

# THOLIMFUNDO PRIMARY SCHOOL

CLIENT



IMPLEMENTING AGENT



## THOLIMFUNDO PS

**RFP 068/2022**

Revision-03

21-August-2023

**CONFIDENTIAL**



**SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT**

**DEFINITIONS**

**1 A1 DEFINITIONS AND INTERPRETATION**

Clause 1.0

Clause 1.0 is amended by the addition of the following clauses:

1.5.7 References to any party to this agreement include its successors or permitted assigns;

1.5.8 References to the contractor include the obligations of its personnel;

1.5.9 References to "month" shall be to a calendar month;

1.5.10 References to any amount shall mean that amount exclusive of VAT, unless the amount expressly includes VAT;

1.5.11 References containing terms such as "best endeavours" when used in connection with an obligation of either party, means taking in good faith and with due diligence all reasonable steps to achieve the objective and to fulfil the obligation at the earliest possible time, including doing all that a reasonable and prudent owner or provider of design and construction services in comparable circumstances would do.

1.5.12 If a definition imposes substantive rights and obligations on a party, such rights and obligations shall be given effect to and shall be enforceable, notwithstanding that they are contained in a definition;

1.5.13 Where any word is defined within the context of any particular clause in this agreement, that word, unless it is clear from the clause in question that word has limited application only to the relevant clause, shall bear the meaning ascribed to it for all purposes in terms of this agreement, notwithstanding that word has not been defined in clause 1.1;

1.5.14 Words defined in this agreement shall bear the same meanings in any annexes or schedules to this agreement unless the annexes or schedules contain their own definitions of such words;

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1.5.15 Where any number of days is prescribed, those days shall be reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day shall be the next succeeding working day;

1.5.16 Words and abbreviations that have well known technical or trade meanings are used in the agreement in accordance with such recognized meanings;

1.5.17 The rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;

1.5.18 The rule of construction that the agreement shall be interpreted against or to the disadvantage of the party responsible for the drafting or preparation of this agreement shall not apply.

1.10 The copyright in all **contract documents, contract drawings** and records (irrespective of who prepared any of the aforesaid) related in any manner to the **works** shall vest in the **employer** and the **contractor** shall not furnish any information in connection with the **works** to any person or organization without the prior written approval of the **employer** to this effect other than subcontractors appointed for purposes of this **agreement**.

1.11 Any provision in this agreement that is or may become illegal, invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such prohibition or unenforceability in such jurisdiction and shall be treated as severed from the balance of this agreement in such jurisdiction, without invalidating the remaining provisions of this agreement in such jurisdiction or affecting it in any other jurisdiction

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**OBJECTIVE AND PREPARATION**

2 **A2 OFFER, ACCEPTANCE AND PERFORMANCE**

Clause 2.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

3 **A3 DOCUMENTS**

Clause 3.0

Clause 3.5 is amended by replacing it with the following:

No clause

Clause 3.7 is amended by replacing **the second sentence starting in line 2** with the following:

The **contractor** shall keep a copy of all drawings, schedules, unpriced **bills of quantities/lump sum document, contract instructions**, minutes of site and other meetings, health and safety files as specified in the scope of work, risk register, claims and variation order register, labour records and subcontractors contracts on the **site** to which the **employer, principal agent and agents** shall have access at all times. The **employer** has the right to call for such further information from the **contractor** it deems necessary in the event it carries out any investigation or audit into potential fraud, corruption, fronting, health and safety incidents or verifying information the **contractor** has to supply to the **employer** in terms of this agreement. The Contractor shall ensure a similar right for the Employer with its subcontractors

Clause 3.10 is amended by replacing "**principal agent**" with "**employer**" in the first line replace

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4 **A4 DESIGN RESPONSIBILITY**  
 Clause 4.0  
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 related: \_\_\_\_\_

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5 **A5 EMPLOYER'S AGENTS**  
 Clause 5.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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6 **A6 SITE REPRESENTATIVE**  
 Clause 6.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
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7 **A7 COMPLIANCE WITH REGULATIONS**

Clause 7.0

Note: The provisions herein include *inter alia*, compliance with all the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), and in particular with Regulation 5(1) requiring the compilation of a health and safety plan, as well as Regulation 6(1) requiring the appointment of a construction supervisor

Clause 7.0 is amended by the addition of the following:

7.3 The Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 will in all respects be applicable to this contract. All obligations in respect of health and safety requirements of the Contractor are set out in the Scope of Work

**Contractor's liability as mandatory**

7.3.1 Notwithstanding any actions which the **employer** may take, the **contractor** accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which the **contractor** is liable as mandatory. By entering into this **agreement** it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act and will enter into the mandatory agreement as set out in the Scope of Work. This clause will be sufficient to establish the mandatory obligations of the **contractor** in the event the parties fail to execute the aforesaid mandatory agreement."

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8 **A8 WORKS RISK**

Clause 8.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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9 **A9 INDEMNITIES**  
 Clause 9.0  
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 related: \_\_\_\_\_

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10 **A10 WORKS INSURANCES**  
 Clause 10.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

11 **A11 LIABILITY INSURANCES**  
 Clause 11.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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12 **A12 EFFECTING INSURANCES**  
 Clause 12.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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13 **A13.0 No clause**

N/A

14 **A14 SECURITY**  
 Clause 14.0  
 Clauses 14.1 is amended by replacing it with the following:  
 The **employer** shall have the right to choose the **security** to be provided in terms of 14.3 or 14.4 as stated in the **schedule**. The **contractor** shall provide the **security** required or chosen by the **employer** in the **schedule** substantially in the format prescribed in the tender documents that the **contractor** submitted a tender offer. The required **security** shall be provided in the time period prescribed by the **employer** in the conditional letter of acceptance of the **contractor's** tender offer.  
 Clauses 14.3 is amended by replacing the last line of

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sub-clause 14.3.1 “twelve point five (12.5%)” with “ten (10%)”.

Clause 14.4 is amended by replacing the last line of sub-clause 14.4.1 replace “seven point five (7.5%)” with “ten (10%)”.

Clause 14.7 is amended by the addition of the following:

The construction guarantee provided by the contractor shall remain valid for the term of the **agreement** . In case of extensions, the security must also be extended or replaced by another construction guarantee of the same value, with an effective term equal to the term of extension. If the contractor fails to keep a valid security for the duration of the agreement, the principal agent shall deduct an amount of 10% from each interim payment certificate and withhold the amount until the contractor provides a valid construction guarantee. Once the contractor provides the valid construction guarantee, the principal agent will then release the amount held from each payment certificate in the next payment certificate.

Clause 14.7.1 is amended by replacing the second and third line amend “two point five (2.5%)” to read “five (5%)”

Clause 14.0 is amended by the addition of the following:

14.9 A payment reduction of five (5%) of the value of each **payment certificate** up to a maximum of five (5%) of the **contract sum** will be applied until **practical completion**. At **practical completion** the amount withheld will be reduced to two point five (2.5%), which amount will reduce to nil (0%) when the **final account** is issued. The employer reserves the right to use retention money to correct defects where contractor fails to correct, fails or refuses to pay service provides or its subcontractors.

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**EXECUTION**

15 **A15 PREPARATION FOR AND EXECUTION OF THE WORKS**

Clause 15.0

Clause 15.1.1 is amended by replacing it with “principal agent” with “employer”:

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

16 **A16 ACCESS TO THE WORKS**

Clause 16.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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17 **A17 CONTRACT INSTRUCTIONS**

Clause 17.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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18 **A18 SETTING OUT OF THE WORKS**

Clause 18.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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19 **A19 ASSIGNMENT**

Clause 19.0

Clause 19 is amended by replacing them with the following:

19.1 The contractor does not cede , delegate or assign any of its rights or obligations to any person.

19.2 Notwithstanding the above, the employer may, on written notice to the contractor, cede, delegate, handover, its rights and obligations under this contract to a Related Party or a Client of the employer. On cession, Client becomes the employer and takes full responsibility. For the purpose hereof the above clause:

19.2.1 a "Related Party" means any entity that directly or indirectly, through one or more intermediaries, controls or controlled by, or is under common control with the employer and includes any other "Organ of state" as defined in Section 239 of the Constitution of the Republic of South Africa, 1996 and any entity or Organ of the State for whom the employer carries out the works or acts as an implementing agent, ("control" means the beneficial ownership of the majority of the entity's assets), and/or the right or ability to direct or otherwise control the entity or the votes attaching to the majority of the entity's equity and "controlled" or "under common control" shall have a similar meaning); and

Client means the owner, funder and or sponsor of the project and or programme managed in terms of the MOA between the Client and DBSA.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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20 **A20 NOMINATED SUB-CONTRACTORS**

Clause 20.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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21 **A21 SELECTED SUBCONTRACTORS**

Clause 21.0

Clause 21 is amended by replacing sub-clause 21.1.2 to 21.1.4 and 21.2 to 21.6 with the following:

The contractor and principal agent shall appoint a selected subcontractor in accordance with the provisions of the Scope of Work

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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22 **A22 EMPLOYER'S DIRECT CONTRACTORS**

Clause 22.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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23 **A23 CONTRACTOR'S DOMESTIC SUBCONTRACTORS**

Clause 23.0

Clause 23 is amended by adding sub-clause 23.3 - 23.6:

23.3 The **contractor** may not subcontract the whole of the work without the written instruction or approval of the **employer**. In such event the **employer** may require the **contractor** to cede the contract to the subcontractor.

23.4 The subcontractors appointed by the **contractor** to comply with the developmental and transformation requirements from the **employer** in terms of applicable legislation, including but not limited to the Preferential Procurement Policy Framework Act, 5 of 2000, and regulation thereto, will be domestic subcontractors for purposes of this **agreement**, and sub-clauses 23.1 and 23.2 will apply accordingly.

23.5 The contractor shall submit the agreement for each subcontract to the Principal Agent and employer may redact all commercially sensitive information.

23.6 Contractors' failure to pay Subcontractors  
If the contractor fails to make payment of any amount due and payable to a subcontractor ("the Subcontractor

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debt”) and the Principal Agent considers that the subcontractor debt has an adverse impact(s) on the progress of the works or the obligations of the contractor under the agreement, the Principal Agent may request evidence of payment to the subcontractor. In the absence of such evidence, the employer may (at its own discretion) pay the subcontractor debt directly to the subcontractor concerned. Such payment is, for all purposes under the agreement, regarded as a payment made on behalf of the contractor and at the request of and with the approval and consent of the contractor, as a payment towards the contract sum. As such, payment to the contractor shall be less the payment to the subcontractor.

All adverse effects as a result of or arising from the subcontractor debt does not entitle the contractor to any cost or time.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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**COMPLETION**

24 **A24 PRACTICAL COMPLETION**  
 Clause 24.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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25 **A25 WORK'S COMPLETION**  
 Clause 25.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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26 **A26 FINAL COMPLETION**  
 Clause 26.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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27 **A27 LATENT DEFECTS LIABILITY PERIOD**  
 Clause 27.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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28 **A28 SECTIONAL COMPLETION**  
 Clause 28.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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29 **A29 REVISION OF DATE FOR PRACTICAL  
 COMPLETION**  
 Clause 29.0  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
 related: \_\_\_\_\_

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30 **A30 PENALTY FOR NON-COMPLETION**

Clause 30.0

Clause 30.1 is amended replacing reference to "36.3" at end of sentence with "36.0"

Where the **contractor** fails to bring the **works** or **sections** thereof to **practical completion** on the date or dates stated in the schedule or revision thereof in terms of 29.0, the contractor shall be liable to the **employer** for the **penalty** per **calender day** for non completion of the **works** or each **section** thereof at the rate stated in the **schedule**. The **principal agent** shall calculate the **penalty** due from the date or revised date in terms of 29.0 up to and including the actual date of **practical completion** of the **works** or **section** thereof or cancellation in terms of 36.0.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

**PAYMENT**

31 **A31 INTERIM PAYMENT TO THE CONTRACTOR**

Clause 31.0

Clause 31.9 is amended by substitution of the words "seven (7) **calendar days**" in the first line by the words "thirty (30) **calendar days**"

Clause 31.12 is amended by removing the words subject to the **employer** giving the **contractor** a **tax** invoice for the amount due

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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32 **A32 ADJUSTMENT TO THE CONTRACT VALUE**

Clause 32.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

33 **A33 RECOVERY OF EXPENSE AND LOSS**

Clause 33.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

34 **A34 FINAL ACCOUNT AND FINAL PAYMENT**

Clause 34.0

Clause 34.13 is amended by removing subject to the **employer** giving the **contractor** a **tax** invoice for the amount due.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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35 **A35 PAYMENT TO OTHER PARTIES**

Clause 35.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**CANCELLATION**

**A36 CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT**

Clause 36.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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36 **A37 CANCELLATION BY EMPLOYER – LOSS AND DAMAGE**

Clause 37.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

37 **A38 CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT**

Clause 38.0

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

38 **A39 CANCELLATION - CESSATION OF THE WORKS**

Clause 39.0

Clause 39.2 is amended by replacing the third sentence with the following:

The **employer** shall pay the **contractor** all amounts due in terms of the contract for work completed at the date of termination or cancellation in terms of this clause 39.2, including retention money after deducting any amounts due to the **employer**. The **employer** will also return any guarantees still valid to the **contractor** after such cancellation.

