

SECTION 3

GENERAL ELECTRICAL INSTALLATION

BILLS OF QUANTITIES

PORT SHEPSTONE REGIONAL HOSPITAL NEW PSYCHIATRIC WARD

PREAMBLE

These Bills of Quantities form part of the Contract Documents, together with the drawings and are to be read in conjunction therewith. It shall be completed and returned upon tender closing date.

A price or rate shall be entered against each item in the Bills of Quantities, whether quantities are stated or not. Items which are not priced shall be considered as covered by other prices or rates in this Bills of Quantities.

Provisional cost amounts shall be treated as stated in the Conditions of Contract and in the Bills of Quantities.

The Quantities in the Bills of Quantities are to be regarded as approximate and not necessarily the actual quantities of work to be done.

The unit rates entered into the Bills of Quantities shall include the cost of all smaller items of installation according to the requirements of the Specification and generally required for the Electrical and Associated Installations.

The exact net quantity of measured work shall be taken as the basis for payment to the Contractor. The Contractor must allow in the rates for all cutting and waste.

No alteration, additions or erasure may be made to the text of the Bills. If such an alteration, addition or erasure is made, it shall not be acknowledged and the original wording of the text shall apply.

The unit rate entered under the heading "unit rate" shall be taken as the correct rate tendered for the execution of the Work. Should there be any difference between the grand total of the Bills rates and the Tender prices, the Electrical Engineer shall have the right to make adjustments to individual prices as may be deemed necessary in order to reconcile the grand total of the Bills of Quantities with the Tender Price. In such an event the contractor will be consulted, but failing to reach an agreement between the two parties, the decision of the Electrical shall be final and binding.

General directions and descriptions of work and material given in the Specification are not necessarily repeated in the Bills of Quantities.

The Contractor shall refer to the Specification for this information.

The final Contract Value for the completed contract shall be calculated from the actual measured material used and work done priced against the unit rate tendered for the various items in the Bills of Quantities.

All prices and tariffs completed herein shall be net, VAT shall be added to the sub total to give an inclusive Final Contract Value.

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**PORT SHEPSTONE REGIONAL HOSPITAL,
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	PROVISIONAL SUM Allow a provisional sum for the recovery of non- indeterminable Works related to the Demolishment of Structures during the construction process on site Profit and Attandance				40 000,00

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

ELECTRICAL INSTALLATIONS (CPAP Work Group
No. 160)

PROVISIONAL SUM

COLLECTION PAGE

		AMOUNT
Total brought forward from pages	PS6/1	
Total Carried forward to Summary page (ESP)		

**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK (CPAP
Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	PREAMBLES Refer to attached Specification for the General Electrical Installation				
1	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation of the General Electrical Installation including fittings, materials and workmanship for a period of TWELVE MONTHS after date of completion	item			
2	TESTING Allow for testing and commissioning the whole of the electrical installation as laid down in the specification, for retesting as may be required after the making good of all defective work to the entire satisfaction of the Department of Works Works, the Department of Health and the Electrical Engineer.	Item			
3	AS BUILT DRAWINGS Provision for the drawings showing all site cable routes, conduit routes, drawboxes and positions of outlets, etc.	Item			
4	CERTIFICATES of COMPLIANCE Provision for the Certificates of Compliance to be issued on completion of the project	Item			
5	SUPPLY CABLES to BUILDINGS to be DEMOLISHED The supply cables to the Existing Buildings to be Demolished are to be recovered as directed on site and to be handed over to the hospital Staff. A schedule of cables removed is to be compiled, signed the designated Hospital member and submitted to the Electrical Engineer	Item			

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	REINFORCED CONCRETE to be DEMOLISHED Steel Reinforced Concrete to be Demolished in order to install Cable Pipes under existing Pathways Measured in Cubic Metres	M ³	4		
2	Temporary Supply Cable to Site Office Allow to Supply and Install a Temporary Supply to the Site Office consisting of the Supply cable and Disbordette as per Specification	Item			
3	Repositioning of cable to the Oxygen Storage Tank Set The New position of the Oxygen Storage Tank Set is indicated on the Site Plan Drawing Noted that the new Road and Pathways are to be repositioned and that the Electrical Installations are to be secured during in the surrounds during Construction work on Site	Item			
4	SUB STATION UPGRADES Allow to supply and install the Works described for upgrades to be undertaken all as Part of the Sub Station Upgrades including New Main Supply Switchgear, New Bus Bar Run, New section to be added to the Existing West Sub Station Main Low Tension Switchboard, the New Standby Generator Set including, New Control panel, alterations and the essential works related to these upgrades works related to these upgrades including the related alterations to existing Installations all as described and allowed for under the various applicable sections. It must be noted however that various of these alterations will have to be carried out outside of normal working hours, at times to be arranged with the responsible hospital personnel. The contractor must ensure that full co-operation must be made in this respect so that there is no undue inconveniences caused that may unduly affect the normal function of the Hospital.	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK

(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	EXISTING SWITCHGEAR and INSTRUMENTS to be REMOVED from the MAIN TRANSFORMER SWITCHBOARD Noted that the switchgear and Instruments are to be handed over to the designated Hospital Staff member and that an acceptance document is to be submitted to the Electrical Engineer as soon as possible after removal	Item			
2	Existing 800Amp 3P MCB feeding the Main Switchboard in the West Substation	Item			
3	Existing 400Amp 3P MCB feeding the Laundry	Item			
4	The Existing Instruments including Ammeters, Voltmeters, selector switch and Protection switchgear	Item			
5	THE EXISTING SUPPLY CABLES to the WEST SUB STATION Allow to remove the two 185mm ² 4-core PVC SWA PVC cables routed at high level via the passage way separating the two Substations The cables are to be recovered and handed over to the designated hospital staff member and that an acceptance document to be submitted to the Electrical Engineer as soon as possible after removal	Item			
6	Existing Supply Cable to the Laundry Allow to recover and divert the existing cable consisting of a 150mm ² 4-core PVC SWA PVC ECC cable, presently routed via the cable trench to the existing Transformer Sub Station, to the Main Switchboard in the West Substation Noted that the cable has been installed via. the Service Tunnel and that it is to be repositioned. via new cable pipes to be installed all as part of the contract	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK

(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	The NEW MAIN ACB and INSTRUMENTS The NEW MAIN ACB and INSTRUMENTS to be installed into the existing Main Transformer Switchboard including fabrication of the Existing Switchboard front Panels to accommodate the revisions, all as follows:	Item			
2	NEW MAIN ACB Supply and install a New 1600 Amp Triple Pole 50kA Air Circuit Breaker MITSUBISHI Type AE 2000-SS or other equal and approved type to be built into existing Sub Station Switchboard complete with bus bar connections to existing switchboard bus bars and New Overhead Bus Bar run supply to existing West Sub Main Low Tension Switchboard.	No	1		
3	NEW INSTRUMENTS (New ACB) Supply and Install New Instrument Sets: Three 0 to 2000Amp Ammeters, 0 to 400Volt Voltmeter, selector Switch to select Voltages between Phases, Phases to Neutral and Off and a set of fuse cartridges and Protection fuses	Item			
4	NEW FRONT PANELS Supply and install new Fabricated Front Panels to allow for the revisions as above. The specification to follow the requirements described for Distribution boards all as per detail Specifications. The Front Panels to all required Labels, consisting of all LEGAL and INFORMATION Labels and Nameplates as per Specification	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	NEW OVERHEAD BUS BAR SUPPLY Supply and install the New Overhead Bus Bar Supply System between the New ACB installed in the Existing Main Low Tension Transformer Switchboard and the New Main Switch to be installed in the West Substation Main Low Tension Switchboard, consisting of a new 2000Amp Three Phase and Neutral including Earth Bar, as specified in the Detail Specification	m	28		
2	TERMINATIONS for the Bus Bar Run Allow for Terminations for the above bus bar System including continuation of bus bars onto the switchgear terminals and neutral bars on both ends, including bolting the outer casing onto the switchboards. Noted that this will be applicable to both Main Switchboards, in the East and West Sub Stations	No	2		
3	BUS BAR RUN BENDS Ninety degree (90°) bends consisting of both lateral and inside bends as indicated installed as part of the bus bar system	No	5		
4	STRUCTURAL SUPPORTS: for BUS BAR RUN The structural supports consisting of P1000 Galvanised Unistrut Sections and 8mm Diameter Galvanised Steel Supports bolted to walls 600mm long 8mm in Diameter Galvanised Steel Hangers, at 800mm intervals along the entire length of run	No	30		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	THE EXISTING MAIN WEST SUBSTATION LOW TENSION SWITCHBOARD The Revisions consist of a NEW SECTION and ALTERATIONS TO THE EXISTING Noted that during the Revision process Power Supply to the Hospital Distribution Boards and Service Control Panels must be maintained with a minimum interruption of power as possible.	Item			
2	The NEW SECTION to be REPLACED ~NOTE~ the entire replacement of the Non and Essential Sections of the Existing Switchboard Allow to Supply and Install the New Board all as a part of the sub Local Board as indicated and detailed on Drawing SL231-SUB1 The New Board is to be accommodated to the left side of the Existing Switchboard The New Board to accommodate the "Detail of Switchgear" etc.as specified para. below	Item			
3	NEW MAIN ISOLATOR New 2000Amp 3phase 50kA Rated ON-LOAD ISOLATOR MITSUBISHI Type AE 2000-SS range or other equal and approved type as the NEW MAIN Switch	No	1		
4	NEW INSTRUMENTS (West Sub Main SB) Supply and Install New Instrument Sets: Three 0 to 2000Amp Ammeters, 0 to 400Volt Voltmeter, selector Switch to select Voltages between Phases, Phases to Neutral and Off, and a set of fuse cartridges and Protection fuses	Item			
5	THE EXISTING AND NEW BUS BAR RUNS Allow to remove the Existing Bus Bar Runs in the Non - Essential Section of the Switchboard and replace with 4 x 2000Amp Rated Section HDHC Bars on Suitably sized Cast Resin Bus Bar mounting supports for the entire estimated 2800mm width of the panel. Ie Total Bus Bar length. Allowance as follows	14m			

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	ALTERATIONS TO THE EXISTING NON and ESSENTIAL sections of the Switchboard Allow for the ALTERATIONS SPECIFIED for the Existing NON-and ESSENTIAL SECTIONS as and detailed on Drawing PE231-SUB1 The Panel Section to accommodate the "Detail of NE/E Switchgear" etc.as specified para. below the removal and refabrication requirements and include all relevant connections between new Bus Bars and Cable connections as required	Item			
2	Removal of the existing of the Existing Switchgear, Bus Bars and Instruments, all as specified	Item			
3	Supply and Install a New 800Amp 3phase 40kA Circuit breaker to feed the New Standby Generator Set Control Panel	No	1		
4	Supply and Install a New 600Amp 3phase 40kA Circuit breaker to feed the New Psychiatric Ward	No	1		
5	Supply and Install a New 400Amp 3phase 35kA Circuit breaker to feed the Existing Hot Water Heating Panel	No	1		
6	Supply and Install a New 400Amp 3phase 35kA Circuit breaker to feed the Existing Laundry Main Distribution Board	No	1		
7	Provide the Spare provisions for future Switchgear	Item			
8	Allow to Supply and Install the New Supply cable from the Specified 800Amp 3phase Circuit Breaker (refer above) to the New Standby Set control Panel consisting of 2 x 240mm ² PVC SWA PVC cables and a 70mm ² PVC Insulated Earth Conductor including overhead support system	m	20		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK

(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	The New ESSENTIAL Section of the Board Allow for the NEW BOARD SPECIFIED for the Existing ESSENTIAL SECTION as indicated and detailed on Drawing SL231-SUB1 The Panel Section to accommodate the "Detail of Essential Switchgear" etc.as specified para. below the removal and refabrication requirements and include all relevant connections between new Bus Bars and Cable connections as required	Item			
2	Removal of the existing of the Existing existing Switchgear etc. including the existing By-Pass Switch, Bus Bars and Instruments, all as specified	Item			
3	NEW INSTRUMENTS (New Essential Section) Supply and Install New Instrument Sets: Three 0 to 1000Amp Ammeters, 0 to 400Volt				
4	Voltmeter, selector Switch to select Voltages between Phases, Phases to Neutral and Off and a set of fuse cartridges and Protection fuses	Item			
5	Supply and Install a New 1000Amp 3phase 40kA Main Isolator as Main Switch fed from the New Standby Generator Set Control Panel	No	1		
6	Supply and Install a New 200Amp 3phase 40kA Circuit breaker to feed the New Psychiatric Ward	No	1		
7	Supply and Install a New 400Amp 3phase 35kA Circuit breaker to feed the Existing DB.LG West Block Distribution Board	No	1		
8	Provide the Spare provisions for future Switchgear as indicated	Item			

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	NEW SITE KIOSK (To replace the Existing)				
1	Allow to Supply and Install a New Site Kiosk. The new position for the Kiosk is shown on the Main Site plan, the position adjacent to the west of the existing Roadway and adjacent to the Main Core Block building.				
2	The existing Kiosk is to be de-commissioned and removed from Site				
3	The New Kiosk is to be built into the adjacent wall in position as shown				
4	The New Kiosk shall consist of a 3CR12 Metal Unit comprising of High Grade Coastal Quality.				
5	Door locks shall be fitted with a 80mm Padlock and Keys signed for by a Hospital Maintenance Staff Representative, original to be placed in the Handover Documentation File.				
6	Noted that the existing Kiosk is fed from DB.LG which is located in the Switchroom in the Adjacent West block. The supply to DB.LG is ESSENTIAL POWER SUPPLY				
7	The Kiosk shall contain the following: 4 x 200A Bus Bars (each 600mm long) mounted on Insulated supports plus appropriately sized Earth Bar	m	1		
8	200A TP 15kA MAIN ISOLATOR	No	1		
9	0-200A Ammeters and 200/5A CT's	No	3		
10	Voltmeter and 5Amp 7way Selector Switch	No	1		
11	80A TP 15kA MCB's	No	4		
12	60A TP 15kA MCB's	No	2		
13	35A TP 15kA MCB's	No	5		
14	25A TP 15kA MCB's	No	3		
15	20A TP 15kA MCB's	No	1		
	Allow to Extend the Cables including joint kits, and cable ends, sizes as follows				
16	70mm ² 4-core ECC	No	1		
17	25mm ² 4-core ECC	No	4		
18	16mm ² 4-core ECC	No	6		
19	6mm ² 2-core ECC	No	4		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	RELOCATION of OXYGEN TANK				
	Allow to fully engage from the initial stage of the relocation process iro. the Existing Oxygen Tank Installation until final handover.	Item			
	Allow to disconnect and for the reinstallation of the existing Electrical Installation.	Item			
	The Existing Installation consists of a dedicated Distribution board that must be replaced with a new Weatherproof Switch Board The Board shall be an Outdoor Weatherproof type secured by means of 4x6mm Dia. Rawlbolts to the support structure.	Item			
	The content of the Board shall consist of the following:				
	60 Amp 15kA 3-phase Isolator	No	1		
	25 Amp TP 10kA CB to feed the Main Circuit	No	1		
	10 Amp SP 5kA Mccb`s to feed the Control Circuit	No	2		
	Provide Live Bus Bars and Earth Bar	Item			
	Allow to extend the Exist. Supply Cable consisting of a 6mm ² 4-core PVC SWA PVC ECC and Control Cable 4mm ² 4-core PVC SWA PVC ECC	m m	50 50		
	Allow to supply and install joint kits as follows: For above cables				
	6mm ² 4-core	No	1		
	4mm ² 4-core	No	1		
	Allow to finally test and hanover	Item			

