タイ王国・ラマ六世橋建設計画

最終報告書 第2編

図面集(予備設計)

昭和57年3月

国際協力事業団

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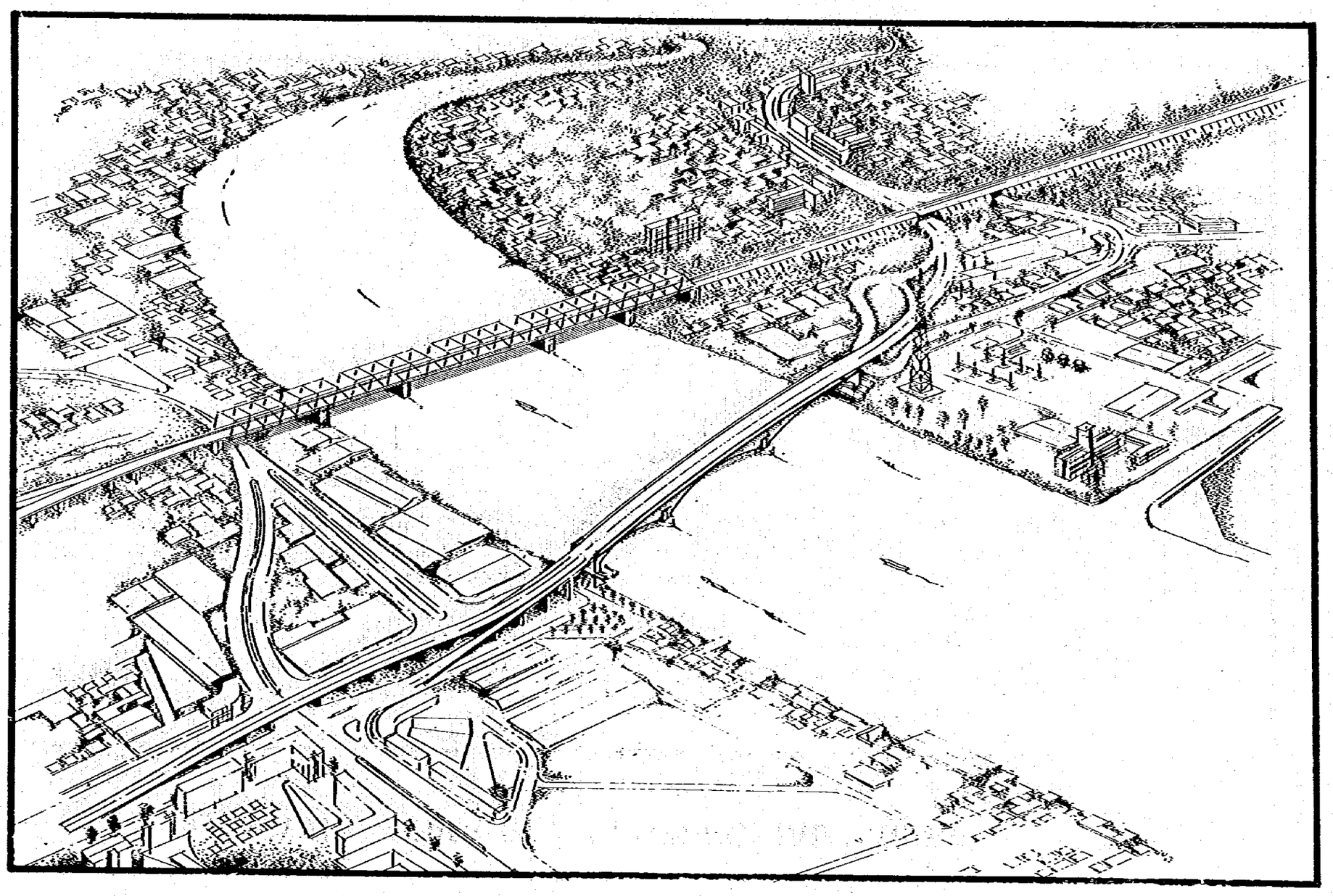
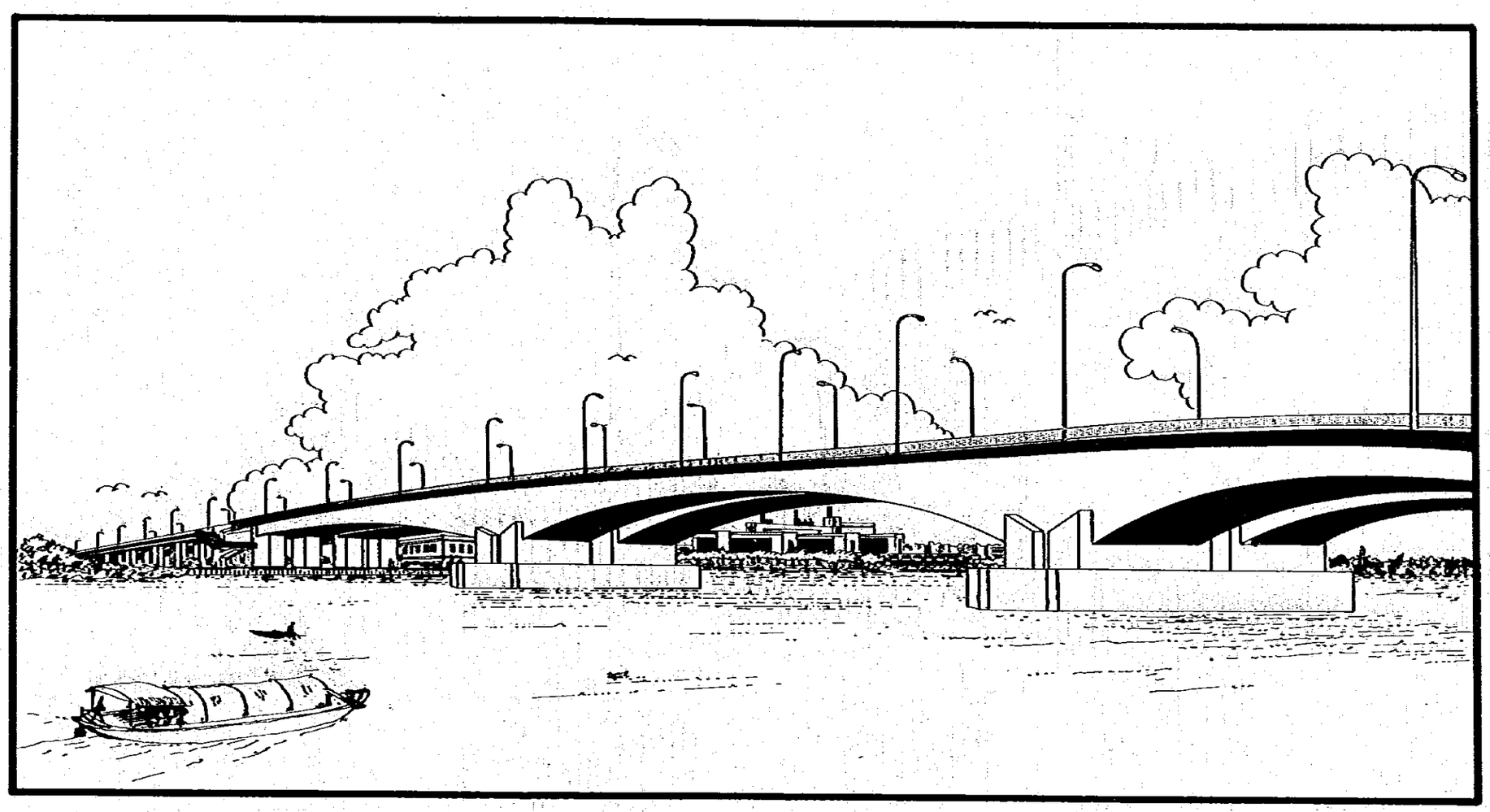
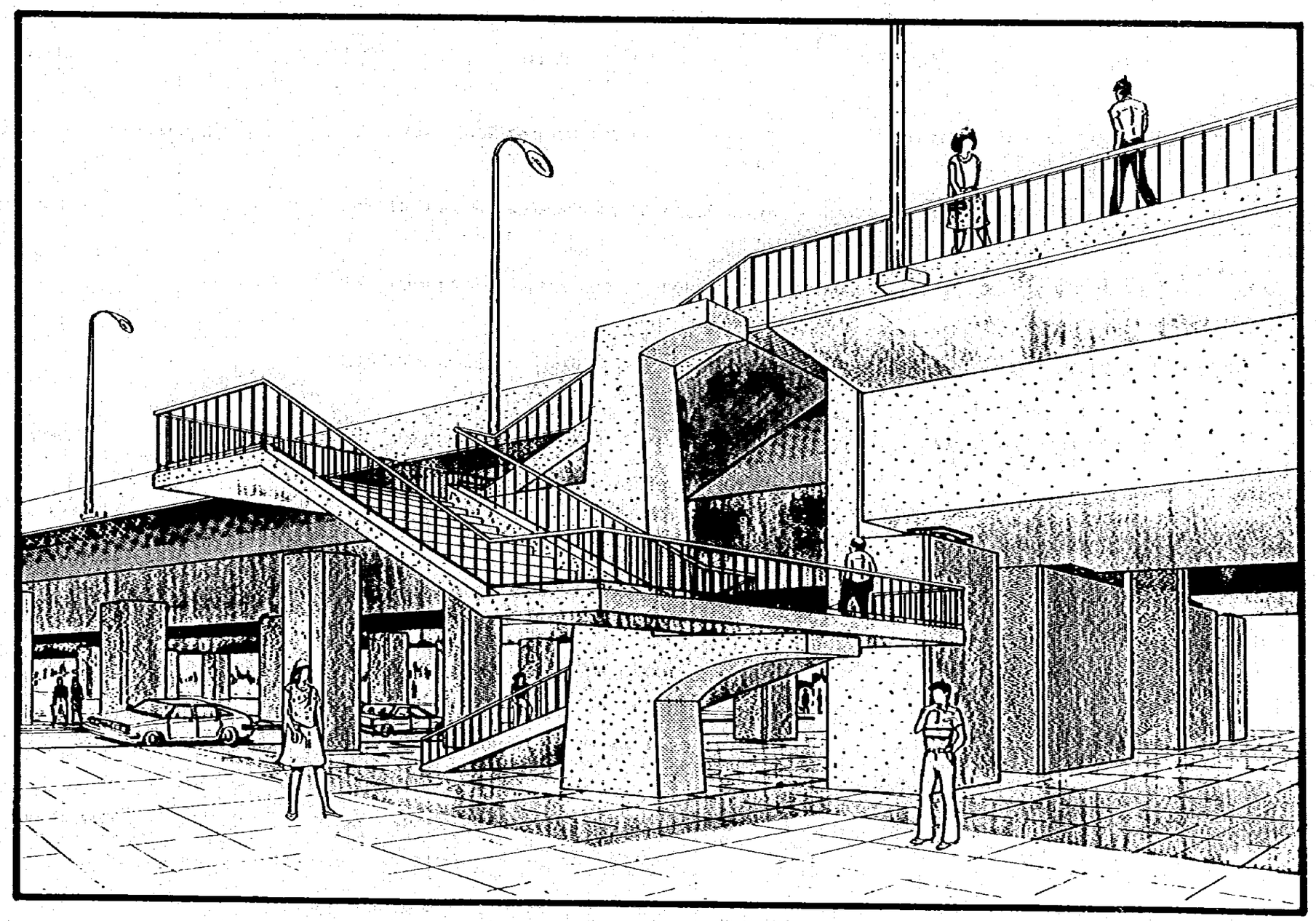


GENERAL PERSPECTIVE VIEW



MAIN BRIDGE PERSPECTIVE VIEW



STAIRCASE PERSPECTIVE VIEW

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SYMBOLS

- BENCH MARK (BM), PERMANENT BENCH MARK (PBM)
- BOX CULVERT (EXISTING)
- BOX CULVERT (PROPOSED)
- BRIDGE (EXISTING)
- BRIDGE (PROPOSED)
- BUILDING, WOOD FRAME
- BUILDING, CONCRETE FRAME
- BORE HOLE
- CONTOURS
- DEFLECTION ANGLE
- DITCH, BELOWS OR RIVER
- DITCH, DIRECTION OF FLOW
- EDGE LINE, LIMIT OF PLANTATION OR CENTER LINE
- ELECTRIC POWER LINE WITH POLE
- ELECTRIC POWER POST
- EXISTING ROAD (PAVED) ON MAPPING WITH ROUTE NO
- EXISTING ROAD (UNPAVED) ON MAPPING WITH ROUTE NO
- FENCE, BAMBOO WOOD
- GROUND LINE
- GROUTED RIP - RAP
- GUIDE POST
- KILOMETER MARKER
- LOCAL ROAD AND TRACK
- PC, PCC, PCT, CT, TS, ST, CS, SC OR PVT OF GEOMETRIC CURVE
- PI, PVI OR POST OF GEOMETRIC CURVE
- PIPE CULVERT (EXISTING)
- PIPE CULVERT (PROPOSED)
- POND OR ORDINARY WELL
- POWER TRANSMISSION LINE WITH STEEL TOWER
- PROJECT ROUTE ALIGNMENT
- PROPOSE CENTER LINE
- RAILWAY
- ROAD (EXISTING)
- ROAD (PROPOSED)
- R/W LINE (EXISTING)
- R/W LINE (PROPOSED)
- R/W MARKER
- SLOPE
- SURVEY LINE
- SWAMP AREA
- TELEPHONE LINE WITH POLE
- TELEPHONE POLE
- TREE
- VILLAGE, BUILT UP AREA
- WATER LEVEL
- WATERWAY
- WOODED AREA

ABBREVIATIONS

A	CLOTHOID PARAMETER; $\sqrt{LC \cdot R}$
AC	ASPHALTIC CONCRETE
AZ	AZIMUTH
AEG	AGGREGATE
AHD	AHEAD
ALT	ALTERNATIVE
ABUT	ABUTMENT
ASST	ASSISTANT
ASTM	AMERICAN SOCIETY FOR TESTING OF MATERIALS
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
APPROX	APPROXIMATE
BH	BORE HOLE
BK	BACK
BM	BENCH MARK
B/	BOTTOM OF
BRG	BEARING
BOTT	BOTTOM
CI	CAST-IN-SITU
CL	CLEARANCE
CM	CENTIMETER
CP	CEMENT PIPE
CBR	CALIFORNIA BEARING RATIO
COL	COLUMN
C/C	CENTER TO CENTER
CONC	CONCRETE
CONSTR	CONSTRUCTION
CS	POINT OF CURVE TO SPIRAL
D	DEGREE OF CURVE
DIA OR Ø	DIAMETER
DWG	DRAWING
EA	EACH
EL	ELEVATION
EXP	EXPANSION
EXT	EXTERIOR
EXIST	EXISTING
FT OR '	FOOT
FIN	FINISHED
FTG	FOOTING
G	GRADIENT
GR	GRADE
H	HEIGHT
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HORIZ	HORIZONTAL
INSIDE	INSIDE DIAMETER
IN OR "	INCH
INT	INTERIOR
INV	INVERT
KG	KILOGRAM
KM	KILOMETER
KPH	KILOMETER PER HOUR
L	LENGTH, OR LENGTH OF CIRCULAR CURVE
LC	LENGTH OF CLOTHOID
LM	LINEAR METER
LS	LENGTH OF SUPERELEVATION TRANSITION
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
LWL	LOW WATER LEVEL
M	METER
M^2	SQUARE METER
M^3	CUBIC METER
MM	MILLIMETER
MID	MIDDLE ORDINATE
MAX	MAXIMUM
MIN	MINIMUM
MSL	MEAN SEA LEVEL
MISC	MISCELLANEOUS
N	NORTH
NG	NOSE GIRDER
NO OR #	NUMBER
OD	OUTSIDE DIAMETER
PC	POINT OF CURVATURE, PRESTRESSED CONCRETE
PS	PROFILE GRADE
PI	POINT OF HORIZONTAL INTERSECTION
PL	PLATE
PT	POINT OF TANGENT
PBM	PERMANENT BENCH MARK
PCC	POINT OF CURVE
PCT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
PWD	PUBLIC WORKS DEPARTMENT
POST	POINT OF SUB-TANGENT
PROJ	PROJECTION
PVCC	POINT OF VERTICAL REVERSE CURVE
R	RADIUS
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RP	REFERENCE POINT
RT	RIGHT
REF	REFERENCE
R/W	RIGHT OF WAY
REINF	REINFORCEMENT
REQ'D	REQUIRED
SC	POINT OF SPIRAL TO CURVE
SE	SUPERELEVATION
SQ	SQUARE
SR	SOIL ROAD
STA	STATION
STD	STANDARD
ST	POINT OF SPIRAL TO TANGENT
SECT	SECTION
SYMM	SYMMETRY
T	TANGENT LENGTH
T/	TOP OF
THK	THICKNESS
TS	POINT OF TANGENT TO SPIRAL
TYP	TYPICAL
V	VELOCITY
VERT	VERTICAL
VOL	VOLUME
W	WEST, WIDTH
W/	WITH
℄	CENTER LINE
℄	SPUR LINE OR SURVEY LINE
@	AT (SPACING)
%	PERCENT

GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN ARE EXPRESSED IN METERS ABOVE MEAN SEA LEVEL.
3. DEFINITION OF SLOPE IS AS FOLLOWS:

4. NOMENCLATURES

PIPE CULVERTS : NUMBER OF PIPE – DIAMETER × LENGTH

FOR EXAMPLE 2 – Ø 1.00 × 35.00

BRIDGE : NUMBER OF BRIDGE – TOTAL LENGTH × WIDTH (NO OF SPAN – SPAN LENGTH)

FOR EXAMPLE 2 – 50.00 × W 7.00 (5 – 10.00 SPANS EACH)

REVISED	DATE	CHECKED

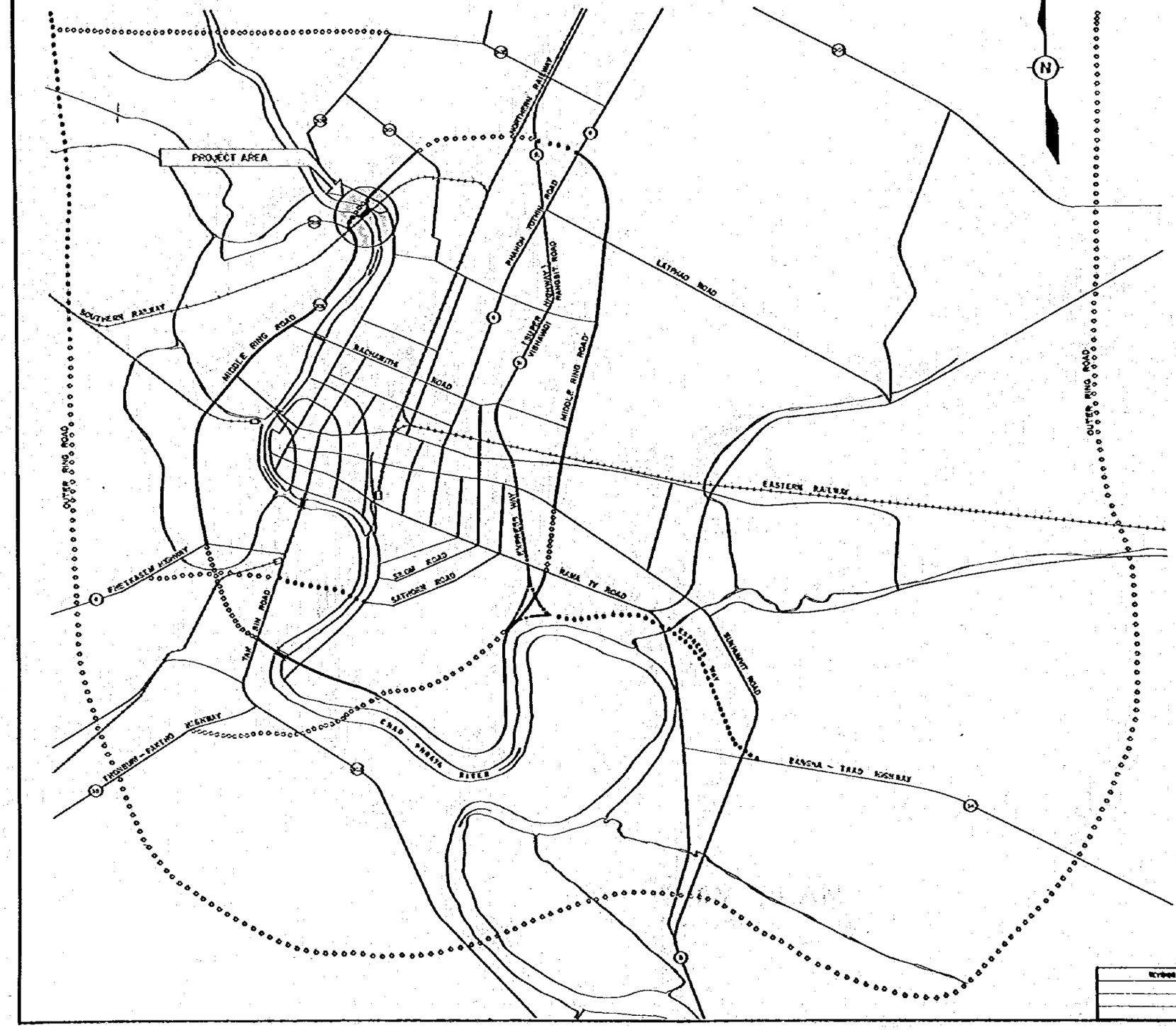
JAPAN INTERNATIONAL COOPERATION AGENCY

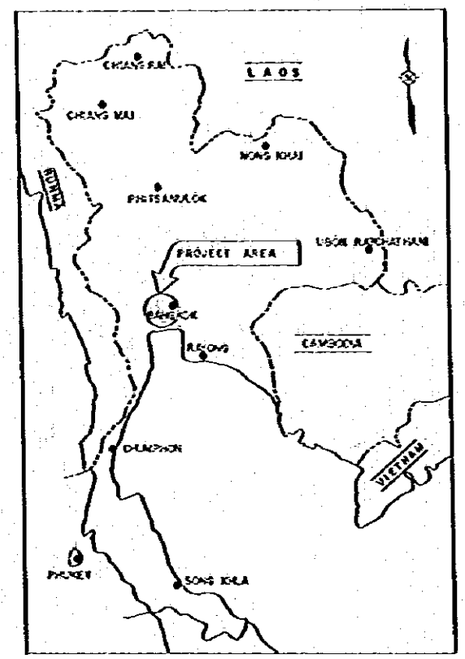
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