Clause 39.2.1 and 39.2.3 are amended by replacing with the following:

No Clause

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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39 **A40 DISPUTE SETTLEMENT**

Clause 40.0

Clause 40 is amended by retaining clause 40 in respect of dispute settlement to be retained in its original form not applying the state clause amendments.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**SUBSTITUTE PROVISIONS**

40 **A41 STATE CLAUSES**

Clause 41.0

Clause 41.1.3 is amended by replacing the definition for **CONSTRUCTION PERIOD** with the following:

**CONSTRUCTION PERIOD** means a duration of 18 months commencing from the period the contractor takes possession of the sites to the date the certificate of practical completion is issued.

Clause 41.1 is amended by the addition of the following:

Notwithstanding any clause to the contrary, on cancellation of this **agreement** either by the **employer** or the **contractor**, or for any reason whatsoever, the **contractor** shall **on** written instruction, discontinue with the **works** on a stated date and withdraw himself from the **site**. The contractor shall not be entitled to refuse to withdraw from the **works** on the grounds of any lien or right of retention or on the grounds of any other right whatsoever.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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**CONTRACT VARIABLES**

41 **A42 PRE-TENDER INFORMATION**

Clause 42.0

Tenderers are referred to the document C1.2 Contract Data DPW04(EC) for variables pertaining to this contract

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**THE SCHEDULE**

**SECTION B: JBCC PRELIMINARIES**

**B1.0 DEFINITIONS AND INTERPRETATION**

42 ***B1.1 Definitions and interpretation***

See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**B2.0 DOCUMENTS**

43 ***B2.1 Checking of documents***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

44 ***B2.2 Provisional bills of quantities***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

45 ***B2.3 Availability of construction documentation***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

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46 **B2.4 Interests of agents**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

47 **B2.5 Priced documents**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

48 **B2.6 Tender submission**  
  
Clause 2.6 is amended by replacing “JBCC Form of  
Tender” with “Form of Offer and Acceptance (C1.1)”.  
  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

**B3.0 THE SITE**

49 **B3.1 Defined works area**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

50 **B3.2 Geotechnical investigation**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

51 **B3.3 Inspection of the site**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

52 **B3.4 Existing premises occupied**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

53 **B3.5 Previous work - dimensional accuracy**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

54 **B3.6 Previous work - defects**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
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55 **B3.7 Services - known**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

56 **B3.8 Services - unknown**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

57 **B3.9 Protection of trees**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

58 **B3.10 Articles of value**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

59 **B3.11 Inspection of adjoining properties**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

**B4.0 MANAGEMENT OF CONTRACT**

60 **B4.1 Management of the works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

61 **B4.2 Programme for the works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

62 **B4.3 Progress meetings**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

63 **B4.4 Technical meetings**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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64 **B4.5 Labour and plant records**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

**B5.0 SAMPLES, SHOP DRAWINGS AND  
MANUFACTURERS' INSTRUCTIONS**

65 **B5.1 Samples of materials**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

66 **B5.2 Workmanship samples**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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67 **B5.3 Shop drawings**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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68 **B5.4 Compliance with manufacturers instruction**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

**B6.0 TEMPORARY WORKS AND PLANT**

69 **B6.1 Deposits and fees**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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70 **B6.2 Enclosure of the works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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71 **B6.3 Advertising**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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72 **B6.4 Plant, equipment, sheds and offices**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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73 **B6.5 Main notice board**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

74 **B6.6 Subcontractors' notice board**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

**B7.0 TEMPORARY SERVICES**

75 **B7.1 Location**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

76 **B7.2 Water**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

77 **B7.3 Electricity**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

78 **B7.4 Telecommunication facilities**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

79 **B7.5 Ablution facilities**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

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**B8.0 PRIME COST AMOUNTS**

80 ***B8.1 Responsibility for prime cost amounts***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**9.0 ATTENDANCE ON N/S SUBCONTRACTORS**

81 ***B9.1 General attendance***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

82 ***B9.2 Special attendance***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

83 ***B9.3 Commissioning - fuel, water and electricity***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

**B10. FINANCIAL ASPECTS**

84 ***B10.1 Statutory taxes, duties and levies***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

85 ***B10.2 Payment for preliminaries***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

86 ***B10.3 Adjustment of preliminaries***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

87 ***B10.4 Payment certificate cash flow***

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time related: \_\_\_\_\_

Item

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**B11. GENERAL**

88 **B11.1 Protection of the works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

89 **B11.2 Protection / isolation of existing / sectionally  
occupied works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

90 **B11.3 Security of the works**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

91 **B11.4 Notice before covering work**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

92 **B11.5 Disturbance**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

93 **B11.6 Environmental disturbance**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

94 **B11.7 Works cleaning and clearing**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

95 **B11.8 Vermin**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

96 **B11.9 Overhand work**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

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97 **B11.10 Instruction manuals and guarantees**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

98 **B11.11 As built information**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

Item

99 **B11.12 Tenant installations**  
Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_ Time  
related: \_\_\_\_\_

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<p>100</p>	<p><b>B12. SCHEDULE OF VARIABLES</b></p> <p><b>B12.1 Pre-tender information</b></p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>This schedule contains all variables referred to in this document and is divided into pretender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries.</p> <p>Spaces requiring information must be filled in, shown as “not applicable” or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross-referenced to the applicable clause of the schedule. Key cross reference clauses are italicized in [ ] brackets</p> <p><b>12.1 PRE TENDER INFORMATION</b></p> <p>12.1.1 <b>Provisional Bills of Quantities</b> [2.2] The quantities are provisional: <i>YES</i></p> <p>12.1.2 <b>Availability of construction documentation</b> [2.3] <i>Construction of documentation is complete: NO</i></p> <p>12.1.3 <b>Interest of agents</b> [2.4] Details: See Contract Data Part C/1 of Tender</p> <p>12.1.4 <b>Defined works area</b> [3.1] Details: As per Tender Data</p> <p>12.1.5 <b>Geotechnical investigation</b> [3.2] Details: NONE</p> <p>12.1.6 <b>Existing premises occupied</b> [3.4] Specific requirements: N/A</p> <p>12.1.7 <b>Previous work - dimensional accuracy</b> [3.5] Details: To be checked on site by contractor prior to building operations.</p> <p>12.1.8 <b>Previous work - defects</b> [3.6] Details: To be checked on site by contractor prior to building operations.</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p><b>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES</b></p>	<p>Item</p>		
				R

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**12.1.9 Services - known**

[3.7] Details: Should the contractor encounter any existing services such as underground cables, pipes or sewer during the execution of the works he shall notify the principal agent immediately and suspend all affected work in the immediate vicinity until instruction to proceed has been given by the principal agent.

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**12.1.10 Protection of trees**

[3.9] Specific requirements: All trees on the site outside of the position of the proposed structure must be protected.

**12.1.11 Inspection of adjoining properties**

[3.11] Specific requirements: The contractor must inspect adjoining properties and immediately bring to the notice of the Principal Agent of any consequences that may arise from the building works.

**12.1.12 Enclosure of the works**

[6.2] Specific requirements: The contractor shall enclose the works as required by the Occupational Health and Safety Act.

**12.1.13 Offices**

[6.4.3] Specific requirements: The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chairs, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.

**12.1.14 Main notice board**

[6.5] Specific requirements:

The contractor shall provide, erect where directed, maintain and remove on completion of the works an DRPW compliant notice board as detailed by the Principal Agent.

The board shall be securely fixed to hoarding where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces.

Sub-contractor's individual boards will be allowed on the site subject to the written approval of the Representative/Agent.

**12.1.15 Subcontractors' notice board**

[6.6] Specific requirements: *NO*

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**12.1.16 Water**

[7.2] Option A (by contractor)  
 (YES)

Option B (by employer - free of charge when available)  
 (NO)

Option C (by employer - metered)  
 (NO)

**12.1.17 Electricity**

[7.3] Option A (by contractor)  
 (YES)

Option B (by employer - free of charge when available)  
 (NO)

Option C (by employer - metered)  
 (NO)

**12.1.18 Telecommunications**

[7.4] Telephone  
 (YES)

Facsimile  
 (NO)

E-mail  
 (YES)

**12.1.19 Ablution facilities**

[7.5] Option A (by contractor)  
 (YES)

Option B (by employer)  
 (NO)

**12.1.20 Protection of existing/sectionally occupied works**

[11.2] Protection is required (Only when existing buildings)  
 (YES)

**12.1.21 Special attendance**

[9.2] **Electrical sub-contractor** (1) details: Site Meetings

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**12.1.22 Protection of works**

[11.1] Specific requirements:

The contractor shall protect the works for the duration of the contract.

**12.1.23 Disturbance**

[11.5] Specific requirements:

The **contractor** shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the **works** all necessary temporary dust screens all to the satisfaction of the **principal agent**

**12.1.24 Environmental disturbance**

[11.6] Specific requirements: None

**12.2 POST-TENDER INFORMATION**

**12.2.1 Payment of preliminaries**

[10.2] Option A (prorated)  
 (NO)

Option B (calculates)  
 (YES)

**12.2.2 Adjustment of preliminaries**

[10.3] Option A (three categories)  
 (YES)

Option B (detailed breakdown)  
 (YES)

**12.2.3 Additional agreed preliminaries items**

Details: **N/A**

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**SCHEDULE OF SUPPLEMENTARY INFORMATION**

**NOTE:**

The information listed below is in respect of certain clauses in the Preliminaries, requiring the supplementary information

Amount of insurance against injury to person or property in respect of any single occurrence **R**  
 Amount of insurance against removal of support to adjoining properties in respect of any single occurrence **Not specifically prescribed**

Contract period - **18 (Eighteen) months**

The date for site handover :- TBA

Amount of penalty per day on which the completion of the works may be in arrears:

**R1.75 per R100 of contract value per day (Excluding VAT)**

Specification of materials and methods to be used:  
 Specification of Materials and Methods to be used - **PW 371, Edition 2.1 July 2014**

Edition of Standard System of measuring building work:  
 Seventh Edition including the latest amendments

**Section C** contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item

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**SECTION C: SPECIFIC PRELIMINARIES**

101 **C1 CONTRACT DRAWINGS**

The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the **works** and the manner in which they are to be executed

Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

102 **C2 GENERAL PREAMBLES**

The document "Specification of Materials and Methods to be used (PW371)" is obtainable on request from the head office and all regional offices of the Department, and shall be read in conjunction with the **bills of quantities** and be referred to for the full descriptions of work to be done and materials to be used

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

103 **C3 TRADE NAMES**

Wherever a trade name for any product has been described in the **bills of quantities**, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

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104 **C4 IMPORTED MATERIALS AND EQUIPMENT**

Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment (DPW23EC) to be completed by tenderer)

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

105 **C5 VIEWING THE SITE IN SECURITY AREAS**

The **site** is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the **site** for tendering purposes

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

106 **C6 COMMENCEMENT OF WORKS IN SECURITY AREAS**

As the **works** falls within a security area the **contractor** must give the unit commander or other responsible officer notice before commencement of the **works**. Should the **contractor** fail to make such arrangements, admission to the site may be refused and any additional costs will be for the **contractor's** account

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

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107 **C7 ENTRANCE PERMITS TO SECURITY AREAS**

As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

108 **C8 SECURITY CHECK OF PERSONNEL**

The **principal agent** may require the **contractor** to have his personnel and workmen, or a certain number of them, security classified

In the event of the **principal agent** requesting the removal of a person or persons from the **works** for security reasons, the **contractor** shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the **works** and the **site** and/or to any document or information relating to the **works**

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

109 **C9 PROHIBITION ON TAKING OF PHOTOGRAPHS**

In terms of article 119 of the defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister

The same prohibition is also applicable to all correctional institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

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**C10 HIV/AIDS AWARENESS**

It is required of the **contractor** to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the **Bills of Quantities**. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained. Also see Part C3.6 Social and Economic Deliverables F1

The **contractor** must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of Clause A 31 of "Section 1: Preliminaries (Section A)" or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.

110 **C10.1 AWARENESS CHAMPION**

Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

Item

111 **C10.2 AWARENESS WORKSHOPS**

Selection and appointment of a competent Service Provider approved by the **principal agent**, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
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112 **C10.3 POSTERS, BOOKLETS, VIDEOS, ETC.**  
 Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
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Item

113 **C10.4 ACCESS TO CONDOMS**  
 Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
 Time related: \_\_\_\_\_

Item

114 **C10.5 MONITORING**  
 Monitoring HIV/AIDS awareness of workers, providing the **principal agent** with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the **construction period** and close out, all in accordance with the HIV/AIDS Specification  
 Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
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115 **C11 OCCUPATIONAL HEALTH AND SAFETY ACT**

The contractor shall comply with the requirements set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

It is required of the contractor to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities/lump sum document.

