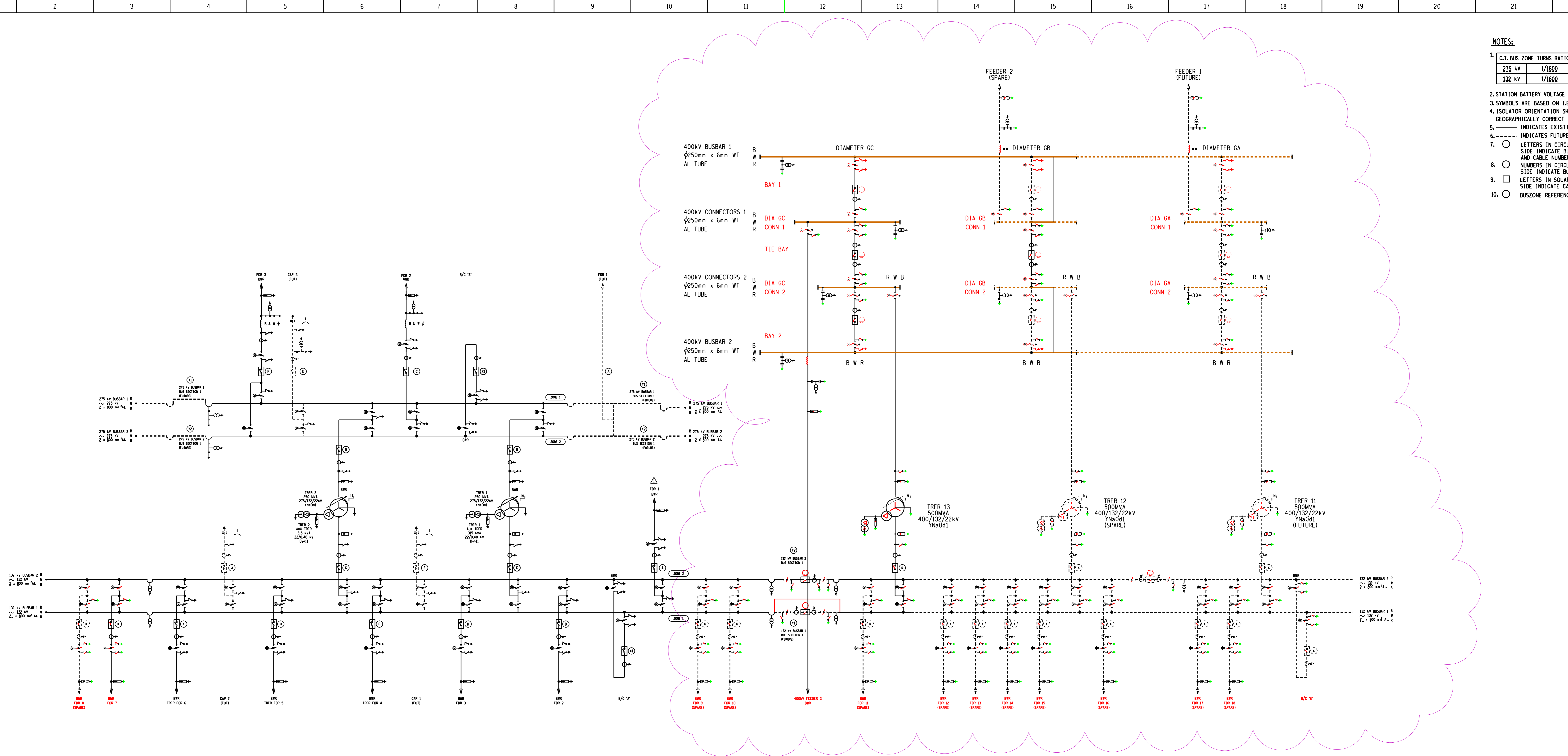


NOTES:

- C.T. BUS ZONE TURNS RATIO

275 kV	1/1600
132 kV	1/1600
- STATION BATTERY VOLTAGE 110 V D.C.
- SYMBOLS ARE BASED ON I.E.C.
- ISOLATOR ORIENTATION SHOWN GEOMATICALLY CORRECT
- INDICATES EXISTING
- INDICATES FUTURE
- LETTERS IN CIRCLES ON 275 kV SIDE INDICATE BUSZONE CIRCUIT AND CABLE NUMBERS
- NUMBERS IN CIRCLES ON 132 kV SIDE INDICATE BUSZONE CIRCUIT.
- LETTERS IN SQUARES ON 275kV SIDE INDICATE CABLE NUMBERS.
- BUSZONE REFERENCE NUMBERS.



