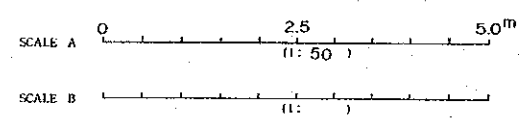
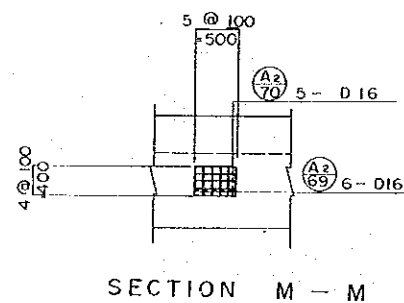
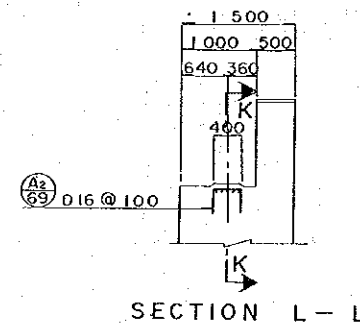
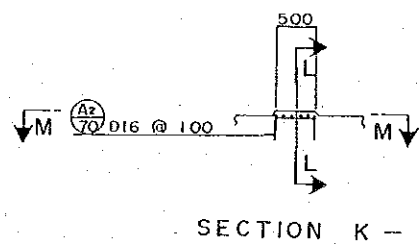
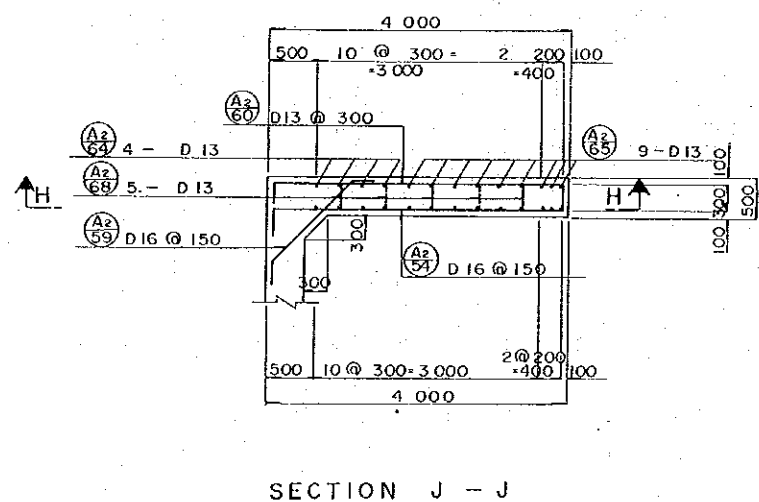
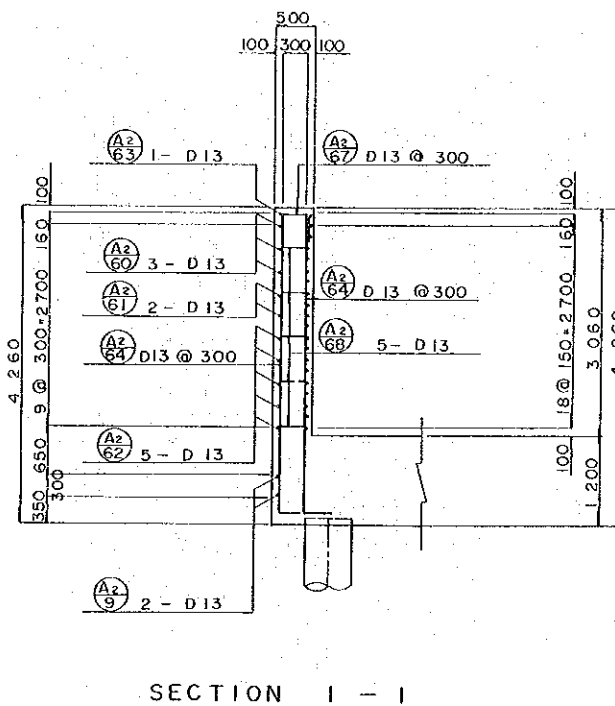
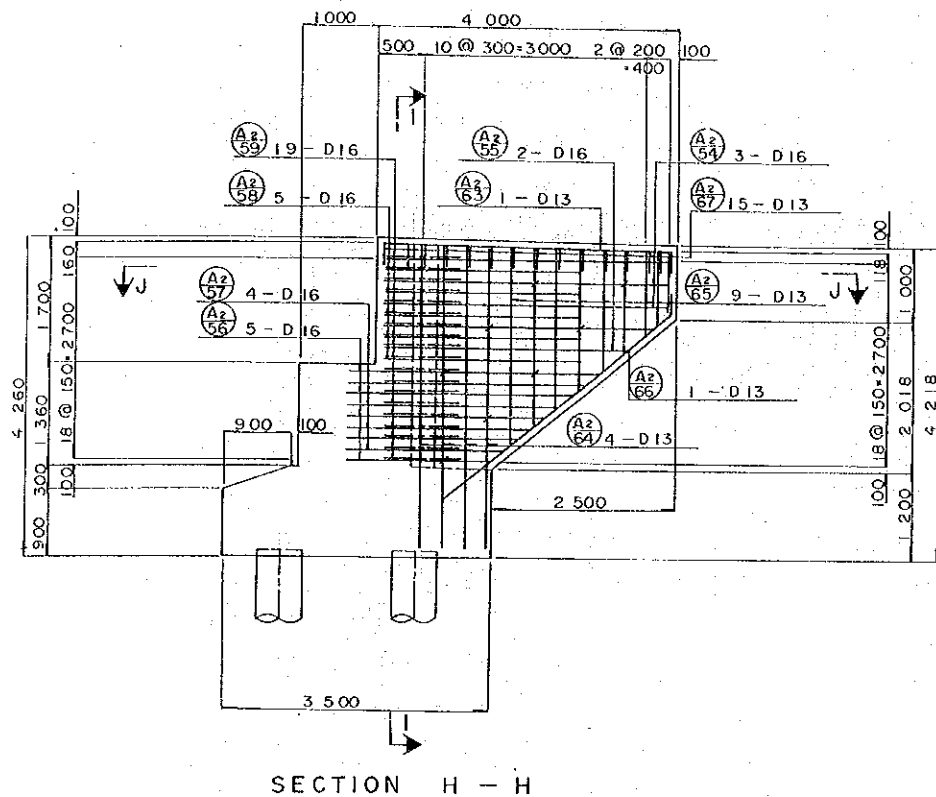


- NOTES ;
- DESIGN STRESSES:
 CONCRETE $\sigma_{cu} = 210 \text{ kg/cm}^2$
 $\sigma_{ca} = 70 \text{ kg/cm}^2$
 REINFORCING BAR $\sigma_{sa} = 1800 \text{ kg/cm}^2$
 - ALL REINFORCING BARS SHALL BE DEFORMED BARS
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED



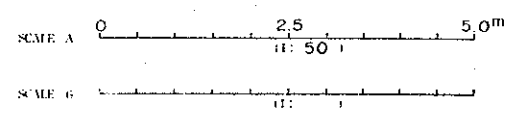
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE

THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM MINISTRY OF WORKS	SELANDER BRIDGE A1 ABUTMENT REINFORCEMENT (I)	MINISTRY OF WORKS NIPPON KOJI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	APPROVED _____ DATE _____ PREPARED CHIKKFD SUBMITTED _____ DATE _____
	DWG. NO. F - 12	JUNE 30, 1980	

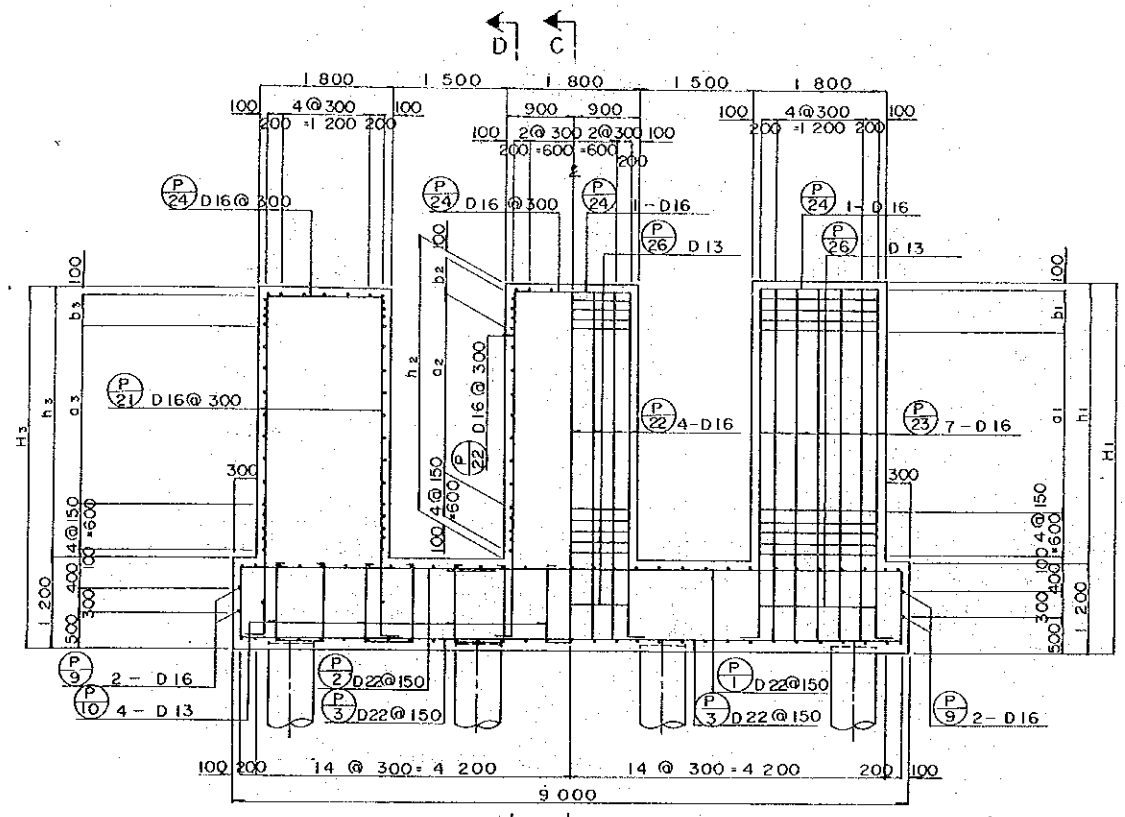


SHOE BED REINFORCEMENT

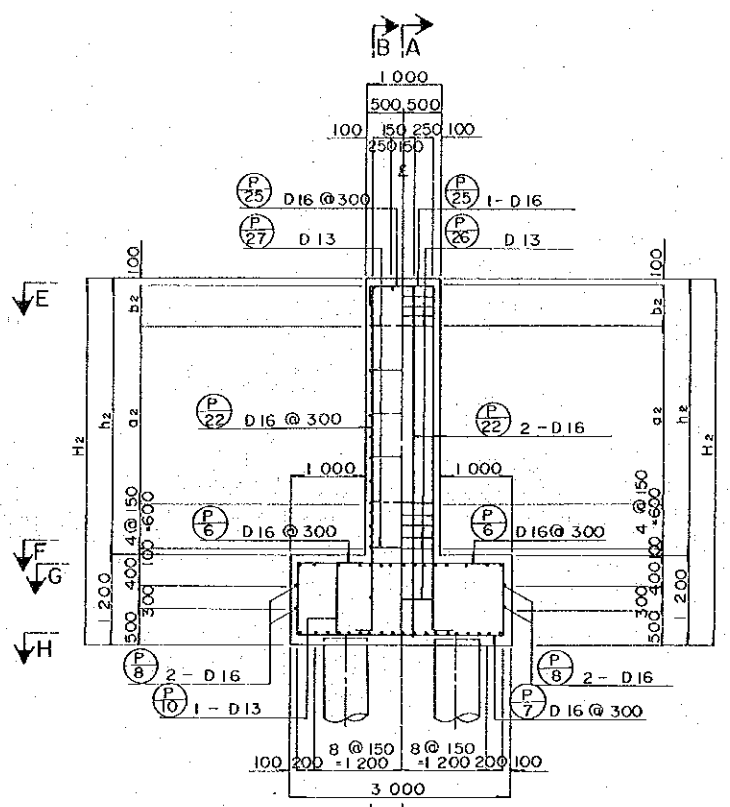
- NOTES :
- DESIGN STRESSES :
 CONCRETE $f_{cu} = 210 \text{ kg/cm}^2$
 $f_{ca} = 70 \text{ kg/cm}^2$
 REINFORCING BAR $f_{sa} = 1800 \text{ kg/cm}^2$
 - ALL REINFORCING BARS SHALL BE DEFORMED BARS
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED



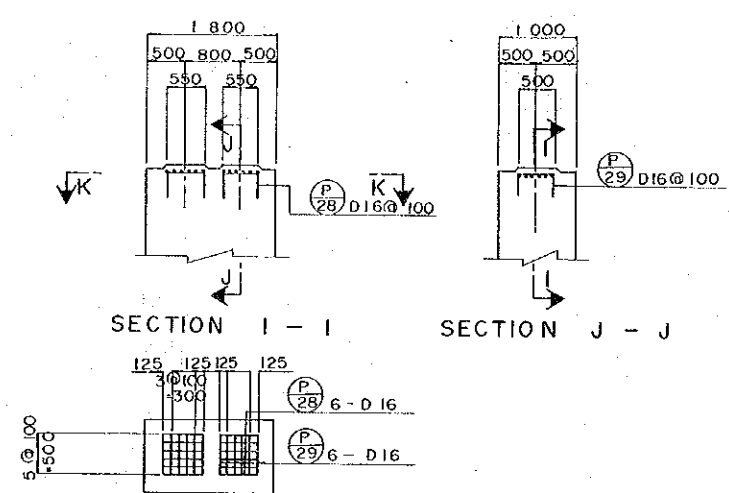
						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		SELANDER BRIDGE A2 ABUTMENT. REINFORCEMENT (2)		MINISTRY of WORKS		APPROVED
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
										DWG. NO. F-15		DATE
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS		DWG. NO. F-15		TOKYO JAPAN		JUNE 30, 1980



SECTION A - A SECTION B - B



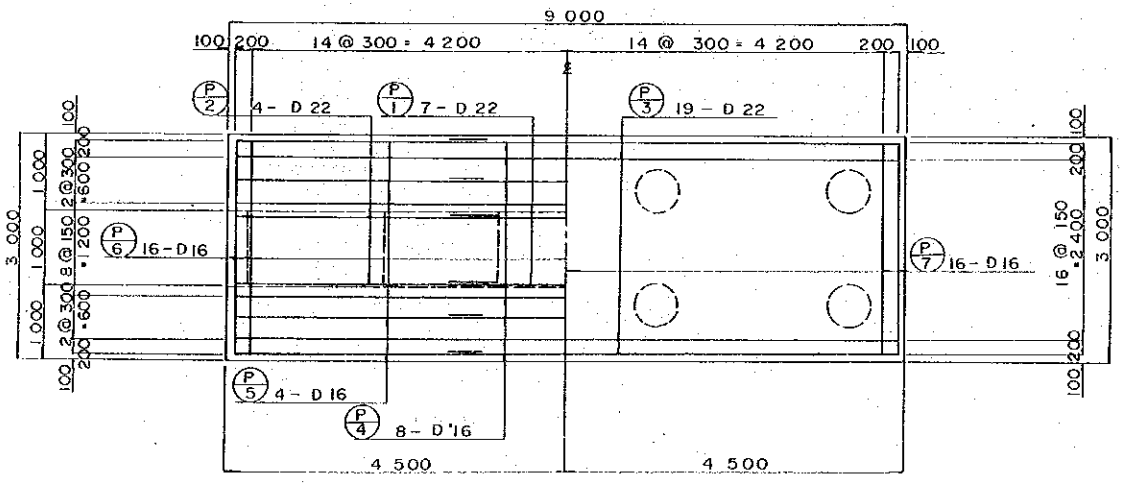
SECTION C - C SECTION D - D



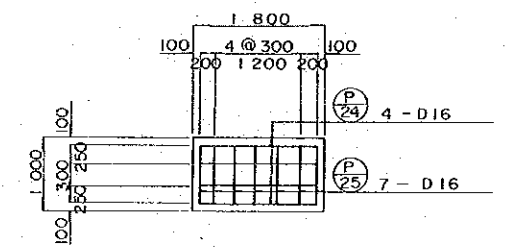
SECTION I - I SECTION J - J
SECTION K - K
SHOE BED REINFORCEMENT

DIMENSIONS

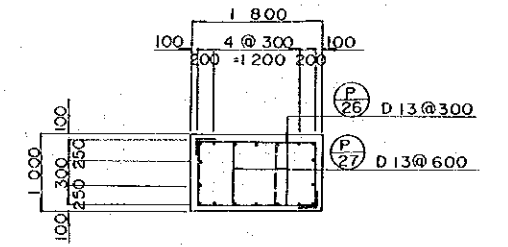
	P ₁	P ₂	P ₃	P ₄
H ₁	3 000	4 000	5 000	5 000
h ₁	1 800	2 800	3 800	3 800
a ₁	2@ 300 - 600	5@ 300+1 500	8@ 300+2 400	8@ 300+2 400
H ₂	2 934	3 934	4 934	4 934
h ₂	1 734	2 734	3 734	3 734
a ₂	2@ 250 - 500	5@ 300+1 500	8@ 300+2 400	8@ 300+2 400
H ₃	2 868	3 868	4 868	4 868
h ₃	1 668	2 668	3 668	3 668
a ₃	2@ 250 - 500	5@ 300+1 500	8@ 300+2 400	8@ 300+2 400
b ₃	4@ 92 - 368	4@ 92 - 368	4@ 117 - 468	4@ 117 - 468



SECTION G - G SECTION H - H

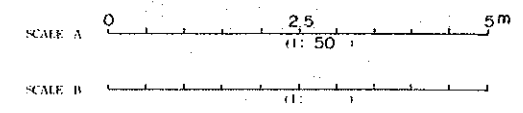


SECTION E - E



SECTION F - F

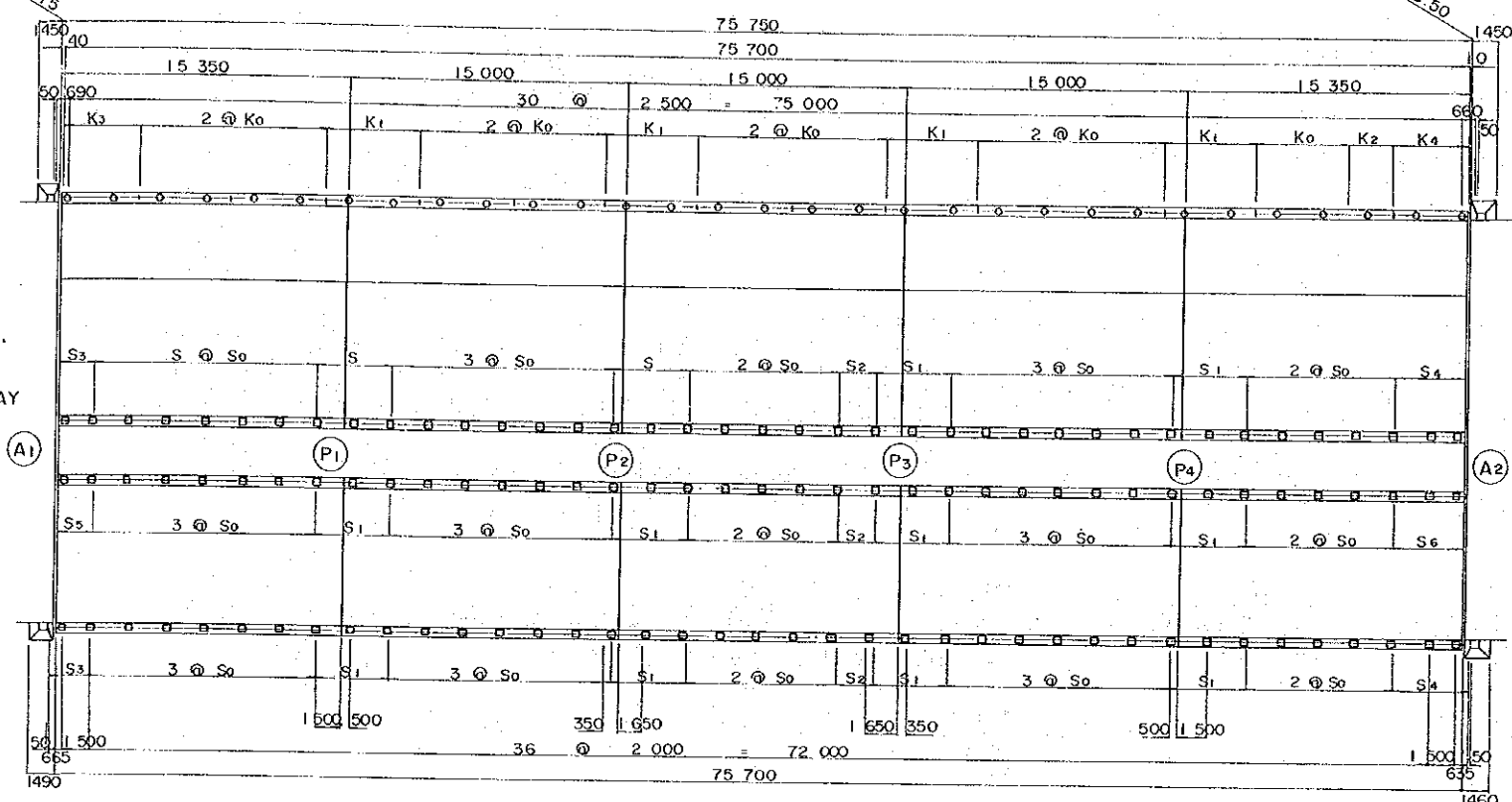
- NOTES :
- DESIGN STRESSES:
 CONCRETE $f_{cu} = 210 \text{ kg/cm}^2$
 $f_{ca} = 70 \text{ kg/cm}^2$
 REINFORCING BAR $f_{sa} = 1800 \text{ kg/cm}^2$
 - ALL REINFORCING BARS SHALL BE DEFORMED BARS
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED



