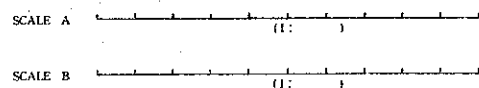


DISTRIBUTION DESCRIPTION	LIGHTING POLE				LIGHTING FIXTURE		CONSTANT WATTAGE BALLAST	
	NO	LP-1	LP-2	LP-3	LP-4	LH-1	LH-2	STEP DIMMING
A	1	9		1	2	10	2	7
	2	14			3	14	3	9
	3	9				9		9
	4	12				12		12
B	1	9		1	2	10	2	8
	2	10			2	10	2	7
	3	5	3		1	8	1	3
	4	7	3		1	10	1	4
TOTAL	75	6	2	11		83	11	38

FNO	POLE NO	POLE POSITION	DISTRIBUTION PANEL	LIGHTING POLE TYPE	FIXTURE	LAMP	CONNECTION	CONSTANT WATTAGE BALLAST
1	1/A1	0 + 25	A (1)	LP-1	LH-1	HF400Wx1	T-N	DIMMING
	2/	0 + 59					S-N	
	3/	KNON 0+28		LP-4	LH-2		R-N	
	4/	0+44		LP-3	LH-1		T-N	
	5/	0+79		LP-1			S-N	DIMMING
	6/	0+57					R-N	
	7/	0+28					T-N	
	8/	1 + 4		LP-4	LH-2		S-N	
	9/	1 + 18		LP-1	LH-1		R-N	
	10/	1 + 49					T-N	
	11/	1 + 76					S-N	DIMMING
	12/	2 + 19					R-N	
2	1/A2	0 - 5	A (2)	LP-1	LH-1	HF400W x1	S-N	DIMMING
	2/	0 + 59					R-N	
	3/	0 + 77		LP-4	LH-2		T-N	
	4/	0 + 93		LP-1	LH-1		S-N	
	5/	1 + 0		LP-4	LH-2		R-N	
	6/	REVA 0+35		LP-1	LH-1		S-N	
	7/	0+60					T-N	DIMMING
	8/	0+79					R-N	
	9/	0+45					T-N	
	10/	0+27		LP-4	LH-2		S-N	
	11/	1 + 31		LP-1	LH-1		R-N	
	12/	1 + 49					T-N	
3	1/A3	3 + 64	A (3)	LP-1	LH-1	HF400Wx1	T-N	DIMMING
	2/	3 + 99					S-N	
	3/	4 + 34					R-N	
	4/	4 + 69					T-N	
	5/	5 + 4					S-N	
	6/	5 + 39					R-N	
	7/	5 + 74					T-N	
	8/	6 + 9					S-N	
	9/	6 + 44					R-N	
	10/	6 + 44					R-N	
	11/	6 + 9					S-N	
	12/	6 + 44					R-N	

FNO	POLE NO	POLE POSITION	DISTRIBUTION PANEL	LIGHTING POLE TYPE	FIXTURE	LAMP	CONNECTION	CONSTANT WATTAGE BALLAST
1	1/B1	9 + 87	B (1)	LP-3	LH-1	HF 400Wx1	T-N	
	2/	9 + 88		LP-1			S-N	
	3/	10 + 13					R-N	
	4/	10 + 1		LP-4	LH-2		T-N	
	5/	OCEAN 10+30		LP-1	LH-1		S-N	
	6/	0+63					R-N	DIMMING
	7/	0+80					T-N	
	8/	0+43					S-N	
	9/	0+23		LP-4	LH-2		R-N	
	10/	10 + 50		LP-1	LH-1		T-N	
	11/	10 + 86					S-N	DIMMING
	12/	11 + 22					R-N	
2	1/B2	11 + 1	B (2)	LP-1	LH-1	HF 400Wx1	R-N	DIMMING
	2/	10 + 66					S-N	
	3/	10 + 31					T-N	
	4/	10 + 14		LP-4	LH-2		R-N	
	5/	9 + 99		LP-1	LH-1		S-N	
	6/	9 + 64					T-N	DIMMING
	7/	9 + 30					R-N	
	8/	8 + 95					S-N	
	9/	8 + 74					T-N	
	10/	8 + 77		LP-4	LH-2		R-N	
	11/	UNITED 8+35		LP-1	LH-1		S-N	
	12/	0+56					T-N	DIMMING
3	1/B3	UNITED 0+75	B (3)	LP-1	LH-1	HF 400W x1	R-N	DIMMING
	2/	0+40					S-N	
	3/	0+22		LP-4	LH-2		T-N	
	4/	8 + 25		LP-1	LH-1		R-N	
	5/	7 + 95					S-N	DIMMING
	6/	7 + 70					T-N	
	7/	7 + 44		LP-2			R-N	
	8/	7 + 9					S-N	
	9/	6 + 74					T-N	
4	1/B4	9 + 51	B (4)	LP-1	LH-1	HF 400Wx1	S-N	DIMMING
	2/	9 + 15					R-N	
	3/	8 + 79					T-N	
	4/	8 + 53					S-N	
	5/	8 + 37		LP-4	LH-2		R-N	
	6/	8 + 19		LP-1	LH-1		T-N	
	7/	7 + 95					S-N	DIMMING
	8/	7 + 70					R-N	
	9/	7 + 44		LP-2			T-N	
	10/	7 + 9					S-N	
	11/	6 + 74					R-N	



REV. NO.		DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		LIST OF LIGHTING FACILITIES		MINISTRY OF WORKS NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		APPROVED _____ DATE _____ PREPARED _____ CHECKED _____ SUBMITTED _____ DATE JUNE 30, 1980
							MINISTRY OF WORKS	DWG. NO. I - 5					

LEGEND

	DISTRIBUTION PANEL
	STREET LIGHTING FIXTURE
	STREET LIGHTING FIXTURE (STEP DIMMING)
	PEDESTRIAN CROSSING LIGHTING FIXTURE
	MANHOLE (REFER TO MANHOLE DETAIL)
	PULL BOX (WATER PROOF) VE 400 x 400 x 400 (mm)
	UNDERGROUND CABLE REFER TO DRAWING
	EXPOSED PIPING CVMAZV 8 ^{sq} -4 ^c +5.5 ^{sq} -1 ^c +GV5.5 ^{sq} (VE54)
	POLE NUMBER
	FEEDER NUMBER
	CROSSLINKED POLYETHYLEN PVC METALARMOUR CORROSION PROOF PVC
	POLYVINYL CHLORIDE INSULATED AND SHEATHED CONTROL CABLES
	GROUND POLYVINYL CHLORIDE INSULATED WIRE
	UNPLASTICIZED POLYVINYL CHLORIDE CONDUITS
	SPIRAL CORRUGATED HARD POLYETHYLEN PIPE
	CARBON STEEL PIPE FOR ORDINARY PIPING I25
	UNDERGROUND CABLE: CVMAZV 8 ^{sq} -4 ^c +5.5 ^{sq} -1 ^c +GV5.5 ^{sq} (GL - 600)
	PHOTOELECTRIC SWITCHES

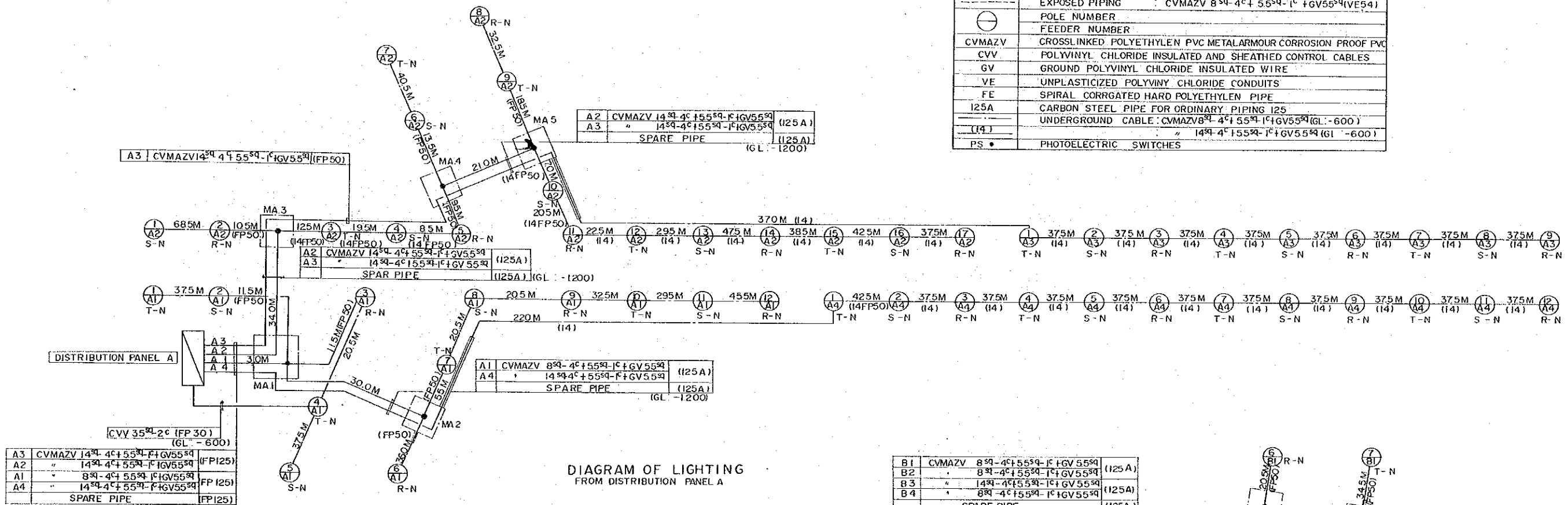


DIAGRAM OF LIGHTING FROM DISTRIBUTION PANEL A

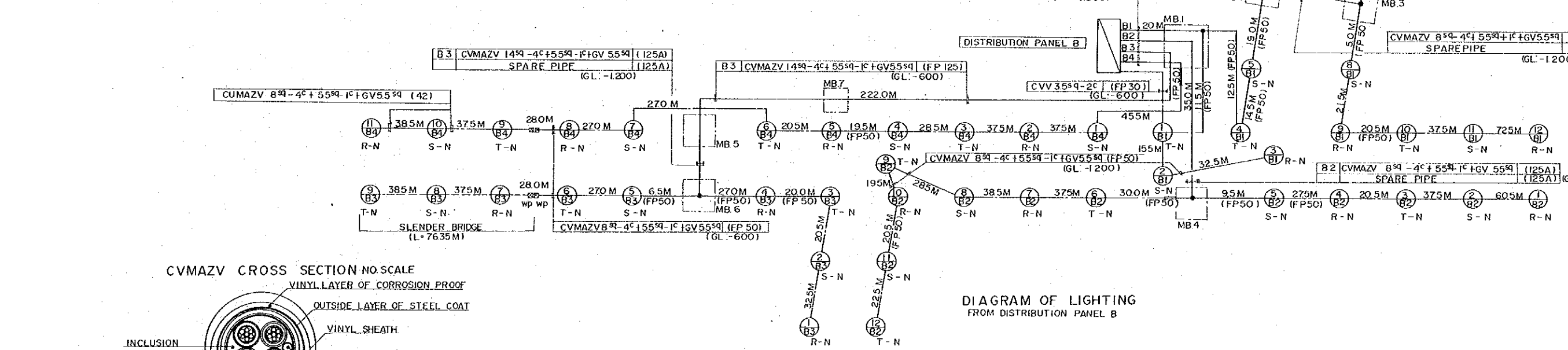
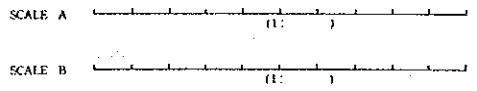
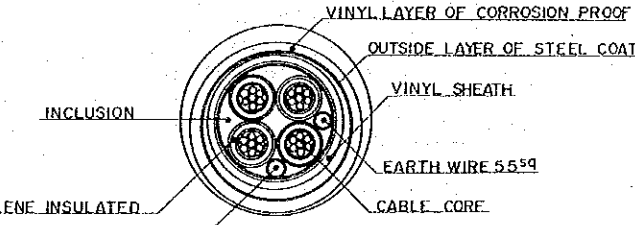
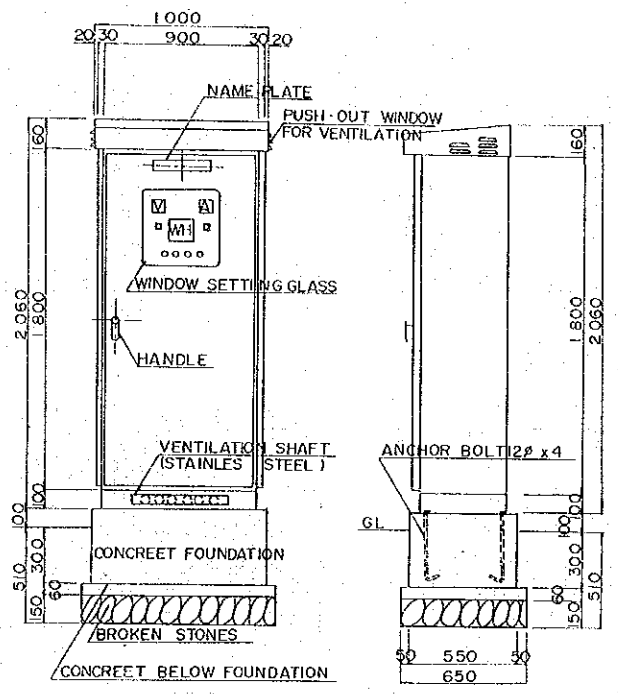


DIAGRAM OF LIGHTING FROM DISTRIBUTION PANEL B

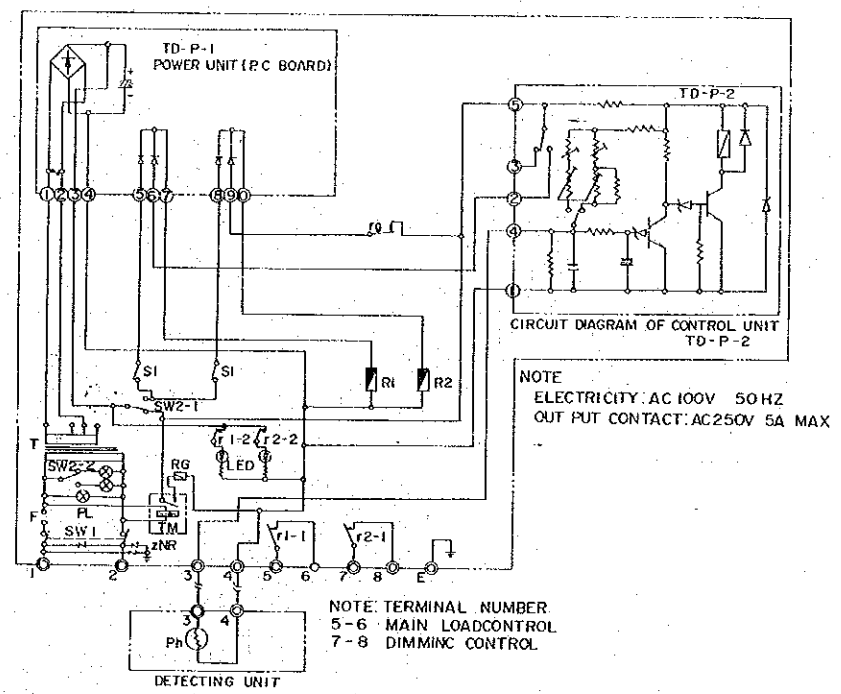
CVMAZV CROSS SECTION NO. SCALE



REV NO	DATE	COORDINATE	REVISION	APPRO	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	CABLE WIRING DIAGRAM FOR LIGHTING SYSTEM	MINISTRY OF WORKS NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	APPROVED DATE PREPARED SUBMITTED DATE
						MINISTRY OF WORKS	DWG. NO. I - 6		JUNE 30, 1980



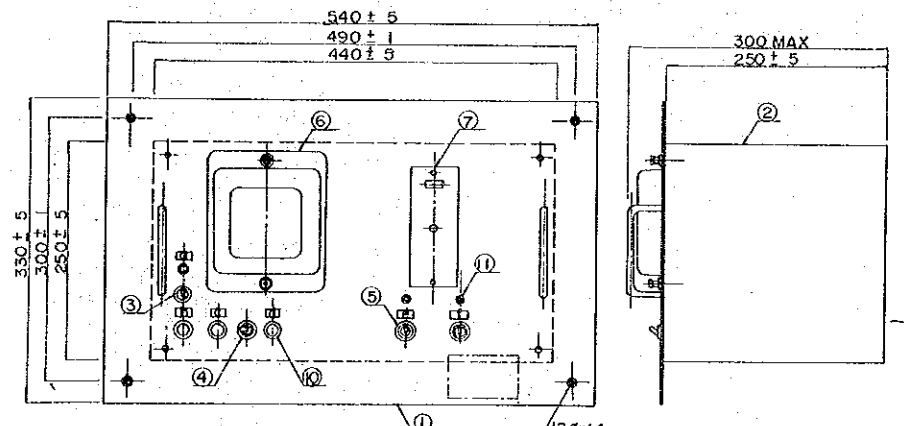
FRONT VIEW SIDE VIEW
 NOTE: ANTI POLLUTION (OUTDOOR TYPE (WATER PROOF))
 "A" "B" CABINET PANEL SCALE A



NOTE: ELECTRICITY: AC 100V 50HZ
 OUT PUT CONTACT: AC 250V 5A MAX

NOTE: TERMINAL NUMBER
 5-6 MAIN LOAD CONTROL
 7-8 DIMMING CONTROL

SIMBOL	QT	PARTS	MATERIAL	SUMMARY
LED	2	INDICATOR	LIGHT EMITTING DIODE	
ZNR	3	SURGE ABSORBER		
Ph	1	PHOTO CELL	Cds	
TD-P-2	1	CONTROL UNIT		
TM	1	TIMER		
TD-P-1	1	POWER UNIT		
R1-2	2	OUT PUT RELAY		
RG	1	CONTROL RELAY		
S1-2	2	MANUAL OPERATION SWITCH		
SW 2	1	AUTO MANUAL SELECTOR		
T	1	POWER TRANSFORMER		
PL	3	PILOT LAMP		
F	1	FUSE		2A
SW1	1	POWER SWITCH		