The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of clause A3.10 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations, Health and Safety Specification and Project Specific Plan is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.

**Note:**

Please refer to "Annexure B - Health & Safety Bill of Quantities" within Book 2 of the Tender Document (Total to be carried forward to this item).

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
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<p>116</p>	<p><b>C11.1 COVID-19 SPECIFIC REQUIREMENTS</b></p> <p>All legislative requirements relating to Covid-19 is to be priced under this clause - refer to the attached Health and Safety COVID related Specifications.</p> <p>Based on a <b>24</b> months Covid-19 restriction period (Provisional)</p> <p>Note: This clause will be excluded from the Fixed, Value and Time-related adjustments.</p>	<p>Item</p>		
<p>117</p>	<p><b>C12. SOCIAL AND ECONOMIC DELIVERABLES IN CONSTRUCTION WORKS CONTRACTS</b></p> <p>The contractor shall thoroughly study and comply with the requirements and specification data set out in the CIDB B.U.I.L.D programme for standard for indirect targeting for enterprise development through construction works and standard for skills development through infrastructure projects.</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	<p>Item</p>		
<p>118</p>	<p><b>C13 LOCAL BUILDING MATERIALS</b></p> <p>Preference shall be given to the supply of materials produced or manufactured in the Gauteng Province provided that:</p> <p>(a) Such materials comply in all respects with the specific requirements of the "Model Preambles For Trades".</p> <p>(b) The availability of such materials shall not adversely affect the desired progress of the specific works.</p> <p>(c) The use of such materials shall not constitute grounds for any claim for increased cost in respect thereof.</p> <p>Target Area 1: Target Area 2:</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	<p>Item</p>		
<p style="text-align: right;"><b>Carried to Collection</b></p>			<p>R</p>	
<p><b>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES</b></p>				

119

**C14 LOCAL EMPLOYMENT GENERATION**

It is an explicit condition of this tender that the Contractors labour force must comprise of persons normally resident in the locality of the works (local labour) and hence must be employed on this contract.

The contractor will not be allowed to import skilled personnel if the required skills exist within the local community. The contractor will however be allowed to make use of his own permanently employed machine operators and drivers.

Provided, however, that should adequate and appropriate labour not be available within the locality, other labour may be employed subject to satisfactory proof that every reasonable endeavour has been made to employ labour from the immediate locality. The contractor shall identify the local community leaders with the purpose of negotiating with them regarding the utilisation of local labour in the construction process.

The specific employment goals, which are to be met for this project, are as follows:

- (a) A minimum of 70% local labour employment  
Target Area 1:  
Target Area 2:
- (b) The Contractor, inclusive of subcontractors and service providers, is allowed to deploy a maximum of 30% seconded (local & non-local labour) on the Project.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
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**C15.1 SMME SPECIFICATIONS**

The Tenderer is encouraged to target works that can be performed by local enterprises as prime contractors, sub-contractors or suppliers. This target must be based on the value of work to be performed. The Local Enterprise Participation goal must be calculated in relation to every entity involved in the project.

Management staff from other areas for the duration of the project will not qualify as local. Plant and equipment brought from other areas will not qualify as local.

Material and plant sourced from local suppliers or agencies will qualify as local. A supplier that has been established locally by a Tenderer solely for the purpose of servicing the project will not qualify.

The contractor shall ensure full achievement of the deliverables through the construction period of this construction contract.

120 **C15.2 SMME CONSTRUCTION MENTOR**

Provision for pricing for the employment, on a full-time basis for the duration of the contract, a SMME Construction Mentor. All costs associated with the execution of the SMME Construction Mentor duties, provision of office facilities and tools of trade are deemed to be priced hereunder. No additional claims in this regard shall be entertained. The above is in strict accordance with Section D 11.1 of the Specification for the Employment of SMME Sub Contractors (SES 006) and all costs should be included in this item.

Fixed: \_\_\_\_\_ Value related: \_\_\_\_\_  
Time related: \_\_\_\_\_

**WAIVER OF LIEN**

121 The tenderers are notified that he/she shall sign "Waiver of Lien" together with the JBCC Principal Building Agreement Edition 4.1 Code 2101 March 2005

Item

Item

**Not Priced**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.1</u></b> <b><u>TEMPORARY UNITS / CLASSROOMS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p>NOTE: Any defects which may become evident due to bad workmanship or materials within six months of completion shall be made good by the Contractor at his own expense.</p> <p>-----</p> <p><u>NOTE:</u></p> <p>The Standard Preambles and the Notes in the various trade bills are to, and do, apply equally to this section.</p> <p>-----</p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><b><u>TEMPORARY BARRIERS, SCREEN ETC:(PROVISIONAL)</u></b></p> <p><b><u>Temporary barriers, screens etc including removal on completion:</u></b></p> <p>1 Allow for protecting all existing work which might be liable to suffer damage (ie. walls, finishes,floors, windows etc) during all building operations, alterations. Make good all work damaged with new material to match existing to the approval of the Principal Agent.</p> <p style="text-align: right;"><b>Carried to Collection</b></p> <p><b>Section No. 2</b> <b>DECANTING</b> <b>Bill No. 1</b> <b>TEMPORARY CLASSROOMS</b></p>	Item		R

**DEMOLITIONS (PROVISIONAL)**

**Demolish and removing complete the following structures:**

2	Single storey prefabricated building (Building 1) with mono pitched roof, approximate size 82 m2 measured flat) on floor plan, comprising of corrugated iron roofing sheets, prefabricated wall system, including 150mm concrete surface beds and taking out, grubbing up and removing all foundation concrete complete, making good by backfilling from stockpiles or imported fill on completion and carting away off site of all building rubble to a dumping site located by the Contractor. Complete demolition and removal of this building is to be priced under this item, and no further claims will be entertained.	m2	82
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**TEMPORARY CLASSROOMS**

**Modular Prefabricated Temporary Buildings:**

3	Admin Block size 18.580 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0,56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, compacted filling, timber doors, door frames, aluminium windows, ironmongery, vinyl floor sheeting, chalk boards, pinning boards, electrical Installation, light fittings, plug points, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-001-A1-REV 3 (DECANTING ADMIN BLOCK) attached at the back of these Bills of Quantities.	No	1
4	1 Classroom Block size 8.140 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, timber doors, door frames, aluminium windows, ironmongery, vinyl floor sheeting, chalk boards, pinning boards, electrical Installation, light fittings, plug points, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-002-A1-REV 3 (DECANTING ONE CLASSROOM BLOCK) attached at the back of these Bills of Quantities.	No	2

**Carried to Collection**

**Section No. 2  
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5	2 Classroom Block size 16.260 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, timber doors, door frames, aluminium windows, ironmongery, vinyl floor sheeting, chalk boards, pinning boards, electrical Installation, light fittings, plug points, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-003-A1-REV 3 (DECANTING TWO CLASSROOM BLOCK) attached at the back of these Bills of Quantities.	No	6
6	Computer Library / Multi Purpose Block size 11.620 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, compacted filling, timber doors, door frames, aluminium windows, ironmongery, vinyl floor sheeting, chalk boards, pinning boards, electrical Installation, light fittings, plug points, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-004-A1-REV 3 (DECANTING COMPUTER LIBRARY / MULTI PURPOSE BLOCK) attached at the back of these Bills of Quantities.	No	1
7	Grade R Classroom Block size 8.140 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, compacted filling, timber doors, door frames, aluminium windows, ironmongery, wood float to floor, toilet roll holders , sinks, urinals and internal plumbing, electrical Installation, light fittings, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-005-A1-REV A (DECANTING GRADE R BLOCK) attached at the back of these Bills of Quantities.	No	2

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8	DNC Block size 13.96 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, compacted filling, timber doors, door frames, aluminium windows, ironmongery, wood float to floor, toilet roll holders , sinks, urinals and internal plumbing, electrical Installation, light fittings, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-006-A1-REV A (DECANTING DNC BLOCK) attached at the back of these Bills of Quantities.	No	1
9	Ablution Block size 11.620 x 7.060 x 1.810mm high, constructed of minimum 75mm insulated wall panels complete with 0.56mm Corrugated roof sheeting with "Factorylite' white bubble foil insulation or similar, PVC gutters and (4x) down pipes with shoes, adjustable jacks where required, compacted filling, timber doors, door frames, aluminium windows, ironmongery, wood float to floor, toilet roll holders , sinks, urinals and internal plumbing, electrical Installation, light fittings, lighting protection and prepare to make ready for use, all inclusive as per the Architects drawing no. 5094-KMB-006-A1-REV A (DECANTING ABLUTION BLOCK) attached at the back of these Bills of Quantities.	No	2
<b><u>RELOCATION OF EXISTING TEMPORARY STRUCTURES</u></b>			
<b><u>Dismantling existing prefabricated units, covered verandahs, fittings, external skirtings, de-electrification, pre-stressed base blocks, adjustable jacks, etc. and carefully setting aside materials for transportation (transportation elsewhere measured) including demolishing of existing concrete slabs approximately 100mm thick:</u></b>			
10	Prefabricated units, size 18.580 x 7.060mm x approximately 1.810mm high each including 1.500 x 18.580mm verandah complete.	No	1
11	Prefabricated units, size 16.260 x 7.060mm x approximately 1.810mm high each including 1.500 x 16.260mm verandah complete.	No	14

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12	Prefabricated units, size 11.620 x 7.060mm x approximately 1.810mm high each including 1.500 x 10.460mm verandah complete.	No	1	
13	Prefabricated units, size 8.140 x 7.060mm x approximately 1.810mm high each including 1.500 x 8.140mm verandah complete.	No	1	
14	Prefabricated units, size 6.980 x 7.060mm x approximately 1.810mm high each including 1.500 x 6.980mm verandah complete.	No	1	
15	Prefabricated units, size 11.620 x 7.060mm x approximately 1.810mm high each including 1.500 x 6.980mm verandah complete.	No	1	
<b><u>The following items below shall include loading, off-loading and transportation to a location determined by the Client within a 70km radius:</u></b>				
16	Prefabricated unit (1 x Admin Block), overall size 18.850 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	1	
17	Prefabricated unit (1 x 2 Classroom Block), overall size 16.260 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	14	
18	Prefabricated unit (1 x 1 Classroom Block), overall size 8.140 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2	
19	Prefabricated unit (1 x Grade R Classroom Block), overall size 6.980 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2	
<b>Carried to Collection</b>				R
<b>Section No. 2 DECANTING Bill No. 1 TEMPORARY CLASSROOMS</b>				

20	Prefabricated unit (1 x Multi-Purpose Classroom Block), overall size 10.460 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	1
21	Prefabricated unit (1 x DNC Block), overall size 11.620 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	1
22	Prefabricated unit (1 x Ablution Block), overall size 11.620 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2
<b><u>The following items below shall include loading, off-loading and transportation to a location determined by the Client within a 70km radius:</u></b>			
23	Prefabricated unit (1 x Admin Block), overall size 18.85 x 7.06m each including all fittings, base blocks. adjustable jacks, verandah (1,50m wide) etc. complete to a location determined by the Client (Provisional).	No	1
24	Prefabricated unit (1 x 2 Classroom Block), overall size 16.260 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	14
25	Prefabricated unit (1 x 1 Classroom Block), overall size 8.140 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2
26	Prefabricated unit (1 x Grade R Classroom Block), overall size 6.980 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2

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**Section No. 2  
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27	Prefabricated unit (1 x Multi-Purpose Classroom Block), overall size 10.460 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	1	
28	Prefabricated unit (1 x DNC Block), overall size 11.620 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	1	
29	Prefabricated unit (1 x Ablution Block), overall size 11.620 x 7.060mm each including all fittings, base blocks. adjustable jacks, verandah (1.500mm wide) etc. complete to a location determined by the Client (Provisional).	No	2	
	<b><u>Assembly of prefabricated units, covered verandahs, fittings, external skirtings, electrification, pre-stressed base blocks, adjustable jacks, etc. as per manufacturer's guidelines:</u></b>			
30	Prefabricated units, size 18.580 x 7.060mm x approximately 1.810mm high each including 1.500 x 18.580mm verandah complete.	No	1	
31	Prefabricated units, size 16.260 x 7.060mm x approximately 1.810mm high each including 1.500 x 16.260mm verandah complete.	No	14	
32	Prefabricated units, size 11.620 x 7.060mm x approximately 1.810mm high each including 1.500 x 10.460mm verandah complete.	No	1	
33	Prefabricated units, size 8.140 x 7.060mm x approximately 1.810mm high each including 1.500 x 8.140mm verandah complete.	No	1	
34	Prefabricated units, size 6.980 x 7.060mm x approximately 1.810mm high each including 1.500 x 6.980mm verandah complete.	No	1	
	<b>Carried to Collection</b>			R
	<b>Section No. 2 DECANTING Bill No. 1 TEMPORARY CLASSROOMS</b>			

35	Prefabricated units, size 11.620 x 7.060mm x approximately 1.810mm high each including 1.500 x 6.980mm verandah complete.	No	1
<b><u>Civil works:</u></b>			
36	Allow for site clearance, compaction (93% MOD AASHTO, G5 filling, etc. complete (Provisional).	m2	3,200
37	15MPa/19mm Concrete slabs (100mm thick) including wood-float finish, expansion joints and formwork to sides complete.	m2	2,190
<b><u>Decanting:</u></b>			
38	Allow for movement of furniture (desks, chairs, etc.) and co-ordination from the current school to the temporary facility, including removal and fitting of the chalkboards and pinning boards.	Item	

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**Section No. 2  
 DECANTING  
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 TEMPORARY CLASSROOMS**

**Section No. 2**

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**TEMPORARY CLASSROOMS**

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**Section No. 2  
 DECANTING  
 Bill No. 1  
 TEMPORARY CLASSROOMS**

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 1</u></b></p> <p><b><u>ALTERATIONS</u></b></p> <p><b><u>ALL TRADES BILL PROVISIONAL</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2017 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><u>View site</u></p> <p>Before submitting his tender the tenderer 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 salvageable from the alterations. 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></p> <p>No explosives whatsoever may be used for alteration purposes unless otherwise stated.</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 tenants in the building and 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>			
	<b>Carried to Collection</b>			
	<p><b>Section No. 3</b> <b>REFURBISHMENTS</b> <b>Bill No. 1</b> <b>ALTERATIONS</b></p>		R	

Doors, fanlights, windows, 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 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 separately.

Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc

Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc

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.

Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary.

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).

**REMOVAL OF EXISTING WORK**

**Breaking up and removing reinforced concrete, including cutting off and removing reinforcement:**

1	100mm Thick surface beds.	m2	94
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**Taking out and removing doors, windows, etc, including thresholds, sills, etc (building up openings and making good finishes elsewhere)**

2	Timber double door and frame exceeding 2,5m <sup>2</sup> and not exceeding 5m <sup>2</sup> .	No	2
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3	Service hatch and frame not exceeding 2,5m <sup>2</sup> .	No	1
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**Carried to Collection**

**Section No. 3  
REFURBISHMENTS  
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<b><u>Breaking down and removing brickwork, etc:</u></b>				
4	One brick walls.	m2	3	
<b><u>Taking out doors, windows, etc, including thresholds, sills, etc, including carting away to a dump site located by Contractor including making good cement plaster on both side to be replaced with new (elsewhere).</u></b>				
5	Steel window, size 1020 x 510mm high.	No	8	
6	Steel window, size 1530 x 680mm high.	No	4	
7	Steel window, size 537 x 654mm high.	No	13	
8	Steel window, size 1510 x 1540mm high.	No	9	
9	Steel window, size 1022 x 710mm high.	No	14	
10	Steel window, size 1250 x 1500mm high.	No	95	
11	Steel window, size 900 x 900mm high.	No	2	
12	Steel window, size 1303 x 510mm high.	No	8	
13	Steel window, size 978 x 510mm high.	No	3	
14	Timber single door and steel frame not exceeding 2,5m <sup>2</sup> from one brick wall.	No	14	
<b><u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u></b>				
15	Corrugated sheet steel roof covering.	m2	1,274	
16	Corrugated sheet steel roof covering and timber purlins.	m2	1,161	
<b>Carried to Collection</b>				
<b>Section No. 3 REFURBISHMENTS Bill No. 1 ALTERATIONS</b>				R

<b><u>Taking out and removing sundry joinery work, fittings, etc</u></b>			
17	Timber skirtings.	m	1,207
18	Timber sink cupboard including disconnecting waste pipe and taps.	No	1
19	Chalkboard fixed to wall, size 4800 x 1230mm high.	No	13
<b><u>Taking up and removing wood block floor coverings, vinyl floor coverings, carpets, etc and preparing screeds for new floor coverings:</u></b>			
20	Vinyl tile floor covering.	m2	894
<b><u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc:</u></b>			
21	Tiles to walls.	m2	14
<b><u>Allow for the careful removal of existing sanitary fittings and replace with new (elsewhere measured) including making safe of water connection and carting away to a dumpsite located by Contractor:</u></b>			
22	Wash hand basin.	No	1
23	Water closet.	No	1

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**PREPARATORY WORK TO EXISTING SURFACES**

**Prepare existing surfaces to receive new paint:**

24	Service existing steel window in accordance to Architect's specifications and make good by replacing all necessary ironmongery related to existing steel windows.	m2	6
25	Repair cracks on existing walls as per Engineer's specifications including skimming to walls to an even finish.	m2	1
26	Repair timber door size 813 x 2032mm and prepare to receive varnish (elsewhere measured).	No	1
27	Repair granolithic screed on existing floors as per Engineer's specifications including skimming to floors to an even finish.	m2	16
28	Dry brush existing face brick wall, clean with water and apply approved weedkiller to areas affected by moss and lichens.	m2	1,269

**OPENINGS THROUGH EXISTING WALLS, ETC**

**Breaking out for and forming plain openings through brick walls, including prestressed concrete lintels and making good cement plaster on both sides and into reveals with 20 MPa concrete thresholds with steel trowelled finish (making good paintwork elsewhere).**

29	Opening 1200 x 2125mm high through one brick wall.	No	1
30	Opening 3230 x 2100mm high through one brick wall.	No	4
31	Opening 3171 x 2100mm high through one brick wall.	No	1
32	Opening 3296 x 2100mm high through one brick wall.	No	1
33	Opening 2820 x 2100mm high through one brick wall.	No	2

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**Section No. 3  
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ALTERATIONS**

34	Opening 1720 x 2100mm high through one brick wall.	No	2
<p><b><u>Breaking out for and forming openings through brick walls for new doors and frames, including brick lintels, making good cement plaster on one side and into reveals and face brickwork on other side and into reveals and with 20 MPa concrete thresholds with steel trowelled finish (new doors and frames and making good paintwork elsewhere):</u></b></p>			
35	Opening for timber door with galvanised steel door frame 877 x 2064mm high overall through one brick wall.	No	1
<p><b><u>Breaking out for and forming openings through brick walls for new windows, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with sloping fibre-cement sills on outside and flat fibre-cement sills on inside (new windows and making good paintwork elsewhere)</u></b></p>			
36	Opening for window 1200 x 1200mm high through one brick wall	No	12

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</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 Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).</p> <p><u>Formwork:</u></p> <p>Descriptions 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>			
	<b>Carried to Collection</b>			R
	<p><b>Section No. 3</b></p> <p><b>REFURBISHMENTS</b></p> <p><b>Bill No. 2</b></p> <p><b>CONCRETE, FORMWORK AND REINFORCEMENT</b></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.

Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.

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.

**UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES**

**25Mpa/19mm concrete:**

1	Aprons cast in panels on waterproofing.	m3	4
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**REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES**

**25Mpa/19mm Concrete:**

2	Foundation beams.	m3	45
3	Surface beds.	m3	36

**TEST CUBES**

4	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	3
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**CONCRETE SUNDRIES**

**Finishing top surfaces of concrete smooth with a wood float**

5	Aprons cast in panels on waterproofing.	m2	37
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**ROUGH FORMWORK (DEGREE OF ACCURACY III)**

**Rough formwork to sides:**

6	Foundation beams (Provisional)	m2	127
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**REINFORCEMENT (PROVISIONAL)**

**Mild steel reinforcement to structural concrete work:**

7	8mm Diameter bars.	t	0.12
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**High tensile steel reinforcement to structural concrete work:**

8	10mm Diameter bars.	t	0.59
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9	12mm Diameter bars.	t	0.16
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10	16mm Diameter bars.	t	2.03
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**Fabric reinforcement:**

11	Ref 193 fabric reinforcement in concrete surface beds etc.	m2	177
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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Sizes in descriptions:</u></p>			
<p>Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.</p>			
<p><u>Face bricks:</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour.</p>			
<p><u>Pointing:</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.</p>			
<p><u>Samples, etc:</u></p>			
<p>Rates for brickwork, faced brickwork, etc shall include for all required samples.</p>			
<p><b><u>BRICKWORK IN SUPERSTRUCTURE</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3                  REFURBISHMENTS                  Bill No. 3                  MASONRY</b></p>			
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<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:</u></b>		
1	Half brick walls.	m2 106
2	One brick walls.	m2 274
3	Ditto, but in beamfilling.	m2 38
4	Ditto, but in firewall.	m2 115
<b><u>BRICKWORK SUNDRIES</u></b>		
<b><u>Brickwork reinforcement:</u></b>		
5	75mm Wide reinforcement built in horizontally.	m 311
6	150mm Wide reinforcement built in horizontally.	m 1,020
<b><u>Prestressed fabricated precast lintels including necessary temporary supports:</u></b>		
7	110mm x 75mm Lintels in lengths not exceeding 3000mm.	m 77
<b><u>FACE BRICKWORK</u></b>		
<b><u>Facebricks (FBS) Autumn Wheat Travertine, size 222 x 106 x 73mm bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>		
8	Extra over brickwork for face brickwork.	m2 243
9	Ditto, but in internal walls to dado level.	m2 85
<b><u>Facebricks (FBS) Firelight Travertine, size 222 x 106 x 73mm bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>		
10	Extra over brickwork for solid bullnose brick-on-edge window cill.	m 175
<b>Carried to Collection</b>		
<b>Section No. 3 REFURBISHMENTS Bill No. 3 MASONRY</b>		

R

**FIBRE CEMENT WINDOW CILLS**

**15mm Thick natural grey cills in single lengths fixed with fibre cement bedded in cement mortar including galvanised lugs screwed to underside of cill, etc in compliance to manufacturer's specification:**

11 150mm Wide cills set flat and slightly projecting. m 163

Carried to Collection

R

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**Section No. 3**

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**MASONRY**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>WATERPROOFING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2017 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Waterproofing:</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs.</p> <p><b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b></p> <p><b><u>One layer 250 micron SABS approved dampproof course:</u></b></p>			
1	In walls.	m2	29	
2	Under cills.	m	31	
	<b>Carried Forward to Summary of Section No. 3</b>			
	<p><b>Section No. 3</b></p> <p><b>REFURBISHMENTS</b></p> <p><b>Bill No. 4</b></p> <p><b>WATERPROOFING</b></p>			R

Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 5</u></b></p>			
<p><b><u>ROOF COVERINGS, ETC.</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2017 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Fixing:</u></p>			
<p>Fixing shall be done according to SABS 1200HB with minimum 225mm end laps.</p>			
<p><u>Guarantee:</u></p>			
<p>The contractor will be required to provide a written guarantee, stating that: 1. The roof sheeting is of the specified thickness. 2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.</p>			
<p><u>Pricing:</u></p>			
<p>Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3 REFURBISHMENTS Bill No. 5 ROOF COVERINGS, CLADDING ETC</b></p>			
			R

**PROFILED METAL SHEETING AND ACCESSORIES**

**0.8mm Colomate finished metal IBR profile roof sheeting on existing 76 x 50mm SA pine purlins:**

1	Roof covering with pitch not exceeding 50 degrees.	m2	2,169
<b><u>0.8mm nominal thickness colomate finished ditto, but flashings:</u></b>			
2	Ridge capping (CODE FS3) 462mm girth to be brown built supa-clad, three times bent along girth and notched on site to suit roof profile.	m	108
3	Hip capping 550mm girth.	m	15
4	Valley flashing 550mm girth.	m	7
5	Barge flashing 580mm girth.	m	43

Carried to Collection

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 REFURBISHMENTS  
 Bill No. 5  
 ROOF COVERINGS, CLADDING ETC

R

**ROOF INSULATION**

**135mm Non-combustible lightweight fibreglass insulation blanket. All to be fixed in accordance with manufacturers specification:**

6	Insulation laid loose on top of brandering and fitted between tie beams including galvanised steel straining wires, laps, etc.	m2	1,075
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**ROOF COVERINGS, CLADDING ETC**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 6</u></b></p>			
<p><b><u>CARPENTRY &amp; JOINERY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Prefabricated roof trusses:</u></p>			
<p>Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturer's as approved by the Architect.</p>			
<p>Prices must include for all cross and windbracing according to the manufacturer's instruction.</p>			
<p>Prices must include for the design, plans and approval of all timber trusses and no claim shall be considered.</p>			
<p>Trusses shall be assembled in truss fabricating jigs with the truss having the proper camber, all tightly clamped together with joints secured using approved connector plates of galvanised steel sheet. Connector plates shall be pressed into the timber simultaneously from both sides of the truss with a hydraulic press capable of exerting such pressure as will ensure complete penetration of the teeth into the timber.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3                  REFURBISHMENTS                  Bill No. 6                  CARPENTRY AND JOINERY</b></p>			
		R	

The connector plates shall be of such size as will ensure that the joints so made will adequately withstand the forces exerted on the joints.