STANDARD SYMBOLS AND ABBREVIATIONS

DESIGNED [illegible]
DRAWN [illegible]
CHECKED [illegible]
SCALE — NONE —
DATE — DEC 1981 —
SUBMITTED BY [illegible] PROJECT MANAGER
DRAWING NO. 1





MAP OF THAILAND

LEGEND

- ●●●●● HIGHWAY OR ROAD UNDER CONSTRUCTION
- ○○○○○ PROPOSED ROUTE

REVISED	DATE	CHECKED

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

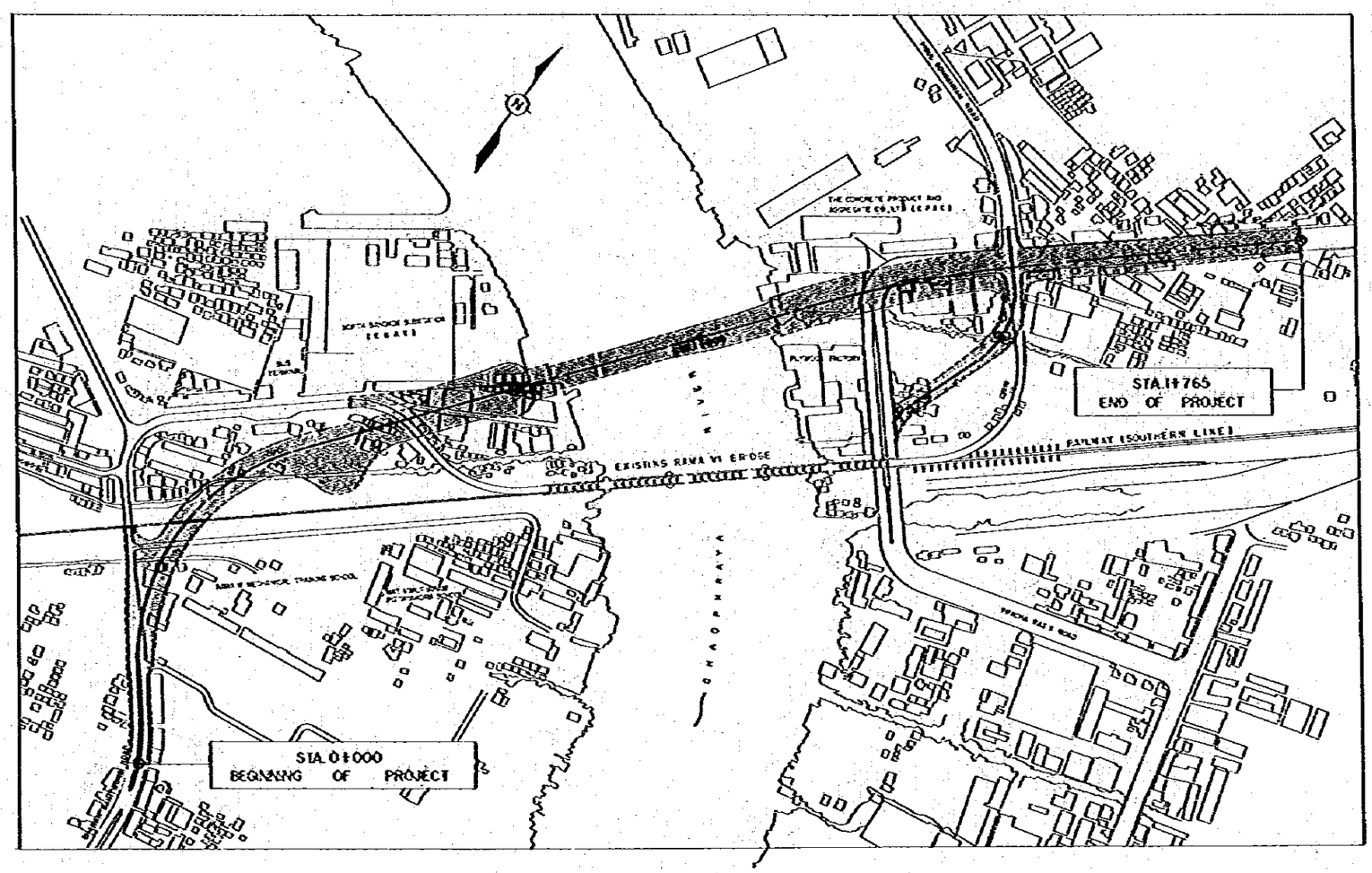
THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

GENERAL LOCATION MAP

DESIGNED
DRAWN
CHECKED
SCALE 1:200,000
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER

JAPAN INTERNATIONAL COOPERATION AGENCY

DRAWING NO. 2



KEY PLAN

0 50 100 200 300 METERS
GRAPHIC SCALE

KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

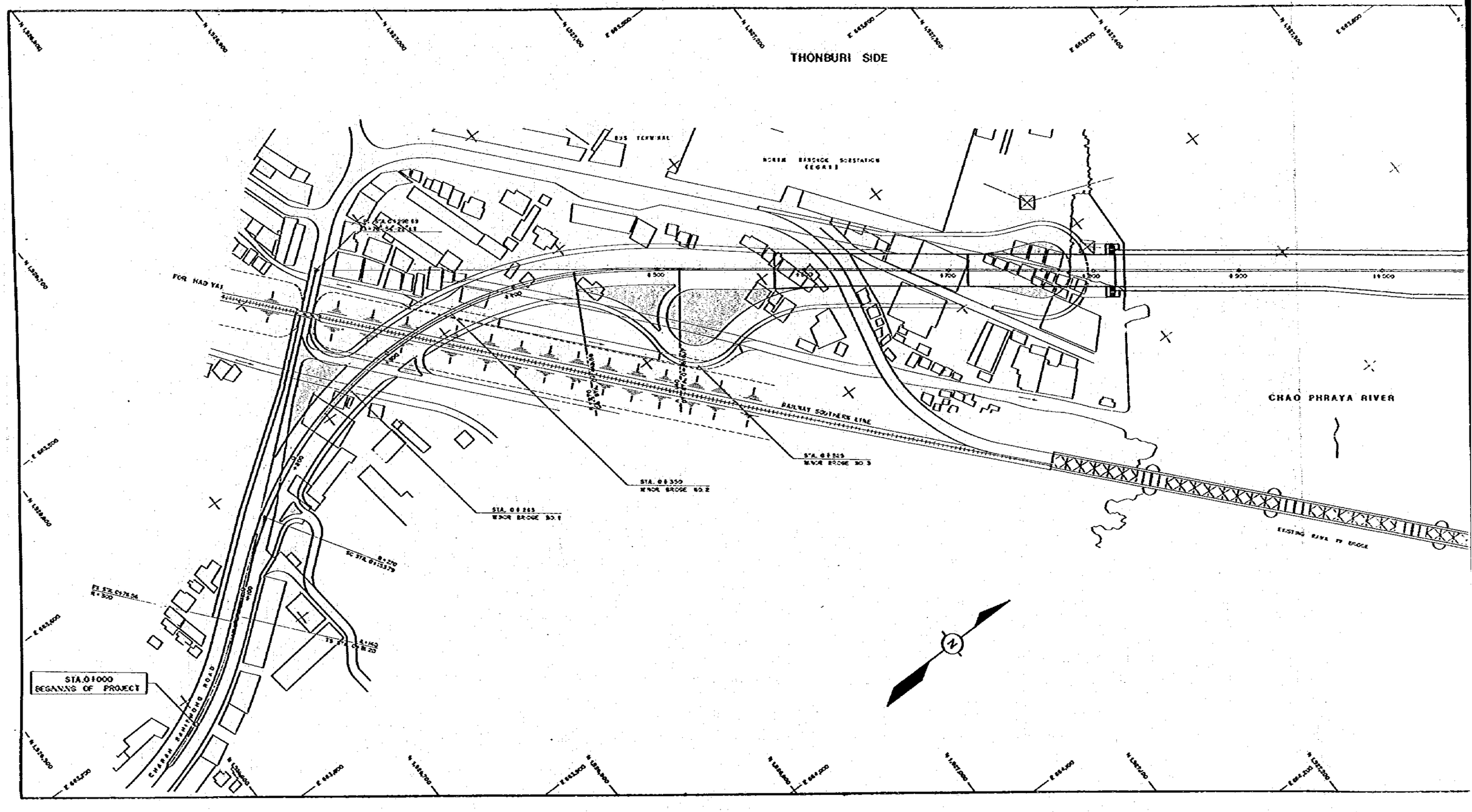
THE FEASIBILITY STUDY ON THE BANG YAI BRIDGE CONSTRUCTION PROJECT

KEY PLAN

Revision	By	Date

JAPAN INTERNATIONAL COOPERATION AGENCY

DRAWING NO. 3


THONBURI SIDE
BUS TERMINAL
ROYAL BARRACK SUBSTATION (EGAT)
FOR HUA YAI
RAILWAY SOUTHERN LINE
CHAO PHRAYA RIVER
STA. 0+350
MINOR BRIDGE NO.2
STA. 0+265
MINOR BRIDGE NO.1
STA.0+000
BEGANNING OF PROJECT
CHAROEN KRUNGTHONG ROAD
N

BANGKOK SIDE

O PHRAYA RIVER

STA. 8+765
END OF PROJECT

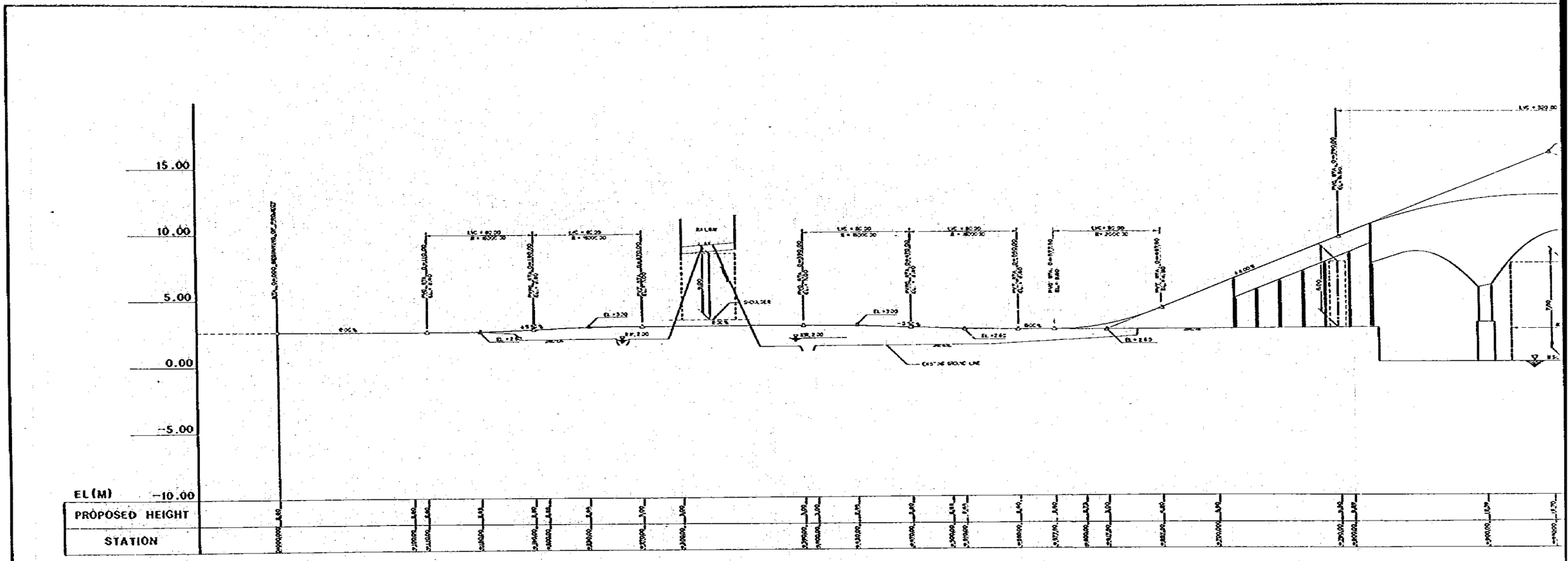
PRELIMINARY ONLY
REDUCED TO HALF SCALE

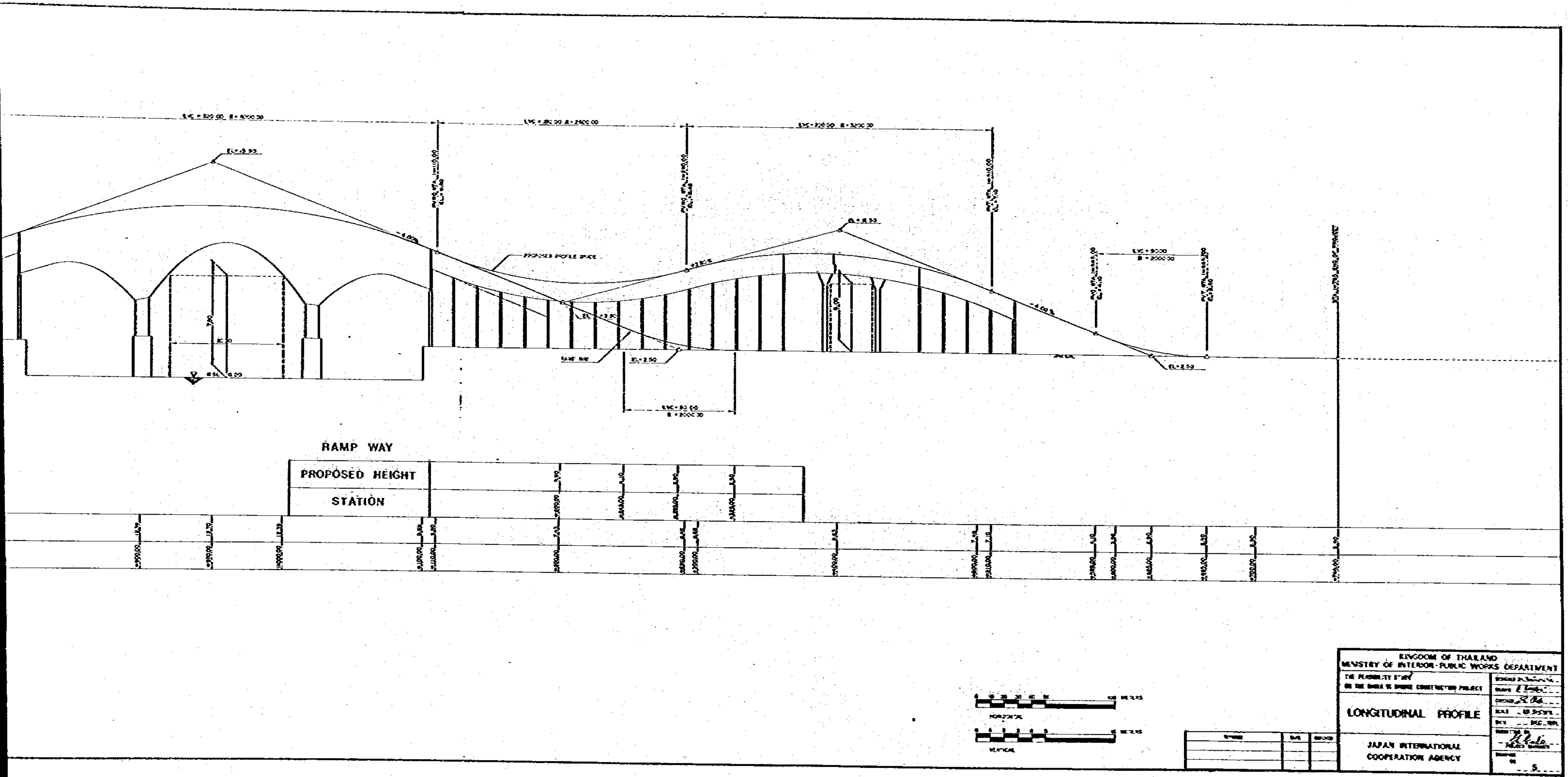
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

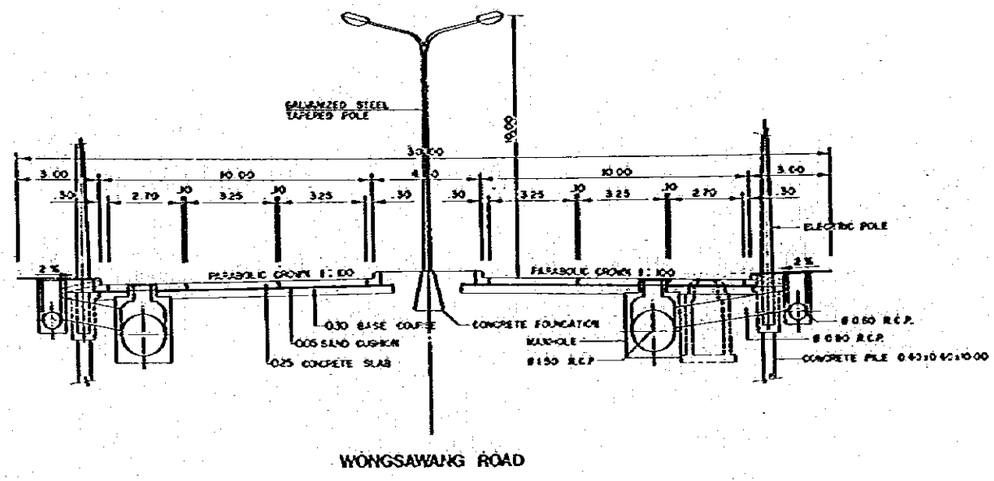
THE FEASIBILITY STUDY
ON THE RAMA IV BRIDGE CONSTRUCTION PROJECT

PLAN

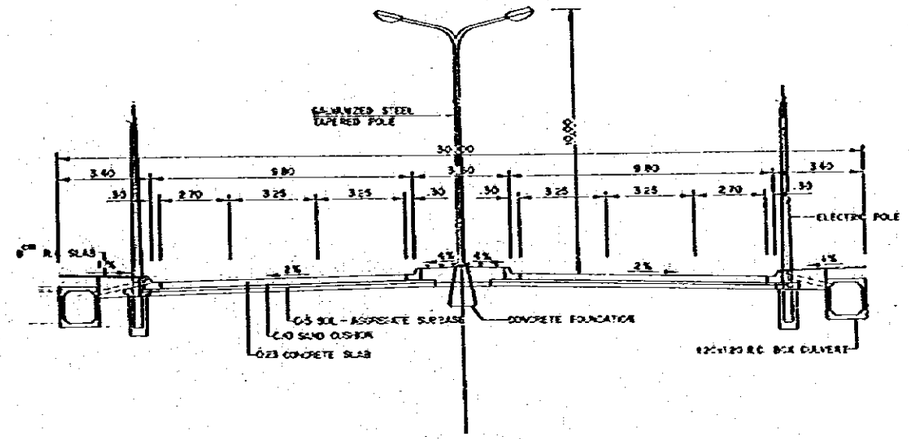
JAPAN INTERNATIONAL
COOPERATION AGENCY


15.00
10.00
5.00
0.00
-5.00
-10.00
EL(M)
PROPOSED HEIGHT
STATION
SOLDIER
EXISTING GROUND LINE

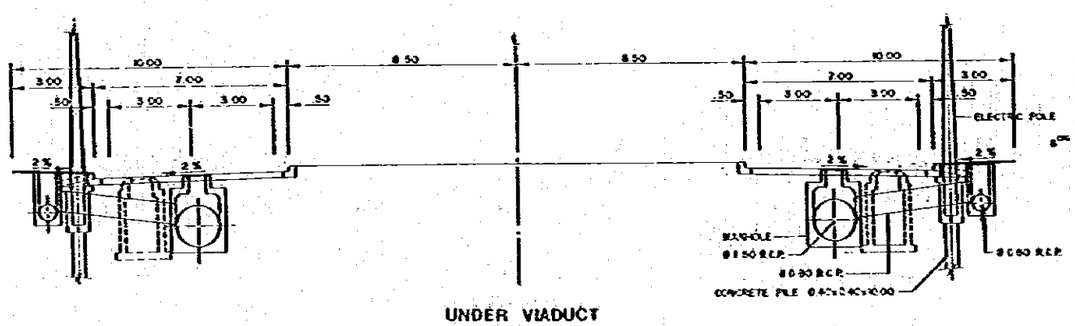

RAMP WAY
PROPOSED HEIGHT
STATION
EL = 2.50
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT
LONGITUDINAL PROFILE
JAPAN INTERNATIONAL
COOPERATION AGENCY