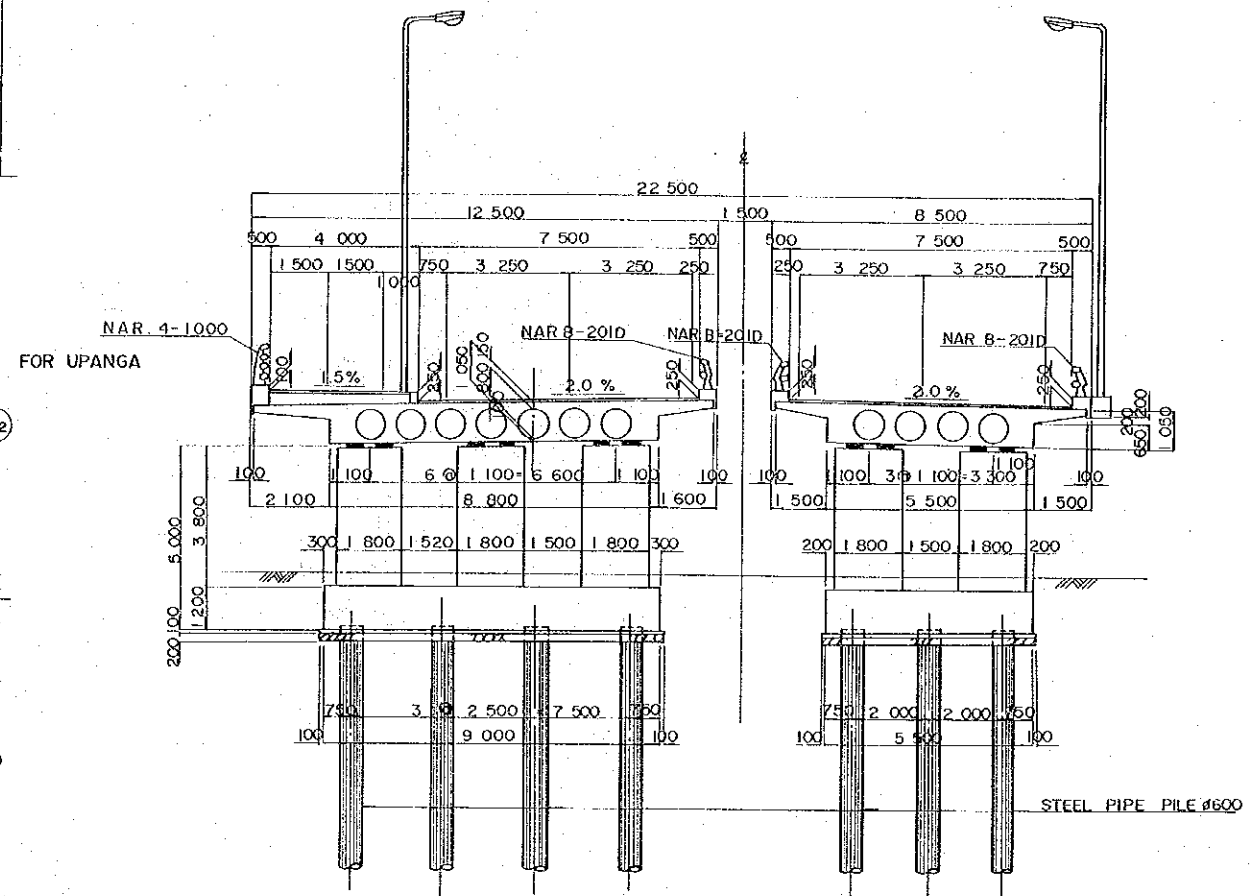
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		SELANDER BRIDGE P ₁ ~ P ₄ PIERS REINFORCEMENT (I)		MINISTRY OF WORKS		APPROVAL
										DATE
										PREPARED
										CHECKED
										DESIGNED
										DATE
										JUNE 30 1980

FOR OYSTER BAY

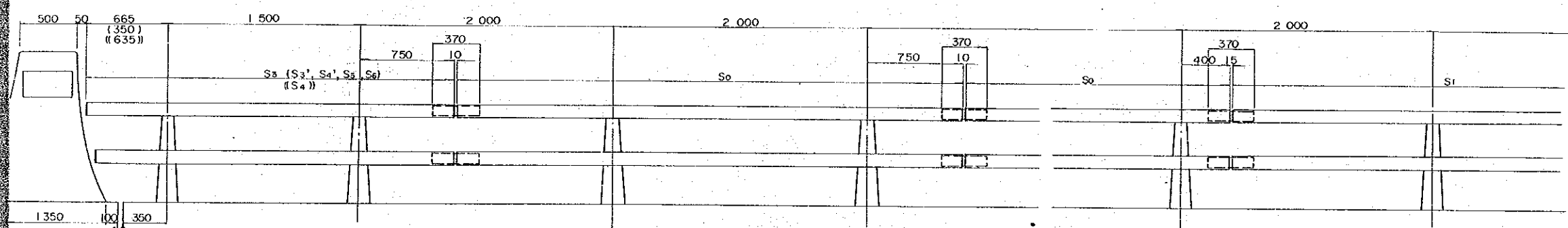
FOR UPANGA



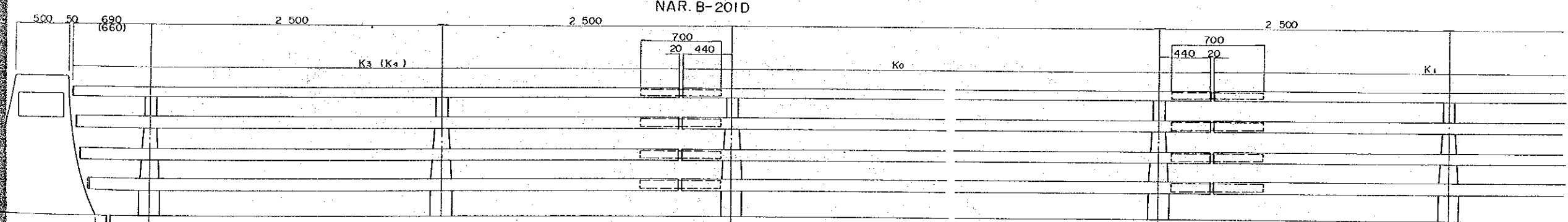
PLAN SCALE A



CROSS SECTION SCALE B

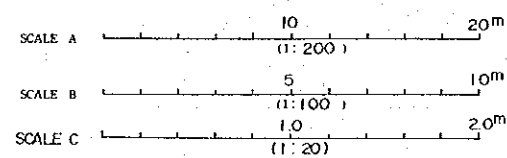


SIDE VIEW SCALE C
NAR. B-201D



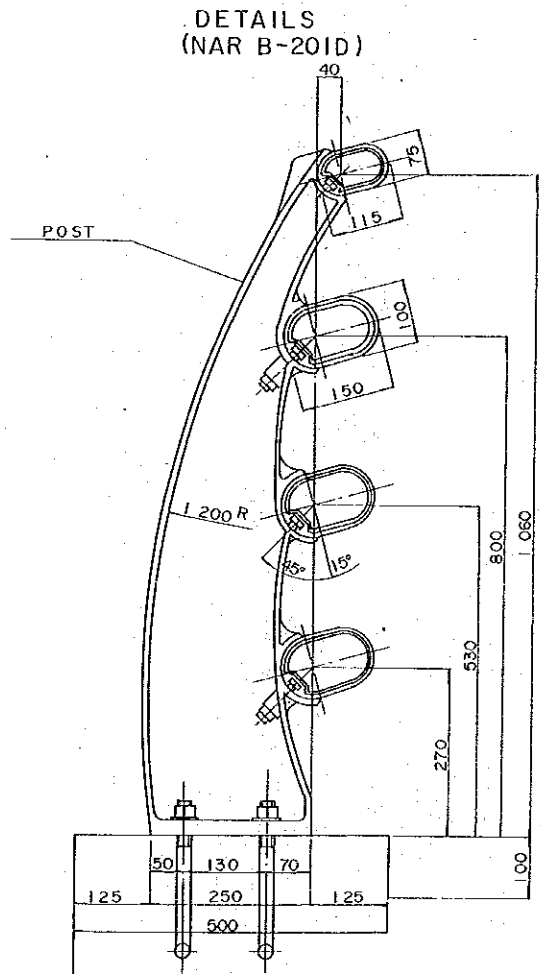
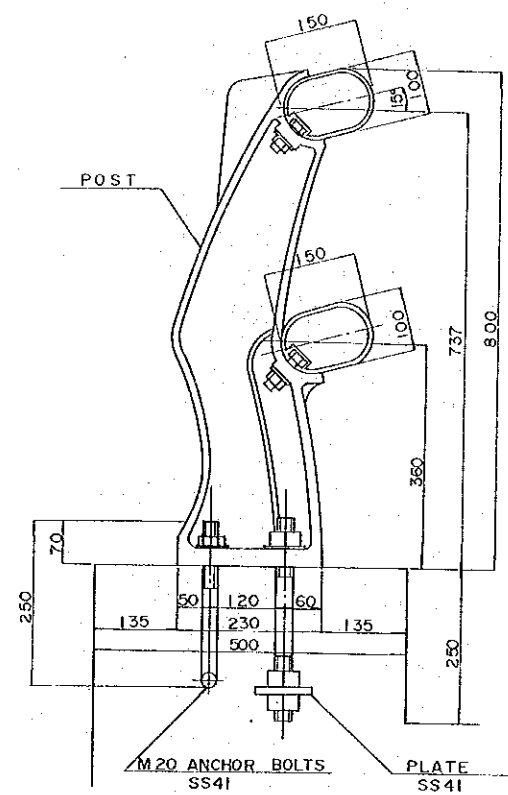
SIDE VIEW SCALE C
NAR. 4-1000

NOTES :
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

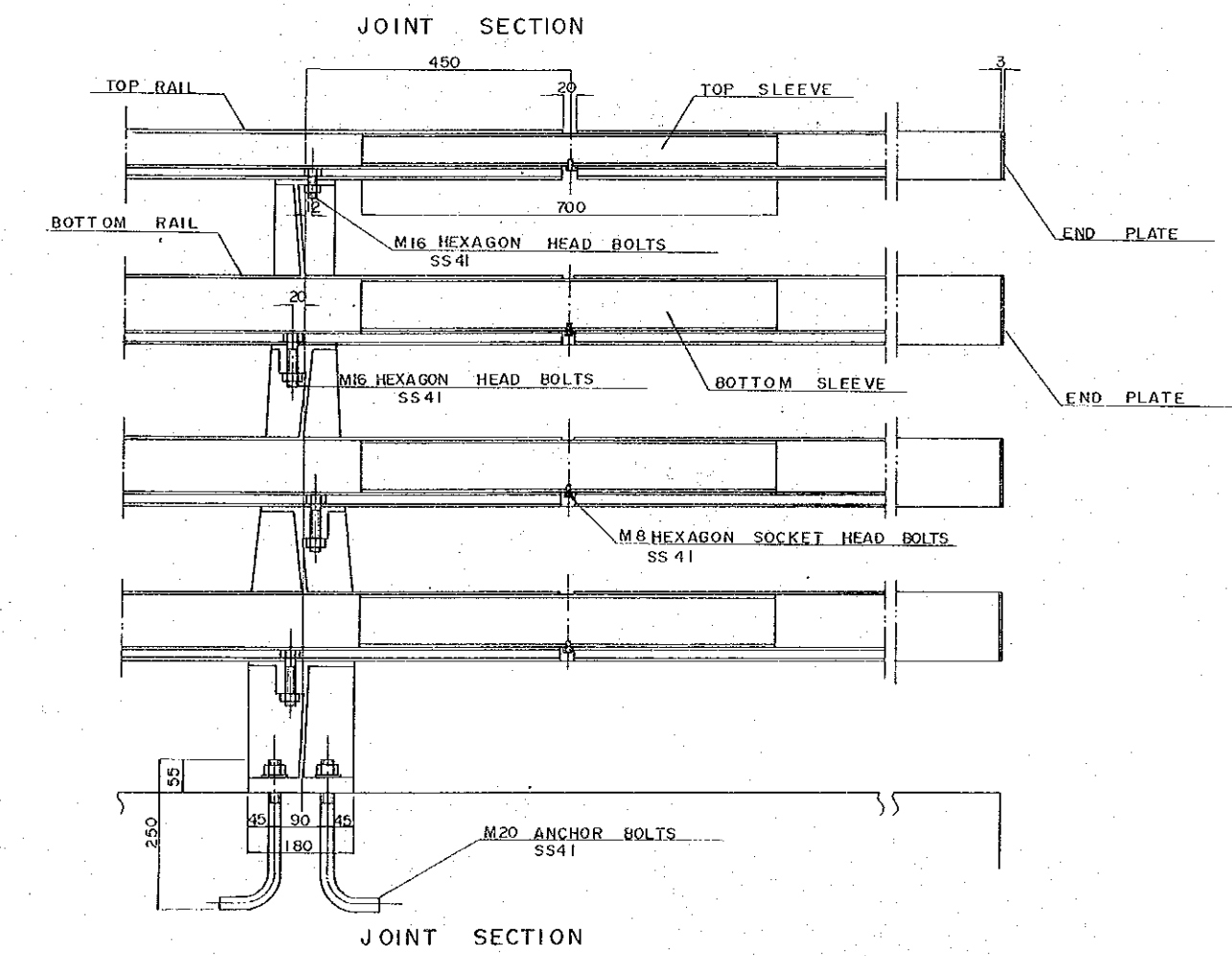
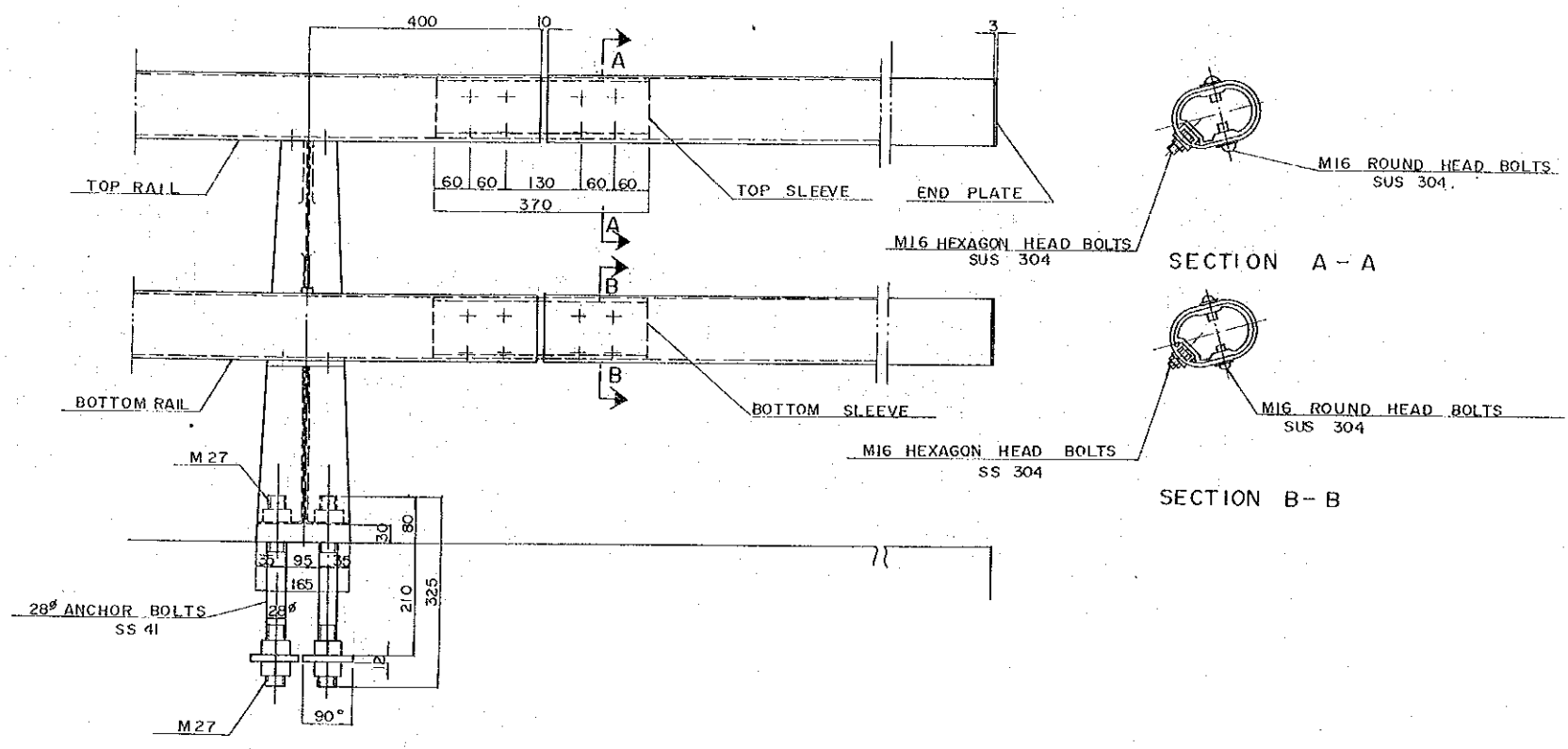
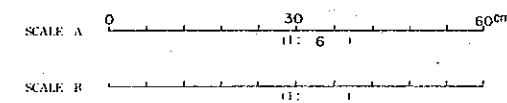


REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE

THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		SELANDER BRIDGE MISCELLANEOUS DETAILS BRIDGE RAILING (I)		MINISTRY OF WORKS	APPROVED _____ DATE _____
MINISTRY OF WORKS		DWG. NO. F-18		NIPPON KOGI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	
				SUBMITTED _____ DATE _____	
				CHECKED _____ DATE _____	
				JUNE 30, 1980	

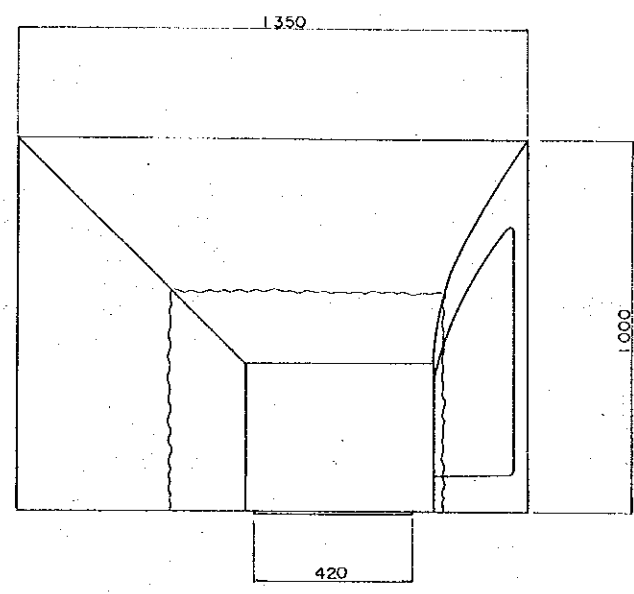


DETAILS (NAR 4-1000)

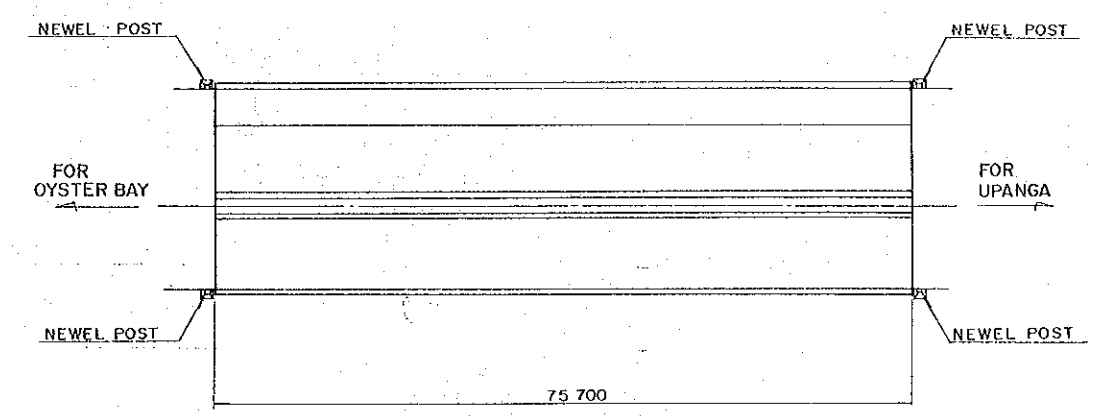


NOTES;
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

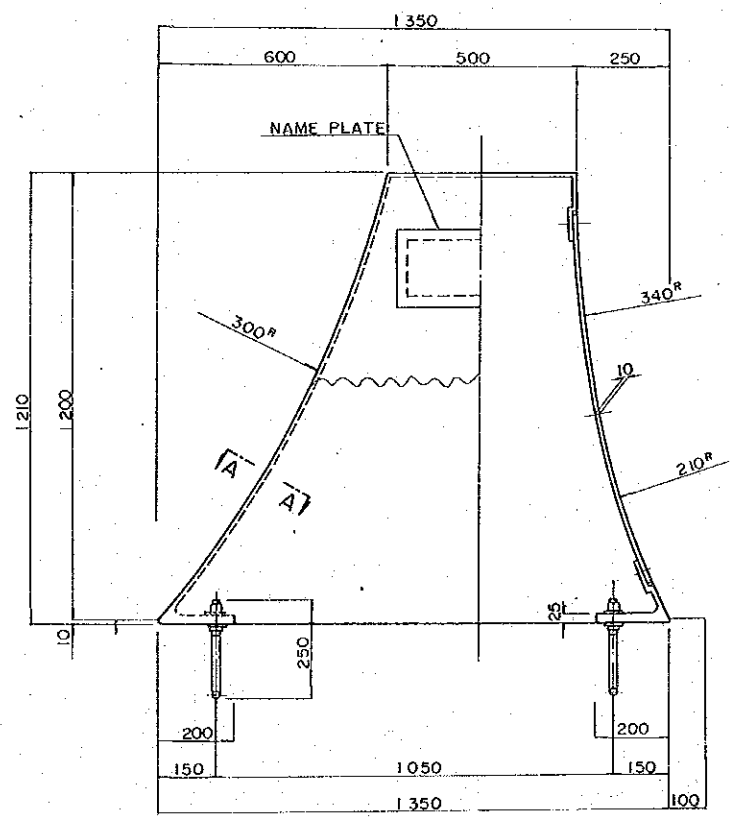
THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		SELANDER BRIDGE MISCELLANEOUS DETAILS BRIDGE RAILING (2)		MINISTRY OF WORKS	APPROVED _____
				NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	DATE _____ PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO. DATE	MINISTRY OF WORKS
					DWG. NO. F - 19
					DATE JUNE 30, 1980



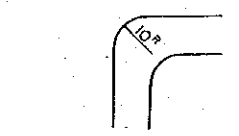
PLAN SCALE A



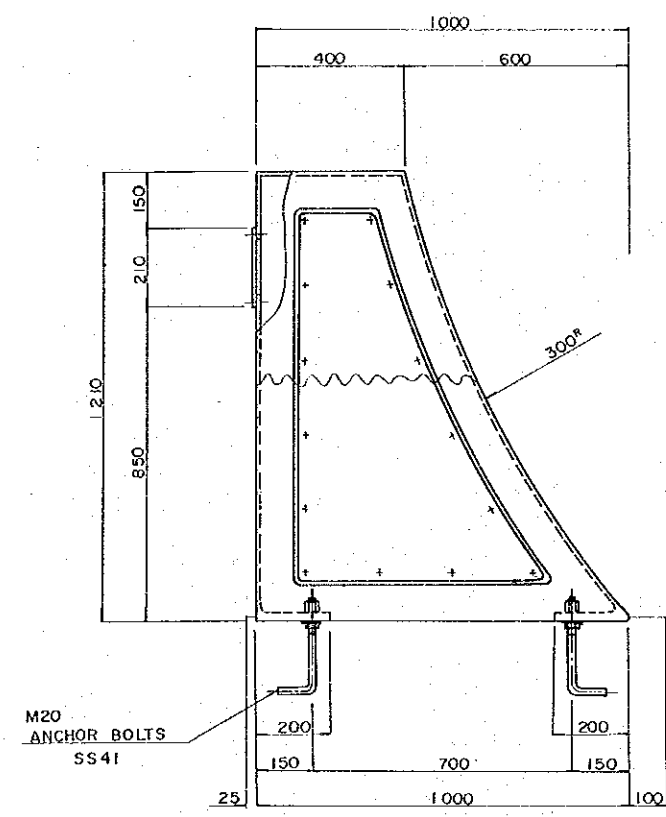
MARKING DIAGRAM



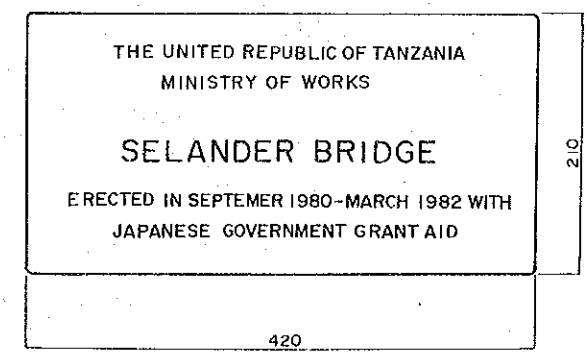
FRONT ELEVATION SCALE A



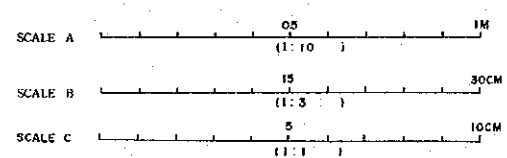
SECTION SCALE C



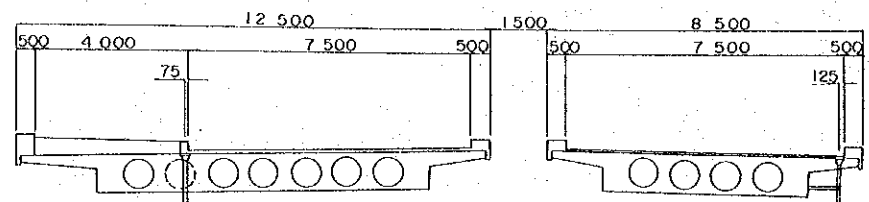
SIDE VIEW SCALE A



NAME PLATE SCALE B

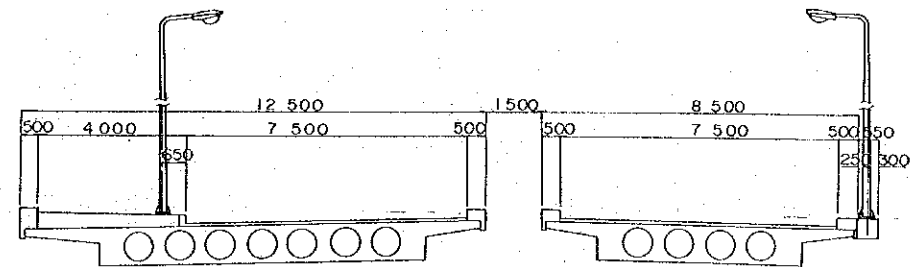


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		SELANDER BRIDGE MISCELLANEOUS DETAILS NEWEL POST		MINISTRY OF WORKS		APPROVED _____
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS		DWG. NO. F-20		DATE		CHECKED _____
										JUNE 30, 1980		



