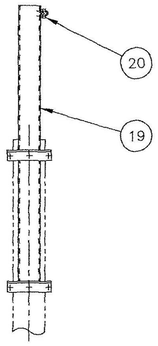
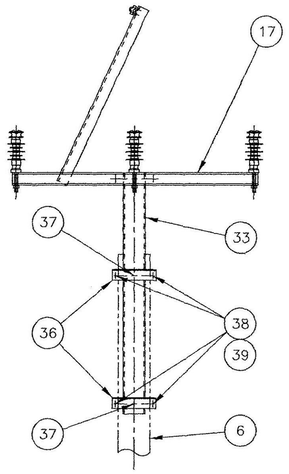


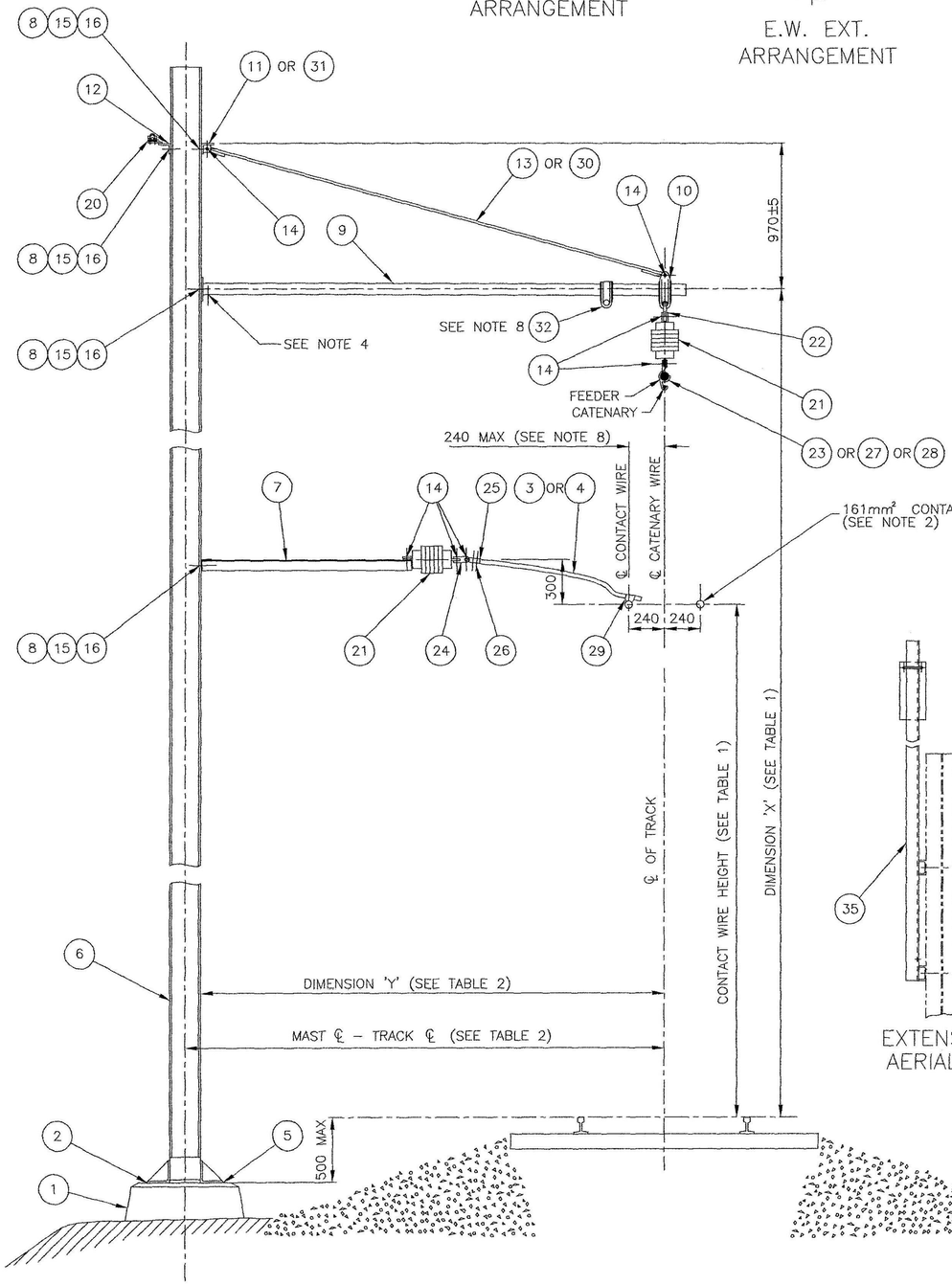
11kV T/LINE MAKE-OFF ARRANGEMENT

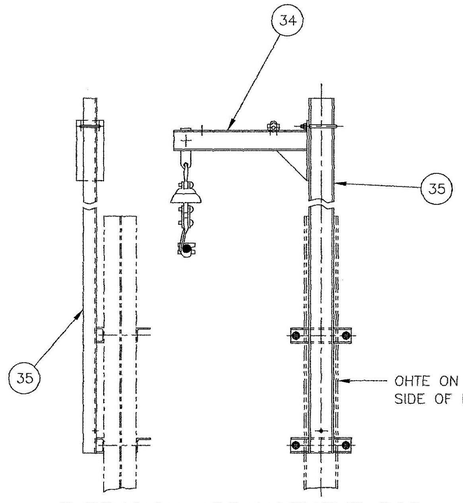


E.W. EXT. ARRANGEMENT

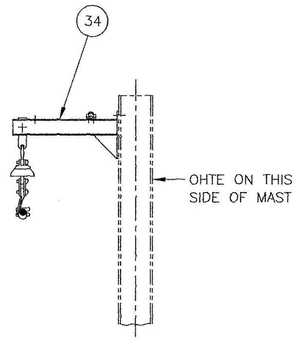


11kV T/LINE EXTENSION ARRANGEMENT





EXTENSION ARRANGEMENT FOR AERIAL BUNDLED CONDUCTOR



NORMAL ARRANGEMENT FOR AERIAL BUNDLED CONDUCTOR

ITEM	DESCRIPTION	QTY	STORES ITEM NO	DRG NO CEE–
1	FOUNDATION	1	———	TQ–0017
2	MAST BASE INSULATION	*	———	TU–0030
3	STEADY ARM	1	54/009314	TND–0019
4	HOCKEY STICK:PULL–OFF TYPE	1	54/009298	TND–0020
5	PACKING PIECE	**	54/004145	TMHF–0095
6	MAST (LENGTH & SIZE TO BE DETERMINED ON SITE)	1	———	TMB–0077
7	STEADY ARM AND HOCKEY STICK ATTACHMENT	1	———	TMF–0208
8	BOLT ADAPTOR (LINDAPTER PLT TYPE B), M20 OR EQUAL APPROVED. GALVANISED (SEE NOTE 5 & 6)	8	———	———
9	TUBULAR CANTILEVER	1	———	TMC–0042
10	CLAMP ASSEMBLY: DUAL PURPOSE	1	54/004889	TNB–0005
11	BRACKET, TIE BAR	1	———	TMF–0206
12	CLAMPING BRACKET, EARTH WIRE CLEAT	1	———	TMF–0202
13	TIE BAR	1	———	TMHB–0003
14	PIN, STRAIGHT, HEADED, ø16	*	54/004020	TX–0066
15	BOLT & NUT, STEEL, HEX. GALV. M20 x 75L	8	———	———
16	WASHER, FLAT, STEEL, ROUND, GALV. M20	*	———	———