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	NEW RETICULATION CABLES and Related External Installations				
	Allow to Supply and Install the New Power Supply Cables from the NEW West Sub Station Main Low Tension Switchboard and the New Psychiatric Main distribution Board as follows:				
	NEW MAIN NON - ESSENTIAL LT Supply Cable				
1	Two 240mm ² 4-core ECC PVC SWA PVC cables installed via. the existing Sub Station, the existing service Tunnel, existing and new cable pipes/ manholes as shown on the Site Plan Drawing SL231 - ESP1 Two lengths of 162m x 2 x (times) equals 324m	m	324		
	NEW MAIN ESSENTIAL LT Supply Cable				
2	One 185mm ² 4-core ECC PVC SWA PVC cable installed via. the existing Sub Station, the existing service Tunnel, existing and new cable pipes/ manholes as shown on the Site Plan Drawing SL231 - ESP1	m	162		
	NEW LIFT Standby Control Cable				
3	One 4,0mm ² 4-core ECC PVC SWA PVC cable installed via. the existing Sub Station, the existing service Tunnel, existing and new cable pipes/ manholes as shown on the Site Plan Drawing SL231 - ESP1	m	262		
	Note: The cable gland ends and cable joints are to be allowed and included all as part of the above Reticulation Cable section of these Bills of Quantities				
	RETICULATION CABLE TERMINATIONS				
	Supply and Install cable glands strip back and gland off with shrouds over the glands and final connections to terminals using crimping lugs, cadmium plated bolts, nuts and lock washers. (All PVC SWA PVC ECC cables)				
4	240mm ² 4-core ECC Cable terminations	No	4		
5	180mm ² 4-core ECC Cable terminations	No	2		
6	4mm ² 4-core ECC Cable terminations	No	4		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	MAIN and SUB DISTRIBUTION BOARDS Supply and Install, delivery to site, storage of the floor standing , flush and semi-flush mounted architrave steel type power distribution boards complete with doors, switchgear mounting trays, copper bus bars, PVC wiring, labelling and legend cards including flush trays and equipment as listed below and in each case refer to the applicable LINE DIAGRAM DRAWING as indicated all as follows: The Fabrication includes the tubular metal structure of the Distribution Boards and all components, including removable front and back metal panels, fixed side panels, doors, base plinths, cable trays, switchgear mounting trays, etc. and all sundry items required as an integral part of switchboard manufacture, all as described fully in the Detail and supporting Specifications allowing 30% spare Capacity. Fabrication and Equipment details below: Parking Level Distribution Boards NEW MAIN LT DISTRIBUTION BOARD 1 NEW MAIN LT DISTRIBUTION BOARD to be installed into the New LT SWITCH ROOM NEW PSYCHIATRIC WARD: PARKING LEVEL Allow to Supply and Install the NEW LT DB equipped as per the Line Diagram on Drawing SL 231 - ELD1 and fabricated and equipped as follows, Floor Standing on a 80mm High Metal Architrave. Allow for fabrication NON - ESSENTIAL SECTION 2 4 x 800A Bus Bars plus Earth Rated 25kA 3 1000A TP 35kA MAIN ISOLATOR 4 0-800A Ammeters and 800/5A CT's 5 Voltmeter and 5A 7way Selector Switch 6 400A TP 25kA CB 7 300 TP 15kA CB 8 200A TP 15kA CB 9 125A TP 15kA CB 10 50A TP 15kA CB	Item			
		m	1		
		No	1		
		No	3		
		No	1		
		No	1		
		No	1		
		No	1		
		No	1		
		No	2		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	continued				
1	35A TP 15kA CB`s	No	2		
2	25A TP 15kA CB`s	No	4		
	ESSENTIAL SECTION (Continued)				
3	4 x 200A Bus Bars plus earth Rated 15kA	m	1		
4	200A TP 25kA MAIN ISOLATOR	No	1		
3	0-200A Ammeters and 200/5A CT`s	No	3		
4	Voltmeter and 5A 7way Selector Switch	No	1		
5	80A TP 15kA MCB`s	No	1		
6	45A TP 15kA MCB	No	1		
7	35A TP 15kA MCB`s	No	5		
8	25A TP 15kA MCB`s	No	4		
9	20A TP 15kA MCB`s	No	4		
	New Sub DB.PL				
10	New Sub DB.PL - Semi-Flush Wall mounted with 50mm stand off Metal Architrave located in the Switch room equipped as per the Line Diagram on Drawing PE231 - ELD1 Allow for Fabricated:	Item			
	NON - ESSENTIAL SECTION				
11	Set of 4 x 60A Bus Bars plus Earth Rated 15kA	m	1		
12	60A TP 15kA Isolator	No	1		
13	25A TP 10kA CB	No	1		
14	60A DP 5kA E/L Units	No	1		
15	20A SP 5kA MCB`s	No	4		
	ESSENTIAL SECTION				
16	Set of 4 x 60A Bus Bars plus Earth Rated 15kA	m	1		
17	60A TP 15kA Isolator	No	1		
18	15A TP 5kA CB	No	1		
19	10A SP 5kA MCB`s	No	16		
	<i>Outside Lights</i>				
20	25A TP 5kA CB	No	1		
21	5A SP MCB	No	1		
22	30A TP Contactor	No	1		
23	10A SP&N 5kA MCB`s	No	2		
24	24/7 Timer to operate Contactor for Outside lights	No	1		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	<i>Parking Bay Lights</i>				
1	35A TP 5kA CB	No	1		
2	5A SP MCB	No	1		
3	24Hr Time Switch with Battery Reserve	No	1		
4	30A TP Contactors	No	2		
5	10A SP&N 5kA MCB`s	No	8		
6	25A TP 5kA CB	No	1		
7	5A SP MCB for DAY LIGHT SWITCH	No	1		
	New Sub DB.GH				
8	New Sub DB.GH - Semi-Flush Wall mounted with 50mm stand off Metal Architrave located in the Guard House equipped as per the Line Diagram on Drawing SL231 - ELD1 Allow for Fabricated:	Item			
	ESSENTIAL SECTION				
9	Set of 4 x 60A Bus Bars plus Earth Rated 15kA	m	1		
10	60A TP 15kA Isolator	No	1		
11	25A TP 10kA CB	No	1		
12	60A DP 5kA E/L Unit	No	1		
13	20A SP 5kA MCB`s	No	4		
14	10A SP 5kA MCB`s	No	4		
	New Sub DB.PU - Semi-Flush Wall mounted				
15	New Sub DB.PU - Semi-Flush Wall mounted with 50mm stand off Metal Architrave located SERVICE SECTION Line Diagram on Drawing SL231 - ELD1 Allow for Fabricated:	Item			
	ESSENTIAL SECTION				
16	Set of 4 x 60A Bus Bars plus Earth Rated 15kA	m	1		
17	60A TP 15kA Isolator	No	1		
18	25A TP 10kA CB	No	2		
19	60A DP 5kA E/L Unit	No	1		
20	20A SP 5kA MCB`s	No	2		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.PLA				
1	New Sub DB.PLA - Surface Wall mounted located in the Water Storage Room equipped as per the Line Diagram on Drawing PE231 - ELD1 Allow for Fabricated:	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 60A Bus Bars Rated 15kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	1		
5	20A SP 5kA MCB's	No	2		
6	25A TP 10kA MCB	No	1		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 15kA	m	1		
8	60A TP 15kA Isolator	No	1		
9	10A SP 5kA MCB's	No	3		
	New Lift Supply DB				
	New Lift Supply DB - Surface wall mounted in Lift Shaft as per Line Diagram Drawing on SL 231 - ELD1 allow for Fabrication	Item			
10	NON-ESSENTIAL SECTION				
11	Set of 4 x 60A Bus Bars Rated 15kA	Item			
12	60A TP 10kA Isolator	No	1		
13	25A TP 10kA MCB	No	1		
	New Lift DB.L				
14	New Lift DBL - Surface DB mounted in Lift Shaft Shaft as per Line Diagram Drawing SL 231 - ELD1 Allow for Fabrication	Item			
	ESSENTIAL SECTION only				
15	60A Bus Bar Rated 5kA	Item	1		
16	30A DP 5kA Isolator	No	1		
17	60A DP 5kA E/L Units	No	1		
18	20A SP 5kA MCB	No	1		
19	10A SP 5kA MCB	No	1		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	NEW PUMP SET SUB DB				
1	New PUMP SET Sub DB - Surface and mounted in the Pump Set Plant Room equipped to supply power to two pumps as per Line Diagram Drawing SL 231 - ELD1 Allow for Fabrication ESSENTIAL POWER ONLY	Item			
2	Set of 4 x 60A Bus Bars Rated 15kA	Item	1		
3	60A TP 15kA Isolator	No	1		
4	25A TP 15kA CB's	No	2		
5	15A TP 15kA CB's	No	4		
	NEW DB.VP				
6	New VACUUM PUMP SET Sub DB - Surface and mounted in the Pump Set Plant Room equipped to supply power to two pumps as per Line Diagram Drawing SL 231 - ELD1 Allow for Fabrication ESSENTIAL POWER ONLY	Item			
7	Set of 4 x 60A Bus Bars Rated 15kA	Item	1		
8	60A TP 15kA Isolator	No	1		
9	25A TP 15kA CB's	No	2		
	NEW DB.OP				
10	New OXYGEN PLANT Sub DB - Surface mounted in the Oxygen Plant Room equipped to supply power to OXYGEN BANK as per Line Diagram Drawing SL 231 - ELD1 Allow for Fabrication ESSENTIAL POWER ONLY	Item			
11	Set of 4 x 60A Bus Bars Rated 15kA	Item	1		
12	60A TP 15kA Isolator	No	1		
13	25A SP 15kA CB's	No	2		
	NEW DB.P				
14	New DB.P Sub DB - Surface mounted in Cupboard				
15	Set of 4 x 60A Bus Bars Rated 15kA	Item			
16	60A DP 5kA E/L Units	No	1		
17	20A SP 5kA MCB's	No	2		
18	10A SP 5kA MCB's	No	3		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
New Ground Floor Level Distribution Boards					
NEW DB.G					
1	New Main Ground Floor Level Distribution Board New DB.G Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2 , fabricated and equipped as follows: Allow for Metal Fabrication		ITEM		
NON - ESSENTIAL SECTION					
2	2 Sets of 4 x 100A Bus Bars Rated 15kA	m	1		
3	100A TP 15kA Isolator	No	1		
4	25A TP 15kA CB`s for Supply to DB.GA, DB.GB DB.GC, DB.GD and DB.GE	No	5		
5	60A TP 5kA SUB Isolator	No	1		
6	60A DP 5kA E/L Units	No	1		
7	20A SP 5kA MCB`s	No	1		
8	15A SP&N 5kA MCB`s	No	4		
ESSENTIAL SECTION					
9	2 Sets of 4 x 100A Bus Bars Rated 15kA	m	1		
10	100A TP 15kA Isolator	No	1		
11	25A TP 15kA CB`s supply to DB`s GA,B,C,D &E	No	5		
12	60A TP 5kA Isolator	No	1		
13	60A DP 5kA E/L Units	No	3		
14	20A SP 5kA MCB`s	No	1		
15	20A SP&N 5kA MCB	No	1		
16	10A SP MCB`s	No	3		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	UPS SECTION (DB.G Continued)				
1	Set of 4 x 60A Bus Bars Rated 15kA	m	1		
2	60A TP 15kA Isolator	No	1		
3	60A DP 5kA E/L Units	No	3		
4	20A SP 5kA MCB`s	No	1		
5	20A DP 5kA MCB	No	1		
	New DB.GA				
6	New Sub DB.GA Ground Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2. Allow for Fabrication	Item			
	NON - ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
8	60A TP 10kA Isolator	No	1		
9	15A TP 5kA MCB`s	No	2		
10	60A DP 5kA E/L Units	No	3		
11	20A SP 5kA MCB`s	No	6		
12	15A SP&N 5kA MCB`s	No	2		
	ESSENTIAL SECTION				
13	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
14	60A TP 10kA Isolator	No	1		
15	60A DP 5kA E/L Units	No	3		
16	20A SP 5kA MCB`s	No	9		
	10A SP MCB`s	No	14		
	UPS SECTION (DB.G Continued)				
17	Set of 4 x 60A Bus Bars Rated 15kA	Item			
18	60A TP 15kA Isolator	No	1		
19	60A DP 5kA E/L Units	No	1		
20	20A SP 5kA MCB`s	No	2		
21	20A TP 5kA MCB`s	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.GB				
1	New Sub DB.GB Ground Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2. Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	1		
5	20A SP 5kA MCB`s	No	4		
6	15A SP&N 5kA MCB`s	No	2		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
8	60A TP 10kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	3		
10	20A SP 5kA MCB`s	No	2		
11	10A SP MCB`s	No	22		
	UPS SECTION				
17	Set of 4 x 60A Bus Bars Rated 15kA	Item			
18	60A TP 15kA Isolator	No	1		
19	60A DP 5kA E/L Units	No	1		
20	20A SP 5kA MCB`s	No	2		
21	20A TP 5kA MCB	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.GC				
1	New Sub DB.GB Ground Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2. Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	6		
5	20A SP 5kA MCB`s	No	16		
6	15A SP&N 5kA MCB`s	No	2		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
8	60A TP 10kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	3		
10	20A SP 5kA MCB`s	No	6		
11	10A SP MCB`s	No	19		
	UPS SECTION				
17	Set of 4 x 60A Bus Bars Rated 15kA	Item			
18	60A TP 15kA Isolator	No	1		
19	60A DP 5kA E/L Units	No	1		
20	20A SP 5kA MCB`s	No	2		
21	20A TP 5kA MCB	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.GD				
1	New Sub DB.GB Ground Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2. Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	6		
5	20A SP 5kA MCB`s	No	16		
6	15A SP&N 5kA MCB`s	No	2		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
8	60A TP 10kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	3		
10	20A SP 5kA MCB`s	No	6		
11	10A SP MCB`s	No	18		
	UPS SECTION				
12	Set of 4 x 60A Bus Bars Rated 15kA	Item			
13	60A TP 15kA Isolator	No	1		
14	60A DP 5kA E/L Units	No	1		
15	20A SP 5kA MCB`s	No	2		
16	20A TP 5kA MCB	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.GE				
1	Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2. Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	6		
5	20A SP 5kA MCB`s	No	16		
6	15A SP&N 5kA MCB`s	No	2		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
8	60A TP 10kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	3		
10	20A SP 5kA MCB`s	No	6		
11	10A SP MCB`s	No	8		
	UPS SECTION				
12	Set of 4 x 60A Bus Bars Rated 15kA	Item			
13	60A TP 15kA Isolator	No	1		
14	60A DP 5kA E/L Units	No	1		
15	20A SP 5kA MCB`s	No	2		
16	20A TP 5kA MCB	No	1		
	New DB.GP				
17	New Sub DB.GP Ground Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD2 Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
18	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
19	60A TP 10kA Isolator	No	1		
20	60A DP 5kA E/L Units	No	1		
21	20A SP 5kA MCB`s	No	3		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	ESSENTIAL SECTION (Continued)				
1	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
2	60A TP 10kA Isolator	No	1		
3	20A TP 5kA CB	No	4		
4	60A DP 5kA E/L Units	No	2		
5	20A SP 5kA MCB's	No	4		
6	10A SP MCB's	No	3		
	EARTH POINT SECTION				
7	Set of 4 x 60A Bus Bars Rated 15kA	Item			
8	60A TP 15kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	1		
10	20A SP 5kA MCB's	No	3		
11	20A TP 5kA CB's	No	1		
	New First Floor Level Distribution Boards				
	NEW DB.F				
12	New DB.F New Main First Floor Level Distribution Board. Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing SL 231 - ELD3 Allow for Fabrication	Item			
	NON - ESSENTIAL SECTION				
13	4 x 100A Bus Bars Rated 15kA	m	1		
14	16A TP 10kA Isolator	No	1		
15	25A TP 5kA MCB's	No	5		
16	60A TP 5kA Isolator	No	1		
17	60A DP 5kA E/L Units	No	1		
18	10A SP 5kA MCB's	No	3		
19	15A SP&N 5kA MCB's	No	5		
	ESSENTIAL SECTION				
20	4 x 100A Bus Bars Rated 15kA	m	1		
21	100A TP 15kA Isolator	No	1		
22	30A TP 5kA MCB's	No	5		
23	25A TP 15kA MCB for supply to UPS PANEL	No	1		
24	60A DP 5kA E/L Units	No	2		
25	20A SP 5kA MCB's	No	4		
26	20A SP&N 5kA MCB	No	2		
27	10A SP MCB's	No	9		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	UPS SECTION				
1	Set of 4 x 60A Bus Bars Rated 15kA	Item			
2	60A TP 15kA Isolator	No	1		
3	60A DP 5kA E/L Unit	No	1		
4	20A SP 5kA MCB`s	No	3		
	NEW DB.FA				
5	New Sub DB.FA First Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing PE 231 - ELD3. Allow for Fabrication	Item			
	NON - ESSENTIAL SECTION				
6	Set of 4 x 100A Bus Bars Rated 15kA	m	1		
7	60A TP 15kA Isolator	No	1		
8	60A DP 5kA E/L Units	No	3		
9	20A SP 5kA MCB`s	No	11		
	ESSENTIAL SECTION				
10	Set of 4 x 60A Bus Bars Rated 10kA	m	1		
11	60A TP 10kA Isolator	No	1		
12	60A DP 5kA E/L Units	No	2		
13	20A SP 5kA MCB`s	No	4		
14	10A SP MCB`s	No	6		
	UPS SECTION				
15	Set of 4 x 60A Bus Bars Rated 15kA	Item			
16	60A TP 15kA Isolator	No	1		
17	60A DP 5kA E/L Unit	No	1		
18	20A SP 5kA MCB`s	No	3		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.FB				
1	New Sub DB.FB First Floor Level Distribution Board Surface Mounted in Cupboard Space equipped as per Line Diagram on Drawing PE 231 - ELD3 Allow for Fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 100A Bus Bars Rated 15kA	m	1		
3	60A TP 15kA Isolator	No	1		
4	25A TP 10kA CB	No	1		
5	50A TP 10kA CB	No	1		
6	60A DP 5kA E/L Unit	No	1		
7	20A SP 5kA MCB's	No	2		
	ESSENTIAL SECTION				
8	Set of 4 x 60A Bus Bars Rated 15kA	m	1		
9	60A TP 15kA Isolator	No	1		
10	25A TP 5kA CB	No	1		
11	5A SP 5kA CB	No	1		
12	30A 3P Contactor	No	1		
13	10A SP&N 5kA CB's	No	5		
14	60A DP 5kA E/L Units	No	2		
15	20A SP 5kA MCB's	No	4		
16	10A SP MCB's	No	3		
	UPS SECTION				
17	Set of 4 x 60A Bus Bars Rated 15kA	Item			
18	60A TP 15kA Isolator	No	1		
19	60A DP 5kA E/L Unit	No	1		
20	20A SP 5kA MCB's	No	3		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New DB.FC				
1	New Sub DB.FC First Floor Level Distribution Board Semi Flush Mounted in Brick Wall equipped as per Line Diagram on Drawing SL 231 - ELD3 DB to be mounted on a 50mm Stand-Off metal Architrave Allow for Fabrication	Item			
	NON - ESSENTIAL SECTION				
2	Set of 4 x 100A Bus Bars Rated 15kA	m	1		
3	60A TP 10kA Isolator	No	1		
4	60A DP 5kA E/L Units	No	1		
5	20A SP 5kA MCB	No	1		
6	25A TP 10kA MCB	No	1		
	ESSENTIAL SECTION				
7	Set of 4 x 60A Bus Bars Rated 15kA	m	1		
8	60A TP 15kA Isolator	No	1		
9	60A DP 5kA E/L Units	No	1		
10	10A SP 5kA MCB`s	No	3		
11	10A SP MCB`s	No	1		
	New DB.FM				
12	New Sub DB.FM, DB.CPFirst Floor Level DB`s Board Semi Flush Mounted in Brick Wall equipped as per Line Diagram on Drawing SL 231 - ELD3 DB to be mounted on a 50mm Stand-Off metal Architrave Allow for Fabrication	Item Item			
	ESSENTIAL SECTION				
13	Set of 4 x 60A Bus Bars Rated 5kA	m	1		
14	60A TP 10kA Isolator	No	1		
15	60A DP 5kA E/L Units	No	2		
16	20A SP 5kA MCB	No	6		
17	10A SP 10kA MCB	No	4		
18	25A TP 10kA MCB	No	1		
19	New DB.CP Including fabrication				
	ESSENTIAL SECTION				
20	Set of 4 x 60A Bus Bars Rated 5kA	m	1		
21	60A TP 10kA Isolator	No	1		
22	60A DP 5kA E/L Units	No	1		
23	20A SP 5kA MCB	No	2		
24	10A SP 5kA MCB	No	4		
25	25A TP 10kA MCB	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	New Sub DB.ACDB1				
1	New Sub DB.ACDB1 First Floor Level Plant Room Board Surface Floor Standing equipped as per Line Diagram on Drawing SL 231 - ELD3 New Floor Standing DB with removable Front and Back Panels supported on 80mm high Metal Architrave. Allow for fabrication	Item			
	NON - ESSENTIAL SECTION				
2	4 x 600A Bus Bars plus Earth Rated 25kA	m	1		
3	600A TP 25kA Isolator	No	1		
4	0-600A Ammeters and 600/5A CT's	No	3		
5	Voltmeter and 5A 7way Selector Switch	No	1		
6	35A TP 15kA CB's	No	3		
7	30A TP 15kA CB	No	1		
8	25A TP 15kA CB's	No	2		
9	15A TP 15kA CB's	No	6		
10	20A TP 5kA CB	No	1		
11	10A SP&N 5kA MCB's	No	10		
	ESSENTIAL SECTION DB.ACDB1 (Continued)				
12	4 x 150A Bus Bars plus Earth Rated 25kA	m	1		
13	150A TP 25kA Isolator	No	1		
14	0-150A Ammeters and 150/5A CT's	No	3		
15	Voltmeter and 5A 7way Selector Switch	No	1		
16	30A TP 15kA CB	No	1		
17	25A TP 15kA CB's	No	2		
18	20A TP 15kA CB	No	1		
19	15A TP 5kA CB's	No	10		
20	New UPS DB BRILLIANT BLUE COVER	Item			
	SUPPLY SECTION ESSENTIAL and RETURN				
21	4 x 60A Bus Bars plus Earth Rated 15kA	m	1		
22	60A TP 15kA Isolator	No	1		
23	20A TP 15kA MCB,s	No	6		
24	20A TP 15kA MCB,s	No	6		
25	10A SP 5kA MCB,s	No	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK

(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	SUPPLY CABLES to DISTRIBUTION BOARDS Refer Drawing SL 231 - MRD and as per spec. Supply and install Mains & Sub Mains Essential, Non-Essential and UPS Power Supply Cables to be installed in cable pipes, via Sleeves vertical cable ducts, cable ladders, etc. as follows:				
1	185mm ² 4-core PVC SWA PVC ECC Cable	m	48		
2	150mm ² 4-core PVC SWA PVC ECC Cable	m	620		
3	120mm ² 4-core PVC SWA PVC ECC Cable	m	324		
4	95mm ² 4-core PVC SWA PVC ECC Cable	m	312		
5	70mm ² 4-core PVC SWA PVC ECC Cable	m	20		
6	50mm ² 4-core PVC SWA PVC ECC Cable	m	120		
7	35mm ² 4-core PVC SWA PVC ECC Cable	m	138		
8	25mm ² 4-core PVC SWA PVC ECC Cable	m	450		
9	16mm ² 4-core PVC SWA PVC ECC Cable	m	852		
10	10mm ² 4-core PVC SWA PVC ECC Cable	m	1368		
11	6mm ² 4-core PVC SWA PVC ECC Cable	m	1306		
12	4mm ² 4-core PVC SWA PVC ECC Cable	m	1047		
13	2,5mm ² 4-core PVC SWA PVC ECC Cable	m	664		
14	2,5mm ² 3-core PVC SWA PVC ECC Cable	m	40		
15	2,5mm ² 2-core PVC SWA PVC ECC Cable	m	660		
16	4mm ² 4-core PVC SWA PVC ECC Cable Signal Cable installed into Ground pipes as required	m	200		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CABLE TERMINATIONS on Distribution Boards				
	Supply and Install cable glands strip back and gland off with shrouds over the glands and final connections to terminals using crimping lugs, cadmium plated bolts, nuts and lock washers. (All PVC SWA PVC ECC cables)				
1	185mm ² 4-core ECC Cable terminations	No	4		
2	150mm ² 4-core ECC Cable terminations	No	4		
3	95mm ² 4-core ECC Cable terminations	No	4		
4	50mm ² 4-core ECC Cable terminations	No	2		
5	35mm ² 4-core ECC Cable terminations	No	4		
6	25mm ² 4-core ECC Cable terminations	No	4		
7	16mm ² 4-core ECC Cable terminations	No	16		
8	10mm ² 4-core ECC Cable terminations	No	24		
9	6mm ² 4-core ECC Cable terminations	No	20		
10	4mm ² 4-core ECC Cable terminations	No	16		
11	2,5mm ² 4-core ECC Cable terminations	No	10		
12	2,5mm ² 3-core ECC Cable terminations	No	4		
13	2,5mm ² 2-core ECC Cable terminations	No	22		
14	4mm ² 4-core ECC Cable Terminations (Lift Signals from Standby Set Control Panel)	No	4		
15	4mm ² 2-core ECC Cable Terminations Signal Cables	No	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	RETICULATION				
	CABLE JOINTS				
	Supply and install "Scotchcast" or other approved cable joint kits for the following size cables: (All PVC SWA PVC ECC Cables)				
1	185mm ² 4-core ECC Cable Joints	No	4		
2	150mm ² 4-core ECC Cable Joints	No	6		
3	95mm ² 4-core ECC Cable Joints	No	4		
4	70mm ² 4-core ECC Cable Joints	No	4		
5	50mm ² 4-core ECC Cable Joints	No	2		
6	35mm ² 4-core ECC Cable Joints	No	2		
7	25mm ² 4-core ECC Cable Joints	No	6		
8	16mm ² 4-core ECC Cable Joints	No	14		
9	10mm ² 4-core ECC Cable Joints	No	22		
10	6mm ² 4-core ECC Cable Joints	No	20		
11	4mm ² 4-core ECC Cable Joints	No	20		
12	2,5mm ² 4-core ECC Cable Joints	No	14		
13	2,5mm ² 3-core ECC Cable Joints	No	4		
14	2,5mm ² 2-core ECC Cable Joints	No	14		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	EARTH CONDUCTORS Supply and install Insulated Earth Conductors to be extended to the EXISTING Main Low Tension Switchboard Earth Bar as Main Earth conductors, etc. (line taps and lugged terminations measured below):				
1	70mm ² earth conductor	m	220		
2	50mm ² earth conductor	m	164		
3	4mm ² earth conductor	m	1160		
4	2,5mm ² earth conductor	m	13 530		
	EARTH CONDUCTOR JOINTS Supply and install suitably sized cadmium plated brass line taps joining earth conductors of sizes as follows:				
5	70mm ² earth conductor joints	No	3		
6	50mm ² earth conductor joints	No	2		
7	4mm ² earth conductor joints	No	10		
	EARTH CONDUCTOR TERMINATIONS Supply and install lugged terminations including cadmium plated brass bolts, washes and nuts for the following size earth conductors:				
8	70mm ² earth conductor termination	No	12		
9	50mm ² earth conductor termination	No	6		
10	4mm ² earth conductor termination	No	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	RETICULATION				
	CABLE STRAPPING Supply and install stainless steel strapping including buckles for cables along cable ladders for the following:				
1	150mm ² 4-core cable strapping	No	30		
2	95mm ² 4-core cable strapping	No	22		
3	50mm ² 4-core cable strapping	No	22		
4	35mm ² 4-core cable strapping	No	16		
5	16mm ² 4-core cable strapping	No	72		
6	10mm ² 4-core cable strapping	No	32		
7	6mm ² 4-core and smaller cable strapping	No	220		
	PLASTIC STRAPPING Supply and install plastic strapping Shurlock" cable ties or other approved, for minor cable runs consisting of Telephone, Public Address, etc.,				
8	10mm or less in dia. at max 1000mm centres	No	120		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	EXCAVATIONS (Provisional) (to be re-measured) General excavation work for cable trenches along the routes pegged out after the required co-ordination with other services.				
1	Excavation not exceeding 600mm deep in earth for cables including bedding, back-filling and compaction.	m ³	48		
2	Extra Over for excavation in intermediate materials	m ³	12		
3	Extra Over for excavation in hard rock	m ³	2		
4	Ditto in consolidated soil through floor construction/paving/around buildings including reinstating of concrete apron	m ³	8		
5	Imported bedding under and filling around cables and below interlocking brickwork comprising of fine sand layers compacted	m ³	12		
6	Allow for carting away surplus material	m ³	6		
	CABLE SLEEVES (Excavations measured elsewhere) Supply and Install PVC cable sleeves as sleeving systems below roadways as entry sleeve systems to Distribution Boards, cables in ground, and all other cable services as required.				
7	200mm diameter (uPVC)	m	260		
8	110mm diameter (uPVC)	m	400		
9	75mm diameter (uPVC)	m	80		
10	50mm diameter (uPVC)	m	280		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	LARGE RADIUS BENDS				
	Supply and Install 110 diameter (Long bends) for entry pipes to Distribution Boards				
1	200mm diameter (uPVC)	No	18		
2	110mm diameter (uPVC)	No	28		
3	75mm diameter (uPVC)	No	6		
4	50mm diameter (uPVC)	No	16		
	CABLE WARNING TAPE (Provisional) (to be re-measured)				
5	Supply and Install 200mm wide red/yellow plastic warning tape	m	520		
	MANHOLES				
6	Supply and Install manholes refer Drwg SL231-ESP1 Internal dimensions shall be 1200mm x 1200mm x 1200mm. Excavate and cast 100mm thick concrete base and build double skin brick work and cast steel reinforced concrete roof slab over. Complete manhole to be sealed with USB Green plastic membrane below base and between brickwork. (Manhole covers below)	No	8		
	MANHOLE COVERS				
7	Supply and install manhole covers 600 x 600mm x 124 kg type 9D Cast Iron double seal manhole cover and frame	No	6		
	DRAW WIRES				
8	Supply and Install 1,6mm ² diameter galvanised steel draw wires in cable pipes and conduits	m	8800		
	CABLE LADDERS				
	Supply and Install cable ladders 2,5mm thick galvanised perforated steel cable ladder with 70/157mm high side sections, including splicing plates as required.				
9	600mm wide	m	140		
10	300mm wide	m	200		
11	200mm wide	m	240		
12	100mm wide	m	72		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CABLE LADDER "T" SECTIONS Supply and Install cable ladder with 76mm high sides by 2,5mm thick galvanised Steel "T" section including support and fixing to cable ladders.				
1	600mm wide	No	2		
2	300mm wide	No	2		
3	200mm wide	No	2		
4	100mm wide	No	2		
	CABLE LADDER 90° BENDS Supply and Install cable ladder with 76mm high sides by 2,5mm thick galvanised Steel 90° Bends including support and fixing to cable ladders.				
5	600mm wide	No	8		
6	300mm wide	No	4		
7	200mm wide	No	4		
8	100mm wide	No	2		
	CABLE LADDER 45° BENDS Supply and Install cable ladder with 76mm high sides by 2,5mm thick galvanised Steel 45° Bends including support and fixing to cable ladders.				
9	600mm wide	No	6		
10	300mm wide	No	4		
11	200mm wide	No	2		
12	100mm wide	No	2		
13	Support Structure for Cable Ladders Vertical Supports for Cable Ladders comprising of OL1000 Olistruts 3000mm high on either side of Cable Ladder Suppots O-Line OL1041	No	120		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CABLE LADDER "HORIZONTAL CROSS OVER SECTIONS Supply and Install cable ladder with 76mm high sides by 2,5mm thick galvanised steel horizontal cross over sections including support and fixing to cable ladders.				
1	310mm wide	No	2		
	CABLE LADDER SUPPORT UNISTRUTS Supply and Install P1000 galvanised steel Unistrut section above and below Cable Ladder Runs at 800mm centres specified. including 2x400mm long 8mm diameter galvanised steel rods				
2	2x620mm long lengths to support 600mm wide cable ladder.	No	70		
3	2x320mm long lengths to support 300mm wide cable ladder.	No	100		
4	2x220mm long lengths to support 200mm wide cable ladder.	No	90		
5	2x120mm long lengths to support 100mm wide cable ladder.	No	30		
6	UNISTRUT RUNS behind DB`s in cupboards Supply and install Unistrut Spacer Supports between walls and DISTRIBUTION BOARDS consisting of P1000 galvanised steel Unistruts 2 x 4000mm long (Provisionally) horizontally positioned 300mm from the bottom and 300mm from the top of each DB including 8mm Diameter Rawlbolts at 800mm centres Noted that no DB`s are to be mounted directly onto walls etc.	No	88		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	UNISTRUTS Supply and Install galvanised steel Unistrut runs with all accessories as required, ie. Splicing plates, spring nuts for bolting, right angle bends, etc, including galvanised steel cover plates for Light Fitting installations, Power Installations, Data Cabling Systems and Fire Detection & Evacuation Systems complete, as follows:				
1	P1000 Unistrut (Light Circuits, Power, Fire Detection & Evacuation, PA Systems etc.)	m	458		
2	P2000 Unistrut (Light Circuits, Power, Fire Detection & Evacuation, PA Systems etc.)	m	600		
3	P8000 Unistrut (Fire Detection & Evacuation Cabling and Lighting Circuits on all Levels	m	80		
4	CONDUIT CONNECTIONS ONTO P2000 UNISTRUTS Supply and install conduit connections onto P2000 Unistruts, including drilled openings and conduit terminations, complete with locknuts and brass bushes.	No	1620		
5	5 AMP 3-PIN SOCKET OUTLETS Supply and Install 5 Amp rated 3-pin unswitched socket outlets installed in 75mm diameter round conduit draw boxes for supply to light fittings in false ceilings.	No	610		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
CONDUIT WORK					
PVC CONDUIT					
Supply and Install SANS approved plain ended PVC conduits complete with all required conduit accessories. Conduits to be cast into concrete, built into brick walls, fixed on surface of brick, concrete or steel surfaces or fixed inside ceiling spaces below steel trusses. All tendered rates must make allowance for wastage.					
Cast into Concrete					
1	20mm diameter	m	6		
2	25mm diameter	m	12		
3	50mm diameter	m	26		
Built or Chased into Brickwork					
4	20mm diameter	m	6		
5	25mm diameter	m	24		
6	50mm diameter	m	32		
In Ceiling Space					
7	20mm diameter	m	12		
8	25mm diameter	m	8		
9	50mm diameter	m	8		
Supply and Install SANS approved plain ended					