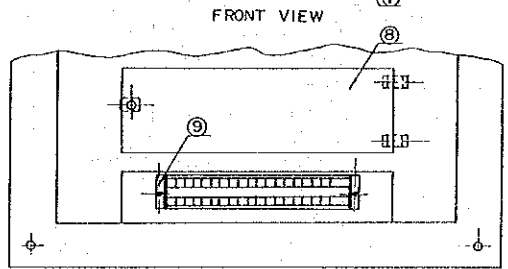


DIMMING CONTROLLER CIRCUIT (NO SCALE)

BURNING CONTROL	TERMINAL NUMBER	SWITCH ON	PRE-SET OF TIMER				SWITCH OFF
			12:00	18:00	24:00	6:00	
MAIN LIGHTING LOAD	5-6	100 Lx	full light up		dimming light up		200 Lx
DIMMING CONTROL	7-8	TIMER					TIMER

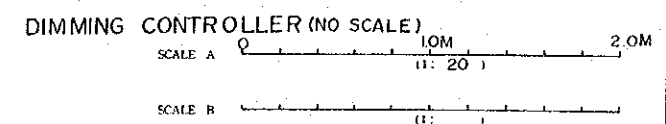
(EXAMPLE)

LIGHTING SEQUENCE (NO SCALE)



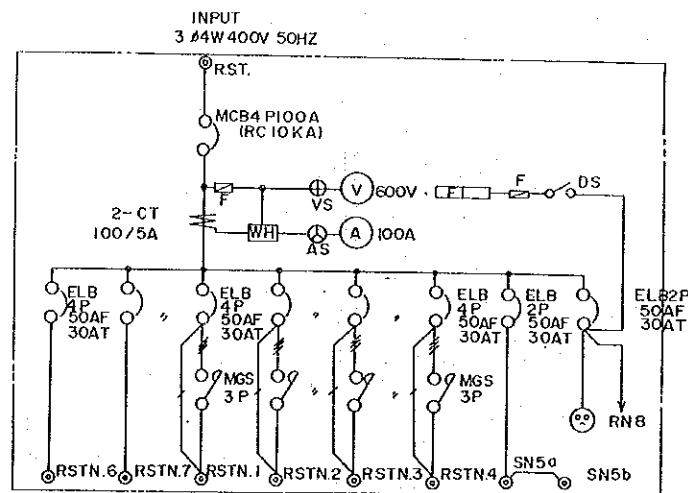
VIEW FOR "A"

NO	PARTS	QT	MATERIAL	SUMMARY
1	FRONT PANNEL	1	STEEL PLATE	231
2	BODY	1	"	121
3	TOGGLE SWITCH	1	MAIN SWITCH	
4	"	1	AUTO-MANUAL	
5	"	2	ON MANUAL OPERATION	
6	TIMER	1	AT INTERRUPTION OF POWER	
7	CONTROL UNIT	1		
8	CANOPY	1	FOR REPLACEMENT OF RELAYS	
9	TERMINAL BLOCK	1		
10	PILOT LAMP	3		
11	INDICATOR	2	LIGHT EMITTING DIODE	



DIMMING CONTROLLER (NO SCALE)

				THE SELANDER BRIDGE EXPANSION PROJECT		GENERAL LAYOUT OF DISTRIBUTION PANEL		MINISTRY OF WORKS		APPROVED _____
				DAR ES SALAAM				NIPPON KOEI CO. LTD. CONSULTING ENGINEERS		DATE _____
								TOKYO JAPAN		CHECKED _____
										SUBMITTED _____
										DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. 1-7			TITLE
										JUNE 30, 1980



SPARE

SPARE

STREET LIGHTING A1 (B1)

A2 (B2)

A3 (B3)

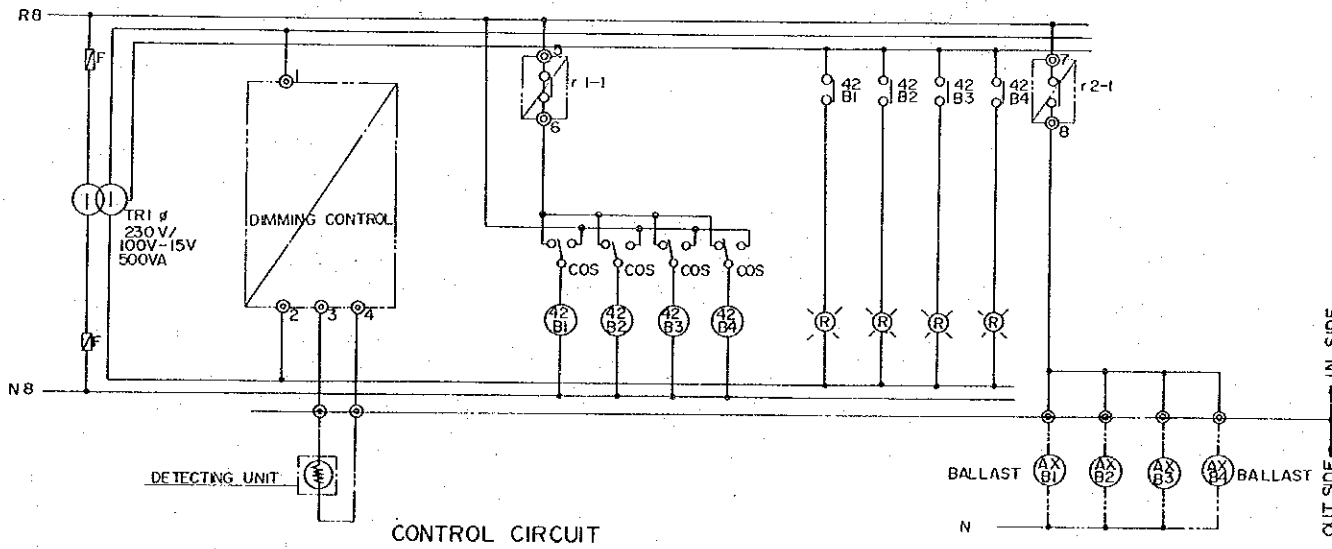
A4 (B4)

TRAFFIC SIGNAL 1

2

PLUG SOCKET AC 230V 2P 15A, EP

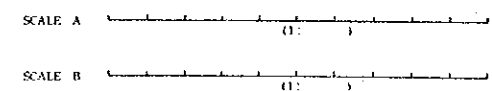
SKELETON DIAGRAM
(DISTRIBUTION PANEL "A" "B")



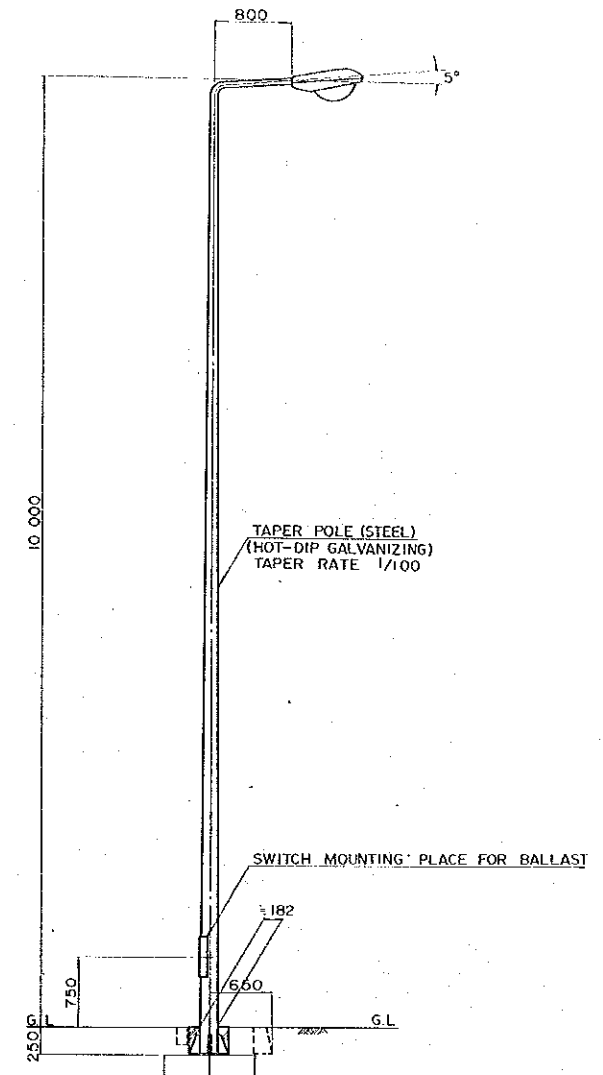
CONTROL CIRCUIT

EXPLANATION OF SYMBOL

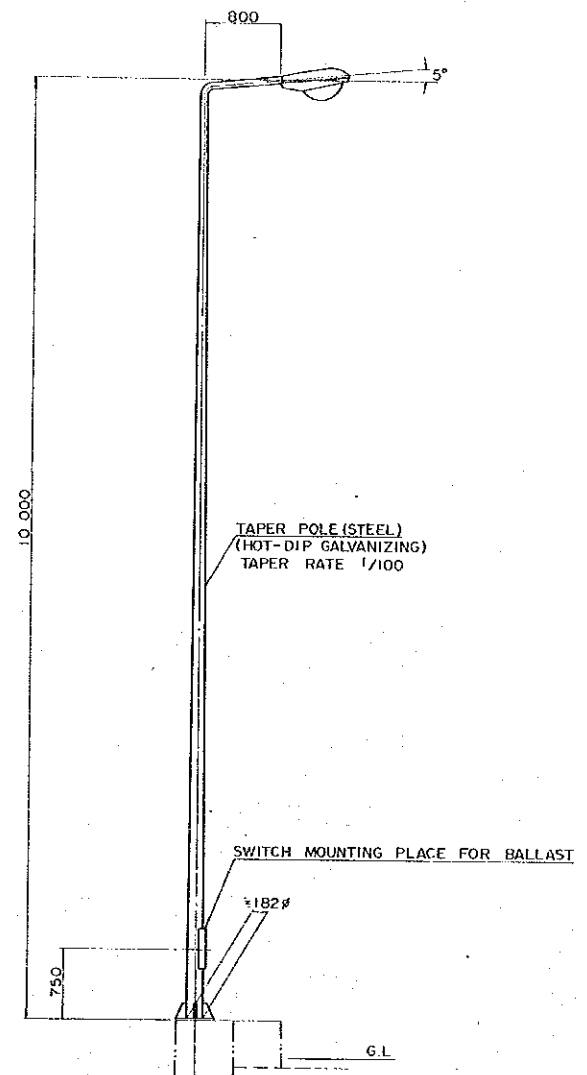
SIMBOLS	DESCRIPTION
(A)	AMMETER
A	AUTOMATIC CONTROL
AS	AMMETER CHANG-OVER SWITCH
AX	AUXILIARY RELAY
CT	CURRENT TRANSFORMER
COS	CHANGE-OVER SWITCH
DS	DOOR SWITCH
ELB	EARTH LEAKAGE CIRCUIT BREAKER
FL	FLUORESCENT LAMP 10W
GR	GROUND RELAY
MCB	MOLDED CASE CIRCUIT BREAKER
MGS (42)	ELECTROMAGNETIC CONTACTOR
(R)	RED LAMP
TR	TRANSFORMER 230V/100V - 15v 500 va
(V)	VOLTMETER 300V
VS	VOLTMETER CHANGE-OVER SWICH
WH	WATT-HOUR METER. 100V 5A
ZCT	ZERO-PHESE-SEQUENCE CURRENT TRASFORMER



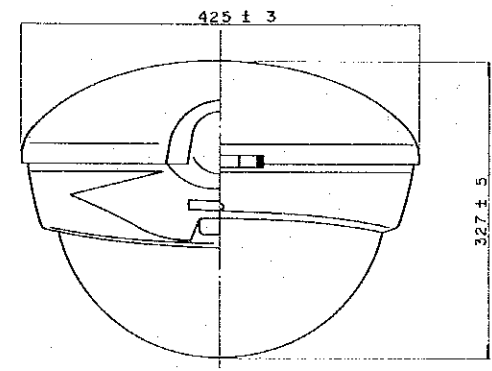
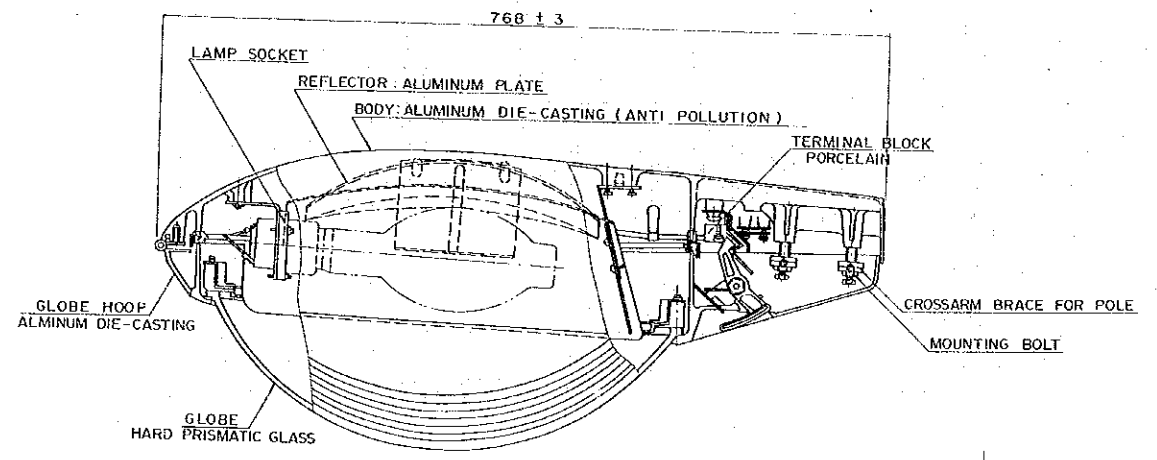
				THE SELANDER BRIDGE EXPANSION PROJECT		INTERNAL WIRING DIAGRAM OF DISTRIBUTION PANEL		MINISTRY OF WORKS		APPROVED _____	
				DAR ES SALAAM				NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE _____	
										PREPARED _____	
										CHECKED _____	
										SUBMITTED _____	
										DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. I - 8			JUNE 30, 1980	



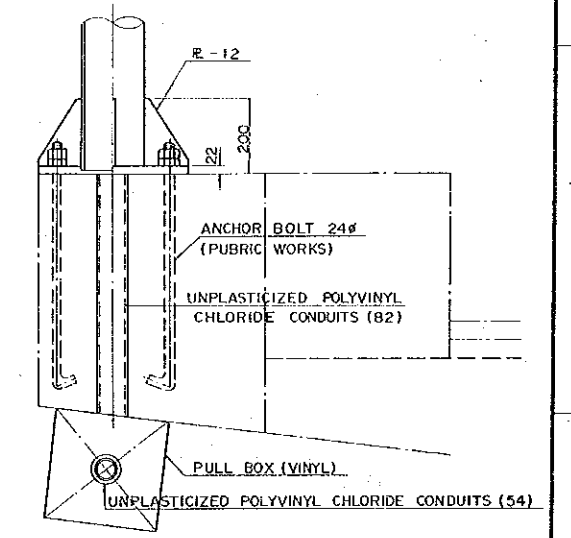
LP-1
ELEVATION OF LIGHTING POLE Scale A



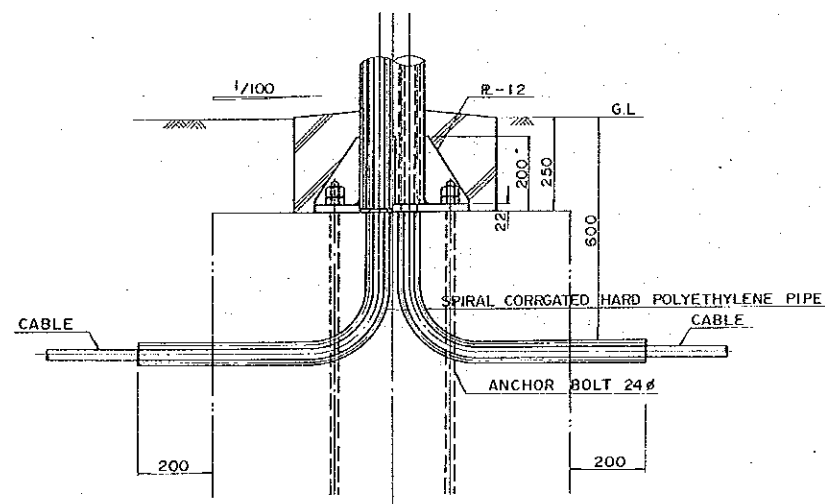
LP-2
ELEVATION OF LIGHTING POLE Scale A



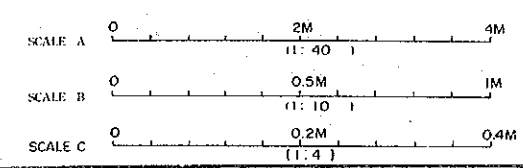
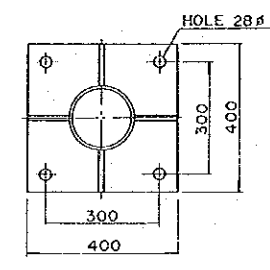
LH-1
FIXTURE OF STREET LIGHTING Scale C
LAMPS: FLUORECENT MERCURY LAMP (HF-400W)
COLOR: SILVER



