

SANSa MATJIESFONTEIN

ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|---------|-----|------|-----------|
| 2.0 | BILL NO. 2 | | | | | |
| | LOW VOLTAGE INSTALLATION | | | | | |
| | LOW VOLTAGE DISTRIBUTION BOARDS | | | | | |
| | Supply and installation of low voltage electrical distribution boards | | | | | |
| 2.1.1 | MLV | | Supply | 1 | R | - |
| | Main LV Distribution board in Energy Centre Building | | Install | 1 | R | - |
| 2.1.2 | SMDB-1 | | Supply | 1 | R | - |
| | Main Operations Building MDB | | Install | 1 | R | - |
| 2.1.3 | SDB-1 | | Supply | 1 | R | - |
| | Main Operations Building General DB | | Install | 1 | R | - |
| 2.1.4 | SDB-2 | | Supply | 1 | R | - |
| | Energy Centre Building General DB | | Install | 1 | R | - |
| 2.1.5 | DB-SANSA-A | | Supply | 1 | R | - |
| | Distribution boards for SANSA A-Supply in SANSA equipment room | | Install | 1 | R | - |
| 2.1.6 | DB-SER | | Supply | 1 | R | - |
| | SANSA equipment room general DB | | Install | 1 | R | - |
| 2.1.7 | DB-UPS-A | | Supply | 1 | R | - |
| | Distribution boards for NASA A-Supply UPS loads in NASA equipment room | | Install | 1 | R | - |
| 2.1.8 | DB-UPS-B | | Supply | 1 | R | - |
| | Distribution boards for NASA B-Supply UPS loads in NASA equipment room | | Install | 1 | R | - |
| 2.1.9 | DB-GH | | Supply | 1 | R | - |
| | Distribution boards for Main Gate Guardhouse | | Install | 1 | R | - |
| 2.1.10 | Kiosk 1 | | Supply | 1 | R | - |
| | IP54 Polycarbonate Kiosk with wooden backboard, front and back padlock lockable doors, Mains Isolator, Busbars, DIN rail and MCB's for general circuits. | | Install | 1 | R | - |
| 2.1.11 | DB-NER | | Supply | 1 | R | - |
| | General/Utility Distribution board for NASA equipment room | | Install | 1 | R | - |
| 2.1.12 | NASA MDP-A | | Supply | 1 | R | - |
| | Distribution board for NASA equipment room A-Supply | | Install | 1 | R | - |
| 2.1.13 | NASA MDP-B | | Supply | 1 | R | - |
| | Distribution board for NASA equipment room B-Supply | | Install | 1 | R | - |
| 2.1.14 | DB-ATS1 | | Supply | 1 | R | - |
| | Automatic Transfer Switch for NASA CRAC Unit 1 | | Install | 1 | R | - |
| 2.1.15 | DB-ATS2 | | Supply | 1 | R | - |
| | Automatic Transfer Switch for NASA CRAC Unit 2 | | Install | 1 | R | - |
| 2.1.16 | DB-ATS3 | | Supply | 1 | R | - |
| | Automatic Transfer Switch for NASA CRAC Unit 3 | | Install | 1 | R | - |
| 2.1.17 | DB-DSL | | Supply | 1 | R | - |
| | IP43 Polycarbonate Kiosk with wooden backboard, front and back padlock lockable doors, Mains Isolator, Busbars, DIN rail and MCB's for general circuits. | | Install | 1 | R | - |
| | BULK LV CABLING AND BUSBAR | | | | | |
| 2.2 | 600/1000V PVC/PVC/SWA/PVC/Cu cable in shaft, sleeve, trench, on cable rack or on surface, including strapping or clamping, supports etc. Terminations and connections of 600/1000V PVC/PVC/SWA/PVC/Cu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc | | | | | |
| 2.2.1 | 1,5mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.2 | 1,5mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.3 | 2,5mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.4 | 2,5mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.5 | 4mm² 4C SWA Cu | Supply | m | 75 | R | - |
| | | Install | m | 75 | R | - |
| 2.2.6 | 4mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.7 | 6mm² 4C SWA Cu | Supply | m | 20 | R | - |
| | | Install | m | 20 | R | - |

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| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|------|-----|------|-----------|
| 2.2.8 | 6mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.9 | 10mm² 4C SWA Cu | Supply | m | 145 | R | - |
| | | Install | m | 145 | R | - |
| 2.2.10 | 10mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.11 | 16mm² 4C SWA Cu | Supply | m | 316 | R | - |
| | | Install | m | 316 | R | - |
| 2.2.12 | 16mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.13 | 25mm² 4C SWA Cu | Supply | m | 80 | R | - |
| | | Install | m | 80 | R | - |
| 2.2.14 | 25mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.15 | 35mm² 4C SWA Cu | Supply | m | 152 | R | - |
| | | Install | m | 152 | R | - |
| 2.2.16 | 35mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.17 | 50mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.18 | 50mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.19 | 70mm² 4C SWA Cu | Supply | m | 30 | R | - |
| | | Install | m | 30 | R | - |
| 2.2.20 | 70mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.21 | 95mm² 4C SWA Cu | Supply | m | 101 | R | - |
| | | Install | m | 101 | R | - |
| 2.2.22 | 95mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.23 | 120mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.24 | 120mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.25 | 150mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.26 | 150mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.27 | 185mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.28 | 185mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.29 | 240mm² 4C SWA Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.2.30 | 240mm² 4C SWA Cu ECC | Supply | m | 1 | R | - |
| | | Install | m | 1 | R | - |
| 2.2.31 | 2,5mm² 12C Multicore Copper Cable | Supply | m | 80 | R | - |
| | | Install | m | 80 | R | - |
| 2.3 | 600/1000V PVC/PVC/SWA/PVC/Alu cable in shaft, sleeve, trench, on cable rack or on surface, including strapping or clamping, supports etc. Terminations and connections of 600/1000V PVC/PVC/SWA/PVC/Alu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc | | | | | |
| 2.3.1 | 25mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.2 | 35mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.3 | 50mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.4 | 70mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |

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|--------|---|---------|------|-----|------|-----------|
| 2.3.5 | 95mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.6 | 120mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.7 | 150mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.8 | 185mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.3.9 | 240mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.4 | Cable terminations | | | | | |
| | Terminate and connect 600/1000V PVC/PVC/SWA/PVC/Cu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc | | | | | |
| 2.4.1 | 1,5mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.2 | 2,5mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.3 | 4mm² 4C SWA Cu | Supply | each | 10 | R | - |
| | | Install | each | 10 | R | - |
| 2.4.4 | 6mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.5 | 10mm² 4C SWA Cu | Supply | each | 4 | R | - |
| | | Install | each | 4 | R | - |
| 2.4.6 | 16mm² 4C SWA Cu | Supply | each | 24 | R | - |
| | | Install | each | 24 | R | - |
| 2.4.7 | 25mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.8 | 35mm² 4C SWA Cu | Supply | each | 20 | R | - |
| | | Install | each | 20 | R | - |
| 2.4.9 | 50mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.10 | 70mm² 4C SWA Cu | Supply | each | 4 | R | - |
| | | Install | each | 4 | R | - |
| 2.4.11 | 95mm² 4C SWA Cu | Supply | each | 8 | R | - |
| | | Install | each | 8 | R | - |
| 2.4.12 | 120mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.13 | 150mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.14 | 185mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.15 | 240mm² 4C SWA Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.4.16 | 2,5mm² 12C Multicore Copper Cable | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.5 | Cable terminations | | | | | |
| | Terminate and connect 600/1000V PVC/PVC/SWA/PVC/ALU cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc | | | | | |
| 2.5.1 | 25mm² 4C SWA Alu | Supply | m | 4 | R | - |
| | | Install | m | 4 | R | - |
| 2.5.2 | 35mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.5.3 | 50mm² 4C SWA Alu | Supply | m | 2 | R | - |
| | | Install | m | 2 | R | - |
| 2.5.4 | 70mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.5.5 | 95mm² 4C SWA Alu | Supply | m | 2 | R | - |
| | | Install | m | 2 | R | - |

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| 2.5.6 | 120mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.5.7 | 150mm² 4C SWA Alu | Supply | m | 18 | R | - |
| | | Install | m | 18 | R | - |
| 2.5.8 | 185mm² 4C SWA Alu | Supply | m | 16 | R | - |
| | | Install | m | 16 | R | - |
| 2.5.9 | 240mm² 4C SWA Alu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6 | <u>Earth conductors</u> | | | | | |
| | Copper earth conductor in trench or sleeve, on racking, steelwork or strapped to cable. | | | | | |
| 2.6.1 | 1,5mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.2 | 2,5mm² 1C BLACK Cu | Supply | m | 65 | R | - |
| | | Install | m | 65 | R | - |
| 2.6.3 | 4mm² 1C BLACK Cu | Supply | m | 10 | R | - |
| | | Install | m | 10 | R | - |
| 2.6.4 | 6mm² 1C BLACK Cu | Supply | m | 391 | R | - |
| | | Install | m | 391 | R | - |
| 2.6.5 | 10mm² 1C BLACK Cu | Supply | m | 150 | R | - |
| | | Install | m | 150 | R | - |
| 2.6.6 | 16mm² 1C BLACK Cu | Supply | m | 152 | R | - |
| | | Install | m | 152 | R | - |
| 2.6.7 | 25mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.8 | 35mm² 1C BLACK Cu | Supply | m | 30 | R | - |
| | | Install | m | 30 | R | - |
| 2.6.9 | 50mm² 1C BLACK Cu | Supply | m | 101 | R | - |
| | | Install | m | 101 | R | - |
| 2.6.10 | 70mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.11 | 95mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.12 | 120mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.13 | 150mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.14 | 185mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.6.15 | 240mm² 1C BLACK Cu | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.7 | <u>Earth conductors Terminations</u> | | | | | |
| | Terminate and connect earth conductor including lug, bolt, nut, etc. | | | | | |
| 2.7.1 | 1,5mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.2 | 2,5mm² 1C BLACK Cu | Supply | each | 6 | R | - |
| | | Install | each | 6 | R | - |
| 2.7.3 | 4mm² 1C BLACK Cu | Supply | each | 4 | R | - |
| | | Install | each | 4 | R | - |
| 2.7.4 | 6mm² 1C BLACK Cu | Supply | each | 24 | R | - |
| | | Install | each | 24 | R | - |
| 2.7.5 | 10mm² 1C BLACK Cu | Supply | each | 6 | R | - |
| | | Install | each | 6 | R | - |
| 2.7.6 | 16mm² 1C BLACK Cu | Supply | each | 20 | R | - |
| | | Install | each | 20 | R | - |
| 2.7.7 | 25mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |

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|--------|--|---------|------|-----|------|-----------|
| | | Install | each | 0 | | Rate Only |
| 2.7.8 | 35mm² 1C BLACK Cu | Supply | each | 4 | R | - |
| | | Install | each | 4 | R | - |
| 2.7.9 | 50mm² 1C BLACK Cu | Supply | each | 8 | R | - |
| | | Install | each | 8 | R | - |
| 2.7.10 | 70mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.11 | 95mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.12 | 120mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.13 | 150mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.14 | 185mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.7.15 | 240mm² 1C BLACK Cu | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.8 | CABLE LADDERS | | | | | |
| | Similar or equal to O-line/Cabstrut Power way heavy duty cable ladder, including all necessary supports, clamps, strapping, welding lugs onto cast-in steel plates in Basement slab, brackets, splicers, hangers. Cable ladders to be supported to 1m centres. | | | | | |
| 2.8.1 | 150mm Wide Cable Ladder | Supply | m | 20 | R | - |
| | | Install | m | 20 | R | - |
| 2.8.2 | 150mm Wide Cable Ladder 90° Bend | Supply | Each | 12 | R | - |
| | | Install | Each | 12 | R | - |
| 2.8.3 | 150mm Wide Cable Ladder T-Piece | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.4 | 150mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.5 | 200mm Wide Cable Ladder | Supply | m | 90 | R | - |
| | | Install | m | 90 | R | - |
| 2.8.6 | 200mm Wide Cable Ladder 90° Bend | Supply | Each | 13 | R | - |
| | | Install | Each | 13 | R | - |
| 2.8.7 | 200mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 3 | R | - |
| | | Install | Each | 3 | R | - |
| 2.8.8 | 200mm Wide Cable Ladder Outer Bend | Supply | Each | 7 | R | - |
| | | Install | Each | 7 | R | - |
| 2.8.9 | 300mm Wide Cable Ladder | Supply | m | 10 | R | - |
| | | Install | m | 10 | R | - |
| 2.8.10 | 300mm Wide Cable Ladder 90° Bend | Supply | Each | 1 | R | - |
| | | Install | Each | 1 | R | - |
| 2.8.11 | 300mm Wide Cable Ladder T-Piece | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.12 | 300mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.13 | 300mm Wide Cable Ladder Outer Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.14 | 400mm Wide Cable Ladder | Supply | m | 20 | R | - |
| | | Install | m | 20 | R | - |
| 2.8.15 | 400mm Wide Cable Ladder 90° Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.16 | 400mm Wide Cable Ladder T-Piece | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.17 | 400mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 6 | R | - |
| | | Install | Each | 6 | R | - |
| 2.8.18 | 400mm Wide Cable Ladder Outer Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.19 | 500mm Wide Cable Ladder | Supply | m | 95 | R | - |