17	11kV TRANSMISSION LINE CROSS ARM STRUCTURE	*	———	TPF–0004
18	11kV TRANSMISSION LINE CROSS ARM MAKE–OFF ASSEMBLY	*	———	PFC–0083
19	EARTH WIRE EXTENSION	*	———	TMF–224
20	EARTH WIRE CLAMP	1	54/002033	TN–0371
21	INSULATOR, STAND–OFF, SOLID CORE	2	54/001141	TNC–0017
22	TOWER HOOK	1	54/003014	TNB–0041
23	CLAMP, DOUBLE SUSPENSION	1	54/004917	TNB–0074
24	CLEVIS FITTING	1	54/001521	TNB–0060
25	SOCKET, STEADY ARM	1	54/001582	TNB–0076
26	PIN, COTTER, SPLIT, BRASS, ø6,3 x 56L	2	54/003823	———
27	CLAMP, SUSPENSION: WITHOUT TIE DOWN FACILITY	1	———	TNB–0072
28	CLAMP, SUSPENSION: WITH TIE DOWN FACILITY	1	54/001533	TNB–0073
29	SWIVEL CLIP	1	54/000690	TND–0035
30	TIE WIRE ASSEMBLY	1	———	TMC–0098
31	TIE WIRE BRACKET	1	———	TMFB–0125
32	CLAMP ASSEMBLY, SINGLE PURPOSE	*	54/004905	TNB–0004
33	TRANSMISSION LINE EXTENSION	*	———	TMFB–0181
34	AERIAL BUNDLE CONDUCTOR SUSPENSION ARM ARRANGEMENT	*	———	TPF–0002
35	SUPPORT BRACKET ASSEMBLY (AERIAL BUNDLED CONDUCTOR)	*	———	TMFB–0062 SHT 1
36	BRACKET, TRANSMISSION LINE EXTENSION	*	———	TMHA–0089
37	BOLT & NUT, STEEL, HEX. GALV. M20 x 40L	*	———	———
38	BOLT & NUT, STEEL, HEX. GALV. M16 x 255L	*	———	———
39	WASHER, FLAT, STEEL, ROUND, GALV. M16	*	———	———