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	GALVANISED CONDUIT				
	Supply and Install Galvanised Steel conduits complete with all required conduit accessories. Conduits to be cast into concrete, built into brick walls, fixed on surface of brick, concrete or steel surfaces or fixed inside ceiling spaces below steel trusses. All tendered rates must make allowance for wastage.				
	Cast into Concrete				
1	20mm diameter	m	7260		
2	25mm diameter	m	284		
3	32mm diameter	m	6		
4	50mm diameter	m	6		
	Built or Chased into Brickwork				
5	20mm diameter	m	4056		
6	25mm diameter	m	162		
7	32mm diameter	m	12		
8	50mm diameter	m	6		
	In Ceiling spaces, installed Surface, etc				
9	20mm diameter	m	4454		
10	25mm diameter	m	136		
11	32mm diameter	m	6		
12	50mm diameter	m	6		
	Installed surface against wall / equipment, etc.				
13	20mm diameter	m	142		
14	25mm diameter	m	116		
15	32mm diameter	m	22		
	CONDUIT CONNECTIONS				
	Connections for large conduits consisting of galvanised steel socket and male terminating adaptor onto opening in distribution board and/or Cast Resin type draw box,etc.				
16	32mm diameter	No	6		
17	50mm diameter	No	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	FLEXIBLE, PVC COVERED TYPE CONDUIT Supply and Install conduit work in 1m lengths complete with termination ends, (both ends) fixed on surface of timber work in ceiling space, as connections to appliances and Panels.				
1	20mm diameter	No	2		
	CONDUIT BOXES Supply and Install SANS approved 75mm diameter galvanised steel conduit boxes, installed in the run of the conduit installations, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.				
	Shallow type Conduit back entry boxes				
2	20mm 1-way type	No	1280		
3	20mm 2-way type	No	244		
4	20mm 3-way type	No	122		
5	20mm 4-way type	No	106		
6	25mm 1-way type	No	6		
7	25mm 2-way type	No	10		
8	25mm 3-way type	No	4		
9	25mm 4-way type	No	6		
10	32mm 1-way type	No	6		
11	32mm 2-way type	No	4		
12	32mm 3-way type	No	6		
13	32mm 4-way type	No	2		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	WALL BOXES (Galvanised Steel) Supply and Install SANS approved galvanised pressed steel boxes installed into ceiling voids for building flush into brickwork or cast into concrete work.				
	Flush mounted type				
1	100 x 50 x 50mm	No	493		
2	100 x 100 x 50mm	No	679		
3	100 x 100 x 100mm (extra deep)	No	4		
4	200 x 100 x 100mm (with cover plate)	No	8		
5	200 x 200 x 100mm (with cover plate)	No	8		
6	600 x 400 x 100mm (with cover plate)	No	2		
7	600 x 400 x 200mm (with cover plate)	No	4		
	Surface mounted type				
8	100 x 100 x 50mm (with cover plate)	No	14		
9	300 x 300 x 100mm (with cover plate)	No	3		
	WALL BOXES (Cast Resin) Supply and Install "Cast Resin" Wall boxes with vertical slide lid or fixed lid surface and/or built/chased into brickwork				
	Slide Lid Type				
10	J2 - 200 x 145 x 80mm	No	4		
11	J3 - 115 x 110 x 92mm	No	2		
12	J4 - 200 x 200 x 100mm (Lightning Protection)	No	18		
13	U5 - 400 x 300 x 100mm	No	2		
	With Doors and Latches (Main Draw boxes)				
14	600mm high x 300mm wide x 200mm Deep	No	4		
	BLANK COVER PLATES Supply and Install over standard wall boxes white plastic cover plates suitable for				
15	100 x 100mm flush drawboxes	No	16		
16	100 x 50mm flush drawboxes	No	20		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	EXPANSION JOINTS				
1	Supply and Install Expansion drawboxes for mains and multi conduit runs (2-4 conduits each)	No	2		
2	Conduit sleeve joints for isolated conduit runs	No	8		
	PVC WIRING				
	Supply and Install SANS approved PVC insulated stranded copper conductors installed in conduit runs, unistrut runs, or as indicated in the detail specification. The tendered rates shall make provision for normal wastage.				
3	1,5mm ²	m	218		
4	2,5mm ²	m	32134		
5	4,0mm ²	m	188		
	FLEXIBLE CONDUCTORS				
	Supply and Install flexible Cabtyre cable connections of 800mm lengths, connected to single and three phase equipment specified including terminations each end with suitably sized PVC compression glands.				
6	2,5mm ² 2-core	No	4		
7	4mm ² 3-core	No	2		
8	2,5mm ² 3-core (Lights)	No	5		
	DRAW WIRES for CONDUIT RUNS				
9	Supply and Install 1,6mm diameter galvanised steel draw wires in conduit runs	m	11370		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	STRANDED PVC INSULATED COPPER				
	EARTH CONDUCTOR				
	Supply and Install stranded PVC insulated copper earth conductor along with PVC conductors in conduits as indicated in the detail specification. Tendered rates shall make provision for wastage.				
1	1,5mm ²	m	102		
2	2,5mm ²	m	14260		
3	4,0mm ²	m	12		
4	6,0mm ²	m	62		
5	10mm ²	m	58		
6	LIGHT SWITCHES, ETC.				
	Supply and Install SANS approved type 16A flush and surface type light switches with "white" coverplates. Switch modules shall be colour coded ie. "white" for Non-Essential, "Red" Essential and "Medium Blue" for UPS. All boxes for flush mounting measured elsewhere. Surface type shall be durable white plastic enclosures. Switches shall be "Crabtree" or other approved, complete with coverplates as specified and Chromed fixing screws. All coverplates to be provided with engraved information as specified with emergency colour code, ie. "black" for Non-Essential, "red" for Essential & "Medium Blue" for UPS Power	Item			
7	1 Lever 1-way fitted with RED module Switches and White Coverplates	No	231		
8	1 Lever 1-way fitted with Black Coverplates and RED module Switches	No	28		
9	1 Lever 2-way fitted with White Coverplates and RED module Switches	No	101		
10	1 Lever 1-Way DP Light Switch for Light/Extract Fans circuits (Red module Switches)	No	6		
11	1 Lever 1-Way Watertight module	No	4		
12	1 Lever 1-way electronic type Dimmer (Seminar Room, Nurses Station,etc)	No	10		
13	1 Lever 1-way Mullion Switch (with White slim line Modules Switches)	No	2		
14	1 Lever 1-way Mullion Switch (with Red slimline Module switches)	No	2		

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NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	SOCKET OUTLETS				
1	Supply and Install SANS approved switched and un-switched type flush mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes. Socket outlets shall be "Crabtree" or other approved, colour coded "white" for Non-Essential, "red" for Essential and "Medium Blue" for UPS, complete with "White" plastic coverplates as specified and chromed fixing screws Including EURO type Switch socket outlets, in Flush wall mounted Draw Boxes or/and Power Skirting Runs all as specified All coverplates to be provided with engraved information as specified with emergency colour code, ie. "black" for Non-Essential, "Red" for Essential & "Medium Blue" for UPS Power Circuits	Item			
2	Type P1 Flush switched socket Single 16A 3-pin "white" switch socket outlets with "white" switch module (Non-Essential Power circuits)	No	98		
3	Type P2 Flush switched socket on PS Single 16A 3-pin "white" switch socket outlets with "red" switch module (Essential Power)	No	92		
4	Type P3 Double switch socket Double 16A 3-pin switch socket outlets with "Red" Switch Modules (Essential Power)	No	3		
5	Type P4 Combination switch sockets Combination 16A 3-pin "white" switch socket and EURO Type "white" switch module (Non Essential Power)	No	269		
6	Exactly as above ECEPT. Only on POW. SKIRTS	N0	211		
7	Type P5 Surface switched socket Single 16A 3-pin socket outlets with "Red" switch module in Surface mounted "York" S15 type weatherproof enclosure (Essential Power)	No	6		