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|--------|---|---------|------|-----|------|-----------|
| | | Install | m | 95 | R | - |
| 2.8.20 | 500mm Wide Cable Ladder 90° Bend | Supply | Each | 4 | R | - |
| | | Install | Each | 4 | R | - |
| 2.8.21 | 500mm Wide Cable Ladder T-Piece | Supply | Each | 3 | R | - |
| | | Install | Each | 3 | R | - |
| 2.8.22 | 500mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 2 | R | - |
| | | Install | Each | 2 | R | - |
| 2.8.23 | 500mm Wide Cable Ladder Outer Bend | Supply | Each | 4 | R | - |
| | | Install | Each | 4 | R | - |
| 2.8.24 | 600mm Wide Cable Ladder | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.8.25 | 600mm Wide Cable Ladder 90° Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.26 | 600mm Wide Cable Ladder T-Piece | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.27 | 600mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.28 | 600mm Wide Cable Ladder Outer Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.29 | 800mm Wide Cable Ladder | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.8.30 | 800mm Wide Cable Ladder 90° Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.31 | 800mm Wide Cable Ladder T-Piece | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.32 | 800mm Wide Cable Ladder Vertical Inner Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.8.33 | 800mm Wide Cable Ladder Outer Bend | Supply | Each | 0 | | Rate Only |
| | | Install | Each | 0 | | Rate Only |
| 2.9 | WIRE BASKET AND TRUNKING | | | | | |
| | Trunking channel as per specification and drawings complete with mounting brackets, hangers, cover plates, knock outs, etc. | | | | | |
| | Wire baskets Similar or equal to O-Line/Cabstrut GS 75 heavy duty type Grid span wire mesh basket and accessories, including all necessary supports, clamps, strapping, brackets, splicers, hangers, etc. | | | | | |
| 2.9.1 | 150mm Wire Mesh | Supply | m | 335 | R | - |
| | | Install | m | 335 | R | - |
| 2.9.2 | 150mm Wire Mesh 90° Bend | Supply | each | 29 | R | - |
| | | Install | each | 29 | R | - |
| 2.9.3 | 150mm Wire Mesh T-Piece | Supply | each | 49 | R | - |
| | | Install | each | 49 | R | - |
| 2.9.4 | 150mm Wire Mesh Inner Bend | Supply | each | 34 | R | - |
| | | Install | each | 34 | R | - |
| 2.9.5 | 150mm Wire Mesh Outer Bend | Supply | each | 16 | R | - |
| | | Install | each | 16 | R | - |
| 2.9.6 | 300mm Wire Mesh | Supply | m | 500 | R | - |
| | | Install | m | 500 | R | - |
| 2.9.7 | 300mm Wire Mesh 90° Bend | Supply | each | 36 | R | - |
| | | Install | each | 36 | R | - |
| 2.9.8 | 300mm Wire Mesh T-Piece | Supply | each | 38 | R | - |
| | | Install | each | 38 | R | - |
| 2.9.9 | 300mm Wire Mesh Inner Bend | Supply | each | 25 | R | - |
| | | Install | each | 25 | R | - |
| 2.9.10 | 300mm Wire Mesh Outer Bend | Supply | each | 20 | R | - |
| | | Install | each | 20 | R | - |
| 2.9.11 | 600mm Wire Mesh | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 2.9.12 | 600mm Wire Mesh 90° Bend | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|------|-----|------|-----------|
| 2.9.13 | 600mm Wire Mesh T-Piece | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.9.14 | 600mm Wire Mesh Inner Bend | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.9.15 | 600mm Wire Mesh Outer Bend | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.9.16 | P2000 Galvanised Metal Trunking | Supply | each | 160 | R | - |
| | | Install | each | 160 | R | - |
| 2.9.17 | P2000 Galvanised Metal Trunking 90° Bend | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.9.18 | P2000 Galvanised Metal Trunking T-Piece | Supply | each | 0 | | Rate Only |
| | | Install | each | 0 | | Rate Only |
| 2.9.19 | P8000 Galvanised Metal Trunking | Supply | each | 900 | R | - |
| | | Install | each | 900 | R | - |
| 2.9.20 | P8000 Galvanised Metal Trunking 90° Bend | Supply | each | 63 | R | - |
| | | Install | each | 63 | R | - |
| 2.9.21 | P8000 Galvanised Metal Trunking T-Piece | Supply | each | 47 | R | - |
| | | Install | each | 47 | R | - |
| 2.9.22 | P8000 Galvanised Metal Trunking Cross-Piece | Supply | each | 7 | R | - |
| | | Install | each | 7 | R | - |
| 2.9.23 | P9000 Galvanised Metal Trunking | Supply | each | 300 | R | - |
| | | Install | each | 300 | R | - |
| 2.9.24 | P9000 Galvanised Metal Trunking 90° Bend | Supply | each | 23 | R | - |
| | | Install | each | 23 | R | - |
| 2.9.25 | P9000 Galvanised Metal Trunking T-Piece | Supply | each | 27 | R | - |
| | | Install | each | 27 | R | - |
| 2.9.26 | P9000 Galvanised Metal Trunking Cross-Piece | Supply | each | 2 | R | - |
| | | Install | each | 2 | R | - |
| 2.9.27 | P9000 Galvanised Metal Trunking Distribution Board Entry | Supply | each | 4 | R | - |
| | | Install | each | 4 | R | - |
| | | | | | | |
| | TOTAL - BILL NO 2 CARRIED TO FINAL SUMMARY PAGE | | | | R | - |
| | | | | | | |
| | | | | | | |
| 3.0 | BILL NO. 3 | | | | | |
