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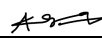


Scheme	N/A
Project	GEORGEDALE REFURBISHMENT (88Kv & 132Kv yards)
Project WBS	TO BE SUPPLIED BY PROJECT MANAGER
Substation	GEORGEDALE
Grid	EASTERN
Document Date	3 AUG 2020
Revision Number	1
Eskom Reference Documents:	240-120804300

Select: **LABELS** ☒ **HARDWARE** ☐

OTHER ☐ specify _____


REVISION CONTROL

Rev	Date	Description	Compiler
1	3 AUG 2020	First issue	A LE GRANGE

	Name	Designation	Signature	Date
Compiled By	A LE GRANGE	Snr Technologist		3/8/2020
Reviewed By	S BHUDA	Snr Eng		04/08/2020
Authorised By	S ZULU	Chief Eng		05/08/2020


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SUBSTATION NAME								
TRFR 12								
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 12 88kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	22.15	0.50
TRFR 12 88kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	22.15	0.50
TRFR 12 88kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 12 88kV VT	30 25	5 (460x230mm)	1	1	8	J	0.00	0.00
TRFR 12 88kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 12 TDB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					84		49.26	3.30
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	3	45.03	1.23					
0.54/1794 (L) x	9	4.23	2.07					


*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

SUBSTATION NAME								
TRANSFORMER 12								
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRANSFORMER 12 88kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	22.15	0.50
TRANSFORMER 12 88kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	22.15	0.50
TRANSFORMER 12 88kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRANSFORMER 12 88kV VT	30 25	5 (460x230mm)	1	1	8	J	0.00	0.00
TRANSFORMER 12 88kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRANSFORMER 12 TDB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					84		49.26	3.30
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	3	45.03	1.23					
0.54/1794 (L) x	9	4.23	2.07					


*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

SUBSTATION NAME								
LOTUS PARK 1		FEEDER No. 4						
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
LOTUS PARK 1 88kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
LOTUS PARK 1 88kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
LOTUS PARK 1 88kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
LOTUS PARK 1 88kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
LOTUS PARK 1 88kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTALS					88		8.56	3.68
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	12	5.64	2.76					


*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steel

SUBSTATION NAME								
NORTHDENE 1		FEEDER No. 3						
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
NORTHDENE 1 88kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
NORTHDENE 1 88kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
NORTHDENE 1 88kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
NORTHDENE 1 88kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
NORTHDENE 1 88kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTALS					88		8.56	3.68
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	12	5.64	2.76					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steel

SUBSTATION NAME								
PENTRICH 3		FEEDER No. 2						
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
PENTRICH 3 88kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
PENTRICH 3 88kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
PENTRICH 3 88kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
PENTRICH 3 88kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
PENTRICH 3 88kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTALS					88		8.56	3.68
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	12	5.64	2.76					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steel

SUBSTATION NAME




88kV B/CPL A

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
88kV B/CPL A B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
88kV B/CPL A B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
88kV B/CPL A BREAKER	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
B/CPL A 88kV JB	30 25	7 (320x100mm)	3	1	4			
R, W, B (ONE LETTER PER DISC) (CT & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					64		6.42	2.76
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/403 (J) x	3	2.19	0.69					
0.54/1794 (L) x	9	4.23	2.07					


*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

SUBSTATION NAME								
88kV BUSBAR 2								
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
88kV BUSBAR 2	150	1 (1830x305mm)	1	2	32	0.54/1790	19.00	1.60
88kV BUSBAR 2 VT	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
88kV BUSBAR 2 88kV VT JB	30 25	7 (320x100mm)	3	1	4	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (ON VT's) (ON BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	SETS 1	18	J L	2.19	0.69
				2			2.82	1.38
TOTALS					62		24.74	3.90
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x	2	19.00	1.60					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	6	2.82	1.38					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

