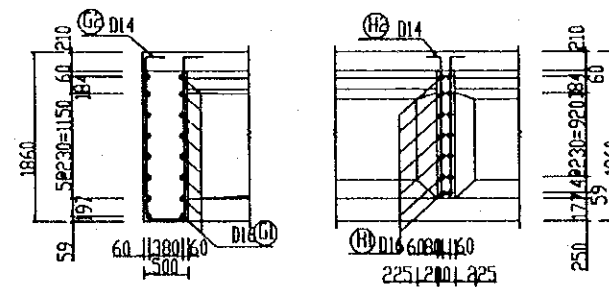
HALF SECTION A-A  
SCALE 1:80

HALF SECTION B-B  
SCALE 1:80



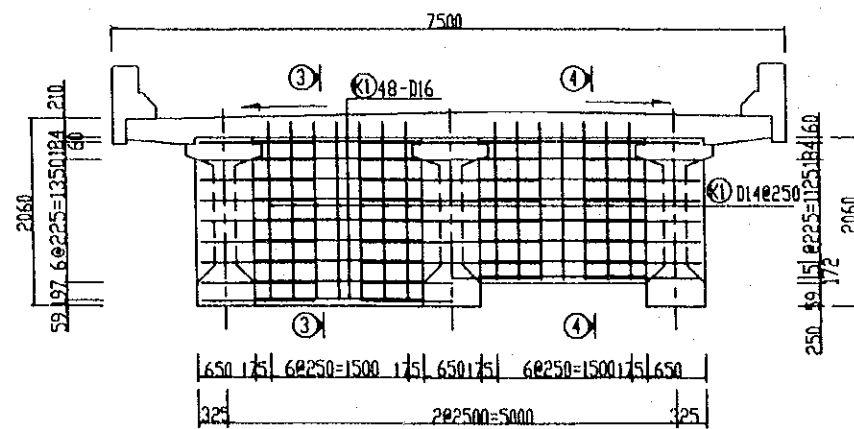
SECTION 1-1  
SCALE 1:75

SECTION 2-2  
SCALE 1:75



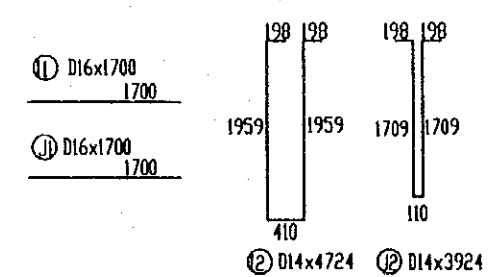
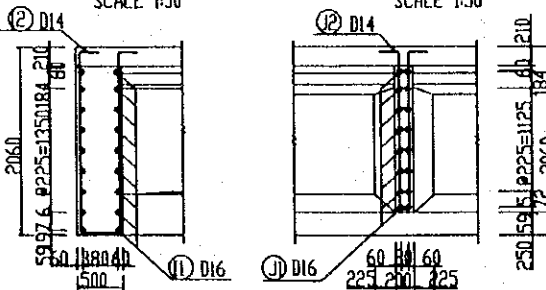
HALF SECTION C-C  
SCALE 1:80