WONGSAWANG ROAD



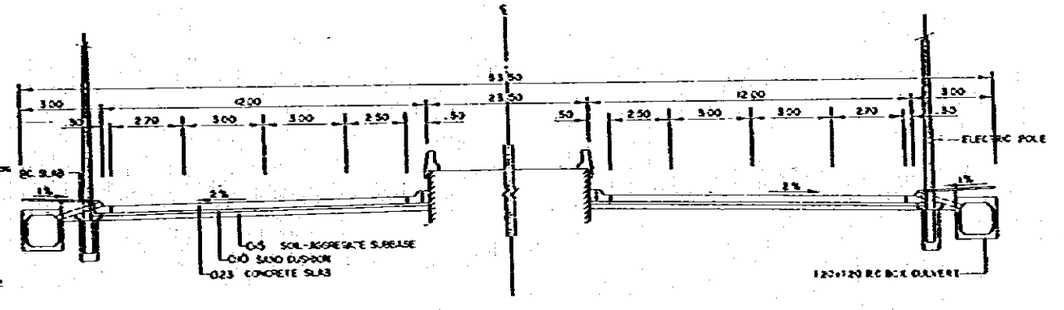
CHARAN SANITWONG ROAD



UNDER VIADUCT

BANGKOK SIDE CROSS SECTION

SCALE 1 : 100



FRONTAGE ROAD

THONBURI SIDE CROSS SECTION

SCALE 1 : 100

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

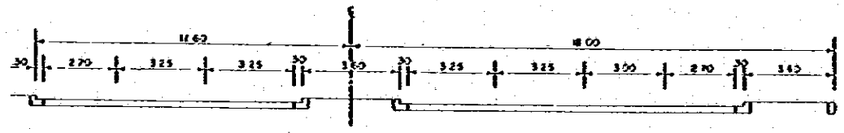
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE BANG YI BRIDGE CONSTRUCTION PROJECT

TYPICAL CROSS SECTIONS

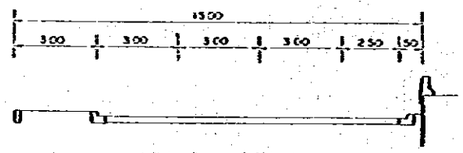
JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1 : 100
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 6



SECTION B – B
SCALE 1 : 100

SECTION A – A
SCALE 1 : 100



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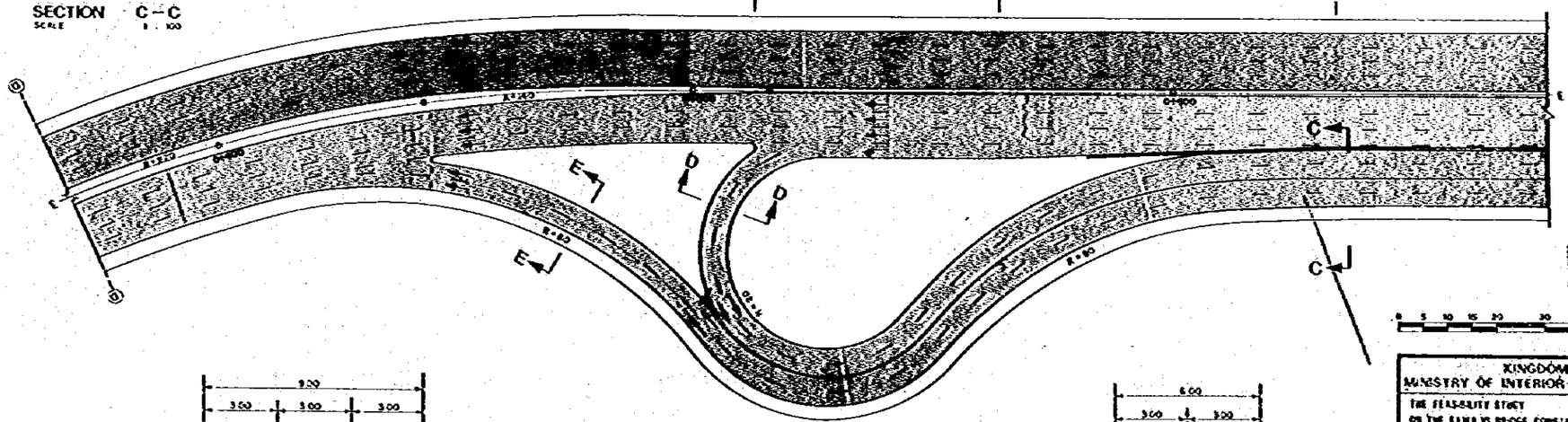


SECTION E – E
SCALE 1 : 100

INTERSECTION THONBURI SIDE
SCALE 1 : 500

SECTION D – D
SCALE 1 : 100

PRELIMINARY ONLY
REDUCED TO HALF SCALE

0 5 10 15 20 30 40 50 METERS

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

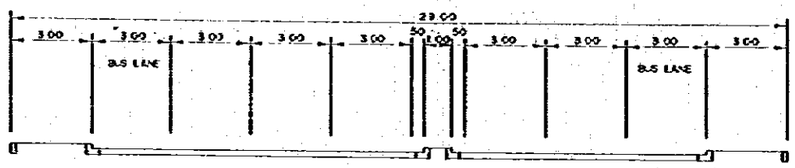
THE FEASIBILITY STUDY
ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

INTERSECTION
THONBURI SIDE

JAPAN INTERNATIONAL
COOPERATION AGENCY

NO.	DATE	CHECKED

DESIGNED S. Pitta
DRAWN T. Tanaka
CHECKED S. Pitta
SCALE AS SHOWN
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 7



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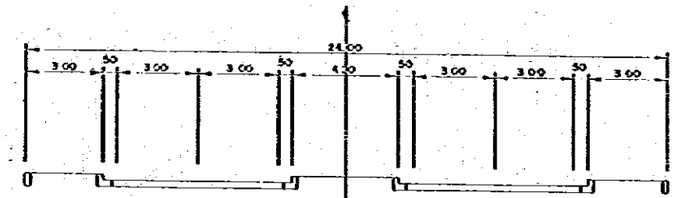

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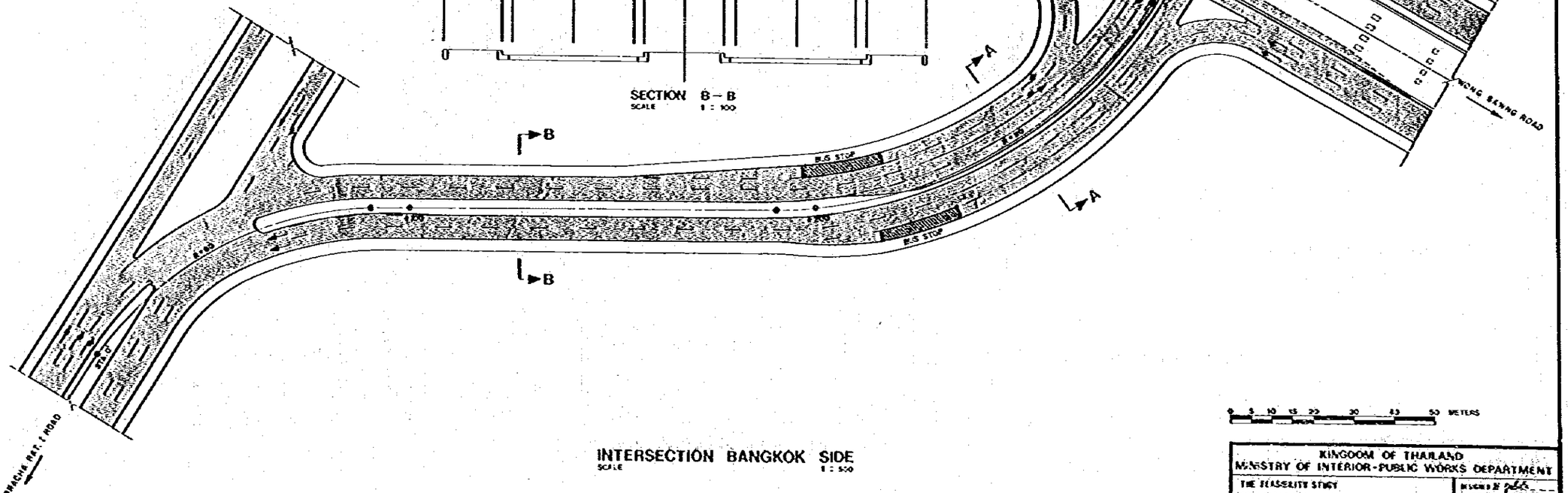


INTERSECTION BANGKOK SIDE
SCALE 1 : 500

0 5 10 15 20 30 40 50 METERS

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

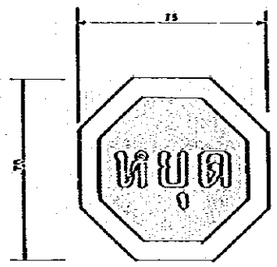
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

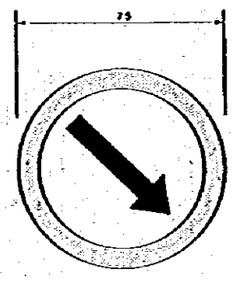
THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

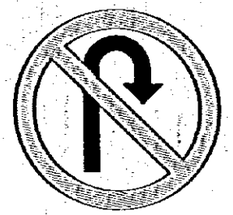
INTERSECTION BANGKOK SIDE

JAPAN INTERNATIONAL COOPERATION AGENCY

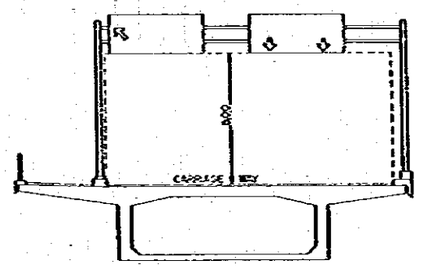
DESIGNED BY
DRAWN
CHECKED
SCALE 1/1,000
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 8



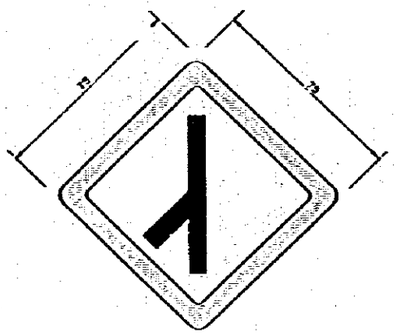


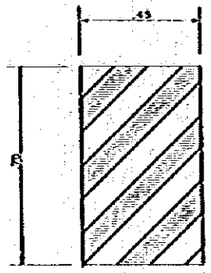


STANDARD FOR REGULATORY SIGNS

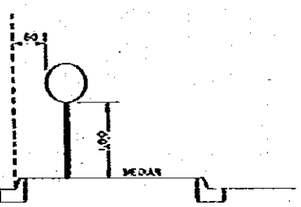


MOUNTED ON STRUCTURES





STANDARD FOR WARNING SIGNS



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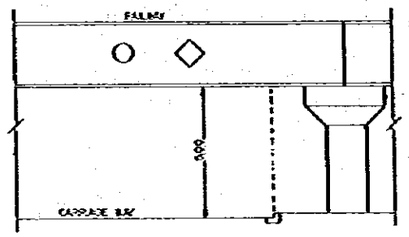
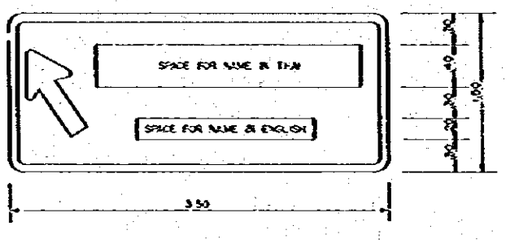
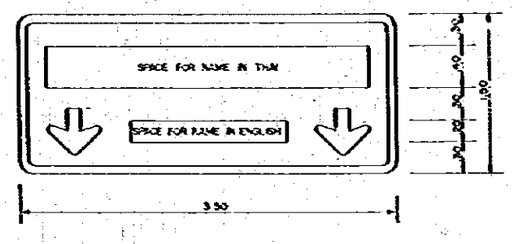


MOUNTED ON RAILWAY GIRDER





STANDARD FOR GUIDE SIGNS

STANDARD FOR MOUNTINGS

KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY
ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

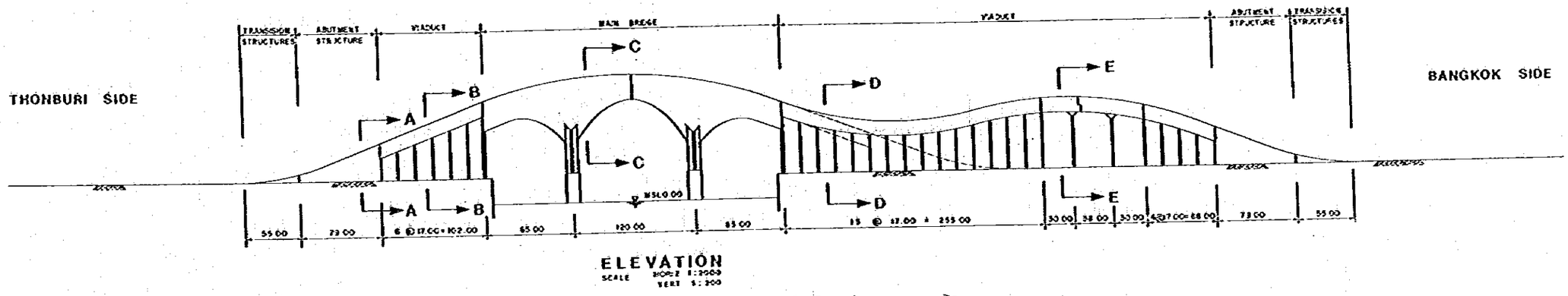
STANDARD TRAFFIC SIGNS

JAPAN INTERNATIONAL
COOPERATION AGENCY

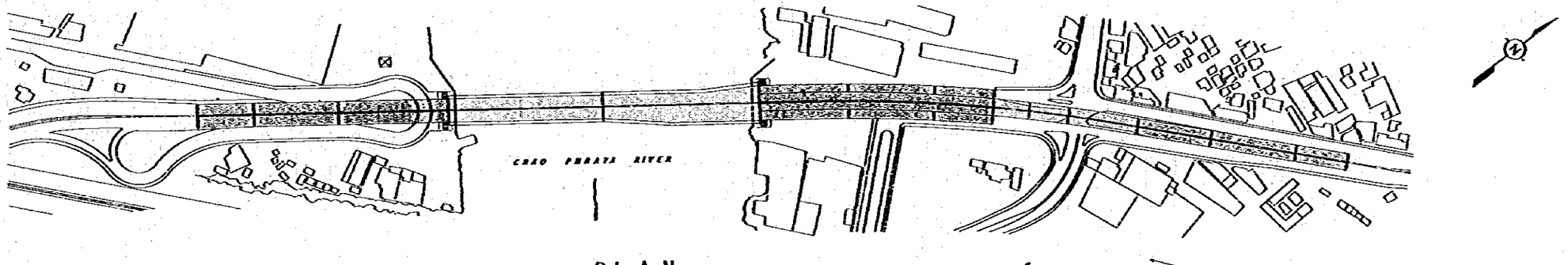
REVISION	DATE	CHECKED

DESIGNED
DRAWN
CHECKED
SCALE NONE
DATE DEC 1991

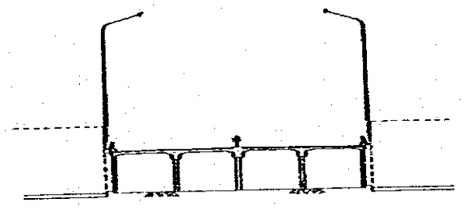
DRAWING NO. 9



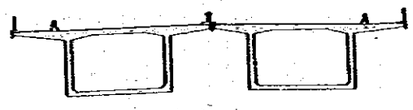
ELEVATION
SCALE HORIZ 1:2000
VERT 1:200



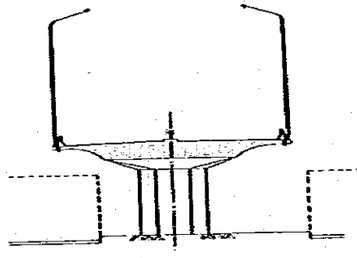
PLAN
SCALE 1:2000



SECTION A – A
SCALE 1:200

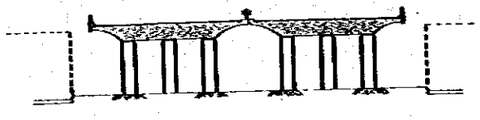


SECTION C – C
SCALE 1:200

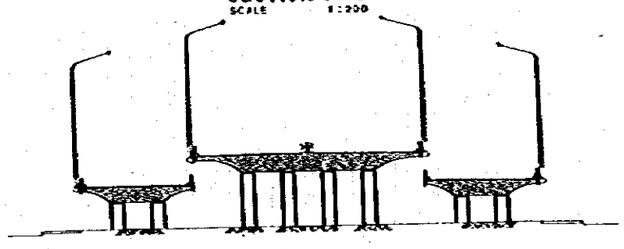


SECTION E – E
SCALE 1:200

LEGEND
PC SECTION
RC SECTION



SECTION B – B
SCALE 1:200



SECTION D – D
SCALE 1:200

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISED	DATE	DESIGN

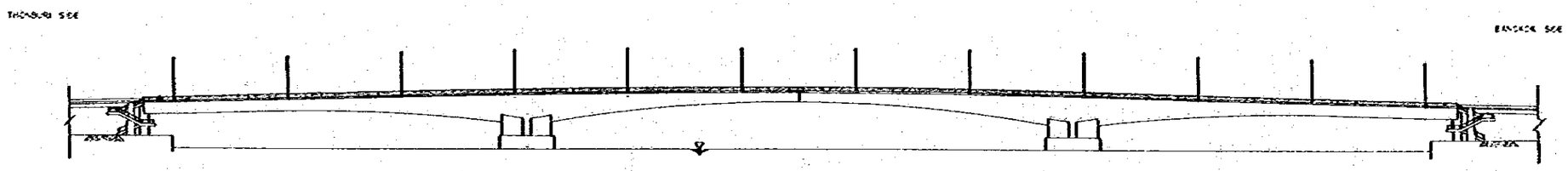
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

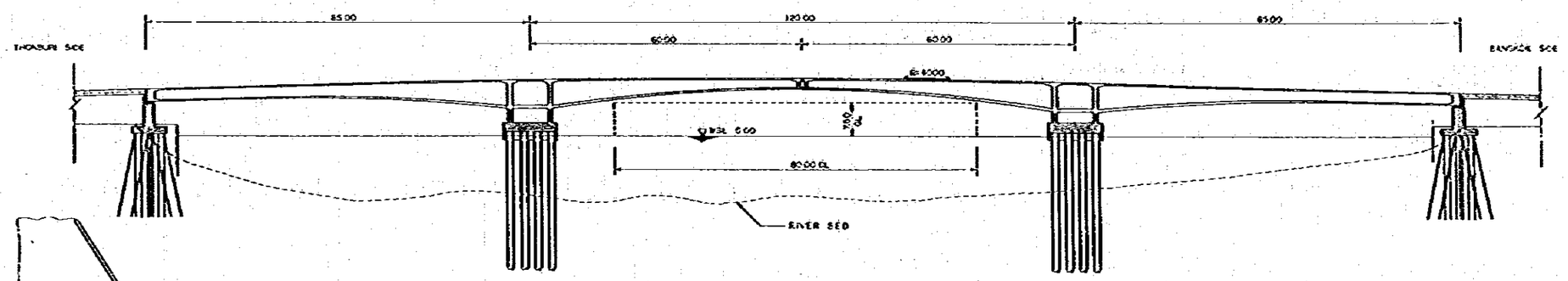
BRIDGE – PLAN AND ELEVATION

JAPAN INTERNATIONAL COOPERATION AGENCY

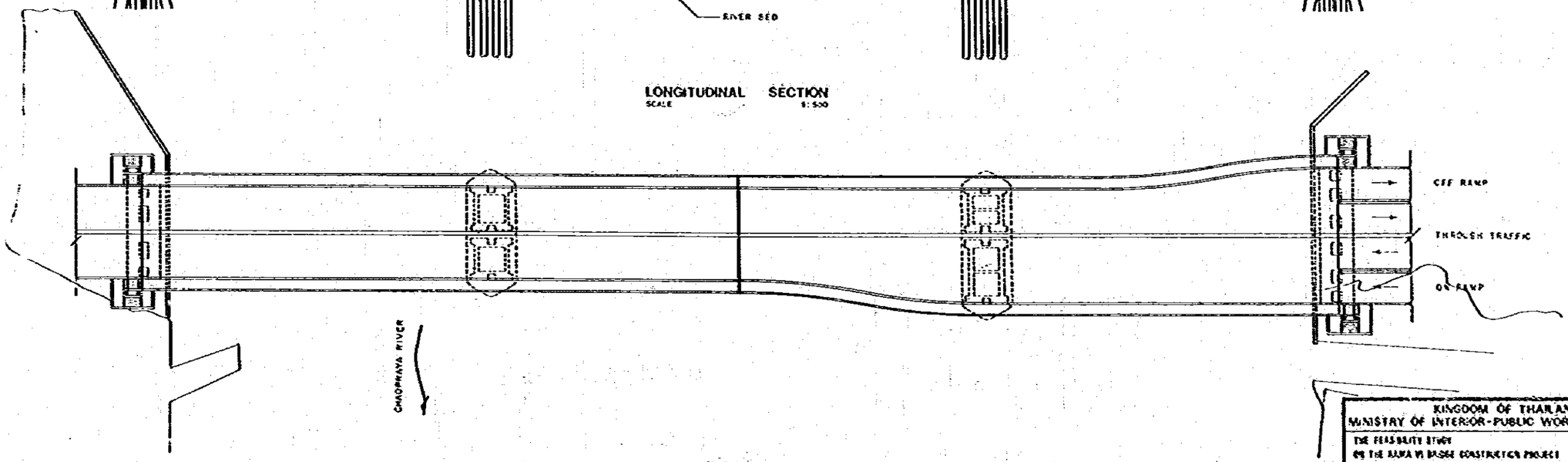
DESIGNED A. Ohta
DRAWN T. Ito
CHECKED A. Ohta
SCALE AS SHOWN
DATE DEC 1981
SUBMITTED BY A. Ohta PROJECT MANAGER
DRAWING NO. 10



