

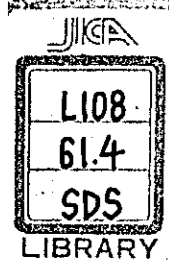
REPUBLIC OF INDONESIA

**FEASIBILITY STUDY
OF
JAKARTA RING ROAD PROJECT**

DRAWINGS

MARCH, 1978

JAPAN INTERNATIONAL COOPERATION AGENCY



JICA LIBRARY



1054911E13

REPUBLIC OF INDONESIA

**FEASIBILITY STUDY
OF
JAKARTA RING ROAD PROJECT**

DRAWINGS

MARCH, 1978

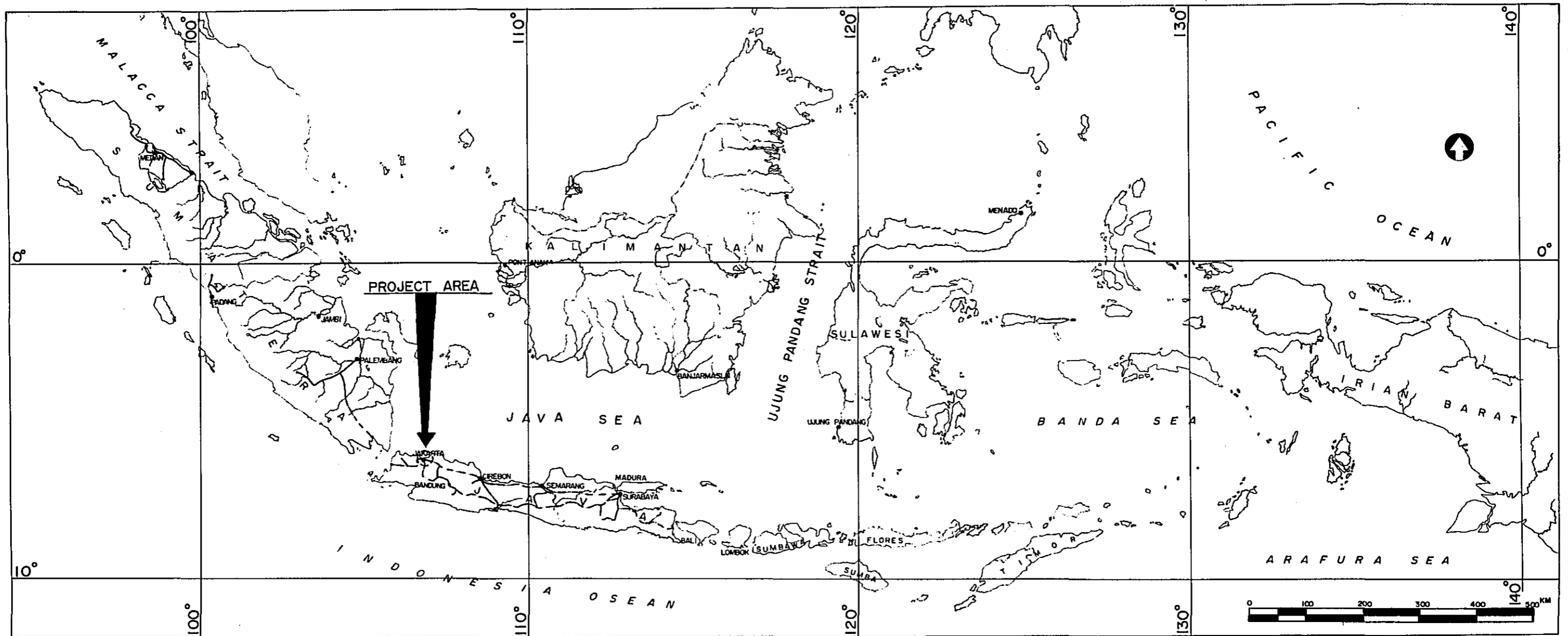
JAPAN INTERNATIONAL COOPERATION AGENCY

国際協力事業団		
受入 月日	'87. 2. 26	L108
登録 No.	08378	61.4
		SDS

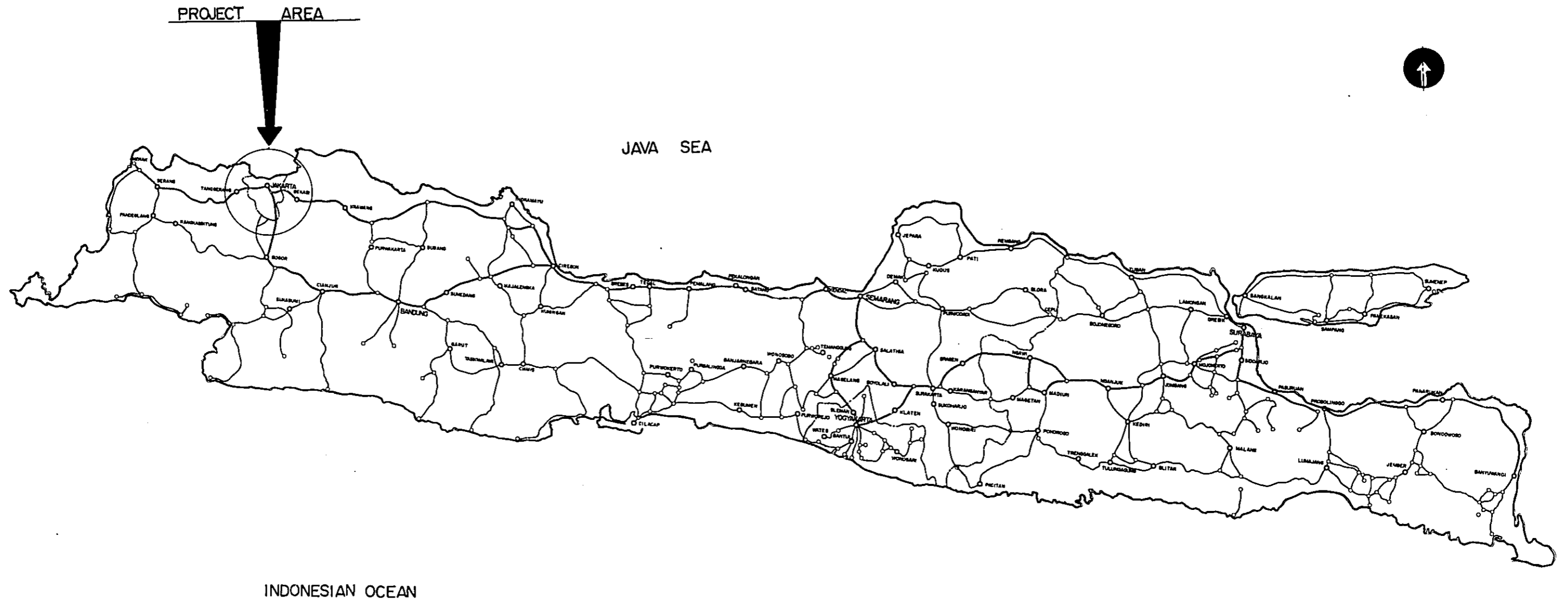
DRAWING SCHEDULE

INDEX OF SHEETS	SCALE	TOTAL SHEET
MAP OF INDONESIA	1 : 7.150.000	1
MAP OF JAVA AND MADURA	1 : 2.400.000	1
MAP OF PROJECT AREA	1 : 125.000 1 : 70.000	3
TYPICAL CROSS SECTION	1 : 200	3
PLAN AND PROFILE	H = 1 : 10.000 V = 1 : 500	21
INTERCHANGE PLANS	H = 1 : 5.000 V = 1 : 500	5
BRIDGE PLANS	1 : 600	5
SUMMARY OF PROJECT	H = 1 : 10.000 V = 1 : 1.000	7
		46

MAP OF INDONESIA



MAP OF JAVA AND MADURA



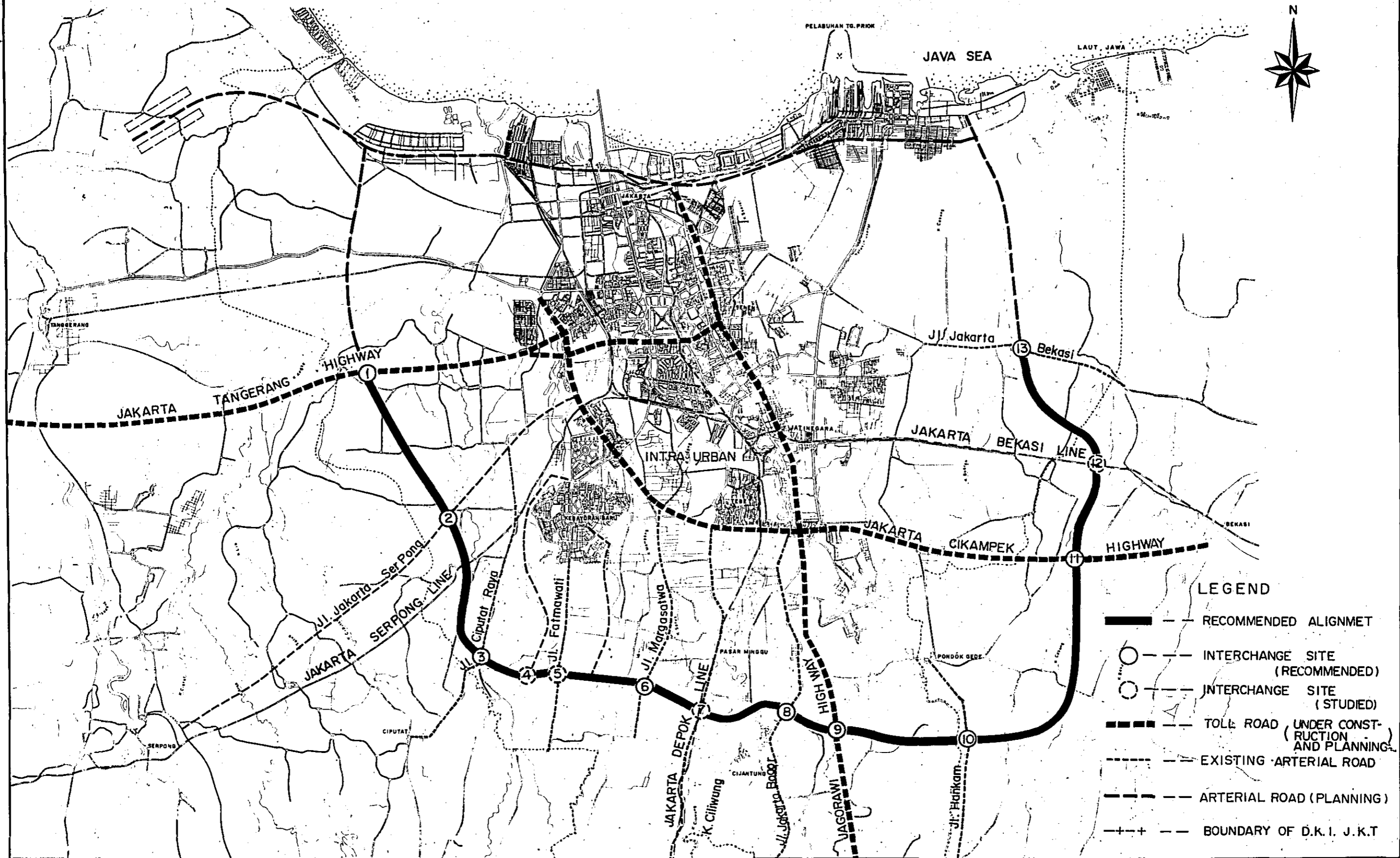
LEGEND

- ==== NATIONAL HIGHWAY
- REGIONAL HIGHWAY
- - - - PROVINCIAL BOUNDARIES
- ⊙ CITIES OF PREFECTURE
- OTHER CITIES



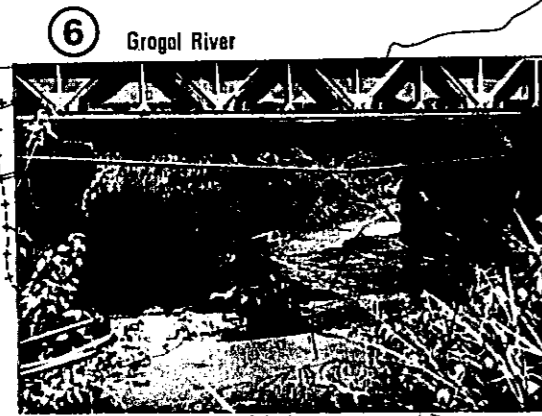
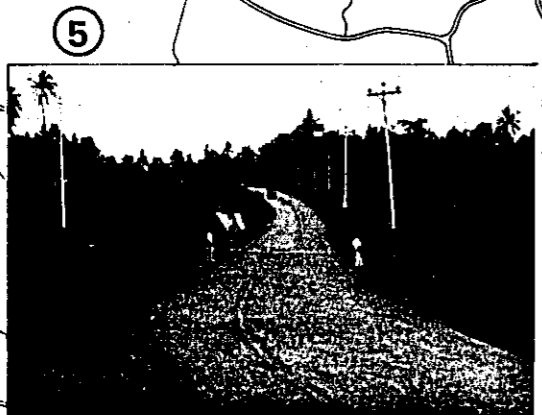
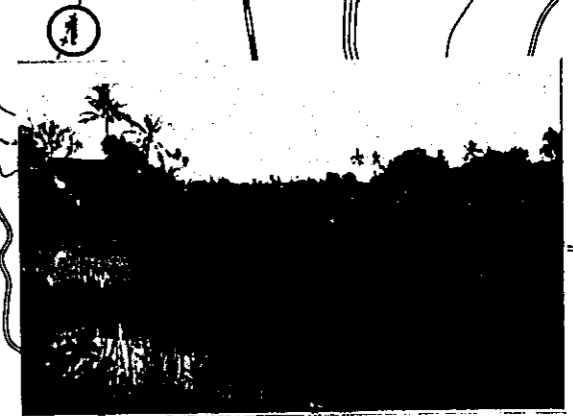
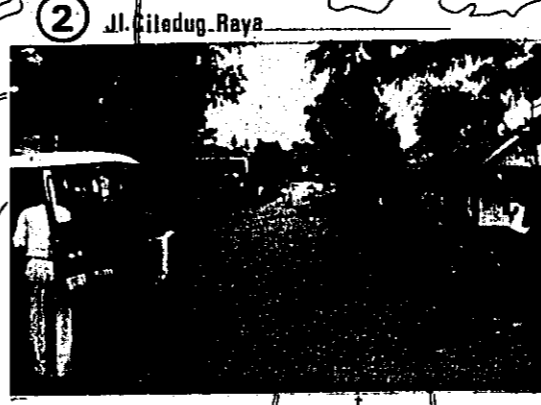
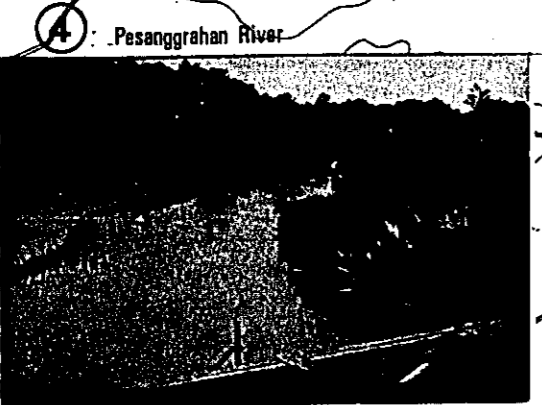
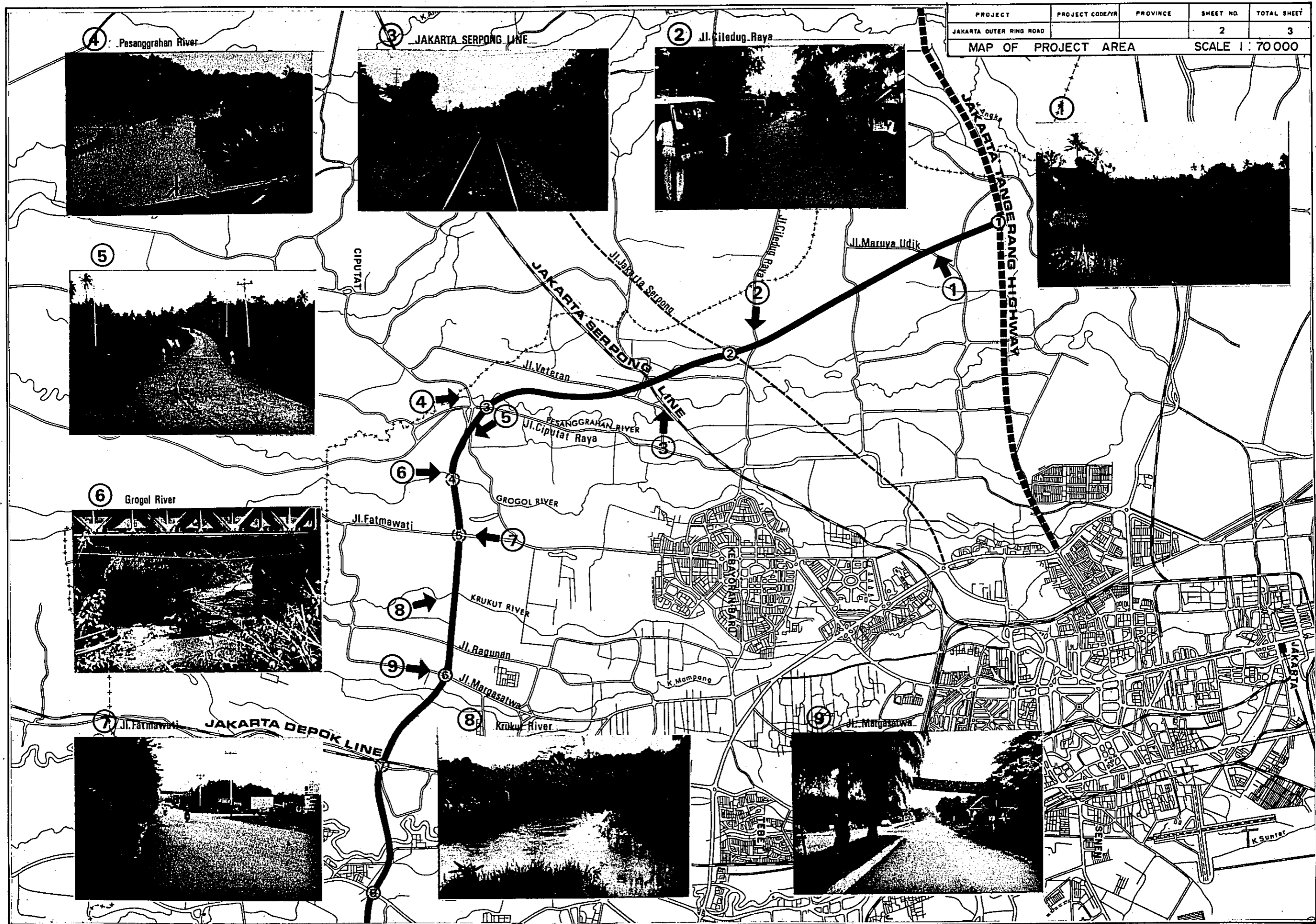
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			1	3
MAP OF PROJECT AREA SCALE 1:125,000				

MAP OF PROJECT AREA



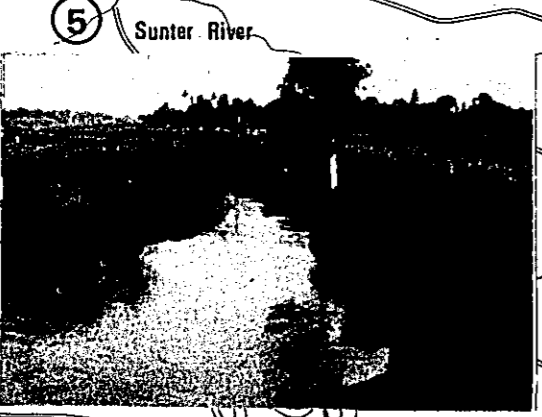
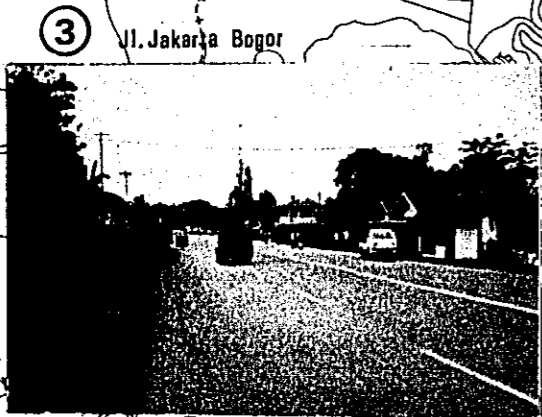
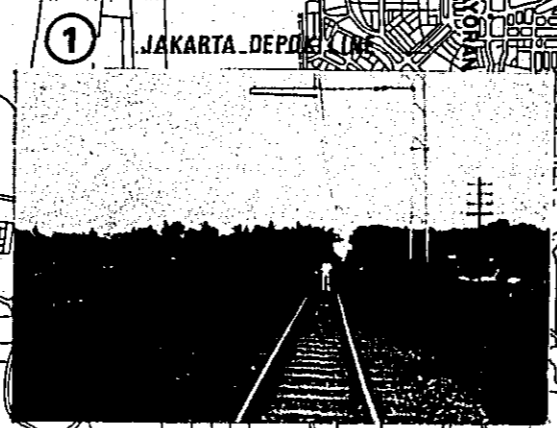
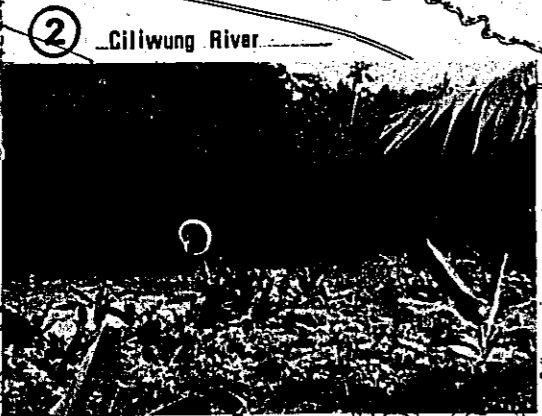
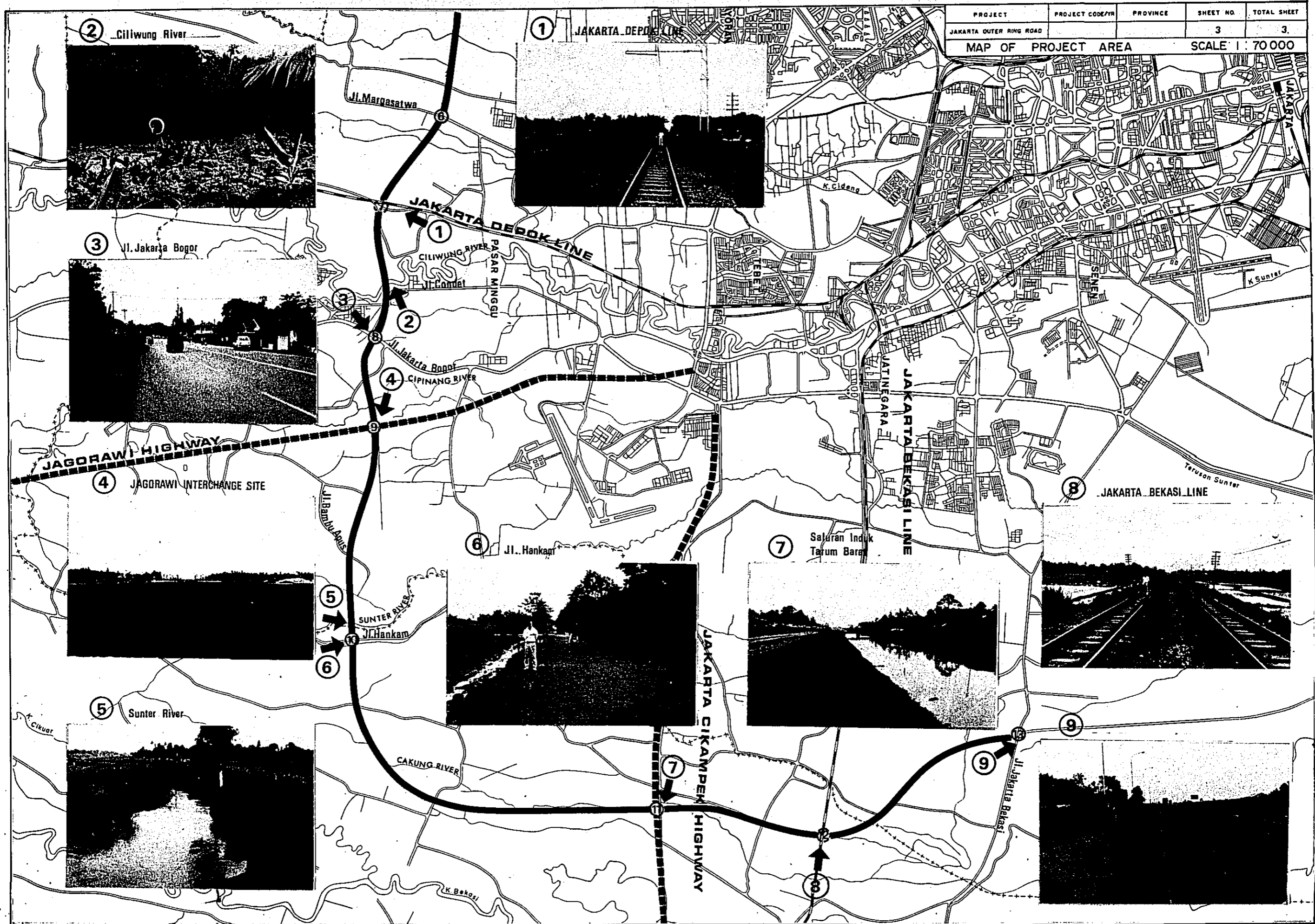
- LEGEND**
- RECOMMENDED ALIGNMENT
 - INTERCHANGE SITE (RECOMMENDED)
 - INTERCHANGE SITE (STUDIED)
 - TOLL ROAD (UNDER CONSTRUCTION AND PLANNING)
 - EXISTING ARTERIAL ROAD
 - ARTERIAL ROAD (PLANNING)
 - BOUNDARY OF D.K.I. J.K.T

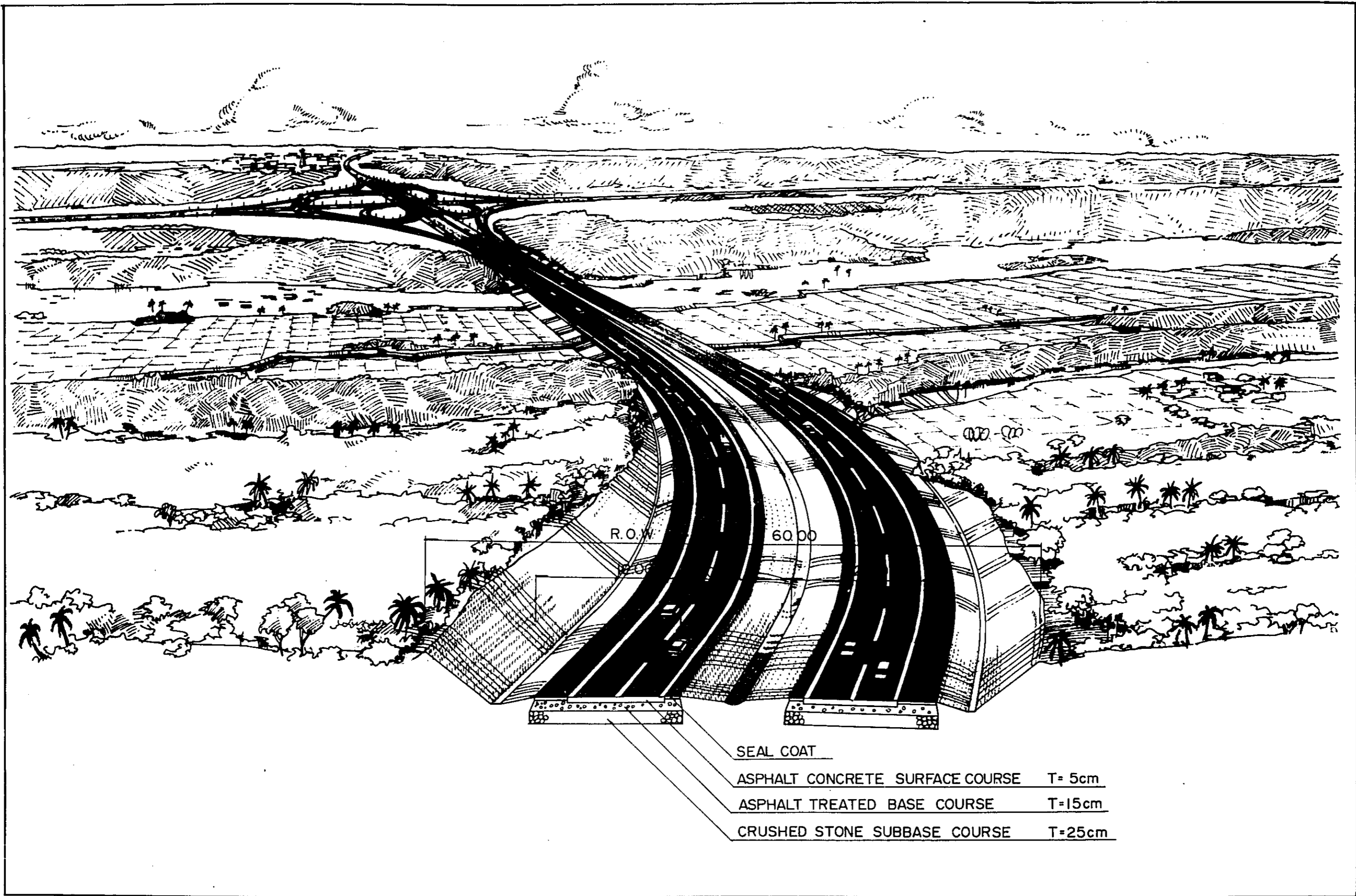
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA OUTER RING ROAD			2	3
MAP OF PROJECT AREA			SCALE 1 : 70 000	



PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA OUTER RING ROAD			3	3

MAP OF PROJECT AREA SCALE 1 : 70 000





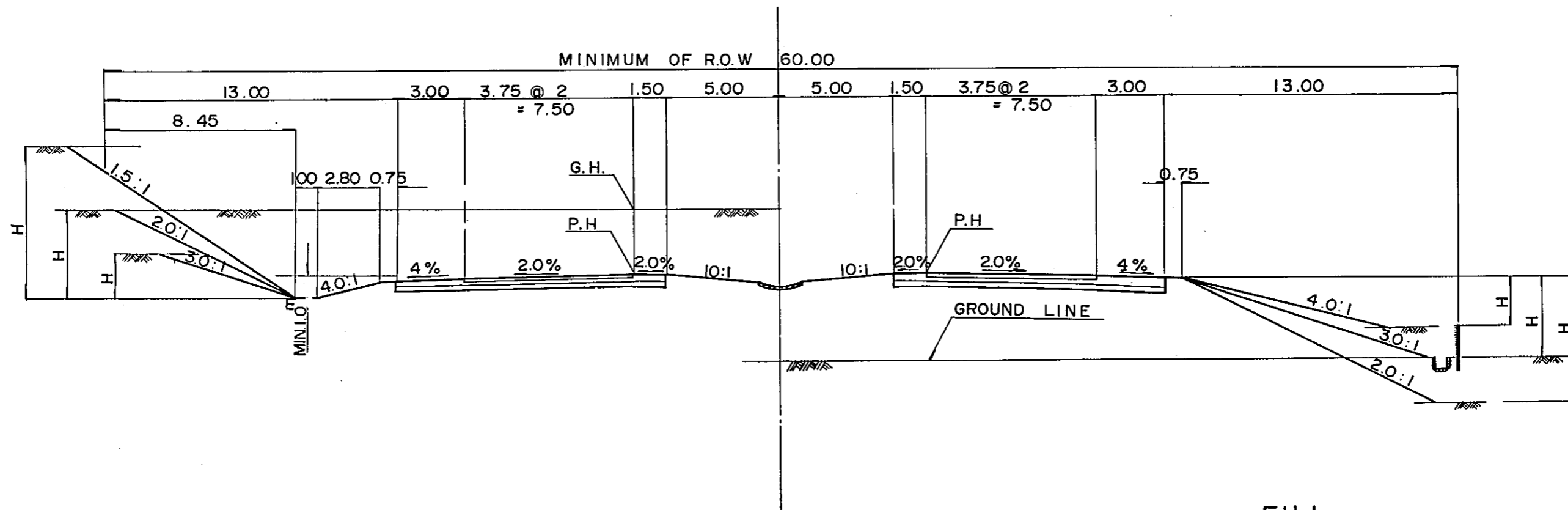
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			2	3
TYPICAL CROSS SECTION			SCALE 1 : 200	

TYPICAL CROSS SECTION OF THROUGHWAY

$V = 120 \text{ km/h}$

CUT

FILL



CUT

H (m)	N : 1
$0 \leq H < 2.5$	3 : 1
$2.5 \leq H < 4.0$	2 : 1
$4.0 \leq H$	1.5 : 1

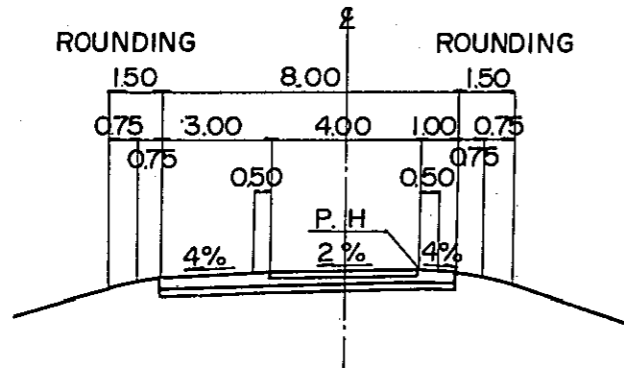
FILL

H	N : 1
$0 \leq H < 2.5$	4 : 1
$2.5 \leq H < 4$	3 : 1
$4 \leq H$	2 : 1

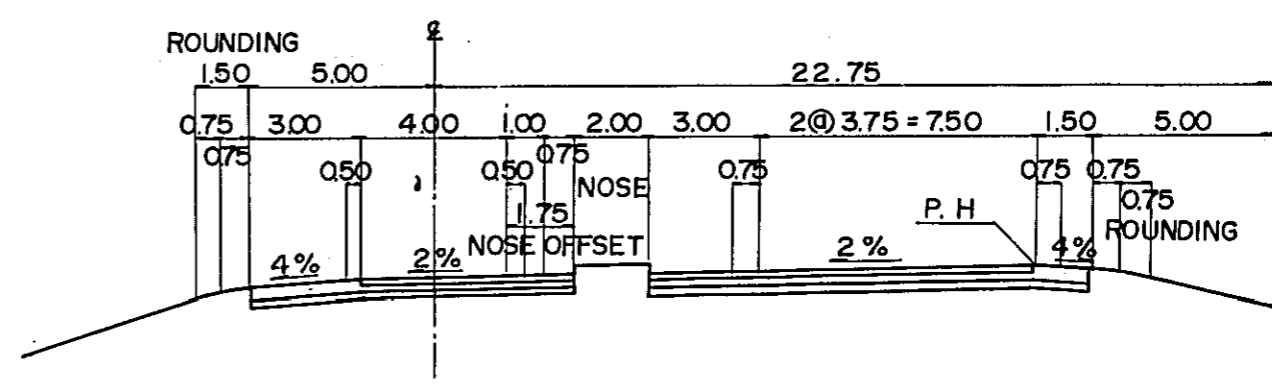
TYPICAL CROSS SECTION OF INTERCHANGE

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			3	3
TYPICAL CROSS SECTION			SCALE 1:200	

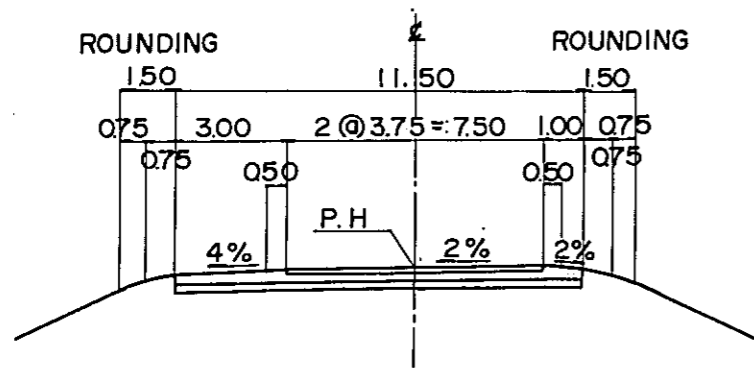
$\nabla = 40 \frac{\text{km}}{\text{hr}} \quad 60 \frac{\text{km}}{\text{hr}}$



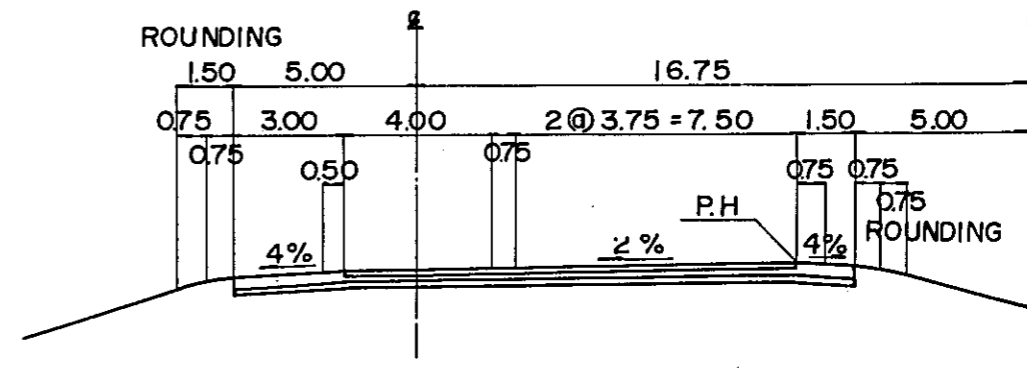
1 - LANE ONE WAY



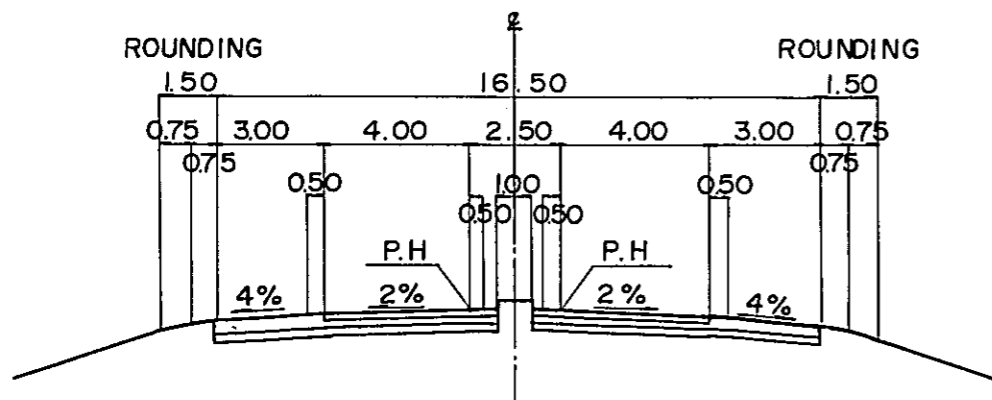
NOSE SECTION OF DECELERATION LANE



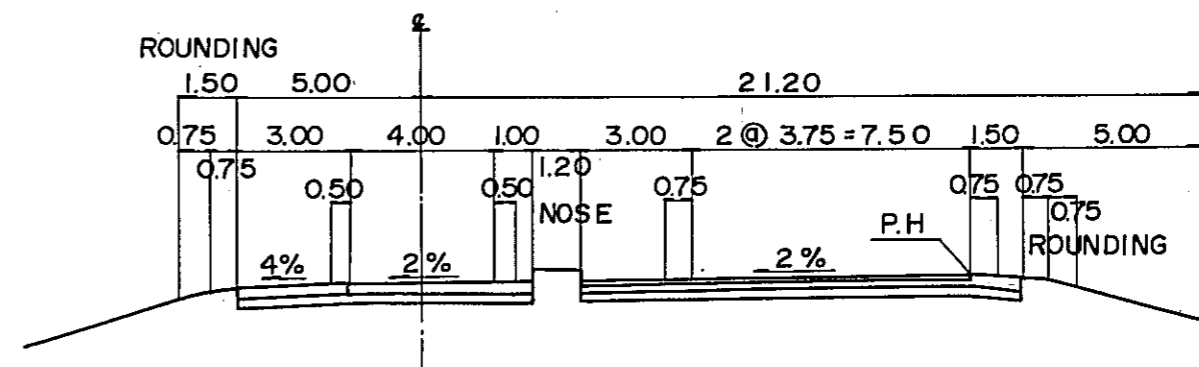
2 - LANE ONE WAY



SECTION OF END FOR TAPER



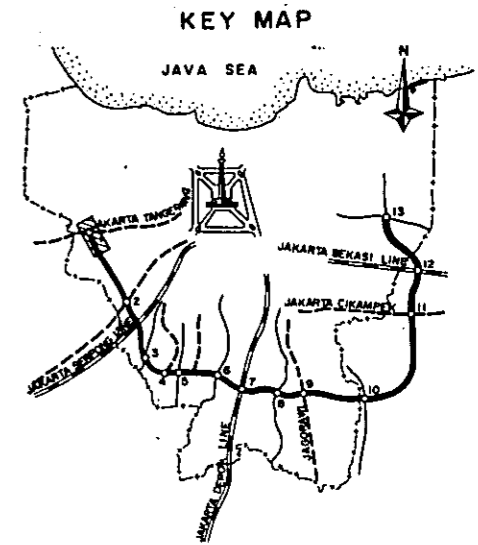
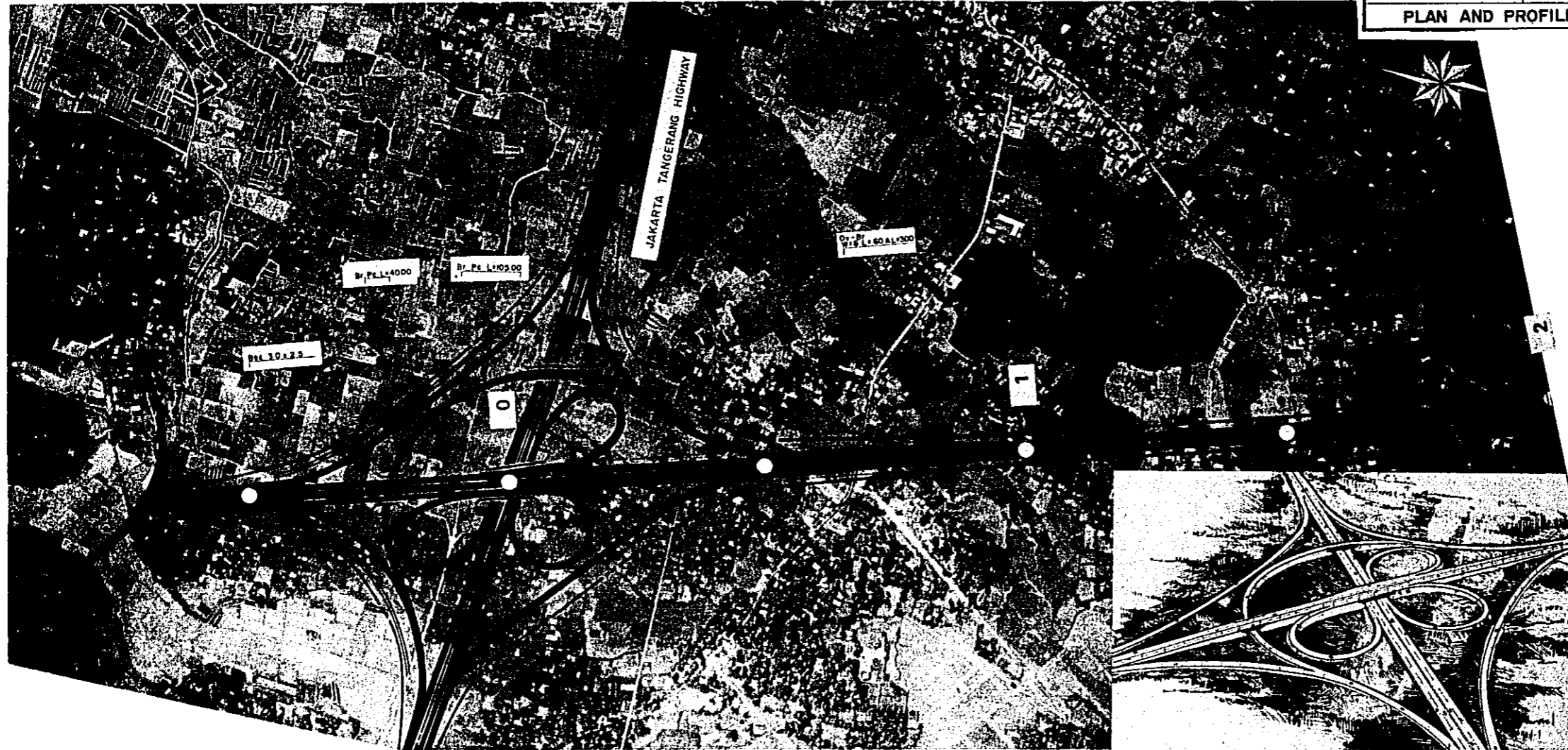
2 - LANE TWO WAY



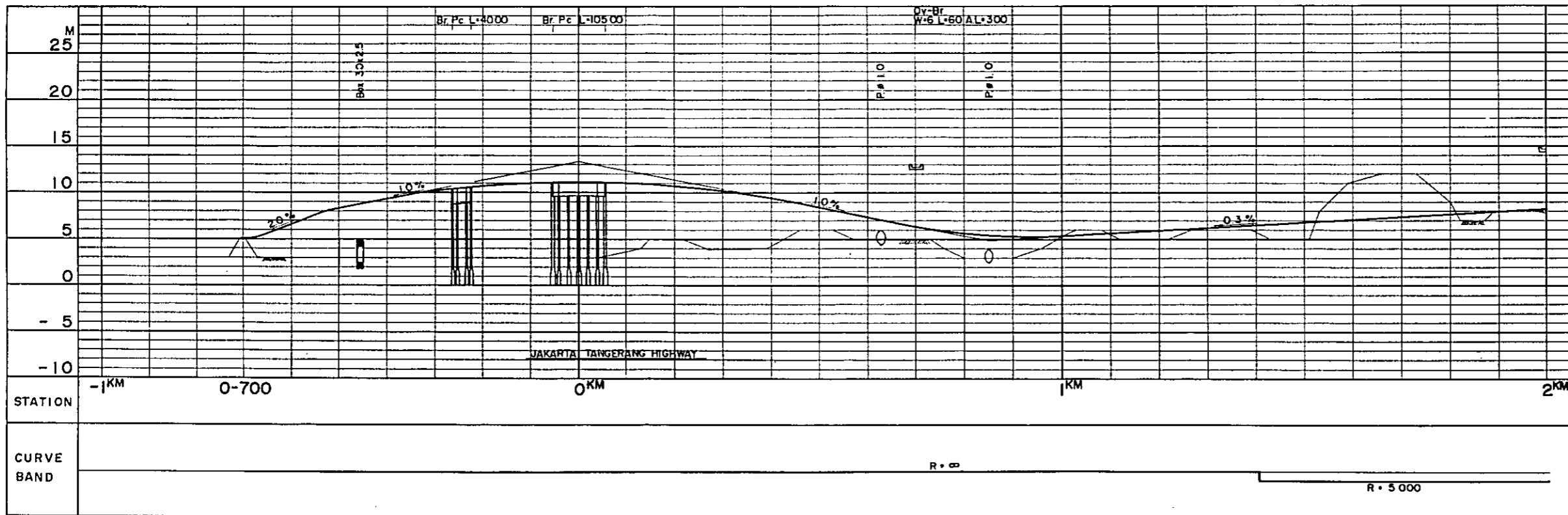
NOSE SECTION OF ACCELERATION LANE

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			1	21

PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H: 10,000 V: 500

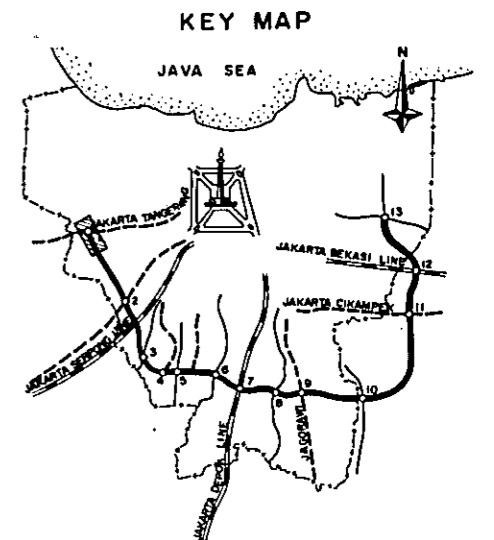


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - CROSS ROAD AND FRONTAGE ROAD
 - () GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - () GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - PEDESTRIAN OVERPASS
 - CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ± 1.0% GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

