

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 1</u></p> <p><u>PRELIMINARIES</u></p> <p><u>BUILDING AGREEMENT AND PRELIMINARIES</u></p> <p>The JBCC Series 2000 Edition 6.2 May 2018 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described</p> <p>The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2018 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities</p> <p>Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p> <p>Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence</p> <p><u>PREAMBLES FOR TRADES</u></p> <p>The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p> | | R | |

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| | Brought Forward | | R | |
| | <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles</p> <p><u>GENERAL</u></p> <p>If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value</p> <p><u>SECTION A - PRINCIPAL BUILDING AGREEMENT</u></p> <p><u>Definitions (A1)</u></p> <p>1/1/1 Definitions and interpretation (clause 1)</p> <p>F:..... V:..... T:.....</p> <p><u>Objective and Preparation (A2 to A14)</u></p> <p>1/1/2 Offer acceptance and performance (clause 2)</p> <p>F:..... V:..... T:.....</p> <p>1/1/3 Documents (clause 3)</p> <p>F:..... V:..... T:.....</p> <p>1/1/4 Design responsibility (clause 4)</p> <p>F:..... V:..... T:.....</p> | | | |
| | Carried Forward | | R | |
| | <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p> | | | |

| Brought Forward | | | R | |
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| 1/1/5 | Employer's agents (clause 5) | | | |
| | F:..... V:..... T:..... | Item | | |
| | The principal agent shall: | | | |
| | - monitor and control progress and scheduling | | | |
| | - monitor all contract conditions, and | | | |
| | - coordinate the efforts of the employer's agents, the contractor and subcontractors | | | |
| | The powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part | | | |
| | The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process | | | |
| 1/1/6 | Contractor's site representative (clause 6) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/7 | Compliance with laws and regulations (clause 7) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/8 | Works risk (clause 8) | | | |
| | F:..... V:..... T:..... | Item | | |
| Carried Forward | | | R | |
| Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | | |

| | Brought Forward | | R | |
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| 1/1/9 | Indemnities (clause 9) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/10 | General insurances (clause 10) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/11 | Special insurances (clause 11) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/12 | Effecting insurances (clause 12) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/13 | Assignment (clause 13) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/14 | Security (clause 14) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Execution (A15-A23)</u> | | | |
| 1/1/15 | Preparation for and execution of the works (clause 15) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/16 | Site and access (clause 16) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/17 | Contract instructions (clause 17) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/18 | Setting out of the works (clause 18) | | | |
| | F:..... V:..... T:..... | Item | | |
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| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| | Brought Forward | | R | |
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| | The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments | | | |
| 1/1/19 | Temporary works and plant (clause 19) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/20 | Nominated subcontractors (clause 20) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/21 | Selected subcontractors (clause 21) | | | |
| | F:..... V:..... T:..... | Item | | |
| | Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted | | | |
| | All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors | | | |
| 1/1/22 | Employer's Direct Contractors (clause 22) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/23 | Contractor's Domestic Sub-Contractors (Clause 23) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Completion (A24-A30)</u> | | | |
| 1/1/24 | Practical completion (clause 24) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/25 | Works completion (clause 25) | | | |
| | F:..... V:..... T:..... | Item | | |
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| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| Brought Forward | | | R |
|---|---|------|---|
| 1/1/26 | Final completion (clause 26) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/27 | Latent defects liability period (clause 27) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/28 | Sectional completion (clause 28) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/29 | Revision of date of practical completion (clause 29) | | |
| | F:..... V:..... T:..... | Item | |
| | The removal and replacement of materials and/or workmanship that do not conform to specification or drawings shall not constitute grounds for an extension of the construction period nor for an adjustment to the contract sum (clause 29.3) | | |
| 1/1/30 | Penalty for late or non-completion (clause 30) | | |
| | F:..... V:..... T:..... | Item | |
| | <u>Payment (A31 - A35)</u> | | |
| 1/1/31 | Interim payment (clause 31) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/32 | Adjustment to the contract value (clause 32) | | |
| | F:..... V:..... T:..... | Item | |
| Carried Forward | | | R |
| Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| | Brought Forward | | R | |
|--------|---|------|---|--|
| | Where prices are submitted by the contractor or nominated/selected subcontractors during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the final certificate, it will be in writing | | | |
| 1/1/33 | Recovery of expense and loss (clause 33) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/34 | Final account and final payment (clause 34) | | | |
| | F:..... V:..... T:..... | Item | | |
| | The employer shall not pay any interest on amounts payable to the contractor for one hundred and forty two (142) days after the date of issue of the certificate of practical completion | | | |
| | The employer shall, however, pay interest to the contractor at the rate stipulated in clause 34.11 on any amounts payable to the contractor more than one hundred and forty two (142) days after the date of issue of the certificate of practical completion but only for such period as the settlement of the final account is delayed by the non-performance of the principal agent or the employer or his agents. In evaluating non-performance for purposes of this clause a reasonable time shall be allowed to the employer or his agents to respond to any matter brought to his/their attention and which may affect the settlement of the final account | | | |
| 1/1/35 | Payment to other parties (clause 35) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Cancellation (A36-A39)</u> | | | |
| 1/1/36 | Termination by employer - contractor's default (clause 36) | | | |
| | F:..... V:..... T:..... | Item | | |
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| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

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| | Brought Forward | | R |
| 1/1/37 | Termination by employer - loss and damage (clause 37) F:..... V:..... T:..... | Item | |
| 1/1/38 | Termination by contractor - employer's default (clause 38) F:..... V:..... T:..... | Item | |
| 1/1/39 | Termination - cessation of the works (clause 39) F:..... V:..... T:..... | Item | |
| | <u>Dispute (A40)</u> | | |
| 1/1/40 | Settlement of disputes (clause 40) F:..... V:..... T:..... | Item | |
| | <u>Contract Agreement</u> | | |
| 1/1/41 | Post tender Provisions (A41) F:..... V:..... T:..... | Item | |
| 1/1/42 | Contractual Agreement (Clause 42) F:..... V:..... T:..... | Item | |
| | <u>THE SCHEDULE</u> Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder | | |
| | Carried Forward | | R |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | |

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| <p style="text-align: center;">Brought Forward</p> <p><u>42.1 CONTRACTING AND OTHER PARTIES</u></p> <p>42.1.1 Employer:</p> <p>Mpumalanga Provincial Department of Public Works Roads and Transport</p> <p>Physical Address:</p> <p>Private Bag X11302 Nelspruit 1200</p> <p>Tel: +27 13 766 8976</p> <p>42.1.2 Employer's Agent:</p> <p>Architect</p> <p>MSK GROUP HOLDINGS P O Box 412 MENLYN 0063</p> <p>Tel: +27 12 348 5680</p> <p>42.1.3 Employer's Agent:</p> <p>Quantity Surveyor</p> <p>BMG COST CONSULTANTS P O Box 71864 BRYANSTON 2120</p> <p>Tel: +27 11 549 5882</p> | | | R | |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p> | | | R | |

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| <p style="text-align: right;">Brought Forward</p> <p>42.1.4 Employer's Agent:</p> <p>Civil/Structural Engineer</p> <p>DENZHE ENGINEERS P O Box 6106 NELSPRUIT 1200</p> <p>Tel: +27 13 752 7622</p> <p>42.1.5 Employer's Agent:</p> <p>Mechanical/Electrical Engineer</p> <p>KATARENA CONSULTING ENGINEERS P O Box 3245 MOKOPANE 0600</p> <p>Tel: +27 11 604 1684</p> <p><u>42.2 CONTRACT DETAILS</u></p> <p>42.2.1 Works Description:</p> <p style="padding-left: 40px;">Construction of new Doornkop Primary School Phase 02</p> <p>42.2.2 Site Description:</p> <p style="padding-left: 40px;">Doornkop, Middleburg 3</p> <p>42.2.3 Work or installations by direct contractors:</p> <p style="padding-left: 40px;">N/A</p> <p>42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only</p> <p style="text-align: right;">Yes</p> <p>42.2.5 Date on which possession of the site is intended to be given:</p> <p style="text-align: right;">TBA</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p> | | R | |
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| <p style="text-align: right;">Brought Forward</p> <p>42.2.6 Period for the commencement of the works after the contractor takes posse</p> <p style="text-align: right;">TBA</p> <p>42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day</p> <p style="text-align: right;">TBA <i>Date</i></p> <p style="text-align: right;"><i>Penalty Amount</i> TBA</p> <p>42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day</p> <p style="text-align: right;">Section 1 .N/A..... <i>Date</i></p> <p style="text-align: right;">R.N/A..... <i>Penalty Amount</i></p> <p>42.2.9 The law applicable to this agreement shall be that of</p> <p style="text-align: right;"><i>South Africa (country)</i></p> <p><u>42.3 INSURANCES</u></p> <p>42.3.1 Contract works insurance to be effected by:</p> <p style="text-align: right;"><i>TBA:</i></p> <p style="text-align: right;"><i>For the Sum of Contract Amount + 10.00 %</i></p> <p style="text-align: right;"><i>With a deductible of - to be determined by the contractor</i></p> <p>42.3.2 Supplementary insurance is required</p> <p style="text-align: right;"><i>No</i></p> <p>42.3.3 Public liability insurance to be effected by:</p> <p style="text-align: right;"><i>Contractor:</i></p> <p style="text-align: right;"><i>For the Sum of TBA</i></p> <p style="text-align: right;"><i>With a deductible of - to be determined by the contractor</i></p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries</p> | | R | |
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| | Brought Forward | | R | |
| | <u>42.4 DOCUMENTS</u> | | | |
| | 42.4.1 Waivers of contractors lien or right of continuing possession is required | | | |
| | Yes | | | |
| | 42.4.2 Number of construction document copies to be supplied to the contractor free of charge: | | | |
| | 3 Number of | | | |
| | 42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with: | | | |
| | "Standard System of Measuring Builders' Work" | | | |
| | 42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within working days | | | |
| | <i>The priced bills of quantities must be handed in with the tender</i> | | | |
| | 42.4.5 JBCC Engineering General Conditions are to be included in the contract documents : | | | |
| | No | | | |
| | 42.4.6 The contract value is to be adjusted using escalation adjustment indices | | | |
| | No | | | |
| | Where JBCC CPAP is to be used | | | |
| | Base Month N/A | | | |
| | 42.4.7 Details of changes made to the provision of JBCC standard documentation: | | | |
| | <u>SECTION B: PRELIMINARIES</u> | | | |
| | <u>Definitions and interpretation (B1)</u> | | | |
| 1/1/43 | Definition and interpretation (B1.1 - B1.4.6) | | | |
| | F:..... V:..... T:..... | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| | Brought Forward | | R | |
|--------|---|------|---|--|
| | <u>Documents (B2)</u> | | | |
| 1/1/44 | Checking of documents (B2.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/45 | Provisional bills of quantities (B2.2) | | | |
| | F:..... V:..... T:..... | N/A | | |
| 1/1/46 | Availability of construction documentation (B2.3) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/47 | Interests of agents (B2.4) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/48 | Priced documents (B2.5) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/49 | Tender submission (B2.6) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>The site (B3)</u> | | | |
| 1/1/50 | Defined works area (B3.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/51 | Geotechnical investigation (B3.2) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/52 | Inspection of the site (B3.3) | | | |
| | F:..... V:..... T:..... | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| | Brought Forward | | R | |
|--------|---|------|---|--|
| 1/1/53 | Existing premises occupied (B3.4) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/54 | Previous work - dimensional accuracy (B3.5) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/55 | Previous work - defects (B3.6) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/56 | Services - known (B3.7) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/57 | Services - unknown (B3.8) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/58 | Protection of trees etc (B3.9) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/59 | Articles of value (B3.10) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/60 | Inspection of adjoining properties etc (B3.11) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Management of contract (B4)</u> | | | |
| 1/1/61 | Management of the works (B4.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/62 | Programme for the works (B4.2) | | | |
| | F:..... V:..... T:..... | Item | | |
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| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| Brought Forward | | | R |
|---|---|------|---|
| 1/1/63 | Progress meetings (B4.3) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/64 | Technical meetings (B4.4) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/65 | Labour and Plant records (B4.5) | | |
| | F:..... V:..... T:..... | Item | |
| | <u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u> | | |
| 1/1/66 | Samples of materials (B5.1) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/67 | Workmanship samples (B5.2) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/68 | Shop drawings (B5.3) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/69 | Compliance with Manufacturer's Instructions (B5.4) | | |
| | F:..... V:..... T:..... | Item | |
| | <u>Temporary works and plant (B6)</u> | | |
| 1/1/70 | Deposits and fees (B6.1) | | |
| | F:..... V:..... T:..... | Item | |
| 1/1/71 | Enclosure of the works (B6.2) | | |
| | F:..... V:..... T:..... | Item | |
| Carried Forward | | | R |
| Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

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|--------|---|------|---|--|
| | Brought Forward | | R | |
| 1/1/72 | Advertising (B6.3) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/73 | Plant, equipment, sheds and offices (B6.4) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/74 | Main notice board (B6.5) | | | |
| | F:..... V:..... T:..... | N/A | | |
| 1/1/75 | Subcontractors' notice board (B6.6) | | | |
| | F:..... V:..... T:..... | N/A | | |
| | <u>Temporary services (B7)</u> | | | |
| 1/1/76 | Location (B7.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/77 | Water (B7.2) | | | |
| | Option [A] shall apply | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/78 | Electricity (B7.3) | | | |
| | Option [A] shall apply | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/79 | Telecommunication facilities (B7.4) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/80 | Ablution facilities (B7.5) | | | |
| | Option [A] shall apply | | | |
| | F:..... V:..... T:..... | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

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|--------|---|------|---|--|
| | Brought Forward | | R | |
| | <u>Prime cost amounts (B8)</u> | | | |
| 1/1/81 | Responsibility for prime cost amounts (B8.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Attendance on N/S Subcontractors (B9)</u> | | | |
| 1/1/82 | General attendance (B9.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/83 | Special attendance (B9.2) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/84 | Commissioning - Fuel, water and power (B9.3) | | | |
| | F:..... V:..... T:..... | Item | | |
| | <u>Financial aspects (B10)</u> | | | |
| | Statutory taxes, duties and levies (B10.1) | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/85 | Payment of preliminaries (B10.2) | | | |
| | Option [B] shall apply | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/86 | Adjustment of preliminaries (B10.3) | | | |
| | Option [A] shall apply | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/87 | Payment certificate cash flow (B10.4) | | | |
| | F:..... V:..... T:..... | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| Brought Forward | | | R | |
|---|--|------|---|--|
| | <u>General (B11)</u> | | | |
| 1/1/88 | Protection of works (B11.1) F:..... V:..... T:..... | Item | | |
| 1/1/89 | Protection/isolation of existing/sectionally occupied works (B11.2) F:..... V:..... T:..... | N/A | | |
| 1/1/90 | Security of the Works (B11.3) F:..... V:..... T:..... | Item | | |
| 1/1/91 | Notice before covering work (B11.4) F:..... V:..... T:..... | Item | | |
| 1/1/92 | Disturbance (B11.5) F:..... V:..... T:..... | Item | | |
| 1/1/93 | Environmental Disturbance (B11.6) F:..... V:..... T:..... | Item | | |
| 1/1/94 | Works cleaning and clearing (B11.7) F:..... V:..... T:..... | Item | | |
| 1/1/95 | Vermin (B11.8) F:..... V:..... T:..... | Item | | |
| 1/1/96 | Overhand work (B11.9) F:..... V:..... T:..... | Item | | |
| 1/1/97 | Instruction manuals and guarantees (B11.10) F:..... V:..... T:..... | Item | | |
| 1/1/98 | As built information (B11.11) F:..... V:..... T:..... | Item | | |
| Carried Forward | | | R | |
| Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | | |

| | | | | |
|---------|---|------|---|--|
| | Brought Forward | | R | |
| 1/1/99 | Tenant Installations (B11.12) F:..... V:..... T:..... <u>Schedule of variables (B12)</u> | Item | | |
| 1/1/100 | Pre-tender information (B12.1) F:..... V:..... T:..... 12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: No 12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete No 12.1.3 Interest of agents (B2.4) 12.1.4 Defined works area (B3.1) 12.1.5 Geotechnical investigation (B3.2) N/A 12.1.6 Existing premises occupied (B3.4) Yes 12.1.7 Previous work - dimensional accuracy (B3.4) 12.1.8 Previous work - defects (B3.5) 12.1.9 Services - known (B3.7) 12.1.10 Protection of trees (B3.9) All trees should be protected and only on instruction of the Principal Agent may any trees be removed | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| | | | | | |
|---------------|--|--|--|---|--|
| | Brought Forward | | | R | |
| 12.1.11 | Inspection of adjoining properties (B3.11) | | | | |
| 12.1.12 | Enclosure of the works (B6.2) | | | | |
| 12.1.13 | Offices (B6.4.3) | | | | |
| | An office for the clerck of works should be provided | | | | |
| 12.1.14 | Main notice board (B6.5) | | | | |
| | Yes | | | | |
| 12.1.15 | Subcontractors notice board (B6.6) | | | | |
| | A notice board is required | | | | |
| | No | | | | |
| 12.1.16 | Water (B7.2) | | | | |
| | Alternative Selected: A | | | | |
| 12.1.17 | Electricity (B7.3) | | | | |
| | Alternative selected: A | | | | |
| 12.1.18 | Telecommunications (B7.4) | | | | |
| 12.1.19 | Ablution facilities (B7.5) | | | | |
| | Alternative selected: A | | | | |
| 12.1.20 | Protection of existing/sectionally occupied works (B11.2) | | | | |
| 12.1.21 | Special attendance (B9.2) | | | | |
| | Subcontractor (1) details: | | | | |
| | N/A | | | | |
| 12.1.22 | Protection of the works (B11.1) | | | | |
| | N/A | | | | |
| 12.1.23 | Disturbance (B11.5) | | | | |
| | N/A | | | | |
| | Carried Forward | | | R | |
| Section No. 1 | | | | | |
| PRELIMINARIES | | | | | |
| Bill No. 1 | | | | | |
| Preliminaries | | | | | |

| | | | | |
|---------|---|------|---|--|
| | Brought Forward | | R | |
| | 12.1.24 Environmental Disturbance (B11.6) | | | |
| | N/A | | | |
| | <u>Post tender information (B12.2)</u> | | | |
| | 12.2.1 Payment of preliminaries Alternative selected: B | | | |
| | 12.2.2 Adjustment of preliminaries Alternative selected: A | | | |
| | 12.2.3 Additional agreed preliminaries items N/A | | | |
| | <u>SECTION C: SPECIFIC PRELIMINARIES</u> | | | |
| | Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included | | | |
| 1/1/101 | Site instructions | | | |
| | Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/102 | Black economic empowerment and training | | | |
| | F:..... V:..... T:..... | Item | | |
| 1/1/103 | Proprietary branded products | | | |
| | F:..... V:..... T:..... | Item | | |
| | The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative | | | |
| 1/1/104 | Contract instructions | | | |
| | F:..... V:..... T:..... | Item | | |
| | Carried Forward | | R | |
| | Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | |

| Brought Forward | | | R | |
|---|---|------|---|--|
| | Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor | | | |
| 1/1/105 | Labour record F:..... V:..... T:..... | Item | | |
| | At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week | | | |
| 1/1/106 | Plant record F:..... V:..... T:..... | Item | | |
| | At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week | | | |
| 1/1/107 | Guarantees F:..... V:..... T:..... | Item | | |
| | Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement | | | |
| Carried Forward | | | R | |
| Section No. 1 PRELIMINARIES Bill No. 1 Preliminaries | | | | |

| | Brought Forward | | R | |
|---------|---|------|---|--|
| 1/1/108 | <p>Overtime</p> <p>F:..... V:..... T:.....</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> | Item | | |
| 1/1/109 | <p>Co-operation of contractor for cost management</p> <p>F:..... V:..... T:.....</p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors</p> | Item | | |
| 1/1/110 | <p>Occupational Health and Safety Specification</p> <p>F:..... V:..... T:.....</p> <p>Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occupational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionnaire" The contractor to comply with all provisions of the above and to be enforced on all selected and or other sub-contractors, as no claim afterwards will be entertained</p> <p><u>SUMMARY OF CATEGORIES</u></p> <p>Category : Fixed R.....</p> <p>Category : Value R.....</p> <p>Category : Time R.....</p> | Item | | |
| | Carried to Final Summary | | R | |
| | <p>Section No. 1</p> <p>PRELIMINARIES</p> <p>Bill No. 1</p> <p>Preliminaries</p> | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 2/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 76 | |
| 2/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 76 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 2/1/3 | Reduced levels under floors | m3 | 13 | |
| 2/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 14 | |
| | Carried Forward | | | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 1 Earthworks (Provisional) | | | |
| | | | R | |

| | Brought Forward | | | R | |
|--------|---|----|------|---|--|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | | |
| 2/1/5 | Soft rock | m3 | 4 | | |
| 2/1/6 | Hard rock | m3 | 1 | | |
| | <u>Extra over all excavations for carting away</u> | | | | |
| 2/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 14 | | |
| | <u>Risk of collapse of excavations</u> | | | | |
| 2/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 18 | | |
| | <u>Keeping excavations free of water</u> | | | | |
| 2/1/9 | Keeping excavations free of all water other than subterranean water | | Item | | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u> | | | | |
| 2/1/10 | Under floors, steps, pavings, etc | m3 | 7 | | |
| | <u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u> | | | | |
| 2/1/11 | Under floors, steps, pavings, etc | m3 | 7 | | |
| | <u>SOIL POISONING</u> | | | | |
| | <u>Soil insecticide</u> | | | | |
| 2/1/12 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 45 | | |
| 2/1/13 | To bottoms and sides of trenches | m2 | 69 | | |
| | Carried Forward to Summary of Section No. 2 | | | R | |
| | Section No. 2 | | | | |
| | BLOCK A - GUARD HOUSE | | | | |
| | Bill No. 1 | | | | |
| | Earthworks (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|------------|---|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 2 Concrete, Formwork and Reinforement</p> | | | |
| | | | R | |

| | | | | |
|--|---|--|---|--|
| | <p style="text-align: center;">Brought Forward</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |
| | | | R | |

| Brought Forward | | | R |
|---|--|----|------|
| <u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> | | | |
| <u>15MPa/19mm concrete</u> | | | |
| 2/2/1 | Foundations | m3 | 14 |
| <u>REINFORCED CONCRETE</u> | | | |
| <u>25MPa/19mm concrete</u> | | | |
| 2/2/2 | Surface beds on waterproofing | m3 | 3 |
| 2/2/3 | Aprons | m3 | 3 |
| <u>TEST BLOCKS</u> | | | |
| 2/2/4 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 4 |
| <u>CONCRETE SUNDRIES</u> | | | |
| <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | |
| 2/2/5 | Aprons, slabs, etc to falls | m2 | 81 |
| <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | | |
| <u>Rough formwork to sides</u> | | | |
| 2/2/6 | Edges, risers, ends and reveals not exceeding 300mm high or wide (Provisional) | m | 73 |
| <u>MOVEMENT JOINTS ETC</u> | | | |
| <u>Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces</u> | | | |
| 2/2/7 | 10mm Joints not exceeding 300mm high | m | 46 |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | |
| 2/2/8 | Rebar | t | 1.51 |
| Carried Forward | | | R |
| Section No. 2 BLOCK A - GUARD HOUSE Bill No. 2 Concrete, Formwork and Reinforement | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>MASONRY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>Sizes in descriptions</u> | | | |
| | Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| | <u>Face bricks</u> | | | |
| | Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| | <u>Pointing</u> | | | |
| | Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| | <u>SUPERSTRUCTURE</u> | | | |
| | <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 2/3/1 | One brick walls in beamfilling | m2 | 6 | |
| 2/3/2 | Half brick walls | m2 | 14 | |
| 2/3/3 | One brick walls | m2 | 38 | |
| | <u>BRICKWORK SUNDRIES</u> | | | |
| | <u>Brickwork reinforcement</u> | | | |
| 2/3/4 | 75mm Wide reinforcement built in horizontally | m | 41 | |
| 2/3/5 | 150mm Wide reinforcement built in horizontally | m | 112 | |
| | Carried Forward | | R | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 3 Masonry | | | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>Prestressed fabricated lintels</u> | | | | |
| 2/3/6 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 9 | | |
| 2/3/7 | 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4,5m | m | 4 | | |
| | <u>Turning pieces to lintels etc</u> | | | | |
| 2/3/8 | 220mm Wide turning pieces | m | 2 | | |
| | <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 2/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 9 | | |
| | <u>FACE BRICKWORK</u> | | | | |
| | <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 2/3/10 | Extra over brickwork for face brickwork | m2 | 38 | | |
| | <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 2/3/11 | Extra over brickwork for brick-on-edge header course lintels | m | 11 | | |
| 2/3/12 | 220mm Wide sill set sloping and slightly projecting | m | 10 | | |
| | Carried Forward to Summary of Section No. 2 | | | R | |
| | Section No. 2 | | | | |
| | BLOCK A - GUARD HOUSE | | | | |
| | Bill No. 3 | | | | |
| | Masonry | | | | |

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| Item No | | | Quantity | Rate | Amount |
|---------|---|----|----------|------|--------|
| | <u>BILL NO. 5</u> | | | | |
| | <u>ROOF COVERINGS ETC</u> | | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | | |
| 2/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 32 | | |
| 2/5/2 | Head wall flashings 308mm girth | m | 1 | | |
| 2/5/3 | Valley flashing | m | 15 | | |
| | <u>ROOF AND WALL INSULATION</u> | | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | | |
| 2/5/4 | Insulation laid taut over purlins (at approximately 100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 22 | | |
| | Carried Forward to Summary of Section No. 2 | | | | R |
| | Section No. 2 | | | | |
| | BLOCK A - GUARD HOUSE | | | | |
| | Bill No. 5 | | | | |
| | Roof Coverings | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 6 Carpentry and Joinery</p> | | R | |

| | | | | | |
|-------|---|--|----|--|---|
| | | Brought Forward | | | R |
| | | <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 1,10m centres</p> <p>Roof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,1m maximum centres.</p> <p>Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering.</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences.</p> <p>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s CLASS-3 - 001 to 002) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</p> <p><u>Sawn softwood</u></p> | | | |
| 2/6/1 | 38 x 114mm Wall plates | m | 19 | | |
| 2/6/2 | Design, manufacture and deliver to site, plate nailed roof truss construction to Gate House, size 5 850 x 5 390mm overall on plan consisting of six mono pitched trusses, each truss with 450mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing (wall plates elsewhere) | No | 1 | | |
| | | | | | |
| | | Carried Forward | | | R |
| | <p>Section No. 2</p> <p>BLOCK A - GUARD HOUSE</p> <p>Bill No. 6</p> <p>Carpentry and Joinery</p> | | | | |

| | Brought Forward | | | R | |
|-------|--|----|----|---|--|
| 2/6/3 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 32 | | |
| | <u>Sundries</u> | | | | |
| 2/6/4 | Two coats creosote on sawn timbers | m2 | 9 | | |
| | <u>EAVES , VERGES , ETC</u> | | | | |
| | <u>"Everite" pressed nutec-cement</u> | | | | |
| 2/6/5 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 22 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 2/6/6 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 2 | | |
| | <u>FITTINGS</u> | | | | |
| | <u>General</u> | | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | | |
| 2/6/7 | L-Shaped worktop with legs 7,100mm long x 825mm wide x 714 mm high overall with 215 mm high edge panel to back and sides, comprising frame, tops, etc | No | 1 | | |
| | Carried Forward to Summary of Section No. 2 | | | R | |
| | Section No. 2 | | | | |
| | BLOCK A - GUARD HOUSE | | | | |
| | Bill No. 6 | | | | |
| | Carpentry and Joinery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 2/7/1 | Ceilings including 38 x 38mm sawn softwood bandering at 400mm centres | m2 | 22 | |
| 2/7/2 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 1 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 2/7/3 | 75mm Coved cornices | m | 19 | |
| | Carried Forward to Summary of Section No. 2 | | R | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 7 Ceilings, Partitions and Access Flooring | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 9</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>LOCKS</u> <u>"Union" or similar approved</u> 2/8/1 50mm Brass padlock No 1 <u>"Mazac Tarpon" or similar approved</u> 2/8/2 "LA952/4L" four lever lockset and handles with chrome plated finish No 2 <u>HANDLES</u> <u>"Brass"</u> 2/8/3 32 x 350mm Stainless steel straight back-to-back pull handles No 1 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 8 Ironmongery | | | |

| Brought Forward | | | R |
|--|--|----|---|
| <u>PUSH PLATES AND KICKING PLATES</u> | | | |
| <u>"Dorma" or similar approved</u> | | | |
| 2/8/4 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 1 |
| <u>BATHROOM FITTINGS</u> | | | |
| <u>"Stiebel Eltron" or similar approved</u> | | | |
| 2/8/5 | "SDSS" Soap dispenser plugged | No | 1 |
| <u>"Nampak" or similar approved</u> | | | |
| 2/8/6 | "TR2" lockable toilet roll holder plugged | No | 1 |
| <u>SUNDRIES</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 2/8/7 | "AL8730AS" door stop plugged | No | 1 |
| 2/8/8 | "AL8722AS" rubber tipped hat and coat hook | No | 2 |
| Carried Forward to Summary of Section No. 2 | | | R |
| Section No. 2 | | | |
| BLOCK A - GUARD HOUSE | | | |
| Bill No. 8 | | | |
| Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 10</u> | | | |
| | <u>METALWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions</u> | | | |
| | Descriptions of bolts shall be deemed to include nuts and washers | | | |
| | Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete | | | |
| | Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described | | | |
| | <u>WELDED SCREENS, GATES, ETC</u> | | | |
| | <u>Steel gates and frames</u> | | | |
| 2/9/1 | Single gate and frame 850 x 2 200mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts, each leaf of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 1 | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | |
| | <u>1,2mm Double rebated frames suitable for half brick walls</u> | | | |
| 2/9/2 | Frame for door 813 x 2 032mm high | No | 1 | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | |
| 2/9/3 | Frame for door 813 x 2 032mm high | No | 1 | |
| | Carried Forward | | R | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 9 Metalwork | | | |

| Brought Forward | | | R |
|--|--|----|---|
| <u>ALUMINIUM WINDOWS, DOORS, ETC</u> | | | |
| <u>Natural anodised standard 70mm aluminium shopfront plugged to partitioning</u> | | | |
| 2/9/4 | Window size 900 x 900mm high (W07) | No | 1 |
| 2/9/5 | Window size 2,400 x 1,200mm high (W08) | No | 2 |
| 2/9/6 | Window size 4,025 x 1,200mm high (W09) | No | 1 |
| <u>SUNDRY STEELWORK</u> | | | |
| Carried Forward to Summary of Section No. 2 | | | R |
| Section No. 2 | | | |
| BLOCK A - GUARD HOUSE | | | |
| Bill No. 9 | | | |
| Metalwork | | | |

| Item No | Quantity | Rate | Amount |
|---|-----------------------------------|------|--------|
| <u>BILL NO. 11</u> | | | |
| <u>PLASTERING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 142 for CPAP formula purposes. | | | |
| <u>SCREEDS</u> | | | |
| <u>1:4 Cement plaster screeds wood floated on concrete</u> | | | |
| 2/10/1 | 25mm Thick on floors and landings | m2 | 22 |
| <u>INTERNAL PLASTER</u> | | | |
| <u>Cement plaster on brickwork</u> | | | |
| 2/10/2 | On walls | m2 | 77 |
| 2/10/3 | On narrow widths | m2 | 3 |
| Carried Forward to Summary of Section No. 2 | | | R |
| Section No. 2 BLOCK A - GUARD HOUSE Bill No. 10 Plastering | | | |

| Item No | Quantity | Rate | Amount |
|---|---|------|--------|
| <u>BILL NO. 12</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>200 x 200 x 6mm Porcelain ceramic tiles (Prime Cost Amount R120.00 / m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 2/11/1 | On walls in isolated panels, splashbacks, etc | m2 | 1 |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm Porcelain tiles (Prime Cost Amount R 180.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 2/11/2 | On floors and landings | m2 | 17 |
| 2/11/3 | Skirting 75mm high | m | 25 |
| Carried Forward to Summary of Section No. 2 | | | R |
| Section No. 2 BLOCK A - GUARD HOUSE Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 13</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 12 Plumbing and Drainage (Provisional)</p> | | R | |

| | | | |
|---|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 12 Plumbing and Drainage (Provisional)</p> | | R | |
| | | R | |

| | | | |
|---|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> | | R | |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 2 BLOCK A - GUARD HOUSE Bill No. 12 Plumbing and Drainage (Provisional)</p> | | R | |

| Brought Forward | | | R |
|--|---|----|----|
| <u>SANITARY FITTINGS</u> | | | |
| <u>Vaal or equally approved</u> | | | |
| 2/12/1 | White vitreous china close coupled wash down WC suite comprising 90 degrees outlet open rim pan and matching 9 litre front single flush top single flush cistern. | No | 1 |
| 2/12/2 | Bantam Vitreous china cloakroom hand basin 340 x 460mm with two tap hole and integrated overflow to SABS specification and chain stay hole bolted to wall with 10mm bolts and sealed with silicone sealant where basin meets wall | No | 1 |
| <u>WASTE UNIONS, ETC</u> | | | |
| <u>"Cobra Watertech" or similar approved</u> | | | |
| 2/12/3 | 32mm "301CP" Basin waste union | No | 1 |
| <u>TRAPS, ETC</u> | | | |
| <u>"Marley" or similar approved</u> | | | |
| 2/12/4 | 32 x 50mm Deep seal "P" or "S" trap | No | 1 |
| <u>TAPS, VALVES, ETC</u> | | | |
| <u>Brass</u> | | | |
| 2/12/5 | 22mm Stopcock | No | 1 |
| <u>"Cobra Watertech" or similar approved</u> | | | |
| 2/12/6 | 15mm "111CP" Pillartap | No | 1 |
| <u>SANITARY PLUMBING</u> | | | |
| <u>uPVC pipes</u> | | | |
| 2/12/7 | 50mm Pipes | m | 8 |
| 2/12/8 | 110mm Pipes | m | 7 |
| 2/12/9 | 110mm Pipe laid in and including trench excavation not exceeding 1m deep including backfilling with selected granular fill in bedding and filling around pipes | m | 12 |
| Carried Forward | | | R |
| Section No. 2 BLOCK A - GUARD HOUSE Bill No. 12 Plumbing and Drainage (Provisional) | | | |

| Brought Forward | | | | R |
|--|--|----|------|---|
| <u>Extra over uPVC pipes for fittings</u> | | | | |
| 2/12/10 | 50mm Bend | No | 3 | |
| 2/12/11 | 110mm Bend | No | 4 | |
| 2/12/12 | 110mm Pan connector | No | 1 | |
| <u>Sundries</u> | | | | |
| 2/12/13 | Testing waste pipe system | | Item | |
| <u>WATER SUPPLIES</u> | | | | |
| <u>Class 0 copper pipes</u> | | | | |
| 2/12/14 | 15mm Pipes | m | 2 | |
| 2/12/15 | 22mm Pipes | m | 1 | |
| 2/12/16 | 15mm Pipes chased into brick walls | m | 1 | |
| 2/12/17 | 22mm Pipes chased into brick walls | m | 1 | |
| <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 2/12/18 | 15mm Fittings | No | 3 | |
| 2/12/19 | 22mm Fittings | No | 3 | |
| <u>TESTING</u> | | | | |
| 2/12/20 | Testing water pipe system | | Item | |
| <u>FIRE APPLIANCES ETC</u> | | | | |
| <u>"Chubb" or similar approved</u> | | | | |
| 2/12/21 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 1 | |
| Carried Forward to Summary of Section No. 2 | | | | R |
| Section No. 2 | | | | |
| BLOCK A - GUARD HOUSE | | | | |
| Bill No. 12 | | | | |
| Plumbing and Drainage (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|------------|--|----------|------|--------|
| | <u>BILL NO. 14</u> <u>GLAZING</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 150 for CPAP formula purposes <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>6mm Silvered float glass copper backed mirrors</u> <u>with polished edges holed for and fixed with</u> <u>chromium plated dome capped mirror screws with</u> <u>rubber buffers to plugs in brickwork or concrete</u> | | | |
| 2/13/1 | Mirror 450 x 900mm high with four screws | No | 1 | |
| | Carried Forward to Summary of Section No. 2 | | R | |
| | Section No. 2 | | | |
| | BLOCK A - GUARD HOUSE | | | |
| | Bill No. 13 | | | |
| | Glazing | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 15 | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 2/14/1 | On internal walls | m2 | 81 | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 2/14/2 | On ceilings and cornices | m2 | 22 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 2/14/3 | On fascias and barge boards | m2 | 5 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 2/14/4 | On door frames | m2 | 1 | |
| 2/14/5 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 4 | |
| | <u>ON WOOD</u> | | | |
| | <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 2/14/6 | On doors | m2 | 7 | |
| 2/14/7 | On skirtings, rails, etc not exceeding 300mm girth | m | 19 | |
| | Carried Forward to Summary of Section No. 2 | | R | |
| | Section No. 2 BLOCK A - GUARD HOUSE Bill No. 14 Painting | | | |

| | | | | | | |
|--------------------------|---|--|---------|--|--------|----|
| Bill No | Section No. 2 | | Page No | | Amount | |
| | BLOCK A - GUARD HOUSE | | | | | |
| | <u>SECTION SUMMARY - BLOCK A - GUARD HOUSE</u> | | | | | |
| | 2/1 | Earthworks (Provisional) | | | | 25 |
| | 2/2 | Concrete, Formwork and Reinforement | | | | 29 |
| | 2/3 | Masonry | | | | 31 |
| | 2/4 | Waterproofing | | | | 32 |
| | 2/5 | Roof Coverings | | | | 33 |
| | 2/6 | Carpentry and Joinery | | | | 36 |
| | 2/7 | Ceilings, Partitions and Access Flooring | | | | 37 |
| | 2/8 | Ironmongery | | | | 39 |
| | 2/9 | Metalwork | | | | 41 |
| | 2/10 | Plastering | | | | 42 |
| | 2/11 | Tiling | | | | 43 |
| | 2/12 | Plumbing and Drainage (Provisional) | | | | 48 |
| 2/13 | Glazing | 49 | | | | |
| 2/14 | Painting | 50 | | | | |
| Carried to Final Summary | | | | | | |
| Section No. 2 | | | | | | |
| BLOCK A - GUARD HOUSE | | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 3/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 651 | |
| 3/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 651 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 3/1/3 | Reduced levels under floors | m3 | 98 | |
| 3/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 118 | |
| | Carried Forward | | | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 1 Foundations (Provisional) | | R | |

| Brought Forward | | | | R |
|-----------------|---|----|-------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 3/1/5 | Soft rock | m3 | 64 | |
| 3/1/6 | Hard rock | m3 | 41 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 3/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 205 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 3/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 102 | |
| | <u>Keeping excavations free of water</u> | | | |
| 3/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | |
| 3/1/10 | Under floors, steps, pavings, etc | m3 | 293 | |
| | <u>Coarse river sand filling supplied by the contractor</u> | | | |
| 3/1/11 | Under floors etc | m3 | 31 | |
| | <u>Compaction of surfaces</u> | | | |
| 3/1/12 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 1,030 | |
| | <u>Prescribed density tests on filling</u> | | | |
| 3/1/13 | "Modified AASHTO Density" test | No | 59 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 3/1/14 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 638 | |
| | Carried Forward | | | R |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 1 Foundations (Provisional) | | | |

| | Brought Forward | | | R | |
|---|----------------------------------|----|-------|---|--|
| 3/1/15 | To bottoms and sides of trenches | m2 | 1,180 | | |
| Carried Forward to Summary of Section No. 3 | | | | R | |
| Section No. 3 | | | | | |
| BLOCK B - ADMINISTRATION | | | | | |
| Bill No. 1 | | | | | |
| Foundations (Provisional) | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 3 BLOCK B - ADMINISTRATION Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | R |
|-----------------|---|----|-----|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | |
| | <u>UNREINFORCED CONCRETE</u> | | |
| | <u>15MPa/19mm concrete</u> | | |
| 3/2/1 | Concrete in-fill between cavity walls in foundations | m3 | 3 |
| | <u>25MPa/19mm concrete</u> | | |
| 3/2/2 | Ramp including thickening (provisional) | m3 | 15 |
| | <u>REINFORCED CONCRETE</u> | | |
| | <u>25MPa/19mm concrete</u> | | |
| 3/2/3 | Foundations | m3 | 118 |
| 3/2/4 | Surface beds on waterproofing | m3 | 58 |
| 3/2/5 | V-drains | m3 | 8 |
| | <u>30MPa/19mm concrete</u> | | |
| 3/2/6 | Walls | m3 | 9 |
| 3/2/7 | Slab | m3 | 2 |
| | <u>TEST BLOCKS</u> | | |
| 3/2/8 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 37 |
| | <u>CONCRETE SUNDRIES</u> | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | |
| 3/2/9 | Ramps,etc to falls (provisional) | m2 | 69 |
| | Carried Forward | | R |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 2 Concrete, Formwork and Reinforcement | | |

| Brought Forward | | | | R |
|-----------------|--|----|-------|---|
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | |
| 3/2/10 | Aprons, slabs, etc to falls | m2 | 787 | |
| 3/2/11 | V-drains to falls | m2 | 89 | |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | | |
| | <u>Smooth formwork to sides</u> | | | |
| 3/2/12 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 353 | |
| | <u>Rough formwork to sides and soffits</u> | | | |
| 3/2/13 | Sides and soffits of slabs | m2 | 13 | |
| 3/2/14 | Sides of concrete walls | m2 | 82 | |
| | <u>MOVEMENT JOINTS, ETC</u> | | | |
| | <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | |
| 3/2/15 | 10mm Joints not exceeding 300mm high | m | 294 | |
| | <u>REINFORCEMENT (PROVISIONAL)</u> | | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | | |
| 3/2/16 | 12mm Diameter bars | t | 13.98 | |
| | <u>Fabric reinforcement</u> | | | |
| 3/2/17 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 774 | |
| | Carried Forward to Summary of Section No. 3 | | | R |
| | Section No. 3 | | | |
| | BLOCK B - ADMINISTRATION | | | |
| | Bill No. 2 | | | |
| | Concrete, Formwork and Reinforcement | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 3/3/1 | Piers | m3 | 3 |
| 3/3/2 | Half brick walls in beamfilling | m2 | 25 |
| 3/3/3 | Half brick walls | m2 | 144 |
| 3/3/4 | One brick walls | m2 | 84 |
| 3/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 370 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 3 BLOCK B - ADMINISTRATION Bill No. 3 Masonry | | | |

| | Brought Forward | | | R |
|--------|--|----|-----|---|
| | <u>Brickwork reinforcement</u> | | | |
| 3/3/6 | 150mm Wide reinforcement built in horizontally | m | 651 | |
| | <u>Prestressed fabricated lintels</u> | | | |
| 3/3/7 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 104 | |
| | <u>Turning pieces to lintels etc</u> | | | |
| 3/3/8 | 220mm Wide turning pieces | m | 22 | |
| | <u>Galvanised hoop iron cramps, ties, etc</u> | | | |
| 3/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 108 | |
| | <u>FACE BRICKWORK</u> | | | |
| | <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | |
| 3/3/10 | Extra over brickwork for face brickwork | m2 | 673 | |
| 3/3/11 | Extra over brickwork for face brick-on-edge header lintel 230mm wide. | m | 7 | |
| | <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | |
| 3/3/12 | 220mm Wide sill set sloping and slightly projecting | m | 27 | |
| | <u>NUTEC-CEMENT WINDOW SILLS</u> | | | |
| | <u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u> | | | |
| 3/3/13 | 15 x 150mm Wide sills set flat and slightly projecting | m | 27 | |
| | Carried Forward to Summary of Section No. 3 | | | R |
| | Section No. 3 | | | |
| | BLOCK B - ADMINISTRATION | | | |
| | Bill No. 3 | | | |
| | Masonry | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,53mm Charcoal grey "IBR" profile roof sheeting at 11 degree on insulation on 76 x 50mm S.A Pine purlins at 750mm c/cs on prefabricated timber trusses to engineers detail and specifications</u> | | | |
| 3/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 446 | |
| 3/5/2 | Sidewall Flashing 375mm girth, one time bent. | m | 94 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | |
| 3/5/3 | Insulation laid taut over purlins (at approximately 1 200mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 446 | |
| | Carried Forward to Summary of Section No. 3 | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 3 BLOCK B - ADMINISTRATION Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | R |
|---|--|----|-----|
| <u>Plate nailed timber roof truss construction</u> The following is applicable in respect of roof trusses: Trusses are at maximum 1,05m centres Roof covering is IBR roof sheeting with "Globalcoat" finish on 50 x 75mm purlins at 1,2m maximum centres. Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm branderling. All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. All joints to be close fitted butt joints. Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. Tenderers must study the roof plan and sections as attached to the back of these bills of quantities(refer drawing No.'s GR-R 01 to 02) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained | | | |
| <u>Sawn softwood</u> | | | |
| 3/6/1 | 38 x 114mm Wall plates | m | 188 |
| 3/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the administration Block B, size 31,320 x 9,980mm overall on plan consisting of mono pitch roof trusses with 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 42 |
| Carried Forward | | | R |
| Section No. 3 BLOCK B - ADMINISTRATION Bill No. 6 Carpentry and Joinery | | | |

| | Brought Forward | | | R | |
|--------|--|----|-----|---|--|
| 3/6/3 | Design, manufacture, supply and deliver on site, plate nailed roof construction to administration verandah block B size 31,320 x 2,200mm overall on plan 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates elsewhere) | No | 42 | | |
| 3/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 390 | | |
| | <u>Sundries</u> | | | | |
| 3/6/5 | Two coats creosote on sawn timbers | m2 | 100 | | |
| | <u>EAVES , VERGES , ETC</u> | | | | |
| | <u>"Everite Flexit" pressed nutec-cement, or similar approved</u> | | | | |
| 3/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 94 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 3/6/7 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 21 | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to timber frames</u> | | | | |
| 3/6/8 | 44mm "TDM" Framed and ledged double door 1 678 x 2 032mm high with rebated meeting stiles and 500 x 1 395mm high glass panel in each leaf rebated all round including glazing beads on one side (glazing measured elsewhere) | No | 2 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 3/6/9 | 44mm Door 813 x 2 032mm high | No | 15 | | |
| 3/6/10 | 44mm Door 900 x 2 032mm high (paraplegic) | No | 1 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | | | | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>SA Pine</u> | | | | |
| 3/6/11 | Dado rail COLDR3T 22 x 44 x 3mm | m | 30 | | |
| | <u>JOINERY SUNDRIES</u> | | | | |
| | <u>Wrought Saligna</u> | | | | |
| 3/6/12 | Entrance foyer bench at overall length of approximately 3600mm long comprising of, 25 x 25mm Saligna filling pie plugged and screwed to wall, 19mm saligna back screw wall filling piece top and bottom, 75 x 25mm Pine filling screwed to seat, 25mm thick laminated saligna seat screw steel frame from top and plugged, 40 x 40 x 3mm mild steel angle iron welded to steel frame across entire length of bench 50 x 50 x 3mm mild steel angle iron welded together to form support frame. Fix steel frame to wall with 3.5mm x 70 mm anchors, etc all in accordance to Architects drawings (det: DT47) | No | 1 | | |
| | <u>FITTINGS</u> | | | | |
| | <u>General</u> | | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | | |
| | <u>Fittings to administration block</u> | | | | |
| 3/6/13 | Floor unit to work station 1 500mm long x 670mm wide x 720mm high overall comprising, worktops, bottoms, sides, divisions, shelves, backs, doors, drawers, etc as per architects drawing No. GR-R 004 | No | 5 | | |
| 3/6/14 | Wall unit to work station 1 500mm long x 300mm wide x 600mm high overall comprising, bottoms, sides, divisions, shelves, backs, doors, etc as per architects drawing No. GR-R 004 | No | 4 | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--|--|----|----|---|--|
| 3/6/15 | L-shaped floor cupboard to kitchen measuring 3 960mm long on centre line x 600mm wide x 902mm high overall comprising, worktops, bottoms, sides, divisions, shelves, backs, doors, drawers, etc (sink elsewhere measured) as per architects drawing No. GR-R 005 | No | 2 | | |
| 3/6/16 | Pigeon hole floor cupboard 1 532mm long x 550mm wide x 2 532mm high overall comprising, bottoms, sides, divisions, shelves, etc as per architects drawing No. GR-R 006 | No | 10 | | |
| 3/6/17 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. GR-R 008 | m | 42 | | |
| Carried Forward to Summary of Section No. 3 | | | | R | |
| Section No. 3 | | | | | |
| BLOCK B - ADMINISTRATION | | | | | |
| Bill No. 6 | | | | | |
| Carpentry and Joinery | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>CEILINGS ETC</u> | | | |
| | <u>Wrought meranti</u> | | | |
| 3/7/1 | 19mm Quadrant bead cornice nailed | m | 42 | |
| | <u>"Aerolite" insulation or similar approved</u> | | | |
| 3/7/2 | 100mm Non-combustible lightweight fibreglass insulation blanket fitted between tie beams and laid loose on top of brandering | m2 | 321 | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 3/7/3 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 321 | |
| 3/7/4 | Sloping ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 96 | |
| | Carried Forward | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 7 Ceilings, Partitions and Access Flooring | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| 3/7/5 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 6 |
| <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 3/7/6 | 75mm Coved cornices | m | 173 |
| Carried Forward to Summary of Section No. 3 Section No. 3 BLOCK B - ADMINISTRATION Bill No. 7 Ceilings, Partitions and Access Flooring | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 8</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 3/8/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 80 <u>LOCKS</u> <u>"Union" or similar approved</u> 3/8/2 "CZ80941SC" WC indicator bolt with keep fixed to metal No 5 3/8/3 CZ682-24/2247-78" or other similar and approved four lever lockset with striking plate fixed to metal or timber (as per architect specifications) No 3 <u>"Mazac Tarpon" or similar approved</u> 3/8/4 "LA952/4L" four lever lockset and handles with chrome plated finish No 5 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 8 Ironmongery | | | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>HANDLES</u> | | | | |
| 3/8/5 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 15 | | |
| | <u>"Dorma" or similar approved</u> | | | | |
| 3/8/6 | 32 x 515mm Stainless steel "D" straight back-to-back pull handles | No | 3 | | |
| | <u>PUSH PLATES AND KICKING PLATES</u> | | | | |
| | <u>"Dorma" or similar approved</u> | | | | |
| 3/8/7 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 2 | | |
| | <u>DOOR CLOSERS</u> | | | | |
| | <u>"Dorma" or similar approved</u> | | | | |
| 3/8/8 | "TS 83" door closer with bracket fixed to metal | No | 2 | | |
| | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| 3/8/9 | 60 x 3mm Thick perspex plate with two 40mm high engraved and painted numerals | No | 15 | | |
| | <u>"Union" or similar approved</u> | | | | |
| 3/8/10 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 3 | | |
| 3/8/11 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 3 | | |
| 3/8/12 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 3 | | |
| 3/8/13 | "AL5066-E14" 152 x 152mm anodised aluminium plate with paraplegic pictogram. | No | 4 | | |
| | <u>"BATHROOM FITTINGS"</u> | | | | |
| | <u>"Stiebel Eltron" or similar approved</u> | | | | |
| 3/8/14 | "PTFS-S" Paper towel dispenser plugged | No | 5 | | |
| 3/8/15 | "SDSS" Soap dispenser plugged | No | 5 | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 8 Ironmongery | | | | |

| Brought Forward | | | R |
|---|---|----|----|
| <u>"Nampak" or similar approved</u> | | | |
| 3/8/16 | "TR2" lockable toilet roll holder plugged | No | 5 |
| <u>"Chairman Industries" or similar approved</u> | | | |
| 3/8/17 | 32mm "DL2" Stainless steel side grab rail 600mm girth plugged | No | 1 |
| 3/8/18 | 32mm "SR2" Stainless steel rear grab rail 600mm long plugged | No | 1 |
| <u>SUNDRIES</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 3/8/19 | "AL8730AS" door stop plugged | No | 23 |
| <u>WRITING BOARDS, PINNING BOARDS, ETC</u> | | | |
| <u>"Parrot products" or similar approved</u> | | | |
| 3/8/20 | "BD0460" 1 500 x 1 200mm Aluminium framed carpet bulletin board | No | 1 |
| Carried Forward to Summary of Section No. 3 | | | R |
| Section No. 3 | | | |
| BLOCK B - ADMINISTRATION | | | |
| Bill No. 8 | | | |
| Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 9</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>WELDED SCREENS, GATES, ETC</u> <u>Metal Screens</u> 3/9/1 "Flatex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screw 250mm intervals. m2 270 <u>Steel gates and frames</u> 3/9/2 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock No 5 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 9 Metalwork | | | |

| | Brought Forward | | | R | |
|--------|---|----|----|---|--|
| 3/9/3 | Double gate and frame 1800 x 2 064mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 1 800 x 2 064mm high, each leaf of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 4 | | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | | |
| | <u>1,2mm Double rebated frames suitable for half brick walls</u> | | | | |
| 3/9/4 | Frame for door 813 x 2 032mm high | No | 15 | | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | | |
| 3/9/5 | Frame for door 813 x 2 032mm high | No | 6 | | |
| 3/9/6 | Frame for door 1600 x 2100mm high (main double door) | No | 2 | | |
| 3/9/7 | Frame for door 900 x 2 032 (paraplegic) | No | 1 | | |
| | <u>ALUMINIUM DOORS AND WINDOWS</u> | | | | |
| | <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | | | |
| 3/9/8 | Window size 889 x 1,244mm high (W01, W02) | No | 24 | | |
| 3/9/9 | Window size 600 x 600mm high (W04) | No | 4 | | |
| 3/9/10 | Window size 1200 x 1200mm high (W03) | No | 3 | | |
| | <u>GALVANISED PRESSED STEEL COMBINATION STRONGROOM DOORS AND FRAMES</u> | | | | |
| | <u>Galvanised pressed steel strongroom doors:</u> | | | | |
| 3/9/11 | Universal strongroom doorstop | No | 1 | | |
| 3/9/12 | Double ended strongroom ventilator | No | 1 | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 9 Metalwork | | | | |

| | | | | |
|--------|---|---|---|--|
| 3/9/13 | <p align="center">Brought Forward</p> <p>Door type D10, 'Mutual DS3' strongroom door, overall size 900 x 3094mm with frame with 7 -lever security keylock, all finished with undercoat and enamel paint.</p> <p align="right">No</p> | 1 | R | |
| | <p align="center">Carried Forward to Summary of Section No. 3</p> <p>Section No. 3 BLOCK B - ADMINISTRATION Bill No. 9 Metalwork</p> | | R | |

