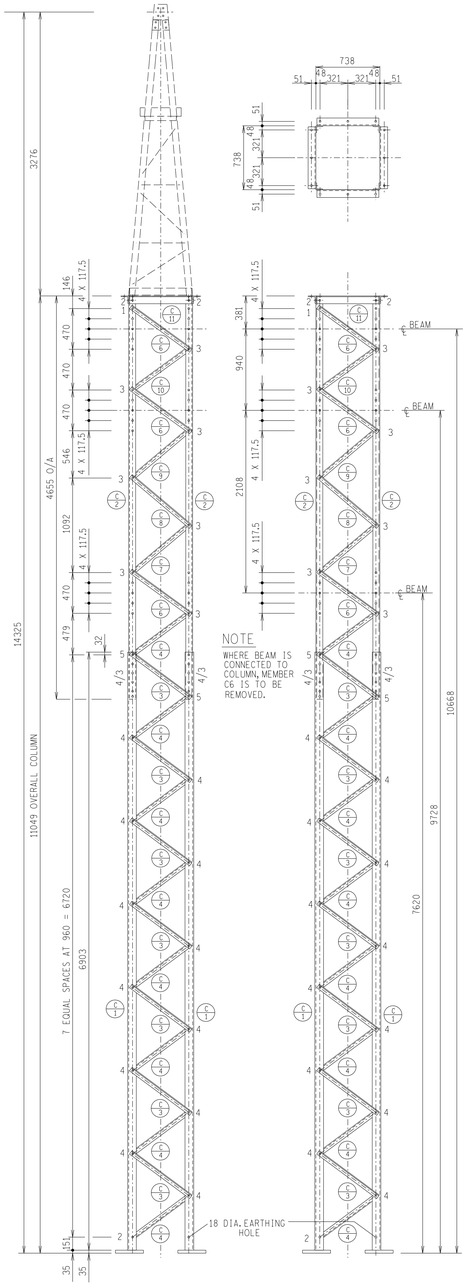
NOTE

EARTHWIRE SUPPORTS ARE NOT REQUIRED FOR ALL COLUMNS, BUT ONLY WHEN ORDERED FOR A SPECIFIC COLUMN, AS SHOWN AND SCHEDULED ON STEEL MARKING PLAN AND / OR GEN. ARRGT. DRG.

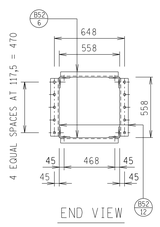


NOTE

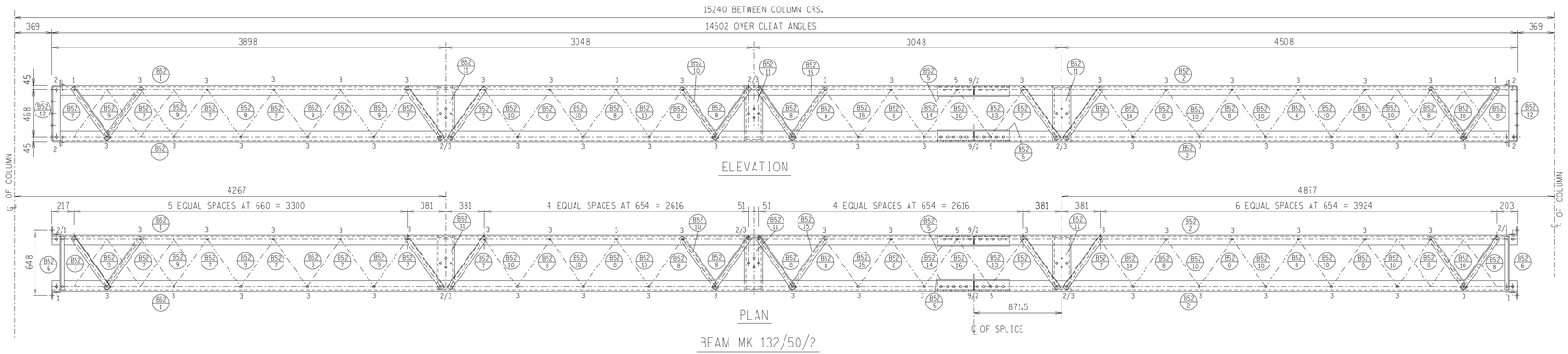
WHERE BEAM IS CONNECTED TO COLUMN, MEMBER C6 IS TO BE REMOVED.