ELÉVATION
SCALE 1:500



LONGITUDINAL SECTION
SCALE 1:500



PLAN
SCALE 1:500

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

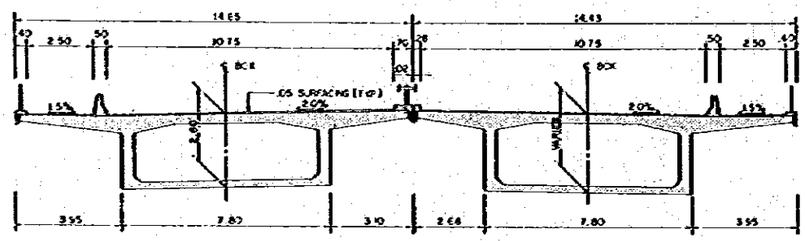
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY
ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

MAIN BRIDGE
GENERAL LAYOUT

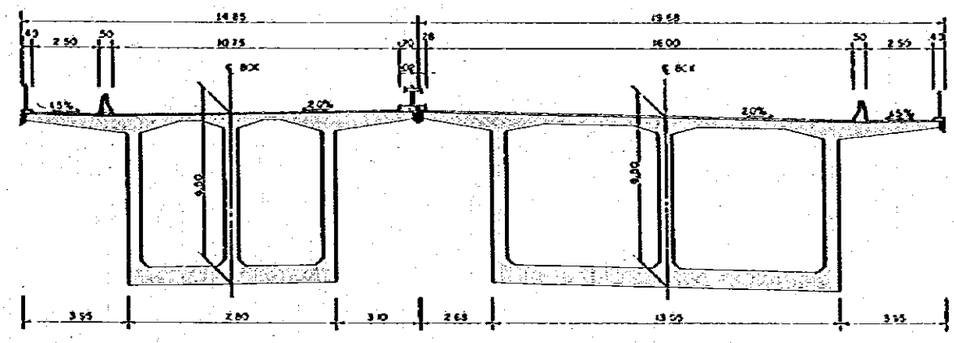
JAPAN INTERNATIONAL
COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1:500
DATE DEC 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 11



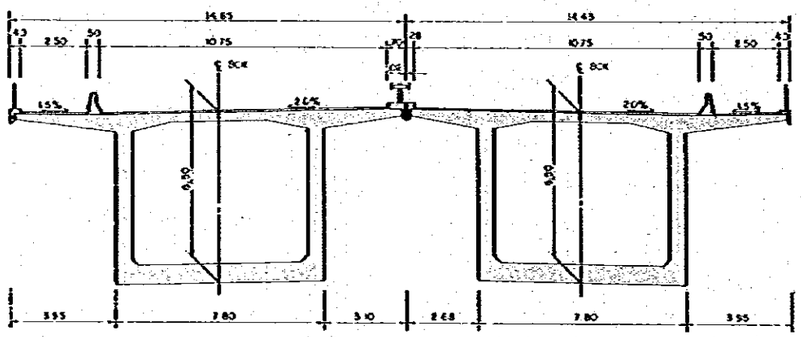
SECTION A – A
SCALE 1 : 100

SECTION B – B
SCALE 1 : 100

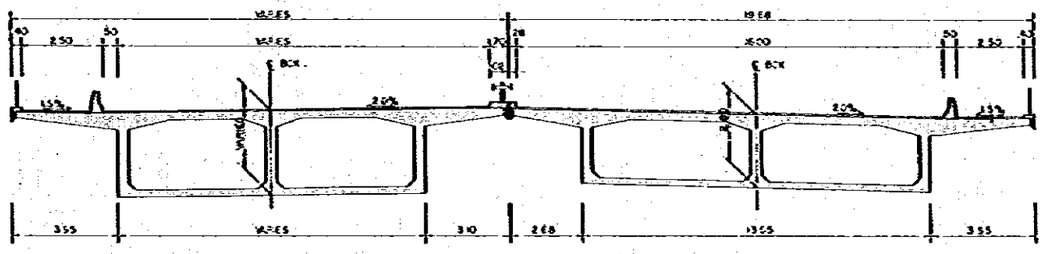


SECTION F – F
SCALE 1 : 100

SECTION G – G
SCALE 1 : 100



SECTION C – C
SCALE 1 : 100



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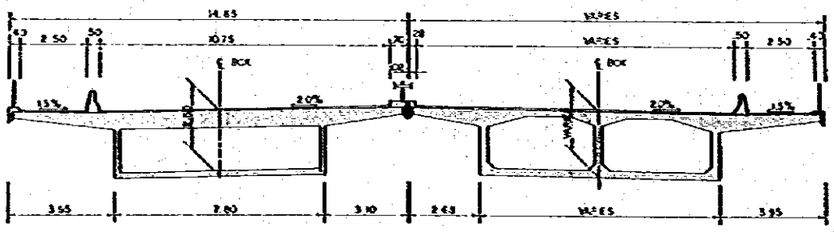
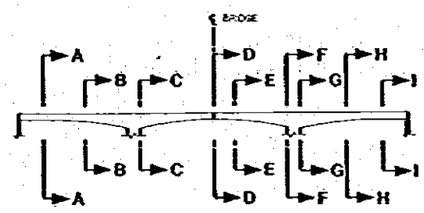
SCALE 1 : 100

SECTION I – I
SCALE 1 : 100



SECTION D – D
SCALE 1 : 100

SECTION E – E
SCALE 1 : 100



KEY
NOT TO SCALE

LEGEND
PC SECTION
RC SECTION

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISED	DATE	CHECKED

KINGDOM OF THAILAND
MINISTRY OF INTERIOR – PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA IV BRIDGE CONSTRUCTION PROJECT

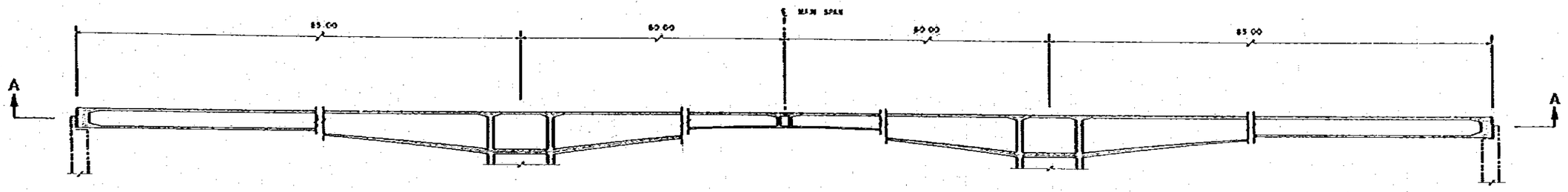
MAIN BRIDGE – SUPERSTRUCTURE
CROSS SECTIONS

DESIGNED K.
DRAWN
CHECKED
SCALE 1 : 100
DATE DEC 1991

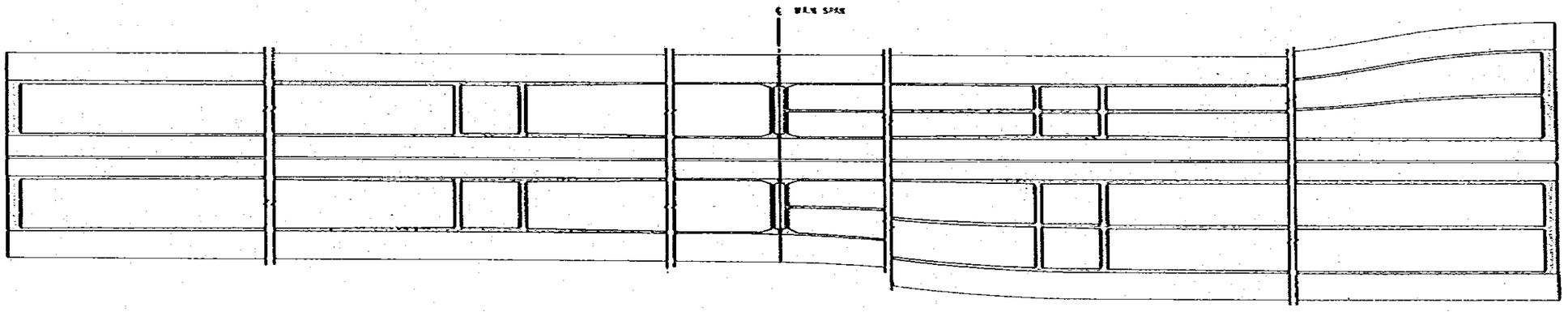
SUBMITTED BY
PROJECT MANAGER

DRAWING NO. 12

JAPAN INTERNATIONAL COOPERATION AGENCY



LONGITUDINAL SECTION
SCALE 1:300



SECTION A–A
SCALE 1:300

PRELIMINARY ONLY
REDUCED TO HALF SCALE

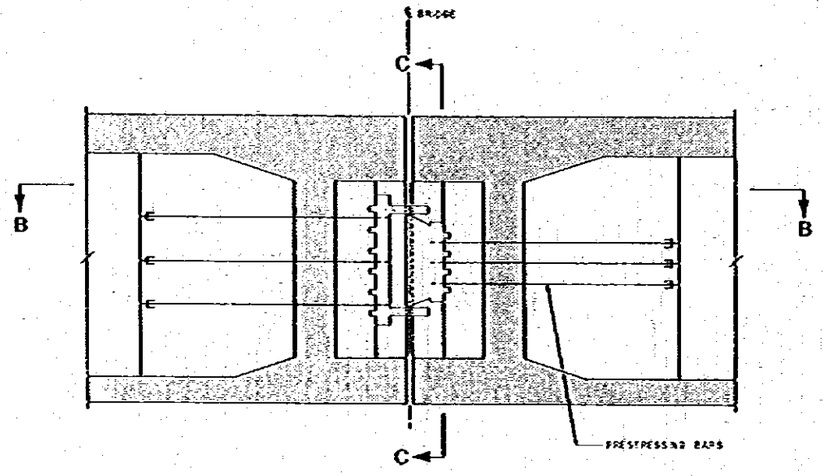
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

MAIN BRIDGE-SUPERSTRUCTURE
LONGITUDINAL SECTIONS

JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1:1,200
DATE DEC 1981
SUBMITTED BY
DRAWING NO. 13



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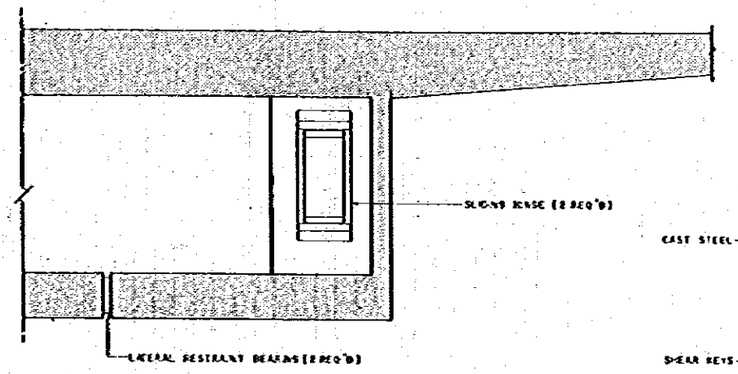
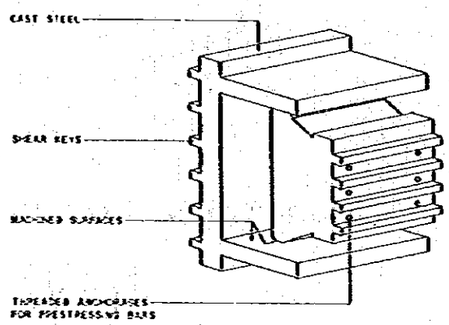
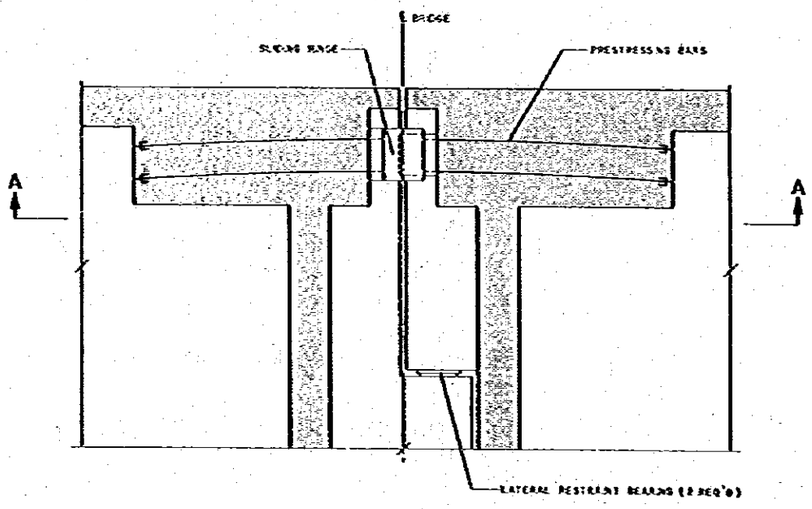
SCALE 1 : 20



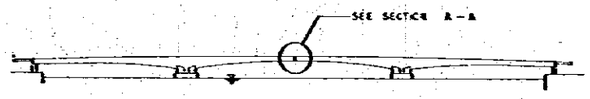
SECTION C – C
SCALE 1 : 20



ISOMETRIC VIEW OF SLIDING HINGE
NOT TO SCALE



SECTION B – B
SCALE 1 : 20



LOCATION OF SLIDING HINGE
SCALE 1:1500

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

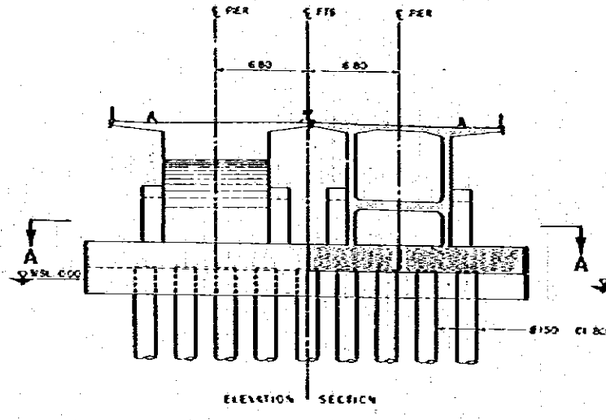
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE KLONG YI BRIDGE CONSTRUCTION PROJECT

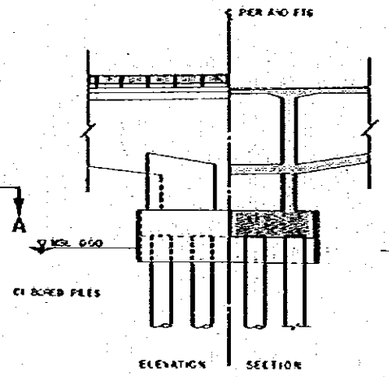
MAIN BRIDGE - CENTRAL SLIDING HINGE DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY

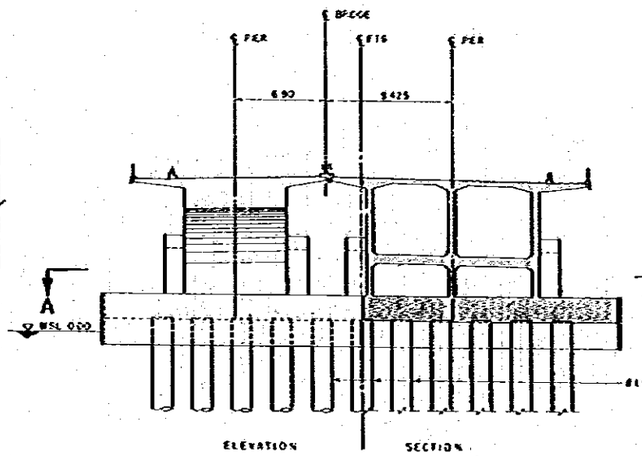
DESIGNED E. Uyeda
DRAWN
CHECKED
SCALE AS SHOWN
DATE DEC. 1991
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 14