| | MEDIUM VOLTAGE INSTALLATION | | | | | |
| | | | | | | |
| | <i>Infrastructure measured under Infrastructure BoQ</i> | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | TOTAL - BILL NO 3 CARRIED TO FINAL SUMMARY PAGE | | | | R | - |
| | | | | | | |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|------|-----|------|-----------|
| 4.0 | BILL NO. 4 | | | | | |
| | POWER INSTALLATION FITTINGS AND ACCESSORIES | | | | | |
| 4.1 | Socket Outlet and Isolators | | | | | |
| | Isolators (All isolators to include relevant adapters, glands, labelling etc) All socket outlets to include relevant adapters, glands, labelling etc) Conduit to be Chased in PVC and to include all required round boxes, covers etc. | | | | | |
| 4.1.1 | 16A Combination Socket Outlet Type 1A as per Major Tech Vet3 1 x 16A RSA, 3 x SANS 164-2, 1 x Black SP Switch, 100x100 Black Cover Plate | Supply | No | 52 | R | - |
| | | Install | No | 52 | R | - |
| 4.1.2 | 16A Combination Socket Outlet Type 1B as per Major Tech Vet3 1 x 16A RSA, 3 x SANS 164-2, 1 x White SP Switch, 100x100 White Cover Plate | Supply | No | 28 | R | - |
| | | Install | No | 28 | R | - |
| 4.1.3 | 16A Combination Socket Outlet Type 2A as per Major Tech Vet3 1 x 16A RSA, 2 x SANS 164-2, 2x USB Type A, 1 x Black SP Switch, 100x100 Black Cover Plate | Supply | No | 10 | R | - |
| | | Install | No | 10 | R | - |
| 4.1.4 | 16A Combination Socket Outlet Type 2B as per Major Tech Vet3 1 x 16A RSA, 2 x SANS 164-2, 2x USB Type A, 1 x White SP Switch, 100x100 White Cover Plate | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 4.1.5 | 16A Combination Socket Outlet in Weather Proof Slide Lid Box 1 x 16A RSA, 1 x SANS 164-2, 1 x White SP Switch | Supply | No | 1 | R | - |
| | | Install | No | 1 | R | - |
| 4.1.6 | Double 16A Dedicated Socket Outlet as per Major Tech Vet3 2 x Shaved 16A RSA, 2 x Red SP Switch, 100x100 Red Cover Plate | Supply | No | 174 | R | - |
| | | Install | No | 174 | R | - |
| 4.1.7 | Blank Cover Plate Type A as per Major Tech Vet3 1 x Black 100x100 Blank Cover Plate | Supply | No | 150 | R | - |
| | | Install | No | 150 | R | - |
| 4.1.8 | Blank Cover Plate Type B as per Major Tech Vet3 1 x White 100x100 Blank Cover Plate | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 4.1.9 | Box for 2 x RJ45 Mods as per Major Tech Vet3 (RJ45 Modules Excluded) 1 x Black Cover Plate | Supply | No | 150 | R | - |
| | | Install | No | 150 | R | - |
| 4.1.10 | 32A 3P+N+E Surface Mounted IP44 Socket Outlet Welding Socket | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 4.1.11 | 32A 2P+E Surface Mounted IP44 Socket Outlet Welding Socket | Supply | No | 28 | R | - |
| | | Install | No | 28 | R | - |
| 4.1.12 | 32A DP Isolator Type A Installed in recessed or surface 100x100 box with Black cover plate | Supply | No | 10 | R | - |
| | | Install | No | 10 | R | - |
| 4.1.13 | 32A DP Isolator Type B Installed in recessed or surface 50x100 box with white cover plate | Supply | No | 2 | R | - |
| | | Install | No | 2 | R | - |
| 4.1.14 | 32A DP Weatherproof Isolator Installed in surface Weather Proof box with slide lid 100x100 box with white cover plate | Supply | No | 12 | R | - |
| | | Install | No | 12 | R | - |
| 4.1.15 | Floor Box 2 x Shaved 16A RSA, 2 x Red SP Switch, 1 x 16A RSA, 1 x SANS 164-2, 1 x White SP Switch | Supply | No | 5 | R | - |
| | | Install | No | 5 | R | - |
| 4.1.16 | 63mm PVC Round Box Recessed or surface with white cover plate | Supply | No | 738 | R | - |
| | | Install | No | 738 | R | - |
| 4.1.17 | 2x4 PVC Box 50x100 Recessed or surface Box | Supply | No | 7 | R | - |
| | | Install | No | 7 | R | - |
| 4.1.18 | 4x4 PVC Box 100x100 Recessed or surface Box | Supply | No | 625 | R | - |
| | | Install | No | 625 | R | - |
| 4.2 | Power Skirting as per Cabstrut Platinum Black or equal. | | | | | |
| | Socket outlets on power skirting including all fittings to mount fittings on power skirting. | | | | | |
| 4.2.1 | Dual Compartment PVC Power Skirting as per Cabstrut Platinum Black | Supply | m | 185 | R | - |
| | | Install | m | 185 | R | - |
| 4.2.2 | 16A Combo Socket Outlet as per Major Tech Vet1 1 x 16A RSA, 1 x SANS 164-2 Black | Supply | No | 68 | R | - |
| | | Install | No | 68 | R | - |
| 4.2.3 | 16A Dedicated Socket Outlet as per Major Tech Vet1 1 x Red 16A RSA, 1 x Red SP Switch, Red Cover Plate | Supply | No | 102 | R | - |
| | | Install | No | 102 | R | - |
| 4.2.4 | Dual RJ45 Outlet as per Crabtree Classic 1 x Yoke and Cover for Dual RJ45. RJ45 Sockets Excluded | Supply | No | 55 | R | - |
| | | Install | No | 55 | R | - |
| 4.2.5 | 63mm PVC Round Box Recessed or surface with white cover plate | Supply | No | 140 | R | - |
| | | Install | No | 140 | R | - |
| 4.2.6 | 2x4 PVC Box 50x100 Recessed or surface Box | Supply | No | 63 | R | - |
| | | Install | No | 63 | R | - |
| 4.2.7 | 4x4 PVC Box 100x100 Recessed or surface Box | Supply | No | 68 | R | - |
| | | Install | No | 68 | R | - |