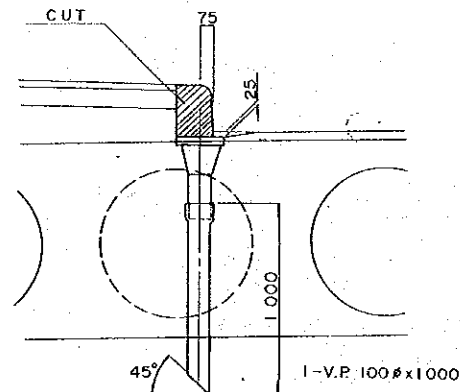
DR-1 DR-2

CROSS SECTION SCALE A

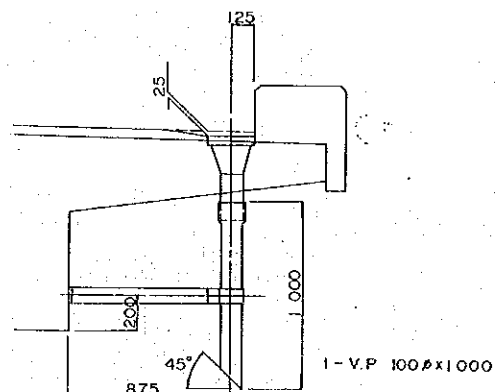


PB-1 PB-2

CROSS SECTION SCALE A

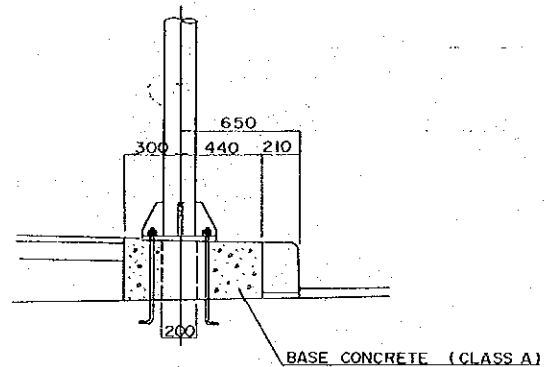


DR-1

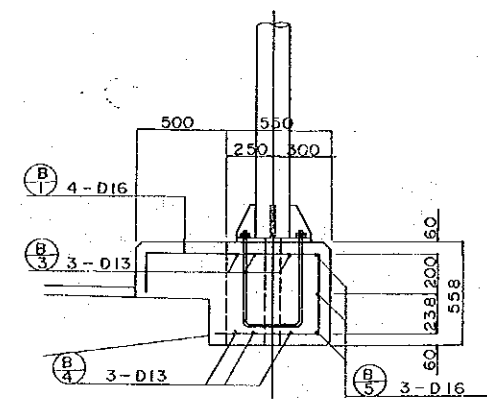


DR-2

DETAIL OF DRAIN SCALE B

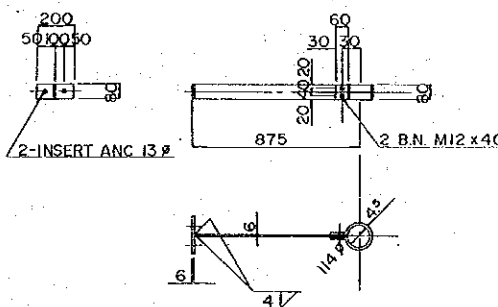
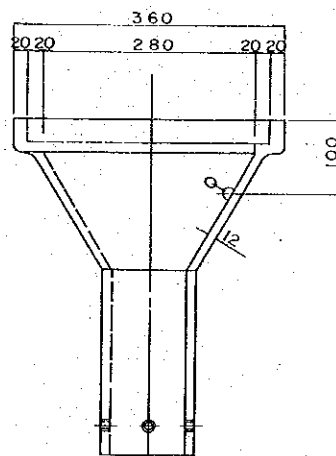
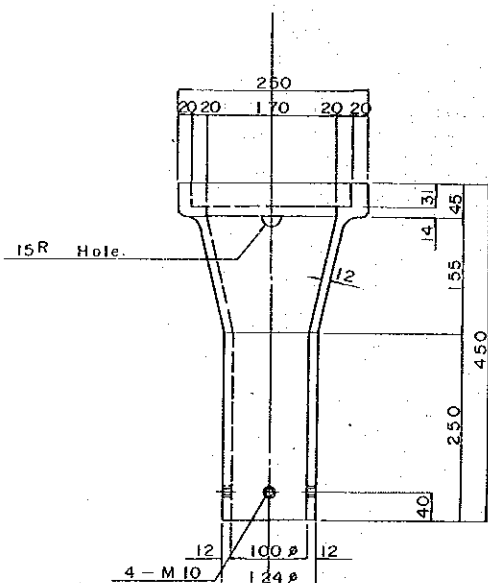


PB-1

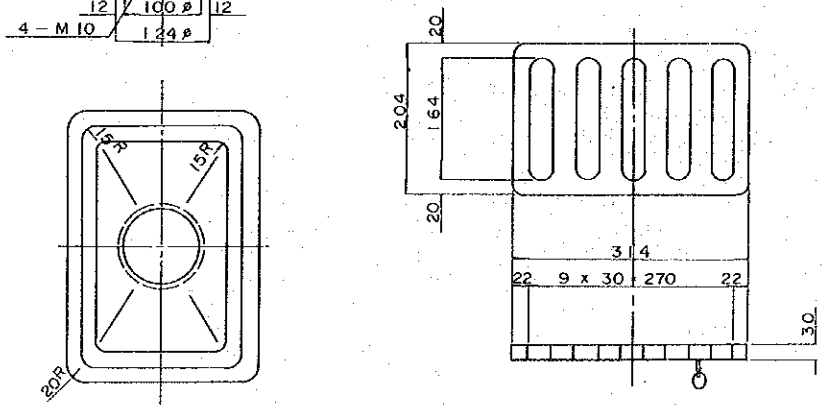
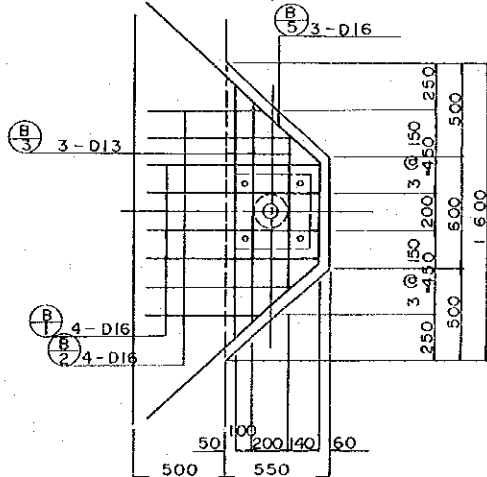
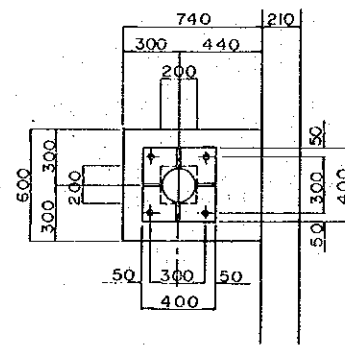


PB-2

DETAIL OF LIGHTING POLE BASE SCALE B



DETAIL OF SUPPORT SCALE B



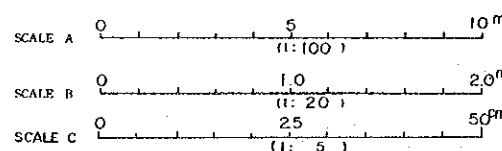
DRAIN BOX SCALE C

		75 700			
2 850	35 000	35 000	2 850		
PB-1		PB-1		PB-1	
20 000	20 000	31 700	20 000	20 000	20 000
DR-1		DR-1		DR-1	
DR-2		DR-2		DR-2	
PB-2		PB-2		PB-2	
2 850	35 000	35 000	2 850		

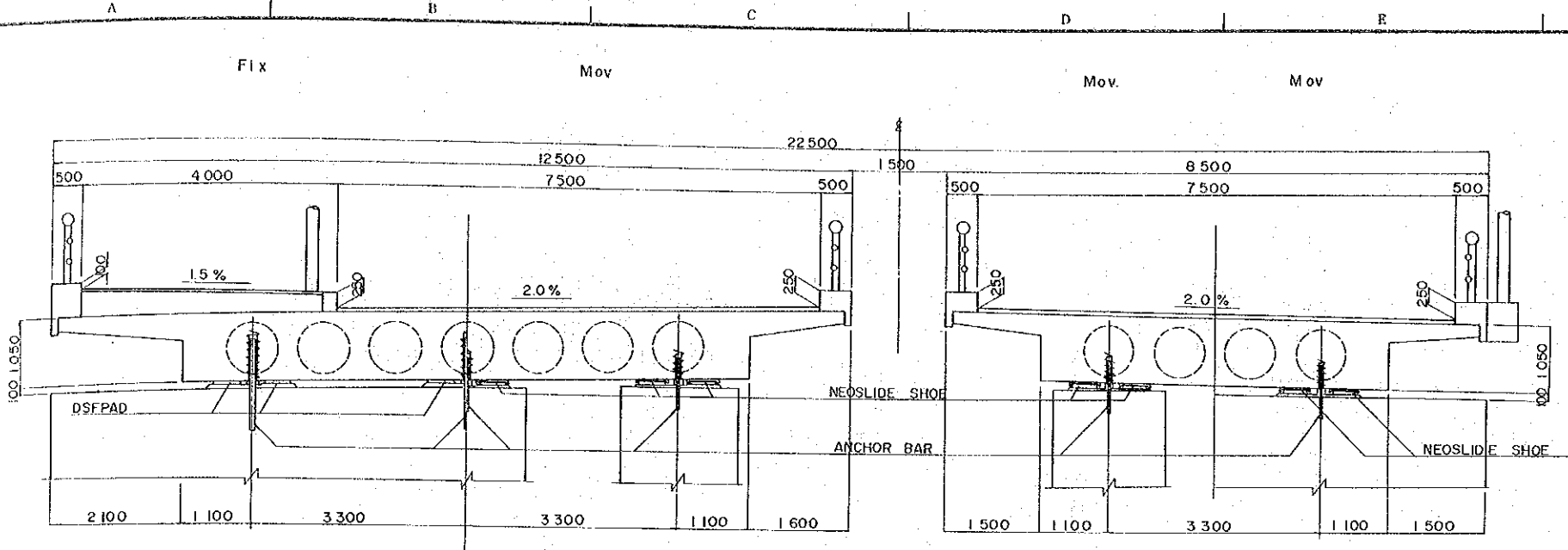
MARKING DIAGRAM

NOTES:

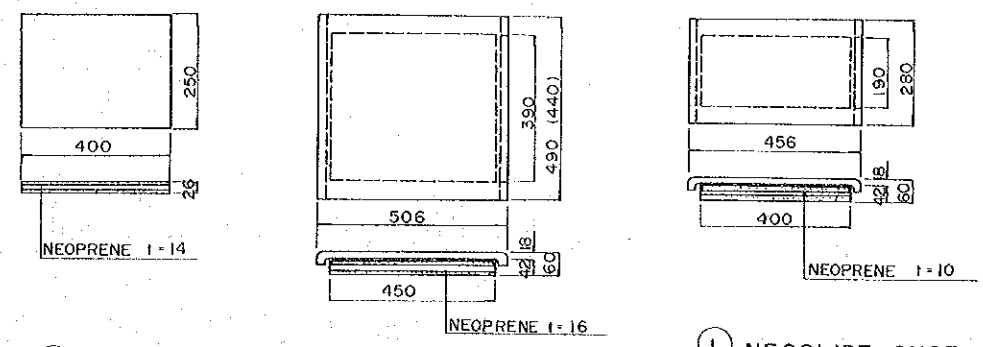
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED
- MATERIAL
- DRAIN BOX : CAST IRON (FC25)
- SUPPORT : STEEL (SS41)
- REINFORCING BAR : DEFORMED STEEL BAR (SD 30)



REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM MINISTRY OF WORKS	SELANDER BRIDGE MISCELLANEOUS DETAILS DRAIN AND LIGHTING POLE BASE DWG. NO. F-21	MINISTRY OF WORKS NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN	APPROVED DATE PREPARED CHECKED SUBMITTED DATE JUNE 30, 1980
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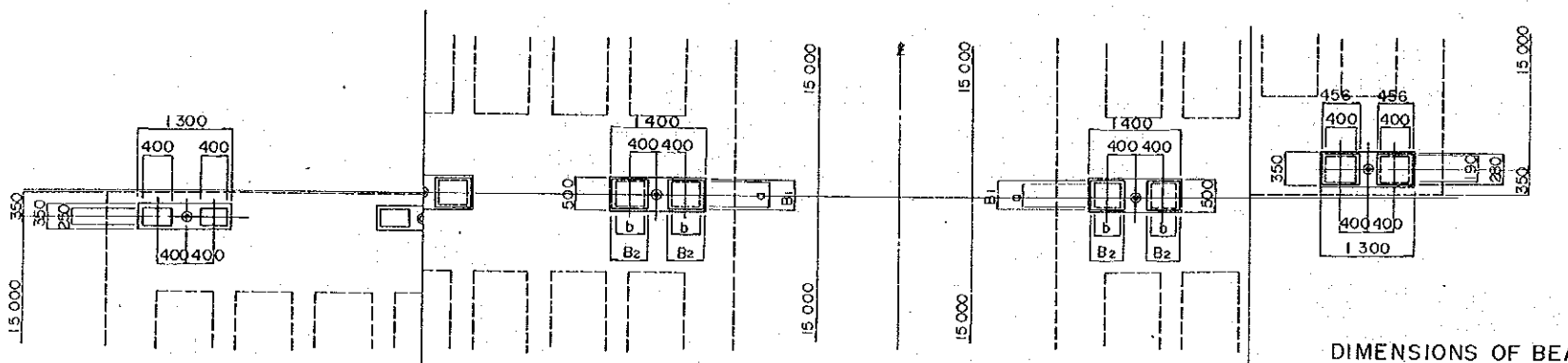


CROSS SECTION SCALE A



DETAIL OF PAD SCALE C

(A₂) (Fix) (P₁) (P₂) (P₃) (P₄) (Mov) (P₁) (P₂) (P₃) (P₄) (Mov) (A₁) (Mov)



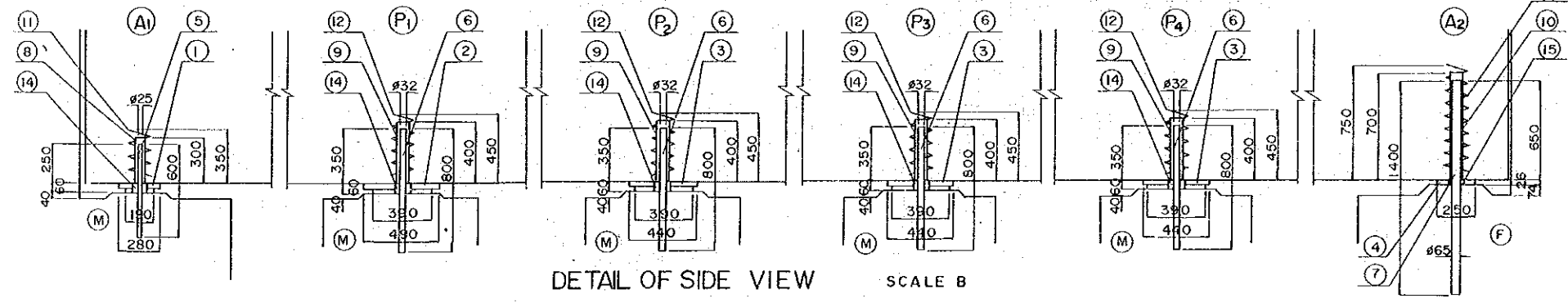
PLAN SCALE A

LIST OF PARTS (UNIT: EACH EXCEPT NO.16)

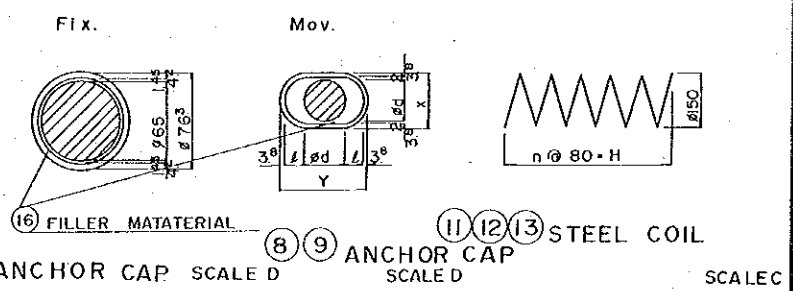
NO.	NAME	SIZE	MATERIAL	(A ₁)	(P ₁)	(P ₂)	(P ₃)	(P ₄)	(A ₂)
1	NEOSLIDE SHOE	456 x 280 x 60 400 x 190 x 60	NEOPRENE, NEOPLAS SS41,	10					
2	"	506 x 490 x 60 450 x 390 x 60	"		10				
3	"	506 x 440 x 60 450 x 390 x 60	"			10	10	10	
4	DSFPAD	400 x 250 x 26	NEOPRENE NEOPLAS						10
5	ANCHOR BAR	∅25 x 600	SS41	5					
6	"	∅32 x 800	"		5	5	5	5	
7	"	∅65 x 1400	"						5
8	ANCHOR CAP	∅34 x 300	SGP 25A	5					
9	"	∅34 x 400	"		5	5	5	5	
10	"	∅76.3 x 700	SGP 65A						5
11	STEEL COIL	∅9 x 1890	SS41	5					
12	"	∅9 x 2360	"		5	5	5	5	
13	"	∅9 x 4240	"						5
14	ANTICOPPOSITE MATERIAL	∅100 x 601	SYNTHETIC RUBBER	5	5	5	5	5	
15	"	∅100 x 261	"						5
16	FILLER MATERIAL			33 l	4.4 l	4.4 l	4.4 l	4.4 l	127 l

DIMENSIONS OF BEARING

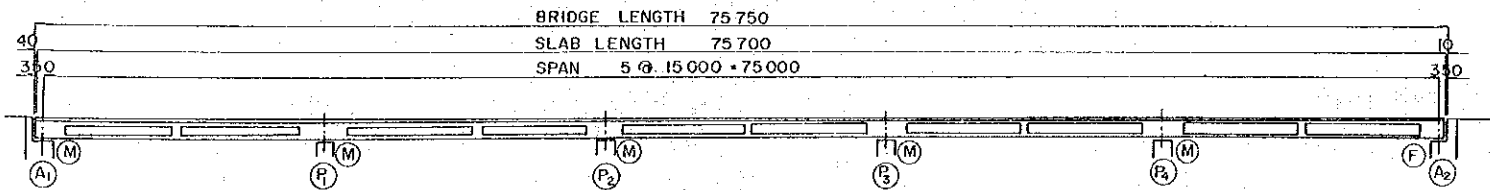
ITEM	a	b	B ₁	B ₂
P ₁	390	450	490	506
P ₂	390	450	440	506
P ₃	390	450	440	506
P ₄	390	450	440	506



DETAIL OF SIDE VIEW SCALE B



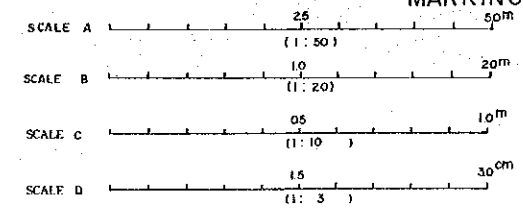
SCALE D SCALE D SCALE C



MARKING DIAGRAM

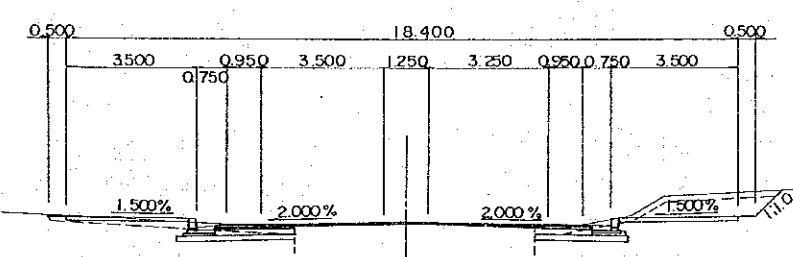
DIMENSIONS

ITEM	A ₁	P ₁	P ₂	P ₃	P ₄	A ₂
d (∅)	25	32	32	32	32	65
l	208	153	153	153	153	---
X	366	436	436	436	436	---
Y	742	702	702	702	702	---
n	4	5	5	5	5	9
H	320	400	400	400	400	720



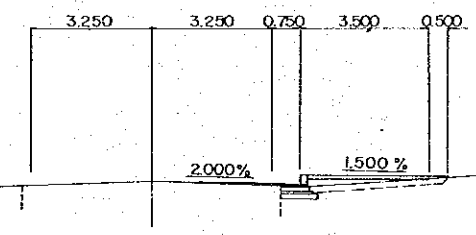
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	SELANDER BRIDGE MISCELLANEOUS DETAILS BEARING PAD	MINISTRY OF WORKS NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	APPROVED DATE PREPARED CHECKED SUBMITTED DATE