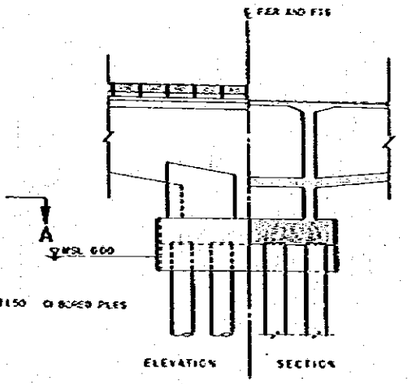
TRANSVERSE ELEVATION AND SECTION
SCALE 1:200



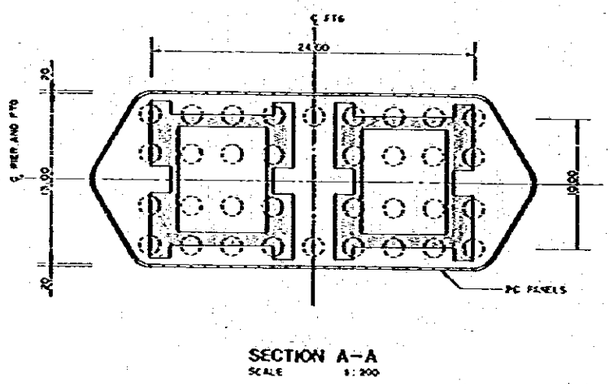
LONGITUDINAL ELEVATION AND SECTION
SCALE 1:200



TRANSVERSE ELEVATION AND SECTION
SCALE 1:200

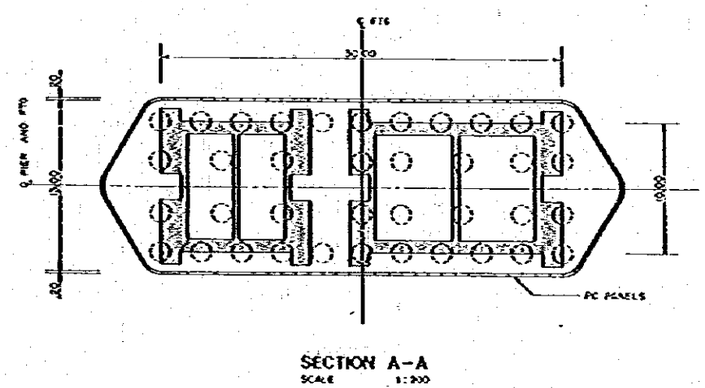


LONGITUDINAL ELEVATION AND SECTION
SCALE 1:200



SECTION A-A
SCALE 1:200

THONBURI SIDE



SECTION A-A
SCALE 1:200

BANGKOK SIDE

PRELIMINARY ONLY
REDUCED TO HALF SCALE

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY
ON THE RAMA III BRIDGE CONSTRUCTION PROJECT

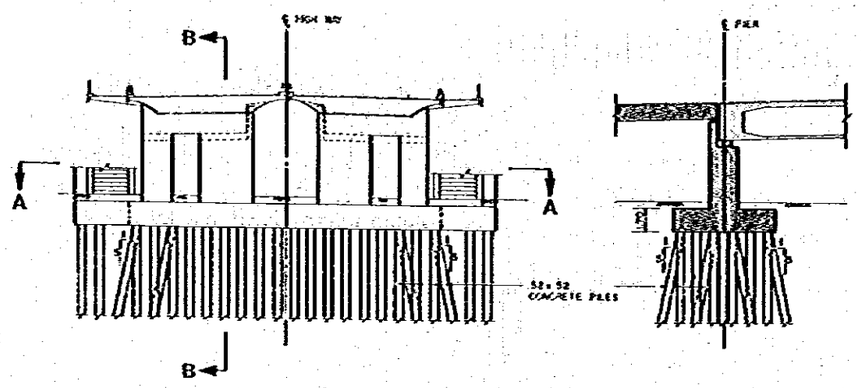
MAIN BRIDGE - SUBSTRUCTURE
MAIN SPAN PIERS

DESIGNED
DRAWN
CHECKED
SCALE 1:200
DATE DEC 1991
SUBMITTED BY
PROJECT MANAGER

JAPAN INTERNATIONAL COOPERATION AGENCY

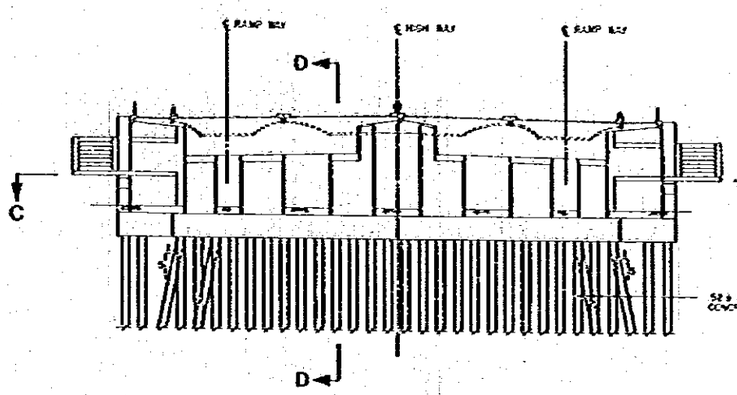
REVISION	DATE	CHECKED

DRAWING NO. 15

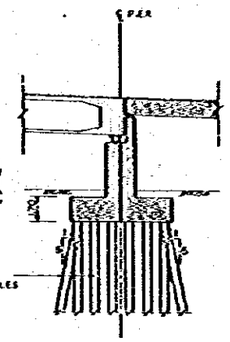


ÉLÉVATION
SCALE 1 : 200

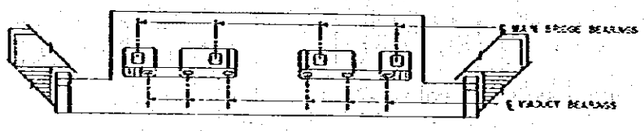
SECTION B–B
SCALE 1 : 200



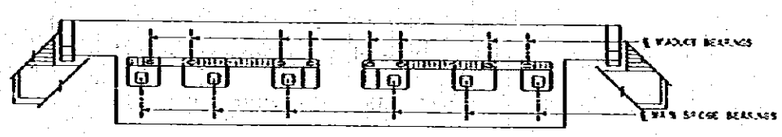
ELEVATION
SCALE 1 : 200



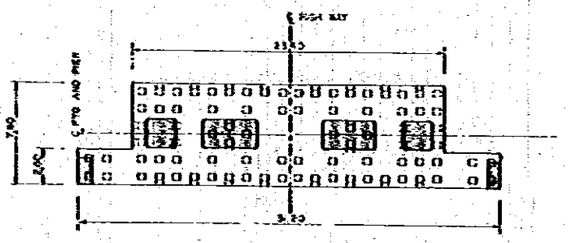
SECTION D–D
SCALE 1 : 200



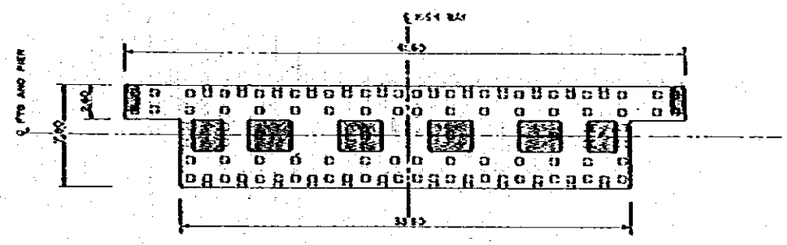
PLAN
SCALE 1 : 200



PLAN
SCALE 1 : 200



SECTION A–A
SCALE 1 : 200



SECTION C–C
SCALE 1 : 200

THONBURI SIDE

BANGKOK SIDE

PRELIMINARY ONLY
REDUCED TO HALF SCALE

KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

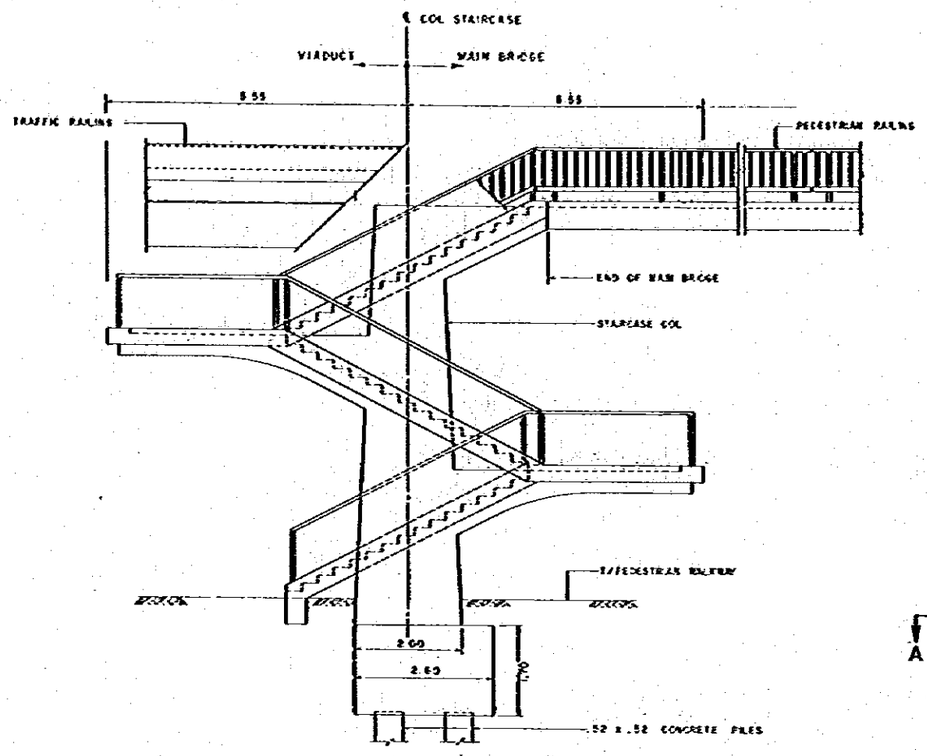
THE FEASIBILITY STUDY
ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

MAIN BRIDGE - SUBSTRUCTURE
END SPAN PIERS

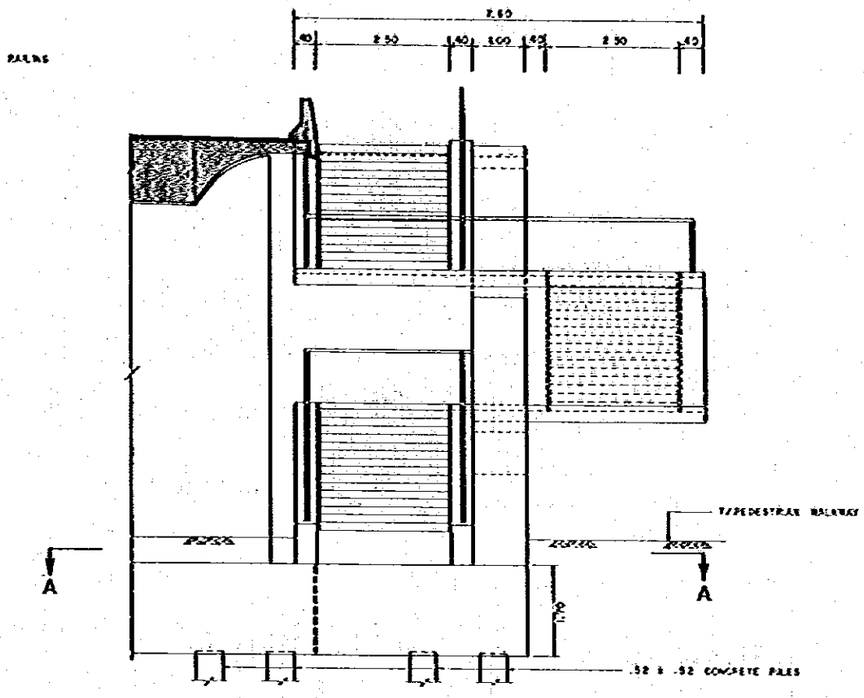
JAPAN INTERNATIONAL
COOPERATION AGENCY

NO.	DATE	REMARKS

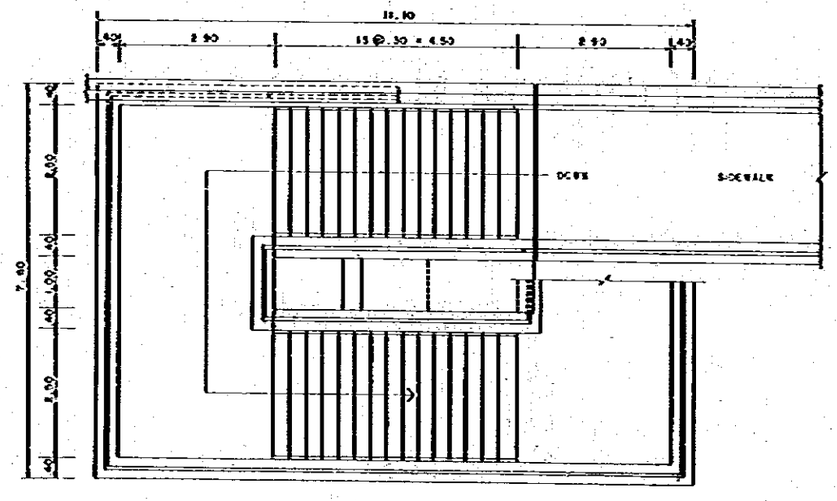
DESIGNED
DRAWN
CHECKED
SCALE 1:200
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 16



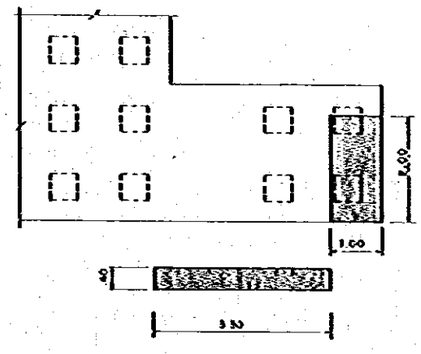
LONGITUDINAL ELEVATION
SCALE 1:50



TRANSVERSE ELEVATION
SCALE 1:50



PLAN
SCALE 1:50



SECTION A – A
SCALE 1:50

PRELIMINARY ONLY
REDUCED TO FULL SCALE

KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE BANG YAI BRIDGE CONSTRUCTION PROJECT

DESIGNED
DRAWN
CHECKED
SCALE 1:50
DATE DEC 1981

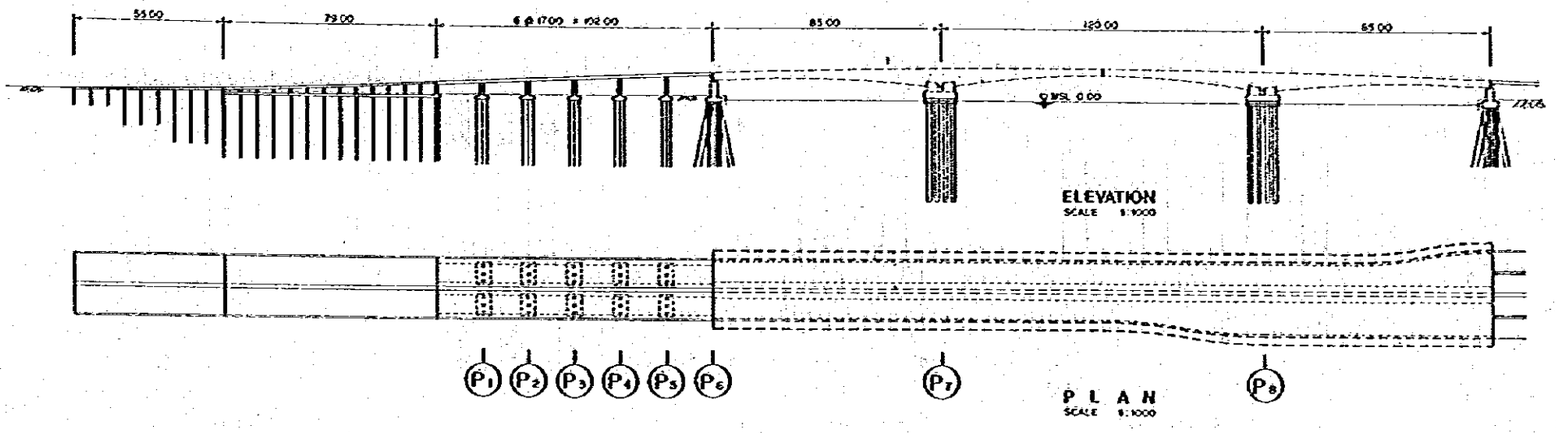
MAIN BRIDGE-STAIRCASE

REVISION	DATE	CHECKED

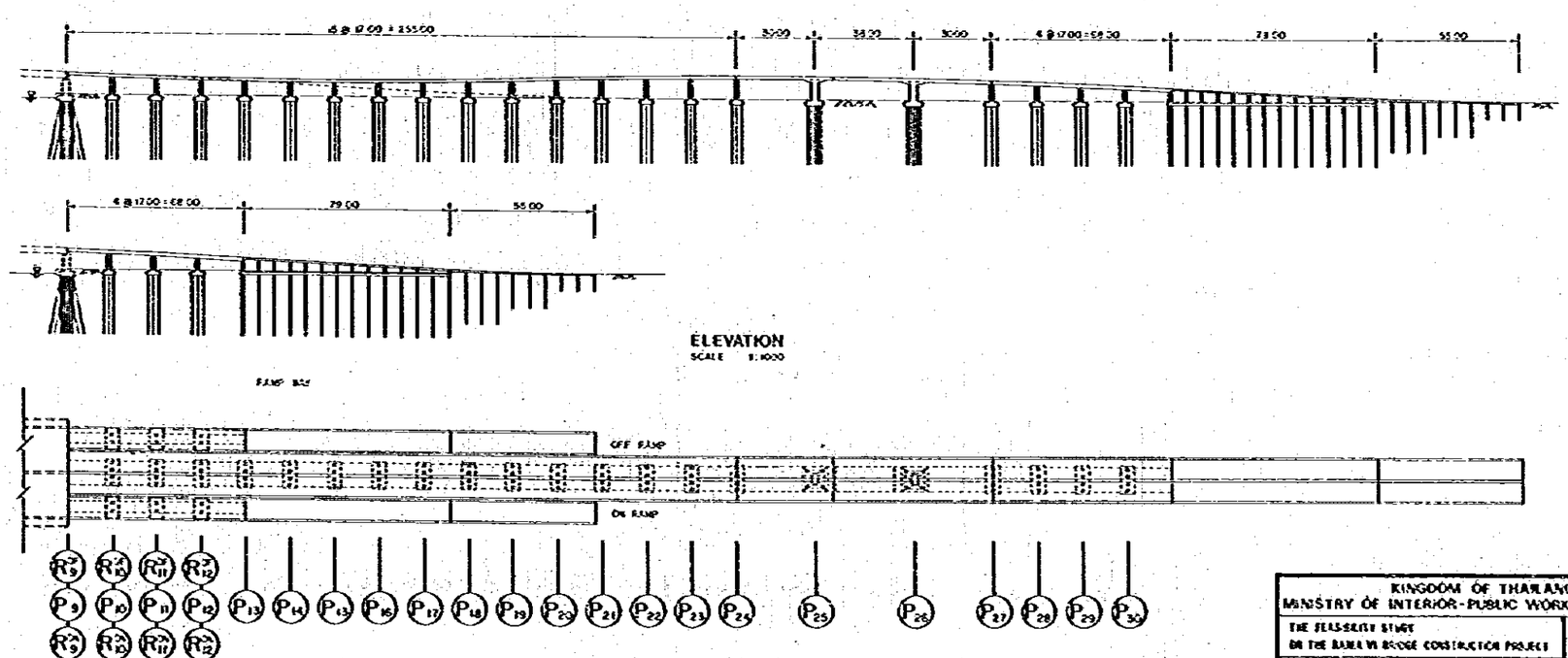
JAPAN INTERNATIONAL COOPERATION AGENCY

SUBMITTED BY
PROJECT MANAGER

DRAWING NO. 12



THONBURI SIDE



BANGKOK SIDE

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

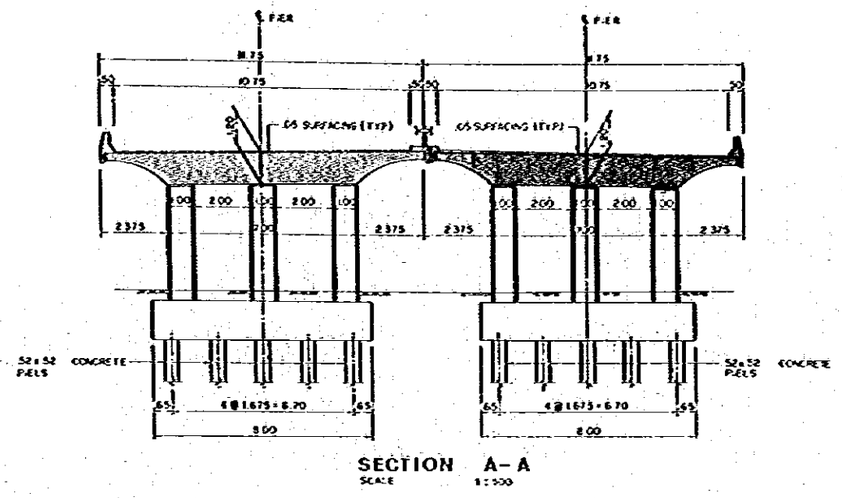
THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

APPROACH SPANS GENERAL LAYOUT

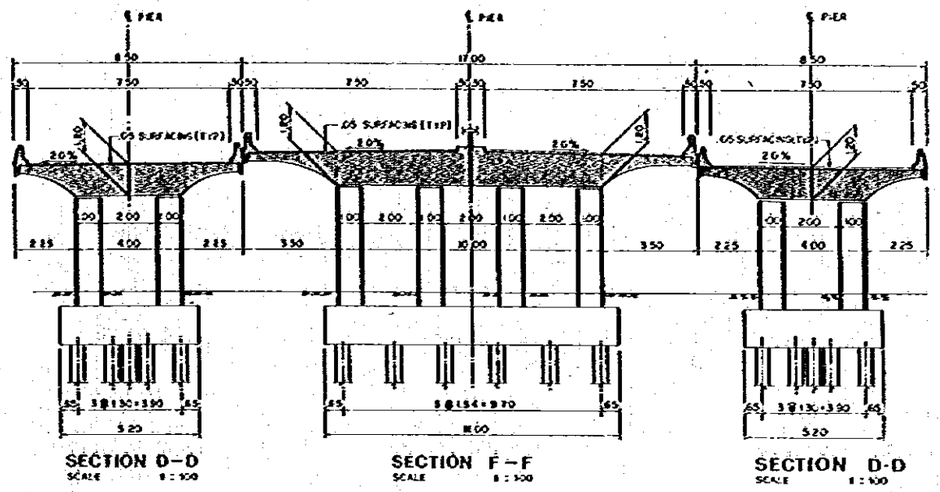
JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED K. Ohta
DRAWN Sopit P.
CHECKED K. Ohta
SCALE 1 : 1000
DATE DEC 1981
SUBMITTED BY K. Ohta PROJECT MANAGER

DRAWING NO. 18



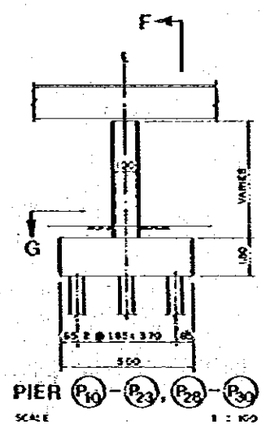
SECTION A–A
SCALE 1:100



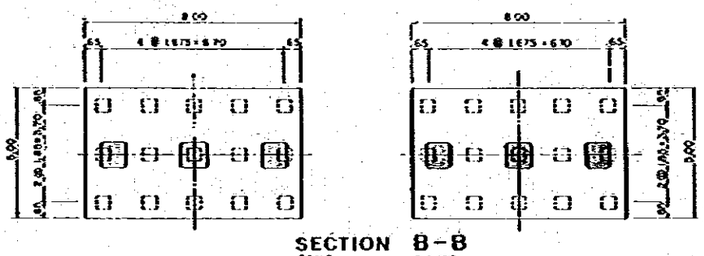
SECTION D–D
SCALE 1:100

SECTION F–F
SCALE 1:100

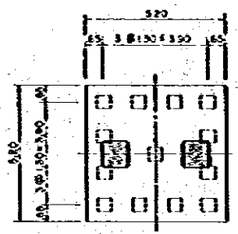
SECTION D–D
SCALE 1:100



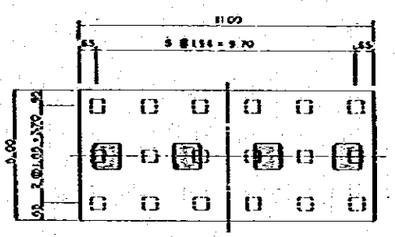
PIER P_{10}–P_{23}, P_{28}–P_{39}
SCALE 1:100