HALF SECTION D-D  
SCALE 1:80

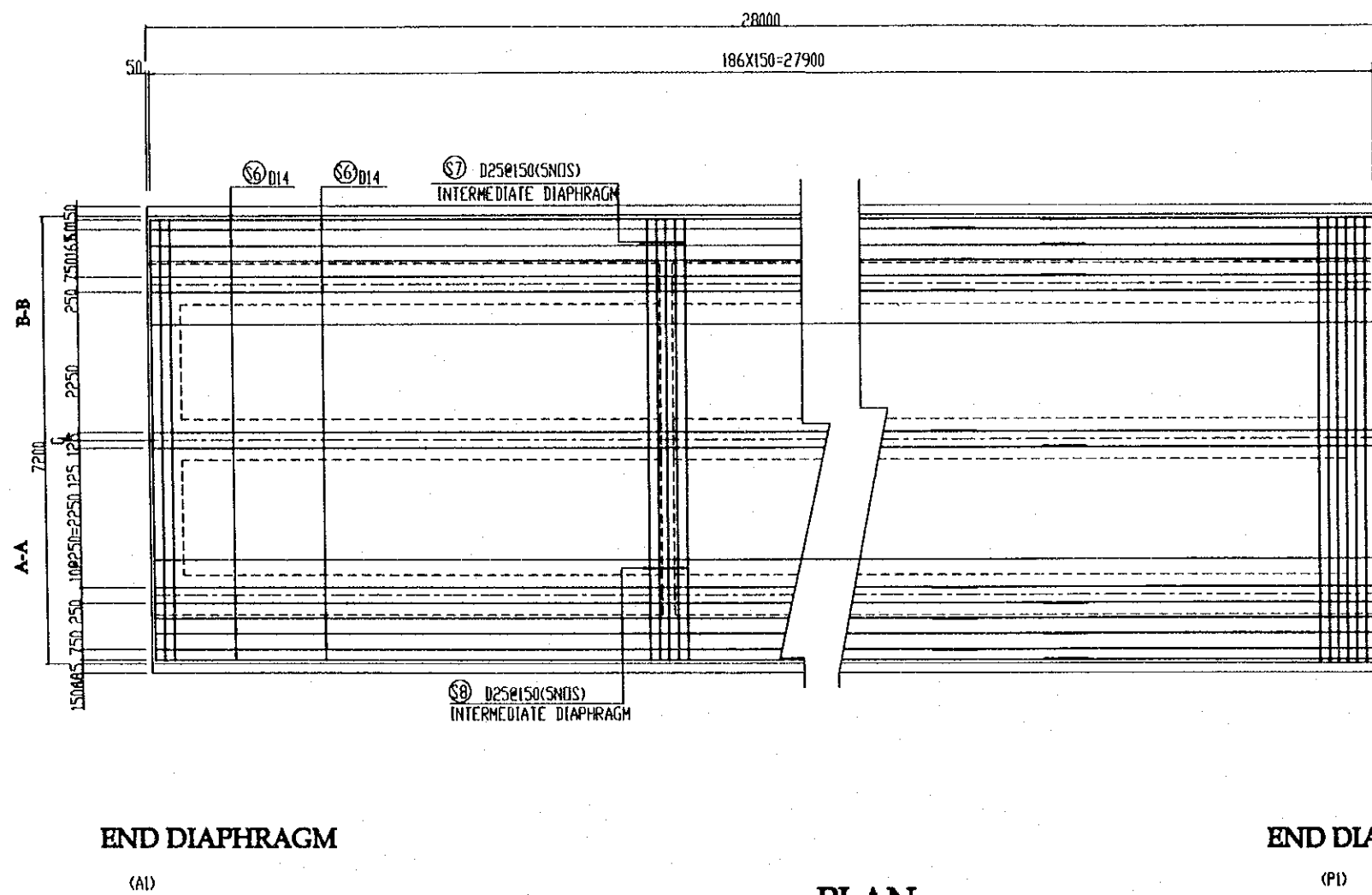
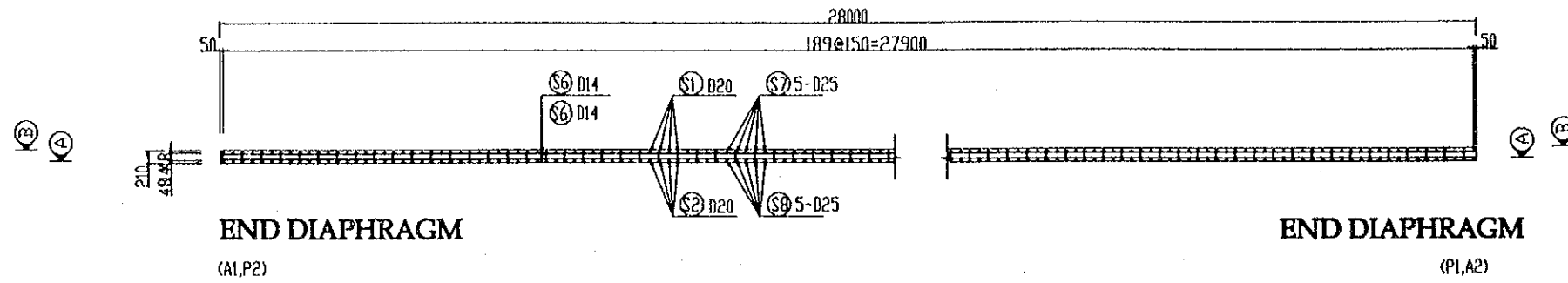


SECTION 3-3  
SCALE 1:50

SECTION 4-4  
SCALE 1:50



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	NIPPON KOEI CO., LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY 'D' BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE REINFORCEMENT OF DIAPHRAGMS	F3/BRS/0200
				DATE: 20/9/2000	DATE: 29/9/2000	DATE: 5/10/2000		