[illegible]

| Item No | Quantity | Rate | Amount |
|---|--------------------|------|--------|
| <u>BILL NO. 11</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>200 x 200 x 6mm Porcelain tiles(PC Amount R120.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 3/11/1 | On walls | m2 | 15 |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 3/11/2 | On floors | m2 | 511 |
| 3/11/3 | Skirting 75mm high | m | 232 |
| Carried Forward to Summary of Section No. 3 | | | R |
| Section No. 3 BLOCK B - ADMINISTRATION Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 3 BLOCK B - ADMINISTRATION Bill No. 12 Plumbing and Drainage</p> | | R | |

| | | | |
|--|--|--|---|
| <p style="text-align: center;">Brought Forward</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> | | | R |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 3 BLOCK B - ADMINISTRATION Bill No. 12 Plumbing and Drainage</p> | | | R |

| | | | | | |
|--------|--|---|----|---|--|
| | | Brought Forward | | R | |
| | | <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>"Franke" stainless steel, or similar approved</u></p> | | | |
| 3/12/1 | | "CVN611 Curvline" sink and drainer 860 x 435mm wide with one bowl | No | 1 | |
| | | Carried Forward | | R | |
| | | <p>Section No. 3</p> <p>BLOCK B - ADMINISTRATION</p> <p>Bill No. 12</p> <p>Plumbing and Drainage</p> | | | |

| | Brought Forward | | | R | |
|---------|---|----|---|---|--|
| | <u>Vaal' or equally approved</u> | | | | |
| 3/12/2 | Bantam Vitreous china cloakroom hand basin 340 x 460mm with two tap hole and integrated overflow to SABS specification and chain stay hole bolted to wall with 10mm bolts and sealed with silicone sealant where basin meets wall | No | 4 | | |
| 3/12/3 | White vitreous china close coupled wash down WC suite comprising 90 degrees outlet open rim pan and matching 9 litre front single flush top single flush cistern. | No | 4 | | |
| 3/12/4 | Vitra "Normus" or other approved wall mounted paraplegic wash hand basin with single tap hole (Code 5079-003-001) fixed with and including "Siphon" or other approved cover pedestal (Code 6948-003-0162) | No | 1 | | |
| 3/12/5 | "Duravit Duraplas" or other approved wall mounted Paraplegic WC Code 254709 or similar approved | No | 1 | | |
| 3/12/6 | Vitreous china wall-hung urinal "VAA-705326WH" with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 2 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech", or similar approved</u> | | | | |
| 3/12/7 | 32mm "301CP" Basin waste union | No | 5 | | |
| 3/12/8 | 40mm "316CP" Bath or sink waste union | No | 1 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Marley", or similar approved</u> | | | | |
| 3/12/9 | 32 x 50mm Deep seal "P" or "S" trap | No | 4 | | |
| 3/12/10 | 40 x 50mm Deep seal "P" or "S" trap | No | 1 | | |
| | <u>"Chrome"</u> | | | | |
| 3/12/11 | 38 mm Bottle trap | No | 3 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 12 Plumbing and Drainage | | | | |

| Brought Forward | | | | R |
|-----------------|---|----|----|---|
| | <u>Brass</u> | | | |
| 3/12/12 | 22mm Stopcock | No | 1 | |
| | <u>"Cobra Watertech", or similar approved</u> | | | |
| 3/12/13 | 15mm 111CP Pillartap | No | 4 | |
| 3/12/14 | Cobra (code 3215ST) or other approved paraplegic tap with S041 overarm swivel spout including all necessary fitting connection. | No | 4 | |
| 3/12/15 | 15mm 059CP Extension piece with sliding wall flange | No | 16 | |
| 3/12/16 | 15mm 166/041CP "Star" sink mixer | No | 1 | |
| 3/12/17 | "Flushmaster" toilet flush valve | No | 2 | |
| | <u>SANITARY PLUMBING</u> | | | |
| | <u>uPVC pipes</u> | | | |
| 3/12/18 | 50mm Pipes | m | 28 | |
| 3/12/19 | 110mm Pipes | m | 8 | |
| | <u>Extra over uPVC pipes for fittings</u> | | | |
| 3/12/20 | 110mm Reducer | No | 7 | |
| 3/12/21 | 50mm Bend | No | 30 | |
| 3/12/22 | 50mm Junction | No | 6 | |
| 3/12/23 | 110mm Pan connector | No | 14 | |
| 3/12/24 | 50mm Access bend | No | 6 | |
| 3/12/25 | 110mm Access bend | No | 9 | |
| 3/12/26 | 50mm Access junction | No | 6 | |
| 3/12/27 | 110mm Access bend with anti-siphon horn | No | 7 | |
| 3/12/28 | 50mm "GI Two-way" vent valve | No | 3 | |
| | Carried Forward | | | R |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 12 Plumbing and Drainage | | | |

| | Brought Forward | | | R | |
|---------|---|----|------|---|--|
| | <u>Sundries</u> | | | | |
| 3/12/29 | Testing waste pipe system | | Item | | |
| | <u>WATER SUPPLIES</u> | | | | |
| | <u>Class 0 copper pipes</u> | | | | |
| 3/12/30 | 15mm Pipes | m | 23 | | |
| 3/12/31 | 15mm Pipes chased into brick walls | m | 42 | | |
| 3/12/32 | 22mm Pipes | m | 33 | | |
| 3/12/33 | 22mm Pipes chased into brick walls | m | 13 | | |
| | <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 3/12/34 | 15mm Fittings | No | 28 | | |
| 3/12/35 | 22mm Fittings | No | 6 | | |
| | <u>Copper overflow and service pipes</u> | | | | |
| 3/12/36 | 15mm Service pipe 500mm girth | No | 1 | | |
| | <u>ELECTRIC WATER HEATERS</u> | | | | |
| | <u>"Kwikot" or similar approved</u> | | | | |
| 3/12/37 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 | | |
| 3/12/38 | PB1.10RB vacuum breaker | No | 1 | | |
| 3/12/39 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 | | |
| | <u>TESTING</u> | | | | |
| 3/12/40 | Testing water pipe system | | Item | | |
| | <u>FIRE APPLIANCES ETC</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 12 Plumbing and Drainage | | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| | <u>"Chubb", or similar approved</u> | | |
| 3/12/41 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 3 |
| 3/12/42 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 |
| | <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | |
| | <u>Galvanised steel pipes</u> | | |
| 3/12/43 | 25mm Pipe | m | 135 |
| | <u>Extra over galvanised steel pipes for fittings</u> | | |
| 3/12/44 | Fittings in varying diameters | No | 45 |
| Carried Forward to Summary of Section No. 3 | | | R |
| Section No. 3 | | | |
| BLOCK B - ADMINISTRATION | | | |
| Bill No. 12 | | | |
| Plumbing and Drainage | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 14</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats interior quality PVA emulsion paint</u> | | | |
| 3/14/1 | On internal walls m2 | 489 | | |
| 3/14/2 | On concrete ceilings m2 | 13 | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 3/14/3 | On external walls m2 | 799 | | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 3/14/4 | On ceilings and cornices m2 | 321 | | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats interior quality acrylic PVA paint</u> | | | |
| 3/14/5 | On internal window sills not exceeding 300mm wide or girth m | 66 | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 3/14/6 | On fascias and bargeboards m2 | 56 | | |
| | <u>ON METAL</u> | | | |
| | Carried Forward | | R | |
| | Section No. 3 BLOCK B - ADMINISTRATION Bill No. 14 Paintwork | | | |

| Brought Forward | | | R |
|---|----------------|----|----|
| <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 3/14/7 | On door frames | m2 | 19 |
| <u>ON WOOD</u> | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 3/14/8 | On doors | m2 | 74 |
| Carried Forward to Summary of Section No. 3 Section No. 3 BLOCK B - ADMINISTRATION Bill No. 14 Paintwork | | | R |

| Bill No | Section No. 3 BLOCK B - ADMINISTRATION <u>SECTION SUMMARY - BLOCK B - ADMINISTRATION</u> | Page No | Amount |
|---|---|----------------|---------------|
| 3/1 | Foundations (Provisional) | 54 | |
| 3/2 | Concrete, Formwork and Reinforcement | 57 | |
| 3/3 | Masonry | 59 | |
| 3/4 | Waterproofing | 60 | |
| 3/5 | Roof Coverings, etc | 61 | |
| 3/6 | Carpentry and Joinery | 66 | |
| 3/7 | Ceilings, Partitions and Access Flooring | 68 | |
| 3/8 | Ironmongery | 71 | |
| 3/9 | Metalwork | 74 | |
| 3/10 | Plastering | 75 | |
| 3/11 | Tiling | 76 | |
| 3/12 | Plumbing and Drainage | 83 | |
| 3/13 | Glazing | 84 | |
| 3/14 | Paintwork | 86 | |
| Carried to Final Summary | | | R |
| Section No. 3 BLOCK B - ADMINISTRATION | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 4/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 423 | |
| 4/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 423 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 4/1/3 | Reduced levels under floors | m3 | 63 | |
| 4/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 107 | |
| | Carried Forward | | | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|---|---|----|------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 4/1/5 | Soft rock | m3 | 34 | |
| 4/1/6 | Hard rock | m3 | 28 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 4/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 149 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 4/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 119 | |
| | <u>Keeping excavations free of water</u> | | | |
| 4/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | |
| 4/1/10 | Under floors, steps, pavings, etc | m3 | 169 | |
| | <u>Coarse river sand filling supplied by the contractor</u> | | | |
| 4/1/11 | Under floors etc | m3 | 18 | |
| | <u>Compaction of surfaces</u> | | | |
| 4/1/12 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 369 | |
| | <u>Prescribed density tests on filling</u> | | | |
| 4/1/13 | "Modified AASHTO Density" test | No | 31 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 4/1/14 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 352 | |
| Carried Forward | | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 1 Foundations (Provisional) | | | | |

| | Brought Forward | | | R | |
|---|----------------------------------|----|-----|---|--|
| 4/1/15 | To bottoms and sides of trenches | m2 | 576 | | |
| Carried Forward to Summary of Section No. 4 | | | | R | |
| Section No. 4 | | | | | |
| BLOCK C - NUTRITION BLOCK | | | | | |
| Bill No. 1 | | | | | |
| Foundations (Provisional) | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | R |
|-----------------|---|----|-----|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | |
| | <u>REINFORCED CONCRETE</u> | | |
| | <u>25MPa/19mm concrete</u> | | |
| 4/2/1 | Holes | m3 | 1 |
| 4/2/2 | Foundations | m3 | 107 |
| 4/2/3 | Surface beds on waterproofing | m3 | 35 |
| 4/2/4 | V-drains | m3 | 6 |
| | <u>TEST BLOCKS</u> | | |
| 4/2/5 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 16 |
| | <u>CONCRETE SUNDRIES</u> | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | |
| 4/2/6 | Ramps,etc to falls (provisional) | m2 | 109 |
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | |
| 4/2/7 | Aprons, slabs, etc to falls | m2 | 460 |
| 4/2/8 | V-drains to falls | m2 | 69 |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | |
| | <u>Smooth formwork to sides</u> | | |
| 4/2/9 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 364 |
| | Carried Forward | | R |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 2 Concrete, Formwork and Reinforcement | | |

| Brought Forward | | | | R |
|--|--|----|-------|---|
| <u>MOVEMENT JOINTS, ETC</u> | | | | |
| <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | | |
| 4/2/10 | 10mm Joints not exceeding 300mm high | m | 307 | |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | | |
| <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 4/2/11 | 12mm Diameter bars | t | 12.13 | |
| <u>Fabric reinforcement</u> | | | | |
| 4/2/12 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 569 | |
| Carried Forward to Summary of Section No. 4 | | | | R |
| Section No. 4 | | | | |
| BLOCK C - NUTRITION BLOCK | | | | |
| Bill No. 2 | | | | |
| Concrete, Formwork and Reinforcement | | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 4/3/1 | Piers | m3 | 1 |
| 4/3/2 | Half brick walls in beamfilling | m2 | 22 |
| 4/3/3 | Half brick walls | m2 | 63 |
| 4/3/4 | One brick walls | m2 | 114 |
| 4/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 347 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 3 Masonry | | | |

| | Brought Forward | | | R | |
|--------|--|----|-----|---|--|
| | <u>Brickwork reinforcement</u> | | | | |
| 4/3/6 | 150mm Wide reinforcement built in horizontally | m | 489 | | |
| | <u>Prestressed fabricated lintels</u> | | | | |
| 4/3/7 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 68 | | |
| | <u>Turning pieces to lintels etc</u> | | | | |
| 4/3/8 | 220mm Wide turning pieces | m | 15 | | |
| | <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 4/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 77 | | |
| | <u>FACE BRICKWORK</u> | | | | |
| | <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 4/3/10 | Extra over brickwork for face brickwork | m2 | 243 | | |
| 4/3/11 | Extra over one brick wall for facing beamfilling. | m2 | 11 | | |
| 4/3/12 | Fair cutting at squint quoin or birdsmouth angle | m | 88 | | |
| | <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 4/3/13 | Extra over brickwork for face brick-on-edge header lintel 230mm wide. | m | 88 | | |
| | <u>NUTEC-CEMENT WINDOW SILLS</u> | | | | |
| | <u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u> | | | | |
| 4/3/14 | 15 x 150mm Wide sills set flat and slightly projecting | m | 29 | | |
| | Carried Forward to Summary of Section No. 4 | | | R | |
| | Section No. 4 | | | | |
| | BLOCK C - NUTRITION BLOCK | | | | |
| | Bill No. 3 | | | | |
| | Masonry | | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,53mm Charcoal grey "IBR" profile roof sheeting at 11 degree on insulation on 76 x 50mm S.A Pine purlins at 750mm c/cs on prefabricated timber trusses to engineers detail and specifications</u> | | | |
| 4/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 342 | |
| 4/5/2 | Sidewall Flashing 375mm girth, one time bent. | m | 41 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | |
| 4/5/3 | Insulation laid taut over purlins (at approximately 1 200mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 301 | |
| | Carried Forward to Summary of Section No. 4 | | R | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 6 Carpentry and Joinery</p> | | R | |

| | | | | |
|-------|---|----|----|----------|
| | Brought Forward | | | R |
| | <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 1,05m centres</p> <p>Roof covering is IBR roof sheeting with "Globalcoat" finish on 50 x 75mm purlins at 1,2m maximum centres.</p> <p>Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm branderling.</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences.</p> <p>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities(refer drawing No.'s GR-R 01 to 02) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained</p> <p><u>Sawn softwood</u></p> | | | |
| 4/6/1 | 38 x 114mm Wall plates | m | 41 | |
| 4/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the Nutrition Block C, size 30,640 x 7,850mm overall on plan consisting of mono pitch roof trusses with 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 41 | |
| | Carried Forward | | | R |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 6 Carpentry and Joinery | | | |

| Brought Forward | | | R |
|---|---|----|-----|
| 4/6/3 | Design, manufacture, supply and deliver on site, plate nailed roof construction to Nutrition Block C verandah size 19,620 x 2,200mm overall on plan 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates elsewhere) | No | 26 |
| 4/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 246 |
| | <u>Sundries</u> | | |
| 4/6/5 | Two coats creosote on sawn timbers | m2 | 30 |
| | <u>EAVES , VERGES , ETC</u> | | |
| | <u>"Everite Flexit" pressed nutec-cement</u> | | |
| 4/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 41 |
| | <u>SKIRTINGS</u> | | |
| | <u>Wrought meranti</u> | | |
| 4/6/7 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | |
| | <u>DOORS ETC</u> | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | |
| 4/6/8 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 4 |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to timber frames</u> | | |
| 4/6/9 | 44mm "TDM" Framed and ledged double door 1 678 x 2 032mm high with rebated meeting stiles and 500 x 1 395mm high glass panel in each leaf rebated all round including glazing beads on one side (glazing measured elsewhere) | No | 11 |
| Carried Forward | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 6 Carpentry and Joinery | | | |

| Brought Forward | | | | R |
|---|--|----|----|---|
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | |
| 4/6/10 | 44mm Door 813 x 2 032mm high | No | 1 | |
| | <u>FRAMED FRAMES, ETC.</u> | | | |
| | <u>Wrot Meranti</u> | | | |
| | Note :- All timber frames to be fitted with 3x standard brass hinges per door leaf | | | |
| 4/6/11 | 68 x 102 mm Rebated and framed frame for double door size 1 800 x 2 032 mm high (overall) (D03) | No | 45 | |
| | <u>SA Pine</u> | | | |
| 4/6/12 | Dado rail COLDR3T 22 x 44 x 3mm | m | 28 | |
| | <u>FITTINGS</u> | | | |
| | <u>General</u> | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | |
| | <u>Fittings to Grade R Classroom</u> | | | |
| 4/6/13 | Floor unit to work station 1 500mm long x 670mm wide x 720mm high overall comprising, worktops, bottoms, sides, divisions, shelves, backs, doors, drawers, etc as per architects drawing No. GR-R 004 | No | 2 | |
| 4/6/14 | L-shaped floor cupboard to kitchen measuring 3 960mm long on centre line x 600mm wide x 902mm high overall comprising, worktops, bottoms, sides, divisions, shelves, backs, doors, drawers, etc (sink elsewhere measured) as per architects drawing No. GR-R 005 | No | 3 | |
| Carried Forward | | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--|--|----|----|---|--|
| 4/6/15 | Wall cupboard to kitchen, 1 360mm long x 300mm wide x 504mm high overall comprising, bottoms, sides, divisions, shelves, backs, doors, etc as per architects drawing No.GR-R 005 | No | 3 | | |
| 4/6/16 | Floor cupboard in washroom 500mm long x 600mm wide x 2400mm high overall comprising, bottoms, sides, divisions, shelves, backs, doors, etc as per architects drawing NO. GR-R 007 | No | 4 | | |
| 4/6/17 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. GR-R 008 | m | 86 | | |
| Carried Forward to Summary of Section No. 4 | | | | R | |
| Section No. 4 | | | | | |
| BLOCK C - NUTRITION BLOCK | | | | | |
| Bill No. 6 | | | | | |
| Carpentry and Joinery | | | | | |

| Item No | Quantity | Rate | Amount |
|---|---|------|--------|
| <u>BILL NO. 7</u> | | | |
| <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions:</u> | | | |
| Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| <u>CEILINGS ETC</u> | | | |
| <u>Wrought meranti</u> | | | |
| 4/7/1 | 19mm Quadrant bead cornice nailed | m | 22 |
| <u>"Aerolite" insulation</u> | | | |
| 4/7/2 | 100mm Non-combustible lightweight fibreglass insulation blanket fitted between tie beams and laid loose on top of branderling | m2 | 246 |
| <u>NAILED UP CEILINGS</u> | | | |
| <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 4/7/3 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 246 |
| 4/7/4 | Sloping ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 74 |
| Carried Forward | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| 4/7/5 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 3 |
| <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 4/7/6 | 75mm Coved cornices | m | 143 |
| <p>Carried Forward to Summary of Section No. 4</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring</p> | | | R |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 8</u> | | | |
| | <u>IRONMONGERY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Finishes to ironmongery</u> | | | |
| | Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated | | | |
| | <u>HINGES, BOLTS, ETC.</u> | | | |
| 4/9/1 | 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge | No | 23 | |
| | <u>LOCKS</u> | | | |
| | <u>"Union" or similar approved</u> | | | |
| 4/9/2 | "CZ80941SC" WC indicator bolt with keep fixed to metal | No | 4 | |
| | <u>"Mazac Tarpon" or similar approved</u> | | | |
| 4/9/3 | "LA952/4L" four lever lockset and handles with chrome plated finish | No | 16 | |
| | Carried Forward | | R | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 9 Ironmongery | | | |

| Brought Forward | | | R |
|---|---|----|----|
| <u>HANDLES</u> | | | |
| 4/9/4 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 16 |
| <u>"Dorma" or similar approved</u> | | | |
| 4/9/5 | 32 x 515mm Stainless steel "D" straight back-to-back pull handles | No | 16 |
| <u>PUSH PLATES AND KICKING PLATES</u> | | | |
| <u>"Dorma" or similar approved</u> | | | |
| 4/9/6 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 4 |
| <u>DOOR CLOSERS</u> | | | |
| <u>"Dorma" or similar approved</u> | | | |
| 4/9/7 | "TS 83" door closer with bracket fixed to metal | No | 4 |
| <u>LETTERS, NAMEPLATES, ETC</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 4/9/8 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 3 |
| 4/9/9 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 4 |
| 4/9/10 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 4 |
| <u>"BATHROOM FITTINGS"</u> | | | |
| <u>"Nampak" or similar approved</u> | | | |
| 4/9/11 | 153W x 153H x 65D Recessed Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications | No | 7 |
| <u>SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 9 Ironmongery | | | |

| | | | | |
|---|---|----|----|--|
| | Brought Forward | | R | |
| 4/9/12 | "Union" or similar approved "AL8730AS" door stop plugged | No | 27 | |
| | | | R | |
| Carried Forward to Summary of Section No. 4 | | | | |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 9 Ironmongery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 9</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>WELDED SCREENS, GATES, ETC</u> <u>Metal Screens</u> 4/10/1 "Flattex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screw 250mm intervals. m2 205 <u>Steel gates and frames</u> 4/10/2 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock No 4 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 10 Metalwork | | | |

| | Brought Forward | | | R | |
|--------|---|----|----|---|--|
| 4/10/3 | Double gate and frame 1800 x 2 064mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 1 800 x 2 064mm high, each leaf of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 5 | | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | | |
| 4/10/4 | Frame for door 813 x 2 032mm high | No | 5 | | |
| 4/10/5 | Frame for door 1600 x 2100mm high (main double door) | No | 15 | | |
| | <u>ALUMINIUM DOORS AND WINDOWS</u> | | | | |
| | <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | | | |
| 4/10/6 | Window size 889 x 1,244mm high (W01, W02) | No | 27 | | |
| 4/10/7 | Window size 1200 x 1200mm high (W03) | No | 6 | | |
| | Carried Forward to Summary of Section No. 4 | | | R | |
| | Section No. 4 | | | | |
| | BLOCK C - NUTRITION BLOCK | | | | |
| | Bill No. 10 | | | | |
| | Metalwork | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 10 | | | |
| | <u>PLASTERING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 142 for CPAP formula purposes. | | | |
| | <u>SCREEDS</u> | | | |
| | <u>1:4 Cement plaster screeds wood floated on concrete</u> | | | |
| 4/11/1 | 25mm Thick on floors and landings | m2 | 205 | |
| 4/11/2 | 35mm Thick on shower to fall | m2 | 2 | |
| | <u>INTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 4/11/3 | On walls | m2 | 252 | |
| 4/11/4 | On narrow widths | m2 | 22 | |
| | <u>EXTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 4/11/5 | On walls | m2 | 93 | |
| | <u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u> | | | |
| 4/11/6 | 3 x 32mm Flat section brass dividing strips between different floor finishes | m | 16 | |
| | Carried Forward to Summary of Section No. 4 | | R | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 11 Plastering | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 11</u> <u>TILING</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding <u>WALL TILING</u> <u>200 x 200 x 6mm Porcelain tiles (PC Amount R100.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> <u>SPLASH BACK</u> | | | |
| 4/12/1 | On walls | m2 | 7 | |
| | <u>600mm x 300mm x 9mm thick Porcelain tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SANS approved standards. Colour and end finish to architects' approval. 12mm stainless steel trips to be used at the corners</u> | | | |
| 4/12/2 | To wall | m2 | 14 | |
| | <u>FLOOR TILING</u> <u>Mosaics unpolished of porcelain floor tiles fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted (waterproof?) grout</u> | | | |
| 4/12/3 | Shower tiles to fall | m2 | 2 | |
| | Carried Forward | | | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 12 Tiling | | | |
| | | | R | |

| Brought Forward | | | R |
|--|--|----|----|
| <u>TOILET PAPER HOLDERS ETC</u> | | | |
| <u>"Johnson" white glazed ceramic</u> | | | |
| 4/12/4 | Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications. | No | 4 |
| <u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u> | | | |
| 4/12/5 | 10mm M-trim Aluminium Straight Edge to the edge of tiles | m | 33 |
| <p align="center">Carried Forward to Summary of Section No. 4</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 12 Tiling</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage</p> | | R | |

| | | | |
|--|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> | | R | |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage</p> | | R | |

| | | | | | |
|--------|--|--|----|---|--|
| | | Brought Forward | | R | |
| | | <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>"Franke" stainless steel or similar approved</u></p> | | | |
| 4/13/1 | | "CVN611 Curvline" sink and drainer 860 x 435mm wide with one bowl | No | 2 | |
| | | Carried Forward | | R | |
| | | <p>Section No. 4</p> <p>BLOCK C - NUTRITION BLOCK</p> <p>Bill No. 13</p> <p>Plumbing and Drainage</p> | | | |

| | Brought Forward | | | R | |
|--------|--|----|---|---|--|
| | <u>Vaal' or equally approved</u> | | | | |
| 4/13/2 | Vitreous China size 560 x 415 mm rounded basin to comply with SABS 497 in one tap hole configuration supplied with integrated overflow and chain stay hole on matching ceramic pedestal stand in strict accordance to manufacturer's specification. (use Vaal7006 "Tuscany with pedestal 7150, or equal and approved) (To be used in instances where B2 cannot be supported by the wall) | No | 7 | | |
| 4/13/3 | Vaal Sanitary ware vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan (code 772800) and matching 7 litre push-button top dual flush cistern (code 711139) complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat (code 8515Z0). or equal and approved. | No | 7 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 4/13/4 | 32mm "301CP" Basin waste union | No | 7 | | |
| 4/13/5 | 40mm "316CP" Bath or sink waste union | No | 2 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Chrome" or similar approved</u> | | | | |
| 4/13/6 | 38mm Bottle trap | No | 7 | | |
| | <u>"Marley" or similar approved</u> | | | | |
| 4/13/7 | 40 x 50mm Deep seal "P" or "S" trap | No | 2 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | <u>Brass</u> | | | | |
| 4/13/8 | 22mm Stopcock | No | 2 | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 4/13/9 | Single lever basin mixer. ½" BSP female inlets. SANS 1480. (Cobra gala GA-651), chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated | No | 7 | | |
| | Carried Forward | | | R | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage | | | | |

| | | | | | |
|---------|---|----|------|---|--|
| | Brought Forward | | | R | |
| 4/13/10 | Cobra 007MULTI-CP" Handshower + rail with sliding handshower holder + handshower hose .Includes; Shower rail, Sliding handshower holder, Handshower ,Handshower hose and Connects to 1/2" male shower outlets | No | 2 | | |
| 4/13/11 | 15mm 059CP Extension piece with sliding wall flange | No | 25 | | |
| 4/13/12 | 15mm 166/041CP "Star" sink mixer | No | 2 | | |
| 4/13/13 | "Flushmaster" toilet flush valve | No | 2 | | |
| | <u>SANITARY PLUMBING</u> | | | | |
| | <u>uPVC pipes</u> | | | | |
| 4/13/14 | 50mm Pipes | m | 17 | | |
| 4/13/15 | 110mm Pipes | m | 4 | | |
| | <u>Extra over uPVC pipes for fittings</u> | | | | |
| 4/13/16 | 110mm Reducer | No | 2 | | |
| 4/13/17 | 50mm Bend | No | 11 | | |
| 4/13/18 | 50mm Junction | No | 3 | | |
| 4/13/19 | 110mm Pan connector | No | 7 | | |
| 4/13/20 | 50mm Access bend | No | 11 | | |
| 4/13/21 | 110mm Access bend | No | 2 | | |
| 4/13/22 | 50mm Access junction | No | 5 | | |
| 4/13/23 | 110mm Access bend with anti-syphon horn | No | 16 | | |
| 4/13/24 | 50mm "GI Two-way" vent valve | No | 1 | | |
| | <u>Sundries</u> | | | | |
| 4/13/25 | Testing waste pipe system | | Item | | |
| | <u>WATER SUPPLIES</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage | | | | |

| Brought Forward | | | | R |
|--|---|----|------|---|
| <u>Class 0 copper pipes</u> | | | | |
| 4/13/26 | 15mm Pipes | m | 23 | |
| 4/13/27 | 15mm Pipes chased into brick walls | m | 18 | |
| 4/13/28 | 22mm Pipes | m | 47 | |
| 4/13/29 | 22mm Pipes chased into brick walls | m | 29 | |
| <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 4/13/30 | 15mm Fittings | No | 29 | |
| 4/13/31 | 22mm Fittings | No | 12 | |
| <u>Copper overflow and service pipes</u> | | | | |
| 4/13/32 | 15mm Service pipe 500mm girth | No | 8 | |
| <u>ELECTRIC WATER HEATERS</u> | | | | |
| <u>"Kwikot" or similar approved</u> | | | | |
| 4/13/33 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 | |
| 4/13/34 | PB1.10RB vacuum breaker | No | 1 | |
| 4/13/35 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 | |
| <u>TESTING</u> | | | | |
| 4/13/36 | Testing water pipe system | | Item | |
| <u>FIRE APPLIANCES ETC</u> | | | | |
| <u>"Chubb" or similar approved</u> | | | | |
| 4/13/37 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 3 | |
| 4/13/38 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 | |
| <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | | |
| Carried Forward | | | | R |
| Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage | | | | |

| Brought Forward | | | R |
|---|-------------------------------|----|----|
| <u>Galvanised steel pipes</u> | | | |
| 4/13/39 | 25mm Pipe | m | 75 |
| <u>Extra over galvanised steel pipes for fittings</u> | | | |
| 4/13/40 | Fittings in varying diameters | No | 1 |
| <p>Carried Forward to Summary of Section No. 4</p> <p>Section No. 4 BLOCK C - NUTRITION BLOCK Bill No. 13 Plumbing and Drainage</p> | | | R |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 14 | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats interior quality PVA emulsion paint</u> | | | |
| 4/15/1 | On internal walls m2 | 487 | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 4/15/2 | On external walls m2 | 125 | | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 4/15/3 | On ceilings and cornices m2 | 246 | | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 4/15/4 | On door frames m2 | 17 | | |
| | <u>ON WOOD</u> | | | |
| | <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 4/15/5 | On doors m2 | 59 | | |
| | Carried Forward to Summary of Section No. 4 | | R | |
| | Section No. 4 | | | |
| | BLOCK C - NUTRITION BLOCK | | | |
| | Bill No. 15 | | | |
| | Paintwork | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 5/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 544 | |
| 5/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 544 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 5/1/3 | Reduced levels under floors | m3 | 51 | |
| 5/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 109 | |
| | Carried Forward | | | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|---|---|----|------|---|
| <u>Extra over trench and hole excavations in earth for excavation in</u> | | | | |
| 5/1/5 | Soft rock | m3 | 34 | |
| 5/1/6 | Hard rock | m3 | 25 | |
| <u>Extra over all excavations for carting away</u> | | | | |
| 5/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 123 | |
| <u>Risk of collapse of excavations</u> | | | | |
| 5/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 95 | |
| <u>Keeping excavations free of water</u> | | | | |
| 5/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u> | | | | |
| 5/1/10 | Under floors, steps, pavings, etc | m3 | 0.3 | |
| <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | | |
| 5/1/11 | Under floors, steps, pavings, etc | m3 | 245 | |
| <u>Coarse river sand filling supplied by the contractor</u> | | | | |
| 5/1/12 | Under floors etc | m3 | 18 | |
| <u>Compaction of surfaces</u> | | | | |
| 5/1/13 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 416 | |
| <u>Prescribed density tests on filling</u> | | | | |
| 5/1/14 | "Modified AASHTO Density" test | No | 49 | |
| <u>SOIL POISONING</u> | | | | |
| Carried Forward | | | | R |
| Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 1 Foundations (Provisional) | | | | |

| Brought Forward | | | R |
|---|---|----|-----|
| | <u>Soil insecticide</u> | | |
| 5/1/15 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 58 |
| 5/1/16 | To bottoms and sides of trenches | m2 | 575 |
| <p align="center">Carried Forward to Summary of Section No. 5</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 1 Foundations (Provisional)</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | R |
|-----------------|---|----|-----|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | |
| | <u>UNREINFORCED CONCRETE</u> | | |
| | <u>25MPa/19mm concrete</u> | | |
| 5/2/1 | Ramp including thickening (provisional) | m3 | 0.3 |
| | <u>REINFORCED CONCRETE</u> | | |
| | <u>25MPa/19mm concrete</u> | | |
| 5/2/2 | Foundations | m3 | 109 |
| 5/2/3 | Surface beds on waterproofing | m3 | 43 |
| 5/2/4 | V-drains | m3 | 6 |
| | <u>TEST BLOCKS</u> | | |
| 5/2/5 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 32 |
| | <u>CONCRETE SUNDRIES</u> | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | |
| 5/2/6 | Ramps,etc to falls (provisional) | m2 | 2 |
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | |
| 5/2/7 | Aprons, slabs, etc to falls | m2 | 469 |
| 5/2/8 | V-drains to falls | m2 | 58 |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | |
| | Carried Forward | | R |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement | | |

| Brought Forward | | | R |
|--|--|----|-------|
| | <u>Smooth formwork to sides</u> | | |
| 5/2/9 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 298 |
| | <u>MOVEMENT JOINTS, ETC</u> | | |
| | <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | |
| 5/2/10 | 10mm Joints not exceeding 300mm high | m | 259 |
| | <u>REINFORCEMENT (PROVISIONAL)</u> | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | |
| 5/2/11 | 12mm Diameter bars | t | 11.92 |
| | <u>Fabric reinforcement</u> | | |
| 5/2/12 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 527 |
| <p align="center">Carried Forward to Summary of Section No. 5</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p> | | | R |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 5/3/1 | Piers | m3 | 4 |
| 5/3/2 | Half brick walls in beamfilling | m2 | 21 |
| 5/3/3 | Half brick walls | m2 | 188 |
| 5/3/4 | One brick walls | m2 | 69 |
| 5/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 278 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 3 Masonry | | | |

| | Brought Forward | | | R | |
|--------|--|----|-------|---|--|
| | <u>Brickwork reinforcement</u> | | | | |
| 5/3/6 | 75mm Wide reinforcement built in horizontally | m | 2,575 | | |
| 5/3/7 | 150mm Wide reinforcement built in horizontally | m | 166 | | |
| | <u>Prestressed fabricated lintels</u> | | | | |
| 5/3/8 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 37 | | |
| | <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 5/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 92 | | |
| | <u>FACE BRICKWORK</u> | | | | |
| | <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 5/3/10 | Extra over brickwork for face brickwork | m2 | 549 | | |
| 5/3/11 | Extra over one brick wall for facing beamfilling. | m2 | 21 | | |
| 5/3/12 | Extra over brickwork for face brick-on-edge header lintel 230mm wide. | m | 60 | | |
| 5/3/13 | Fair cutting at squint quoin or birdsmouth angle | m | 66 | | |
| 5/3/14 | Piers | m3 | 12 | | |
| | <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 5/3/15 | 220mm Wide sill set sloping and slightly projecting | m | 66 | | |
| | <u>NUTEC-CEMENT WINDOW SILLS</u> | | | | |
| | <u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u> | | | | |
| 5/3/16 | 15 x 150mm Wide sills set flat and slightly projecting | m | 54 | | |
| | Carried Forward to Summary of Section No. 5 | | | R | |
| | Section No. 5 | | | | |
| | BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK | | | | |
| | Bill No. 3 | | | | |
| | Masonry | | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 6 Carpentry and Joinery</p> | | R | |

| | | | | | |
|-------|---|---|----|--|---|
| | | Brought Forward | | | R |
| | | <u>Plate nailed timber roof truss construction</u> | | | |
| | | The following is applicable in respect of roof trusses: | | | |
| | | Trusses are at maximum 1,05m centres | | | |
| | | Roof covering is IBR roof sheeting with "Globalcoat" finish on 50 x 75mm purlins at 1,2m maximum centres. | | | |
| | | Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering. | | | |
| | | All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. | | | |
| | | Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. | | | |
| | | All joints to be close fitted butt joints. | | | |
| | | Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. | | | |
| | | The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. | | | |
| | | Tenderers must study the roof plan and sections as attached to the back of these bills of quantities(refer drawing No.'s GR-R 01 to 02) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained | | | |
| | | <u>Sawn softwood</u> | | | |
| 5/6/1 | 38 x 114mm Wall plates | m | 77 | | |
| 5/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the Grade R Classroom Block, size 38,425 x 9,520mm overall on plan consisting of mono pitch roof trusses with 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 51 | | |
| | | | | | |
| | | Carried Forward | | | R |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 6 Carpentry and Joinery | | | | |

| | | | | | |
|-------|--|----|-----|---|--|
| | Brought Forward | | | R | |
| 5/6/3 | Design, manufacture, supply and deliver on site, plate nailed roof construction to Grade R Block size 38,456 x 2,200mm overall on plan 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates elsewhere) | No | 51 | | |
| 5/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 451 | | |
| | Sundries | | | | |
| 5/6/5 | Two coats creosote on sawn timbers | m2 | 61 | | |
| | EAVES , VERGES , ETC | | | | |
| | "Everite Flexit" pressed nutec-cement | | | | |
| 5/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 97 | | |
| | DOORS ETC | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 5/6/7 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 3 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 5/6/8 | 44mm Door 813 x 2 032mm high | No | 15 | | |
| | FRAMED FRAMES, ETC. | | | | |
| | SA Pine | | | | |
| | Note :- All timber frames to be fitted with 3x standard brass hinges per door leaf | | | | |
| 5/6/9 | Dado rail COLDR3T 22 x 44 x 3mm | m | 111 | | |
| | FITTINGS | | | | |
| | | | | | |
| | Carried Forward | | | R | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 6 Carpentry and Joinery | | | | |

| Brought Forward | | | R |
|--|--|----|----|
| <u>General</u> | | | |
| The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | |
| <u>Fittings to Grade R Classroom</u> | | | |
| 5/6/10 | Wall cupboard to kitchen, 1 360mm long x 300mm wide x 504mm high overall comprising, bottoms, sides, divisions, shelves, backs, doors, etc as per architects drawing No.GR-R 005 | No | 1 |
| 5/6/11 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. GR-R 008 | m | 27 |
| <u>NOTICE BOARDS, CHALKBOARDS, ETC</u> | | | |
| <u>Chalkboards</u> | | | |
| 5/6/12 | Standard "Vitrex System 100" vitreous enamelled magnetic 4800 x 1200mm high chalkboard (SABS Specification CK of 1980) consisting of two fixed panels each 2400 x 1200mm high complete with bottom aluminium chalk rail all including setting in position, plugged | No | 3 |
| Carried Forward to Summary of Section No. 5 | | | R |
| Section No. 5 | | | |
| BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK | | | |
| Bill No. 6 | | | |
| Carpentry and Joinery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 5/7/1 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 221 | |
| 5/7/2 | Sloping ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 63 | |
| 5/7/3 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 6 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 5/7/4 | 75mm Coved cornices | m | 240 | |
| | Carried Forward to Summary of Section No. 5 | | | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 8</u> | | | |
| | <u>IRONMONGERY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Finishes to ironmongery</u> | | | |
| | Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated | | | |
| | <u>HINGES, BOLTS, ETC.</u> | | | |
| 5/8/1 | 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge | No | 36 | |
| | <u>LOCKS</u> | | | |
| | <u>"Union"</u> | | | |
| 5/8/2 | "CZ80941SC" WC indicator bolt with keep fixed to metal | No | 9 | |
| 5/8/3 | CZ682-24/2247-78" or other similar and approved four lever lockset with striking plate fixed to metal or timber (as per architect specifications) | No | 3 | |
| | <u>"Mazac Tarpon"</u> | | | |
| 5/8/4 | "LA952/4L" four lever lockset and handles with chrome plated finish | No | 3 | |
| | Carried Forward | | | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 8 Ironmongery | | R | |

| Brought Forward | | | R |
|---|--|----|----|
| <u>HANDLES</u> | | | |
| 5/8/5 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 15 |
| <u>"Dorma"</u> | | | |
| 5/8/6 | 32 x 515mm Stainless steel "D" straight back-to-back pull handles | No | 3 |
| <u>PUSH PLATES AND KICKING PLATES</u> | | | |
| <u>"Dorma"</u> | | | |
| 5/8/7 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 3 |
| <u>DOOR CLOSERS</u> | | | |
| <u>"Dorma"</u> | | | |
| 5/8/8 | "TS 83" door closer with bracket fixed to metal | No | 3 |
| <u>LETTERS, NAMEPLATES, ETC</u> | | | |
| <u>"Union"</u> | | | |
| 5/8/9 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 3 |
| 5/8/10 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 3 |
| 5/8/11 | "AL5066-E14" 152 x 152mm anodised aluminium plate with paraplegic pictogram. | No | 3 |
| <u>"BATHROOM FITTINGS"</u> | | | |
| <u>"Stiebel Eltron"</u> | | | |
| 5/8/12 | "PTFS-S" Paper towel dispenser plugged | No | 6 |
| 5/8/13 | "SDSS" Soap dispenser plugged | No | 6 |
| <u>"Nampak"</u> | | | |
| 5/8/14 | "TR2" lockable toilet roll holder plugged | No | 9 |
| Carried Forward | | | R |
| Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 8 Ironmongery | | | |

| Brought Forward | | | R |
|--|---|----|----|
| <u>"Chairman Industries"</u> | | | |
| 5/8/15 | 32mm "DL2" Stainless steel side grab rail 600mm girth plugged | No | 3 |
| 5/8/16 | 32mm "SR2" Stainless steel rear grab rail 600mm long plugged | No | 3 |
| <u>SUNDRIES</u> | | | |
| <u>"Union"</u> | | | |
| 5/8/17 | "AL8730AS" door stop plugged | No | 18 |
| <u>WRITING BOARDS, PINNING BOARDS, ETC</u> | | | |
| <u>"Parrot products"</u> | | | |
| 5/8/18 | "BD0460" 1 500 x 1 200mm Aluminium framed carpet bulletin board | No | 1 |
| Carried Forward to Summary of Section No. 5 | | | R |
| Section No. 5 | | | |
| BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK | | | |
| Bill No. 8 | | | |
| Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 9</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>WELDED SCREENS, GATES, ETC</u> <u>Metal Screens</u> 5/9/1 "Flattex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screw 250mm intervals. m2 284 <u>Steel gates and frames</u> 5/9/2 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock No 3 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 9 Metalwork | | | |

| | Brought Forward | | | R | |
|-------|---|----|----|---|--|
| 5/9/3 | Double gate and frame 1800 x 2 064mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 1 800 x 2 064mm high, each leaf of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 2 | | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | | |
| | <u>1,2mm Double rebated frames suitable for half brick walls</u> | | | | |
| 5/9/4 | Frame for door 813 x 2 032mm high | No | 15 | | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | | |
| 5/9/5 | Frame for door 813 x 2 032mm high | No | 3 | | |
| | <u>ALUMINIUM DOORS AND WINDOWS</u> | | | | |
| | <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | | | |
| 5/9/6 | Window size 889 x 1,244mm high (W01, W02) | No | 36 | | |
| 5/9/7 | Window size 600 x 600mm high (W04) | No | 6 | | |
| 5/9/8 | Window size 2,510 x 532mm high (W05) | No | 12 | | |
| | <u>Purpose made medium universal doors, sidelights, fanlights, etc with glazing beads</u> | | | | |
| 5/9/9 | Door 1600 x 2635mm high D01 | No | 2 | | |
| | Carried Forward to Summary of Section No. 5 | | | R | |
| | Section No. 5 | | | | |
| | BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK | | | | |
| | Bill No. 9 | | | | |
| | Metalwork | | | | |

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| Item No | Quantity | Rate | Amount |
|---|--------------------|------|--------|
| <u>BILL NO. 11</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>200 x 200 x 6mm Porcelain tiles (PC Amount R100.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 5/11/1 | On walls | m2 | 15 |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 5/11/2 | On floors | m2 | 200 |
| 5/11/3 | Skirting 75mm high | m | 265 |
| Carried Forward to Summary of Section No. 5 | | | R |
| Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage</p> | | R | |

| | | | |
|---|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage</p> | | R | |
| | | R | |

| | | | | | |
|--------|--|--|----|---|--|
| | | Brought Forward | | R | |
| | | <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>"Franke" stainless steel or similar approved</u></p> | | | |
| 5/12/1 | | "CVN611 Curvline" sink and drainer 860 x 435mm wide with one bowl | No | 1 | |
| | | Carried Forward | | R | |
| | | <p>Section No. 5</p> <p>BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK</p> <p>Bill No. 12</p> <p>Plumbing and Drainage</p> | | | |

| | Brought Forward | | | R | |
|---------|---|----|----|---|--|
| | <u>Vaal' or equally approved</u> | | | | |
| 5/12/2 | Hibiscus or similar approved vitreous china basin Catalogue No. 702303 overall size 510 x 405mm comprising two tap holes, 32mm chromium plated basin waste with plug, chain and stay Catalogue No. 301, basin set on and including pedestal and sealed around | No | 13 | | |
| 5/12/3 | Hibiscus or similar approved vitreous china WC suite Catalogue No. 7105LL comprising semi-close coupled 90 degree outlet open rim washdown pan (code 751400), double flap heavy duty plastic seat with lid, intergral "S" trap, matching 9 litre cistern | No | 6 | | |
| 5/12/4 | Vitra "Normus" or other approved wall mounted paraplegic wash hand basin with single tap hole (Code 5079-003-001) fixed with and including "Siphon" or other approved cover pedestal (Code 6948-003-0162) | No | 3 | | |
| 5/12/5 | "Duravit Duraplas" or other approved wall mounted Paraplegic WC Code 254709 or similar approved | No | 3 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 5/12/6 | 32mm "301CP" Basin waste union | No | 15 | | |
| 5/12/7 | 40mm "316CP" Bath or sink waste union | No | 1 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Marley" or similar approved</u> | | | | |
| 5/12/8 | 32 x 50mm Deep seal "P" or "S" trap | No | 13 | | |
| 5/12/9 | 40 x 50mm Deep seal "P" or "S" trap | No | 1 | | |
| | <u>"Chrome" or similar approved</u> | | | | |
| 5/12/10 | 38 mm Bottle trap | No | 3 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage | | | | |

| | Brought Forward | | | R | |
|---------|---|----|------|---|--|
| | <u>Brass</u> | | | | |
| 5/12/11 | 22mm Stopcock | No | 3 | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 5/12/12 | 15mm 111CP Pillartap | No | 13 | | |
| 5/12/13 | Cobra (code 3215ST) or other approved paraplegic tap with S041 overarm swivel spout including all necessary fitting connection. | No | 3 | | |
| 5/12/14 | 15mm 059CP Extension piece with sliding wall flange | No | 41 | | |
| 5/12/15 | 15mm 166/041CP "Star" sink mixer | No | 1 | | |
| | <u>SANITARY PLUMBING</u> | | | | |
| | <u>uPVC pipes</u> | | | | |
| 5/12/16 | 50mm Pipes | m | 25 | | |
| 5/12/17 | 110mm Pipes | m | 5 | | |
| | <u>Extra over uPVC pipes for fittings</u> | | | | |
| 5/12/18 | 110mm Reducer | No | 3 | | |
| 5/12/19 | 50mm Bend | No | 25 | | |
| 5/12/20 | 50mm Junction | No | 16 | | |
| 5/12/21 | 110mm Pan connector | No | 9 | | |
| 5/12/22 | 50mm Access bend | No | 4 | | |
| 5/12/23 | 110mm Access bend | No | 9 | | |
| 5/12/24 | 50mm Access junction | No | 16 | | |
| 5/12/25 | 110mm Access bend with anti-siphon horn | No | 6 | | |
| 5/12/26 | 50mm "GI Two-way" vent valve | No | 3 | | |
| | <u>Sundries</u> | | | | |
| 5/12/27 | Testing waste pipe system | | Item | | |
| | Carried Forward | | | R | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage | | | | |

| Brought Forward | | | | R |
|--|---|----|------|---|
| <u>WATER SUPPLIES</u> | | | | |
| <u>Class 0 copper pipes</u> | | | | |
| 5/12/28 | 15mm Pipes | m | 18 | |
| 5/12/29 | 15mm Pipes chased into brick walls | m | 27 | |
| 5/12/30 | 22mm Pipes | m | 35 | |
| 5/12/31 | 22mm Pipes chased into brick walls | m | 45 | |
| <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 5/12/32 | 15mm Fittings | No | 18 | |
| 5/12/33 | 22mm Fittings | No | 74 | |
| <u>Copper overflow and service pipes</u> | | | | |
| 5/12/34 | 15mm Service pipe 500mm girth | No | 1 | |
| <u>ELECTRIC WATER HEATERS</u> | | | | |
| <u>"Kwikot" or similar approved</u> | | | | |
| 5/12/35 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 | |
| 5/12/36 | PB1.10RB vacuum breaker | No | 1 | |
| 5/12/37 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 | |
| <u>TESTING</u> | | | | |
| 5/12/38 | Testing water pipe system | | Item | |
| <u>FIRE APPLIANCES ETC</u> | | | | |
| <u>"Chubb" or similar approved</u> | | | | |
| 5/12/39 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 3 | |
| 5/12/40 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 | |
| Carried Forward | | | | R |
| Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage | | | | |

| Brought Forward | | | R |
|--|-------------------------------|----|-----|
| <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | |
| <u>Galvanised steel pipes</u> | | | |
| 5/12/41 | 25mm Pipe | m | 120 |
| <u>Extra over galvanised steel pipes for fittings</u> | | | |
| 5/12/42 | Fittings in varying diameters | No | 40 |
| <p align="center">Carried Forward to Summary of Section No. 5</p> <p>Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage</p> | | | R |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 14</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats interior quality PVA emulsion paint</u> | | | |
| 5/14/1 | On internal walls | m2 | 470 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 5/14/2 | On external walls | m2 | 129 | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 5/14/3 | On ceilings and cornices | m2 | 284 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats interior quality acrylic PVA paint</u> | | | |
| 5/14/4 | On internal window sills not exceeding 300mm wide or girth | m | 66 | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 5/14/5 | On fascias and bargeboards | m2 | 52 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 5/14/6 | On door frames | m2 | 24 | |
| | Carried Forward | | | |
| | Section No. 5 BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK Bill No. 14 Paintwork | | | |
| | | | R | |