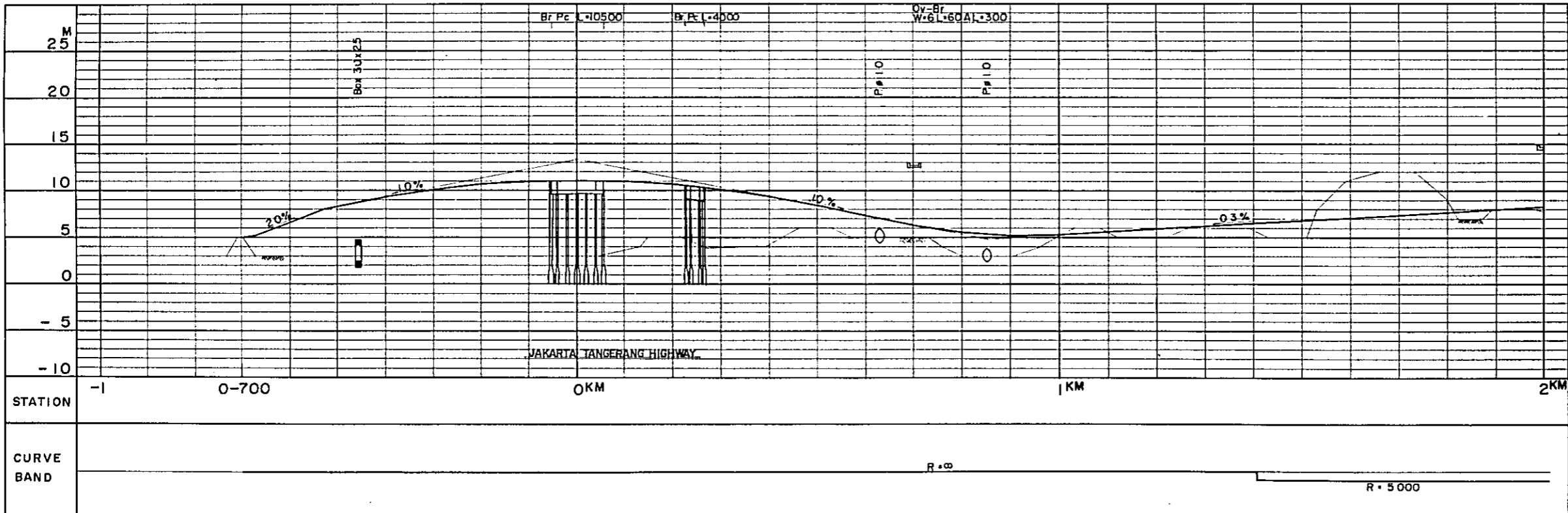
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			2	21
PLAN AND PROFILE (COLLECTING SYSTEM) SCALE			H: 10 000	V: 500



LEGEND

HORIZONTAL ALIGNMENT
SCALE 1 : 10 000

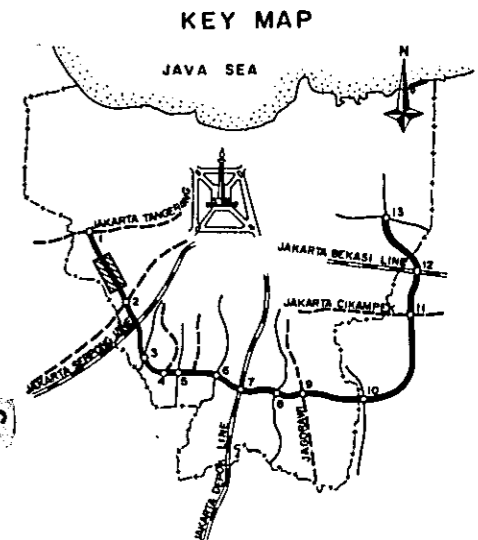
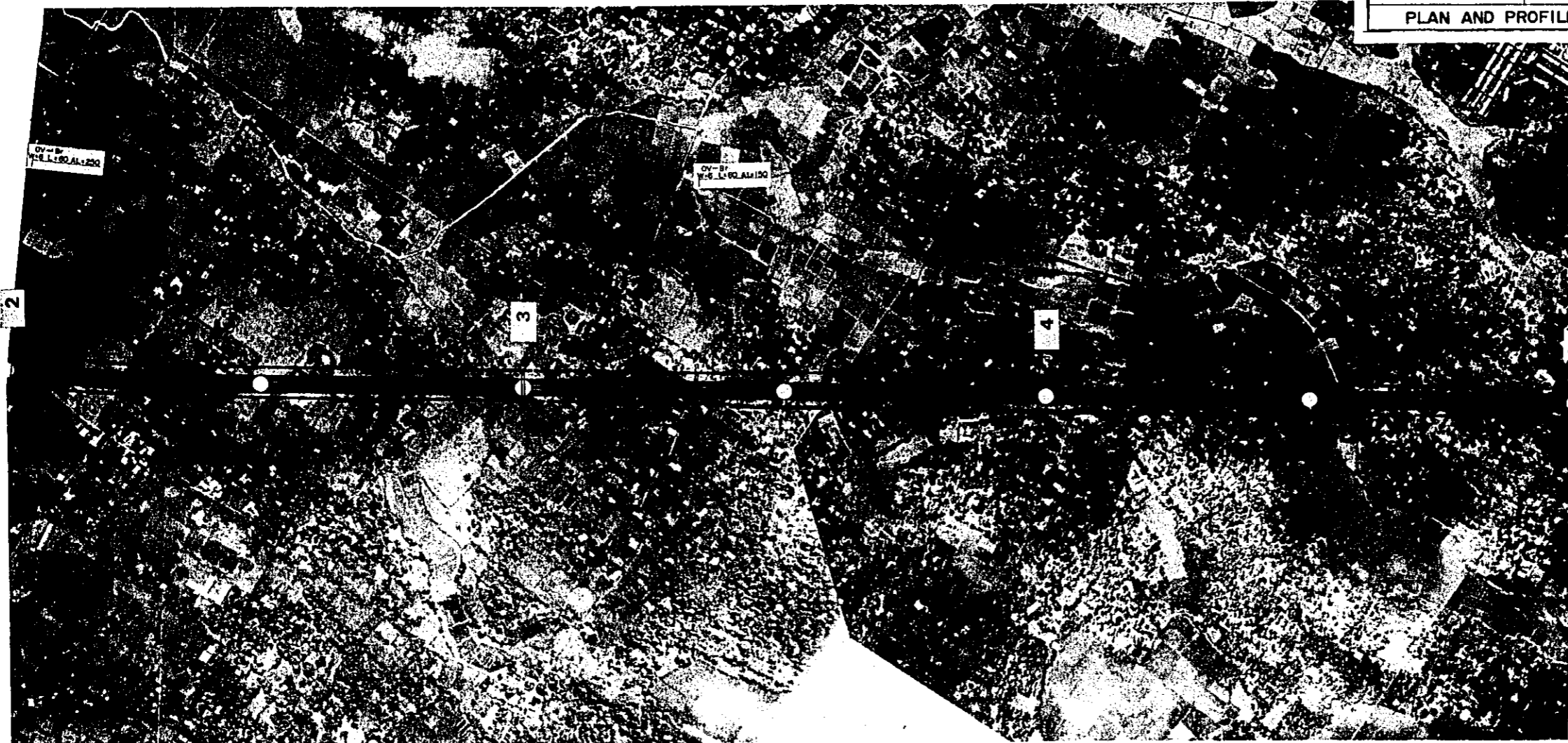
- +—+— CENTER LINE OF RECOMMENDED ALIGNMENT
- +—+— BOUNDARY OF RIGHT OF WAY
- +—+— CROSS ROAD AND FRONTAGE ROAD
- +—+— GRADE SEPARATION (CROSS ROAD-OVERPASS)
- +—+— GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- +—+— PEDESTRIAN OVERPASS
- +—+— CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE



VERTICAL ALIGNMENT
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

- +—+— GRADIENT OF RECOMMENDED ALIGNMENT
- +—+— EXISTING GROUND
- +—+— GRADE SEPARATION STRUCTURE
- +—+— GRADE SEPARATION STRUCTURE
- +—+— PEDESTRIAN OVERPASS
- +—+— BOX CULVERT
- +—+— PIPE CULVERT
- +—+— HIGH WATER LEVEL

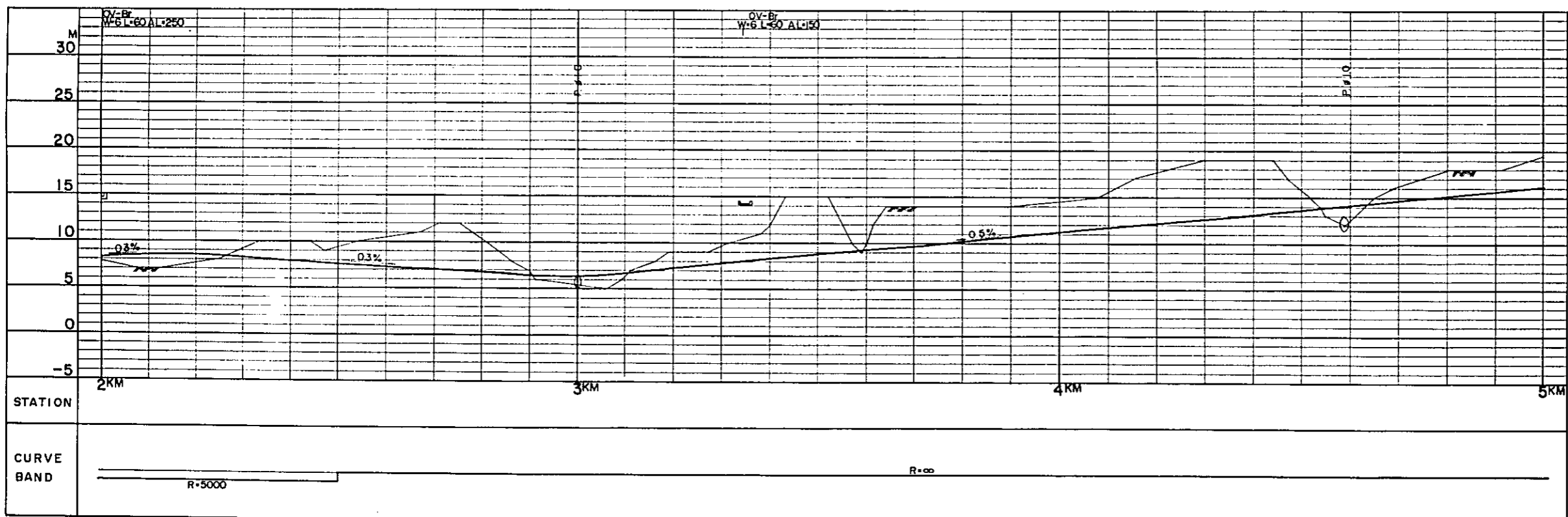
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			3	21
PLAN AND PROFILE (COLLECTING SYSTEM)			SCALE	H: 10,000 V: 500
FLAT OR ZONE				



LEGEND

HORIZONTAL ALIGNMENT
SCALE 1 : 10 000

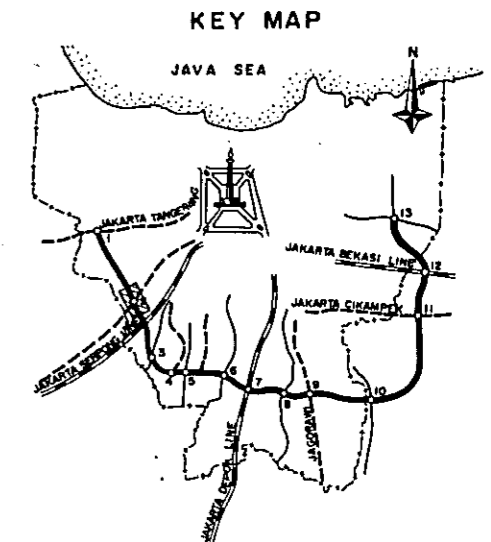
- CENTER LINE OF RECOMMENDED ALIGNMENT
- - - BOUNDARY OF RIGHT OF WAY
- ==== CROSS ROAD AND FRONTAGE ROAD
- ||--- GRADE SEPARATION (CROSS ROAD-OVERPASS)
- ||--- GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- ||--- PEDESTRIAN OVERPASS
- ||--- CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE



VERTICAL ALIGNMENT
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

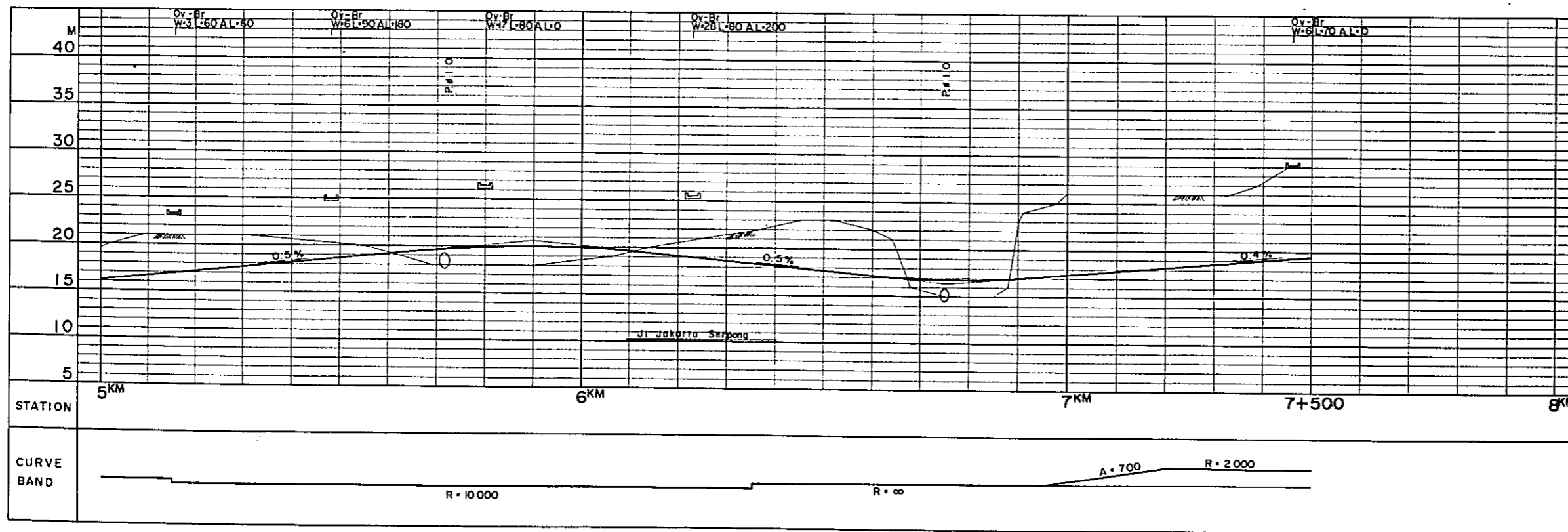
- +1.0% GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- ||--- GRADE SEPARATION STRUCTURE
- ||--- GRADE SEPARATION STRUCTURE
- ||--- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- ⋆ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			4	21
PLAN AND PROFILE (COLLECTING SYSTEM) FLAT OR ZONE SCALE : H : 10.000 V : 500				



LEGEND

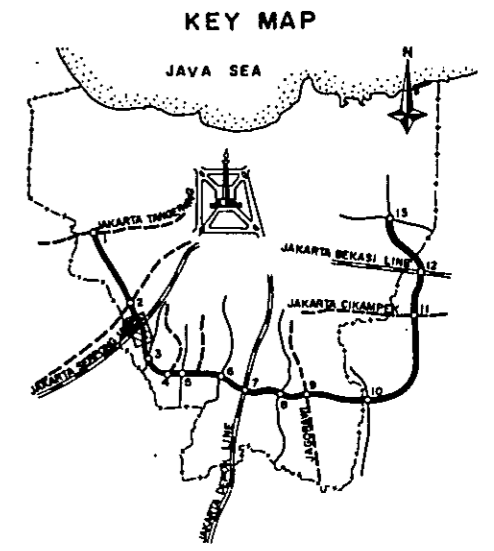
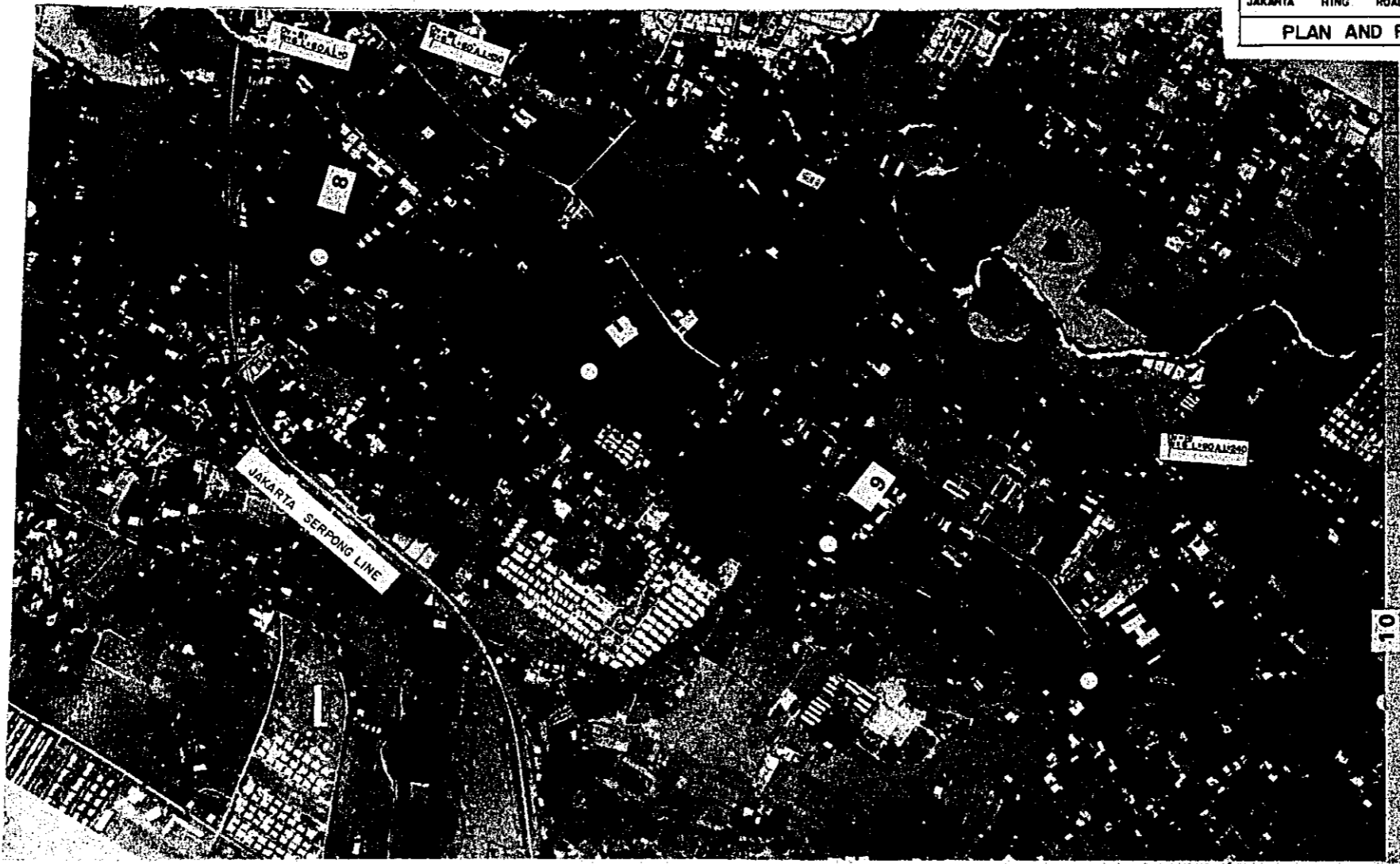
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - - - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - ⌋ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⌋ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⌋ PEDESTRIAN OVERPASS
 - ⌋ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



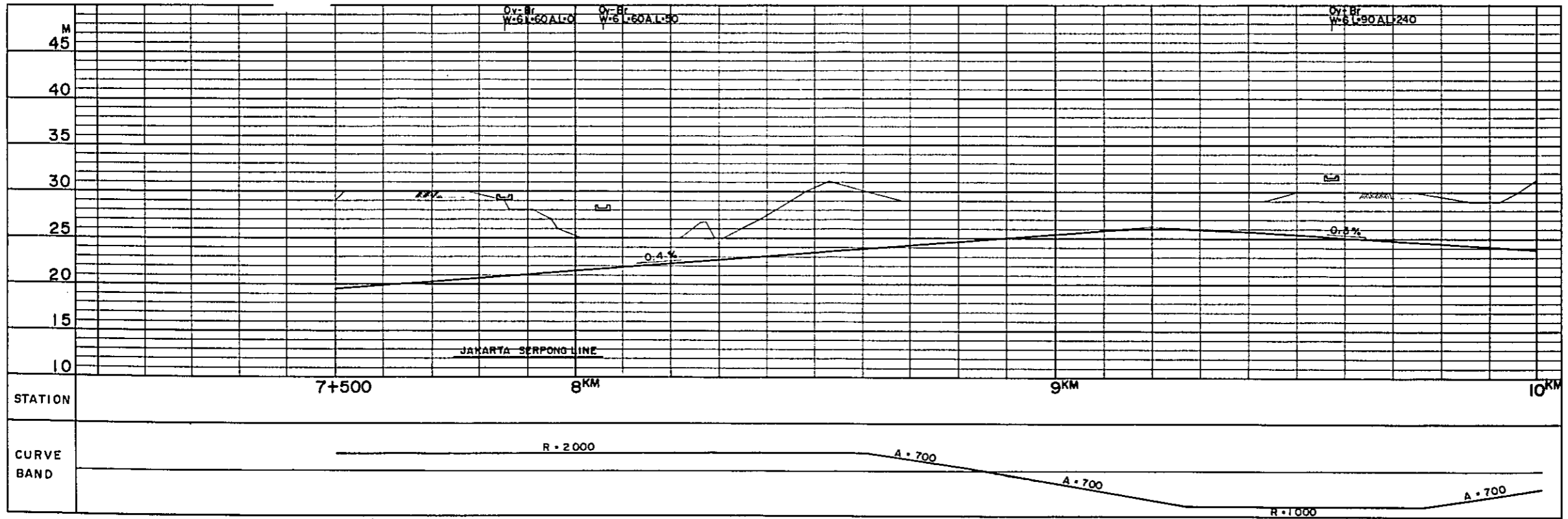
- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- +10% GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			5	21

PLAN AND PROFILE (COLLECTING SYSTEM FLAT OR ZONE) SCALE : H • 10,000 V • 500



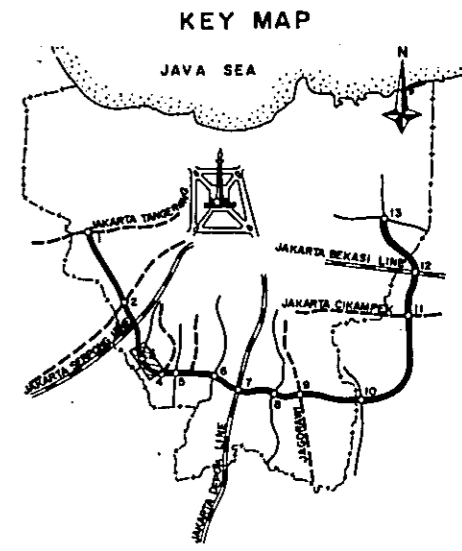
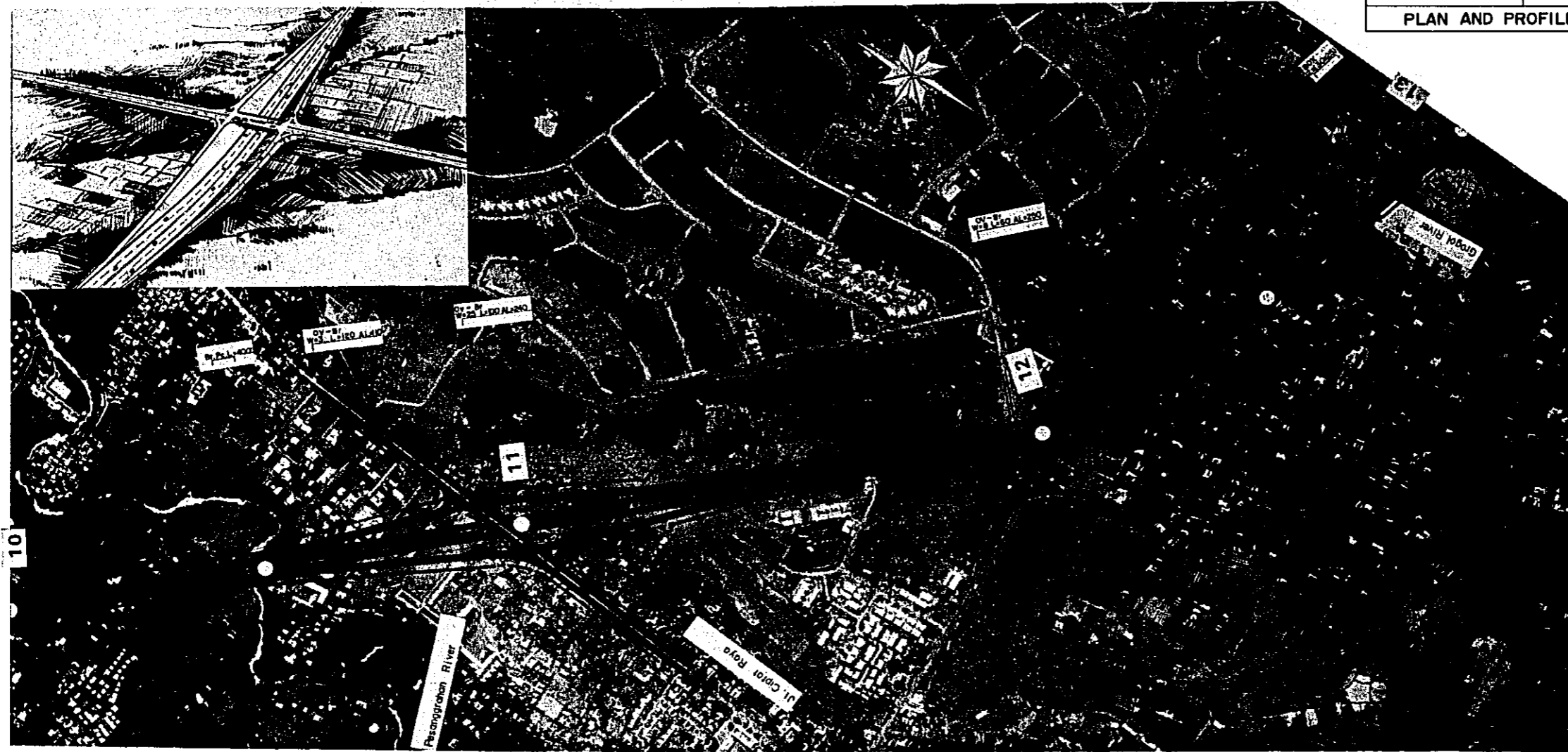
- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - CROSS ROAD AND FRONTAGE ROAD
 - (—) GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - (—) GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - +— PEDESTRIAN OVERPASS
 - +— CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



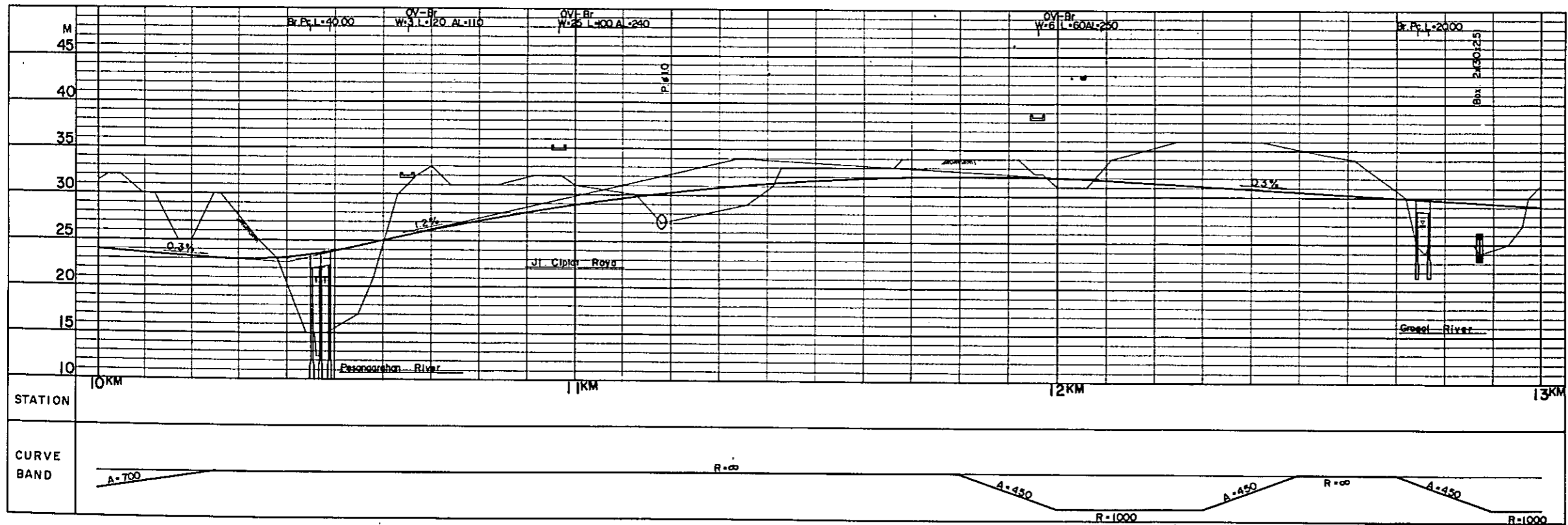
- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ± 1.0 % GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			6	21

PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H=10,000
FLAT V=500

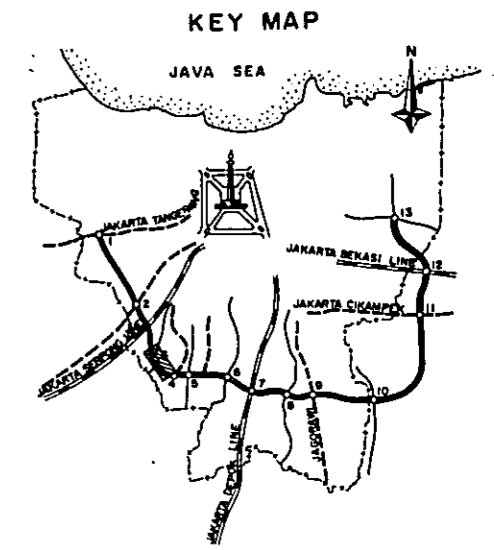
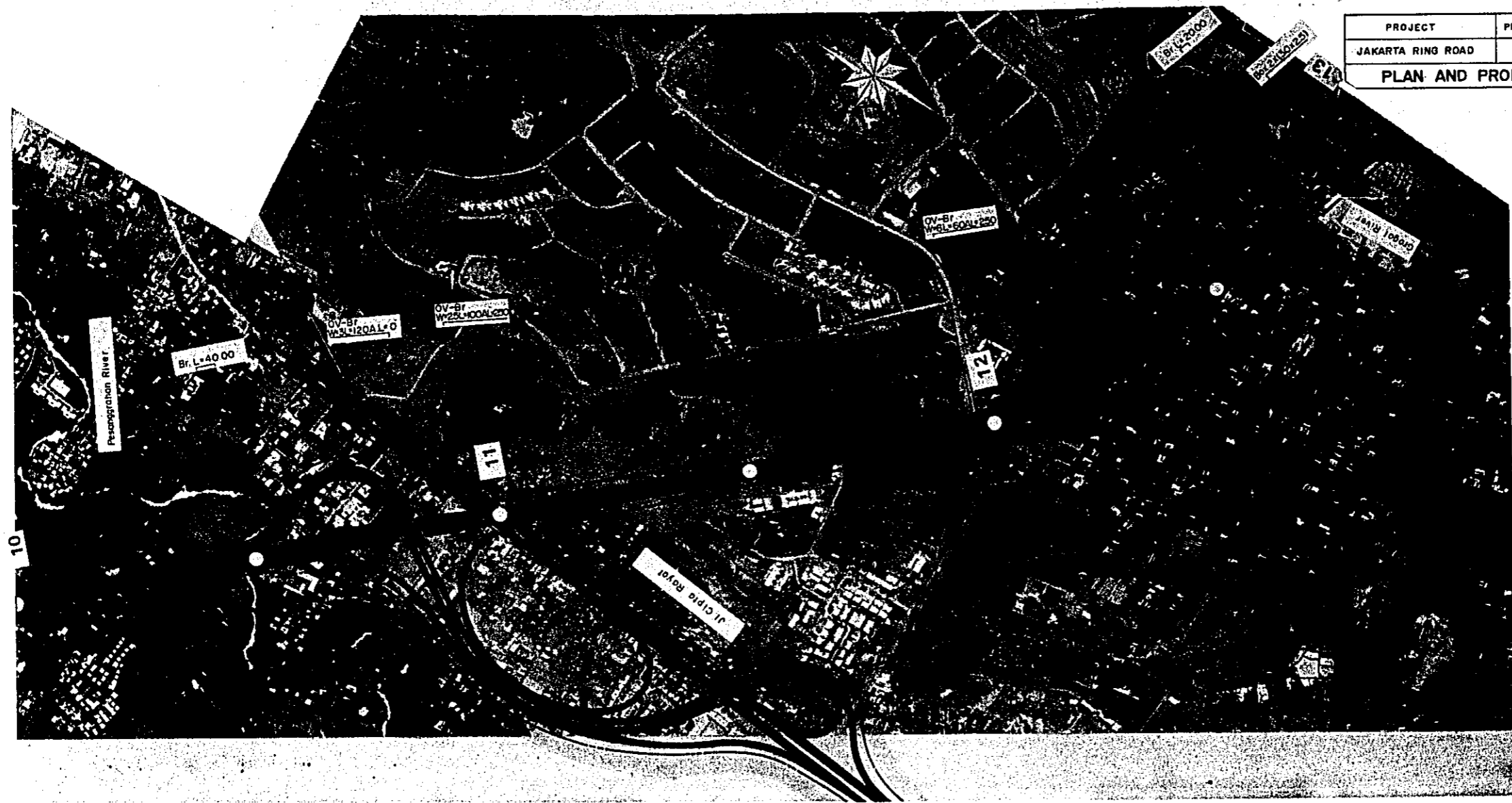


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - - - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - ⌈⌋ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⌈⌋ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⌈⌋ PEDESTRIAN OVERPASS
 - ⌈⌋ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE

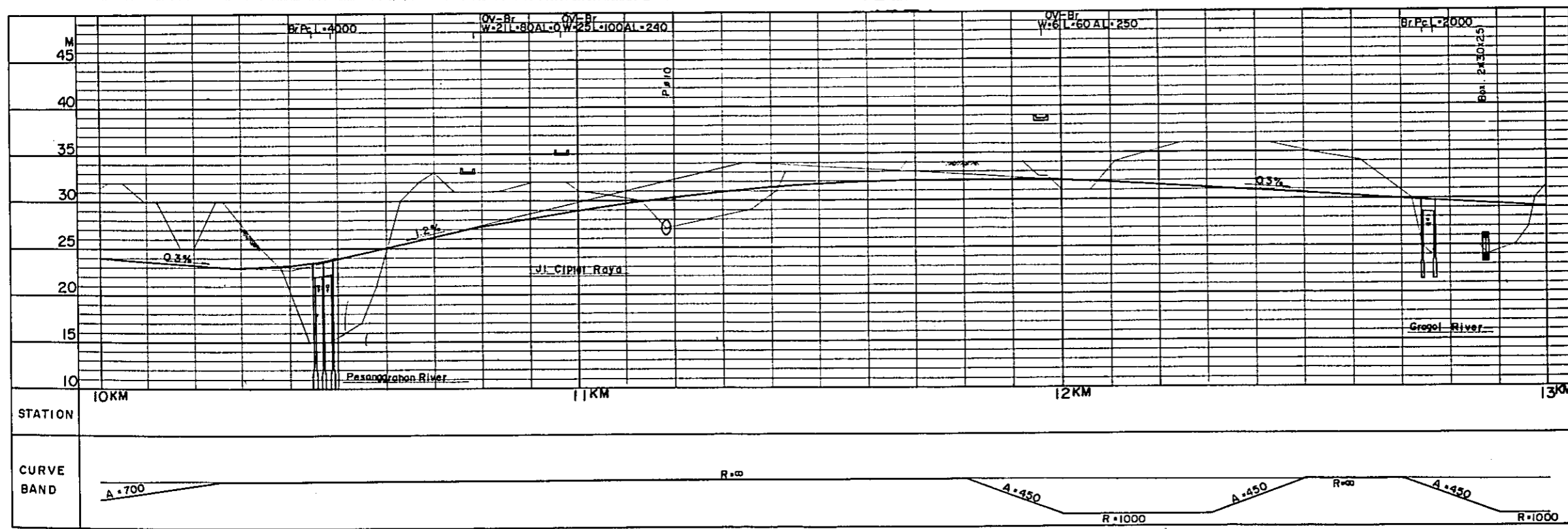


- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ± 1.0% GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - ⌈⌋ GRADE SEPARATION STRUCTURE
 - ⌈⌋ GRADE SEPARATION STRUCTURE
 - ⌈⌋ PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - ⌈⌋ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			7	21
PLAN AND PROFILE (COLLECTING SYSTEM ZONE)				SCALE : H = 10000 V = 500

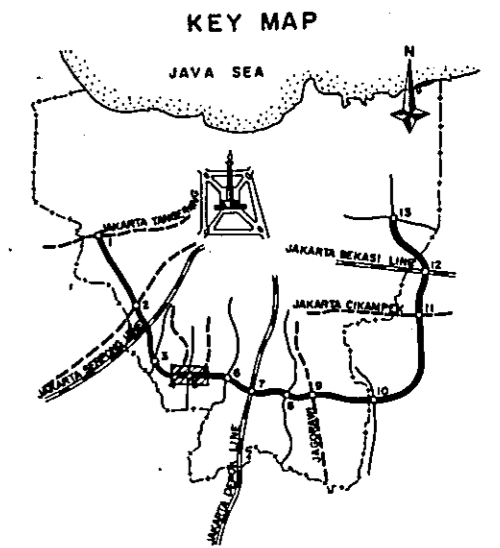
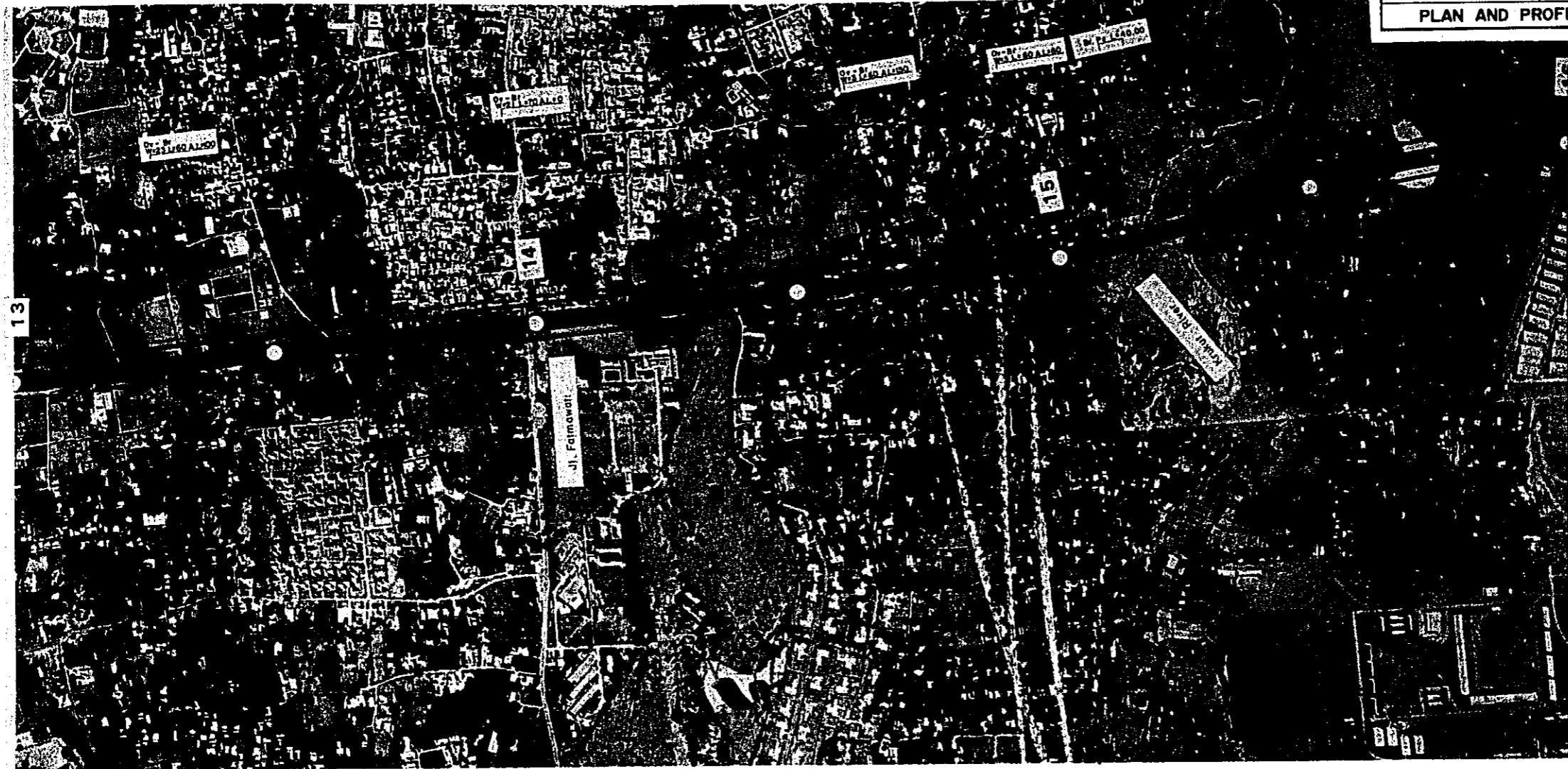


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - - - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - ⌋ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⌋ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⌋ PEDESTRIAN OVERPASS
 - ⌋ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ± 10% GRADIENT OF RECOMMENDED ALIGNMENT
 - ⌋ EXISTING GROUND
 - ⌋ GRADE SEPARATION STRUCTURE
 - ⌋ GRADE SEPARATION STRUCTURE
 - ⌋ PEDESTRIAN OVERPASS
 - ⌋ BOX CULVERT
 - ⌋ PIPE CULVERT
 - ⌋ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			8	21
PLAN AND PROFILE (COLLECTING SYSTEM)			SCALE : H = 10,000 V = 500	



LEGEND

HORIZONTAL ALIGNMENT

SCALE 1 : 10 000

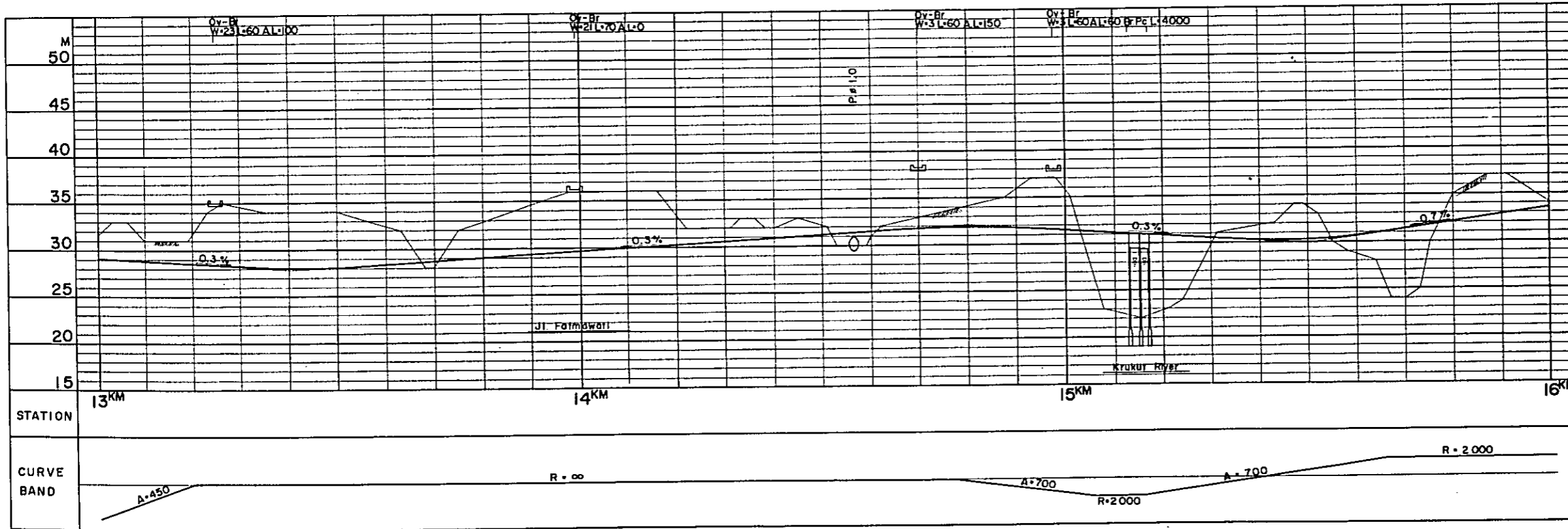
- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- CROSS ROAD AND FRONTAGE ROAD
- GRADE SEPARATION (CROSS ROAD-OVERPASS)
- GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- PEDESTRIAN OVERPASS
- CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE

VERTICAL ALIGNMENT

HORIZONTAL SCALE 1 : 10 000

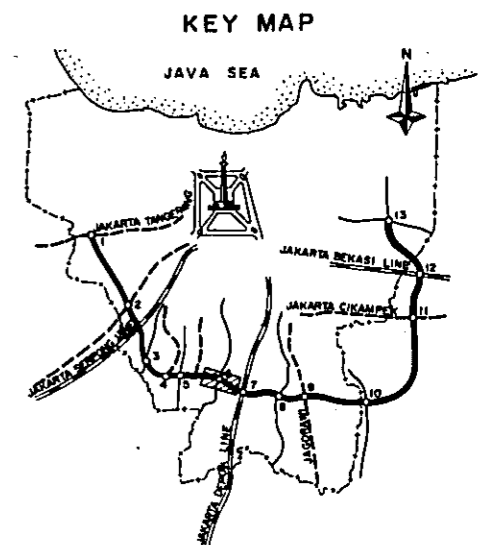
VERTICAL SCALE 1 : 500

- +1.0% GRADIENT OF RECOMMENDED ALIGNMENT
- ~ EXISTING GROUND
- GRADE SEPARATION STRUCTURE
- GRADE SEPARATION STRUCTURE
- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- ↓ HIGH WATER LEVEL



PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			9	21

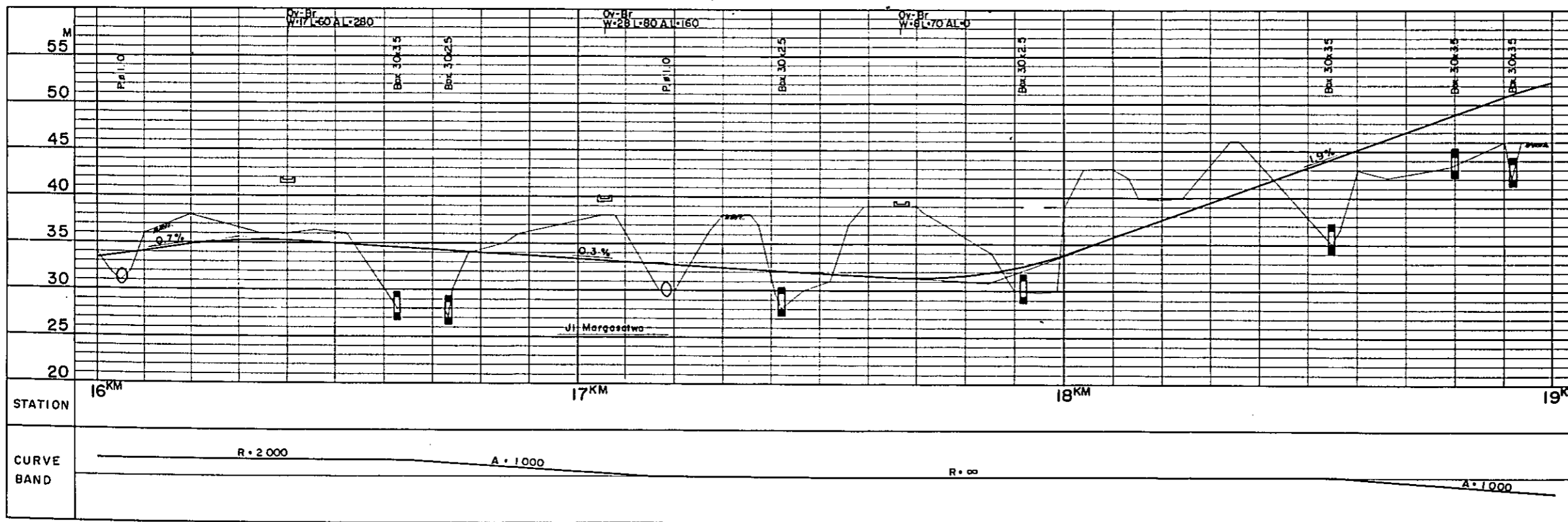
PLAN AND PROFILE (COLLECTING SYSTEM FLAT OR ZONE) SCALE : H : 10 000 V : 500



LEGEND

HORIZONTAL ALIGNMENT
SCALE 1 : 10 000

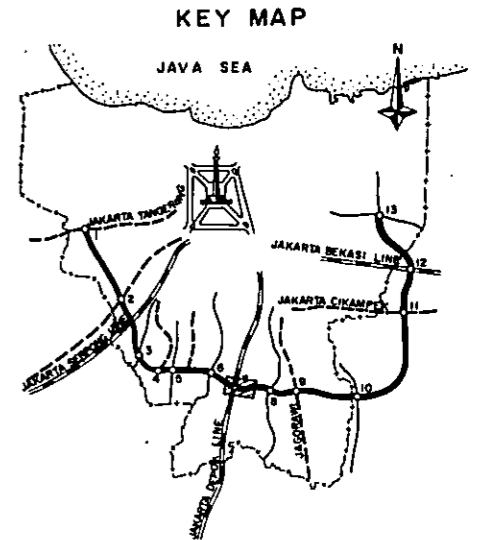
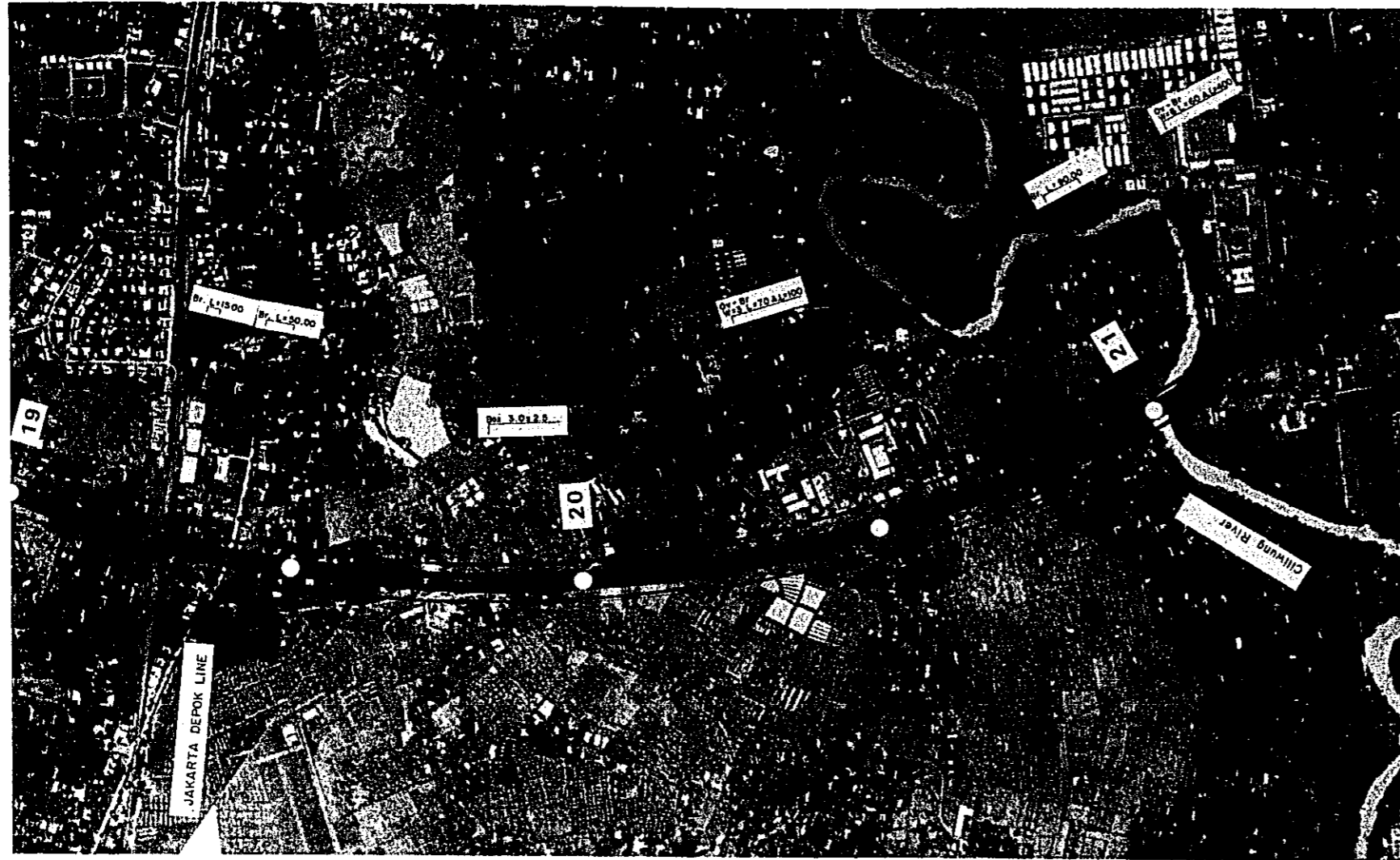
- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- ==== CROSS ROAD AND FRONTAGE ROAD
- (—) GRADE SEPARATION (CROSS ROAD-OVERPASS)
- (—) GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- (—) PEDESTRIAN OVERPASS
- (—) CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE



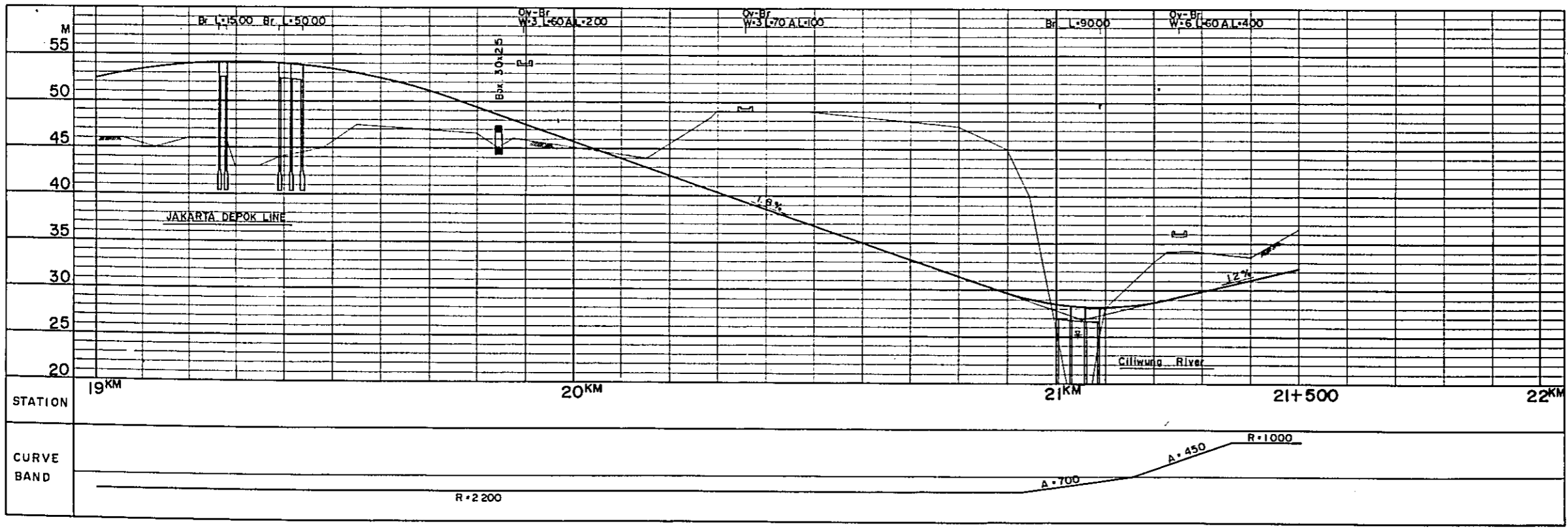
VERTICAL ALIGNMENT
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

- GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- GRADE SEPARATION STRUCTURE
- GRADE SEPARATION STRUCTURE
- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			10	21
PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H : 10,000 FLAT OR ZONE V : 500				



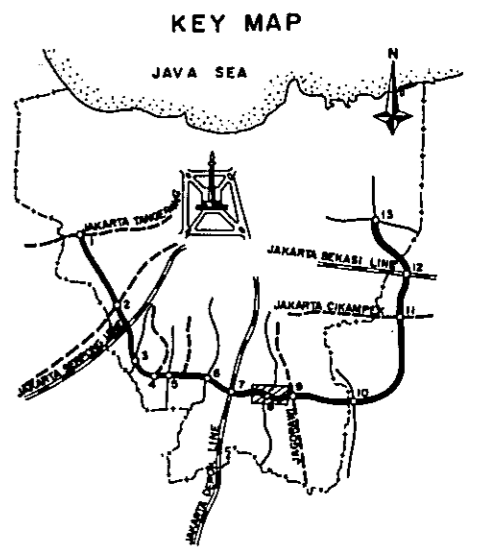
- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - CROSS ROAD AND FRONTAGE ROAD
 - GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - PEDESTRIAN OVERPASS
 - CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			11	21

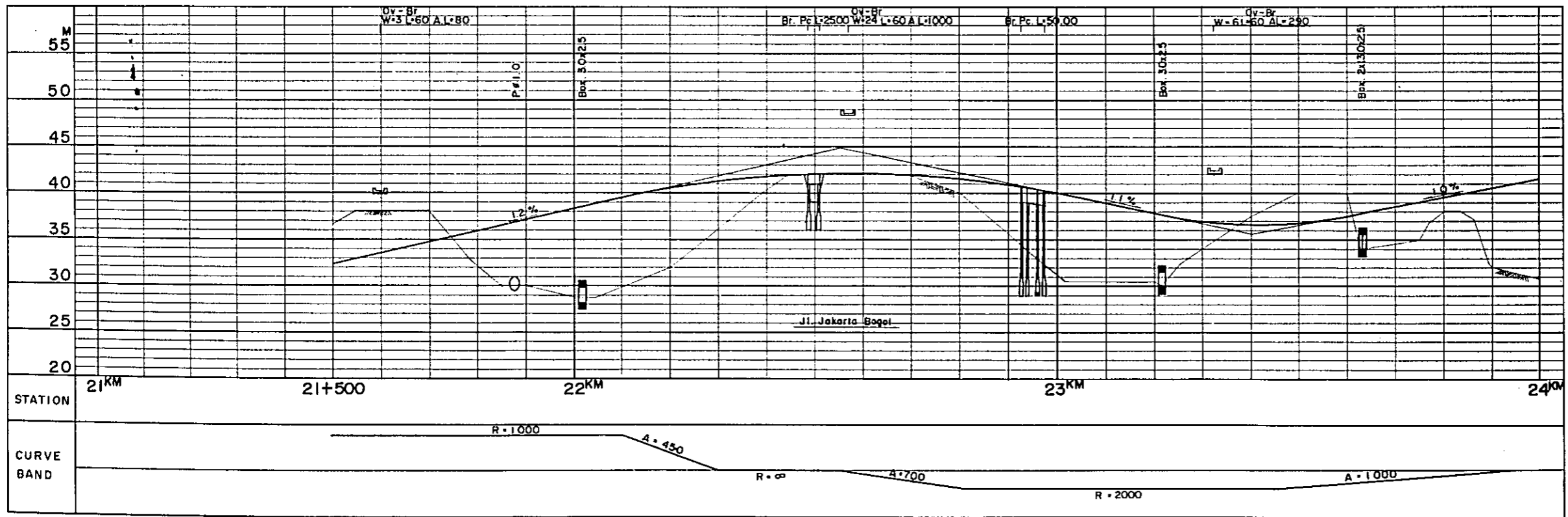
PLAN AND PROFILE (COLLECTING SYSTEM)
FLAT OR ZONE SCALE : H = 10,000
V = 500



LEGEND

HORIZONTAL ALIGNMENT
SCALE 1 : 10 000

- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- CROSS ROAD AND FRONTAGE ROAD
- GRADE SEPARATION (CROSS ROAD-OVERPASS)
- GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- PEDESTRIAN OVERPASS
- CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE

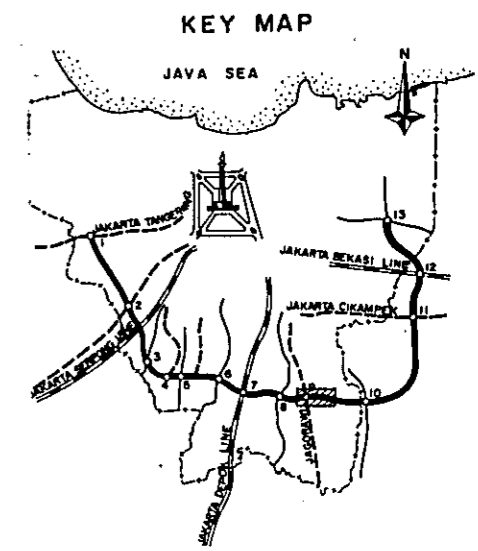
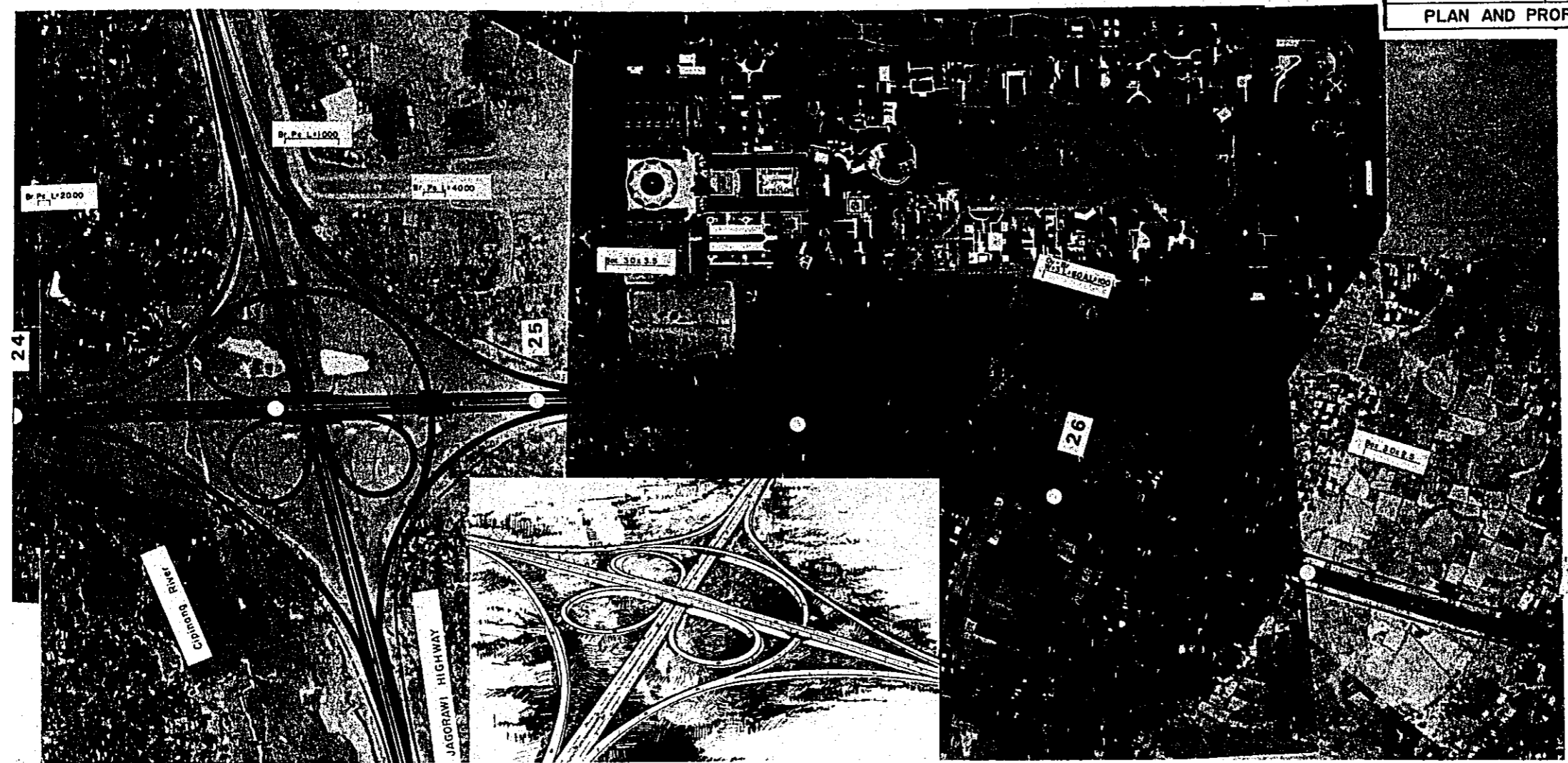


VERTICAL ALIGNMENT
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

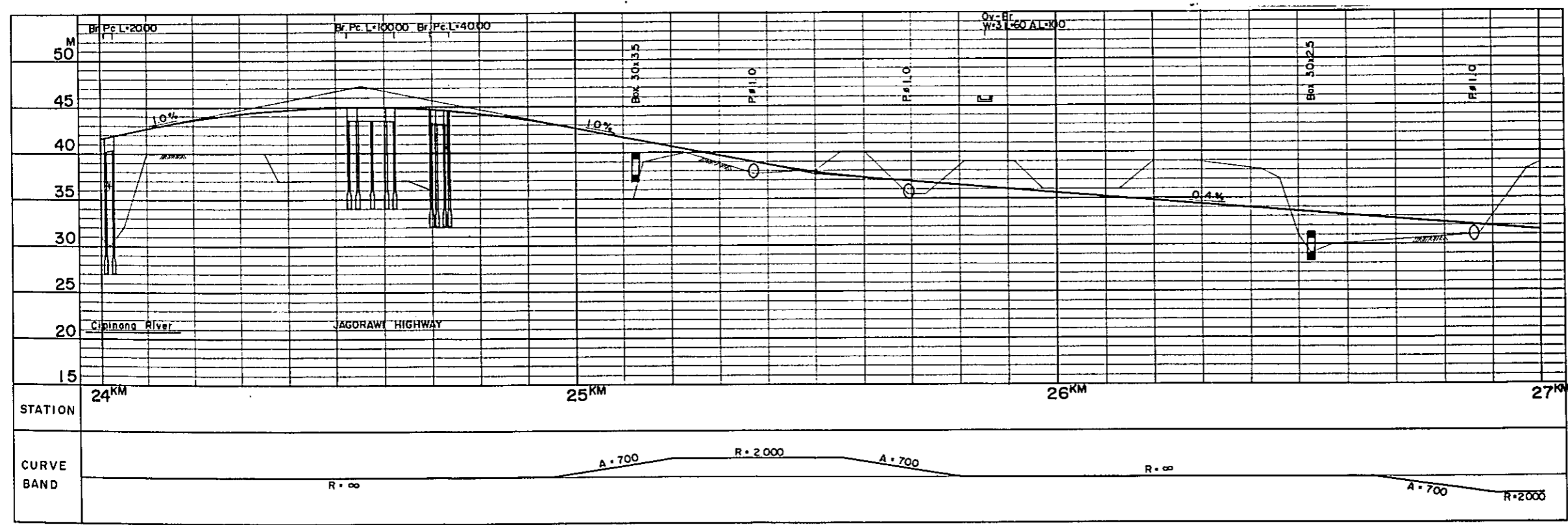
- ± 1.0% GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- GRADE SEPARATION STRUCTURE
- GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			12	21

PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H = 10,000
FLAT OR ZONE V = 500

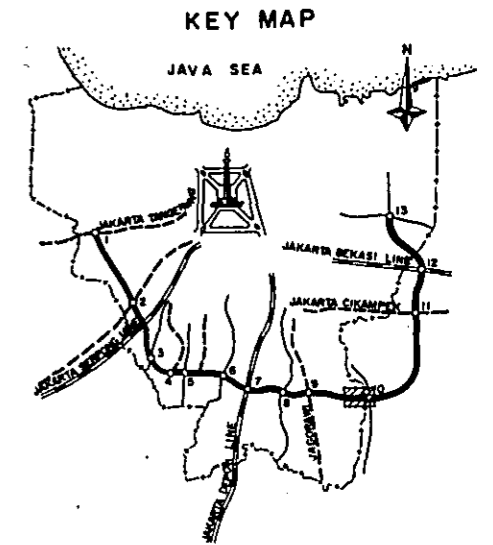
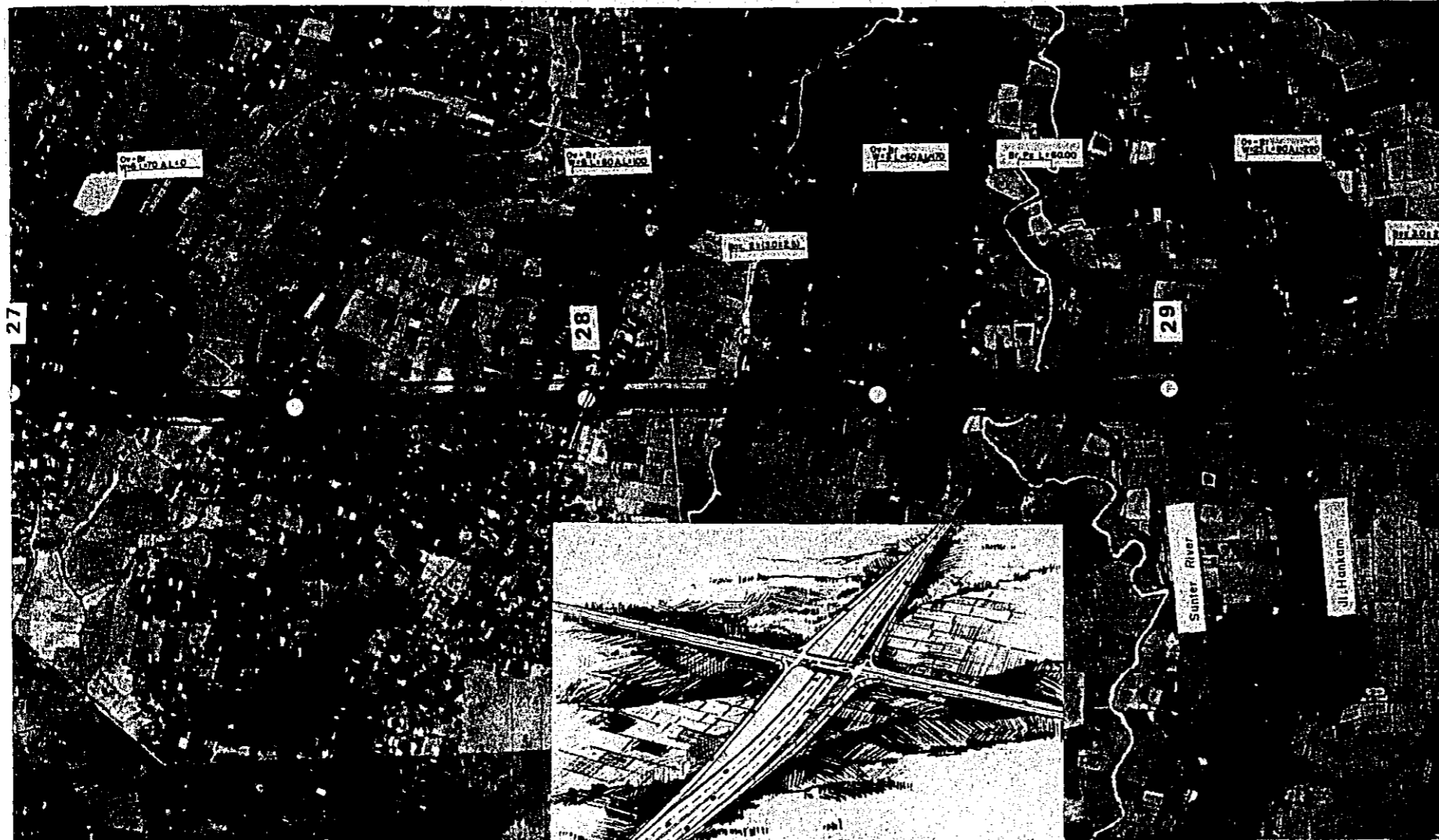


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - X— GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - /— GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - +— PEDESTRIAN OVERPASS
 - |— CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - X— GRADE SEPARATION STRUCTURE
 - /— GRADE SEPARATION STRUCTURE
 - +— PEDESTRIAN OVERPASS
 - |— BOX CULVERT
 - |— PIPE CULVERT
 - +— HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			13	21
PLAN AND PROFILE (COLLECTING SYSTEM FLAT OR ZONE)			SCALE : H = 10,000 V = 500	

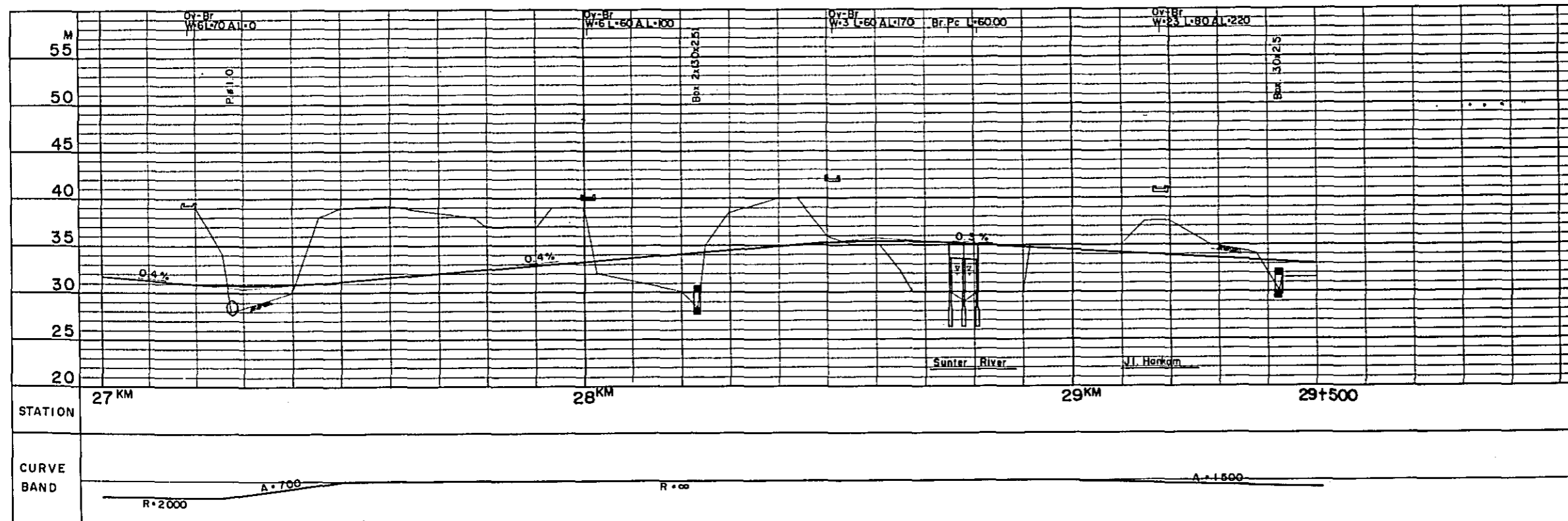


LEGEND

HORIZONTAL ALIGNMENT

SCALE 1 : 10 000

- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- ==== CROSS ROAD AND FRONTAGE ROAD
- (—) GRADE SEPARATION (CROSS ROAD-OVERPASS)
- (—) GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- (—) PEDESTRIAN OVERPASS
- (—) CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE

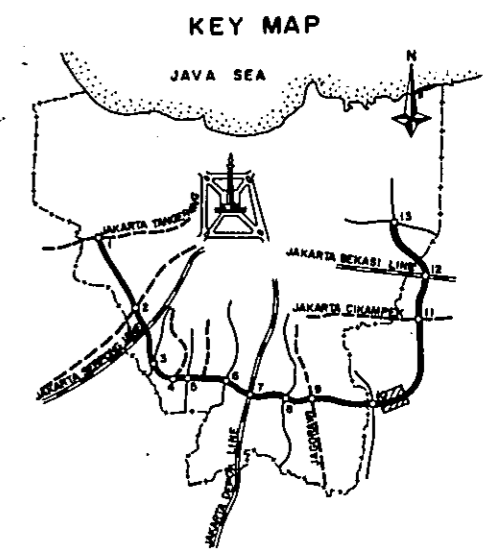
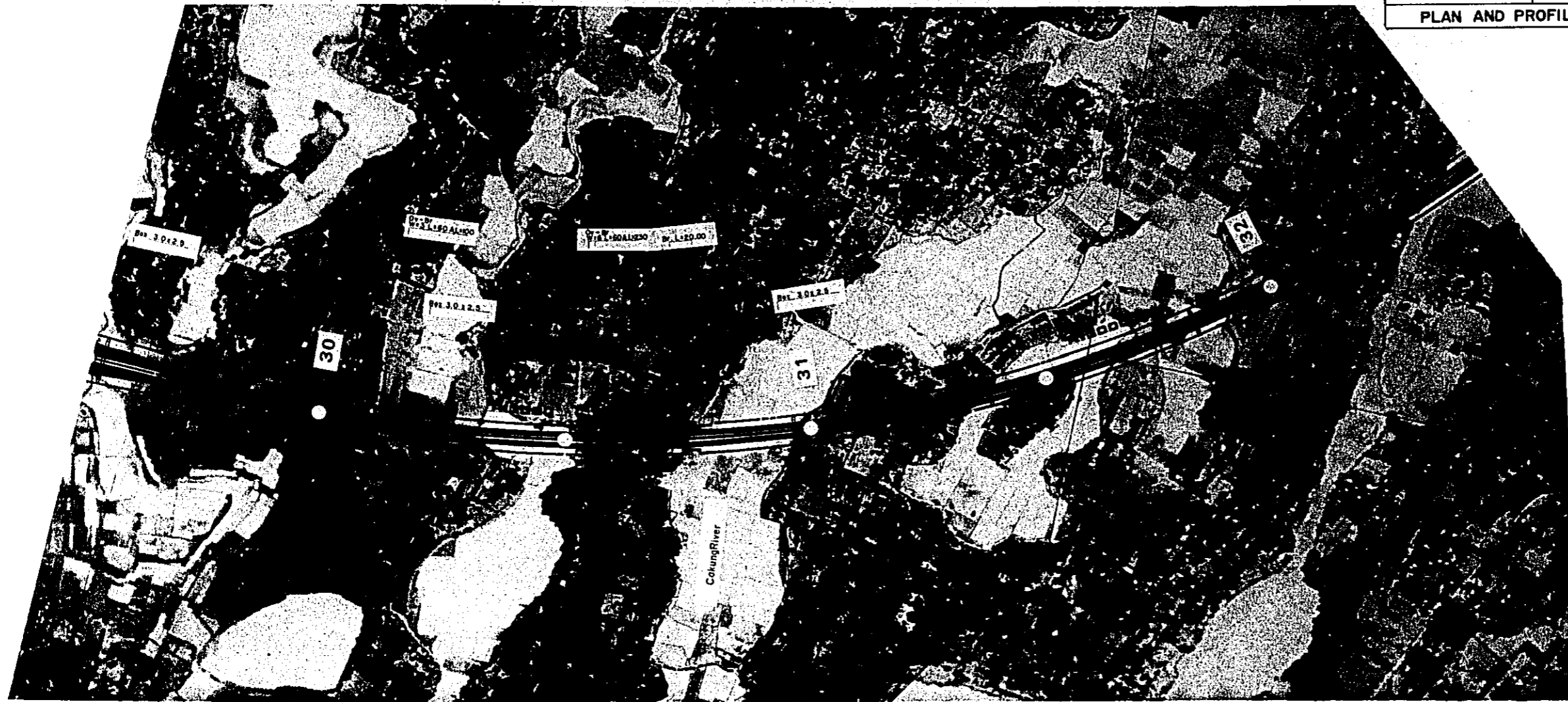


VERTICAL ALIGNMENT

HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

- 1.0% GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- GRADE SEPARATION STRUCTURE
- GRADE SEPARATION STRUCTURE
- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- HIGH WATER LEVEL

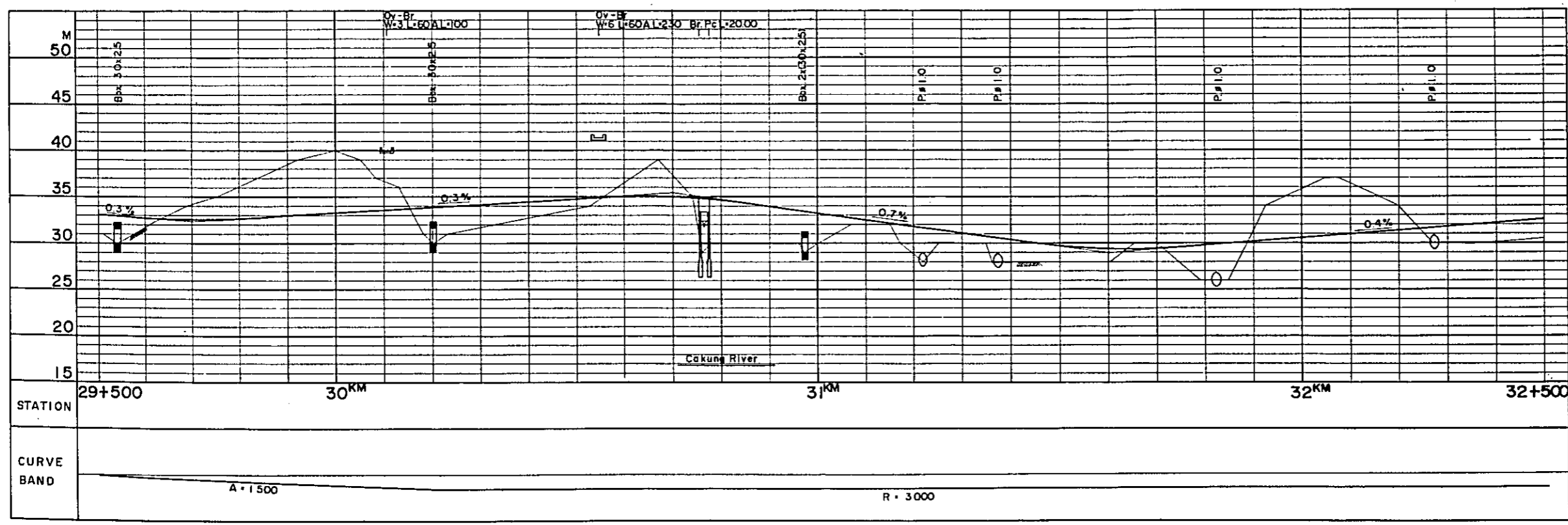
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			14	21
PLAN AND PROFILE (COLLECTING SYSTEM FLAT OR ZONE) SCALE : H : 10.000 V : 500				



LEGEND

HORIZONTAL ALIGNMENT
SCALE 1 : 10 000

- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- ==== CROSS ROAD AND FRONTAGE ROAD
- +— GRADE SEPARATION (CROSS ROAD-OVERPASS)
- +— GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- +— PEDESTRIAN OVERPASS
- +— CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE

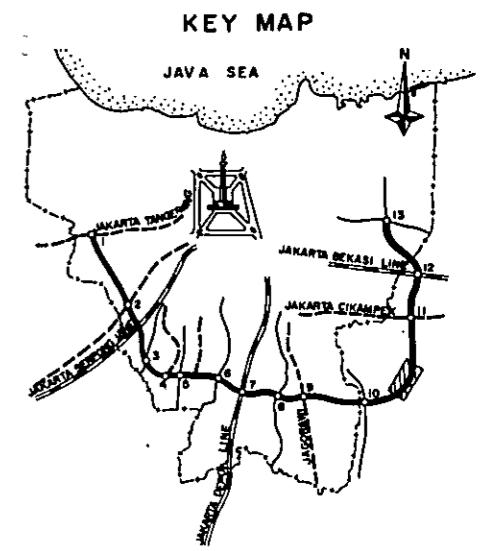
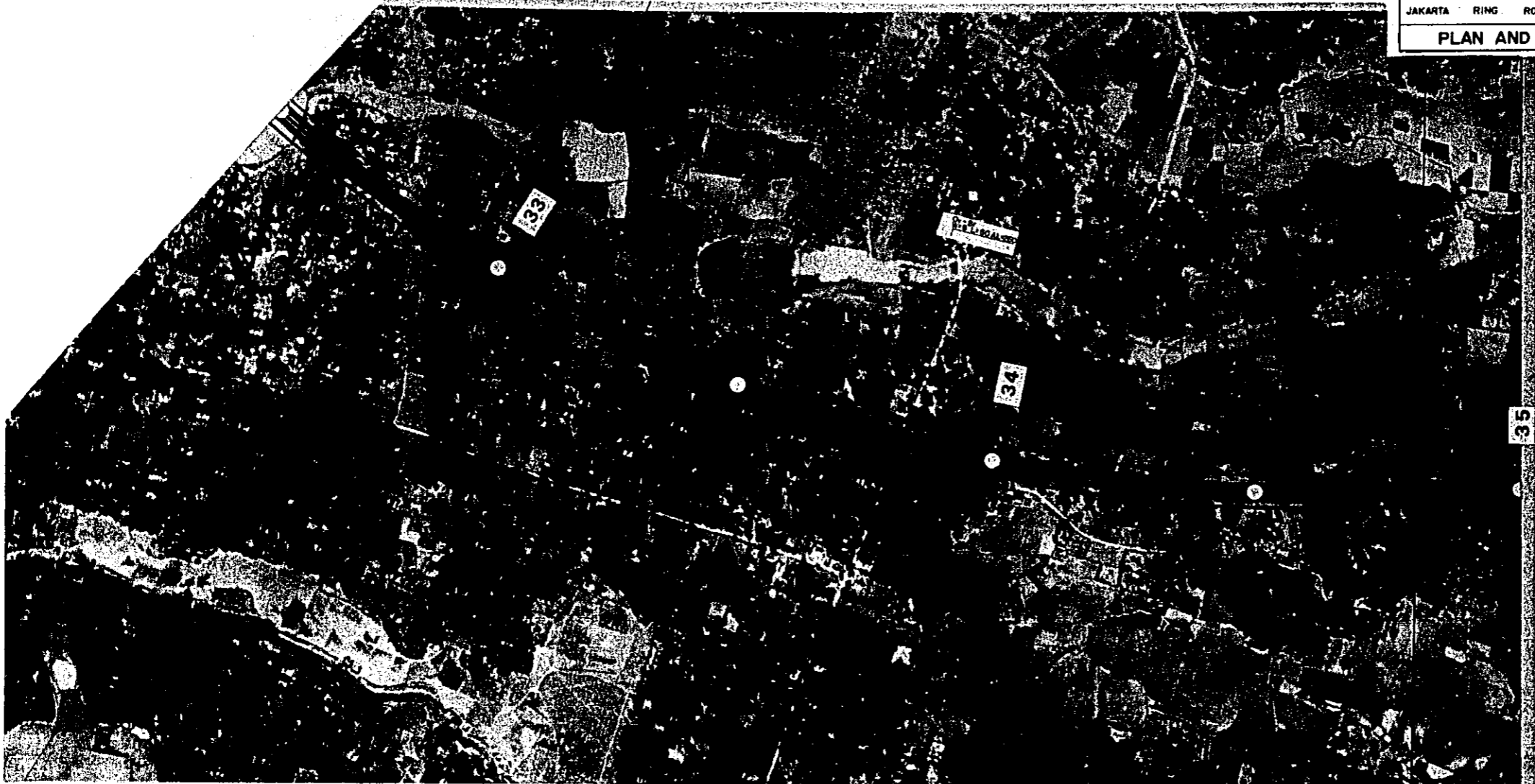


VERTICAL ALIGNMENT

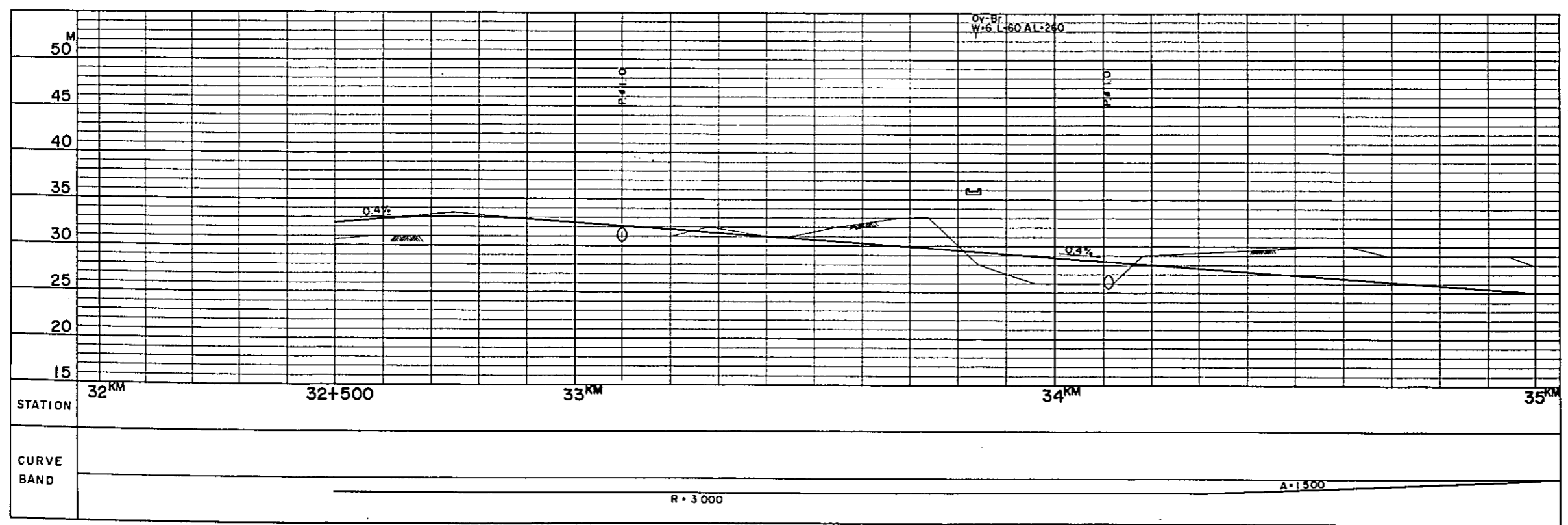
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

- GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- +— GRADE SEPARATION STRUCTURE
- +— GRADE SEPARATION STRUCTURE
- +— PEDESTRIAN OVERPASS
- +— BOX CULVERT
- +— PIPE CULVERT
- +— HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			15	21
PLAN AND PROFILE (COLLECTING SYSTEM)			SCALE : H : 10,000 V : 500	



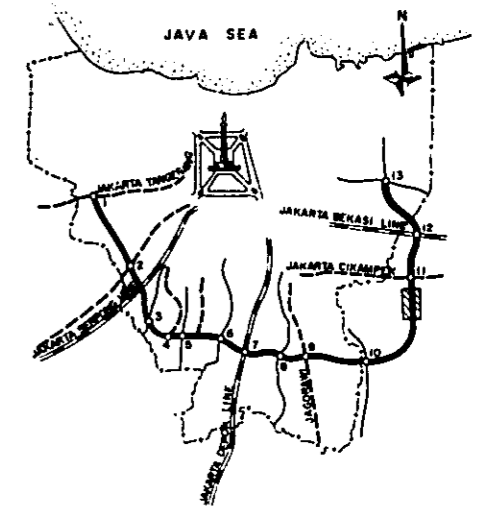
- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - === CROSS ROAD AND FRONTAGE ROAD
 - ⊗ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⊘ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⊕ PEDESTRIAN OVERPASS
 - ⊖ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- +10% GRADIENT OF RECOMMENDED ALIGNMENT
 - ~ EXISTING GROUND
 - ⌈ GRADE SEPARATION STRUCTURE
 - ⌋ GRADE SEPARATION STRUCTURE
 - ⊕ PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - ⬆ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			16	21
PLAN AND PROFILE (COLLECTING SYSTEM FLAT OR ZONE)			SCALE : H = 10,000 V = 500	

KEY MAP



LEGEND

HORIZONTAL ALIGNMENT

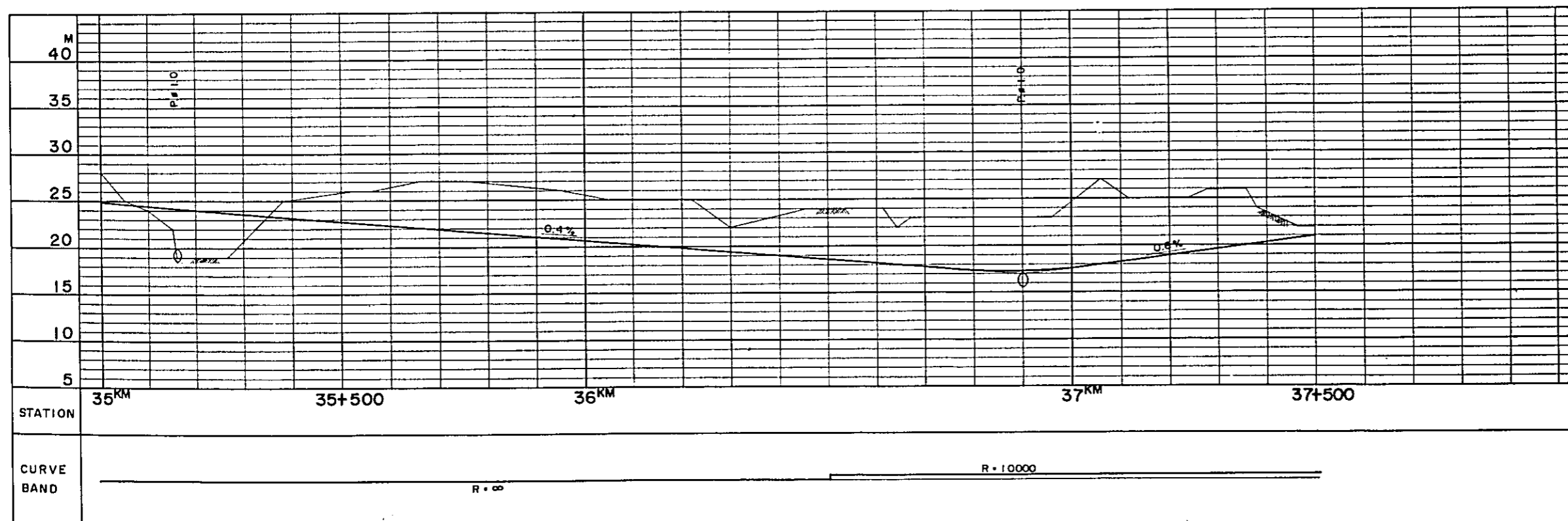
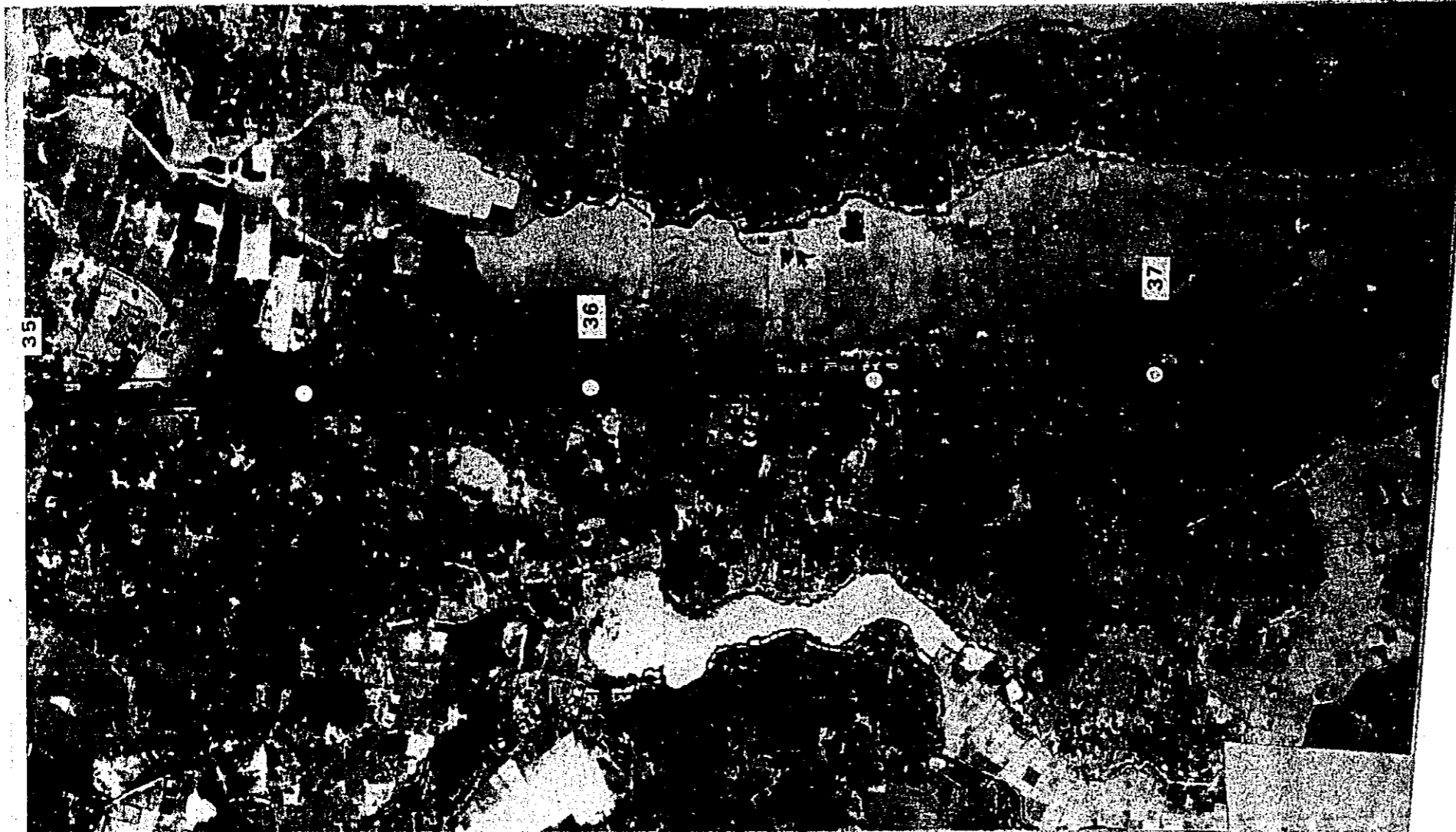
SCALE 1 : 10 000