STA0+00
 GH = 5.79 C.A = 3.05
 PH = 5.833 E.A = 0.75



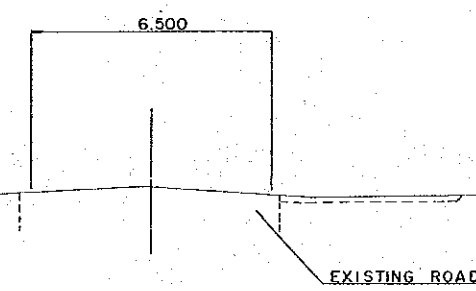
DL = 5.00

STA0-20
 GH = 5.82 C.A = 0.10
 PH = 5.843 E.A = 1.10

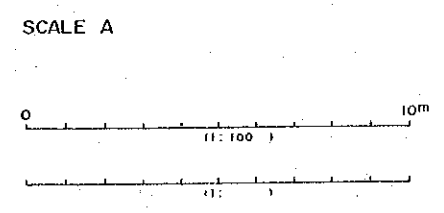


DL = 5.00

STA0-40
 GH = 5.83 C.A = 0.00
 PH = 5.833 E.A = 0.00

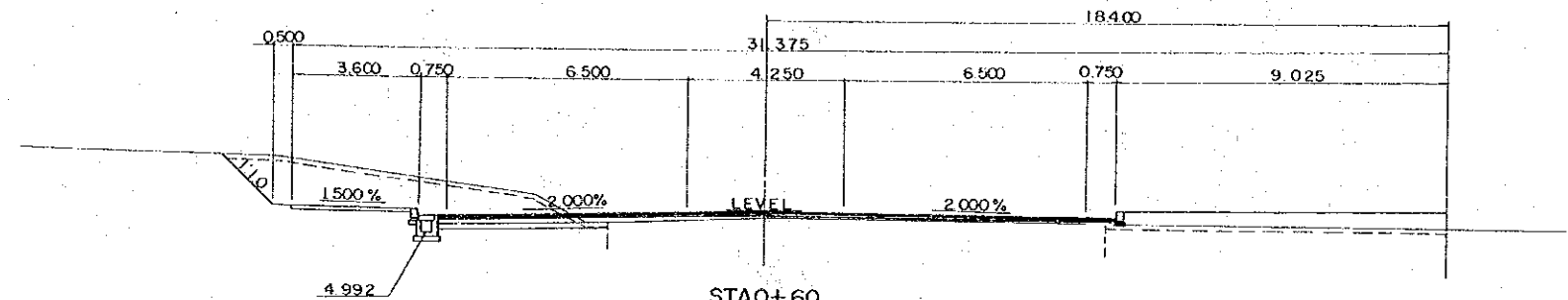


DL = 5.00

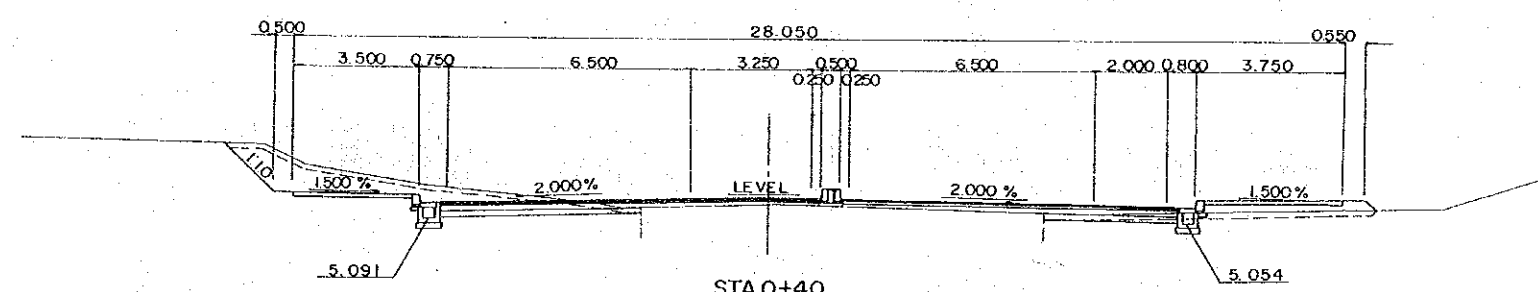


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (I)		MINISTRY OF WORKS		APPROVED
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
REV. NO	DATE	COORDINATE	REVISION	APPRO	DATE	MINISTRY OF WORKS	DWG. NO.	G - 1			DATE	JUNE 30, 1980

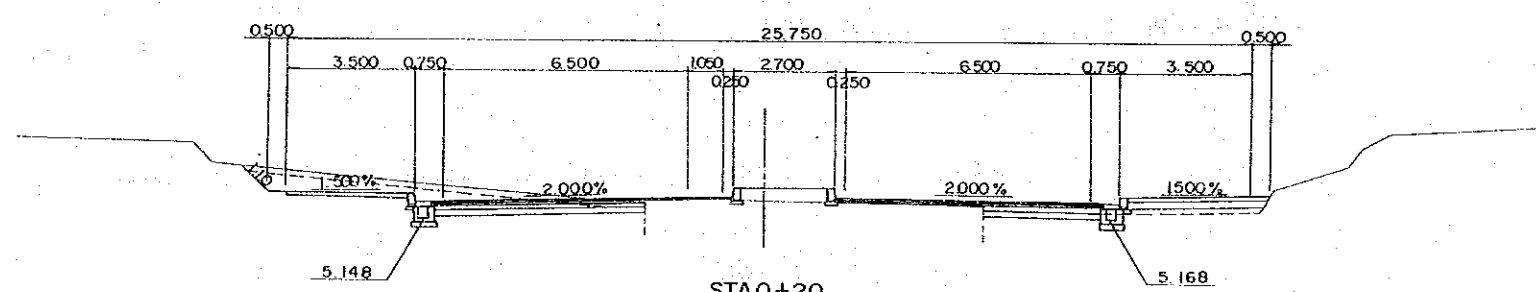
STA0+80
 GH= 5.41 CA= 8.07
 PH= 5.571 EA= 4.38



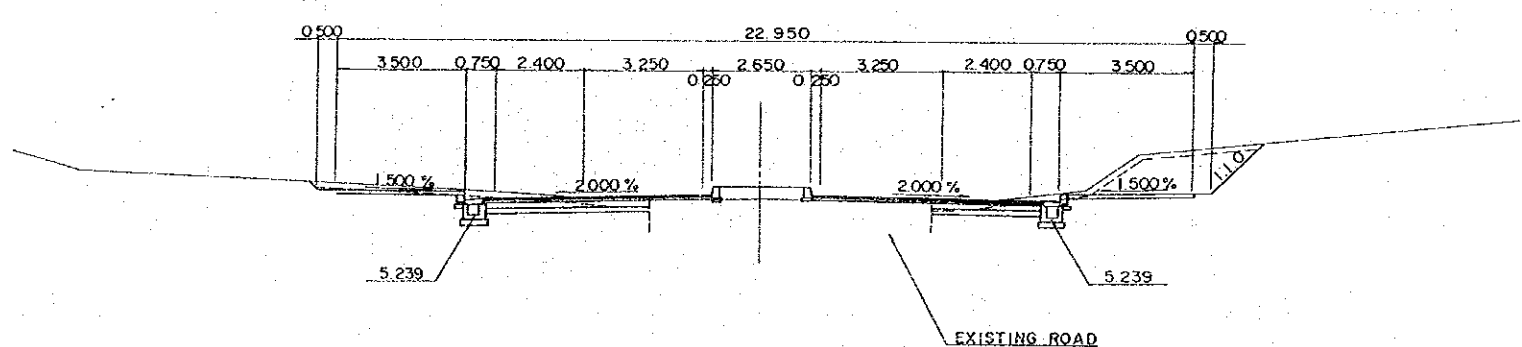
STA0+60
 GH= 5.53 CA= 7.04
 PH= 5.670 EA= 1.56



STA0+40
 GH= 5.70 CA= 7.71
 PH= 5.747 EA= 2.28



STA0+20
 GH= 5.74 CA= 5.76
 PH= 5.801 EA= 0.66

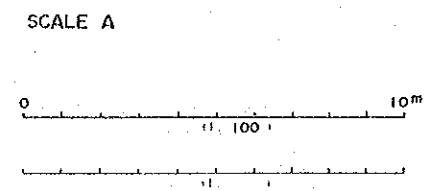


DL = 5.00

DL = 5.00

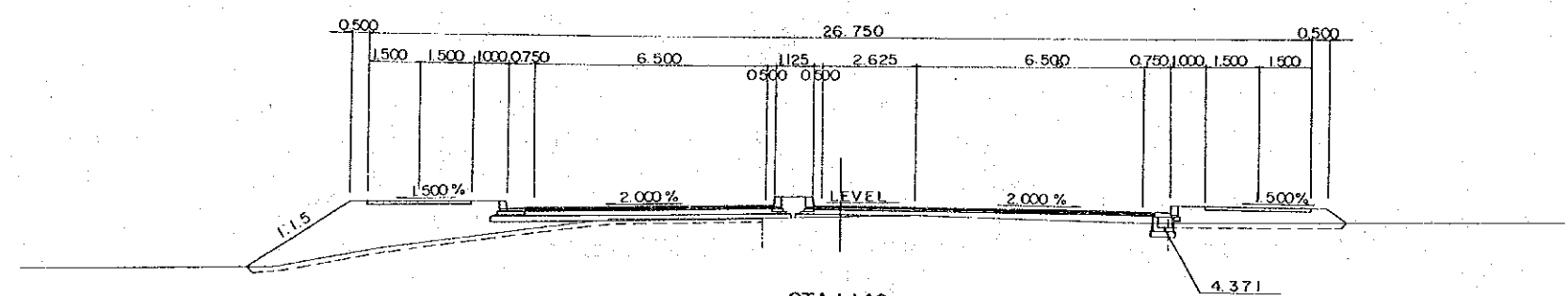
DL = 5.00

DL = 5.00

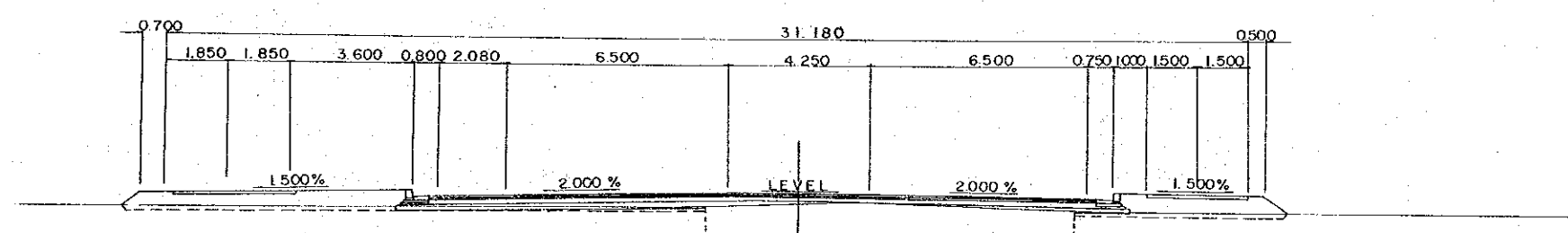


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (2)		MINISTRY of WORKS		APPROVED _____
										NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE _____ PREPARED _____ CHECKED _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	G - 2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

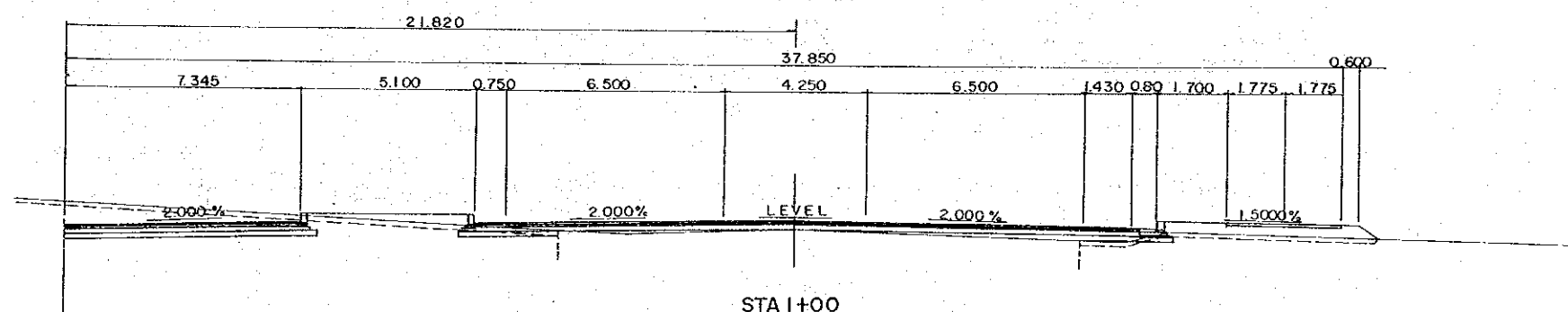
STA 1+60
 GH = 4.70
 PH = 4.950
 C.A = 0.17
 E.A = 11.91



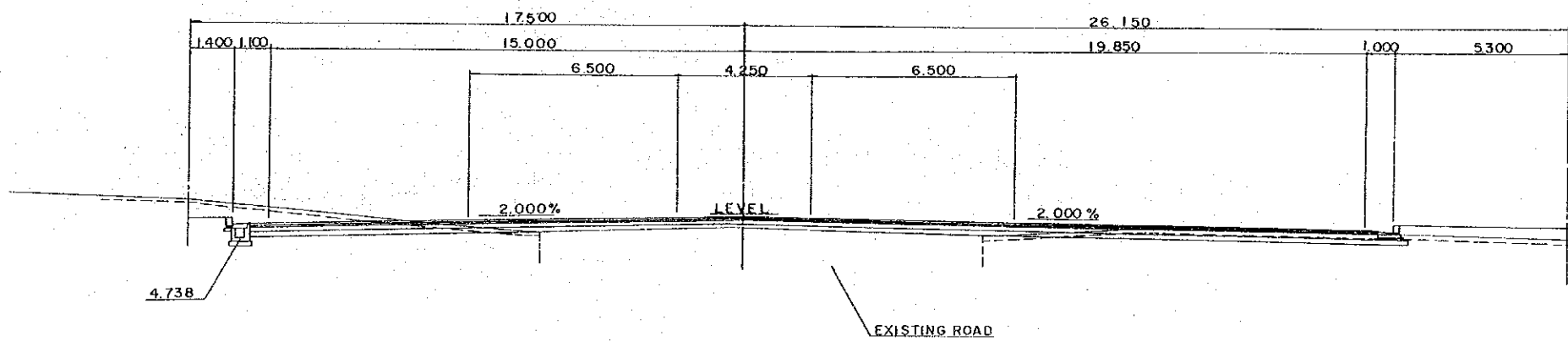
STA 1+40
 GH = 4.985
 PH = 5.139
 C.A = 0.00
 E.A = 8.18



STA 1+20
 GH = 5.00
 PH = 5.305
 C.A = 5.40
 E.A = 4.94



STA 1+00
 GH = 5.10
 PH = 5.449
 C.A = 6.87
 E.A = 2.68



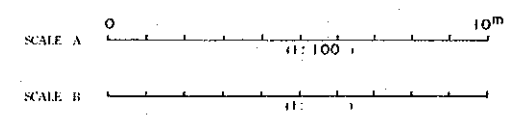
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DL = 5.00

DL = 5.00

DL = 5.00

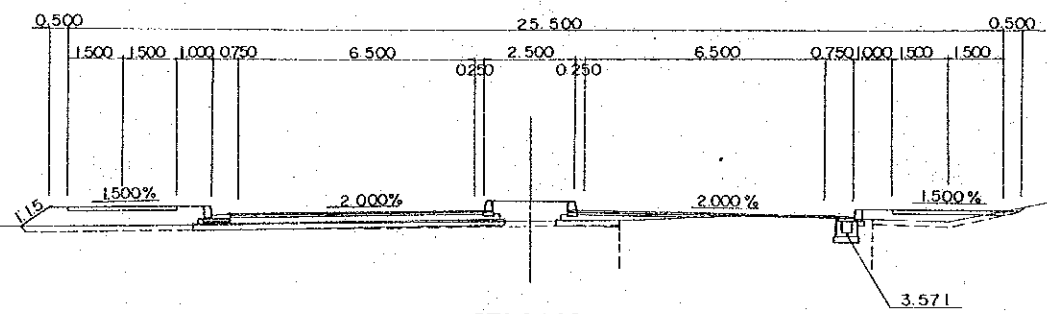
SCALE A



						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (3)		MINISTRY OF WORKS NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		APPROVED _____ DATE _____ PREPARED _____ CHECKED _____ DRAWN _____ DATE JUNE 30, 1980	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	G - 3					

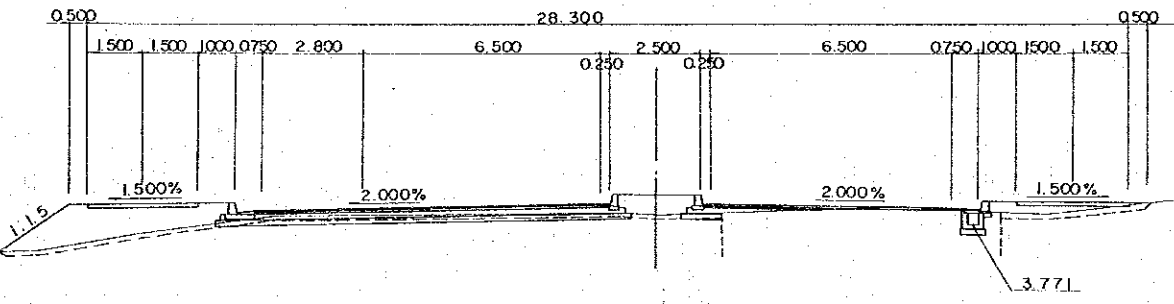
STA2+40

GH = 3.85 CA = 0.42
PH = 4.150 EA = 5.84



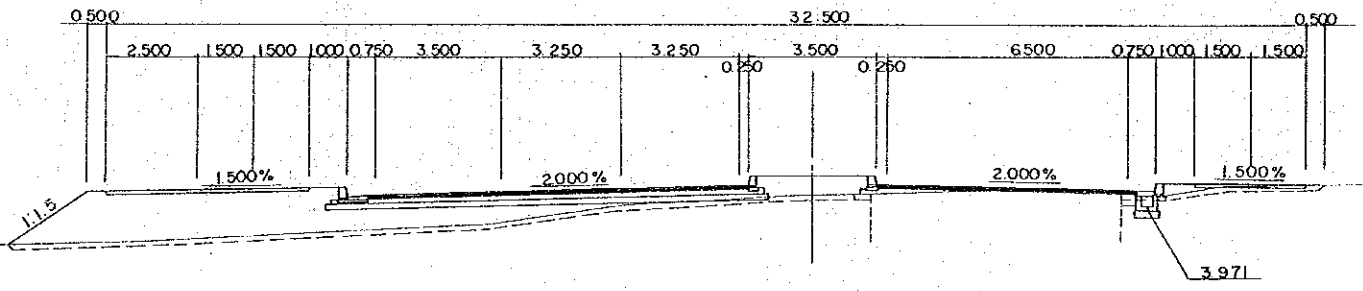
STA2+20

GH = 4.15 CA = 0.82
PH = 4.350 EA = 7.26



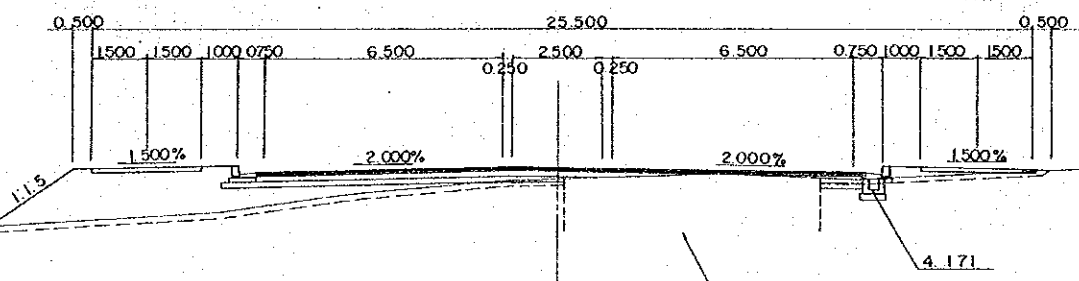
STA2+00

GH = 4.28 CA = 0.30
PH = 4.550 EA = 18.46



STA1+80

GH = 4.46 CA = 0.32
PH = 4.750 EA = 11.51



EXISTING ROAD

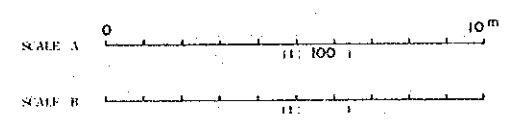
DL = 0.00

DL = 0.00

DL = 0.00

DL = 0.00

SCALE A



REV. NO.	DATE	CO. OR NAME	REVISION	APPRO.	DATE

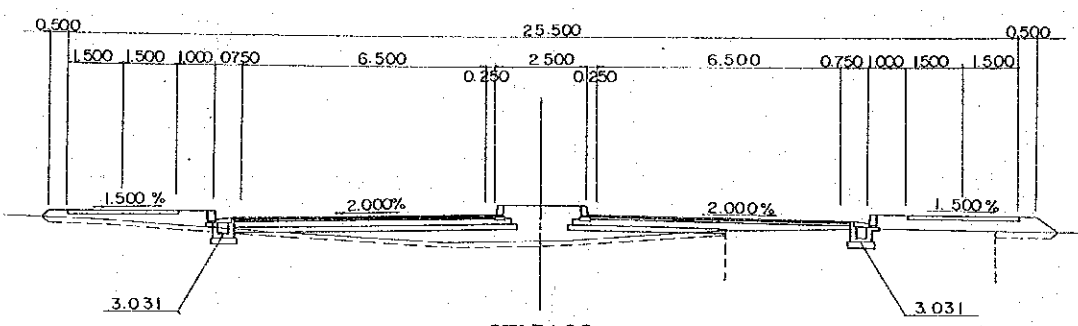
THE SELANDER BRIDGE
EXPANSION PROJECT
DAR ES SALAAM

CROSS SECTION
MAIN ROAD (4)

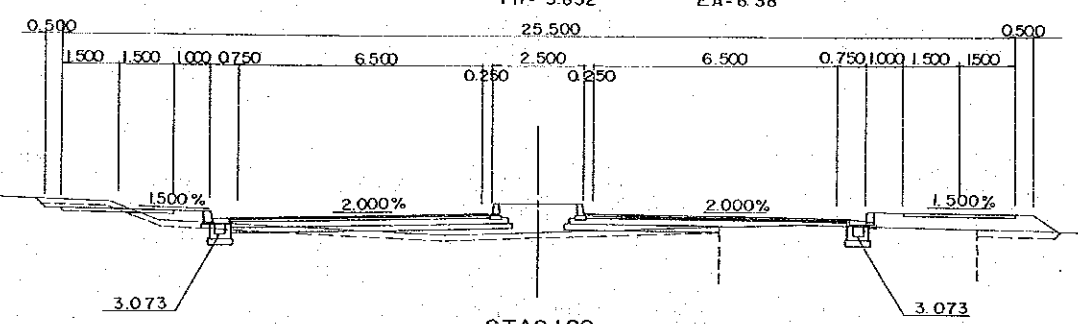
DWG. NO. G - 4

MINISTRY OF WORKS	APPROVED
	DATE
NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	PREPARED
	CHECKED
	DATE
	JUNE 30, 1980

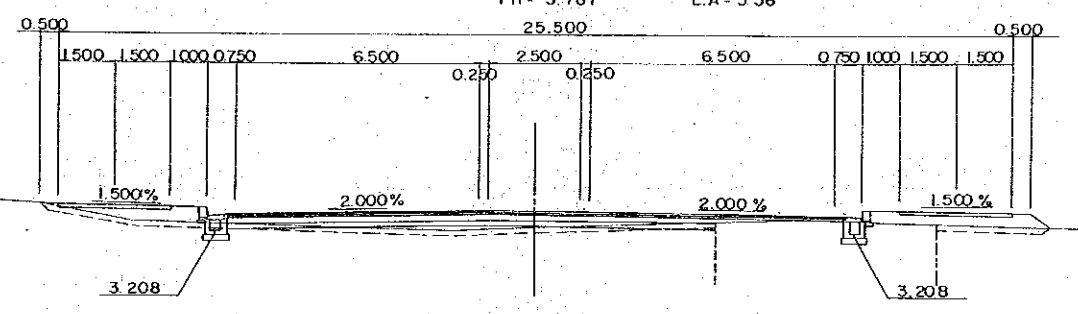
STA3+20
 GH = 2.98 CA = 0.43
 PH = 3.610 EA = 7.94



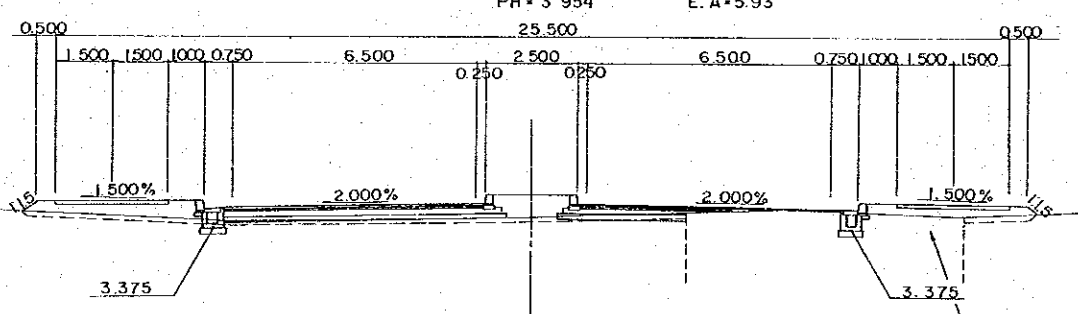
STA3+00
 GH = 3.19 CA = 0.49
 PH = 3.652 EA = 6.38