**CONCEPT DESIGN
NOT FOR CONSTRUCTION**

C.B. RATING	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A	kA				
275	3150	50	TRANSFORMER 1.	250 MVA.		✓
132	3150	50				
275	3150	50	TRANSFORMER 2.	250 MVA.	✓	
132	3150	40				

C.B. RATING	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A	kA		2007	2013	2014
3150	40	FEEDER 1	VENULU 1	✓		
3150	40	FEEDER 2	GIYANI 1	✓		
3150	40	FEEDER 3	MAMITWA	✓		
3150	40	TRFR FEEDER 4	BOLOBEDU 2			✓
3150	40	TRFR FEEDER 5	BOLOBEDU 1	✓		
3150	40	FEEDER 6	BOMBENI			✓
3150	40	FEEDER 7	LETABA			
3150	40	FEEDER 8	(FUTURE)			
3150	40	FEEDER 9	(FUTURE)			
3150	40	FEEDER 10	(FUTURE)			
3150	40	FEEDER 11	(FUTURE)			
3150	40	FEEDER 12	(FUTURE)			
3150	40	FEEDER 13	(FUTURE)			
3150	40	FEEDER 14	(FUTURE)			
3150	40	FEEDER 15	(FUTURE)			
3150	40	FEEDER 16	(FUTURE)			
		BUSBAR 1 BUS SECTION 1				
		BUSBAR 2 BUS SECTION 1				
		BUSBAR 2 BUS SECTION 2	(FUTURE)			
		CAPACITOR 1	UNEQUIP. FUTURE			
		CAPACITOR 2	UNEQUIP. FUTURE			
		BUS COUPLER 'A'	EQUIPPED BAY			
		BUS COUPLER 'B'	(FUTURE)			

C.B. RATING	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A	kA				
3150	50	FEEDER 1	SPARE			✓
4000	50	FEEDER 2	TABOR 1			✓
4000	50	FEEDER 3	WITKOP 1	✓		
3150	50	BUS COUPLER 'A'	UNEQUIP. FUTURE	✓		✓

C.B. RATING	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A	kA				
		TRANSFORMER 11	250 MVA.			
		TRANSFORMER 12	250 MVA.			
400	4000	50	TRANSFORMER 13	250 MVA.	✓	

C.B. RATING	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A	kA				
4000	50	FEEDER 1	FUTURE			
4000	50	FEEDER 2	SPARE			
4000	50	FEEDER 3	FOSKOR 1	✓		

C.B. RATING	DIAMETER	BAY	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4
kV	A						
4000	50	GA	BAY 1 (FUTURE), TIE BAY (FUTURE), BAY 2 (FUTURE)	FEEDER 1 (FUTURE), TRFR 11 (FUTURE)			
4000	50	GB	BAY 1 (FUTURE), TIE BAY (FUTURE), BAY 2 (FUTURE)	FEEDER 2 (FUTURE), TRFR 12 (FUTURE)	✓		
4000	50	GC	BAY 1, TIE BAY, BAY 2	FEEDER 3, TRANSFORMER 13	✓		

REV	DESCRIPTION	DRAWN	CHKD	CHKD (ELEC)	AUTH (ELEC)	DATE	Sp16P06-SE-01	REFERENCE DRAWINGS
0								
DESIGN CHECKED	DESIGN APPROVED	Eskom		Eskom Holdings		SOC Limited REG No. 2002/01552T/30		
DATE	DATE	SPENCER		STATION ELECTRIC DIAGRAM		EXTENTION TO THE RIGHT - OPTION 3		
DESIGN CHECKED	DRAWN BY	©		SHEET NUMBER		REVISION		
DATE	DATE	SCALE:		Sp16P06-SE-C3		0 0		

132kV TUBULAR BUSBAR LAYOUT
FND, TRENCH & EARTH MAT
KEY PLAN