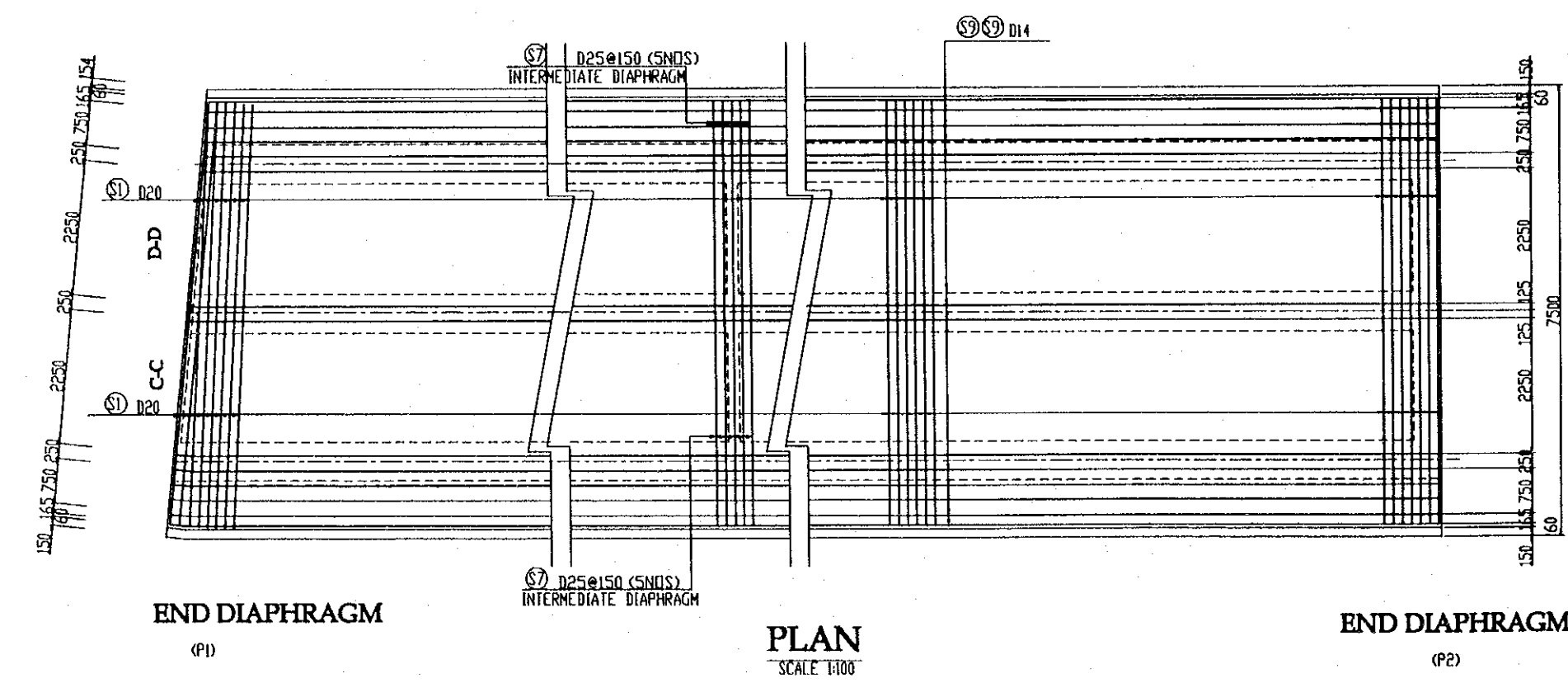
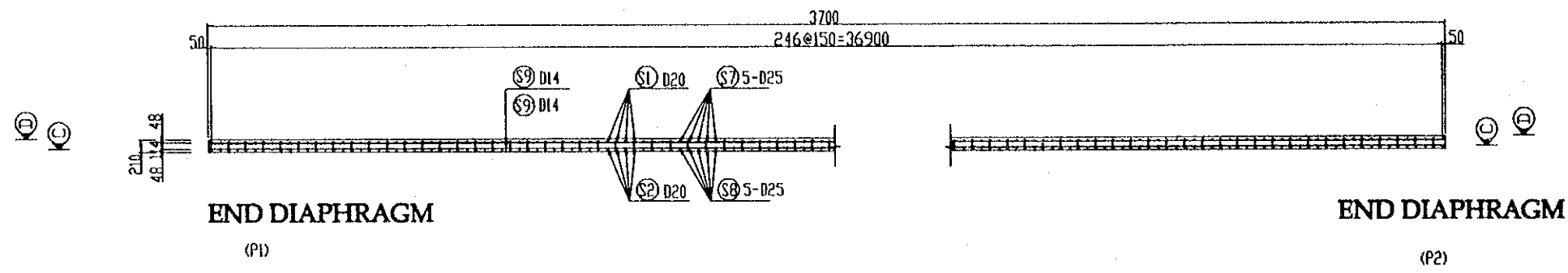


**NOTES:**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

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	NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY "D" BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE DECK SLAB REINFORCEMENT SHEET-1	P3/BR9/0210
				NAME				
				SIGNATURE				
				DATE	20/9/2000	29/9/2000	5/10/2000	