- CENTER LINE OF RECOMMENDED ALIGNMENT
- BOUNDARY OF RIGHT OF WAY
- CROSS ROAD AND FRONTAGE ROAD
- GRADE SEPARATION (CROSS ROAD-OVERPASS)
- GRADE SEPARATION (CROSS ROAD-UNDERPASS)
- PEDESTRIAN OVERPASS
- CULVERT
- R RADIUS
- A PARAMETER OF CLOTHOID CURVE

VERTICAL ALIGNMENT

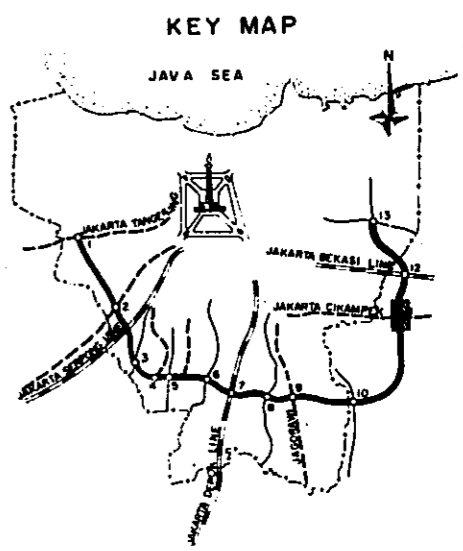
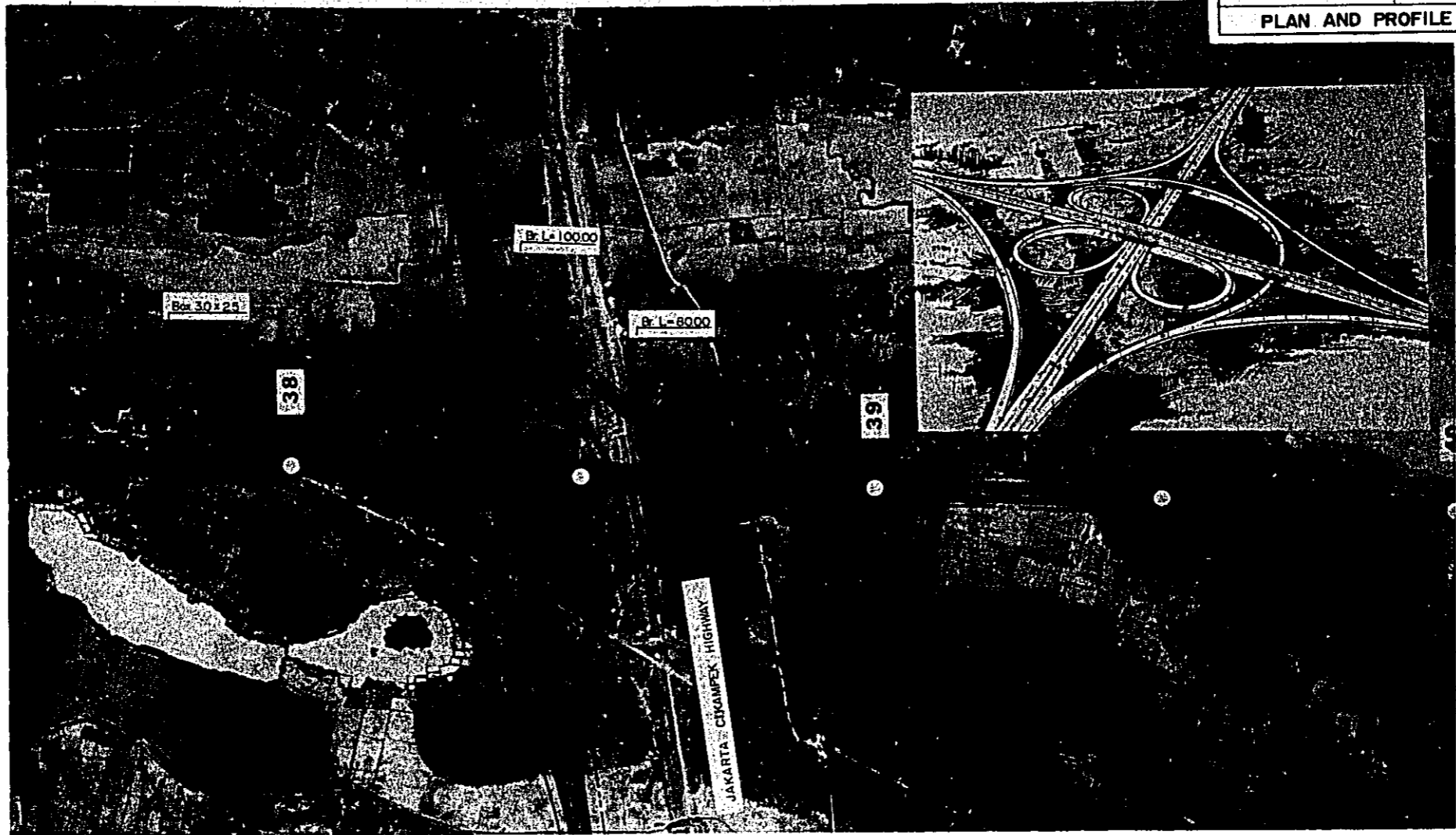
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500

- GRADIENT OF RECOMMENDED ALIGNMENT
- EXISTING GROUND
- GRADE SEPARATION STRUCTURE
- GRADE SEPARATION STRUCTURE
- PEDESTRIAN OVERPASS
- BOX CULVERT
- PIPE CULVERT
- HIGH WATER LEVEL

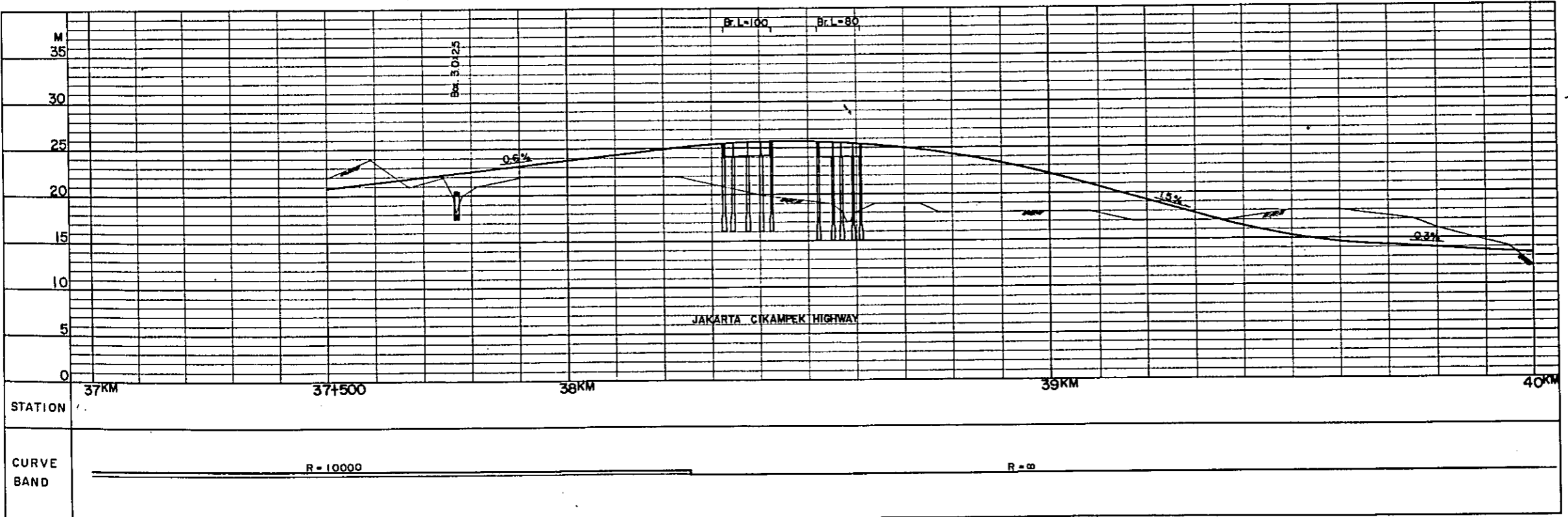


PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			17	21

PLAN AND PROFILE (COLLECTING SYSTEM) SCALE: H = 10000, V = 500
FLAT

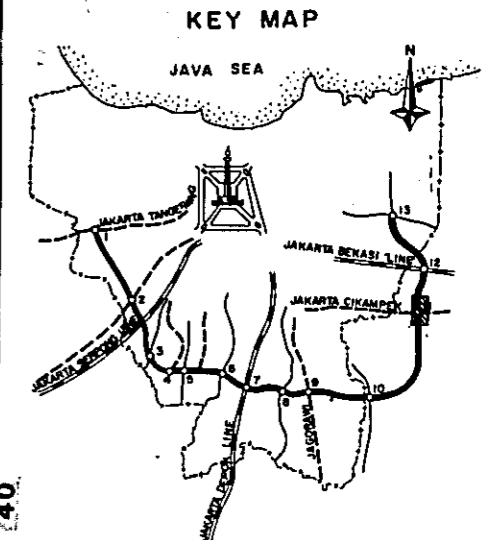


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - - - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - (—) GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - (—) GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - +— PEDESTRIAN OVERPASS
 - +— CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE

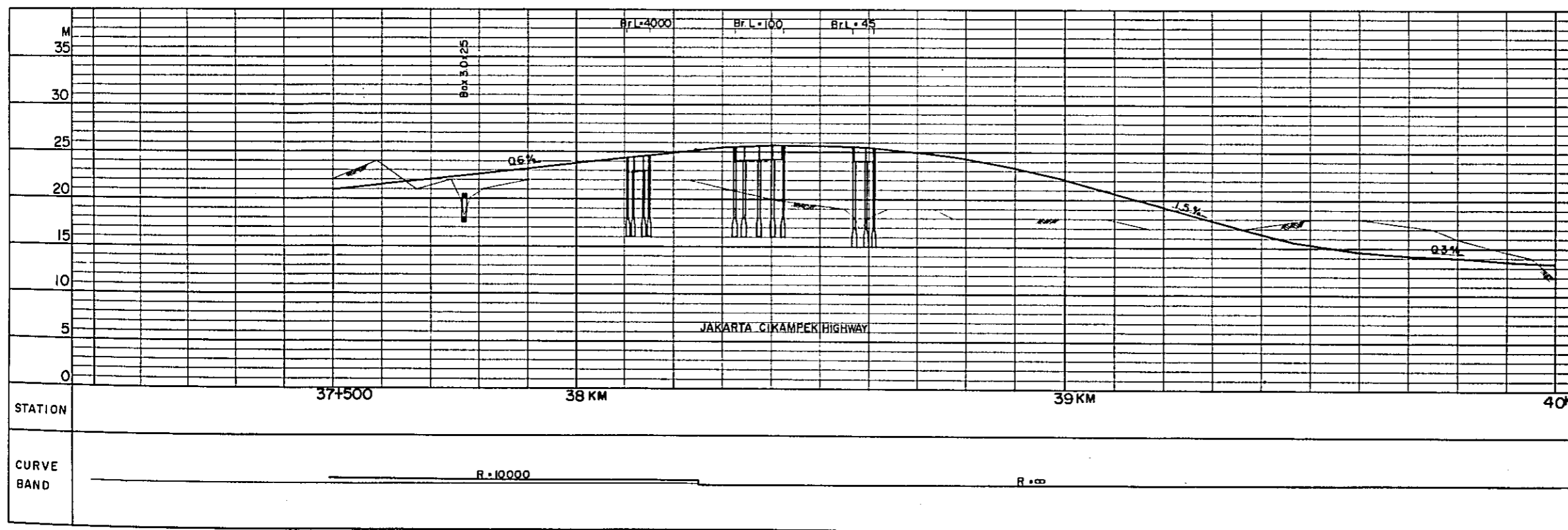


- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- +1.0% GRADIENT OF RECOMMENDED ALIGNMENT
 - - - EXISTING GROUND
 - (—) GRADE SEPARATION STRUCTURE
 - (—) GRADE SEPARATION STRUCTURE
 - +— PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - +— HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			18	21
PLAN AND PROFILE (COLLECTING SYSTEM ZONE)			SCALE	H = 10000 V = 500

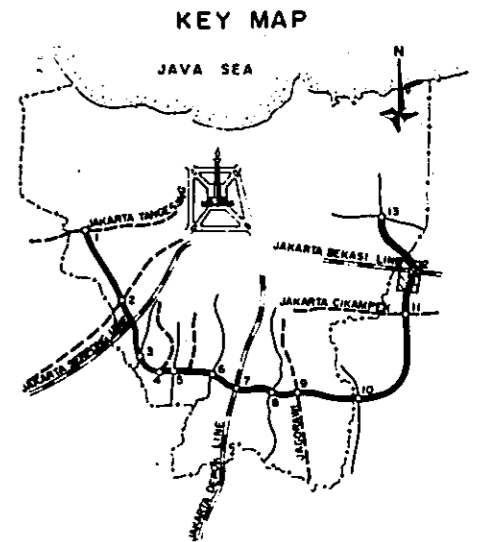


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - CROSS ROAD AND FRONTAGE ROAD
 - GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - PEDESTRIAN OVERPASS
 - CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE



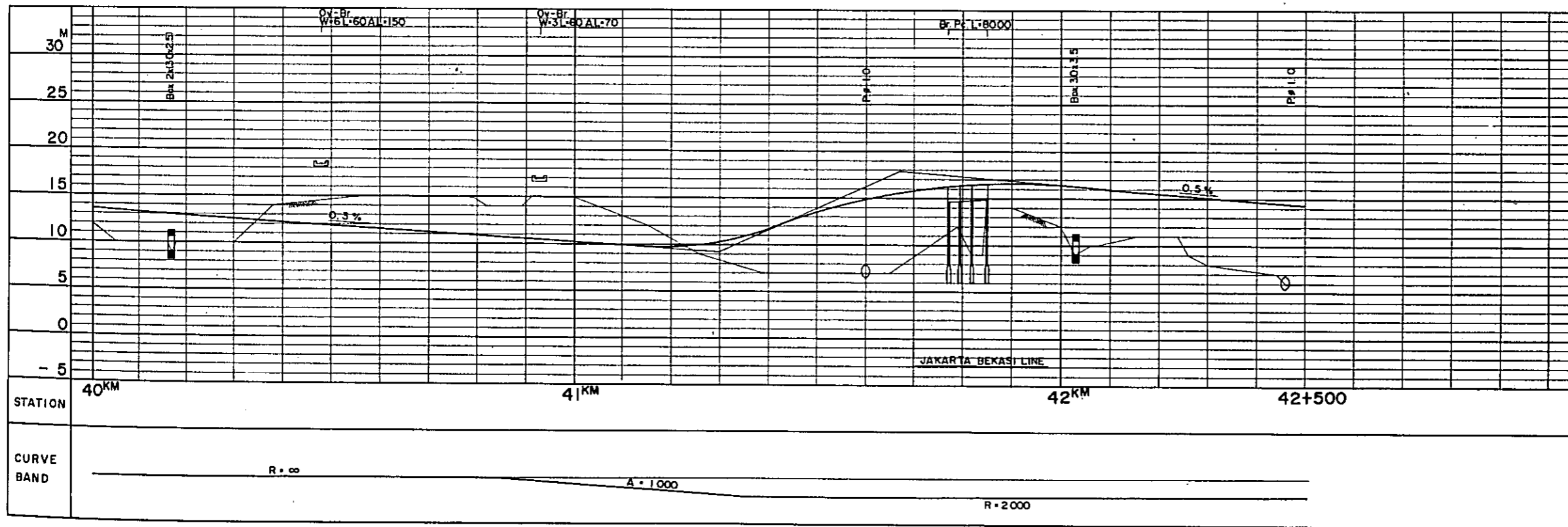
- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			19	21
PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H : 10.000 FLAT OR ZONE V : 500				



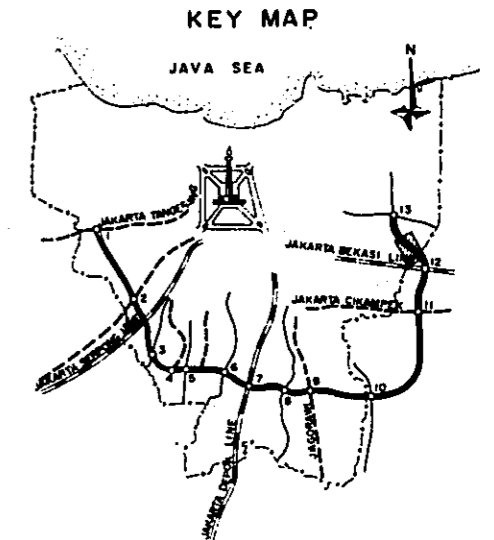
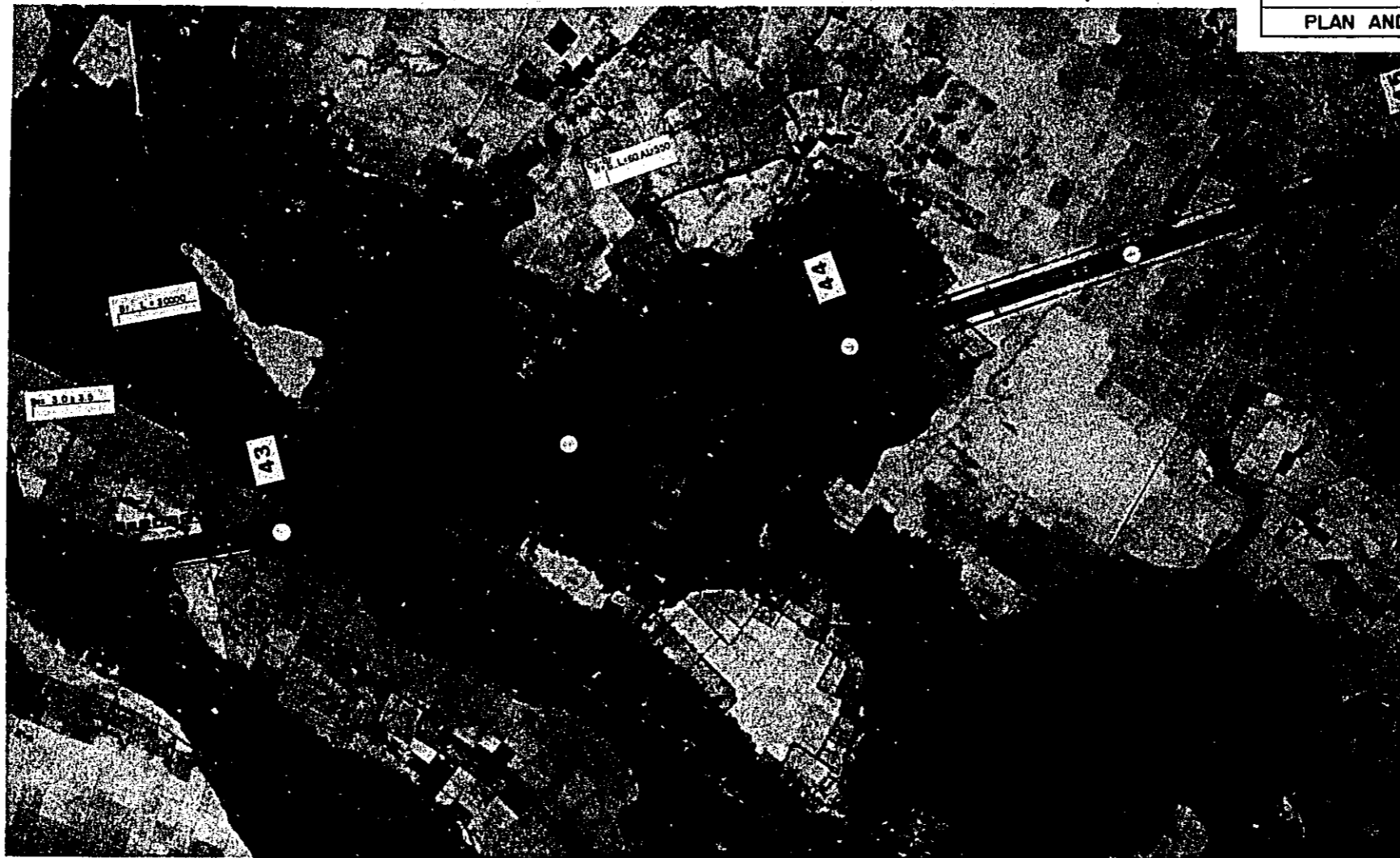
LEGEND

- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - - - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - ⊥ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⊥ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⊥ PEDESTRIAN OVERPASS
 - ⊥ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE

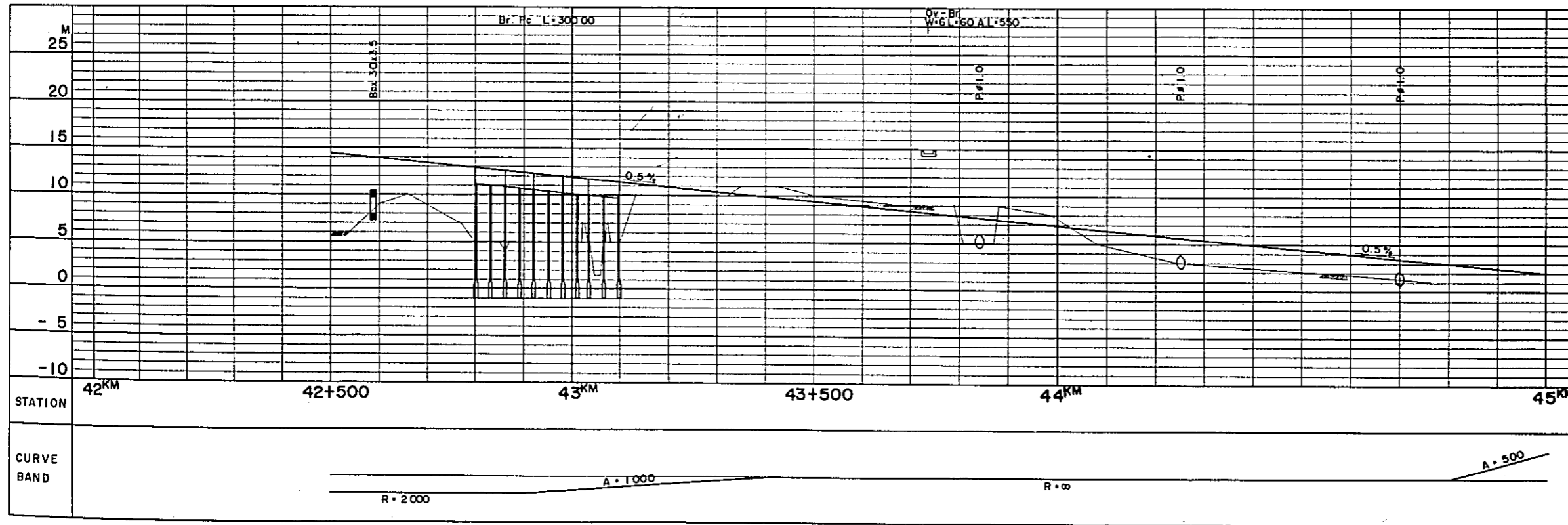


- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- GRADIENT OF RECOMMENDED ALIGNMENT
 - - - EXISTING GROUND
 - ⊥ GRADE SEPARATION STRUCTURE
 - ⊥ GRADE SEPARATION STRUCTURE
 - ⊥ PEDESTRIAN OVERPASS
 - ⊥ BOX CULVERT
 - ⊥ PIPE CULVERT
 - ⊥ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			20	21
PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H : 10,000 FLAT OR ZONE V : 500				

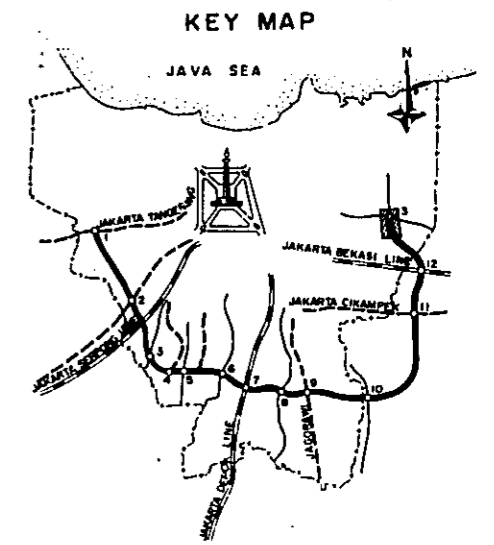


- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - ==== CROSS ROAD AND FRONTAGE ROAD
 - ⌈⌋ GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - ⌋⌈ GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - ⊥ PEDESTRIAN OVERPASS
 - ⊥ CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE

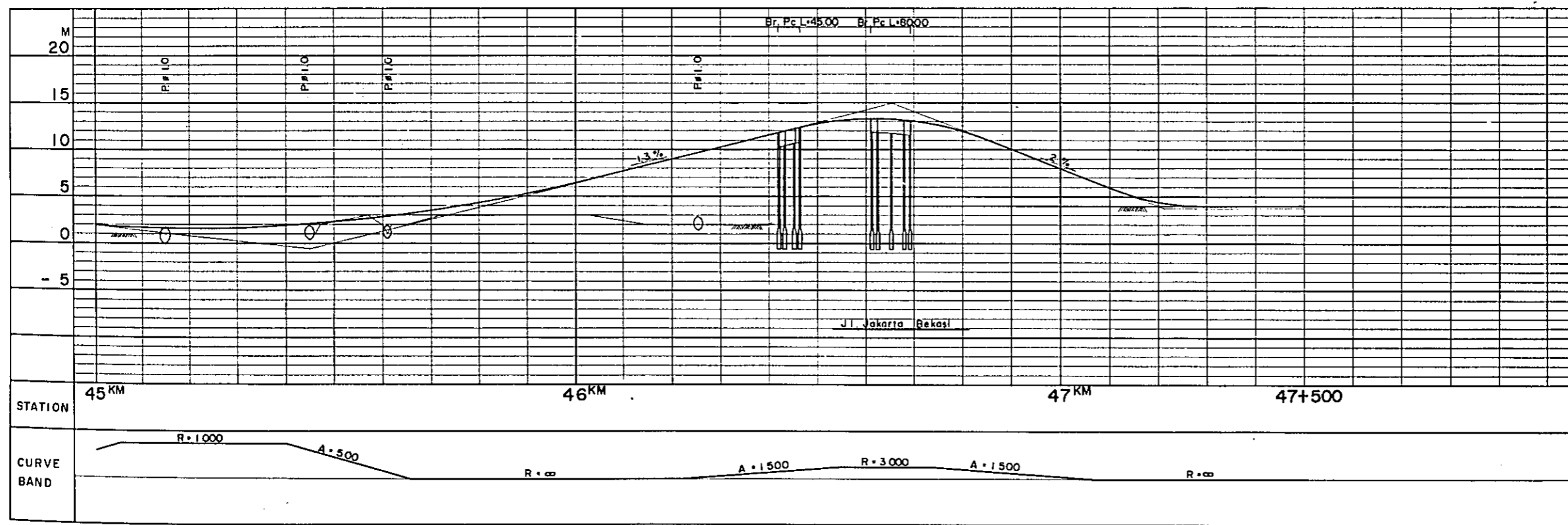


- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ±10% GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - ⌈⌋ GRADE SEPARATION STRUCTURE
 - ⌋⌈ GRADE SEPARATION STRUCTURE
 - ⊥ PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - ⬆ HIGH WATER LEVEL

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA RING ROAD			21	21
PLAN AND PROFILE (COLLECTING SYSTEM) SCALE : H : 10.000 FLAT OR ZONE V : 500				



- LEGEND**
- HORIZONTAL ALIGNMENT**
SCALE 1 : 10 000
- CENTER LINE OF RECOMMENDED ALIGNMENT
 - BOUNDARY OF RIGHT OF WAY
 - CROSS ROAD AND FRONTAGE ROAD
 - GRADE SEPARATION (CROSS ROAD-OVERPASS)
 - GRADE SEPARATION (CROSS ROAD-UNDERPASS)
 - PEDESTRIAN OVERPASS
 - CULVERT
 - R RADIUS
 - A PARAMETER OF CLOTHOID CURVE

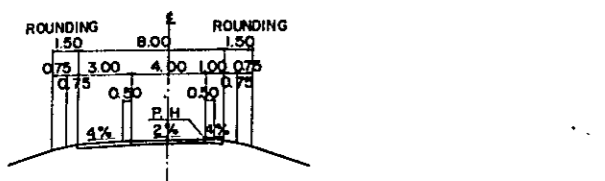
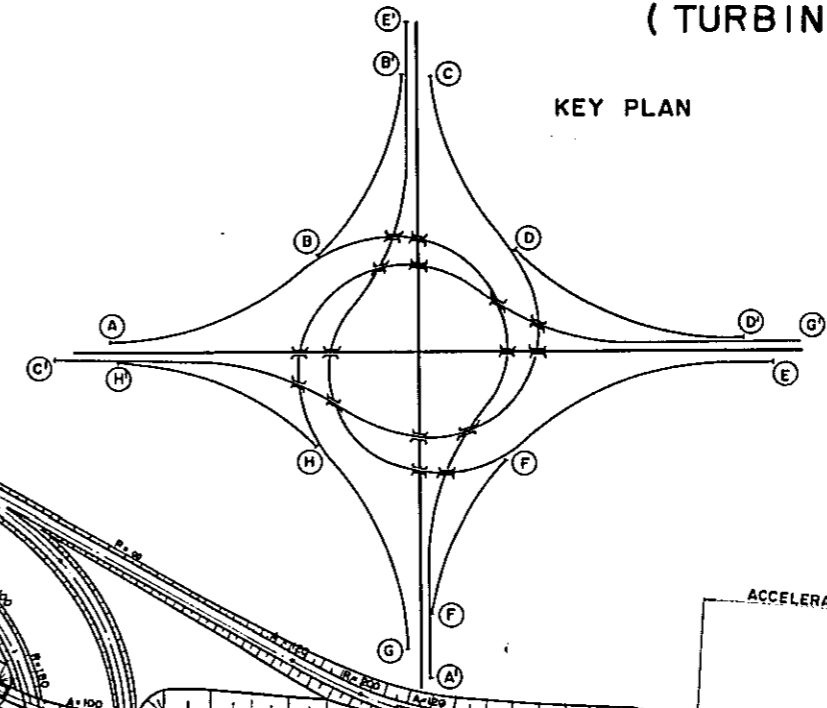


- VERTICAL ALIGNMENT**
HORIZONTAL SCALE 1 : 10 000
VERTICAL SCALE 1 : 500
- ± 1.0 % GRADIENT OF RECOMMENDED ALIGNMENT
 - EXISTING GROUND
 - GRADE SEPARATION STRUCTURE
 - GRADE SEPARATION STRUCTURE
 - PEDESTRIAN OVERPASS
 - BOX CULVERT
 - PIPE CULVERT
 - HIGH WATER LEVEL

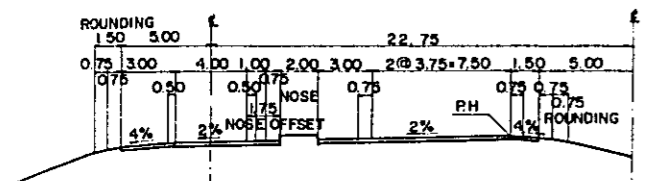
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA	RING ROAD		1	5

INTERCHANGE SCALE 1:5,000
(TURBINE TYPE)

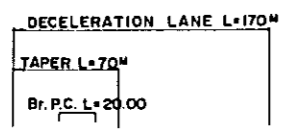
KEY PLAN



1-LANE ONE WAY S=1:400



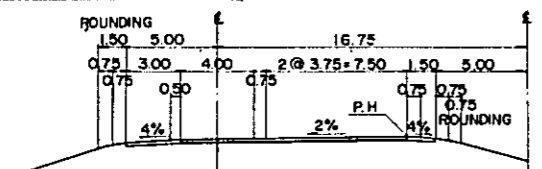
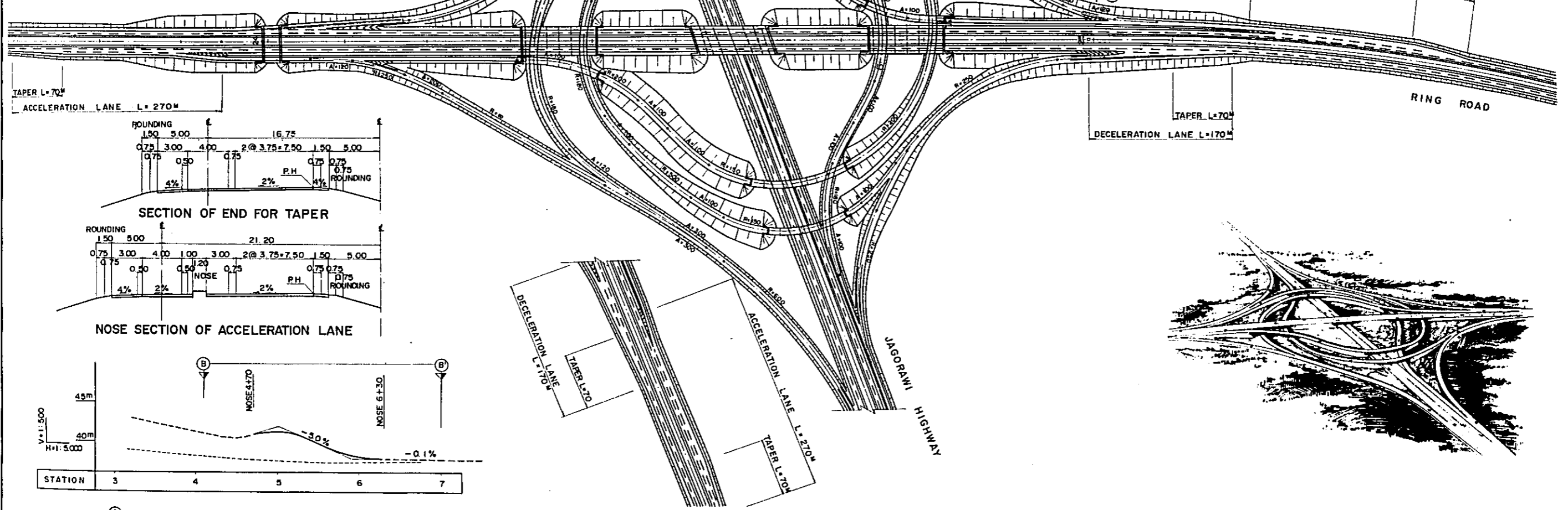
NOSE SECTION OF DECELERATION LANE



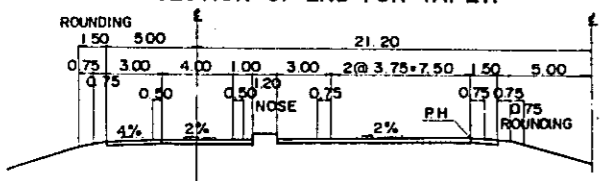
DECELERATION LANE L=170M

TAPER L=70M

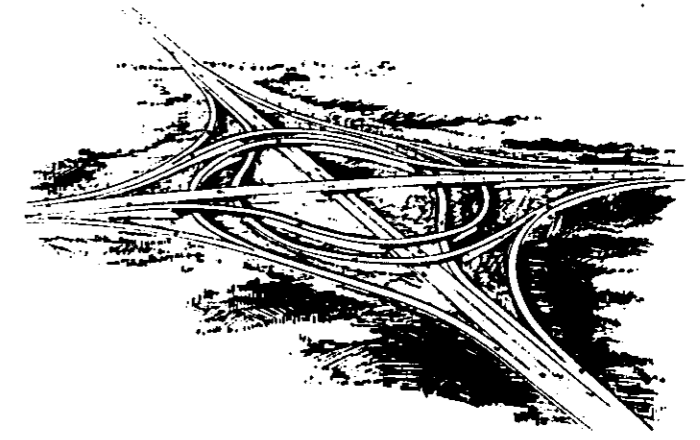
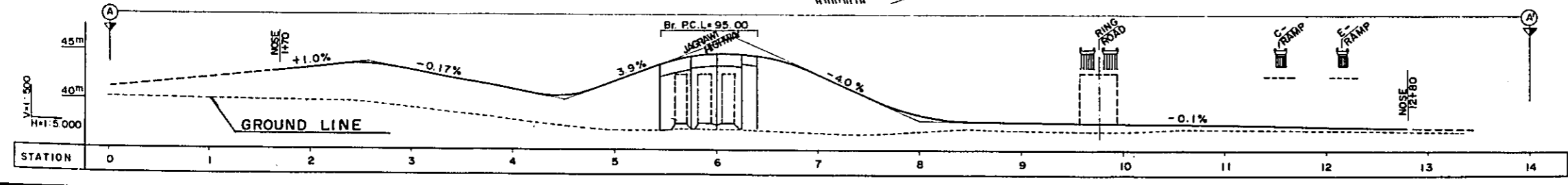
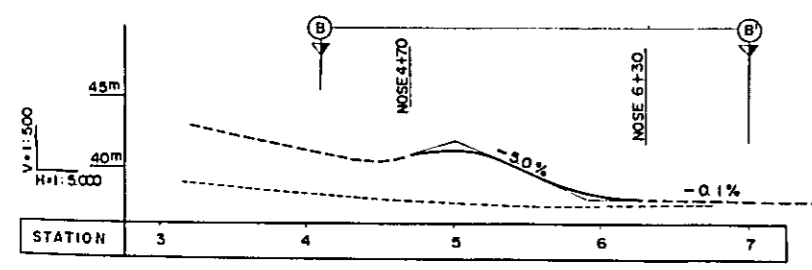
Br. P.C. L=20.00



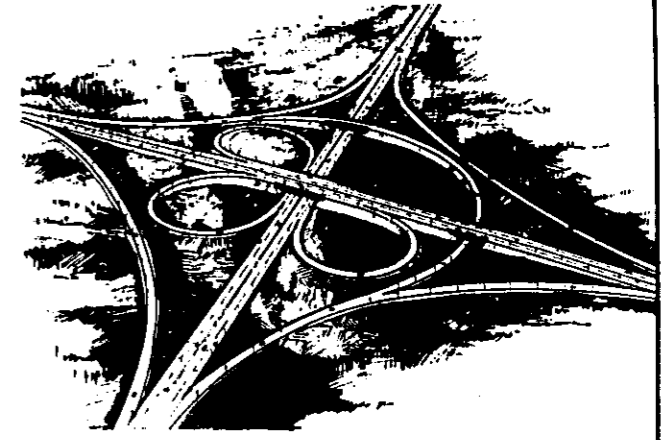
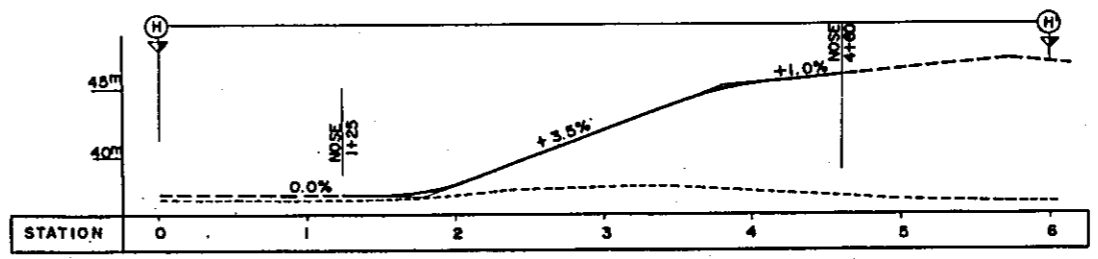
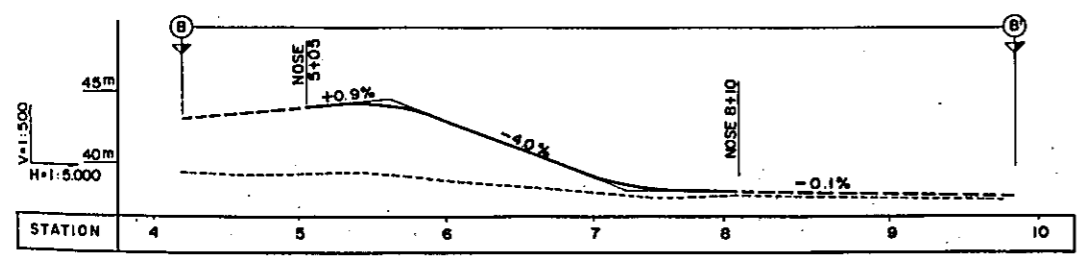
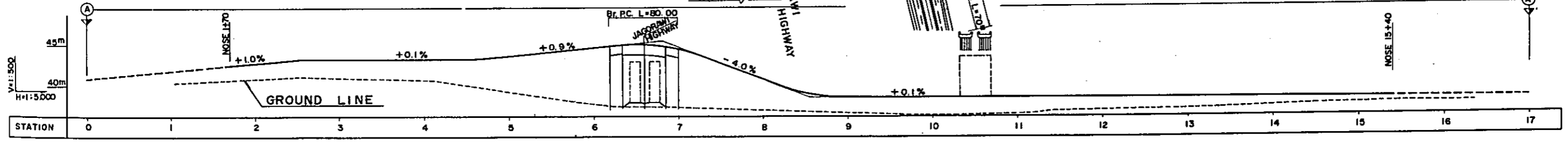
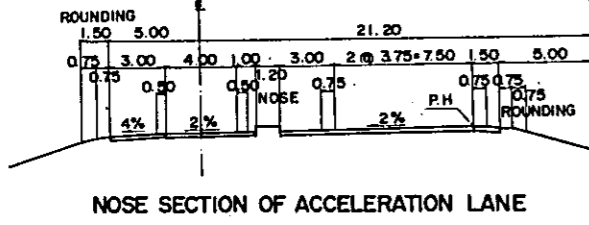
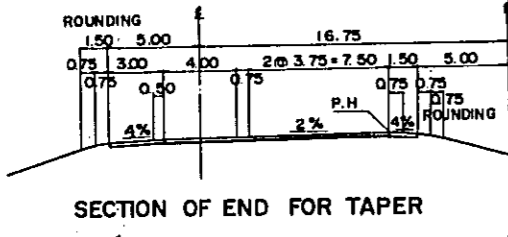
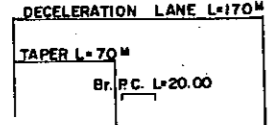
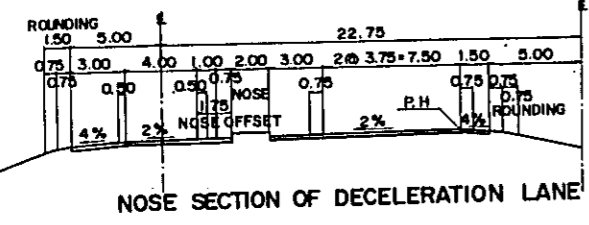
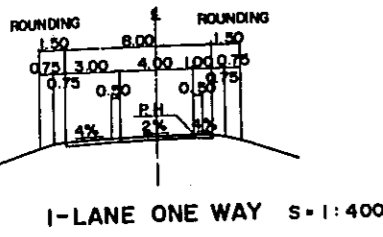
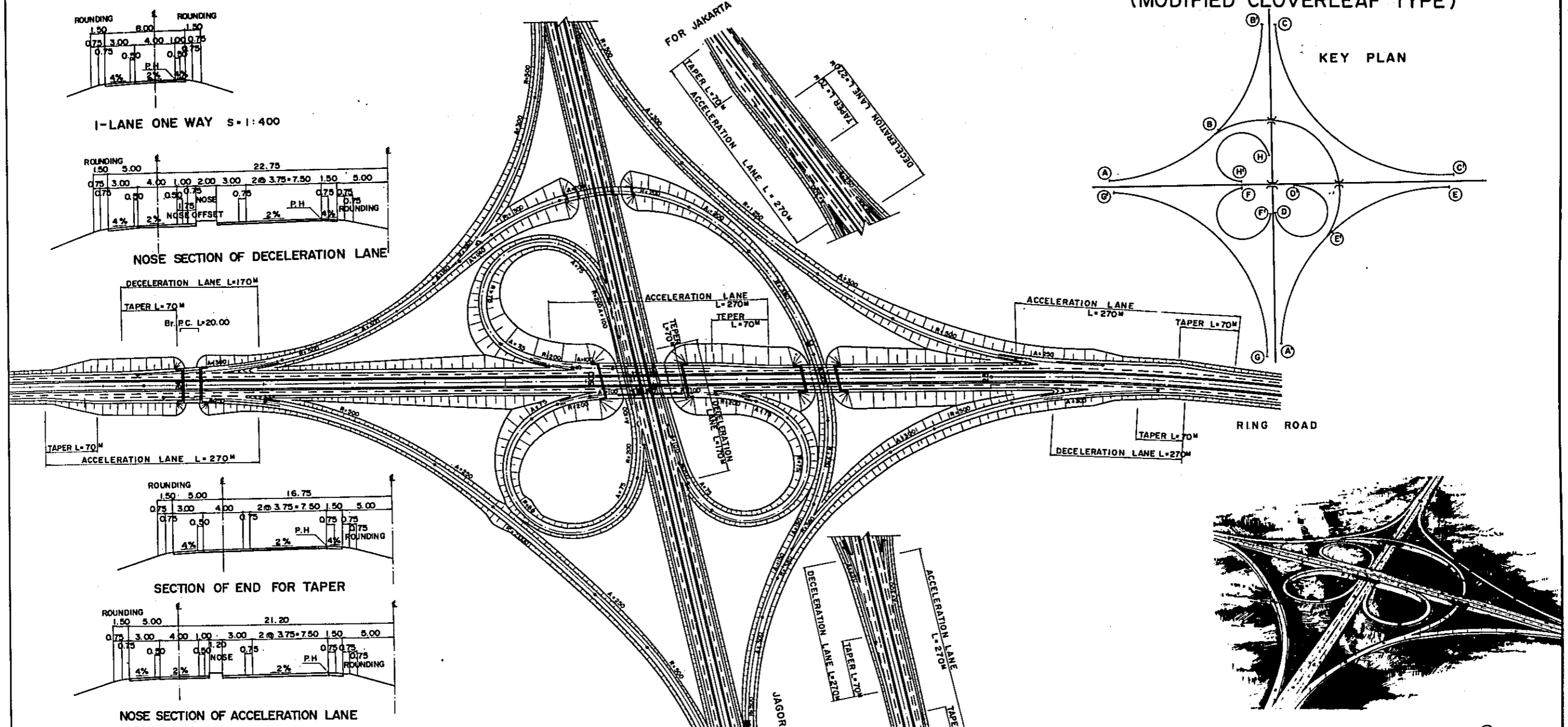
SECTION OF END FOR TAPER



