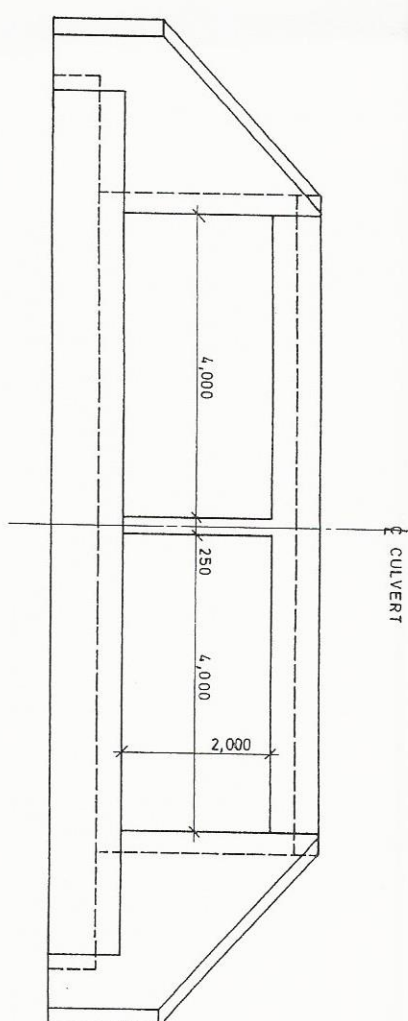


SB/522

SCALE 1 : 50

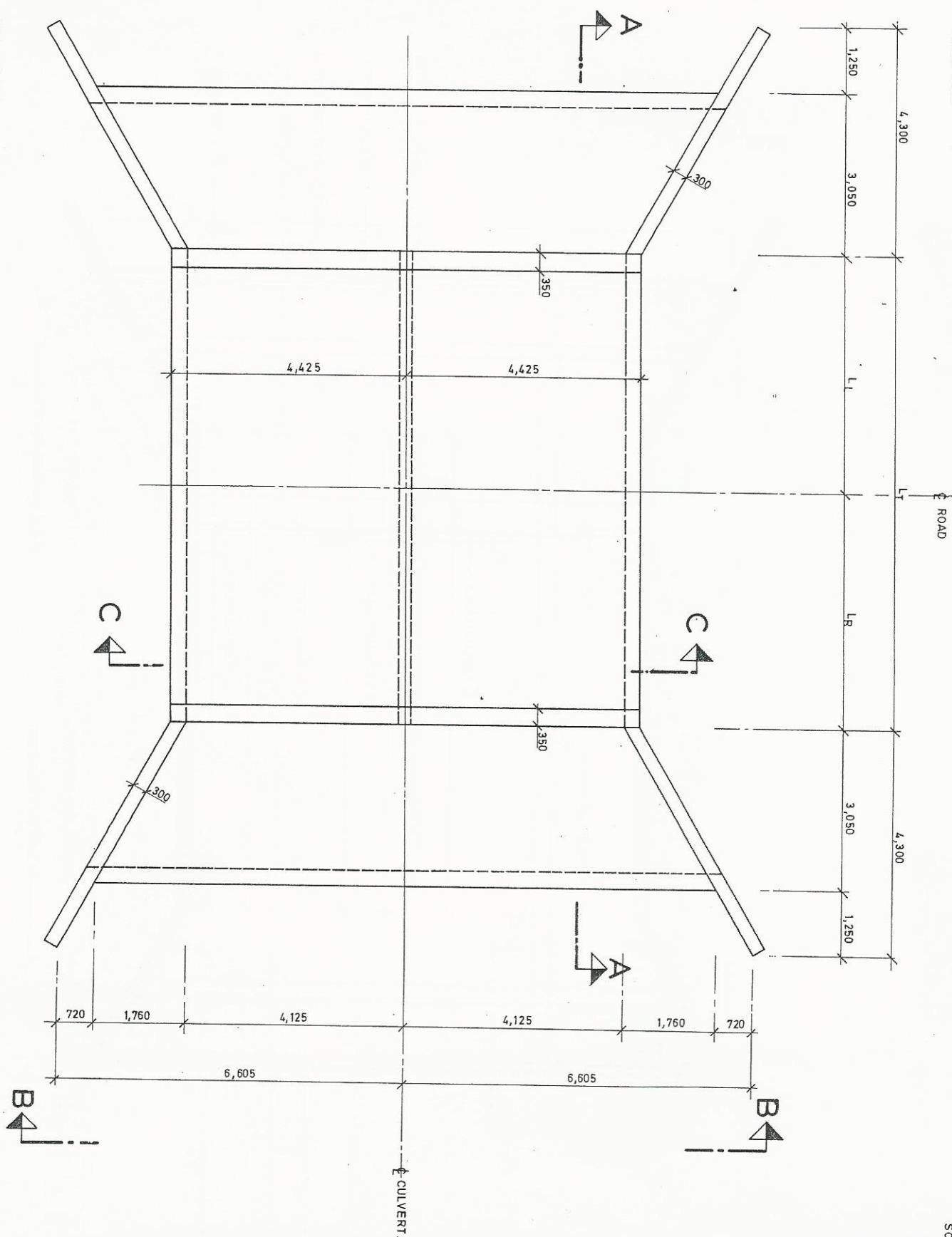


SCALE 1:50

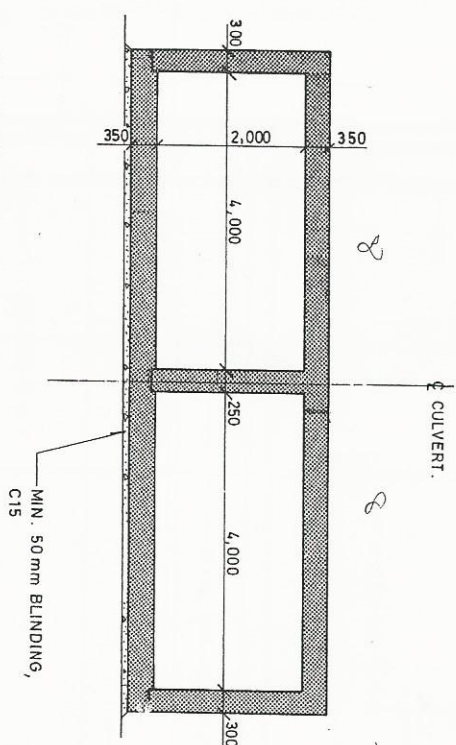


PLAN:

SCALE 1:50



SCALE 1:50



1. GENERAL NOTES, SEE DRAWING SB/ 500

1. GENERAL NOTES, SEE DRAWING SB/500
2. REINFORCEMENT, SEE DRAWING SB/523 AND SB/524
3. TOTAL LENGTH OF CULVERT LT AND LENGTH ON LEFT L_L AND RIGHT HAND SIDE LR OF CENTER-LINE ROAD RESPECTIVELY ARE GIVEN ON THE GENERAL ARRANGEMENT DRAWING FOR THE PROJECT.

REVISIONS		
No.	DESCRIPTION	DATE

**MINISTRY OF TRANSPORT & COMMUNICATIONS
ROADS DEPARTMENT
BRIDGES SECTION**

CHIEF ENGINEER (R & A): *Wm. L. 10/1/87*
CHIEF SUPT. ENGINEER (DESIGN) *Wm. L. 10/1/87*
SEN. SUPT. ENGINEER (BRIDGES) *Wm. L. 10/1/87*