[illegible]

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 6/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 469 | |
| 6/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 469 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 6/1/3 | Reduced levels under floors | m3 | 70 | |
| 6/1/4 | Trenches and holes for thickening under surface beds, etc | m3 | 92 | |
| | Carried Forward | | | |
| | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|---|---|----|------|---|
| <u>Extra over trench and hole excavations in earth for excavation in</u> | | | | |
| 6/1/5 | Soft rock | m3 | 5 | |
| 6/1/6 | Hard rock | m3 | 30 | |
| <u>Extra over all excavations for carting away</u> | | | | |
| 6/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 92 | |
| <u>Risk of collapse of excavations</u> | | | | |
| 6/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 77 | |
| <u>Keeping excavations free of water</u> | | | | |
| 6/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u> | | | | |
| 6/1/10 | Under floors, steps, pavings, etc | m3 | 52 | |
| <u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u> | | | | |
| 6/1/11 | Under floors, steps, pavings, etc | m3 | 52 | |
| <u>Coarse river sand filling supplied by the contractor</u> | | | | |
| 6/1/12 | Under floors etc | m3 | 52 | |
| <u>SOIL POISONING</u> | | | | |
| <u>Soil insecticide</u> | | | | |
| 6/1/13 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 385 | |
| 6/1/14 | To bottoms and sides of trenches | m2 | 448 | |
| Carried Forward to Summary of Section No. 6 | | | | R |
| Section No. 6 | | | | |
| BLOCK F: 3 CLASSROOMS + HOD | | | | |
| Bill No. 1 | | | | |
| Foundations (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | | R |
|-----------------|---|----|-----|---|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | | |
| | <u>REINFORCED CONCRETE</u> | | | |
| | <u>25MPa/19mm concrete</u> | | | |
| 6/2/1 | Strip footings | m3 | 32 | |
| 6/2/2 | Foundations | m3 | 92 | |
| 6/2/3 | V-drain | m3 | 12 | |
| 6/2/4 | Surface beds on waterproofing | m3 | 52 | |
| | <u>TEST BLOCKS</u> | | | |
| 6/2/5 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 38 | |
| | <u>FORMWORK</u> | | | |
| | <u>Rough form work to sides</u> | | | |
| 6/2/6 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 263 | |
| | <u>MOVEMENT JOINTS, ETC</u> | | | |
| | <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | |
| 6/2/7 | 12mm Joints not exceeding 300mm high | m | 463 | |
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | |
| 6/2/8 | Aprons, slabs, etc to falls | m2 | 540 | |
| 6/2/9 | V-drains to falls | m2 | 83 | |
| | <u>REINFORCEMENT (PROVISIONAL)</u> | | | |
| | Carried Forward | | | R |
| | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 2 Concrete, Formwork and Reinforcement | | | |

| Brought Forward | | | R |
|---|---|----|-------|
| | <u>High tensile steel reinforcement to structural concrete work</u> | | |
| 6/2/10 | 12mm Diameter bars | t | 10.15 |
| | <u>Fabric reinforcement</u> | | |
| 6/2/11 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 540 |
| Carried Forward to Summary of Section No. 6 | | | R |
| Section No. 6 | | | |
| BLOCK F: 3 CLASSROOMS + HOD | | | |
| Bill No. 2 | | | |
| Concrete, Formwork and Reinforcement | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 6/3/1 | Piers | m3 | 9 |
| 6/3/2 | Half brick walls in beamfilling | m2 | 18 |
| 6/3/3 | Half brick walls | m2 | 6 |
| 6/3/4 | One brick walls | m2 | 46 |
| 6/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 372 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 3 Masonry | | | |

| Brought Forward | | | | R |
|--|---|----|-------|---|
| <u>Brickwork reinforcement</u> | | | | |
| 6/3/6 | 150mm Wide reinforcement built in horizontally | m | 1,172 | |
| <u>Turning pieces</u> | | | | |
| 6/3/7 | 230mm Wide turning piece to lintels etc | m | 37 | |
| <u>Prestressed fabricated lintels</u> | | | | |
| 6/3/8 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 70 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 6/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 59 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 6/3/10 | Extra over brickwork for face brickwork | m2 | 311 | |
| 6/3/11 | Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit | m | 4 | |
| 6/3/12 | Piers | m3 | | |
| <u>Internal face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 6/3/13 | Extra over brickwork for face brickwork | m2 | 84 | |
| 6/3/14 | Fair raking cutting | m | 32 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 6/3/15 | 220mm Wide sill set sloping and slightly projecting | m | 32 | |
| <u>NUTEC-CEMENT WINDOW SILLS</u> | | | | |
| Carried Forward | | | | R |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 3 Masonry | | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | |
| 6/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 387 | |
| 6/5/2 | Head wall flashings 308mm girth | m | 97 | |
| 6/5/3 | Cover flashing 154mm girth | m | 97 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | |
| 6/5/4 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 387 | |
| | Carried Forward to Summary of Section No. 6 | | R | |
| | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | R |
|---|--|----|-----|
| <u>Plate nailed timber roof truss construction</u> The following is applicable in respect of roof trusses: Trusses are at maximum 1,10m centres Roof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,0m maximum centres. Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering. All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. All joints to be close fitted butt joints. Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s LIB -001 to 002) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained. | | | |
| <u>Sawn softwood</u> | | | |
| 6/6/1 | 38 x 114mm Wall plates | m | 130 |
| 6/6/2 | Design, manufacture and deliver on site, plate nailed roof truss construction to Library, size 19 744 x 10 060mm overall on plan consisting of seventeen mono pitched trusses, each truss 10 060 x 1 355mm high overall with 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing (wall plates elsewhere) | No | 43 |
| Carried Forward | | | R |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 6 Carpentry and Joinery | | | |

| | | | | | |
|-------|---|----|-----|---|--|
| | Brought Forward | | | R | |
| 6/6/3 | Design, manufacture and deliver on site, plate nailed roof truss construction to Stoep, size 19 144 x 2 530mm overall on plan consisting of nineteen lean-to rafters with 500mm eaves overhang projecting one side and fixed to head wall on other side, including all necessary truss hangers, purlins, runners, bracing and cross bracing (wall plates elsewhere) | No | 43 | | |
| 6/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 303 | | |
| | Sundries | | | | |
| 6/6/5 | Two coats creosote on sawn timbers | m2 | 78 | | |
| | EAVES , VERGES , ETC | | | | |
| | "Everite" pressed nutec-cement | | | | |
| 6/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 195 | | |
| | SKIRTINGS | | | | |
| | Wrought meranti | | | | |
| 6/6/7 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | | | |
| | DOORS ETC | | | | |
| | Wrought hardwood flushback doors with sapele veneer hung to steel frames | | | | |
| 6/6/8 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 5 | | |
| | Semi-solid flush doors with sapele veneer on both sides hung to steel frames | | | | |
| 6/6/9 | 44mm Door 813 x 2 032mm high | No | 1 | | |
| | NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC | | | | |
| | Carried Forward | | | R | |
| | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>Wrought meranti</u> | | | | |
| 6/6/10 | 19 x 75mm Twice rebated surrounds plugged | m | 34 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | <u>SA Pine</u> | | | | |
| 6/6/11 | Dado rail COLDR3T 22 x 44 x 3mm | m | 94 | | |
| | <u>Softboard</u> | | | | |
| 6/6/12 | 12mm Pinning boards glued to plastered walls | m2 | 18 | | |
| | <u>FITTINGS</u> | | | | |
| | <u>General</u> | | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | | |
| | <u>Fittings to Library</u> | | | | |
| 6/6/13 | Floor cupboard to teacher's room 2 400 x 551 x 2 100mm high overall comprising top, bottom, sides, divisions, shelves, backs, doors, etc as per architects drawing No. LIB - 006 | No | 2 | | |
| 6/6/14 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. LIB - 011 | m | 56 | | |
| | Carried Forward to Summary of Section No. 6 | | | R | |
| | Section No. 6 | | | | |
| | BLOCK F: 3 CLASSROOMS + HOD | | | | |
| | Bill No. 6 | | | | |
| | Carpentry and Joinery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>CEILINGS ETC</u> | | | |
| | <u>Wrought meranti</u> | | | |
| 6/7/1 | 19mm Quadrant bead cornice nailed | m | 36 | |
| | <u>"Aerolite" insulation</u> | | | |
| 6/7/2 | 75mm Insulation closely fitted and laid on top of branderling between roof timbers etc | m2 | 231 | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 6/7/3 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 231 | |
| 6/7/4 | Sloping ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 127 | |
| | Carried Forward | | R | |
| | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 7 Ceilings, Partitions and Access Flooring | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| 6/7/5 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 4 |
| | <u>4mm "Everite Nutec" or other equal and approved fibre-cement boards with H-type pressed steel jointing strips</u> | | |
| 6/7/6 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 71 |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | |
| 6/7/7 | 75mm Coved cornices | m | 118 |
| Carried Forward to Summary of Section No. 6 | | | R |
| Section No. 6 | | | |
| BLOCK F: 3 CLASSROOMS + HOD | | | |
| Bill No. 7 | | | |
| Ceilings, Partitions and Access Flooring | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 8</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 6/8/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 84 <u>LOCKS</u> <u>"Mazac Tarpon" or similar approved</u> 6/8/2 "952/4L" four lever lockset and handles with chrome plated finish No 6 <u>HANDLES</u> 6/8/3 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) No 6 | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 8 Ironmongery</p> | | R | |

| Brought Forward | | | R |
|---|--|----|---|
| <u>LETTERS, NAMEPLATES, ETC</u> | | | |
| 6/8/4 | 60 x 3mm Thick perspex plate with two 40mm high engraved and painted numerals | No | 5 |
| <u>"Union" or similar approved</u> | | | |
| 6/8/5 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 3 |
| <u>SUNDRIES</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 6/8/6 | "AL8730AS" door stop plugged | No | 6 |
| Carried Forward to Summary of Section No. 6 Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 8 Ironmongery | | | R |

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| Item No | Quantity | Rate | Amount |
|---|------------------------|------|--------|
| <u>BILL NO. 10</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>600mm x 300mm x 9mm thick porcelain tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SANS approved standards. Colour and end finish to architects' approval. 12mm stainless steel trips to be used at the corners</u> | | | |
| 6/10/1 | To wall | m2 | 9 |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm x 8mm Porcelain tiles (Prime Cost Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 6/10/2 | On floors and landings | m2 | 231 |
| 6/10/3 | Skirting 75mm high | m | 153 |
| Carried Forward to Summary of Section No. 6 | | | R |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 10 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 11</u> | | | |
| | <u>METALWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions</u> | | | |
| | Descriptions of bolts shall be deemed to include nuts and washers | | | |
| | Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete | | | |
| | Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described | | | |
| | <u>WELDED SCREENS, GATES, ETC</u> | | | |
| | <u>Metal Screens</u> | | | |
| 6/11/1 | "Flattex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screw 250mm intervals. | m2 | 231 | |
| | <u>Steel gates and frames</u> | | | |
| 6/11/2 | Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 5 | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | |
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| Item No | | Quantity | Rate | Amount |
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| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 12 Plumbing and Drainage</p> | | R | |

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|--|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> | | R | |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 12 Plumbing and Drainage</p> | | R | |

| Brought Forward | | | R |
|---|--|----|----|
| <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>FIRE APPLIANCES ETC</u></p> <p><u>"Chubb" or similar approved</u></p> | | | |
| 6/12/1 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 3 |
| 6/12/2 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 |
| <p><u>WATER SUPPLIES TO FIRE APPLIANCES</u></p> <p><u>Galvanised steel pipes</u></p> | | | |
| 6/12/3 | 25mm Pipe | m | 75 |
| <p><u>Extra over galvanised steel pipes for fittings</u></p> | | | |
| 6/12/4 | Fittings in varying diameters | No | 1 |
| <p>Carried Forward to Summary of Section No. 6</p> <p>Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 12 Plumbing and Drainage</p> | | | R |

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| Brought Forward | | | R |
|---|--|----|----|
| <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 6/13/7 | On door frames | m2 | 33 |
| 6/13/8 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 16 |
| <u>ON WOOD</u> | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 6/13/9 | On doors | m2 | 99 |
| Carried Forward to Summary of Section No. 6 | | | R |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD Bill No. 13 Paintwork | | | |

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|---|---|---|---|---------------|
| Bill No 6/1 6/2 6/3 6/4 6/5 6/6 6/7 6/8 6/9 6/10 6/11 6/12 6/13 | Section No. 6 BLOCK F: 3 CLASSROOMS + HOD <u>SECTION SUMMARY - BLOCK F: 3 CLASSROOMS + HOD</u> | Page No 158 161 164 165 166 170 172 174 175 176 178 181 183 | | Amount |
| | Foundations (Provisional) | | | |
| | Concrete, Formwork and Reinforcement | | | |
| | Masonry | | | |
| | Waterproofing | | | |
| | Roof Coverings, etc | | | |
| | Carpentry and Joinery | | | |
| | Ceilings, Partitions and Access Flooring | | | |
| | Ironmongery | | | |
| | Plastering | | | |
| | Tiling | | | |
| | Metalwork | | | |
| | Plumbing and Drainage | | | |
| | Paintwork | | | |
| Carried to Final Summary | | | R | |
| Section No. 6 BLOCK F: 3 CLASSROOMS + HOD | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 7/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 440 | |
| 7/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 440 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 7/1/3 | Reduced levels under floors | m3 | 66 | |
| 7/1/4 | Trenches and holes for thickening under surface beds, etc | m3 | 117 | |
| | Carried Forward | | | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|---|----|------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 7/1/5 | Soft rock | m3 | 11 | |
| 7/1/6 | Hard rock | m3 | 5 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 7/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 109 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 7/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 106 | |
| | <u>Keeping excavations free of water</u> | | | |
| 7/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u> | | | |
| 7/1/10 | Under floors, steps, pavings, etc | m3 | 38 | |
| | <u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u> | | | |
| 7/1/11 | Under floors, steps, pavings, etc | m3 | 38 | |
| | <u>Coarse river sand filling supplied by the contractor</u> | | | |
| 7/1/12 | Under floors etc | m3 | 14 | |
| | <u>Garden soil filling obtained from the excavations and/or prescribed stockpiles on site (not compacted)</u> | | | |
| 7/1/13 | On site | m3 | 38 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 7/1/14 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 287 | |
| Carried Forward | | | | R |
| Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 1 Foundations (Provisional) | | | | |

| Brought Forward | | | | | R |
|---|----------------------------------|----|-----|--|---|
| 7/1/15 | To bottoms and sides of trenches | m2 | 445 | | |
| <p>Carried Forward to Summary of Section No. 7</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 1 Foundations (Provisional)</p> | | | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | R |
|-----------------|---|----|-----|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | |
| | <u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> | | |
| | <u>15MPa/19mm concrete</u> | | |
| 7/2/1 | Aprons including thickenings | m3 | 3 |
| | <u>REINFORCED CONCRETE</u> | | |
| | <u>25MPa/19mm concrete</u> | | |
| 7/2/2 | Foundations | m3 | 145 |
| 7/2/3 | V-drain | m3 | 5 |
| 7/2/4 | Surface beds on waterproofing | m3 | 30 |
| | <u>30MPa/19mm concrete</u> | | |
| 7/2/5 | Walls | m3 | 9 |
| 7/2/6 | Slab | m3 | 2 |
| | <u>TEST BLOCKS</u> | | |
| 7/2/7 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 36 |
| | <u>FORMWORK</u> | | |
| | <u>Rough form work to sides</u> | | |
| 7/2/8 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 277 |
| | <u>Formwork to sides and soffits</u> | | |
| 7/2/9 | Sides of concrete walls | m2 | 79 |
| 7/2/10 | Sides and soffits of slabs | m2 | 14 |
| | Carried Forward | | R |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 2 Concrete, Formwork and Reinforcement | | |

| Brought Forward | | | | R |
|--|--|----|-------|---|
| <u>MOVEMENT JOINTS, ETC</u> | | | | |
| <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | | |
| 7/2/11 | 12mm Joints not exceeding 300mm high | m | 394 | |
| <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | | |
| 7/2/12 | Aprons, slabs, etc to falls | m2 | 524 | |
| 7/2/13 | V-drains to falls | m2 | 56 | |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | | |
| <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 7/2/14 | 12mm Diameter bars | t | 15.79 | |
| <u>Fabric reinforcement</u> | | | | |
| 7/2/15 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 414 | |
| Carried Forward to Summary of Section No. 7 | | | | R |
| Section No. 7 | | | | |
| BLOCK G - COMPUTER BLOCK | | | | |
| Bill No. 2 | | | | |
| Concrete, Formwork and Reinforcement | | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 7/3/1 | Piers | m3 | 3 |
| 7/3/2 | Half brick walls in beamfilling | m2 | 54 |
| 7/3/3 | Half brick walls | m2 | 14 |
| 7/3/4 | One brick walls | m2 | 70 |
| 7/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 317 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 3 Masonry | | | |

| Brought Forward | | | | R |
|--|---|----|-------|---|
| <u>Brickwork reinforcement</u> | | | | |
| 7/3/6 | 150mm Wide reinforcement built in horizontally | m | 631 | |
| 7/3/7 | 75mm Wide reinforcement built in horizontally | m | 1,574 | |
| <u>Turning pieces</u> | | | | |
| 7/3/8 | 230mm Wide turning piece to lintels etc | m | 42 | |
| <u>Prestressed fabricated lintels</u> | | | | |
| 7/3/9 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 44 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 7/3/10 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 86 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 7/3/11 | Extra over brickwork for face brickwork | m2 | 343 | |
| 7/3/12 | Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit | m | 8 | |
| 7/3/13 | Fair raking cutting | m | 24 | |
| <u>Internal face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 7/3/14 | Extra over brickwork for face brickwork | m2 | 68 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 7/3/15 | 220mm Wide sill set sloping and slightly projecting | m | 25 | |
| <u>NUTEC-CEMENT WINDOW SILLS</u> | | | | |
| Carried Forward | | | | R |
| Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 3 Masonry | | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 4 | | | |
| | <u>WATERPROOFING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes | | | |
| | <u>DAMP-PROOFING OF WALLS AND FLOORS</u> | | | |
| | <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u> | | | |
| 7/4/1 | In walls m2 | 141 | | |
| | <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 7/4/2 | Under surface beds m2 | 732 | | |
| | <u>JOINT SEALANTS, ETC</u> | | | |
| | <u>"Denbraven LM15" polysulphide sealing compound including backing cord, bond breaker, primer, etc</u> | | | |
| 7/4/3 | 10 x 10mm In expansion joints in floors m | 172 | | |
| | Carried Forward to Summary of Section No. 7 | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 4 Waterproofing | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 5</u> | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | |
| 7/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 334 | |
| 7/5/2 | Head wall flashings 308mm girth | m | 28 | |
| 7/5/3 | Cover flashing 154mm girth | m | 28 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced alumnium foil bonded insulation</u> | | | |
| 7/5/4 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 334 | |
| | Carried Forward to Summary of Section No. 7 | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 6 Carpentry and Joinery</p> | | R | |

| | | | | | | |
|-------|--|---|-----|--|---|--|
| | | Brought Forward | | | R | |
| | | <u>Plate nailed timber roof truss construction</u> | | | | |
| | | The following is applicable in respect of roof trusses: | | | | |
| | | Trusses are at maximum 1,10m centres | | | | |
| | | Roof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,0m maximum centres. | | | | |
| | | Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering. | | | | |
| | | All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. | | | | |
| | | Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. | | | | |
| | | All joints to be close fitted butt joints. | | | | |
| | | Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. | | | | |
| | | The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. | | | | |
| | | Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s COMP - 001 to 002) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained. | | | | |
| | | <u>Sawn softwood</u> | | | | |
| 7/6/1 | 38 x 114mm Wall plates | m | 200 | | | |
| 7/6/2 | Design, manufacture and delivered on site, plate nailed roof truss construction to Computer room, size 27 800 x 7 490mm overall on plan with 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing (wall plates elsewhere) | No | 37 | | | |
| | | | | | | |
| | | Carried Forward | | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 6 Carpentry and Joinery | | | | | |

| | | | | | |
|--------|--|----|-----|---|--|
| | Brought Forward | | | R | |
| 7/6/3 | Design, manufacture and deliver on site, plate nailed roof truss construction to Stoep, size 27 800 x 2 210mm with 750mm eaves overhang projecting one side and fixed to head wall on other side, including all necessary truss hangers, purlins, runners, bracing and cross bracing (wall plates elsewhere) | No | 37 | | |
| 7/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 334 | | |
| | Sundries | | | | |
| 7/6/5 | Two coats creosote on sawn timbers | m2 | 9 | | |
| | EAVES , VERGES , ETC | | | | |
| | "Everite" pressed nutec-cement | | | | |
| 7/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 600 | | |
| | SKIRTINGS | | | | |
| | Wrought meranti | | | | |
| 7/6/7 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | 11 | | |
| | DOORS ETC | | | | |
| | Wrought hardwood flushback doors with sapele veneer hung to steel frames | | | | |
| 7/6/8 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 6 | | |
| 7/6/9 | 44mm Door 900 x 2 032mm high (paraplegic) | No | 2 | | |
| | Semi-solid flush doors with sapele veneer on both sides hung to steel frames | | | | |
| 7/6/10 | 44mm Door 813 x 2 032mm high | No | 9 | | |
| | NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC | | | | |
| | Carried Forward | | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>Wrought meranti</u> | | | | |
| 7/6/11 | 19 x 75mm Twice rebated surrounds plugged | m | 40 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | <u>SA Pine</u> | | | | |
| 7/6/12 | Dado rail COLDR3T 22 x 44 x 3mm | m | 58 | | |
| | <u>Softboard</u> | | | | |
| 7/6/13 | 12mm Pinning boards glued to plastered walls | m2 | 25 | | |
| | <u>FITTINGS</u> | | | | |
| | <u>General</u> | | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | | |
| | <u>Fittings to Computer room</u> | | | | |
| 7/6/14 | Floor cupboard to teacher's room, 1 200 x 551 x 2 100mm high overall comprising top, bottom, sides, divisions, shelves, backs, doors, etc as per architects drawing No. COMP - 004 | No | 1 | | |
| 7/6/15 | Worktop with legs 6 189mm long x 800mm wide x 714 mm high overall with 215 mm high edge panel to back and sides, comprising frame, tops, etc as per architects drawing No. COMP-005 | No | 1 | | |
| 7/6/16 | Worktop with legs 7 050mm long x 800mm wide x 714 mm high overall with 215 mm high edge panel to back and sides, comprising frame, tops, etc as per architects drawing NO. COMP - 006 | No | 1 | | |
| 7/6/17 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. COMP - 007 | m | 17 | | |
| | Carried Forward to Summary of Section No. 7 | | | R | |
| | Section No. 7 | | | | |
| | BLOCK G - COMPUTER BLOCK | | | | |
| | Bill No. 6 | | | | |
| | Carpentry and Joinery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 7/7/1 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 169 | |
| 7/7/2 | Sloping ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 51 | |
| 7/7/3 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 4 | |
| | <u>4mm "Everite Nutec" or other equal and approved fibre-cement boards with H-type pressed steel jointing strips</u> | | | |
| 7/7/4 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 117 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 7/7/5 | 75mm Coved cornices | m | 172 | |
| | Carried Forward to Summary of Section No. 7 | | | |
| | Section No. 7 | | | |
| | BLOCK G - COMPUTER BLOCK | | | |
| | Bill No. 7 | | | |
| | Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 8</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 7/8/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 34 <u>LOCKS</u> <u>"Union" or similar approved</u> 7/8/2 "CZ80941SC" WC indicator bolt with keep fixed to metal No 8 <u>"Mazac Tarpon" or similar approved</u> 7/8/3 "952/4L" four lever lockset and handles with chrome plated finish No 17 <u>PUSH PLATES AND KICKING PLATES</u> | | | |
| | <div>Carried Forward</div> <div> Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 8 Ironmongery </div> | | R | |

| | Brought Forward | | | R | |
|--------|--|----|----|---|--|
| | <u>"Dorma" or similar approved</u> | | | | |
| 7/8/4 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 4 | | |
| | <u>HANDLES</u> | | | | |
| 7/8/5 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 17 | | |
| | <u>"Dorma" or similar approved</u> | | | | |
| 7/8/6 | 32 x 515mm Stainless steel "D" straight back-to-back pull handles | No | 17 | | |
| | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| 7/8/7 | 60 x 3mm Thick perspex plate with two 40mm high engraved and painted numerals | No | 5 | | |
| | <u>"Union" or similar approved</u> | | | | |
| 7/8/8 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 3 | | |
| 7/8/9 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 2 | | |
| 7/8/10 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 2 | | |
| 7/8/11 | "AL5066-E14" 152 x 152mm anodised aluminium plate with paraplegic pictogram. | No | 2 | | |
| | <u>SUNDRIES</u> | | | | |
| | <u>"Union" or similar approved</u> | | | | |
| 7/8/12 | "AL8730AS" door stop plugged | No | 17 | | |
| | <u>"BATHROOM FITTINGS"</u> | | | | |
| | <u>"Nampak" or similar approved</u> | | | | |
| 7/8/13 | "TR2" lockable toilet roll holder plugged | No | 10 | | |
| | Carried Forward | | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 8 Ironmongery | | | | |

| Brought Forward | | | R |
|--|--|----|---|
| <u>"Chairman Industries" or similar approved</u> | | | |
| 7/8/14 | 32mm "DL2" Stainless steel side grab rail 600mm girth plugged | No | 2 |
| 7/8/15 | 32mm "SR2" Stainless steel rear grab rail 600mm long plugged | No | 2 |
| <u>STEEL LOCKERS</u> | | | |
| <u>"Greenfield Baseline Guardsman" Steel lockers with standard baked enamel finish, or similar approved</u> | | | |
| 7/8/16 | "GB002" locker 300 x 450 x 1 800mm high | No | 3 |
| <u>WRITING BOARDS, PINNING BOARDS, ETC</u> | | | |
| <u>"Vitrex" vitreous enamelled writing boards, etc or similar approved</u> | | | |
| 7/8/17 | Green writing board 4 800 x 1 140mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 1 |
| <u>"Parrot products" or similar approved</u> | | | |
| 7/8/18 | "BD0476" 2 400 x 1 200mm Aluminium framed carpet bulletin board | No | 1 |
| Carried Forward to Summary of Section No. 7 | | | R |
| Section No. 7 | | | |
| BLOCK G - COMPUTER BLOCK | | | |
| Bill No. 8 | | | |
| Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 9</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>WELDED SCREENS, GATES, ETC</u> <u>Metal Screens</u> 7/9/1 "Flattex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screws at 250mm intervals. m2 287 <u>Steel gates and frames</u> 7/9/2 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt and padlock No 8 <u>PRESSED STEEL DOOR FRAMES</u> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 9 Metalwork</p> | | R | |

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[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 11</u> | | | |
| | <u>TILING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions</u> | | | |
| | Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| | <u>WALL TILING</u> | | | |
| | <u>200 x 200 x 6mm Porcelain tiles (PC Amount R120.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 7/11/1 | On walls | m2 | 8 | |
| | <u>FLOOR TILING</u> | | | |
| | <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 7/11/2 | On floors | m2 | 209 | |
| 7/11/3 | Skirting 75mm high | m | 186 | |
| | Carried Forward to Summary of Section No. 7 | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|------------|--|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 12 Plumbing and Drainage</p> | | | |
| | | | R | |

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| <p style="text-align: center;">Brought Forward</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 12 Plumbing and Drainage</p> | | R | |
| | | R | |

| | Brought Forward | | | R | |
|--------|--|----|---|---|--|
| | <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>Vaal' or equally approved</u></p> | | | | |
| 7/12/1 | <p>Bantam Vitreous china cloakroom hand basin 340 x 460mm with two tap hole and integrated overflow to SABS specification and chain stay hole bolted to wall with 10mm bolts and sealed with silicone sealant where basin meets wall</p> | No | 8 | | |
| 7/12/2 | <p>White vitreous china close coupled wash down WC suite comprising 90 degrees outlet open rim pan and matching 9 litre front single flush top single flush cistern.</p> | No | 8 | | |
| | Carried Forward | | | R | |
| | <p>Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 12 Plumbing and Drainage</p> | | | | |

| | Brought Forward | | | R | |
|---------|---|----|----|---|--|
| 7/12/3 | Vitra "Normus" or other approved wall mounted paraplegic wash hand basin with single tap hole (Code 5079-003-001) fixed with and including "Siphon" or other approved cover pedestal (Code 6948-003-0162) | No | 2 | | |
| 7/12/4 | "Duravit Duraplas" or other approved wall mounted Paraplegic WC Code 254709 or similar approved | No | 2 | | |
| 7/12/5 | Vitreous china wall-hung urinal " VAA-705326WH " with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 4 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 7/12/6 | 32mm "301CP" Basin waste union | No | 10 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Marley" or similar approved</u> | | | | |
| 7/12/7 | 32 x 50mm Deep seal "P" or "S" trap | No | 8 | | |
| | <u>"Chrome" or similar approved</u> | | | | |
| 7/12/8 | 38 mm Bottle trap | No | 6 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | <u>Brass</u> | | | | |
| 7/12/9 | 22mm Stopcock | No | 1 | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 7/12/10 | 15mm 111CP Pillartap | No | 8 | | |
| 7/12/11 | Cobra (code 3215ST) or other approved paraplegic tap with S041 overarm swivel spout including all necessary fitting connection. | No | 2 | | |
| 7/12/12 | 15mm 059CP Extension piece with sliding wall flange | No | 38 | | |
| 7/12/13 | "Flushmaster" toilet flush valve | No | 4 | | |
| | Carried Forward | | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 12 Plumbing and Drainage | | | | |

| Brought Forward | | | | R | |
|---|---|----|------|---|--|
| <u>SANITARY PLUMBING</u> | | | | | |
| <u>uPVC pipes</u> | | | | | |
| 7/12/14 | 50mm Pipes | m | 21 | | |
| 7/12/15 | 110mm Pipes | m | 5 | | |
| <u>Extra over uPVC pipes for fittings</u> | | | | | |
| 7/12/16 | 50mm Bend | No | 14 | | |
| 7/12/17 | 50mm Junction | No | 14 | | |
| 7/12/18 | 110mm Pan connector | No | 10 | | |
| 7/12/19 | 50mm Access bend | No | 14 | | |
| 7/12/20 | 110mm Access bend | No | 10 | | |
| 7/12/21 | 50mm Access junction | No | 14 | | |
| 7/12/22 | 110mm Access bend with anti-syphon horn | No | 10 | | |
| <u>Sundries</u> | | | | | |
| 7/12/23 | Testing waste pipe system | | Item | | |
| <u>WATER SUPPLIES</u> | | | | | |
| <u>Class 0 copper pipes</u> | | | | | |
| 7/12/24 | 22mm Pipes | m | 72 | | |
| 7/12/25 | 22mm Pipes chased into brick walls | m | 48 | | |
| <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | | |
| 7/12/26 | 22mm Fittings | No | 8 | | |
| <u>Copper overflow and service pipes</u> | | | | | |
| 7/12/27 | 15mm Service pipe 500mm girth | No | 1 | | |
| <u>ELECTRIC WATER HEATERS</u> | | | | | |
| Carried Forward | | | | R | |
| Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 12 Plumbing and Drainage | | | | | |

| Brought Forward | | | R |
|---|---|----|------|
| | <u>"Kwikot" or similar approved</u> | | |
| 7/12/28 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 |
| 7/12/29 | PB1.10RB vacuum breaker | No | 1 |
| 7/12/30 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 |
| | <u>TESTING</u> | | |
| 7/12/31 | Testing water pipe system | | Item |
| | <u>FIRE APPLIANCES ETC</u> | | |
| | <u>"Chubb" or similar approved</u> | | |
| 7/12/32 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 3 |
| 7/12/33 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 |
| | <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | |
| | <u>Galvanised steel pipes</u> | | |
| 7/12/34 | 25mm Pipe | m | 135 |
| | <u>Extra over galvanised steel pipes for fittings</u> | | |
| 7/12/35 | Fittings in varying diameters | No | 135 |
| Carried Forward to Summary of Section No. 7 | | | R |
| Section No. 7 | | | |
| BLOCK G - COMPUTER BLOCK | | | |
| Bill No. 12 | | | |
| Plumbing and Drainage | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 14 | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 7/14/1 | On internal walls | m2 | 469 | |
| 7/14/2 | Soffits of concrete slab | m2 | 14 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 7/14/3 | On external walls | m2 | 53 | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 7/14/4 | On ceilings and cornices | m2 | 169 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats interior quality acrylic PVA paint</u> | | | |
| 7/14/5 | On internal window sills not exceeding 300mm wide or girth | m | 24 | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 7/14/6 | On ceilings and cornices | m2 | 117 | |
| 7/14/7 | On fascias and bargeboards | m2 | 180 | |
| | <u>ON METAL</u> | | | |
| | Carried Forward | | R | |
| | Section No. 7 BLOCK G - COMPUTER BLOCK Bill No. 14 Paintwork | | | |

| Brought Forward | | | R |
|---|---|----|----|
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | |
| 7/14/8 | On door frames | m2 | 18 |
| 7/14/9 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 26 |
| | <u>ON WOOD</u> | | |
| | <u>Three coats polyurethane semi-gloss varnish</u> | | |
| 7/14/10 | On doors | m2 | 56 |
| Carried Forward to Summary of Section No. 7 | | | R |
| Section No. 7 | | | |
| BLOCK G - COMPUTER BLOCK | | | |
| Bill No. 14 | | | |
| Paintwork | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 8/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 567 | |
| 8/1/2 | Stripping average 150mm thick layer of vegetable soil including carting away to a dumping site to be located by the contractor | m2 | 567 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 8/1/3 | Reduced levels under floors | m3 | 85 | |
| 8/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 84 | |
| | Carried Forward | | | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|---|----|------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 8/1/5 | Soft rock | m3 | 4 | |
| 8/1/6 | Hard rock | m3 | 8 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 8/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 84 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 8/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 78 | |
| | <u>Keeping excavations free of water</u> | | | |
| 8/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u> | | | |
| 8/1/10 | Over site | m3 | 57 | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u> | | | |
| 8/1/11 | Under floors, steps, pavings, etc | m3 | 57 | |
| | <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | |
| 8/1/12 | Under floors, steps, pavings, etc. | m3 | 57 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 8/1/13 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 430 | |
| 8/1/14 | To bottoms of trenches | m2 | 396 | |
| Carried Forward to Summary of Section No. 8 | | | | R |
| Section No. 8 | | | | |
| BLOCK H - MULTI-PURPOSE CLASSROOM | | | | |
| Bill No. 1 | | | | |
| Foundations (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 2</u> | | | |
| | <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Cost of tests</u> | | | |
| | The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately) | | | |
| | <u>REINFORCED CONCRETE</u> | | | |
| | <u>25MPa/19mm concrete</u> | | | |
| 8/2/1 | Surface beds on waterproofing | m3 | 307 | |
| 8/2/2 | Foundations | m3 | 84 | |
| 8/2/3 | V-drain | m3 | 8 | |
| | <u>TEST BLOCKS</u> | | | |
| 8/2/4 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 61 | |
| | <u>CONCRETE SUNDRIES</u> | | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | |
| 8/2/5 | Ramps,etc to falls (provisional) | m2 | 430 | |
| | Carried Forward | | | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 2 Concrete, Formwork and Reinforcement | | | |
| | | | R | |

| | Brought Forward | | | R | |
|--------|---|----|-------|---|--|
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | | |
| 8/2/6 | Aprons, slabs, etc to falls | m2 | 1,082 | | |
| 8/2/7 | V-drains to falls | m2 | 55 | | |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | | | |
| | <u>Rough formwork to sides</u> | | | | |
| 8/2/8 | Edges, risers, ends and reveals not exceeding 300mm high or wide (Provisional) | m | 281 | | |
| | <u>MOVEMENT JOINTS ETC</u> | | | | |
| | <u>Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces</u> | | | | |
| 8/2/9 | 10mm Joints not exceeding 300mm high | m | 281 | | |
| | <u>REINFORCEMENT (PROVISIONAL)</u> | | | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 8/2/10 | 12mm Diameter bars | t | 9.24 | | |
| | <u>Fabric reinforcement</u> | | | | |
| 8/2/11 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 587 | | |
| | Carried Forward to Summary of Section No. 8 | | | R | |
| | Section No. 8 | | | | |
| | BLOCK H - MULTI-PURPOSE CLASSROOM | | | | |
| | Bill No. 2 | | | | |
| | Concrete, Formwork and Reinforcement | | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 8/3/1 | Piers | m3 | 3 |
| 8/3/2 | Half brick walls in beamfilling. | m2 | 11 |
| 8/3/3 | Half brick walls. | m2 | 8 |
| 8/3/4 | One brick walls | m2 | 75 |
| 8/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 352 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 3 Masonry | | | |

| Brought Forward | | | | R |
|---|--|----|-------|---|
| <u>Brickwork reinforcement</u> | | | | |
| 8/3/6 | 150mm Wide reinforcement built in horizontally | m | 1,461 | |
| <u>Turning pieces</u> | | | | |
| 8/3/7 | 230mm Wide turning piece to lintels etc | m | 67 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 8/3/8 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 102 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed horizontal and vertical joints</u> | | | | |
| 8/3/9 | Extra over brickwork for face brickwork | m2 | 381 | |
| 8/3/10 | Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit | m | 48 | |
| 8/3/11 | Extra over brickwork for brick-on-edge header course lintel pointed on both faces and 230mm soffit | m | 84 | |
| 8/3/12 | Fair raking cutting | m | 24 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed joints on all exposed faces</u> | | | | |
| 8/3/13 | 180mm Wide sill set sloping and slightly projecting | m | 21 | |
| Carried Forward to Summary of Section No. 8 | | | | R |
| Section No. 8 | | | | |
| BLOCK H - MULTI-PURPOSE CLASSROOM | | | | |
| Bill No. 3 | | | | |
| Masonry | | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>Modek opal 10, 1,25mm thick polycarbonate corrugated roof sheeting fixed to manufacturers detail and specifications at 17dgr on insulation: thermal insulation material/aluminium foil on 75 x 50mm hot rolled lip channel purlins at 2mc/cc on prefabricated 300 x 230mm to portal frame to engineers details and specifications</u> | | | |
| 8/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 477 | |
| 8/5/2 | Sidewall Flashing 375mm girth, one time bent. | m | 80 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | |
| 8/5/3 | Insulation laid taut over purlins (at approximately 1 200mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 447 | |
| | Carried Forward to Summary of Section No. 8 | | R | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | | R |
|---|---|----|----|---|
| <u>Plate nailed timber roof truss construction</u> | | | | |
| The following is applicable in respect of roof trusses: | | | | |
| Trusses are at maximum 1,05m centres | | | | |
| Roof covering is galvanised IBR roof sheeting on 50 x 75mm purlins at 1,2m maximum centres. | | | | |
| Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm branderling. | | | | |
| All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. | | | | |
| Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. | | | | |
| All joints to be close fitted butt joints. | | | | |
| Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. | | | | |
| The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. | | | | |
| <u>Sawn softwood</u> | | | | |
| 8/6/1 | 38 x 114mm Wall plates | m | 40 | |
| 8/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the Multi-purpose Classroom Block, size 39,929 x 8,020mm overall on plan consisting of mono pitch roof trusses with 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 53 | |
| 8/6/3 | Design, manufacture, supply and deliver on site, plate nailed roof construction to Multi-purpose Block verandah area size 39,929 x 2,200mm overall on plan 750mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates elsewhere) | No | 53 | |
| Carried Forward | | | | R |
| Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 6 Carpentry and Joinery | | | | |

| | Brought Forward | | | R | |
|--------|---|----|-----|---|--|
| 8/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 287 | | |
| | <u>Sundries</u> | | | | |
| 8/6/5 | Two coats creosote on sawn timbers | m2 | 96 | | |
| | <u>EAVES , VERGES , ETC</u> | | | | |
| | <u>"Everite Flexit" or other equal and approved pressed nutec-cement</u> | | | | |
| 8/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 40 | | |
| | <u>SKIRTINGS</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 8/6/7 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 8/6/8 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 19 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 8/6/9 | 44mm Door 813 x 2 032mm high | No | 2 | | |
| | <u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 8/6/10 | 19 x 75mm Rebated surrounds plugged | m | 34 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | <u>SA Pine</u> | | | | |
| 8/6/11 | Dado rail COLDR3T 22 x 44 x 3mm | m | 125 | | |
| | Carried Forward | | | R | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 6 Carpentry and Joinery | | | | |

| Brought Forward | | | R |
|---|--|----|----|
| | <u>Softboard</u> | | |
| 8/6/12 | 12mm Pinning boards glued to plastered walls | m2 | 14 |
| | <u>FITTINGS</u> | | |
| | <u>General</u> | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | |
| 8/6/13 | Wall unit to work station 1 500mm long x 300mm wide x 600mm high overall comprising, bottoms, sides, divisions, shelves, backs, doors, etc as per architects drawing No. GR-R 004 | No | 2 |
| 8/6/14 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. GR-R 008 | m | 14 |
| Carried Forward to Summary of Section No. 8 | | | R |
| Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 6 Carpentry and Joinery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>CEILINGS ETC</u> | | | |
| | <u>Wrought meranti</u> | | | |
| 8/7/1 | 19mm Quadrant bead cornice nailed | m | 84 | |
| | <u>"Aerolite" or other equal and approved insulation</u> | | | |
| 8/7/2 | 100mm Insulation closely fitted and laid on top of brander between roof timbers etc | m2 | 375 | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" or other equal and approved gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 8/7/3 | Ceilings including 38 x 38mm sawn softwood brander at 400mm centres | m2 | 287 | |
| 8/7/4 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 5 | |
| | Carried Forward | | | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 7 Ceilings, Partitions and Access Flooring | | R | |

| Brought Forward | | | R |
|---|--|----|-----|
| | <u>4mm "Everite Nutec" or other equal and approved fibre-cement boards with H-type pressed steel jointing strips</u> | | |
| 8/7/5 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 88 |
| | <u>"Rhino" or other equal and approved gypsum plasterboard cornices</u> | | |
| 8/7/6 | 75mm Coved cornices | m | 120 |
| Carried Forward to Summary of Section No. 8 | | | R |
| Section No. 8 | | | |
| BLOCK H - MULTI-PURPOSE CLASSROOM | | | |
| Bill No. 7 | | | |
| Ceilings, Partitions and Access Flooring | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 8</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 8/8/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 12 <u>LOCKS</u> <u>"Mazac Tarpon" or similar approved</u> 8/8/2 "952/4L" four lever lockset and handles with chrome plated finish No 6 <u>PUSH PLATES AND KICKING PLATES</u> <u>HANDLES</u> 8/8/3 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) No 6 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 8 Ironmongery | | | |

| Brought Forward | | | R |
|--|--|----|---|
| <u>LETTERS, NAMEPLATES, ETC</u> | | | |
| 8/8/4 | 60 X 3mm Thick perspex plate with two 40mm high engraved and painted letters or numerals | No | 4 |
| <u>"Union" or similar approved</u> | | | |
| 8/8/5 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 3 |
| <u>SUNDRIES</u> | | | |
| 8/8/6 | "Union AL8730" or other equal and approved door stop plugged | No | 6 |
| <u>WRITING BOARDS</u> | | | |
| <u>"Virtrex" or other equal and approved vitreous enamelled writing boards, etc</u> | | | |
| 8/8/7 | Green writing board 4 800 x 1 140mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 4 |
| Carried Forward to Summary of Section No. 8 | | | R |
| Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 8 Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 9 | | | |
| | METALWORK | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | WELDED SCREENS, GATES, ETC | | | |
| | Security gates to steel door frames | | | |
| 8/9/1 | Single gate 813 x 2 032mm high of 40 x 60 x 2,5mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 12mm diameter vertical rails at 100mm centres fitted with one and a half pairs of suitable pin hinges welded to steel door frame, complete with and including five lever security lock | No | 4 | |
| | PRESSED STEEL DOOR FRAMES | | | |
| | 1,2mm Double rebated frames suitable for one brick walls | | | |
| 8/9/2 | Frame for door 813 x 2 032mm high | No | 6 | |
| | ALUMINIUM DOORS AND WINDOWS | | | |
| | Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning | | | |
| 8/9/3 | Window size 889 x 1,244mm high (W01, W02) | No | 24 | |
| | Carried Forward to Summary of Section No. 8 | | R | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 9 Metalwork | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 148 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 11 Plumbing and Drainage (Provisional)</p> | | R | |

| Brought Forward | | | R |
|--|--|----|-----|
| <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>WATER SUPPLIES TO FIRE APPLIANCES</u></p> <p><u>FIRE APPLIANCES ETC</u></p> <p><u>"Chubb" or similar approved</u></p> | | | |
| 8/11/1 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 4 |
| 8/11/2 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 |
| <p><u>WATER SUPPLIES TO FIRE APPLIANCES</u></p> <p><u>Galvanised steel pipes</u></p> | | | |
| 8/11/3 | 25mm Pipe | m | 102 |
| <p><u>Extra over galvanised steel pipes for fittings</u></p> | | | |
| 8/11/4 | Fittings in varying diameters | No | 24 |
| <p>Carried Forward to Summary of Section No. 8</p> <p>Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 11 Plumbing and Drainage (Provisional)</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 11</u> <u>TILING</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding <u>WALL TILING</u> <u>200 x 200 x 6mm Porcelain tiles(PC Amount R100.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 8/12/1 | On walls | m2 | 12 | |
| | <u>FLOOR TILING</u> <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 8/12/2 | On floors | m2 | 287 | |
| 8/12/3 | Skirting 75mm high | m | 147 | |
| | Carried Forward to Summary of Section No. 8 Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 12 Tiling | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 13</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 8/13/1 | On internal walls | m2 | 378 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 8/13/2 | On external walls | m2 | 87 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>ON PLASTER BOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 8/13/3 | On ceilings and cornices | m2 | 287 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 8/13/4 | On ceilings and cornices | m2 | 88 | |
| 8/13/5 | On fascias and bargeboards | m2 | 12 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 8/13/6 | On door frames | m2 | 8 | |
| | Carried Forward | | | |
| | Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 13 Paintwork | | R | |

| Brought Forward | | | | R |
|---|--|----|----|---|
| 8/13/7 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 13 | |
| <u>ON WOOD</u> | | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | | |
| 8/13/8 | On doors | m2 | 20 | |
| <p style="text-align: right;">Carried Forward to Summary of Section No. 8</p> <p>Section No. 8 BLOCK H - MULTI-PURPOSE CLASSROOM Bill No. 13 Paintwork</p> | | | | R |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 9/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 666 | |
| 9/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 666 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 9/1/3 | Reduced levels under floors | m3 | 73 | |
| 9/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 98 | |
| | Carried Forward | | | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|---|----|------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 9/1/5 | Soft rock | m3 | 5 | |
| 9/1/6 | Hard rock | m3 | 9 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 9/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 91 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 9/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 78 | |
| | <u>Keeping excavations free of water</u> | | | |
| 9/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u> | | | |
| 9/1/10 | Under floors, steps, pavings, etc | m3 | 224 | |
| | <u>Compaction of surfaces</u> | | | |
| 9/1/11 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 489 | |
| | <u>Prescribed density tests on filling</u> | | | |
| 9/1/12 | "Modified AASHTO Density" test | No | 10 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 9/1/13 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 489 | |
| 9/1/14 | To bottoms and sides of trenches | m2 | 406 | |
| Carried Forward to Summary of Section No. 9 | | | | R |
| Section No. 9 | | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | | |
| Bill No. 1 | | | | |
| Foundations (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| Brought Forward | | | | R |
|-----------------|---|----|------|---|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | | |
| | <u>REINFORCED CONCRETE</u> | | | |
| | <u>25MPa/19mm concrete</u> | | | |
| 9/2/1 | Foundations | m3 | 98 | |
| 9/2/2 | Surface beds on waterproofing | m3 | 56 | |
| 9/2/3 | V-drains | m3 | 5 | |
| 9/2/4 | Allow a PC amount of R63,000.00 for stormwater concrete channel with steel grating | | Item | |
| | <u>TEST BLOCKS</u> | | | |
| 9/2/5 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 32 | |
| | <u>CONCRETE SUNDRIES</u> | | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | |
| 9/2/6 | Aprons, slabs, etc to falls | m2 | 590 | |
| 9/2/7 | V-drains to falls | m2 | 54 | |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | | |
| | <u>Rough formwork to sides</u> | | | |
| 9/2/8 | Edges, risers, ends and reveals not exceeding 300mm high or wide (Provisional) | m | 242 | |
| | <u>MOVEMENT JOINTS ETC</u> | | | |
| | Carried Forward | | | R |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 2 Concrete, Formwork and Reinforcement | | | |