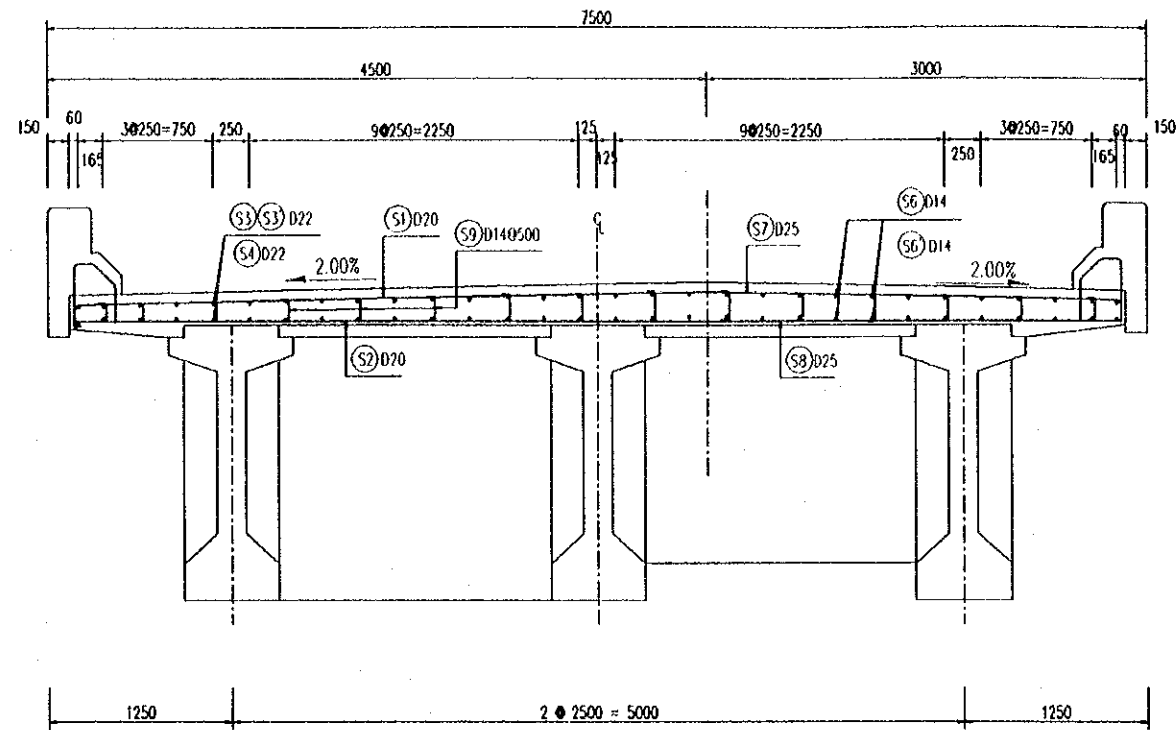




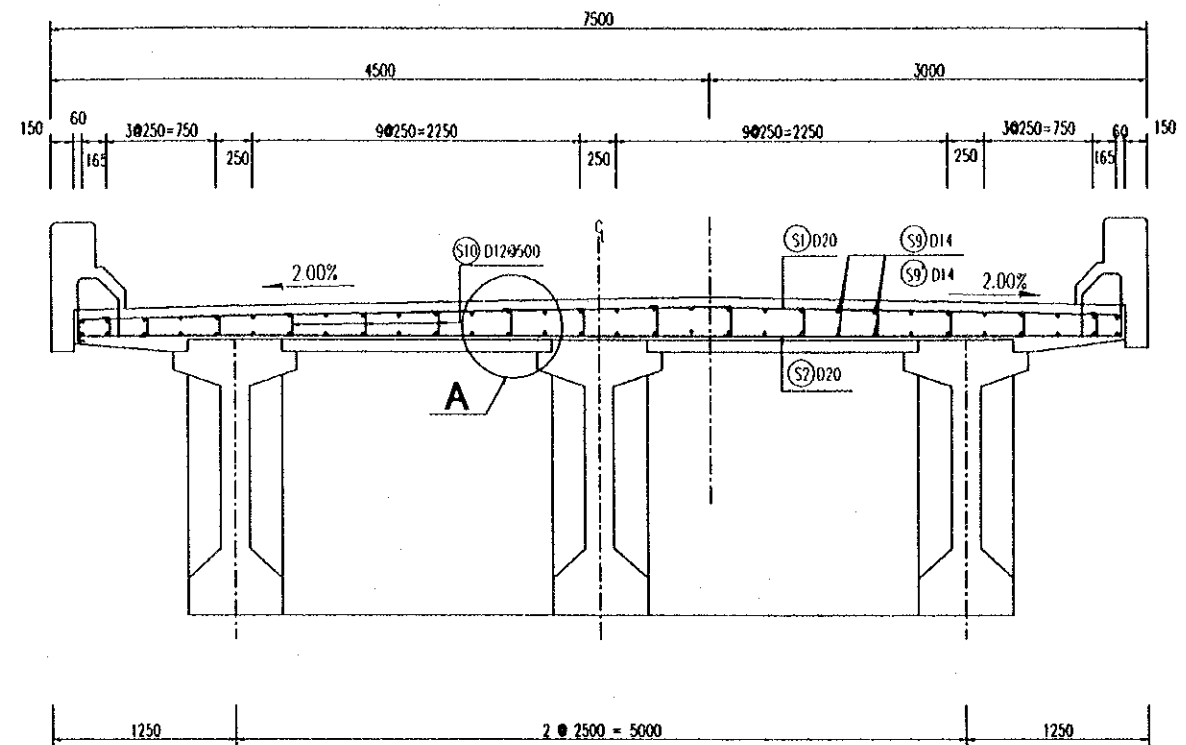
**NOTES:**  
FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.