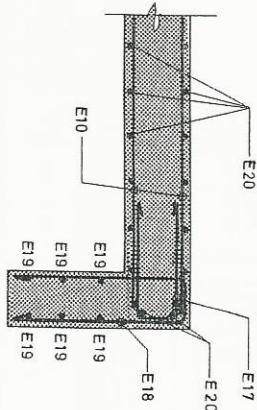
SCALES

1 : 50, 1 : 20

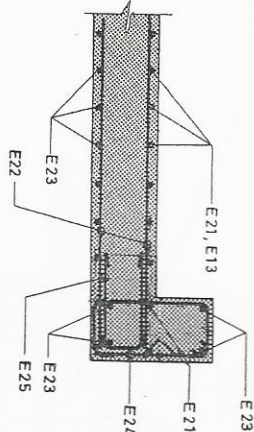
STANDARD CONCRETE BOX CULVERTS
BOX CULVERT, 2 x 4.0 x 2.0m
REINFORCEMENT

SB/523

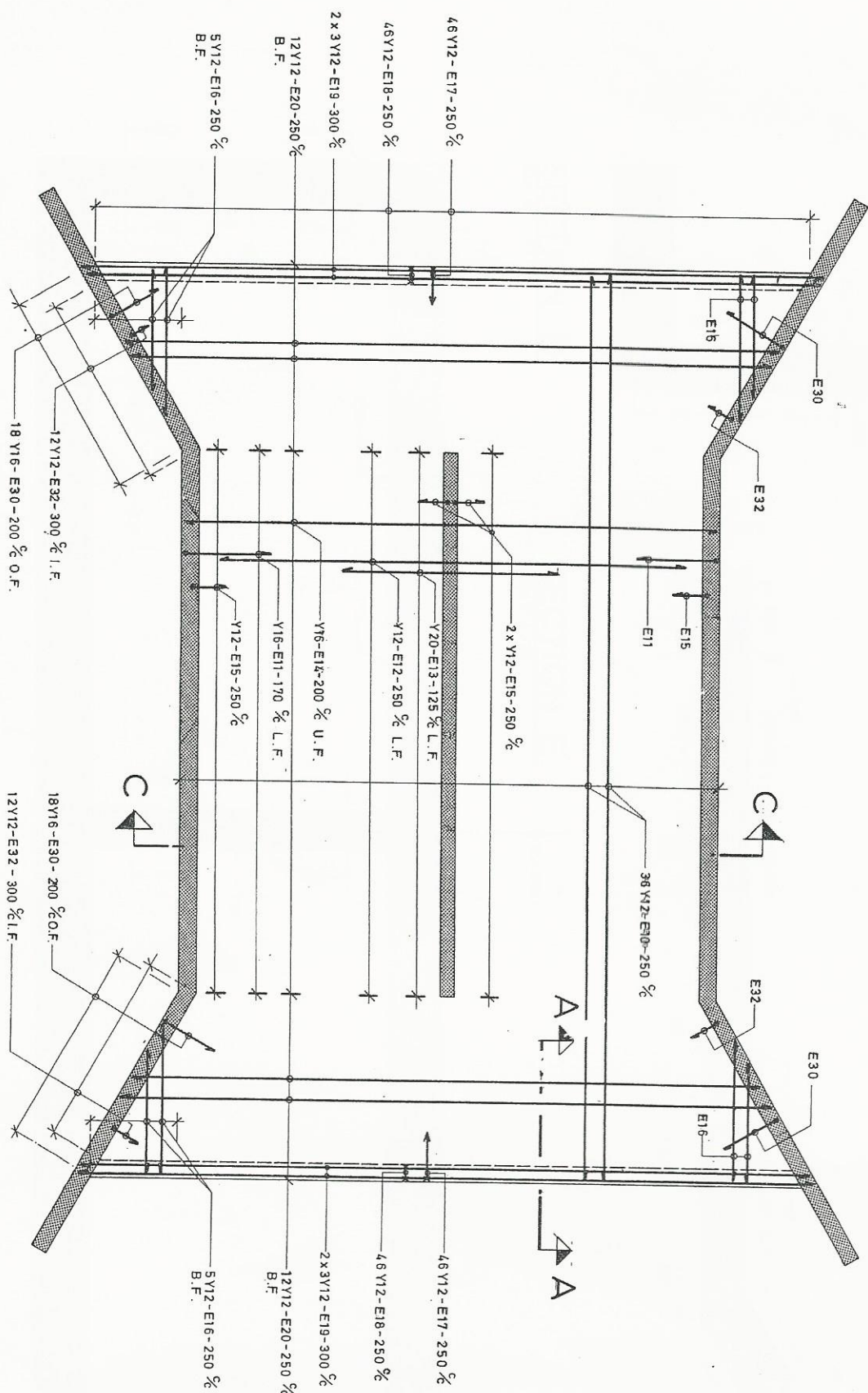
SCALE 1: 20