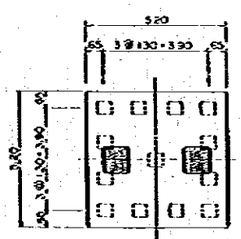
SECTION B–B
SCALE 1:100



SECTION E–E
SCALE 1:100



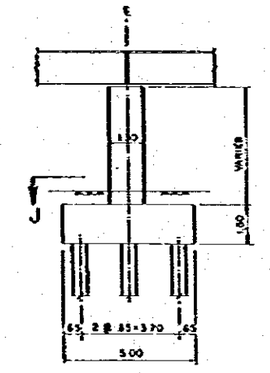
SECTION G–G
SCALE 1:100



SECTION E–E
SCALE 1:100

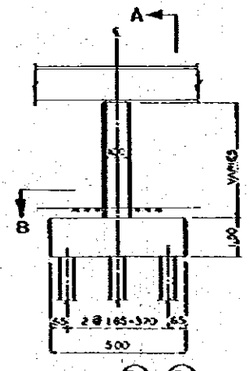
RAMP WAY

RAMP WAY



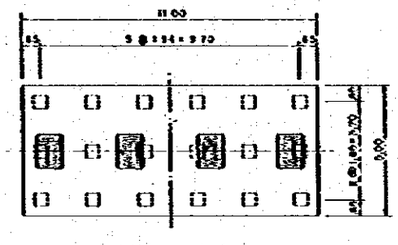
PIER P_{24}–P_{27}
SCALE 1:100

MAIN WAY



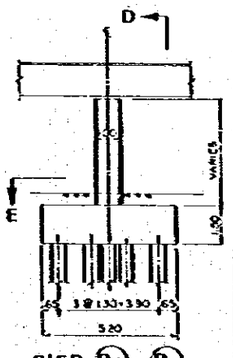
PIER P_1–P_9
SCALE 1:100

THONBURI SIDE



SECTION J–J
SCALE 1:100

MAIN WAY



PIER P_{30}–P_{32}
SCALE 1:100

BANGKOK SIDE

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISED	DATE	CHECKED

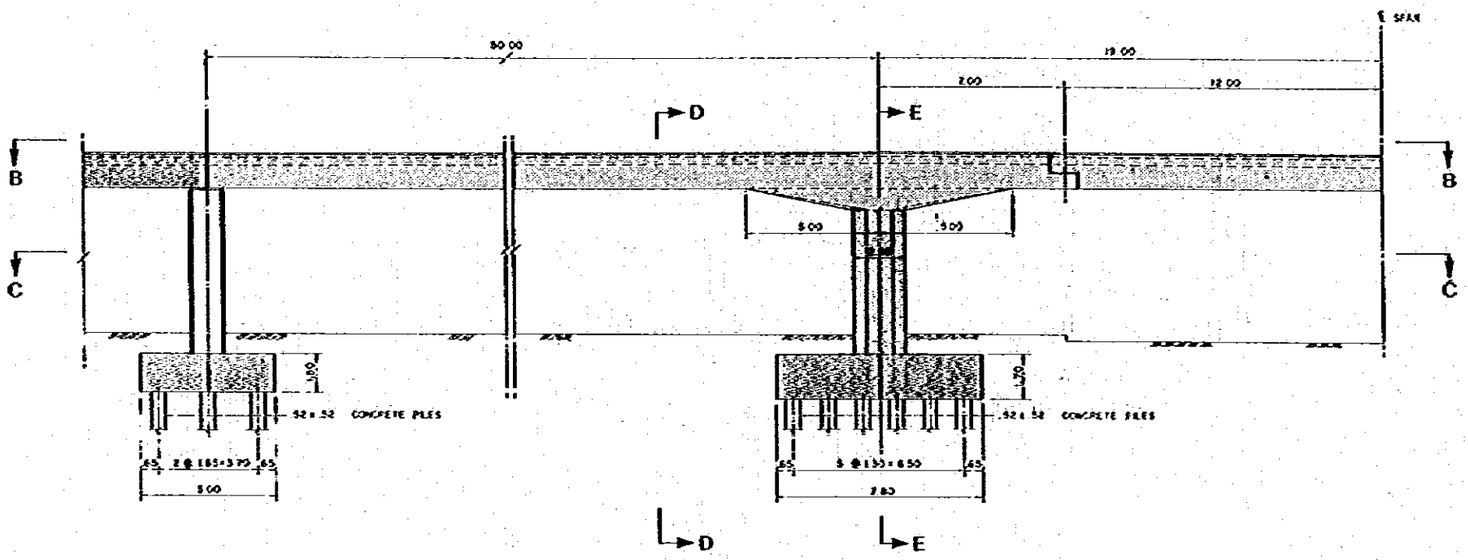
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

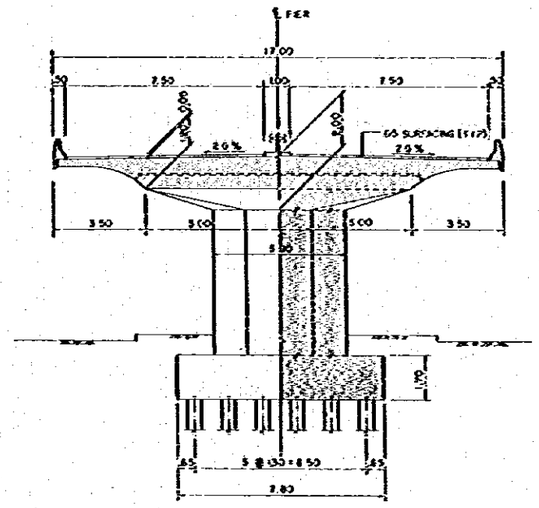
THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

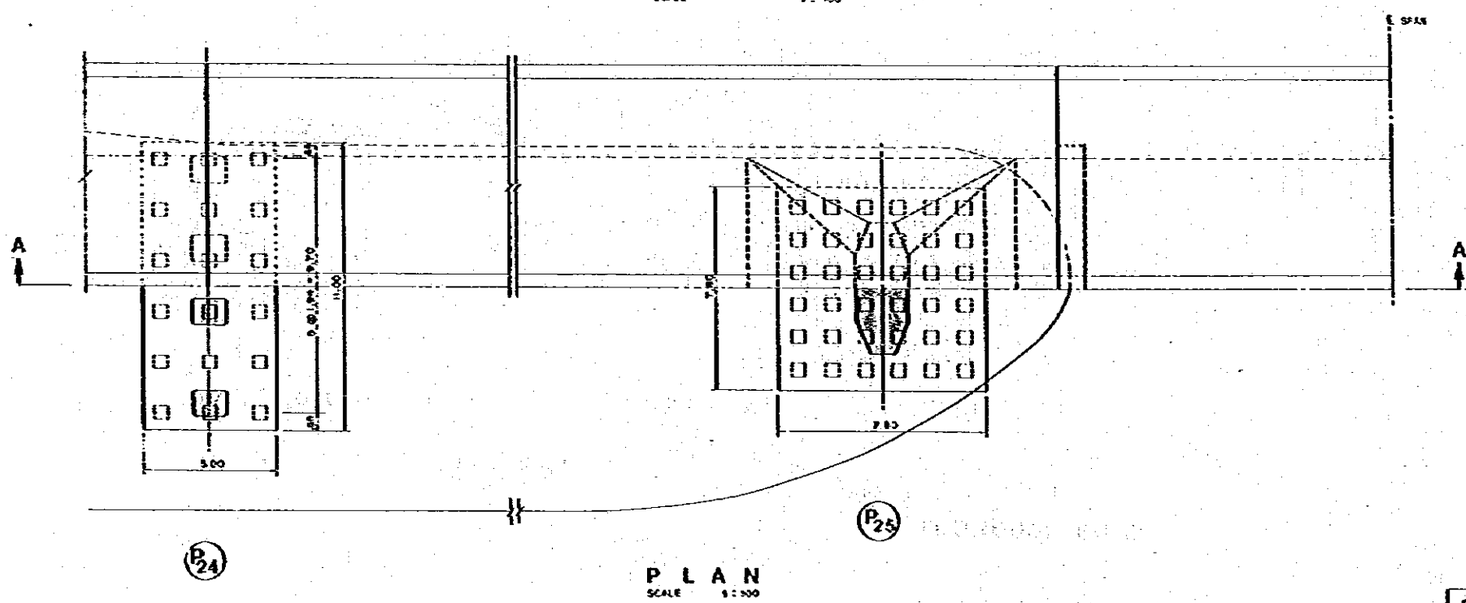
VIADUCT–CONTINUOUS BRIDGE PIERS

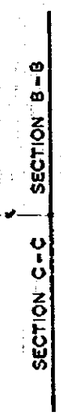
JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1:300
DATE DEC 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 19









LEGEND

PC SECTION

PC SECTION

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

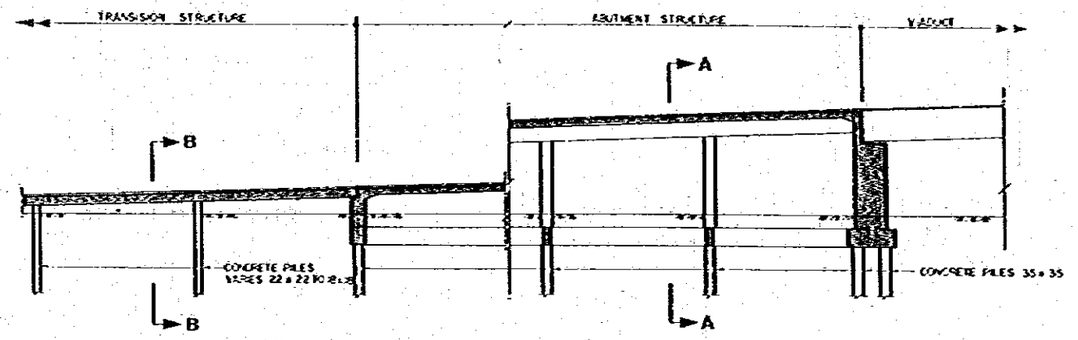
THE FEASIBILITY STUDY ON THE KLONG VI BRIDGE CONSTRUCTION PROJECT

VIADUCT MASHROOM TYPE
BRIDGE PIERS

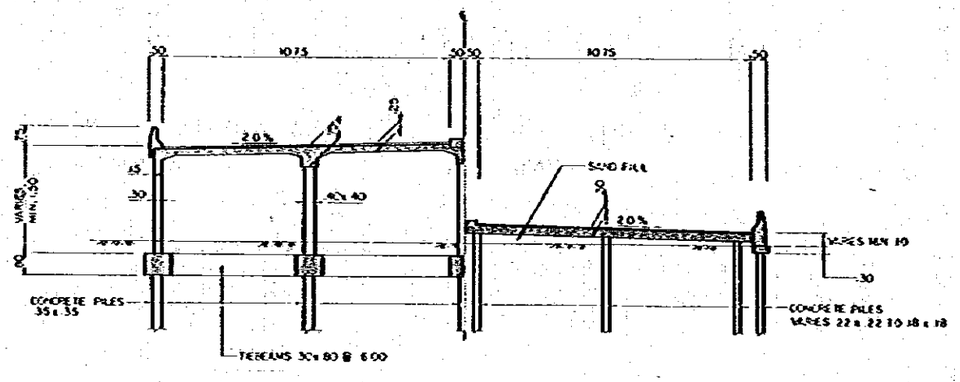
JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1 : 100
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER

DRAWING NO.
20



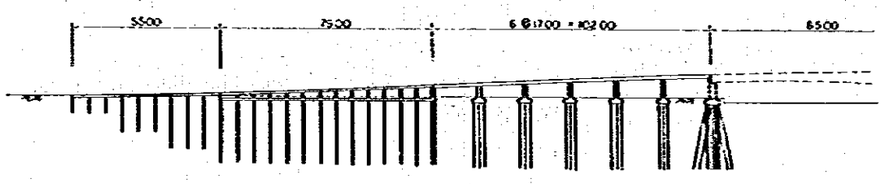
LONGITUDINAL SECTION
SCALE 1:100



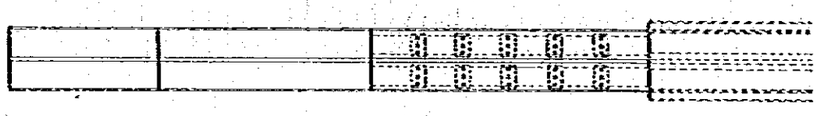
SECTION A-A
SCALE 1:100

SECTION B-B
SCALE 1:100

MAIN WAY



MAIN WAY



KEY PLAN
SCALE 1:100

THONBURI SIDE

PRELIMINARY ONLY
REDUCED TO HALF SCALE

	DATE	CHECKED

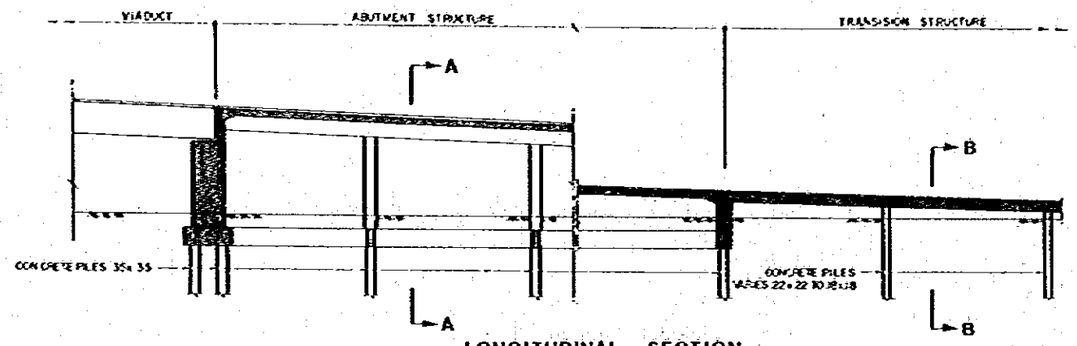
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

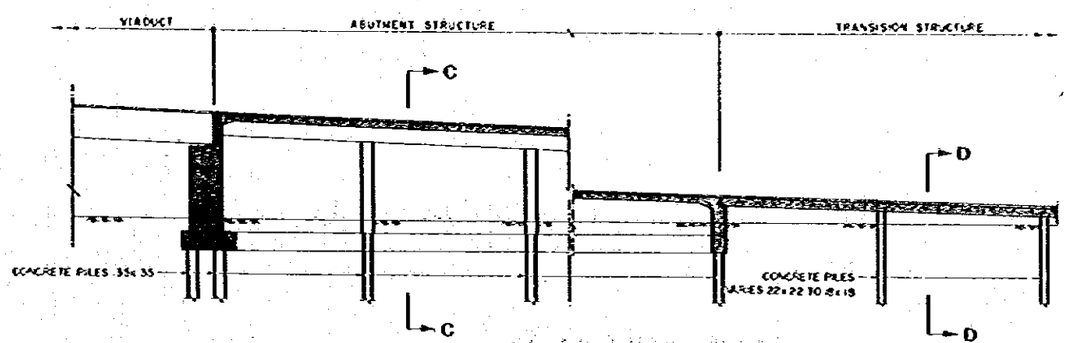
ABUTMENT STRUCTURES

JAPAN INTERNATIONAL COOPERATION AGENCY

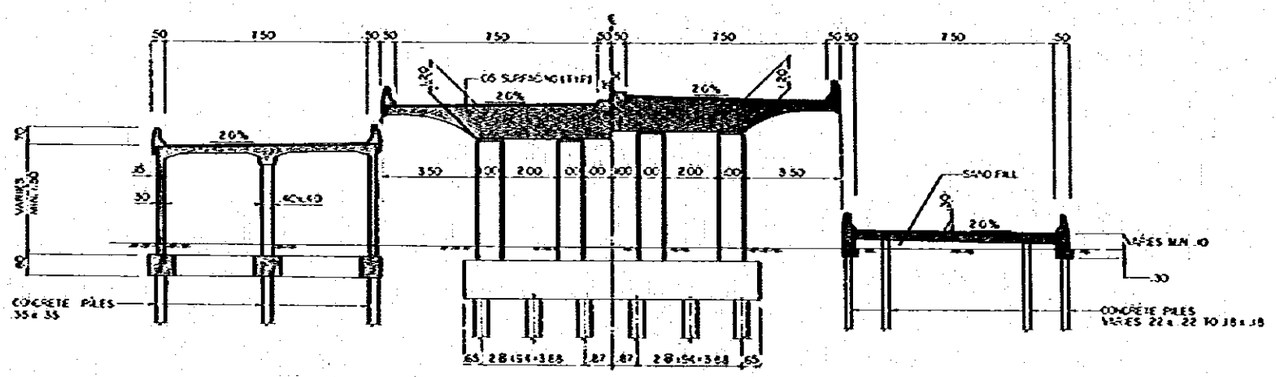
DESIGNED H. Chida
DRAWN S.K.K.
CHECKED S. Chida
SCALE 1 : 100
DATE SEP. 1981
SUBMITTED BY S. Chida PROJECT MANAGER
DRAWING NO. 21



LONGITUDINAL SECTION
SCALE 1:100

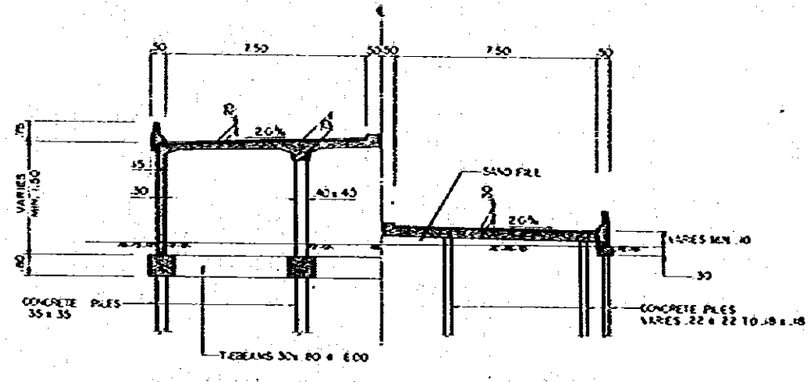


LONGITUDINAL SECTION
SCALE 1:100



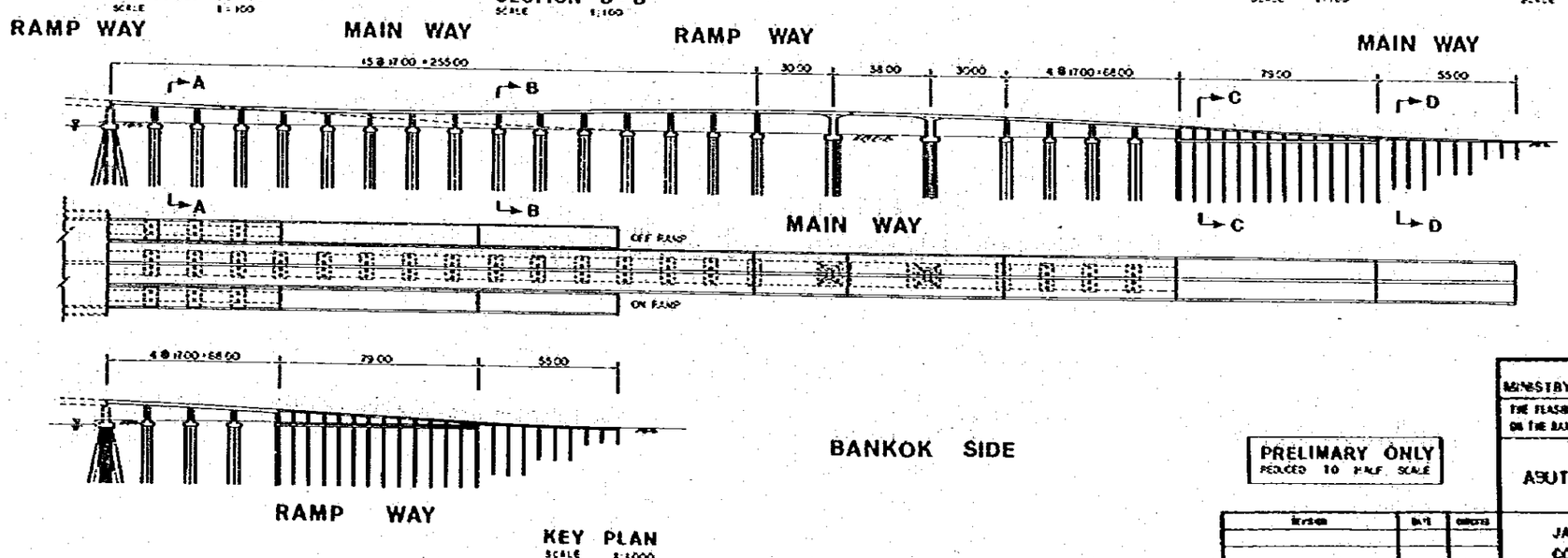
SECTION A - A
SCALE 1:100

SECTION B - B
SCALE 1:100



SECTION C - C
SCALE 1:100

SECTION D - D
SCALE 1:100



KEY PLAN
SCALE 1:1000

BANKOK SIDE

PRELIMARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

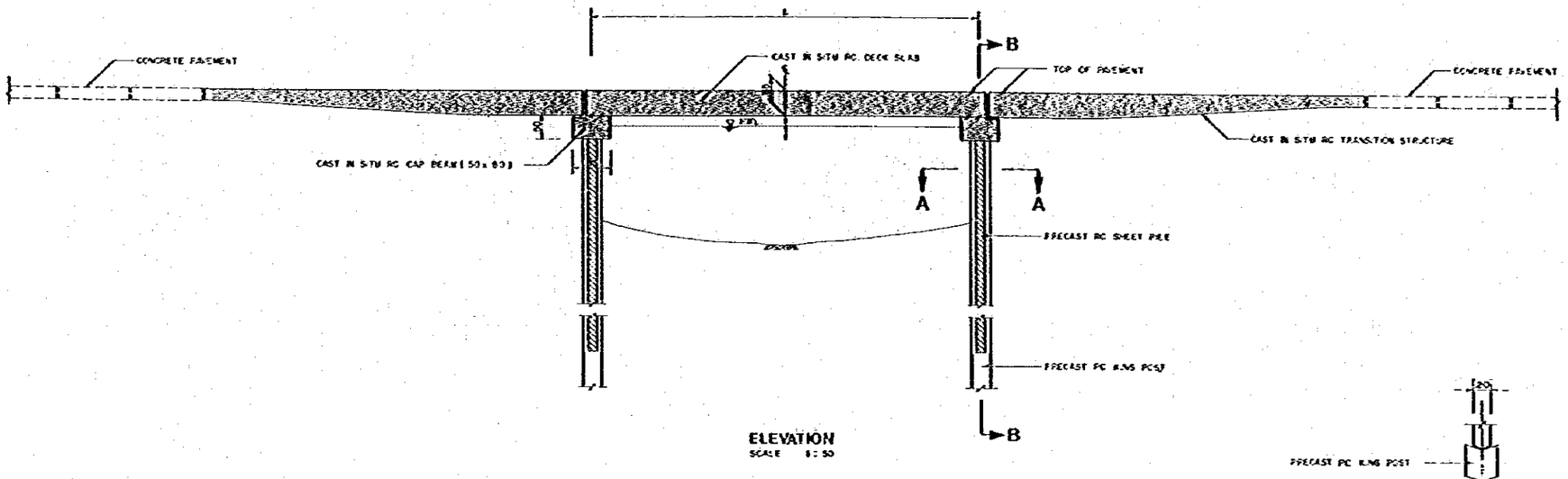
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY
ON THE BANG NA BRIDGE CONSTRUCTION PROJECT