COLUMN MK 132/C

1:25



END VIEW

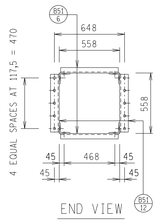


ELEVATION

PLAN

BEAM MK 132/50/2

1:20



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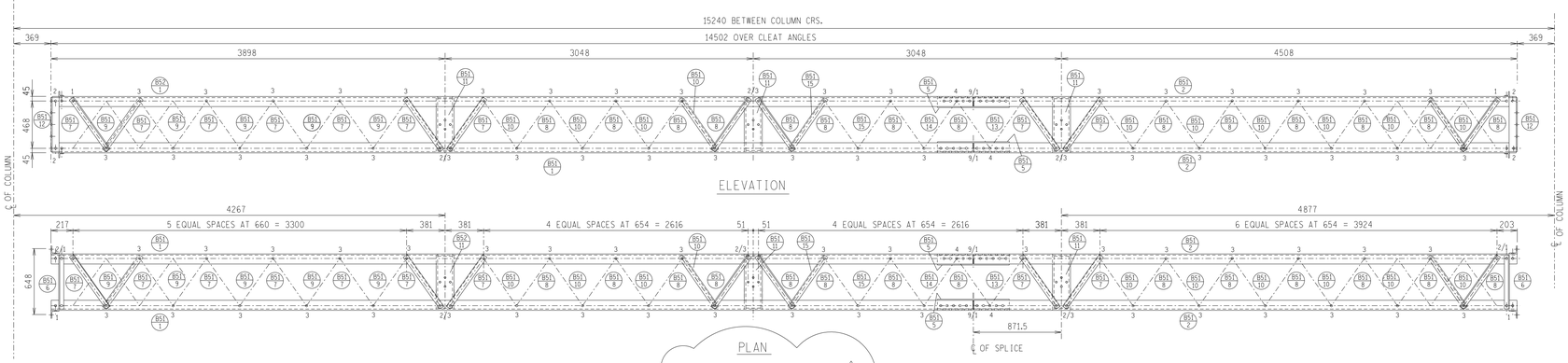
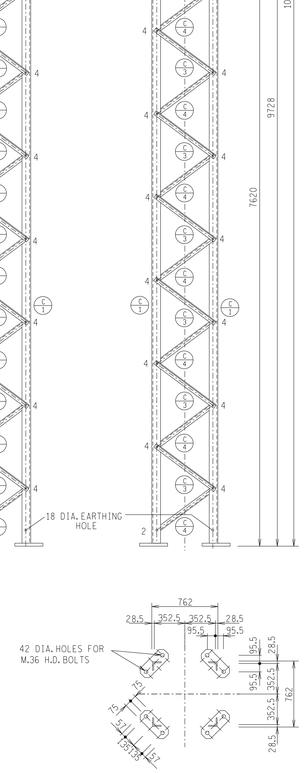


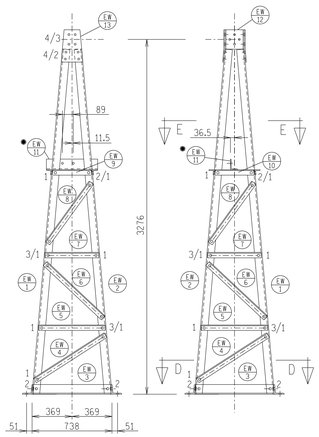
ELEVATION

PLAN

BEAM MK 132/50/1 (4)

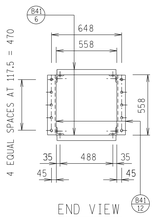
1:20



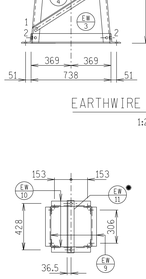


EARTHWIRE SUPPORT "EW"

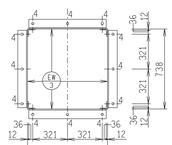
1:20



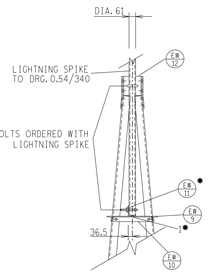
END VIEW



SECTION E-E



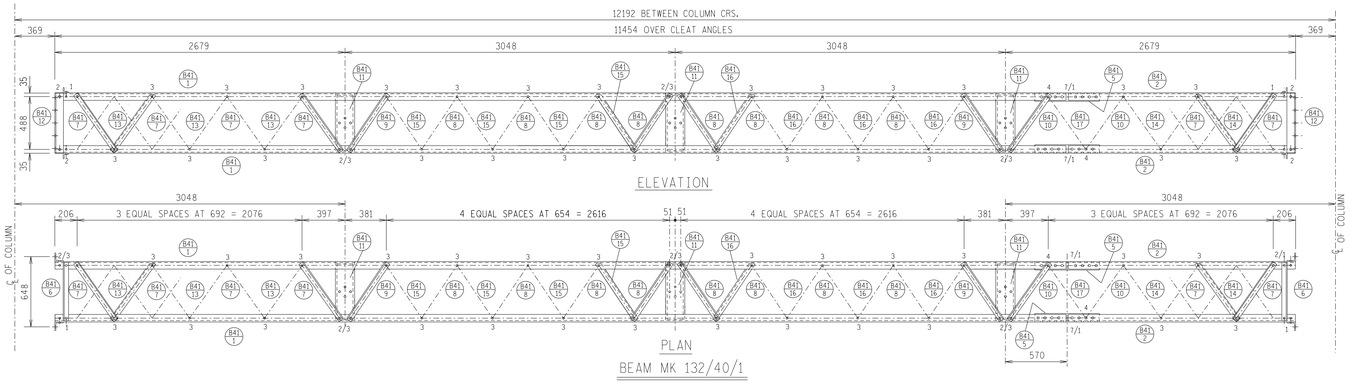
SECTION D-D



ASSEMBLY OF EARTHWIRE SUPPORT WITH LIGHTNING SPIKE

(● ADDITIONAL ITEMS REQUIRED FOR EARTHWIRE SUPPORT WHEN LIGHTNING SPIKE IS FITTED)