| Brought Forward | | | R |
|--|--|----|------|
| | <u>Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces</u> | | |
| 9/2/9 | 10mm Joints not exceeding 300mm high | m | 186 |
| | <u>REINFORCEMENT (PROVISIONAL)</u> | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | |
| 9/2/10 | 12mm Diameter bars | t | 9.13 |
| | <u>Fabric reinforcement</u> | | |
| 9/2/11 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 866 |
| Carried Forward to Summary of Section No. 9 | | | R |
| Section No. 9 | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | |
| Bill No. 2 | | | |
| Concrete, Formwork and Reinforcement | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>MASONRY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>Sizes in descriptions</u> | | | |
| | Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| | <u>Face bricks</u> | | | |
| | Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| | <u>Pointing</u> | | | |
| | Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>SUPERSTRUCTURE</u> | | | |
| | <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 9/3/1 | Piers | m3 | 4 | |
| 9/3/2 | Half brick walls | m2 | 9 | |
| 9/3/3 | One brick walls | m2 | 84 | |
| 9/3/4 | 270mm Hollow walls of two half brick skins in beamfilling | m2 | 30 | |
| 9/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 237 | |
| | Carried Forward | | | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 3 Masonry | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|---|----|-----|---|
| <u>BRICKWORK SUNDRIES</u> | | | | |
| <u>Brickwork reinforcement</u> | | | | |
| 9/3/6 | 75mm Wide reinforcement built in horizontally | m | 26 | |
| 9/3/7 | 150mm Wide reinforcement built in horizontally | m | 247 | |
| <u>Prestressed fabricated lintels</u> | | | | |
| 9/3/8 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 115 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 9/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 43 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 9/3/10 | Extra over brickwork for face brickwork | m2 | 280 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 9/3/11 | 220mm Wide sill set sloping and slightly projecting | m | 30 | |
| 9/3/12 | Extra over brickwork for brick-on-edge header course lintel | m | 37 | |
| 9/3/13 | Extra over brickwork for brick-on-edge header course band | m | 40 | |
| Carried Forward to Summary of Section No. 9 | | | | R |
| Section No. 9 | | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | | |
| Bill No. 3 | | | | |
| Masonry | | | | |

| Item No | Quantity | Rate | Amount |
|---|---|------|--------|
| <u>BILL NO. 4</u> | | | |
| <u>WATERPROOFING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes | | | |
| <u>DAMP-PROOFING OF WALLS AND FLOORS</u> | | | |
| <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u> | | | |
| 9/4/1 | In walls m2 | 23 | |
| <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 9/4/2 | Under surface beds m2 | 841 | |
| <u>JOINT SEALANTS, ETC</u> | | | |
| <u>"Denbraven LM15" polysulphide sealing compound including backing cord, bond breaker, primer, etc</u> | | | |
| 9/4/3 | 10 x 10mm In expansion joints in floors m | 312 | |
| Carried Forward to Summary of Section No. 9 | | | R |
| Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 4 Waterproofing | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | |
| 9/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 456 | |
| 9/5/2 | Cover flashing 154mm girth | m | 36 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | |
| 9/5/3 | Insulation laid taut over purlins (at approximately 100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 351 | |
| | Carried Forward to Summary of Section No. 9 | | R | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 6 Carpentry and Joinery</p> | | R | |

| | | | | | |
|-------|--|--|-----|--|---|
| | | Brought Forward | | | R |
| | | <p><u>Plate nailed timber roof truss construction</u></p> <p>The following is applicable in respect of roof trusses:</p> <p>Trusses are at maximum 1,10m centres</p> <p>Roof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,1m maximum centres.</p> <p>Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering.</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</p> <p>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences.</p> <p>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s CLASS-4 - 001 to 002) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</p> <p><u>Sawn softwood</u></p> | | | |
| 9/6/1 | 38 x 114mm Wall plates | m | 105 | | |
| 9/6/2 | Design, manufacture and deliver on site, plate nailed inverted mono pitched roof trusses, size 35,079 x 8,020mm overall on plan consisting of eighteen mono pitched trusses, each truss 8,020 x 2,113mm high overall with 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing, etc (wall plates elsewhere) | No | 1 | | |
| | | Carried Forward | | | R |
| | <p>Section No. 9</p> <p>BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR</p> <p>Bill No. 6</p> <p>Carpentry and Joinery</p> | | | | |

| | Brought Forward | | | R | |
|--------|--|----|-----|---|--|
| 9/6/3 | Design, manufacture and deliver on site, plate nailed roof truss construction to Veranda, size 35,079 x 2,201mm overall on plan consisting of eighteen lean-to rafters with 500mm eaves overhang projecting one side and fixed to head wall on other side, including all necessary truss hangers, purlins, runners, bracing and cross bracing, etc (wall plates elsewhere) | No | 1 | | |
| 9/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 359 | | |
| | <u>Sundries</u> | | | | |
| 9/6/5 | Two coats creosote on sawn timbers | m2 | 108 | | |
| | <u>EAVES , VERGES , ETC</u> | | | | |
| | <u>"Everite" pressed nutec-cement</u> | | | | |
| 9/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 133 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 9/6/7 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high (D5) | No | 3 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 9/6/8 | 44mm Door 813 x 2 032mm high | No | 8 | | |
| | <u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 9/6/9 | 19 x 75mm Twice rebated surrounds plugged | m | 40 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | <u>SA Pine</u> | | | | |
| 9/6/10 | Dado rail COLDR3T 22 x 44 x 3mm | m | 91 | | |
| | Carried Forward | | | R | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 6 Carpentry and Joinery | | | | |

| Brought Forward | | | R |
|--|---|----|------|
| | <u>Softboard</u> | | |
| 9/6/11 | 12mm Pinning boards glued to plastered walls | m2 | 25 |
| | <u>FITTINGS</u> | | |
| | <u>General</u> | | |
| | <p>The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities)</p> | | |
| | <u>Fittings to Classroom Store</u> | | |
| 9/6/12 | Allow a PC amount of R385,000.00 for worktops, shelving and counter tops at Science Lab and Media Centre | | Item |
| <p align="center">Carried Forward to Summary of Section No. 9</p> <p>Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 6 Carpentry and Joinery</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>CEILINGS ETC</u> | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 9/7/1 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 139 | |
| 9/7/2 | Sloping ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 135 | |
| 9/7/3 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 2 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 9/7/4 | 75mm Coved cornices | m | 168 | |
| | Carried Forward to Summary of Section No. 9 | | | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 9</u> | | | |
| | <u>IRONMONGERY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Finishes to ironmongery</u> | | | |
| | Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated | | | |
| | <u>LOCKS</u> | | | |
| | <u>"Mazac Tarpon" or similar approved</u> | | | |
| 9/9/1 | "952/4L" four lever lockset and handles with chrome plated finish | No | 11 | |
| | <u>HANDLES</u> | | | |
| | <u>"Dorma" or similar approved</u> | | | |
| 9/9/2 | 32 x 350mm Stainless steel DPH213 "D" straight back-to-back pull handles | No | 11 | |
| | <u>"Dorma" or similar approved</u> | | | |
| 9/9/3 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 3 | |
| | Carried Forward | | | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 9 Ironmongery | | R | |

| Brought Forward | | | R |
|---|--|----|----|
| <u>LETTERS, NAMEPLATES, ETC</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 9/9/4 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 6 |
| <u>SUNDRIES</u> | | | |
| <u>"Union" or similar approved</u> | | | |
| 9/9/5 | "AL8730AS" door stop plugged | No | 11 |
| <u>STEEL LOCKERS</u> | | | |
| <u>"Greenfield Baseline Guardsman" Steel lockers with standard baked enamel finish or similar approved</u> | | | |
| 9/9/6 | "GB002" locker 300 x 450 x 1 800mm high | No | 2 |
| <u>WRITING BOARDS, PINNING BOARD, ETC</u> | | | |
| <u>"Vitrex" vitreous enamelled writing boards, etc or similar approved</u> | | | |
| 9/9/7 | Green writing board 3,690 x 1,213mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 2 |
| <u>"Parrot products" or similar approved</u> | | | |
| 9/9/8 | "BD0476" 3 000 x 1 200mm Aluminium framed carpet bulletin board | No | 2 |
| Carried Forward to Summary of Section No. 9 | | | R |
| Section No. 9 | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | |
| Bill No. 9 | | | |
| Ironmongery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 10</u> | | | |
| | <u>METALWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions</u> | | | |
| | Descriptions of bolts shall be deemed to include nuts and washers | | | |
| | Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete | | | |
| | Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described | | | |
| | <u>WELDED SCREENS, GATES, ETC</u> | | | |
| | <u>Steel gates and frames</u> | | | |
| 9/10/1 | Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt and padlock | No | 3 | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | |
| | <u>1,2mm Double rebated frames suitable for half brick walls</u> | | | |
| 9/10/2 | Frame for door 813 x 2 032mm high | No | 1 | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | |
| 9/10/3 | Frame for door 813 x 2 032mm high | No | 7 | |
| | Carried Forward | | | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 10 Metalwork | | R | |

| Brought Forward | | | R |
|---|---|----|----|
| | <u>1,2mm Double rebated frames suitable for 270mm cavity walls</u> | | |
| 9/10/4 | Frame for door 813 x 2 032mm high | No | 3 |
| | <u>ALUMINIUM DOORS AND WINDOWS</u> | | |
| | <u>Epoxy powdercoated aluminium frames</u> | | |
| | <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | |
| 9/10/5 | Window size 889 x 1,244mm high (W01, W02) | No | 35 |
| 9/10/6 | Window size 2,510 x 532mm high (W05) | No | 9 |
| Carried Forward to Summary of Section No. 9 | | | R |
| Section No. 9 | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | |
| Bill No. 10 | | | |
| Metalwork | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 11 | | | |
| | <u>PLASTERING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 142 for CPAP formula purposes. | | | |
| | <u>SCREEDS</u> | | | |
| | <u>Screeds on concrete</u> | | | |
| 9/11/1 | 25mm Thick on floors and landings | m2 | 253 | |
| | <u>GRANOLITHIC</u> | | | |
| | <u>Untinted granolithic on concrete</u> | | | |
| 9/11/2 | 35mm Thick on floors and landings | m2 | 151 | |
| | <u>INTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 9/11/3 | On walls | m2 | 461 | |
| 9/11/4 | On narrow widths | m2 | 23 | |
| | <u>EXTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 9/11/5 | On walls | m2 | 64 | |
| 9/11/6 | On narrow widths | m2 | 6 | |
| | Carried Forward to Summary of Section No. 9 | | R | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 11 Plastering | | | |

| Item No | | Quantity | Rate | Amount |
|--|--|----------|------|--------|
| | <u>BILL NO. 12</u> | | | |
| | <u>PLUMBING AND DRAINAGE</u> | | | |
| 9/12/1 | Allow a PC amount for R36,000.00 plumbing and drainage | Item | | |
| | <u>FIRE APPLIANCES ETC</u> | | | |
| | <u>"Chubb" or similar approved</u> | | | |
| 9/12/2 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 2 | |
| Carried Forward to Summary of Section No. 9 | | | | R |
| Section No. 9 | | | | |
| BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR | | | | |
| Bill No. 12 | | | | |
| Plumbing and Drainage | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 13</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 9/13/1 | On internal walls | m2 | 484 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 9/13/2 | On external walls | m2 | 64 | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 9/13/3 | On ceilings and cornices | m2 | 274 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 9/13/4 | On fascias and barge boards | m2 | 29 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 9/13/5 | On door frames | m2 | 14 | |
| 9/13/6 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 5 | |
| | <u>ON WOOD</u> | | | |
| | Carried Forward | | R | |
| | Section No. 9 BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRAR Bill No. 13 Paintwork | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|-------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 10/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 2,274 | |
| 10/1/2 | Stripping average 150mm thick layer of top soil and stockpiling on site | m2 | 2,274 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 10/1/3 | Reduced levels under floors | m3 | 470 | |
| 10/1/4 | Trenches and holes for thickening under surface beds, etc | m3 | 343 | |
| | Carried Forward | | | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|-----------------|---|----|-------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 10/1/5 | Soft rock | m3 | 17 | |
| 10/1/6 | Hard rock | m3 | 30 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 10/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 343 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 10/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 261 | |
| | <u>Keeping excavations free of water</u> | | | |
| 10/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density</u> | | | |
| 10/1/10 | Under floors, steps, pavings, etc | m3 | 255 | |
| | <u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u> | | | |
| 10/1/11 | Under floors, steps, pavings, etc | m3 | 1,263 | |
| | <u>Compaction of surfaces</u> | | | |
| 10/1/12 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 2,808 | |
| | <u>Prescribed density tests on filling</u> | | | |
| 10/1/13 | "Modified AASHTO Density" test | No | 15 | |
| | <u>SOIL POISONING</u> | | | |
| | Carried Forward | | | R |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 1 Foundations (Provisional) | | | |

| Brought Forward | | | R |
|---|---|----|-------|
| | <u>Soil insecticide</u> | | |
| 10/1/14 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 1,404 |
| 10/1/15 | To bottoms and sides of trenches | m2 | 1,449 |
| <p style="text-align: right;">Carried Forward to Summary of Section No. 10</p> <p>Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 1 Foundations (Provisional)</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| | Brought Forward | | | R | |
|--------|---|----|-------|---|--|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | | | |
| | <u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u> | | | | |
| | <u>25MPa/19mm concrete</u> | | | | |
| 10/2/1 | Ramps including thickenings (Provisional) | m3 | 9 | | |
| | <u>REINFORCED CONCRETE</u> | | | | |
| | <u>25MPa/19mm concrete</u> | | | | |
| 10/2/2 | V-drains | m3 | 18 | | |
| 10/2/3 | Foundations | m3 | 343 | | |
| 10/2/4 | Surface beds on waterproofing | m3 | 159 | | |
| | <u>TEST BLOCKS</u> | | | | |
| 10/2/5 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 108 | | |
| | <u>CONCRETE SUNDRIES</u> | | | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | | |
| 10/2/6 | Aprons, slabs, etc to falls | m2 | 1,750 | | |
| 10/2/7 | V-drains to falls | m2 | 177 | | |
| | <u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u> | | | | |
| | <u>Rough formwork to sides</u> | | | | |
| 10/2/8 | Edges, risers, ends and reveals not exceeding 300mm high or wide (Provisional) | m | 617 | | |
| | Carried Forward | | | R | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement | | | | |

| Brought Forward | | | | R |
|---|--|----|-------|---|
| <u>MOVEMENT JOINTS ETC</u> | | | | |
| <u>Expansion joints with closed cell expanded polystyrene joint filler between vertical concrete and/or brick surfaces</u> | | | | |
| 10/2/9 | 10mm Joints not exceeding 300mm high | m | 617 | |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | | |
| <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 10/2/10 | 12mm Diameter bars | t | 37.72 | |
| <u>Fabric reinforcement</u> | | | | |
| 10/2/11 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 1,927 | |
| Carried Forward to Summary of Section No. 10 | | | | R |
| Section No. 10 | | | | |
| BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | | | | |
| Bill No. 2 | | | | |
| Concrete, Formwork and Reinforcement | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>MASONRY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>Sizes in descriptions</u> | | | |
| | Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| | <u>Face bricks</u> | | | |
| | Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| | <u>Pointing</u> | | | |
| | Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>SUPERSTRUCTURE</u> | | | |
| | <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 10/3/1 | Piers | m3 | 7 | |
| 10/3/2 | Half brick walls | m2 | 18 | |
| 10/3/3 | One brick walls | m2 | 334 | |
| 10/3/4 | 270mm Hollow walls of two half brick skins in beamfilling | m2 | 105 | |
| 10/3/5 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 827 | |
| | Carried Forward | | | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 3 Masonry | | R | |

| Brought Forward | | | | R |
|--|---|----|-------|---|
| <u>BRICKWORK SUNDRIES</u> | | | | |
| <u>Brickwork reinforcement</u> | | | | |
| 10/3/6 | 75mm Wide reinforcement built in horizontally | m | 53 | |
| 10/3/7 | 150mm Wide reinforcement built in horizontally | m | 1,033 | |
| <u>Prestressed fabricated lintels</u> | | | | |
| 10/3/8 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 278 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 10/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 146 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 10/3/10 | Extra over brickwork for face brickwork | m2 | 675 | |
| <u>Internal face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 10/3/11 | Extra over brickwork for face brickwork | m2 | 235 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | | |
| 10/3/12 | Extra over brickwork for brick-on-edge header course lintel | m | 71 | |
| 10/3/13 | Extra over brickwork for brick-on-edge header course band | m | 258 | |
| Carried Forward to Summary of Section No. 10 | | | | R |
| Section No. 10 | | | | |
| BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | | | | |
| Bill No. 3 | | | | |
| Masonry | | | | |

| Item No | Quantity | Rate | Amount |
|---|---|-------|--------|
| <u>BILL NO. 4</u> | | | |
| <u>WATERPROOFING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes | | | |
| <u>DAMP-PROOFING OF WALLS AND FLOORS</u> | | | |
| <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u> | | | |
| 10/4/1 | In walls m2 | 64 | |
| <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 10/4/2 | Under surface beds m2 | 2,371 | |
| <u>JOINT SEALANTS, ETC</u> | | | |
| <u>"Denbraven LM15" polysulphide sealing compound including backing cord, bond breaker, primer, etc</u> | | | |
| 10/4/3 | 10 x 10mm In expansion joints in floors m | 551 | |
| Carried Forward to Summary of Section No. 10 | | | R |
| Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 4 Waterproofing | | | |

| Item No | | | Quantity | Rate | Amount |
|---------|---|----|----------|------|--------|
| | <u>BILL NO. 5</u> | | | | |
| | <u>ROOF COVERINGS ETC</u> | | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | | |
| 10/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 1,227 | | |
| 10/5/2 | Cover flashing 154mm girth | m | 124 | | |
| | <u>ROOF AND WALL INSULATION</u> | | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | | |
| 10/5/3 | Insulation laid taut over purlins (at approximately 100mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 1,227 | | |
| | Carried Forward to Summary of Section No. 10 | | | | |
| | Section No. 10 | | | | |
| | BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | | | | |
| | Bill No. 5 | | | | |
| | Roof Coverings, etc | | | | |
| | | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | R |
|--|--|----|-----|
| <u>Plate nailed timber roof truss construction</u> The following is applicable in respect of roof trusses: Trusses are at maximum 1,10m centres Roof covering is galvanised "IBR" roof sheeting with "Globalcoat" finish on one side on 50 x 75mm purlins at 1,1m maximum centres. Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm brandering. All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. All joints to be close fitted butt joints. Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. Tenderers must study the roof plan and sections as attached to the back of these bills of quantities (refer drawing No.'s CLASS-4 - 001 to 002) and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained. | | | |
| <u>Sawn softwood</u> | | | |
| 10/6/1 | 38 x 114mm Wall plates | m | 245 |
| 10/6/2 | Design, manufacture and deliver on site, plate nailed inverted mono pitched roof trusses, size 40,802 x 8,020mm overall on plan consisting of eighteen mono pitched trusses, each truss 8,020 x 2,113mm high overall with 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing, etc (wall plates elsewhere) | No | 3 |
| Carried Forward | | | R |
| Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| Brought Forward | | | R |
|---|--|----|-------|
| 10/6/3 | Design, manufacture and deliver on site, plate nailed roof truss construction to Veranda, size 40,802 x 2,201mm overall on plan consisting of eighteen lean-to rafters with 500mm eaves overhang projecting one side and fixed to head wall on other side, including all necessary truss hangers, purlins, runners, bracing and cross bracing, etc (wall plates elsewhere) | No | 3 |
| 10/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 1,251 |
| <u>Sundries</u> | | | |
| 10/6/5 | Two coats creosote on sawn timbers | m2 | 375 |
| <u>EAVES , VERGES , ETC</u> | | | |
| <u>"Everite" pressed nutec-cement</u> | | | |
| 10/6/6 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 429 |
| <u>DOORS ETC</u> | | | |
| <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | |
| 10/6/7 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 12 |
| <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | |
| 10/6/8 | 44mm Door 813 x 2 032mm high | No | 3 |
| <u>FITTINGS</u> | | | |
| Carried Forward | | | R |
| Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery | | | |

| | | | | |
|--|--|---|----|--|
| | Brought Forward | | R | |
| | <p><u>General</u></p> <p>The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities)</p> <p><u>Fittings to Classroom Store</u></p> <p>Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. CLASS-4 - 003 & 004</p> | m | 10 | |
| | Carried Forward to Summary of Section No. 10 | | R | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 10/7/1 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 477 | |
| 10/7/2 | Sloping ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 846 | |
| 10/7/3 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 12 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 10/7/4 | 75mm Coved cornices | m | 688 | |
| | Carried Forward to Summary of Section No. 10 | | | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO.8</u> | | | |
| | <u>IRONMONGERY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Finishes to ironmongery</u> | | | |
| | Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated | | | |
| | <u>HINGES, BOLTS, ETC</u> | | | |
| | <u>Approved</u> | | | |
| 10/8/1 | 100mm Steel hinge | No | 24 | |
| | <u>LOCKS</u> | | | |
| | <u>"Mazac Tarpon" or similar approved</u> | | | |
| 10/8/2 | "952/4L" four lever lockset and handles with chrome plated finish | No | 15 | |
| | <u>HANDLES</u> | | | |
| | <u>"Dorma" or similar approved</u> | | | |
| 10/8/3 | 32 x 350mm Stainless steel DPH213 "D" straight back-to-back pull handles | No | 15 | |
| | Carried Forward | | | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 8 Ironmongery | | R | |

| Brought Forward | | | | R |
|---|--|----|----|---|
| <u>PUSH PLATES AND KICKING PLATES</u> | | | | |
| <u>"Dorma" or similar approved</u> | | | | |
| 10/8/4 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 12 | |
| <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| <u>"Union" or similar approved</u> | | | | |
| 10/8/5 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 6 | |
| <u>SUNDRIES</u> | | | | |
| <u>"Union" or similar approved</u> | | | | |
| 10/8/6 | "AL8730AS" door stop plugged | No | 15 | |
| <u>STEEL LOCKERS</u> | | | | |
| <u>"Greenfield Baseline Guardsman" Steel lockers with standard baked enamel finish or similar approved</u> | | | | |
| 10/8/7 | "GB002" locker 300 x 450 x 1 800mm high | No | 12 | |
| <u>WRITING BOARDS, PINNING BOARD, ETC</u> | | | | |
| <u>"Vitrex" vitreous enamelled writing boards, etc or similar approved</u> | | | | |
| 10/8/8 | Green writing board 4 800 x 1 140mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 12 | |
| <u>"Parrot products" or similar approved</u> | | | | |
| 10/8/9 | "BD0476" 2 400 x 1 200mm Aluminium framed carpet bulletin board | No | 12 | |
| Carried Forward to Summary of Section No. 10 | | | | R |
| Section No. 10 | | | | |
| BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | | | | |
| Bill No. 8 | | | | |
| Ironmongery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 9</u> | | | |
| | <u>METALWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions</u> | | | |
| | Descriptions of bolts shall be deemed to include nuts and washers | | | |
| | Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete | | | |
| | Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described | | | |
| | <u>WELDED SCREENS, GATES, ETC</u> | | | |
| | <u>Steel gates and frames</u> | | | |
| 10/9/1 | Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt and padlock | No | 12 | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | |
| 10/9/2 | Frame for door 813 x 2 032mm high | No | 3 | |
| | <u>1,2mm Double rebated frames suitable for 270mm cavity walls</u> | | | |
| 10/9/3 | Frame for door 813 x 2 032mm high | No | 12 | |
| | Carried Forward | | R | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 9 Metalwork | | | |

| Brought Forward | | | R |
|---|---|----|----|
| <u>ALUMINIUM DOORS AND WINDOWS</u> | | | |
| <u>Epoxy powdercoated aluminium frames</u> | | | |
| <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | | |
| 10/9/4 | Window size 889 x 1,244mm high (W01, W02) | No | 72 |
| 10/9/5 | Window size 2,510 x 532mm high (W05) | No | 30 |
| Carried Forward to Summary of Section No. 10 | | | R |
| Section No. 10 | | | |
| BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | | | |
| Bill No. 9 | | | |
| Metalwork | | | |

[illegible]

| Item No | Quantity | Rate | Amount |
|---|------------------------|------|--------|
| <u>BILL NO. 11</u> | | | |
| <u>TILING</u> | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm x 8mm Porcelain tiles (Prime Cost Amount R120.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 10/11/1 | On floors and landings | m2 | 328 |
| 10/11/2 | Skirting 75mm high | m | 567 |
| Carried Forward to Summary of Section No. 10 | | | R |
| Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 11 Tiling | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|-------|--------|
| | BILL NO. 13 | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats interior quality PVA emulsion paint</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 10/13/1 | On internal walls | m2 | 647 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 10/13/2 | On external walls | m2 | 212 | |
| | <u>ON PLASTERBOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 10/13/3 | On ceilings and cornices | m2 | 1,323 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats interior quality acrylic PVA paint</u> | | | |
| 10/13/4 | On internal window sills not exceeding 300mm wide or girth | m | 15 | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 10/13/5 | On fascias and barge boards | m2 | 107 | |
| | <u>ON METAL</u> | | | |
| | Carried Forward | | R | |
| | Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 13 Paintwork | | | |

| Brought Forward | | | R |
|---|--|----|----|
| <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 10/13/6 | On door frames | m2 | 20 |
| 10/13/7 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 48 |
| <u>ON WOOD</u> | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 10/13/8 | On doors | m2 | 93 |
| Carried Forward to Summary of Section No. 10 | | | R |
| Section No. 10 BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS Bill No. 13 Paintwork | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 11/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 937 | |
| 11/1/2 | Stripping average 150mm thick layer of vegetable soil including carting away to a dumping site to be located by the contractor | m2 | 937 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 11/1/3 | Reduced levels under floors | m3 | 141 | |
| 11/1/4 | Trenches and holes for thickening under surface beds etc | m3 | 203 | |
| | Carried Forward | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|---|---|----|-------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 11/1/5 | Soft rock | m3 | 10 | |
| 11/1/6 | Hard rock | m3 | 20 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 11/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 203 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 11/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 175 | |
| | <u>Keeping excavations free of water</u> | | | |
| 11/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u> | | | |
| 11/1/10 | Under floors, steps, pavings, etc | m3 | 771 | |
| 11/1/11 | Backfilling to trenches, holes, etc | m3 | | |
| | <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | |
| 11/1/12 | Under floors, steps, pavings, etc. | m3 | 91 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 11/1/13 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 771 | |
| 11/1/14 | To bottoms of trenches | m2 | 1,058 | |
| Carried Forward to Summary of Section No. 11 | | | | R |
| Section No. 11 | | | | |
| BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | | |
| Bill No. 1 | | | | |
| Foundations (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 2</u> | | | |
| | <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Cost of tests</u> | | | |
| | The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately) | | | |
| | <u>REINFORCED CONCRETE</u> | | | |
| | <u>25MPa/19mm concrete</u> | | | |
| 11/2/1 | Surface beds on waterproofing | m3 | 104 | |
| 11/2/2 | Strip footings | m3 | 129 | |
| 11/2/3 | Foundations | m3 | 203 | |
| 11/2/4 | V-drain | m3 | 50 | |
| | <u>CONCRETE SUNDRIES</u> | | | |
| | <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | |
| 11/2/5 | Aprons to falls | m2 | 332 | |
| | <u>TEST BLOCKS</u> | | | |
| 11/2/6 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 97 | |
| | Carried Forward | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement | | | |
| | | | R | |

| Brought Forward | | | R |
|--|--|----|-------|
| <u>FORMWORK</u> | | | |
| <u>Rough form work to sides</u> | | | |
| 11/2/7 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 571 |
| <u>MOVEMENT JOINTS, ETC</u> | | | |
| <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | |
| 11/2/8 | 12mm Joints not exceeding 300mm high | m | 1,173 |
| <u>CONCRETE SUNDRIES</u> | | | |
| <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | |
| 11/2/9 | Aprons, slabs, etc to falls | m2 | 1,549 |
| 11/2/10 | V-drains to falls | m2 | 332 |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | |
| <u>High tensile steel reinforcement to structural concrete work</u> | | | |
| 11/2/11 | 12mm Diameter bars | t | 22.25 |
| <u>Fabric reinforcement</u> | | | |
| 11/2/12 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 1,881 |
| Carried Forward to Summary of Section No. 11 | | | R |
| Section No. 11 | | | |
| BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | |
| Bill No. 2 | | | |
| Concrete, Formwork and Reinforcement | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|-------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>MASONRY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>Sizes in descriptions</u> | | | |
| | Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| | <u>Face bricks</u> | | | |
| | Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| | <u>Pointing</u> | | | |
| | Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| | <u>SUBSTRUCTURE</u> | | | |
| | <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u> | | | |
| 11/3/1 | Piers | m3 | 1 | |
| 11/3/2 | One brick walls | m2 | 169 | |
| 11/3/3 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 474 | |
| | <u>Brickwork reinforcement</u> | | | |
| 11/3/4 | 150mm Wide reinforcement built in horizontally | m | 6,778 | |
| | Carried Forward | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 3 Masonry | | R | |

| Brought Forward | | | | R |
|---|---|----|-------|---|
| <u>External face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed horizontal and vertical joints</u> | | | | |
| 11/3/5 | Extra over brickwork for face brickwork | m2 | 164 | |
| 11/3/6 | Fair raking cutting | m | 128 | |
| <u>SUPERSTRUCTURE</u> | | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | | |
| 11/3/7 | Piers | m3 | 9 | |
| 11/3/8 | Half brick walls in beamfilling. | m2 | 35 | |
| 11/3/9 | Half brick walls. | m2 | 14 | |
| 11/3/10 | One brick walls | m2 | 189 | |
| 11/3/11 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 424 | |
| <u>BRICKWORK SUNDRIES</u> | | | | |
| <u>Brickwork reinforcement</u> | | | | |
| 11/3/12 | 75mm Wide reinforcement built in horizontally | m | 42 | |
| 11/3/13 | 150mm Wide reinforcement built in horizontally | m | 1,613 | |
| <u>Turning pieces</u> | | | | |
| 11/3/14 | 230mm Wide turning piece to lintels etc | m | 84 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 11/3/15 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 308 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed horizontal and vertical joints</u> | | | | |
| 11/3/16 | Extra over brickwork for face brickwork | m2 | 1,166 | |
| Carried Forward | | | | R |
| Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 3 Masonry | | | | |

| | Brought Forward | | | R | |
|---|---|----|-----|---|--|
| 11/3/17 | Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit | m | 145 | | |
| 11/3/18 | Fair raking cutting | m | 64 | | |
| | <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed joints on all exposed faces</u> | | | | |
| 11/3/19 | 180mm Wide sill set sloping and slightly projecting | m | 64 | | |
| | <u>Internal face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed horizontal and vertical joints</u> | | | | |
| 11/3/20 | Extra over brickwork for face brickwork | m2 | 256 | | |
| Carried Forward to Summary of Section No. 11 | | | | R | |
| Section No. 11 | | | | | |
| BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | | | |
| Bill No. 3 | | | | | |
| Masonry | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 4 WATERPROOFING NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes DAMP-PROOFING OF WALLS AND FLOORS <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or other equal and approved embossed damp proof course</u> | | | |
| 11/4/1 | In walls | m2 | 100 | |
| | <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or other equal and approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 11/4/2 | Under surface beds | m2 | 771 | |
| 11/4/3 | Joint sealant | m | 446 | |
| | Carried Forward to Summary of Section No. 11 | | R | |
| | Section No. 11 | | | |
| | BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | |
| | Bill No. 4 | | | |
| | Waterproofing | | | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | R |
|---|---|----|-----|
| <u>Plate nailed timber roof truss construction</u> | | | |
| The following is applicable in respect of roof trusses: | | | |
| Trusses are at maximum 1,05m centres | | | |
| Roof covering is galvanised IBR roof sheeting on 50 x 75mm purlins at 1,2m maximum centres. | | | |
| Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm branderling. | | | |
| All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. | | | |
| Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. | | | |
| All joints to be close fitted butt joints. | | | |
| Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. | | | |
| The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. | | | |
| <u>Sawn softwood</u> | | | |
| 11/6/1 | 38 x 114mm Wall plates | m | 130 |
| 11/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the Grade R Classroom Block, size 38,425 x 9,520mm overall on plan consisting of mono pitch roof trusses with 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 87 |
| 11/6/3 | Design, manufacture, supply and deliver on site, plate nailed roof construction to Grade R 4-Toilet Block size 38,456 x 2,200mm overall on plan 800mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates elsewhere) | No | 87 |
| Carried Forward | | | R |
| Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery | | | |

| | | | | | |
|---------|---|----|-----|---|--|
| | Brought Forward | | | R | |
| 11/6/4 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 892 | | |
| | <u>Sundries</u> | | | | |
| 11/6/5 | Two coats creosote on sawn timbers | m2 | 19 | | |
| 11/6/6 | 3,2mm Diameter galvanised wire tie 600mm girth wrapped around rafter and purlin with ends tied together | No | 282 | | |
| | <u>EAVES , VERGES , ETC</u> | | | | |
| | <u>"Everite Flexit"or other equal and approved pressed nutec-cement</u> | | | | |
| 11/6/7 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 389 | | |
| | <u>SKIRTINGS</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 11/6/8 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | 236 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 11/6/9 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 10 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 11/6/10 | 44mm Door 813 x 2 032mm high | No | 2 | | |
| | <u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 11/6/11 | 19 x 75mm Twice rebated surrounds plugged | m | 34 | | |
| | Carried Forward | | | R | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery | | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| | <u>Softboard</u> | | |
| 11/6/12 | 12mm Pinning boards glued to plastered walls | m2 | 22 |
| | <u>FRAMED FRAMES, ETC.</u> | | |
| | <u>SA Pine</u> | | |
| 11/6/13 | Dado rail COLDR3T 22 x 44 x 3mm | m | 187 |
| | <u>FITTINGS</u> | | |
| | <u>General</u> | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | |
| 11/6/14 | Shelving 350mm wide made up of 25mm thick hardwood top and 250 x 250mm high triangular mild steel brackets bolted to wall complete with paint and varnish as per architects drawing No. GR-R 008 | m | 145 |
| Carried Forward to Summary of Section No. 11 | | | R |
| Section No. 11 | | | |
| BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | |
| Bill No. 6 | | | |
| Carpentry and Joinery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" or other equal and approved gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 11/7/1 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 462 | |
| 11/7/2 | Sloping ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 277 | |
| 11/7/3 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 12 | |
| | <u>4mm "Everite Nutec" or other equal and approved fibre-cement boards with H-type pressed steel jointing strips</u> | | | |
| 11/7/4 | Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres | m2 | 143 | |
| | Carried Forward | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

| Brought Forward | | | R |
|--|--|----|-----|
| 11/7/5 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 8 |
| | <u>"Rhino" or other equal and approved gypsum plasterboard cornices</u> | | |
| 11/7/6 | 75mm Coved cornices | m | 308 |
| Carried Forward to Summary of Section No. 11 Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 8</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 11/8/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 24 <u>LOCKS</u> <u>"Union" or similar approved</u> 11/8/2 "Union CZ682-24/2295-76" or other equal and approved two lever lockset with striking plate fixed to metal No 12 <u>HANDLES</u> 11/8/3 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) No 12 <div style="text-align: right;">Carried Forward</div> | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 8 Ironmongery | | R | |

| | Brought Forward | | | R | |
|---------|---|----|----|---|--|
| | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| 11/8/4 | 60 X 3mm Thick perspex plate with two 40mm high engraved and painted letters or numerals | No | 12 | | |
| | <u>"Union" or similar approved</u> | | | | |
| 11/8/5 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 6 | | |
| 11/8/6 | "AL5066-E14" 152 x 152mm anodised aluminium plate with paraplegic pictogram. | No | 2 | | |
| | <u>"BATHROOM FITTINGS"</u> | | | | |
| 11/8/7 | 153W x 153H x 65D Recessed Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications | No | 10 | | |
| | <u>"Chairman Industries" or similar approved</u> | | | | |
| 11/8/8 | 32mm "DL2" Stainless steel side grab rail 600mm girth plugged | No | 2 | | |
| 11/8/9 | 32mm "SR2" Stainless steel rear grab rail 600mm long plugged | No | 2 | | |
| | <u>SUNDRIES</u> | | | | |
| 11/8/10 | "Union AL8730" or other equal and approved door stop plugged | No | 12 | | |
| | <u>WRITING BOARDS</u> | | | | |
| | <u>"Vitrex" or other equal and approved vitreous enamelled writing boards, etc</u> | | | | |
| 11/8/11 | Green writing board 4 800 x 1 140mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 6 | | |
| | Carried Forward to Summary of Section No. 11 | | | R | |
| | Section No. 11 | | | | |
| | BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | | |
| | Bill No. 8 | | | | |
| | Ironmongery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | BILL NO. 9 | | | |
| | METALWORK | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | WELDED SCREENS, GATES, ETC | | | |
| | Security gates to steel door frames | | | |
| 11/9/1 | Single gate 813 x 2 032mm high of 40 x 60 x 2,5mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 12mm diameter vertical rails at 100mm centres fitted with one and a half pairs of suitable pin hinges welded to steel door frame, complete with and including five lever security lock | No | 10 | |
| | PRESSED STEEL DOOR FRAMES | | | |
| | 1,2mm Double rebated frames suitable for one brick walls | | | |
| 11/9/2 | Frame for door 813 x 2 032mm high | No | 12 | |
| | ALUMINIUM DOORS AND WINDOWS | | | |
| | Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning | | | |
| 11/9/3 | Window size 889 x 1,244mm high (W01, W02) | No | 72 | |
| | Carried Forward to Summary of Section No. 11 | | R | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 9 Metalwork | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 10 | | | |
| | <u>PLASTERING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 142 for CPAP formula purposes. | | | |
| | <u>SCREEDS</u> | | | |
| | <u>Screeds on concrete</u> | | | |
| 11/10/1 | 25mm Thick on floors m2 | 605 | | |
| | <u>INTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 11/10/2 | On walls m2 | 537 | | |
| 11/10/3 | On narrow widths m2 | 53 | | |
| | <u>EXTERNAL PLASTER</u> | | | |
| | <u>Cement plaster on brickwork</u> | | | |
| 11/10/4 | On walls m2 | 87 | | |
| | Carried Forward to Summary of Section No. 11 | | R | |
| | Section No. 11 | | | |
| | BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | | | |
| | Bill No. 10 | | | |
| | Plastering | | | |

| Item No | Quantity | Rate | Amount |
|---|------------------------|------|--------|
| <u>BILL NO. 11</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>600mm x 300mm x 9mm thick porcelain tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SANS approved standards. Colour and end finish to architects' approval. 12mm stainless steel trips to be used at the corners</u> | | | |
| 11/11/1 | To wall | m2 | 10 |
| <u>FLOOR TILING</u> | | | |
| <u>300 x 300mm x 8mm Porcelain tiles (Prime Cost Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 11/11/2 | On floors and landings | m2 | 462 |
| 11/11/3 | Skirting 75mm high | m | 296 |
| Carried Forward to Summary of Section No. 11 | | | R |
| Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 148 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage</p> | | R | |

| | Brought Forward | | | R | |
|---------|---|----|---|---|--|
| | <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>SANITARY FITTINGS</u></p> <p><u>Vaal' or equally approved</u></p> | | | | |
| 11/12/1 | <p>Vitreous China size 560 x 415 mm rounded basin to comply with SABS 497 in one tap hole configuration supplied with integrated overflow and chain stay hole on matching ceramic pedestal stand in strict accordance to manufacturer's specification. (use Vaal7006 "Tuscany with pedestal 7150, or equal and approved) (To be used in instances where B2 cannot be supported by the wall)</p> | No | 8 | | |
| 11/12/2 | <p>Vaal Sanitary ware vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan (code 772800) and matching 7 litre push-button top dual flush cistern (code 711139) complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat (code 8515Z0). or equal and approved.</p> | No | 8 | | |
| 11/12/3 | <p>Vitra "Normus" or other approved wall mounted paraplegic wash hand basin with single tap hole (Code 5079-003-000) fixed with and including "Siphon" or other approved cover pedestal (Code 6948-003-0162)</p> | No | 2 | | |
| 11/12/4 | <p>"Duravit Duraplas" or other approved wall mounted Paraplegic WC Code 254709 or similar approved</p> | No | 2 | | |
| | <p>Carried Forward</p> <p>Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage</p> | | | R | |

| | Brought Forward | | | R | |
|----------|---|----|----|---|--|
| 11/12/5 | Vitreous china wall-hung urinal "VAA-705326WH " with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 4 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 11/12/6 | 32mm "301CP" Basin waste union | No | 10 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Chrome" or similar approved</u> | | | | |
| 11/12/7 | 38 mm Bottle trap | No | 14 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 11/12/8 | Single lever basin mixer. ½" BSP female inlets. SANS 1480. (Cobra gala GA-651), chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated | No | 8 | | |
| 11/12/9 | Cobra (code 3215ST) or other approved paraplegic tap wii S041 overarm swivel spout including all neccessary fitting connection. | No | 2 | | |
| 11/12/10 | 15mm 059CP Extension piece with sliding wall flange | No | 20 | | |
| 11/12/11 | "Flushmaster" toilet flush valve | No | 4 | | |
| | <u>SANITARY PLUMBING</u> | | | | |
| | <u>uPVC pipes</u> | | | | |
| 11/12/12 | 50mm Pipes | m | 10 | | |
| 11/12/13 | 110mm Pipes | m | 7 | | |
| | <u>Extra over uPVC pipes for fittings</u> | | | | |
| 11/12/14 | 110mm Reducer | No | 10 | | |
| 11/12/15 | 50mm Bend | No | 10 | | |
| | Carried Forward | | | R | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage | | | | |

| | Brought Forward | | | R | |
|----------|---|----|------|---|--|
| 11/12/16 | 50mm Junction | No | 10 | | |
| 11/12/17 | 110mm Pan connector | No | 10 | | |
| 11/12/18 | 50mm Access bend | No | 10 | | |
| 11/12/19 | 110mm Access bend | No | 14 | | |
| 11/12/20 | 50mm Access junction | No | 10 | | |
| 11/12/21 | 110mm Access bend with anti-syphon horn | No | 14 | | |
| | <u>Sundries</u> | | | | |
| 11/12/22 | Testing waste pipe system | | Item | | |
| | <u>WATER SUPPLIES</u> | | | | |
| | <u>Class 0 copper pipes</u> | | | | |
| 11/12/23 | 22mm Pipes | m | 34 | | |
| 11/12/24 | 22mm Pipes chased into brick walls | m | 51 | | |
| | <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 11/12/25 | 22mm Fittings | No | 8 | | |
| | <u>TESTING</u> | | | | |
| 11/12/26 | Testing water pipe system | | Item | | |
| | <u>FIRE APPLIANCES ETC</u> | | | | |
| | <u>"Chubb" or similar approved</u> | | | | |
| 11/12/27 | 4,5kg Carbon dioxide fire extinguisher | No | 6 | | |
| 11/12/28 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 2 | | |
| | <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | | |
| | <u>Galvanised steel pipes</u> | | | | |
| 11/12/29 | 25mm Pipe | m | 300 | | |
| | Carried Forward | | | R | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage | | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 14</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 11/14/1 | On internal walls | m2 | 537 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 11/14/2 | On external walls | m2 | 87 | |
| | <u>ON PLASTER BOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 11/14/3 | On ceilings and cornices | m2 | 462 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 11/14/4 | On ceilings and cornices | m2 | 143 | |
| 11/14/5 | On fascias and bargeboards | m2 | 117 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 11/14/6 | On door frames | m2 | 66 | |
| 11/14/7 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 66 | |
| | Carried Forward | | | |
| | Section No. 11 BLOCK M & E: 2 x THREE CLASSROOM BLOCKS Bill No. 14 Paintwork | | | |
| | | | R | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 12/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 884 | |
| 12/1/2 | Stripping average 150mm thick layer of vegetable soil including carting away to a dumping site to be located by the contractor | m2 | 884 | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>Excavation in earth not exceeding 2m deep</u> | | | |
| 12/1/3 | Reduced levels under floors | m3 | 133 | |
| 12/1/4 | Trenches and holes for thickening under surface beds, etc | m3 | 170 | |
| | Carried Forward | | | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Brought Forward | | | | R |
|---|---|----|------|---|
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 12/1/5 | Soft rock | m3 | 9 | |
| 12/1/6 | Hard rock | m3 | 17 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 12/1/7 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 170 | |
| | <u>Risk of collapse of excavations</u> | | | |
| 12/1/8 | Sides of trench and hole excavations not exceeding 1,5m deep | m2 | 104 | |
| | <u>Keeping excavations free of water</u> | | | |
| 12/1/9 | Keeping excavations free of all water other than subterranean water | | Item | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u> | | | |
| 12/1/10 | Under floors, steps, pavings, etc | m3 | 114 | |
| | <u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u> | | | |
| 12/1/11 | Under floors, steps, pavings, etc. | m3 | 354 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 12/1/12 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 847 | |
| 12/1/13 | To bottoms of trenches | m2 | 821 | |
| Carried Forward to Summary of Section No. 12 | | | | R |
| Section No. 12 | | | | |
| BLOCK N - SCHOOL HALL | | | | |
| Bill No. 1 | | | | |
| Foundations (Provisional) | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 2</u> | | | |
| | <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Cost of tests</u> | | | |
| | The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately) | | | |
| | <u>UNREINFORCED CONCRETE</u> | | | |
| | <u>15MPa/19mm concrete</u> | | | |
| 12/2/1 | Ramps including thickenings | m3 | 2 | |
| | <u>REINFORCED CONCRETE</u> | | | |
| | <u>25MPa/19mm concrete</u> | | | |
| 12/2/2 | Strip footings | m3 | 50 | |
| 12/2/3 | Foundations | m3 | 170 | |
| 12/2/4 | Holes | m3 | 2 | |
| 12/2/5 | V-drain | m3 | 16 | |
| 12/2/6 | Surface beds on waterproofing | m3 | 89 | |
| | <u>TEST BLOCKS</u> | | | |
| 12/2/7 | Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional) | No | 61 | |
| | Carried Forward | | | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 2 Concrete, Formwork and Reinforcement | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|--|----|-------|---|
| <u>CONCRETE SUNDRIES</u> | | | | |
| <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | | |
| 12/2/8 | Ramps | m2 | 13 | |
| <u>FORMWORK</u> | | | | |
| <u>Rough form work to sides</u> | | | | |
| 12/2/9 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 381 | |
| <u>MOVEMENT JOINTS, ETC</u> | | | | |
| <u>Expansion joints with softboard between vertical concrete surfaces</u> | | | | |
| 12/2/10 | 12mm Joints not exceeding 300mm high | m | 4 | |
| <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | | |
| 12/2/11 | 12mm Joints not exceeding 300mm high | m | 273 | |
| <u>CONCRETE SUNDRIES</u> | | | | |
| <u>Finishing top surfaces of concrete smooth with a wood float</u> | | | | |
| <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | | |
| 12/2/12 | Aprons, slabs, etc to falls | m2 | 968 | |
| 12/2/13 | V-drains to falls | m2 | 109 | |
| <u>REINFORCEMENT (PROVISIONAL)</u> | | | | |
| <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 12/2/14 | 12mm Diameter bars | t | 18.71 | |
| <u>Fabric reinforcement</u> | | | | |
| 12/2/15 | Type 193 fabric reinforcement in concrete surface beds, slabs, etc | m2 | 1,077 | |
| Carried Forward to Summary of Section No. 12 | | | | R |
| Section No. 12 | | | | |
| BLOCK N - SCHOOL HALL | | | | |
| Bill No. 2 | | | | |
| Concrete, Formwork and Reinforcement | | | | |

| Item No | Quantity | Rate | Amount |
|---|--|------|--------|
| <u>BILL NO. 3</u> | | | |
| <u>MASONRY</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>BRICKWORK</u> | | | |
| <u>Sizes in descriptions</u> | | | |
| Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| <u>Face bricks</u> | | | |
| Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| <u>Pointing</u> | | | |
| Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| <u>SUPERSTRUCTURE</u> | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | |
| 12/3/1 | Piers | m3 | 7 |
| 12/3/2 | Half brick walls in beamfilling. | m2 | 22 |
| 12/3/3 | Half brick walls. | m2 | 243 |
| 12/3/4 | One brick walls | m2 | 388 |
| 12/3/5 | 280mm Hollow walls of two half brick skins including wire ties | m2 | 591 |
| <u>BRICKWORK SUNDRIES</u> | | | |
| Carried Forward | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 3 Masonry | | | |

| Brought Forward | | | | R |
|---|---|----|-------|---|
| <u>Brickwork reinforcement</u> | | | | |
| 12/3/6 | 150mm Wide reinforcement built in horizontally | m | 3,626 | |
| <u>Turning pieces</u> | | | | |
| 12/3/7 | 115mm Wide turning piece to lintels etc | m | 36 | |
| 12/3/8 | 230mm Wide turning piece to lintels etc | m | 4 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 12/3/9 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 125 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed horizontal and vertical joints</u> | | | | |
| 12/3/10 | Extra over brickwork for face brickwork | m2 | 973 | |
| 12/3/11 | Extra over brickwork for brick-on-edge header course lintel pointed on face and 115mm soffit | m | 40 | |
| 12/3/12 | Fair raking cutting | m | 31 | |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 2 500.00/1000) pointed with recessed joints on all exposed faces</u> | | | | |
| 12/3/13 | 180mm Wide sill set sloping and slightly projecting | m | 33 | |
| Carried Forward to Summary of Section No. 12 | | | | R |
| Section No. 12 | | | | |
| BLOCK N - SCHOOL HALL | | | | |
| Bill No. 3 | | | | |
| Masonry | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 4</u> | | | |
| | <u>WATERPROOFING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes | | | |
| | <u>DAMP-PROOFING OF WALLS AND FLOORS</u> | | | |
| | <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" or other equal and approved embossed damp proof course</u> | | | |
| 12/4/1 | In walls | m2 | 64 | |
| | <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" or other equal and approved waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 12/4/2 | Under surface beds | m2 | 847 | |
| | <u>JOINT SEALANTS, ETC</u> | | | |
| | <u>"Denbraven LM15" polysulphide sealing compound including backing cord, bond breaker, primer, etc</u> | | | |
| 12/4/3 | 10 x 10mm In expansion joints in floors | m | 248 | |
| | Carried Forward to Summary of Section No. 12 | | | |
| | Section No. 12 | | | |
| | BLOCK N - SCHOOL HALL | | | |
| | Bill No. 4 | | | |
| | Waterproofing | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---|---|----------|------|--------|
| BILL NO. 5 | | | | |
| <u>ROOF COVERINGS ETC</u> | | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | | |
| <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | | |
| <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories</u> | | | | |
| 12/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 702 | |
| 12/5/2 | 0,6m IBR thick Chromadeck side sheets 1000 wide on 3 canopies 5000 wide - colour dove grey | m2 | 409 | |
| 12/5/3 | 0.6mm Side flashing | m | 115 | |
| 12/5/4 | 0.6mm Side flashing on top of canopies | m | 115 | |
| 12/5/5 | Ridge capping 450mm girth | m | 40 | |
| <u>ROOF AND WALL INSULATION</u> | | | | |
| <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | | |
| 12/5/6 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 702 | |
| | | | | |
| Carried Forward to Summary of Section No. 12 | | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 5 Roof Coverings, etc | | | | |

