



NOTES:

- FOR A COMPLETELY CROSS OR DOUBLE POINT BONDED SYSTEM, SHEATH VOLTAGE LIMITERS ARE NOT REQUIRED & THE CABLE SHEATH IS TO BE CONNECTED DIRECTLY TO THE EARTH BAR. THE EARTH CONTINUITY CONDUCTOR THAT RUNS PARALLEL TO THE UNDERGROUND CABLE IS NOT REQUIRED. REFER TO EARTHING SCHEMATIC ON SHEET 1 FOR ADDITIONAL DETAILS.
- ALL EARTH CABLES THAT LEAVE THE UGWH SITE ARE TO BE CLEARLY & PERMANENTLY LABELLED AT THE EARTH BAR CONNECTION WITH THE CABLE DESTINATION. SEE STAINLESS STEEL TAG DETAILS.
- ALL COMPRESSION LUGS TO BE TERMINATED USING CORRECT PROCEDURES AND CALIBRATED TOOLS.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. DO NOT SCALE, DIMENSIONS TAKE PRECEDENCE.
- ONLY ONE ELECTRICAL CONNECTION PER BOLT PERMITTED.
- TOP CABLE COVER MOUNTING BRACKET FERRULES IN CONCRETE POLE FOR EACH CABLE COVER TO BE EARTH FERRULES.
- K SERIES CLEATS TO BE TIGHTENED TO 5nm. KR SERIES CLEATS TO BE TIGHTENED TO 8nm.
- FOR COMPLETE COMMUNICATION REQUIREMENTS FOR SUBTRANSMISSION UGWH POLES, REFER TO DRG: 212386 SH2.
- REFER TO DESIGNER SAFETY REPORT D24/333919 FOR ATYPICAL HAZARDS ASSOCIATED WITH THIS STANDARD CONSTRUCTION.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SHEET 1