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PART C1.2.2
BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--|---|---------|------|-------|----------|-----------|
| 4.3 | Conductors | | | | | |
| | 600/1000V PVC insulated copper conductors into conduit, trunking, void duct or power skirting, including conductor identification labels, terminating, etc. | | | | | |
| 4.3.1 | 2,5mm² Conductor | Supply | m | 5 455 | R | - |
| | | Install | m | 5 455 | R | - |
| 4.3.2 | 4mm² Conductor | Supply | m | 6 150 | R | - |
| | | Install | m | 6 150 | R | - |
| 4.3.3 | 6mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.4 | 2,5mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.5 | 4mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.6 | 6mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.7 | 2,5mm² 2C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.8 | 4mm² 2C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.9 | 6mm² 2C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.10 | 2,5mm² 4C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.11 | 4mm² 4C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.3.12 | 6mm² 4C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.4 | PVC/Bosal conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. | | | | | |
| 4.4.1 | 20mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 4 088 | R | - |
| | | Install | m | 4 088 | R | - |
| 4.4.2 | 25mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 362 | R | - |
| | | Install | m | 362 | R | - |
| 4.4.3 | 32mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 60 | R | - |
| | | Install | m | 60 | R | - |
| 4.4.4 | 20mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 4.4.5 | 25mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 300 | R | - |
| | | Install | m | 300 | R | - |
| 4.4.6 | 32mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| TOTAL - BILL NO 4 CARRIED TO FINAL SUMMARY PAGE | | | | | R | - |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|------|-----|------|-----------|
| | BILL NO. 5 | | | | | |
| | LIGHTING INSTALLATION FITTINGS AND ACCESSORIES | | | | | |
| 5.1 | Light Fittings | | | | | |
| | Supply, store and installation of light fittings. | | | | | |
| 5.1.1 | Type A | Supply | Each | 33 | R | - |
| | Vapor Proof LED Fitting Aquaman 40W - LED Light Consult or Similarly Approved | Install | Each | 33 | R | - |
| 5.1.2 | Type AE | Supply | Each | 34 | R | - |
| | Vapor Proof LED Fitting Aquaman 40W With 2hr Battery Back-Up - LED Light Consult or Similarly Approved | Install | Each | 34 | R | - |
| 5.1.3 | Type AEX | Supply | Each | 2 | R | - |
| | Spark/Explosion Proof LED Fitting Aquaman-EX-VP 38W - LED Light Consult or Similarly Approved | Install | Each | 2 | R | - |
| 5.1.4 | Type B1 | Supply | Each | 79 | R | - |
| | 600x600 LED Fitting Luxon Prism Backlit - Regent Lighting or Similarly Approved | Install | Each | 79 | R | - |
| 5.1.5 | Type B1E | Supply | Each | 45 | R | - |
| | 600x600 LED Fitting Luxon Prism Backlit With 2hr Battery Back-Up - Regent Lighting or Similarly Approved | Install | Each | 45 | R | - |
| 5.1.6 | Type C1 | Supply | Each | 162 | R | - |
| | Dimmable GU10 LED Downlight 2229 Low-Glare Downlight With 5W Osram 3000k Bulb - LED Light Consult or Similarly Approved | Install | Each | 162 | R | - |
| 5.1.7 | Type C2 | Supply | Each | 32 | R | - |
| | Dimmable GU10 LED Downlight 2229 Low-Glare Downlight With 5W Osram 4000k Bulb - LED Light Consult or Similarly Approved | Install | Each | 32 | R | - |
| 5.1.8 | Battery Packs For Type C1E & C2E | Supply | Each | 20 | R | - |
| | 2hr Self Testing Battery Pack For 3x C1 or C2 Downlights(3x Downlights Per Pack) | Install | Each | 20 | R | - |
| 5.1.9 | Type C3 | Supply | Each | 4 | R | - |
| | Integrated LED Downlight MERA-M 18W 44° 3000k - LED Light Consult or Similarly Approved | Install | Each | 4 | R | - |
| 5.1.10 | Type C3E | Supply | Each | 12 | R | - |
| | Integrated LED Downlight MERA-M 18W 44° 3000k With 2hr Battery Back-Up- LED Light Consult or Similarly Approved | Install | Each | 12 | R | - |
| 5.1.11 | Type C4 | Supply | Each | 6 | R | - |
| | Integrated LED Downlight MERA-M 18W 44° 4000k - LED Light Consult or Similarly Approved | Install | Each | 6 | R | - |
| 5.1.12 | Type C4E | Supply | Each | 7 | R | - |
| | Integrated LED Downlight MERA-M 18W 44° 4000k With 2hr Battery Back-Up- LED Light Consult or Similarly Approved | Install | Each | 7 | R | - |
| 5.1.13 | Type D1 | Supply | m | 60 | R | - |
| | Dimmable LED Linear Light Fitting Batman 75 16,4W/m 3000k - LED Light Consult or Similarly Approved | Install | m | 60 | R | - |
| 5.1.14 | Type D1E | Supply | m | 2 | R | - |
| | Dimmable LED Linear Light Fitting Batman 75 16,4W/m 3000k With 2hr Battery Back-Up - LED Light Consult or Similarly Approved | Install | m | 2 | R | - |
| 5.1.15 | Type D2 | Supply | m | 80 | R | - |
| | Dimmable LED Linear Light Fitting Batman 75 16,4W/m 4000k - LED Light Consult or Similarly Approved | Install | m | 80 | R | - |
| 5.1.16 | Type D2E | Supply | m | 20 | R | - |
| | Dimmable LED Linear Light Fitting Batman 75 16,4W/m 4000k With 2hr Battery Back-Up - LED Light Consult or Similarly Approved | Install | m | 20 | R | - |
| 5.1.17 | Type E1 | Supply | Each | 58 | R | - |
| | LED Foot Light IP65 Plato 7W 4000k - Regent Lighting or Similarly Approved | Install | Each | 58 | R | - |
| 5.1.18 | Type E2 | Supply | Each | 28 | R | - |
| | LED Flood Light IP65 Nerus 65W 4000k - LED Light Consult or Similarly Approved | Install | Each | 28 | R | - |
| 5.1.19 | Type E3 | Supply | Each | 3 | R | - |
| | LED Bulkhead Giza Eyelid 13W 4000k - Regent Lighting or Similarly Approved | Install | Each | 3 | R | - |
| 5.1.20 | Type E4 | Supply | Each | 8 | R | - |
| | LED Flood Light IP65 Nerus 180W 4000k - LED Light Consult or Similarly Approved | Install | Each | 8 | R | - |
| 5.1.21 | Type E5 | Supply | Each | 10 | R | - |
| | LED Bulkhead Focal Round 8W 3000k - LED Light Consult or Similarly Approved | Install | Each | 10 | R | - |
| 5.1.22 | Type F1 | Supply | Each | 0 | | Rate Only |
| | Concrete LED Bollard Light Slabo 7W 3000k - Regent Lighting or Similarly Approved | Install | Each | 0 | | Rate Only |
| 5.1.23 | Type F1E | Supply | Each | 8 | R | - |
| | Concrete LED Bollard Light Slabo 7W 3000k With 2hr Battery Back-Up - Regent Lighting or Similarly Approved | Install | Each | 8 | R | - |
| 5.1.24 | Type F2 | Supply | Each | 8 | R | - |
| | Concrete LED Bollard Light Slabo 7W 4000k - Regent Lighting or Similarly Approved | Install | Each | 8 | R | - |
| 5.1.25 | Type PL1 | Supply | Each | 2 | R | - |
| | 3,5m Light Pole Black galvanized | Install | Each | 2 | R | - |
| 5.1.26 | Type PL2 | Supply | Each | 4 | R | - |
| | 5m Light Pole Black galvanized | Install | Each | 4 | R | - |