NOSE SECTION OF ACCELERATION LANE



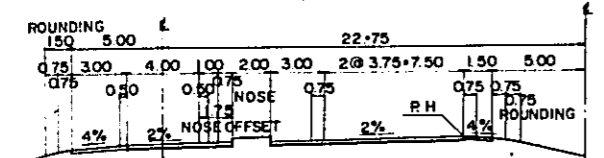
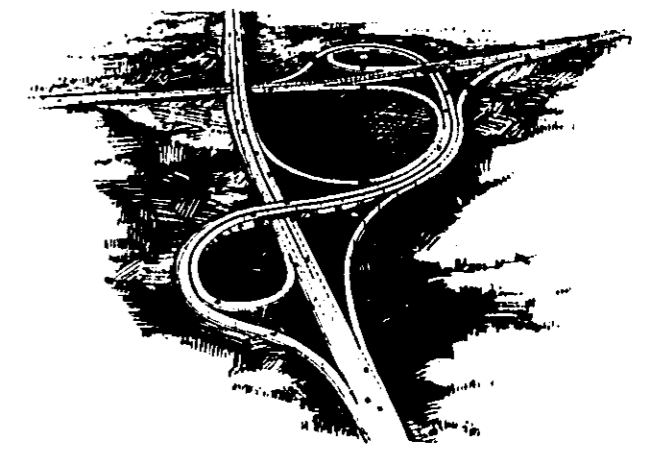
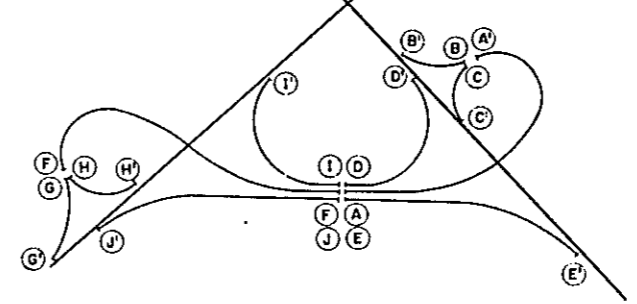
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			2	5
INTERCHANGE SCALE 1:5,000				
(MODIFIED CLOVERLEAF TYPE)				



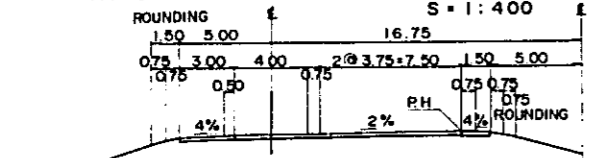
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			3	5

INTERCHANGE SCALE 1:5,000
(DOUBLE TRUMPET TYPE)

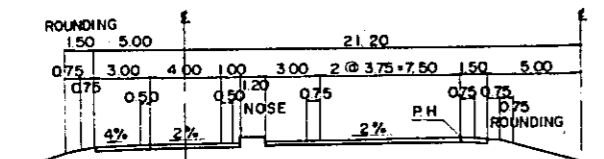
KEY PLAN



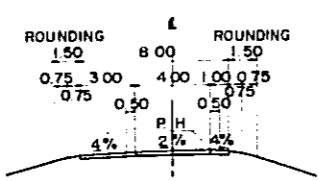
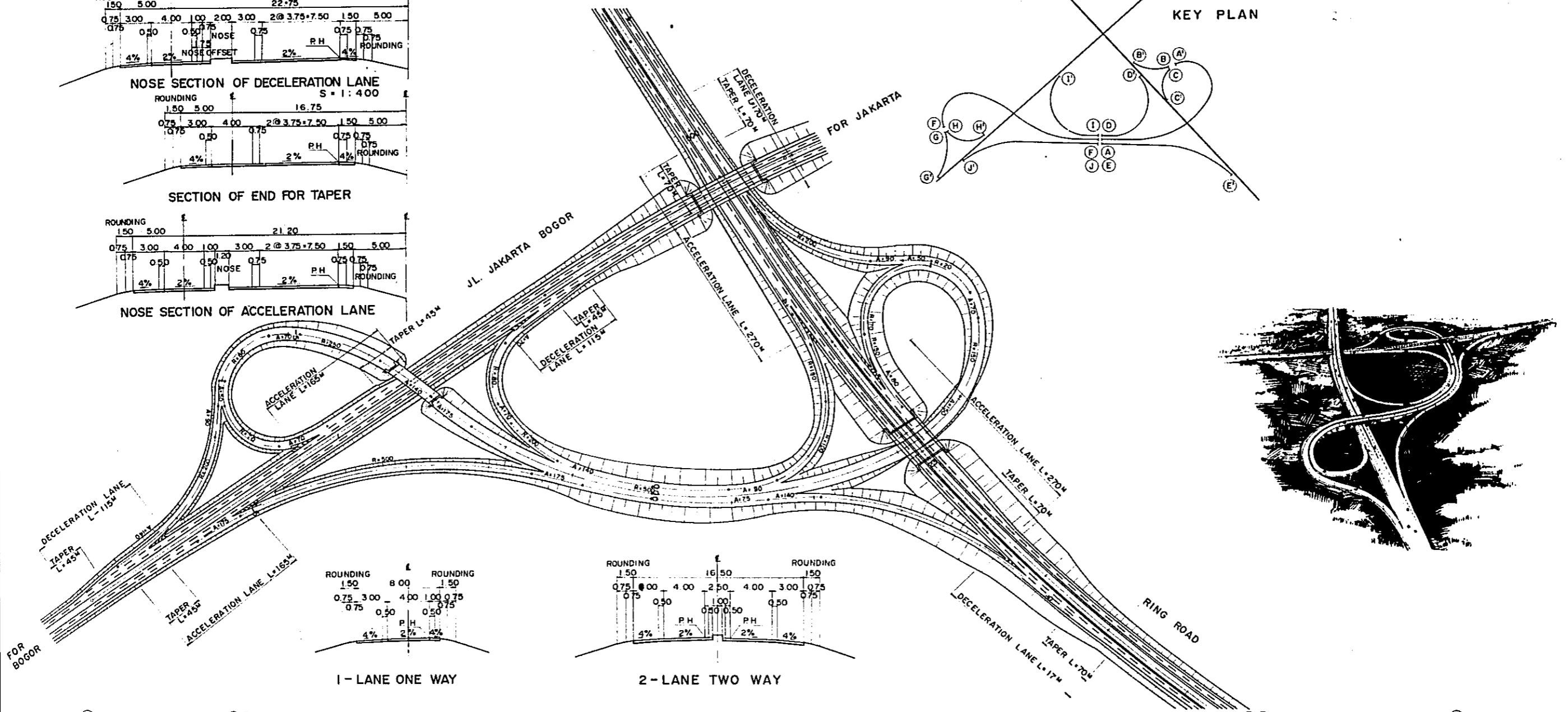
NOSE SECTION OF DECELERATION LANE



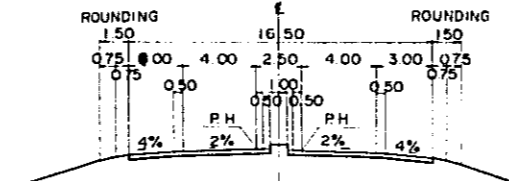
SECTION OF END FOR TAPER



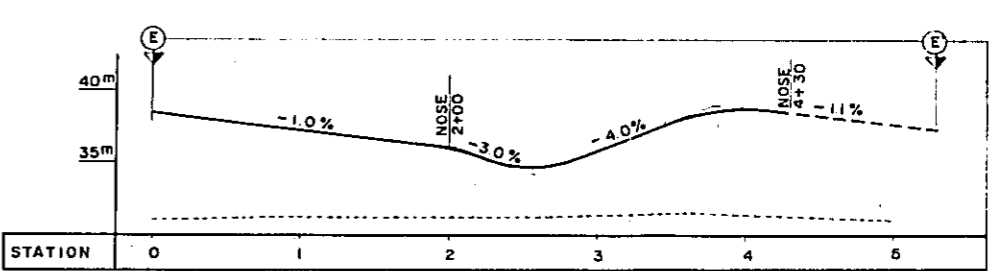
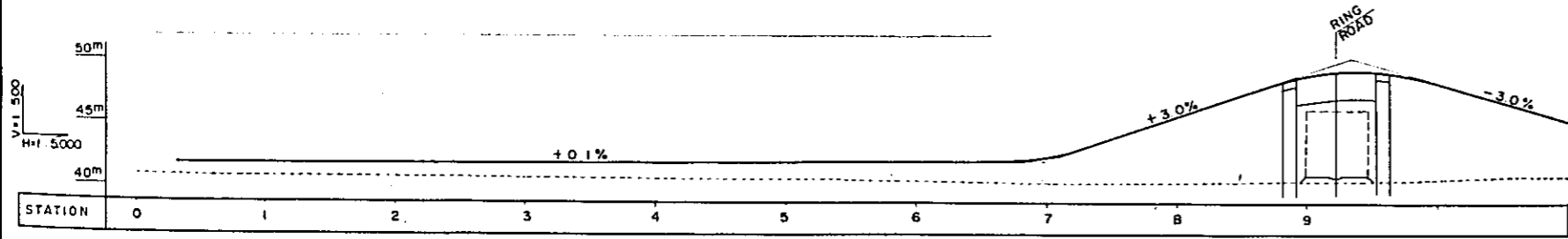
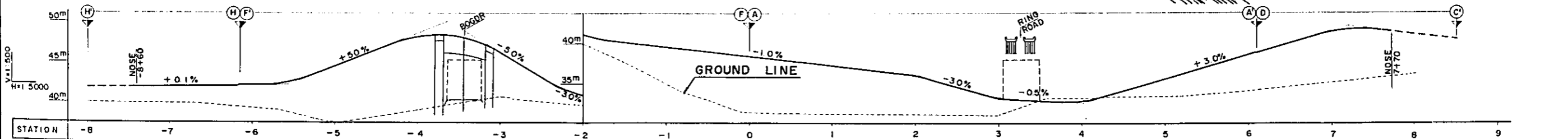
NOSE SECTION OF ACCELERATION LANE



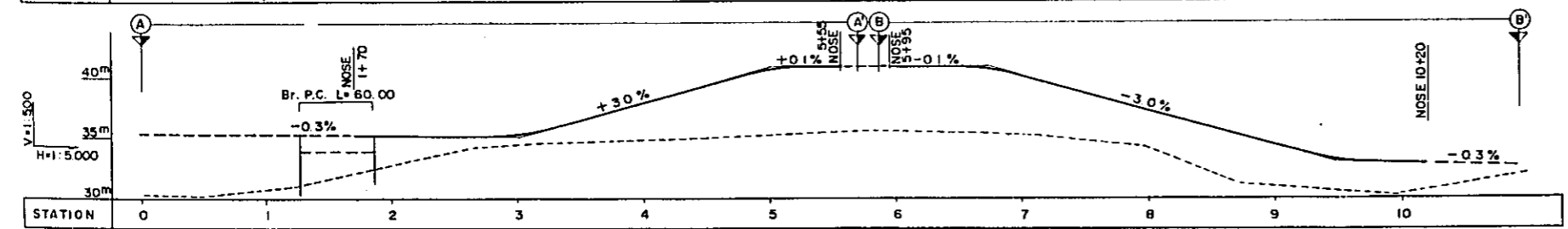
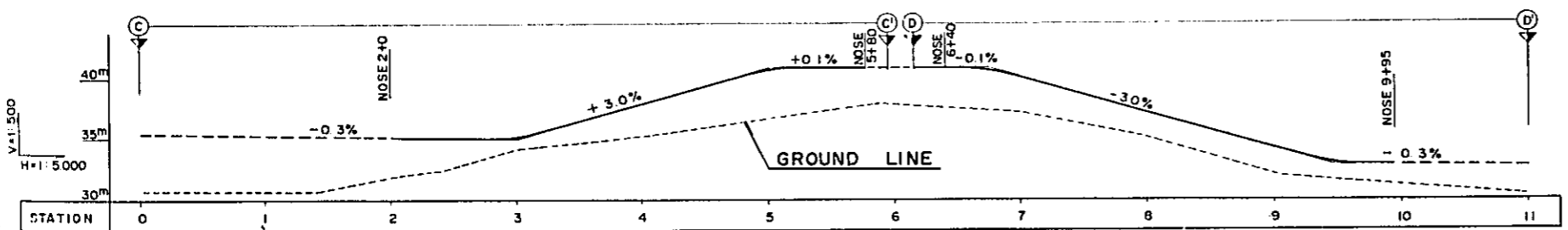
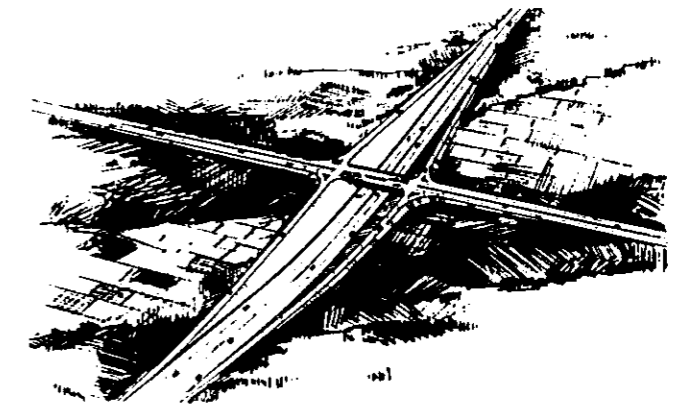
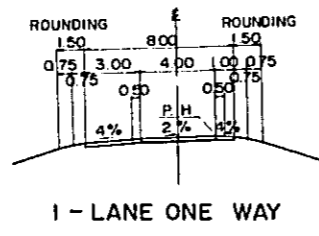
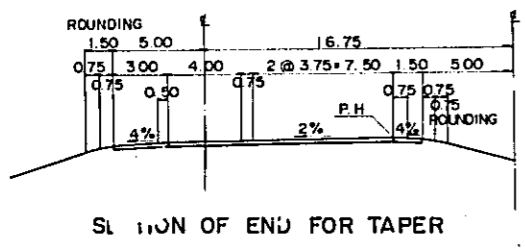
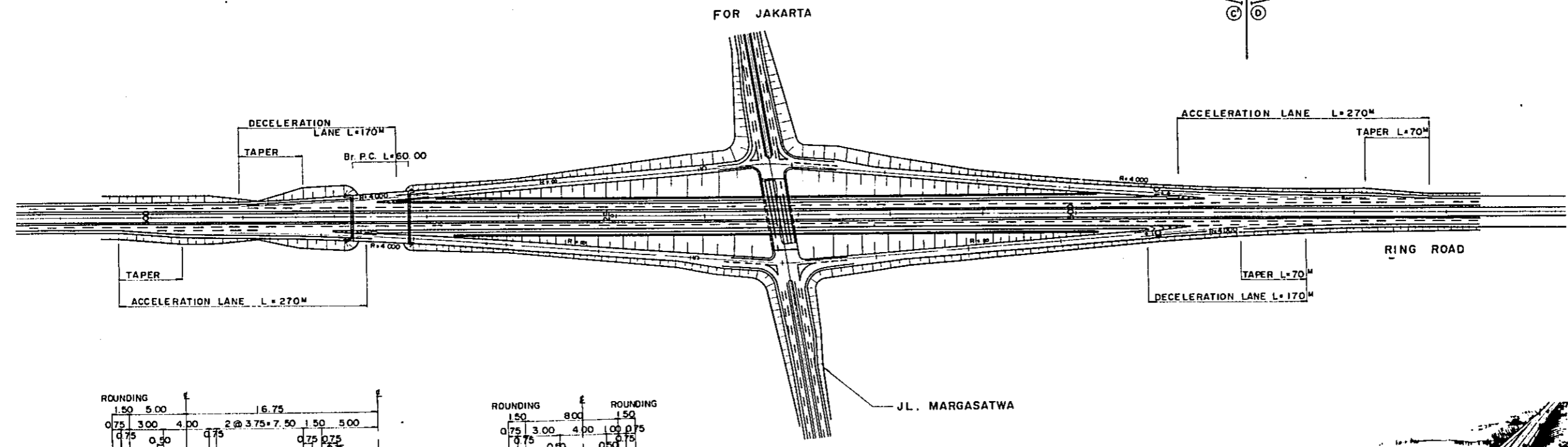
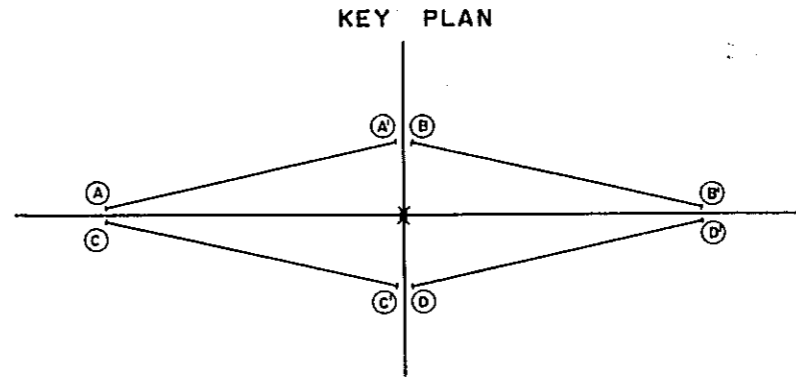
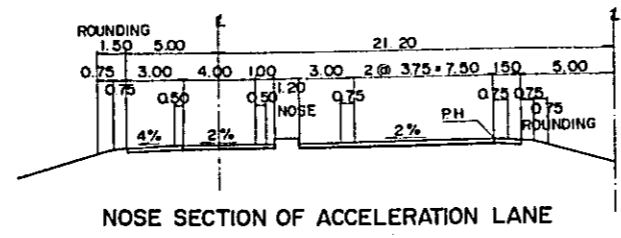
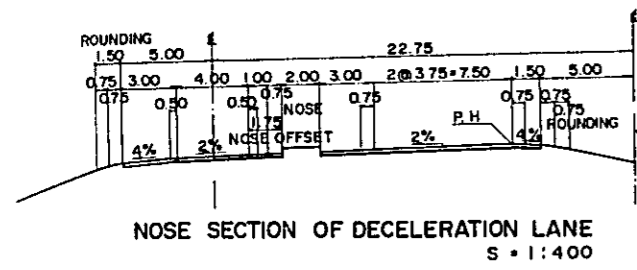
1-LANE ONE WAY



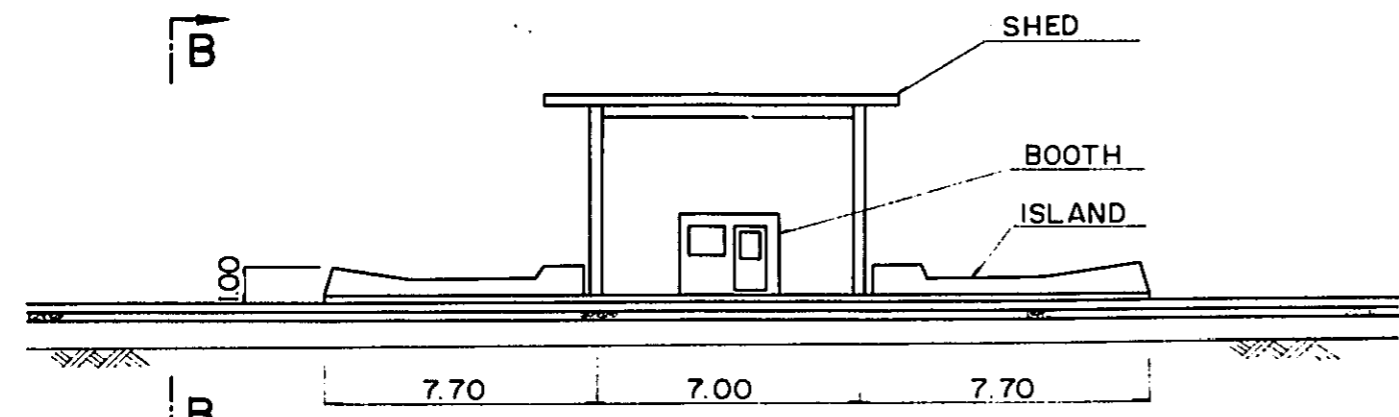
2-LANE TWO WAY



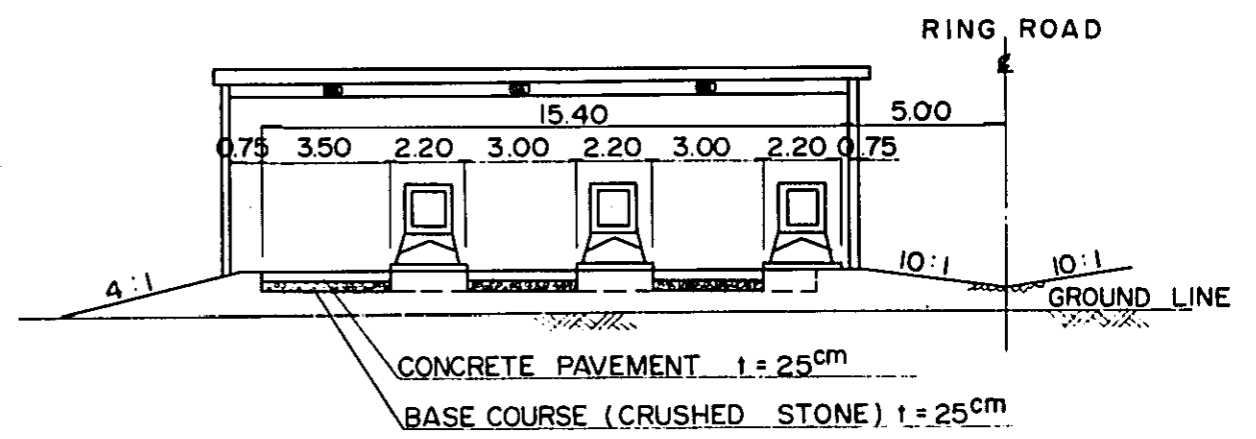
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			4	5
INTERCHANGE SCALE 1:5.000 (DIAMOND TYPE)				



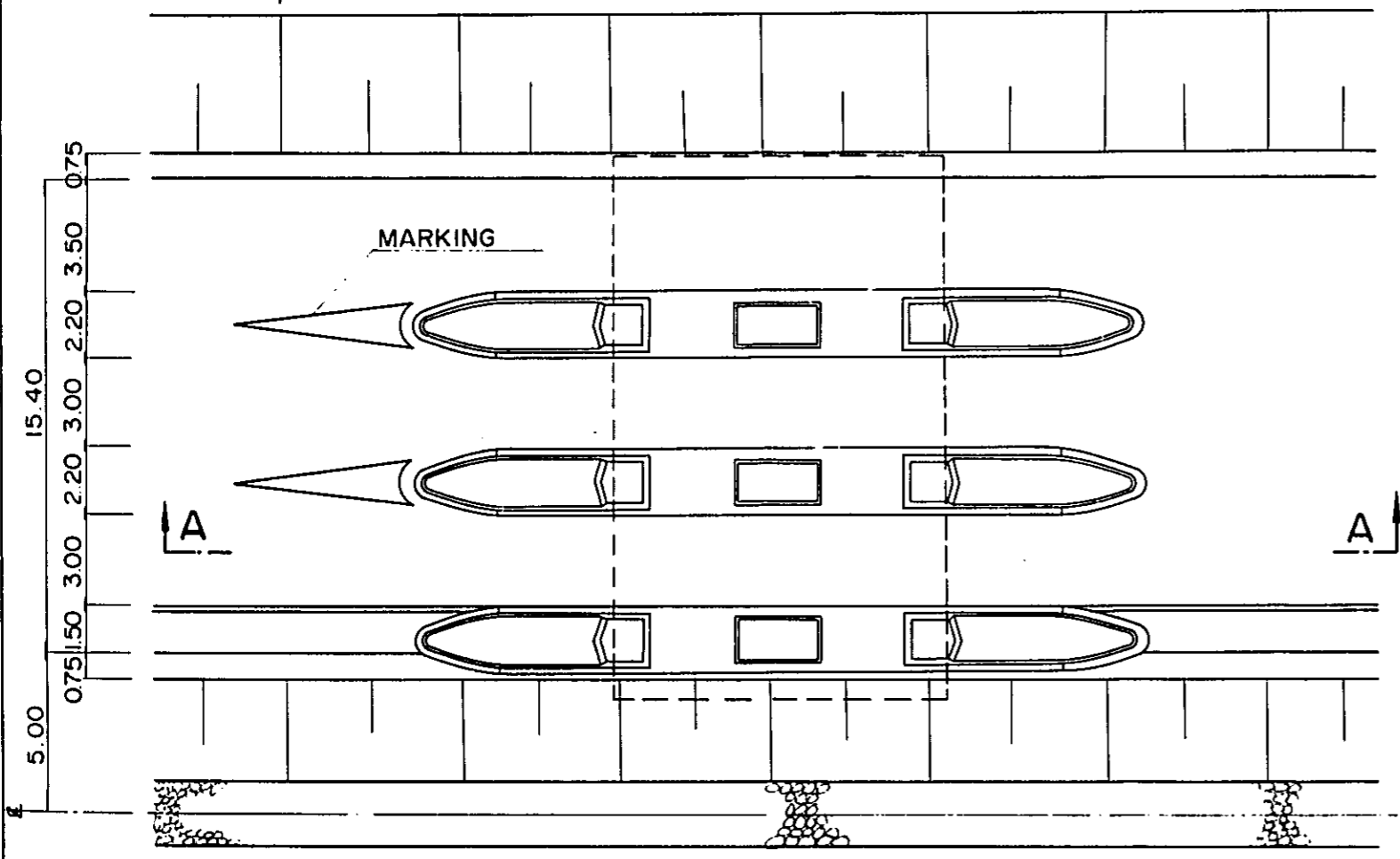
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			5	5
TOLL GATE			SCALE 1 : 200	



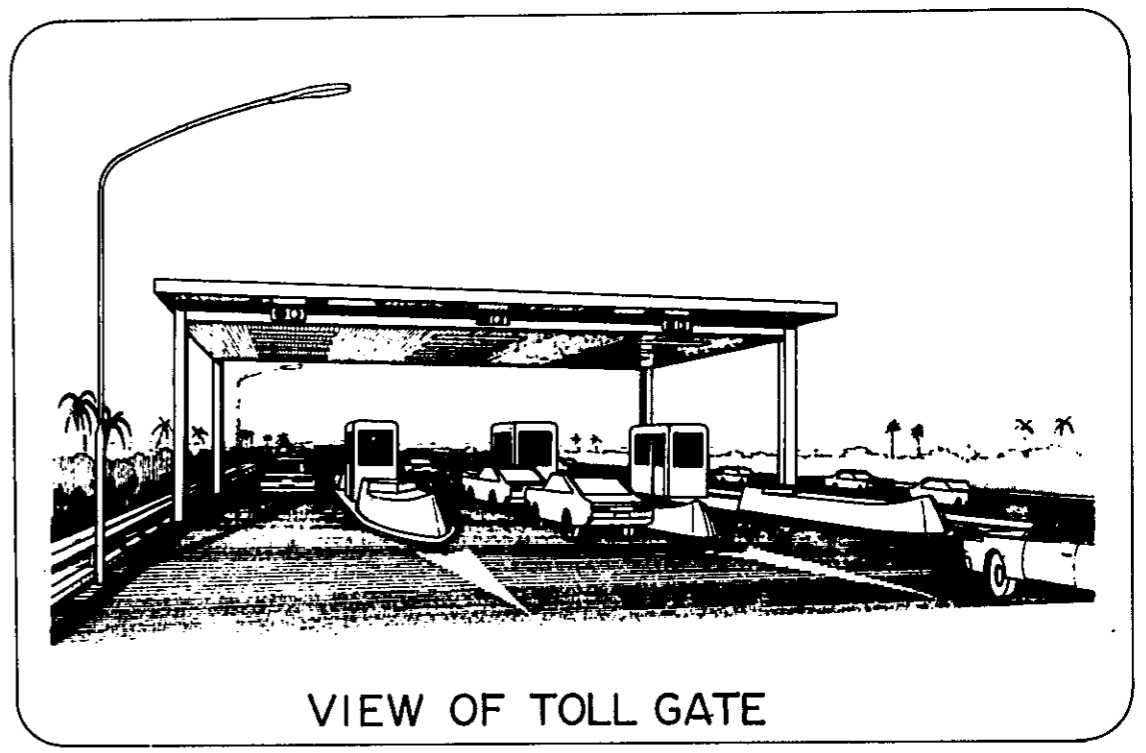
SECTION A-A S = 1:200



SECTION B-B S = 1:200



PLAN S = 1:200

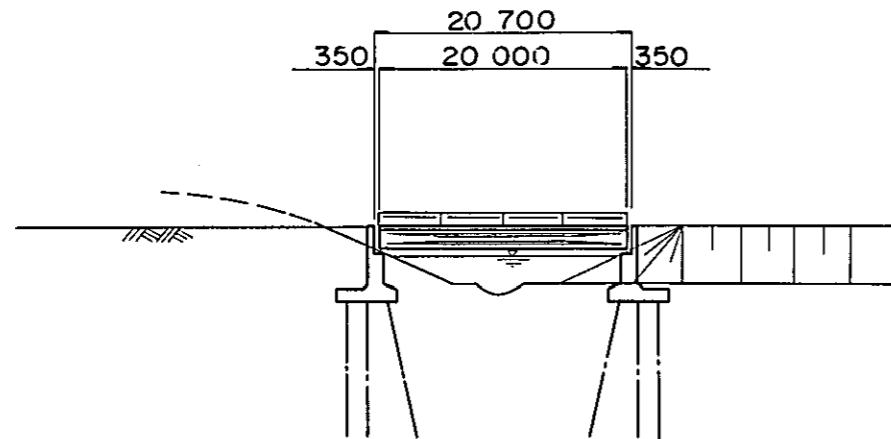


VIEW OF TOLL GATE

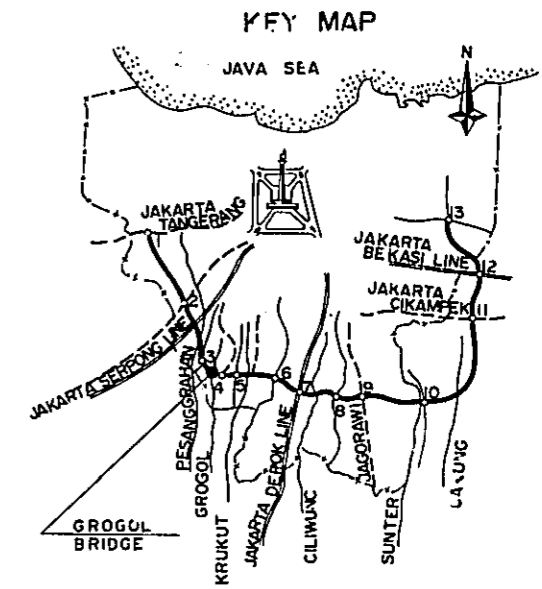
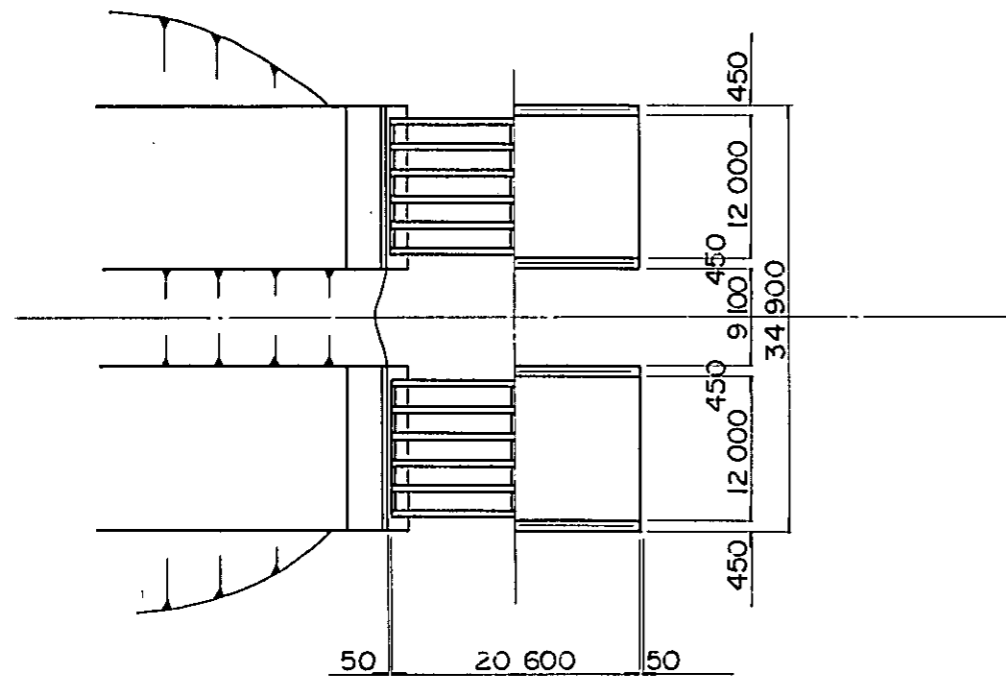
GROGOL BRIDGE

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			1	5
GROGOL BRIDGE				

ELEVATION
S = 1 : 600

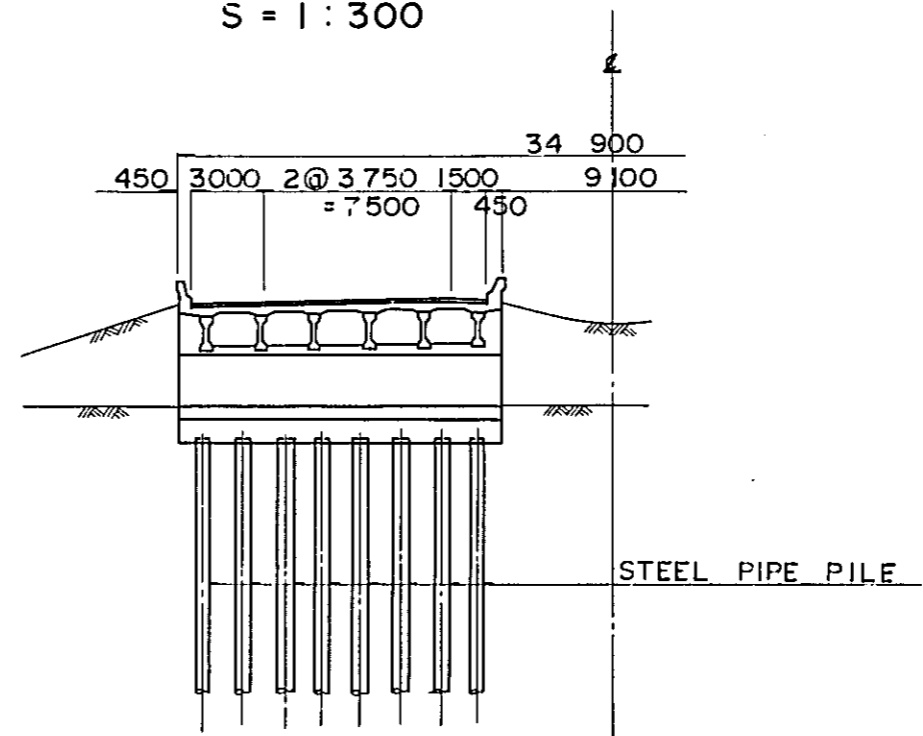


PLAN
S = 1 : 600



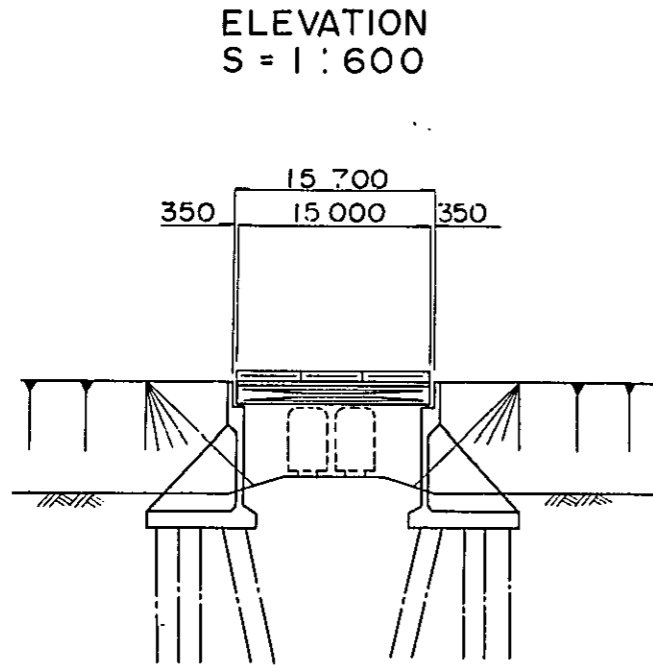
- NOTES :
1. SUPERSTRUCTURE TYPE IS PRESTRESSED CONCRETE COMPOSITE BEAMS .
 2. SIZE AND NUMBER OF SUPER AND SUBSTRUCTURES AND FOUNDATION PILES SHOWN ARE FOR PRELIMINARY ONLY .
 3. DIMENSIONS SHOWN ARE IN MILLIMETERS .

SECTION
S = 1 : 300

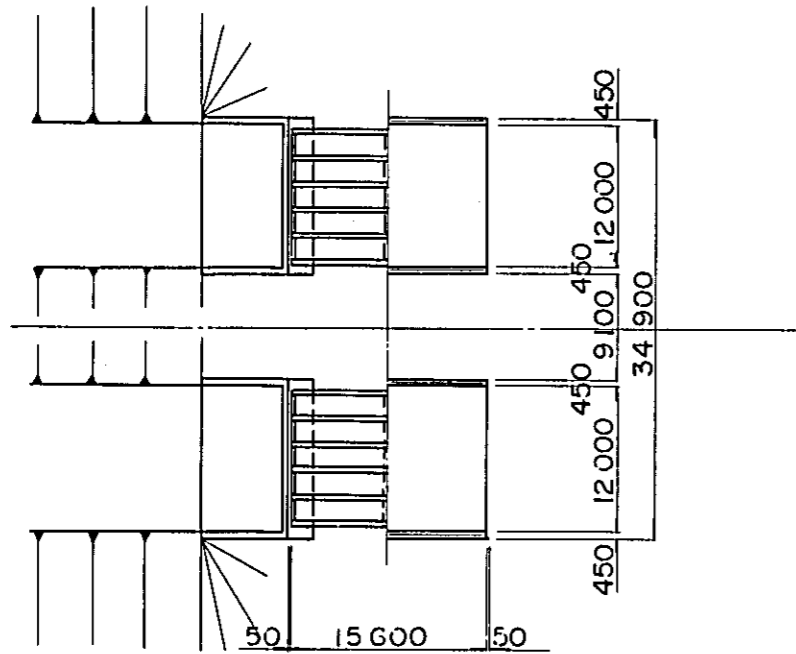


JAKARTA-DEPOK RAILWAY BRIDGE

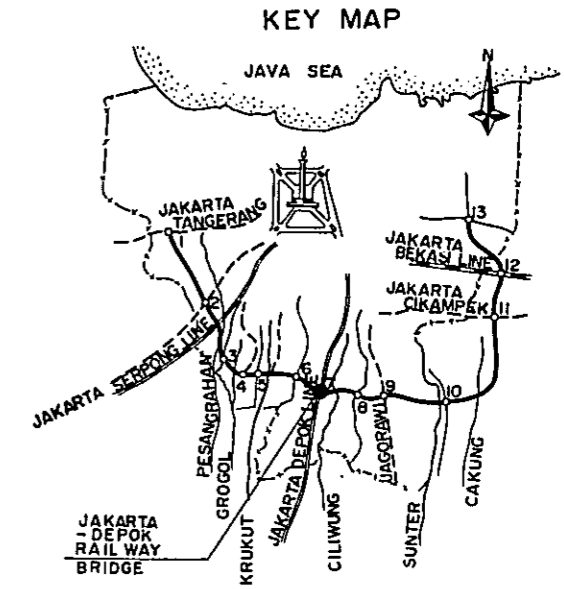
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			2	5
JAKARTA-DEPOK RAILWAY BRIDGE				



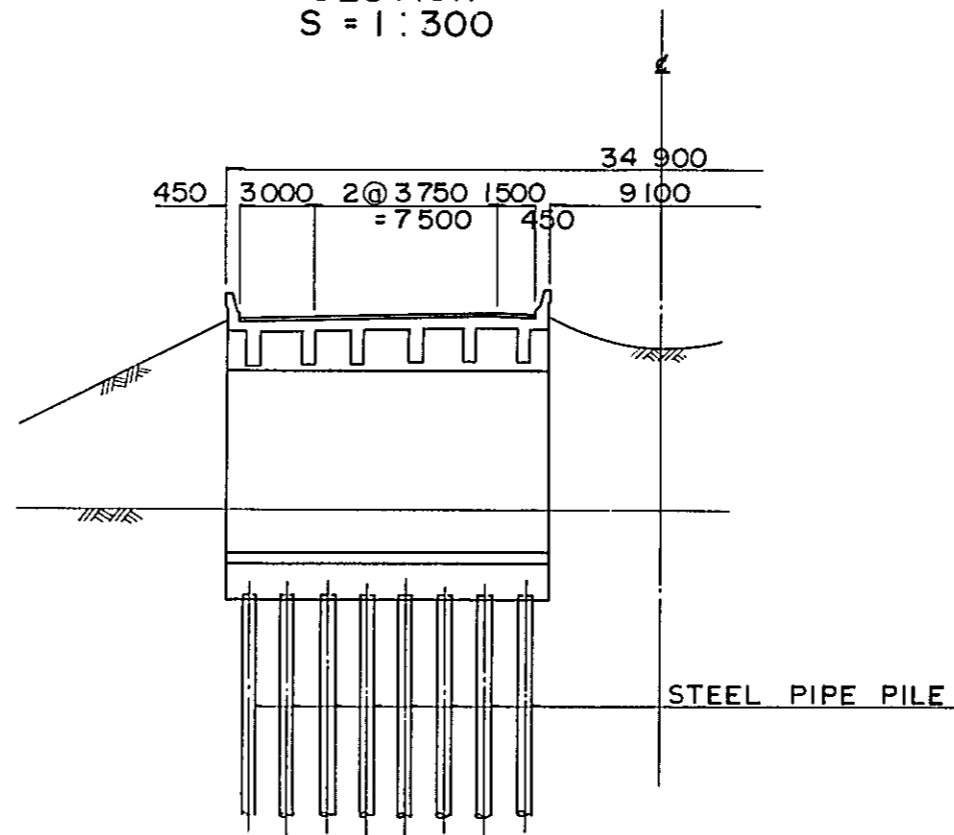
PLAN
S = 1 : 600



- NOTES :
1. SUPERSTRUCTURE TYPE IS REINFORCED CONCRETE BEAMS .
 2. SIZE AND NUMBER OF SUPER AND SUBSTRUCTRES AND FOUNDATION PILES SHOWN ARE FOR PRELIMINARY ONLY .
 3. DIMENSIONS SHOWN ARE IN MILLIMETERS .



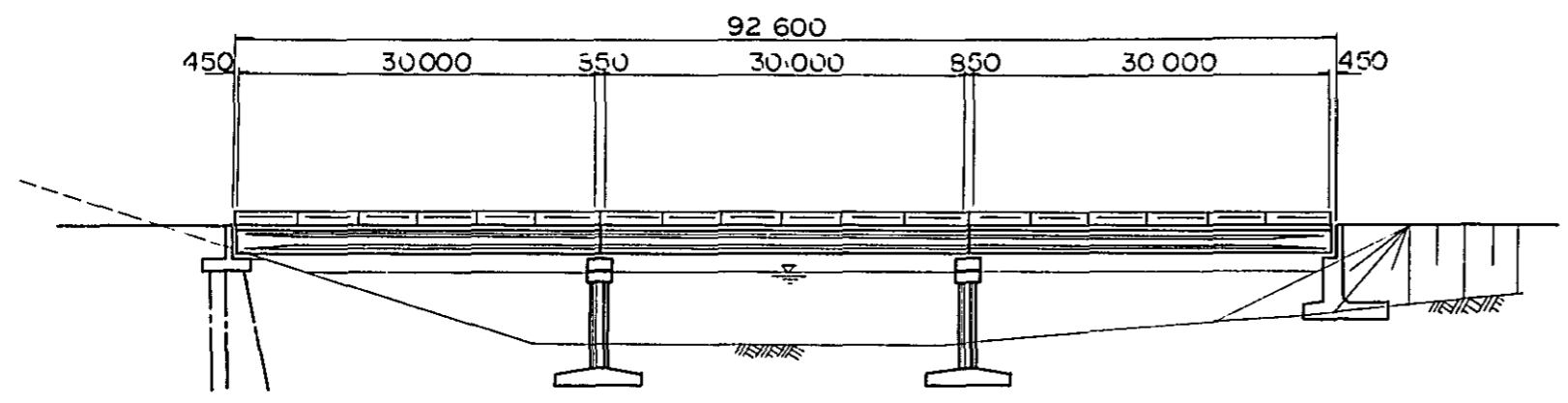
SECTION
S = 1 : 300



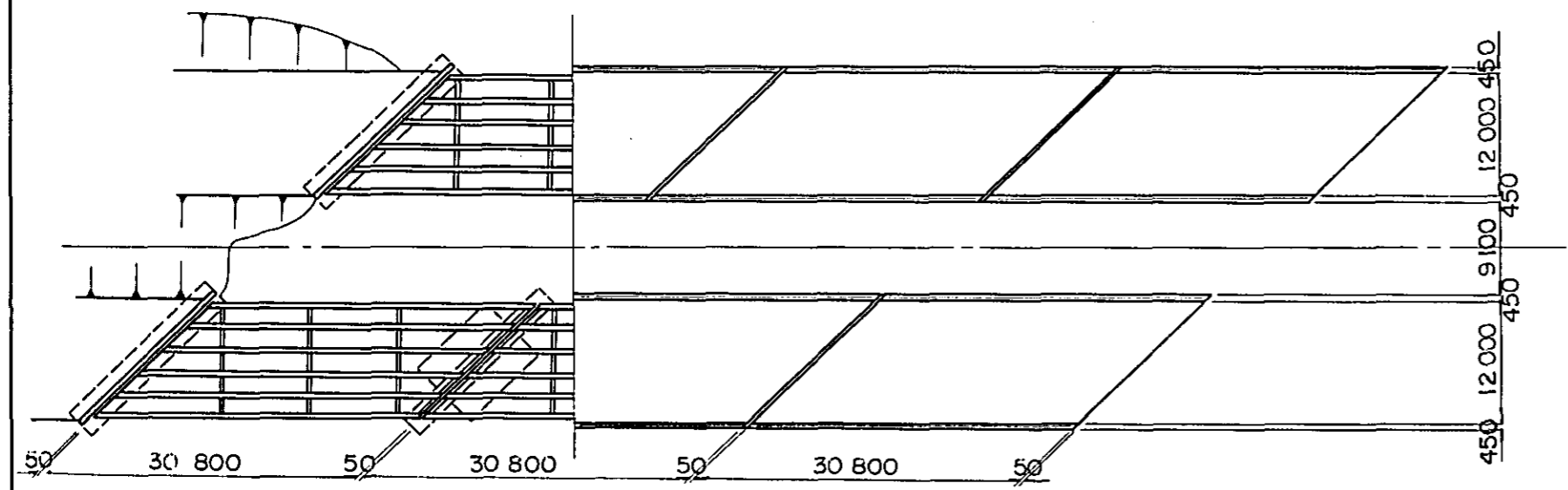
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			3	5

CILIWUNG BRIDGE

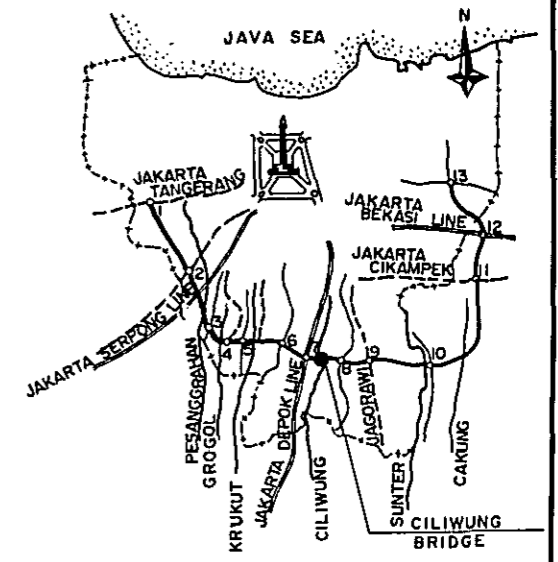
ELEVATION
S = 1:600



PLAN
S = 1:600

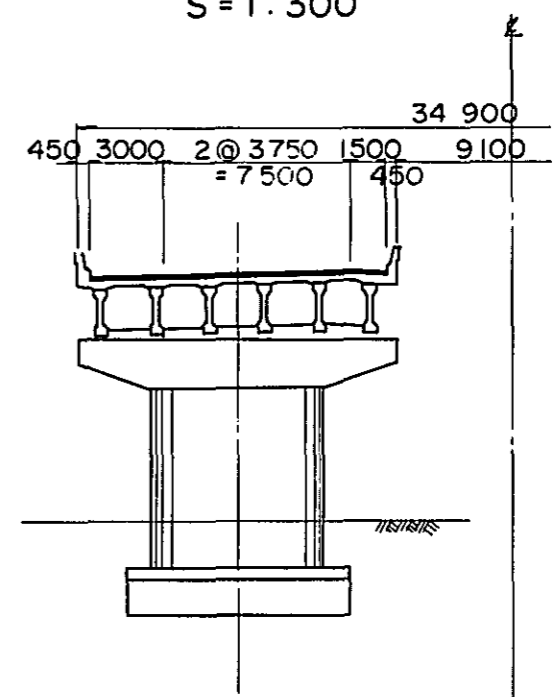


KEY MAP



- NOTES :
1. SUPERSTRUCTURE TYPE IS PRESTRESSED CONCRETE COMPOSITE BEAMS .
 2. PRESTRESSED CONCRETE COMPOSITE BEAM BRIDGE SHALL BE ALSO ADOPTED AS OVERPASS BRIDGES FOR ANOTHER LARGE RIVER AND CANAL .
 3. SIZE AND NUMBER OF SUPER AND SUBSTRUCTURES SHOWN ARE FOR PRELIMINARY ONLY .
 4. DIMENSIONS SHOWN ARE IN MILLIMETERS .