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PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Combination switch sockets Type P6 Combination 16A 3-pin "white" switch socket and EURO Type "white" switch module in Tamper Proof Enclosure fitted with Tamper proof locking screws (Non Essential Power)	No	34		
2	Floor Mounted "Cottage Enclosure" Type P7 Single 16 A 3-pin "white" switch socket outlet and TEL / DATA outlet Point. (Non Essential Power)	No	4		
3	Type P8 Flush switched sockets Single 16A 3-pin "White" switch socket outlets with "Medium Blue" switch module (UPS Power circuits)	No	28		
4	Type P9 Power Skirting switched sockets Single 16A 3-pin "white" switch socket outlets with "Medium Blue" switch module (UPS Power circuits)	No	14		
5	60 AMP TP&N COMBINATION ISOLATOR/ SOCKET OUTLETS Allow to supply and install a 60 Amp Triple Pole and Neutral Isolator and Socket outlet combination unit complete with plug top. The isolator to be mechanically interlocked so that the isolator can only be switched on when the plug top has been properly inserted. For Switch Room and Plant Rooms. To be used for routine maintenance	No	4		
6	5 Amp Socket Outlet modules To be installed onto Unistruts/Walls/Ceilings etc as required for Light Fittings all as indicated on the layout drawings. For all 5Amp Plug Top and Flexible cord supplies	No	591		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	ON-LOAD ISOLATING SWITCHES				
1	Supply and Install SANS approved on-load isolating switches suitable for mounting inside flush or surface mounted type steel wall boxes complete with cover plates. The colour finishes to the boxes to be equal to that of the light switches and switched socket outlets. All coverplates are to be provided with suitable labels. Labels for galvanised steel shall be engraved ivory, plastic coverplates and shall be engraved - colour coded as specified - refer Socket and Light Switches	Item			
2	20 Amp Double Pole Isolator complete with an indicating light module installed into a 100x50x50mm flush draw box for isolating of hand dryer and fan circuits complete with white" coverplates.	No	42		
3	30A Triple Pole Isolator installed surface in Enclosure for supply to appliances as indicated on the Layout Drawings	No	9		
4	50A Double Pole Isolator complete with an indicating light module installed into a 100 x 100 x 40mm surface extension drawbox for isolating of Security panel Supply, Nurse Call Supply Panel, and Fire Panels	No	6		
5	60A Triple Pole Isolator installed into a flush mounted "Cast Resin" draw box for supply to 3-phase Bed Pan Washer. (Draw box measured elsewhere)	No	1		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CABLES FOR SUB MAINS SUPPLIES to AIR HANDLING AC CONTROL PANELS Supply and install cables for Air Conditioning Control Panels of sizes and lengths as follows:				
1	16mm ² 4-core PVC SWA PVC ECC	m	28		
2	10mm ² 4-core PVC SWA PVC ECC	m	68		
3	6mm ² 4-core PVC SWA PVC ECC	m	76		
4	4mm ² 4-core PVC SWA PVC ECC	m	250		
5	2,5mm ² 4-core PVC SWA PVC ECC	m	762		
	Terminations for the above				
6	16mm ² 4-core PVC SWA PVC ECC	No	4		
7	10mm ² 4-core PVC SWA PVC ECC	No	8		
8	6mm ² 4-core PVC SWA PVC ECC	No	6		
9	4mm ² 4-core PVC SWA PVC ECC	No	18		
10	2,5mm ² 4-core PVC SWA PVC ECC	No	36		
	FLEXIBLE CONDUCTORS				
11	Supply and Install 2,5mm ² 3-core flexible Cabtyre cable connections of 500mm length terminated with compression glands on either end and connected to fittings/ appliances as required.	No	4		
12	CABLES FOR POLE LIGHTS Supply and Install Cabling in Conduits, in cable pipes and ground for Pole Lights as follows 2,5mm ² 4-core PVC SWA PVC ECC cable (3-Phase, neutral and earth)	m	44		
13	TERMINATIONS (Pole Lights) Supply and Install Cable glands for 2,5mm ² 2-core PVC SWA PVC ECC Cable strip back and gland off with waterproof shrouds over glands onto Switchgear in pole light access openings and final connections to terminals (See specification)	No	5		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	POWER SKIRTING RUNS Supply and install power skirting runs, consisting of 2-channel 3-compartment section, against the walls/ partitions complete with all accessories, (eg. joiner pieces, right angle bends, fish plates, in and outside bends, end plates, etc.)	m	438		
2	Switch Socket modules Non Essential standard modules 16 Amp 3-pin Non-Essential power switch socket outlets (with "white" switch modules)	No	7		
3	Combination Non Essential standard plus Euro type 16Amp 3-pin outlet plus Euro outlet switch socket outlets (both with "white switch modules)	No	9		
4	Essential Standard Modules 16 Amp 2-pin Essential power switch socket outlets (with "red" switch modules)	No	16		
5	Telephone Outlets On Powerskirting Runs	No	29		
6	On Walls	No	32		
7	Data/Computer Outlets On Powerskirting Runs	No	20		
8	On Walls	No	25		
Note: Telephone and Computer modules to be installed on Walls and Power Skirting runs have have been allowed for in theT telephone Installation and Computor Installion sections of these B of Q's					

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	LIGHT FITTINGS (LF) Supply, delivery to site, storage and installation of the below specified light fittings complete with drivers and lamps . Allowance must be made in the rates for all the required fixing materials and accessories. Fittings to be as per Type & Detail specified. To be Noted: Samples of all Light Fittings(LF) shall be provided for approval prior to procurement, one of each approved LF shall be handed over to the Electrical Engineer as a sample, no deviations after approval will be entertained, the fittings shall be returned timeously before the completion of the contract				
1	Type A 15W LED Surface mounted round slimline Bulkhead type Light Fitting Rated IP66 with polycarbonate base and diffuser, vandal proof, Colour white, Enlite Cat No EN-BH15/40, or equal and approved.	No	30		
2	Type B 25W LED Surface mounted Utility Oval Polycarbonate Bulkhead type Light Fitting Rated IP66 Enlite Cat No EN-BH220/40, or equal and approved	No	22		
3	Type BH 30W LED Surface wall mounted Utility type Light Fitting , Rated IP 65, with cast aluminium Base and Polycarbonate diffuser, Enlite Cat No EN-WP102/40,or equal and approved	No	27		
4	Type C 30W LED Surface mounted Floodlight type Light Fitting , Adjustable, Rated IP65 Enlite Cat No ENFL30B/40 or equal and approved	No	26		

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**PORT SHEPSTONE REGIONAL HOSPITAL
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GENERAL ELECTRICAL INSTALLATION WORK
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ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type CO 25W LED Surface mounted Utility Round Polycarbonate Bulkhead Light Fitting Rated IP 65 Enlite Cat. No.EN-BH35/40 or equal and approved, mounted onto a YORK Type Raised RL45/P 350x250x120mm, comprising a Reinforced Poleyester Enclosure. Refer detail on drawing SL 231 - EL3, or equal and approved	No	74		
2	Type C1 4W Recessed Downlight (Body White Cast Aluminium) type Light Fitting, cast into concrete slab 140mm square by 125mm high IP65 Rated Slab Box,Swanlight SLS-ACC-/AO - Budbox/ GRP or equal and approved.	No	12		
3	Type D 13W LED GIZA EYELID Surface mounted Bulkhead Light Fitting, Rated IP65, LMG die cast aluminium housing , with UV stabilized opal acrylic acrylic Diffuser, Black Powder Coated, with Tamper proof stainless steel screws. Regent Cat No. ZHAGA BOARDS, or equal and approved	No	32		
4	Type D1 10W LED Dimmable Recessed round Downlighter type Light Fitting, Rated IP44 with integrated Driver, colour White, Enlite Cat No EN-DDL 10/40,, or equal and approved.	No	37		
5	Type D2 15W LED Dimmable Surface mounted round Downlighter type Light Fitting, Rated IP54 with integrated Driver, colour White, Enlite Cat No EN-DLSMR15T/40, or equal and approved.	No	8		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type DS Daylight switches comprising NATIONAL Type mounted in a Surface Rated IP 66 Enclosure Typical to SPAZIO Split type Light Fitting IP54 Coastal quality (without LED Lamps etc.) or equal and Approved	No	3		
2	Type E 7W LED Wall mounted 3Hours maintained aluminium Emergency EXIT Light Fitting, Emergency aluminium type Light Fitting, Enlite Cat No EN-EMLED22 in White frame including Legend in Green and White EN - LG2D, or equal and Approved.	No	11		
3	Type EC 14W LED ECLIPSE wall mounted Bulkhead Light Fitting, Rated IP54, LM 6 die cast and extruded aluminium housing , with UV stabilized satine acrylic Diffuser, Black Powder coated Finnish with tamper Proof stainless steel screws Regent Cat No. Samsung 2835, or equal and approved.	No	12		
4	Type G 18W LED GIZA wall mounted Bulkhead Light Fitting, Rated IP65, LM 6 die cast and extruded aluminium housing , with UV stabilized high impact Opal acrylic Diffuser, Black Powder coated Finnish with tamper Proof stainless steel screws, Regent Cat No. Samsung 2835, or equal and approved.	No	12		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK

(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type H 18W LED GIZA PLATEAU wall mounted Bulkhead Light Fitting, Rated IP65, LM 6 die cast and extruded aluminium housing , with UV stabilized high impact Opal acrylic Diffuser, Black Powder coated Finnish with tamper Proof stainless steel screws, Regent Cat No. Samsung 2835, or equal and approved.	No	4		
2	Type TB 25W Surface Bulkhead Light Fitting, Rated IP 65 with Polycarbonate Body and diffuser, white in colour, Maximum vandal Resistant fitted with Allen type stainless steel screws, Enlite Cat No EN-BH25 or equal and approved.	No	122		
3	Type WD 3W LED Dichroic White Recessed Downlight Type Light Fitting in cast into slab 140mm square by 125mm IP55 Slab Box fitted with cover secured with 4 x Allen Key screws or equal and approved.	No	34		
4	Type FT 1,12W LED Recessed Foot Light Fitting, Rated IP 54, Coastal Quality Stainless Steel Frame and Perspex Diffuser, Spazio cat No 4474/3038, or equal and approved	No	21		
5	Type I/L 1W LED Indicating Light Fitting, Enlite Cat No EN-W4104 marker light, mounted into an extra deep galvanised steel conduit box Fitted with a Red Lens, complete with a350mA Driver Driver installed into a surface enclosure with ventilation slots to allow free air flow or equal and approved	No	20		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type ENT 2x5W LED Wall Mounted Up and Down Light Fitting , Rated IP44, with Stainless Steel Body, Spacio Cat No. Paulie DY/5024/39 or equal and approved	No	26		
2	Type RA 15W LED Recessed CEILING Mounted Adjustable Downlight Light Fitting, Rated IP44, with Driver, Spacio Cat No 2479.01 or equal and approved	No	30		
3	Type SH 2 x 17W LED SHUTTLE Wall mounted UP and DOWN Light Fitting , Rated IP 65, LM6 die cast aluminium and extruded aluminium housing , with 4mm Opal glass diffuser, with High Efficiency realtor , Black powder coated, Regent Cat No COB CRI 80,or equal and approved.	No	17		
4	Type PROC 14W LED Ceiling Mounted Medical Procedure Light fitting , Hutz Medical Product Code L200 : Solaris 11 LED 2000, Luminance Output 50,000Lux at 1000mm, or equal and approved	No	1		
5	Type EXAM 12W LED Wall mounted Medical Examination Light Fitting , Rated IP54, Colour White, Hutz Medical Product Name: HUGO LED-W, supplied with 1500mm flexible cable fitted with standard SANS 3-pin Plug Top, or equal and approved. To be mounted against the wall by means of a Flat 120 x 100 x 10mm stainless steel mounting plate fitted to walls by means of 4x6mm diam. Rawlbolts. The base of the Examination Light to be secured to the plate in accordance with the manufacturers fixing specifications, all or equal and approved	No	28		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type F1 50W LED Recessed Light Fitting , 1200x600mm (5425lm) High Output, installed into a Fabricated 3CR12 metal Enclosure. Refer Spec. and Detail on Drawing SL 230 - EL5 or Equal and Approved	No	45		
2	Type F2 54W LED 1500mm long Surface type Light Fitting , Rated IP65 Anti-Corrosion, Vandal Proof, Polycarbonate housing and Opal diffuser, Enlite Cat No. EN-ANTE554/40, or Equal and Approved	No	134		
3	Type F3 50W LED 1200x600mm Recessed Flat Panel type Light Fitting , Non-Dimmable, complete with condensate sealant, Enlite L70 50,000Hours Cat No. EN-FPRO1260/40, or Equal and Approved, including Flat Panel Cat No EN-CRM1260A	No	2		
4	Type F4 50W LED 1200x600mm Surface Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000 Hours Cat No. EN-FPRO1260/40, or Equal and Approved, including Flat Panel for Surface mounting Cat No EN-SM106B	No	14		
5	Type F5 50W LED 1200x600mm Recessed Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000Hours Cat No. EN-FPRO1260/40, or Equal and Approved, including Flat Panel Cat No EN-CRM1260A,complete with 5 Amp 3-pin Plug Top and Flexible Cabtyre Cable	No	591		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type F6 50W LED 1200x600mm Surface Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000 Hours Cat No. EN-FPRO1260/40, or Equal and Approved, including Flat Panel for Surface mounting Cat No EN-SM106B with sealant applied to perimeter of fitting	No	56		
2	Type F7 50W LED 1200x600mm Recessed Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000Hours Cat No. EN-FPRO1260/40, or Equal and Approved, including Flat Panel Cat No EN-CRM1260A, Fitted with 3hour battery emergency pack, complete with 5 Amp 3-pin Plug Top and Flexible Cabtyre Cable	No	3		
3	Type F8 50W LED 1200x600mm Surface Flat Panel type Light Fitting , Enlite L70 50,000 Hours Cat No. EN-FPRO1260/40EM, or Equal and Approved, including Flat Panel for Surface mounting Cat No EN-SM106B, Fitted with 3hour battery emergency battery pack	No	14		
4	Type F9 30W LED 1200x600mm Recessed Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000Hours Cat No. EN-FPRO6060/40, or Equal and Approved, including Flat Panel Cat No EN-CRM6060A, complete with 5 Amp 3-pin Plug Top and Flexible Cabtyre Cable	No	22		
5	Type F10 30W LED 600x600mm Surface Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000 Hours Cat No. EN-FPRO6060/40, or Equal and Approved, including Flat Panel for Surface mounting Cat No EN-SM103B	No	12		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type F11 30W LED 600x600mm Recessed Flat Panel type Light Fitting , Non-Dimmable, Enlite L70 50,000 Hours Cat No. EN-FPRO6060/40, or Equal and Approved, including Flat Panel Cat No EN-CRM6060A, complete with 5 Amp 3-pin Plug Top and Flexible Cabtyre Cable, with sealant to perimeter of fitting	No	2		
2	Type F12 54W LED 1500mm long Surface type Light Fitting , exactly as for Type F2, Rated IP65, Rated IP65 Anti-Corrosion, Vandal Proof, Polycarbonate housing and Opal diffuser, connected in Tandem, including Fabricated Stainless Steel Reflector the full length of each fitting and width plus section protruding 100mm below fitting to provide a reflector to direct light on Signage on wall as indicated on the Layout Drawing PE231 - EL3	No	24		
3	Type F13 54W LED 1500mm long Surface type Light Fitting , exactly as for Type F2, Rated IP65, Rated IP65 Anti-Corrosion, Vandal Proof, Polycarbonate housing and Opal diffuser, connected in Tandem, below Handrail as indicated on the Layout Drawing PE231 - EL5	No	36		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type P 37W LED Post-Top Luminaire , Beka Range, 4000k, or equal and approved, including a 4800mm long galvanised Tubular Steel Pole in accordance with relevant SANS Specifications, with access window, to compartment containing Driver, Control Gear, 5Amp SP&N CB and Earth Stud. The Pole installed into a Concrete Base to relevant SANS specifications.	No	5		
2	Type P1 30W LED Post Mounted Luminaire Regent Cat No ILANGA Black outer colour. NOTE: The full specification is available for procurement Refer to the Main Project Specification				
3	Type P2 54W LED Post Mounted Luminaire Regent Cat No KHANYA ISTR A Black outer colour. NOTE: The full specification is available for procurement Refer to the Main Project Specification				