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PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|--|---------|------|-----|------|-----------|
| 5.1.27 | Type Track | Supply | m | 60 | R | - |
| | Three Wire Recessed Track - Spazio or Similarly Approved | Install | m | 60 | R | - |
| 5.1.28 | Type T1 | Supply | Each | 62 | R | - |
| | GU10 LED Track Spot With 5W Osram 3000k Bulb - LED Light Consult or Similarly Approved | Install | Each | 62 | R | - |
| 5.1.29 | Type T2 | Supply | Each | 0 | | Rate Only |
| | GU10 LED Track Spot With 5W Osram 4000k Bulb - LED Light Consult or Similarly Approved | Install | Each | 0 | | Rate Only |
| 5.1.30 | Type TE | Supply | Each | 0 | | Rate Only |
| | Emergency LED Track Spot - Regent Lighting or Similarly Approved | Install | Each | 0 | | Rate Only |
| 5.1.31 | Type LED1-DIM | Supply | m | 75 | R | - |
| | Dimmable LED Strip Light With 24V 22W/m LED Board 3000k - LED Light Consult or Similarly Approved | Install | m | 75 | R | - |
| 5.1.32 | Type LED1 | Supply | m | 45 | R | - |
| | Non-Dimmable LED Strip Light With 24V 22W/m LED Board 3000k - LED Light Consult or Similarly Approved | Install | m | 45 | R | - |
| 5.1.33 | Type LED2 | Supply | m | 10 | R | - |
| | Non-Dimmable LED Strip Light Slim Recessed Profile Black With 9W/m 24V LED Tape 3000k - LED Light Consult or Similarly Approved | Install | m | 10 | R | - |
| 5.1.34 | Type LED3 | Supply | m | 4 | R | - |
| | Non-Dimmable LED Strip Light Slim Recessed Profile Black With 9W/m 24V LED Tape 4000k - LED Light Consult or Similarly Approved | Install | m | 4 | R | - |
| 5.1.35 | Type LED Driver - DIM | Supply | Each | 17 | R | - |
| | Dimmable LED Strip Light Driver 120W 24V LED Strip Light Driver - LED Light Consult or Similarly Approved | Install | Each | 17 | R | - |
| 5.1.36 | Type LED Driver | Supply | Each | 15 | R | - |
| | NON Dimmable LED Strip Light Driver 120W 24V LED Strip Light Driver - LED Light Consult or Similarly Approved | Install | Each | 15 | R | - |
| 5.1.37 | Type S1 Occupancy sensor | Supply | Each | 34 | R | - |
| | | Install | Each | 34 | R | - |
| 5.2 | 5A socket outlet mounted on trunking or concrete including all boxes, glands and fixings, Wiring included in Section 4 of this bill. | | | | | |
| 5.2.1 | 5A Unswitched Socket outlets | Supply | No | 465 | R | - |
| | 5A unswitched socket outlet in surface mounted 75x75 metal box mounted on P8000 ceiling void trunking | Install | No | 465 | R | - |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--|---|---------|------|--------|------|-----------|
| 5.3 | Light switches | | | | | |
| | Light switches, complete with all necessary connections, labelling, screws, cover plates, etc as specified. 50x100 flush metal back boxes are to be allowed with all light switches | | | | | |
| 5.3.1 | 16A one lever one-way flush mounted light switch | Supply | No | 18 | R | - |
| | | Install | No | 18 | R | - |
| 5.3.2 | 16A one lever two-way flush mounted light switch | Supply | No | 2 | R | - |
| | | Install | No | 2 | R | - |
| 5.3.3 | 16A two lever one-way flush mounted light switch | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 5.3.4 | 16A three lever one-way flush mounted light switch | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 5.3.5 | 16A four lever one-way flush mounted light switch | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 5.3.6 | 16A one lever DIMMABLE one-way flush mounted light switch with bell press switch | Supply | No | 0 | | Rate Only |
| | | Install | No | 0 | | Rate Only |
| 5.3.7 | 16A two lever DIMMABLE one-way flush mounted light switch with bell press switch | Supply | No | 4 | R | - |
| | | Install | No | 4 | R | - |
| 5.3.8 | Photocell | Supply | No | 4 | R | - |
| | | Install | No | 4 | R | - |
| 5.4 | Conductors | | | | | |
| | 600/1000V PVC insulated copper conductors into conduit, trunking, void duct or power skirting, including conductor identification labels, terminating, etc. | | | | | |
| 5.4.1 | 1,5mm² Conductor | Supply | m | 17 000 | R | - |
| | | Install | m | 17 000 | R | - |
| 5.4.2 | 2,5mm² Conductor | Supply | m | 2 160 | R | - |
| | | Install | m | 2 160 | R | - |
| 5.4.3 | 4mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.4.4 | 6mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.4.5 | 2,5mm² 2C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.8 | PVC/Bosal conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. | | | | | |
| 5.8.1 | 20mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 5 040 | R | - |
| | | Install | m | 5 040 | R | - |
| 5.8.2 | 25mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.8.3 | 32mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.8.4 | 20mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.8.5 | 25mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 5.8.6 | 32mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| TOTAL - BILL NO 5 CARRIED TO FINAL SUMMARY PAGE | | | | | | |
| | | | | | R | - |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS
PART C1.2.2
BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|--------|---|---------|------|-------|------|-----------|
| | BILL NO. 6 | | | | | |
| | HVAC INSTALLATION | | | | | |
| 6.1 | Isolators for indoor and outdoor units installed in surface mounted boxes with the appropriate glands cover plates, fixings,etc. Wiring included in Bill No 4. 100x100 back boxes are to be allowed with all isolators unless otherwise specified. | | | | | |
| 6.1.1 | 30A DP Isolator | Supply | No | 10 | R | - |
| | Flush or Surface for indoor application | Install | No | 10 | R | - |
| 6.1.2 | 60A DP Isolator | Supply | No | 0 | | Rate Only |
| | Flush or Surface for indoor application | Install | No | 0 | | Rate Only |
| 6.1.3 | 30A 3P Isolator | Supply | No | 0 | | Rate Only |
| | Flush or Surface for indoor application | Install | No | 0 | | Rate Only |
| 6.1.4 | 60A 3P Isolator | Supply | No | 0 | | Rate Only |
| | Flush or Surface for indoor application | Install | No | 0 | | Rate Only |
| 6.1.5 | 32A 2P+N+E Rotary Isolator with Lockout, IP67 | Supply | No | 32 | R | - |
| | For outdoor application | Install | No | 32 | R | - |
| 6.1.6 | 63A 2P+N+E Rotary Isolator with Lockout, IP67 | Supply | No | 2 | R | - |
| | For outdoor application | Install | No | 2 | R | - |
| 6.1.7 | 32A 3P+N+E Rotary Isolator with Lockout, IP67 | Supply | No | 11 | R | - |
| | For outdoor application | Install | No | 11 | R | - |
| 6.1.8 | 63A 3P+N+E Rotary Isolator with Lockout, IP67 | Supply | No | 3 | R | - |
| | For outdoor application | Install | No | 3 | R | - |
| 6.1.9 | Blank Cover Plate Type A as per Major Tech Vet3 | Supply | No | 28 | R | - |
| | 1 x Black 100x100 Blank Cover Plate | Install | No | 28 | R | - |
| 6.1.10 | Blank Cover Plate Type B as per Major Tech Vet3 | Supply | No | 0 | | Rate Only |
| | 1 x White 100x100 Blank Cover Plate | Install | No | 0 | | Rate Only |
| 6.1.11 | 63mm PVC Round Box | Supply | No | 206 | R | - |
| | Recessed or surface with white cover plate | Install | No | 206 | R | - |
| 6.1.12 | 2x4 PVC Box | Supply | No | 50 | R | - |
| | 50x100 Recessed or surface Box | Install | No | 50 | R | - |
| 6.1.13 | 4x4 PVC Box | Supply | No | 53 | R | - |
| | 100x100 Recessed or surface Box | Install | No | 53 | R | - |
| 6.2 | Conductors | | | | | |
| | 600/1000V PVC insulated copper conductors into conduit, trunking, void duct or power skirting, including conductor identification labels, terminating, etc. | | | | | |
| 6.2.1 | 2,5mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.2 | 4mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.3 | 6mm² Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.4 | 2,5mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.5 | 4mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.6 | 6mm² T&E Conductor | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.7 | 2,5mm² 2C+E Surfix | Supply | m | 852 | R | - |
| | | Install | m | 852 | R | - |
| 6.2.8 | 4mm² 2C+E Surfix | Supply | m | 1 085 | R | - |
| | | Install | m | 1 085 | R | - |
| 6.2.9 | 6mm² 2C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.10 | 2,5mm² 4C+E Surfix | Supply | m | 610 | R | - |
| | | Install | m | 610 | R | - |
| 6.2.11 | 4mm² 4C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.2.12 | 6mm² 4C+E Surfix | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |

SANSA MATJIESFONTEIN

ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | | UNIT | QTY | RATE | TOTAL |
|-------|--|---------|------|-------|----------|-----------|
| 6.3 | PVC/Bosal conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. | | | | | |
| 6.3.1 | 20mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 420 | R | - |
| | | Install | m | 420 | R | - |
| 6.3.2 | 25mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 264 | R | - |
| | | Install | m | 264 | R | - |
| 6.3.3 | 32mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.3.4 | 20mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 6.3.5 | 25mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 300 | R | - |
| | | Install | m | 300 | R | - |
| 6.3.6 | 32mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| | | | | | | |
| | | | | | | |
| | TOTAL - BILL NO 6 CARRIED TO FINAL SUMMARY PAGE | | | | R | - |
| | | | | | | |
| | | | | | | |
| | BILL NO. 7 | | | | | |
| | ELECTRONIC INSTALLATIONS | | | | | |
| | | | | | | |
| 7.1 | PVC/Bosal conduit fittings. | | | | | |
| 7.1.1 | 63mm PVC Round Box | Supply | No | 292 | R | - |
| | Recessed or surface with white cover plate | Install | No | 292 | R | - |
| 7.1.2 | 2x4 PVC Box | Supply | No | 115 | R | - |
| | 50x100 Recessed or surface Box | Install | No | 115 | R | - |
| 7.1.3 | 4x4 PVC Box | Supply | No | 244 | R | - |
| | 100x100 Recessed or surface Box | Install | No | 244 | R | - |
| 7.2 | PVC/Bosal conduit complete with bends, joints, adaptors, couplings, saddles, cutting, etc. | | | | | |
| 7.2.1 | 20mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 7.2.2 | 25mm PVC Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 2 190 | R | - |
| | | Install | m | 2 190 | R | - |
| 7.2.3 | 25mm PVC Conduit With Metal Saddles mounted every 500mm For Fire Detection | Supply | m | 738 | R | - |
| | | Install | m | 738 | R | - |
| 7.2.4 | 20mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 7.2.5 | 25mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 300 | R | - |
| | | Install | m | 300 | R | - |
| 7.2.6 | 32mm Bosal Conduit cast in concrete built into or chased into brickwork or surface mounted | Supply | m | 0 | | Rate Only |
| | | Install | m | 0 | | Rate Only |
| 7.2.7 | Draw wire for electronic Services | Supply | m | 4 196 | R | - |
| | | Install | m | 4 196 | R | - |
| | | | | | | |
| | TOTAL - BILL NO 7 CARRIED TO FINAL SUMMARY PAGE | | | | R | - |

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ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS

PART C1.2.2

BILL OF QUANTITIES

| ITEM | DESCRIPTION | UNIT | QTY | RATE | TOTAL |
|------|---|------|-----|------|-----------------------------|
| | FINAL SUMMARY PAGE | | | | |
| | BILL NO. 1 | | | | |
| | PRELIMINARIES AND GENERAL | | | R | - |
| | BILL NO. 2 | | | | |
| | LOW VOLTAGE INSTALLATION | | | R | - |
| | BILL NO. 3 | | | | |
| | MEDIUM VOLTAGE INSTALLATION | | | | Under Infrastructure BoQ |
| | BILL NO. 4 | | | | |
| | POWER INSTALLATION FITTINGS AND ACCESSORIES | | | R | - |
| | BILL NO. 5 | | | | |
| | LIGHTING INSTALLATION FITTINGS AND ACCESSORIES | | | R | - |
| | BILL NO. 6 | | | | |
| | HVAC INSTALLATION | | | R | - |
| | BILL NO. 7 | | | | |
| | ELECTRONIC INSTALLATIONS | | | R | - |
| | BILL NO. 8 | | | | |
| | UPS | | | R | - |
| | BILL NO. 9 | | | | |
| | PC SUMS | | | R | - |
| | Any other items tenderers may wish to add of a Technical nature not specifically mentioned above in order to comply with the specification and contract conditions. Please add below: | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | TOTAL CARRIED TO BILL NO. 16 ELECTRICAL INSTALLATION - LOW VOLTAGE INSTALLATION + UPS PART C1.2.2 | | | R | - |