Approval of pre-fabricated roofing systems, whether measured as an alternative or not, shall be subject to the following requirements:

- (a) The Manufacturer of the pre-fabricated trusses shall hold a certificate of competence issued by the Insitute for Timber Construction.
- (b) A polyester print, size A1 having a minimum thickness of 0,5mm, shall be submitted by the Contractor to the Regional Representative at an early stage for approval by the Directorate: Structural Engineering Services.
- (c) The drawings shall be signed by a Registered Professional Engineer whose name appears on the Departmental panel for structural work.
- (d) In the case of systems buildings, approval shall be given with submission of the contract drawings on acceptance of the tender.

The following minimum information shall be shown on the drawings:

- (a) Details of the roof system with the position of the rafters and purlins indicated thereon as well as typical elevations.
- (b) Bracing as recommended by the Institute for Timber Construction.
- (c) Sizes and grading of the timber components.
- (d) Truss sizes, e.g. height of ridge or angle of pitch.
- (e) Plate sizes for every construction point. (Code numbers only are deemed insufficient).
- (f) Seperate connection details for hip, valley and jack rafters.
- (g) Maximum spacing for purlins and brandering to ceilings shall be according to Subclauses 7.6.1 and 7.6.2 and Clauses 7.8, 7.9 and 9.5.

**Carried to Collection**

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CARPENTRY AND JOINERY**

R

(h) The type of roof covering as well as the design load. Over and above the supervision undertaken by the Representative / Agent, the Truss Fabricator or his Design Engineer shall inspect the completed roof structure and issue a certificate of confirmation to the Department that:

"The roof structure(s) has (have) been erected in accordance with the Design Engineer's drawings, as accepted by the Department, and the relevant details given in the manual "THE ERECTION AND BRACING OF TIMBER ROOF TRUSSES" issued by the National Timber Research Institute and the Institute for Timber Construction".

Joinery:

Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.

Fixing:

All nailing of timber roof trusses, purlins, etc. shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Where items are described as "bolted" the bolts have been measured elsewhere.

**ROOFS ETC.**

**Sawn softwood:**

1	38mm x 114mm Wall plates.	m	41
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**Carried to Collection**

**Section No. 3  
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R

**PREFABRICATED ROOF TRUSSES, ETC.**

**Prefabricated timber roof construction with trusses at maximum 1100mm centres to 17,5 degree pitch with 800mm eaves overhangs to "clip on" (for breaking off in high wind/tornado conditions), complete including purlins at 1050mm maximum centres, runners, bracing, cleats, purlins, brackets, bolts, etc., supplied and fixed complete (wall plates elsewhere measured):**

2	Roof construction to double pitched roof with one gable end and two hipped ends, size 40.82 x 14.02m overall on plan x 1390mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Administration Block	No	1
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**Wrought S.A. Pine.**

3	76mm x 50mm Purlins.	m	1,440
4	Extra over for wrought purlins at eaves and verandahs	m	22

**EAVES, VERGES, ETC.**

**Medium density plain fibre-cement fascia and barge boards:**

5	12mm x 225mm Fascia boards, including galvanised steel H-profile joiners, etc.	m	190
6	85mm x 275mm x 6mm Barge boards, including galvanised steel H-profile joiners, etc.	m	84

**SKIRTINGS**

**Wrought meranti:**

7	19 x 76mm Skirting including 19mm quadrant bead, nailed.	m	689
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**TIMBER DOORS, WINDOWS, ETC**

**Solid core pine softwood timber flash panel door:**

8	40mm Door, size 813 x 2032mm high.	No	21
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**Section No. 3  
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CARPENTRY AND JOINERY**

9 40mm Door, size 936 x 2032mm high.

No

1

**Single leaf framed, ledged and braced solid meranti  
 hardwood timber door with flash back panel. Timber  
 weather bar screw fixed to door:**

10 40mm Door, size 813 x 2032mm high.

No

9

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R

**SHELVING**

**Hardboard (HDF):**

11	16mm Hardboard (HDF) screw fixed onto Gelmar (2974) or equally approved heavy duty stayed brackets (elsewhere). All as indicated on Architect's Drawing No. T3CLRM-A1002	m2	62	
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**FITTINGS**

**The references given in the descriptions are to the respective types of fittings detailed on the architect's drawings annexed to these bills of quantities for tender purposes:**

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.

All joinery must be completed after the Architect's approval of samples.

**Note:**

All dimensions to be confirmed on site.

12	Print room cupboard unit, size approximately 1705mm long x 600mm wide x 890mm high, including all finishes, all as indicated on Architect's drawing No. TAD-A1000, annexed to these bills of quantities.	No	1	
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13	Security room L- shaped cupboard and counter unit, size approximately 4459mm long x 600mm wide x 902mm high, including all finishes, worktops, all as indicated on Architect's drawing No. TGH - A8000, annexed to these bills of quantities.	No	1	
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14	Reception counter unit, size approximately 8494mm long x 600mm wide x 902mm high, including all finishes, worktops, all as indicated on Architect's drawing No. TGH - A8000, annexed to these bills of quantities.	No	1	
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**Carried to Collection**

R

**Section No. 3  
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CARPENTRY AND JOINERY**

15 Staff room counter unit, size approximately 27852mm long x 600mm wide x 902mm high, including all finishes, worktops, all as indicated on Architect's drawing No. TGH - A8000, annexed to these bills of quantities.

No

1

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**Bill No. 6**

**CARPENTRY AND JOINERY**

R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Descriptions:</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p> <p>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.</p> <p><b><u>NAILED UP AND SCREW UP CEILINGS</u></b></p> <p><b><u>6mm Fibre-cement ceiling boards with H-profile white PVC jointing strips over joints:</u></b></p>			
1	<p>Fibre cement ceiling boards fixed to 38mm x 38mm SAP battens at 600mm centres using 32 x 2,5mm serrated ceiling nails at 150mm centres, all in accordance with the manufacturer's recommendations.</p>	m2	29	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 3</b> <b>REFURBISHMENTS</b> <b>Bill No. 7</b> <b>CEILING, PARTITIONS AND ACCESS FLOORING</b></p>			

2	Fibre cement eaves closure board including 38mm x 38mm SAP battens and to have 20mm radius meranti quadrant.	m2	440
3	Extra over ceiling for 700mm x 700mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around.	No	9
	<b><u>1200 X 2400 6.4mm Rhinoboard Classic flush plastered ceiling with square edged Rhinoboard fixed print side up with 35mm Rhinoboard sharp point screws at 150mm centers.</u></b>		
4	Ceilings including 38 x 38mm SA Pine brandering at 300mm centers in one direction. All joints to be covered with Rhinotape fixed over joints (double over butt joints) and plastered with 3mm to 6mm thick Rhinolite Multipurpose plaster, all in accordance with the manufacturer's recommendations.	m2	303
5	Extra over ceiling for 600mm x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around.	No	6
	<b><u>6.4mm Gypsum plasterboard knock up ceiling boards with skimmed joints:</u></b>		
6	Ceilings including 38 x 50mm sawn softwood brandering at 400mm centres with cross brandering at 400mm centres and at joints, ends of sheets and at light fittings, etc.	m2	691
7	Extra over ceiling for 600mm x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around.	No	14

**INSULATION**

Carried to Collection

R

**Section No. 3  
REFURBISHMENTS  
Bill No. 7  
CEILINGS, PARTITIONS AND ACCESS FLOORING**

**135mm Non-combustible lightweight fibreglass insulation blanket. All to be fixed in accordance with manufacturers specification:**

8 Insulation laid loose on top of brandering and fitted between tie beams including galvanised steel straining wires, laps, etc.

m2

995

Carried to Collection

R

**Section No. 3  
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**Section No. 3**

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**CEILINGS, PARTITIONS AND ACCESS FLOORING**

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**Bill No. 7  
CEILINGS, PARTITIONS AND ACCESS FLOORING**

R

Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 8</u></b></p>			
<p><b><u>FLOOR COVERINGS, WALL LININGS, ETC</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Cleaning:</u></p>			
<p>Rates for floor covering shall include for proper cleaning on completion.</p>			
<p><u>Fixing:</u></p>			
<p>Floor coverings, wall linings, etc. shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc.</p>			
<p><u>Sizes:</u></p>			
<p>Sizes and patterns of vinyl sheeting described hereunder may vary from the final specification.</p>			
<p>No claim for extras in respect of additional labour or wastage will be entertained should final sizes vary from those described hereunder.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3                  REFURBISHMENTS                  Bill No. 8                  FLOOR COVERINGS, WALL LININGS ETC</b></p>			
		R	

Rates:

Rates for vinyl sheeting are deemed to include for laying in patterns in differing contracting colour and in one or alternating tones of colours as any be specified by the Architect.

**Carried to Collection**

**Section No. 3  
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Bill No. 8  
FLOOR COVERINGS, WALL LININGS ETC**

R

**FLOOR COVERINGS**

**Vinyl floor sheeting;**

1	On floors.	m2	1,197
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**POLISH, SEALERS, ETC**

**Scrub with neutral detergent and seal with three coats water based polymer emulsion or equally approved sealer:**

2	On vinyl flooring.	m2	1,197
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Carried to Collection

Section No. 3  
 REFURBISHMENTS  
 Bill No. 8  
 FLOOR COVERINGS, WALL LININGS ETC

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**FLOOR COVERINGS, WALL LININGS ETC**

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**Bill No. 8  
FLOOR COVERINGS, WALL LININGS ETC**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 10</u></b></p>			
<p><b><u>IRONMONGERY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent:</p>			
<p><u>Finishes to ironmongery:</u></p>			
<p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:</p>			
<p>BS Satin bronze lacquered CP 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 Fixing</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3 REFURBISHMENTS Bill No. 9 IRONMONGERY</b></p>			
			R

Descriptions of wall mounted and floor standing ironmongery items shall be deemed to include for fixing in position and all fixing accessories.

Descriptions of proprietary items shall be deemed to include fixing in position and all fixing accessories.

**Carried to Collection**

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REFURBISHMENTS  
Bill No. 9  
IRONMONGERY**

R

**HINGES, BOLTS, ETC.**

**Manufactured by "Dormakaba" or similar approved:**

1	Hinges by steel manufacture (Code: HBSFM)	No	11
2	Adjustable stainless steel roller bolt (Code: DBC-SS-022).	No	1

**LOCKS**

**Manufactured by "Dormakaba" or similar approved:**

3	Stainless steel cylinder sash lock, case dimensions (mm) 116.5H x 78D, forend dimensions (mm) 168H x 22W, backset 57mm, at 61mm centres (Code: D036S SS).	No	11
4	Stainless steel cylinder sash lock, case dimensions (mm) 102H x 78D, forend dimensions (mm) 155H x 22W, backset 57mm, at 61mm centres (Code: D035S SS).	No	1
5	Stainless steel multiple lever sash lock, case dimensions (mm) 102H x 78D, forend dimensions (mm) 155H x 22W, backset 57mm, at 62mm centres (Code: D035S SS).	No	1
6	Stainless steel bathroom deadlock, case dimensions (mm) 38H x 76D, forend dimensions (mm) 78H x 22.5W, backset 55mm centres (Code: DMWC-SS-008).	No	1
7	50mm Satin nickel padlock master keyed and spring clip to secure gates.	No	2
8	63mm Five pin satin nickel Euro-profile double cylinder master keyed (Code: DDC206301 MK)	No	11
9	66mm Five pin satin nickel Euro-profile double cylinder master keyed (Code: DDC106601 MK).	No	11
10	55mm back set single long throw profile cylinder gate lock, ISEO 1450.00.55. (Code: 1450).	No	1

**Carried to Collection**

R

**Section No. 3  
REFURBISHMENTS  
Bill No. 9  
IRONMONGERY**

**HANDLES**

**Manufactured by "Dormakaba" or similar approved:**

11	Satin Chrome lever handle on plate with cylinder cutout (Code: CB30 Cyl S.C)	Sets	11.0
12	325 x 25mm Stainless Steel straight tubular pull handle flange fixing (Code: DPH301B).	No	2
13	200 x 22mm Stainless steel straight tubular pull handle BTB (BTB fixing sets included) - (Code: DPH209 BTB).	Pairs	9.0
14	149 x 19mm Stainless Steel straight tubular pull handle BTB (BTB fixing sets included)- (Code: DPH301C BTB).	Pairs	9.0
15	Stainless steel lever handle on rose with cylinder escutcheons (Code: CR001 Cyl S.S).	No	11

**DOOR CLOSERS**

**Manufactured by "Dormakaba" or similar approved:**

16	Silver EN 2-4 Parallel arm delayed action door closer (Code: TS73V PA DC). Push side fixing (parallel arm bracket included) EN2 750-850, EN3 850-950, EN4 950-1100, or similar approved.	Sets	1.0
17	Silver EN 2-4 Regular arm non hold open door closer - adjustable strength, hydraulic speed control (Code: TS73V). Pull side fixing EN2 750-850, EN3 850-950, EN4 950-1100, or similar approved.	No	9

**LETTERS, NAMEPLATES, ETC.**

All signage specifications to be in line with SABS Standards and to comply with all SANS Regulations.