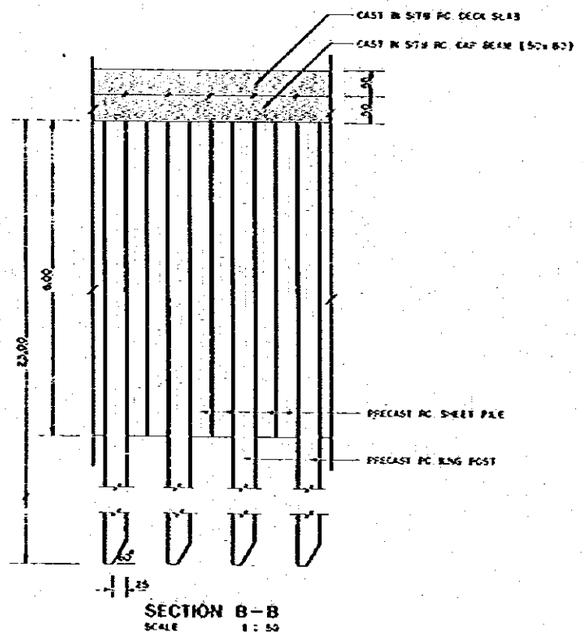
ABUTMENT STRUCTURES

JAPAN INTERNATIONAL
COOPERATION AGENCY

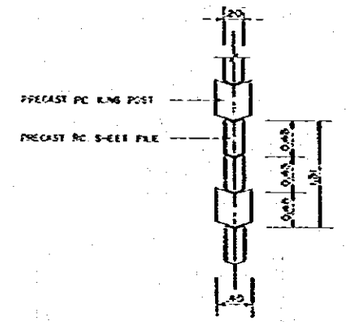
DESIGNED
DRAWN
CHECKED
SCALE 1:100
DATE DECEMBER
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 22



ELEVATION
SCALE 1 : 50



SECTION B–B
SCALE 1 : 50



SECTION A–A
SCALE 1 : 20

LOCATION	L (m)
KHLONG (STA.0+222)	5.00
KHLONG (STA.0+354)	8.00
KHLONG (BANGKOK SIDE)	10.00

PRELIMINARY ONLY
REDUCED TO FULL SCALE

REMARK	DATE	CHECKED

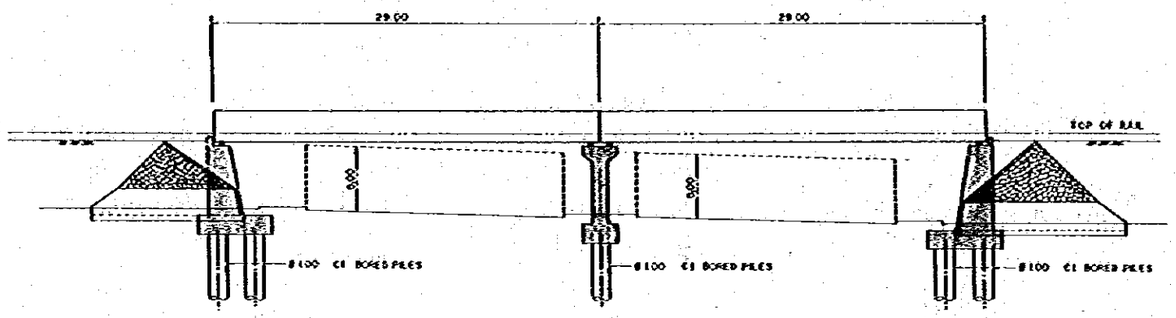
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

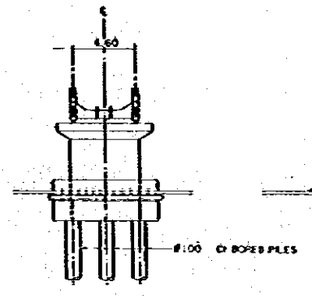
MINOR BRIDGES

JAPAN INTERNATIONAL COOPERATION AGENCY

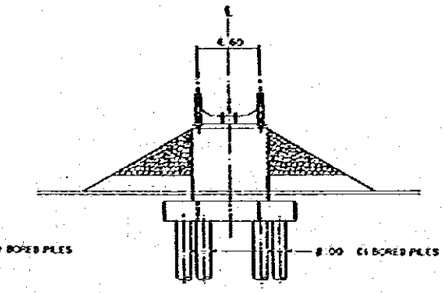
DESIGNED
DRAWN
CHECKED
SCALE 1:50 (A3)
DATE DEC 1991
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 23



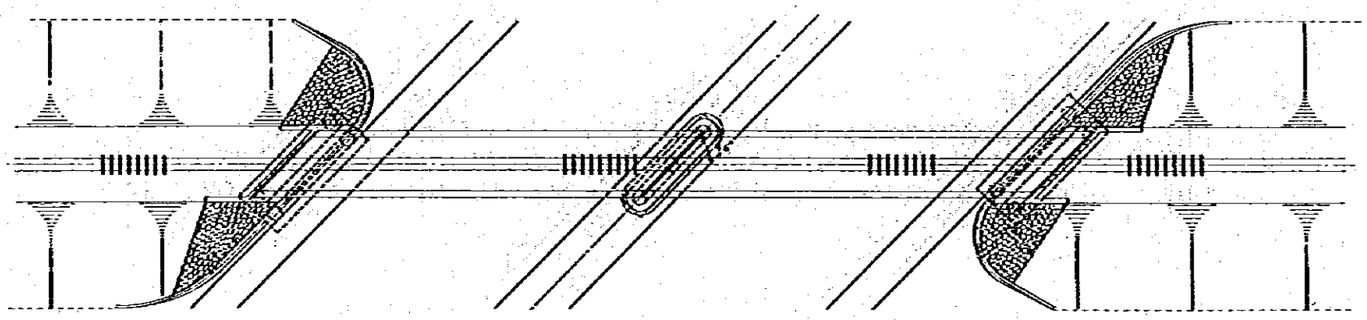
ELEVATION
SCALE 1 : 200



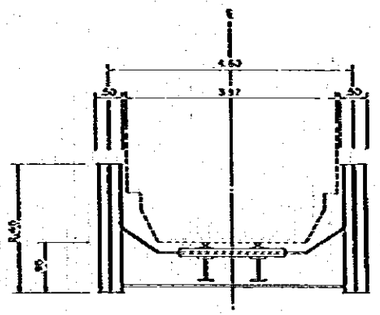
PIER
SCALE 1 : 200



ABUTMENT
SCALE 1 : 200



PLAN
SCALE 1 : 200



GIRDER
SCALE 1:50

CROSS SECTION

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

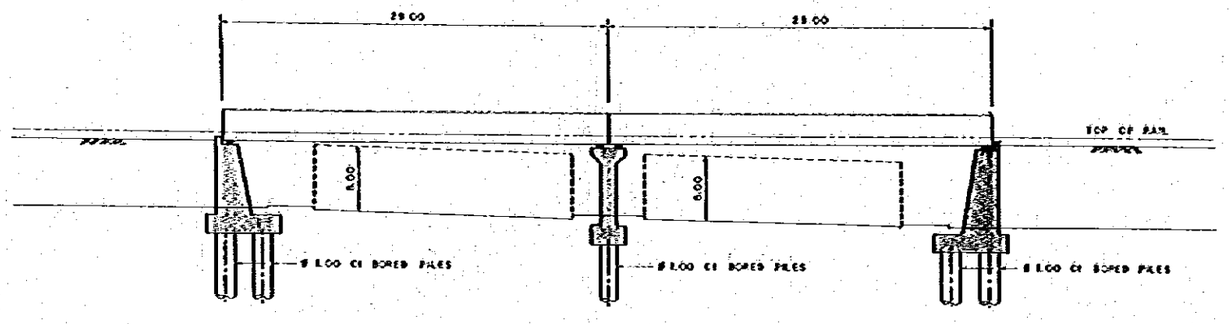
KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE BANG YAI BRIDGE CONSTRUCTION PROJECT

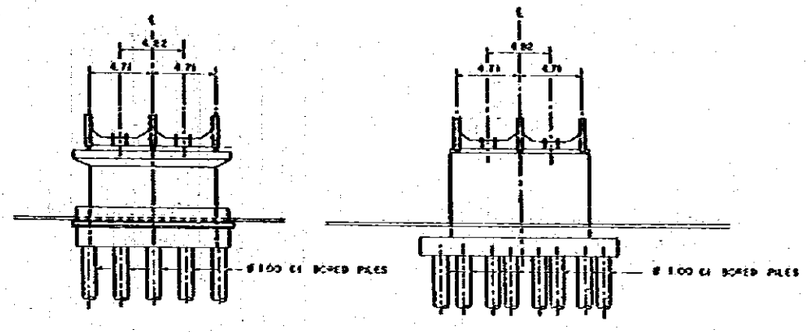
RAILWAY VIADUCT (SINGLE TRACK)

JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED A. Chaiya
DRAWN Boy K.R.
CHECKED S. Nitta
SCALE AS SHOWN
DATE DEC 1981
DRAWING BY A. Chaiya PROJECT MANAGER
DRAWING NO. 24

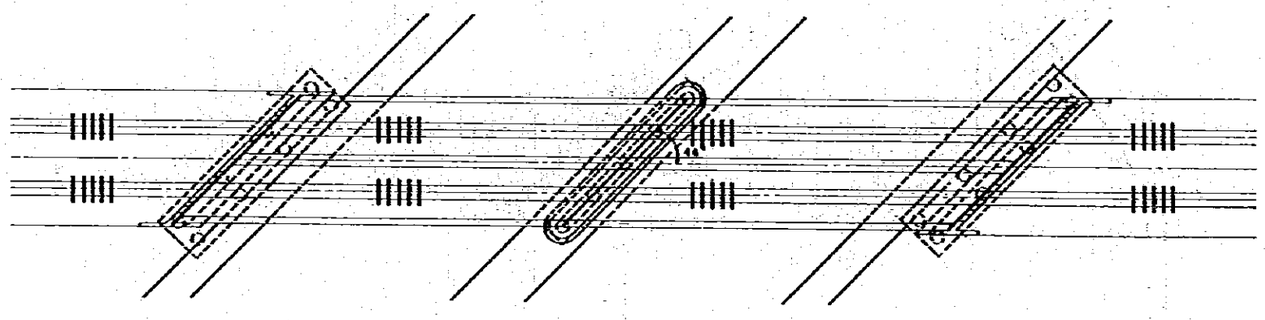


ELEVATION
SCALE 1:200

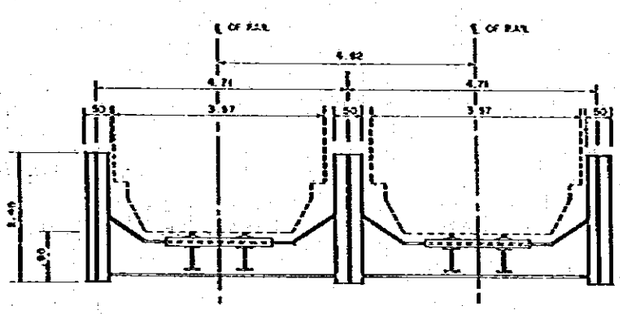


PIER
SCALE 1:200

ABUTMENT
SCALE 1:200



PLAN
SCALE 1:200



GIRDER
SCALE 1:50

CROSS SECTION

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISED	DATE	CHECKED

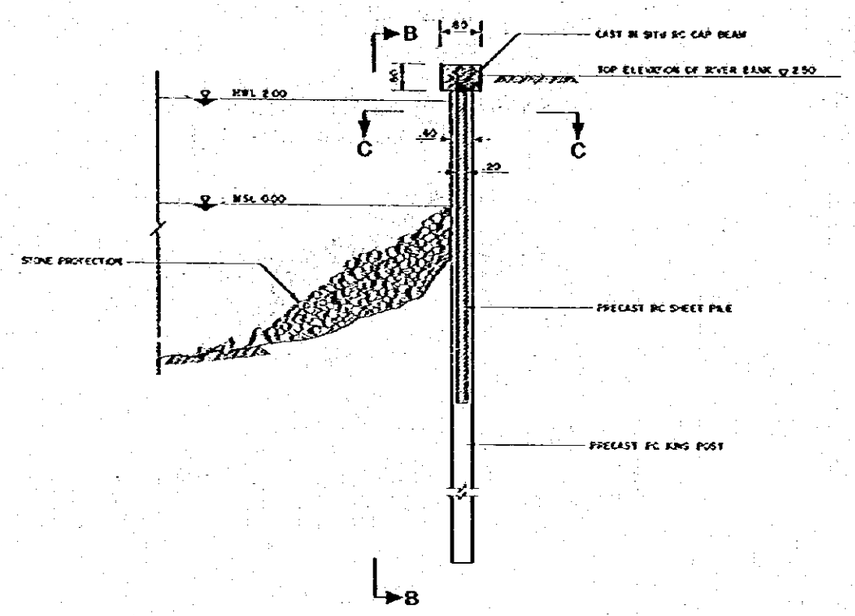
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE BANG YAI BRIDGE CONSTRUCTION PROJECT

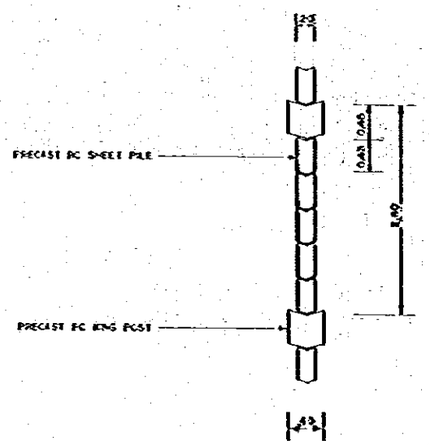
RAILWAY VIADUCT (DOUBLE TRACK)

JAPAN INTERNATIONAL COOPERATION AGENCY

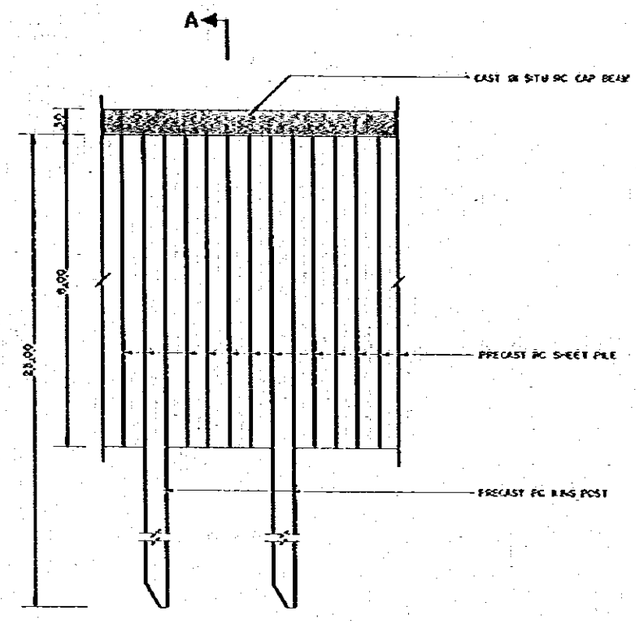
DESIGNED B. Sato
DRAWN Varaly K.
CHECKED [illegible]
SCALE AS SHOWN
DATE DEC 1981
SUBMITTED BY [illegible]
PROJECT MANAGER
DRAWING NO. 25



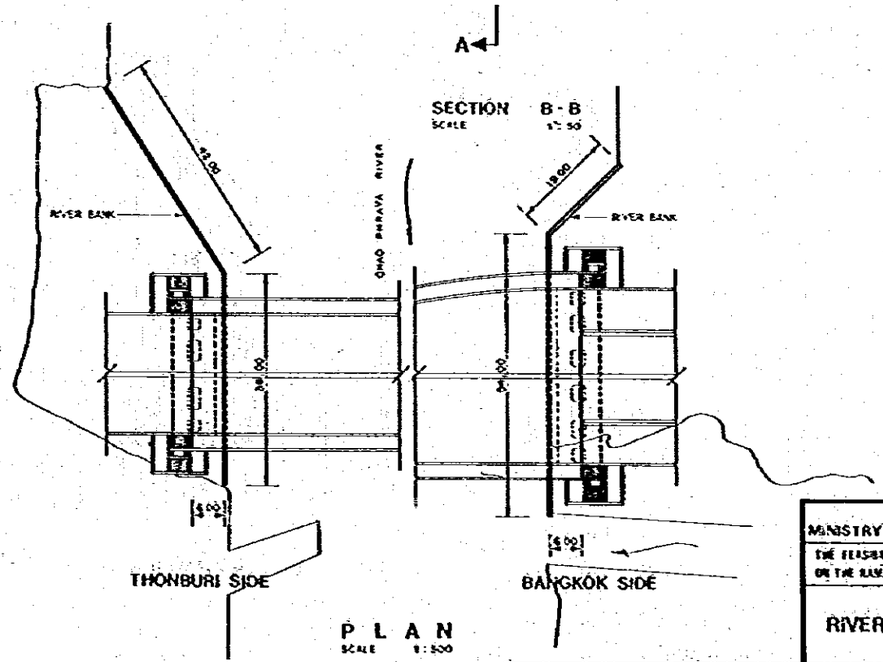
SECTION A-A
SCALE 1:50



SECTION C-C
SCALE 1:25



SECTION B-B
SCALE 1:50



PLAN
SCALE 1:500

PRELIMINARY ONLY
REDUCED TO HALF SCALE

KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA IX BRIDGE CONSTRUCTION PROJECT