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.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY "D" BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE DECK SLAB REINFORCEMENT SHEET-2	P3/BR9/0220
				SIGNATURE	SIGNATURE	SIGNATURE		
				DATE	DATE	DATE		

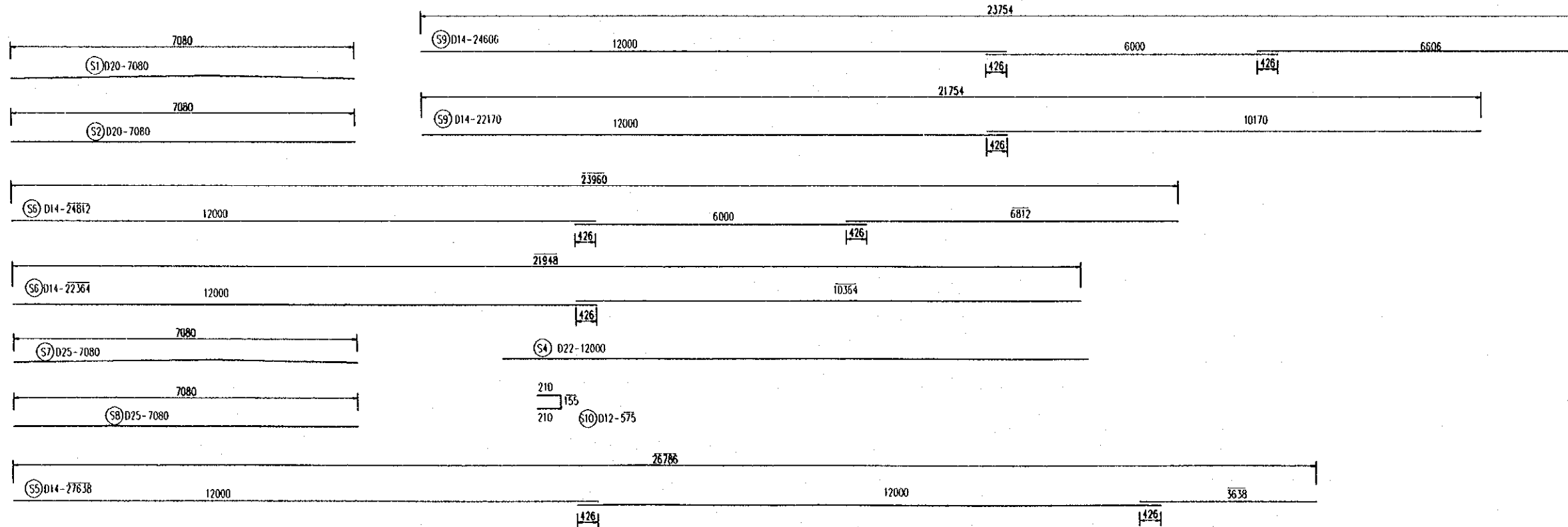
1/2 SECTION AT  
CONNECTION DIAPHRAGM



1/2 SECTION AT  
INTERMEDIATE DIAPHRAGM



A



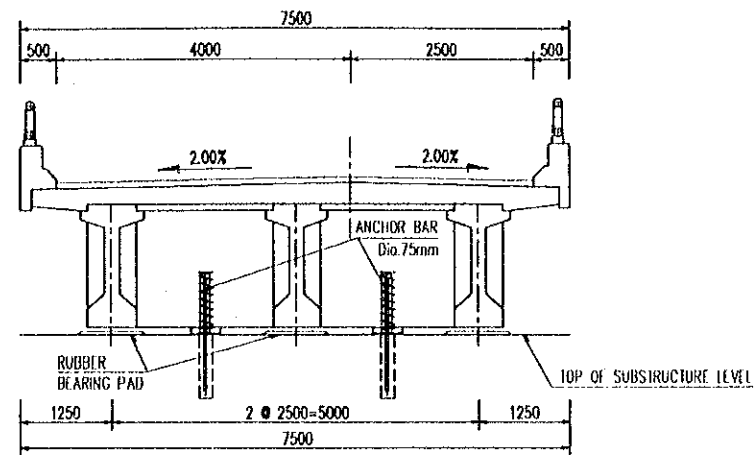
**NOTES:**

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO. P3/BR9/0030.  
THE LAPS OF S5 AND S6 WILL BE STORAGED