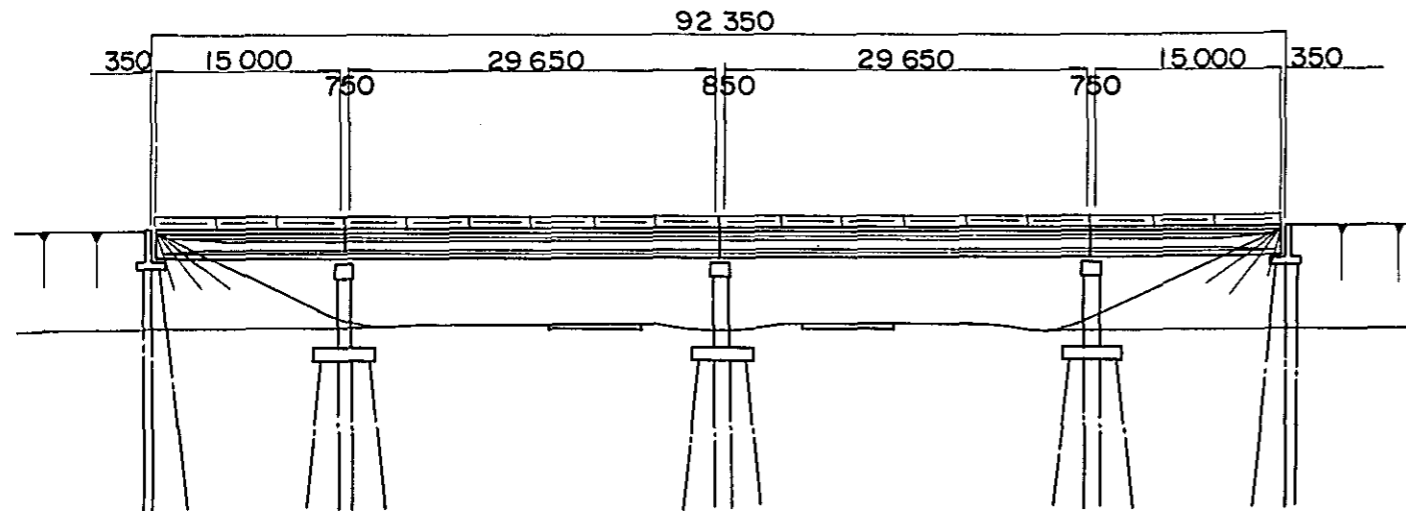
SECTION
S = 1:300



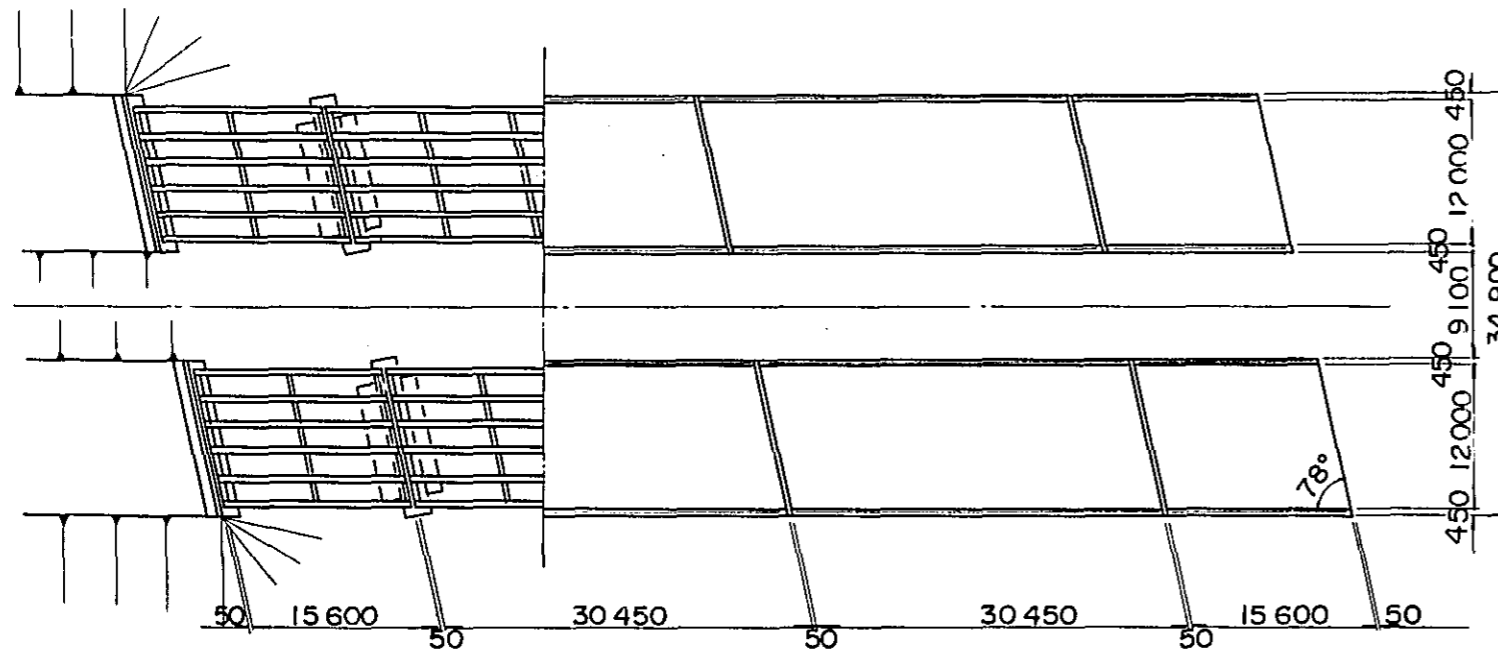
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			4	5
JAGORAWI HIGHWAY BRIDGE				

JAGORAWI HIGHWAY BRIDGE

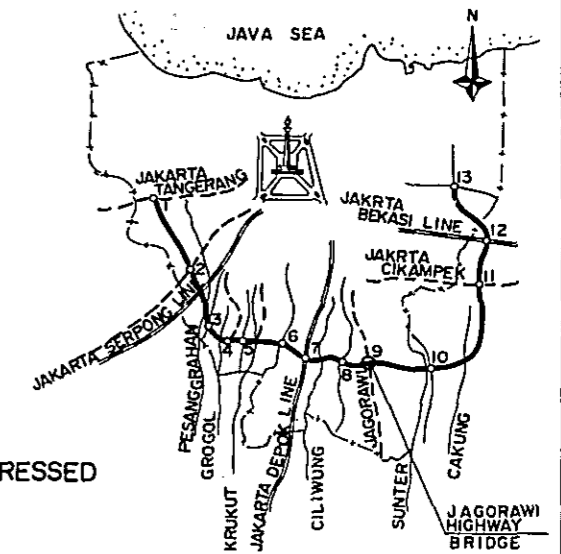
ELEVATION
S = 1 : 600



PLAN
S = 1 : 600

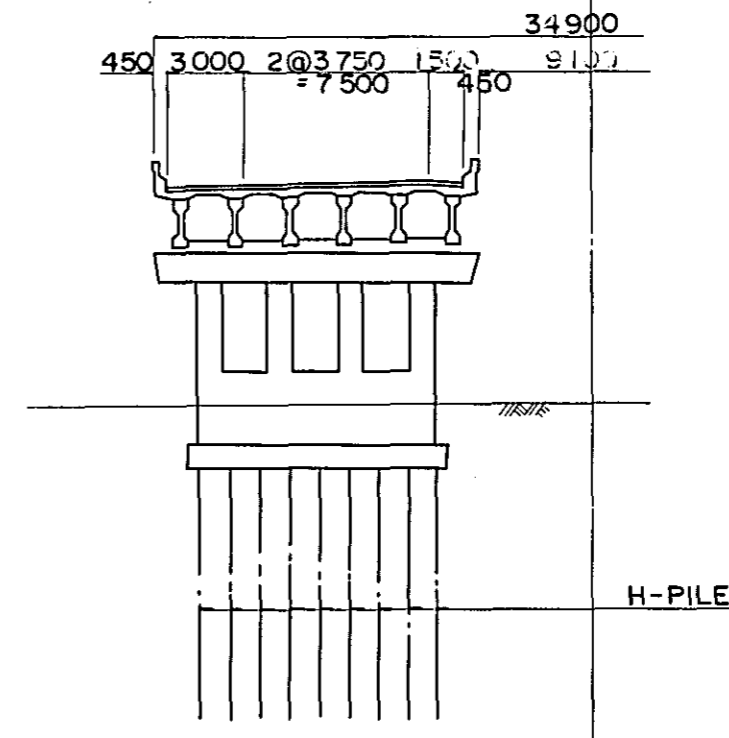


KEY MAP



- NOTES :
1. SUPERSTRUCTURE TYPE IS PRESTRESSED CONCRETE COMPOSITE BEAMS .
 2. PRESTRESSED CONCRETE COMPOSITE BEAM BRIDGE SHALL BE ALSO ADOPTED AS OVERPASS BRIDGES FOR GRADE-SEPARATION FOR THE TOLL WAY AND ANOTHER HIGHWAY .
 3. SIZE AND NUMBER OF SUPER AND SUBSTRUCTURES AND FOUNDATION PILES SHOWN ARE FOR PRELIMINARY ONLY .
 4. DIMENSIONS SHOWN ARE IN MILLIMETERS .

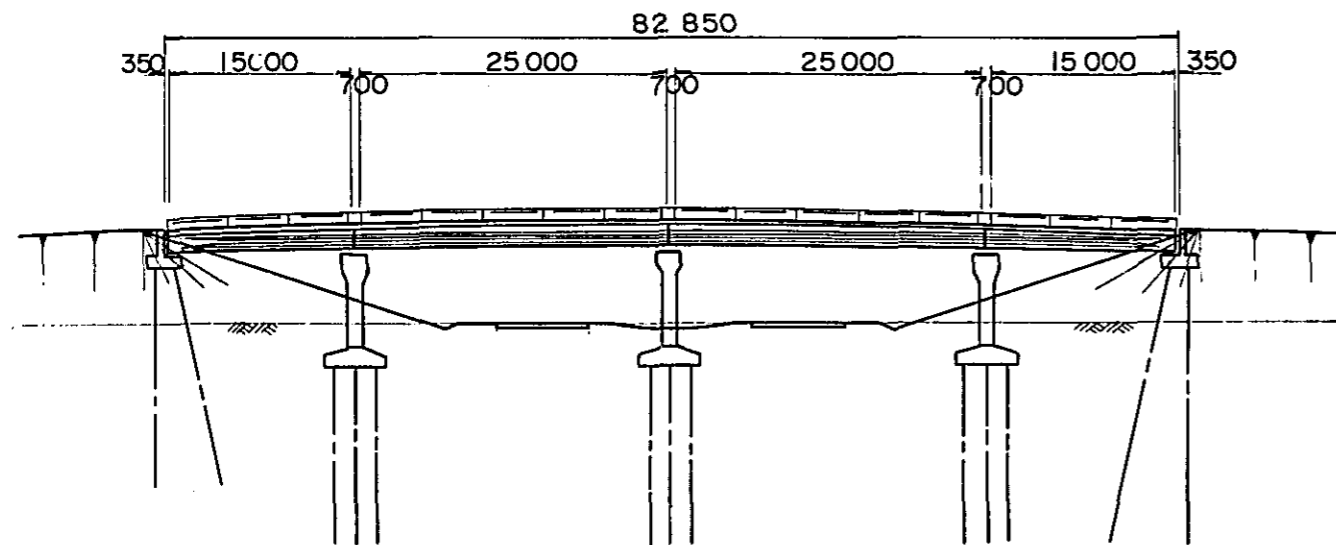
SECTION
S = 1 : 600



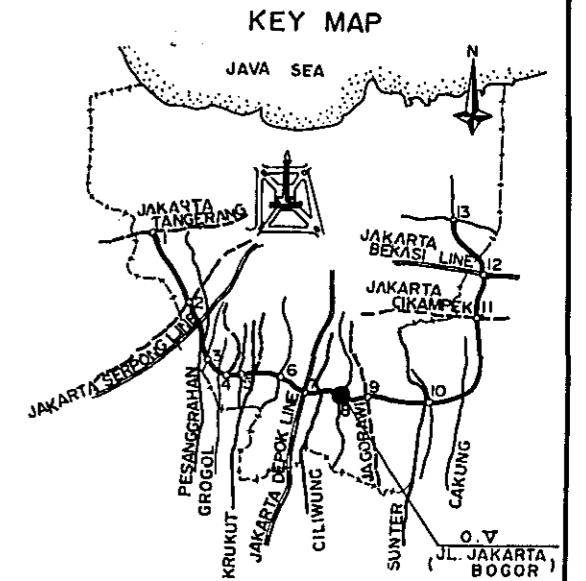
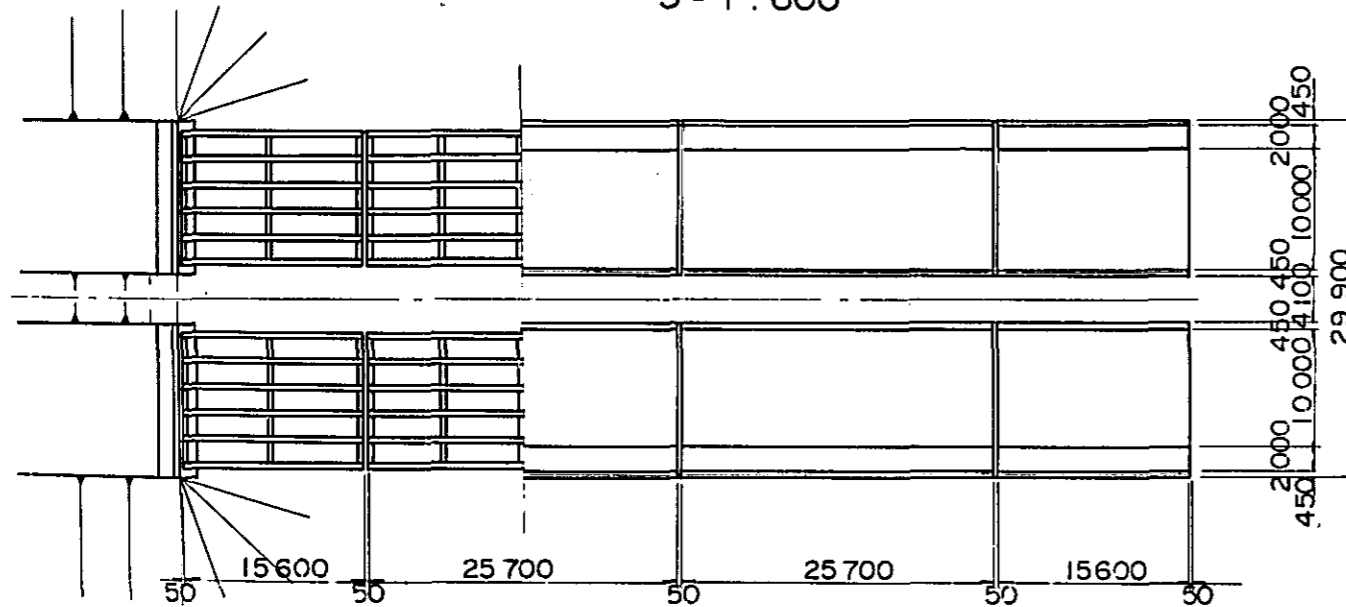
PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO.	TOTAL SHEET
JAKARTA RING ROAD			5	5
OVER BRIDGE (JL. JAKARTA BOGOR)				

OVER BRIDGE (JL. JAKARTA BOGOR)

ELEVATION
S = 1 : 600

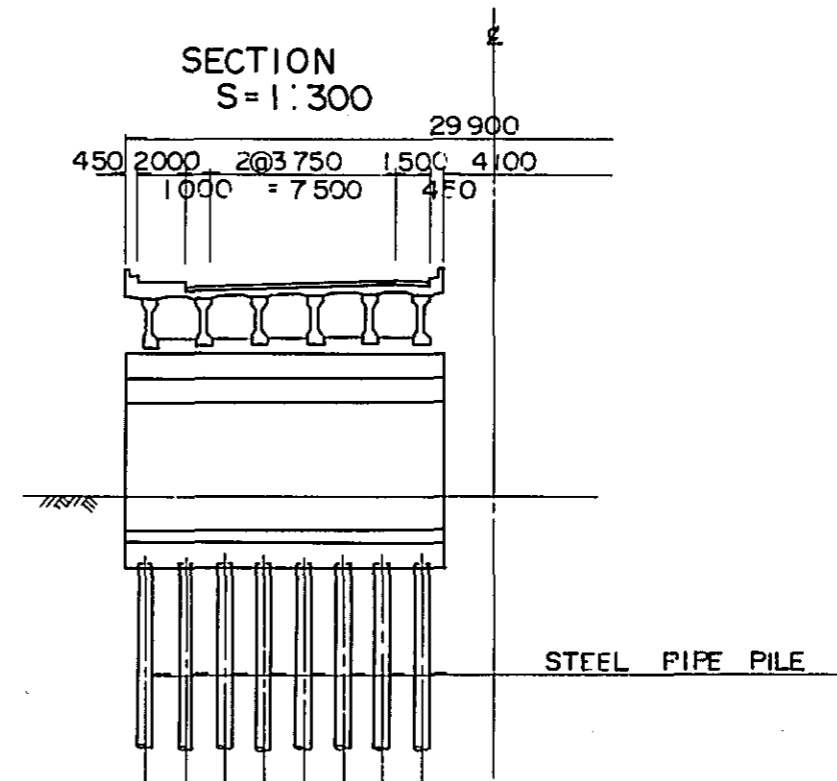


PLAN
S = 1 : 600



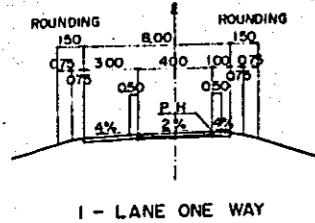
- NOTES:
1. SUPERSTRUCTURE TYPE IS PRESTRESSED CONCRETE COMPOSITE BEAMS.
 2. PRESTRESSED CONCRETE COMPOSITE BEAM BRIDGE SHALL BE ALSO ADOPTED AS OVERPASS BRIDGES FOR GRADE-SEPARATION FOR THE OUTER RING ROAD.
 3. SIZE AND NUMBER OF SUPER AND SUBSTRUCTURES AND FOUNDATION PILES SHOWN ARE FOR PRELIMINARY ONLY.
 4. DIMENSIONS SHOWN ARE IN MILLIMETERS.

SECTION
S = 1 : 300

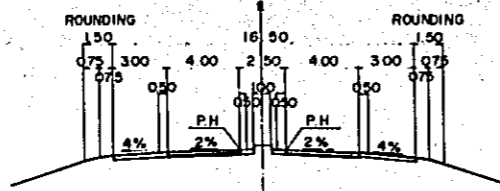


STEEL PIPE PILE

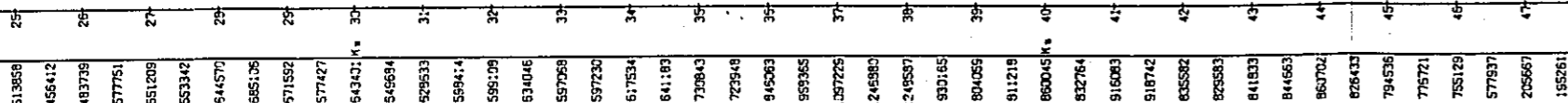
RAMP



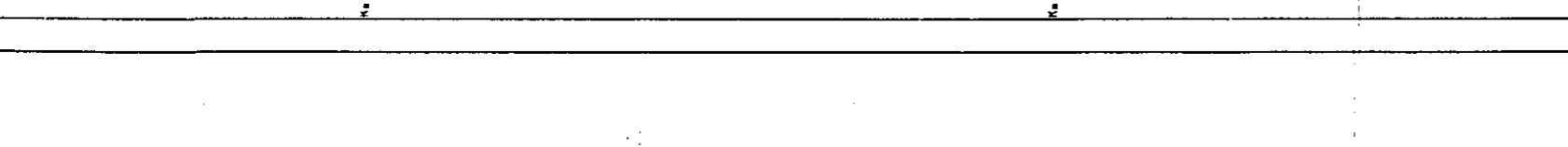
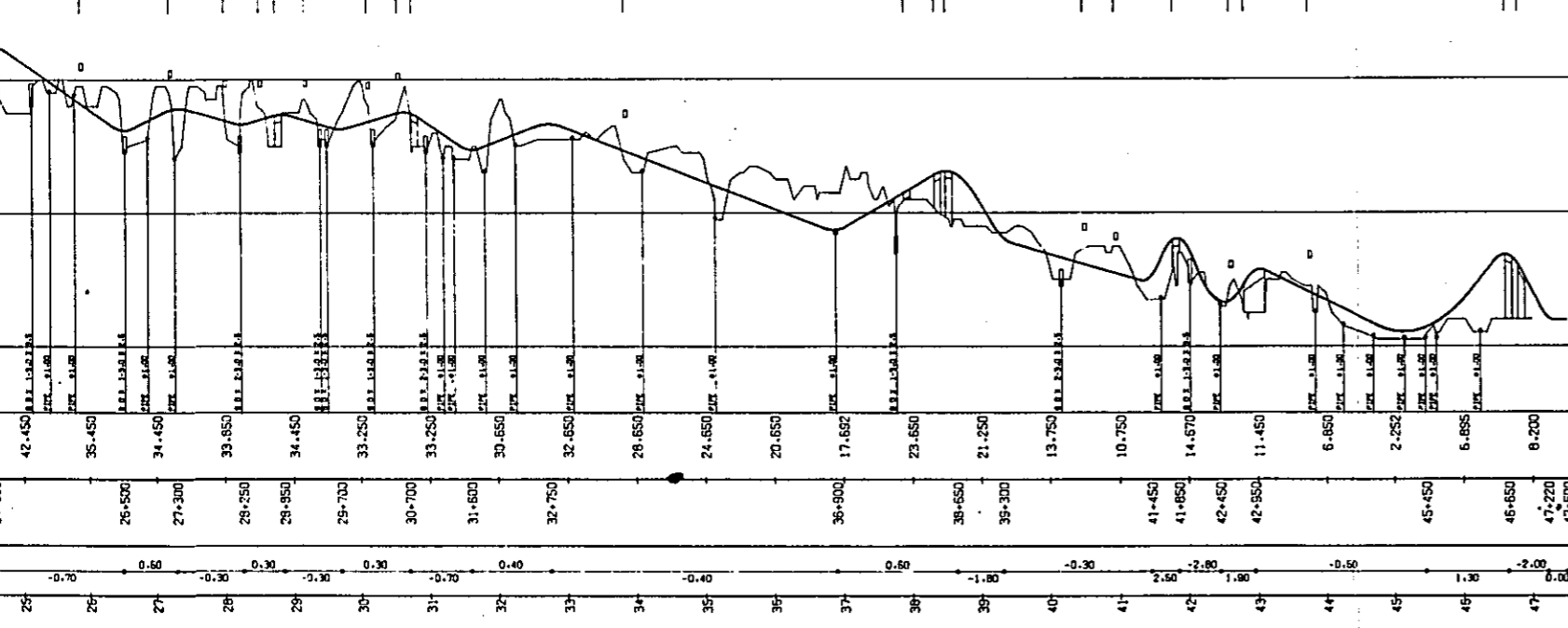
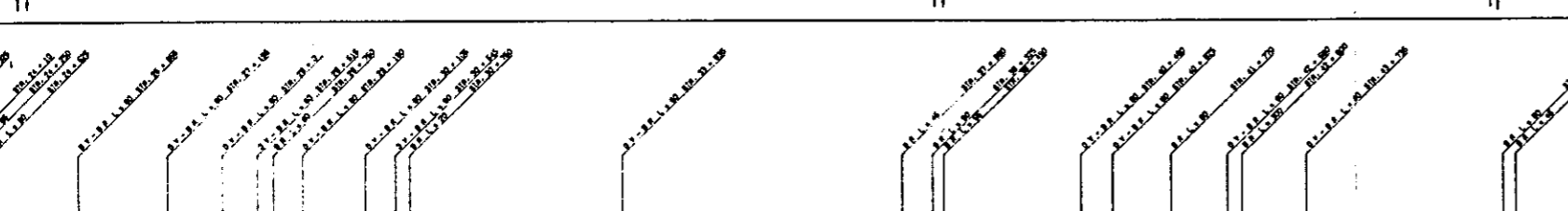
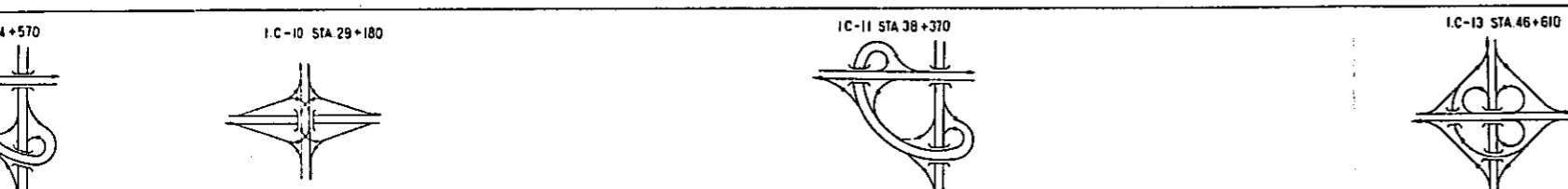
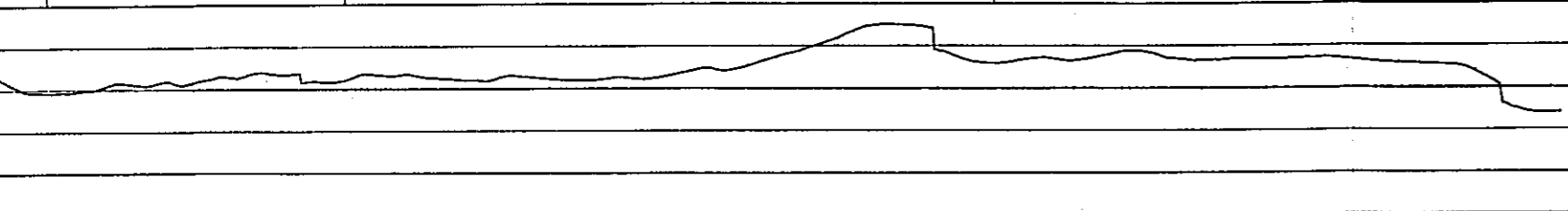
1 - LANE ONE WAY



2 - LANE TWO WAY



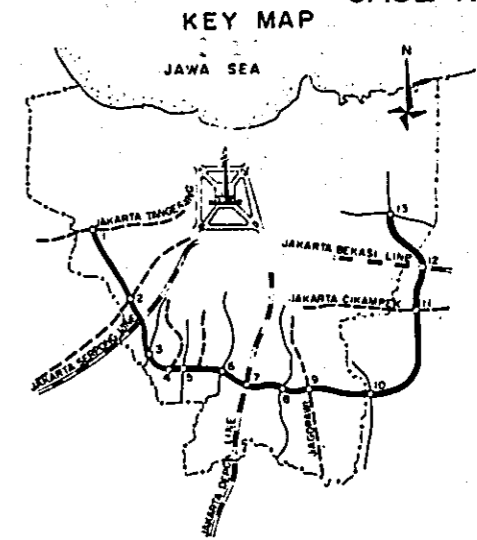
566041	513858	458412	483739	577751	551209	583342	544570	565106	571582	577427	543401	546694	529533	589414	586109	634046	597589	597230	617534	641183	730843	729948	945063	959365	1267225	1246980	1249887	930165	894065	911219	860045	832764	916083	918742	865882	829583	841833	844663	862702	826433	794536	775721	755129	577837	205667	155261
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------



PROJECT	PROJECT CODE/VR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			1	7

SUMMARY OF PROJECT (COLLECTING SYSTEM: FREE)

CASE NO. F-01



JAKARTA OUTER RING ROAD T-3 SUMMARY OF PROJECT

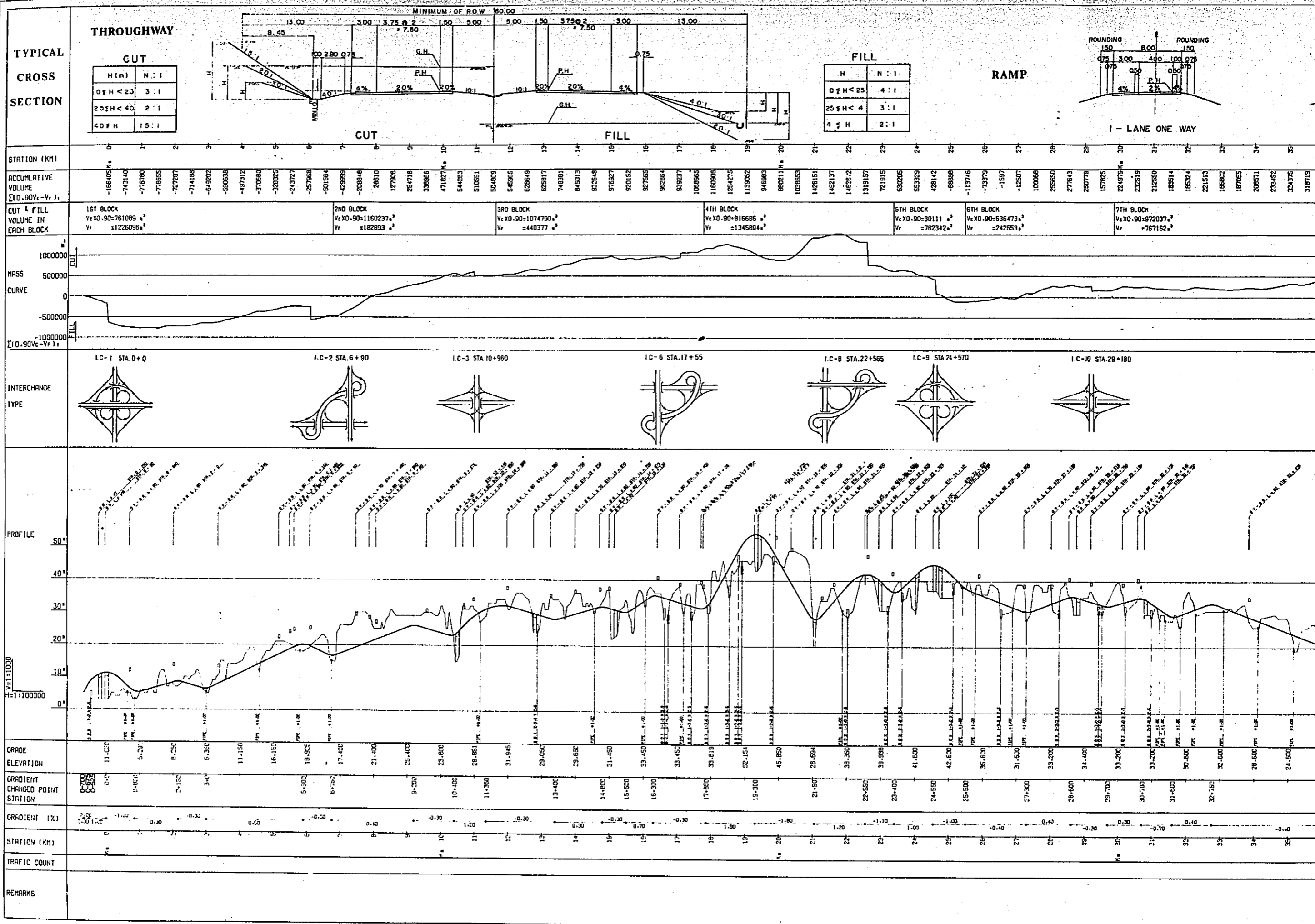
100KM/H - FREE - 4 LANE

BEGIN STAT.	0-700	COMBINATION OF INTERCHANGE	DIAMOND	IV	CLOVER	TORBITNE
END STAT.	47+500					
ROAD LENGTH.	48.200KM					
ROAD WIDTH.	34 M					

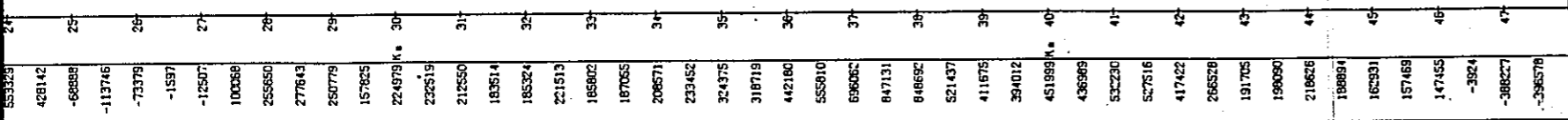
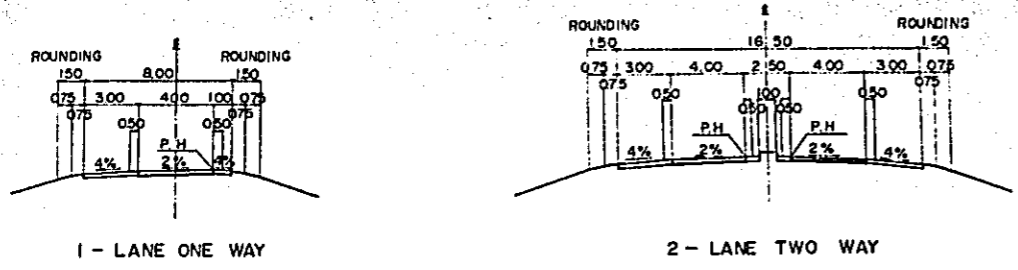
ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST		TOTAL	RP
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP		
0100	GENERAL								
0200	EARTHWORKS	12858501	1320982594	1959898	377089640	5446800	1861200000	4121622000	7847708000
0300	DRAINAGE STRUCTURE	891312	710703432	111800	133546200	14818399	1698072234	1260541000	9734002000
0400	PAVEMENT	11377850	2047844818	4930350	918254280	10093112	844249632	2966099098	18855635000
0500	BRIDGE STRUCTURE	25047188	4493695215	6697801	1187769558	16308200	2966099098	5681464773	5378772000
0600	MISCELLANEOUS	1098204	1009028262	7492114	802761501	31744990	1811789783	8590318	195787125
0700	FRONTAGE ROAD	877298	195787125	0	0	877298	195787125	0	559866000
0001	TOTAL HIGHWAY CONSTRUCTION COST	52150353	9778041446	21191963	3419421179	78789117	15058662626	47756146000	1016548000
0800	LAND ACQUISITION	0	8513429000	0	6562551000	0	15075980000	15075980000	1016548000
0900	LAND COMPENSATION	0	503593000	0	512955000	0	1016548000	1016548000	1016548000
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	9017022000	0	7075506000	0	16092528000	16092528000	12769735000
0003	CONTINGENCIES					15757823	6230238125	12769735000	
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					9454694	3738142875	7661841000	
0000	TOTAL PROJECT AMOUNT					104001634	41119571626	84280250002	

1 US.\$ = 415 RP

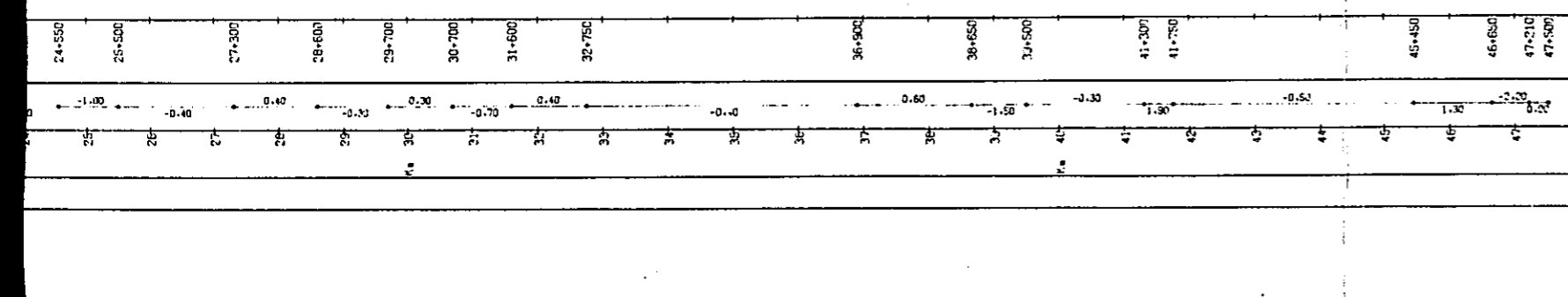
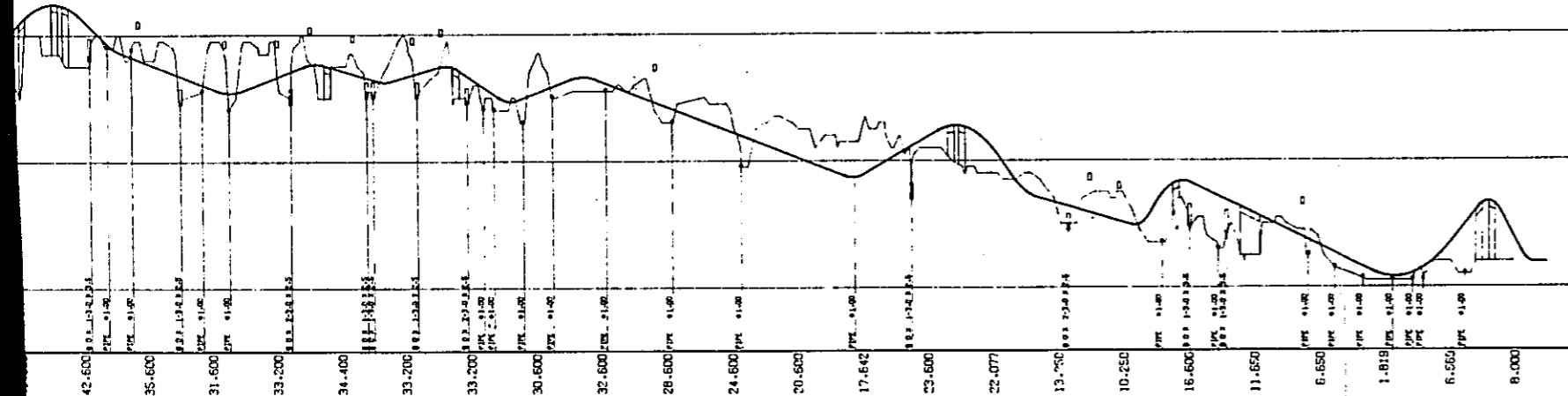
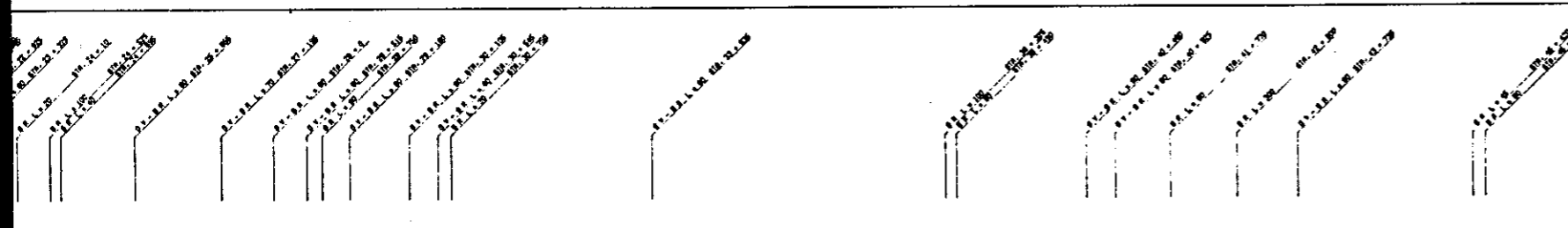
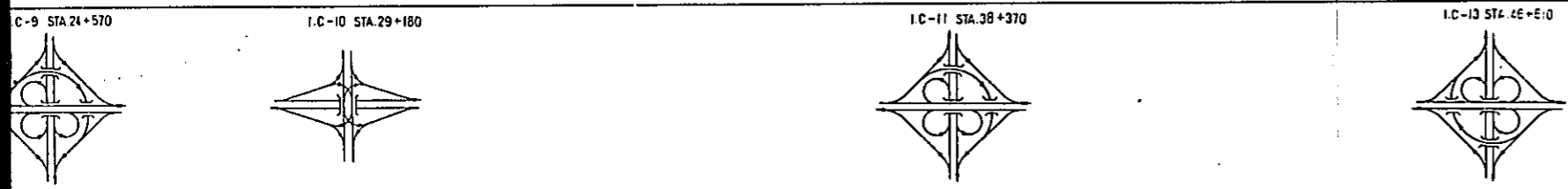
T-3.2 MAJOR QUANTITY OF PROJECT		T-3.3 REQUIRED AMOUNT OF MATERIALS	
1100	TOTAL CUT VOLUME	6260329	CU.M
1200	TOTAL FILL VOLUME	5439035	CU.M
1300	TOTAL NUMBER OF BRIDGES	33	PLACES
1400	TOTAL LENGTH OF BRIDGES	1950	M
1500	OVER BRIDGE	38	PLACES
1600	BOX CULVERTS	32	PLACES
1700	PIPE CULVERTS	32	PLACES
1800	INTERCHANGE	9	PLACES
2100	FUEL	30896308	LIT.
2200	REINFORCING BAR	4844	M.T
2300	PRESTRESSING BAR	161	M.T
2400	STRUCTURAL STEEL	21184	M.T
2500	FINE AGGREGATE	487950	CU.M
2600	COURSE AGGREGATE	498759	CU.M
2700	CEMENT	31480	M.T
2800	ASPHALT	35678	M.T



RAMP



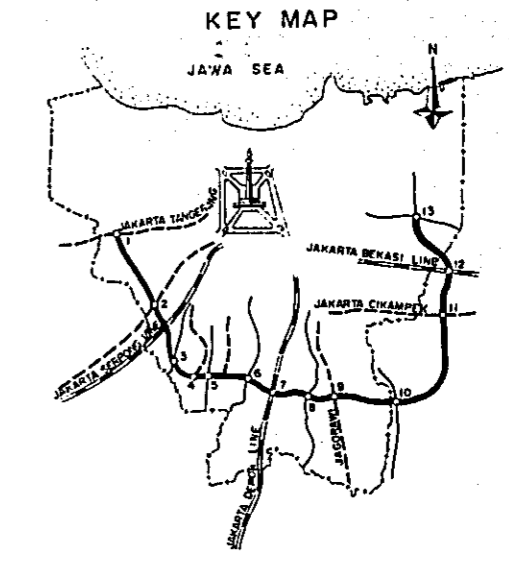
6TH BLOCK Vc XO.90=536473 Vr =782342	7TH BLOCK Vc XO.90=872037 Vr =767162	8TH BLOCK Vc XO.90=265848 Vr =1046532
--	--	---



PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			2	7

SUMMARY OF PROJECT (COLLECTING SYSTEM; FLAT)

CASE NO. T-01



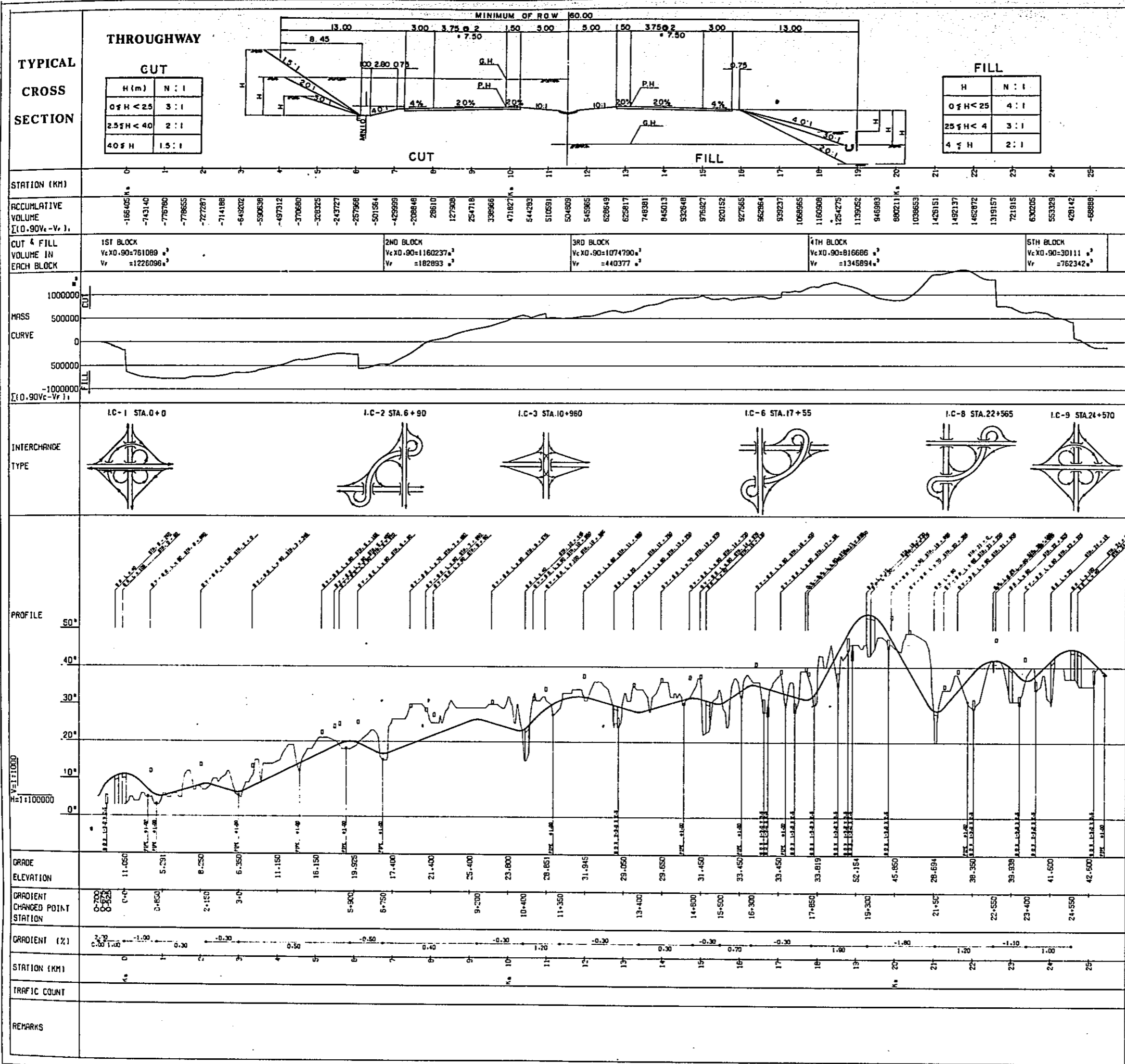
Vc XO.90=5617275
Vr =6013853

JAKARTA OUTER RING ROAD		T-3 SUMMARY OF PROJECT		120KM/H - TOLL - 4 LANE	
BEGIN STAT.	0-700	COMBINATION OF INTERCHANGE		I.C. NO	
END STAT.	47+500	ROAD LENGTH		ROAD WIDTH	
ROAD LENGTH	48.200KM	ROAD WIDTH		34 M	

ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST	
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP
0100	GENERAL EARTHWORKS	8956126	1031570031	8227642	1140775181	5446800	1861200000
0200	DRINAGE STRUCTURE	983920	746502182	104142	124399200	17183768	2172345212
0300	PAVEMENT	11369448	2046335832	4473133	889878100	1088062	870901382
0400	BRIDGE STRUCTURE	25971406	4666090300	5604247	999564720	16842581	2936213932
0500	MISCELLANEDUS	1194326	1019329326	9912846	983938830	31575652	5664655020
0600	FRONTAGE ROAD	883765	197228250	0	0	11107112	2003268156
0700						883755	197228250
0001	TOTAL HIGHWAY CONSTRUCTION COST	49358982	9706055921	28322010	4138556031	83127792	15705811952
0800	LAND ACQUISITION	0	8524629000	0	4754506000	0	13279135000
0900	LAND COMPENSATION	0	505299000	0	310350000	0	815649000
0002	TOTAL LAND ACQUIS AND COMPENS. COST	0	29928000	0	5064856000	0	14094784000
0003	CONTINGENCIES					16625568	5960119190
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					9975335	3576071514
0000	TOTAL PROJECT AMOUNT					109728685	39338786656

1 US.\$ = 415 RP

T-3.2 MAJOR QUANTITY OF PROJECT		T-3.3 REQUIRED AMOUNT OF MATERIALS	
1100	TOTAL CUT VOLUME	6241417	CU.M
1200	TOTAL FILL VOLUME	6013853	CU.M
1300	TOTAL NUMBER OF BRIDGES	35	PLACES
1400	TOTAL LENGTH OF BRIDGES	2460	M
1500	OVER BRIDGE	39	PLACES
1600	BOX CULVERTS	22	PLACES
1700	PIPE CULVERTS	32	PLACES
1800	INTERCHANGE	9	PLACES
2100	FUEL	31717542	LIT.
2200	REINFORCING BAR	4892	M.T
2300	PRESTRESSING BAR	158	M.T
2400	STRUCTURAL STEEL	21152	M.T
2500	FINE AGGREGATE	629782	CU.M
2600	COURSE AGGREGATE	495581	CU.M
2700	CEMENT	36090	M.T
2800	ASPHALT	34092	M.T



Vc X 0.90 = 3842916
Vr = 3957605

JAKARTA OUTER RING ROAD T-3 SUMMARY

BEGIN STAT. 0+700
END STAT. 25+450
ROAD LENGTH: 26.150KM
ROAD WIDTH: 34 M

COMBINATION OF INTERCHANGE

T-3.1 CONSTRUCTION COST		THROUGHWAY COST		INTERCHANGE	
ITEM NO.	DESCRIPTION	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	
0100	GENERAL				
0200	EARTHWORKS	4947428	566879894	5402329	
0300	DRAINAGE STRUCTURE	561974	403172542	71368	
0400	PAVEMENT	6204641	1116939441	3103831	
0500	BRIDGE STRUCTURE	15328692	2773589880	3431152	
0600	MISCELLANEOUS	571855	697652581	6860659	
0700	FRONTAGE ROAD	760398	169698645	0	
0001	TOTAL HIGHWAY CONSTRUCTION COST	28474788	5627932783	18869349	
0800	LAND ACQUISITION	0	6024610000	0	
0900	LAND COMPENSATION	0	359265000	0	
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	6383875000	0	
0003	CONTINGENCIES				
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS				
0000	TOTAL PROJECT AMOUNT				

T-3.2 MAJOR QUANTITY OF PROJECT

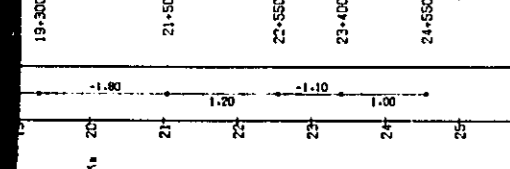
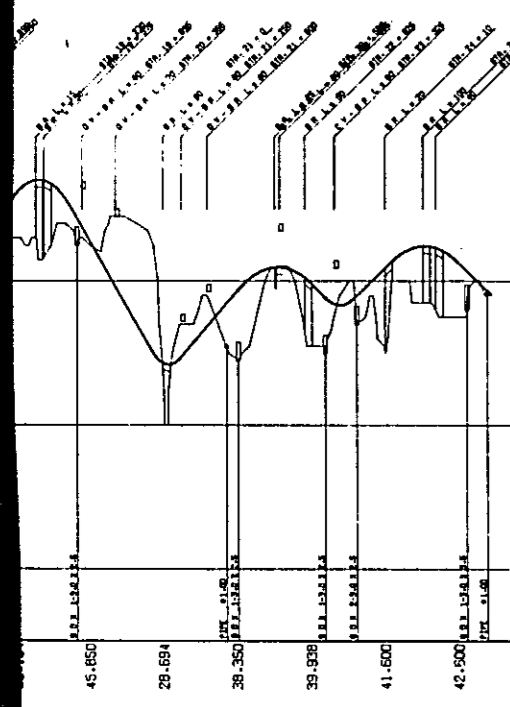
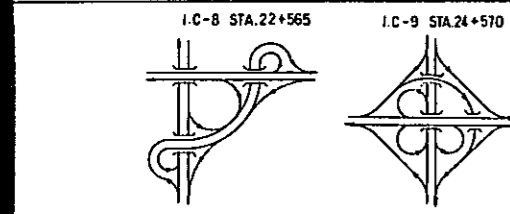
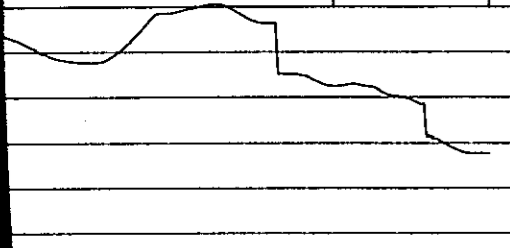
1100	TOTAL CUT VOLUME	4269907	CU.M
1200	TOTAL FILL VOLUME	3957605	CU.M
1300	TOTAL NUMBER OF BRIDGES	22	PLACES
1400	TOTAL LENGTH OF BRIDGES	1345	M
1500	OVER BRIDGE	28	PLACES
1600	BOX CULVERTS	14	PLACES
1700	PIPE CULVERTS	13	PLACES
1800	INTERCHANGE	5	PLACES

FILL

H	N : 1
0 < H < 25	4 : 1
25 < H < 4	3 : 1
4 < H	2 : 1

1139522	946983	680211	1038653	1426151	1492137	1462972	1319157	721916	630205	553329	428142	-68888
---------	--------	--------	---------	---------	---------	---------	---------	--------	--------	--------	--------	--------

6TH BLOCK
 Vc X0.90=30111
 Vr =762342



Ve X0.90=3842916
 Vr =3957605

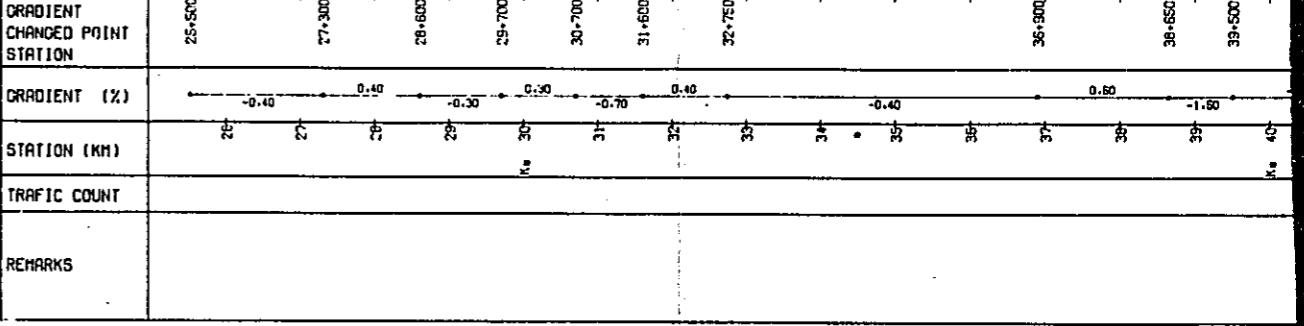
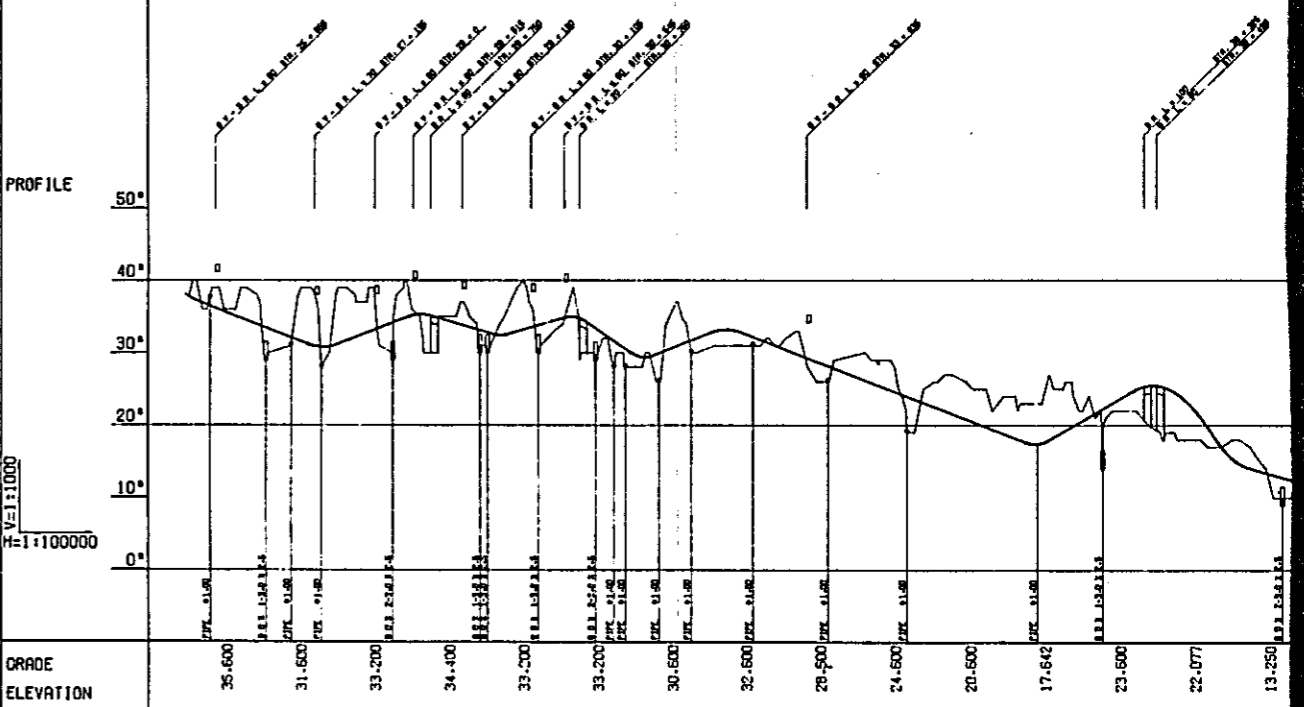
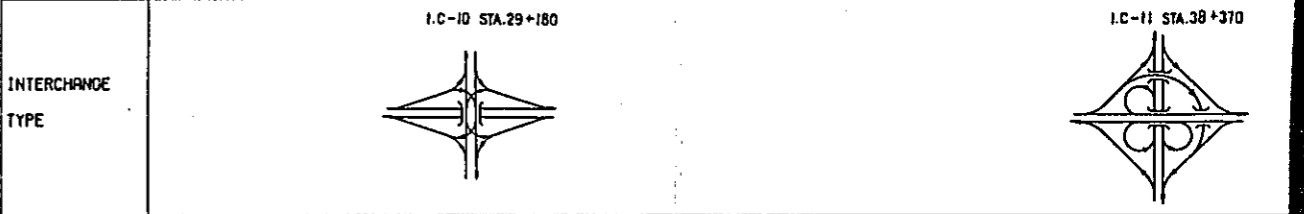
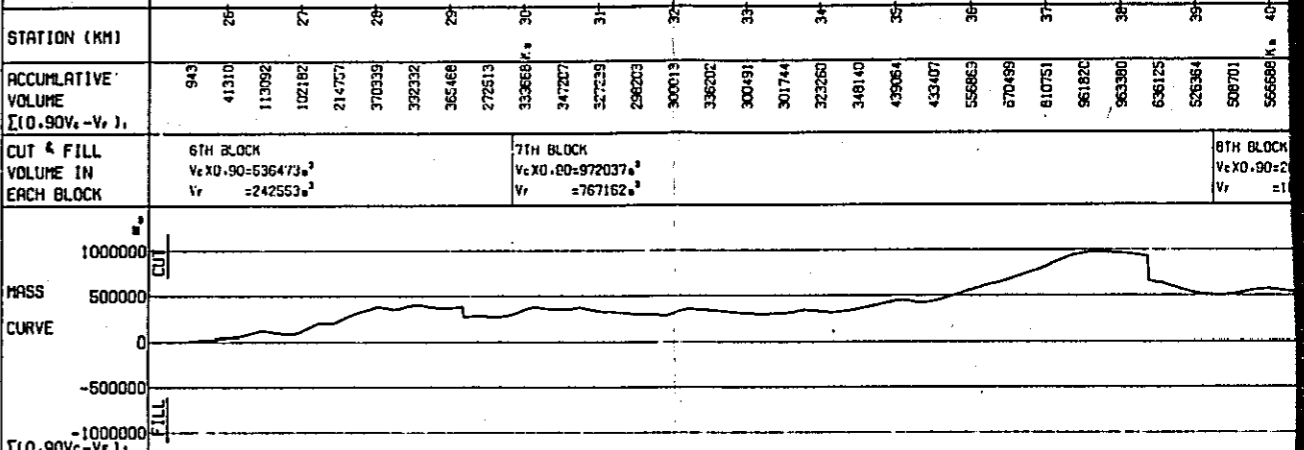
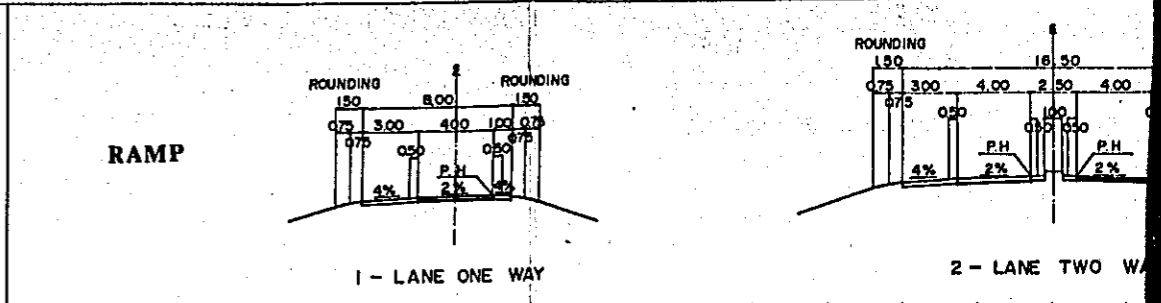
JAKARTA OUTER RING ROAD T-3 SUMMARY OF PROJECT ALTERNATIVE - 04
 120KM/H - TOLL - 4 LANE

BEGIN STAT.	0-700
END STAT.	25+450
ROAD LENGTH	26.150KM
ROAD WIDTH	34 M

ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST		TOTAL	RP
		FOREIGN US.\$	LOCAL	FOREIGN US.\$	LOCAL	FOREIGN US.\$	LOCAL		
0100	GENERAL					3267200	1115800000	2471680000	
0200	EARTHWORKS	4947428	566879694	5402329	657877176	10349757	1224756870	5519906000	
0300	DRINADE STRUCTURE	561974	403172542	71368	85250040	633341	488422582	751259000	
0400	PAVEMENT	6204641	1116939441	3103831	611728500	9308472	1728667941	5591584000	
0500	BRIDGE STRUCTURE	15328632	2773589880	3431162	613878840	18759854	3387468720	11172808000	
0600	MISCELLANEOUS	671655	597852581	6860659	728076304	7532314	1325728885	4451639000	
0700	FRONTAGE ROAD	760398	169598645	0	0	760398	169698645	485264000	
0001	TOTAL HIGHWAY CONSTRUCTION COST	28474788	5627932783	18869349	2696810860	50611337	9440543644	30444248000	
0800	LAND ACQUISITION	0	6024610000	0	3664605000	0	9689215000	9689215000	
0900	LAND COMPENSATION	0	359265000	0	274725000	0	633990000	633990000	
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	6383875000	0	3939330000	0	10323205000	10323205000	
0003	CONTINGENCIES					10122267	3952749729	8153491000	
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					6073360	2371649837	4892094000	
0000	TOTAL PROJECT AMOUNT					66806965	26088148210	53813038000	

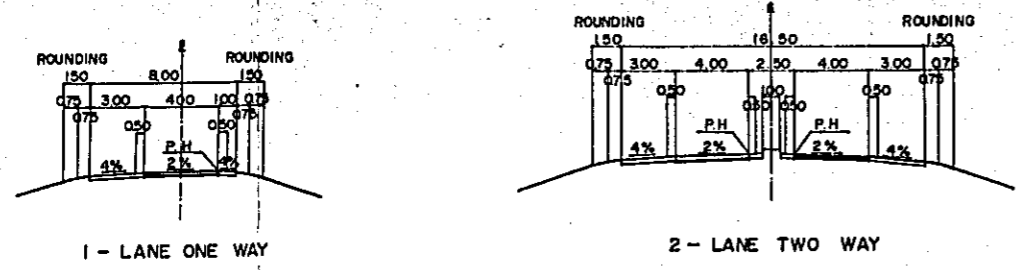
T-3.2 MAJOR QUANTITY OF PROJECT		T-3.3 REQUIRED AMOUNT OF MATERIALS	
1100	TOTAL CUT VOLUME	4269907	CU.M
1200	TOTAL FILL VOLUME	3957605	CU.M
1300	TOTAL NUMBER OF BRIDGES	22	PLACES
1400	TOTAL LENGTH OF BRIDGES	1345	M
1500	OVER BRIDGE	28	PLACES
1600	BOX CULVERTS	14	PLACES
1700	PIPE CULVERTS	13	PLACES
1800	INTERCHANGE	5	PLACES
2100	FUEL	19381004	LIT.
2200	REINFORCING BAR	2943	M.T
2300	PRESTRESSING BAR	87	M.T
2400	STRUCTURAL STEEL	12512	M.T
2500	FINE AGGREGATE	346008	CU.M
2600	COURSE AGGREGATE	300128	CU.M
2700	CEMENT	22191	M.T
2800	ASPHALT	20238	M.T

TYPICAL CROSS SECTION

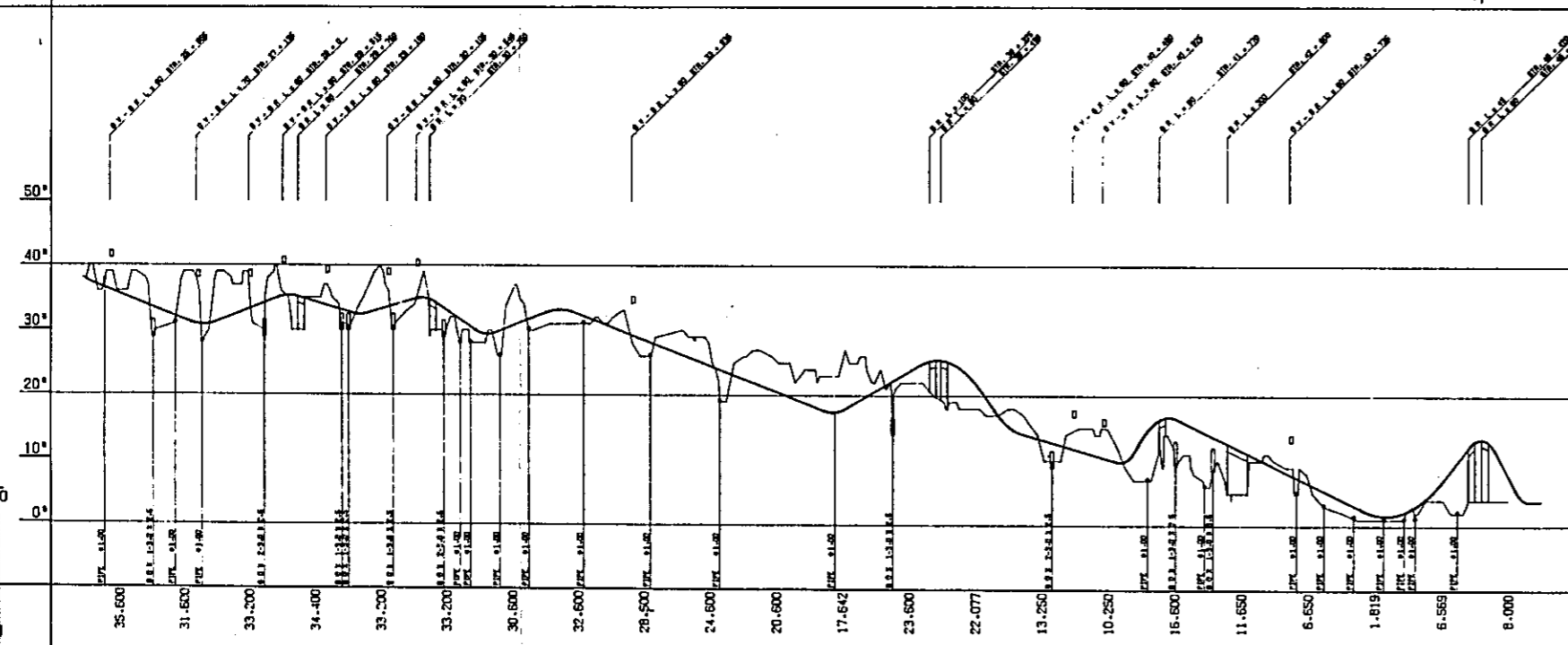
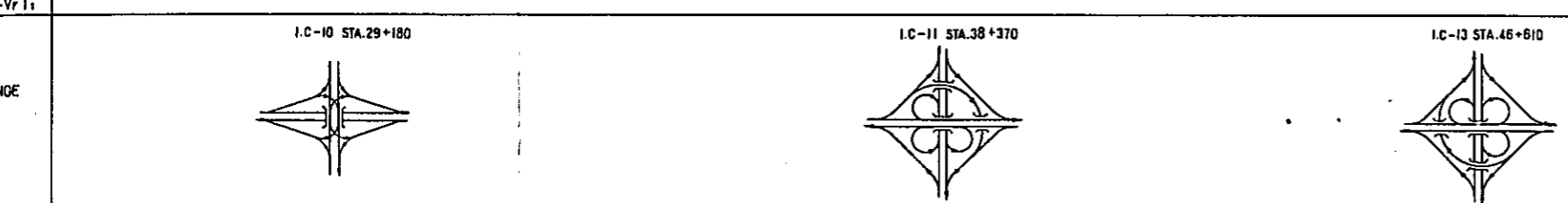
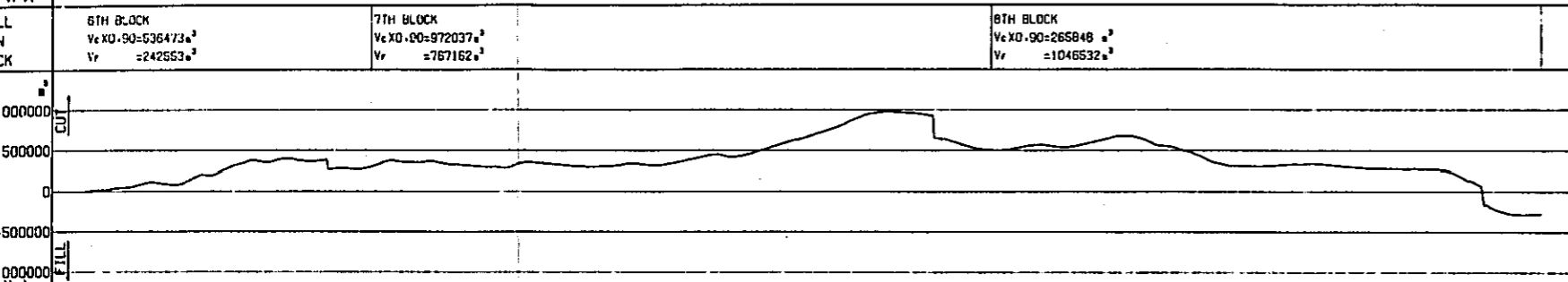


CAL
SS
ION

RAMP



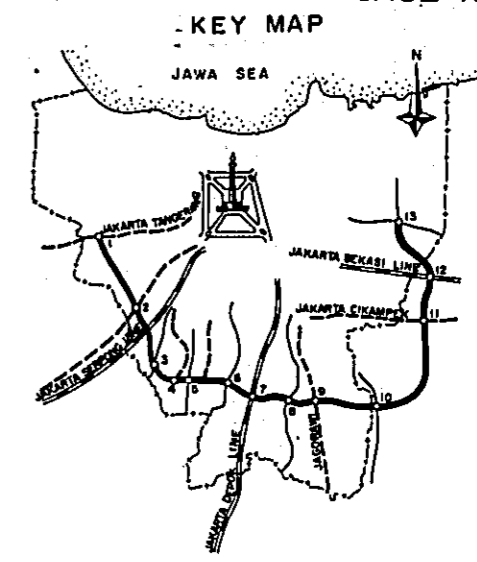
(KM)	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47																							
ELEVATION (m)	943	41310	113982	102182	216757	370339	392332	365468	272513	133668	347207	327239	298203	300013	336202	300491	301744	323260	348140	439064	433407	558863	870495	810751	961822	963090	636125	526364	508701	566688	551678	648918	642205	532110	381216	306594	312778	333315	303583	277620	272157	262143	110785	-273538	-281889



POINT	25+500	27+300	28+600	29+700	30+700	31+600	32+750	36+800	38+650	39+500	41+300	41+750	45+450	46+650	47+210	47+500
(%)	-0.40	0.40	-0.30	0.30	-0.70	0.40	-0.40	0.60	-1.80	-0.30	-0.60	-0.60	-2.00	-0.60	-0.60	

PROJECT	JAKARTA OUTER RING ROAD	PROJECT CODE/YR		PROVINCE		SHEET NO	3	TOTAL SHEET	7
SUMMARY OF PROJECT (COLLECTING SYSTEM; FLAT)									

CASE NO. T-02

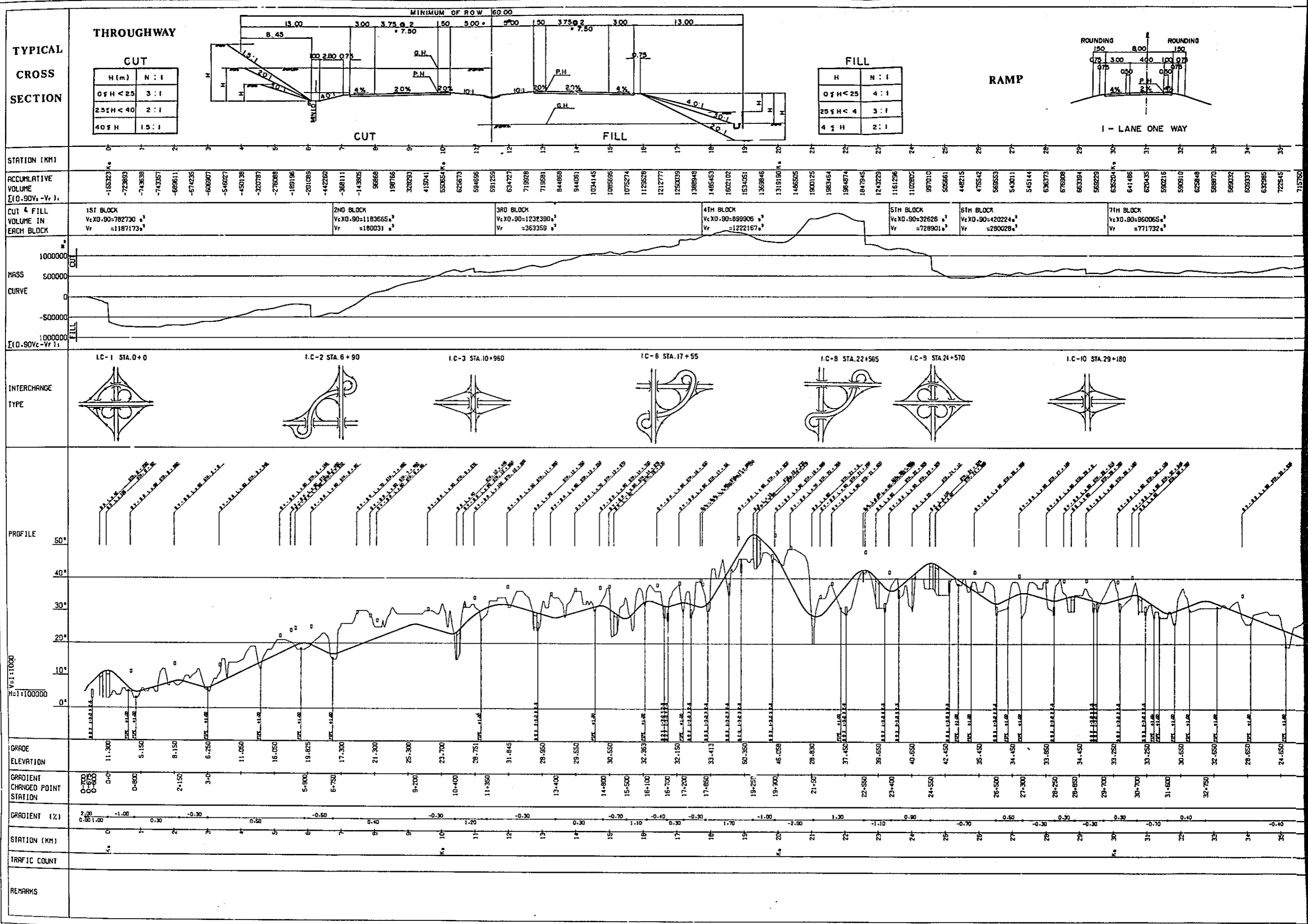


JAKARTA OUTER RING ROAD		T-3 SUMMARY OF PROJECT												
BEGIN STAT.	25+450	120KM/H - TOLL - 4 LANE												
END STAT.	47+500	COMBINATION OF INTERCHANGE												
ROAD LENGTH	22.050KM	L.C. NO. 1 2 3 4 5 6 7 8 9 10 11 12 13												
ROAD WIDTH	34 M	ROAD TYPE: D-TURBO, CLOVER, TURBINE												

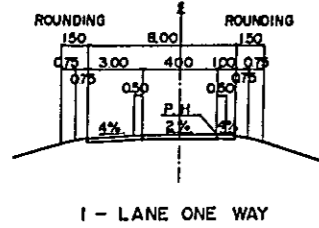
ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST	
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP
0100	GENERAL					2179600	745400000
0200	EARTHWORKS	4008698	464690337	2825313	482898005	6834012	947588342
0300	DRINADE STRUCTURE	421947	343329640	32774	39149160	454721	382478800
0400	PAVEMENT	5164807	929396391	1369302	278149600	6534109	1207645991
0500	BRIDGE STRUCTURE	10642713	1891500420	2173085	385685880	12815798	2277186300
0600	MISCELLANEOUS	522571	421676745	3052187	255862526	3574858	677539270
0700	FRONTAGE ROAD	123357	27529605	0	0	123357	27529605
0001	TOTAL HIGHWAY CONSTRUCTION COST	20884194	4078123138	9452661	1441745170	32516455	6265268308
0800	LAND ACQUISITION	0	2500019000	0	1089901000	0	3589920000
0900	LAND COMPENSATION	0	1460340000	0	356250000	0	1816590000
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	2646053000	0	1125526000	0	3771579000
0003	CONTINGENCIES					6503291	2007369462
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					3901975	1204421677
0000	TOTAL PROJECT AMOUNT					42921721	13248638447

1 US.\$ = 415 RP

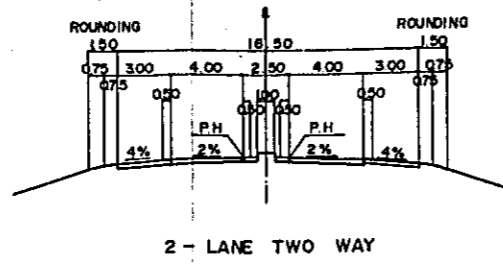
T-3.2 MAJOR QUANTITY OF PROJECT				T-3.3 REQUIRED AMOUNT OF MATERIALS			
1100	TOTAL CUT VOLUME	1971510	CU.M	2100	FUEL	12336538	LIT.
1200	TOTAL FILL VOLUME	2056248	CU.M	2200	REINFORCING BAR	1948	M.T
1300	TOTAL NUMBER OF BRIDGES	14	PLACES	2300	PRESTRESSING BAR	70	M.T
1400	TOTAL LENGTH OF BRIDGES	1210	M	2400	STRUCTURAL STEEL	8640	M.T
1500	OVER BRIDGE	11	PLACES	2500	FINE AGGREGATE	283774	CU.M
1600	BOX CULVERTS	10	PLACES	2600	COURSE AGGREGATE	195453	CU.M
1700	PIPE CULVERTS	19	PLACES	2700	CEMENT	13898	M.T
1800	INTERCHANGE	9	PLACES	2800	ASPHALT	13853	M.T



RAMP

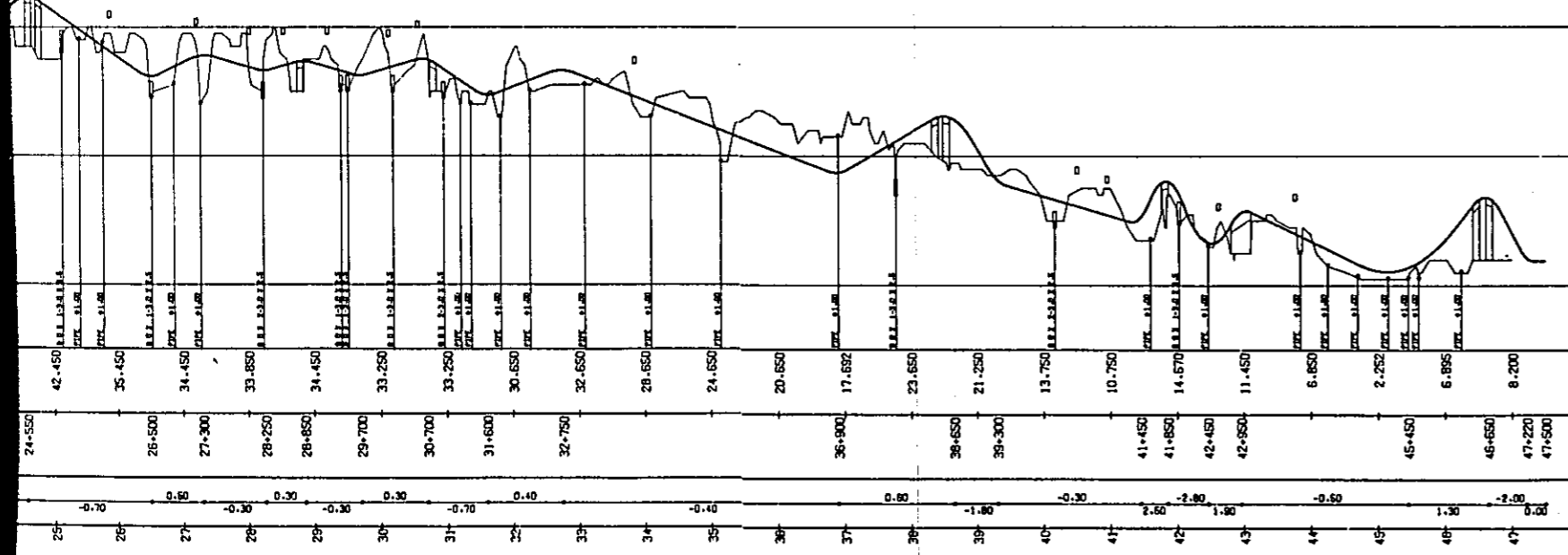
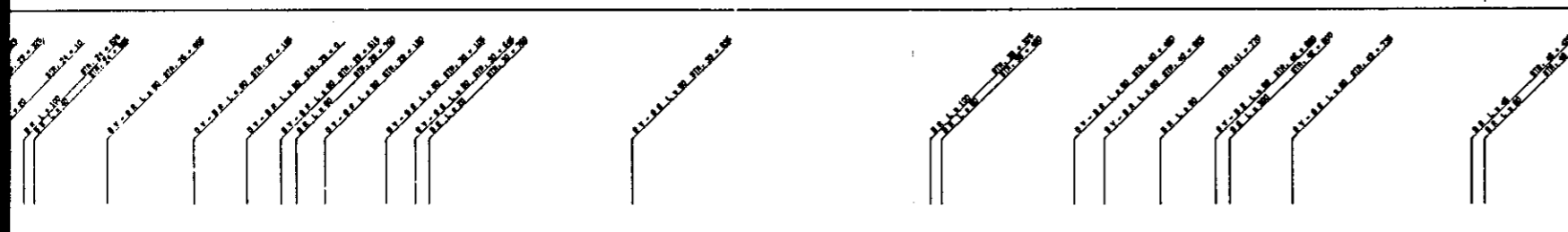
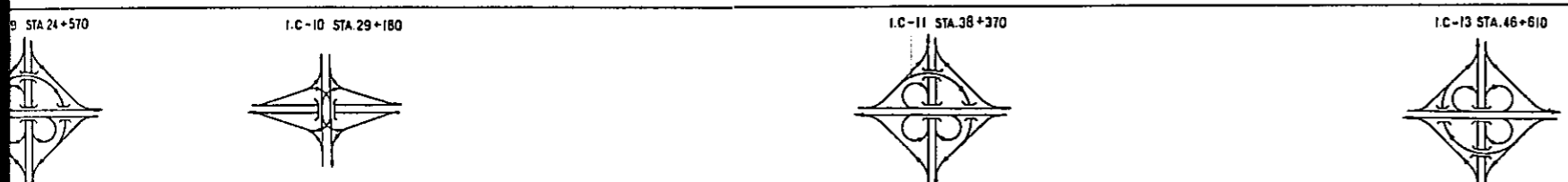
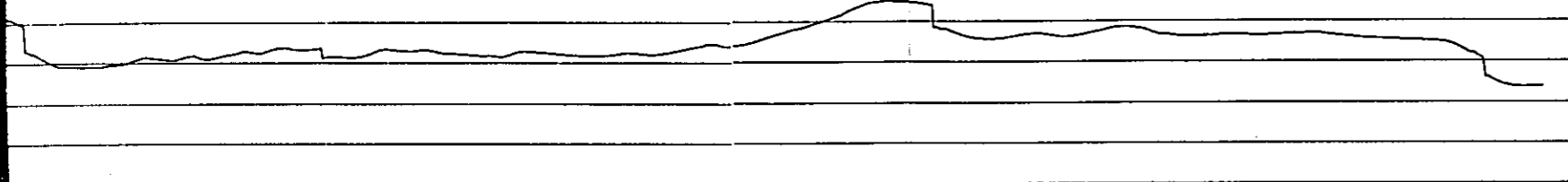


1 - LANE ONE WAY



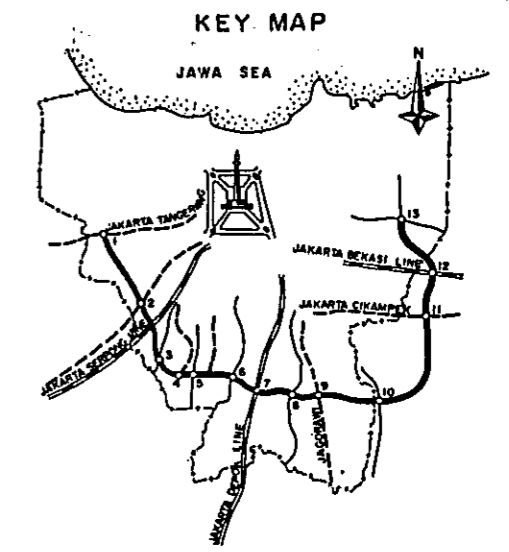
2 - LANE TWO WAY

987010	505661	448215	475542	565553	543011	545144	636373	676908	663384	595229	655204	641486	620435	590216	590910	629946	598670	588032	609337	632965	722645	715750	837855	950167	1088031	1238662	1239086	907545	790673	797832	846559	819378	902697	905357	822196	816197	828447	831277	847316	813047	781150	763335	741743	584097	194217	183811
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------



PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			4	7

SUMMARY OF PROJECT (COLLECTING SYSTEM: FLAT.)
CASE NO. T-03



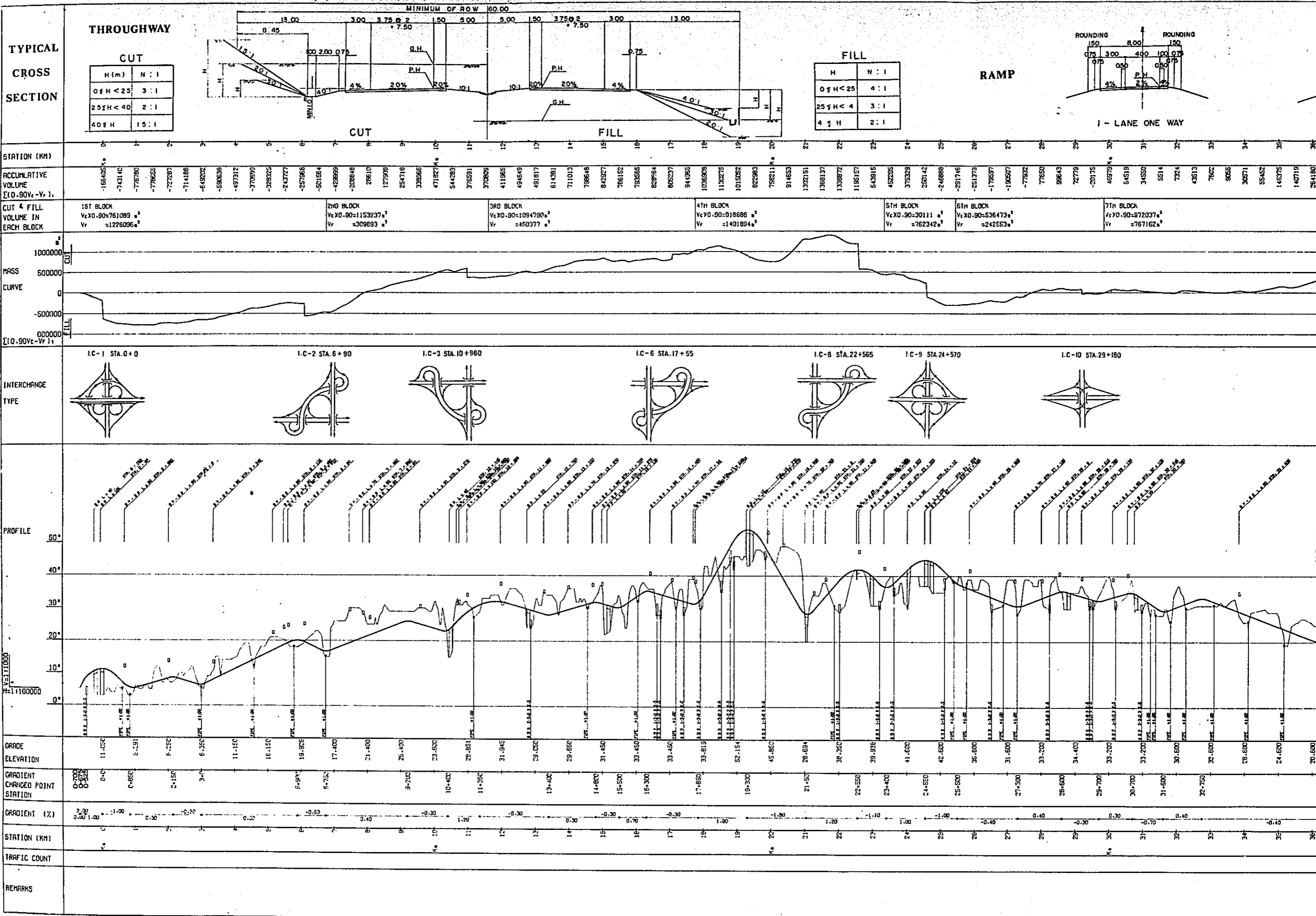
Vc X0.90=5774678.3
 Vr =5590867.3

JAKARTA OUTER RING ROAD		T-3 SUMMARY OF PROJECT												
BEGIN STAT.	0+700	COMBINATION OF INTERCHANGE											100KM/H - TOLL - 4 LANE	
END STAT.	47+500	L.C. NO.												
ROAD LENGTH.	48.200KM	L.C. TYPE												
ROAD WIDTH.	34 M	D. TRUCKET												
		C. COVER												
		T. TURBINE												

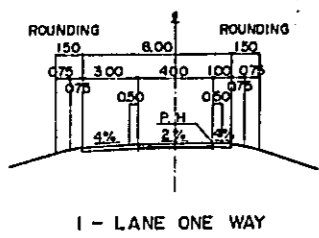
T-3.1 CONSTRUCTION COST		THROUGHWAY COST		INTERCHANGE COST		TOTAL COST			
ITEM NO.	DESCRIPTION	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	TOTAL	RP
0100	GENERAL					5290800	1808200000	4003882000	
0200	EARTHWORKS	13142566	1343389604	2953510	716468000	16096076	2059857604	8739729000	
0300	DRAINAGE STRUCTURE	876582	704508480	104142	124398200	980724	828907680	1235908000	
0400	PAVEMENT	11370180	2046490812	4473133	889878100	15843313	2936368912	9511344000	
0500	BRIDGE STRUCTURE	26086393	4686280800	5604247	999564720	31690639	5685845520	18837461000	
0600	MISCELLANEOUS	1080349	1011227946	9912846	883938830	10993185	1995166776	6557343000	
0700	FRONTAGE ROAD	876191	195540076	0	0	876191	195540076	559169000	
0001	TOTAL HIGHWAY CONSTRUCTION COST	53432260	9987437717	23047877	3714248850	81770938	15509886567	49444826000	
0800	LAND ACQUISITION	0	8513429000	0	4764506000	0	13267935000	13267935000	
0900	LAND COMPENSATION	0	503593000	0	310350000	0	813943000	813943000	
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	9017022000	0	5064856000	0	14081878000	14081878000	
0003	CONTINGENCIES					16354188	5918352913	12705341000	
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					9812513	3551011748	7623204000	
0000	TOTAL PROJECT AMOUNT					107937638	39061129228	83856249002	

1 US.\$ = 415 RP

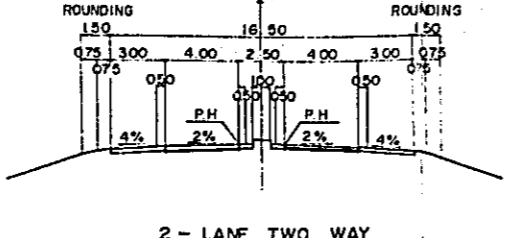
T-3.2 MAJOR QUANTITY OF PROJECT				T-3.3 REQUIRED AMOUNT OF MATERIALS			
1100	TOTAL CUT VOLUME	6416310	CU.M	2100	FUEL	31195892	LIT.
1200	TOTAL FILL VOLUME	5590867	CU.M	2200	REINFORCING BAR	4823	M.T
1300	TOTAL NUMBER OF BRIDGES	38	PLACES	2300	PRESTRESSING BAR	158	M.T
1400	TOTAL LENGTH OF BRIDGES	2496	M	2400	STRUCTURAL STEEL	21225	M.T
1500	OVER BRIDGE	41	PLACES	2500	FINE AGGREGATE	623513	CU.M
1600	BOX CULVERTS	22	PLACES	2600	COURSE AGGREGATE	494861	CU.M
1700	PIPE CULVERTS	32	PLACES	2700	CEMENT	35946	M.T
1800	INTERCHANGE	9	PLACES	2800	ASPHALT	34087	M.T