| Item No | | Quantity | Rate | Amount |
|------------|---|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>ROOFS, ETC</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 12 BLOCK N - SCHOOL HALL Bill No. 6 Carpentry and Joinery</p> | | R | |

| Brought Forward | | | R |
|---|---|----|-----|
| <u>Plate nailed timber roof truss construction</u> | | | |
| The following is applicable in respect of roof trusses: | | | |
| Trusses are at maximum 1,05m centres | | | |
| Roof covering is galvanised IBR roof sheeting on 50 x 75mm purlins at 1,2m maximum centres. | | | |
| Ceilings are generally 6,4mm gypsum plasterboard on 38 x 38mm branderling. | | | |
| All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245. | | | |
| Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish. | | | |
| All joints to be close fitted butt joints. | | | |
| Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation. | | | |
| The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabricaton commences. | | | |
| <u>Sawn softwood</u> | | | |
| 12/6/1 | 38 x 114mm Wall plates | m | 80 |
| 12/6/2 | Design, manufacture, supply and deliver on site, plate nailed roof construction to the school hall, size 40,000 x 17,550mm overall on plan consisting of mono pitch roof trusses with 750 mm eaves overhang projecting both sides, including all necessary purlins, runners, bracing and cross bracing,etc (wall plates measured elsewhere) | No | 53 |
| 12/6/3 | Take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gangboarding, temporary and permanent bracing, etc (measured on slope of roof) | m2 | 670 |
| <u>Sundries</u> | | | |
| 12/6/4 | Two coats creosote on sawn timbers | m2 | 36 |
| <u>EAVES , VERGES , ETC</u> | | | |
| Carried Forward | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 6 Carpentry and Joinery | | | |

| | Brought Forward | | | R | |
|---------|--|----|-----|---|--|
| | <u>"Everite Flexit" or other equal and approved pressed nutec-cement</u> | | | | |
| 12/6/5 | 12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips | m | 80 | | |
| | <u>SKIRTINGS</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 12/6/6 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | 122 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to timber frames</u> | | | | |
| 12/6/7 | 44mm "TDM" Framed and ledged double door 1 678 x 2 032mm high with rebated meeting stiles and 500 x 1 395mm high glass panel in each leaf rebated all round including glazing beads on one side (glazing measured elsewhere) | No | 4 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 12/6/8 | 44mm Door 813 x 2 032mm high | No | 17 | | |
| 12/6/9 | 44mm Door 900 x 2 032mm high (paraplegic) | No | 1 | | |
| | <u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 12/6/10 | 19 x 75mm Twice rebated surrounds plugged | m | 115 | | |
| | <u>Softboard</u> | | | | |
| 12/6/11 | 12mm Pinning boards glued to plastered walls | m2 | 36 | | |
| | Carried Forward to Summary of Section No. 12 | | | R | |
| | Section No. 12 | | | | |
| | BLOCK N - SCHOOL HALL | | | | |
| | Bill No. 6 | | | | |
| | Carpentry and Joinery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>CEILINGS ETC</u> | | | |
| | <u>"Aerolite" or other equal and approved insulation</u> | | | |
| 12/7/1 | 100mm Insulation closely fitted and laid on top of brandering between roof timbers etc | m2 | 670 | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" or other equal and approved gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 12/7/2 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 670 | |
| | <u>"Rhino" or other equal and approved gypsum plasterboard cornices</u> | | | |
| 12/7/3 | 75mm Coved cornices | m | 237 | |
| | Carried Forward to Summary of Section No. 12 | | | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 9</u> <u>IRONMONGERY</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated <u>HINGES, BOLTS, ETC.</u> 12/9/1 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge No 36 <u>LOCKS</u> <u>"Union" or similar approved</u> 12/9/2 "CZ80941SC" WC indicator bolt with keep fixed to metal No 7 <u>HANDLES</u> <u>"Dorma" or similar approved</u> 12/9/3 "Union CZ682-24/2295-76" or other equal and approved two lever lockset with striking plate fixed to metal No 18 12/9/4 32 x 350mm Stainless steel DPH213 "D" straight back-to-back pull handles No 18 <div>Carried Forward</div> <div>R</div> | | | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 9 Ironmongery | | | |

| | Brought Forward | | | R | |
|---------|---|----|----|---|--|
| | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| 12/9/5 | 60 X 3mm Thick perspex plate with two 40mm high engraved and painted letters or numerals | No | 10 | | |
| | <u>"Union" or similar approved</u> | | | | |
| 12/9/6 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 4 | | |
| 12/9/7 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 2 | | |
| 12/9/8 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 2 | | |
| 12/9/9 | "AL5066-E14" 152 x 152mm anodised aluminium plate with paraplegic pictogram. | No | 1 | | |
| | <u>"BATHROOM FITTINGS"</u> | | | | |
| 12/9/10 | 153W x 153H x 65D Recessed Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications | No | 7 | | |
| | <u>"Chairman Industries" or similar approved</u> | | | | |
| 12/9/11 | 32mm "DL2" Stainless steel side grab rail 600mm girth plugged | No | 1 | | |
| 12/9/12 | 32mm "SR2" Stainless steel rear grab rail 600mm long plugged | No | 1 | | |
| | <u>SUNDRIES</u> | | | | |
| 12/9/13 | "Union AL8730" or other equal and approved door stop plugged | No | 18 | | |
| | <u>WRITING BOARDS</u> | | | | |
| | <u>"Virtrex" or other equal and approved virtreous enamelled writing boards, etc</u> | | | | |
| 12/9/14 | Green writing board 4 800 x 1 140mm high consisting of two fixed panels each 2 400 x 1 140mm high complete with aluminium chalk rail, etc, plugged | No | 3 | | |
| | Carried Forward to Summary of Section No. 12 | | | R | |
| | Section No. 12 | | | | |
| | BLOCK N - SCHOOL HALL | | | | |
| | Bill No. 9 | | | | |
| | Ironmongery | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO.10</u></p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>PREAMBLES</u></p> <p>The Model Preambles for Trades (2009 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>All notes, specifications, instructions, references, requirements, preparations, finishes, etc. and construction details reflected on these drawings should be carefully studied and priced. The requirements, notes and specifications on the drawings are not repeated here as preambles but are applicable to the measured items in all respects. Tenderers are to find and refer to the detail drawings and specification for clarity and the full extent of descriptions when pricing ALL the items in this trade. No claim in this regard will be entertained.</p> <p><u>Descriptions:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers and shall be galvanised unless otherwise described.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p><u>STEEL ROOF TRUSS</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 12 BLOCK N - SCHOOL HALL Bill No. 10 Structural Work</p> | | R | |

| Brought Forward | | | R |
|---|--|----|-------|
| | <u>Purlins and rails bolted to steel:</u> | | |
| 12/10/1 | <u>150 x 90 x 12mm x 12m Unequal angle</u> | t | 6.50 |
| | <u>Welded bracing, etc.:</u> | | |
| 12/10/2 | 80 x 80 x 6mm Bracing | t | 7.00 |
| | <u>STEEL COLUMNS AND BEAMS</u> | | |
| 12/10/3 | 254 x 146 x 43mm I-section beams. | t | 6.34 |
| | <u>Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to</u> | | |
| 12/10/4 | 50 x 50 x 6mm Sag Angles | t | 2.50 |
| | <u>SUNDRIES</u> | | |
| | <u>Base plate</u> | | |
| 12/10/5 | 345 x 345 x 20mm Thick | No | 10 |
| | <u>Gr8.8 M20 bolts joining together 200 x 200 x 4.5 column (elsewhere measured)</u> | | |
| 12/10/6 | M20 bolts | No | 40 |
| | <u>Grouting</u> | | |
| 12/10/7 | Dry pack grouting 25mm thick under steel base plate to top of column size 500 x 500mm. | No | 10 |
| | <u>PAINTING</u> | | |
| 12/10/8 | To structural steelwork | t | 58.57 |
| Carried Forward to Summary of Section No. 12 | | | R |
| Section No. 12 | | | |
| BLOCK N - SCHOOL HALL | | | |
| Bill No. 10 | | | |
| Structural Work | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 11</u> | | | |
| | <u>METALWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes | | | |
| | <u>WELDED SCREENS, GATES, ETC</u> | | | |
| | <u>Security gates to steel door frames</u> | | | |
| 12/11/1 | Double gate and frame 1800 x 2 064mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 1 800 x 2 064mm high, each leaf of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrel bolt and padlock | No | 4 | |
| | <u>PRESSED STEEL DOOR FRAMES</u> | | | |
| | <u>1,2mm Double rebated frames suitable for half brick walls</u> | | | |
| 12/11/2 | Frame for door 813 x 2 032mm high | No | 14 | |
| | <u>1,2mm Double rebated frames suitable for one brick walls</u> | | | |
| 12/11/3 | Frame for door 813 x 2 032mm high | No | 4 | |
| 12/11/4 | Frame for door 1600 x 2100mm high (main double door) | No | 4 | |
| 12/11/5 | Frame for door 900 x 2 032 (paraplegic) | No | 1 | |
| | <u>ALUMINIUM DOORS AND WINDOWS</u> | | | |
| | <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> | | | |
| 12/11/6 | Window size 889 x 1,244mm high (W01, W02) | No | 18 | |
| | Carried Forward | | R | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 11 Metalwork | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

[illegible]

[illegible]

| Item No | Quantity | Rate | Amount |
|---|----------------------|------|--------|
| <u>BILL NO. 13</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>200 x 200 x 6mm Porcelain tiles (PC Amount R120.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 12/13/1 | On walls | m2 | 24 |
| <u>600mm x 300mm x 9mm thick porcelain tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SANS approved standards. Colour and end finish to architects' approval. 12mm stainless steel trips to be used at the corners</u> | | | |
| 12/13/2 | To wall | m2 | 14 |
| <u>FLOOR TILING</u> | | | |
| <u>Mosaics unpolished of porcelain floor tiles fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted (waterproof?) grout</u> | | | |
| 12/13/3 | Shower tiles to fall | m2 | 2 |
| Carried Forward | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 13 Tiling | | | |

| Brought Forward | | | | R |
|--|---|----|-----|---|
| | <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 12/13/4 | On floors | m2 | 106 | |
| 12/13/5 | Skirting 75mm high | m | 60 | |
| | <u>TOILET PAPER HOLDERS ETC</u> | | | |
| | <u>"Johnson" white glazed ceramic</u> | | | |
| 12/13/6 | Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications. | No | 2 | |
| Carried Forward to Summary of Section No. 12 | | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 13 Tiling | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 14</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 148 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage</p> | | R | |

| Brought Forward | | | R |
|--|--|----|----|
| <u>Fixing of pipes</u> Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level <u>Excavations</u> No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling "Soft rock" and "hard rock" shall be as defined in "Earthworks" <u>RAINWATER DISPOSAL</u> <u>0.8 mm Hot Dipped Galvanised sheet iron with "Chromodeck" finish</u> | | | |
| 12/14/1 | 150 x150 mm Eaves box gutter | m | 80 |
| 12/14/2 | Extra over 150 x 150mm eaves gutter for stopped end | No | 4 |
| 12/14/3 | Extra over 150 x 150mm eaves gutter for outlet for 125 x 125mm pipe | No | 4 |
| 12/14/4 | 125 x 125mm Diameter rainwater pipes | m | 22 |
| 12/14/5 | Extra over 125 x 125mm rainwater pipe for bend | No | 4 |
| 12/14/6 | Extra over 125 x 125mm rainwater pipe for shoe | No | 4 |
| <u>SANITARY FITTINGS</u> <u>"Franke" stainless steel</u> | | | |
| 12/14/7 | "CVN611 Curvline" sink and drainer 860 x 435mm wide with double bowl | No | 1 |
| Carried Forward | | | R |
| Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage | | | |

| | Brought Forward | | | R | |
|----------|--|----|---|---|--|
| | <u>Vaal' or equally approved</u> | | | | |
| 12/14/8 | Vitreous China size 560 x 415 mm rounded basin to comply with SABS 497 in one tap hole configuration supplied with integrated overflow and chain stay hole on matching ceramic pedestal stand in strict accordance to manufacturer's specification. (use Vaal7006 "Tuscany with pedestal 7150, or equal and approved) (To be used in instances where B2 cannot be supported by the wall) | No | 6 | | |
| 12/14/9 | Vaal Sanitary ware vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan (code 772800) and matching 7 litre push-button top dual flush cistern (code 711139) complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat (code 8515Z0). or equal and approved. | No | 8 | | |
| 12/14/10 | Vitra "Normus" or other approved wall mounted paraplegic wash hand basin with single tap hole (Code 5079-003-001) fixed with and including "Siphon" or other approved cover pedestal (Code 6948-003-0162) | No | 1 | | |
| 12/14/11 | "Duravit Duraplas" or other approved wall mounted Paraplegic WC Code 254709 or similar approved | No | 1 | | |
| 12/14/12 | Vitreous china wall-hung urinal " VAA-705326WH " with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 2 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech"</u> | | | | |
| 12/14/13 | 32mm "301CP" Basin waste union | No | 7 | | |
| 12/14/14 | 40mm "316CP" Bath or sink waste union | No | 1 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Chrome"</u> | | | | |
| 12/14/15 | 38mm Bottle trap | No | 6 | | |
| 12/14/16 | 38 mm Bottle trap (Urinal) | No | 3 | | |
| | Carried Forward | | | R | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage | | | | |

| | Brought Forward | | | R | |
|----------|---|----|----|---|--|
| | <u>"Marley"</u> | | | | |
| 12/14/17 | 40 x 50mm Deep seal "P" or "S" trap | No | 3 | | |
| 12/14/18 | 32 x 50mm Shower trap | No | 2 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | <u>Brass</u> | | | | |
| 12/14/19 | 22mm Stopcock | No | 2 | | |
| | <u>"Cobra Watertech"</u> | | | | |
| 12/14/20 | Single lever basin mixer. ½" BSP female inlets. SANS 1480. (Cobra gala GA-651), chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated | No | 7 | | |
| 12/14/21 | Cobra 007MULTI-CP" Handshower + rail with sliding handshower holder + handshower hose .Includes; Shower rail, Sliding handshower holder, Handshower ,Handshower hose and Connects to 1/2" male shower outlets | No | 2 | | |
| 12/14/22 | Cobra (code 3215ST) or other approved paraplegic tap wit S041 overarm swivel spout including all neccessary fitting connection. | No | 1 | | |
| 12/14/23 | 15mm 059CP Extension piece with sliding wall flange | No | 25 | | |
| 12/14/24 | 15mm 166/041CP "Star" sink mixer | No | 1 | | |
| 12/14/25 | "Flushmaster" toilet flush valve | No | 2 | | |
| | <u>SANITARY PLUMBING</u> | | | | |
| | <u>uPVC pipes</u> | | | | |
| 12/14/26 | 50mm Pipes | m | 8 | | |
| 12/14/27 | 110mm Pipes | m | 6 | | |
| | <u>Extra over uPVC pipes for fittings</u> | | | | |
| 12/14/28 | 110mm Reducer | No | 3 | | |
| | Carried Forward | | | R | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage | | | | |

| | Brought Forward | | | R | |
|----------|---|----|------|---|--|
| 12/14/29 | 50mm Bend | No | 10 | | |
| 12/14/30 | 50mm Junction | No | 8 | | |
| 12/14/31 | 110mm Pan connector | No | 9 | | |
| 12/14/32 | 50mm Access bend | No | 8 | | |
| 12/14/33 | 110mm Access bend | No | 11 | | |
| 12/14/34 | 50mm Access junction | No | 8 | | |
| 12/14/35 | 110mm Access bend with anti-syphon horn | No | 9 | | |
| 12/14/36 | 50mm "GI Two-way" vent valve | No | 3 | | |
| | <u>Sundries</u> | | | | |
| 12/14/37 | Testing waste pipe system | | Item | | |
| | <u>WATER SUPPLIES</u> | | | | |
| | <u>Class 0 copper pipes</u> | | | | |
| 12/14/38 | 22mm Pipes | m | 38 | | |
| 12/14/39 | 22mm Pipes chased into brick walls | m | 51 | | |
| | <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 12/14/40 | 22mm Fittings | No | 6 | | |
| | <u>Copper overflow and service pipes</u> | | | | |
| 12/14/41 | 15mm Service pipe 500mm girth | No | 1 | | |
| | <u>ELECTRIC WATER HEATERS</u> | | | | |
| | <u>"Kwikot"</u> | | | | |
| 12/14/42 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 | | |
| 12/14/43 | PB1.10RB vacuum breaker | No | 1 | | |
| 12/14/44 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 | | |
| | Carried Forward | | | R | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage | | | | |

| Brought Forward | | | R |
|---|---|------|-----|
| <u>TESTING</u> | | | |
| 12/14/45 | Testing water pipe system | Item | |
| <u>FIRE APPLIANCES ETC</u> | | | |
| <u>"Chubb"</u> | | | |
| 12/14/46 | 4,5kg Carbon dioxide fire extinguisher | No | 4 |
| 12/14/47 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 |
| <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | |
| <u>Galvanised steel pipes</u> | | | |
| 12/14/48 | 25mm Pipe | m | 100 |
| <u>Extra over galvanised steel pipes for fittings</u> | | | |
| 12/14/49 | Fittings in varying diameters | No | 20 |
| <p align="center">Carried Forward to Summary of Section No. 12</p> <p>Section No. 12 BLOCK N - SCHOOL HALL Bill No. 14 Plumbing and Drainage</p> | | | R |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 16</u> | | | |
| | <u>PAINTWORK</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 152 for CPAP formula purposes | | | |
| | <u>ON FLOATED PLASTER</u> | | | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 12/16/1 | On internal walls | m2 | 956 | |
| | <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 12/16/2 | On external walls | m2 | 49 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>ON PLASTER BOARD</u> | | | |
| | <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 12/16/3 | On ceilings and cornices | m2 | 670 | |
| | <u>ON FIBRE-CEMENT</u> | | | |
| | <u>One coat primer and two coats exterior quality PVA emulsion paint</u> | | | |
| 12/16/4 | On ceilings and cornices | m2 | 670 | |
| 12/16/5 | On fascias and bargeboards | m2 | 48 | |
| | <u>ON METAL</u> | | | |
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 12/16/6 | On door frames | m2 | 6 | |
| | Carried Forward | | | |
| | Section No. 12 BLOCK N - SCHOOL HALL Bill No. 16 Paintwork | | | |
| | | | R | |

| Brought Forward | | | R |
|---|--|----|-----|
| 12/16/7 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 59 |
| <u>ON WOOD</u> | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 12/16/8 | On doors | m2 | 13 |
| 12/16/9 | On skirtings, rails, etc not exceeding 300mm girth | m | 122 |
| Carried Forward to Summary of Section No. 12 | | | R |
| Section No. 12 | | | |
| BLOCK N - SCHOOL HALL | | | |
| Bill No. 16 | | | |
| Paintwork | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 1</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>EXCAVATION, FILLING, ETC</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 13/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 1m girth, bush, etc | m2 | 66 | |
| 13/1/2 | Removal of topsoil to a nominal depth of 200 mm, stockpiling and preventing dust as specified in section 5 of SABS 1200D | m2 | 66 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 13/1/3 | To bottom of concrete aprons | m2 | 66 | |
| | Carried Forward to Summary of Section No. 13 | | | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 1 Foundations (Provisional) | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 2 Concrete, Formwork and Reinforcement</p> | | R | |

| | Brought Forward | | | R | |
|--------|---|----|-----|---|--|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | | | |
| | <u>REINFORCED CONCRETE</u> | | | | |
| | <u>25MPa/19mm concrete</u> | | | | |
| 13/2/1 | Aprons | m3 | 7 | | |
| | <u>TEST BLOCKS</u> | | | | |
| 13/2/2 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 13 | | |
| | <u>FORMWORK</u> | | | | |
| | <u>Rough form work to sides</u> | | | | |
| 13/2/3 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 270 | | |
| | <u>MOVEMENT JOINTS, ETC</u> | | | | |
| | <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | | |
| 13/2/4 | 12mm Joints not exceeding 300mm high | m | 292 | | |
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | | |
| 13/2/5 | Aprons, slabs, etc to falls | m2 | 66 | | |
| | Carried Forward to Summary of Section No. 13 | | | R | |
| | Section No. 13 | | | | |
| | BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | |
| | Bill No. 2 | | | | |
| | Concrete, Formwork and Reinforcement | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|-------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>MASONRY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 116 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>BRICKWORK</u> | | | |
| | <u>Sizes in descriptions</u> | | | |
| | Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick | | | |
| | <u>Face bricks</u> | | | |
| | Bricks shall be ordered timeously to obtain uniformity in size and colour | | | |
| | <u>Pointing</u> | | | |
| | Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. | | | |
| | <u>SUBSTRUCTURE</u> | | | |
| | <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u> | | | |
| 13/3/1 | One brick walls | m2 | 112 | |
| 13/3/2 | Piers | m3 | 0.1 | |
| 13/3/3 | Half brick walls. | m2 | 11 | |
| | <u>Brickwork reinforcement</u> | | | |
| 13/3/4 | 150mm Wide reinforcement built in horizontally | m | 1,779 | |
| | Carried Forward | | | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 3 Masonry | | | |
| | | | R | |

| Brought Forward | | | | R |
|--|---|----|-------|---|
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 13/3/5 | Extra over brickwork for face brickwork | m2 | 24 | |
| 13/3/6 | Fair raking cutting | m | 24 | |
| <u>SUPERSTRUCTURE</u> | | | | |
| <u>Brickwork of NFP bricks in class II mortar</u> | | | | |
| 13/3/7 | Half brick walls in beamfilling | m2 | 32 | |
| 13/3/8 | Half brick walls | m2 | 29 | |
| 13/3/9 | 270mm Hollow walls of two half brick skins including wire ties | m2 | 241 | |
| <u>BRICKWORK SUNDRIES</u> | | | | |
| <u>Brickwork reinforcement</u> | | | | |
| 13/3/10 | 75mm Wide reinforcement built in horizontally | m | 1,417 | |
| 13/3/11 | 150mm Wide reinforcement built in horizontally | m | 510 | |
| <u>Turning pieces</u> | | | | |
| 13/3/12 | 230mm Wide turning piece to lintels etc | m | 32 | |
| <u>Prestressed fabricated lintels</u> | | | | |
| 13/3/13 | 110 x 75mm Lintels in lengths not exceeding 3m | m | 33 | |
| <u>Galvanised hoop iron cramps, ties, etc</u> | | | | |
| 13/3/14 | 30 x 1,6mm Roof tie 1,5m long with one end fixed to timber and other end built into brickwork | No | 45 | |
| <u>FACE BRICKWORK</u> | | | | |
| <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 13/3/15 | Extra over brickwork for face brickwork | m2 | 129 | |
| Carried Forward | | | | R |
| Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 3 Masonry | | | | |

| Brought Forward | | | R |
|--|---|---|----|
| 13/3/16 | Extra over brickwork for brick-on-edge header course lintel pointed on both faces and 230mm soffit | m | 1 |
| 13/3/17 | Fair raking cutting | m | 24 |
| <u>Brick-on-edge header course copings, sills, etc of external face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush joints on all exposed faces</u> | | | |
| 13/3/18 | 220mm Wide sill set sloping and slightly projecting | m | 24 |
| <u>NUTEC-CEMENT WINDOW SILLS</u> <u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs etc</u> | | | |
| 13/3/19 | 15 x 150mm Wide sills set flat and slightly projecting | m | 24 |
| Carried Forward to Summary of Section No. 13 | | | R |
| Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 3 Masonry | | | |

| Item No | Quantity | Rate | Amount |
|---|---|------|--------|
| <u>BILL NO. 4</u> | | | |
| <u>WATERPROOFING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 120 for CPAP formula purposes | | | |
| <u>DAMP-PROOFING OF WALLS AND FLOORS</u> | | | |
| <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u> | | | |
| 13/4/1 | In walls m2 | 21 | |
| <u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u> | | | |
| 13/4/2 | Under surface beds m2 | 305 | |
| <u>JOINT SEALANTS, ETC</u> | | | |
| <u>"Denbraven LM15" polysulphide sealing compound including backing cord, bond breaker, primer, etc</u> | | | |
| 13/4/3 | 10 x 10mm In expansion joints in floors m | 293 | |
| Carried Forward to Summary of Section No. 13 | | | R |
| Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 4 Waterproofing | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | BILL NO. 5 | | | |
| | <u>ROOF COVERINGS ETC</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 124 for CPAP formula purposes | | | |
| | <u>PROFILED METAL SHEETING AND ACCESSORIES</u> | | | |
| | <u>0,6mm "IBR" Z275 spelter galvanised troughed sheet steel with "globalcoat" finish on one side in single lengths fixed to timber purlins and 0,6mm galvanised sheet steel accessories with "globalcoat" finish on one side</u> | | | |
| 13/5/1 | Roof covering with pitch not exceeding 25 degrees | m2 | 449 | |
| 13/5/2 | Head wall flashings 308mm girth | m | 39 | |
| 13/5/3 | Cover flashing 154mm girth | m | 39 | |
| | <u>ROOF AND WALL INSULATION</u> | | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced alumnium foil bonded insulation</u> | | | |
| 13/5/4 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 449 | |
| | Carried Forward to Summary of Section No. 13 | | R | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 5 Roof Coverings, etc | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>EAVES , VERGES , ETC</u></p> <p><u>"Everite" pressed nutec-cement</u></p> | | | |
| 13/6/1 | <p>12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips</p> <p><u>SKIRTINGS</u></p> | m | 117 | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 6 Carpentry and Joinery</p> | | R | |

| | Brought Forward | | | R | |
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| | <u>Wrought meranti</u> | | | | |
| 13/6/2 | 19 x 76mm Skirting including 19mm quadrant bead nailed | m | 89 | | |
| | <u>DOORS ETC</u> | | | | |
| | <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | | |
| 13/6/3 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high | No | 6 | | |
| | <u>Semi-solid flush doors with sapele veneer on both sides hung to steel frames</u> | | | | |
| 13/6/4 | 44mm Door 813 x 2 032mm high | No | 4 | | |
| | <u>NOTICE BOARDS, KEYBOARDS, DUCKBOARDS, ETC</u> | | | | |
| | <u>Wrought meranti</u> | | | | |
| 13/6/5 | 19 x 75mm Twice rebated surrounds plugged | m | 34 | | |
| | <u>FRAMED FRAMES, ETC.</u> | | | | |
| | <u>SA Pine</u> | | | | |
| 13/6/6 | Dado rail COLDR3T 22 x 44 x 3mm | m | 15 | | |
| | <u>Softboard</u> | | | | |
| 13/6/7 | 12mm Pinning boards glued to plastered walls | m2 | 11 | | |
| | <u>FITTINGS</u> | | | | |
| | <u>General</u> | | | | |
| | The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc (refer Architect's drawings as attached to the back of these Bills of Quantities) | | | | |
| | Carried Forward | | | R | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 6 Carpentry and Joinery | | | | |

| Brought Forward | | | | R |
|---|--|----|---|---|
| 13/6/8 | <p><u>Wrought Saligna</u></p> <p>Change room bench at overall length of approximately 3600mm long comprising of, 25 x 25mm Saligna filling piece plugged and screwed to wall, 19mm saligna back screw to wall filling piece top and bottom, 75 x 25mm Pine filling screwed to seat, 25mm thick laminated saligna seat screw to steel frame from top and plugged, 40 x 40 x 3mm mild steel angle iron welded to steel frame across entire length of bench, 50 x 50 x 3mm mild steel angle iron welded together to form support frame. Fix steel frame to wall with 3.5mm x 70 mm anchors, etc all in accordance to Architects drawings (detail DT47)</p> | No | 4 | |
| <p>Carried Forward to Summary of Section No. 13</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 6 Carpentry and Joinery</p> | | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 7</u> | | | |
| | <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Descriptions:</u> | | | |
| | Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete | | | |
| | Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere | | | |
| | <u>NAILED UP CEILINGS</u> | | | |
| | <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 13/7/1 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 224 | |
| 13/7/2 | Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening | No | 3 | |
| | <u>4mm "Everite Nutec" or other equal and approved fibre-cement boards with H-type pressed steel jointing strips</u> | | | |
| 13/7/3 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres | m2 | 77 | |
| | <u>"Rhino" gypsum plasterboard cornices</u> | | | |
| 13/7/4 | 75mm Coved cornices | m | 89 | |
| | Carried Forward to Summary of Section No. 13 | | | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 7 Ceilings, Partitions and Access Flooring | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount | | | | | | | | | | | | | | | |
|---------|---|----------|---|--------|----|--|--------|--|----|---|--|--------|---|----|----|--|--|--|--|
| | <p><u>BILL NO. 9</u></p> <p><u>IRONMONGERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated</p> <p><u>HINGES, BOLTS, ETC.</u></p> <tr> <td>13/8/1</td><td>102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge</td><td>No</td><td>20</td><td></td></tr> <p><u>LOCKS</u></p> <p><u>"Union" or similar approved</u></p> <tr> <td>13/8/2</td><td>"CZ80941SC" WC indicator bolt with keep fixed to metal</td><td>No</td><td>3</td><td></td></tr> <p><u>"Mazac Tarpon" or similar approved</u></p> <tr> <td>13/8/3</td><td>"952/4L" four lever lockset and handles with chrome plated finish</td><td>No</td><td>10</td><td></td></tr> <p><u>PUSH PLATES AND KICKING PLATES</u></p> | 13/8/1 | 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge | No | 20 | | 13/8/2 | "CZ80941SC" WC indicator bolt with keep fixed to metal | No | 3 | | 13/8/3 | "952/4L" four lever lockset and handles with chrome plated finish | No | 10 | | | | |
| 13/8/1 | 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge | No | 20 | | | | | | | | | | | | | | | | |
| 13/8/2 | "CZ80941SC" WC indicator bolt with keep fixed to metal | No | 3 | | | | | | | | | | | | | | | | |
| 13/8/3 | "952/4L" four lever lockset and handles with chrome plated finish | No | 10 | | | | | | | | | | | | | | | | |
| | Carried Forward | | R | | | | | | | | | | | | | | | | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 8 Ironmongery | | | | | | | | | | | | | | | | | | |

| | Brought Forward | | | R | |
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| | <u>"Dorma" or similar approved</u> | | | | |
| 13/8/4 | "dkp-ss-161" Stainless steel kickplate plate size 813 x 300mm high fixed to timber | No | 10 | | |
| | <u>HANDLES</u> | | | | |
| 13/8/5 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 10 | | |
| | <u>LETTERS, NAMEPLATES, ETC</u> | | | | |
| | <u>"Union" or similar approved</u> | | | | |
| 13/8/6 | "AL5066-06ASE06" 152 x 152mm anodised aluminium plate with fire extinguisher pictogram | No | 4 | | |
| 13/8/7 | "AL5066-E10" 152 x 152mm anodised aluminium plate with male pictogram | No | 1 | | |
| 13/8/8 | "AL5066-E11" 152 x 152mm anodised aluminium plate with female pictogram | No | 1 | | |
| | <u>SUNDRIES</u> | | | | |
| | <u>"Union" or similar approved</u> | | | | |
| 13/8/9 | "AL8730AS" door stop plugged | No | 10 | | |
| | <u>"BATHROOM FITTINGS"</u> | | | | |
| 13/8/10 | 153W x 153H x 65D Recessed Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications | No | 3 | | |
| | <u>STEEL LOCKERS</u> | | | | |
| | <u>"Greenfield Baseline Guardsman" Steel lockers with standard baked enamel finish or similar approved</u> | | | | |
| 13/8/11 | "GB002" locker 300 x 450 x 1 800mm high | No | 4 | | |
| Carried Forward to Summary of Section No. 13 | | | | R | |
| Section No. 13 | | | | | |
| BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | | |
| Bill No. 8 | | | | | |
| Ironmongery | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 10</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>WELDED SCREENS, GATES, ETC</u> <u>Metal Screens</u> 13/9/1 "Flattex" or other approved 358 mesh painted with black primer on both sides, fixed to wooden roof trusses using screw and electro galvanised washers, mesh to be screw 250mm intervals. <div style="text-align: right;">m2</div> <div style="text-align: right;">224</div> <u>Steel gates and frames</u> 13/9/2 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt and padlock <div style="text-align: right;">No</div> <div style="text-align: right;">7</div> | | | |
| | Carried Forward to Summary of Section No. 13 Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 9 Metalwork | | R | |

[illegible]

| Item No | Quantity | Rate | Amount |
|---|----------------------|------|----------|
| <u>BILL NO. 12</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>WALL TILING</u> | | | |
| <u>200 x 200 x 6mm Porcelain tiles(PC Amount R120.00/m2) fixed with adhesive to plaster (plaster elsewhere)</u> | | | |
| 13/11/1 | On walls | m2 | 50 |
| <u>600mm x 300mm x 9mm thick porcelain tiles in matt finish laid to approved pattern using approved adhesive and grout. All to be manufactured and installed in strict compliance to the latest SANS approved standards. Colour and end finish to architects' approval. 12mm stainless steel trips to be used at the corners</u> | | | |
| 13/11/2 | To wall | m2 | 6 |
| <u>FLOOR TILING</u> | | | |
| <u>Mosaics unpolished of porcelain floor tiles fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted (waterproof?) grout</u> | | | |
| 13/11/3 | Shower tiles to fall | m2 | 6 |
| Carried Forward | | | R |
| Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 11 Tiling | | | |

| Brought Forward | | | R |
|--|---|----|-----|
| | <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | |
| 13/11/4 | On floors | m2 | 295 |
| | <u>SOAP DISH, ETC</u> | | |
| | <u>"Johnson" white glazed ceramic</u> | | |
| 13/11/5 | Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications. | No | 7 |
| | <u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u> | | |
| 13/11/6 | 10mm M-trim Aluminium Straight Edge to the edge of tiles | m | 56 |
| Carried Forward to Summary of Section No. 13 | | | R |
| Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 13</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 12 Plumbing and Drainage (Provisional)</p> | | | |
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| <p style="text-align: center;">Brought Forward</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 12 Plumbing and Drainage (Provisional)</p> | | R | |
| | | R | |

| | | | | | |
|---------|--|----|---|---|--|
| | <p style="text-align: center;">Brought Forward</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>Vaal' or equally approved</u></p> | | | R | |
| 13/12/1 | <p>Vitreous China size 560 x 415 mm rounded basin to comply with SABS 497 in one tap hole configuration supplied with integrated overflow and chain stay hole on matching ceramic pedestal stand in strict accordance to manufacturer's specification. (use Vaal7006 "Tuscany with pedestal 7150, or equal and approved) (To be used in instances where B2 cannot be supported by the wall)</p> | No | 6 | | |
| | <p style="text-align: center;">Carried Forward</p> <p>Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 12 Plumbing and Drainage (Provisional)</p> | | | R | |

| | Brought Forward | | | R | |
|---------|---|----|---|---|--|
| 13/12/2 | Vaal Sanitary ware vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan (code 772800) and matching 7 litre push-button top dual flush cistern (code 711139) complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat (code 8515Z0). or equal and approved. | No | 3 | | |
| 13/12/3 | Vitreous china wall-hung urinal "VAA-705326WH " with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 3 | | |
| | <u>WASTE UNIONS, ETC</u> | | | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 13/12/4 | 32mm "301CP" Basin waste union | No | 6 | | |
| | <u>TRAPS, ETC</u> | | | | |
| | <u>"Chrome" or similar approved</u> | | | | |
| 13/12/5 | 38mm Bottle Trap | No | 6 | | |
| | <u>"Marley" or similar approved</u> | | | | |
| 13/12/6 | 32 x 50mm Shower trap | No | 7 | | |
| | <u>TAPS, VALVES, ETC</u> | | | | |
| | <u>Brass</u> | | | | |
| 13/12/7 | 22mm Stopcock | No | 1 | | |
| | <u>"Cobra Watertech" or similar approved</u> | | | | |
| 13/12/8 | Single lever basin mixer. ½" BSP female inlets. SANS 1480. (Cobra gala GA-651), chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated | No | 6 | | |
| 13/12/9 | Cobra 007MULTI-CP" Handshower + rail with sliding handshower holder + handshower hose .Includes; Shower rail, Sliding handshower holder, Handshower ,Handshower hose and Connects to 1/2" male shower outlets | No | 7 | | |
| | Carried Forward | | | R | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 12 Plumbing and Drainage (Provisional) | | | | |

| | Brought Forward | | | R | |
|----------|---|----|------|---|--|
| 13/12/10 | 15mm 059CP Extension piece with sliding wall flange | No | 35 | | |
| 13/12/11 | "Flushmaster" toilet flush valve | No | 3 | | |
| | <u>SANITARY PLUMBING</u> | | | | |
| | <u>uPVC pipes</u> | | | | |
| 13/12/12 | 50mm Pipes | m | 24 | | |
| 13/12/13 | 110mm Pipes | m | 2 | | |
| | <u>Extra over uPVC pipes for fittings</u> | | | | |
| 13/12/14 | 110mm Reducer | No | 16 | | |
| 13/12/15 | 50mm Bend | No | 16 | | |
| 13/12/16 | 50mm Junction | No | 16 | | |
| 13/12/17 | 110mm Pan connector | No | 3 | | |
| 13/12/18 | 50mm Access bend | No | 16 | | |
| 13/12/19 | 110mm Access bend | No | 3 | | |
| 13/12/20 | 50mm Access junction | No | 16 | | |
| 13/12/21 | 110mm Access bend with anti-syphon horn | No | 3 | | |
| | <u>Sundries</u> | | | | |
| 13/12/22 | Testing waste pipe system | | Item | | |
| | <u>WATER SUPPLIES</u> | | | | |
| | <u>Class 0 copper pipes</u> | | | | |
| 13/12/23 | 22mm Pipes | m | 38 | | |
| 13/12/24 | 22mm Pipes chased into brick walls | m | 57 | | |
| | <u>Extra over class 0 copper pipes for capillary fittings</u> | | | | |
| 13/12/25 | 22mm Fittings | No | 6 | | |
| | Carried Forward | | | R | |
| | Section No. 13 BLOCK O: CHANGE ROOMS/TUCK SHOP Bill No. 12 Plumbing and Drainage (Provisional) | | | | |

| | Brought Forward | | | R | |
|----------|---|----|------|---|--|
| | <u>Copper overflow and service pipes</u> | | | | |
| 13/12/26 | 15mm Service pipe 500mm girth | No | 2 | | |
| | <u>ELECTRIC WATER HEATERS</u> | | | | |
| | <u>"Kwikot" or similar approved</u> | | | | |
| 13/12/27 | 200 Litre horizontal electric water heater in roof including standard galvanised sheet iron drip tray with overflow pipe to external wall | No | 1 | | |
| 13/12/28 | PB1.10RB vacuum breaker | No | 1 | | |
| 13/12/29 | PA1.1RB "Kwikflo" 400 kPa pressure reducing valve | No | 1 | | |
| | <u>TESTING</u> | | | | |
| 13/12/30 | Testing water pipe system | | Item | | |
| | <u>FIRE APPLIANCES ETC</u> | | | | |
| | <u>"Chubb" or similar approved</u> | | | | |
| 13/12/31 | 4,5kg Carbon dioxide fire extinguisher complete with 520 x 115 x 22mm thick timber backboard plugged to wall and varnished | No | 4 | | |
| 13/12/32 | "Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket | No | 1 | | |
| | <u>WATER SUPPLIES TO FIRE APPLIANCES</u> | | | | |
| | <u>Galvanised steel pipes</u> | | | | |
| 13/12/33 | 25mm Pipe | m | 102 | | |
| | <u>Extra over galvanised steel pipes for fittings</u> | | | | |
| 13/12/34 | Fittings in varying diameters | No | 24 | | |
| | Carried Forward to Summary of Section No. 13 | | | R | |
| | Section No. 13 | | | | |
| | BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | |
| | Bill No. 12 | | | | |
| | Plumbing and Drainage (Provisional) | | | | |

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| | Brought Forward | | | R | |
|---|--|----|----|---|--|
| | <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | | |
| 13/14/7 | On door frames | m2 | 30 | | |
| 13/14/8 | On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area) | m2 | 23 | | |
| | <u>ON WOOD</u> | | | | |
| | <u>Three coats polyurethane semi-gloss varnish</u> | | | | |
| 13/14/9 | On doors | m2 | 84 | | |
| 13/14/10 | On skirtings, rails, etc not exceeding 300mm girth | m | 89 | | |
| Carried Forward to Summary of Section No. 13 | | | | R | |
| Section No. 13 | | | | | |
| BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | | |
| Bill No. 14 | | | | | |
| Paintwork | | | | | |

| | | | | | | |
|---------------------------------|---|--|---------|--|--------|-----|
| Bill No | Section No. 13 | | Page No | | Amount | |
| | BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | | |
| | SECTION SUMMARY - BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | | |
| | 13/1 | Foundations (Provisional) | | | | 352 |
| | 13/2 | Concrete, Formwork and Reinforcement | | | | 354 |
| | 13/3 | Masonry | | | | 357 |
| | 13/4 | Waterproofing | | | | 358 |
| | 13/5 | Roof Coverings, etc | | | | 359 |
| | 13/6 | Carpentry and Joinery | | | | 362 |
| | 13/7 | Ceilings, Partitions and Access Flooring | | | | 363 |
| | 13/8 | Ironmongery | | | | 365 |
| | 13/9 | Metalwork | | | | 366 |
| | 13/10 | Plastering | | | | 367 |
| | 13/11 | Tiling | | | | 369 |
| | 13/12 | Plumbing and Drainage (Provisional) | | | | 375 |
| 13/13 | Glazing | 376 | | | | |
| 13/14 | Paintwork | 378 | | | | |
| Carried to Final Summary | | | | | | |
| Section No. 13 | | | | | | |
| BLOCK O: CHANGE ROOMS/TUCK SHOP | | | | | | |

| Item No | | Quantity | Rate | Amount |
|------------|--|----------|------|--------|
| | <p><u>BILL NO. 1</u></p> <p><u>ALTERATIONS (PROVISIONAL)</u></p> <p>NOTE: Tenderers are advised to study the Model Preambles for Trades before pricing this Bill.</p> <p><u>Removal</u> Where items are described as "remove", the rate should include the removal to a suitable dumping site</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>View site</u> Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <p><u>Explosives</u> No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 1 Alterations</p> | | R | |

| | | | |
|---|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p>Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent</p> <p>Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given seperately</p> <p>Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing</p> <p>With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork</p> <p>Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)</p> | | R | |
| <p style="text-align: center;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 1 Alterations</p> | | R | |

| Brought Forward | | | R |
|---|--|----|-----|
| <u>REMOVAL OF EXISTING WORK</u> | | | |
| <u>Breaking down and removing brickwork etc</u> | | | |
| 14/1/1 | One brick wall | m2 | 111 |
| <u>Taking out and removing doors, windows, etc including thresholds, sills, etc (building up openings elsewhere)</u> | | | |
| 14/1/2 | Timber single door and frame 813 x 2 032mm high overall from one brick wall | No | 23 |
| <u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u> | | | |
| 14/1/3 | Pitched corrugated iron roof including roof covering, timber trusses and purlins, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes | m2 | 134 |
| 14/1/4 | Gypsum plasterboard ceilings including cornices, timber bandering, etc | m2 | 99 |
| <u>Taking up and removing electrical fittings</u> | | | |
| 14/1/5 | Take down and remove existing electrical fittings (measured flat) | m2 | 99 |
| <u>Taking out and removing doors, windows, etc from brickwork to be demolished</u> | | | |
| 14/1/6 | Timber single door 813 x 2 032mm high overall from steel door frame | No | 23 |
| 14/1/7 | Glazed steel window not exceeding 2,5m2 and prepare opening to receive new windows | No | 6 |
| <u>Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes</u> | | | |
| 14/1/8 | 300 x 300mm Tiles to floors | m2 | 99 |
| <u>Servicing steel windows, etc including replacing hardware where required</u> | | | |
| 14/1/9 | Steel window 1950 x 654mm high overall with two side hung opening sections | No | |
| Carried Forward | | | R |
| Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 1 Alterations | | | |

| Brought Forward | | | R |
|--|---|----|----|
| | <u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u> | | |
| 14/1/10 | Stainless steel wash hand basin | No | 5 |
| 14/1/11 | Vitreous china wash hand basin | No | 10 |
| 14/1/12 | Vitreous china WC pan with cistern | No | 19 |
| 14/1/13 | Vitreous china urinal | No | 6 |
| | <u>Taking out and removing glass and mirrors</u> | | |
| 14/1/14 | Glass from steel windows including cleaning out rebates and preparing for new glass | m2 | |
| Carried Forward to Summary of Section No. 14 | | | R |
| Section No. 14 | | | |
| BLOCK P: EXSTING ABLUTIONS | | | |
| Bill No. 1 | | | |
| Alterations | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 2</u> | | | |
| | <u>FOUNDATIONS (PROVISIONAL)</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 104 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Nature of ground</u> | | | |
| | The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock" | | | |
| | <u>Carting away of excavated material</u> | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site | | | |
| | <u>EARTHWORKS</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| 14/2/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs, trees etc. not exceeding 200mm girth | m2 | 46 | |
| 14/2/2 | Stripping average 150mm thick layer of topsoil and depositing material | m2 | 46 | |
| | <u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density</u> | | | |
| 14/2/3 | Under floors, steps, pavings, etc | m3 | 14 | |
| | <u>SOIL POISONING</u> | | | |
| | <u>Soil insecticide</u> | | | |
| 14/2/4 | To bottom of concrete aprons | m2 | 46 | |
| | Carried Forward to Summary of Section No. 14 | | | |
| | Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 2 Foundations (Provisional) | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 110 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the Principal Agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the Principal Agent. (Test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.</p> <p>Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 3 Concrete, Formwork and Reinforcement</p> | | R | |

| | Brought Forward | | | R | |
|--------|---|----|----|---|--|
| | Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" | | | | |
| | <u>REINFORCED CONCRETE</u> | | | | |
| | <u>25MPa/19mm concrete</u> | | | | |
| 14/3/1 | Aprons | m3 | 6 | | |
| | <u>TEST BLOCKS</u> | | | | |
| 14/3/2 | Making and testing 150 x 150 x 150mm concrete strenght test cube (Provisional) | No | 1 | | |
| | <u>FORMWORK</u> | | | | |
| | <u>(HAYLETT FORMULA WORK GROUP NO. 111)</u> | | | | |
| | <u>Rough form work to sides</u> | | | | |
| 14/3/3 | Edges, risers, ends and reveals not exceeding 300mm high or wide | m | 46 | | |
| | <u>MOVEMENT JOINTS, ETC</u> | | | | |
| | <u>Expansion joints with softboard between vertical concrete and brick surfaces</u> | | | | |
| 14/3/4 | 12mm Joints not exceeding 300mm high | m | 58 | | |
| | <u>Finishing top surfaces of concrete smooth with a steel trowel including rounding edges to form a bullnose finish</u> | | | | |
| 14/3/5 | Aprons, slabs, etc to falls | m2 | 46 | | |
| | Carried Forward to Summary of Section No. 14 | | | R | |
| | Section No. 14 | | | | |
| | BLOCK P: EXSTING ABLUTIONS | | | | |
| | Bill No. 3 | | | | |
| | Concrete, Formwork and Reinforcement | | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 7</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No.126 for CPAP formula purposes</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>EAVES , VERGES , ETC</u></p> <p><u>"Everite" pressed nutec-cement</u></p> | | | |
| 14/6/1 | <p>12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips</p> | m | 24 | |
| | <p><u>DOORS ETC</u></p> | | | |
| | <p>Carried Forward</p> | | R | |
| | <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 6 Carpentry and Joinery</p> | | | |

| Brought Forward | | | R |
|---|--|----|----|
| <u>Wrought hardwood flushback doors with sapele veneer hung to steel frames</u> | | | |
| 14/6/2 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high on one brick walls | No | 10 |
| 14/6/3 | 44mm "TDM" Framed and ledged door 813 x 2 032mm high on half brick walls | No | 17 |
| 14/6/4 | 44mm "TDM" Framed and ledged door 920 x 2 032mm high on one brick walls | No | 2 |
| Carried Forward to Summary of Section No. 14 | | | R |
| Section No. 14 | | | |
| BLOCK P: EXSTING ABLUTIONS | | | |
| Bill No. 6 | | | |
| Carpentry and Joinery | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <u>BILL NO. 8</u> <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 129 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions:</u> Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere <u>NAILED UP CEILINGS</u> <u>6,4mm "Rhino" gypsum plasterboard with H-type pressed steel jointing strips</u> | | | |
| 14/7/1 | Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres <u>"Rhino" gypsum plasterboard cornices</u> | m2 | 99 | |
| 14/7/2 | 75mm Coved cornices | m | 40 | |
| | Carried Forward to Summary of Section No. 14 Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 7 Ceilings, Partitions and Access Flooring | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 9</u> <u>METALWORK</u> NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 136 for CPAP formula purposes <u>SUPPLEMENTARY PREAMBLES</u> <u>Descriptions</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described <u>STEEL GATES AND FRAME</u> 14/8/1 Single gate and frame 965 x 2 067mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate 813 x 2 032mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt and padlock <u>ALUMINIUM DOORS AND WINDOWS</u> <u>Epoxy powdercoated aluminium glazed partitioning complete with hinges and flush bolts and all necessary ironmongery, glass, sealing, etc and fixing to brickwork, concrete or drywall partitioning</u> 14/8/2 Window size 1200 x 1200mm high (W03) | No | 6 | |
| | | No | 6 | |
| | Carried Forward to Summary of Section No. 14 Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 8 Metalwork | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <u>BILL NO. 10</u> | | | |
| | <u>IRONMONGERY</u> | | | |
| | NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 132 for CPAP formula purposes | | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| | <u>Finishes to ironmongery</u> | | | |
| | Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickle plated | | | |
| | <u>HINGES, BOLTS, ETC.</u> | | | |
| 14/9/1 | 102 x 75 x 3mm Double ball bearing butt hinge including 8 bolts per hinge | No | 54 | |
| | <u>LOCKS</u> | | | |
| | <u>"Mazac Tarpon" or similar approved</u> | | | |
| 14/9/2 | "952/4L" four lever lockset and handles with chrome plated finish | No | 10 | |
| | <u>HANDLES</u> | | | |
| 14/9/3 | 3 Mortise lock with chrome plated handles for both sides, back plate (as per architect specifications) | No | 27 | |
| | Carried Forward | | | |
| | Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 9 Ironmongery | | R | |

[illegible]