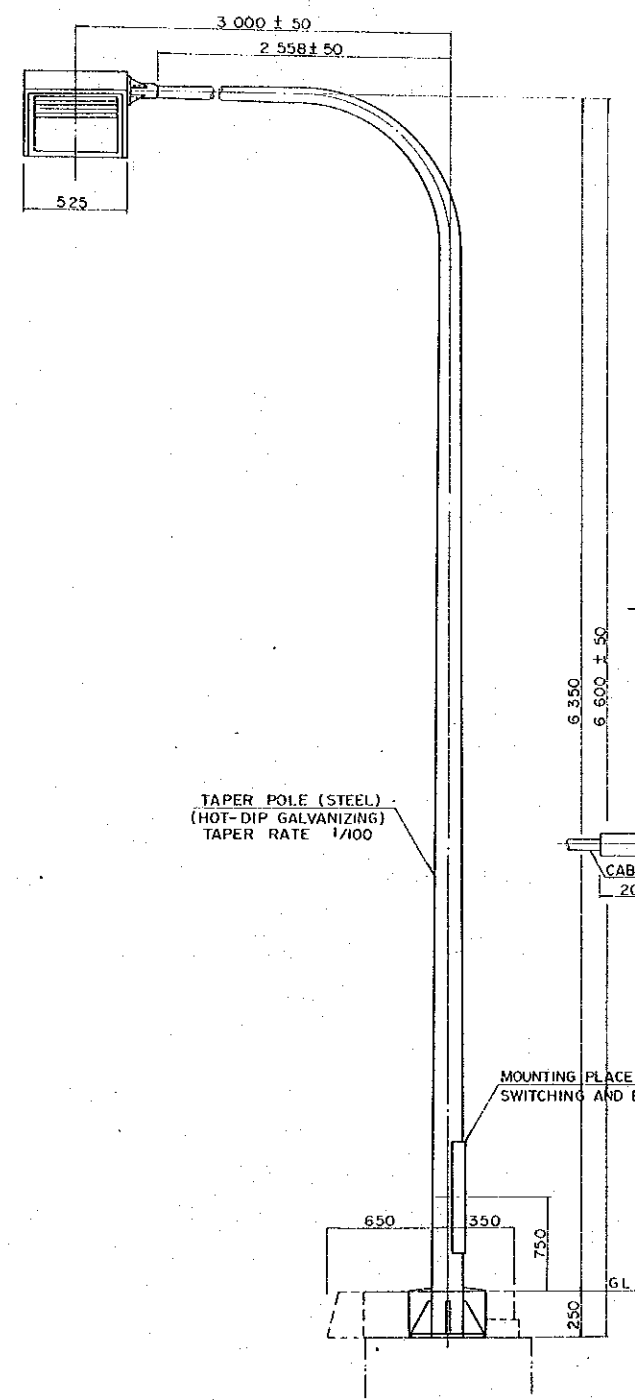
DETAIL OF BASE PLATE Scale B



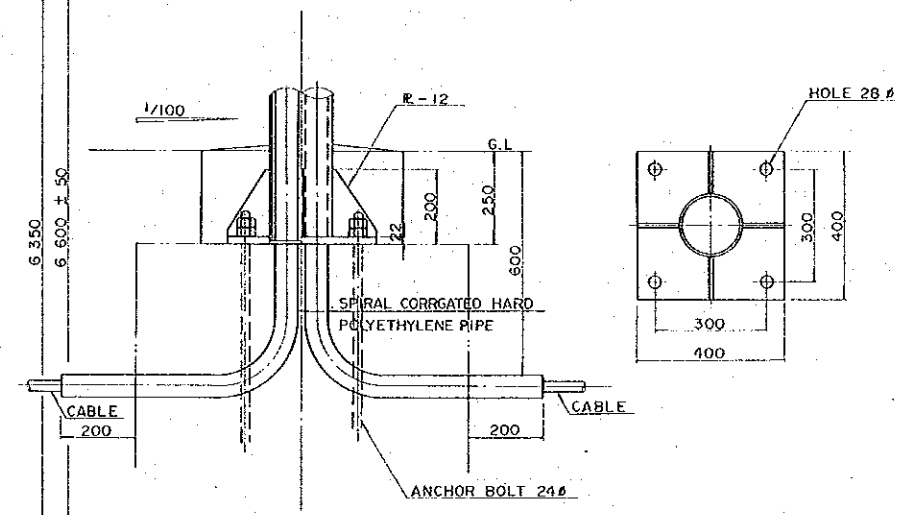
DETAIL OF BASE PLATE Scale B



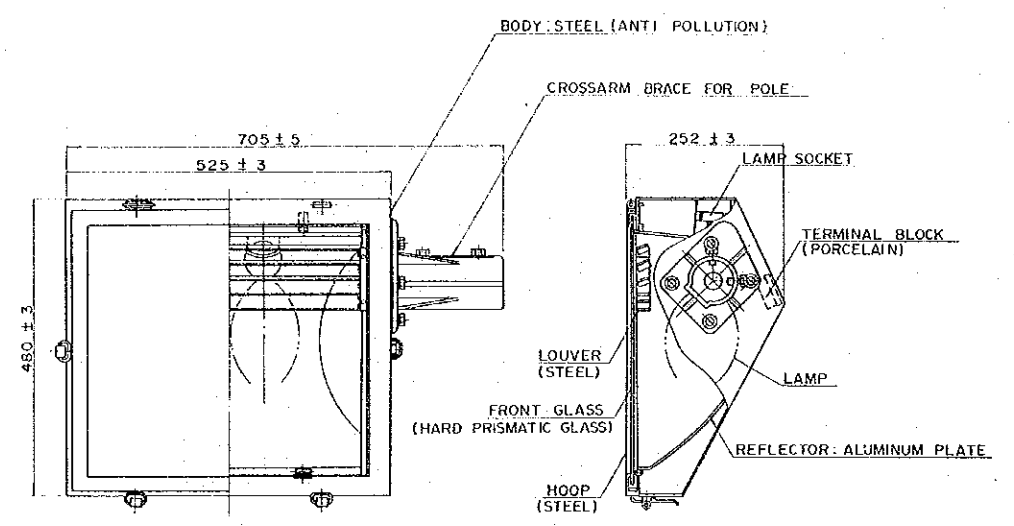
						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		LIGHTING APPARATUS (I)		MINISTRY OF WORKS		APPROVED _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE _____	
										DWG. NO. I - 9		DATE JUNE 30, 1980	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS							



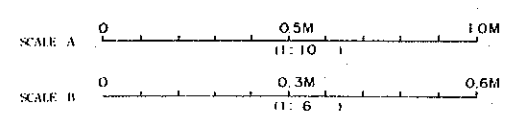
LP-4
ELEVATION OF LIGHTING POLE NO Scale
FOR PEDESTRIAN CROSSING



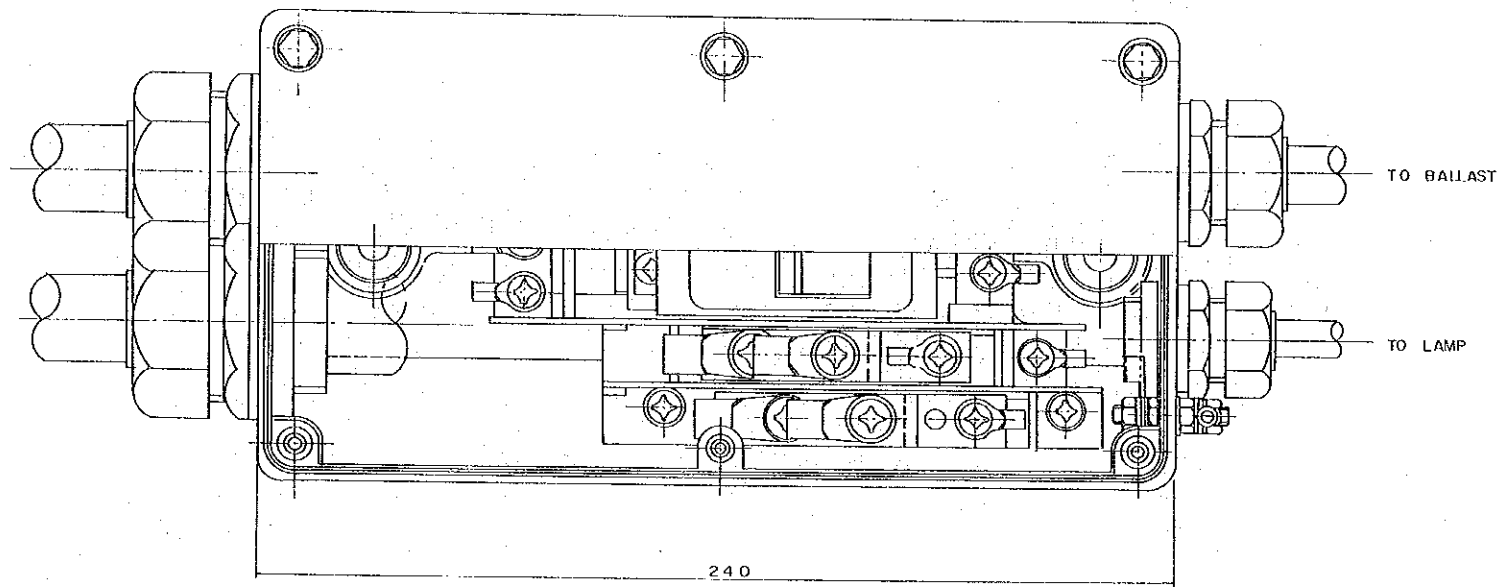
DETAIL OF BASE PLATE Scale A



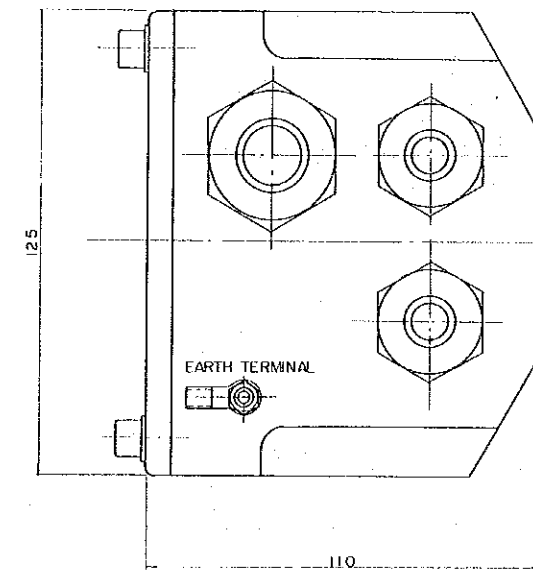
LH-2
LIGHTING FIXTURE OF PEDESTRIAN CROSSING Scale B
LAMPS: FLUORESCENT MERCURY LAMP (HF-400W)
COLOR: SILVER



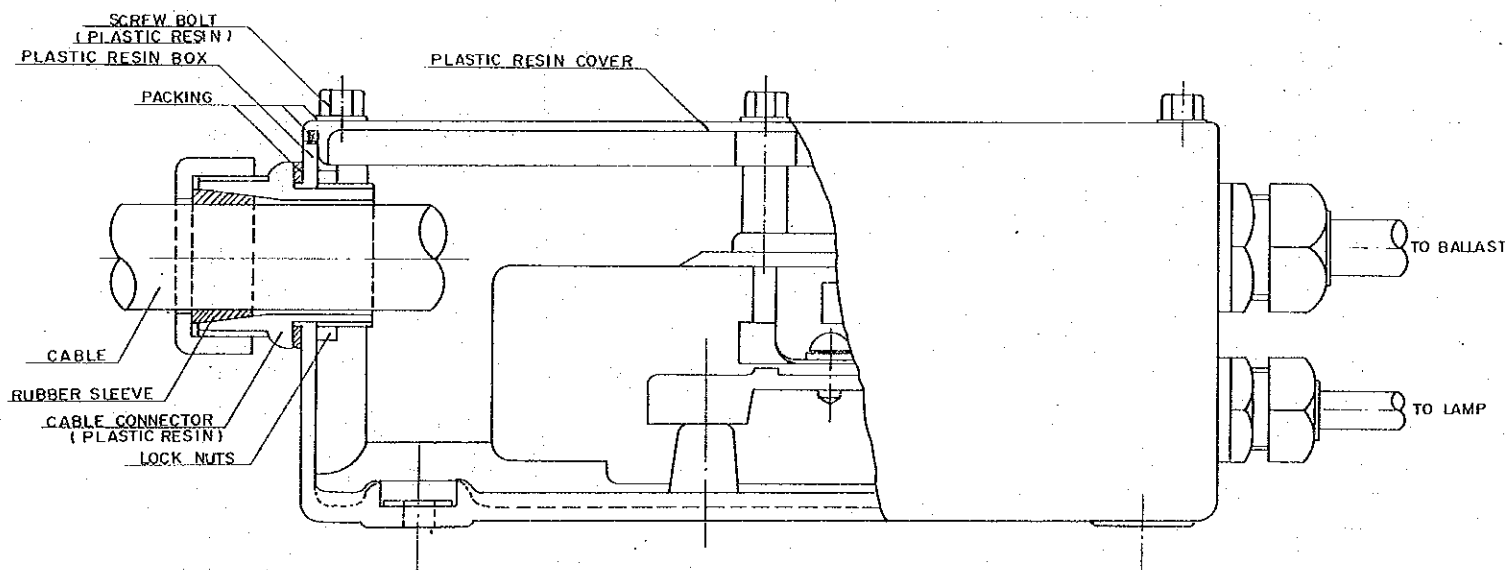
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		LIGHTING APPARATUS (2)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
								SIFPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. 1 - 10			DATE JUNE 30, 1980	



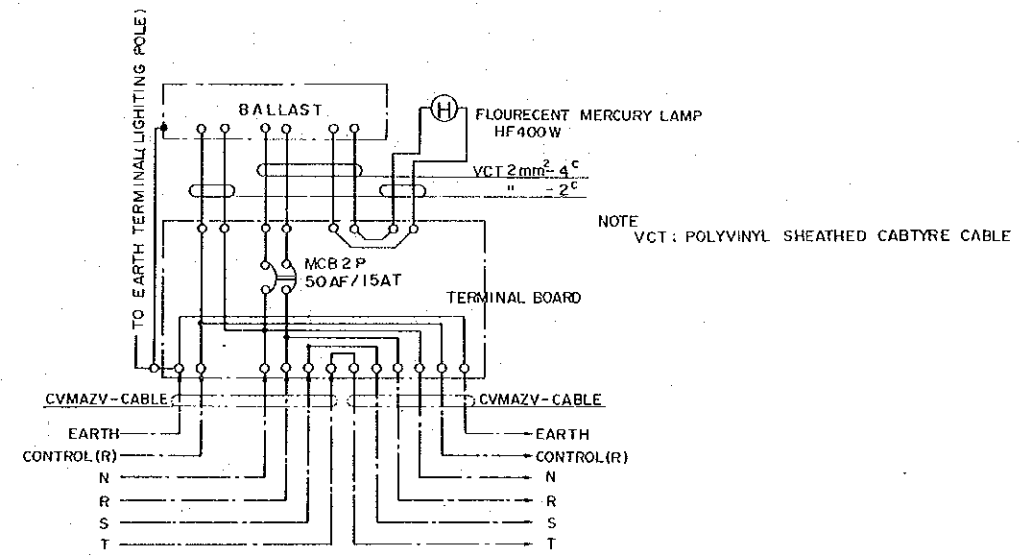
FRONT VIEW Scale A



SIDE VIEW Scale A

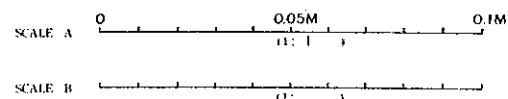


SECTIONAL VIEW Scale A



CONNECTION R-N TYPE

CONNECTION DIAGRAM



REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE

THE SELANDER BRIDGE
EXPANSION PROJECT
DAR ES SALAAM

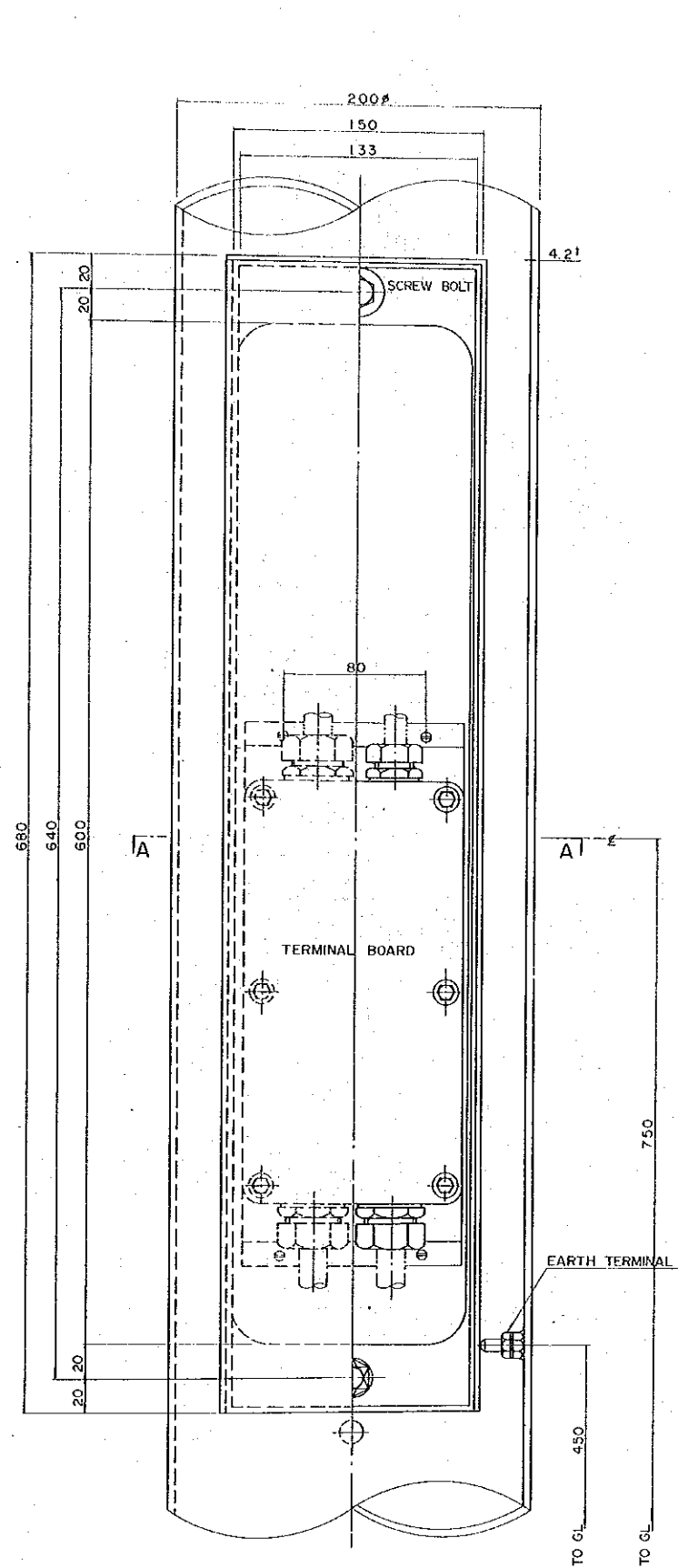
LIGHTING APPARATUS
(TERMINAL BOARD)