SCALE 1:20



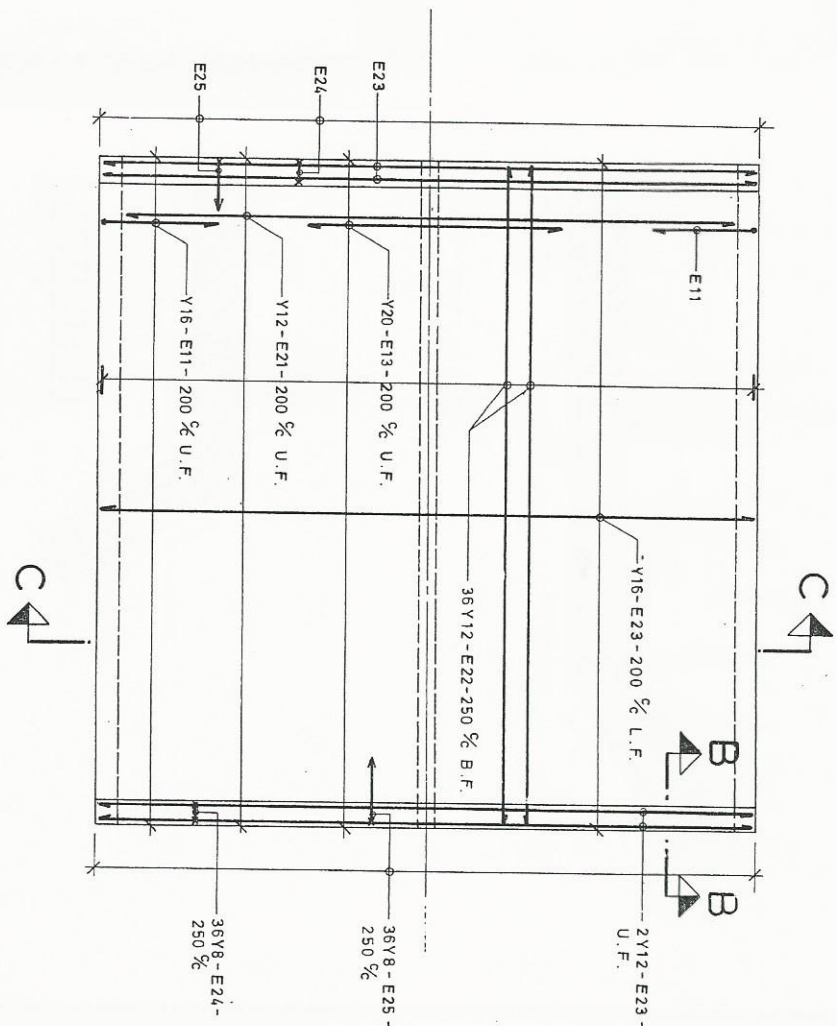
SCALE 1:50

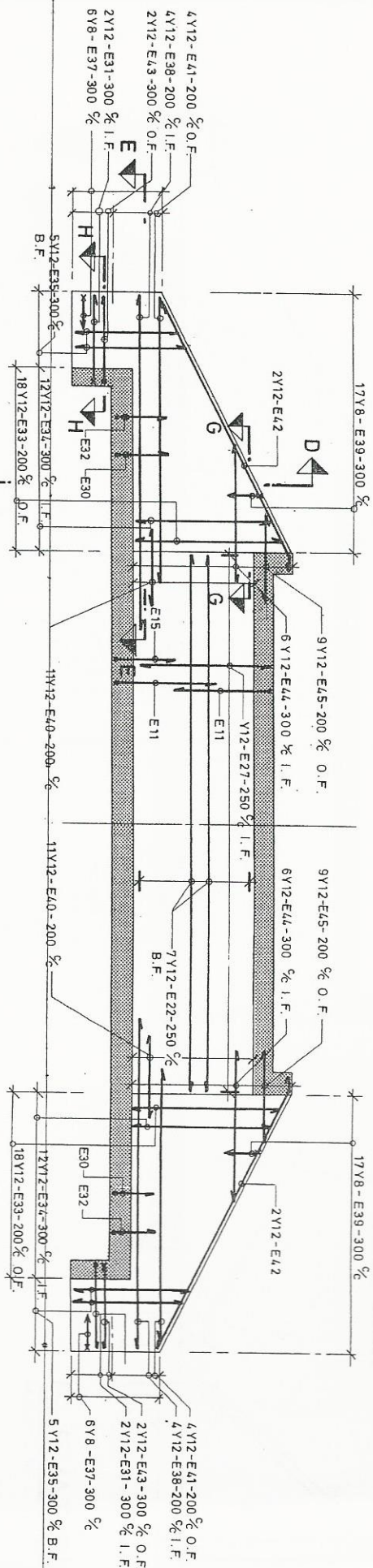


SCALE 1 : 50

1. GENERAL NOTES, SEE DRAWING SB/500

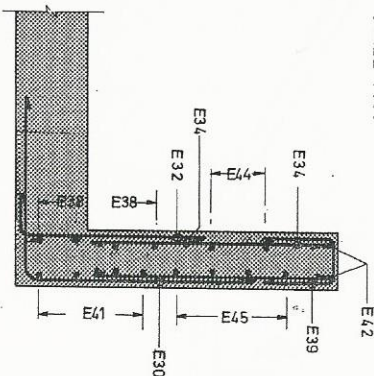