STA2+80
 GH = 3.35 CA = 0.47
 PH = 3.787 EA = 5.56



STA2+60
 GH = 3.62 CA = 0.55
 PH = 3.954 EA = 5.93



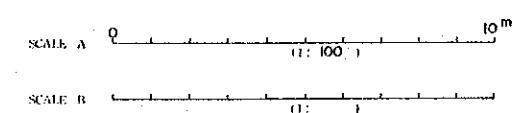
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DL = 0.00

DL = 0.00

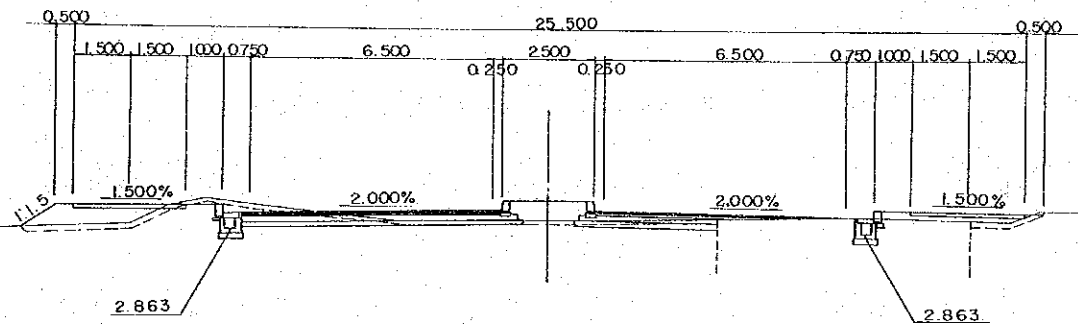
DL = 0.00

SCALE A



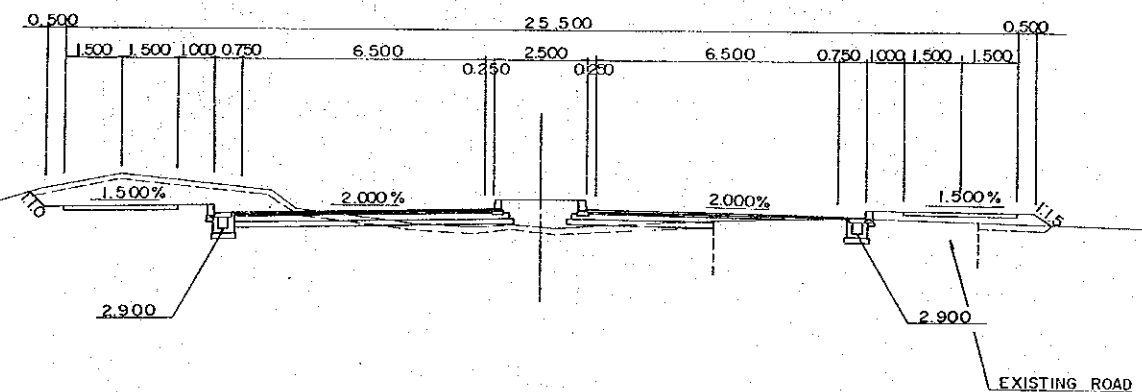
						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (5)		MINISTRY OF WORKS		APPROVED
										NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
												PREPARED
												CHECKED
												SUBMITTED
												DATE
REV. NO.	DATE	COORDINATE		REVISION		APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 5			JUNE 30, 1980

STA3+60
 GH= 3.14
 PH= 3.442
 C.A= 2.62
 E.A= 4.84

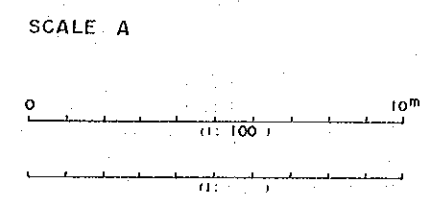


DL = 0.00

STA3+40
 GH= 3.00
 PH= 3.479
 C.A= 5.28
 E.A= 4.37

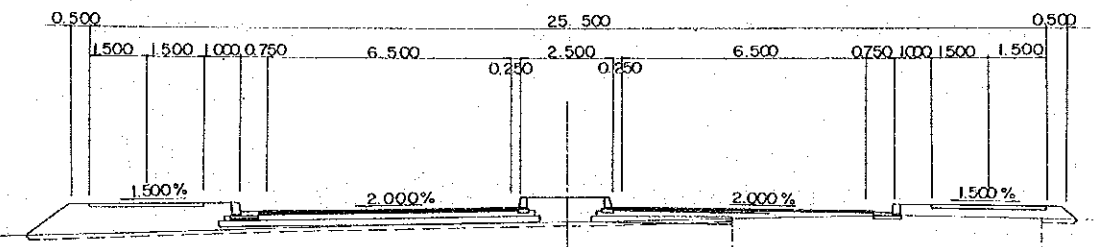


DL = 0.00

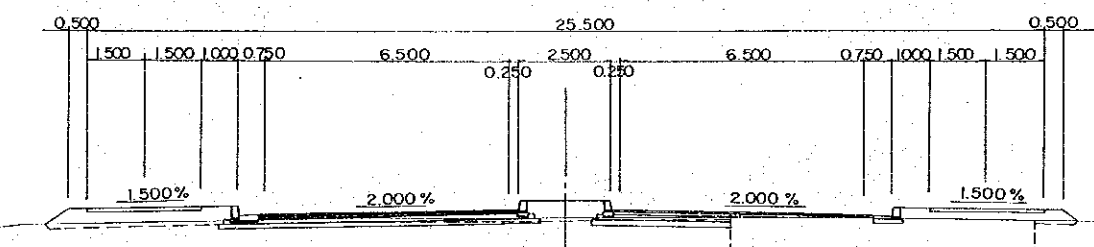


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (6)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
										NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	6 - 6			DATE		JUNE 30, 1980

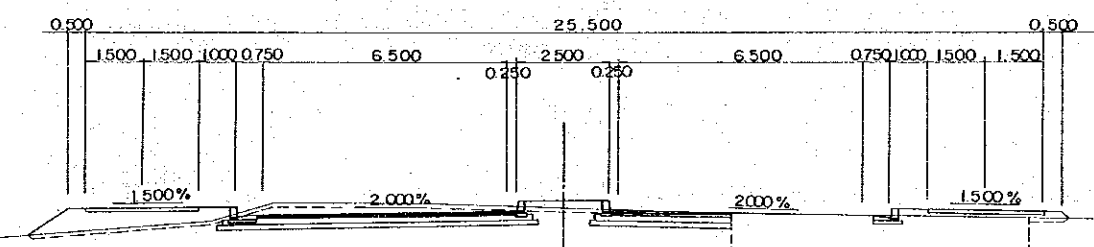
STA4+40
 GH = 3.08 C.A = 0.20
 PH = 3.580 E.A = 8.77



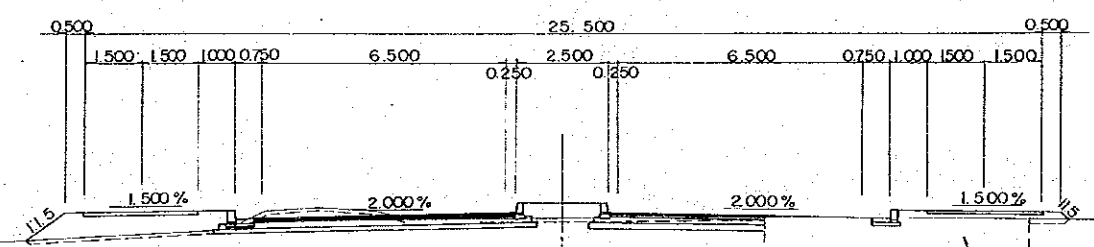
STA4+20
 GH = 3.26 C.A = 1.29
 PH = 3.520 E.A = 5.33



STA4+00
 GH = 3.54 C.A = 5.09
 PH = 3.464 E.A = 4.67



STA3+80
 GH = 3.26 C.A = 3.63
 PH = 3.437 E.A = 5.52



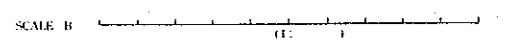
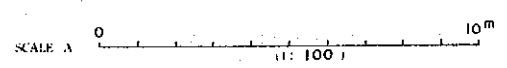
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DL = 0.00

DL = 0.00

DL = 0.00

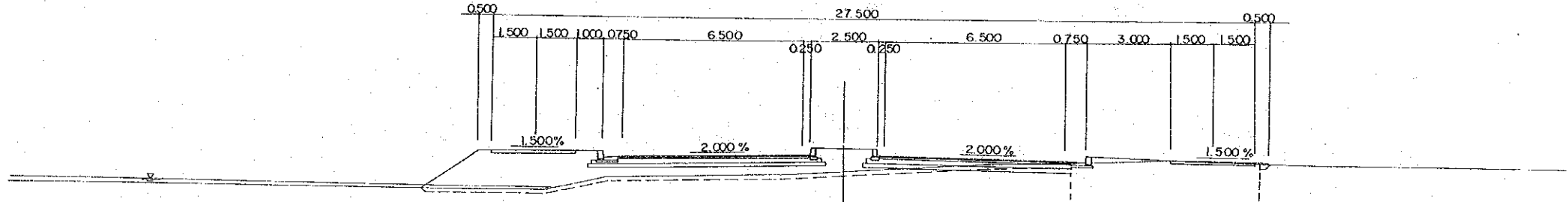
SCALE A



						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (7)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____	
REV. NO.	DATE	COORDINATE		REVISION		APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. 6-7			DATE JUNE 30, 1980	

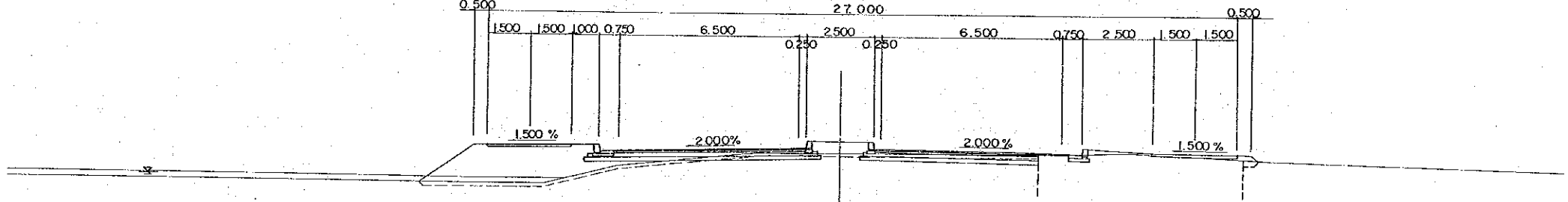
STA5+20

GH= 3.15 CA= 0.52
PH= 3820 EA= 14.775



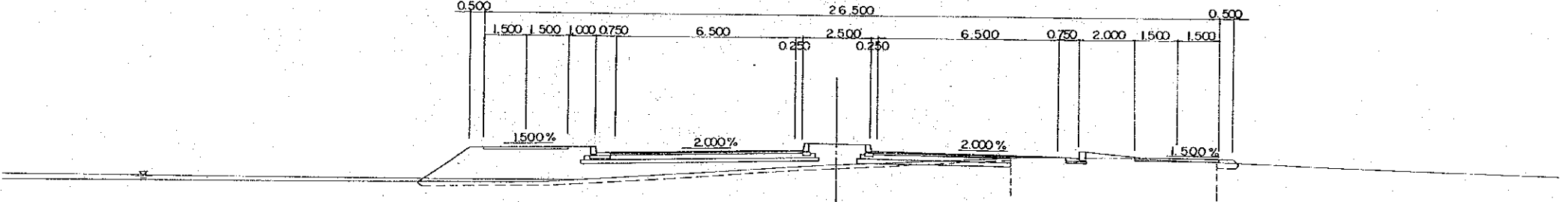
STA5+00

GH= 3.50 CA= 1.59
PH= 3.760 EA= 11.07



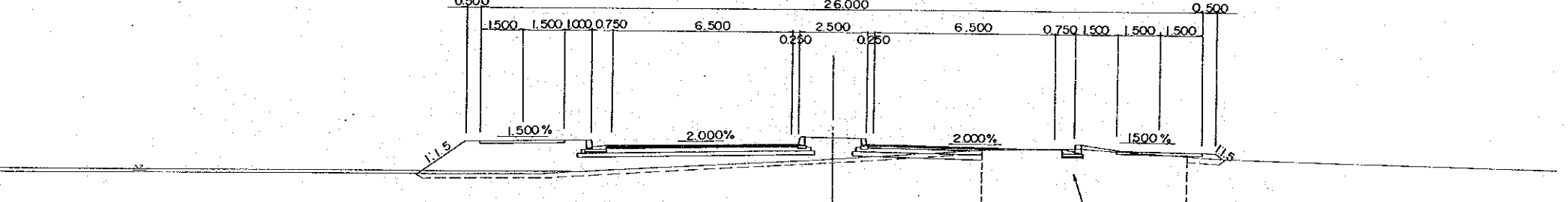
STA4+80

GH= 3.12 CA= 0.54
PH= 3.700 EA= 13.24



STA4+60

GH= 3.05 CA= 0.40
PH= 3.640 EA= 13.10



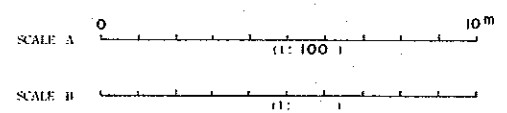
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DL=0.00

DL=0.00

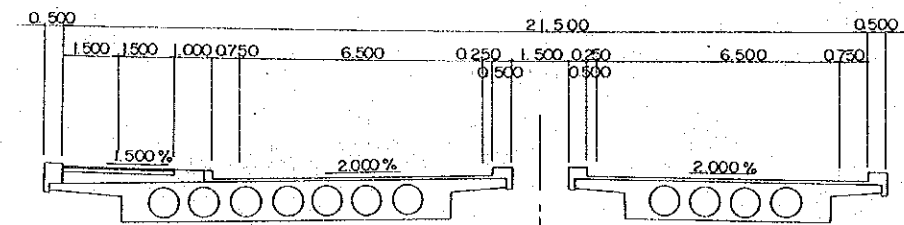
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SCALE A

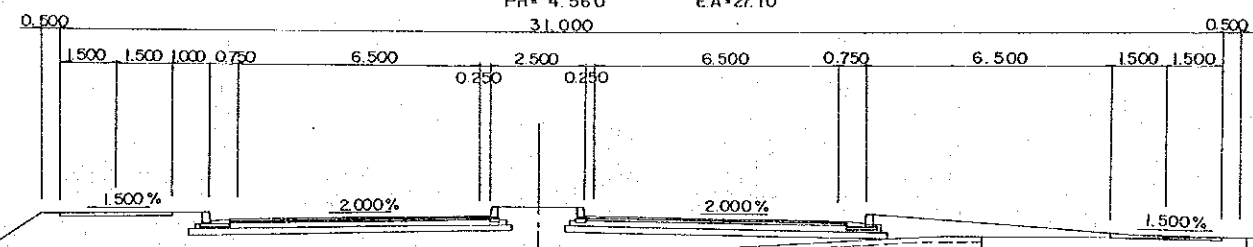


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (8)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TORYO JAPAN		PREPARED _____ CHECKED _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS		DWG. NO. G - 8				DATE JUNE 30, 1980	

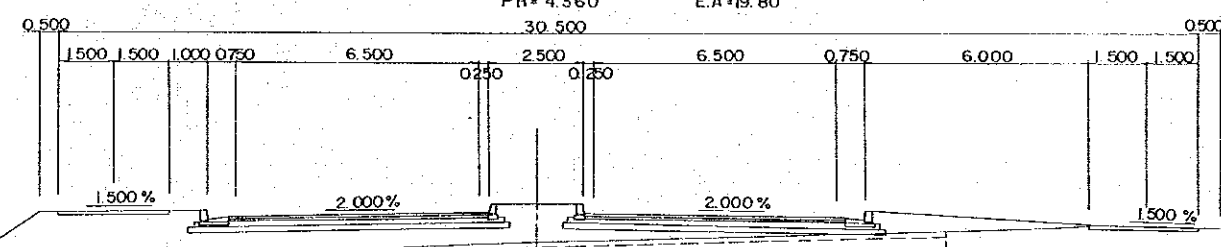
STA 6+80
GH = 2.63
PH = 4.732



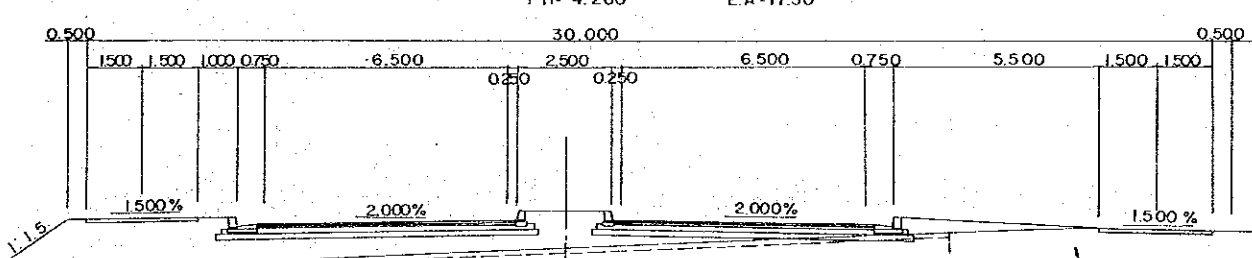
STA 6+60
GH = 3.50
PH = 4.560
CA = 0.00
EA = 27.10



STA 6+40
GH = 3.55
PH = 4.360
CA = 0.00
EA = 19.80



STA 6+20
GH = 3.40
PH = 4.200
CA = 0.00
EA = 17.30



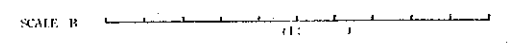
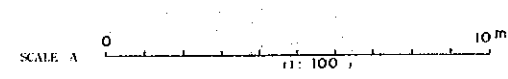
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DL = 0.00

DL = 0.00

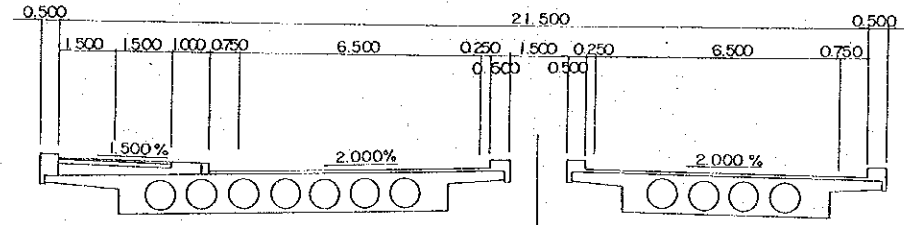
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SCALE A



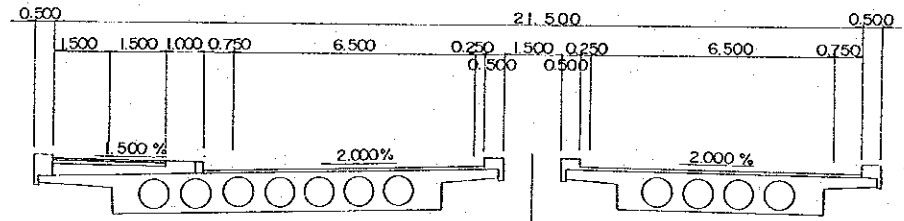
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	CROSS SECTION MAIN ROAD (10)	MINISTRY OF WORKS	APPROVED
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	DATE
						MINISTRY OF WORKS	DWG. NO. G - 10		JUNE 30, 1980

STA 7+40
GH =
PH = 4.672



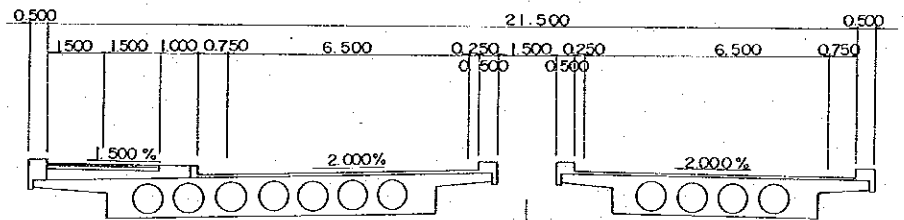
DL = 0.00

STA 7+20
GH =
PH = 4.788



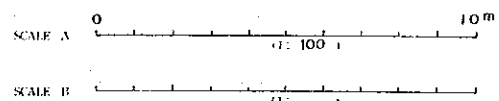
DL = 0.00

STA 7+00
GH = 2.16
PH = 4.808



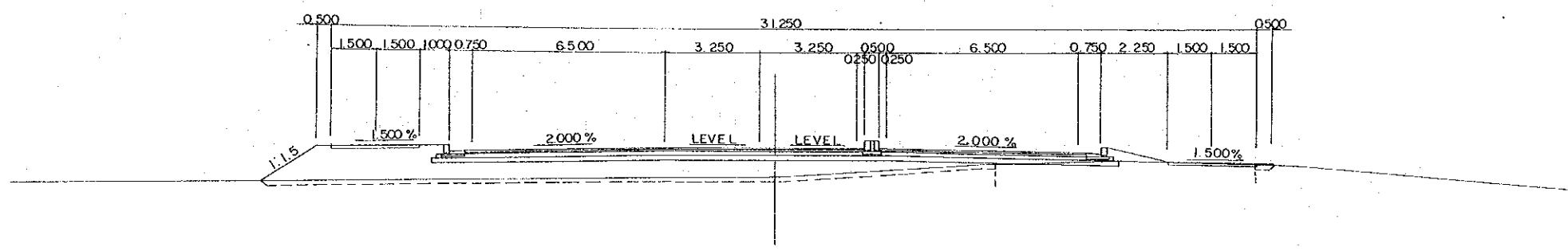
DL = 0.00

SCALE A



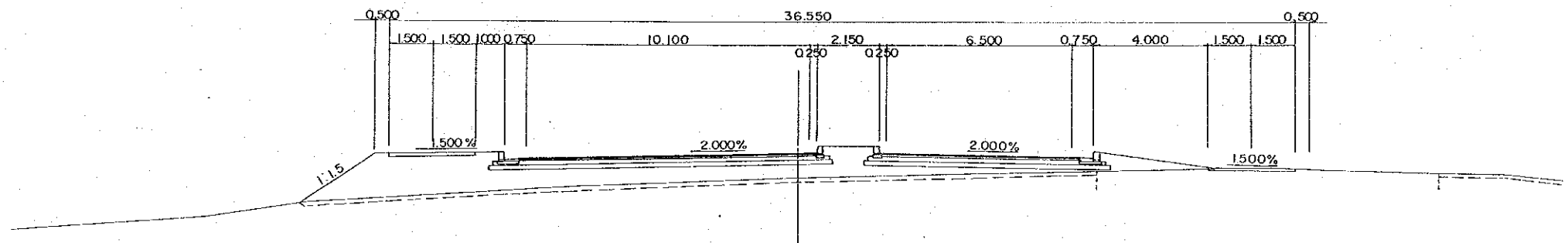
						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (II)		MINISTRY OF WORKS		APPROVED
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
												PREPARED
												CHECKED
												DATE
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO.	G - 11			DATE	JUNE 30, 1980