Manufacturers to provide guarantees on all items and art work for weather proofing and UV protection. All fixing details to be in accordance with Engineer's recommendations and manufacturers specifications.

**Carried to Collection**

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**Section No. 3  
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IRONMONGERY**

18	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK B' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-BLOCK B-S-A6000	No	1
19	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK D' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-BLOCK D-S-A6000	No	1
20	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK F' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-BLOCK F-S-A6000	No	1
21	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK G' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-BLOCK G-S-A6000	No	1
22	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'ADMINISTRATION BLOCK' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-ADMIN-S-A6000	No	2
23	3mm Thick x 200mm high Reflective laser cut stainless steel lettering with letters 'RECEPTION' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TA-ADMIN-S-A6000	No	1
24	Engraved Grade 304 stainless steel Disabled Ablution Pictogram sign, size 150 x 150 x 1.2mm with counter-sunk fixing holes plugged and screwed with aluminium screws.	No	1
25	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STORE ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	5

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26	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STORE ROOM 1" in colour black mounted on door, all as indicated in the signage schedule.	No	1
27	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STORE ROOM 2" in colour black mounted on door, all as indicated in the signage schedule.	No	1
28	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "KITCHENETTE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
29	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "ADMINISTRATION" in colour black mounted on door, all as indicated in the signage schedule.	No	2
30	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "RECEPTION" in colour black mounted on door, all as indicated in the signage schedule.	No	1
31	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STRONG ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
32	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "PRINCIPALS OFFICE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
33	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "DEPUTY PRINCIPAL" in colour black mounted on door, all as indicated in the signage schedule.	No	2

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34	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "PASTORAL CARE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
35	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "ACCOUNTING OFFICE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
36	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "SECURITY ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
37	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "PRINT ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
38	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "ARCHIVE ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
39	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "MALE TOILETS" in colour black mounted on door, all as indicated in the signage schedule.	No	1
40	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "FEMALE TOILETS" in colour black mounted on door, all as indicated in the signage schedule.	No	1
41	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "LOBBY 3" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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**Section No. 3  
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42	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "SICK BAY 2" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
43	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "SICK BAY" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
44	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STAFF ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
45	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLEANERS ROOM ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	2		
46	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "TUCK SHOP" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
47	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "H.O.D OFFICE" in colour black mounted on door, all as indicated in the signage schedule.	No	2		
48	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "ABLUTION" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
49	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "WORKSHOP" in colour black mounted on door, all as indicated in the signage schedule.	No	1		
<b>Carried to Collection</b>					
<b>Section No. 3 REFURBISHMENTS Bill No. 9 IRONMONGERY</b>					R

50	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 16" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
51	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 15" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
52	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 14" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
53	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 13" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
54	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 12" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
55	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 11" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
56	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 10" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
57	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 09" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
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**Manufactured by "Dormakaba" or similar approved:**

66	38mm concealed fixing plain rubber door stop (Code: DJW).	No	11
67	Stainless Steel Heavy duty spring clip (Code: H076).	No	11
68	Door mounted door stop plugged to concrete floor (Code: DDS-SS-017).	No	10

**BLINDS**

**Manually operated Roller Blind with enhanced light reduction, privacy and light control flame retardant fabric, size to match opening, controlled with Stainless steel chain or equally approved**

69	Size 1022 x 710mm	No	14
70	Size 1200 x 1200mm	No	24
71	Size 1250 x 1500mm	No	95
72	Size 1510 x 1540mm	No	9

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<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p>Descriptions</p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers.</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>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described.</p>			
<p>NOTE: All steel will be galvanised unless otherwise stated.</p>			
<p><u>Reference to drawings and details:</u></p>			
<p>Where drawings and/ or details have been referred to Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p>			
<p><u>Descriptions of bolts, anchors, etc.:</u></p>			
<p>Unless otherwise described, descriptions of items shall be deemed to include for fixing to brickwork or concrete.</p>			
<p>Where item are described as "bolted", the bolts are measured elsewhere.</p>			
<p><b>Carried to Collection</b></p>			
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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.

Items described as 'holed for bolt(s)' shall be deemed to exclude the bolts unless otherwise described.

Fixing:

Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres.

Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be laminated performance glass as shown on the window schedules appended to these bills of quantities (as described in the headings to window descriptions). Glass thickness shall comply with SAGGA regulations irrespective of thickness shown on the schedules. Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed. For purpose made windows and doors, refer to drawings annexed to these bills of quantities.

The following certificates shall be provided prior to commencement of site work:

1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product.
2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively.
3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process.

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4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked.

5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years.

**STEEL WINDOWS, DOORS, ETC.**

**Standard DDA steel door constructed from 38 x 38mm angle irons with 5mm galvanised steel solid infill at base glass view panels:**

1	1511 x 2032mm High door.	No	1
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**ALUMINIUM WINDOWS, ETC**

Aluminium sections shall be fabricated as per AAAMSA regulation.

**Charcoal finished purpose made aluminium windows, complete with subframes, ironmongery, glazing to comply with SABS 0400, sealing, including 30 x 12mm galvanised steel flat bar with 10mm diameter galvanised steel round bars infill at approximately 125mm centres fixed to frame during manufacture, over all opening sections and fixing to brickwork with M10 expansion bolts. All coating and burglar bars to be executed by manufacturer in accordance with SANS 1796, all in accordance with Architect window schedule.**

2	Top hung aluminium window, size 537 x 654mm high.	No	13
3	Top hung aluminium with louvre window, size 1530 x 680mm high.	No	4
4	Top hung aluminium window, size 1020 x 600mm high.	No	8
5	Top hung aluminium window, size 1200 x 1200mm high.	No	128
6	Top hung aluminium window, size 900 x 900mm high.	No	19

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7	Top hung aluminium window, size 1303 x 510mm high.	No	8		
<b><u>GALVANISED PRESSED STEEL DOOR FRAMES</u></b>					
<b><u>1,6mm Double rebated steel door frames suitable for 270mm walls:</u></b>					
8	Frame for door 813 x 2032mm high.	No	3		
<b><u>1,6mm Double rebated steel door frames suitable for 110mm brick walls:</u></b>					
9	Frame for door 813 x 2032mm high.	No	21		
<b><u>1,6mm Double rebated steel door frames suitable for one brick walls:</u></b>					
10	Frame for door 936 x 2032mm high.	No	1		
<b><u>Galvanised steel door frames:</u></b>					
11	38mm Galvanised steel door frame suitable for 230mm wall, to accommodate integral with 1510 x 2032mm door leaf. Door frame complete with 2 pairs 100mm butt hinges, rubber door buffers set in frame and fixing lugs.	No	1		
12	50 x 50mm Steel door frame with three pairs of heavy duty bullet hinges, to be screw fixed to wall by M12 stainless steel rawl bolts. Frame secured to floor by 100mm x 100mm x 3mm thick baseplate welded to bottom of frame posts and baseplate screw fixed to concrete floor by 2 x 12mm rawl bolts to Engineers approval.	No	4		
<b>Carried to Collection</b>					
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**SECURITY GATES**

**Galvanised steel security gates:**

Note: The contractor is to check on site measurements before placing of order.

13	Entrance security grille gates (G01) size 865 x 2032mm high overall constructed from 38 x 38mm galvanised steel square tubes with 20mm galvanised steel solid tubes infill laid perpendicular at 90 degrees at 100mm centres.	No	1
14	Entrance security grille gates (G01) size 813 x 2032mm high overall constructed from 38 x 38mm galvanised steel square tubes with 25 x 25mm galvanised steel square tubes infill laid diagonally at 45 degrees at 125mm centres.	No	3

**SHELVING**

**Approved standard white powder coated finish shelving, etc. fixed in position strictly in accordance with the manufacturer's specification:**

15	Gelmar (2974) or equally approved heavy duty stayed bracket, size 300 x 350mm mild steel bracket with black powder coat finish, screw fixed to walls at maximum 800mm centers. All as indicated on Architect's Drawing No. T3CLRM-A1002	No	176
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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 10</u></b></p>			
<p><b><u>PLASTERING</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Moisture tests:</u></p>			
<p>Before any finishes, coverings, etc. are applied to screeds, plastering, etc. or any other in-situ finish moisture tests are to be carried out to the complete satisfaction of the Principal Agent to ensure that these surfaces have the correct moisture content for the finish to be applied.</p>			
<p><u>Labours, etc.:</u></p>			
<p>Labours such as fair, rounded and chamfered edges, trowel cuts, throats, V-joints, angles, etc. shall be deemed to be included in the descriptions.</p>			
<p><u>Granolithic:</u></p>			
<p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into a true and even colour.</p>			
<p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.</p>			
<p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width.</p>			
<p><b>Carried to Collection</b></p>			
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Unless otherwise described, granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic.

For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all dirt, oil, etc. is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic.

Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints.

Cement plaster:

Unless otherwise described, cement plaster shall be taken to mean Class 1 cement plaster.

Self - levelling screed:

To Contractor's expense should Grade 1 variance in F1 above not be achieved. Grind & prime existing surface with self-leveling Tal-Screed Master or equal & approved - thickness between between 4 to 5mm.

**SCREEDS**

**3:1 Cement plaster screed power floated on concrete:**

1	30mm Thick screed on floors and landings.	m2	35
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**Carried to Collection**

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REFURBISHMENTS  
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PLASTERING**

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**GRANOLITHIC**

**Smooth granolite on screed free of dents and bumps**

2	On floors and landings	m2	16
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**INTERNAL PLASTER**

**12mm Thick 4:1 One coat cement plaster steel trowelled on brickwork:**

3	On walls (Provisional).	m2	117
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4	On narrow widths.	m2	6
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	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Fixing:</u></p> <p>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.</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key - coat.</p> <p>Ceramic, tiles are to be fixed and grouted with suitable adhesives and grouts from the Professional range of products as recommended by the manufacturer of the tiles.</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>330 x 330 x 5mm Thick ceramic tiles fixed with adhesive to plaster (plaster elsewhere)</u></b></p>			
1	On walls	m2	27	
2	On narrow widths.	m2	2	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 3</b> <b>REFURBISHMENTS</b> <b>Bill No. 12</b> <b>TILING</b></p>			

**FLOOR TILING**

**152 x 152 x 5mm Thick white glazed tiles fixed to plaster (elsewhere measured) with and approved tile adhesive to and pointed with white cement to:**

3	On floors.	m2	7
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**SUNDRIES**

**Aluminium dividing strips, etc.:**

4	40mm Aluminium transition strip embedded into screed between vinyl sheeting and porcelain floor tiles.	m	18
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**Section No. 3**

**Bill No. 12**

**TILING**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2017 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>References to details and drawings:</u></p>			
<p>Where drawings and/ or details have been referred to Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders 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>Stormwater channels:</u></p>			
<p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc., and disposal of surplus material on site.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3 REFURBISHMENTS Bill No. 13 PLUMBING AND DRAINAGE</b></p>			
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French drains:

Descriptions of French drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, approved geo-fabric filter blanket over stone, 300mm earth filling over and disposal of surplus material on site.

Stainless steel basins, sinks, wash troughs, urinals, etc.:

Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc. shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc. shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Sealing of edges:

Outer edges of sinks, basins, baths, urinals, etc. are to be sealed against adjacent surfaces with approved silicone.

uPVC pipes and fittings:

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings.

uPVC pressure pipes and fittings:

Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 63mm 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.

High density polyethylene (HDPE) pipes and fittings:

Pipes shall be type IV and of the class specified with Plasson or Alprene compression fittings.

**Carried to Collection**

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Bill No. 13  
PLUMBING AND DRAINAGE**

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Polycop polypropylene pipes:

Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with Fast-fuse heat welded thermoplastic or where so described Polylock compression fittings 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.

Copper pipes:

Pipes shall be hard drawn and half-hard Maksal pipes of the class described. 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-siphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016.

Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc. to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition.

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing' and 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.

Fixing of pipes:

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.

**Carried to Collection**

**Section No. 3  
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PLUMBING AND DRAINAGE**

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Paper wrapping to pipes:

Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings.

Disinfection of water pipework:

Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere).

Laying, backfilling, bedding, etc. of pipes:

Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.

Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines SABS 1200LD : Sewers SABS 1200LE : Stormwater drainage Pipe trenches, etc. shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : 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 1200LB : Bedding (Pipes) Unless otherwise described bedding of rigid pipes shall be Class B bedding.