3. IF NECESSARY BARS MAY BE LAPSPICED (LAP LENGTH TO BE AT LEAST 50 TIMES THE BAR DIAMETER), THE LAPS SHALL BE WELL STAGGERED.





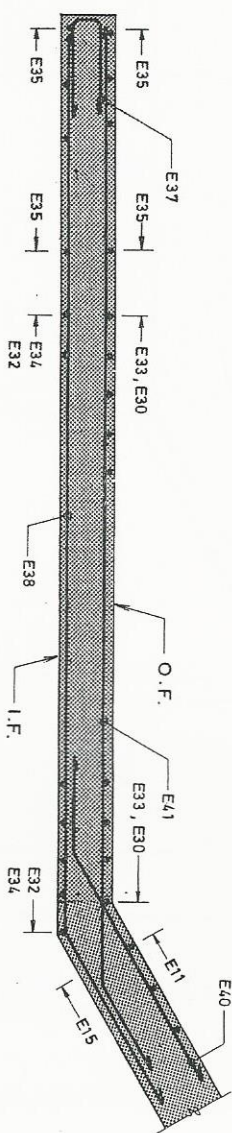
ELEVATION OF WALL AND WINGWALL.

SCALE 1:50



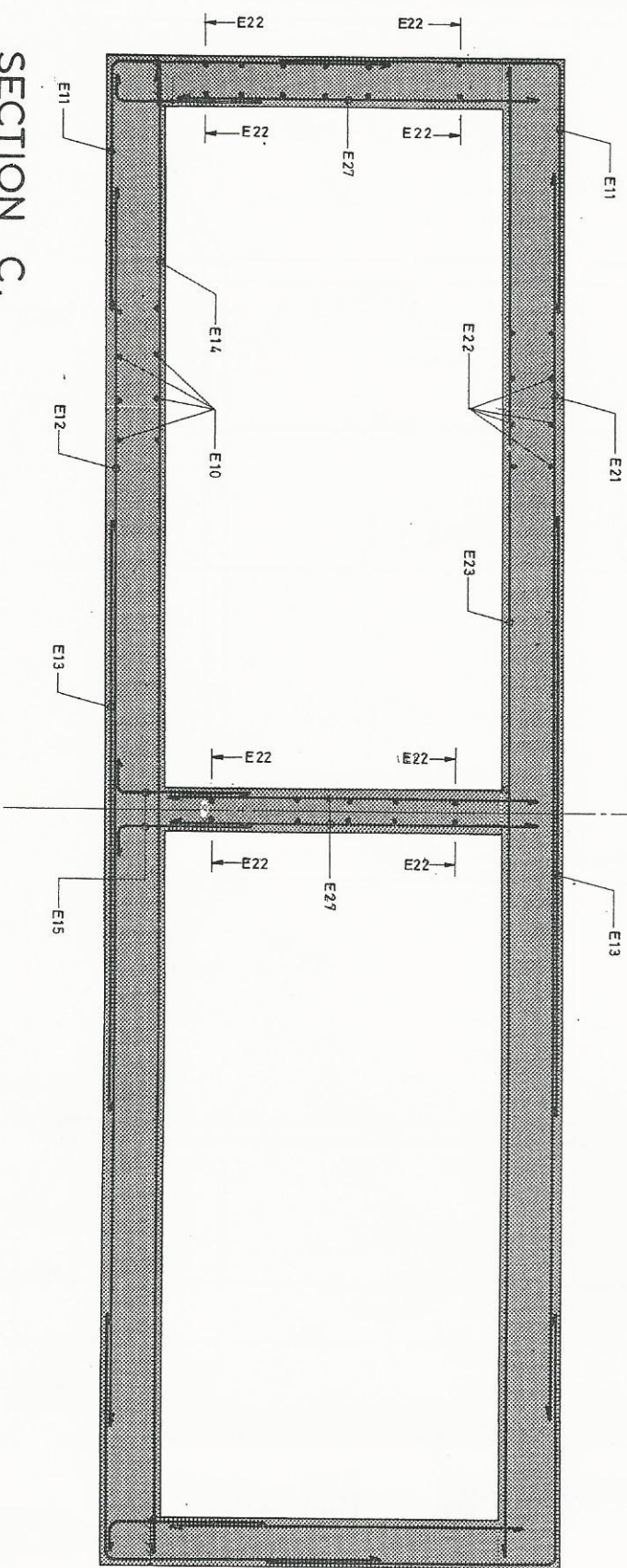
SECTION D.