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: T. Kametani SIGNATURE: [Signature] DATE: 20/9/2000	NAME: K. Matsumoto SIGNATURE: [Signature] DATE: 29/9/2000	NAME: K. Enomoto SIGNATURE: [Signature] DATE: 5/10/2000	RAMDWAY "D" BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE DECK SLAB REINFORCEMENT - SHEET 3	P3/BR9/0230

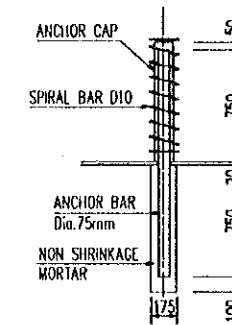
### CROSS SECTION

SCALE 1:100



### ANCHOR BAR

SCALE 1:50



### BEARING PERFORMANCE REQUIREMENTS

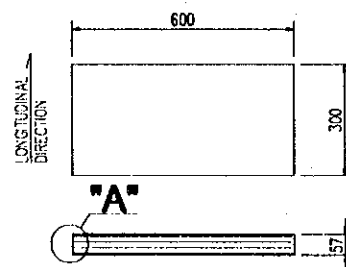
LOCATION	SERVICABILITY	
	VERTICAL LOAD (KN)	
	MAXIMUM	MINIMUM
MOVABLE BEARINGS	1 180	555

### QUANTITY TABLE ( FOR ENTIRE BRIDGE )

ITEMS	UNIT	SERVICABILITY
BEARINGS	600x300x57(mm)	6
	500x250x50(mm)	12
ANCHOR BAR Dia. 75mm	SET	12

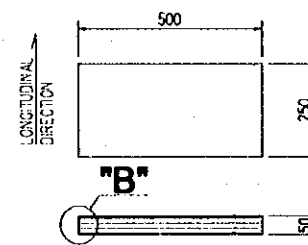
### ELASTOMERIC BEARING OF GIRDER L=37M

SCALE 1:20



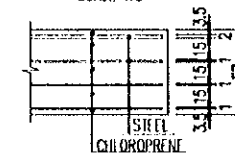
### ELASTOMERIC BEARING OF GIRDER L=28M

SCALE 1:20



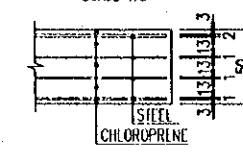
### DETAIL "A"