RIVER BANK STRUCTURE

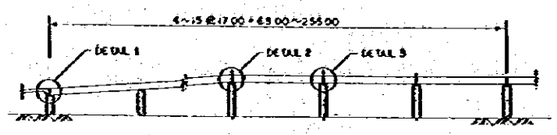
DESIGNED
DRAWN
CHECKED
SCALE 1:50 1:500
DATE DEC. 1981

SUBMITTED BY
PROJECT MANAGER

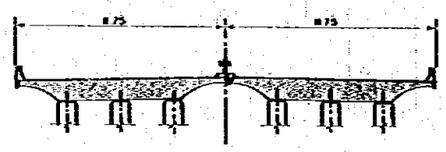
DRAWING NO. 26

JAPAN INTERNATIONAL COOPERATION AGENCY

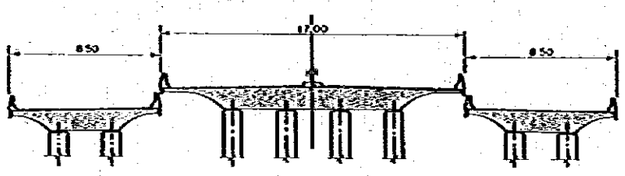
REVISION	DATE	CHECKED



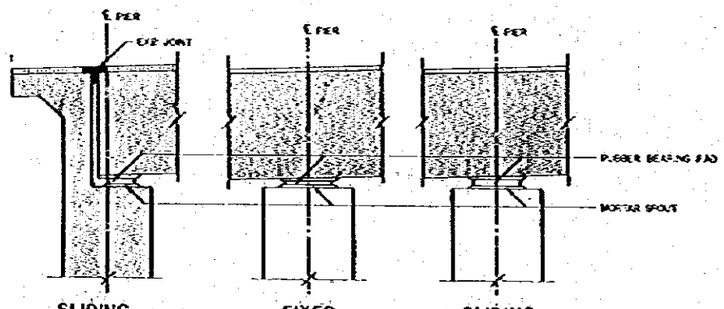
4 TO 15 SPAN CONTINUOUS VIADUCT
LONGITUDINAL ELEVATION
SCALE 1 : 500



THONBURI SIDE



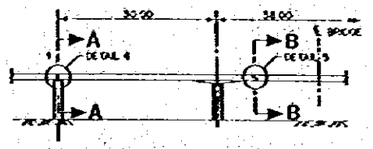
BANGKOK SIDE
TRANSVERSE ELEVATION
SCALE 1 : 150



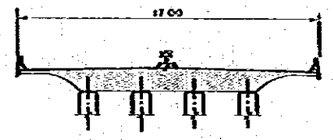
SLIDING
DETAIL 1
SCALE 1 : 30

FIXED
DETAIL 2
SCALE 1 : 30

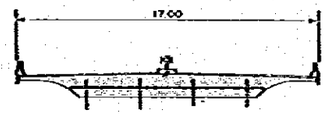
SLIDING
DETAIL 3
SCALE 1 : 30



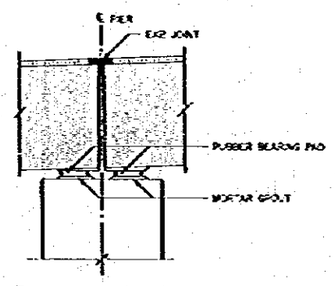
PC MUSHROOM TYPE VIADUCT
LONGITUDINAL ELEVATION
SCALE 1 : 500



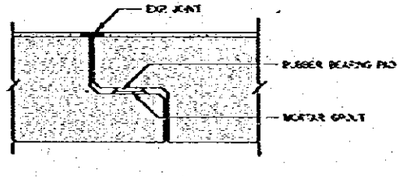
SECTION A - A
SCALE 1 : 150



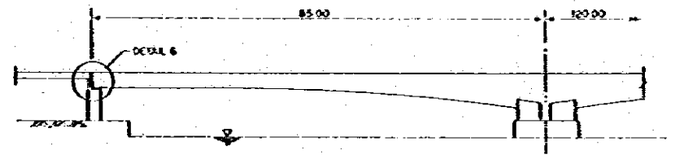
SECTION B - B
SCALE 1 : 150



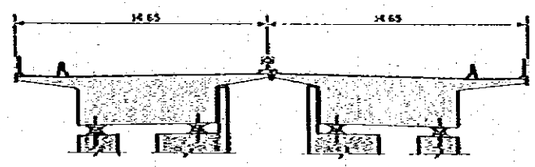
DETAIL 4
SCALE 1 : 30



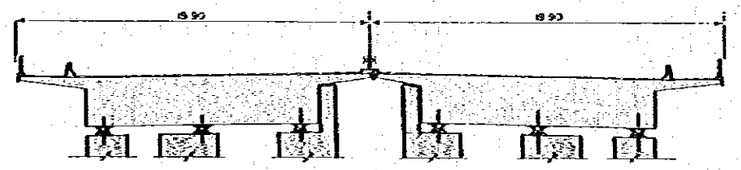
DETAIL 5
SCALE 1 : 30



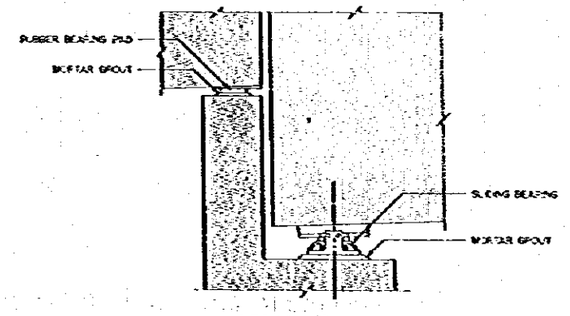
MAIN BRIDGE
LONGITUDINAL ELEVATION
SCALE 1 : 500



THONBURI SIDE END PIER



BANGKOK SIDE END PIER
TRANSVERSE ELEVATION
SCALE 1 : 150



DETAIL 6
SCALE 1 : 30

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY
ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

BEARING ARRANGEMENTS

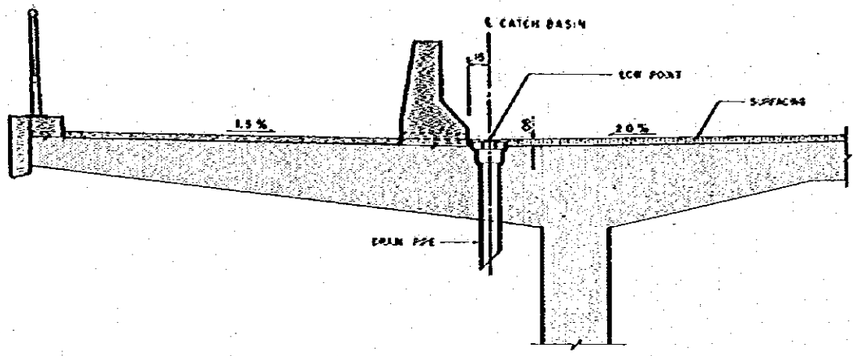
PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

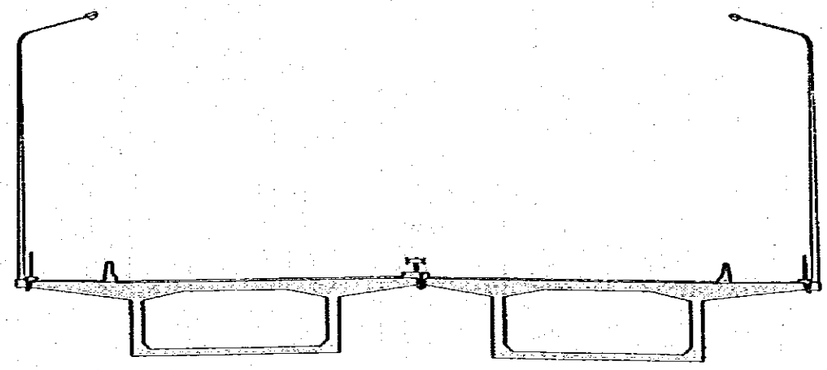
JAPAN INTERNATIONAL
COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE AS SHOWN
DATE DEC. 1981
SUBMITTED BY
PROJECT MANAGER

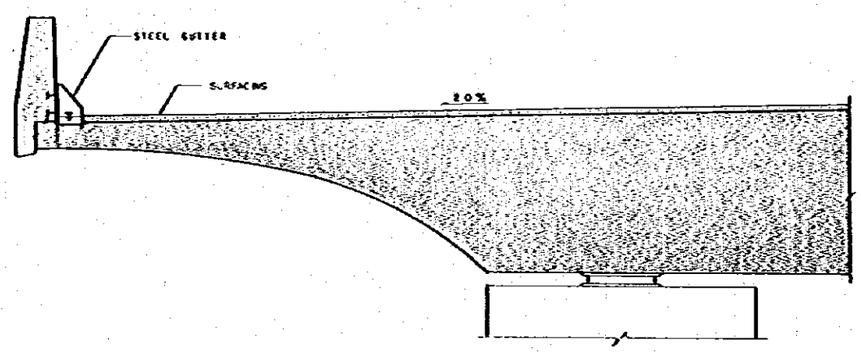
DRAWING NO.
M
27



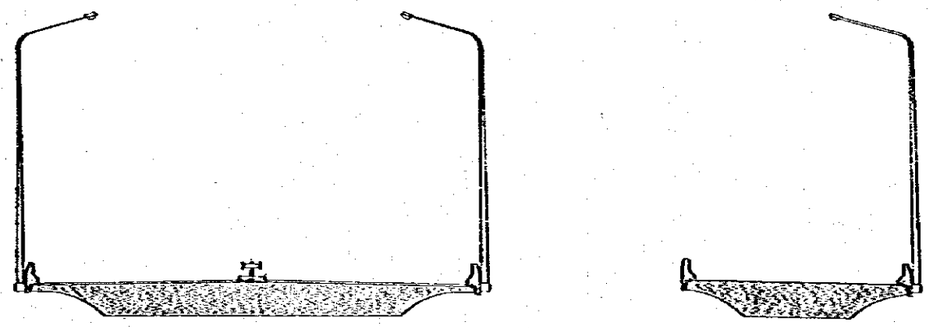
TYPICAL MAIN BRIDGE DRAIN
SCALE 1:20



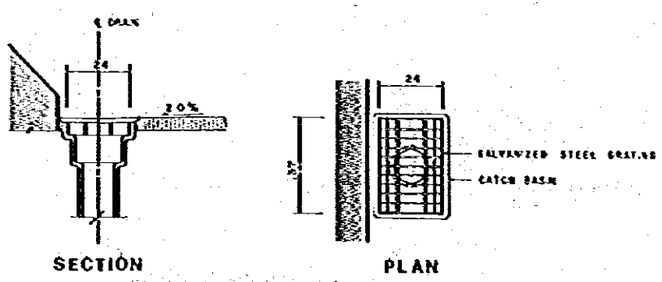
MAIN BRIDGE LIGHTING POLE INSTALLATION
SCALE 1:100



TYPICAL APPROACH SPAN DRAIN
SCALE 1:20



APPROACH SPANS LIGHTING POLE INSTALLATION
SCALE 1:100



SECTION PLAN

CATCH BASIN DETAIL
SCALE 1:10

LEGEND

- RC SECTION
- PC SECTION
- PLAIN CONCRETE SURFACING
- ASPHALTIC SURFACING

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

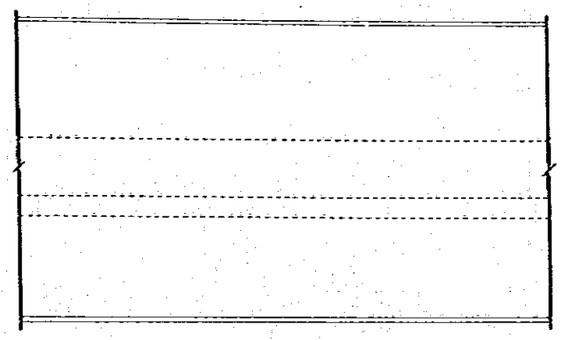
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

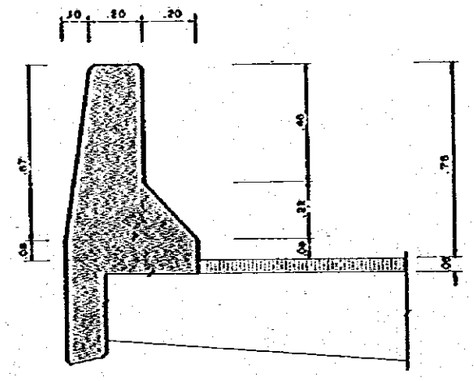
DRAIN DETAILS AND LIGHTING POLES

JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED K. Utsumi
DRAWN Yoshi K.
CHECKED K. Ito
SCALE AS SHOWN
DATE DEC. 88
SUBMITTED BY K. Ito PROJECT MANAGER
DRAWING NO. 28

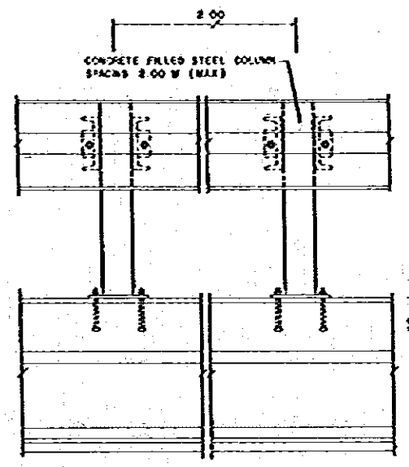


ELEVATION



SECTION

TRAFFIC BARRIER
SCALE 1:10



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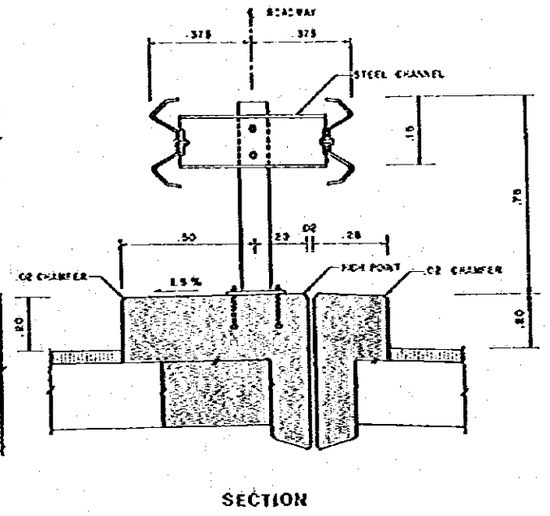
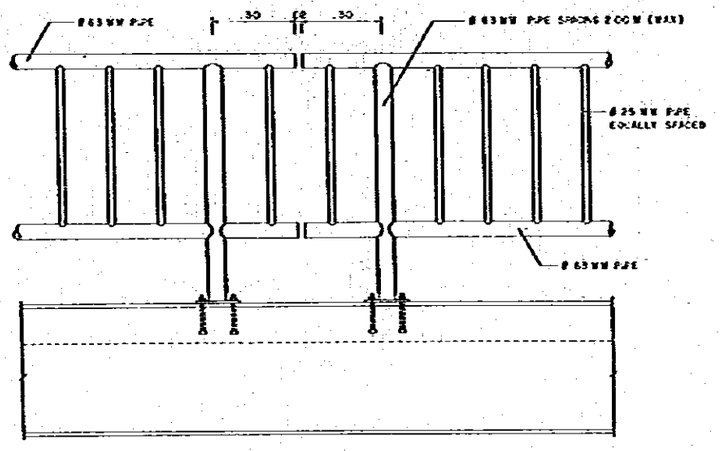


SECTION

TRAFFIC RAILING
SCALE 1:10



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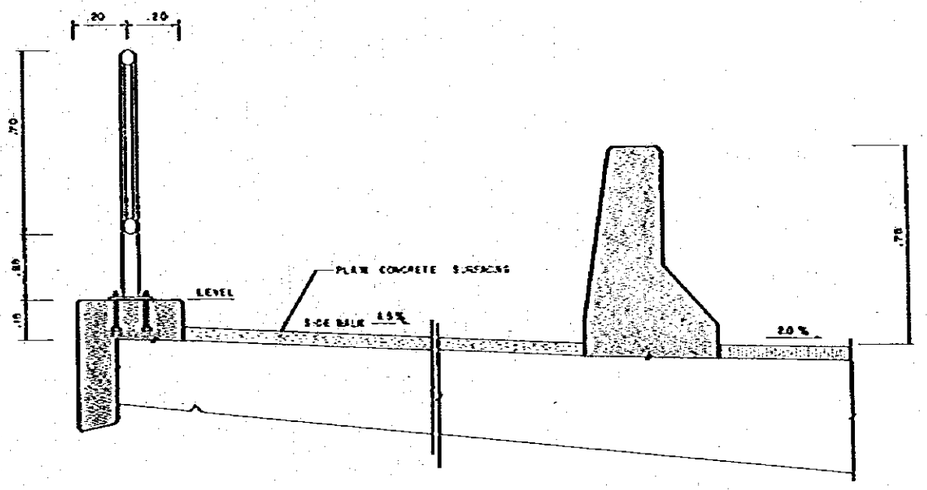


SECTION

PEDESTRIAN RAILING
SCALE 1:10

LEGENT

- RC SECTION
- PLAIN CONCRETE SURFACING
- ASPHALTIC SURFACING

PRELIMINARY ONLY
REDUCED TO HALF SCALE

REVISION	DATE	CHECKED

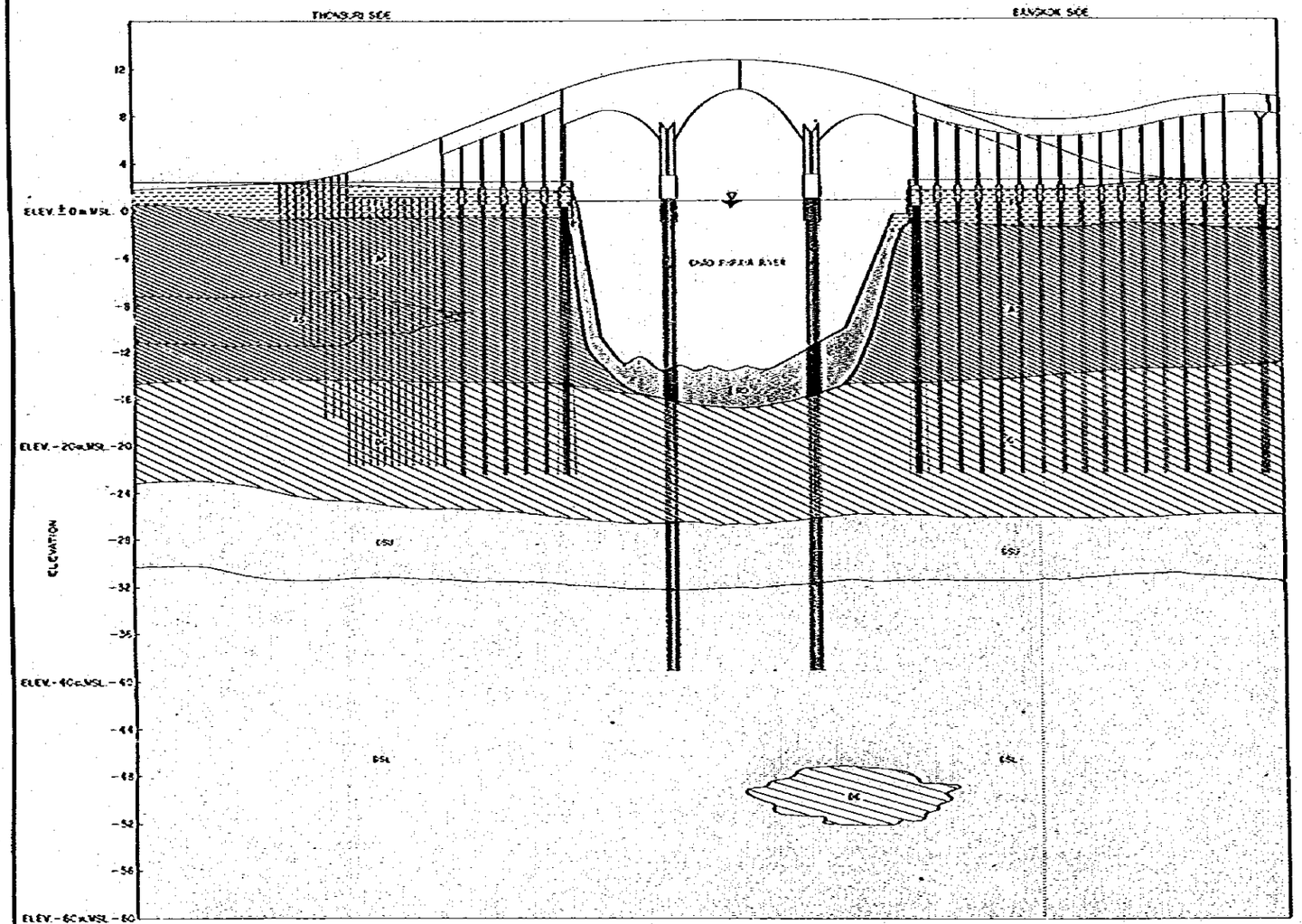
KINGDOM OF THAILAND
MINISTRY OF INTERIOR-PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE BANG YAI BRIDGE CONSTRUCTION PROJECT

RAILING DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY

DESIGNED
DRAWN
CHECKED
SCALE 1:1.10
DATE DEC 1981
SUBMITTED BY
PROJECT MANAGER
DRAWING NO. 29



SOIL PROFILE

HOR. SCALE 1:500

LEGEND OF DEPOSITS

(AGES)	(SOIL TYPE)		(DESCRIPTION)
QUATERNARY	ALLUVIUM	FILL	- EMBANKMENT, BROKEN BRICK, LOOSE SANDY SOIL AND SOFT CLAYEY SOIL WITH GRAVEL, BROWN - GREY. THIS LAYER IS SITUATED FOR SURFACE SOIL OR LAND ABOUT 3 m THICKNESS.
		RIVER BED DEPOSIT	- SOFT SILTY CLAY WITH SAND AND ORGANIC MATTER, BROWN - DARK GREY - GREY. THIS LAYER IS DISTRIBUTED RIVER BED ABOUT 2 M TO 4 M THICKNESS.
		CLAYEY SOIL	- SOFT CLAY OR SILTY CLAY WITH SHELL AND MICA FRAGMENTS, GREY. THIS LAYER HAS ABOUT 9 M TO 14 M THICKNESS EXCEPT THE AREA BELOW CHAO PHRAYA RIVER.
		SANDY SOIL	- LOOSE TO MEDIUM FINE SAND, GREY. THIS LAYER IS DISTRIBUTED IN SOFT CLAYEY SOIL
		CLAYEY SOIL	- STIFF CLAY AND SALTY CLAY WITH SLICKENSIDE AND LATERITE MATTER MULTICOLOR. THIS LAYER IS DISTRIBUTED GL-12 M TO -28 M ABOUT 10 M TO 18 M THICKNESS. N = 10 - 30, $\bar{N}$ = 20.
	DILUVIUM	UPPER SAND	- DENSE FINE TO COARSE SAND WITH FINE GRAVEL, YELLOW BROWN - GREY. THIS LAYER IS DISTRIBUTED BELOW GL-27 M ABOUT 5 M TO 6 M THICKNESS AND GRADES TO LOWER LAYER. N = 30 - > 50
		LOWER SAND	- DENSE FINE TO COARSE SAND WITH FINE GRAVEL AND LENS OF CLAYEY SOIL OR B - S GREY - LIGHT GREY. THIS LAYER IS SAME DEPOSIT WITH UPPER SAND AND IS DISTRIBUTED BELOW GL-33 M N > 50 SOME OF N - VALUE IS 30 TO 50

KINGDOM OF THAILAND
MINISTRY OF INTERIOR - PUBLIC WORKS DEPARTMENT

THE FEASIBILITY STUDY ON THE RAMA VI BRIDGE CONSTRUCTION PROJECT

SOIL PROFILE

DESIGNED K. Miyauchi
DRAWN Sept. 85
CHECKED K. Abe
SCALE AS SHOWN
DATE DEC. 1985
SUBMITTED BY K. Kato PROJECT MANAGER
DRAWING NO. 30

JAPAN INTERNATIONAL COOPERATION AGENCY

REVISION	DATE	CHECKED