* AS REQUIRED
** SEE NOTE 3

TABLE 1		
CONTACT WIRE HEIGHT	TRACK SLEEPERS	DIMENSION 'X'
5 000	CONCRETE	7 650
5 150	WOOD OR STEEL	7 800
5 500	CONCRETE	8 150
5 650	WOOD OR STEEL	8 300

TABLE 2	
MAST ℄ – TRACK ℄	DIMENSION 'Y'
2 750	2 640
3 200	3 090
3 700	3 590

NOTES
1. WHEN ITEM 17 OR 18 OR 19 OR 34 OR 35 IS REQUIRED, OMIT ITEMS 12 & 20.
2. FOR PUSH–PULL–OFF TUBE ARRANGEMENT SEE DRG NO CEE–TPF–0005.
3. INSERT REQUIRED NUMBER OF PACKING PIECES (ITEM 5) BETWEEN INSULATION PAD AND MAST FOUNDATION TO PROVIDE 75mm BACK RAKE AT THE TOP OF THE UNLOADED MAST. DO NOT PROVIDE BACK RAKE ON PUSH–PULL CONSTRUCTIONS.
4. DRAINAGE HOLE TO POINT DOWNWARDS.
5. FOR 216 x 206 UNIVERSAL COLUMNS, USE ONE M20 LINDAPTER WASHER, TYPE CW, 4 THK PER ITEM 8 (OR EQUAL APPROVED).
6. ITEMS 8 AND WASHER, NOTE 5, TO BE COATED WITH 'OXYSEAL' FOR COASTAL AND HEAVY POLLUTED AREAS.
7. FOR TYPICAL WIRING ARRANGEMENT AT TURN–OUTS SEE DRG NO CEE–TPF–0006.
8. THE ℄ CATENARY WIRE TO ℄ CONTACT WIRE HORIZONTAL DISTANCE IS NOT TO EXCEED 240mm. TO ENSURE THIS THE TIE WIRE (ITEM 30) LENGTH MAY BE ADJUSTED AND THE CLAMP (ITEM 10) REPOSITIONED, OR IF A TIE BAR ASSEMBLY (ITEM 13) IS USED, A SEPERATE SINGLE PURPOSE SUSPENSION CLAMP (ITEM 32) MAY BE USED TO SUSPEND THE CATENARY WIRE.

AMENDMENTS		
NO	NAME	DATE
1	W BRIGHT	94–08–18
DRG REVISED. ATTACHMENT FOR TWO STEADY ARMS REMOVED. NOTE 8 ADDED. DRG NO WAS CEE–TMG–60. DO REF T93/032		
2	W BRIGHT	94–08–18
ITEM 30 ADDED. DO REF T94/011		
3	JP DU P	94–09–08
ITEM 31 ADDED. DO REF T94/044		
4	JP DU P	95–04–05
ITEM 32 & NOTE 9 ADDED. DO REF T95/012		
5	JVT	97–11–24
ITEM'S 33 TO 38 AND VIEWS ADDED. NOTES REVISED. DO REF: T97/009		
6		98/03/27
ITEM 38 WAS M20 AND ITEM 39 ADDED. LATEST PIN INSULATOR SHOWN. ECP REF: BBC1841 DO REF: CDO/5075		

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DO REF: Y76/43	GEN TOL: LIN± ——	ANG± ——
DRN: A J S	CKD: W R G	DATE: 78–03–31
ENG: I DE VILLIERS	F PIENAAR	for CHIEF ENG
CENTRAL DRAWING OFFICE SPOORNET		

STRUCTURE, TUBULAR CANTILEVER

206 x 204 AND 216 x 206 UNIVERSAL COLUMN
3kV DC FIXED CANTILEVER.

DIMENSIONS: mm
SCALE: 1:20
A1
DRAWING NO CEE-TMGC-0022
SHEET - OF -