RAMP

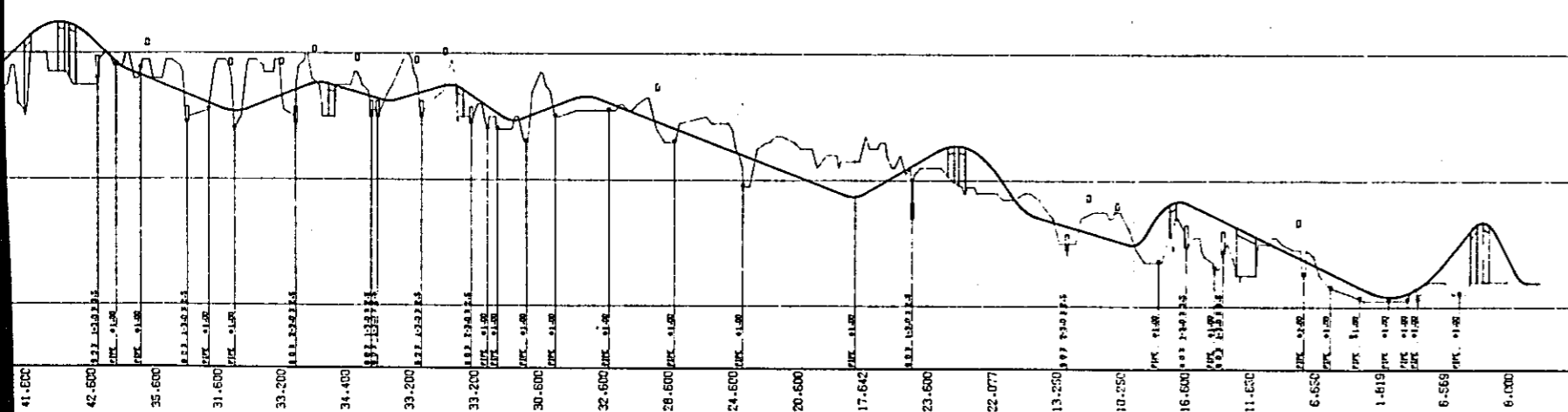
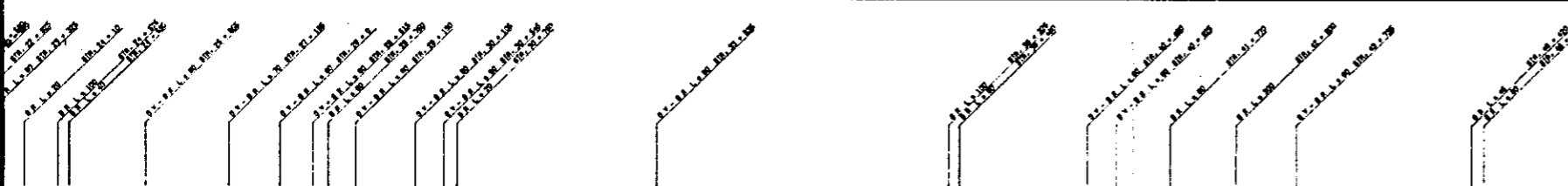
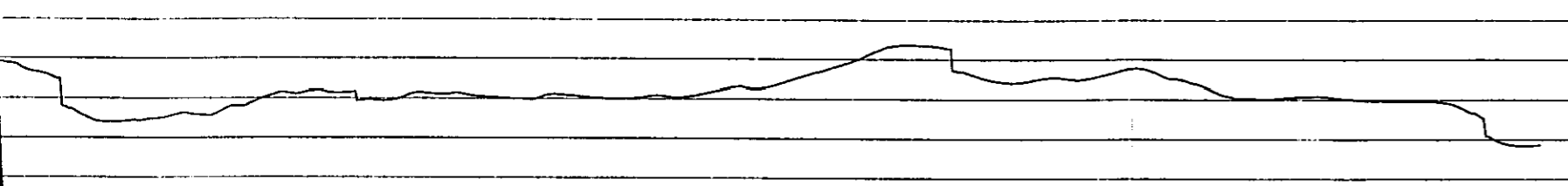


1 - LANE ONE WAY



2 - LANE TWO WAY

24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47																								
375329	250142	-246888	-291716	-251379	-179597	-190507	-77932	77650	99643	72779	-20175	46979	54519	34650	5514	7324	43513	7800	9655	30571	55452	145375	140719	254180	377810	518062	669131	670692	343437	233675	216012	273399	258889	354300	348516	23942	88528	13705	30090	40625	10094	-15069	-20531	-30545	-181924	-586227	-574578
BLOCK 67H BLOCK Vc X0.90=30111 Vr =762342			BLOCK 67H BLOCK Vc X0.90=536473 Vr =242553			BLOCK 67H BLOCK Vc X0.90=972037 Vr =767162			BLOCK 67H BLOCK Vc X0.90=265848 Vr =1046532																																						

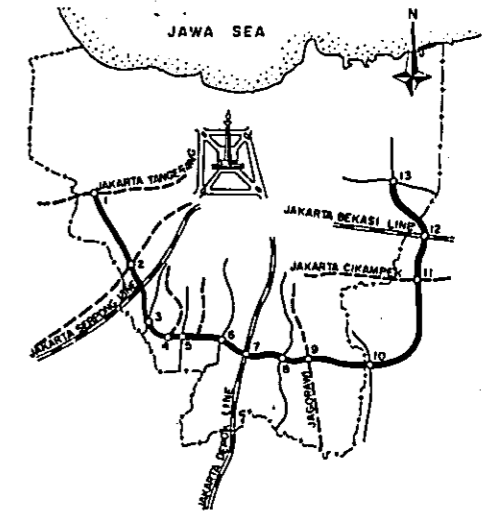


24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47					
41.000	42.600	35.600	31.600	33.200	34.400	33.200	33.200	30.600	32.600	28.600	24.600	20.600	17.642	23.600	22.077	13.200	10.250	16.600	11.600	6.550	1.619	6.569	6.000					
24.500	25.500	27.300	28.600	29.700	30.700	31.600	32.750	36.000	38.650	39.500	41.300	41.750	45.450	46.650	47.200	47.500												
<p>Grades: 4.0%, 4.0%</p>																												

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			5	7
SUMMARY OF PROJECT (COLLECTING SYSTEM; ZONE)				

CASE NO. T-05

KEY MAP



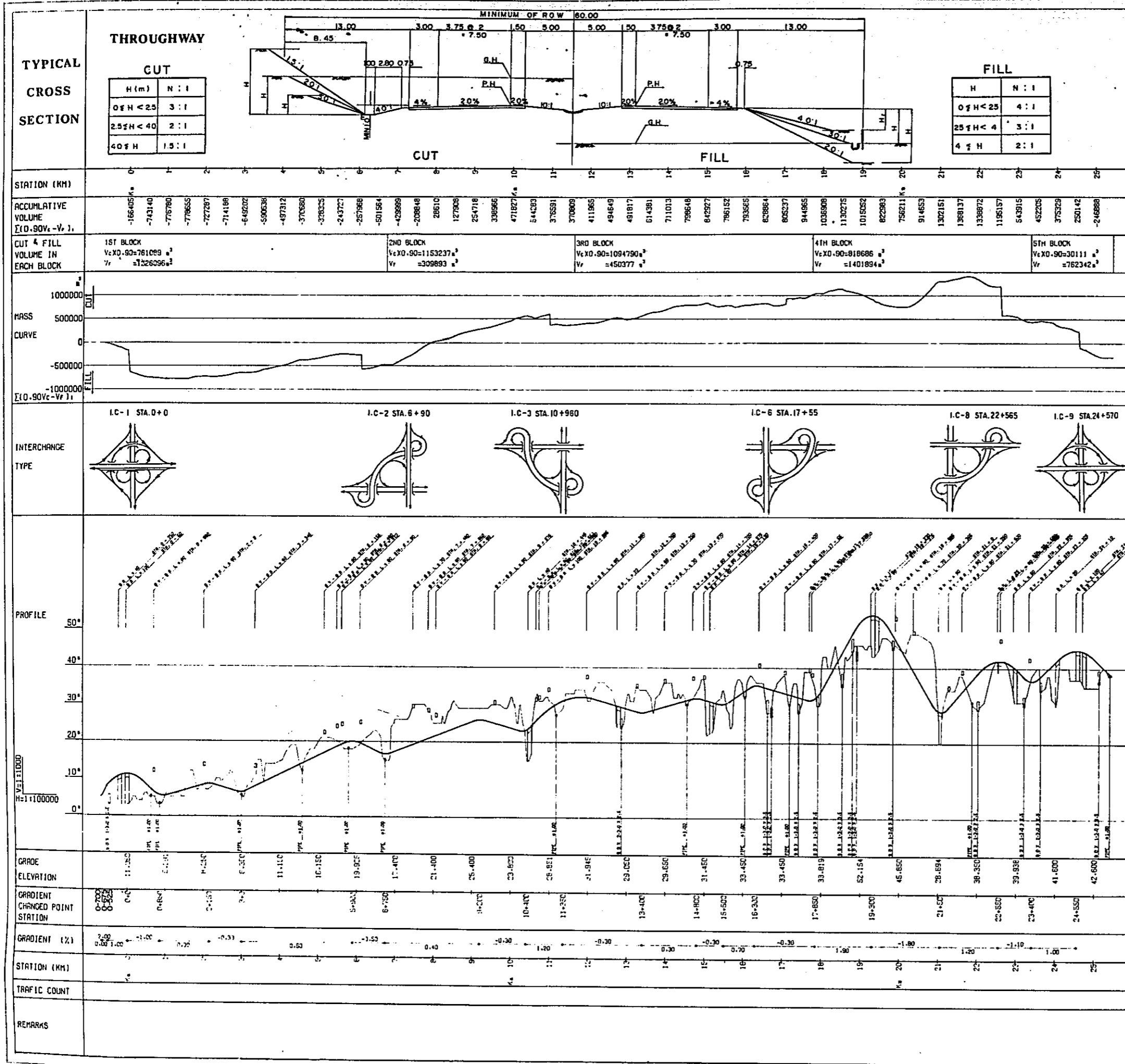
Vc X0.90=5632275
Vr =6206853

JAKARTA OUTER RING ROAD		T-3 SUMMARY OF PROJECT											
BEGIN STAT. 0-700		120KM/H - TOLL - 4 LANE											
END STAT. 47+500		COMBINATION OF INTERCHANGE											
ROAD LENGTH 48.200KM		I-C NO											
ROAD WIDTH 34 M		I-C TYPE											

ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST	
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP
0100	GENERAL					5446800	1861200000
0200	EARTHWORKS	8956125	1031570031	8890912	1207073181	17847038	2238543212
0300	DRAINAGE STRUCTURE	989920	746502182	114250	136473240	1098170	882975422
0400	PAVEMENT	11369448	2046335832	5289752	1038393650	16553210	3085329492
0500	BRIDGE STRUCTURE	26829575	4823312700	6618408	1178548620	33448383	6001851320
0600	MISCELLANEOUS	1194573	1027972716	12332669	1101896672	13527242	2129869388
0700	FRONTAGE ROAD	883755	197228250	0	0	883755	197228250
0001	TOTAL HIGHWAY CONSTRUCTION COST	50217798	9872921711	33240001	4662985373	88904599	16397107084
0800	LAND ACQUISITION	0	8524629000	0	6983056000	0	15507685000
0900	LAND COMPENSATION	0	505299000	0	429225000	0	934524000
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	9029928000	0	7412281000	0	16442209000
0003	CONTINGENCIES					17780920	6567863217
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					10668552	3940717930
0000	TOTAL PROJECT AMOUNT					117354070	43347897230

1 US.\$ = 415 RP

T-3.2 MAJOR QUANTITY OF PROJECT			T-3.3 REQUIRED AMOUNT OF MATERIALS		
1100	TOTAL CUT VOLUME	6258084 CU-M	2100	FUEL	33113632 LIT.
1200	TOTAL FILL VOLUME	6206853 CU-M	2200	REINFORCING BAR	5198 M.T
1300	TOTAL NUMBER OF BRIDGES	34 PLACES	2300	PRESTRESSING BAR	166 M.T
1400	TOTAL LENGTH OF BRIDGES	2320 M	2400	STRUCTURAL STEEL	22564 M.T
1500	OVER BRIDGE	39 PLACES	2500	FINE AGGREGATE	643532 CU-M
1600	BOX CULVERTS	24 PLACES	2600	COURSE AGGREGATE	520265 CU-M
1700	PIPE CULVERTS	32 PLACES	2700	CEMENT	38358 M.T
1800	INTERCHANGE	9 PLACES	2800	ASPHALT	35811 M.T



Vc X 0.90 = 3857916 m³
Vr = 4150605 m³

JAKARTA OUTER RING ROAD T-3 SUMMARY OF

BEGIN STAT. 0+700
END STAT. 25+450
ROAD LENGTH 26.150 KM
ROAD WIDTH 34 M

COMBINATION OF INTERCHANGE I.C. TYPE OF INTERCHANGE

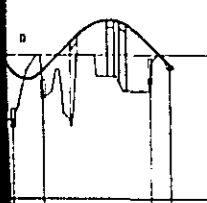
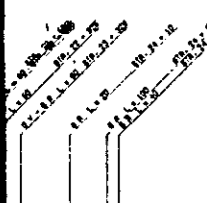
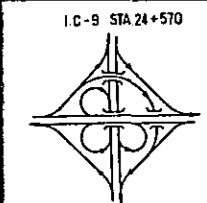
T-3.1 CONSTRUCTION COST THROUGHWAY COST INTERCHANGE COST

ITEM NO.	DESCRIPTION	FOREIGN US. \$	LOCAL RP	FOREIGN US. \$	LOCAL RP
0100	GENERAL				
0200	EARTHWORKS	4947428	566979694	6065599	71476
0300	DRAINAGE STRUCTURE	561974	403172542		81476
0400	PAVEMENT	6204641	1118939441	3934256	7
0500	BRIDGE STRUCTURE	16187262	2931812280	4445323	7
0600	MISCELLANEOUS	671901	606295971	9361094	8
0700	FRONTAGE ROAD	760398	169698845		0
0001	TOTAL HIGHWAY CONSTRUCTION COST	29333604	5794798573	23887748	32
0800	LAND ACQUISITION	0	6024610000	0	58
0900	LAND COMPENSATION	0	359265000	0	3
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	6383875000	0	62
0003	CONTINGENCIES				
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS				
0000	TOTAL PROJECT AMOUNT				

T-3.2 MAJOR QUANTITY OF PROJECT

1100	TOTAL CUT VOLUME	4286574	CU-M
1200	TOTAL FILL VOLUME	4150605	CU-M
1300	TOTAL NUMBER OF BRIDGES	22	PLACES
1400	TOTAL LENGTH OF BRIDGES	1270	M
1500	OVER BRIDGE	28	PLACES
1600	BOX CULVERTS	14	PLACES
1700	PIPE CULVERTS	13	PLACES
1800	INTERCHANGE	6	PLACES

24	25
452205	375329
250142	-246888
5TH BLOCK	
VcX0.90=30111 m ³	VcX0.90=3857916 m ³
Vr =762342 m ³	Vr =4150605 m ³



23-4TC	24-5SD
41-6DD	42-6DD
1.00	
24	25

JAKARTA OUTER RING ROAD T-3 SUMMARY OF PROJECT ALTERNATIVE - 12
120KM/H - TOLL - 4 LANE

BEGIN STAT.	0+700
END STAT.	25+450
ROAD LENGTH.	26.150KM
ROAD WIDTH.	34 M

COMBINATION OF INTERCHANGE	I.C. NO.	1	2	3	4	5	6	7	8	9	10	11	12	13
D. DIAMOND														
D. TRUMPET														
CLOVER														
TURBINE														

T-3.1 CONSTRUCTION COST		THROUGHWAY COST		INTERCHANGE COST		TOTAL COST		
ITEM NO.	DESCRIPTION	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	TOTAL RP
0100	GENERAL EARTHWORKS	4947428	566879694	6065599	724175176	3267200	111580000	2471688000
0200	DRAINAGE STRUCTURE	561974	403172542	81476	97324080	11013027	1291054870	5861461000
0300	PAVEMENT	6204641	1116839441	3934256	768202100	643449	500496622	767528000
0400	BRIDGE STRUCTURE	16187262	2931812280	4445323	792862740	10138897	1885141541	6092784000
0500	MISCELLANEOUS	671901	606295971	9361094	848715662	20632585	3724675020	12287198000
0600	FRONTAGE ROAD	760398	169698645	0	0	10032996	1455011633	5618705000
0700						760398	169698645	485764000
0001	TOTAL HIGHWAY CONSTRUCTION COST	29333604	5794798573	23887748	3231279758	56488552	10141878331	33584628000
0800	LAND ACQUISITION	0	6024610000	0	5893155000	0	11917765000	11917765000
0900	LAND COMPENSATION	0	359265000	0	393600000	0	752865000	752865000
0002	TOTAL LAND ACQUISITION AND COMPENSATION COST	0	6383875000	0	6286755000	0	12670630000	12670630000
0003	CONTINGENCIES					11297710	4562501666	9251052000
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					6778626	2737501000	5550631000
0000	TOTAL PROJECT AMOUNT					74584889	30112510997	61056940000

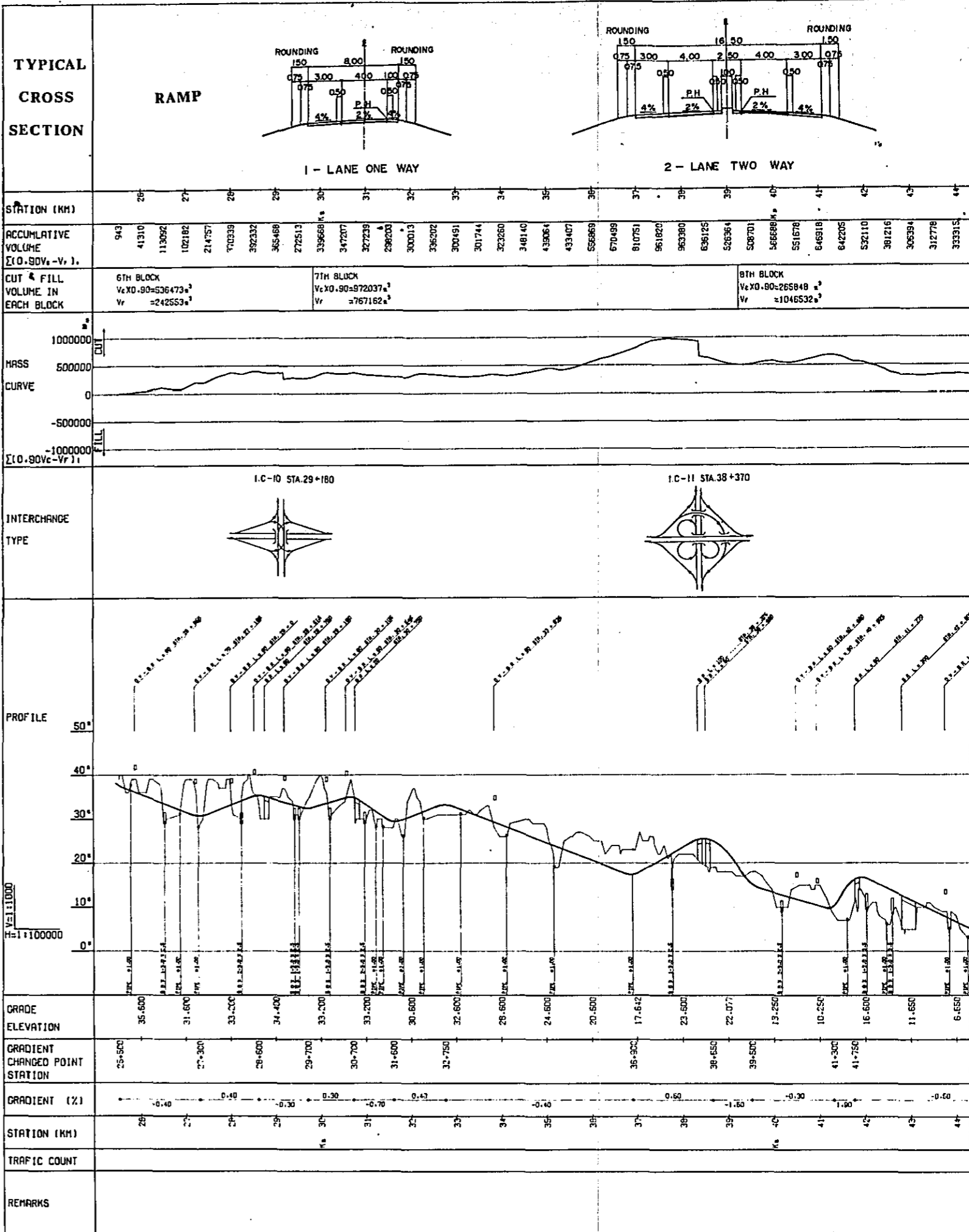
1 US.\$ = 415 RP

T-3.2 MAJOR QUANTITY OF PROJECT

1100	TOTAL CUT VOLUME	4286574	CU.M
1200	TOTAL FILL VOLUME	4150605	CU.M
1300	TOTAL NUMBER OF BRIDGES	22	PLACES
1400	TOTAL LENGTH OF BRIDGES	1270	M
1500	OVER BRIDGE	28	PLACES
1600	BOX CULVERTS	14	PLACES
1700	PIPE CULVERTS	13	PLACES
1800	INTERCHANGE	6	PLACES

T-3.3 REQUIRED AMOUNT OF MATERIALS

2100	FUEL	20780934	LIT.
2200	REINFORCING BAR	3255	M.T
2300	PRESTRESSING BAR	96	M.T
2400	STRUCTURAL STEEL	13931	M.T
2500	FINE AGGREGATE	359995	CU.M
2600	COURSE AGGREGATE	32356	CU.M
2700	CEMENT	24784	M.T
2800	ASPHALT	21957	M.T



CAL
SS
ON

KM)

VE

Vr 1)

L

K

000000

500000

0

500000

000000

VE

50°

40°

30°

20°

10°

0°

25-500

27-300

28-600

29-700

30-700

31-600

32-750

36-300

38-650

39-600

41-300

41-750

45-450

46-650

47-210

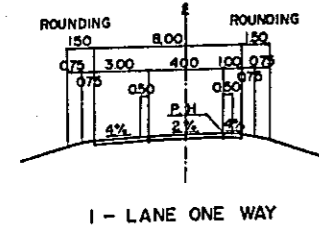
47-500

X1)

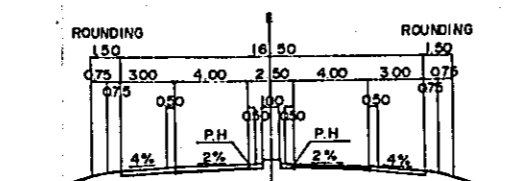
KM)

NT

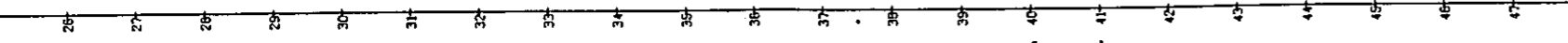
RAMP



1 - LANE ONE WAY

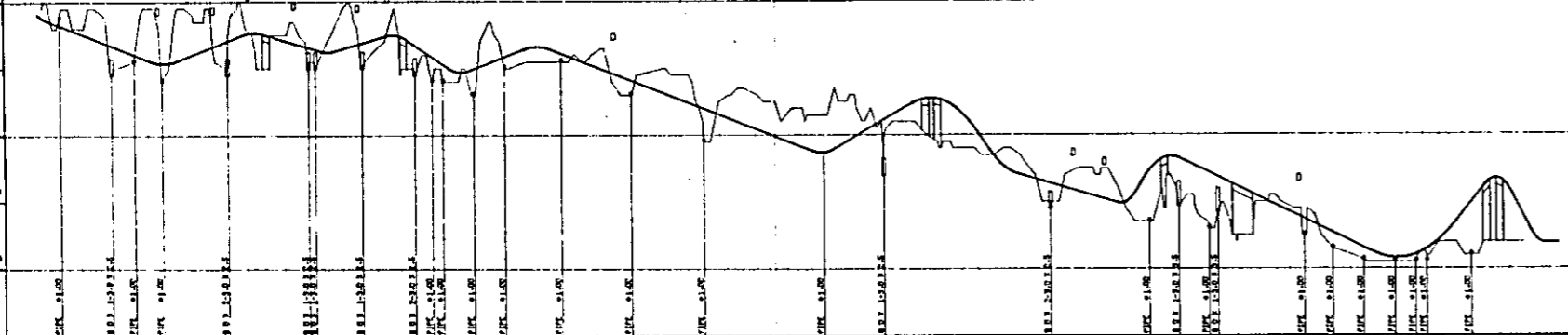
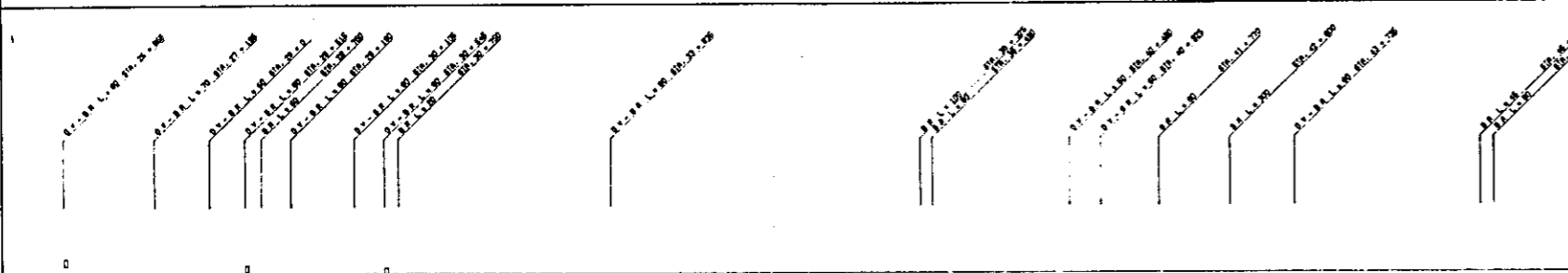
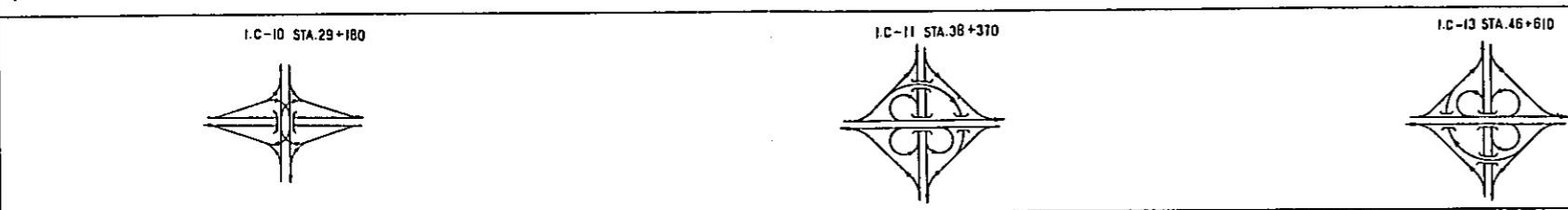
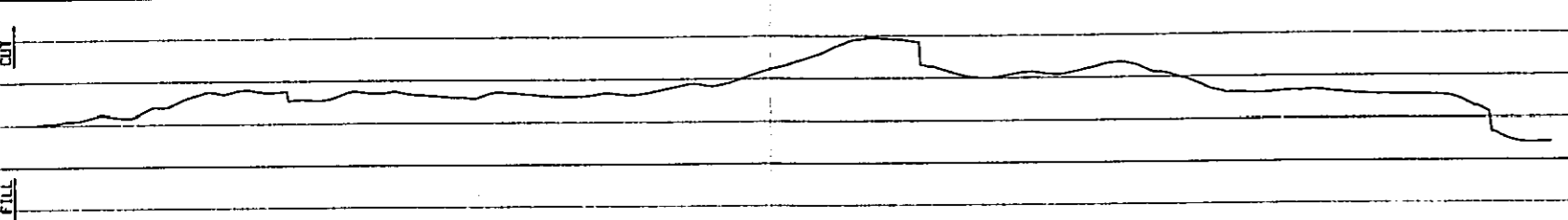


2 - LANE TWO WAY

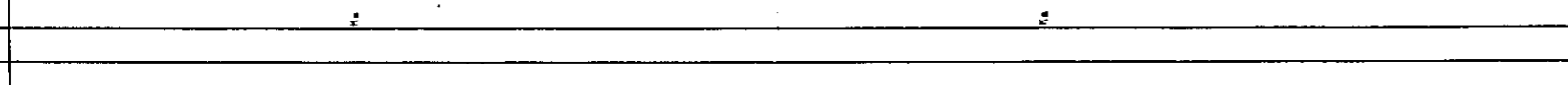
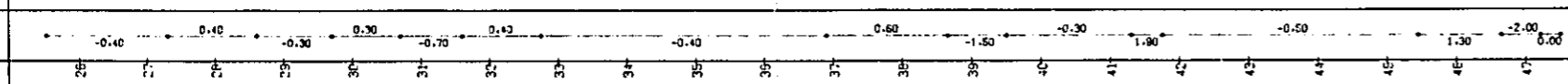


943	41310	113092	102182	214757	1709339	392332	365468	272513	339668	347207	327239	298203	300013	336202	300491	301744	322250	346140	439064	433407	556869	670499	810751	961920	963390	636125	526364	506701	566686	551678	646918	642205	532110	391216	306334	312778	333316	303983	277620	272157	262143	110765	-279538	-281689
-----	-------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------

6TH BLOCK Vc X0.90=536473 m³ Vr =242553 m³										7TH BLOCK Vc X0.90=972037 m³ Vr =767162 m³										8TH BLOCK Vc X0.90=265848 m³ Vr =1046532 m³									
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--



25-500	27-300	28-600	29-700	30-700	31-600	32-750	36-300	38-650	39-600	41-300	41-750	45-450	46-650	47-210	47-500
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

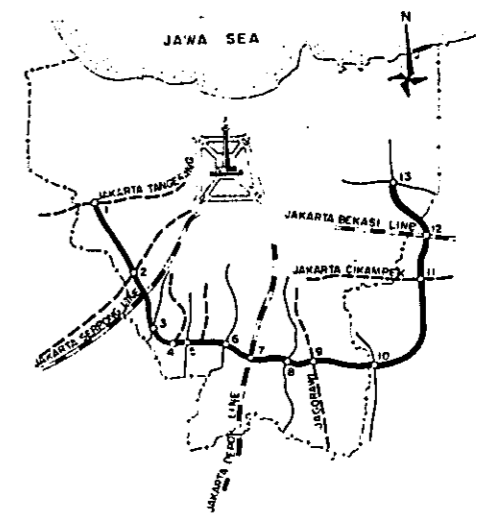


PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			6	7

SUMMARY OF PROJECT (COLLECTING SYSTEM; ZONE)

CASE NO. T-06

KEY MAP



Vc X0.90=1774358 m³
Vr =2056247 m³

JAKARTA OUTER RING ROAD T-3 SUMMARY OF PROJECT

BEGIN STAT.	25+450	COMBINATION OF INTERCHANGE	I.C. NO	120KM/H - TOLL - 4 LANE
END STAT.	47+500		1 2 3 4 5 6 7 8 9 10 11 12 13	
ROAD LENGTH.	22.050KM			
ROAD WIDTH.	34 M			

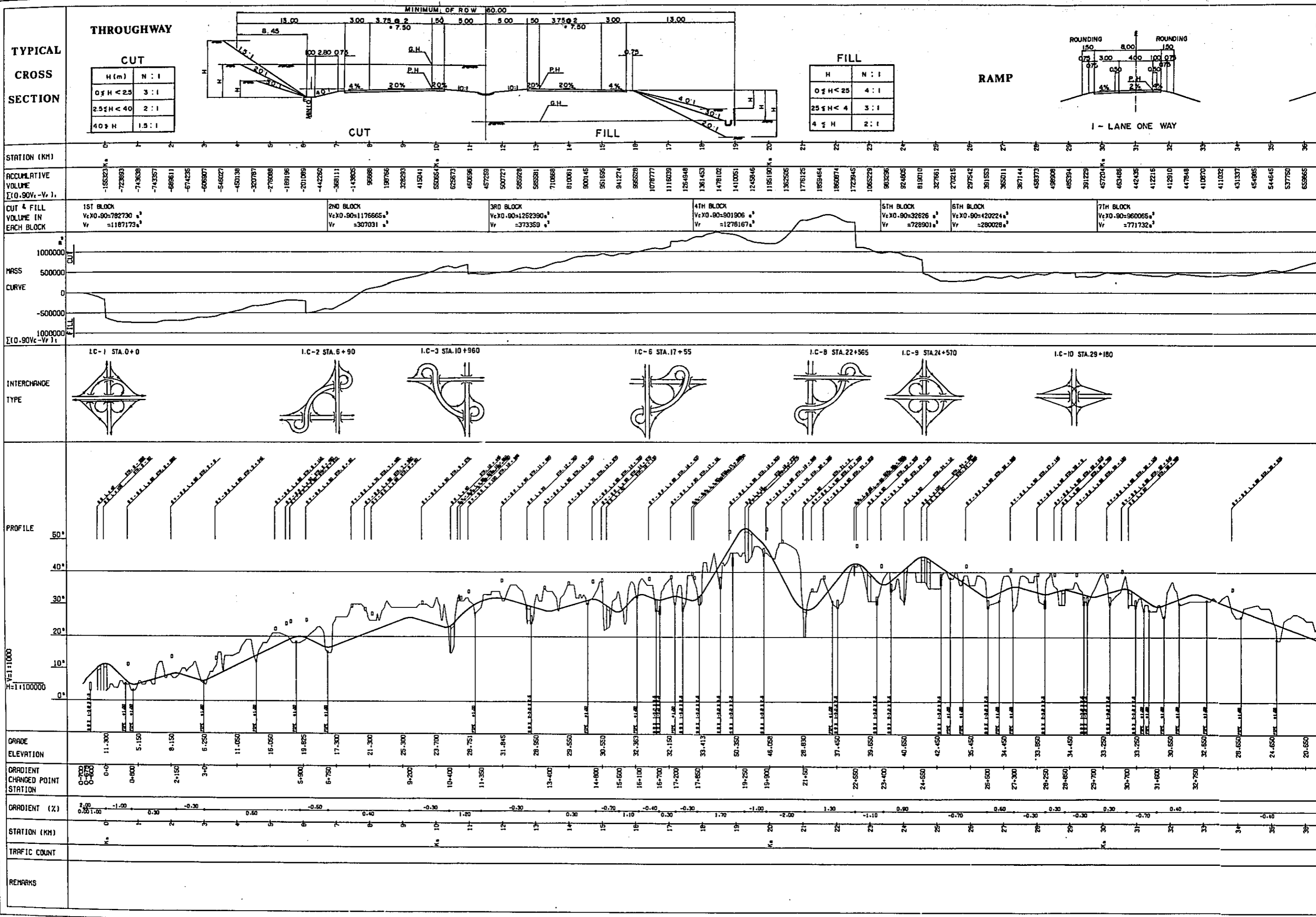
ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST	
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP
0100	GENERAL						
0200	EARTHWORKS	4008698	464690337	2825313	482898005	2179600	745400000
0300	DRAINAGE STRUCTURE	421947	343329640	32774	39149160	6834012	947588342
0400	PAVEMENT	5184007	529398391	1349506	270791560	454721	382478800
0500	BRIDGE STRUCTURE	10642713	1891500420	2173085	385685880	6514313	1200187951
0600	MISCELLANEOUS	522671	421676745	2971575	253181010	12815798	2277186300
0700	FRONTAGE ROAD	123357	27529605	0	0	3494246	674857755
0001	TOTAL HIGHWAY CONSTRUCTION COST	20884194	4078123138	9352253	1431705615	123357	27529605
0800	LAND ACQUISITION	0	2500019000	0	1089901000	0	3589920000
0900	LAND COMPENSATION	0	146034000	0	35625000	0	181659000
0002	TOTAL LAND ACQUISITION AND COMPENSATION COST	0	2646053000	0	1125526000	0	3771579000
0003	CONTINGENCIES					6483209	2005361551
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					3889926	1203216930
0000	TOTAL PROJECT AMOUNT					42789181	13235386234

1 US.\$ = 415 RP

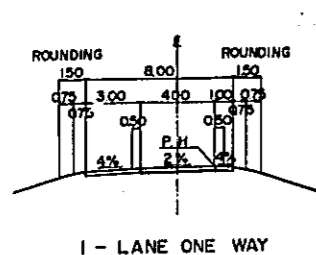
T-3.2 MAJOR QUANTITY OF PROJECT

T-3.3 REQUIRED AMOUNT OF MATERIALS

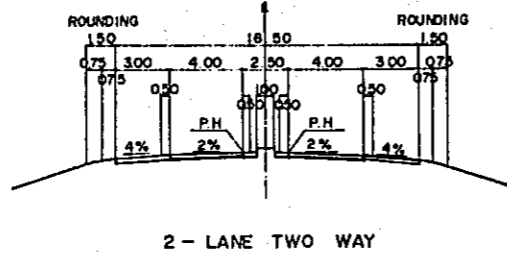
1100	TOTAL CUT VOLUME	1971510	CU.M	2100	FUEL	12332698	LIT.
1200	TOTAL FILL VOLUME	2056248	CU.M	2200	REINFORCING BAR	1942	M.T
1300	TOTAL NUMBER OF BRIDGES	12	PLACES	2300	PRESTRESSING BAR	70	M.T
1400	TOTAL LENGTH OF BRIDGES	1050	M	2400	STRUCTURAL STEEL	8633	M.T
1500	OVER BRIDGE	11	PLACES	2500	FINE AGGREGATE	285338	CU.M
1600	BOX CULVERTS	10	PLACES	2600	COURSE AGGREGATE	194909	CU.M
1700	PIPE CULVERTS	19	PLACES	2700	CEMENT	13564	M.T
1800	INTERCHANGE	3	PLACES	2800	ASPHALT	13853	M.T



RAMP



1 - LANE ONE WAY



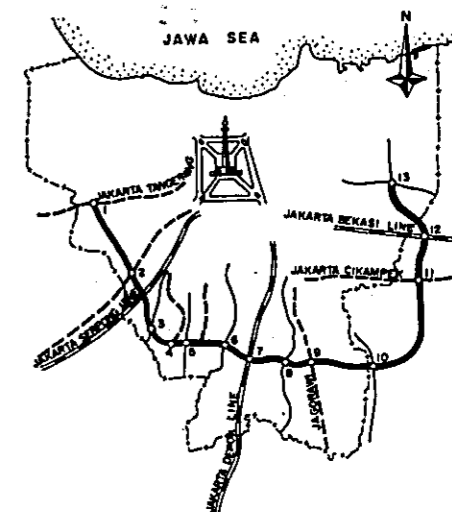
2 - LANE TWO WAY

PROJECT	PROJECT CODE/YR	PROVINCE	SHEET NO	TOTAL SHEET
JAKARTA OUTER RING ROAD			7	7

SUMMARY OF PROJECT (COLLECTING SYSTEM I ZONE)

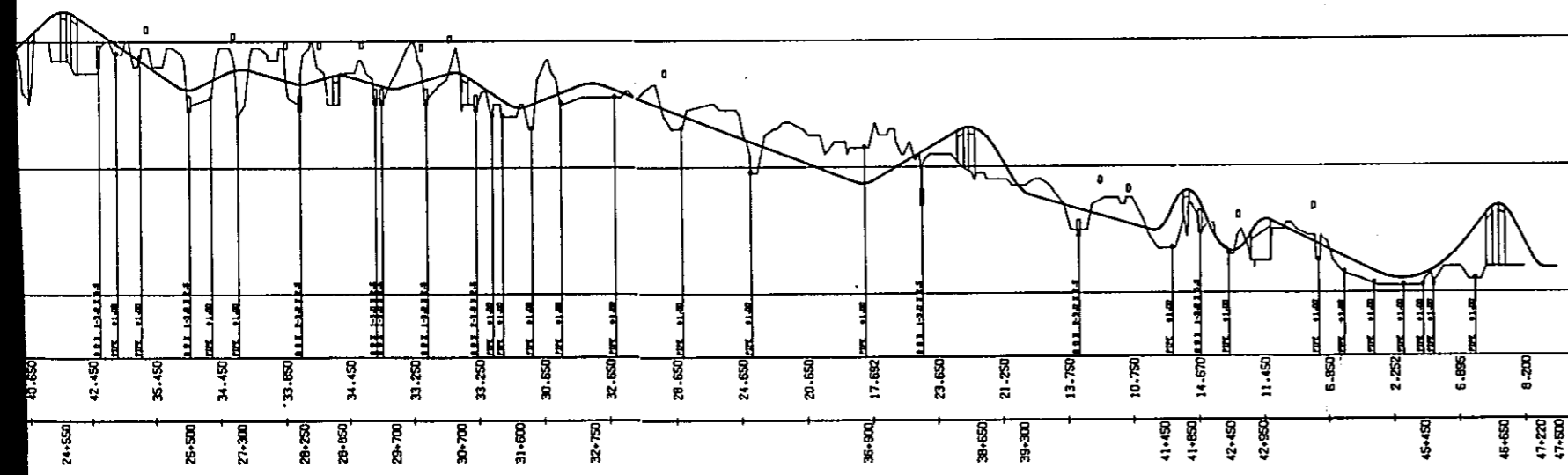
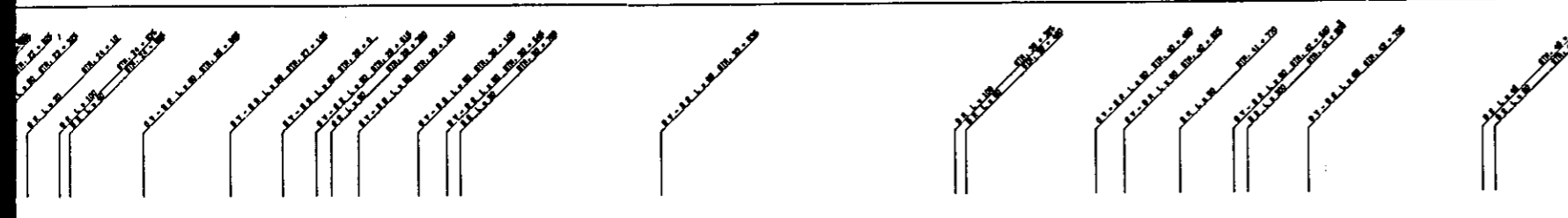
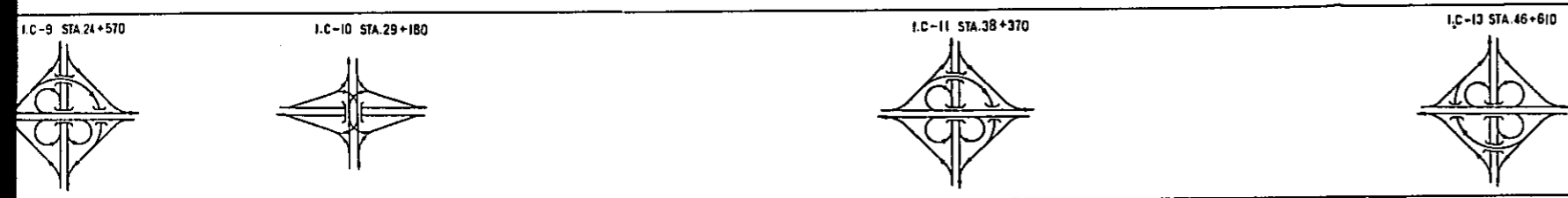
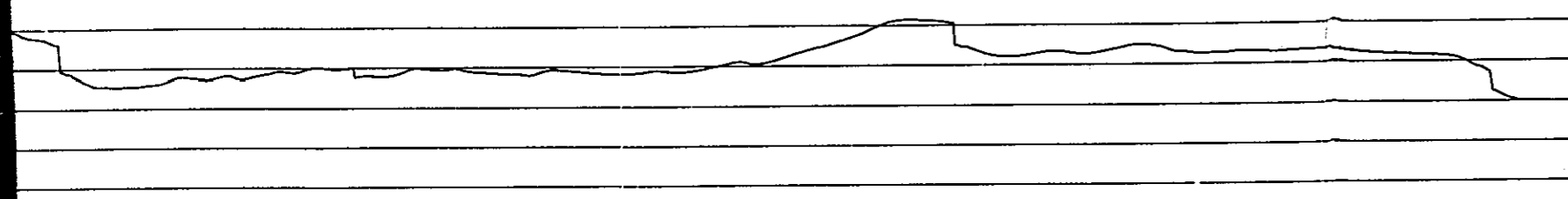
CASE NO T-09

KEY MAP



24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47																								
824865	819010	327661	270215	297542	391553	365011	367144	496373	496908	485394	391229	457204	463486	442435	412216	412910	447846	410870	411022	431397	454985	544645	537750	659865	722167	911031	1060682	1061088	723545	812873	619832	668559	641378	724697	727357	644196	638197	650447	653277	669316	635047	603150	586335	563743	406097	16217	6811

BLOCK	6TH BLOCK	7TH BLOCK	8TH BLOCK
Vc X0.90=32626	Vc X0.90=420224	Vc X0.90=960065	Vc X0.90=263069
Vr =728901	Vr =280028	Vr =771732	Vr =857472



24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
	-0.70	-0.50	-0.30	-0.30	0.30	0.30	0.16	0.16	0.80	-0.30	-0.30	2.80	2.80	1.80	-0.60	-0.60	1.30	-2.80	-2.80	0.30			

JAKARTA OUTER RING ROAD T-3 SUMMARY OF PROJECT

100KM/H - TOLL - 4 LANE

BEGIN STAT. 0-700
END STAT. 47+500
ROAD LENGTH. 48.200KM
ROAD WIDTH. 34 M

COMBINATION OF INTERCHANGE	I.C. NO.												
	1	2	3	4	5	6	7	8	9	10	11	12	13
D. TRUCK													
C. OVER													
TURBINE													

ITEM NO.	DESCRIPTION	THROUGHWAY COST		INTERCHANGE COST		TOTAL COST		
		FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	FOREIGN US.\$	LOCAL RP	
0100	GENERAL					5290800	180820000	4003882000
0200	EARTHWORKS	13201306	1350509604	3013360	728654000	16214666	2079163604	8808250000
0300	DRAINAGE STRUCTURE	876582	704508480	114250	136473240	990632	840981720	1252177000
0400	PAVEMENT	11370180	2045490812	5293762	103993660	16653942	3085484472	9996870000
0500	BRIDGE STRUCTURE	26844962	4844503200	6819406	1178548620	33563370	6023051820	19951851000
0600	MISCELLANEOUS	1080596	1019871336	12332669	1101896672	13413265	2121768008	7688273000
0700	FRONTAGE ROAD	678191	195540076	0	0	876191	195540076	559169000
0001	TOTAL HIGHWAY CONSTRUCTION COST	54349816	10161429507	27362448	4184566192	87003065	16154189699	62260462000
0800	LAND ACQUISITION	0	8513429000	0	6983056000	0	15496485000	16496485000
0900	LAND COMPENSATION	0	503593000	0	429225000	0	932818000	932818000
0002	TOTAL LAND ACQUIS. AND COMPENS. COST	0	9017022000	0	7412281000	0	16429303000	16429303000
0003	CONTINGENCIES					17400613	6516698540	13737953000
0004	FINAL ENGINEERING SUPERVISION ADMINISTRATION AND OTHERS					10440368	3910019124	6242772000
0000	TOTAL PROJECT AMOUNT					114844046	43010210362	90670489002

1 US.\$ = 415 RP

T-3.2 MAJOR QUANTITY OF PROJECT		T-3.3 REQUIRED AMOUNT OF MATERIALS	
---------------------------------	--	------------------------------------	--

1100	TOTAL CUT VOLUME	6432976	CU.M	2100	FUEL	32344562	LIT.
1200	TOTAL FILL VOLUME	5783667	CU.M	2200	REINFORCING BAR	5129	M.T
1300	TOTAL NUMBER OF BRIDGES	34	PLACES	2300	PRESTRESSING BAR	167	M.T
1400	TOTAL LENGTH OF BRIDGES	2260	M	2400	STRUCTURAL STEEL	22637	M.T
1500	OVER BRIDGE	41	PLACES	2600	FINE AGGREGATE	637264	CU.M
1600	BOX CULVERTS	22	PLACES	2600	COURSE AGGREGATE	519646	CU.M
1700	PIPE CULVERTS	32	PLACES	2700	CEMENT	38215	M.T
1800	INTERCHANGE	9	PLACES	2800	ASPHALT	35806	M.T