SCALE 1:20



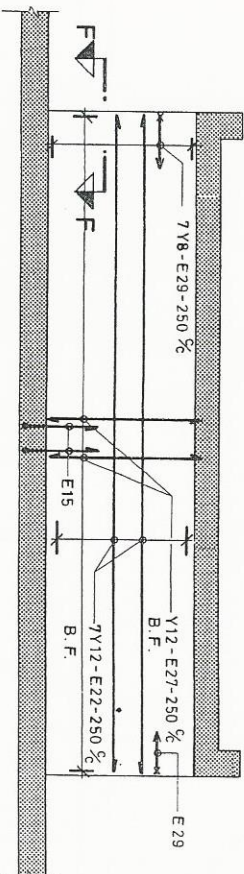
SECTION E.

SCALE 1:20



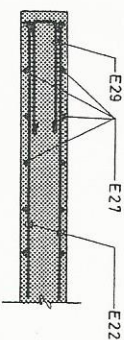
SECTION C.

SCALE 1:20



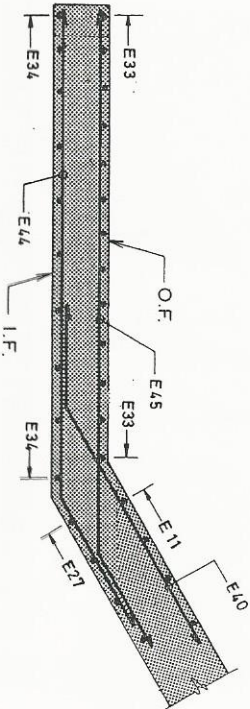
ELEVATION OF MID WALL.

SCALE 1:50



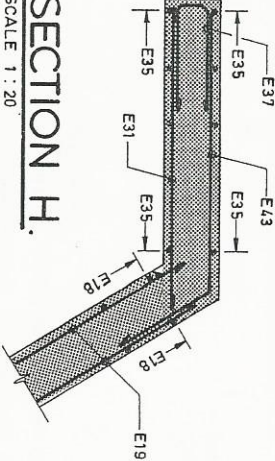
SECTION F.

SCALE 1:20



SECTION G.

SCALE 1:20



SECTION H.

SCALE 1:20

NOTES
1. GENERAL NOTES, SEE DRWG SB/500.

NO.	REVISIONS	DATE

MINISTRY OF TRANSPORT & COMMUNICATIONS
ROADS DEPARTMENT
BRIDGES SECTION

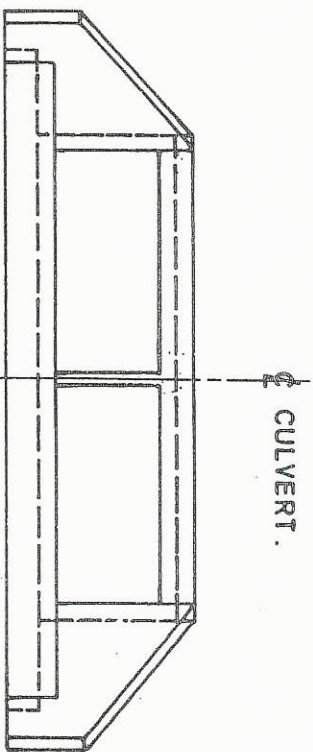
CHIEF ENGINEER (R & A):
CHIEF SUPT. ENGINEER (DESIGN):
SEN. SUPT. ENGINEER (BRIDGES):

SCALES
1:50, 1:20

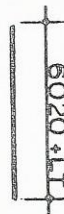
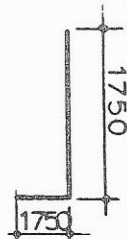
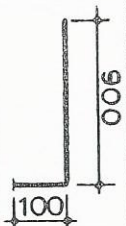
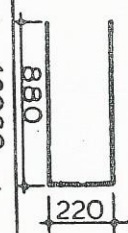
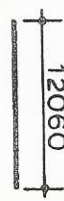
STANDARD CONCRETE BOX CULVERTS
BOX CULVERT, 2 x 4.0 x 2.0m
REINFORCEMENT.