SCALE 1:5

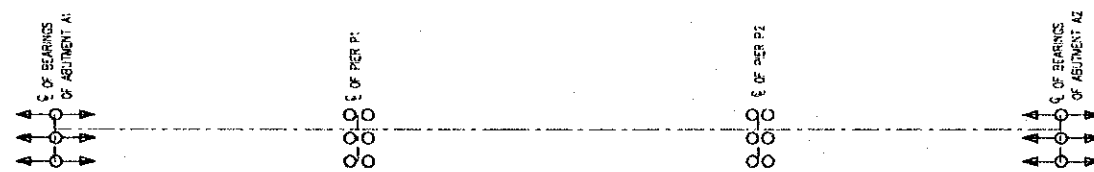


### DETAIL "B"

SCALE 1:5

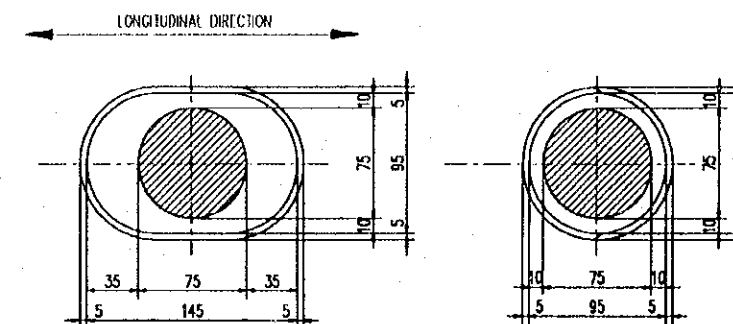


### BEARING LAYOUT



### ANCHOR CAP

SCALE 1:5



### SYMBOLS:

- DENOTES GUIDE SLIDING BEARING (IN THE DIRECTION GIVEN BY THE ARROWS)
- DENOTES GUIDE SLIDING FIXED BEARING

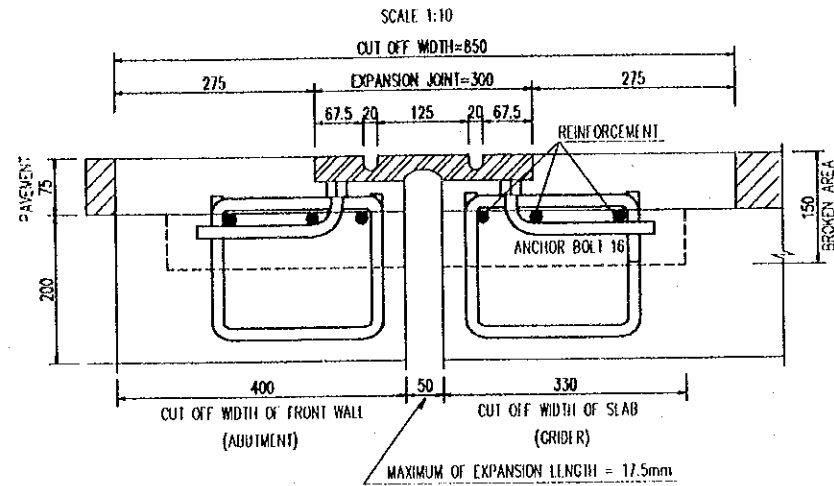
### NOTES

- FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR9/0030.

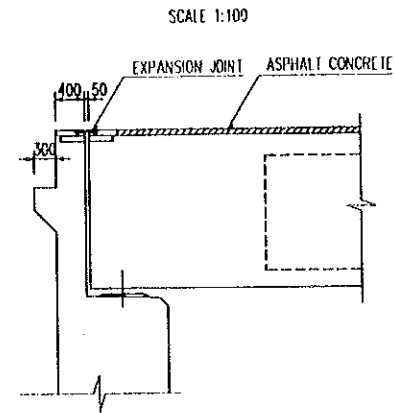
PROJECT NAME	IMPLEMENTATION AGENCY	EXECUTING AGENCY	JICA STUDY TEAM	PREPARED BY	CHECKED BY	APPROVED BY	DRAWING TITLE	DWG NO.
DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF TRANSPORT (MOT) MY THUAN PROJECT MANAGEMENT UNIT	NIPPON KOEI CO.,LTD.	T. Kametani	K. Matsumoto	K. Enomoto	RAMPWAY "D" BRIDGE INTERCHANGE 3 SUPERSTRUCTURE DETAIL OF BEARINGS	P3/BR9/0240
				DATE	DATE	DATE		
				20/9/2000	29/9/2000	5/10/2000		

## DETAILS OF EXPANSION JOINTS AT ABUTMENT A1&A2

### FOR ABUTMENT



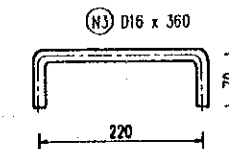
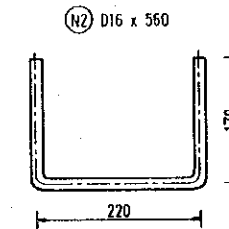
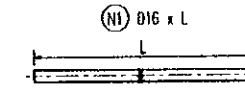
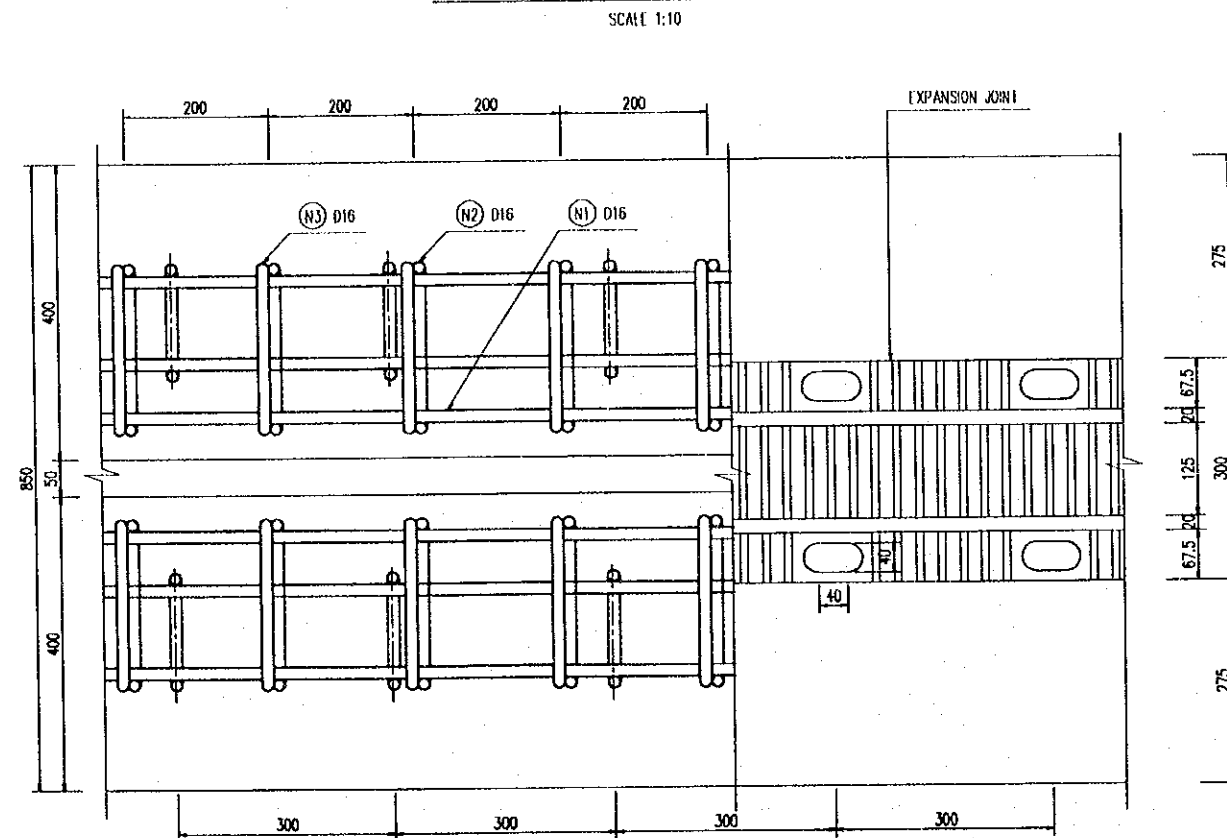
### DETAIL AT ABUTMENT