MINISTRY OF WORKS
NIPPON KOEI CO. LTD.
CONSULTING ENGINEERS
TOKYO JAPAN

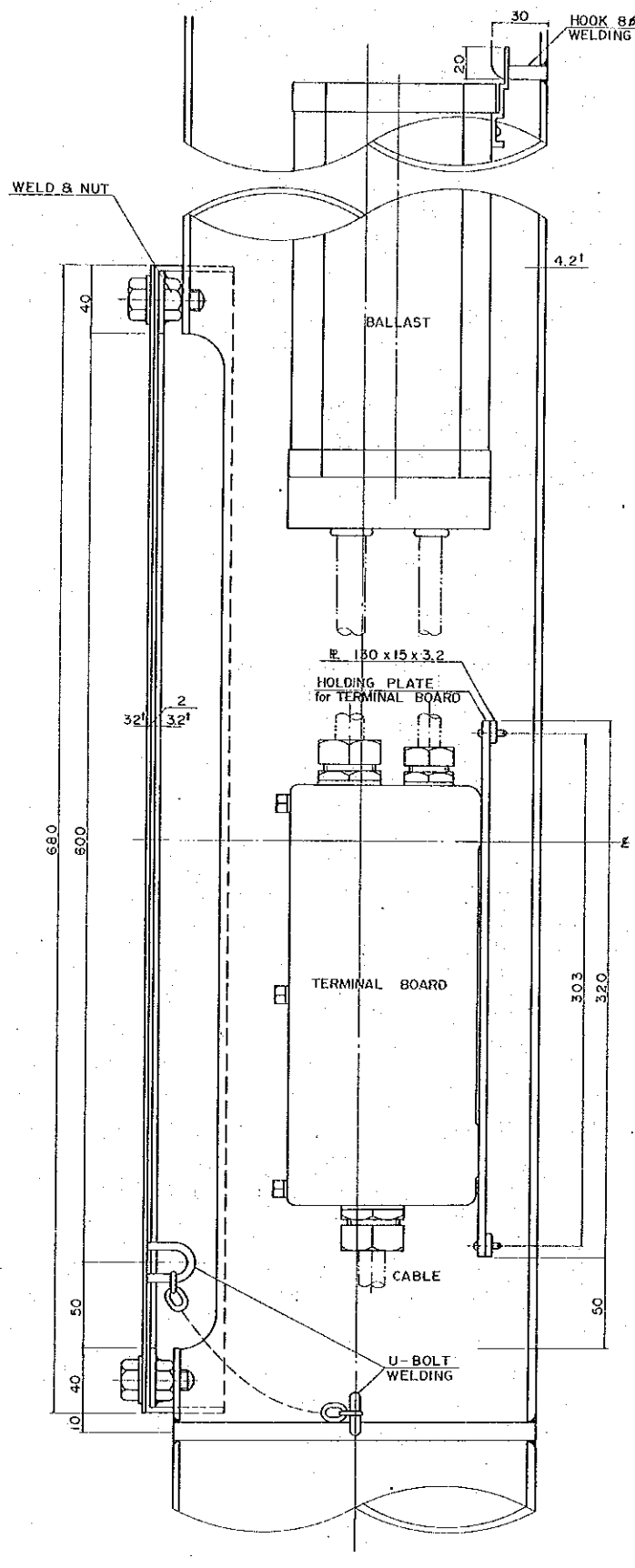
APPROVED _____
DATE _____
PREPARED _____
CHECKED _____
SUBMITTED _____
DATE _____
JUNE 30, 1980

MINISTRY OF WORKS

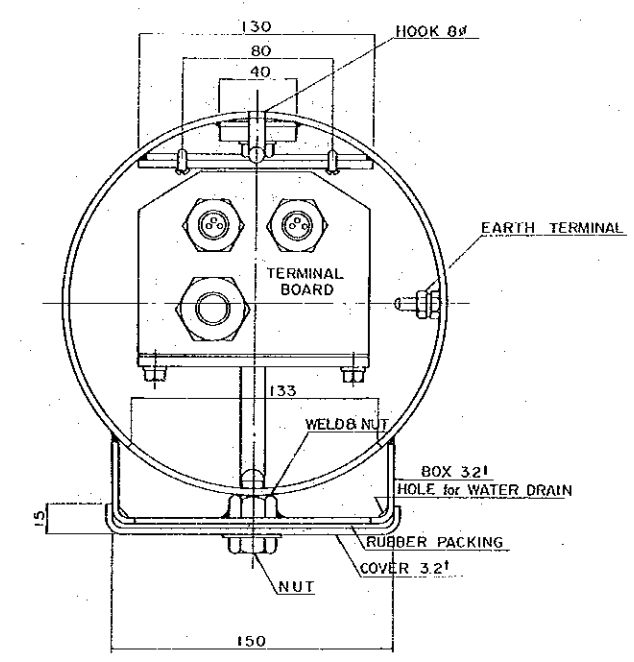
DWG. NO. I-11



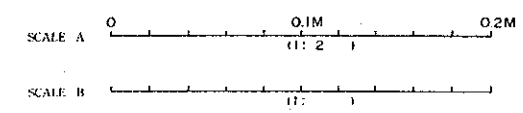
FRONT VIEW Scale A



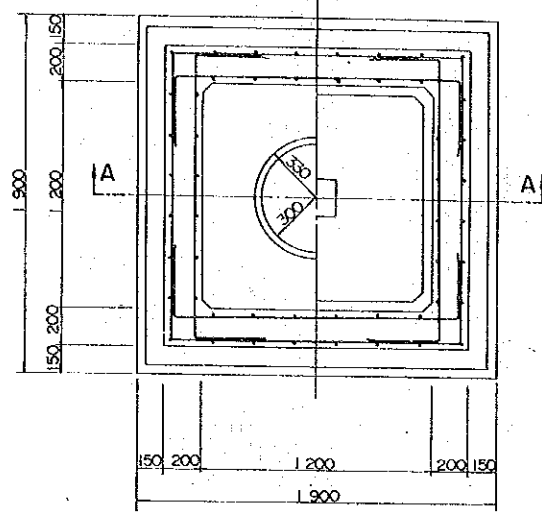
SIDE VIEW Scale A



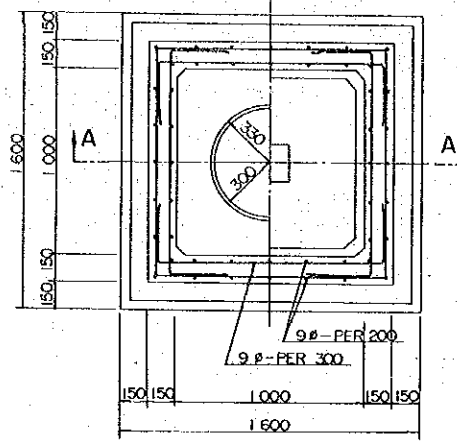
A-A SECTIONAL VIEW Scale A



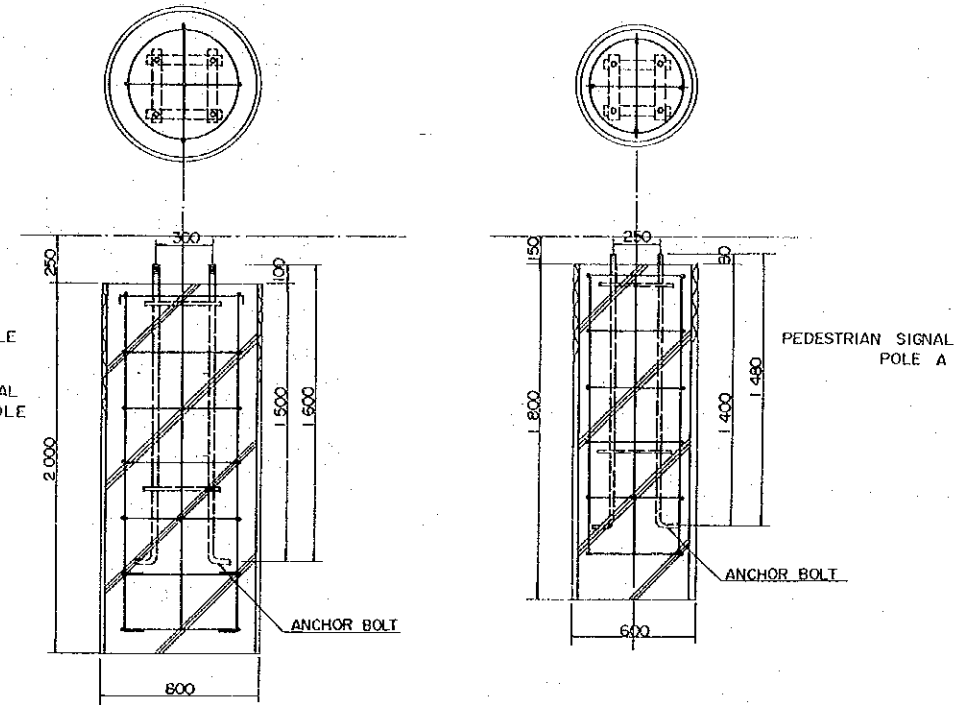
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		MINISTRY OF WORKS		MINISTRY OF WORKS		INSTALLATION OF TERMINAL BOARD		MINISTRY OF WORKS		APPROVED _____ DATE _____	
								DWG. NO. I - 12				NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS								JUNE 30, 1980	



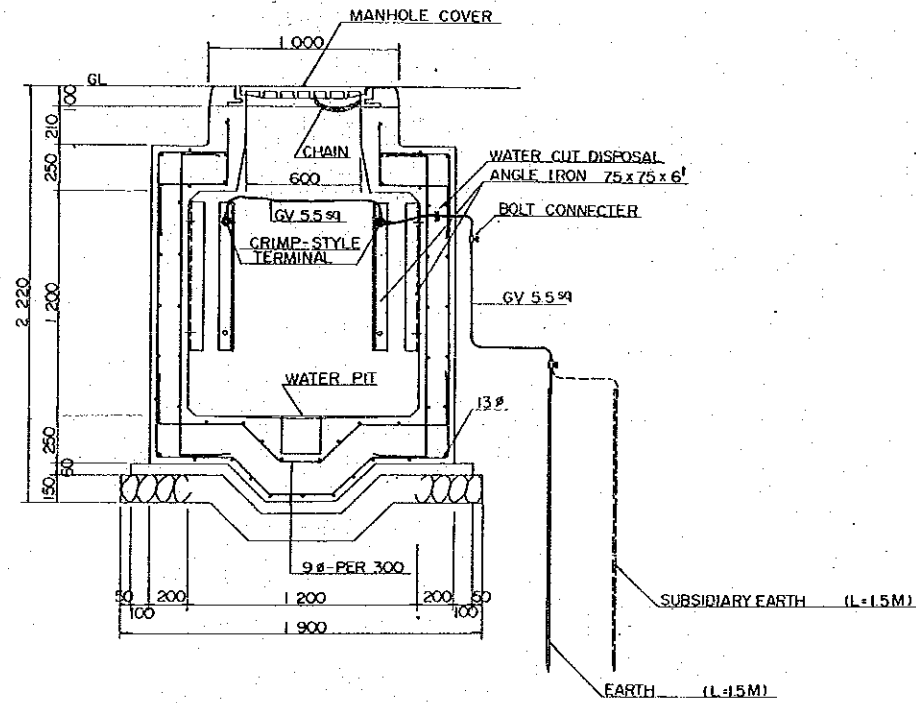
MANHOLE - PLAN Scale A
REINFORCED CONCRETE



MANHOLE PLAN Scale A
REINFORCED CONCRETE

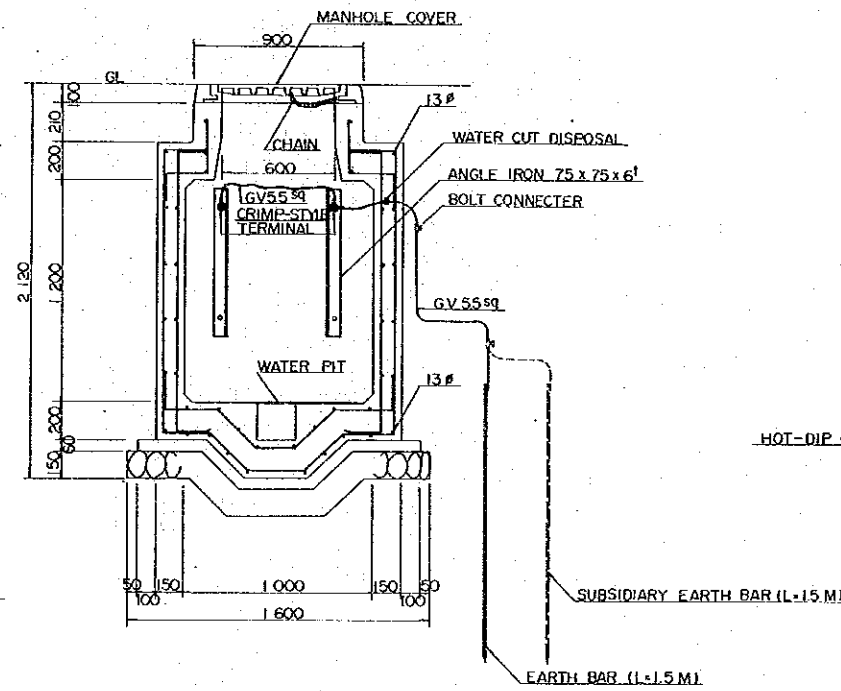


POLE FOUNDATION Scale A



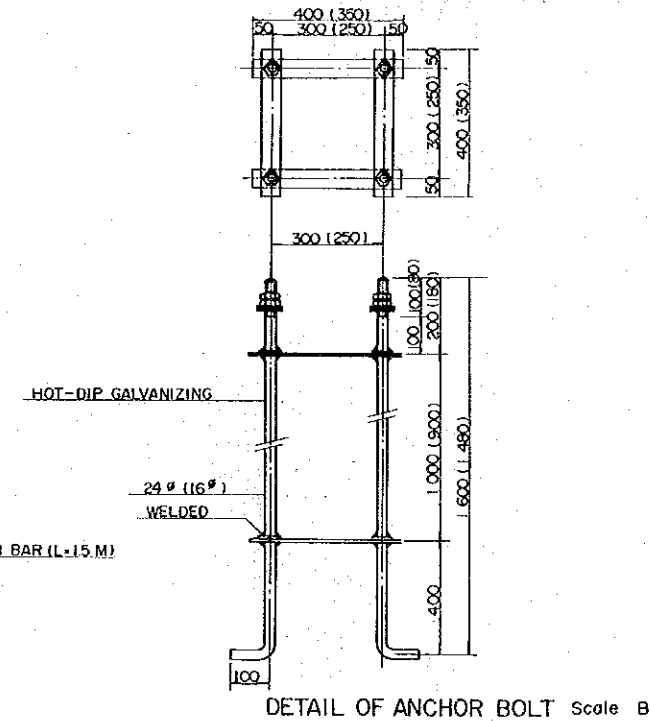
SECTIONAL VIEW Scale A

EMPLOYMENT DIVISION OF MANHOLE SYMBOL
•MA 1
•MB 1

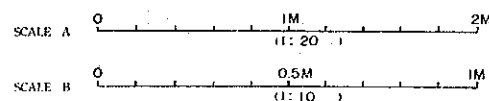


SECTIONAL VIEW Scale A

EMPLOYMENT DIVISION OF MANHOLE SYMBOL
•MA 2 — MA 5
•MB 2 — MB 7



DETAIL OF ANCHOR BOLT Scale B



				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		DETAILS OF MANHOLE AND FOUNDATION FOR LIGHTING POLE		MINISTRY OF WORKS		APPROVED _____ DATE _____	
				MINISTRY OF WORKS		DWG. NO. I - 13		NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE					JUNE 30, 1980	

NORTH SIDE JUNCTION TIME SCHEDULE

	1	2	3	4	5	6	7	8	9	10	11	12
1												
1 P												
2												
3												
3 P												
4 P												
1 A												
2 A												

32sec 35sec 35sec 35sec

WIRING TABLE

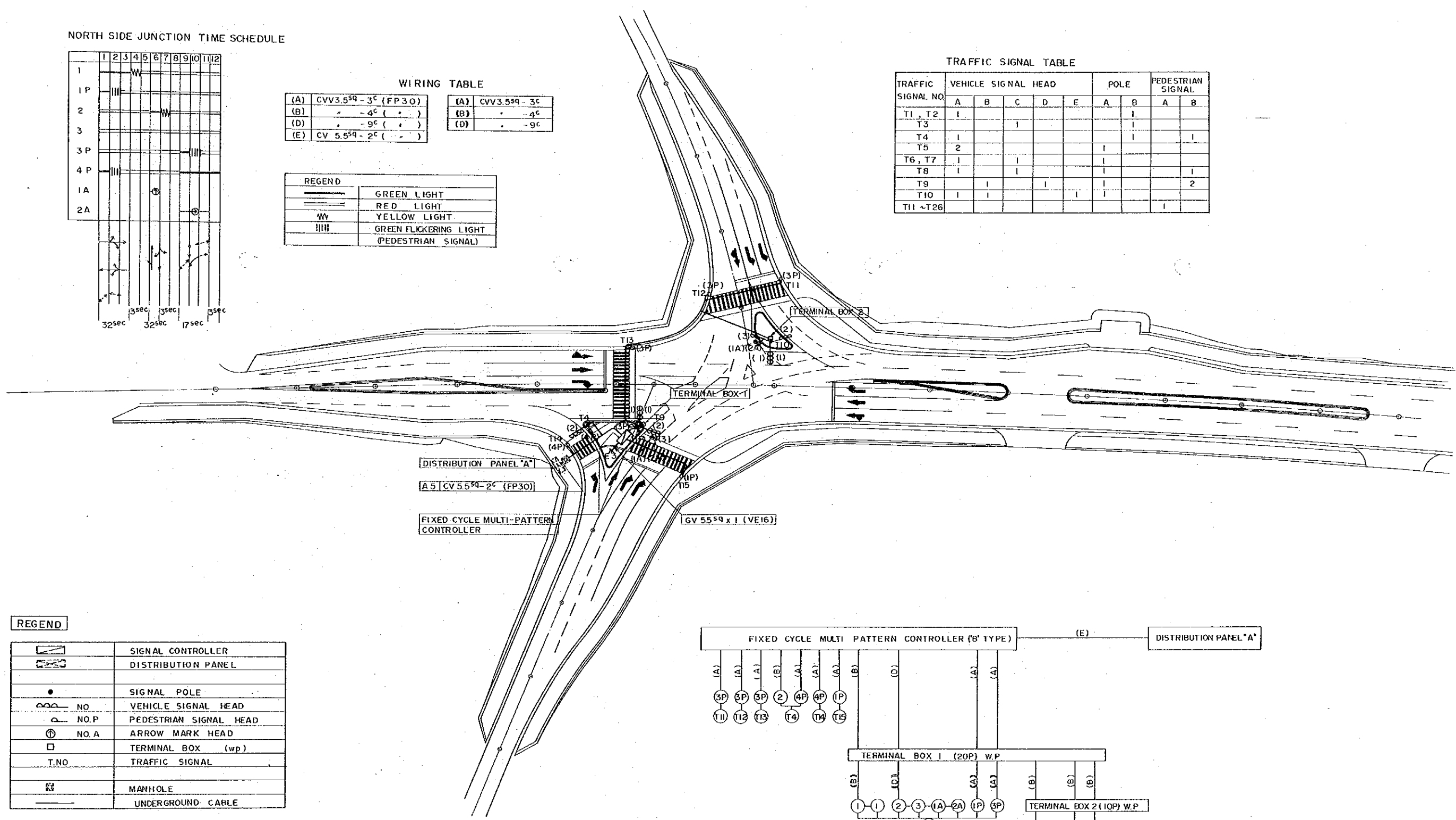
(A) CVV3.5 ⁵⁹ -3 ^c (FP30)	(A) CVV3.5 ⁵⁹ -3 ^c
(B) " -4 ^c (")	(B) " -4 ^c
(D) " -9 ^c (")	(D) " -9 ^c
(E) CV 5.5 ⁵⁹ -2 ^c (")	