STA8+00
 GH = 3.07 CA = 0.00
 PH = 4.080 EA = 18.00



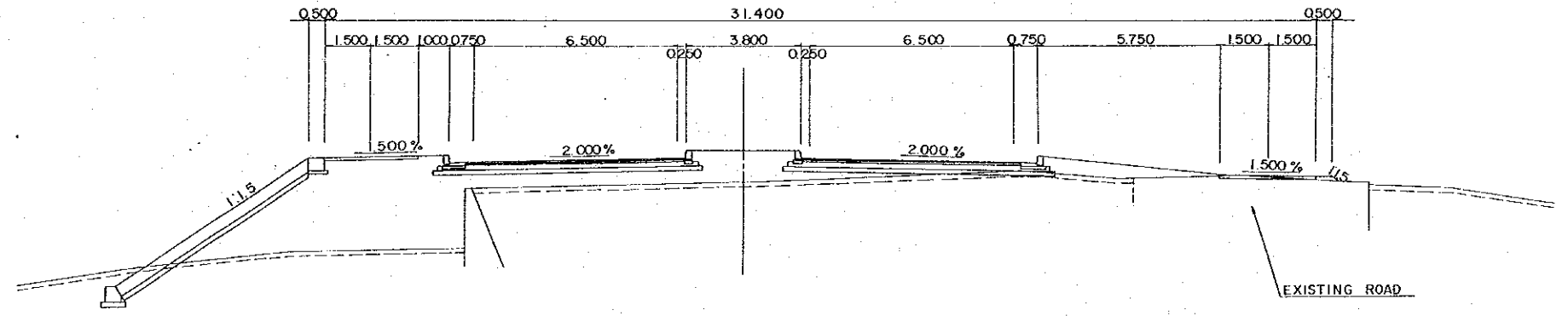
DL = 0.00

STA7+80
 GH = 3.38 CA = 0.00
 PH = 4.235 EA = 24.20



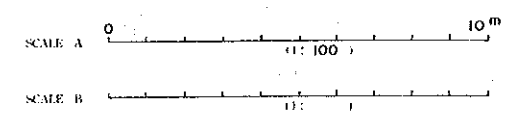
DL = 0.00

STA7+60
 GH = 3.70 CA = 0.00
 PH = 4.460 EA = 31.40



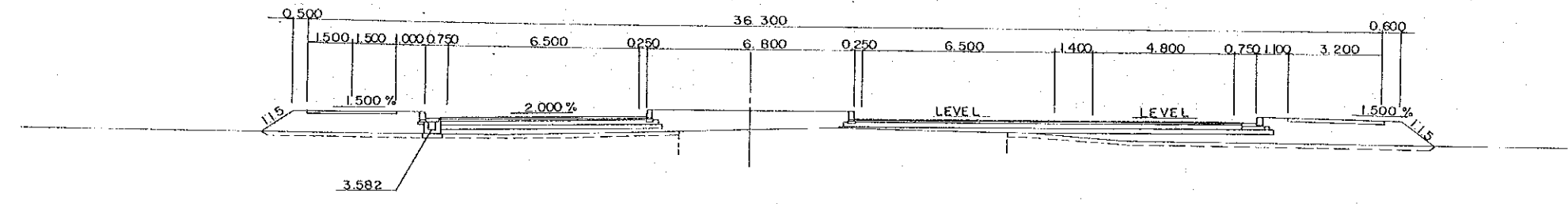
DL = 0.00

SCALE A

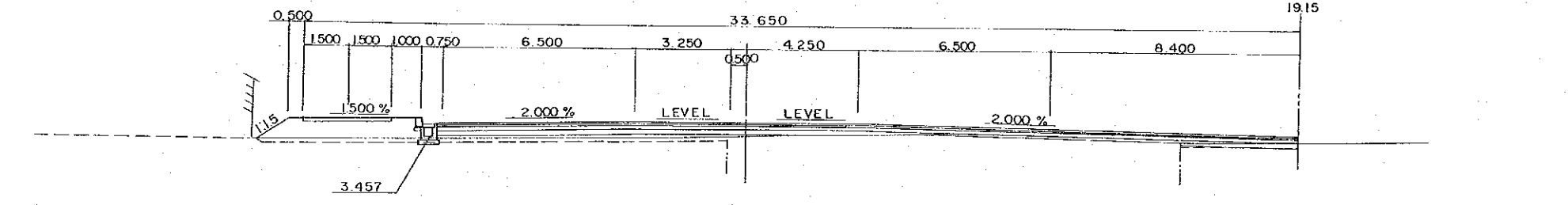


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	CROSS SECTION MAIN ROAD (12)	MINISTRY OF WORKS	APPROVED _____
									DATE _____
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	PREPARED _____
									DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 12	TOTAL	JUNE 30, 1980

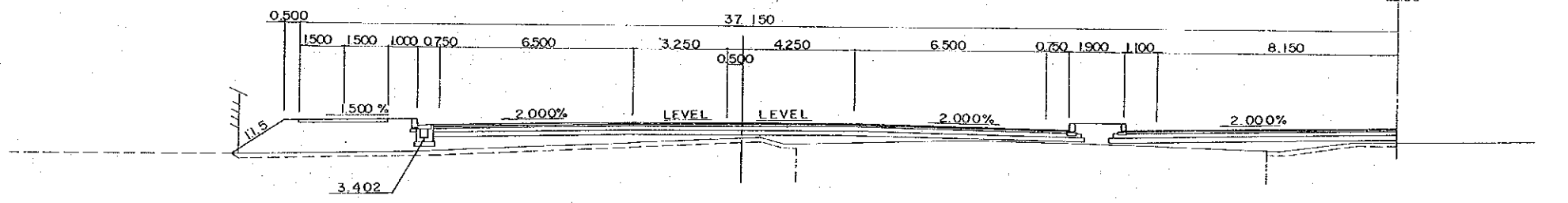
STA8+80
 GH = 3.77
 PH = 4.16
 CA = 0.00
 EA = 20.00



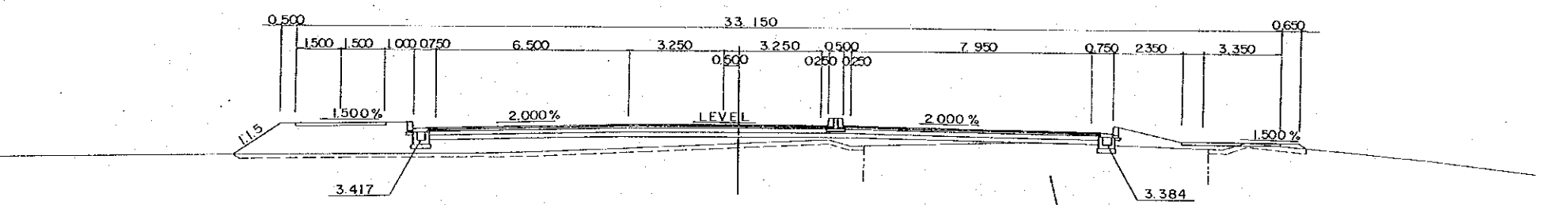
STA8+60
 GH = 3.55
 PH = 4.035
 CA = 0.00
 EA = 7.70



STA8+40
 GH = 3.48
 PH = 3.980
 CA = 0.00
 EA = 16.70



STA8+20
 GH = 3.36
 PH = 3.995
 CA = 0.00
 EA = 16.40



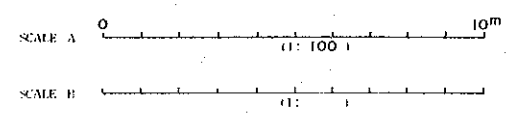
DL = 0.00

DL = 0.00

DL = 0.00

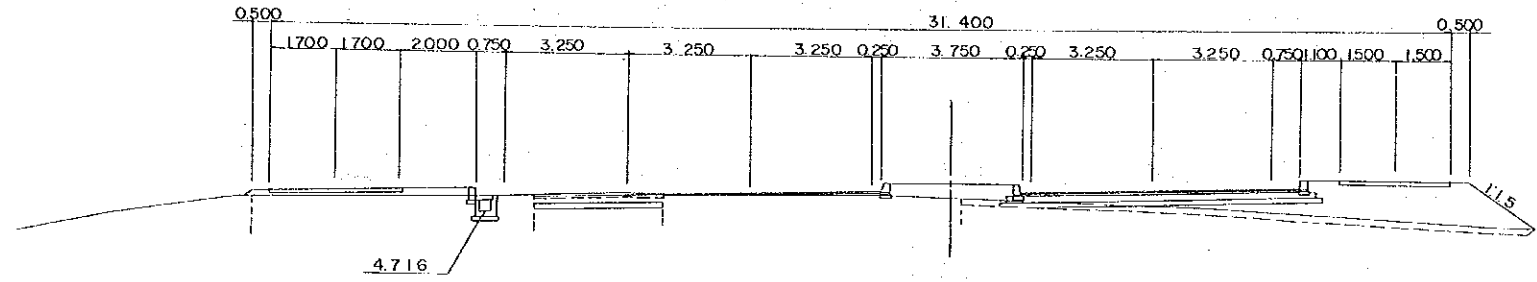
DL = 0.00

SCALE A



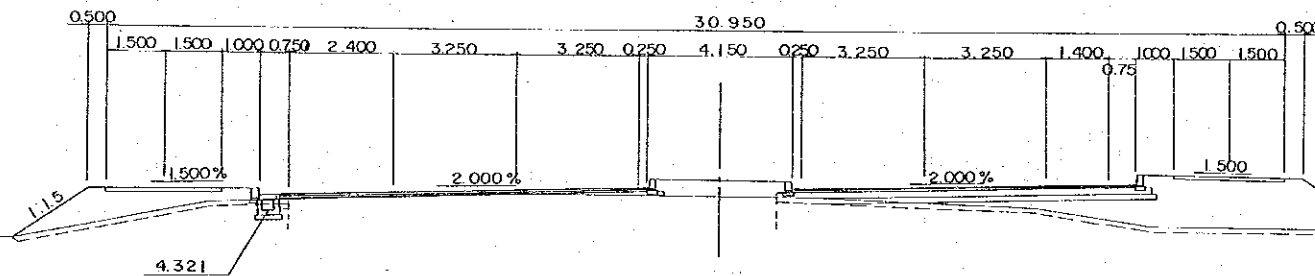
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (13)		MINISTRY OF WORKS		APPROVED _____
								MINISTRY OF WORKS		DATE _____
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____
										CHECKED _____
										DATE _____
										DATE _____
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 13			DATE
										JUNE 30, 1980

STA9+60
 GH= 5.18 C.A= 0.00
 PH= 5.360 E.A= 11.60



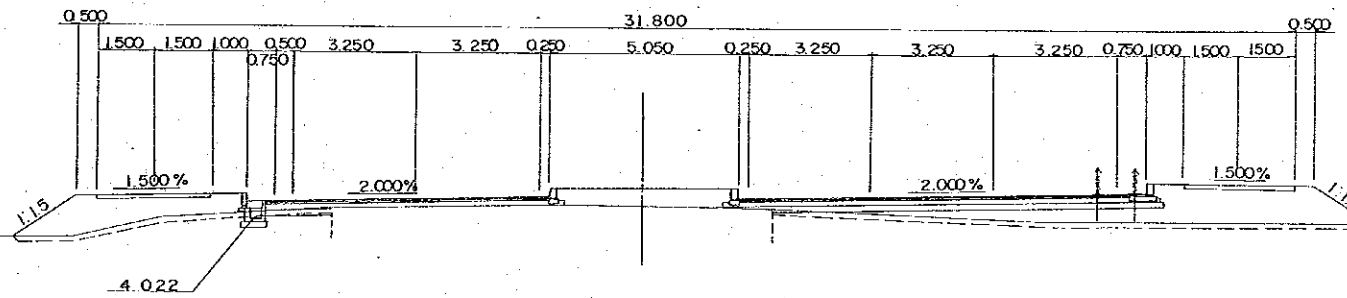
DL= 5.00

STA9+40
 GH= 4.76 C.A= 0.00
 PH= 4.955 E.A= 16.70



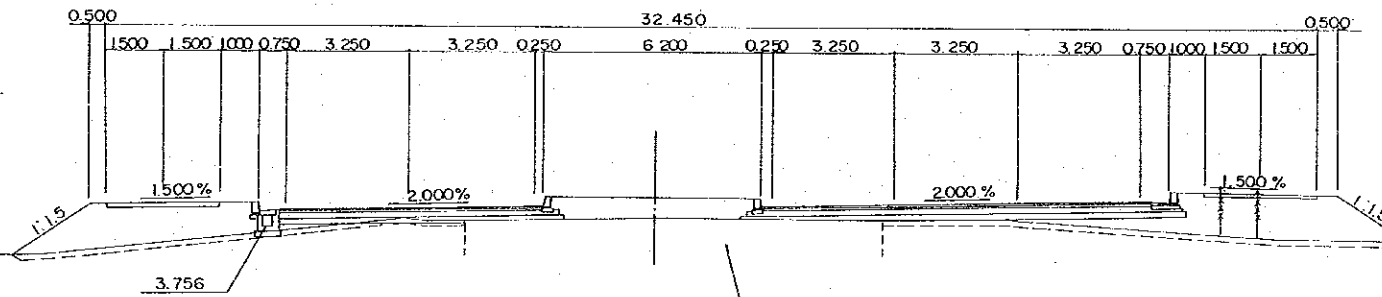
DL= 5.00

STA9+20
 GH= 4.35 C.A= 0.00
 PH= 4.620 E.A= 16.70



DL= 5.00

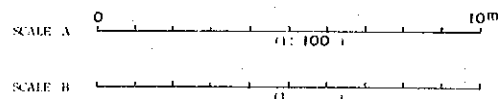
STA9+00
 GH= 4.05 C.A= 0.00
 PH= 4.335 E.A= 19.80



DL= 5.00

EXISTING ROAD

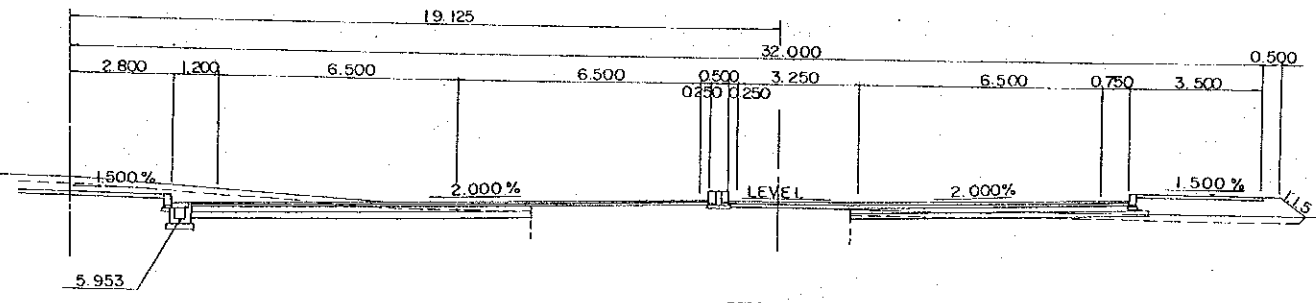
SCALE A



				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (14)		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. G - 14			JUNE 30, 1980	

STA10+40

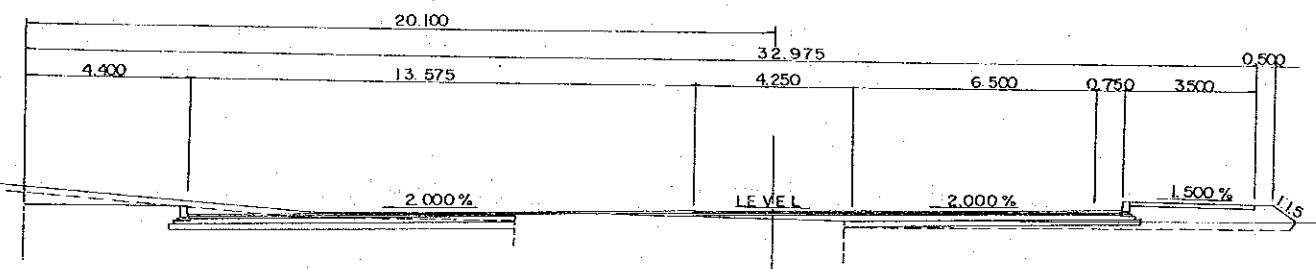
GH = 6.50 C.A. = 4.90
PH = 6.668 E.A. = 2.90



DL = 5.00

STA10+20

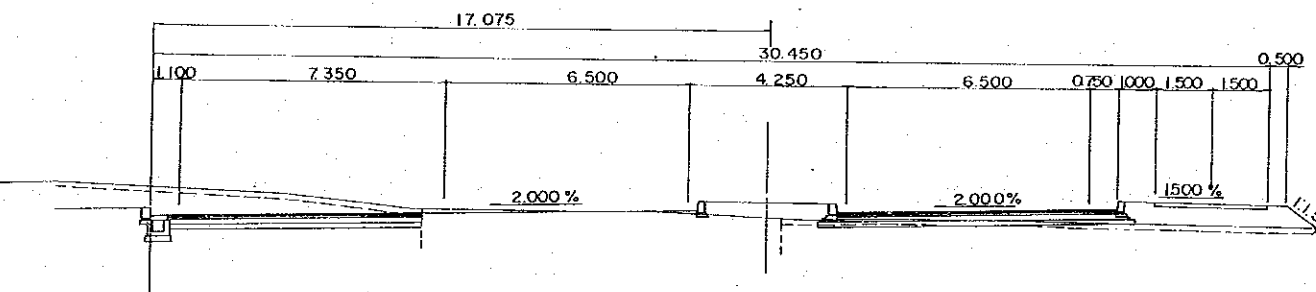
GH = 6.22 C.A. = 4.30
PH = 6.436 E.A. = 3.20



DL = 5.00

STA10+00

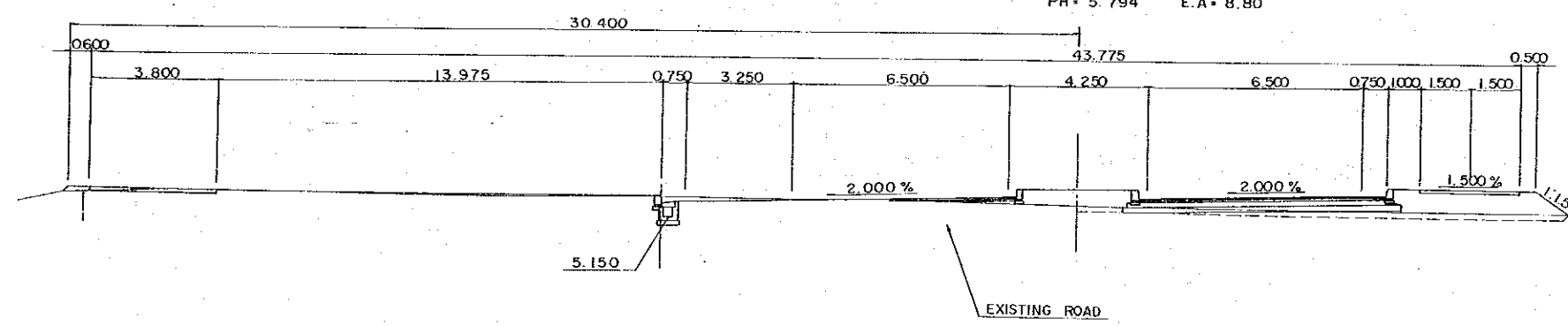
GH = 5.97 C.A. = 6.10
PH = 6.152 E.A. = 8.80



DL = 5.00

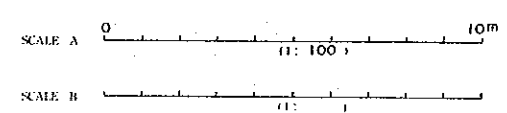
STA9+80

GH = 5.54 C.A. = 0.00
PH = 5.794 E.A. = 8.80



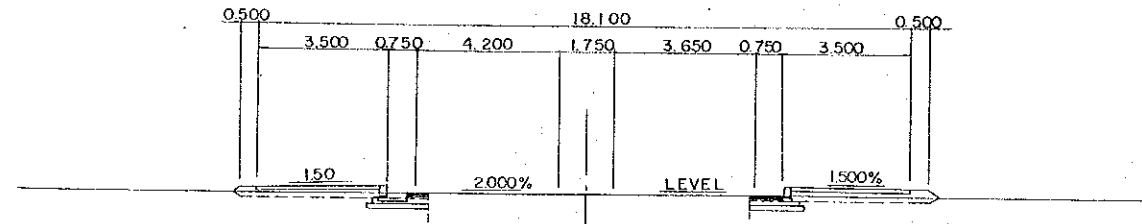
DL = 5.00

SCALE A



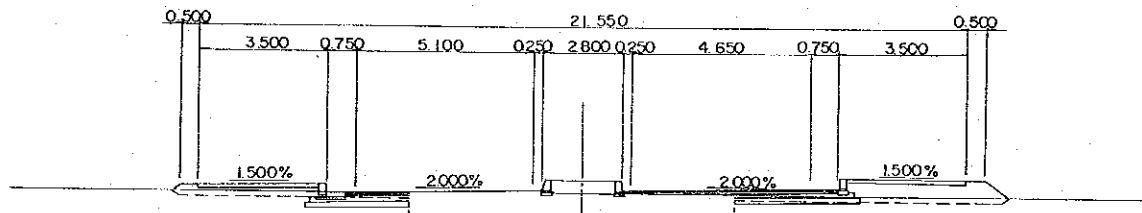
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (15)		MINISTRY OF WORKS		APPROVED
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		DATE
										PREPARED
										CHECKED
										SUBMITTED
										DATE
REV. NO.	DATE	COORDINATE		REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 15	JUNE 30, 1980	

STAI+20
 GH = 6.76 CA = 0.90
 PH = 6.78 EA = 2.80



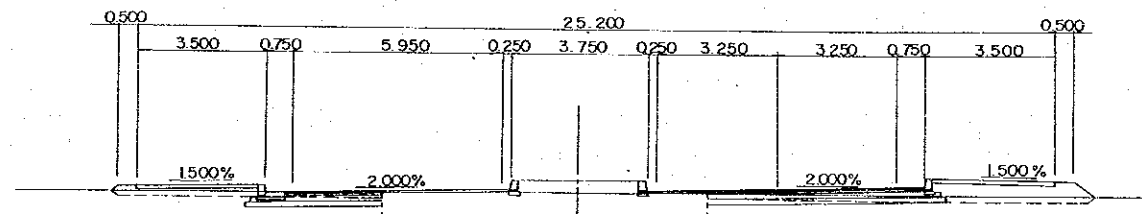
DL = 5.00

STAI+00
 GH = 6.82 CA = 1.00
 PH = 6.84 EA = 4.50



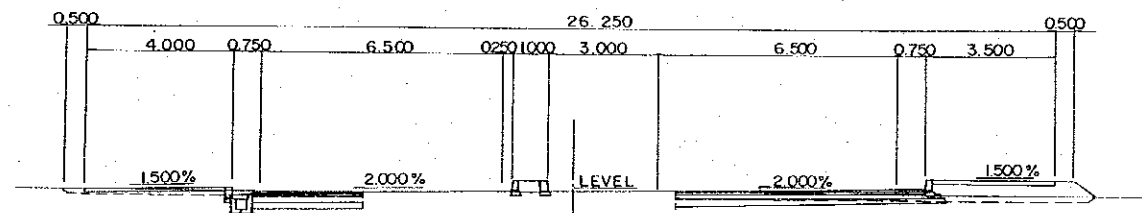
DL = 5.00

STAI0+80
 GH = 6.82 CA = 1.40
 PH = 6.861 EA = 4.80



DL = 5.00

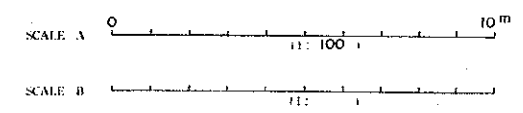
STAI0+60
 GH = 6.79 CA = 2.60
 PH = 6.804 EA = 4.20



DL = 5.00

EXISTING ROAD

SCALE A



						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (16)		MINISTRY OF WORKS		APPROVED: _____ DATE: _____	
										NIPPON KOEI CO., LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED: _____ CHECKED: _____ SUBMITTED: _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRD.	DATE	MINISTRY OF WORKS	DWG. NO.	G - 16			DATE: JUNE 30, 1980		