END VIEW



ELEVATION

PLAN

BEAM MK 132/40/1

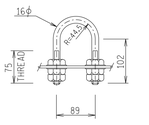
1:20

BOLT SCHEDULE (STRENGTH GRADE 4.8)					
ITEM	MK	DIA	LENGTH	No OF WASHERS	No OFF
COLUMN MK 132/C	1	M20	45	2	4
	2	M20	45	1	12
	3	M20	50	1	60
	4	M20	55	2	48
	5	M20	60	1	8
BEAM MK 132/50/2	1	M20	45	1	16
	2	M20	50	1	96
	3	M20	55	2	168
	4	M20	55	1	4
	5	M20	60	1	8
BEAM MK 132/50/1	1	M20	40	2	88
	2	M20	45	1	8
	3	M20	50	2	168
	4	M20	50	1	24
	5	M20	55	1	4
BEAM MK 132/40/1	1	M16	40	2	72
	2	M16	40	1	8
	3	M16	45	2	128
	4	M16	50	2	8
	5	M20	50	1	16
	6	M20	55	2	4
EARTHWIRE SUPPORT (WITHOUT LIGHTNING SPIKE)	1	M20	40	2	48
	2	M20	45	1	16
	3	M20	50	1 BEVEL	8
	4	M20	50	1	12
ADDITIONAL BOLTS FOR EARTHWIRE SUPPORT.(WHEN LIGHTNING SPIKE IS FITTED)	1	M20	40	2	2

BOLTS NOTES: 1. WASHERS TO BE PLACED UNDER BOLT.
2. ALL BOLTS/WASHERS TO BE HOT DIP GALVANISED.
3. BOLTS POSITIONS INDICATED : No OFF/MARK

NOTES:

1. QUANTITIES SHOWN ARE FOR ONE ITEM ONLY.
2. ALL STEELWORK TO BE HOT DIP GALVANISED TO S.A.B.S. ISO 1461.
3. FABRICATION TOLERANCE TO BE + OR - 1mm.
4. HOLE DIA. TO BE AS MARKED.
5. THE CONTRACTOR SHALL SUPPLY ALL NUTS, BOLTS, WASHERS, ETC, REQUIRED FOR ERECTION.
6. H.D. BOLTS SUPPLIED UNDER SEPARATE CONTRACT.
7. ALL WELDING SYMBOLS TO S.A.B.S 044.
8. ALL PORTIONS OF WELDED JOINTS, NOT SEALED BY STRUCTURAL WELD, SHALL BE SEAL WELDED.
9. ALL MARKS TO BE STAMPED ONTO STEELWORK AND SHALL BE CLEARLY LEGIBLE AFTER GALVANISING.



"U" BOLT DETAIL

1:5

MASS SCHEDULE IN kg.		
ITEM	STRUCTURE	BOLTS
COLUMN MK 132/C	1158	37
BEAM MK 132/50/2	1508	84
BEAM MK 132/50/1	1043	81
BEAM MK 132/40/1	800	38
EARTHWIRE SUPPORT	199	22
ADDITIONAL ITEM TO E/WIRE SUPPT. (WHEN LIGHTNING SPIKE IS FITTED)	4	0,5
"U" BOLTS	–	0,9

MASS OF BOLTS IN SCHEDULE INCLUSIVE OF NUTS AND WASHERS.

REV	DATE	AUTH	REVISION/REVISIES	BY DEUR	CHKD NAGES	0,54/
4	DJC.S	26.10.09	BEAM TITLE REVISED	PHD	DJC.S	
3	A.C.B	14.8.91	REDRAWN ON CAD AND ESKOM LOGO REVISED.	L.A	A.D	340
2	A.C.B	24.1.85	REDRAWN, METRICATED AND GENERALLY REVISED.	DIEZ	R.J.C	339
1	A.C.B	1.3.82	METRIC SECTIONS UPDATED, MASS REVISED.	G.W.F		341
0			FIRST ISSUE / EERSTE UITREIKING			337

Lightning Spike
Anti-climbing Device
132kV Col.Found. Detail
132kV Col.& Beams Details

SECTIE REGISTER

TRANSMISSION ENGINEERING

ESKOM

132kV YARD STEELWORK (BOLTED) BEAM AND COLUMN ARRGT.

CHKD NAGES	FS	21.6.82	APPROVED	GOEDGEKEUR		0.54/336 REV 4
DRAWN GETEKEN	AC	14.6.82	P.J. Battison			
SCALE SKAAL	1:25 1:20			23.10.62	23.10.62	

PLOTTING SCALE: 200

SIZE GROOTTE A0