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	FIXTURES/ APPLIANCES Supply, delivery to site, storage and installation of the below specified "Type" Fixtures / appliances complete with all necessary accessories. Fixtures and appliances to be as specified or other approved.				
	Procedure Rooms Earth Fault Indicating Lights				
1	Type - TIL Indicator Lights for the Procedure Rooms - "Red" flashing 2W LED lamp and Green" 2W LED Lamp in flush mounted box with 200x100mm cover plate	No	2		
2	Type - TLN 4 x 2W LED Lamp Indicator Light Nurses Station	No	1		
3	Type - PEP Patient Earth Point for Procedure Room including specialized plug point and cord as specified.	No	1		
	Viewing Screens				
4	Type - XR3 Flush mounted X-Ray viewing screens three plate, size 1260 x 430mm. to be switched from Procedure Room Control Switch Box	No	1		
5	Type - XR4 Surface mounted X-Ray viewing screens, three plate, size 1260 x 430mm, with integrally mounted switch module for the Treatment Rooms	No	4		

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD
GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Door Mechanisms / Buzzers, etc. Type - DR Door Mounted Latch Release mechanisms to be supplied for access doors	No	4		
2	Type - DRP 20 Amp "On-Off" Push Button Station, flush mounted as specified	No	2		
3	Type - DRK Wall mounted 12 digit programmable release Key Pad station for five doors, including 2 intercom stations per door, as specified	No	4		
4	Type - DRR 12 Volt Ring Tone Unit including including intercom units, as specified	No	2		
5	Type - BZ Buzzer unit for Electric Door Latch release, including 2 intercom stations, as specified.	No	4		
6	Type TCB - TRAFFIC CONTROL BOOMS Allow to Supply and Install Traffic Control Booms as Specified. The Booms shall be Automatic Electrically powered, on both Entrance and Exit lanes. Supply and Install Main Pedestals and locating Pedestals on the opposite sides of the roads, operating a 5000mm long red/white/yellow spiral painted booms fitted with a STOP and NO-ENTRY signs respectively identifiable from both sides, controlled by means of activation by Discs and Remote Modules, and including Induction Loops to be installed for both booms as specified including the supply of 50 Discs and 50 remote Modules, refer specification Noted that the there is a South and West Entrance and both Entrances are to served with Boom Gates	No	2		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Type BWC - Battery Operated WALL CLOCKS Allow to supply and install Battery Operated Wall clocks comprising 254mm Circular dial Units to allow time clock adjustments and settings to be made without having to reseal units for normal operation	No	8		
2	Type - HB 1,5kW 10 litre Wall mounted "Hydroboil Unit" stainless steel with thermostat.	No	10		
3	Type - 2000W Wall Mounted Hand Dryers, the body to consist of a High Quality Stainless Steel, controlled by means of a Proximity Switch	No	14		
4	Type - BHU1 (Procedure/Treatment Rooms) Horizontally installed surface mounted trunking 1500mm wide, equipped with 3 sets of Oxygen & Vacuum outlets, 3 x Provision only for Nurse Call Stations, 2 x Emergency Stations, 3 x 600mm medical rails & 3 sets 2 x 15 Amp 3-pin socket outlets equally divided between essential power and non-essential power.	No	2		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	EARTHING Earth Test Earth Resistivity tests in the location designated and forwarding results to determine installation of Mains and Computer Earthing requirements. (Positions to be shown for both the Mains Earthing and Computer Earthing Systems)	Item			
2	Earth Spikes - Mains Earth Supply and Install Earth spike 1,5m long driven into the ground and connected to distribution board and/or earth stud at the cable pipe entry to the building, using 50mm ² PVC insulated copper earth wire each 10mm girth including all cable terminations, etc.	No	5		
3	Earth Spikes - Computer Earth Supply and Install Earth spike 1,5m long driven into the ground and connected to distribution board and/or earth stud at the cable pipe entry to the building, using 50mm ² PVC insulated copper earth wire each 10mm girth including all cable terminations, etc.	No	14		
4	Computer Earth Studs Supply and install a stand-off Insulated Earth Stud in 100 x 100 x 100mm cast resin enclosure on each level as a dedicated computer earth point (70mm ² Earth Conductor and Lugged terminations measured under reticulation earthing)	No	2		
5	Earthing and Bonding Earthing and bonding of the installation including all equipment, water pipes, etc. in compliance with the General Specification, the Code of Practice and the Local Supply Authorities as per the Statutory requirements iro Wiring of Premises	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

GENERAL ELECTRICAL INSTALLATION WORK
(CPAP Work Group No.160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

ELECTRICAL INSTALLATIONS (CPAP Work Group
No. 160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

TELEPHONE INSTALLATIONS (CPAP Work
Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	TELEPHONE INSTALLATIONS Allow to supply and install the equipment and labour in the existing Telephone Exchange in the existing Hospital to accommodate approximately 48 additional extensions including the connecting of conductors as may be required.	Item			
2	TELEPHONE INSTRUMENTS Supply and install clear tone, push button desk top type, supplied by PLESSIS CC TELLUMAT M100 Analogue type, handsets, tone/pulse switchable with ring, speaker and volume control, complete with handset. Light grey in colour all as per specification.	No	48		
3	TELEPHONE OUTLETS Supply and Install telephone outlets in power skirtings and on wall mounted draw boxes to be equipped with RJ11 type telephone jack outlets complete with appropriate cover plates as required	No	48		
4	TELEPHONE CABLE Supply and Install 0,10mm ² 100-pair PVC insulated SANS approved armoured Telephone Cable installed via Conduits, Cable Pipes, Cable Trays, Power Skirting Runs etc. between the New Psychiatric Ward and the Main MDF at the entrance to the Hospital situated at the Bazley Street Entrance	m	480		
5	Supply and Install 0,10mm ² 4-Pair PVC insulated SANS approved Telephone Cable installed into conduits and on cable ladders and connected both ends, all as per specification, as follows:	m	362		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

TELEPHONE INSTALLATIONS (CPAP Work
Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	TESTING & COMMISSIONING OF TELEPHONE INSTALLATION Allow to Test and Commission the installation including final programming as per specific- ation and handing over to the Department's Representative	Item			
2	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover	Item			
3	OPERATING MANUALS, ETC Allow to provide sets of Operating and Instruction Manuals including parts lists, catalogues, etc.	Sets	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

TELEPHONE INSTALLATIONS (CPAP Work Group
No. 160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

**PUBLIC ADDRESS INSTALLATIONS (CPAP
Work Group No.160)**

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	PUBLIC ADDRESS INSTALLATIONS Allow to Supply and Install the complete Public Address installations on three levels for the New PSYCHIATRIC WARD facility all as indicated on Drawings and as Specified and connecting to the existing PA System in the existing Hospital Hospital, all as follows:.				
1	Connecting to the Existing Allow to incorporate the New PA Speaker System into the existing System Main Control Panel situated at the existing Main 24Hr Room at the Main Entrance to the Hospital off Bazley Street. (The main reticulation cable included below)	Item			
2	SPEAKERS (Internal Recessed) Supply and Install 10 Watt 400mm Round recessed mounted speakers complete with a 10 Watt transformer,suitable for 110V line system installed in Suitable Recess Enclosure	No	16		
3	SPEAKERS (Internal Surface) Supply and Install 10 Watt 400mm round Surface mounted speakers complete with a 10 Watt transformers uitable for 110V line system in Suitable Surface Enclosure	No	4		
4	SPEAKERS (External) Supply and Install 10 Watt 400mm aluminuim horn speakers complete with a 10 Watt transformer suitable for 110V line system but externally mounted	No	2		
5	PUBLIC ADDRESS CABLE (universal) Supply and Install 0,10mm ² 4-pair PVC insulated SANS approved telephone type cabling installed into conduit runs and on cable ladders, etc., and connected to speakers and equipment as specified.	m	290		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

**PUBLIC ADDRESS INSTALLATIONS (CPAP
Work Group No.160)**

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	PUBLIC ADDRESS CABLE (External) Supply and Install 0,10mm ² 4-pair PVC insulated armoured SANS approved telephone type cable installed in cable pipes, conduit runs, connected to speakers and equipment as specified.	m	166		
2	PUBLIC ADDRESS CABLE (Connecting to 24Hr Existing Main Control Panel) Supply and Install 1,5mm ² 4-Core PVC SWA PVC insulated armoured SANS approved Armoured type cable installed via Conduit, Cable Pipe and Unistruts etc.between the New Psychiatric Ward Building and the existing 24hr main control panel	m	280		
3	TESTING & COMMISSIONING of the PA SYSTEM INSTALLATION Allow to test and commission the installation as per specification and handing over to the Department's Representative	Item			
4	GUARANTEE AND MAINTENANCE Guarantee and maintenance to cover the work that has been undertaken and completed as part of this contract including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover.	Item			
4	OPERATING MANUALS, ETC Allow to provide sets of Operating and Instruction Manuals including parts lists, catalogues, etc., for new equipment	Sets	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

CCTV INSTALLATIONS (CPAP Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CCTV INSTALLATIONS Supply and install the complete the Closed Circuit Colour Television Installations for the New Psychiatric Ward Facility comprising of Three separate Systems as follows: A. The Main Patient Observation B. The Surrounding Ward circulation Areas, Ground and First Floor C. The Security Surveillance, Parking Level and Externally the Surrounding the Building Equipment required for each System as follows: A. The Main Patient Observation Units The Main Control Units located on the desks in the Nurses Stations, including selector Panels remote control modules, to enable selection of individual cameras and full screen observation of all cameras simultaneously. The control units to include Flash Drive / CD Unit with multi chamber feed recording from selected or all cameras as may be required. The Units to be supplied with Computer Software and Training as Specified.				
1		No	4		
2	Closed Circuit Colour High Resolution TV Monitors consisting of 32cm screen including swivel mounting brackets	No	4		
3	Domed TV colour Cameras with 3,7mm lens, suitable for internal installations against concrete and/or suspended ceilings including mounting brackets	No	18		
4	Allow for the installation of the MAIN PATIENT OBSERVATION System as specified Noted that the "cable and terminations" refer following Bill pages as measured, conduits with draw wires installed by the appointed Electrical Contractor	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

CCTV INSTALLATIONS (CPAP Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	B. The Surrounding Ward circulation Areas, Ground and First Floor				
1	The Main Control Unit located on Ground Floor Security including selector Panel, remote control modules, to enable selection of individual cameras and full screen observation of all cameras simultaneously. The control unit to include Flash Drive / CD Unit with multi chamber feed recording from selected or all cameras as may be required. The Unit to be supplied with Computer Software and Training as Specified.	No	1		
2	Closed Circuit Colour High Resolution TV Surveillance Cameras, with 2,8 - 12.0mm variable direct dome lens complete with pan, zoom, controls, including galvanised steel mounting bracket, all suitable for internal installation Refer Mounting Details on Drawings PE 231-CCTV1 and CCTV2	No	28		
3	Closed Circuit Colour High Resolution TV Monitors located on the Security Desk, the Security Guard Desk and on the Main Nurses Station Desk, all on Ground Floor Level, consisting closed Circuit Colour High Resolution including swivel mount bases.	No	3		
4	Allow for the installation of the Surrounding Ward and Circulation Areas Systems as specified Noted that the "cable and terminations" referred in the following Bill pages as measured, conduits including draw wires installed by the appointed Electrical Contractor. The CCTV sub Contractor is to engage fully during the installation of the conduit runs and outlets	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

CCTV INSTALLATIONS (CPAP Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	C. The Security Surveillance, Parking Level and Externally Surrounding the Building				
1	The Main Control Unit, to be located on the Security Guard desk at the entrance to the building, including selector Panel and remote control modules, to enable selection of individual cameras and full screen observation of all cameras simultaneously. The control unit to include Flash Drive / CD Unit with multi chamber feed recording from selected or all cameras as may be required. The Unit to be supplied with Computer Software and Training as Specified.	Item			
2	Closed Circuit Colour High Resolution TV Surveyance Cameras, with 2,8 - 12.0mm variable direct dome lens complete with pan, zoom, controls, including galvanised steel mounting bracket, all suitable for internal installation Refer Mounting Details on Drawings PE 231-CCTV1 and CCTV2	No	12		
3	Closed Circuit Colour High Resolution TV Monitors consisting of 80cm Screen including swivel mounting brackets to be installed on the Security Desk at the Entrance to the Psychiatric Unit and a Remotely Insatalled unit in the Security Building at the South Entrance to the Hospital	No	2		
5	UPS POWER PACK FOR EMERGENCY Power Pack equipment consisting of a 5kVA UPS with battery capacity to supply power to the Main Security Panel for a minimum of 2hrs	Item			
	CABLING FOR THE CCTV INSTALLATIONS as SPECIFIED				
4	Closed Circuit TV co-axial cable with connections to Controls Panels, Cameras and Monitors including required DC Jack socket outlets. consisting of twisted core shielded cable in the industry known as (Twisters)	m	1090		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

CCTV INSTALLATIONS (CPAP Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	SUNDRY ITEMS All sundry items required for the complete supply and installation of the CCTV installations as Specified	Item			
2	TESTING & COMMISSIONING Allow to test and commission the installation as per specification and handing over to the Department	Item			
3	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

CCTV INSTALLATIONS (CPAP Work Group No.160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

