










NOTES:

1. The purpose of this drawing is to clarify the requirements of the associated contract/enquiry specification. The issue of this with the specification does not absolve the successful contractor from his normal responsibility to provide a satisfactory scheme or to submit drawings of systems proposed for approval by the client.

2. All relays have been shown de-energised with switches open

3. This drawing will enable the different contractors to co-ordinate their respective systems with associated equipment. For this reason ferrule numbers of interconnecting points must be strictly adhered to. Where absolutely necessary ferrule numbers of connectors not associated with equipment on other contract may be added or altered.

<u>LEGEND</u>	
TMK	Transformer: Marshalling Kiosk
TCCP	Tap Change Control Panel
TCM	Tap Change Mechanism
VR Relay	Voltage Regulating Relay
CB	Circuit Breaker
BB1	Busbar 1
BB2	Busbar 2
PB	Push Button
S/V	Supervisory
BCD	Binary Coded Decimal
DC	Over Current
<V	Under Voltage
R	Resistor
	Fuse
	Link
	Control Switch
	Push Button
	Relay Digital Input
	Relay Analog Input
	Normally Open Contact
	Normally Closed Contact
	Current Transformer

DATE	JRL				
DRW	05/08/2013		2	UPDATED I.V. SPARE CT RATIO	HL 31/07/2015
TRACES			1	TRANSFORMER CT JUDGMENTS	2-4H 06/08/2013
		REFERENCE DRAWING:		REVISING:	87.
<p align="center"><b>ETHEKWINI ELECTRICITY</b></p> <p align="center">GENERAL PROTECTION AND CONTROL SCHEMATICS FOR POWER TRANSFORMERS</p>					
CHEF					
PLANNING					
ENGINEER					
PROTECTION					
ENGINEER					
PLAN.PROJ1					
ENGINEER					
PLAN.PROJ1					
MANAGER					
APPROVED		SCALE	DRAWING NUMBER		REV:
DIRECTOR TRANSMISSION		N.T.S.	TD 21		2