SUBSTATION NAME								
88kV BUSBAR 1								
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
88kV BUSBAR 1	150	1 (1830x305mm)	1	2	32	0.54/1790	19.00	1.60
88kV BUSBAR 1 VT	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
88kV BUSBAR 1 88kV VT JB	30 25	7 (320x100mm)	3	1	4	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (ON VT's) (ON BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	SETS 1	18	J L	2.19	0.69
				2			2.82	1.38
TOTALS					62		24.74	3.90
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x	2	19.00	1.60					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	6	2.82	1.38					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

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TRFR 4

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 4 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 4 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 4 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 4 132kV BKRE/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
TRFR 4 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 4 TDB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 4 132/kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
TRFR 4 AUX TRFR 1 22kV/400V	30 25 25	5 (460x230mm)	1	1	8	J	0.73	0.23
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					100		30.03	3.72
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	5	3.65	1.15					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

TRFR 3

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 3 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 3 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 3 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 3 132kV BKRE/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
TRFR 3 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 3 TDB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 3 132/kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
TRFR 3 AUX TRFR 1 22kV/400V	30 25 25	5 (460x230mm)	1	1	8	J	0.73	0.23
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					100		30.03	3.72
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	5	3.65	1.15					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

TRFR 2

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 2 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 2 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 2 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 2 132kV BKRE/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
TRFR 2 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 2 TDB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 2 132/kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
TRFR 2 AUX TRFR 1 22kV/400V	30 25 25	5 (460x230mm)	1	1	8	J	0.73	0.23
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					100		30.03	3.72
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	5	3.65	1.15					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

TRFR 13

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 13 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 13 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 13 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 13 132kV BKRE/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
TRFR 13 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 13 132/kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					84		29.30	3.49
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**


"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

TRFR 12

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL (kg)	MASS BOLTS(kg)
TRFR 12 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 12 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 12 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
TRFR 12 132kV BKRE/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
TRFR 12 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
TRFR 12 132/kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					84		29.30	3.49
TOTALS								
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE								
MPUMALANGA 1	FEEDER No. 7							
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
MPUMALANGA 1 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
MPUMALANGA 1 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
MPUMALANGA 1 132kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
MPUMALANGA 1 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
MPUMALANGA 1 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
MPUMALANGA 1 132kV BKR E/SW LINE SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
MPUMALANGA 1 132kV LINE E/SW	30 25	5 (460x230mm)	2	1	8	J	0.00	0.00
MPUMALANGA 1 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTAL					112		10.02	4.14


TOTALS

LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)
0.54/1790 x			
0.54/400 x			
0.54/403 (J) x	7	4.38	1.38
0.54/1794 (L) x	12	5.64	2.76

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

THE ABOVE PROFORMA/SCHEDULE IS ONLY APPLICABLE IF THE BAY'S LABELS HAVE NOT ALREADY BEEN REPLACED TO ALIGN WITH REV 2 OF THE LABELLING STANDARD 240-120804300.

GEORGEDALE								
FERRALOYS 1		FEEDER No. 6						
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
FERRALOYS 1 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 1 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 1 132kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 1 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 1 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
FERRALOYS 1 132kV BKR E/SW LINE SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
FERRALOYS 1 132kV LINE E/SW	30 25	5 (460x230mm)	2	1	8	J	0.00	0.00
FERRALOYS 1 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTAL					112		10.02	4.14


TOTALS

LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)
0.54/1790 x			
0.54/400 x			
0.54/403 (J) x	7	4.38	1.38
0.54/1794 (L) x	12	5.64	2.76

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

THE ABOVE PROFORMA/SCHEDULE IS ONLY APPLICABLE IF THE BAY'S LABELS HAVE NOT ALREADY BEEN REPLACED TO ALIGN WITH REV 2 OF THE LABELLING STANDARD 240-120804300.