ITEM	DESCRIPTION	DRG. No	STOCK CODE	QTY	
73	CABLE - COPPER, PVC INSULATED (SIZE WITH MINIMUM CSA EQUIVALENT TO CABLE SHEATH)			A/R	
72	REDUCER - CONDUIT, Ø63 TO Ø32, HD			1	
71	CLAMP - CONDUCTOR, ASSEMBLY		H12110	1	
70	WASHER - SPRING, M16, GALVANISED			6	
69	WASHER - FLAT, M16, GALVANISED	518081	177984	12	
68	BOLT & NUT - M16x50mm, HEX, GALVANISED	515466	46524	6	
67	NUT - M12, HEX, GALVANISED	515466	9118	A/R	
66	BOLT - M12x30mm, HEX, GALVANISED	515466	46367	A/R	
65	NUT - M20, HEX, GALVANISED	515466	175361	26	
64	TIE - CABLE, 520x4 6mm, STAINLESS STEEL		182644	A/R	
63	NLAY - NEOPRENE (CUT TO SUIT)			A/R	
62	CONDUIT - CORRUGATED, Ø32mm, UV STABILISED, GREY (SEE NOTE 8)			A/R	
61	CONDUIT - HPVC, Ø63mm, ORANGE (SEE NOTE 8)			A/R	
60	COVER - EARTHING CABLE, UPPER (ITEM 2 ON MANUFACTURING DRAWING) (SEE NOTE 6)	223073		1	
59	COVER - EARTHING CABLE, LOWER (ITEM 1 ON MANUFACTURING DRAWING) (SEE NOTE 6)	223073		1	
58	BRACKET - CLAMP, EARTHING CABLE (ITEM 4 ON MANUFACTURING DRAWING)	223073		A/R	
57	WASHER - SPRING, M10, GALVANISED			9	
56	WASHER - FLAT, M10, GALVANISED	518081	177983	18	
55	LUG - COMPRESSION, COPPER, M10 HOLE (TO SUIT 70mm ² CABLE) (SEE NOTE 3)		75148	3	
54	BOLT & NUT - M10x50mm, HEX, GALVANISED	515466	46284	9	
53	BOLT - M12x50mm, HEX, GALVANISED	515466	46391	A/R	
52	LUG - COMPRESSION, M12 HOLE (TO SUIT MERCURY, 7/4.5 AAC) (SEE NOTE 3)	514063	H10257	8	
51	CONDUCTOR - MERCURY, 7/4.5 AAC		H13433	A/R	
50	BRACKET - 132kV, SEALING END & CABLE MOUNTING (SUITS 345mm-400mm MOUNTING CENTRES)	254250		13	
49	LUG - COMPRESSION, COPPER, M12 HOLE (TO SUIT 70mm ² CABLE) (SEE NOTE 3)		74831	3	
48	CABLE - 70mm ² , Cu, PVC INSULATED, BLACK		65111	A/R	
47	EYE - TONGUE, 160KN, A.S. 1154.2		183889	3	
46	BRACKET - MOUNTING, SHEATH VOLTAGE LIMITER	202896		3	
45	LIMITER - SHEATH, VOLTAGE, (SVL), TRIPOD BASE, INSULATED TYPE 125x (REFER TO DESIGN FOR VOLTAGE RATING)			3	
44	CONNECTOR - VERSACLAMP, TEE OFF, CU, TYPE RV5 (POWERLINE EQUIPMENT)			2	
43	BRACKET - CABLE, COIL, FIBRE OPTIC			1	
42	ENCLOSURE - SPLICE, COYOTE (CIV STRAIN RELIEF & MOUNTING BRACKET)			1	
41	CLAMP - CABLE (6 Technik SERIES 'K' OR SERIES 'KR' AS REQ. BY CABLE SIZE) (SEE NOTE 7)			A/R	
40	BRACKET - CLAMP, CABLE (FOR USE WITH CABLE COVER) (ITEM 5 ON MANUFACTURING DRAWING)		CABLE LIP TO Ø80mm	18	
39	BRACKET - CLAMP, CABLE (ITEM 4 ON MANUFACTURING DRAWING)		REFER TO DRG: 223074	A/R	
38	WASHER - FLAT, STAINLESS STEEL (ITEM 3 ON MANUFACTURING DRAWING)		CABLE 80mm²-130mm	48	
37	COVER - CABLE, UPPER (ITEM 2 ON MANUFACTURING DRAWING) (SEE NOTE 6)		REFER DRG: 223075	3	
36	COVER - CABLE, LOWER (ITEM 1 ON MANUFACTURING DRAWING) (SEE NOTE 6)		CABLE 130mm²-160mm	3	
35	NLAY - ELASTIC (d-Technik)		REFER DRG: 223076	A/R	
34	ARRESTER - SURGE, 132kV, TYCO 3HSRCP120L1E27M522 (CIV LINE TERMINATION FOUR HOLE PAD)	244226	152687	3	
33	BRACKET - ARRESTER, 132kV, SURGE	248467		3	
32	TERMINAL - BOLTED RUN (4xØ14mm HOLES, 50x50mm SPACING) (TO SUIT SEALING END STUD)			3	