REGEND

—	GREEN LIGHT
—	RED LIGHT
—	YELLOW LIGHT
	GREEN FLICKERING LIGHT (PEDESTRIAN SIGNAL)

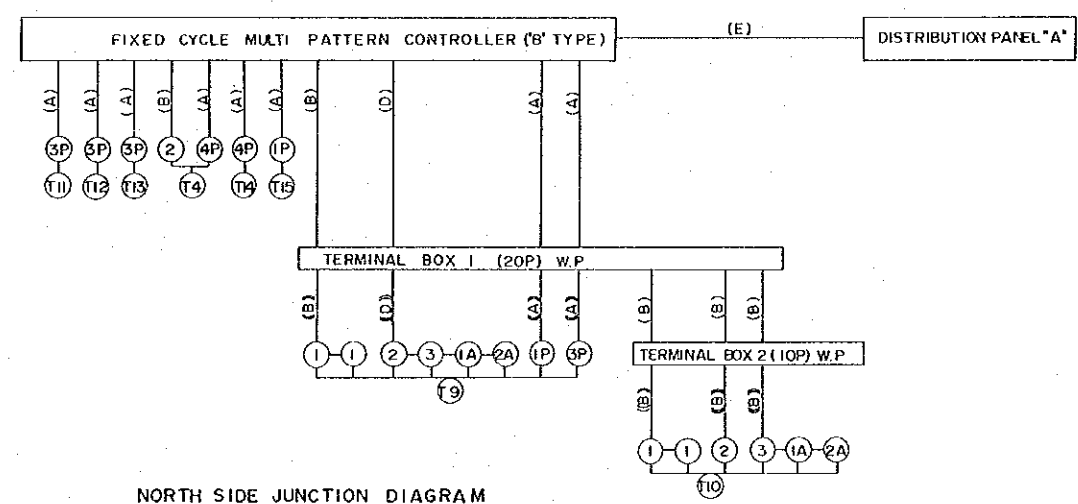
TRAFFIC SIGNAL TABLE

TRAFFIC SIGNAL NO.	VEHICLE SIGNAL HEAD					POLE		PEDESTRIAN SIGNAL	
	A	B	C	D	E	A	B	A	B
T1, T2	1							1	
T3			1						1
T4	1								1
T5	2								1
T6, T7	1		1						1
T8	1		1						1
T9		1		1					2
T10	1	1			1				1
T11 ~ T26									1



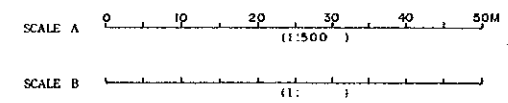
REGEND

—	SIGNAL CONTROLLER
—	DISTRIBUTION PANEL
•	SIGNAL POLE
—	NO. P VEHICLE SIGNAL HEAD
—	NO. P PEDESTRIAN SIGNAL HEAD
—	NO. A ARROW MARK HEAD
□	TERMINAL BOX (wp)
T.NO	TRAFFIC SIGNAL
—	MANHOLE
—	UNDERGROUND CABLE

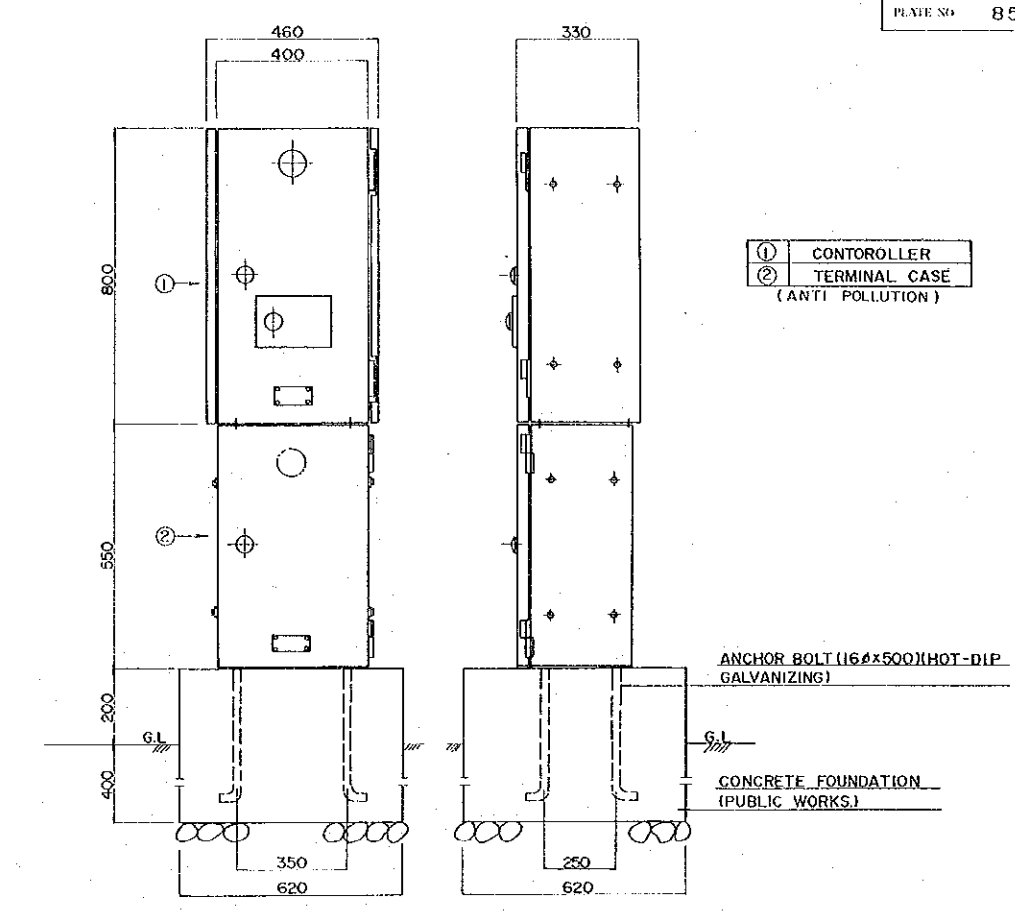
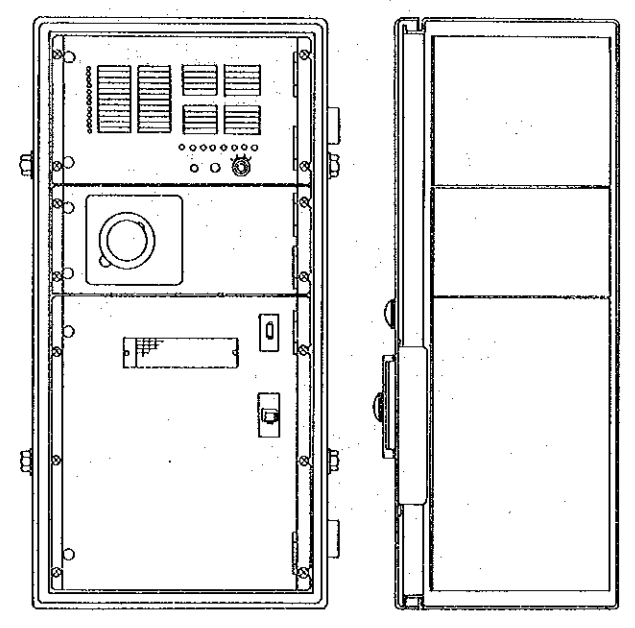
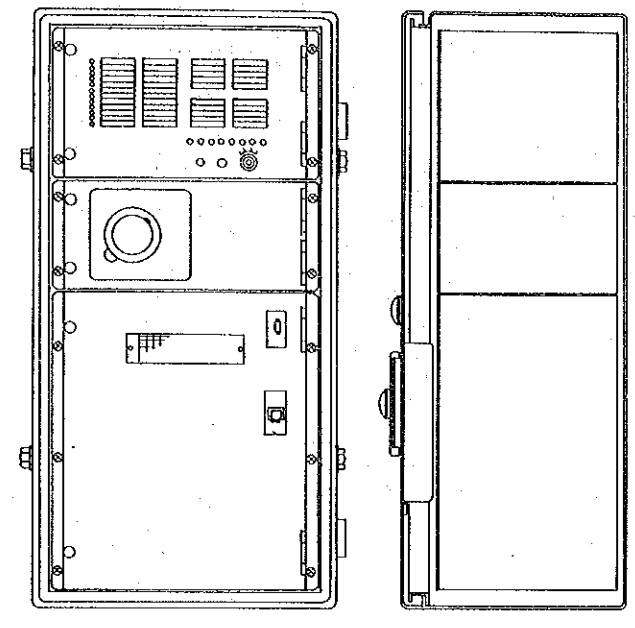


PLAN Scale A

- NOTES
- FP SPIRAL CORRUGATED HARD POLYETHYLEN PIPE.
 - VE UNPLASTICIZED POLYVINYL CHLORIDE CONDUITS
 - CV CROSS LINKED POLYETHYLENE INSULATED CABLES
 - CVV POLYVINYL CHLORIDE INSULATED AND SHEATHED CONTROL CABLES
 - CVVS POLYVINYL CHLORIDE INSULATED AND SHEATHED SHIELD CONTROL CABLES
 - GV GROUND POLYVINYL CHLORIDE INSULATED WIRE



REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	GENERAL ARRANGEMENT OF TRAFFIC SIGNAL SYSTEM (1)	MINISTRY OF WORKS	APPROVED _____ DATE _____ PREPARED _____ CHECKED _____
						MINISTRY OF WORKS	DWG. NO. I - 15	NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	DATE JUNE 30, 1980



(A-TYPE) FIXED CYCLE MULTI-PATTERN CONTROLLER (1 UNIT)
(WITH SYNCHRONOUS SIGNAL SENDING CIRCUIT)

(B-TYPE) FIXED CYCLE MULTI-PATTERN CONTROLLER (2 UNIT)

SIGNAL CONTROLLER
(SELF-STAND TYPE)

OPERATION SWITCH

NAME OF SWITCH	MAIN POWER	CONT. POWER	HEAD POWER	LIGHT FLASH	PATTERN SELECTION	OPERATION SELECTION
OPERATING CONDITION						
AUTO MULTI PATTERN	ON	ON	ON	OFF	AUTO	AUTO
FIXED PATTERN	ON	ON	ON	OFF	P1, P2, P3	AUTO
MANUAL	ON	ON	ON	OFF	(ANY)	MANUAL
FLASHING	ON	ON	ON	ON	(ANY)	(ANY)

OPERATION SWITCH

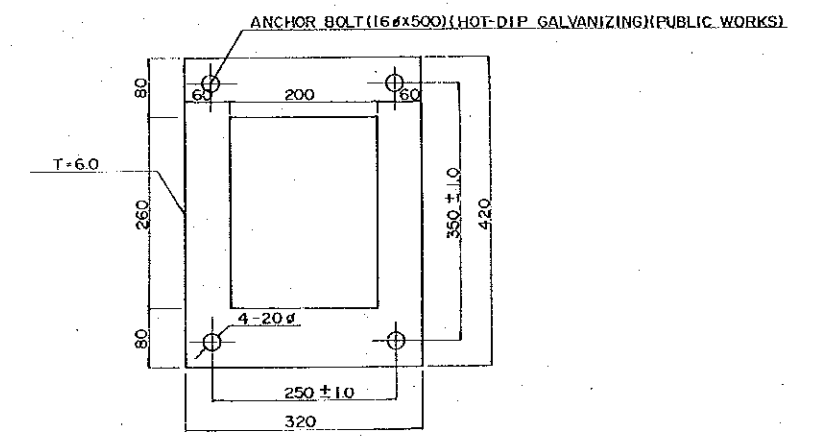
NAME OF SWITCH	MAIN POWER	CONT. POWER	HEAD POWER	LIGHT FLASH	PATTERN SELECTION	OPERATION SELECTION
OPERATING CONDITION						
AUTO MULTI PATTERN	ON	ON	ON	OFF	AUTO	AUTO
FIXED PATTERN	ON	ON	ON	OFF	P1, P2, P3	AUTO
MANUAL	ON	ON	ON	OFF	(ANY)	MANUAL
FLASHING	ON	ON	ON	ON	(ANY)	(ANY)

MONITOR LAMP

- CLOCK : FLASHES WITH 1 SECOND INTERVAL AT ALL TIMES.
- G-G FAILURE : LIGHTS WHEN SIGNAL HEADS AT BOTH MAIN AND CROSS DIRECTION LIT IN GREEN AT SAME TIME.
- TIME FAILURE : LIGHTS WHEN ABNORMAL SHORT OR LONG STEP TIMMING IS DETECTED.
- FLASH : LIGHTS WHEN LIGHT FLASHING SWITCH IS PUT "ON".
- P1, P2, P3, F : LIGHTS THE MONITOR LAMP WHICH IS SELECTED BY PATTERN PROGRAM SWITCH, OR TIME SWITCH.

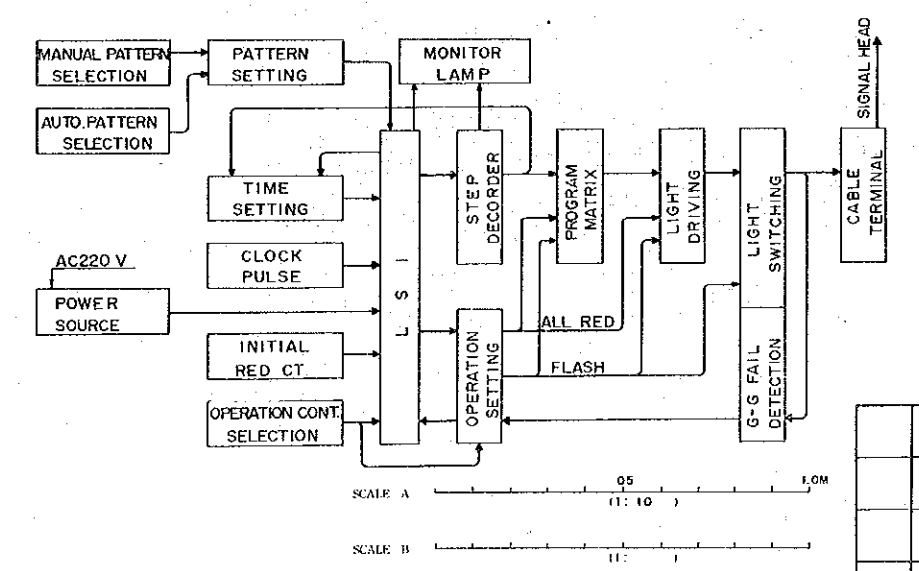
MONITOR LAMP

- CLOCK : FLASHES WITH 1 SECOND INTERVAL AT ALL TIMES.
- G-G FAILURE : LIGHTS WHEN SIGNAL HEAD AT BOTH MAIN AND CROSS DIRECTION LIT IN GREEN AT SAME TIME.
- TIME FAILURE : LIGHTS WHEN ABNORMAL SHORT OR LONG STEP TIMMING IS DETECTED.
- FLASH : LIGHTS WHEN LIGHT FLASHING SWITCH IS PUT "ON".
- P1, P2, P3, F : LIGHTS THE MONITOR LAMP WHICH IS SELECTED BY PATTERN PROGRAM SWITCH, OR TIME SWITCH.