GEORGEDALE FERRALOYS 2	 FEEDER No. 5							
	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
FERRALOYS 2 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 2 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 2 132kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 2 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
FERRALOYS 2 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
FERRALOYS 2 132kV BKR E/SW LINE SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
FERRALOYS 2 132kV LINE E/SW	30 25	5 (460x230mm)	2	1	8	J	0.00	0.00
FERRALOYS 2 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTAL					112		10.02	4.14


TOTALS

LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)
0.54/1790 x			
0.54/400 x			
0.54/403 (J) x	7	4.38	1.38
0.54/1794 (L) x	12	5.64	2.76

*** NOTE:**

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GEORGEDALE								
UMLAAS 2		FEEDER No. 2						
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
UMLAAS 2 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 2 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 2 132kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 2 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 2 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
UMLAAS 2 132kV BKR E/SW LINE SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
UMLAAS 2 132kV LINE E/SW	30 25	5 (460x230mm)	2	1	8	J	0.00	0.00
UMLAAS 2 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTAL					112		10.02	4.14


TOTALS

LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)
0.54/1790 x			
0.54/400 x			
0.54/403 (J) x	7	4.38	1.38
0.54/1794 (L) x	12	5.64	2.76

*** NOTE:**

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GEORGEDALE								
UMLAAS 1	FEEDER No. 1							
LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
UMLAAS 1 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 1 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 1 132kV LINE ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 1 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
UMLAAS 1 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
UMLAAS 1 132kV BKR E/SW LINE SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
UMLAAS 1 132kV LINE E/SW	30 25	5 (460x230mm)	2	1	8	J	0.00	0.00
UMLAAS 1 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT, SA & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	4 SETS	48	L	5.64	2.76
TOTAL					112		10.02	4.14

TOTALS

LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)
0.54/1790 x			
0.54/400 x			
0.54/403 (J) x	7	4.38	1.38
0.54/1794 (L) x	12	5.64	2.76

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

THE ABOVE PROFORMA/SCHEDULE IS ONLY APPLICABLE IF THE BAY'S LABELS HAVE NOT ALREADY BEEN REPLACED TO ALIGN WITH REV 2 OF THE LABELLING STANDARD 240-120804300.

CAP 1

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
CAP 1 132kV	100 75	1 (1830x305mm)	1	1	8	0.54/400	22.15	0.50
CAP 1 132kV BKR	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
CAP 1 132kV B/B 1 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
CAP 1 132kV B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.73	0.23
CAP 1 132kV BKR E/SW B/B SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
CAP 1 132kV JB	30 25	7 (320x100mm)	3	1	8	NONE	NONE	NONE
R,W,B (ONE LETTER PER DISC) (CT, CVT, & BEAMS)	150	6 (DIA. 230mm)	4,5,6	3	12	L	1.41	0.69
TOTAL					60		26.48	2.11
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/400 x	1	22.15	0.50					
0.54/403 (J) x	4	2.92	0.92					
0.54/1794 (L) x	9	1.41	0.69					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/CPL B

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/CPL B B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.00	0.23
132kV B/CPL B B/B 1 ISOL	30 25	5	1	1	8	J	0.73	0.23
132kV B/CPL B BKR	30 25	5 (460x230mm)	1	1	16	J	0.73	0.23
132kV B/CPL B BKR E/SW B/B 2 SIDE	30 25 25	5 (460x230mm)	2	1	8	0	0.73	0.23
132kV B/CPL B BKR E/SW B/B 1 SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
132kV B/CPL B 132kV JB	30 25	7 (320x100mm)	3	1	4			
R, W, B (ONE LETTER PER DISC) (CT & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					88		7.15	3.22
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x								
0.54/403 (J) x	4	2.92	1.15					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/CPL A

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/CPL A B/B 2 ISOL	30 25	5 (460x230mm)	1	1	8	J	0.00	0.23
132kV B/CPL A B/B 1 ISOL	30 25	5	1	1	8	J	0.73	0.23
132kV B/CPL A BKR	30 25	5 (460x230mm)	1	1	16	J	0.73	0.23
132kV B/CPL A BKR E/SW B/B 2 SIDE	30 25 25	5 (460x230mm)	2	1	8	0	0.73	0.23
132kV B/CPL A BKR E/SW B/B 1 SIDE	30 25 25	5 (460x230mm)	2	1	8	J	0.73	0.23
132kV B/CPL A 132kV JB	30 25	7 (320x100mm)	3	1	4			
R, W, B (ONE LETTER PER DISC) (CT & BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	4.23	2.07
TOTAL					88		7.15	3.22
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x								
0.54/403 (J) x	4	2.92	1.15					
0.54/1794 (L) x	9	4.23	2.07					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/B 2B