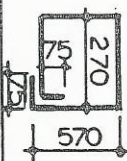
SB/524
SHEET 19

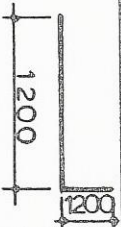
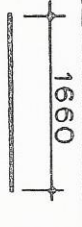
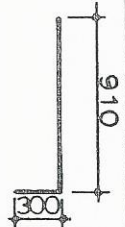
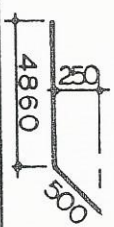
VI



BOX CULVERT 2x4.0 x 2.0m.

M.O.P.W. ROADS DEPARTMENT BRIDGES SECTION				BENDING SCHEDULE				PAGE E1	
MADE BY : G.A.C.		DATE : 2-9-86		STANDARD CONCRETE BOX CULVERT 2x4.0x2.0m				REF DRG No. SB/523 & 524	
REVISIONS :									
MARK NO.	BAR TYPE AND SIZE mm.	LENGTH OF EACH BAR mm.	NO. OF BARS	TOTAL LENGTH m.	SKETCH OF BAR DIMENSIONS IN mm.	NOTES			
E10	Y12	6020 + LT	72	433.5+72 LT					
E11	Y16	3460	21.8 LT	75.4LT					
E12	Y12	6700	4 LT	26.8LT					
E13	Y20	4000	13 LT	52 LT					
E14	Y16	8770	5 LT	43.9 LT					
E15	Y12	970	16 LT	15.5 LT					
E16	Y12	910 to 2670 in steps of 440	4x5=20	35.8	910 - 2670 IN STEPS OF 440				
E17	Y12	1370	92	126.1					
E18	Y12	1920	92	176.7					
E19	Y12	12060	12	144.8					
SUMMARY									
BAR TYPE AND SIZE (mm).									
TOTAL LENGTH(m)									
TOTAL WEIGHT(Kg)									

M.O.P.W. ROADS DEPARTMENT BRIDGES SECTION				BENDING SCHEDULE				PAGE E2	
MADE BY : G.A.C.C.		DATE : 2-9-86		STANDARD CONCRETE BOX CULVERT 2 x 4.0 x 2.0m				REF DRG No. SB/523 & 524	
REVISIONS :									
MARK No.	BAR TYPE AND SIZE mm.	LENGTH OF EACH BAR mm.	NO. OF BARS	TOTAL LENGTH m.	SKETCH OF BAR DIMENSIONS IN mm.	NOTES			
E20	Y12	9090 to 12280 in steps of 290	4x12=48	512.9	9090 -12280 IN STEPS OF 290				
E21	Y12	6700	5LT	33.5LT					
E22	Y12	LT-80	114	114 LT-9.1					
E23	Y16	8770	5LT+5	43.9LT+43.9					
E24	Y8	1730	72	124.6					
E25	Y8	1430	72	103.0					
E26	NOT USED								
E27	Y12	2200	16LT	35.2LT					
E28	NOT USED								
E29	Y8	450	14	6.3					
SUMMARY		BAR TYPE AND SIZE (mm).							
		TOTAL LENGTH(m)							
		TOTAL WEIGHT(Kg)							