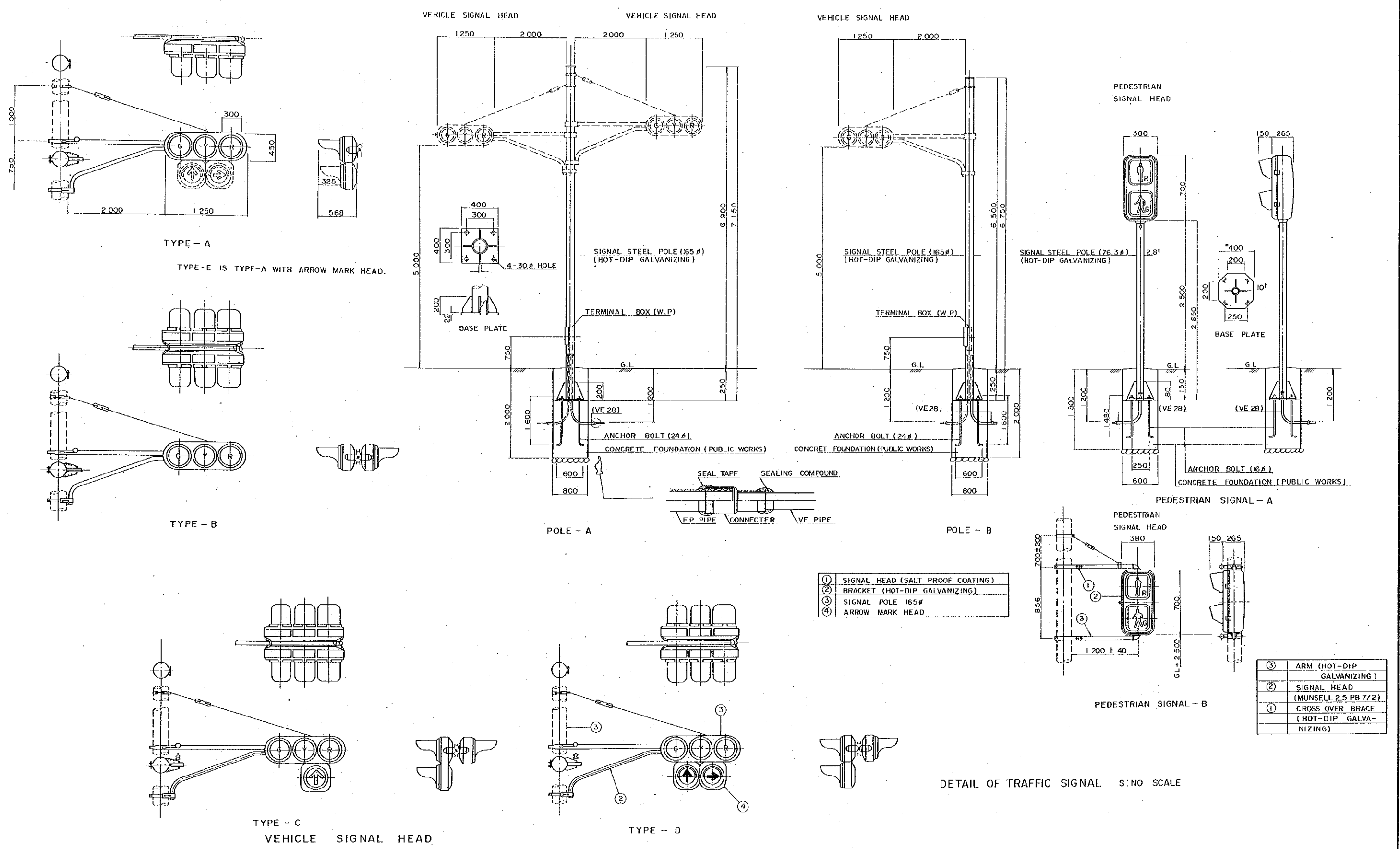
TERMINAL CASE BASE PLATES DIMENSIONS
(FOR SIGNAL CONTROLLER)

BLOCK DIAGRAM



DETAIL OF SIGNAL CONTROLLER

				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		GENERAL LAYOUT OF SIGNAL CONTROLLER		MINISTRY OF WORKS		APPROVED
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
										PREPARED
										CHECKED
										DATE
										DATE
REV. NO	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	I - 18		DATE
										JUNE 30, 1980



TYPE - A
TYPE - E IS TYPE - A WITH ARROW MARK HEAD.

TYPE - B

TYPE - C
VEHICLE SIGNAL HEAD

POLE - A

TYPE - D

POLE - B

PEDESTRIAN SIGNAL - A

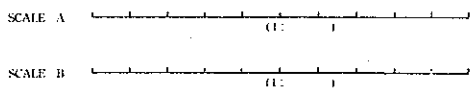
PEDESTRIAN SIGNAL - B

DETAIL OF TRAFFIC SIGNAL S: NO SCALE

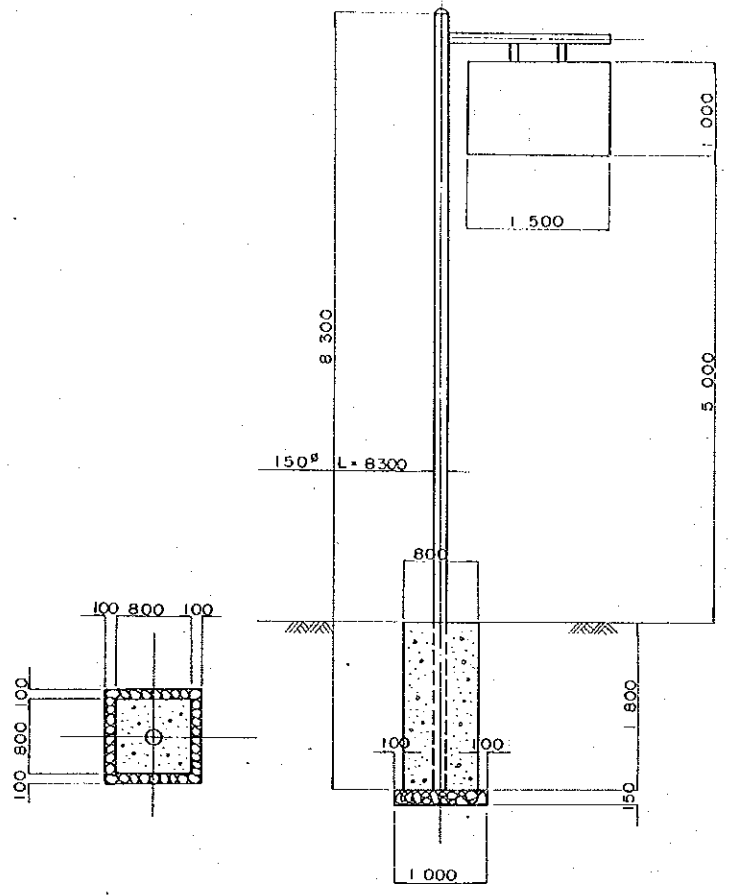
- ① SIGNAL HEAD (SALT PROOF COATING)
- ② BRACKET (HOT-DIP GALVANIZING)
- ③ SIGNAL POLE 165#
- ④ ARROW MARK HEAD

- ③ ARM (HOT-DIP GALVANIZING)
- ② SIGNAL HEAD (MUNSELL 2.5 PB 7/2)
- ① CROSS OVER BRACE (HOT-DIP GALVANIZING)

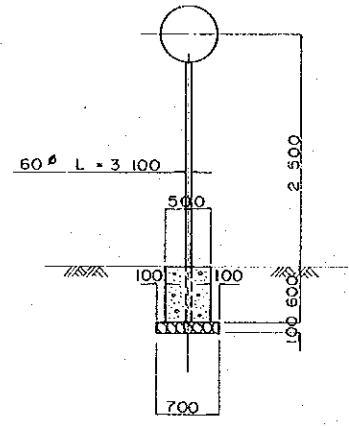
NOTES: ANCHOR BOLT, CROSS OVER BRACE,
BRACKET. (HOT-DIP GALVANIZING)
REFERENCE SHAPE AND DIMENSIONS.



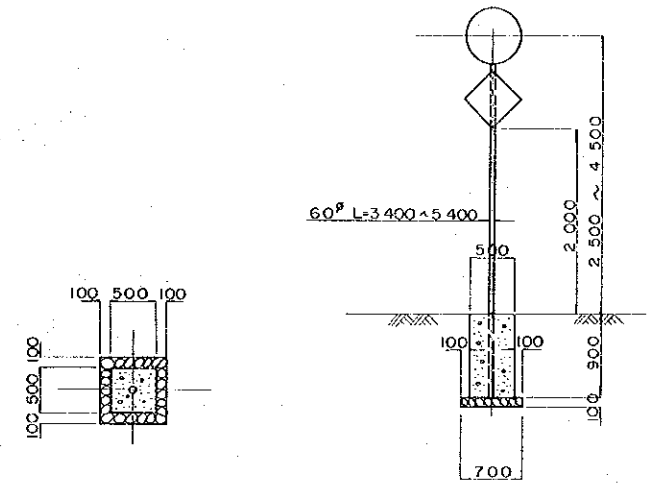
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	TRAFFIC SIGNAL APPARATUS	MINISTRY of WORKS	APPROVED _____
						MINISTRY OF WORKS	DWG. NO. I - 19	NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	PREPARED _____ CHECKED _____ SPECIFIED _____ DATE _____
									JUNE 30, 1980



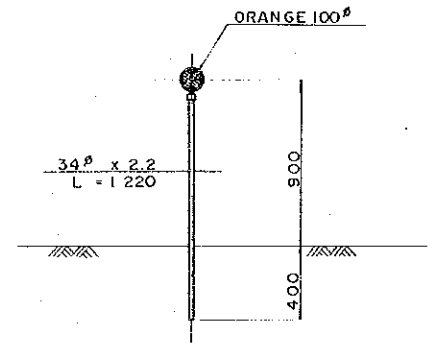
A SCALE A



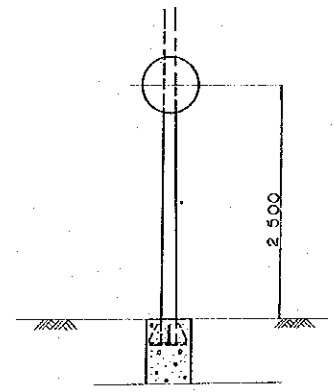
B - 1 SCALE A



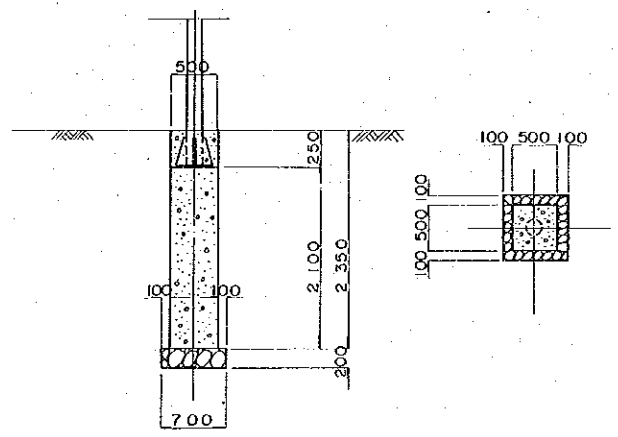
B - 2 SCALE A



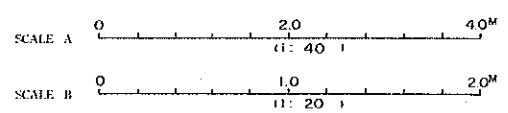
D - Y - D - I SCALE B



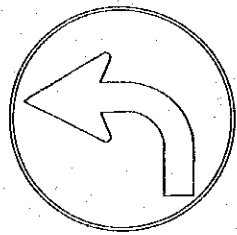
C SCALE A



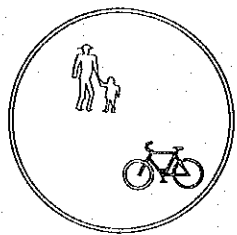
BASE CONCRETE OF LIGHTING POLE SCALE A



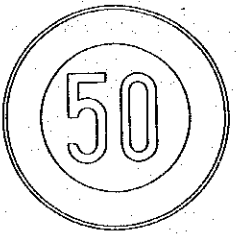
						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		TRAFFIC SIGN AND DELINEATOR POLE		MINISTRY OF WORKS		APPROVED: _____ DATE: _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED: _____ CHECKED: _____ DATE: _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS		DWG. NO. I - 20				DATE: JUNE 30, 1980	



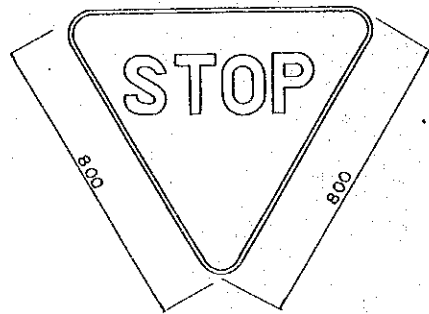
LEFT TURN ONLY



BICYCLE & PEDESTRIAN TRACK

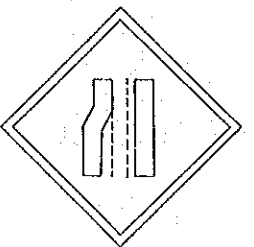
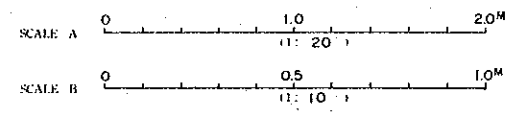


HIGHEST SPEED

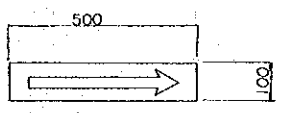


STOP SIGN SCALE B

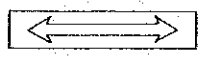
REGULATORY SIGN SCALE B



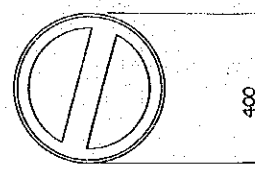
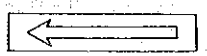
ROAD NARROWS ON OFFSIDE
DANGER SIGN SCALE B



BEGIN

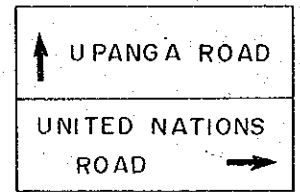
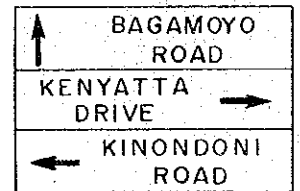
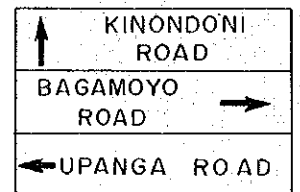
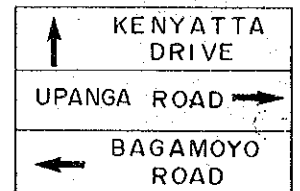
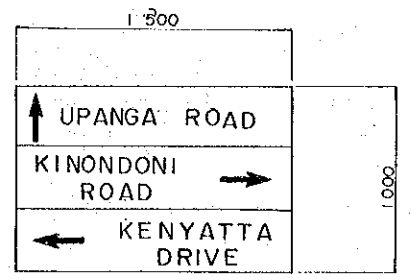


CONTROL SECTION

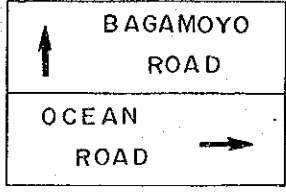
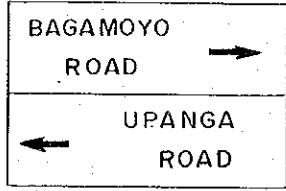
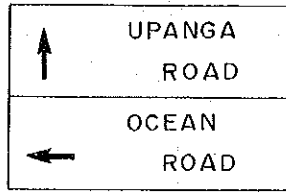
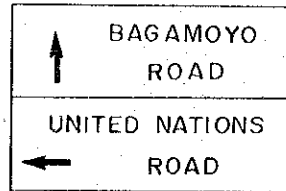
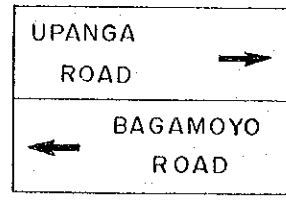