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 8</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 146 for CPAP formula purposes.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 10 Plumbing and Drainage (Provisional)</p> | | | |
| | | | R | |

| | | | |
|---|--|---|--|
| <p style="text-align: center;">Brought Forward</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 10 Plumbing and Drainage (Provisional)</p> | | R | |
| | | R | |

| | | | | | |
|---------|--|----|----|---|--|
| | <p style="text-align: center;">Brought Forward</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steel basins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>SANITARY FITTINGS</u></p> <p><u>Vaal' or similar approved</u></p> | | | R | |
| 14/10/1 | <p>Vitreous China size 560 x 415 mm rounded basin to comply with SABS 497 in one tap hole configuration supplied with integrated overflow and chain stay hole on matching ceramic pedestal stand in strict accordance to manufacturer's specification.</p> | No | 12 | | |
| | <p style="text-align: center;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 10 Plumbing and Drainage (Provisional)</p> | | | R | |

| Brought Forward | | | R |
|--|--|----|------|
| 14/10/2 | Vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan and matching 7 litre push-button top dual flush cistern complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat. | No | 17 |
| 14/10/3 | Vitreous china "Tuscany" close coupled 90° outlet closed rim wash-down pan and matching 7 litre push-button top dual flush cistern complete with lid and fitments. The dual flush cistern is designed to flush effectively on 6/3 litres. Supplied with purpose-made wooden seat for paraplegic toilet | No | 2 |
| 14/10/4 | Vitreous china wall-hung urinal with 38mm chrome plated domical grating, chrome plated top inlet spreader, and two hanger brackets . | No | 3 |
| <u>WASTE UNIONS, ETC</u> | | | |
| <u>"Cobra Watertech" or similar approved</u> | | | |
| 14/10/5 | 32mm "301CP" Basin waste union | No | 12 |
| <u>TRAPS, ETC</u> | | | |
| <u>"Chrome" or similar approved</u> | | | |
| 14/10/6 | 38mm Bottle Trap | No | 12 |
| <u>TAPS, VALVES, ETC</u> | | | |
| <u>Brass</u> | | | |
| 14/10/7 | 22mm Stopcock | No | 24 |
| <u>"Cobra Watertech" or similar approved</u> | | | |
| 14/10/8 | "Flushmaster" urinal flush valve | No | 3 |
| <u>SANITARY PLUMBING</u> | | | |
| <u>uPVC pipes</u> | | | |
| 14/10/9 | Allow a PC Sum of R10,000.00 for the refurbishment of the existing sewer line | | Item |
| Carried Forward | | | R |
| Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 10 Plumbing and Drainage (Provisional) | | | |

[illegible]

| Item No | Quantity | Rate | Amount |
|---|-----------|------|--------|
| <u>BILL NO. 12</u> | | | |
| <u>TILING</u> | | | |
| NOTE : Unless otherwise stated herein, all items in this bill shall be deemed to fall into Work Group No. 144 for CPAP formula purposes. | | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | | |
| <u>Descriptions</u> | | | |
| Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding | | | |
| <u>300 x 300mm x 9mm Porcelain tiles in matt finish (PC Amount R180.00/m2) fixed with adhesive to bedding (bedding elsewhere) and flush pointed with tinted waterproof jointing compound</u> | | | |
| 14/11/1 | On floors | m2 | 99 |
| 14/11/2 | Skirting | m | 42 |
| Carried Forward to Summary of Section No. 14 | | | R |
| Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 11 Tiling | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------|
| | <p><u>BILL NO. 13</u></p> <p><u>PAINTWORK</u></p> <p><u>PREAMBLES</u></p> <p>For preambles refer to "General Specification of Labour and Material and Methods to be used PW371"</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Representative/Agent</p> <p>Unless otherwise described the Preambles and Supplementary Preambles and descriptions of items in the following sections and bills are to apply equally to this section</p> <p><u>PREPARATORY WORK TO EXISTING WORK</u></p> <p><u>Previously painted plastered surfaces</u></p> <p>Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth</p> <p><u>Previously painted metal surfaces</u></p> <p>Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal</p> <p><u>Previously painted wood surfaces</u></p> <p>Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth</p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 14 BLOCK P: EXSTING ABLUTIONS Bill No. 12 Paintwork</p> | | R | |

| Brought Forward | | | R |
|--|--|----|-----|
| <u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u> | | | |
| <u>ON FLOATED PLASTER</u> | | | |
| <u>One coat alkali resistant primer, one undercoat and two coats eggshell enamel paint</u> | | | |
| 14/12/1 | On internal walls | m2 | 104 |
| <u>One coat primer and two coats interior quality PVA emulsion paint</u> | | | |
| 14/12/2 | On ceilings and cornices | m2 | 99 |
| <u>ON METAL</u> | | | |
| <u>Spot priming defects in pre primed surfaces with zinc chromate primer and applying one undercoat and two coat high gloss enamel paint on steel</u> | | | |
| 14/12/3 | On door frames | m2 | 29 |
| <u>PAINTWORK ETC TO NEW WORK</u> | | | |
| <u>ON FIBRE-CEMENT</u> | | | |
| <u>One coat primer and two coats interior quality acrylic PVA paint</u> | | | |
| 14/12/4 | On internal window sills not exceeding 300mm wide or girth | m | 10 |
| 14/12/5 | On fascias and bargeboards | m2 | 4 |
| <u>ON WOOD</u> | | | |
| <u>Three coats polyurethane semi-gloss varnish</u> | | | |
| 14/12/6 | On doors | m2 | 89 |
| Carried Forward to Summary of Section No. 14 | | | R |
| Section No. 14 | | | |
| BLOCK P: EXSTING ABLUTIONS | | | |
| Bill No. 12 | | | |
| Paintwork | | | |

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| Item No | | Quantity | Rate | Amount |
|---------|--|----------|--------|--------|
| | <u>SECTION 5</u> | | | |
| | <u>BILL NO. 1</u> | | | |
| | <u>EXTERNAL WORKS (PROVISIONAL)</u> | | | |
| | <u>EARTHWORKS (ROADS, SUBGRADE)</u> | | | |
| | <u>SITE CLEARANCE ETC</u> | | | |
| | <u>Site clearance</u> | | | |
| 15/1/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 1m girth, bush, etc | m2 | 10,200 | |
| 15/1/2 | Removal of topsoil to a nominal depth of 200 mm, stockpiling and preventing dust as specified in section 5 of SABS 1200D | m2 | 10,200 | |
| | <u>BULK EXCAVATIONS</u> | | | |
| | <u>Open face excavation in earth over sloping site</u> | | | |
| 15/1/3 | Excavate in all materials and use for embankment or backfilling or dispose as ordered | m3 | 4,590 | |
| | <u>Extra over all excavations for carting away</u> | | | |
| 15/1/4 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m3 | 850 | |
| | <u>Extra over trench and hole excavations in earth for excavation in</u> | | | |
| 15/1/5 | Intermediate rock excavation | m3 | 689 | |
| 15/1/6 | Hard rock | m3 | 367 | |
| 15/1/7 | Removal of oversize material | m3 | 85 | |
| | <u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u> | | | |
| 15/1/8 | 150mm Layer sub-base of type G5 material compacted to 95% Mod AASHTO density | m3 | 5,610 | |
| | Carried Forward | | | |
| | Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks, Roads and Side Walks | | R | |

| | Brought Forward | | | R | |
|---------|--|----|--------|---|--|
| | <u>Soil insecticide</u> | | | | |
| 15/1/9 | Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming | m2 | 5,610 | | |
| | <u>PLATFORM PREPARATION</u> | | | | |
| 15/1/10 | Rip and recompact the insitu material to to 90% of Mod AASHTO max density 150mm thick | m3 | 1,760 | | |
| 15/1/11 | Intermediate rock excavation | m3 | 264 | | |
| 15/1/12 | Hard rock | m3 | 141 | | |
| 15/1/13 | Removal of oversize material | m3 | 50 | | |
| | <u>TOP SOILING</u> | | | | |
| 15/1/14 | Excavate material from stockpile, transport and spread material to a designated position as order by the Engineer on site. | m3 | 1,683 | | |
| | <u>ROADWORKS AND SIDEWALKS</u> | | | | |
| | <u>SITE CLEARANCE</u> | | | | |
| 15/1/15 | Preparation of site including removal of 0.2m top soil, boulders, grubbing of trees and tree stump irrespective of boulder, tree and tree stump sizes. | m2 | 10,200 | | |
| 15/1/16 | Handling cost and profit in respect to sub-item above | | % | | |
| | <u>ROAD BED TREATMENT AND EARTHWORKS</u> | | | | |
| 15/1/17 | Roadbed preparation and compaction of material to 93% of Mod AASHTO maximum density 150mm thick | m3 | 149 | | |
| 15/1/18 | In-place treatment of roadbed in intermediate or hard excavation by ripping | m3 | 45 | | |
| | <u>Cut to spoil or stockpile from</u> | | | | |
| 15/1/19 | Soft rock | m3 | 149 | | |
| 15/1/20 | Intermediate rock excavation | m3 | 37 | | |
| 15/1/21 | Hard rock | m3 | 7 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks, Roads and Side Walks | | | | |

| | Brought Forward | | | R | |
|---------|--|----|--------|---|--|
| 15/1/22 | Cut to fill compacted to 93% mod AASHTO maximum density | m3 | 149 | | |
| 15/1/23 | Selected layer compacted to 95% of modified AASHTO max. density 150mm thick | m3 | 149 | | |
| | <u>Extra over items above items for excavating and breaking down material in:</u> | | | | |
| 15/1/24 | Intermediate excavation | m3 | 15 | | |
| 15/1/25 | Hard excavation | m3 | 3 | | |
| 15/1/26 | Removal of oversize materials | m3 | 10 | | |
| | <u>PAVEMENT LAYERS</u> | | | | |
| 15/1/27 | Construct 150mm base course with G6 material from commercial source stabilised to C4 quality material compacted to 95 % Mod AASHTO | m3 | 172 | | |
| 15/1/28 | Construct 150 mm subgrade from imported G7 quality material obtained from commercial sources and compacted to 93% MOD AASHTO | m3 | 179 | | |
| | <u>PAVING BLOCKS</u> | | | | |
| | <u>ON ROADS</u> | | | | |
| 15/1/29 | Supplying and construction of 60mm SA interlocking paving blocks placed in herringbone pattern on 20mm sand layer bedding | m2 | 11,730 | | |
| 15/1/30 | Extra over for cutting paving block to fit edge | m | 1,760 | | |
| 15/1/31 | Weed killing treatment of surfaces under paving | m2 | 11,730 | | |
| | <u>Precast kerb to SANS 927 as shown on the drawings issued</u> | | | | |
| 15/1/32 | Figure 3 kerbs | m | 175 | | |
| 15/1/33 | Extra over for kerbing on curved edges | m | 168 | | |
| 15/1/34 | Precast concrete kerb (SABS 927 figure 12) | m | 966 | | |
| 15/1/35 | Extra over for kerbing on curved edges | m | 77 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 1 Earthworks, Roads and Side Walks | | | | |

| | Brought Forward | | | R | |
|---------|---|----|-------|---|-----------|
| 15/1/36 | Excavate to reduce levels and cart to spoil or stockpile for reuse as ordered by the Engineer | m3 | 145 | | |
| 15/1/37 | Extra over for intermediate excavation | m3 | 14 | | |
| 15/1/38 | In-situ rip and re-compact to a depth of 150mm thick, to 93% modified AASHTO density | m3 | 145 | | |
| 15/1/39 | Import fill material from commercial source and compact in layers of 150mm to 93% mod. AASHTO density | m3 | 290 | | |
| | <u>ROAD MARKING</u> | | | | |
| | <u>Non-reflectorised paint applied at nominal rate of 0.42l/m2</u> | | | | |
| 15/1/40 | White lines (broken or unbroken) 100mm width | m | 1,000 | | |
| 15/1/41 | White characters and symbols | m2 | 5 | | |
| 15/1/42 | Yellow characters and symbols | m2 | 5 | | |
| 15/1/43 | Setting out and pre-marking of lines excluding symbols | m | 100 | | |
| | <u>PERMANENT ROAD SIGNS</u> | | | | |
| 15/1/44 | Statutory road signs, street names and the like | No | 5 | | |
| | <u>TESTING OF MATERIALS</u> | | | | |
| 15/1/45 | Cost of testing | | Item | | 12,000.00 |
| 15/1/46 | Charge of prime cost sum | | % | | |
| | Carried Forward to Summary of Section No. 15 | | | R | |
| | Section No. 15 | | | | |
| | EXTERNAL WORKS | | | | |
| | Bill No. 1 | | | | |
| | Earthworks, Roads and Side Walks | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|-------|-----------|
| | <u>BILL NO. 2</u> | | | |
| | <u>STORM WATER DRAINAGE</u> | | | |
| 15/2/1 | Clear vegetation, rubble, bushes and trees up to 1 m of girth to a width of 1.5m from the centre of the trench to either side as well as any other obstructions | m2 | 1,450 | |
| | <u>Excavate by machine in all materials for trenches, compact the trench base to 90 % MOD AASHTO density, backfill by hand in 150 mm thick layers using imported or excavated material, compact the layers to 93 % MOD AASHTO density, dispose of all surplus and/or unsuitable material</u> | | | |
| 15/2/2 | Excavation exceeding 0.0 m up to and including 1.0 m. | m3 | 410 | |
| | <u>Trimming of excavations for concrete-lined open drains in</u> | | | |
| 15/2/3 | Soft rock | m3 | 615 | |
| 15/2/4 | Intermediate rock excavation | m3 | 154 | |
| 15/2/5 | Cast in-situ concrete lining (25mpa/19mm) to open drains | m3 | 95 | |
| | <u>Formwork to cast-in-situ concrete lining of open drains</u> | | | |
| 15/2/6 | To sides with formwork on the internal face only | m2 | 738 | |
| 15/2/7 | To ends of slabs | m2 | 100 | |
| 15/2/8 | Sealed joints in concrete lining of open drains | m | 1,200 | |
| 15/2/9 | Steel mesh reinforcement Ref 617 | t | 20.00 | |
| 15/2/10 | Construction of water detention areas (rain gardens) | No | 2 | |
| | <u>TESTING OF MATERIALS</u> | | | |
| 15/2/11 | Cost of testing | Item | | 12,000.00 |
| 15/2/12 | Charge of prime cost sum | % | | |
| | Carried Forward to Summary of Section No. 15 | | | |
| | Section No. 15 | | | |
| | EXTERNAL WORKS | | | |
| | Bill No. 2 | | | |
| | Stormwater | | | |
| | | | R | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|-------|--------|
| | <u>BILL NO. 3</u> | | | |
| | <u>WATER PIPES</u> | | | |
| | <u>Site Clearance</u> | | | |
| 15/3/1 | Clear vegetation, rubble, bushes and trees up to 1m of girth to a width of 1.5m from the centre of the trench to either side as well as any other obstructions if instructed by the Engineer in writing, recorded in the site instruction book and forwarded with the relevant certificates for payment purposes. This item shall include the removal of the topsoil to a depth of 75 mm and a width of 3 000 mm, the maintenance thereof until it can be re-used and the re-laying and spreading upon the completion of the pipe line to the satisfaction of the Engineer | m2 | 1,975 | |
| | <u>Remove and grub large trees and tree stumps of girth</u> | | | |
| 15/3/2 | Exceeding 1m and up to and including 2m | No | 7 | |
| | <u>Excavate in all materials for trenches, compact the trench bottom to 90 % MOD AASHTO density, backfill by hand in layers of not exceeding of 150 mm in thickness using excavated material unless otherwise instructed by the Engineer in writing, compact the layers to 90 % MOD AASHTO density, dispose of all surplus and / or unsuitable material within free haul distance at a place as shall be instructed by the Engineer for the 90 mm diameter pipes, for the following depths:</u> | | | |
| 15/3/3 | Excavation exceeding 0.0 m up to and including 1.5m | m2 | 1,778 | |
| 15/3/4 | Excavation exceeding 1.5m up to and including 2.0m. | m3 | 36 | |
| | <u>Extra over for excavation in hard rock material (as specified in SANS 1 200 D</u> | | | |
| | <u>Quantities with positions and dates must be recorded in the site instruction book and agreed with the Engineer on site before any blasting commences. Those records must accompany the certificates for payment purposes. Rate shall include the spoiling of un - usable hard rock material within free haul distance</u> | | | |
| 15/3/5 | Intermediate excavation | m3 | 356 | |
| | Carried Forward | | | |
| | Section No. 15 EXTERNAL WORKS Bill No. 3 Water Reticulation | | | |
| | | | R | |

| | Brought Forward | | | R | |
|---------|--|----|-----|-----|--|
| 15/3/6 | Hard rock excavation | m3 | 178 | | |
| 15/3/7 | Extra over for additional deeper excavations in trench bottoms caused by unsuitable material to lay bedding on, rate shall include the disposal of any such material within free haul distance, quantities must be agreed upon by the Engineer and recorded in the site instruction book and forwarded with the relevant certificates for payment purposes | m3 | 18 | | |
| | <u>EXCAVATION ANCILLARY ITEMS</u> | | | | |
| | <u>Make up deficiency in backfill material due to spoiling of surplus, unsuitable and / or rock material from other necessary excavations on site within free haul of 0.5km (compaction of this material measured in excavation items), quantity to be agreed with the Engineer, recorded in the site instruction book and forwarded with the relevant certificates for payment purposes.</u> | | | | |
| 15/3/8 | Within free haul of 1 km (compaction of this material measured in excavation items) | m3 | 444 | | |
| 15/3/9 | Outside a free haul of 1 km (compaction of this material measured in excavation items) | m3 | 444 | | |
| 15/3/10 | Compaction in road reserves to 95 % MOD AASHTO density with soilcrete using a ratio of 1 : 10, rate shall include all materials and labour. Positions, dates and quantities shall be recorded in the site instruction book and accompany the certificates for payment, (in each instance 5 000 mm from road centre line in both direction (10 000 mm length) x trench width x trench depth less 300 mm from street level must be cast), all trenches in street crossings must have soilcrete filling | m3 | 21 | | |
| | <u>Temporary works: control ground water inflow from anywhere on site</u> | | | | |
| 15/3/11 | Provide Equipment | | | SUM | |
| 15/3/12 | Operate and maintain | No | 60 | | |
| 15/3/13 | Remove equipment | | | SUM | |
| | <u>DEALING WITH EXISTING SERVICES</u> | | | | |
| | <u>Dealing with services that intersect or adjoin the pipe trenches involved in this contract</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 3 Water Reticulation | | | | |

| Brought Forward | | | R |
|-----------------|---|----|-----|
| | <u>Excavate by hand in soft material to expose existing services crossing the road or shoulder areas and provide permanent or temporary protection to be approved by the Engineer and recorded in the site instruction book, with position for the following items and forwarded with the relevant certificates for payment purposes, these items must be shown on the "record" drawings as well which are to be handed to the Engineer's office at completion of the project</u> | | |
| 15/3/14 | Electrical and Telkom cables | No | 2 |
| 15/3/15 | Water mains up to 300 mm diameter | No | 2 |
| | <u>SURFACE FINISHING</u> | | |
| 15/3/16 | Provision of bedding and covering material from trench excavations | m2 | 2 |
| | <u>PROVISION FOR BEDDING AND COVERING</u> | | |
| 15/3/17 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposes | m3 | 533 |
| 15/3/18 | Selected fill material for blanket as specified for Class B beddings, compacted uniformly in layers with light compaction directly over pipes, ensuring that no stones are amongst the blanket materials, the Engineer must inspect, approve and record each section of 300 mm thick covering fill in the site instruction book and each approval must accompany the certificates for payment purposes instruction book and each approval must accompany the certificates for | m3 | 889 |
| | Carried Forward | | R |
| | Section No. 15 EXTERNAL WORKS Bill No. 3 Water Reticulation | | |

| Brought Forward | | | R |
|-----------------|---|----|-------|
| | <u>Provision of bedding and covering material from commercial sources and compact to 93% Mod AASHTO</u> | | |
| 15/3/19 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposed | m3 | 184 |
| 15/3/20 | Selected fill material for blanket as specified for Class B beddings, compacted uniformly in layers with light compaction directly over pipes, ensuring that no stones are amongst the blanket materials, the Engineer must inspect, approve and record each section of 300 mm thick covering fill in the site instruction book and each approval must accompany the certificates for payment purposed | m3 | 333 |
| 15/3/21 | 19 mm stones to be used for bedding if requested by the Engineer in writing in the site instruction book, Item shall cover the cost of acquiring the material regardless of the distance, delivering to points alongside the trenches and the disposal of material displaced by such importation | m3 | 178 |
| | <u>WATER PIPES</u> | | |
| | <u>Supply and lay, handle, bed on Class B (or as specified by the Engineer) bedding, joint test, cut pipes where necessary and disinfect various water pipes of the following sizes and types (compaction measured under item 1.2 of this bill of quantites</u> | | |
| 15/3/22 | 63mm diameter Upvc Class 9 water pipe | m | 1,350 |
| 15/3/23 | 75mm diameter Upvc Class 9 water pipe | m | 622 |
| | <u>SPECIALS AND FITTINGS</u> | | |
| | <u>Supply, handle, lay, bed on Class B (or as specified by the Engineer) bedding, joint, test, cut pipes where necessary and disinfect the following items</u> | | |
| | <u>Upvc pressure fittings Class 9</u> | | |
| 15/3/24 | 63mm Diameter | No | 3 |
| | Carried Forward | | R |
| | Section No. 15 EXTERNAL WORKS Bill No. 3 Water Reticulation | | |

| | Brought Forward | | | R | |
|---------|--|----|----|---|--|
| 15/3/25 | 75mm Diameter | No | 7 | | |
| | <u>Bends 45 degrees</u> | | | | |
| 15/3/26 | 63mm Diameter | No | 4 | | |
| 15/3/27 | 75mm Diameter | No | 8 | | |
| | <u>Bends 90 degrees</u> | | | | |
| 15/3/28 | 63mm Diameter | No | 6 | | |
| 15/3/29 | 75mm Diameter | No | 12 | | |
| | <u>Valves</u> | | | | |
| | <u>Supply, fixing and bedding of resilient seal gate valves, anti clockwise closing, complete as per drawings to suit</u> | | | | |
| 15/3/30 | 63mm Diameter | No | 6 | | |
| 15/3/31 | 75mm Diameter | No | 5 | | |
| | <u>Equal Tee Piece</u> | | | | |
| 15/3/32 | 63mm Diameter | No | 2 | | |
| 15/3/33 | 75mm Diameter | No | 12 | | |
| | <u>Upvc Reducer</u> | | | | |
| 15/3/34 | 75 x 63mm | No | 4 | | |
| 15/3/35 | 90 x 75mm | No | 4 | | |
| | <u>WATER ANCILLARY ITEMS</u> | | | | |
| 15/3/36 | Supply, test and install SABS approved water meters including all fittings and concrete base 50mm | No | 1 | | |
| 15/3/37 | Break into and connect to existing water lines, at positions and levels indicated on the relevant plans, sections and details on the drawings, make good all connections and ensure water tight sealing of the existing pipes after connection, the rate shall include all excavations, backfill and re - compaction to be 90 % MOD AASHTO density | No | 1 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 3 Water Reticulation | | | | |

| | Brought Forward | | | R | |
|---|--|----|------|---|------------|
| 15/3/38 | Anchor trust blocks and pedestals using mass concrete of 15Mpa mix strength where required by the pipe bends, tees and end - caps or where the Engineer requested and recorded in the site instruction book and forwarded with the relevant certificates for payment purposes, rate shall include the cost of concrete, reinforcement, form work, excavation , backfill, compaction etc. | m3 | 20 | | |
| | <u>VALVE BOX CHAMBER</u> | | | | |
| 15/3/39 | Supply materials and construct box chamber as detailed on drawings. (Pipes and fittings to be included) | No | 11 | | |
| | <u>FIRE HYDRANT ASSEMBLIES</u> | | | | |
| 15/3/40 | Extra over above items for supply, install, bed and testing fire hydrant assemblies complete including cutting of pipes, couplings, tee pieces etc... as per manufacturer's recommendations. | No | 2 | | |
| | <u>WATER STORAGE TREATMENT AND STORAGE</u> | | | | |
| 15/3/41 | Allow a PC Amount of R500,000.00 for the supply and installation of a 85kl steel galvanised water storage tank including elevated steel frame on concrete bases. | | Item | | |
| | <u>Drinking Fountains</u> | | | | |
| 15/3/42 | Allow a PC amount of R180,000 for the construction of drinking fountains | | Item | | 180,000.00 |
| Carried Forward to Summary of Section No. 15 | | | | R | |
| Section No. 15 | | | | | |
| EXTERNAL WORKS | | | | | |
| Bill No. 3 | | | | | |
| Water Reticulation | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|-------|--------|
| | BILL NO. 4 | | | |
| | <u>SEWER PIPE TRENCHES</u> | | | |
| | <u>SITE CLEARANCE</u> | | | |
| 15/4/1 | Clear vegetation, rubble, bushes and trees up to 1 m of girth to a width of 1.5 m from the centre of the trench to either side as well as any other obstructions if instructed by the Engineer in writing, recorded in the site instruction book and forwarded with the relevant certificates for payment purposes. This item shall include the removal of the topsoil to a depth of 75mm and a width of 3 000 mm, the maintenance thereof until it can be re-used and the re-laying and spreading upon the completion of the pipe line to the satisfaction of the Engineer | m2 | 1,580 | |
| | <u>Remove and grub large trees and tree stumps of girth</u> | | | |
| 15/4/2 | Exceeding 1m and up to and including 2m | No | 10 | |
| | <u>EXCAVATIONS</u> | | | |
| | <u>Excavate in all materials for trenches, compact the trench bottom to 90 % MOD AASHTO density, backfill by hand in layers of not exceeding of 150 mm in thickness using excavated material unless otherwise instructed by the Engineer in writing, compact the layers to 90 % MOD AASHTO density, dispose of all surplus and / or unsuitable material within free haul distance at a place as shall be instructed by the Engineer for the 90 mm diameter pipes, for the following depths:</u> | | | |
| | Carried Forward | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation | | | |

| | Brought Forward | | | R | |
|---------|---|----|-----|---|--|
| | <u>Excavate in all materials for trenches, compact the trench bottom to 90 % MOD AASHTO density, backfill by hand in layers of not exceeding of 150 mm in thickness using excavated material unless otherwise instructed by the Engineer in writing, compact the layers to 90 % MOD AASHTO density, dispose of all surplus and / or unsuitable material within free haul distance at a place as shall be instructed by the Engineer for pipe sizes of 110 mm and 160 mm diameter for depths as described below (any changes and / or deviations from the designs are to be agreed upon, confirmed by the Engineer on site and recorded in the site instruction book</u> | | | | |
| 15/4/3 | 110 mm diameter excavation exceeding 0.0m up to and including 1.5m. | m3 | 886 | | |
| 15/4/4 | 110 mm diameter excavation exceeding 1.5m up to and including 2.0m. | m3 | 72 | | |
| 15/4/5 | 110 mm diameter excavation exceeding 2.0m up to and including 2.5m. | m3 | 9 | | |
| 15/4/6 | 160 mm diameter excavation exceeding 0.0m up to and including 1.5m. | m3 | 220 | | |
| 15/4/7 | 160 mm diameter excavation exceeding 1.5m up to and including 2.0m. | m3 | 84 | | |
| 15/4/8 | 160 mm diameter excavation exceeding 2.0m up to and including 2.5m. | m3 | 22 | | |
| | <u>Extra over for excavation in hard rock material (as specified in SANS 1 200 D. Quantities with positions and dates must be recorded in the site instruction book and agreed with the Engineer on site before any blasting commences. Those records must accompany the certificates for payment purposes. Rate shall include the spoiling of un - usable hard rock material within free haul distance</u> | | | | |
| 15/4/9 | Intermediate excavation | m3 | 55 | | |
| 15/4/10 | Hard rock excavation | m3 | 11 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation | | | | |

| Brought Forward | | | R |
|---|--|----|-----|
| 15/4/11 | Extra over for additional deeper excavations in trench bottoms caused by unsuitable material to lay bedding on, rate shall include the disposal of any such material within free haul distance, quantities must be agreed upon by the Engineer and recorded in the site instruction book and forwarded with the relevant certificates for payment purposes | m3 | 240 |
| <u>EXCAVATION ANCILLARY ITEMS</u> | | | |
| <u>Make up deficiency in backfill material due to spoiling of surplus, unsuitable and / or rock material from other necessary excavations on site within free haul distance, quantity to be agreed with the Engineer, recorded in the site instruction book and forwarded with the relevant certificates for payment purposes</u> | | | |
| 15/4/12 | Within free haul of 1 km (compaction of this material measured in excavation items) | m3 | 769 |
| 15/4/13 | Outside a free haul of 1 km (compaction of this material measured in excavation items) | m3 | 769 |
| 15/4/14 | Compaction in road reserves to 95 % MOD AASHTO density with soilcrete using a ratio of 1 : 10, rate shall include all materials and labour. Positions, dates and quantities shall be recorded in the site instruction book and accompany the certificates for payment, (in each instance 5 000 mm from road centre line in both direction (10 000 mm length) x trench width x trench depth less 300 mm from street level must be cast), all trenches in street crossings must have soilcrete filling | m3 | 30 |
| <u>Temporary works: control ground water inflow from anywhere on site.</u> | | | |
| 15/4/15 | Provide equipment | | SUM |
| 15/4/16 | Operate and maintain | No | 1 |
| 15/4/17 | Remove equipment | | SUM |
| <u>DEALING WITH EXISTING SERVICES</u> | | | |
| <u>Dealing with services that intersect or adjoin the pipe trenches involved in this contract</u> | | | |
| Carried Forward | | | R |
| Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation | | | |

| | | Brought Forward | | | R |
|---------|---|--|-------|--|---|
| | | <u>Excavate by hand to expose existing services intersecting or adjoining the trench and provide permanent or temporary protection to be approved by the Engineer and recorded in the site instruction book, with position for the following items and forwarded with the relevant certificates for payment purposes, these items must be shown on the "record" drawings as well which are to be handed to the Engineer's office at completion of the project</u> <u>Services that intersect a trench</u> | | | |
| 15/4/18 | Electrical and Telkom cables | No | 2 | | |
| 15/4/19 | Water mains up to 300 mm diameter | No | 4 | | |
| | <u>PROVISION FOR BEDDING COVERING</u> | | | | |
| | <u>Provision of bedding and covering material from designated borrow pits</u> | | | | |
| 15/4/20 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposes | m3 | 577 | | |
| 15/4/21 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposes | m3 | 2,308 | | |
| | <u>Provision of bedding and covering material from commercial sources and compact to 93% Mod AASHTO</u> | | | | |
| 15/4/22 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposes | m3 | 198 | | |
| | Carried Forward | | | | R |
| | Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation | | | | |

| Brought Forward | | | R |
|---|---|----|-----|
| 15/4/23 | Selected granular material for bedding as specified for Class B bedding, placed and compacted in uniform layers as pipe barrel on both sides of the pipes for bedding cradle, ensuring that no stones are amongst the materials, the Engineer must inspect, approve and record each section of bedding in the site instruction book and each approval must accompany the relevant certificates for payment purposes | m3 | 498 |
| 15/4/24 | 19 mm stones to be used for bedding if requested by the Engineer in writing in the site instruction book, Item shall cover the cost of acquiring the material regardless of the distance, delivering to points alongside the trenches and the disposal of material displaced by such importation | m3 | 124 |
| <u>SEWER PIPES</u> | | | |
| <u>Supply and lay, handle, bed on Class B (or as specified by the Engineer) bedding, joint, test and connect into manholes various sewer pipes of the following sizes and types (compaction measured under Items 3.2 of this bill of quantities</u> | | | |
| 15/4/25 | 110 mm diameters Upvc class 400 under ground sewer pipe as per SANS 1 601 | m | 738 |
| 15/4/26 | 160 mm diameters Upvc class 400 under ground sewer pipe as per SANS 1 601 | m | 636 |
| Carried Forward | | | R |
| Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation | | | |

| | Brought Forward | | | R | |
|---------|---|----|----|---|--|
| | <p><u>Supply and install 1 000 mm diameter concrete manhole bases and rings including the reinforced concrete cover slab with steel ring, step irons cast into concrete rings at 300 mm staggered intervals. The rate shall cover the cost of all necessary excavations in all types of materials, the backfill in 150 mm thick layers compacted to 90 % MOD AASHTO density, the compaction of ground before the placing of base commences to 90 % MOD AASHTO density, the connection of the main sewer pipes to the manhole and the water tight sealing of the structure as per specifications in SANS 1 200 DB 8.3.2 and 8.3.3 as well as SANS 1 200 LD 3.6 for the following depths (depths are to be confirmed from the relevant longitudinal section drawings supplied in the construction drawings for this contract, any changes and / or deviations from the designs are to be confirmed and agreed upon by the Engineer or his representative on site, recorded in the site instruction book and accompany the relevant certificates for payment purposes) :</u></p> | | | | |
| 15/4/27 | From 0.0 m up to and including 1.5 m | No | 24 | | |
| 15/4/28 | From 1.5m up to and including 2.0m | No | 9 | | |
| 15/4/29 | From 2.0m up to and including 2.5m | No | 5 | | |
| | <u>MANHOLE COVERS</u> | | | | |
| | <p><u>Cast iron manhole covers and frames (SABS 558) build into roofs of valve, stormwater and sewer chambers. See Drawing for details. For type:</u></p> | | | | |
| 15/4/30 | Type 4 (heavy duty for paved or open area) | No | 38 | | |
| | <u>SEWER ANCILLARY ITEMS</u> | | | | |
| | <u>Extra over for sewer fittings</u> | | | | |
| | <u>uPVC sewer specials for solid wall pipes (Supradur or similar approved) of outside diameters stated:</u> | | | | |
| 15/4/31 | ABC Rodding Eyes - 110 mm diameter x 45° | No | 12 | | |
| 15/4/32 | Female stop ends of diameters stated: 110mm | No | 12 | | |
| | Carried Forward | | | | |
| | <p>Section No. 15 EXTERNAL WORKS Bill No. 4 Sewer Reticulation</p> | | | | |
| | | | | R | |

| | Brought Forward | | | R | |
|---|--|----|----|---|--|
| 15/4/33 | Anchor trust blocks and pedestals using mass concrete of 15 Mpa mix strength where required by the Engineer on the site, recorded in the site instruction book and forwarded with the relevant certificates for payment purposes, rate shall include the cost of concrete, reinforcement, form work, excavation, back fill, excavation , backfill, compaction etc. | m3 | 60 | | |
| 15/4/34 | Break into and connect to existing manholes, at positions and levels indicate on the relevant plans, sections and details on the drawings, make good all benching and ensure water tight sealing of the existing structure after connection, the rate shall include all excavations, backfill and re - compaction to be 93% MOD AASHTO density | No | 1 | | |
| | <u>SEPTIC TANK</u> | | | | |
| 15/4/35 | Allow a PC amount of R1,000,000.00 for the construction of a septic tank | m | 1 | | |
| Carried Forward to Summary of Section No. 15 | | | | R | |
| Section No. 15 | | | | | |
| EXTERNAL WORKS | | | | | |
| Bill No. 4 | | | | | |
| Sewer Reticulation | | | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|-------|--------|
| | <u>BILL NO. 5</u> | | | |
| | <u>SOCCER FIELD (PROVISIONAL)</u> | | | |
| | All excavations are measured as being in "earth" and/or filling compacted to 98% modified AASHTO density | | | |
| | Descriptions of excavations shall be deemed to include for setting aside surplus excavated material in spoil heaps for use as filling or for depositing within 150m of the perimeter of the excavations and spreading and roughly levelling as directed, as well as for increase in bulk and multiple handling of excavated material caused by the Contractor's method of operation | | | |
| | Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and for bulking | | | |
| | <u>SOCCER FIELD</u> | | | |
| | <u>Site clearance</u> | | | |
| 15/5/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 5,174 | |
| | <u>Earthworks</u> | | | |
| 15/5/2 | Cut to spoil | m3 | 2,328 | |
| | <u>Filling, etc.</u> | | | |
| 15/5/3 | Imported earth filling supplied by the Contractor and brought onto site to make up levels around buildings compacted to 93% modified AASHTO density. | m3 | 3,105 | |
| | <u>Compaction of surfaces</u> | | | |
| 15/5/4 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 5,174 | |
| | Carried Forward | | | |
| | Section No. 15 EXTERNAL WORKS Bill No. 5 Sports Field | | R | |

| | Brought Forward | | | R | |
|---------|--|----|-------|---|--|
| 15/5/5 | Compaction to 93% Mod AASHTO density of ground surface under etc by wetting and compacting with 3 passes of a 10 ton vibratory roller | m3 | 2,328 | | |
| | <u>GRASSING</u> | | | | |
| | <u>Grassing with weed free sods approximately 500 x 500 x 75mm thick and maintaining (elsewhere) to approval until date of first delivery</u> | | | | |
| 15/5/6 | Kikuyu grass on sports field. | m2 | 5,174 | | |
| | <u>Maintenance</u> | | | | |
| 15/5/7 | Maintenance of grassed areas until date of first delivery (total area approximately 5465m2) | | Item | | |
| | <u>MARKING</u> | | | | |
| | <u>Thick lime slurry applied with a mechanical marker machine on well established and mowed grass surfaces including setting out</u> | | | | |
| 15/5/8 | Soccer field, shotput and discus marking lines 100mm wide. | m | 492 | | |
| 15/5/9 | Soccer field marking lines 100mm wide set out circular. | m | 380 | | |
| | <u>SUNDRY STEELWORK</u> | | | | |
| | <u>Standard sports nets including all fixing ropes, attachments, etc.</u> | | | | |
| 15/5/10 | Soccer goal post net to fit frame with front size 7,52 x 2,54m high and handing over to the Representative/Agent. | No | 2 | | |
| | <u>OPEN CHANNEL</u> | | | | |
| 15/5/11 | V-shaped channel 600mm wide x 100mm thick with rounded salient edges and finished on exposed surfaces with 2:1 cement mortar, laid to falls in panels not exceeding 1,8m long with 12mm bitumen impregnated softboard movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations and formwork. Including extra for fair open end and Extra for T-intersection. | m | 201 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 5 Sports Field | | | | |

| Brought Forward | | R |
|---|---|------|
| 15/5/12 | <p><u>RUNNING TRACK</u></p> <p>Allow a PC Sum of R490,172.00 (Four Hundred and Ninety Thousand One Hundred and Seventy Two Rands Only)</p> | Item |
| <p>Carried Forward to Summary of Section No. 15</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 5 Sports Field</p> | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|-------|--------|
| | <u>BILL NO. 6</u> | | | |
| | <u>COMBI COURTS</u> | | | |
| | <u>Site clearance</u> | | | |
| 15/6/1 | Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc | m2 | 2,105 | |
| | <u>Earthworks</u> | | | |
| 15/6/2 | Cut to spoil | m3 | 947 | |
| | <u>Filling, etc.</u> | | | |
| 15/6/3 | Imported earth filling supplied by the Contractor and brought onto site to make up levels around buildings compacted to 93% modified AASHTO density. | m3 | 1,263 | |
| | <u>Compaction of surfaces</u> | | | |
| 15/6/4 | Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m2 | 2,105 | |
| 15/6/5 | Compaction of ground surface under ? etc by wetting and compacting with ? passes of a ? ton vibratory roller | m3 | 947 | |
| | <u>BITUMINOUS SURFACING</u> | | | |
| | <u>Surfacing</u> | | | |
| 15/6/6 | Finished layer formed of three layers of light lurry, to fill in the slacks, level with a rail and compact without vibration | m2 | 2,105 | |
| | <u>All weather surfacing</u> | | | |
| 15/6/7 | Apply three coats of primer by squeegee of a blended compound formed by ratio of 100 litres of emulsion of blended co-polymer resins and fibrous inert fillers to 300 litres of specially rounded sand to 125 litres of waters, each coat to be applied in an alternate direction. | m2 | 2,105 | |
| | Carried Forward | | | |
| | Section No. 15 EXTERNAL WORKS Bill No. 6 Combi-court | | R | |

| | Brought Forward | | | R | |
|---------|---|----|-------|---|--|
| 15/6/8 | Apply final colour coat by squeegee of a blended co-polymer resins, pigment and vibrous inert fillers to fillers to 300 litres of specially rounded sand to 125 litres of water. | m2 | 2,105 | | |
| | <u>PAINTWORK</u> | | | | |
| | <u>Paint on wood floated concrete</u> | | | | |
| | <u>Prepare and apply one thinned first coat and two full coats waterbased acrylic roof paint including silica sand sprinkled on before the paint has set to form slip-free surface</u> | | | | |
| 15/6/9 | Netball court marking lines 56mm wide. | m | 849 | | |
| 15/6/10 | Netball court marking lines 56mm wide set out circular. | m | 849 | | |
| | <u>Prepare and apply one thinned first coat and two full coats waterbased acrylic roof paint in brilliant colour including silica sand sprinkled on before the paint has set to form slip-free surface</u> | | | | |
| 15/6/11 | Volleyball court marking lines 56mm wide. | m | 849 | | |
| | <u>Prepare and apply two full coats solvent based road and runway marking paint including silica sand sprinkled on before the paint has set to form slip-free surface</u> | | | | |
| 15/6/12 | Tennis court marking lines 56mm wide. | m | 849 | | |
| 15/6/13 | Basketball court marking lines 56mm wide. | m | 849 | | |
| 15/6/14 | Basketball court marking lines 56mm wide set out circular. | m | 849 | | |
| | <u>Prepare and apply one coat universal undercoat and two full coats high gloss enamel paint in brilliant colour</u> | | | | |
| 15/6/15 | Backboard marking lines 50mm wide. | m | 849 | | |
| | <u>RUNNING TRACK</u> | | | | |
| | <u>Surfacing</u> | | | | |
| 15/6/16 | Finished layer formed of three layers of light lurry, to fill in the slacks, level with a rail and compact without vibration | m2 | 84 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 6 Combi-court | | | | |

| Brought Forward | | | R |
|---|---|----|-----|
| | <u>All weather surfacing</u> | | |
| 15/6/17 | Apply three coats of primer by squeegee of a blended compound formed by ratio of 100 litres of emulsion of blended co-polymer resins and fibrous inert fillers to 300 litres of specially rounded sand to 125 litres of waters, each coat to be applied in an alternate direction. | m2 | 84 |
| 15/6/18 | Apply final colour coat by squeegee of a blended co-polymer resins, pigment and vibrous inert fillers to fillers to 300 litres of specially rounded sand to 125 litres of water. | m2 | 84 |
| | <u>FENCING</u> | | |
| | <u>Galvanied wire mesh fencing, including site clearance and preparation of ground</u> | | |
| 15/6/19 | Pre-galvanised 50 x 50 x 2.5mm weld mesh fence at 1800 high with 100mm diameter x 3mm galvanised straining po 8m centres with 300 x 300 x 6mm base plate cast in 450 x 900mm deep concrete base. Top of concrete base to be 50mm above ground level. Provide holes for eye bolts and for fixing of anchor post, 50mm diameter x 2.5mm stay po bolted to straining posts with 200 x 200 x 6mm base plate in 450 x 760 x 600mm deep concrete base. Top of concrete base to be 50mm above ground level. Provide 50mm diar x 2.5mm Galvanised intermediate posts at every 8m centre with 300 x 300 x 6mm base plate cast in 300 x 300 x 900mm deep concrete base. Fencing to include 700mm diameter wrap fixed to 2 of 4 strings of barbed wire with wire ties inside. All in accordance to Architect's drawings including necessary excavation, formwork ,etc (Note the contractor price for and including excavation, bracing, etc supply | m | 185 |
| | Carried Forward | | R |
| Section No. 15 EXTERNAL WORKS Bill No. 6 Combi-court | | | |

| Brought Forward | | | | R |
|---|---|----|---|---|
| 15/6/20 | Standard 1.8m high x 1.35m wide single manual swing gate manufactured from 50mm diameter x 2.8mm tubular frame with bracing as shown, complete with 2 hinges, bolts to each barrel bolt to take padlock as well as vertical extension 600mm long and 4 tying holes for barbed wire. 100mm diameter straining posts to be provided at both sides of gate with 300 x 6mm base plate cast into 450 x 450 x 900mm concrete base. Provide 50 x 50 x 2.5mm galvanised "weldmesh" 1.2m high fixed to gate. Stay poles 50mm diameter x 2.8mm barbed to straining posts with 200 x 200 x 6mm base plate. Base plate extend 50mm above ground level. All according to Architectural drawings. | No | 1 | |
| | <u>Sundries</u> | | | |
| 15/6/21 | Locking chain 500mm long with 50 x 35 x 10mm diameter shackles with one shackle welded to gate frame or gate | No | 1 | |
| <p align="center">Carried Forward to Summary of Section No. 15</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 6 Combi-court</p> | | | | R |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL NO. 7</u></p> <p><u>COVERED ASSEMBLY AND COURT YARD</u></p> <p><u>PREAMBLES</u></p> <p>The Model Preambles for Trades (2009 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>All notes, specifications, instructions, references, requirements, preparations, finishes, etc. and construction details reflected on these drawings should be carefully studied and priced. The requirements, notes and specifications on the drawings are not repeated here as preambles but are applicable to the measured items in all respects. Tenderers are to find and refer to the detail drawings and specification for clarity and the full extent of descriptions when pricing ALL the items in this trade. No claim in this regard will be entertained.</p> <p><u>Descriptions:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers and shall be galvanised unless otherwise described.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p><u>REINFORCED CONCRETE</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 7 Covered Assembly and Court Yard</p> | | R | |

| | Brought Forward | | | R | |
|--------|---|----|-------|---|--|
| | <u>25MPa/19mm concrete</u> | | | | |
| 15/7/1 | Holes | m3 | 12 | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 15/7/2 | 12mm Diameter bars | t | 2.57 | | |
| | <u>BRICKWORK</u> | | | | |
| | <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u> | | | | |
| 15/7/3 | Piers | m3 | 8 | | |
| | <u>Brickwork reinforcement</u> | | | | |
| 15/7/4 | 150mm Wide reinforcement built in horizontally | m | 240 | | |
| | <u>External face bricks (Prime Cost Amount R 3 500.00/1000) pointed with flush horizontal and vertical joints</u> | | | | |
| 15/7/5 | Extra over brickwork for face brickwork | m2 | 57 | | |
| | <u>PAVING</u> | | | | |
| | <u>Light grey "Grinaker G-blocks" interlocking precast concrete (35 MPa) paving blocks laid with butt joints on 50mm thick river sand bed with sand swept into joints including preparation of ground or filling</u> | | | | |
| 15/7/6 | 60mm paving blocks | m2 | 4,857 | | |
| 15/7/7 | Circular cutting to paving | m | 150 | | |
| | <u>Technicrete or similar and approved precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing</u> | | | | |
| 15/7/8 | Mountable kerb (Figure 8C), size 300 x 200/100mm high (complying with SANS 927:2007) in 1000mm lengths, wet pressed, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at back of each joint, excavation, backfilling, ramming, etc. | m | 463 | | |
| 15/7/9 | Kerbs circular on plan | m | 25 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 7 Covered Assembly and Court Yard | | | | |

| | Brought Forward | | | R | |
|---------|---|----|------|---|--|
| | <u>ROOF COVERING</u> | | | | |
| | <u>0.6mm Charcoal grey finished metal IBR profile roof sheeting @ 30° and 11° on insulation on 76 x 50mm purling @ 1200mm C/Cs on mild steel H-section to engineers detail and specification</u> | | | | |
| 15/7/10 | Roof covering with pitch not exceeding 25 degrees, in transportable lengths not exceeding 20m. | m2 | 659 | | |
| 15/7/11 | Ridge cappings 462mm girth, one time bent including broad flute serrated closers. | m | 59 | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | | |
| 15/7/12 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 618 | | |
| | <u>RAINWATER DISPOSAL</u> | | | | |
| | <u>0.8 mm Hot Dipped Galvanised sheet iron with "Chromodeck" finish</u> | | | | |
| 15/7/13 | 125 x100 mm Eaves box gutter | m | 89 | | |
| 15/7/14 | Extra over 150 x 150mm eaves gutter for stopped end | No | 6 | | |
| 15/7/15 | Extra over 150 x 150mm eaves gutter for outlet for 125 x 125mm pipe | No | 18 | | |
| 15/7/16 | 125 x 125mm Diameter rainwater pipes | m | 57 | | |
| 15/7/17 | Extra over 125 x 125mm rainwater pipe for bend | No | 18 | | |
| 15/7/18 | Extra over 125 x 125mm rainwater pipe for shoe | No | 18 | | |
| | <u>STEEL ROOF TRUSS</u> | | | | |
| | <u>Purlins and rails bolted to steel:</u> | | | | |
| 15/7/19 | 175 x 75 x 20 x 2,5 CFLC purlins | t | 3.00 | | |
| 15/7/20 | <u>150 x 90 x 12mm x 12m Unequal angle</u> | t | 1.45 | | |
| | <u>Welded bracing, etc.:</u> | | | | |
| 15/7/21 | 100 x 100 x 8mm L Bottom chord members | t | 2.50 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 7 Covered Assembly and Court Yard | | | | |

| Brought Forward | | | R |
|--|--|----|------|
| 15/7/22 | 80 x 80 x 6mm Bracing | t | 0.56 |
| <u>STEEL COLUMNS AND BEAMS</u> | | | |
| 15/7/23 | 254 x 146 x 31mm I-section beams. | t | 5.65 |
| <u>Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to</u> | | | |
| 15/7/24 | 50 x 50 x 6mm Sag Angles | t | 1.89 |
| <u>SUNDRIES</u> | | | |
| <u>Base plate</u> | | | |
| 15/7/25 | 400 x 400 x 20mm Thick | No | 27 |
| <u>Gr8.8 M20 bolts joining together 200 x 200 x 4.5 column (elsewhere measured)</u> | | | |
| 15/7/26 | M20 bolts | No | 108 |
| <u>Grounting</u> | | | |
| 15/7/27 | Dry pack grouting 25mm thick under steel base plate to top of column size 500 x 500mm. | No | 27 |
| Carried Forward to Summary of Section No. 15 | | | R |
| Section No. 15 | | | |
| EXTERNAL WORKS | | | |
| Bill No. 7 | | | |
| Covered Assembly and Court Yard | | | |

| Item No | | Quantity | Rate | Amount |
|---------|--|----------|------|--------|
| | <p><u>BILL No. 8</u></p> <p><u>COVERED EATING AREA</u></p> <p><u>PREAMBLES</u></p> <p>The Model Preambles for Trades (2009 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>All notes, specifications, instructions, references, requirements, preparations, finishes, etc. and construction details reflected on these drawings should be carefully studied and priced. The requirements, notes and specifications on the drawings are not repeated here as preambles but are applicable to the measured items in all respects. Tenderers are to find and refer to the detail drawings and specification for clarity and the full extent of descriptions when pricing ALL the items in this trade. No claim in this regard will be entertained.</p> <p><u>Descriptions:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers and shall be galvanised unless otherwise described.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p><u>REINFORCED CONCRETE</u></p> | | | |
| | <p style="text-align: right;">Carried Forward</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 8 Covered Eating Area</p> | | R | |