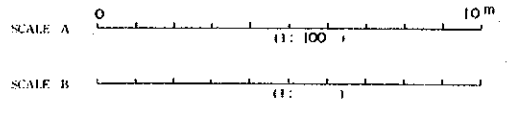
KA4-2
 GH = 6.73 CA = 0.00
 PH = 6.740 EA = 0.00

6.500

EXISTING ROAD

DL = 5.00

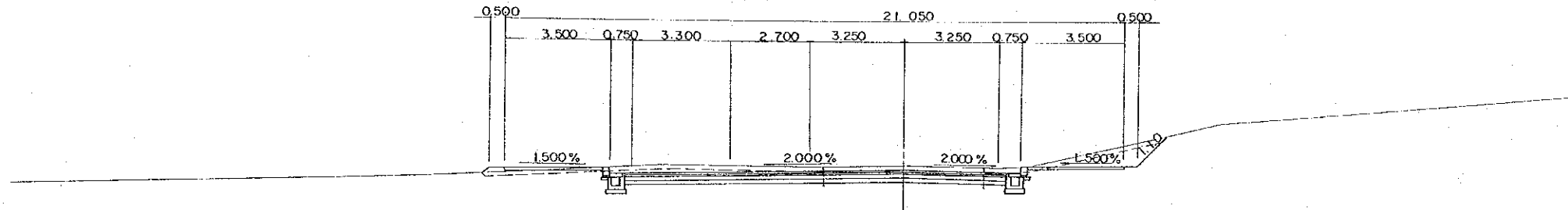
SCALE A



				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION MAIN ROAD (17)		MINISTRY of WORKS		APPROVED _____ DATE _____	
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. 6 - 17			DATE JUNE 30, 1980	

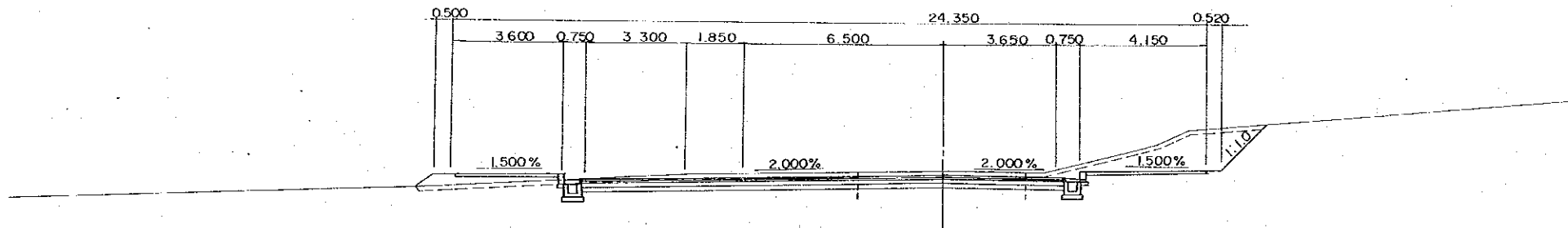
STA0+60
 GH = 4.99
 PH = 4.881
 C.A = 7.10
 E.A = 0.90

DL = 5.00



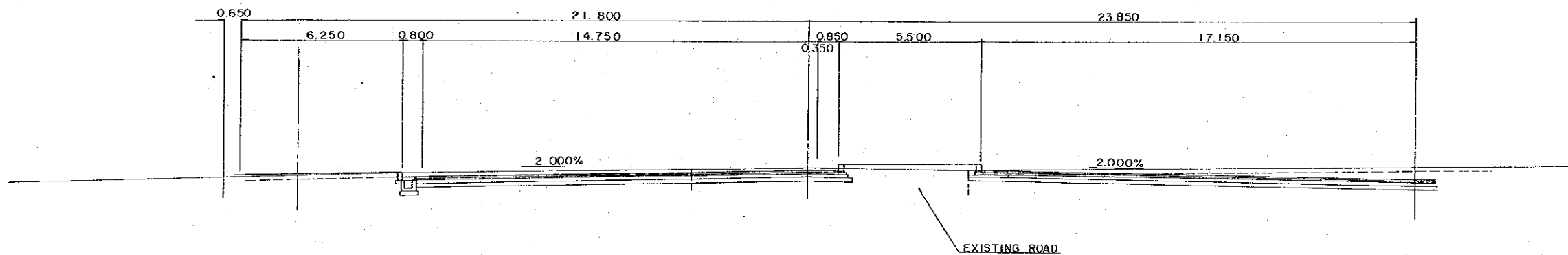
STA0+40
 GH = 5.12
 PH = 4.982
 C.A = 12.00
 E.A = 1.70

DL = 5.00

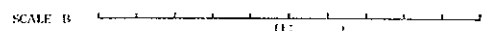


STA0+20
 GH = 5.27
 PH = 5.158
 C.A = 13.90
 E.A = 1.80

DL = 5.00



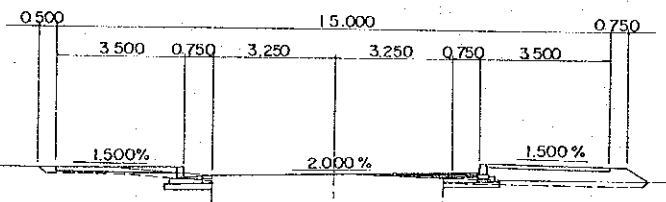
SCALE A



				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION ACCESS ROAD (I) (KINONDONI ROAD)		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. G - 18	JUNE 30, 1980

STAO+80

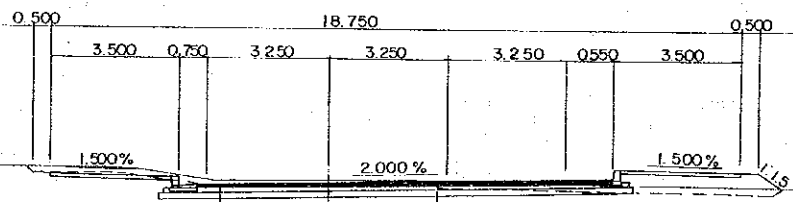
GH= 6.92 CA= 0.40
PH= 6.920 EA= 2.60



DL = 5.00

STAO+60

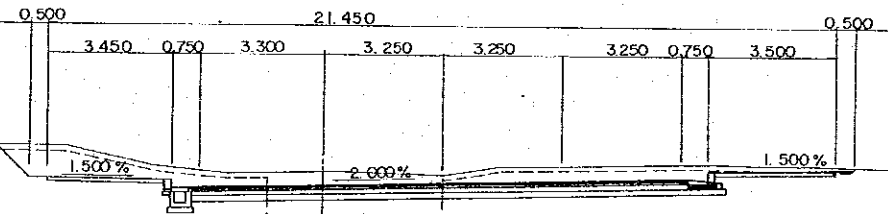
GH= 6.73 CA= 3.90
PH= 6.647 EA= 2.50



DL = 5.00

STAO+40

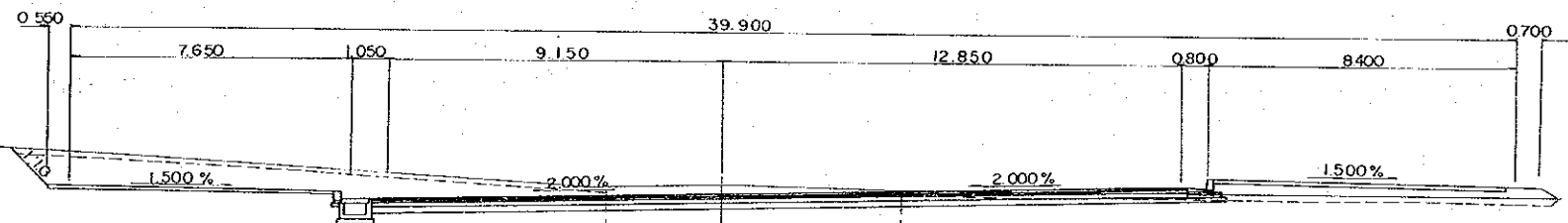
GH= 6.34 CA= 12.40
PH= 5.987 EA= 0.00



DL = 5.00

STAO+20

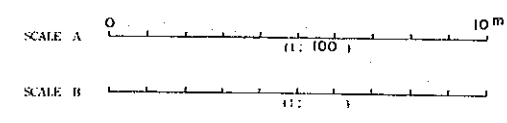
GH= 5.64 CA= 18.30
PH= 5.418 EA= 4.40



DL = 5.00

EXISTING ROAD

SCALE A



REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE

THE SELANDER BRIDGE
EXPANSION PROJECT
DAR ES SALAAM

CROSS SECTION
ACCESS ROAD (3)
(KENYATTA DRIVE)

MINISTRY OF WORKS

DWG. NO. G - 20

MINISTRY of WORKS
NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS
TOKYO JAPAN

APPROVED	DATE
PREPARED	CHECKED
SUBMITTED	DATE
JUNE 30, 1980	

STAO+80
 GH = 3.82
 PH = 3.820
 C.A = 0.00
 E.A = 0.00

STAO+60
 GH = 3.71
 PH = 3.734
 C.A = 2.50
 E.A = 3.10

STAO+40
 GH = 3.54
 PH = 3.630
 C.A = 2.70
 E.A = 3.40

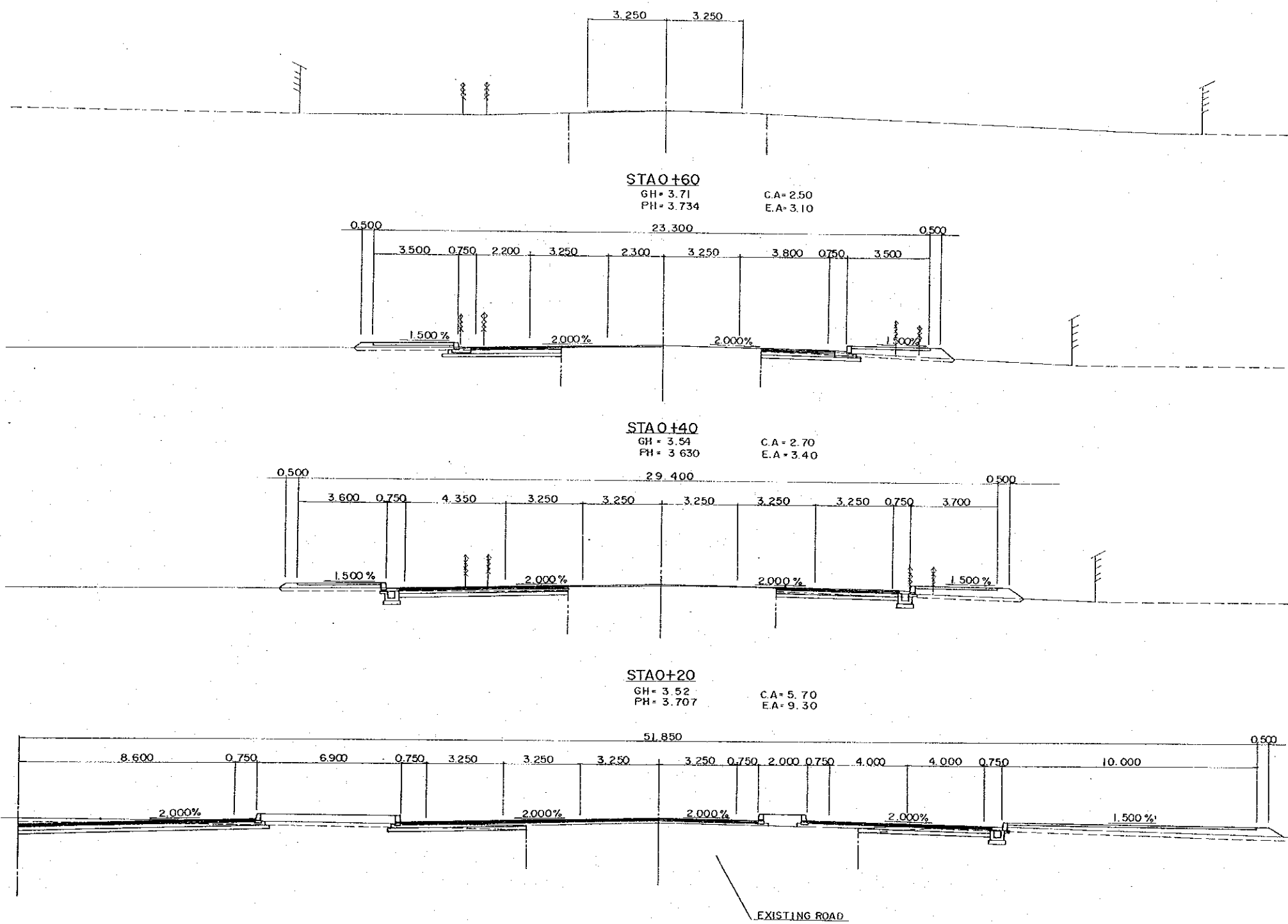
STAO+20
 GH = 3.52
 PH = 3.707
 C.A = 5.70
 E.A = 9.30

DL = 0.00

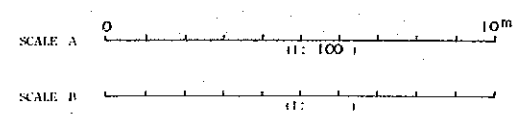
DL = 0.00

DL = 0.00

DL = 0.00

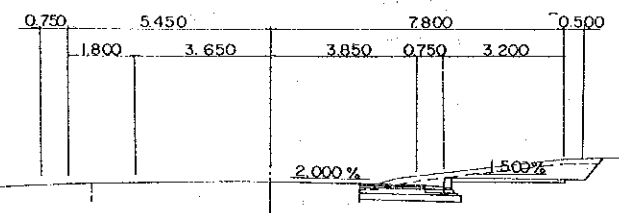


SCALE A



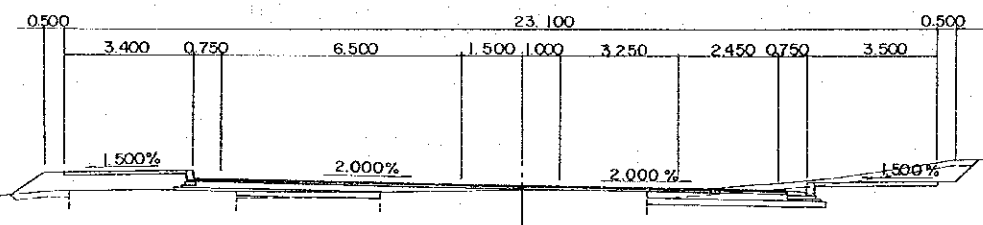
				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION ACCESS ROAD (4) (UNITED NATIONS ROAD)		MINISTRY of WORKS	
								APPROVED _____ DATE _____	
								FORWARDED _____ CHECKED _____	
								SIGNATURE _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 21	NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	
							JUNE 30, 1980		

STA0+80
 GH = 6.89
 PH = 6.890
 C.A = 1.80
 E.A = 0.00



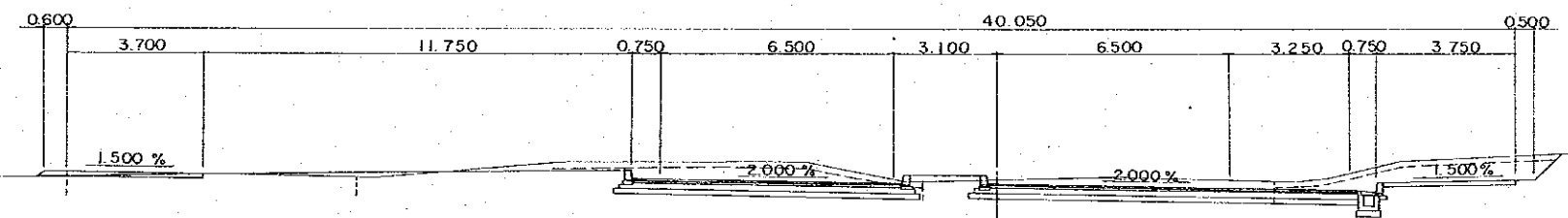
DL = 5.00

STA0+60
 GH = 6.71
 PH = 6.808
 C.A = 2.40
 E.A = 2.50



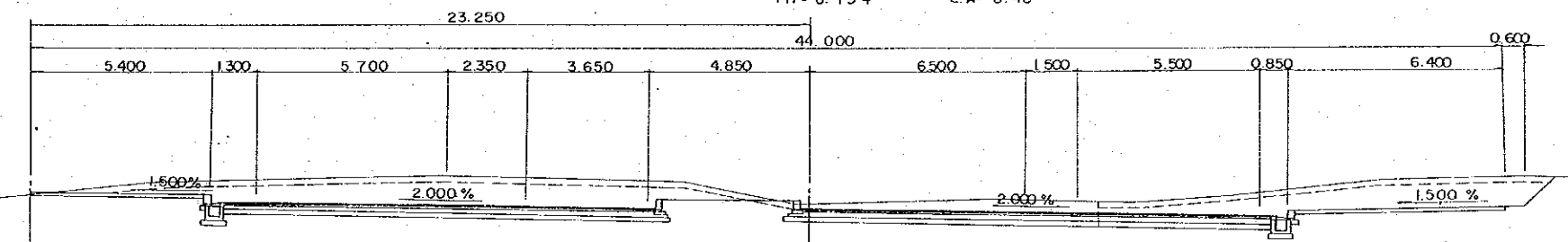
DL = 5.00

STA0+40
 GH = 6.51
 PH = 6.393
 C.A = 15.80
 E.A = 0.90



DL = 5.00

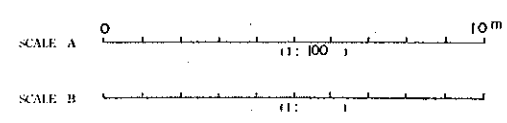
STA0+20
 GH = 6.33
 PH = 6.194
 C.A = 32.80
 E.A = 0.40



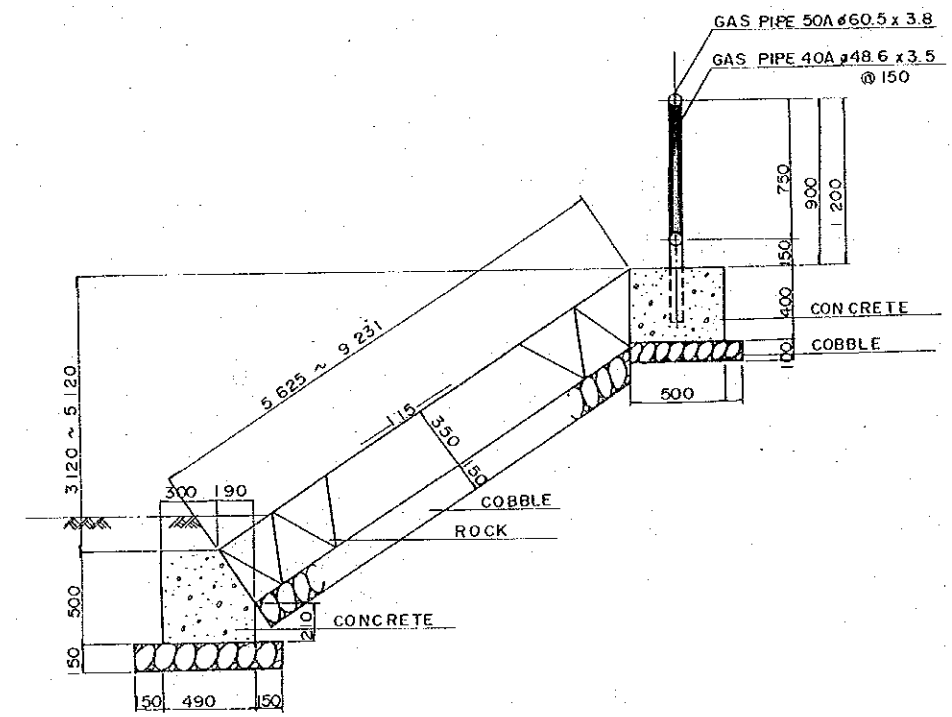
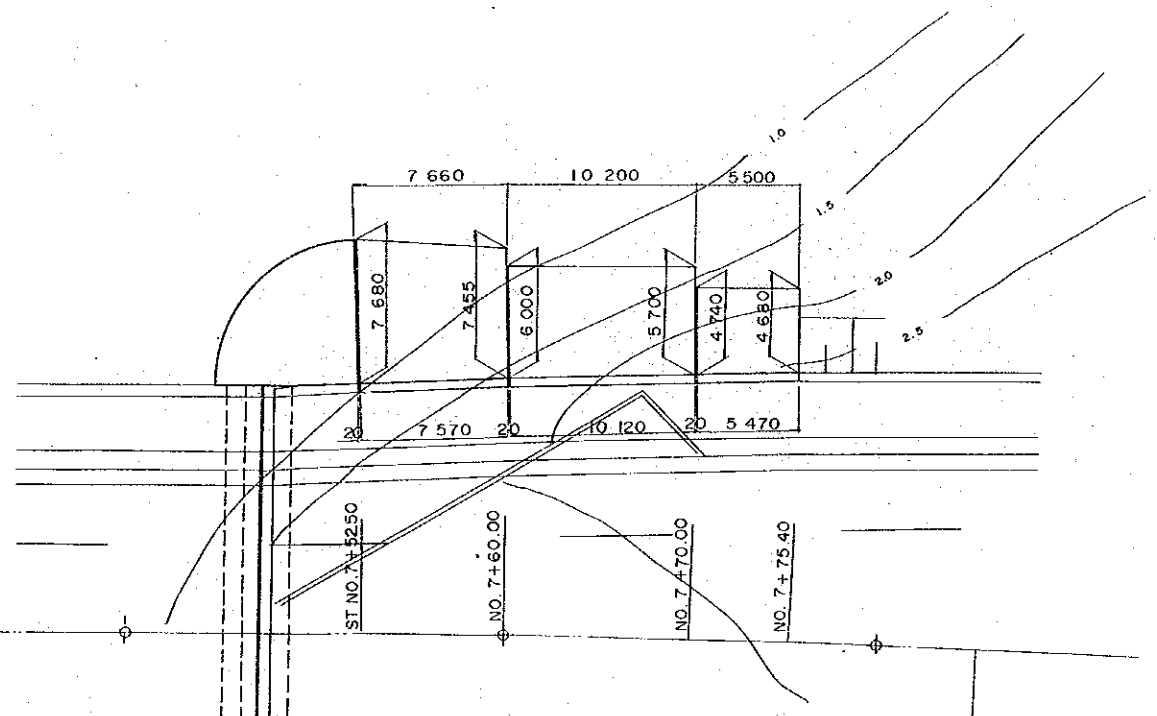
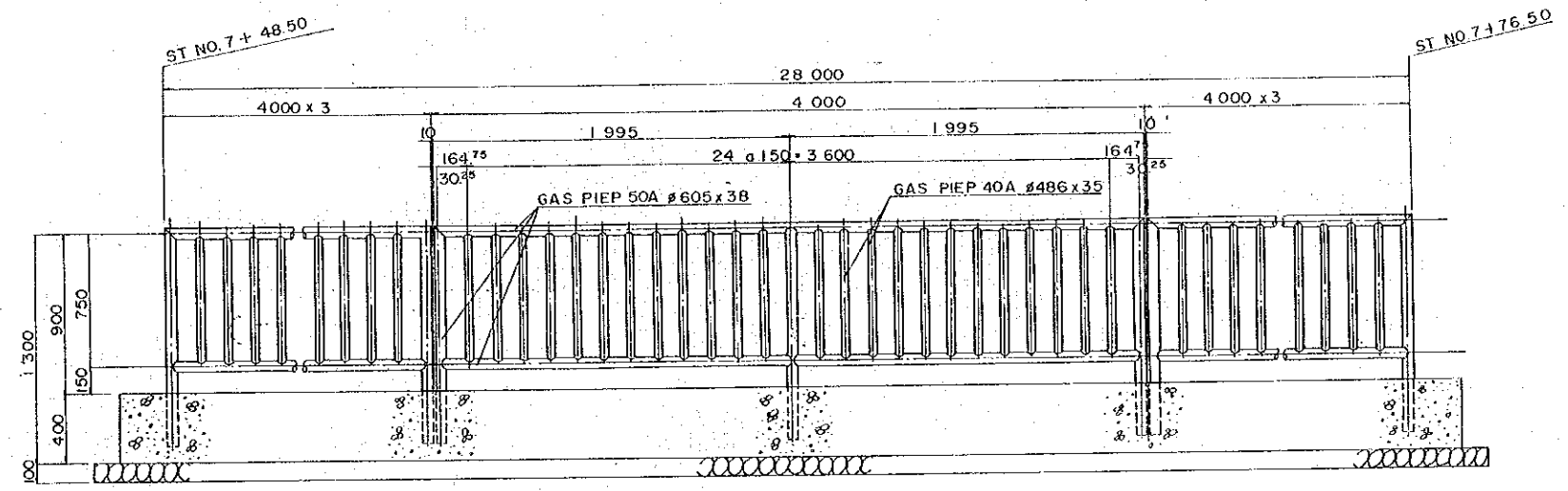
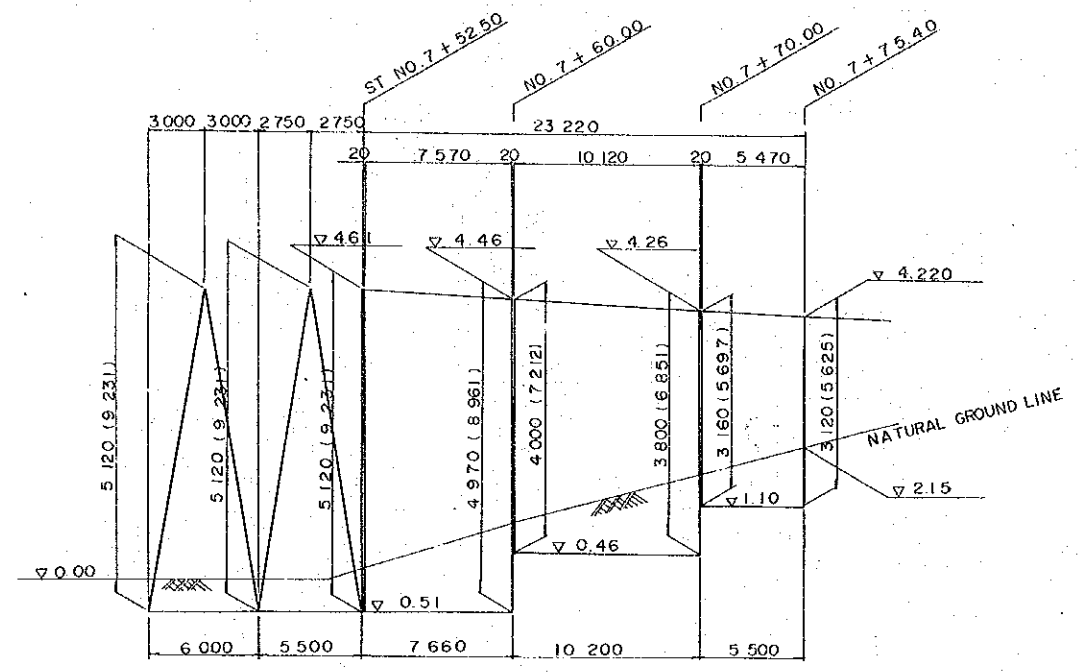
DL = 5.00