END

AUXILIARY SIGN SCALE B

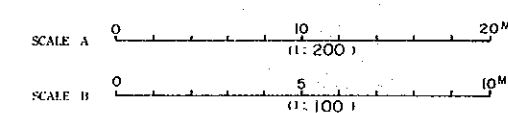
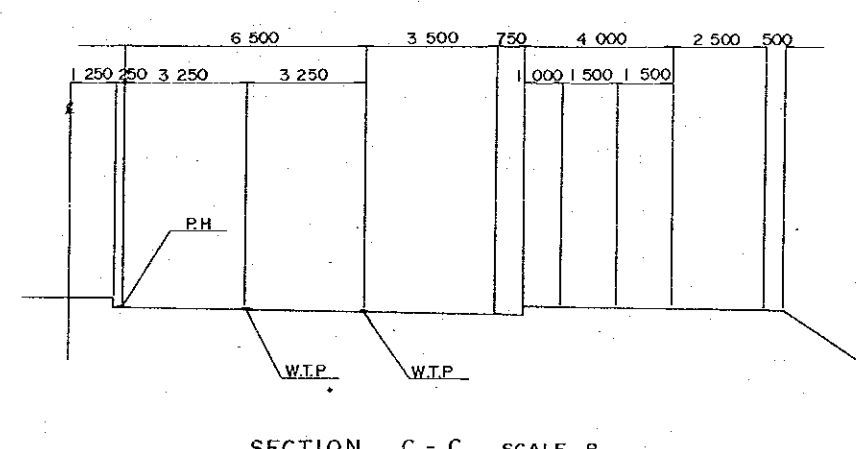
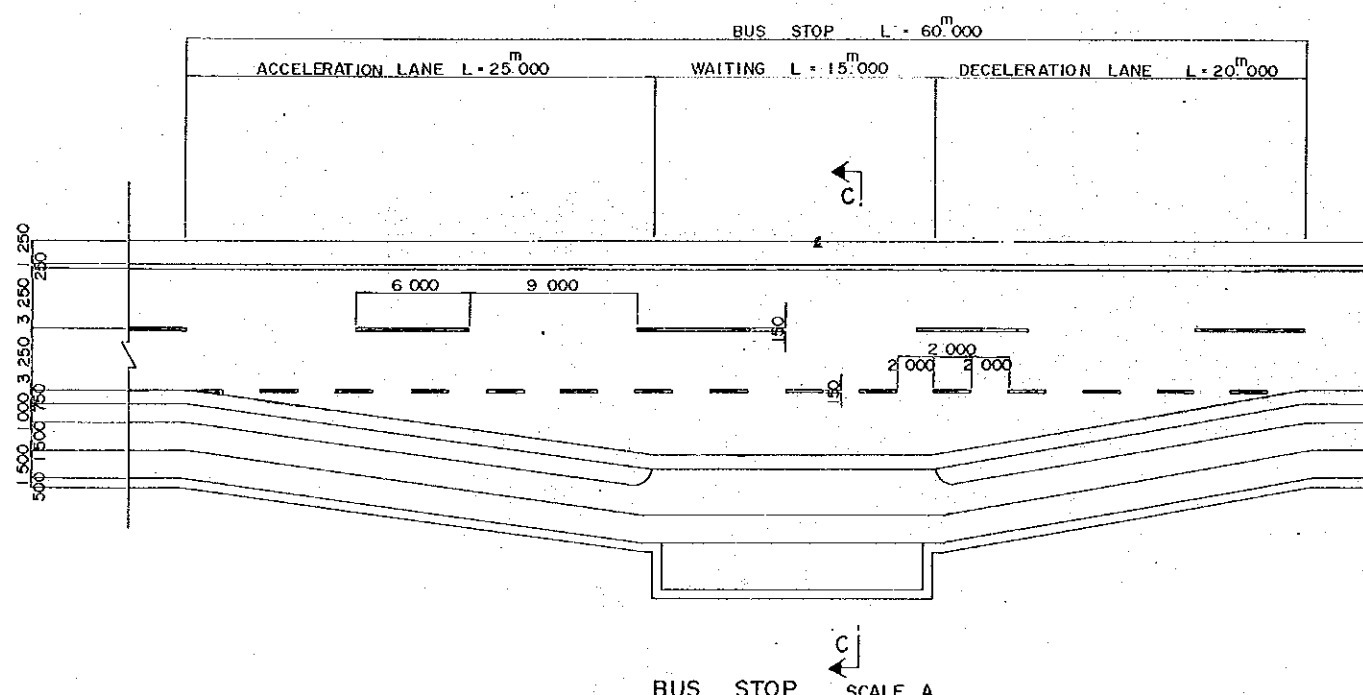
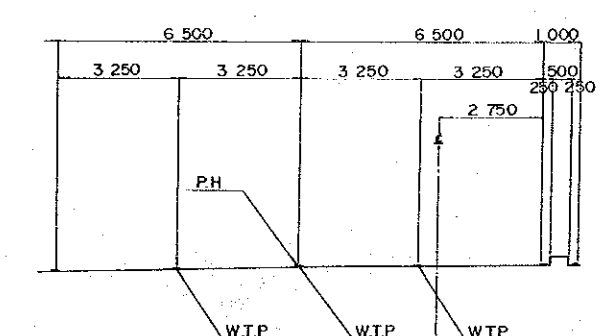
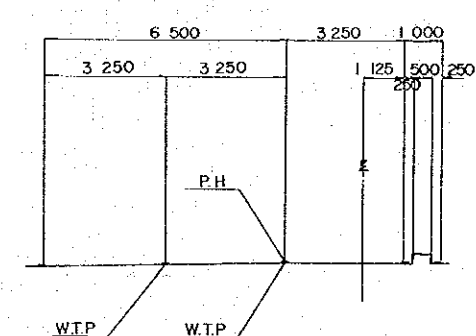
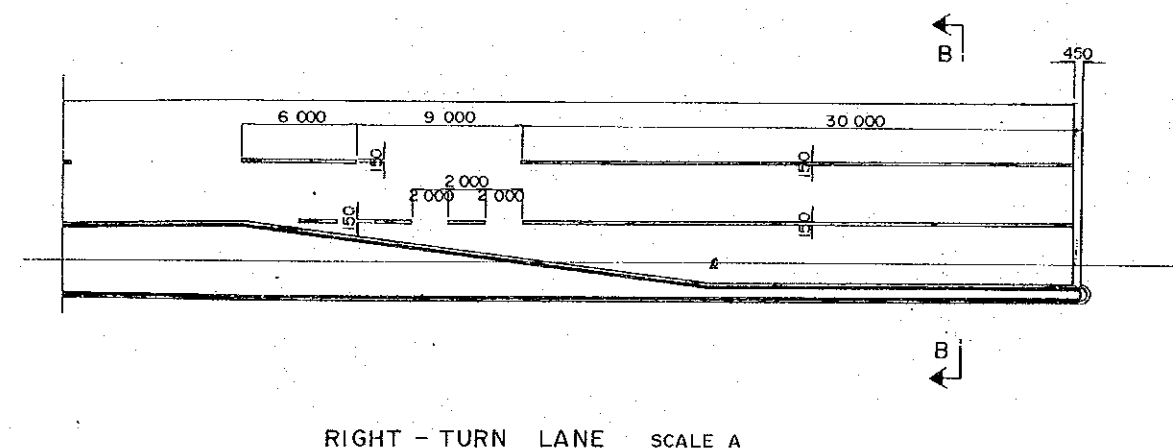
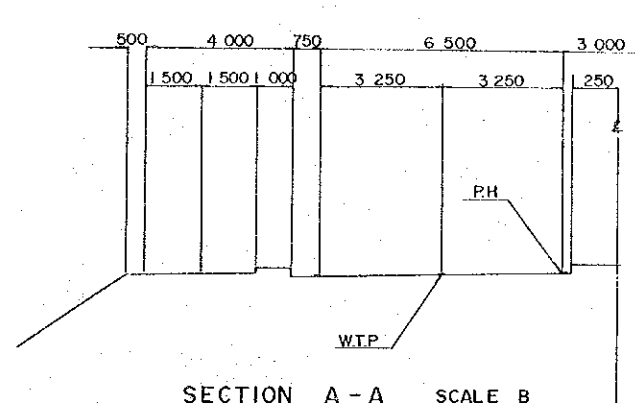
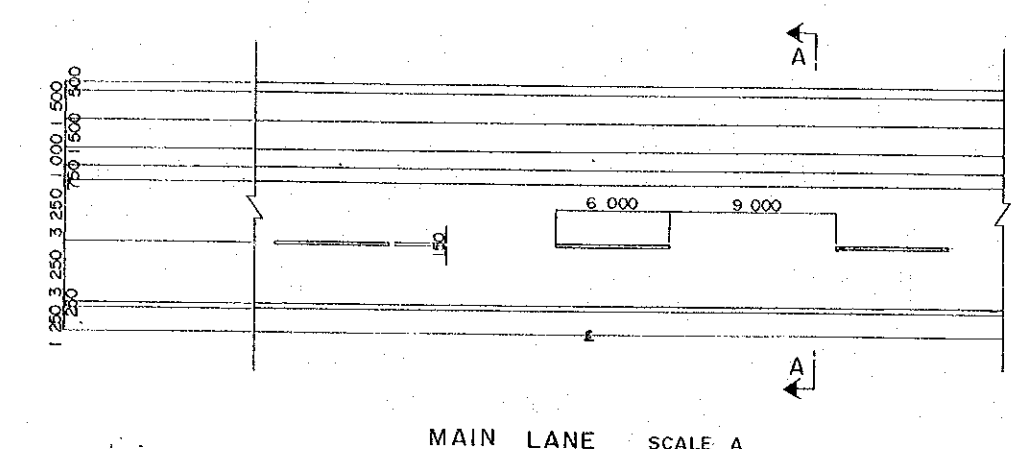


SCALE A
INFORMATORY SIGN



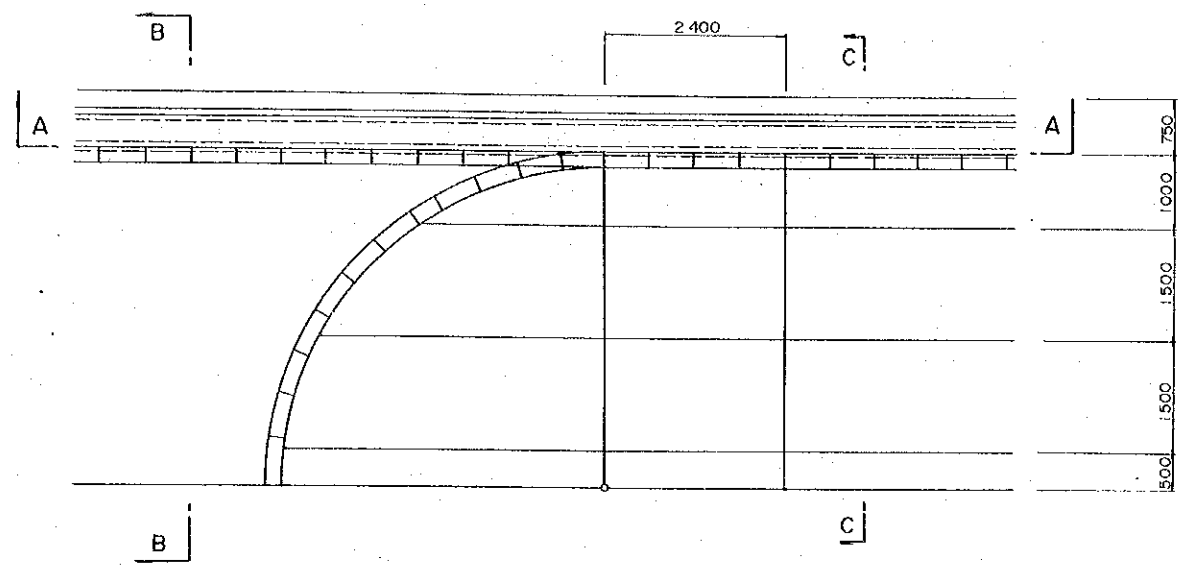
SCALE A

				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		MINISTRY OF WORKS		APPROVED _____ DATE _____	
						NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____	
						DWG. NO. J - 1		SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS		DATE JUNE 30, 1980	

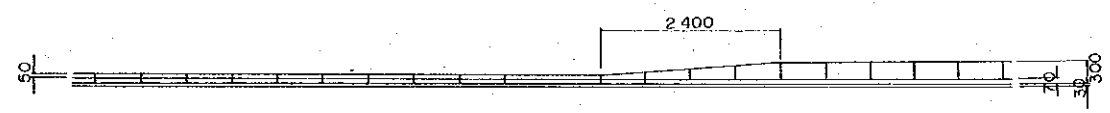


REV. NO	DATE	COORDINATE	REVISION	APPRO.	DATE

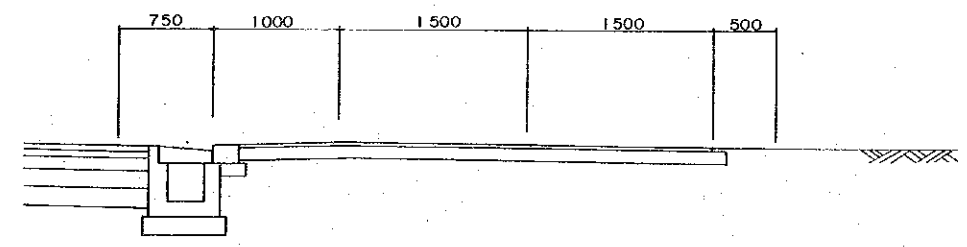
THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	DETAIL OF ROAD MARKINS (I)	MINISTRY OF WORKS	APPROVED _____ DATE _____
		NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TORYO JAPAN	PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____
MINISTRY OF WORKS	DWG. NO. J - 2	JUNE 30, 1980	



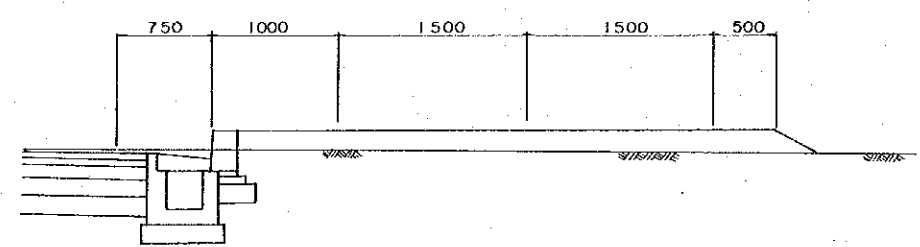
PLAN SCALE B



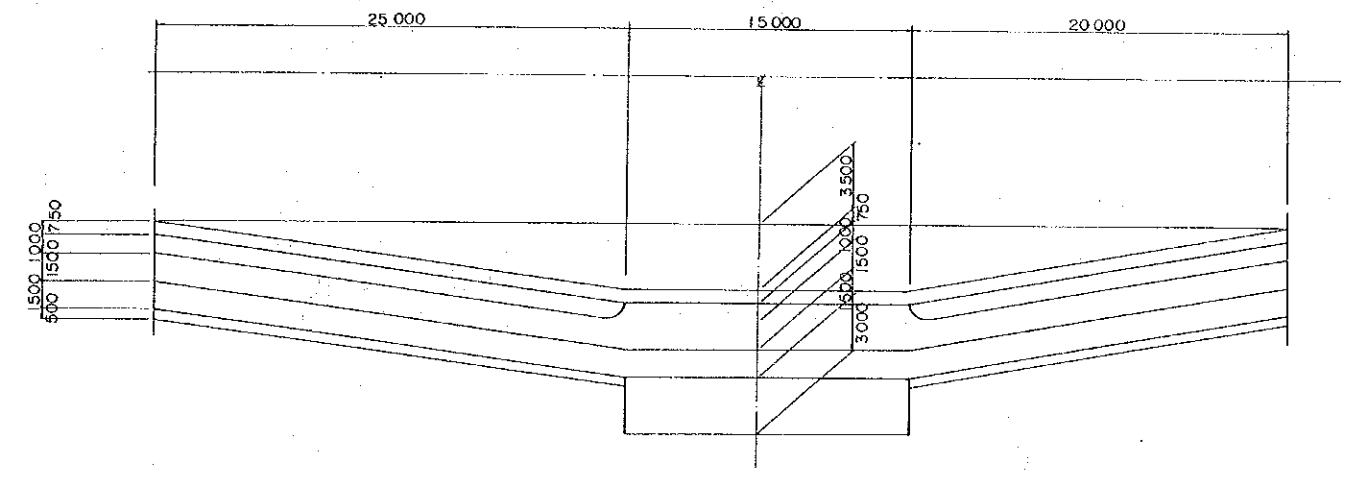
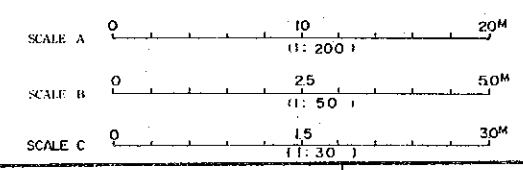
SECTION A-A SCALE B