MICROPHONE AND SPEAKER INSTALLATIONS
(CPAP Work Group No.160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	MICROPHONE AND SPEAKER INSTALLATIONS Supply and install the complete Microphone and Speaker installations for the Student Training Room, as indicated on the Power Layout drawing SL231 - EP4 and as Specified				
1	Amplifier 100 Watt Stereo Amplifier with built in CD Player, Microphone and Speaker outlets and 2 x USB Ports	No	1		
2	Microphone Uni-directional Microphones on desk mounting brackets	No	1		
3	Speakers 36 Watt Speakers on adjustable ceiling/wall mounting brackets	No	4		
4	MICROPHONE AND LOUDSPEAKER CABLE Supply and install 0,10mm ² 4-pair PVC Insulated SANS approved from Amplifier to Microphone & Speaker, cable into conduit and connected both ends, all as per specification	m	42		
5	TESTING & COMMISSIONING OF AMPLIFIER MICROPHONE & SPEAKER INSTALLATION Allow to test and commission the installation as per specification and handing over to the Department's Representative	Item			
6	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover	Item			
7	OPERATING MANUALS, ETC. Allow to provide sets of Operating and Instruction Manuals including parts lists, catalogues, etc.	Sets	4		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

**NURSE CALL SYSTEM INSTALLATIONS (CPAP
Work Group No.160)**

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	<p>NURSE CALL SYSTEM. Allow to supply and install a Nurse Call System generally for the Procedure Room and Associated facilities as per detail specification</p> <p>Note: Allowance to be made for the provision of the Pushbuttons / Cancellation stations and plug in sockets and for umbilical cords for remote push-Buttons to be allowed all as part of the Nurse Call Installations</p> <p>MAIN NURSES STATION</p>				
1	The Main Annunciator and Control Station to be installed on the Nurses Station Desk Counter	No	1		
2	Wall Mounted Nurse Call Stations Units, plug-in-type, with umbilical cords	No	4		
3	Nurse Call response illuminated cancellation stations in wall draw boxes	No	3		
4	Emergency Pushbutton Stations in wall boxes	No	3		
5	Ring Devices with flashing indicating lights to be installed in wall or ceiling drawboxes	No	3		
,	Nurse Call System Cabling - Supply and install 0,10mm ² 10-pair PVC insulated SANS approved Nurse Call conductor into conduit and connected to the equipment specified	m	180		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

**NURSE CALL SYSTEM INSTALLATIONS (CPAP
Work Group No.160)**

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
6	SERVICE MANUALS Complete sets of Service Manuals, Operating Instructions, Part Lists, and Catalogue Details	No	4		
7	TESTING & COMMISSIONING Allow to test and commission the installation as per specification and handing over to the Department	Item			
8	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

NURSE CALL INSTALLATION (CPAP Work Group
No.160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

**TELEVISION INSTALLATION (CPAP Work
Group No. 160)**

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	Supply & Installation of TELEVISION SETS and Associated Infrastructure				
1	Supply and Install New 1390mm (55inch) LED HD Television Sets (TV) The TV Sets shall be of High Quality LG or Samsung, or equal and approved Make including remote control handsets, Sets supplied with standard Yellow/White/Red - Video/LMono /Radio, HDMI and USB inputs all duplicated on the rear and side of the Set. The TV Sets Shall be LG, Samsung or equal and approved	No	5		
2	Supply and install a 800mm diameter wall mounted Satellite TV Dish manufactured from pressed/moulded aluminium and anodisation coated, complete with LNB receiver Module, and Galvanised steel mounting brackets and Galvanised steel bolting fixtures	No	1		
3	Field strength test for the installation of VHF /UHF Television Aerial System	Item			
4	Television socket outlets for TV Sets	No	2		
5	Provisional Single Core Co-axial cable Installed between Dish and TV Set socket outlet (conduit measured elsewhere)	m	280		
6	Installation of Earthing System for the TV Sets	Item			
7	Provisional Antennae Earth Conductor consisting of 16mm ² solid Alluminium	m	60		
8	3 x 1500mm long Earth Spikes installed 100mm below ground level	Item			
	Note: 25mm Galvanised steel conduit and 100 x 100 x 50mm draw boxes, cover plates and draw wires have been allowed and measured as part of the General Electrical Installation work				

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**TELEVISION INSTALLATION (CPAP Work
Group No. 160)**

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TV6/3

**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

LIGHTNING PROTECTION INSTALLATION (CPAP
Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	LIGHTNING PROTECTION INSTALLATION (Provisional) Proprietary Articles All equipment or materials used in the Contract shall be that which is specified in the General Specification or Bills of Quantities or other approved. Note: All quantities within this Bill are Provisional				
1	SOIL TESTING Allow for the testing and execution of a soil resistivity test survey of the complete scheme and for submitting a copy of the reports complete with recommendations to the Electrical Engineer	Item			
2	TESTING (LIGHTNING PROTECTION) Allow for the testing of the complete scheme as described in the Detail Specification, inclusive of any other costs and issuing of the SANS Test Certificate	Item			
3	DOWN CONDUCTORS Supply and Install 70mm ² insulated stranded copper earth conductors in galvanised conduit in walls, brickwork, etc., as down conductors to earth rods, etc., including lugs, ferrules, bolts, etc. NOTE: Each of the 22 Down conductor is to be Installed via a Lightning Protection Test Box, built flush into Brickwork/Concrete Wall at 1000mm above ground level. The Test Boxes and Conduits by the appointed Electrical Contractor	m	400		
4	AIR TERMINALS Allow for Air Terminals for Non Metallic Sections of roof coverage consisting of the following: Supply and install 9,5mm diameter aluminium alloy conductors on standard stand-off aluminium alloy guides at 1200mm centres.	m	40		

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LP6/1

**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

LIGHTNING PROTECTION INSTALLATION (CPAP

Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	CONNECTING POINTS TO DOWN CONDUCTORS				
1	Supply and Install connecting points to Down Conductors consisting of solid 9,5mm dia. aluminium section ferruled to the Air Terminal on one end and lugged on the other end (End to be bolted to brass terminal of Down) Conductor).	No	22		
	SLEEVES, JOINTS AND CRIMPING				
	Supply and Install the following items:				
2	Crimp sleeves for jointing of roof structure with down conductors	No	22		
3	Ferrules and lugs for bonding of any metal work to roof structure	No	22		
4	Fininals inclusive of connections and jointing to roof structure	No	22		
5	Test point connection for each down Conductor	No	22		
6	50mm² Copper Earth Conductor for laying in trenches as horizontal earth conductor	m	74		
	EARTH RODS				
7	Supply and Install 1,5m Copper Clad Steel Earth Rods driven into ground including joining to copper bonding conductor (Allowed for elsewhere)	No	22		
	GALVANISED CONDUIT				
8	Supply and Install 25mm galvanised conduit installed flush in walls, including all necessary off-sets, for down conductors, as specified	m	212		
9	Supply and Install 25mm galvanised conduit coupling and stopper combination at the top and bottom for down conductors. (Conductor entry drilled in stopper as Specified)	m	22		

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LP6/2

**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

LIGHTNING PROTECTION INSTALLATION (CPAP
Work Group No. 160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

UPS INSTALLATION
INSTALLATIONS (CPAP Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	UPS INSTALLATIONS				
1	Supply and install the 20kVA Uninterruptible Power Supply (UPS) Units with 32 x 45Ahs battery sets in a suitable cabinet with Three phase input supply and Three Phase Output supply, complete with digital display Display Control Panels and Remote monitoring Unit. The unit UPS shall be complete with batteries and shall operate as described in the Detail Electrical Specification. The unit to be installed in the UPS ROOM on First Floor level.	No	1		
	THE REMOTE DIGITAL DISPLAY				
2	Supply and install a Digital Panel above the Entrance door in a suitable enclosure	No	1		
	MANUALS / CATALOGUES, etc				
2	Allow to supply four sets of Service and Maintenance Manuals including Technical Diagrams operating instructions and Parts catalogues	No			
	TESTING & COMMISSIONING OF UPS INSTALLATION				
3	Allow to test and commission the Installation as per specification and handing over to the Department's Representative.	Item			
	GUARANTEE AND MAINTENANCE				
4	Guarantee and maintenance for the complete installation including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover.	Item			

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UPS6/1

**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

UPS INSTALLATION (CPAP Work Group 160)

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**PORT SHEPSTONE REGIONAL HOSPITAL NEW
PSYCHIATRIC WARD**

DATA/COMPUTER SYSTEMS INSTALLATION (CPAP
Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	<p>NEW COMPUTER/DATA INSTALLATIONS Allow to Supply and Install the Computer/Data Equipment and Cabling as per the Data/Telephone Drawings: SL 231 - TD1, TD2 and TD3 consisting of the Parking Level, Ground Floor and First Floor Levels respectively. Noted that the Telephone Layout is shown on the same Drawings, due to Computer and Telephones in most cases next to each other. The Telephone outlets/Installations to be allowed sepeately as per the dedicated Telephone Bills Of Quantities</p>				
1	<p>SITA Accreditation Important to note that the Entire Computer/Data Installations must be completed by a SITA ie. State Information Technology Agency approved Contractor. The contractor is to submit Accreditation Details prior to commencement on Site. Allowance in this regard.</p>	Item			
2	<p>The Main/Existing Computer Frame Allow to Incorporate/Connect to the Existing Main Computer Frame ie. MCF, situated in the Server Room Located on the Lower Ground Level of the Existing West Block.</p>	Item			
3	<p>Reticulation Cabling Allow to Supply and Install the Reticulation Cabling between the MCF and the New Main Computer Switch/Hub to be installed in the Server Room on the First Floor of the New Psychiatric Building. The cables to consist of an armoured Fibre Optic Cable, selected to accommodate the passage of Data between the Existing and New Facility The Cables is to be routed via. Cable pipes/ Manholes, Cable Ladders and Conduits, as indicated on the Site Plan drawing SL 231 - ESP1 Ensure that an additional cable is installed for future</p>	m	460		

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**PORT SHEPSTONE REGIONAL HOSPITAL NEW
PSYCHIATRIC WARD**
DATA/COMPUTER SYSTEMS INSTALLATION (CPAP
Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	Building Switch/Hub Interconnection Cabling Supply and Install Fibre Optic cable between the Switch/Hub units indicated on Parking level, Ground and First Floors: And the Main Core switch for the New Psychiatric Ward facility installed by IT Specialist into the Server room on 1st Floor	m	220		
2	SFP CONVERTORS Allow to Supply and Install SFP CONVERTORS for Fibre Optic Cable terminations on IT Core Switches and Patch Panels	No	20		
3	THE MAIN CORE SWITCH Supply and Install the Main Core Switch in the Main Server Room on First Floor. The Switch is to be installed in a Suitable metal IT cabinet fully ventilated Fitted with Lockable Door. The switch to be served with appropriate Patch Panels and cords. The Core Switch to be Aruba 3610M 10SF CHM c/o First Technology or equal and approved	No	1		
4	New Edge Swithes/Hubs Supply and Install New Edge Switches/Hubs and appropriate Patch Panels in the postions Indicated for the Security Desk and Associated Offices, on the walls and Floors, and strictly as required for all floor offices as indicated on the Computer/ Data drawings. Noted that the Edge Switches are to be connected to the Main Core Switch via Fibre Optic Cables as specified The Edge Switches to be Aruba 2530-24G-POE+ VUWANI c/o First Technology or Equal and Approved	No	8		
5	LAN CABLING Type Cat. 5E Enhanced Data Cable installed in conduits / power skirting / trunking systems etc. for the connection of the Computer Stations	m	4050		
6	NEW DESK TOP COMPUTERS Supply and Install Desk Top Computers with Screens and Mouses (on cords) to be Installed in selected Departments including basic software requirements. REFER SPECIFICATIONS	No	98		

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**PORT SHEPSTONE REGIONAL HOSPITAL NEW
PSYCHIATRIC WARD**
DATA/COMPUTER SYSTEMS INSTALLATION (CPAP
Work Group No. 160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
1	PRINTERS Allow to Supply and Install Laser Jet Printers, including all connections, Loaded onto the IT Computer Network as Specified	No	24		
2	SOFTWARE Allow to provide and Install Software for ancillary Hardware in accordance with DOH requirements and as required by Port Shepstone Hospital, Generally a printer for a cluster of computers.	Item			
3	COMPUTER OUTLETS Single housings with type MPS modules with RJ45 socket outlets for connecting to computer plug leads. Note that coverplates for Computer Outlets in walls (28) and/or Powerskirting Runs (70) have been allowed for and to be installed as part of the General Electrical Installations	No	98		
4	COMPUTER/PRINTER CONNECTIONS 3000mm long Fly leads for connecting to computers with R145 connections both ends	No	98		
5	CABLE TRAYS and BASKETS (Gridspans) 200mm Wide Galvanised Steel Cable Support Baskets supplied and Installed specifically by IT Specialist in False Ceiling Voids on Levels or/as required. All components including hanging provisions, Bends, splicing etc.to be included	m	360		
6	TESTING, COMMISSIONING OF ALL: incl.etc. COMPUTERS, DATA, CABLING INSTALLATIONS. Allow to test and commission the installation as per specification and handing over to Department's Representative	Item			
7	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation, including fittings, fixtures, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover.	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

DATA / COMPUTER INSTALLATIONS (CPAP Work
Group No.160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

SECURITY INSTALLATION (CPAP Work Group No.
160)

ITEM	DESCRIPTION	No	QTY	RATE	AMOUNT
	SECURITY INSTALLATION. Supply, delivery to site, installation, testing and commissioning the Security Installations for Doors in Passages as Indicated on the Layout Drawings				
1	Main Security Control Panels	No	2		
2	Transformer, Battery/ Battery Charger	No	2		
3	Digital Key Pad Control Units	No	2		
4	Security Type Latches for Doors	No	2		
5	Magnetic Door Release Mechanisms	No	4		
6	1,0mm ² 4-pair Security Cable	m	64		
7	OPERATING PROCEDURES On site instructions given to responsible personnel for the operation of the Security Installation	Item			
8	SERVICE MANUALS Complete sets of Service Manuals, Operating Instructions, Parts Lists and Cat.details	No	4		
9	SUNDRY ITEMS All sundry items required for the complete supply and installation of the Security Installations as specified.	Item			

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SECURITY INSTALLATION (CPAP Work Group No.
160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

SECURITY INSTALLATION (CPAP Work Group
No.160)