31	PALM - TAP, BOLTED RUN, SINGLE CONDUCTOR (4xØ14mm HOLES, 50x50mm SPACING) (TO SUIT PHASE CONDUCTOR)			3	
30	TERMINAL - COMPRESSION, 30° PALM (4xØ14mm HOLES, 50x50mm SPACING) (TO SUIT PHASE CONDUCTOR) (SEE NOTE 3)			3	
29	CLIP - OFFSET EARTHING (Ø22mm HOLE)		507734	H11708	8
28	CLAMP - DOWNLEAD CUSHION, FIBRE/IGN (TO SUIT CONCRETE/STEEL POLE)			A/R	
27	BUCKLE - STRAPPING, 19mm, STAINLESS STEEL		177722	2	
26	STRAP - BAND, 19mm, STAINLESS STEEL		177721	A/R	
25	ROD - M20, THREADED, GALVANISED (CUT TO REQUIRED LENGTH)			1	
24	LUG - COMPRESSION, 300mm ² , COPPER (Ø12mm HOLE) (SEE NOTE 3)		H20569	5	
23	CABLE - 300mm ² , 1C, Cu, PVC INSULATED		184616	A/R	
22	SEALING END - 132kV, SUKABEL TYPE EHFVC 72 5123/145/170			3	
21	SEALING END - 132kV, NKT TYPE FEV 145 V5 SIZE 2			3	
20	SEALING END - 132kV, NKT KABELDON TYPE TD145			1	
19	WASHER - SPRING, M12, GALVANISED	518082	H12047	A/R	
18	WASHER - FLAT, M12, GALVANISED	518081	177982	A/R	
17	BOLT & NUT - M12x50mm, HEX, GALVANISED	515466	46391	12	
16	WASHER - SPRING, M20, GALVANISED	518082	175569	37	
15	INSULATOR - 132kV, HORIZONTAL LINE POST (TRUNNION CLAMP END FITTING)		178280	1	
14	WASHER - SQUARE, 50x50x6mm, GALVANISED (Ø22mm HOLE)	518081	H30265	46	
13	BOLT & NUT - M20, HEX, GALVANISED (LENGTH TO SUIT POLE)	515465		17	
12	DEADEND - TERMINATION ASSEMBLY, FIBRE/IGN (TO SUIT CONDUCTOR)			1	
11	BAND - POLE, 3 BOLT (TO SUIT POLE SIZE)	507741		4	
10	DEADEND - PREFORMED (TO SUIT CONDUCTOR)	514098		3	
9	CLEVIS - THIMBLE, 70KN, A.S. 1154.2 (TO SUIT CONDUCTOR)	514132		3	
8	NUT - M12, HEX, STAINLESS STEEL	515467	8987	24	
7	WASHER - FLAT, M12, STAINLESS STEEL	518081	45429	64	
6	WASHER - SPRING, M12, STAINLESS STEEL	518082	143859	41	
5	SCREW - SET, M12x30mm, HEX, STAINLESS STEEL	515467	H38528	26	
4	BOLT - M12x50mm, HEX, STAINLESS STEEL	515467	45195	12	
3	BOLT - M12x75mm, HEX, GALVANISED	515466	46425	A/R	
2	BOLT - M12, HEX, GALVANISED (LENGTH TO SUIT CABLE CLAMP)	515466		3	
1	INSULATOR - LONGROD, 132kV, POLYMERIC, 120KN (EYE/EYE CLEVIS FITTINGS)		178275	A/R	
	BAR - FLAT, 50 8x3 18mm, TINNED HD COPPER (SEE DETAIL 10)			1	
	POLE - CONCRETE (AS REQUIRED)			2	

1	APPD: GLENN FORD CHKD: PHILIP JONES DATE: 28/09/2017 SEALING END BRACKETS CHANGED, MATERIAL LIST & NOTES AMENDED. DETAIL 18 ADDED.
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1	OPGW SPLICING BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT	565743
2	OPGW SPLICING BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT	565743
3	OPGW SPLICING BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT	565743
4	OPGW SPLICING BOX & COILED CABLE BRACKET MOUNTING ARRANGEMENT	565743

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SCALE	NTS	STANDARD CONSTRUCTION
DESIGNED	ADAM BRADFORD	132kV TRANSMISSION LINE
DRAWN	GARY HUGHES	UGWH TERMINATION
CHECKED	ADAM BRADFORD	DETAILS
APPROVED	GLENN FORD	
DATE	21/06/2011	
PROJECT NUMBER	STD	
TRIM REF NUMBER	D24/333919	
SIZE	A1	
DRAWING No	221816	
SHEET	2	
REV	4	