SECTION B-B SCALE C

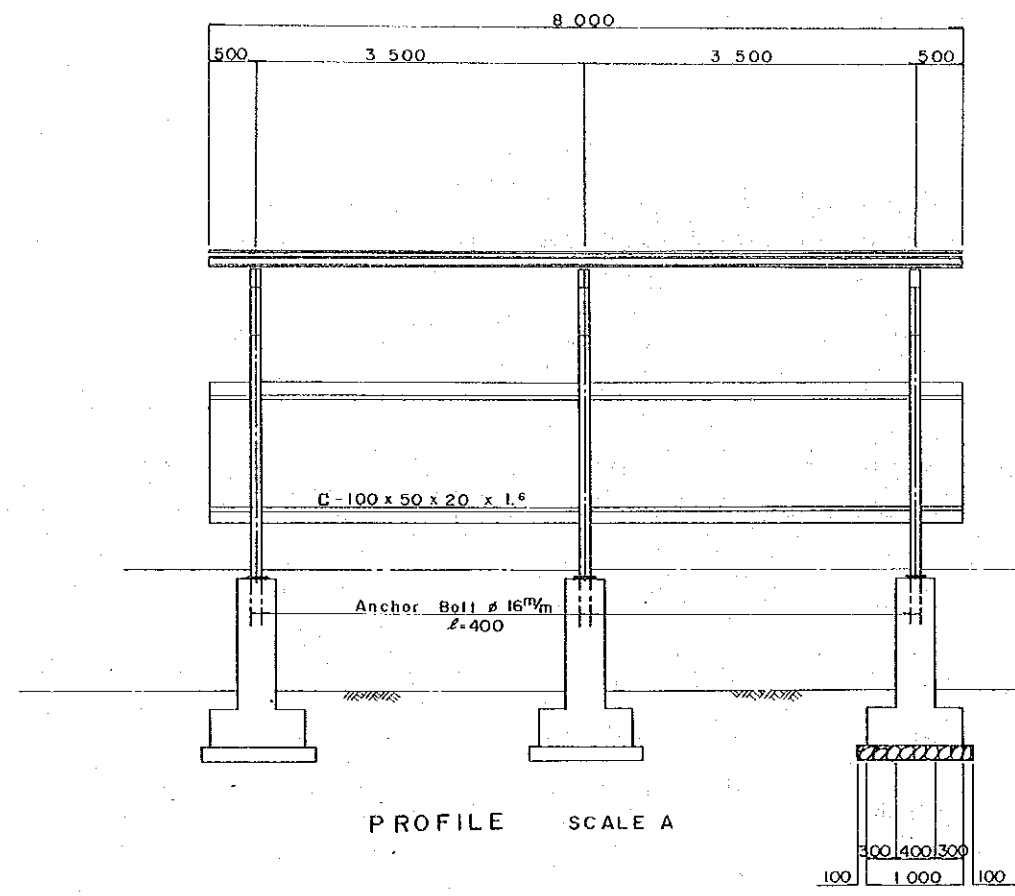


SECTION D-D SCALE C

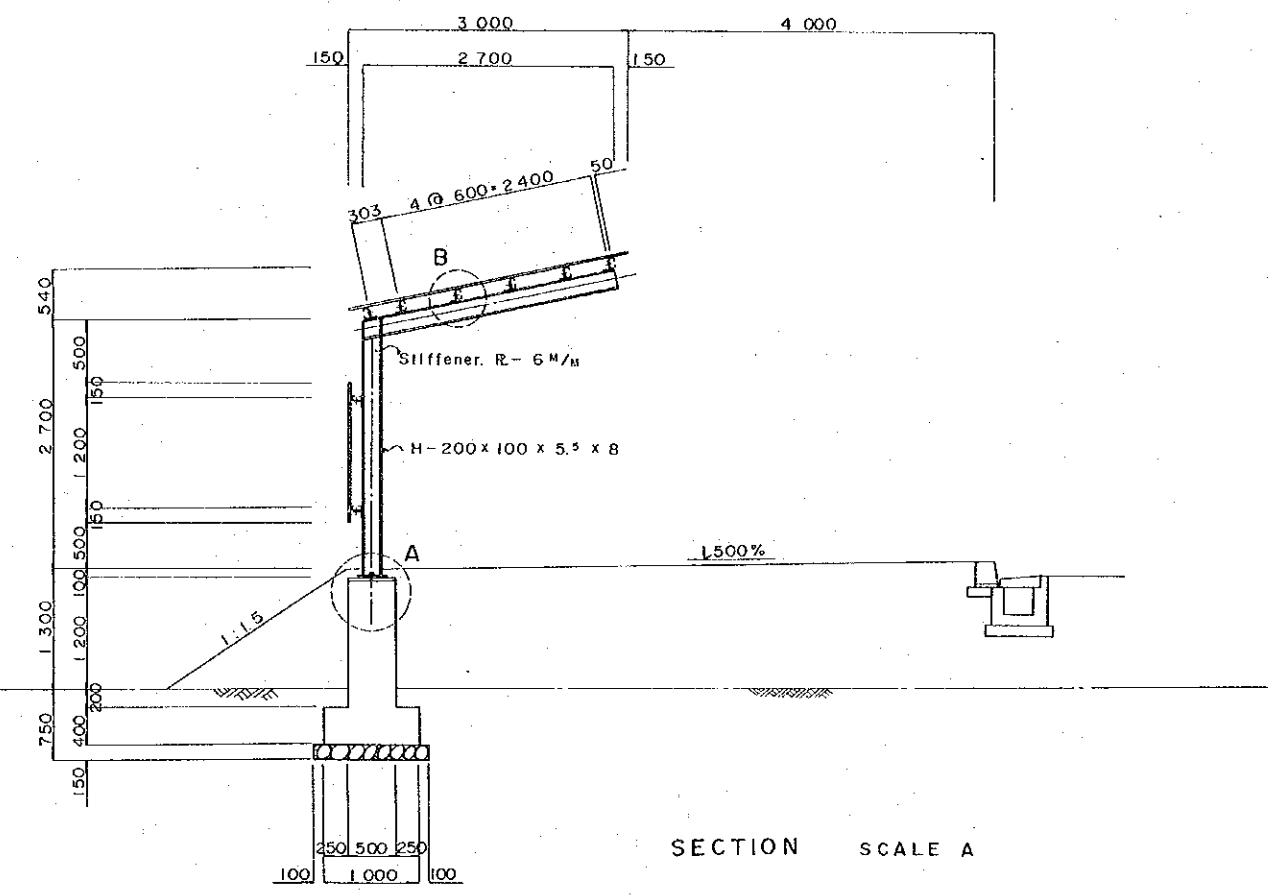


BUS STOP PLAN SCALE A

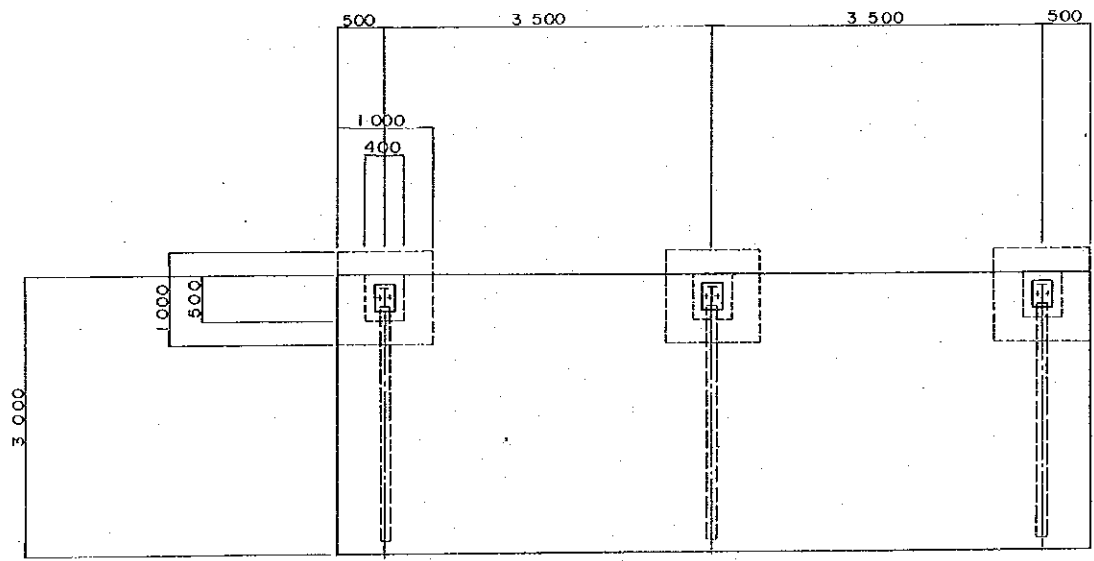
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		ACCESS CONNECTION AND BUS STOP		MINISTRY OF WORKS		APPROVED _____ DATE _____
								NIPPON KOHI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. J - 4	JUNE 30, 1980		



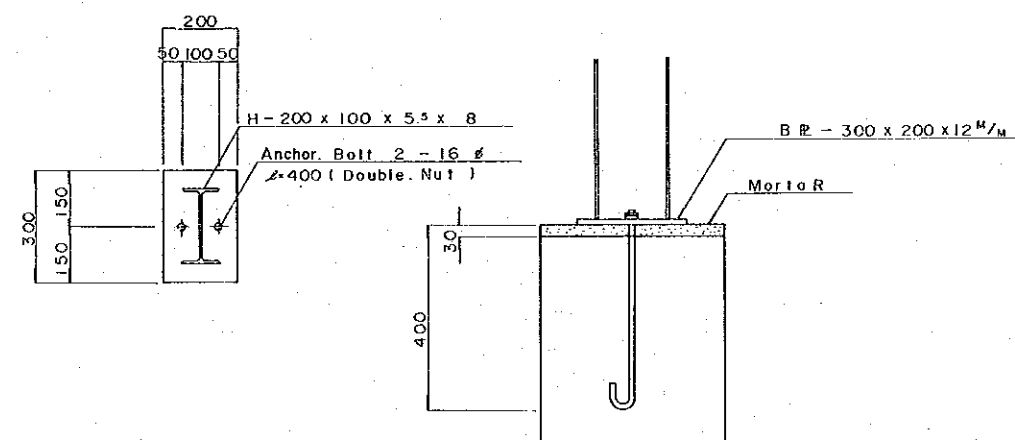
PROFILE SCALE A



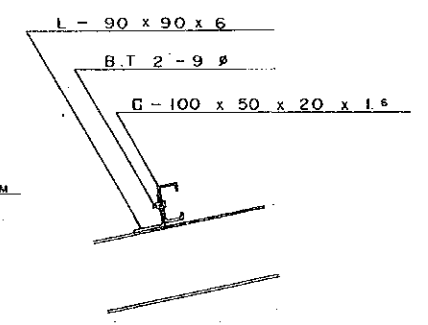
SECTION SCALE A



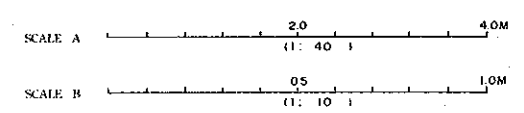
PLAN SCALE A



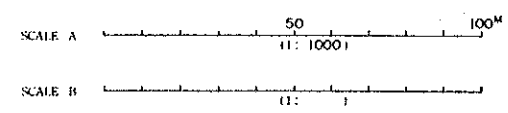
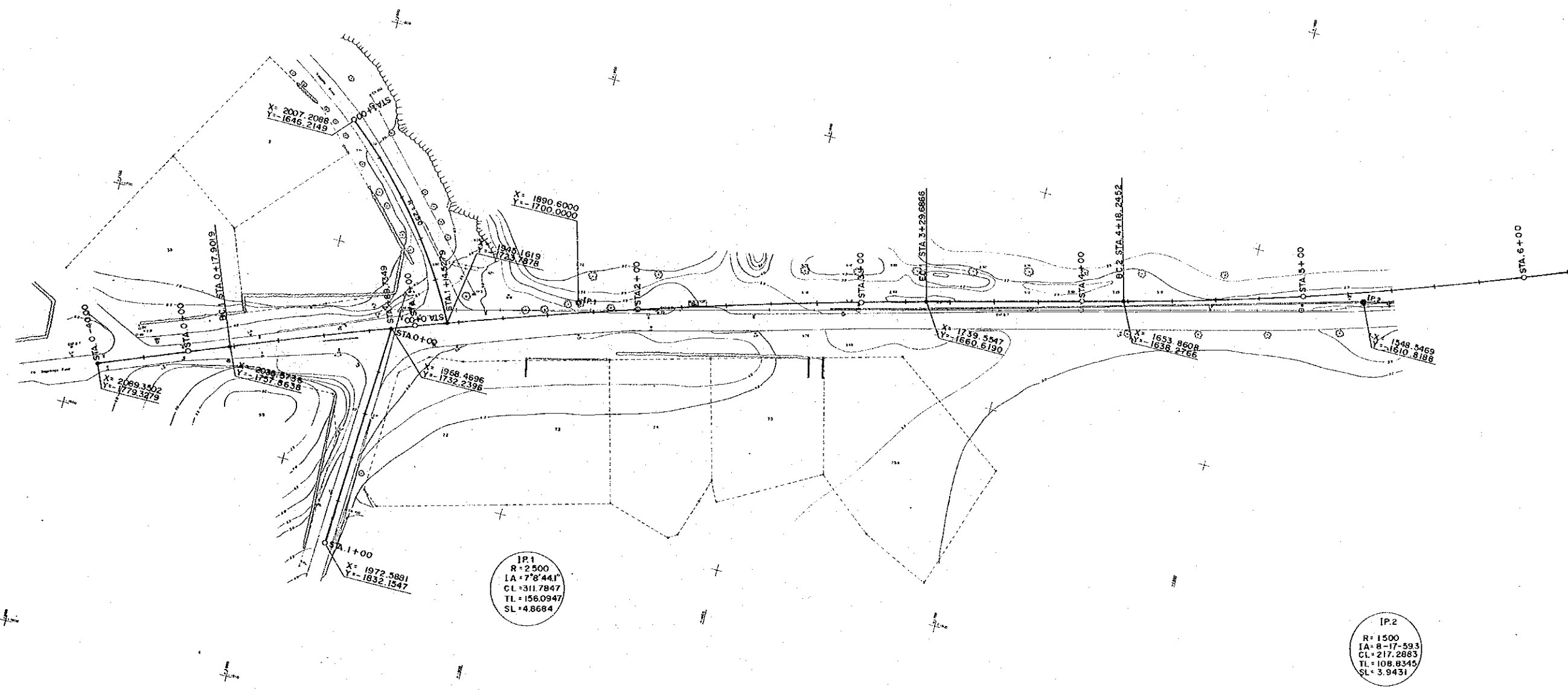
DETAIL OF A SCALE B



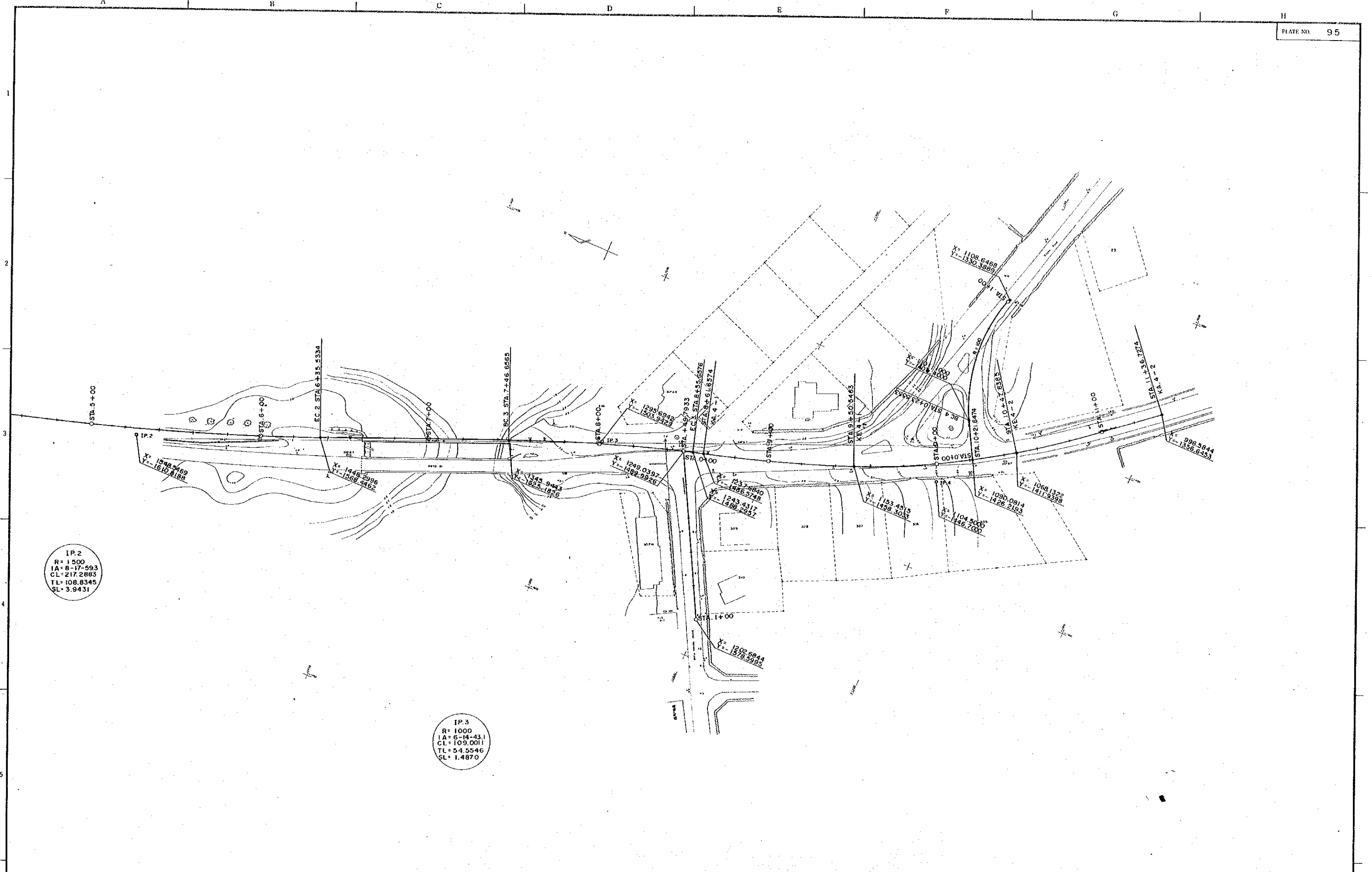
DETAIL OF B SCALE B



REV. NO.		DATE		COORDINATE		REVISION		APPRO. DATE		THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		BUS STOP SHELTER		MINISTRY OF WORKS APPROVED _____ DATE _____	
REV. NO.		DATE		COORDINATE		REVISION		APPRO. DATE		MINISTRY OF WORKS DWG. NO. J - 5		NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE JUNE 30, 1980	

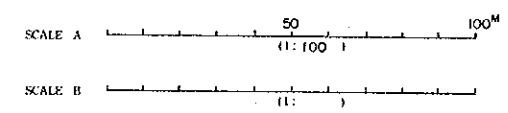


				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		HORIZONTAL ALIGNMENT AND COORDINATE (I)		MINISTRY OF WORKS		APPROVED: _____
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE: _____
										PREPARED: _____
										CHECKED: _____
										SUBMITTED: _____
										DATE: _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. K-1	JUNE 30, 1980		

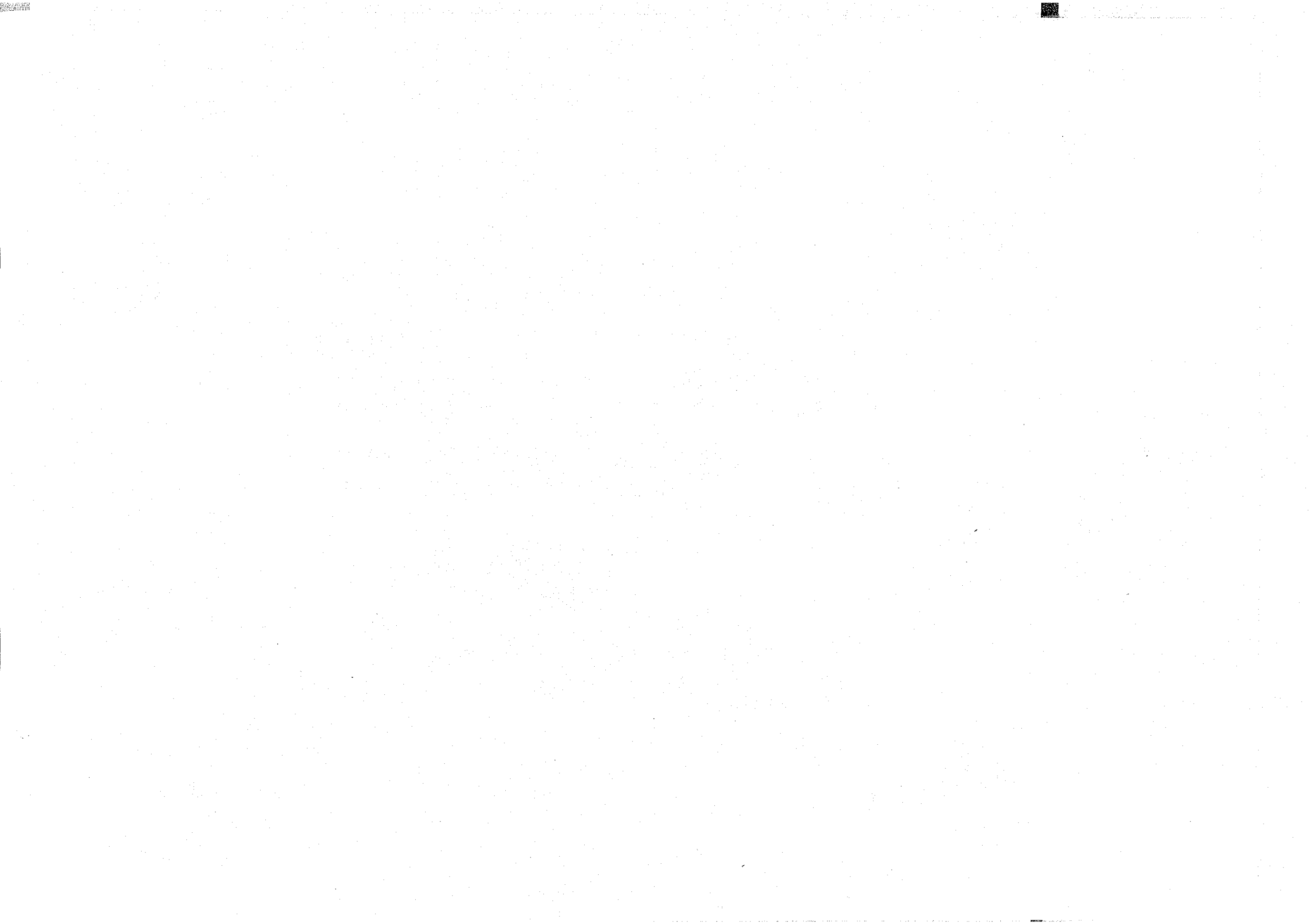


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						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		HORIZONTAL ALIGNMENT AND COORDINATE (2)		MINISTRY of WORKS		APPROVED _____ DATE _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	K - 2			JUNE 30, 1980		



JICA