ROADS DEPARTMENT BRIDGES SECTION				BENDING SCHEDULE				REF DRG No. SB/523 & 524	
MADE BY : G.A.C.C.		DATE : 2-9-86		STANDARD CONCRETE BOX CULVERT 2 x 4.0 x 2.0m					
REVISIONS :									
MARK No.	BAR TYPE AND SIZE mm.	LENGTH OF EACH BAR mm.	NO. OF BARS	TOTAL LENGTH m.	SKETCH OF BAR DIMENSIONS IN mm.	NOTES			
E30	Y16	2360	72	170.0					
E31	Y12	1660	8	13.3					
E32	Y12	1180	48	56.7					
E33	Y12	1070 to 2515 in steps of 85	4x18=72	129.1	1070 - 2515 IN STEPS OF 85				
E34	Y12	1100 to 2530 in steps of 130	4x12=48	87.2	1100 - 2530 IN STEPS OF 130				
E35	Y12	1420 to 1940 in steps of 130	8x5=40	67.2	1420 - 1940 IN STEPS OF 130				
E36	NOT USED								
E37	Y8	755	24	18.2					
E38	Y12	5350	16	85.6					
E39	Y8	480	68	32.7					
SUMMARY		BAR TYPE AND SIZE (mm).							
		TOTAL LENGTH(m)							
		TOTAL WEIGHT(Kg)							

MADE BY :
G.A.C.

DATE :
2-9-86

STANDARD CONCRETE BOX CULVERT
2 x 4.0 x 2.0m

REF DRG No.
SB/523
& 524

REVISIONS :

MARK NO.	BAR TYPE AND SIZE mm.	LENGTH OF EACH BAR mm.	NO. OF BARS	TOTAL LENGTH m.	SKETCH OF BAR DIMENSIONS IN mm.	NOTES
E40	Y12	1390	44	61.2		
E41	Y12	5690	16	91.1		
E42	Y12	5670	8	45.4		
E43	Y12	2145	8	17.2		
E44	Y12	1410 to 4 10 in steps of 700	4x6=24	75.9		
E45	Y12	1290 to 5290 in steps of 500	4x9=36	118.5		
SUMMARY						
BAR TYPE AND SIZE (mm).		Y8	Y12	Y16	Y20	TOTAL
TOTAL LENGTH(m)		285	2270 + 297LT	214 + 164LT	52LT	
TOTAL WEIGHT(Kg)		113	2015 + 264 LT	338 + 258 LT	129 LT	2466 + 651 LT

QUANTITIES OF MATERIALS FOR
BOX CULVERT 2x 4.0 x 2.0m.

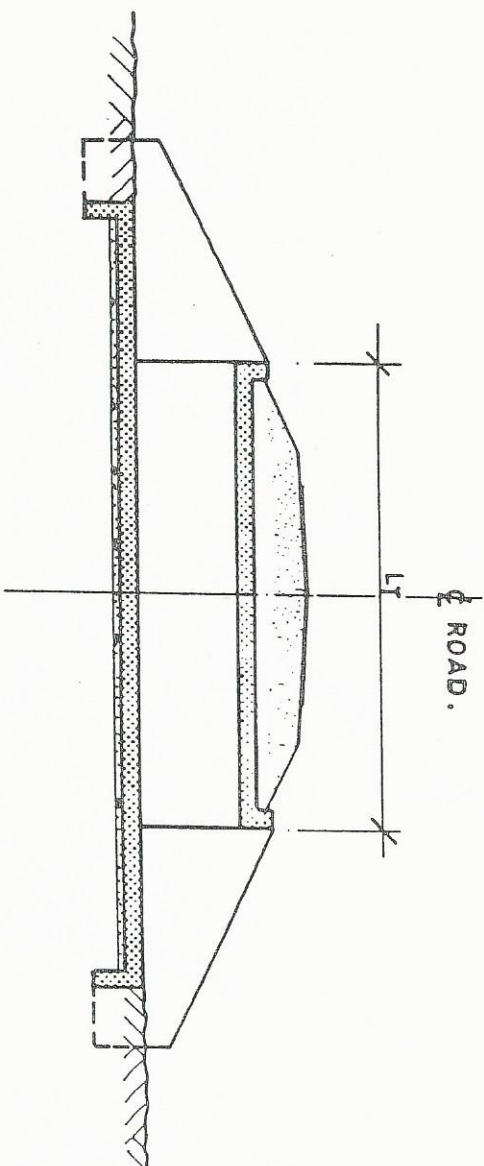
Ref. drawings :

Dimensions : SB/522

Reinforcement : SB/523 and 524.

TYPE OF MATERIAL		QUANTITIES
CONCRETE (m ³)	Grade 15	0.5 LT + 3.4
	Grade 25	7.9 LT + 40.2
FORMWORK (m ²)		21.4 LT + 118.8
REINFORCEMENT (Kg)		651 LT + 2466

LT = Total length of culvert, measured in metres.



Typical section.