### QUANTITY TABLE (Per m)

	KIND OR SIZE	QUANTITY	REMARKS
EXPANSION JOINT	NEOPRENE RUBBER	1 M	JS-K-6301
ANCHOR BOLT	D16 L=272 mm	1/30 CM	Ø300
HUI	NEOPRENE RUBBER		
WASHER	NEOPRENE RUBBER		
REINFORCEMENT	(N1) 5 - D16	4.72 kg	L=11.6 m, N=3
	(N2) 5 - D16	4.42 kg	Ø200
	(N3) 5 - D16	2.84 kg	Ø200
CUT OFF	PAVEMENT	0.057 m <sup>3</sup>	
	SLAB	0.050 m <sup>3</sup>	
CONCRETE	B - 1	0.095 m <sup>3</sup>	CAST IN PLACE

### PLAN OF EXPANSION JOINT



### NOTES

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR9/0030.

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.	T. Kamelani	K. Matsumoto	K. Enomoto	RAMPWAY "D" BRIDGE - INTERCHANGE 3 SUPERSTRUCTURE DETAILS OF EXPANSION JOINTS	P3/BR9/0250
				NAME	DATE	DATE		
				20/9/2000	29/9/2000	5/10/2000		

## QUANTITY TABLE OF SUPERSTRUCTURE

ITEMS		UNIT	TOTAL
<b>A- BEAM</b>			
CONCRETE	GROER CONCRETE CLASS B	m <sup>3</sup>	210.6
	PRECAST CONCRETE PLATE CLASS D	m <sup>3</sup>	25.3
	CROSS BEAM CLASS D	m <sup>3</sup>	34.3
	DECK SLAB CLASS D	m <sup>3</sup>	176.3
ASPHALT CONCRETE OF 70 MM THICKNESS		m <sup>2</sup>	607.8
WATER PROOFING OF 5 MM THICKNESS		m <sup>2</sup>	607.8
CABLE	CABLES 12S12.7	m	1051.1
	CABLES 3S12.7	m	146.9
ANCHORAGE	ANCHORAGE CABLES 12S12.7	set	66.0
	ANCHORAGE CABLES 3S12.7	set	52.0
SHEATHING	CABLES 12S12.7 # 80/85 MM	m	1051.1
	CABLES 3S12.7 # 50/55 MM	m	146.9
CEMENT GROUT IN SHEATHING		m <sup>3</sup>	5.6
STEEL SHEAR KEY		set	72.0
REINFORCEMENT	D25	kg	1909.5
	D22	kg	9690.8
	D20	kg	20671.8
	D16	kg	2153.1
	D14	kg	40835.4
	D12	kg	2479.5
	D10	kg	101.7
	D6	kg	3035.5
	TOTAL	kg	80877.3
B-EXPANSION JOINT 50 MM		m	13.0
C-BEARING	500x250x50	set	12.0
	600x300x57	set	6.0
D- ANCHORAGE BAR		set	12.0

### NOTES

FOR STANDARD STRUCTURAL NOTES SEE DRAWING NO P3/BR9/0030.

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 KOBEL CO.,LTD.	NAME T. Kametani SIGNATURE <i>T. Kametani</i> DATE 20/9/2000	K. Matsumoto <i>K. Matsumoto</i> 29/9/2000	K. Enomoto <i>K. Enomoto</i> 5/10/2000	RAMPWAY "D" BRIDGE-INTERCHANGE 3 SUPERSTRUCTURE QUANTITY TABLE OF SUPERSTRUCTURE	P3/BR9/0260