| | Brought Forward | | | R | |
|--------|---|----|------|---|--|
| | <u>25MPa/19mm concrete</u> | | | | |
| 15/8/1 | Holes | m3 | 7 | | |
| | <u>High tensile steel reinforcement to structural concrete work</u> | | | | |
| 15/8/2 | 12mm Diameter bars | t | 0.65 | | |
| | <u>BRICKWORK</u> | | | | |
| | <u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u> | | | | |
| 15/8/3 | Piers in foundations | m3 | 3 | | |
| 15/8/4 | Piers in superstructure | m3 | 4 | | |
| | <u>Brickwork reinforcement</u> | | | | |
| 15/8/5 | 150mm Wide reinforcement built in horizontally | m | 271 | | |
| 15/8/6 | Piers | m3 | 4 | | |
| | <u>PAVING</u> | | | | |
| | <u>Light grey "Grinaker G-blocks" interlocking precast concrete (35 MPa) paving blocks laid with butt joints on 50mm thick river sand bed with sand swept into joints including preparation of ground or filling</u> | | | | |
| 15/8/7 | 60mm paving blocks | m2 | 608 | | |
| | <u>Technicrete or similar and approved precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing</u> | | | | |
| 15/8/8 | Mountable kerb (Figure 8C), size 300 x 200/100mm high (complying with SANS 927:2007) in 1000mm lengths, wet pressed, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at back of each joint, excavation, backfilling, ramming, etc. | m | 104 | | |
| | <u>ROOF COVERING</u> | | | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 8 Covered Eating Area | | | | |

| | Brought Forward | | | R | |
|---------|---|----|------|---|--|
| | <u>0.6mm Charcoal grey finished metal IBR profile roof sheeting @ 30° and 11° on insulation on 76 x 50mm purling @ 1200mm C/Cs on mild steel H-section to engineers detail and specification</u> | | | | |
| 15/8/9 | Roof covering with pitch not exceeding 25 degrees, in transportable lengths not exceeding 20m. | m2 | 608 | | |
| 15/8/10 | Ridge cappings 462mm girth, one time bent including broad flute serrated closers. | m | 23 | | |
| | <u>"Sisalation 410" housing grade glass fibre reinforced aluminium foil bonded insulation</u> | | | | |
| 15/8/11 | Insulation laid taut over purlins (at approximately 1 000mm centres) and fixed concurrent with roof covering including galvanised steel straining wires | m2 | 608 | | |
| | <u>RAINWATER DISPOSAL</u> | | | | |
| | <u>0.8 mm Hot Dipped Galvanised sheet iron with "Chromodeck" finish</u> | | | | |
| 15/8/12 | 125 x100 mm Eaves box gutter | m | 45 | | |
| 15/8/13 | Extra over 150 x 150mm eaves gutter for stopped end | No | 4 | | |
| 15/8/14 | Extra over 150 x 150mm eaves gutter for outlet for 125 x 125mm pipe | No | 4 | | |
| 15/8/15 | 125 x 125mm Diameter rainwater pipes | m | 13 | | |
| 15/8/16 | Extra over 125 x 125mm rainwater pipe for bend | No | 4 | | |
| 15/8/17 | Extra over 125 x 125mm rainwater pipe for shoe | No | 4 | | |
| | <u>STEEL ROOF TRUSS</u> | | | | |
| | <u>Purlins and rails bolted to steel:</u> | | | | |
| 15/8/18 | 175 x 75 x 20 x 2,5 CFLC purlins | t | 0.77 | | |
| 15/8/19 | <u>150 x 90 x 12mm x 12m Unequal angle</u> | t | 1.64 | | |
| | <u>Welded bracing, etc.:</u> | | | | |
| 15/8/20 | 100 x 100 x 8mm L Bottom chord members | t | 1.38 | | |
| 15/8/21 | 80 x 80 x 6mm Bracing | t | 0.58 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 8 Covered Eating Area | | | | |

| Brought Forward | | | R |
|---|--|----|------|
| <u>STEEL COLUMNS AND BEAMS</u> | | | |
| 15/8/22 | 254 x 146 x 31mm I-section beams. | t | 5.93 |
| <u>Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to</u> | | | |
| 15/8/23 | 50 x 50 x 6mm Sag Angles | t | 0.39 |
| <u>SUNDRIES</u> | | | |
| <u>Base plate</u> | | | |
| 15/8/24 | 400 x 400 x 20mm Thick | No | 14 |
| <u>Gr8.8 M20 bolts joining together 200 x 200 x 4.5 column (elsewhere measured)</u> | | | |
| 15/8/25 | M20 bolts | No | 56 |
| <u>Grouting</u> | | | |
| 15/8/26 | Dry pack grouting 25mm thick under steel base plate to top of column size 500 x 500mm. | No | 14 |
| <p align="center">Carried Forward to Summary of Section No. 15</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 8 Covered Eating Area</p> | | | R |

| Item No | | Quantity | Rate | Amount |
|------------|---|----------|------|--------|
| | <p><u>BILL NO. 9</u></p> <p><u>PARKING AREA AND CARPORTS</u></p> <p><u>PREAMBLES</u></p> <p>The Model Preambles for Trades (2009 edition), as published by the Association of South African Quantity Surveyors, shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items, fully described in the said Model Preambles, will be entertained</p> <p>The following "Supplementary Preambles" are incorporated in this bill to satisfy the requirements of the project and shall take precedence over the provisions of the said Model Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>All notes, specifications, instructions, references, requirements, preparations, finishes, etc. and construction details reflected on these drawings should be carefully studied and priced. The requirements, notes and specifications on the drawings are not repeated here as preambles but are applicable to the measured items in all respects. Tenderers are to find and refer to the detail drawings and specification for clarity and the full extent of descriptions when pricing ALL the items in this trade. No claim in this regard will be entertained.</p> <p><u>Descriptions:</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers and shall be galvanised unless otherwise described.</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete.</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.</p> <p><u>COVERED PARKING</u></p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 15 EXTERNAL WORKS Bill No. 9 Parking area and Carports</p> | | | |
| | | | R | |

| | Brought Forward | | | R | |
|---------|--|----|------|---|--|
| | <u>Excavation in all materials other than rock not exceeding 2m deep:</u> | | | | |
| 15/9/1 | Holes | m3 | 0.5 | | |
| | <u>Extra over trench excavations in earth for excavation in:</u> | | | | |
| 15/9/2 | Soft rock. | m3 | 0.1 | | |
| | <u>Keeping excavations free of water:</u> | | | | |
| 15/9/3 | Keeping excavations free of water other than subterranean water. | | Item | | |
| | <u>25 Mpa/19mm Concrete:</u> | | | | |
| 15/9/4 | Bases | m3 | 2 | | |
| | <u>Mild steel reinforcement to structural concrete work:</u> | | | | |
| 15/9/5 | Mild steel bars of varying diameter. | t | 1.08 | | |
| | <u>ROOF COVERING</u> | | | | |
| | <u>6mm Galvanised IBR sheet steel with Chromadek finish on one side in single lengths fixed to steel purlins or rails and 6mm galvanised sheet steel accessories with Chromadek finish on one side:</u> | | | | |
| 15/9/6 | Roof covering with pitch not exceeding 25 degrees, in transportable lengths not exceeding 20m. | m2 | 114 | | |
| | <u>METALWORK</u> | | | | |
| | <u>Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to Beams:</u> | | | | |
| 15/9/7 | 75 x 75 x 3mm x 5,52kg/m Square Hollow-section columns. | t | 2.16 | | |
| 15/9/8 | 16mm Diameter anchor bolt. | No | 48 | | |
| | <u>Sundries:</u> | | | | |
| 15/9/9 | 25mm Cement grouting under steel columns. | No | 12 | | |
| 15/9/10 | 250 x 250 x 8mm Base plate | No | 48 | | |
| | Carried Forward | | | R | |
| | Section No. 15 EXTERNAL WORKS Bill No. 9 Parking area and Carports | | | | |

| Brought Forward | | | R |
|--|---|---|------|
| | <u>38x38mm composite timber fixed to hollow mild steel framework with steel angle</u> | | |
| 15/9/11 | Timber slates | m | 100 |
| | <u>Ramps, Rails and Walkways</u> | | |
| 15/9/12 | Allow a PC amount of R498,800 for the construction of ramps, rails and covered walkways | | Item |
| | <u>Refuse Yard</u> | | |
| 15/9/13 | Allow a PC amount of R220,800 for the construction of a refuse yard | | Item |
| | <u>Bus Pick-up and Drop-off</u> | | |
| 15/9/14 | Allow a PC amount of R120,800 for the construction of the bus pick-up and drop-off | | Item |
| Carried Forward to Summary of Section No. 15 | | | R |
| Section No. 15 | | | |
| EXTERNAL WORKS | | | |
| Bill No. 9 | | | |
| Parking area and Carports | | | |

| Item No | | Quantity | Rate | Amount |
|---------|---|----------|------|--------------|
| | <u>BILL NO. 10</u> | | | |
| | <u>EXTERNAL WORKS (PROVISIONAL)</u> | | | |
| | <u>FENCING</u> | | | |
| | <u>ClearVu fencing or equally approved</u> | | | |
| 15/10/1 | ClearVu high density anti- climbing and anti-cut pressed mesh panel fencing 1,8m high, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires, or similar approved | m | 940 | |
| 15/10/2 | Sliding gate 4, 00 x 2,1m high including running track and accessories | No | 1 | |
| | <u>Steel palisade as per attached drawing complete, joined to brick columns, and brickwalls, the fence painted on both sides (colour to architects)</u> | | | |
| 15/10/3 | Steel palisade 1,60m high with a maximum of twenty eight pales per 2,90m sections, consisting of 40 x 40 x 5mm vertical angle iron with "metalwall trident head " or similar approved, centered at 100mm between each other, welded to horizontal top and bottom support, including stabilizer at center of bottom horizontal.Including all foundations | m | 72 | |
| 15/10/4 | Steel pedestrian gate 1,800 x 2,1m high including locking mechanism | No | 1 | |
| | <u>PROVISIONAL ALLOWANCES</u> | | | |
| | <u>Demolitions and Alterations</u> | | | |
| 15/10/5 | Allow a PC amount of R240,000.00 for the demolition of existing structures | Item | | 240,000.00 |
| | <u>Grade R Play Area</u> | | | |
| 15/10/6 | Allow a PC amount of R1,200,000 for Grade R play area (grass, sandpits, playing equipment, etc) | Item | | 1,200,000.00 |
| | <u>Artificial Tunnels</u> | | | |
| 15/10/7 | Allow a PC amount of R250,000 for the construction of artificial tunnels | Item | | 250,000.00 |
| | Carried Forward to Summary of Section No. 15 | | | |
| | Section No. 15 | | | |
| | EXTERNAL WORKS | | | |
| | Bill No. 10 | | | |
| | External Works (Provisional) | | | |
| | | | R | |

[illegible]

| Item No | Quantity | Rate | Amount |
|---|----------|------|--------|
| <u>BILL NO. 1</u> | | | |
| <u>PROVISIONAL SUMS</u> | | | |
| <u>NOTES:</u> | | | |
| <p>1. The Contractor's attention is drawn specifically to the Principal Building Agreement Clause 20.0 (Nominated Sub-Contractors), Clause 21.0 (Selected Sub-Contractors) and Clause 22 (Work by Others) and to the related Clauses in Section 1, Bill No. 1 - Preliminaries</p> <p>2. The Contractor's attention is drawn also to the definition of attendance on Nominated or Selected Sub-Contractors and of fuel, power and water for commissioning of mechanical and other specialised installations given in the JBCC Preliminaries</p> <p>3. Where special attendance includes the provision of hoisting facilities for a Sub-Contractor then the Contractor shall:-</p> <ul style="list-style-type: none"> * Ensure that the capacities of his hoisting equipment are sufficient to deal with the masses and the quantities of the items to be hoisted, * Schedule the times of availability of the hoisting equipment for each Sub-Contractor, * Provide all necessary personnel to operate the hoisting equipment, <p>all to enable the Sub-Contractor to execute the hoisting or lowering of his material, etc. using the facilities provided by the Contractor</p> <p>4. Under no circumstances may any Provisional Amount, etc. be extended at an amount lower than the amount given in this Bill</p> <p>5. CPAP Formula Work Group 190 shall apply to all lump sum amounts of profit and attendance</p> | | | |
| Carried Forward | | | |
| Section No. 16 PROVISIONAL SUMS Bill No. 1 Provisional Sums | | | R |

| Brought Forward | | | R | |
|--|--|------|---|--------------|
| <u>PROVISIONAL SUMS FOR NOMINATED SUB-CONTRACTS</u> | | | | |
| 16/1/1 | Provide the amount of R 35,250.00 for Gas and Fume Cupboard Installation supplied and installed complete | Item | | 35,250.00 |
| 16/1/2 | Profit | Item | | |
| 16/1/3 | Allow for general attendance | Item | | |
| <u>Fire and Directional Signage</u> | | | | |
| 16/1/4 | Provide the amount of R 34,200.00 for fire and directional signage | Item | | 34,200.00 |
| 16/1/5 | Profit | Item | | |
| 16/1/6 | Allow for general attendance | Item | | |
| <u>Relocation of existing prefabricated classrooms</u> | | | | |
| 16/1/7 | Provide the amount of R1,700 000.00 for the relocation of prefabricated classrooms | Item | | 1,700,000.00 |
| 16/1/8 | Profit | Item | | |
| 16/1/9 | Allow for general attendance | Item | | |
| <u>Irrigation and Landscaping</u> | | | | |
| 16/1/10 | Provide the amount of R2,000,000.00 for the supply and installation landscaping complete | Item | | 2,000,000.00 |
| 16/1/11 | Profit | Item | | |
| 16/1/12 | Allow for general attendance | Item | | |
| <u>School Furniture</u> | | | | |
| 16/1/13 | Provide the amount of R 3,500,000.00 for the supply and installation of school furniture complete | Item | | 3,500,000.00 |
| 16/1/14 | Profit | Item | | |
| 16/1/15 | Allow for general attendance | Item | | |
| Carried Forward | | | R | |
| Section No. 16 PROVISIONAL SUMS Bill No. 1 Provisional Sums | | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| Brought Forward | | | R |
|--|--|------|--------------|
| <u>School Computers</u> | | | |
| 16/1/16 | Provide the amount of R450,000.00 for the supply and installation of school computers complete | Item | 450,000.00 |
| 16/1/17 | Profit | Item | |
| 16/1/18 | Allow for general attendance | Item | |
| <u>Outdoor Furniture</u> | | | |
| 16/1/19 | Provide the amount of R195,000.00 for outdoor furniture complete | Item | 195,000.00 |
| 16/1/20 | Profit | Item | |
| 16/1/21 | Allow for general attendance | Item | |
| <u>Covered Pavilion</u> | | | |
| 16/1/22 | Provide the amount of R2,185,000.00 for the construction of a covered palion | Item | 2,185,000.00 |
| 16/1/23 | Profit | Item | |
| 16/1/24 | Allow for general attendance | Item | |
| <u>Cricket Pitch</u> | | | |
| 16/1/25 | Provide the amount of R280,000.00 for the construction of a cricket pitch | Item | 280,000.00 |
| 16/1/26 | Profit | Item | |
| 16/1/27 | Allow for general attendance | Item | |
| Carried to Final Summary | | | R |
| Section No. 16 PROVISIONAL SUMS Bill No. 1 Provisional Sums | | | |

| MOROKWENG PRIMARY SCHOOL | | | | |
|---|---|-----|------|-------|
| SUMMARY: ELECTRICAL & ELECTRONICS WORKS | | | | |
| SECTION | DESCRIPTION | QTY | RATE | TOTAL |
| 1 | P&G's | | | |
| Electrical Bulk / Supply | | | | |
| 2 | MV Reticulation and Connection | Sum | | |
| Electrical Installations - External Works | | | | |
| 3 | LV Reticulation | 1 | | |
| 4 | Perimeter Covered Eating Area & Parking Sports Area | 1 | | |
| Electrical Installations | | | | |
| 5 | Administration | 1 | | |
| 6 | 3 Classroom + Store+Ablution | 1 | | |
| 7 | 4 Classroom + Store+HOD | 3 | | |
| 8 | 3 CLR and Multi P Lab | 1 | | |
| 9 | Media Centre & Sci Lab & Store | 1 | | |
| 10 | Computer Centre | 1 | | |
| 11 | Guard House + Refuse | 1 | | |
| 12 | Change Room & Tuck shop | 1 | | |
| 13 | Grade R | 1 | | |
| 14 | Nutrition Centre | 1 | | |
| 15 | Multi Purpose Hall | 1 | | |
| 16 | Existing Ablutions | 1 | | |
| Provisional Sum Electrical & Electronic Installations - Buildings | | | | |
| 17 | PC Amount Electronics Installation CCTV & Security System | Sum | | |
| Specialized Installations - Buildings | | | | |
| 18 | Earthing & Lightning Protection | Sum | | |
| Standby / Emergency Power, Alternative Energy Source | | | | |
| 19 | PV Solar 50kwp | | | |
| | SUB TOTAL 1 | | | |
| | 15% VAT | | | |
| TOTAL BID PRICE VAT INCL | | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| ITEM | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|--|---|------|-----|--------------|--------|
| 2 | <u>MV RETICULATION</u> | | | | |
| 2.1 | <p>Provide a Sum of R300 000.00 for new Eskkom LT network to connect school Site.Quotation to be sourced from relevant Authority upon construction</p> <p>Note(s): 50kVA power supply from Eskom.Engineer to issue instruction on the budgeted value</p> | Sum | 1 | R 300 000,00 | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QTY | RATE | TOTAL |
|---|---|------|--------|------|-------|
| | <u>LV RETICULATION</u> | | | | |
| 3.1 | Distribution Kiosks, equipment as specified | | | | |
| 3.1.1 | Main Kiosk | No | 1 | | |
| 3.1.2 | Kiosk K2 | No | 2 | | |
| 3.1.3 | Plinth | No | 3 | | |
| 3.2 | Trenching Excavating, bedding, backfilling, consolidating and making good as specified, | | | | |
| 3.2.1 | Pickable soil | m³ | 297,50 | | |
| 3.2.2 | Soft rock | m³ | 85,00 | | |
| 3.2.3 | Very hard rock | m³ | 42,50 | | |
| 3.2.4 | Backfilling and compaction | m³ | 425,00 | | |
| 3.3 | 110mm dia PVC sleeves for road crossings/cable entries into the building-rate must include for galv steel draw wires in spare sleeves and sealing of ends | m | 200 | | |
| 3.4 | 600x600mm manholes for Electrical & Data | No. | 8 | | |
| 3.5 | Cable warning tape, 300mm above cables | m | 1200 | | |
| 3.6 | Cable markers, above cables | No | 25 | | |
| 3.7 | 600/1000V PVC SWA cables, in trenches and sleeves, including labels | | | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|----|-------|--|-----------|
| 3.7.1 | 150mm ² 4core | m | | | rate only |
| 3.7.2 | 70mm ² 4core | m | | | rate only |
| 3.7.3 | 50mm ² 4core | m | 215 | | |
| 3.7.4 | 35mm ² 4core | m | 0 | | |
| 3.7.5 | 25mm ² 4core | m | 80 | | |
| 3.7.5 | 16mm ² 4core | m | 750 | | |
| 3.7.6 | 16mm ² 3core | m | 395 | | |
| 3.7.7 | 10mm ² 2core | m | 200 | | |
| 3.7.8 | 6mm ² 2core | m | 60,00 | | |
| 3.7.9 | 4mm ² 2core | m | 90,00 | | |
| 3.8 | 600/1000V Cable terminations, for PVC PVC SWA PVC Cu cables, for indoor or outdoor use, as required | | | | |
| 3.8.1 | Gland no 5 complete with shroud | No | 11 | | |
| 3.8.2 | Gland no 4 complete with shroud | No | | | rate only |
| 3.8.3 | Gland no 3 complete with shroud | No | 12 | | |
| 3.8.4 | Gland no 2 complete with shroud | No | 16 | | |
| 3.9 | Earth conductors (HDHC), including ends | | | | |
| 3.9.1 | 95mm ² | m | | | rate only |
| 3.9.2 | 35mm ² | m | | | rate only |
| 3.9.3 | 25mm ² | m | 215 | | |
| 3.9.4 | 16mm ² | m | 80,00 | | |
| 3.9.5 | 10mm ² | m | 1225 | | |
| 3.9.6 | 6mm ² | m | 200 | | |
| 3.9.7 | 4mm ² | m | 150 | | |
| 3.10 | Testing of this section in the presence of the Employer and/or the Engineer, including all equipment, power generator, etc. | No | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|--|---|------|----------|------|-----------|
| 4 | <u>AREA LIGHTING</u> | | | | |
| 4,1 | 20m Galvanised Mast complete with circuit breakers and accessories | each | 1 | | |
| 4,1 | 8m Galvanised Black Streetlight poles complete with circuit breakers and accessories | each | 5 | | |
| 4,2 | 5m Galvanised Black Streetlight poles complete with circuit breakers and accessories | each | 8 | | |
| 4,3 | Supply and install 155W GEN LED FLOOD Fittings complete with assessories in each pole above | each | 6 | | |
| 4,4 | Supply and install 50W GEN LED Streetlight optic 41803 Fittings complete with assessories in each pole above | each | 8 | | |
| 4,5 | Supply and install 51W GEN LED streetlight optic 41815 LED led Midi Light Fittings complete with assessories in each pole above | each | 8 | | |
| 4,5 | Supply and install 6mm 3core swa cable 600/1000V PVC for Streetlights | m | 100 | | |
| 4,6 | Supply and install 4mm 3core swa cable 600/1000V PVC for Streetlights | m | 120 | | |
| 4,8 | 18W EVO 4ft LED Weatherproof IP66 IK10 | No | 6 | | |
| 4,8 | Type B1: Ceiling mounted bulkhead 1x 18W CFL | No | | | rate only |
| 4,9 | Supply and install 4mm Bare Copper Earth Wire for Streetlights | m | 220 | | |
| 4.10 | Supply and install Terminations for above cable | each | 20 | | |
| 4.11 | Supply and install Electrical Danger Tape | m | 220 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 5 | <u>ADMINISTRATION BLOCK</u> | | | | |
| 5,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 5.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 5.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 5.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 5,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 5.2.1 | 75mm Diameter for Data | m | | | rate only |
| 5.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 5.2.3 | 75mm Diameter | No | | | rate only |
| 5.2.7 | 110mm Diameter | No | | | rate only |
| 5,3 | Draw Wires | | | | |
| 5.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 5,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 5.5.1 | Distribution Board (DB-ADM) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|-----|--|-----------|
| 5,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 5.5.1 | 25mm 4 core PVC SWA Cable | m | | | rate only |
| 5.5.2 | 16mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 5.5.3 | 25mm 4 core cable | No | 1 | | |
| 5.5.4 | 16mm BCEW | No | 1 | | |
| 5,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 5.6.1 | 20mm PVC Conduit | m | | | rate only |
| 5.6.2 | 25mm PVC Conduit | m | 250 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 5.6.3 | 20mm PVC Conduit | m | 230 | | |
| 5.6.4 | 25mm PVC Conduit | m | | | rate only |
| 5.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 5.6.5 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 5.6.6 | 20mm diameter 4 way type(round box) | No | 80 | | |
| 5.6.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 5,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 5.7.1 | 100 x 50 x 50mm | No | 1 | | |
| 5.7.2 | 100 x 100 x 50mm | No | 23 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 5,8 | PVC Wiring in conduits: | | | | |
| 5.8.1 | 2.5mm² for lights circuits | m | 900 | | |
| 5.8.2 | 4mm² for plug sockets circuits | m | 750 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 5.8.3 | 2.5mm² | m | 580 | | |
| 5.8.4 | 4mm² | m | 780 | | |
| 5,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 5.9.1 | 1 Lever 1 way | No | 3 | | |
| 5.9.2 | 1 Lever 2 way | No | 1 | | |
| 5.9.3 | 2 Lever 2 way | No | | | rate only |
| 5.9.4 | Photo cell | No | 1 | | |
| 5.9.4 | Occupancy Sensors | No | 14 | | |
| 5,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 5.10.1 | 16A 3 pin double socket outlets | No | 8 | | |
| 5.10.2 | Type D: Wall mounted power cluster socket outlets | No | 9 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|--|---|-----|----|--|--|
| 5,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 5.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 38 | | |
| 5.11.2 | Type W2: 2x26W 1200mm T5 LED Vapour Proof I Fluorescent Light | No | 4 | | |
| 5.11.3 | Type D1: 14 W LED Ceiling mounted downlighter | No | 36 | | |
| 5.11.4 | Type B1: Wall mounted bulkhead 18W CFL | No | 18 | | |
| 5.11.5 | Type SLR: 9W Strobe light | No | 1 | | |
| 5,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 5.12.1 | Building installation | Sum | 1 | | |
| 5,13 | Others | | | | |
| 5.13.1 | 300 x 300mm - Telephone & Data DB | No | 1 | | |
| 5.13.2 | Provide the sum of R30000-00 for ICT cable trays installations by specialist | No | 1 | | |
| 5.13.3 | 2 compartment power skirting installed in offices | m | 40 | | |
| 5.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 15 | | |
| 5.13.5 | 20A 2pole Isolator, in suitable York Box, for HVAC | No | 5 | | |
| 5.13.6 | Power points points on Powerskirting; must include draw box, blank cover plate, etc, | No | 15 | | |
| 5.13.7 | Provide the sum of R15500-00 for the supply and installation of school motorised siren c/w timer | Sum | 1 | | |
| 5.13.8 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | 2 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 6 | <u>3 CLASSROOM BLOCK +STORE</u> | | | | |
| 6,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 6.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 6.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 6.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 6,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 6.2.1 | 75mm Diameter for Data | m | | | rate only |
| 6.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 6.2.3 | 75mm Diameter | No | | | rate only |
| 6.2.7 | 110mm Diameter | No | | | rate only |
| 6,3 | Draw Wires | | | | |
| 6.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 6,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 6.4.1 | Distribution Board (DB-3CL+Store) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 6,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 6.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 6.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 6.5.3 | 10mm 2 core cable | No | 1 | | |
| 6.5.4 | 6mm BCEW | No | 1 | | |
| 6,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 6.6.1 | 20mm PVC Conduit | m | | | rate only |
| 6.6.2 | 25mm PVC Conduit | m | 80 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 6.6.3 | 20mm PVC Conduit | m | 100 | | |
| 6.6.4 | 25mm PVC Conduit | m | | | rate only |
| 6.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 6.6.6 | 20mm diameter 4 way type(round box) | No | 25 | | |
| 6.6.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 6,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 6.6.1 | 100 x 50 x 50mm | No | 4 | | |
| 6.6.2 | 100 x 100 x 50mm | No | 8 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 6,8 | PVC Wiring in conduits: | | | | |
| 6.6.1 | 2.5mm² for lights circuits | m | 600 | | |
| 6.6.2 | 4mm² for plug sockets circuits | m | 300 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 6.6.3 | 2.5mm² for lights circuits | m | 600 | | |
| 6.6.4 | 4mm² for plug sockets circuits | m | 300 | | |
| 6,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 6.9.1 | 1 Lever 1 way | No | 4 | | |
| 6.9.2 | 1 Lever 2 way | No | | | rate only |
| 6.9.3 | 2 Lever 2 way | No | | | rate only |
| 6.9.4 | Photo cell | No | 1 | | |
| 6.9.4 | Occupancy Sensors | No | 4 | | |
| 6,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 6.10.1 | 16A 3 pin single socket outlets | No | 1 | | |
| 6.10.2 | 16A 3 pin double socket outlets | No | 8 | | |
| 6.10.3 | Type D: Wall mounted power cluster socket outlets | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 6,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 6.11.1 | Type F1: 2x26W 1200mm T8 LED Open Channel Light | No | 20 | | |
| 6.11.2 | Type F2: 2x26W 1200mm T8 Vapour proof | No | 4 | | |
| 6.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | rate only |
| 6.11.4 | Type B1: Wall mounted bulkhead 2x 18W LED | No | 8 | | |
| 6,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 6.12.1 | Building installation | Sum | 1 | | |
| 6,13 | Others | | | | |
| 6.13.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 6.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 6.13.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 6.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | | | rate only |
| 6.13.5 | 16A power socket outlet on power skirting | No | | | rate only |
| 6.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 6.13.7 | Supply 1200mm 100w Ceiling Sweff fans complete wit controller | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 7 | <u>3 CLASSROOM BLOCK +STORE</u> | | | | |
| 7,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 7.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 7.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 7.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 7,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 7.2.1 | 75mm Diameter for Data | m | | | rate only |
| 7.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 7.2.3 | 75mm Diameter | No | | | rate only |
| 7.2.7 | 110mm Diameter | No | | | rate only |
| 7,3 | Draw Wires | | | | |
| 7.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 7,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 7.4.1 | Distribution Board (DB-4CL+Store+HOD) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 7,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 7.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 7.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 7.5.3 | 10mm 2 core cable | No | 1 | | |
| 7.5.4 | 6mm BCEW | No | 1 | | |
| 7,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 7.7.1 | 20mm PVC Conduit | m | | | rate only |
| 7.7.2 | 25mm PVC Conduit | m | 80 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 7.7.3 | 20mm PVC Conduit | m | 100 | | |
| 7.7.4 | 25mm PVC Conduit | m | | | rate only |
| 7.7.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 7.7.6 | 20mm diameter 4 way type(round box) | No | 32 | | |
| 7.7.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 7,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 7.7.1 | 100 x 50 x 50mm | No | 6 | | |
| 7.7.2 | 100 x 100 x 50mm | No | 12 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 7,8 | PVC Wiring in conduits: | | | | |
| 7.7.1 | 2.5mm² for lights circuits | m | 600 | | |
| 7.7.2 | 4mm² for plug sockets circuits | m | 350 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 7.7.3 | 2.5mm² for lights circuits | m | 600 | | |
| 7.7.4 | 4mm² for plug sockets circuits | m | 350 | | |
| 7,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 7.9.1 | 1 Lever 1 way | No | 6 | | |
| 7.9.2 | 1 Lever 2 way | No | 1 | | rate only |
| 7.9.3 | 2 Lever 2 way | No | | | rate only |
| 7.9.4 | Photo cell | No | 1 | | |
| 7.9.4 | Occupancy Sensors | No | 4 | | |
| 7,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 7.10.1 | 16A 3 pin single socket outlets | No | 2 | | |
| 7.10.2 | 16A 3 pin double socket outlets | No | 8 | | |
| 7.10.3 | Type D: Wall mounted power cluster socket outlets | No | 2 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 7,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 7.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 22 | | |
| 7.11.2 | Type F2: 1x26W 1200mm T5 Open Channel Fluorescent Light | No | | | rate only |
| 7.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | rate only |
| 7.11.4 | Type B1: Wall mounted bulkhead 2x 18W LED | No | 8 | | |
| 7,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 7.12.1 | Building installation | Sum | 1 | | |
| 7,13 | Others | | | | |
| 7.13.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 7.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 7.13.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 7.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | | | rate only |
| 7.13.5 | 16A power socket outlet on power skirting | No | | | rate only |
| 7.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 7.13.7 | Supply 1200mm 100w Ceiling Sweft fans complete wit controller | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|--|------|----------|------|-----------|
| 8 | <u>3 CLASSROOM BLOCK +MULTI PURPOSE</u> | | | | |
| 8,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services Allowance must be made for the sifting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks. | | | | |
| 8.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 8.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 8.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 8,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 8.2.1 | 75mm Diameter for Data | m | | | rate only |
| 8.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 8.2.3 | 75mm Diameter | No | | | rate only |
| 8.2.7 | 110mm Diameter | No | | | rate only |
| 8,3 | Draw Wires | | | | |
| 8.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 8,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 8.4.1 | Distribution Board (DB-3CL+Multi Purpose) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 8,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 8.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 8.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 8.5.3 | 10mm 2 core cable | No | 1 | | |
| 8.5.4 | 6mm BCEW | No | 1 | | |
| 8,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 8.8.1 | 20mm PVC Conduit | m | | | rate only |
| 8.8.2 | 25mm PVC Conduit | m | 150 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 8.8.3 | 20mm PVC Conduit | m | 120 | | |
| 8.8.4 | 25mm PVC Conduit | m | | | rate only |
| 8.8.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 8.8.6 | 20mm diameter 4 way type(round box) | No | 36 | | |
| 8.8.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 8,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 8.8.1 | 100 x 50 x 50mm | No | 6 | | |
| 8.8.2 | 100 x 100 x 50mm | No | 12 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 8,8 | PVC Wiring in conduits: | | | | |
| 8.8.1 | 2.5mm² for lights circuits | m | 800 | | |
| 8.8.2 | 4mm² for plug sockets circuits | m | 400 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 8.8.3 | 2.5mm² for lights circuits | m | 800 | | |
| 8.8.4 | 4mm² for plug sockets circuits | m | 400 | | |
| 8,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 8.9.1 | 1 Lever 1 way | No | 6 | | |
| 8.9.2 | 1 Lever 2 way | No | 1 | | rate only |
| 8.9.3 | 2 Lever 2 way | No | | | rate only |
| 8.9.4 | Photo cell | No | 1 | | |
| 8.9.4 | Occupancy Sensors | No | 4 | | |
| 8,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 8.10.1 | 16A 3 pin single socket outlets | No | 2 | | |
| 8.10.2 | 16A 3 pin double socket outlets | No | 8 | | |
| 8.10.3 | Type D: Wall mounted power cluster socket outlets | No | 3 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 8,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 8.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 24 | | |
| 8.11.2 | Type F2: 1x26W 1200mm T5 Open Channel Fluorescent Light | No | | | rate only |
| 8.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | rate only |
| 8.11.4 | Type B1: Wall mounted bulkhead 2x 18W LED | No | 14 | | |
| 8,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 8.12.1 | Building installation | Sum | 1 | | |
| 8,13 | Others | | | | |
| 8.13.1 | 300 x 300mm - Telephone & Data DB | No | 1 | | |
| 8.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 8.13.3 | 2 compartment power skirting installed in offices | m | 9 | | |
| 8.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 6 | | |
| 8.13.5 | 16A power socket outlet on power skirting | No | 6 | | |
| 8.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | 1 | | rate only |
| 8.13.7 | Supply 1200mm 100w Ceiling Sweff fans complete wit controller | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 9 | <u>MEDIA CENTRE ,SCINCE LAB & STORE</u> | | | | |
| 9,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 9.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 9.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 9.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 9,2 | Cable and Data Sleeves Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 9.2.1 | 75mm Diameter for Data | m | | | rate only |
| 9.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 9.2.3 | 75mm Diameter | No | | | rate only |
| 9.2.7 | 110mm Diameter | No | | | rate only |
| 9,3 | Draw Wires | | | | |
| 9.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 9,4 | Distribution Boards Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 9.9.1 | Distribution Board (DB-MED C SCI LAB & S) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|-----|--|-----------|
| 9,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 9.5.1 | 25mm 2 core PVC SWA Cable | m | | | rate only |
| 9.5.2 | 25mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 9.5.3 | 25mm 2 core cable | No | 1 | | |
| 9.5.4 | 16mm BCEW | No | 1 | | |
| 9,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 9.6.1 | 20mm PVC Conduit | m | | | rate only |
| 9.6.2 | 25mm PVC Conduit | m | 300 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 9.6.3 | 20mm PVC Conduit | m | 150 | | |
| 9.6.4 | 25mm PVC Conduit | m | | | rate only |
| 9.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 9.6.5 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 9.6.6 | 20mm diameter 4 way type(round box) | No | 42 | | |
| 9.6.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 9,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 9.9.1 | 100 x 50 x 50mm | No | 4 | | |
| 9.9.2 | 100 x 100 x 50mm | No | 12 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 9,8 | PVC Wiring in conduits: | | | | |
| 9.8.1 | 2.5mm² for lights circuits | m | 600 | | |
| 9.8.2 | 4mm² for plug sockets circuits | m | 600 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 9.8.3 | 2.5mm² for lights circuits | m | 600 | | |
| 9.8.4 | 4mm² for plug sockets circuits | m | 600 | | |
| 9,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 9.9.1 | 1 Lever 1 way | No | 6 | | |
| 9.9.2 | 1 Lever 2 way | No | 2 | | |
| 9.9.3 | 2 Lever 2 way | No | | | rate only |
| 9.9.4 | Photo cell | No | 1 | | |
| 9.9.4 | Occupancy Sensors | No | 4 | | |
| 9,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 9.10.1 | 16A 3 pin double socket outlets | No | 8 | | |
| 9.10.2 | Type D: Wall mounted power cluster socket outlets | No | 6 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 9,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 9.9.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 18 | | |
| 9.9.2 | Type F2: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | | | rate only |
| 9.9.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | rate only |
| 9.9.4 | Type B1: Wall mounted bulkhead 2x 18W CFL | No | 12 | | |
| 9,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 9.12.1 | Building installation | Sum | 1 | | |
| 9,13 | Others | | | | |
| 9.13.1 | 300 x 300mm - Telephone & Data DB | No | 1 | | |
| 9.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | 2 | | |
| 9.13.3 | 2 compartment power skirting installed in offices | m | 9 | | |
| 9.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 4 | | |
| 9.13.5 | 200L Solar Gyser | No | | | rate only |
| 9.13.6 | 20A 2pole Isolator, in suitable York Box, for HVAC | No | 2 | | |
| 9.13.7 | Supply 1200mm 100w Ceiling Sweff fans complete wit controller | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|--|------|----------|------|-----------|
| 10 | <u>Computer Centre</u> | | | | |
| 10,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services Allowance must be made for the sifting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks. | | | | |
| 10.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 10.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 10.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 10,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 10.2.1 | 75mm Diameter for Data | m | | | rate only |
| 10.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 10.2.3 | 75mm Diameter | No | | | rate only |
| 10.2.5 | 110mm Diameter | No | | | rate only |
| 10,3 | Draw Wires | | | | |
| 10.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 10,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 10.4.1 | Distribution Board (DB-Comp) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|----|--|-----------|
| 10,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 10.5.1 | 25mm 4 core PVC SWA Cable | m | | | rate only |
| 10.5.2 | 16mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 10.5.3 | 25mm 4 core cable | No | | | |
| 10.5.4 | 16mm BCEW | No | | | |
| 10,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 10.6.1 | 20mm PVC Conduit | m | 80 | | |
| 10.6.2 | 25mm PVC Conduit | m | 0 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 10.6.3 | 20mm PVC Conduit | m | 0 | | |
| 10.6.4 | 25mm PVC Conduit | m | 80 | | |
| 10.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 10.6.6 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 10.6.7 | 20mm diameter 4 way type(round box) | No | 18 | | |
| 10.6.8 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 10,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 10.7.1 | 100 x 50 x 50mm | No | 6 | | |
| 10.7.2 | 100 x 100 x 50mm | No | 8 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|------|--|-----------|
| 10,8 | PVC Wiring in conduits: | | | | |
| 10.10.1 | 2.5mm² for lights circuits | m | 600 | | |
| 10.10.2 | 4.0mm² for plug sockets circuits | m | 1200 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 10.10.3 | 1.5mm² | m | 600 | | |
| 10.10.4 | 2.5mm² | m | 1200 | | |
| 10,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 10.10.1 | 1 Lever 1 way | No | 2 | | |
| 10.10.2 | 1 Lever 2 way | No | | | |
| 10.10.3 | 2 Lever 2 way | No | | | rate only |
| 10.10.4 | Photo cell | No | 1 | | |
| 10.10.5 | Occupancy Sensors | No | 2 | | |
| 10.10' | Socket Outlets | | | | |
| 7y7ybb | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 10.10.1 | 16A 3 pin single socket outlets | No | 4 | | |
| 10.10.2 | 16A 3 pin double socket outlets | No | 6 | | |
| 10.10.3 | Type D: Wall mounted power cluster socket outlets | No | 3 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 10,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 10.11.1 | Type F1: 2x26W 1200mm T8 Open Channel LED Light | No | 21 | | |
| 10.11.2 | Type F2: 2x26W 1200mm T8 Vapour proof LED Light | No | 6 | | |
| 10.11.3 | Type B1: Wall mounted bulkhead 2x 18W CFL | No | 12 | | |
| 10,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 10.10.1 | Building installation | Sum | 1 | | |
| 10,13 | Others | | | | |
| 10.13.1 | 300 x 300mm - Telephone & Data DB | No | 1 | | |
| 10.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 10.13.3 | 2 compartment power skirting installed in offices | m | 40 | | |
| 10.13.4 | Power Data points on Powerskirting; must include draw box, blank cover plate, etc, | No | 35 | | |
| 10.13.5 | Data points on Powerskirting; must include draw box, blank cover plate, etc, | No | 35 | | |
| 10.13.6 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 0 | | |
| 10.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC & server | No | 2 | | |
| 10.13.7 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | 2 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 11 | <u>GUARD HOUSE</u> | | | | |
| 11,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 11.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 11.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 11.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 11,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 11.2.1 | 75mm Diameter for Data | m | | | rate only |
| 11.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 11.2.3 | 75mm Diameter | No | | | rate only |
| 11.2.7 | 110mm Diameter | No | | | rate only |
| 11,3 | Draw Wires | | | | |
| 11.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 30 | | |
| 11,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 11.11.1 | Distribution board (Guard House) | Sum | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|----|--|-----------|
| 11,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 11.5.1 | 6mm 2 core PVC SWA Cable | m | | | rate only |
| 11.5.2 | 4mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 11.5.3 | 6mm 2 core cable | No | 1 | | |
| 11.5.4 | 4mm BCEW | No | 1 | | |
| 11,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 11.6.1 | 20mm PVC Conduit | m | | | rate only |
| 11.6.2 | 25mm PVC Conduit | m | 60 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 11.6.3 | 20mm PVC Conduit | m | 40 | | |
| 11.6.4 | 25mm PVC Conduit | m | | | rate only |
| 11.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 11.6.5 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 11.6.6 | 20mm diameter 4 way type(round box) | No | 16 | | |
| 11.6.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 11,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 11.7.1 | 100 x 50 x 50mm | No | 3 | | |
| 11.7.2 | 100 x 100 x 50mm | No | 4 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 11,8 | PVC Wiring in conduits: | | | | |
| 11.8.1 | 2.5mm² for lights circuits | m | 100 | | |
| 11.8.2 | 4mm² for plug sockets circuits | m | 150 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 11.8.3 | 2.5mm² for lights circuits | m | 100 | | |
| 11.8.4 | 4mm² for plug sockets circuits | m | 150 | | |
| 11,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 11.11.1 | 1 Lever 1 way | No | 3 | | |
| 11.11.2 | 1 Lever 2 way | No | | | rate only |
| 11.11.3 | 2 Lever 2 way | No | | | rate only |
| 11.11.4 | Photo cell | No | 1 | | |
| 11.11.4 | Occupancy Sensors | No | 2 | | |
| 11,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 11.10.1 | 16A 3 pin double socket outlets | No | 2 | | |
| 11.10.2 | Type D: Wall mounted power cluster socket outlets | No | | | rate only |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|---|--|-----------|
| 11,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 11.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 2 | | |
| 11.11.2 | Type F2: 1x26W 1200mm T5 Open Channel Fluorescent Light | No | | | rate only |
| 11.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | rate only |
| 11.11.4 | Type B1: Ceiling mounted bulkhead 2x 18W CFL | No | 4 | | |
| 11,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 11.11.1 | Building installation | Sum | 1 | | |
| 11,13 | Others | | | | |
| 11.11.1 | 300 x 300mm - Telephone & Data DB | No | 1 | | |
| 11.11.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 11.11.3 | 2 compartment power skirting installed in offices | m | 3 | | |
| 11.11.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 1 | | |
| 11.11.5 | 16A power socket outlet on power skirting | No | 2 | | |
| 11.11.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | 1 | | |
| 11.11.7 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | | | rate only |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|--|------|----------|------|-----------|
| 12 | <u>CHANGE ROOMS & TUCKSHOP</u> | | | | |
| 12,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services Allowance must be made for the sifting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks. | | | | |
| 12.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 12.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 12.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 12,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 12.2.1 | 75mm Diameter for Data | m | | | rate only |
| 12.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 12.2.3 | 75mm Diameter | No | | | rate only |
| 12.2.7 | 110mm Diameter | No | | | rate only |
| 12,3 | Draw Wires | | | | |
| 12.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 150 | | |
| 12,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 12.4.1 | Distribution Board (DB-CR & TS) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 12,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 12.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 12.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 12.5.3 | 60mm 2 core cable | No | 1 | | |
| 12.5.4 | 10mm BCEW | No | 1 | | |
| 12,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 12.12.1 | 20mm PVC Conduit | m | 80 | | |
| 12.12.2 | 25mm PVC Conduit | m | 90 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 12.12.3 | 20mm PVC Conduit | m | 200 | | |
| 12.12.4 | 25mm PVC Conduit | m | | | rate only |
| 12.12.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 12.12.6 | 20mm diameter 4 way type(round box) | No | 46 | | |
| 12.12.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 12,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 12.12.1 | 100 x 50 x 50mm | No | 18 | | |
| 12.12.2 | 100 x 100 x 50mm | No | 22 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|------|--|-----------|
| 12,8 | PVC Wiring in conduits: | | | | |
| 12.12.1 | 2.5mm ² for lights circuits | m | 900 | | |
| 12.12.2 | 4mm ² for plug sockets circuits | m | 1350 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 12.12.3 | 2.5mm ² for lights circuits | m | 900 | | |
| 12.12.4 | 4mm ² for plug sockets circuits | m | 1350 | | |
| 12,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 12.9.1 | 1 Lever 1 way | No | 14 | | |
| 12.9.2 | 1 Lever 2 way | No | 6 | | |
| 12.9.3 | 2 Lever 2 way | No | | | rate only |
| 12.9.4 | Photo cell | No | 1 | | |
| 12.9.4 | Occupancy Sensors | No | 15 | | |
| 12,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 12.10.1 | 16A 3 pin single socket outlets | No | 4 | | |
| 12.10.2 | 16A 3 pin double socket outlets | No | 8 | | |
| 12.10.3 | Type D: Wall mounted power cluster socket outlets | No | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 12,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 12.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 18 | | |
| 12.11.2 | Type F2: 2x26W 1200mm T8 Vapour Proof Light | No | 4 | | |
| 12.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | |
| 12.11.4 | Type B1: Wall mounted bulkhead 2x 18W LED | No | 24 | | |
| 12,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 12.12.1 | Building installation | Sum | 1 | | |
| 12,13 | Others | | | | |
| 12.13.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 12.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 12.13.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 12.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | | | rate only |
| 12.13.5 | 16A power socket outlet on power skirting | No | | | rate only |
| 12.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 12.13.7 | Provide sum of R30000.00 for re routing of existing electrical works conversion | Sum | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|--|------|----------|------|-----------|
| 13 | <u>GRADE R CLASSROOMS</u> | | | | |
| 13,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services Allowance must be made for the sifting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks. | | | | |
| 13.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 13.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 13.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 13,2 | Cable and Data Sleeves Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 13.2.1 | 75mm Diameter for Data | m | | | rate only |
| 13.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 13.2.3 | 75mm Diameter | No | | | rate only |
| 13.2.7 | 110mm Diameter | No | | | rate only |
| 13,3 | Draw Wires | | | | |
| 13.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 150 | | |
| 13,4 | Distribution Boards Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 13.4.1 | Distribution Board (DB-Grade R) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 13,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 13.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 13.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 13.5.3 | 60mm 2 core cable | No | 1 | | |
| 13.5.4 | 10mm BCEW | No | 1 | | |
| 13,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 13.13.1 | 20mm PVC Conduit | m | 80 | | |
| 13.13.2 | 25mm PVC Conduit | m | 90 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 13.13.3 | 20mm PVC Conduit | m | 200 | | |
| 13.13.4 | 25mm PVC Conduit | m | | | rate only |
| 13.13.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 13.13.6 | 20mm diameter 4 way type(round box) | No | 42 | | |
| 13.13.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 13,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 13.13.1 | 100 x 50 x 50mm | No | 10 | | |
| 13.13.2 | 100 x 100 x 50mm | No | 14 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 13,8 | PVC Wiring in conduits: | | | | |
| 13.13.1 | 2.5mm² for lights circuits | m | 900 | | |
| 13.13.2 | 4mm² for plug sockets circuits | m | 600 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 13.13.3 | 2.5mm² for lights circuits | m | 900 | | |
| 13.13.4 | 4mm² for plug sockets circuits | m | 600 | | |
| 13,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 13.9.1 | 1 Lever 1 way | No | 8 | | |
| 13.9.2 | 1 Lever 2 way | No | 4 | | |
| 13.9.3 | 2 Lever 2 way | No | | | rate only |
| 13.9.4 | Photo cell | No | 1 | | |
| 13.9.4 | Occupancy Sensors | No | 12 | | |
| 13,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 13.10.1 | 16A 3 pin single socket outlets | No | 2 | | |
| 13.10.2 | 16A 3 pin double socket outlets | No | 3 | | |
| 13.10.3 | Type D: Wall mounted power cluster socket outlets | No | 3 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 13,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 13.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 18 | | |
| 13.11.2 | Type F2: 2x26W 1200mm T8 Vapour Proof Light | No | 4 | | |
| 13.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | | | |
| 13.11.4 | Type B1: Wall mounted bulkhead 2x 18W LED | No | 24 | | |
| 13,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 13.12.1 | Building installation | Sum | 1 | | |
| 13,13 | Others | | | | |
| 13.13.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 13.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 13.13.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 13.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | | | rate only |
| 13.13.5 | 16A power socket outlet on power skirting | No | | | rate only |
| 13.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 13.13.7 | Provide sum of R60000.00 for DSTV SAT & TVs | Sum | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 14 | <u>NUTRITION CENTRE - KITCHEN</u> | | | | |
| 14,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 14.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 14.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 14.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 14,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 14.2.1 | 75mm Diameter for Data | m | | | rate only |
| 14.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 14.2.3 | 75mm Diameter | No | | | rate only |
| 14.2.7 | 110mm Diameter | No | | | rate only |
| 14,3 | Draw Wires | | | | |
| 14.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 100 | | |
| 14,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 14.4.1 | Distribution Board (DB-NTR) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|-----|--|-----------|
| 14,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 14.5.1 | 16mm 2 core PVC SWA Cable | m | | | rate only |
| 14.5.2 | 10mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 14.5.3 | 16mm 4 core cable | No | 1 | | |
| 14.5.4 | 10mm BCEW | No | 1 | | |
| 14,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 14.14.1 | 20mm PVC Conduit | m | | | rate only |
| 14.14.2 | 25mm PVC Conduit | m | 200 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 14.14.3 | 20mm PVC Conduit | m | 250 | | |
| 14.14.4 | 25mm PVC Conduit | m | | | rate only |
| 14.14.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 14.14.5 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 14.14.6 | 20mm diameter 4 way type(round box) | No | 44 | | |
| 14.14.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 14,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 14.7.1 | 100 x 50 x 50mm | No | 10 | | |
| 14.7.2 | 100 x 100 x 50mm | No | 16 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 14,8 | PVC Wiring in conduits: | | | | |
| 14.8.1 | 2.5mm ² for lights circuits | m | 900 | | |
| 14.8.2 | 4mm ² for plug sockets circuits | m | 600 | | |
| 14.8.3 | 6mm ² for plug sockets circuits | m | 100 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 14.8.3 | 2.5mm ² for lights circuits | m | 900 | | |
| 14.8.4 | 4mm ² for plug sockets circuits | m | 700 | | |
| 14,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 14.9.1 | 1 Lever 1 way | No | 4 | | |
| 14.9.2 | 1 Lever 2 way | No | 2 | | |
| 14.9.3 | 2 Lever 2 way | No | 2 | | |
| 14.9.4 | Photo cell | No | 1 | | |
| 14.9.4 | Occupancy Sensors | No | 6 | | |
| 14,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 14.10.1 | 16A 3 pin double socket outlets | No | 10 | | |
| 14.10.2 | Type D: Wall mounted power cluster socket outlets | No | | | rate only |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|----|--|-----------|
| 14,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 14.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 10 | | |
| 14.11.2 | Type W2: 2x26W 1200mm T5 LED Vapour Proof I Fluorescent Light | No | 12 | | |
| 14.11.3 | Type F: 50 W Flood Light | No | 1 | | |
| 14.11.4 | Type B1: Ceiling mounted bulkhead 18W CFL | No | 18 | | |
| 14,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 14.12.1 | Building installation | Sum | 1 | | |
| 14,13 | Others | | | | |
| 14.14.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 14.14.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | 1 | | |
| 14.14.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 14.14.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | 1 | | |
| 14.14.5 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 14.14.6 | Supply and install a 200L Solar Water Geyser | No | 1 | | |
| 14.14.7 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | 8 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 15 | <u>SCHOOL HALL</u> | | | | |
| 15,1 | General trenching work for sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 15.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 15.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 15.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 15,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 15.2.1 | 75mm Diameter for Data | m | | | rate only |
| 15.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 15.2.3 | 75mm Diameter | No | | | rate only |
| 15.2.7 | 110mm Diameter | No | | | rate only |
| 15,3 | Draw Wires | | | | |
| 15.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 200 | | |
| 15,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays, doors, switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 15.15.1 | Distribution Board (DB-HALL) | No. | 1 | | |
| 15.15.2 | Distribution Board (DB-STAGE) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|-----|-----|--|-----------|
| 15,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 15.15.1 | 25mm 4 core PVC SWA Cable | m | | | rate only |
| 15.15.2 | 16mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 15.15.3 | 25mm 2 core cable | No | 1 | | |
| 15.15.4 | 16mm BCEW | No | 1 | | |
| 15,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 15.6.1 | 20mm PVC Conduit | m | 200 | | |
| 15.6.2 | 25mm PVC Conduit | m | 250 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 15.6.3 | 20mm PVC Conduit | m | 150 | | |
| 15.6.4 | 25mm PVC Conduit | m | 100 | | |
| 15.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| | Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 15.6.6 | 20mm diameter 4 way type(round box) | No | 65 | | |
| 15.6.7 | 450 x 450mm Bonding tray in roof space | No | 0 | | |
| 15,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 15.7.1 | 100 x 50 x 50mm | No | 20 | | |
| 15.7.2 | 100 x 100 x 50mm | No | 32 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|------|--|-----------|
| 15,8 | PVC Wiring in conduits: | | | | |
| 15.8.1 | 2.5mm² for lights circuits | m | 1800 | | |
| 15.8.2 | 4mm² for plug sockets circuits | m | 900 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 15.8.3 | 2.5mm² for lights circuits | m | 1800 | | |
| 15.8.4 | 4mm² for plug sockets circuits | m | 900 | | |
| 15,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 15.9.1 | 1 Lever 1 way | No | 8 | | |
| 15.9.2 | 1 Lever 2 way | No | 6 | | |
| 15.9.3 | 2 Lever 2 way | No | 6 | | |
| 15.9.4 | Photo cell | No | 1 | | |
| 15.9.4 | Occupancy Sensors | No | 7 | | |
| 15.10 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 15.10.1 | 16A 3 pin double socket outlets | No | 25 | | |
| 15.10.2 | Type D: Wall mounted power cluster socket outlets | No | | | rate only |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | | |
|---|---|-----|----|--|--|-----------|
| 15,11 | Light Fittings | | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | | |
| 15.15.1 | Type A2: 3x28W 1200mmx60mm T8 High bay Light Emergency | No | 6 | | | |
| 15.15.2 | Type A2: 3x28W 1200mmx60mm T8 High bay Light | No | 36 | | | |
| 15.15.3 | Type D1: 18 W Ceiling mounted downlighter | No | 20 | | | |
| 15.15.4 | Type B1: Wall /Ceiling mounted bulkhead 2x 18W CFL | No | 16 | | | |
| 15.15.5 | Type R: Ceiling mounted 2x 18W RHONDO H Downlighter | No | 18 | | | |
| 15.15.6 | Beams LED IR Flat Parkcons 7x 18W Luminaire including mounting structure and other accessories | No | 18 | | | |
| 15.15.7 | Moving Head Spot 14X 10W Luminaire including mounting structure and other accessories | No | 6 | | | |
| 15,12 | Electrical Tests | | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | | |
| 15.15.1 | Building installation | Sum | 1 | | | |
| 15,13 | Others | | | | | |
| 15.13.1 | 300 x 300mm - Telephone & Data DB | No | | | | rate only |
| 15.13.2 | Provide the sum of R60.000-00 for P8000 lay-in wiring ducts c/w lighting and ceiling support accessories | Sum | 1 | | | |
| 15.13.3 | Provide the sum of R25000-00 for a 18-channel preset compact dimmer controller desk unit | Sum | 1 | | | |
| 15.13.4 | Provide the sum of R16500-00 for stage lighting chords mount bar etc | Sum | 1 | | | |
| 15.13.5 | Supply and install a 200L Solar Water Geyser | No | 1 | | | |
| 15.13.6 | 20A 2pole Isolator, in suitable York Box, for HVAC | No | 3 | | | |
| 15.13.7 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | 2 | | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | | |

| ITEM | DESCRIPTION | UNIT | QUANTITY | RATE | AMOUNT |
|---|---|------|----------|------|-----------|
| 16 | <u>Ablutions</u> | | | | |
| 16,1 | General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried | | | | |
| 16.1.1 | Trenching through floor for sleeves | m³ | | | rate only |
| 16.1.2 | Excavation and backfilling in soft soil | m³ | | | rate only |
| 16.1.3 | Excavation and backfilling in hard rock | m³ | | | rate only |
| 16,2 | Cable and Data Sleeves | | | | |
| | Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends | | | | |
| 16.2.1 | 75mm Diameter for Data | m | | | rate only |
| 16.2.2 | 110mm Diameter for power cable | m | | | rate only |
| | Radius bends: | | | | |
| 16.2.3 | 75mm Diameter | No | | | rate only |
| 16.2.7 | 110mm Diameter | No | | | rate only |
| 16,3 | Draw Wires | | | | |
| 16.3.1 | Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation | m | 50 | | |
| 16,4 | Distribution Boards | | | | |
| | Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna | | | | |
| 16.16.1 | Distribution Board (DB-ABL) | No. | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|--|-----|----|--|-----------|
| 16,5 | Low Voltage PVC Cables Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 16.5.1 | 10mm 2 core PVC SWA Cable | m | | | rate only |
| 16.5.2 | 6mm BCEW | m | | | rate only |
| | Terminations: | | | | |
| 16.5.3 | 10mm 2 core cable | No | 1 | | |
| 16.5.4 | 6mm BCEW | No | 1 | | |
| 16,6 | Conduit Work Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. Built or Chase into brick or concrete work: | | | | |
| 16.6.1 | 20mm PVC Conduit | m | | | rate only |
| 16.6.2 | 25mm PVC Conduit | m | 30 | | |
| | In Ceiling space and Timber work or along Purlins | | | | |
| 16.6.3 | 20mm PVC Conduit | m | 60 | | |
| 16.6.4 | 25mm PVC Conduit | m | | | rate only |
| 16.6.5 | Girder clamp for chain and wire, STRUTFAST Type AH-1420 | No. | | | rate only |
| 16.6.5 | Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories. | | | | |
| 16.6.6 | 20mm diameter 4 way type(round box) | No | 15 | | |
| 16.6.7 | 450 x 450mm Bonding tray in roof space | No | | | rate only |
| 16,7 | Wall Boxes Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. Flush mounted type: | | | | |
| 16.7.1 | 100 x 50 x 50mm | No | 4 | | |
| 16.7.2 | 100 x 100 x 50mm | No | 2 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|----------------------------------|---|----|-----|--|-----------|
| 16,8 | PVC Wiring in conduits: | | | | |
| 16.8.1 | 2.5mm² for lights circuits | m | 200 | | |
| 16.8.2 | 4mm² for plug sockets circuits | m | 60 | | |
| | Stranded Bare Copper Earth Wire | | | | |
| | Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage. | | | | |
| 16.8.3 | 2.5mm² for lights circuits | m | 200 | | |
| 16.8.4 | 4mm² for plug sockets circuits | m | 60 | | |
| 16,9 | Light Switches | | | | |
| | Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas | | | | |
| 16.16.1 | 1 Lever 1 way | No | 4 | | |
| 16.16.2 | 1 Lever 2 way | No | | | rate only |
| 16.16.3 | 2 Lever 2 way | No | | | rate only |
| 16.16.4 | Photo cell | No | 1 | | |
| 16.16.4 | Occupancy Sensors | No | 2 | | |
| 16,1 | Socket Outlets | | | | |
| | Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface. | | | | |
| | The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification. | | | | |
| | All flush type boxes and special pedestals measured elsewhere. | | | | |
| | Flush switched sockets type: | | | | |
| 16.16.1 | 16A 3 pin double socket outlets | No | 2 | | |
| 16.16.2 | Type D: Wall mounted power cluster socket outlets | No | 0 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|---|---|-----|---|--|-----------|
| 16,11 | Light Fittings | | | | |
| | Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories. | | | | |
| | Fittings to be equal and similar approved to the below quoted manufacture. | | | | |
| 16.11.1 | Type F1: 2x26W 1200mm T5 LED Open Channel Fluorescent Light | No | 6 | | |
| 16.11.2 | Type F2: 1x26W 1200mm T5 Open Channel Fluorescent Light | No | | | rate only |
| 16.11.3 | Type D1: 18 W Ceiling mounted downlighter | No | 0 | | |
| 16.11.4 | Type B1: Wall mounted bulkhead 2x 18W CFL | No | 8 | | |
| 16,12 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 16.16.1 | Building installation | Sum | 1 | | |
| 16,13 | Others | | | | |
| 16.13.1 | 300 x 300mm - Telephone & Data DB | No | | | rate only |
| 16.13.2 | 100 x 100 x 50mm - Draw box for Communication complete with blank cover | No | | | rate only |
| 16.13.3 | 2 compartment power skirting installed in offices | m | | | rate only |
| 16.13.4 | Telephone points on Powerskirting; must include draw box, blank cover plate, etc, | No | | | rate only |
| 16.13.5 | 16A power socket outlet on power skirting | No | | | rate only |
| 16.13.6 | 5A 2pole Isolator, in suitable York Box, for HVAC | No | | | rate only |
| 16.13.7 | 40A Isolator points with complete and suitable fitting, for geyser or cooker | No | | | rate only |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| ITEM | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|-------------|---|--------|-----|------------|--------|
| 17 | PROVISIONAL AMOUNTS | | | | |
| 17,1 | Provide the sum of R550 000.00 for the instalation of Security System and CCTV by specialist service provider in consultation with the Engineer/Consultant | PC Sum | 1 | 550 000,00 | |
| 17,2 | Provide the sum of R300 000.00 for the temporal connection of Park home classrooms by specialist service provider in consultation with the Engineer/Consultant | PC Sum | 1 | 300 000,00 | |
| 17,3 | Provide the sum of R100 000.00 for the demolition of existing Electrical infrastructure by specialist service provider in consultation with the Engineer/Consultant | PC Sum | 1 | 100 000,00 | |
| | TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | |

| ITEM | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|--|---|------|-----|------|--------|
| 18 | <u>Earthing and Lightning Protection System</u> | | | | |
| | Low Voltage Conductor | | | | |
| | Supply and installation of Bare Copper Earth Wire for Earthing and Bonding on earth mat with connecting accessories | | | | |
| 18,1 | Bonding and Earth Conductors | | | | |
| 18.1.1 | Bonding Conductor 16mm ² CU conductor & connecting accessories | m | 600 | | |
| 18.1.2 | Earth Conductor 50mm ² CU conductor & connecting accessories | m | 400 | | |
| 18.1.3 | Air terminating Conductor 50mm ² Al conductor & connecting accessories | m | 900 | | |
| 18.1.4 | Exometric weld | No | 60 | | |
| 18,2 | Earth Electrode | | | | |
| | Supply and installation of PVC SWA PVC cable and Bare Copper Earth Wire in sleeves and in trenches | | | | |
| 18.2.1 | Earth spikes 1,2m long and accessories | No | 82 | | |
| 18,3 | Conduit Work | | | | |
| | Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories. | | | | |
| | Built or Chase into brick or concrete work: | | | | |
| 18.3.1 | 25mm PVC Conduit | m | 200 | | |
| 18.3.2 | 30mm Galvanised Conduit | m | 300 | | |
| 18,4 | Test Joint Wall Boxes | | | | |
| | Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work. | | | | |
| | Surface mounted type: | | | | |
| 18.4.1 | 100 x 100 x 50mm box for LPS with clamps | No | 40 | | |
| 18.4.1 | 100 x 100 Blank cover for LPS | No | 40 | | |
| 18,5 | Electrical Tests | | | | |
| | Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate. | | | | |
| 18.5.1 | Soil resistivity Test | Sum | 1 | | |
| 18.5.2 | Risk Assessment | Sum | 1 | | |
| 18.5.3 | Installations accessories including surge protection devices etc | Sum | 1 | | |
| 9.5.4 | Certificate of Compliance as per IEC 62305:2010-2012 | Sum | 1 | | |
| 18,6 | Others | | | | |
| 18.6.1 | As Built documentation | No | 1 | | |
| 18.6.2 | Service detection tests | No | 0 | | |
| 18.6.3 | Sundries and other associated items | No | 1 | | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| | Description | Unit | QTY | Rate | Total Price |
|---|---|------|-----|------|-------------|
| 19 | <u>50kw Solar PV System</u> | | | | |
| 19,1 | Solar Panels and associated equipment | | | | |
| 19.1.1 | Canadian Solar/ JA Solar 540W Monocrystalline with MC4 connectors or similar and approved | No | 112 | | |
| 19.1.2 | Aluminuim mounting Structure on IBR/Tile/Kliplock Roof (per panel), including end clamps, mid clamps, end clamps, rails, screws and waterproofing | No | 112 | | |
| 19.1.3 | MC4 IP65-DC INLINE FUSE -15A-1000V | No | 26 | | |
| 19,2 | Inverter and associated equipment | | | | |
| 19.2.1 | ATESS HPS 50kW Hybrid Inverter | No | 1 | | |
| 19.2.2 | ATESS 50kW ATS | No | 1 | | |
| 19.2.3 | ATESS 200A Current Transformers (set) | No | 1 | | |
| 19.2.4 | ATESS Shinemaster | No | 1 | | |
| 19.2.4 | ATESS smart energy meter for HPS range of hybrid inverters. | No | 1 | | |
| 19,3 | DC Components | | | | |
| 19.3.1 | 1000V Connector for solar modules PAIR | No | 52 | | |
| 19.3.2 | 6mm2 single-core PV DC cable - Pair | m | 650 | | |
| 19.3.3 | 16mm2 single-core PV DC cable - Pair | m | 50 | | |
| 19.3.4 | DC Breaker 1000V 100A 15kA with enclosure and hand isolator | No | 1 | | |
| 19.3.5 | Single String 2Pole DC Switch Disconnecter 16A 1000V | No | 13 | | |
| 19.3.6 | Single String 2Pole DC DEHN or similar and approved PV surge arrestor | No | 13 | | |
| 19.3.7 | PV on Roof and Hazard Labels Pack | No | 1 | | |
| 19.3.8 | Protection/Combiner Box with 200A Busbars, galvanised, with 100A 15kA breaker | No | 1 | | |
| 19.3.9 | 6sqmm PVC earth wire | m | 100 | | |
| 19.3.10 | 1.2m Cu clad Earth Spike with lug | No | 3 | | |
| 19.3.11 | Dual length of P2000 steel trunking 1.6mm with steel cover, mounted side by side (+ & -), c/w splices, bends, Tees, rivets, waterproofing | m | 200 | | |
| 19.3.12 | Steel 25sqmm galvanised conduit to feed into trunking c/w bends, end caps, glands, bends, brass bushes and locknuts | m | 150 | | |
| 19,4 | Battery and Associated components | | | | |
| 19.4.1 | Freedom Won Lite Business 80/64 HV Battery | | 1 | | |
| 19.4.2 | 50sqmm single core flexible battery cable | | 20 | | |
| 19.4.3 | MC4 Pre terminated cable 2m (1 Pack) | | 25 | | |
| TOTAL FOR BILL - CARRIED FORWARD | | | | | |

| TOTAL FOR BILL - BROUGHT FORWARD | | | | | |
|--|--|----|-----|----------|--|
| 19,5 | AC Components | | | | |
| 19.5.1 | 200A Three Phase supply 15kA breaker installed in main Kiosk including wiring and Class I+II Surge Arrestors inc. Earthing | No | 1 | | |
| 19.5.2 | Three Phase AC Switch Disconnecter 100A 15kA with enclosure and hand isolator | No | 1 | | |
| 19.5.3 | 200A Three Phase AC Change Over Switch with enclosure and hand isolator | No | 1 | | |
| 19.5.4 | 95sqmm 4c ECC cable from DB to ATESS ATS Change Over Panel | m | 10 | | |
| 19.5.5 | 70sqmm 4c ECC cable from Generator to ATESS ATS Change Over Panel | m | 10 | | |
| 19.5.6 | 35sqmm 4c ECC cable from ATESS ATS Change Over Panel to ATESS Inverter | m | 10 | | |
| 19.5.7 | 35sqmm 4c ECC cable from ATESS Inverter to Manual Change Over Switch | m | 10 | | |
| 19.5.8 | 35sqmm 4c ECC cable from Manual Change Over Switch to Loads | m | 10 | | |
| 19.5.9 | 2.5sqmm 4c SWA Control cable from Generator to ATESS INVERTER | m | 100 | | |
| 19.5.10 | New DB for Essential loads, Tie into existing DB | No | 1 | | |
| 19,6 | Delivery, P&Gs and Installation | | | | |
| 19,7 | Trip from JHB | | 1 | | |
| 19,8 | Installation | | 1 | | |
| 19,9 | P&Gs | | 1 | | |
| 19.10 | Safety | | 1 | | |
| | Proof of PV Greencard Certification | | | Required | |
| | Proof of ECSA registered engineer to sign off | | | Required | |
| | COC for solar installation, Proof of Department of Labour registration | | | Required | |
| TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY | | | | | |

| MOROKWENG PRIMARY SCHOOL | | |
|---|--|--------|
| SUMMARY: MECHANICAL WORKS INSTALLATION | | |
| SECTION | DESCRIPTION | AMOUNT |
| 1 | Preliminary and General | |
| 2 | Fire Protection | |
| 3 | Water Supply | |
| 4 | Drainage | |
| 5 | Heating, Ventilation, and Air Conditioning - Split Systems | |
| 6 | LP Gas | |
| 7 | Kitchen Equipment | |
| | SUB TOTAL 1 | |
| | CONTINGENCIES @ 10% | |
| | SUB TOTAL 2 | |
| | 15% VAT | |
| TOTAL BID PRICE (VAT Incl) | | |

| ITEM | REF | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------------|---------------|--|------|-----|------|--------|
| 2 | | FIRE PROTECTION | | | | |
| | | Supply, delivery, installation, commissioning and testing of Fire Protection Systems complete with connections and fittings in Accordance with SANS 10400 Part T and SANS 10400 Part W | | | | |
| 2.1 | FHR/FH | Supply, delivery, installation, commissioning and testing of Fire Hydrants & Fire Hose Reels | | | | |
| 2.1.1 | | Φ100 Two Port Booster with Pressure Guage (FPC) - Please align to SQS for Fire Protection | No | 1 | | |
| 2.1.2 | | Φ100mm Storz Hydrant – Φ100mm female BSP inlet & Φ100mm Storz outlet (FPH) | No | 1 | | |
| 2.1.3 | | Φ65mm Outlet Outdoor Type Fire Hydrant (FH) | No | 5 | | |
| 2.1.4 | | Φ65mm, 30m MET Lay flat hose with coupling | No | 0 | | |
| 2.1.5 | | Φ100mm Non Return Valve and two gate valves | No | 1 | | |
| 2.1.6 | | Φ25mm Galvanised Steel (SABS 62) Piping for Connection of Fire Hose Reels | m | 100 | | |
| 2.1.7 | | Φ32mm Galvanised Steel (SABS 62) Piping for Connection of Fire Hose Reels | m | 60 | | |
| 2.1.8 | | Φ40mm Class 16 HDPE Piping for Connection of Fire Hose Reels | m | 105 | | |
| 2.1.9 | | Φ65mm Galvanised Steel (SABS 62) Piping for Connection of Fire Hydrants | m | 150 | | |
| 2.1.10 | | Φ80mm Class 16 uPVC Piping for Connection of Fire Hydrants | m | 100 | | |
| 2.1.11 | | Φ110mm Class 16 uPVC Piping Mains Connection | m | 550 | | |
| 2.1.12 | | Pipe Supports at Dia. 25mm Galavanised Reticulation at a manimum interval of 2.4m, Reducing Valves, Fittings and Accessories (Fire Hose Reels) | Sum | 1 | | |
| 2.1.13 | | Pipe Supports at Dia. 32mm Galavanised Reticulation at a minimum interval of 2.7 m, Reducing Valves, Fittings and Accessories (Fire Hose Reels) | Sum | 1 | | |
| 2.1.14 | | Pipe Supports at Dia. 40mm HDPE at a minimum interval of 0.5m, Reducing Valves, Fittings and Accessories (Fire Hose Reels) | Sum | 1 | | |
| 2.1.15 | | Pipe Supports at Dia. 80mm Galavanised Reticulation at a minimum interval of 4m, Reducing Valves, Fittings and Accessories (Fire Hydrants) | Sum | 1 | | |
| 2.1.16 | | Pipe Supports at Dia. 80mm uPVC at a minimum interval of 0.9m, Reducing Valves, Fittings and Accessories (Fire Hydrants) | Sum | 1 | | |
| 2.1.17 | | Pipe Supports at Dia. 110mm uPVC at a minimum interval of 1.2m, Reducing Valves, Fittings and Accessories (Fire Hydrants) | Sum | 1 | | |
| 2.1.18 | | Red Oxide Imperial Paint | L | 10 | | |
| 2.1.19 | | Open Fire Hose Cabinet (This unit is only required for the refuse yard hose reel) | No | 18 | | |
| | | PUMP ROOM PUMPHOUSE PIPEWORK & ELECTRICAL CONNECTIONS | | | | |
| 2.1.20 | | 300.0 m ³ Steel Panel Water Storage Tank complete with accessories and fixtures - mounitng plinths, strainers, non-return valves, ball valves, and inlet and outlet manifolds | No | 1 | | |
| | | Please you m ust measure from the standard drawing. NB | | | | |
| 2.1.18 | | End suction Vertical centrifugal pump type, fire pump complete with 42l/s at a total head of 5.5 Bar including by pass arrangement for periodical testing of the working of the pump set as required, strainer on suction side and pressure gauge on delivery side etc.The pump shall be provided with mechanical seals.and outlet manifoldsThe above mounted on a base, pre-piped, pre-wired and tested. Stanby pump connected to diesel generator. | No | 2 | | |
| 2.1.19 | | Squirel cage A.C induction motor suitable for operation on 415V, 3 Phase 50Hz A.C supply and of minimum 100kW for the above pump with flexible coupling as per specification | No | 1 | | Incl. |
| 2.1.20 | | All coupling of pump and motor should be covered with safety guard | | | | Incl. |
| 2.1.21 | | Jockey Pump: 1.5 L/s @ 5.5 Bar Jockey Electrically driven (Not required) | No | 1 | | Incl. |
| 2.1.22 | | | | | | |
| 2.1.23 | | PUMP ROOM PUMPHOUSE PIPEWORK & ELECTRICAL CONNECTIONS | | | | |
| 2.1.24 | | All pumphouse pipework and necessary valves as per tender drawings and specification | Sum | 1 | | Incl |
| 2.1.25 | | All electrical panels, cabling, safeties, switches, etc for electrical pump, jockey pump and any other equipment housed within the pump house (You cannot measur eth pumps again) | Sum | 1 | | Incl. |

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| 2.2 | FE | Supply, delivery, installation, commissioning and testing of Fire Extinguishers complete with chevron board | | | | |
| 2.2.1 | | 30m, 20mm diameter, non-swinging rotary pattern type Fire Hose Reels | No | 18 | | |
| 2.2.2 | | 9 kg Dry Chemical Powder Portable Fire Extinguishers | No | 2 | | |
| 2.2.3 | | 10 kg Carbon Dioxide Portable Fire Extinguishers | No | 0 | | |
| 2.2.4 | | 5 kg Carbon Dioxide Portable Fire Extinguishers | No | 7 | | |
| 2.2.5 | | 4.5 kg Dry Chemical Powder Portable Fire Extinguishers | No | 34 | | |
| 2.2.6 | | Fire Extinguishers Cabinet for 5kg CO ₂ (Please the units are inside cupboards we do not require cabinets) | No | 7 | | |
| 2.2.7 | | Fire Extinguishers Cabinet for 4.5kg DCP (Not required) | No | 35 | | |
| 2.2.8 | | Fire Extinguishers Cabinet for 10kg CO ₂ | No | 0 | | |
| 2.2.9 | | Fire Extinguishers Cabinet for 9kg DCP | No | 2 | | |
| 2.2.10 | | Wooden Fire Extinguisher Boards | No | 44 | | |
| 2.3 | ES | Supply, delivery and installation of Evacuation Signage and Fire Escape Doors | | | | |
| 2.3.1 | | E1/E2, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.3.2 | | E1/E2, Size: 380mm x 190mm (h x w) Vertical projecting double sided photoluminescent sign framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 20 | | |
| 2.3.3 | | E2, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.3.4 | | E1, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.3.5 | | E3, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 40 | | |
| 2.3.6 | | E16/E17, Size: 190mm x 570mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 14 | | |
| 2.3.7 | | E13/E14, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.3.8 | | E13, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4 | FS | Supply, delivery and installation of Fire Equipment Signage | | | | |
| 2.4.1 | | F2/F3, Size: 190mm x 760mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4.2 | | F1, Size: 190mm x 760mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4.3 | | F5/F6, Size: 190mm x 570mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 10 | | |

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| 2.4.4 | F5, Size: 190mm x 570mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4.5 | F4, Size: 190mm x 570mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 10 | | |
| 2.4.6 | F18/F21, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4.7 | F5, Size: 190mm x 870mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 0 | | |
| 2.4.8 | F16/F19, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 12 | | |
| 2.4.9 | F13, Size: 190mm x 380mm (h x w) Double sided photoluminescent sign with back plate framed in natural anodised aluminium. Supply and install with steel wire and ceiling hook/onto mild steel bracket at 3.0 meters from finished floor level/mechanically mounted onto wall/fixture. | No | 8 | | |
| 2.5 | Testing and Commissioning of all Fire Protection Installations | | | | |
| 2.5.1 | Testing and Commissioning of all Fire Protection Installations | Sum | 1 | | |
| TOTAL BOUGHT DOWN (FIRE PROTECTION) | | | | | |

| ITEM | REF | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------------|-----------|---|------|-----|------|--------|
| 3 | | WET SERVICES - | | | | |
| | | Supply, delivery, installation, commissioning and testing of New water supply and waste water drainage piping, complete connections and fittings. | | | | |
| 3,1 | SW | Supply, delivery, installation, commissioning and testing of Cold/Hot Water Supply system | | | | |
| 3.1.1 | | Φ15mm 460/ Copper Piping for Connection of Hot Water Supply Piping complete with connections, reducers and fittings | m | 100 | | |
| 3.1.2 | | Φ15mm Galvanised Piping for Connection of Cold Water Supply Piping complete with connections, reducers and fittings | m | 100 | | |
| 3.1.3 | | Φ22mm 460/0 Copper Piping for Connection of Hot Water Supply Piping complete with connections, reducers and fittings | m | 120 | | |
| 3.1.4 | | Φ20mm Galvanised Piping for Connection of Cold Water Supply Piping complete with connections, reducers and fittings | m | 120 | | |
| 3.1.5 | | Φ40mm HDPE Piping for Connection of Cold Water Supply Piping complete with connections, reducers and fittings | m | 120 | | |
| 3.1.6 | | SABS Approved Copper Adjustable Pressure Reducing Valves | Sum | 1 | | |
| 3.1.7 | | Stop/Gate Valves | Sum | 1 | | |
| 3.1.8 | | Pipe Supports at Dia. 15mm Galavanised Reticulation at a manimum interval of 2.4m, Reducing Valves, Fittings and AccessoriesAccessories (Braided Connectors, Elbows, Tees and etc.) | Sum | 1 | | |
| 3.1.9 | | Pipe Supports at Dia. 15mm Copper Reticulation at a manimum interval of 1.8m, Reducing Valves, Fittings and AccessoriesAccessories (Braided Connectors, Elbows, Tees and etc.) | Sum | 1 | | |
| 3.1.10 | | Pipe Supports at Dia. 22mm Copper Reticulation at a manimum interval of 2.4m, Reducing Valves, Fittings and AccessoriesAccessories (Braided Connectors, Elbows, Tees and etc.) | Sum | 1 | | |
| 3.1.11 | | Pipe Supports at Dia. 20mm Galvanised Reticulation at a manimum interval of 2.4m, Reducing Valves, Fittings and AccessoriesAccessories (Braided Connectors, Elbows, Tees and etc.) | Sum | 1 | | |
| 3.1.12 | | Pipe Supports at Dia. 40mm HDPE Reticulation at a manimum interval of 0.5m, Reducing Valves, Fittings and AccessoriesAccessories (Braided Connectors, Elbows, Tees and etc.) | Sum | 1 | | |
| 3,2 | | Hot Water | | | | |
| | | Solar Geysers | | | | |
| 3.2.1 | | 150L Indirect Solar Geyser with electric backup element | No | 1 | | |
| 3.2.2 | | 250L Indirect Solar Geyser with electric backup element | No | 3 | | |
| 3.2.3 | | 200L Indirect Electric Geyser | No | 1 | | |
| 3.2.4 | | 6kW Tankless system @ 10 L/min Flow Rate (Consulting/Treatment Rooms) | No | 2 | | |
| 3.2.5 | | Glycol 5L Bottle (food grade) | No | 3 | | |
| 3.2.6 | | Pipe 22x5.5m 460/0 Copper Tube | No | 3 | | |
| 3.2.7 | | Insul 7/8x1/2 Insuflex 22x13mmx1.83m | m | 10 | | |
| 3.2.8 | | Bottom Angle Bracket | No | 2 | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

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| 3.2.9 | | Consumables | Sum | 1 | | |
| 3.2.10 | | Parts Kit | Sum | 1 | | |
| 3.2.11 | | Hydroboil complete with fittings and electrical accessories | Sum | 2 | | |
| 3.3 | TC | Testing and Commissioning | | | | |
| 3.3.1 | | Testing and Commissioning of all Fire Protection Installations | Sum | 1 | | |
| TOTAL BROUGHT DOWN (WET SERVICES) | | | | | | |

| ITEM | REF | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|--------------|-----------|--|------|-----|------|--------|
| 4 | | WET SERVICES - DRAINAGE | | | | |
| | | Supply, delivery, installation, commissioning and testing of new drainage piping, complete with connections and fittings. | | | | |
| 4.1 | DW | Supply, delivery, installation, commissioning and testing of new drainage piping, complete with connections and fittings. | | | | |
| 4.1.1 | | uPVC drain pipe or silimar approved, to duct and walls including brackets & support to manufacturers specifications | | | | |
| 4.1.1.1 | | 110 mm pipe | m | 150 | | |
| 4.1.1.2 | | 50 mm Pipe | m | 180 | | |
| 4.1.1.3 | | 40mm Pipe | m | 150 | | |
| 4.1.2 | | Extra over uPVC drainage pipe fittings | | | | |
| | | Bends | | | | |
| 4.1.2.1 | | 110 mm Bend 22.5°/87.5° | No | 25 | | |
| 4.1.2.2 | | 110 mm Bend 45° | No | 25 | | |
| 4.1.2.3 | | 110 mm Bend 45° Access Bend Left and Right Hand | No | 13 | | |
| 4.1.2.4 | | 50 mm Bend 22.5°/8.5° | No | 20 | | |
| 4.1.2.5 | | 50 mm Bend 45° | No | 15 | | |
| 4.1.2.6 | | 50 mm Bend 45° Access Heel | No | 30 | | |
| 4.1.2.7 | | 50 mm Bend 22.5°/87.5° Access Heel | No | 30 | | |
| 4.1.2.8 | | 40mm x 45° Bend | No | 20 | | |
| 4.1.2.9 | | 40mm x 87.5° Bend | No | 15 | | |
| 4.1.2.10 | | 40mm x 45° Bend Accss Heel | No | 15 | | |
| 4.1.2.11 | | 40mm x 87.5° Bend Heel | No | 18 | | |
| | | Junctions | | | | |
| 4.1.2.12 | | 110 mm Junction 45° Ribbed Plain | No | 17 | | |
| 4.1.2.13 | | 110 mm Junction 45° Ribbed Left Hand | No | 18 | | |
| 4.1.2.14 | | 110 mm Junction 45° Ribbed Right Hand | No | 19 | | |

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|----------|---|----|----|--|--|
| 4.1.2.15 | 50mm x 45mm Single Junction Plain | No | 23 | | |
| 4.1.2.16 | 50mm x 45mm Single Junction Access Heel | No | 23 | | |
| 4.1.2.17 | 50mm x 50mm x 87.5 ⁰ Double Junction Plain | No | 21 | | |
| 4.1.2.18 | 50mm x 50mm x 87.5 ⁰ Double Junction Access Heel | No | 11 | | |
| 4.1.2.19 | 50mm x 87.5 ⁰ Single Junction | No | 10 | | |
| 4.1.2.20 | 50mm x 87.5 ⁰ Single Junction Access Heel | No | 13 | | |
| 4.1.2.21 | 110 mm Junction With Screw Type Access Eye | No | 13 | | |
| | Ball Junction | | | | |
| 4.1.2.22 | 100 mm four way | No | 8 | | |
| | Reducing Junction | | | | |
| 4.1.2.23 | 100 mm x 50mm x 45mm Double Reducing Junction | No | 8 | | |
| 4.1.2.24 | 100 mm x 50mm x 87.5 ⁰ Double Reducing Junction Access Heel | No | 14 | | |
| 4.1.2.25 | 100 mm x 40mm x 87.5 ⁰ mm Double Reducing Junction | No | 13 | | |
| 4.1.2.26 | 100 mm x 40mm x 87.5 ⁰ mm Single Reducing Junction | No | 12 | | |
| 4.1.2.27 | 100 mm x 40mm x 87.5 ⁰ mm Single Reducing Junction Access Heel | No | 13 | | |
| 4.1.2.28 | 100mm x 50mm x 45 ⁰ Single Reducing Junction | No | 8 | | |
| 4.1.2.29 | 100mm x 50mm x 45 ⁰ Single Reducing Junction Access Heel | No | 8 | | |
| 4.1.2.30 | 100mm x 50mm x 87.5 ⁰ Single Reducing Junction Access Heel | No | 13 | | |
| 4.1.2.31 | 100mm x 50mm x 87.5 ⁰ Double Reducing Junction Access Heel | No | 5 | | |
| 4.1.2.32 | 50 mm Reducing junctions | No | 8 | | |
| | Electroweld Couplings | | | | |
| 4.1.2.33 | 110 mm electroweld couplings | No | 5 | | |
| 4.1.2.34 | 50 mm Electroweld couplings | No | 10 | | |
| 4.1.2.35 | 40 mm Electroweld couplings | No | 15 | | |
| | Expansion sockets | | | | |
| 4.1.2.36 | 110mm Single Expansion Sockets | No | 10 | | |
| 4.1.2.37 | 110mm Double Expansion Socket | No | 10 | | |
| 4.1.2.38 | 50mm Single Expansion Socket | No | 12 | | |
| 4.1.2.39 | 50mm Double Expansion Socket | No | 12 | | |

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|------------|------------|--|----|----|--|--|
| 4.1.2.40 | | 40mm Single Expansion Socket | No | 15 | | |
| 4.1.2.41 | | 40mm Double Expansion Socket | No | 15 | | |
| | | Screwed End Caps | | | | |
| 4.1.2.42 | | 110 mm screw on caps | No | 10 | | |
| 4.1.2.43 | | 50 mm Screwed end cap | No | 15 | | |
| 4,2 | MIA | MI ADAPTORS | | | | |
| 4.2.1 | | 50 mm Adaptors | No | 35 | | |
| 4,3 | FIA | FI ADAPTORS | | | | |
| 4.3.1 | | 50 mm adaptors | No | 35 | | |
| 4.3.2 | | Overflow facility to detail 100 mm assembly to detail (junction+short pipe+cleaning eye) | No | 8 | | |
| 4.3.3 | | 100mm PVC Vent Valves 1 way | No | 12 | | |
| 4.3.4 | | 50mm PVC Vent Valves 1 way | No | 8 | | |
| 4.3.5 | | 100mm PVC Vent Valves 2 way | No | 8 | | |
| 4,4 | WU | WASTE UNION | | | | |
| 4.4.1 | | Kessel Dn50 Ultraflat ABS SKU 45000& upper section stainless cover SKU 48201 Shower trap | No | 8 | | |
| 4.4.2 | | Cobra 316 sink waste chromium plated with 70mm flange and 45mm long shank slotted | No | 10 | | |
| 4.4.3 | | Cobra 301 basin waste chromium plated | No | 30 | | |
| 4.4.4 | | Herbish 200SV stainless steel floor drain or similar | No | 5 | | |
| 4.4.5 | | 32mm chromium plated bottle trap | No | 5 | | |
| 4.4.6 | | Geberit 50mm diameter vertical concealed siphonic urinal trap (code 152.94.00.1) | No | 15 | | |
| 4.4.7 | | 50mm Flexi bath combination P trap | No | 15 | | |
| 4.4.8 | | 50mm Flexi mini P trap | No | 10 | | |
| 4.4.9 | | 110 mm Geberit pan connector | No | 5 | | |
| 4.4.10 | | 152.232.00.1 Geberit concealed trap for washing machine, with in-wall cabinet and ready-to fit set 50 - 56 or similar approved | No | 8 | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

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| 4.4.11 | | Marley grease trap MGT700 . Provide unit and install above ground as indicated on plans of buildings in waste pipes of some sinks or groups of sinks. | No | 1 | | |
| 4,5 | TC | Testing and Commissioning | | | | |
| 4.5.1 | | Testing and Commissioning of all Installations | Sum | 1 | | |
| TOTAL BROUGHT DOWN (WET SERVICES) | | | | | | |

| ITEM | REFERENCE | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------------|------------------|---|------|-----|------|--------|
| 5 | | SPLIT SYSTEMS | | | | |
| | | Supply and install Floor Plan Inverter heat pump air-conditioning units complete with fittings and fixtures, avm and (R410a) refrigerant gas for commissioning as specified and shown on the drawing. | | | | |
| 5,1 | MWU 01 | Supply, delivery, installation, commissioning and testing of 2.8 kW cooling capacity midwall split indoor unit (Heat Pump, Inverter, R410) complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection, remote controls and top-up refrigerant | | | | |
| 5.1.1 | | Mid-Wall Split Units, 2.8 kW cooling capacity with Heat Pump and Inverter (SABS Approved or Equivalent) | No | 1 | | |
| 5.1.2 | | Wired Controller | No | 1 | | |
| 5.1.3 | | Chord for Wired Controller | m | 3 | | |
| 5.1.4 | | Interface Adapter for Wired Controller | No | 1 | | |
| 5.1.5 | | Refrigerant piping - Liquid (Φ 9.52mm) Flare Connection | m | 30 | | |
| 5.1.6 | | Refrigerant piping - Gas (Φ 15.9mm) Flare Connection | m | 30 | | |
| 5.1.7 | | Drain piping ID (Φ 25) VP25 | m | 30 | | |
| 5,2 | MWU 02 | Supply, delivery, installation, commissioning and testing of 3.8 kW cooling capacity midwall split indoor unit (Heat Pump, Inverter, R410) complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection, remote controls and top-up refrigerant | | | | |
| 5.2.1 | | Mid-Wall Split Units, 3.8 kW cooling capacity with Heat Pump and Inverter (SABS Approved or Equivalent) | No | 3 | | |
| 5.2.2 | | Wired Controller | No | 3 | | |
| 5.2.3 | | Chord for Wired Controller | m | 9 | | |
| 5.2.4 | | Interface Adapter for Wired Controller | No | 3 | | |
| 5.2.5 | | Refrigerant piping - Liquid (Φ 9.52mm) Flare Connection | m | 60 | | |
| 5.2.6 | | Refrigerant piping - Gas (Φ 15.9mm) Flare Connection | m | 60 | | |
| 5.2.7 | | Drain piping ID (Φ 25) VP25 | m | 60 | | |
| 5,3 | FWCU - 01 | Supply, delivery, installation, commissioning and testing of 5.3 kW cooling capacity corner cassette unit (Heat Pump, Inverter, R410) complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection, remote controls and top-up refrigerant | | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| ITEM | REFERENCE | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|-------|-----------|---|------|-----|------|--------|
| 5.3.1 | FWCU - 02 | Ceiling Mounted Corner Cassette Split Unit, 5.3 kW cooling capacity with Heat Pump and Inverter (SABS Approved or Equivalent) | No | 3 | | |
| 5.3.2 | | Wired Controller | No | 3 | | |
| 5.3.3 | | Chord for Wired Controller | m | 9 | | |
| 5.3.4 | | Interface Adapter for Wired Controller | No | 3 | | |
| 5.3.5 | | Refrigerant piping - Liquid (Φ 9.52mm) Flare Connection | m | 55 | | |
| 5.3.6 | | Refrigerant piping - Gas (Φ 15.9mm) Flare Connection | m | 55 | | |
| 5.3.7 | | Drain piping ID (Φ 25) VP25 | m | 55 | | |
| 5.4 | | Supply, delivery, installation, commissioning and testing of 11.2 kW cooling capacity corner cassette unit (Heat Pump, Inverter, R410) complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection, remote controls and top-up refrigerant | | | | |
| 5.4.1 | | Ceiling Mounted Corner Cassette Split Unit, 11.2 kW cooling capacity with Heat Pump and Inverter (SABS Approved or Equivalent) | No | 1 | | |
| 5.4.2 | | Wired Controller | No | 1 | | |
| 5.4.3 | | Chord for Wired Controller | m | 3 | | |
| 5.4.4 | | Interface Adapter for Wired Controller | No | 1 | | |
| 5.4.5 | | Refrigerant piping - Liquid (Φ 9.52mm) Flare Connection | m | 40 | | |
| 5.4.6 | | Refrigerant piping - Gas (Φ 15.9mm) Flare Connection | m | 40 | | |
| 5.4.7 | | Drain piping ID (Φ 25) VP25 | m | 40 | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| ITEM | REFERENCE | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|---|-------------|---|------|-----|------|--------|
| 5,4 | FWCU - 01/1 | Supply, delivery, installation, commissioning and testing of 8.0 kW cooling capacity corner cassette unit (Heat Pump, Inverter, R410) complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection, remote controls and top-up refrigerant | | | | |
| 5.4.1 | | Ceiling Mounted Corner Cassette Split Unit, 8.0 kW cooling capacity with Heat Pump and Inverter (SABS Approved or Equivalent) | No | 2 | | |
| 5.4.2 | | Wired Controller | No | 2 | | |
| 5.4.3 | | Chord for Wired Controller | m | 6 | | |
| 5.4.4 | | Interface Adapter for Wired Controller | No | 2 | | |
| 5.4.5 | | Refrigerant piping - Liquid (Φ 9.52mm) Flare Connection | m | 40 | | |
| 5.4.6 | | Refrigerant piping - Gas (Φ 15.9mm) Flare Connection | m | 40 | | |
| 5.4.7 | | Drain piping ID (Φ 25) VP25 | m | 40 | | |
| 5.4 | | TEST & COMMISSION | | | | |
| 5.4.1 | | Test and Commission | Item | 1 | | |
| TOTAL CARRIED TO SUMMARY (HVAC, SYSTEM SPLIT UNITS) | | | | | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| ITEM | REF | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------------|---------------|--|------|-----|------|--------|
| 6 | | GAS | | | | |
| | | Supply, delivery, installation, commissioning and testing of LPG gas canisters, connections and other accessories complying with SANS 10087 requirements and to be completed by gas specialists | | | | |
| 6,1 | GC - 1 | Supply, delivery, installation, commissioning and testing of Gas <u>Canisters</u>, pipes and connections (Science Lab) | | | | |
| 6.1.1 | | 48kg LP Gas cylinder | No | 2 | | |
| 6.1.2 | | Ø15mm Schedule 80 steel pipe | m | 80 | | |
| 6.1.3 | | Gas Regulator (Pigtails and changeover valve) | No | 1 | | |
| 6.1.4 | | 15mm Shut off Valve or (coupled combination) | No | 1 | | |
| 6.1.5 | | Other Accessories (Fasteners, joints, tees and etc) | Sum | 10 | | |
| 6,2 | GC - 2 | Supply, delivery, installation, commissioning and testing of Gas Canisters, pipes and connections (Nutrition Centre) | | | | |
| 6.2.1 | | 48kg LP Gas cylinder | No | 4 | | |
| 6.2.2 | | Ø20mm Schedule 80 steel pipe | m | 35 | | |
| 6.2.3 | | Neoprene Pigtails | No | 4 | | |
| 6.2.4 | | Change Over Switch | No | 1 | | |
| 6.2.5 | | 20mm Shut off Valve | No | 4 | | |
| 6.2.6 | | Gas Regulator | No | 1 | | |
| 6.2.7 | | Other Accessories (Fasteners, joints, tees and etc) | Sum | 1 | | |
| 6,3 | GC | Supply, delivery and Installation of Gas Cage | | | | |
| 4.3.2 | | Double Door - 48 kg Cage | No | 3 | | |
| 6,4 | S | Supply, delivery and installation of Gas Warning Signage | | | | |
| 6.4.1 | | 210mm x 210mm Fire Signage | Sum | 1 | | |
| 6,5 | GC - 1 | Supply, delivery, installation, commissioning and testing of Gas Canisters, pipes and connections (Kitchen) | | | | |
| 6.5.1 | | 48kg LP Gas cylinder | No | 2 | | |
| 6.5.2 | | Ø15mm Schedule 80 steel pipe | m | 5 | | |

PROPOSED MOROKWENG PRIMARY SCHOOL

| | | | | | | |
|------------------------------|-----------|---|-----|----|--|--|
| 6.5.3 | | Ø22mm Schedule 80 steel pipe | m | 30 | | |
| 6.5.4 | | Gas Regulator | No | 1 | | |
| 6.5.5 | | 15mm Shut off Valve or (coupled combination) | No | 2 | | |
| 6.5.6 | | 22mm Shut off Valve or (coupled combination) | No | 2 | | |
| 6.5.7 | | 22mm Firemans Shut off Valve or (coupled combination) | No | 1 | | |
| 6.5.8 | | 22mm Change over device 3-Way Valve | No | 1 | | |
| 6.5.9 | | Other Accessories (Fasteners, joints, tees and etc) | Sum | 1 | | |
| 6.5.10 | | Gas Hobs (2 x 4 plates gas cooker hobs) | No | 1 | | |
| 6,6 | TC | Testing and Commissioning | | | | |
| 6.6.1 | | Testing and Commissioning of all Gas Installations | Sum | 1 | | |
| TOTAL CARRIED FORWARD | | | | | | |

| ITEM | REF | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|------------------------------|-----|--|------|-----|------------|--------|
| 7 | | KITCHEN EQUIPMENT | | | | |
| 7,1 | | REFRIGERATION | | | | |
| | | Supply, delivery, installation and commissioning regrigeration system for the kitchen Block. | | | | |
| 7.1.1 | | 285 L Top Loader Deep Freezer | No. | 2 | | |
| 7.1.2 | | 247 L Bottom Freezer Fridge | No. | 1 | | |
| 7,2 | | Extraction Canopy | | | | |
| 7.2.1 | | 3100X750X150 mm Stainless Steel Extract Canopy | No. | 1 | | |
| 7,3 | | Gas Stove | | | | |
| 7.3.1 | | Gas Stove 4 plate burner | No. | 4 | | |
| 7,4 | | Provisional Sum For Additional Kitchen Equipment | Sum | 1 | 100 000,00 | |
| TOTAL CARRIED FORWARD | | | | | | |

| Section No | FINAL SUMMARY | Page No | | Amount |
|------------|---|---------|---|------------|
| 1 | PRELIMINARIES | 23 | | |
| 2 | BLOCK A - GUARD HOUSE | 51 | | |
| 3 | BLOCK B - ADMINISTRATION | 87 | | |
| 4 | BLOCK C - NUTRITION BLOCK | 123 | | |
| 5 | BLOCK D - 1 x 3 GRADE R CLASSROOM BLOCK | 156 | | |
| 6 | BLOCK F: 3 CLASSROOMS + HOD | 184 | | |
| 7 | BLOCK G - COMPUTER BLOCK | 217 | | |
| 8 | BLOCK H - MULTI-PURPOSE CLASSROOM | 241 | | |
| 9 | BLOCK J: MEDIA CENTRE, SCIENCE LAB AND LIBRARY | 265 | | |
| 10 | BLOCKS I, K L: 3 x FOUR CLASSROOM BLOCKS | 290 | | |
| 11 | BLOCK M & E: 2 x THREE CLASSROOM BLOCKS | 319 | | |
| 12 | BLOCK N - SCHOOL HALL | 351 | | |
| 13 | BLOCK O: CHANGE ROOMS/TUCK SHOP | 379 | | |
| 14 | BLOCK P: EXSTING ABLUTIONS | 403 | | |
| 15 | EXTERNAL WORKS | 441 | | |
| 16 | PROVISIONAL SUMS | 444 | | |
| | Sub-total | | R | |
| | ELECTRICAL INSTALLATION | Item | | |
| | FIRE AND MECHANICAL INSTALLATION | Item | | |
| | Sub Total | | R | |
| | Allowance for Contingency at 10% | % | | |
| | Allow for the remuneration of a Community Liaison Officer | Item | | 120,000.00 |
| | Carried Forward | | R | |

[illegible]