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/B 2B	150	1 (1830x305mm)	1	1	16	0.54/1790	9.50	0.80
132kV B/B 2B VT	30 25	5 (460x230mm)	1	1	8	J	143.99	0.23
132kV B/B 2B E/SW	30 25	5 (460x230mm)	2	1	8	J	143.99	0.23
132kV B/B 2B 132kV VT JB	30 25	7 (320x100mm)	3	1	4	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (ON VT's) (ON BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	SETS	18	J L	431.97 2.82	0.69 1.38
				1				
				2				
TOTALS					54		732.27	3.33
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x	1	9.50	0.80					
0.54/403 (J) x	5	719.95	1.15					
0.54/1794 (L) x	6	2.82	1.38					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/B 2A

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/B 2A	150	1 (1830x305mm)	1	2	32	0.54/1790	19.00	1.60
132kV B/B 2A VT	30 25	5 (460x230mm)	1	1	8	J	143.99	0.23
132kV B/B 2A E/SW	30 25	5 (460x230mm)	2	1	8	J	143.99	0.23
132kV B/B 2A 132kV VT JB	30 25	7 (320x100mm)	3	1	4	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (ON VT's) (ON BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	SETS	18	J L	431.97 2.82	0.69 1.38
				1				
				2				
TOTALS					70		741.77	4.13
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x	2	19.00	1.60					
0.54/403 (J) x	5	719.95	1.15					
0.54/1794 (L) x	6	2.82	1.38					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/B 1

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/B 1	150	1 (1830x305mm)	1	2	32	0.54/1790	19.00	1.60
132kV B/B 1 VT	30 25	5 (460x230mm)	1	1	8	J	143.99	0.23
132kV B/B 1 E/SW	30 25	5 (460x230mm)	2	1	8	J	143.99	0.23
132kV B/B 1 132kV VT JB	30 25	7 (320x100mm)	3	1	4	NONE	NONE	NONE
R, W, B (ONE LETTER PER DISC) (ON VT's) (ON BEAMS)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	SETS	18	J L	431.97 2.82	0.69 1.38
				1				
				2				
TOTALS					70		741.77	4.13
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x	2	19.00	1.60					
0.54/403 (J) x	5	719.95	1.15					
0.54/1794 (L) x	6	2.82	1.38					

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.

GEORGEDALE



132kV B/B 2 B/SECT 1

LABEL WORDING	LETTER SIZE (mm)	LABEL TYPE & SIZE	COLOUR SCHEME	QTY	WASHERS QTY	BRACKET TYPE	MASS STEEL(kg)	MASS BOLTS(kg)
132kV B/B 2 B/SECT 1 ISOL B/B 2A SIDE	30 25 25	5 (460x230mm)	1	1	8	J	0.73	0.23
132kV B/B 2 B/SECT 1 ISOL B/B 2B SIDE	30 25 25	5 (460x230mm)	1	1	8	J	0.73	0.23
132kV B/B 2 B/SECT 1 BKR	30 25	5 (460x230mm)	1	1	0	J	0.73	0.23
B/SECT 1 132kV JB	30 25	7 (320x100mm)	3	1	4	—	NONE	NONE
R, W, B (ONE LETTER PER DISC) (CT)	150	6 (DIA. 230mm)	4,5,6 (1 SET)	3 SETS	36	L	6.57	2.07
TOTAL					56		8.76	2.76
LABEL TYPE	QTY.	S/W (kg)	BOLTS (kg)					
0.54/1790 x								
0.54/400 x								
0.54/403 (J) x	12	8.76	2.76					
0.54/1794 (L) x								

*** NOTE:**

"J" & "L" Bracket quantities are for calculation purposes only and will be ordered on a separate steelwork pro-forma.