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

FIRE DETECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PREAMBLES The following all to be visited and certified in order to finally hand over to the Hospital all as part of the NEW PSYCHIATRIC WARD CONTRACT				
1	DEMONSTRATION OF WORK COMPLETED Allow to demonstrate to a the Hospital Personnel and Engineer the complete Installation The costs to be allowed for shall include travelling and time allocated for the inspection	Item			
2	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation of the Fire Detection Installation including fittings and materials, and workmanship for a period of TWELVE MONTHS after date of completion and handover all as part of the NEW PSYCHIATRIC WARD	Item			
3	RETESTING & RECOMMISSIONING Allow for retesting and recommissioning as may be required specification, for retesting as may be required after the making good of all defective work to the entire satisfaction of the Department and Consulting Engineers.	Item			
4	AS BUILT DRAWINGS Provision for the drawings showing all site cable routes, conduit routes, drawboxes and positions of outlets, etc.	Item			
5	CERTIFICATE OF COMPLETION Provision for the Final Certificates of Completion to be issued on completion of the project for the general Electrical Installation work.	Item			
6	MAINTENANCE MANUALS, ETC. Full sets of maintenance manuals, operating instructions, schematic diagrams, parts lists and catalogue details	No	4		
7	TRAINING Training of Operators and Technical Personnel in order to operate the Fire Detection System, Fire Evacuation System and P.A. System during Fire Alert and Fire Fighting conditions "and" to understand the technical requirements in order to carry out basic maintenance and affect minor repairs on equipment. It will be expected to train at least two operators and two technical personnel over a two-day period to ensure that the hospital staff are fully conversant Including signed and dated certificates as required	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

FIRE DETECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p>Generally the FIRE DETECTION SYSTEM TO BE INSTALLED is to be in addition, connected to the existing Main Fire Panel in the Hospital 24Hour Room. The additions are to be completely compatible with the existing FIRE DETECTION INSTALLATION</p> <p>The specification for the additions to follow the existing previously as follows:</p> <p>For the complete supply of the equipment to site and installation including testing, commissioning and handing over in perfect working order of a complete addressable, automatic fire detection and a very early smoke detection system, complete with all equipment consisting of Main Fire Control Panel, Fire Brigade Panel, Detectors, Manual Activated Resettable Fire Alarm units, Sounders, Printers, Wiring, Cabling, etc. including all as provided for below</p>				
1	<p>24 Hour RECEPTION SECURITY STATION ROOM</p> <p>The Main Fire Control Panel</p> <p>To be noted that this was previously installed</p> <p>The addressable Analogue type installation including CPU and all the auxiliary provisions and equipment extendable to 4 loops, upgradable to 8 loops, in order to accommodate up to 24 zones, complete with Network Cards, extrusion and communicating parts. Including the full range of cable connecting leads provided. (At this stage 10 zones approx. being utilized)</p>	NOTE			
2	<p>Graphic Zone Annunciator Panel</p> <p>To be noted that this was previously installed</p> <p>Operating in conjunction with the Main Fire Detection Control Panel including required interconnecting cable link arrangements.</p>	NOTE			
3	<p>Fire Brigade Panel</p> <p>To be noted that this was previously installed into the Security Entrance Building off Colley Str.</p> <p>Complete with LCD display to enable communication between the installed Fire Detection System and Fire Brigade communication signal device equipment including cable connections including Radio Transmitter & Receiver and link to the Fire Department.</p>	NOTE			
4	<p>Power Supply Module - 5 kVA UPS</p> <p>To be noted that this was previously installed</p> <p>For dedicated Mains at required voltage and rated current (230 Volt to 24 VDC) for the Fire Detection System and cabling, including Power Pack with Batteries and Battery charger.</p>	NOTE			
5	<p>FIELD PANELS AND DEVICES FOR THE FIRE DETECTION SYSTEM</p> <p>To be noted that this was previously installed</p> <p>Analogue addressable detectors and additional Devices as specified.</p>	NOTE			
6	<p>Additional Remote Graphic Zone Annunciator</p> <p>To be noted that this was previously installed</p> <p>For installation into the Security Guard House</p>	NOTE			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

FIRE DETECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	NOTE : The following is all New and is to be SUPPLIED and INSTALLED all as an integral part of This NEW PSYCHIATRIC WARD CONTRACT				
1	New Main Fire Control Panel To be Installed against the Wall in the Security Office situated on the First Floor of the building New Addressable Analogue type Panel and associated installation including CPU and all the auxiliary provisions and equipment extendable to 4 loops, in order to accommodate the envisaged 6 zones, the Panel complete with Network Cards, extrusion and communicating parts, including the full range of cable connecting leads provided. The Panel is to accommodate all the Fire Detection Devices, the Fire Addressable Points, the Fire Signal to the Fire Brigade Panel (Situated in the Security Entrance Building off Colley Street) Important to note that the Control/Shut Down of Air Handling Units Installed in the First Floor Plant room are to be Addressable from the corresponding Devices specifically indicated for the each separate Zone, and including the Lift Emergency Signal	Item			
2	Graphic Zone Annunciator Panel New Annunciator Panel installed as an Integral part and Operating in conjunction with the Main Fire Detection Control Panel including required interconnecting cable link arrangements.	Item			
3	Microphone /Amplifier Zone Units Supply and Install at each Main Station on each of the 3 Levels in the positions indicated on the Fire Layout Drawings SL 231 - FE1, FE2 and FE3 Control Stations consisting of Flush mounted Enclosures containing a Microphone Amplifier combination Unit consisting of a Main Fire Telephone and Microphone to Communicate related Fire Control Measures	No	6		
4	NEW Illuminated Block Diagrams Block Diagrams to be inserted in 600x600x74mm 30W LED Panels Enlite Cat No EN-FPR06060 Surface Aluminium Enclosure mounted in a Surface mounted Box Kit Enlite Cat No.EN-SM103B or Similar and Equal Enclosure type, complete with a DOUBLE POLYCARBONATE front Diffusers to enable the insertion of the applicable Zone/Floor Layout Drawing (Refer Layout Dwgs - 6 zones)	No	6		
5	Ionisation Detectors Analogue addressable Ionisation Detectors indicating LED's complete with base and mounting provisions as required.	No	9		
6	Optical Detectors Analogue addressable Optical Detectors including indicating LED's complete with base and mounting provisions as required.	No	230		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

FIRE DETECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	Heat Detectors Analogue addressable heat detectors including Indicating LED's complete with base & mounting provisions as required	No	33		
2	Optical Detectors installed on Ceilings and and Concrete Slabs	No	52		
3	Remote indicating LED's for Detectors Installed in concealed spaces incl. suspended ceilings etc.	No	52		
2	Ionisation Detectors (in Roof Spaces and Machine Rooms	No	20		
3	Remote indicating LED's for Detectors Installed in concealed spaces incl. suspended ceilings etc.	No	15		
4	Manual Fire Alarm Units Manual activated resettable wall mounted Fire Alarm Units	No	50		
5	Electronic Audible Sounders Installed in positions shown complete with all provisions for mounting onto outlet boxes at high level including interface units.	No	9		
6	Magnetic Door Control Devices Installed in positions shown complete with all provisions for mounting onto outlet boxes in positions to Control Doors	No	6		
7	Speakers Loudspeakers install on ceilings in suitable enclosures as indicated on the layout Drawings	No	16		
8	Visible Alarms Complete with flashing "Red" strobe lights /speaker combination units installed in positions throughout the buildings, shown complete with all provisions for mounting onto outlet boxes at high level.	No	5		
9	Power Supply Units Including 230V AC / 24V DC Transformers/ Rectifiers with backup for zone power supplies	No	3		
10	Loop Isolators Installed for each zone in position as shown adjacent to Fire Draw boxes as indicated for connection of each loop including LED indicating device. Connecting to Air Handling Panels, Lift Panel, equipment in Distribution Boards and Fire Control Panels as required.	No	34		

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

FIRE DETECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	FIRE DETECTION, CABLE AND CONDUIT, WIRE WAYS, ETC., INSTALLATION WORK Installation work associated with the Fire Detection System. Note: The Supply & Installation of the Control Equipment in the Main Control Room and Guard House part of the items previously referred.				
	FIRE RATED CABLES / CONDUCTORS				
1	2,5mm ² PH120 fire detection/ fire resistant cable for device loops installed in trunking or conduit.	m	2880		
2	2,5mm ² Four Core PH120 Fire rated armoured Control Cable installed via conduits, on cable trays, cable pipes, Service Tunnel and Existing Ceilings to be Connected to The Existing Main Panel in the 24Hr Room off Bazley Street and Emergency Standby Set Panel	m	360		
3	Fire Rated Junction and Conduit Draw Boxes RED Fire Rated Drawboxes and pullboxes including locknuts, bushes, glands, coverplates, fixing materials when required.	No	6		
4	Fire Cable Inspection Enclosure (FCIE) RED 350 x 250 x 120mm Junction box with hinged door - lockable	No	6		
5	RED Fire Cable Inspection Enclosure (FCIE) 100 x 100 x 50mm Flush box	No	8		
6	RED Fire Cable Inspection Enclosure (FCIE) 100 x 50 x 50mm Flush box with Coverplate for each of LOOP ISOLATORS for Air Handling Units	No	16		
	Note: Allow to identify each of the below and receive same from the Electrical Contractor				
7	Conduit Runs Installed in concrete, cast into brickwork, cut into brickwork, installed in roof spaces; including terminations on to draw boxes, couplings, tees, saddles etc. (Note: Included in Bills of Quantities under the "General Electrical Installation)	Item			
8	Conduit Boxes Round 75mm dia. galvanised steel conduit boxes been included with Bills of Quantities under the General Electrical Installation	Item			
9	P2000 Unistrut Runs P2000 Unistrut Runs for the Fire Detection & Evacuation Installed as part of the General Electrical Installations	Item			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

EVACUATION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PREAMBLES The Evacuation Installation consisting of "RED" FIRE TELEPHONE INSTALLATIONS and EVACUATION SYSTEM INSTALLATION NOTED THAT THE EVACUATION INSTALLATION ADDITIONS TO BE INTERGRATED INTO THE EXISTING INSTALLED AT THE HOSPITAL and that all the ADDITIONAL EQUIPMENT IS TO BE COMPLETELY COMPATIBLE WITH EXISTING "RED" FIRE TELEPHONE INSTALLATION				
1	GUARANTEE AND MAINTENANCE Guarantee and maintenance for the complete installation of the Evacuation Installation including fittings, materials and workmanship for a period of TWELVE MONTHS after date of completion and handover	Item			
2	RETESTING & RECOMMISSIONING Allow for retesting and recommissioning and making good of all defective work to the entire satisfaction of the Department and Consulting Engineers.	Item			
3	AS BUILT DRAWINGS Provision for the drawings showing all site cable routes, conduit routes, drawboxes and positions of outlets, etc.	Item			
4	CERTIFICATE OF COMPLETION Provision for the Certificate of Completion to be issued on completion of the project for the general Electrical Installation work.	Item			
5	MAINTENANCE MANUALS, ETC. Full sets of maintenance manuals, operating instructions, schematic diagrams, parts lists and catalogue details.	No	4		
	TRAINING Note: The training of the Fire Telephone Installation is to be included as an integral part of the Fire Detection System.	Note			

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**PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD**

EVACUATION INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	<p>The FIRE and EVACUATION Installations</p> <p>Supply and Installation for the complete Installation on site including testing, commissioning and handing over in perfect working order of complete Evacuation System, consisting of a Main "Fire" Telephone System and an Evacuation System to the Main Fire Telephone installed in the Main Security Control office and wall mounted fire telephones for each zone and the Evacuation System. All connected to Main Control Panel and including the Zone Selector Panel, Including Micro-phones to the Main Control office and Evacuation Loudspeakers indicated on the layout Drawings and finally hand over finally as part of the New PSYCHIATRIC WARD CONTRACT</p> <p>FIELD PANELS AND DEVICES FOR THE EVACUATION INSTALLATION</p> <p>SUB FIRE STATION ENCLOSURES (Refer to positions indicated on Dwgs</p>	Item			
2	<p>Red" Zone Fire Telephone Handset complete as specified.</p>	No	10		
3	<p>Microphone Handset with Amplifier To drive local zone speakers as specified.</p>	No	10		
4	<p>Sub Fire Station Zone Fire Rated Enclosures for "Fire Telephone Handset" and Evacuation Microphone Handset/Amplifier as specified.</p>	No	10		
	EVACUATION LOUDSPEAKERS				
	Internal				
5	<p>Allow to Supply and Install Fire Evacuation Loudspeakers in positions indicated on the Layout Drawings, Fire Rated to SANS Code</p>	No	22		
	External				
6	<p>Fire Rated to SANS Code, including local and booster amplifiers consisting of Surface Horn type.</p>	No	6		
7	<p>CONDUIT Conduits placed in position for fixing on brickwork or concrete including jointing, draw boxes, coupling, tees and/or saddles. Allowed under Electrical Installation. Allow to identify and receive same to successfully complete the works.</p>	Item			
	CABLE				
8	<p>2,5mm² PH120 Fire Rated Cabling (4- pair) for individual loops to Fire Telephones, between microphones, loudspeakers and control panel, installed in conduit/ trunking runs, etc.</p>	m	980		
9	<p>2,5mm² 3-core fire rated armoured cable installed on cable trays, in trunking runs, conduit runs , cable pipes,etc for connecting of the Emergency RED FIRE TELEPHONES to the EXISTING MAIN PANEL in the 24Hr Room of Bazley Street and including all Panels and outlets indicated on drawings that require Fire Signals as indicated on the First Floor Machine Room</p>	m	660		

Carried to Collection Page (FDE6/8)

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PORT SHEPSTONE REGIONAL HOSPITAL
NEW PSYCHIATRIC WARD

FIRE DETECTION AND EVACUATION INSTALLATION
(CPAP Work Group No. 160)

COLLECTION PAGE

FIRE DETECTION		AMOUNT R	AMOUNT
Total brought forward from pages	FDE6/1		
	FDE6/2		
	FDE6/3		
	FDE6/4		
	FDE6/5		
	SUB TOTAL		R
EVACUATION INSTALLATION			
Total brought forward from pages	FDE6/6		
	FDE6/7		
	SUB TOTAL		R
TOTAL BILLS NOS.11.1 & 11.2 CARRIED TO SUMMARY PAGE (ESP)			R

ELECTRICAL INSTALLATION SECTION

Total Amount brought forward from pages

General Electrical Installation

Provisional Sum

General Electrical Installation Work

Telephones Installation

Public Address Installation

CCTV Installation

Microphone and Speaker Installation

Nurse Call Installation

Television Installation

Lightning Protection Installation

UPS Installation

Data/Computer and Cabling System Installation

Security Installation

Fire Detection & Evacuation Installation

Fire Pump Installation

PAGE	AMOUNT R
PS6/2	40 000.00
E6/63	
TI/3	
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CCTV6/5	
MS6/2	
NC6/3	
TV6/3	
LP6/3	
UPS/2	
DCS6/4	
S6/3	
FDE6/8	
E6/66	

**TOTAL FOR THE ELECTRICAL INSTALLATION
CARRIED TO Page FS (EXCL.VAT)**

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