EXISTING ROAD

SCALE A

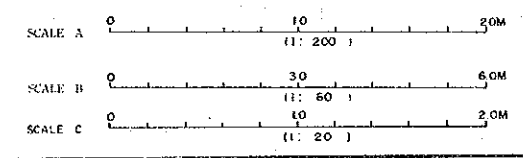


				THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		CROSS SECTION ACCESS ROAD (5) (OCEAN ROAD)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
								NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	MINISTRY OF WORKS	DWG. NO. G - 22			JUNE 30, 1980	

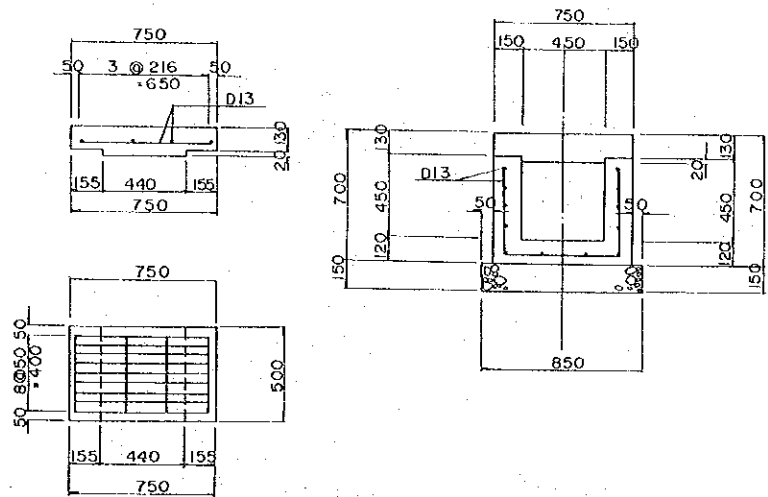


MATERIAL LIST

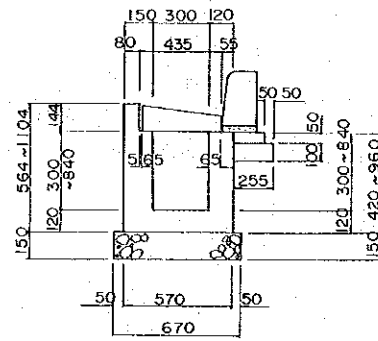
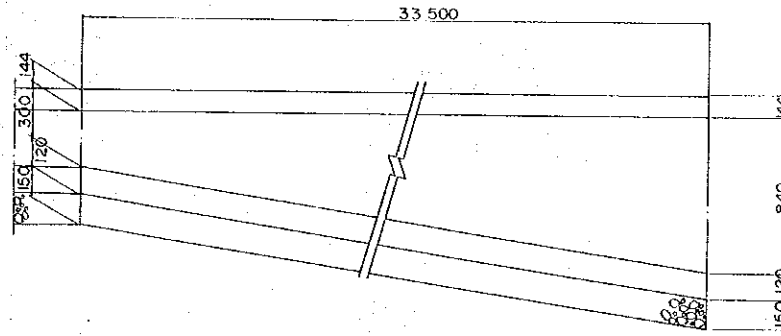
TYPE	SIZE	QUANTITY(M)	WEIGHT(KG)
GAS PIPE 50A	60.5 x 3.8	83.3	442.32
GAS PIPE 40A	48.6 x 3.5	126	490.14
TOTAL			932.46



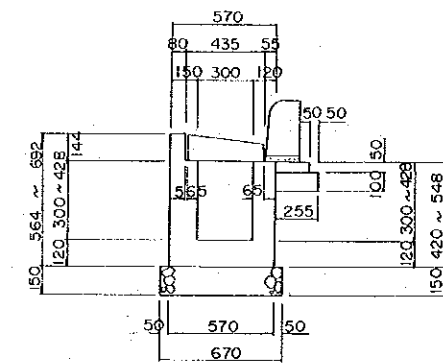
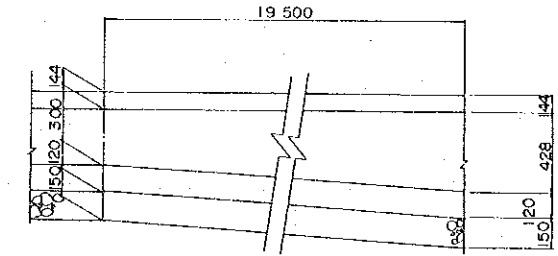
REV. NO.	DATE	COORDINATE	REVISION	APPRO. DATE	MINISTRY OF WORKS	DWG. NO. H-1	MINISTRY of WORKS	APPROVED
					THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	ROCK RIPRAP AND HAND RAIL	NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	DATE JUNE 30, 1980



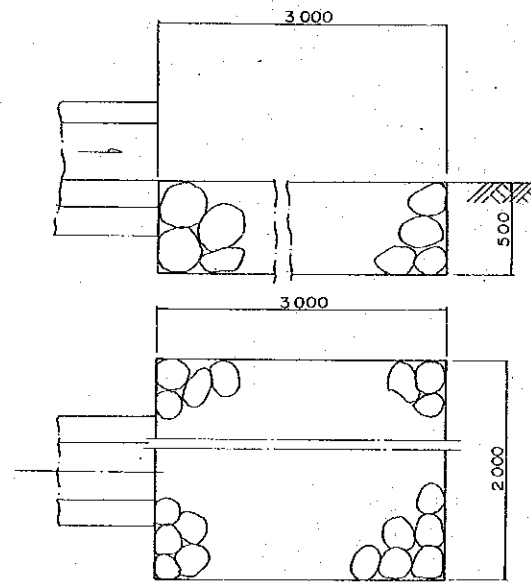
Ds - U(R) 0.45 0.45 SCALE B



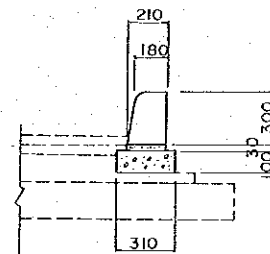
Ds - Lü 0.30 0.30 0.840 SCALE B



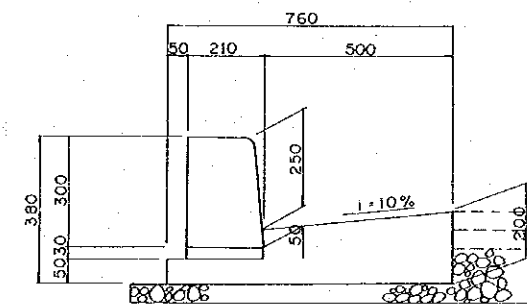
Ds - Lü 0.30 0.30 ~ 0.428



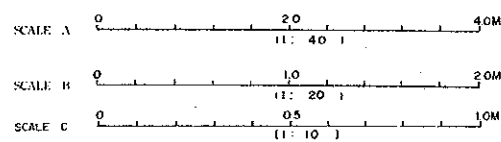
OUT LET SCALE A



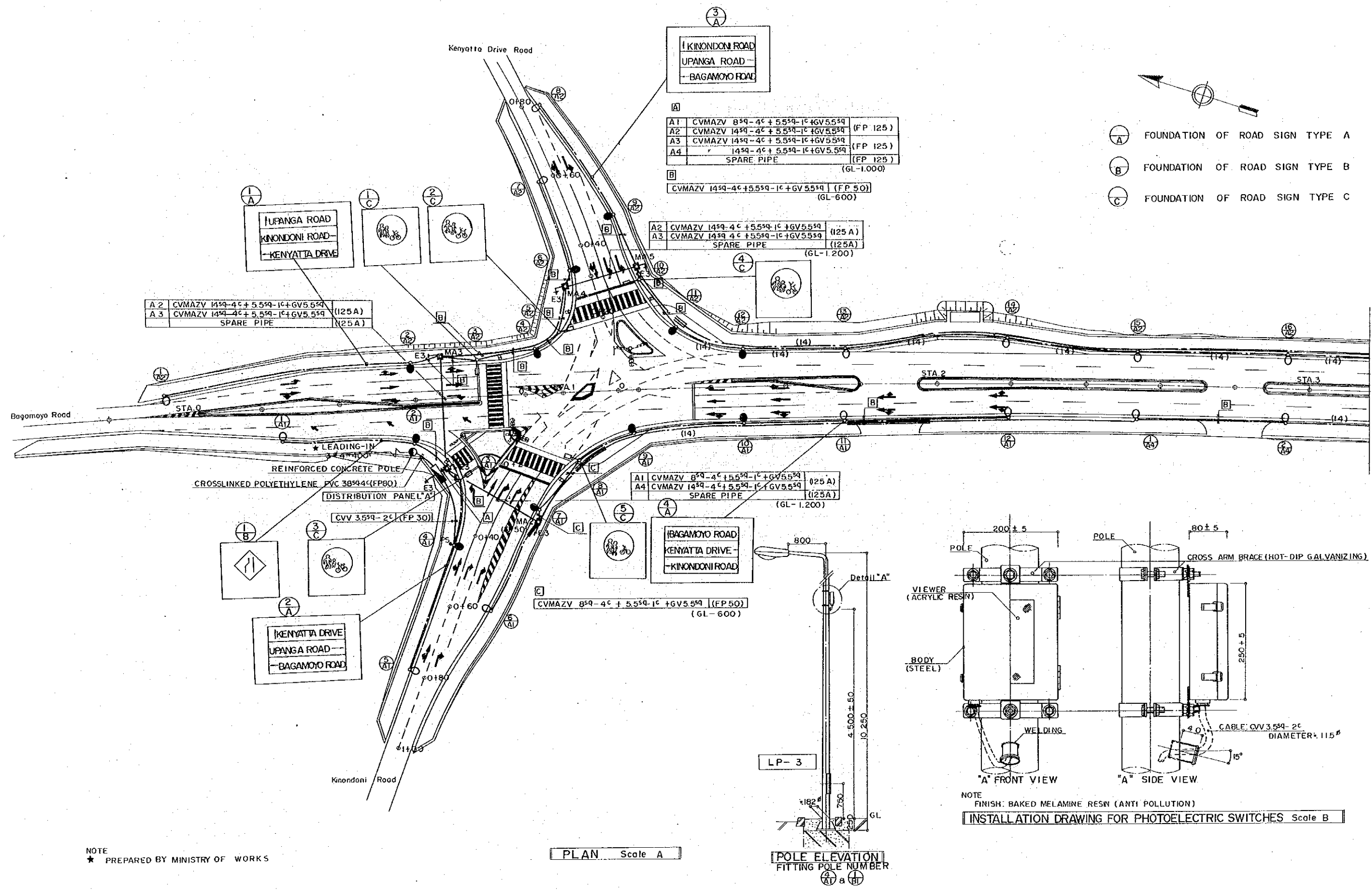
Kerb SCALE B



Ds - L 0.5 SCALE C



						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		DRAINAGE STRUCTURE (2) AND KERB		MINISTRY of WORKS APPROVED _____ DATE _____	
						MINISTRY OF WORKS		DWG. NO. H - 3		NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TORYO JAPAN PREPARED _____ CHECKED _____ SUBMITTED _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO. DATE	MINISTRY OF WORKS		DWG. NO. H - 3		TORYO JAPAN		DATE JUNE 30, 1980



A1	CVMAZV 8 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 125)
A2	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 125)
A3	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 125)
A4	14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 125)
SPARE PIPE		(FP 125)
(GL-1.000)		

B	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 50)
		(GL-600)

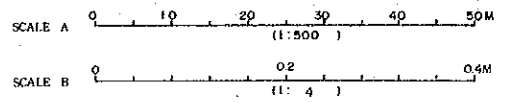
A2	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(125 A)
A3	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(125 A)
SPARE PIPE		(125 A)
(GL-1.200)		

A1	CVMAZV 8 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(125 A)
A4	CVMAZV 14 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(125 A)
SPARE PIPE		(125 A)
(GL-1.200)		

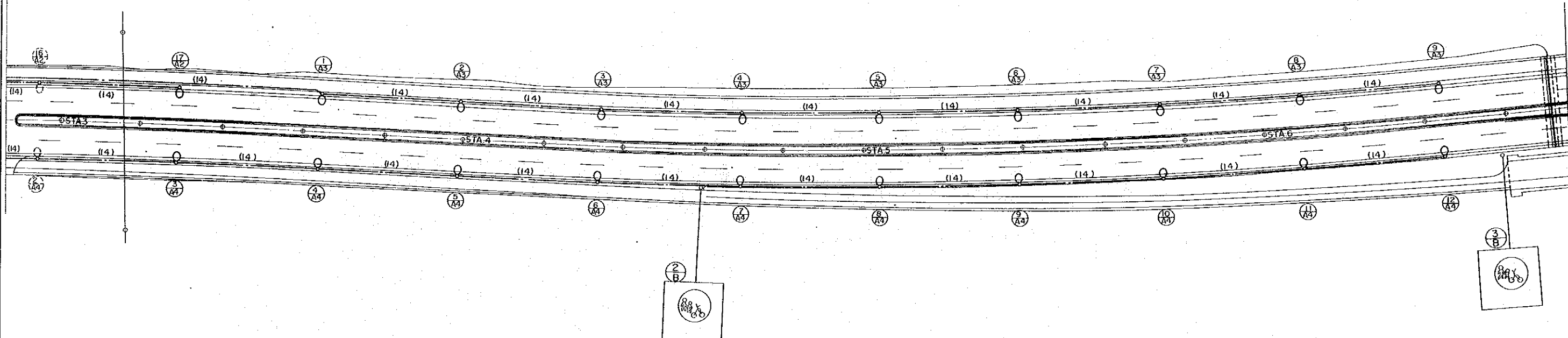
C	CVMAZV 8 ⁵ q-4c + 5.5 ⁵ q-1c + 6V5.5 ⁵ q	(FP 50)
		(GL-600)

- (A) FOUNDATION OF ROAD SIGN TYPE A
- (B) FOUNDATION OF ROAD SIGN TYPE B
- (C) FOUNDATION OF ROAD SIGN TYPE C

NOTE
★ PREPARED BY MINISTRY OF WORKS

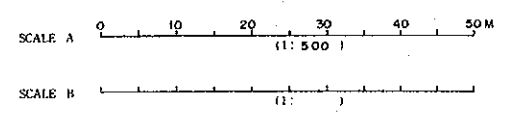


REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE	THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM	MINISTRY OF WORKS	GENERAL ARRANGEMENT OF TRAFFIC FACILITIES (I)	MINISTRY OF WORKS	APPROVED
									NIPPON KOFI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN	DATE
							DWG. NO. I - I			PREPARED CHECKED
		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

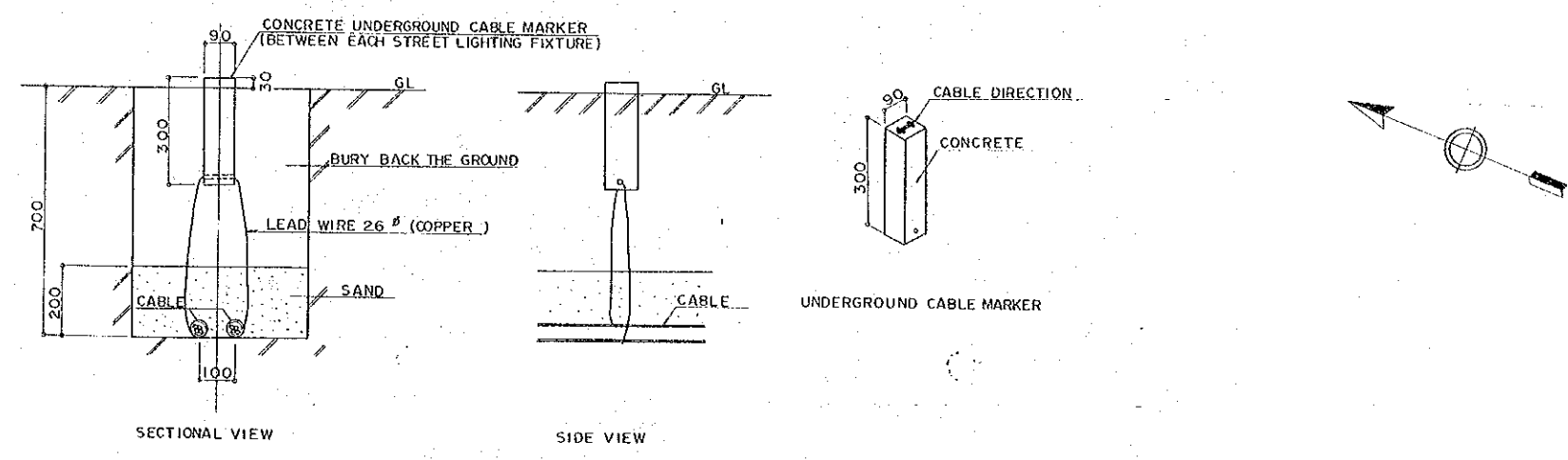


⊙ FOUNDATION OF ROAD SIGN TYPE B

PLAN Scale A

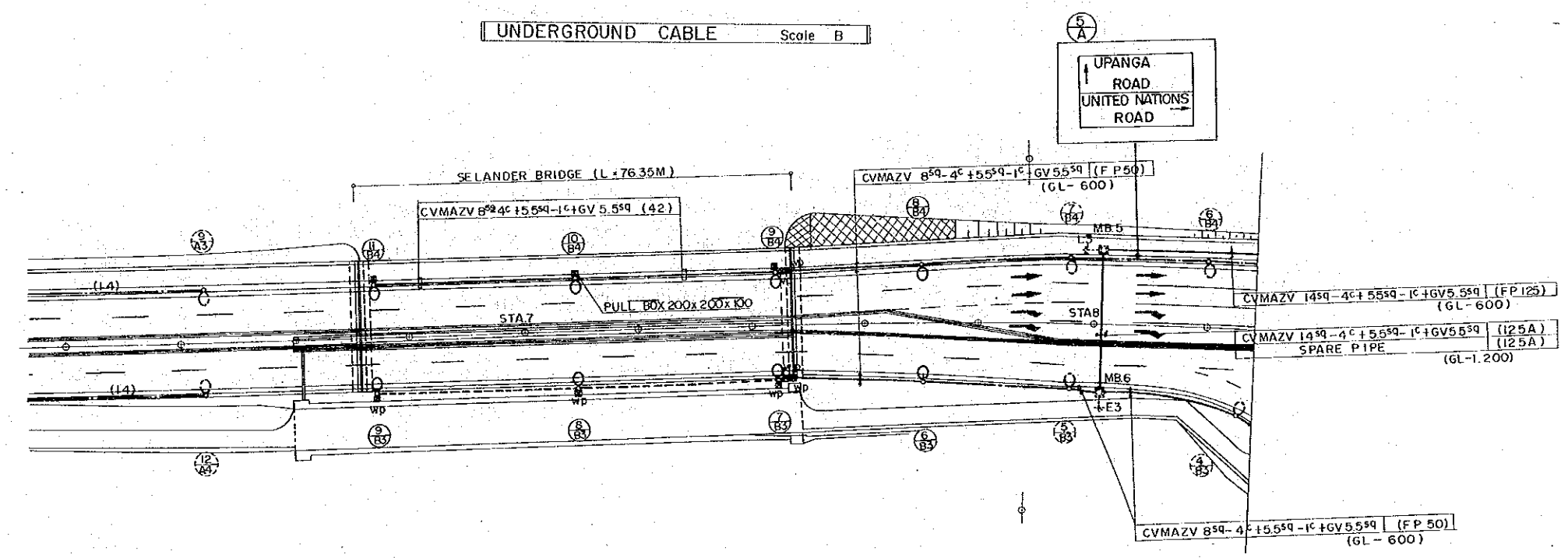


						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		GENERAL ARRANGEMENT OF TRAFFIC FACILITIES (2)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
										NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE		REVISION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



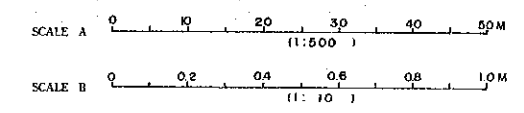
NOTE: REFERENCE SHAPE AND DIMENSIONS

UNDERGROUND CABLE Scale B



PLAN Scale A

- ⊙ FOUNDATION OF ROAD SIGN TYPE A
- ⊙ FOUNDATION OF ROAD SIGN TYPE B



						THE SELANDER BRIDGE EXPANSION PROJECT DAR ES SALAAM		GENERAL ARRANGEMENT OF TRAFFIC FACILITIES (3)		MINISTRY OF WORKS		APPROVED _____ DATE _____	
						MINISTRY OF WORKS		DWG. NO. I - 3		NIPPON KOEI CO. LTD. CONSULTING ENGINEERS TOKYO JAPAN		PREPARED _____ CHECKED _____ SUBMITTED _____ DATE _____	
REV. NO.	DATE	COORDINATE	REVISION	APPRO.	DATE							JUNE 30, 1980	