General:

Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc. are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends.

Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc. shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 93% Mod AASHTO density and disposal of surplus material on site.

Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc. and to steel pipes (adaptors for connections to copper pipes, etc. are given separately).

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Descriptions of WC pans, slop hoppers, etc. shall be deemed to include for joints to soil pipes (pan connectors are separately measured).

As-built drawings:

Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere).

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**RAINWATER DISPOSAL**

**Pre-coated seamless aluminium**

**125mm x 100mm x 0.5mm Thick Galvanised steel gutter with stop ends (or equally approved) fixed on Nutec fascia board @ 800mm centres by 125mm x 100mm x 8mm thick galvanised square brackets with 75mm x 50mm x 0.5mm Thick Galvanised circular crimped downpipe (or equally approved) fixed to wall by 3 round holder bats screw fixed to wall at equal spacing with 1 x 8mm x 65mm long top hat screw and 2 x 6 x 20mm gutter bolts and nuts including all necessary bends, elbows, shoes etc, painted with one coat Galvanised Iron primer and two coats Status Matt using a roller, brush or airless spray gun:**

1	150 x 125mm eaves gutter	m	439
2	150 x 125mm eaves gutter stopped end	No	22
3	150 x 125mm eaves gutter mitre corner	No	4
4	75 x 50mm eaves gutter outlet	No	31
5	75 x 50mm fluted rainwater pipe	m	77
6	75 x 50mm crimped rainwater pipe bend	No	41
7	75 x 50mm crimped rainwater pipe shoe	No	31

**SANITARY FITTINGS, TANKS, GEYSERS, ETC**

**Supply and fix the following sanitary fittings, geysers and equipment together with loose ancillary fittings supplied therewith, including unloading, storing, unpacking, hoisting or lowering as required, fixing and building into position, cutting all mortices and chases as required for fixing and building in position, cutting, brackets, clamps, etc., and connecting up pipework and handing over in perfect working order at completion:**

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**Manufactured by "Franke" or similar approved:**

8	Franke 1,2mm Grade 304 18/10 stainless steel HDTX597 wall and floor mounted shrouded pan (Code: 2540167), size 500 x 360 x 450mm high with internal flange with 250mm long extended pipes, exposed back entry flush valve (elsewhere specified) and 60mm flush pipe, bolted to wall and floor with anchor bolts, compliant with SABS 497:1991 and SABS 1733:2002.	No	17
9	Franke Grade 304 18/10 stainless steel CMPX594 wall hung WC pan for disabled persons (Code: 2540138), size 360 x 700 x 350mm high, exposed back entry flush valve (elsewhere specified) and 38mm flush pipe, 3mm stainless steel bracket bolted to wall with 4 x 8mm anchor bolts, compliant with SABS 1733:2002.	No	1
10	Franke Stratos STRX618 1,2/1,5mm thick satin finished stainless steel soap dispenser (Code: 2120041), size 100 x 134 x 304mm high with a replaceable and refillable 1 litre container, cylinder lock with standard Franke key, plugged and screwed to the wall with stainless steel screws.	No	13
11	Franke 0.8mm Grade 304 18/10 stainless steel WB001 wash hand basin with tiling key (Code: 2520003), size 535 x 420 x 150mm deep with a one piece pressed bowl, 32mm high apron and 40mm waste outlet, galvanised mild steel Eagle brackets size 408 x 319mm (Code: 2120008) bolted to wall with 2No. 6mm anchor bolts. Or similar approved.	No	15
12	Franke 1,2mm Grade 304 18/10 stainless steel BE Barron bowl urinal (Code: 2540055), size 316 x 241 x 425mm high, Cobra Junior Flushmaster (Code: FJ8.102) exposed back entry flush valve, 40mm waste outlet, pressed perforated stainless steel grid and chrome plated button spreader connected to 15mm water supply, 2mm thick mounting plate bolted to wall with anchor bolts. Or similar approved.	No	6

**TAPS, VALVES, ETC.**

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REFURBISHMENTS  
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PLUMBING AND DRAINAGE**

**Manufactured by "Cobra" or similar approved:**

13	Cobra Demand Pillar tap. Code SKU: FPT2A1DT-0GT01. Chrome finished silver tap. Deck mounted commercial style with dimensions height: 78mm, diameter: 42mm, projection: 89mm, installation depth: 48mm, spout to deck height: 30mm. Or equally approved.	No	13
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**Valves, etc.**

14	COBRA Flush Master Toilet Flush Valve. Exposed back entry. Non-hold open feature with wall flange, integral vacuum breaker and control stop with integral non-return valve inlet. Adjustable control stop to valve connection 108mm to 140mm. With bent flushpipe and rubber pan connector. 1 1/4BSP female iron connection end. Recommended optimum design pressures: inlet flow pressure 30 - 300kPa for back entry WC pans: Maximum system pressure 600kPa. Product code: FM1-100/N. Or similar approved.	No	18
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**WASTE UNIONS, TRAPS, ETC.**

**Manufactured by "Cobra" or similar approved:**

15	Bottle trap with adjustable telescopic waste connection pipe. 1 1/4BSP female inlet connection. 1 1/4BSP male iron outlet connection. Brass body. Comes with waste adaptor 1 1/4 to 1 1/2 BSP & outlet adaptors 1 1/4 & 1 1/2. Product Code: 340/N.	No	17
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**PLUMBING AND DRAINAGE**

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<p><b><u>BILL NO. 13</u></b></p>			
<p><b><u>PAINTWORK</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>PREPARATORY WORK TO EXISTING WORK</u></b></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><u>Painting specification:</u></p>			
<p>All painting shall be done in accordance with SABS specifications unless otherwise described.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 3                  REFURBISHMENTS                  Bill No. 14                  PAINTWORK</b></p>			
			R

Colours:

Unless otherwise described, all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accordance with SABS 1091.

When staining timber, the resultant colour or shade must be to the complete satisfaction of the Principal Agent before any overcoating or preservative is applied.

**ON INTERNAL FLOATED PLASTER SURFACES**

**Prepare surfaces and remove all loose material, apply one coat alkaline resistant primer, one universal undercoat two coats eggshell enamel paint on:**

1	On walls.	m2	1,240
2	In narrow widths.	m2	62

**ON PLASTERBOARD SURFACES**

**Prepare and apply two coats Super Acrylic PVA, As per Architect specification:**

3	Ceilings and cornices.	m2	1,021
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**ON METAL SURFACES**

**Prepare surfaces and apply gloss enamel paint according to Architect's paint schedule:**

4	Steel columns.	m2	45
5	Steel gates (measured flat on both sides).	m2	20
6	Steel door frames.	m2	35

**Polish**

7	Stainless steel wash hand basin.	m2	3
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**ON WOOD SURFACES**

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**Sand down, prepare surface and apply varnish all to Architect specification:**

8	Timber service hatch and timber window frame.	m2	1
9	Timber doors (all sides measured).	m2	63
10	Timber shelving.	m2	56
11	Counter tops.	m2	14

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<p><b><u>BILL NO. 1</u></b></p>			
<p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Nature of material to be excavated:</u></p>			
<p>The material to be excavated is assumed to be predominantly of a composition that will allow excavation in "earth" as specified, but including a percentage of excavation in "soft rock" and "hard rock".</p>			
<p>A soils investigation has been carried out on site by the Engineer and the report is available from them. Descriptions of excavations shall be deemed to include all ground conditions classifiable as earth described in the above report and where conditions of a more difficult character are indicated these are separately measured.</p>			
<p><u>Carting away of excavated material:</u></p>			
<p>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.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 1                  EARTHWORKS</b></p>			
			R

Dewatering of excavations:

The Contractor shall allow for removing seepage and other water from subterranean sources from the excavations by pumping, baling or otherwise. Accurate records of all such dewatering shall be kept to determine the total volume of water so removed and a clear distinction shall be made between water from subterranean sources and other water.

Density testing on filling:

Rates for filling, etc. shall include for all density and soil type testing to prove that the specified compaction is achieved. When additional testing is done on instruction of the Principal Agent and these tests are successful, they will be paid for additionally.

Imported fill:

"Filling and bedding to trenches etc. to be in compliance with SABS 1200 DB and LB respectively"

**EXCAVATION, FILLING, ETC. OTHER THAN BULK**

**Excavation in earth not exceeding 2m deep:**

1	Trenches and holes.	m3	1,045	
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**Extra over trench and hole excavations in earth for excavation in:**

2	Soft rock.	m3	104	
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3	Hard rock.	m3	52	
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**Extra over all excavations for carting away:**

4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the Contractor.	m3	1,045	
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**Risk of collapse of excavations:**

5	Sides of trenches and holes excavation not exceeding 1500mm deep.	m2	8,124	
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<b><u>Keeping excavations free of water:</u></b>				
6	Keeping excavations free of all water other than subterranean water.			
<b><u>FILLING, ETC.</u></b>				
<b><u>Earth Filling Selected And Supplied By The Contractor, Deposited In Layers Not Exceeding 150mm Thick, Watered And Consolidated In:</u></b>				
7	G7 gravel fill material compacted to 90% modified AASHTO density under footings, etc.	m3	810	
<b><u>Coarse river sand filling supplied by the contractor:</u></b>				
8	Under floors etc.	m3	424	
9	Under aprons.	m3	38	
<b><u>Compaction of surfaces:</u></b>				
10	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	8,487	
<b><u>Prescribed density tests on filling:</u></b>				
11	Modified AASHTO density test.	No	39	
<b><u>SOIL POISONING</u></b>				
<b><u>Approved brand of anti-termite soil poison in accordance with SANS 5859, with 50mm sand over poison applied by a Registered Pest Control Company and guaranteed against termite infestation for ten years:</u></b>				
12	Under floors etc. including forming and poisoning shallow furrows against foundation walls etc., filling in furrows and ramming.	m2	8,487	
13	To bottoms and sides of trenches etc	m2	10,156	
<b>Carried to Collection</b>				
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**Section No. 4**

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<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</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 Architect. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Architect. (Test cubes are measured separately).</p> <p><u>Formwork:</u></p> <p>Descriptions 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 style="text-align: right;"><b>Carried to Collection</b></p> <p><b>Section No. 4 NEW BUILDING WORKS Bill No. 2 CONCRETE, FORMWORK AND REINFORCMENT</b></p>			R

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.

Formwork to soffits of solid slabs etc., shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described.

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.

**UNREINFORCED CONCRETE CAST ON FORMWORK**

**20Mpa/19mm. Concrete:**

1	Concrete counters.	m3	1
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**REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES**

**25 MPa/19mm. Concrete:**

2	Foundation beams.	m3	809
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**REINFORCED CONCRETE CAST ON FORMWORK**

**25 MPa/19mm. Concrete:**

3	Surface beds.	m3	827
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4	Aprons.	m3	93
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**TEST BLOCKS.**

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**Test blocks:**

5	Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	29.0
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**CONCRETE SUNDRIES**

**Finishing top surfaces of concrete smooth with a wood float:**

6	Aprons.	m2	727
7	Surface beds, slabs, etc.	m2	8,272

**ROUGH FORMWORK (DEGREE OF ACCURACY II)**

**Rough formwork to sides:**

8	Edges, risers, ends and reveals not exceeding 300mm high or wide.	m	1,667
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**MOVEMENT JOINTS ETC.**

**Isolation joint with closed cell foam or compressible softboard between vertical concrete and brick surfaces sealed with 10 x 10mm Sikaflex-pro 2HP or similar approved:**

9 10mm Joint not exceeding 300mm high. m 1,535

**Expansion joints with closed cell foam or compressible soft board between vertical brickwork surfaces filled with 10 x 10mm Sikaflex-pro 2HP or similar approved:**

10 10mm Joint not exceeding 300mm high. m 311

**Saw cut joints ream out to 6 x 20mm and sealed with 15 x 6 sikaflex-pro 2HP sealant on polychord backing strip:**

11 3.5 x 30mm Saw cut joints on top of concrete. m 1,046

**REINFORCEMENT (PROVISIONAL)**

**Fabric reinforcement:**

12 Type 193 fabric reinforcement in concrete apron channels, etc. m2 727

13 Type 193 fabric reinforcement in surface beds, slabs etc. m2 8,272

**High tensile steel reinforcement to structural concrete work:**

14 10mm Diameter bar t 16.35

15 12mm Diameter bar t 0.07

16 16mm Diameter bar t 57.97

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**CONCRETE, FORMWORK AND REINFORCMENT**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>PRECAST CONCRETE</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Sizes:</u></p> <p>Blocks, sills, etc measured linear shall be made n suitable lengths.Large size setting out drawings shall be prepared where neccessary and submitted to the principal agent for approval before moulds are made</p> <p><u>General</u></p> <p>where kerbstones, blocks, etc are laid in ground descriptions shall be deemed to include necessary excavation, filling in and ramming</p> <p><u>User note</u></p> <p><i>Where precast concrete copings, sills, beams, facings, claddings, etc are specially designed then the relevant supplementary preambles are to be included here. Items are to be given with brief descriptions referring to detailed drawings annexed to these bills of quantities where necessary</i></p> <p><b><u>PRECAST CONCRETE SLABS ETC</u></b></p> <p><b><u>25 Mpa precast concrete bollards including reinforcement:</u></b></p>			
1	220mm Diameter precast concrete bollards installed to manufacturer's detail at max 1.5mm centers. Finish to Architect's specification.	No	6	
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	<p><b>Section No. 4</b></p> <p><b>NEW BUILDING WORKS</b></p> <p><b>Bill No. 3</b></p> <p><b>PRECAST CONCRETE</b></p>			

Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 4</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Sizes in descriptions:</u></p>			
<p>Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.</p>			
<p><u>Face bricks:</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour.</p>			
<p><u>Pointing:</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.</p>			
<p><u>Samples, etc:</u></p>			
<p>Rates for brickwork, faced brickwork, etc shall include for all required samples.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 4                  MASONRY</b></p>			
		R	

**BRICKWORK IN SUPERSTRUCTURE**

**Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar:**

1	Half brick walls.	m2	545
2	Ditto, but in beamfilling.	m2	47
3	One brick walls.	m2	1,832
4	Ditto, but in gable walls	m2	66
5	Ditto, but in breeze wall.	m2	275
6	270mm Hollow walls of two half brick skins including galvanised wire ties.	m2	3,632
7	Ditto, but in beamfilling.	m2	443
8	Ditto, but in gable walls.	m2	10
9	Brick columns	m3	55

**BRICKWORK SUNDRIES**

**Brickwork sundries:**

10	Bag down outer face of inner skin of brick wall with 4:1 cement slurry and apply two coats bituminous emulsion including working around ties.	m2	2,247
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**Reinforcing and stabilising brickwork:**

11	110 x 75mm Solid facebrick lintels in lengths not exceeding 3000mm.	m	583
12	110 x 75mm Solid facebrick lintels in lengths exceeding 3000mm and not exceeding 4500mm.	m	3

**Approved polysulphide sealing compound including backing cord, bond breaker, primer etc.:**

13	10mm x 12mm In expansion joints in walls including raking out expansion joint filler as necessary	m	131
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Carried to Collection

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**Section No. 4  
NEW BUILDING WORKS  
Bill No. 4  
MASONRY**

<b><u>Joint forming material in movement joints:</u></b>				
14	10mm Cell foam or compressible softboard built in vertically or horizontally between brick skins, concrete, etc.	m2	203	
<b><u>Brickwork reinforcement:</u></b>				
15	75mm Wide reinforcement built in horizontally.	m	2,689	
16	150mm Wide reinforcement built in horizontally.	m	11,045	
<b><u>Prestressed fabricated precast lintels including necessary temporary supports:</u></b>				
17	110mm x 75mm Lintels in lengths not exceeding 3000mm.	m	600	
18	110mm x 75mm. Lintels in lengths exceeding 3000mm and not exceeding 4500mm	m	3	
<b><u>Wall insulation</u></b>				
19	Isoboard high density 32-36kg/m3 rigid extruded polystyrene 100% closed cell insulation boarding 40mm thick x 600mm wide with tongue and groove joints fixed to inner skin of brick cavity wall such to shed moisture, with galvanised mild steel once bent support and hold back ties size 20 x 1.6 x 120mm girth with fishtailed ends built into horizontal joints in wall at maximum 600mm centres along top and bottom edge including neatly notching board edges around wall ties, window and door frames, or similar approved	m2	3,632	
<b><u>Galvanised hoop iron cramps, ties, etc.</u></b>				
20	30 x 1,6mm Cramp 500mm long with one end fixed to timber and other end built into brickwork	No	975	
<b><u>FACE BRICKWORK</u></b>				
<b><u>Facebricks (FBS) Autumn Wheat Travertine, size 222 x 106 x 73mm bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>				
21	Extra over brickwork for face brickwork.	m2	2,927	
<b>Carried to Collection</b>				
<b>Section No. 4 NEW BUILDING WORKS Bill No. 4 MASONRY</b>				R

22	Ditto, but halfbrick walls pointed on both sides.	m2	289
23	Extra over brickwork for facing brick columns.	m2	278
	<b><u>Facebricks (FBS) Firelight Travertine, size 222 x 106 x 73mm bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>		
24	Extra over brickwork for solid bullnose brick-on-edge window cill.	m	471
	<b><u>Facebricks (FBS) Moroccan Red Travertine, size 222 x 106 x 73mm bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>		
25	Extra over brickwork for face brickwork to internal walls to dado level.	m2	1,024
	<b><u>FIBRE CEMENT WINDOW CILLS</u></b>		
	<b><u>15mm Thick natural grey cills in single lengths fixed with fibre cement bedded in cement mortar including galvanised lugs screwed to underside of cill, etc in compliance to manufacturer's specification:</u></b>		
26	150mm Wide cills set flat and slightly projecting.	m	464

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NEW BUILDING WORKS  
Bill No. 4  
MASONRY

**Section No. 4**

**Bill No. 4**

**MASONRY**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 5</u></b></p> <p><b><u>WATERPROOFING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Proprietary products in descriptions:</u></p> <p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p> <p><u>Waterproofing:</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs.</p> <p><b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b></p> <p><b><u>One layer of 375 micron embossed polyethylene dampproof course or similar approved:</u></b></p>			
1	In walls, under cills, etc.	m2	617	
	<p><b><u>One layer of 250 micron green polyethylene damp proof membrane (as per clause 7.2 of specification SABS-0400), all side overlaps sealed with approved contact adhesive</u></b></p>			
2	Under floors	m2	8,272	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 4</b> <b>NEW BUILDING WORKS</b> <b>Bill No. 5</b> <b>WATERPROOFING</b></p>			

3	<p><b><u>A.B.E or equally approved Two coats "Brixal" bitumen emulsion waterproof coating in accordance with recommendation of A.B.E Construction chemicals:</u></b></p> <p>Inner leaf of cavity walls.</p>	m2	3,632	
<p><b><u>JOINT SEALANTS, ETC.</u></b></p>				
<p><b><u>SIKASIL-728NS:</u></b></p>				
4	<p>In joint sealing and pointing all round external window and door frames.</p>	m	2,382	
<p><b><u>Two-part grey polysulphide sealing compound including backing cord, bond breaker, primer, etc.</u></b></p>				
5	<p>Between timber or metal door or window frames and face brick / plaster reveal.</p>	m	2,199	
<p><b>Carried to Collection</b></p>				
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**Bill No. 5**

**WATERPROOFING**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 6</u></b></p>			
<p><b><u>ROOF COVERINGS, ETC.</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Fixing:</u></p>			
<p>Fixing shall be done according to SABS 1200HB with minimum 225mm end laps.</p>			
<p><u>Guarantee:</u></p>			
<p>The contractor will be required to provide a written guarantee, stating that: 1. The roof sheeting is of the specified thickness. 2. The client is indemnified against any defects, including colour deterioration for a minimum period of 15 years.</p>			
<p><u>Pricing:</u></p>			
<p>Prices for roof covering and cladding are to include for all necessary drive screws, hook bolts, sheet bolts, nuts, washers, etc., for drilling holes for screws and bolts including removing all swarf from the sheeting and all right angle cutting and waste (Measured net).</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4 NEW BUILDING WORKS Bill No. 6 ROOF COVERINGS, CLADDING ETC</b></p>			
			R

**CORRUGATED METAL SHEETING AND ACCESSORIES**

**0,8mm Colomate finished metal IBR profile roof sheeting on existing 76 x 50mm SA pine purlins:**

1	Roof covering with pitch not exceeding 25 degrees.	m2	8,840
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**0,8mm Nominal thickness colomate finished ditto, but flashings:**

2	0.8mm metal ridge capping 462mm girth to be brown built supra-clad, three times bent along girth and notched on site to suit roof profile (Code: FS3)	m	465
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3	Hip capping 550mm girth.	m	414
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4	Barge flashing 580mm girth.	m	85
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5	Valley flashing 550mm girth.	m	168
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**ROOF INSULATION**

**135mm Non-combustible lightweight fibreglass insulation blanket. All to be fixed in accordance with manufacturers specification:**

6	Insulation laid taut under battens and fixed concurrent with roof covering including galvanised steel straining wires, laps, etc.	m2	6,253
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ROOF COVERINGS, CLADDING ETC

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**Section No. 4**

**Bill No. 6**

**ROOF COVERINGS, CLADDING ETC**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 7</u></b></p>			
<p><b><u>CARPENTRY &amp; JOINERY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Prefabricated roof trusses:</u></p>			
<p>Prefabricated timber roof trusses shall be constructed of South African pine by a firm of specialist designer manufacturer's as approved by the Architect.</p>			
<p>Prices must include for all cross and windbracing according to the manufacturer's instruction.</p>			
<p>Prices must include for the design, plans and approval of all timber trusses and no claim shall be considered.</p>			
<p>Trusses shall be assembled in truss fabricating jigs with the truss having the proper camber, all tightly clamped together with joints secured using approved connector plates of galvanised steel sheet. Connector plates shall be pressed into the timber simultaneously from both sides of the truss with a hydraulic press capable of exerting such pressure as will ensure complete penetration of the teeth into the timber.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4 NEW BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY</b></p>			
		R	

The connector plates shall be of such size as will ensure that the joints so made will adequately withstand the forces exerted on the joints.

Approval of pre-fabricated roofing systems, whether measured as an alternative or not, shall be subject to the following requirements:

- (a) The Manufacturer of the pre-fabricated trusses shall hold a certificate of competence issued by the Insitute for Timber Construction.
- (b) A polyester print, size A1 having a minimum thickness of 0,5mm, shall be submitted by the Contractor to the Regional Representative at an early stage for approval by the Directorate: Structural Engineering Services.
- (c) The drawings shall be signed by a Registered Professional Engineer whose name appears on the Departmental panel for structural work.
- (d) In the case of systems buildings, approval shall be given with submission of the contract drawings on acceptance of the tender.

The following minimum information shall be shown on the drawings:

- (a) Details of the roof system with the position of the rafters and purlins indicated thereon as well as typical elevations.
- (b) Bracing as recommended by the Institute for Timber Construction.
- (c) Sizes and grading of the timber components.
- (d) Truss sizes, e.g. height of ridge or angle of pitch.
- (e) Plate sizes for every construction point. (Code numbers only are deemed insufficient).
- (f) Seperate connection details for hip, valley and jack rafters.
- (g) Maximum spacing for purlins and brandering to ceilings shall be according to Subclauses 7.6.1 and 7.6.2 and Clauses 7.8, 7.9 and 9.5.

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(h) The type of roof covering as well as the design load. Over and above the supervision undertaken by the Representative / Agent, the Truss Fabricator or his Design Engineer shall inspect the completed roof structure and issue a certificate of confirmation to the Department that:

"The roof structure(s) has (have) been erected in accordance with the Design Engineer's drawings, as accepted by the Department, and the relevant details given in the manual "THE ERECTION AND BRACING OF TIMBER ROOF TRUSSES" issued by the National Timber Research Institute and the Institute for Timber Construction".

Joinery:

Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc.

Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.

Fixing:

All nailing of timber roof trusses, purlins, etc. shall be done with galvanised nails. In coastal areas, copper, aluminium or stainless steel nails shall be used.

Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.

Where items are described as "bolted" the bolts have been measured elsewhere.

**ROOFS ETC.**

**Sawn softwood:**

1	38 x 114mm Wall plates.	m	1,379	
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NEW BUILDING WORKS  
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CARPENTRY AND JOINERY**

R

**PREFABRICATED ROOF TRUSSES, ETC.**

**The following is applicable in respect of roof trusses, trusses not exceeding 25 degree pitch, maximum 1200mm centers. Roof covering 0,8mm Colomate finished metal IBR profile roof sheeting including 50 x 76mm timber purlins at maximum 700mm centers. runners, bracing, cleats, brackets, bolts, etc., supplied and fixed complete, The contractor is to confirm dimensions from the Architect and confirm actual dimensions on site before fabrication (wall plates elsewhere measured):**

2 Roof construction to double pitched roof with two gable ends, 5.75 x 6.84m overall on plan x 920mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Generator Room.

No 1

3 Roof construction to double pitched roof with one gable end and four hipped ends, 35.31 x 34.38m overall on plan x 3590mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - DNC

No 1

4 Roof construction to double pitched roof, 61.58 x 37.46m overall on plan x 1850mm high overall, with 41.12 x 15.69m opening in the centre, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Foundation Phase

No 1

5 Roof construction to double pitched roof with hipped ends, 46.11 x 38.97m overall on plan x 2030mm high overall, with 10.07 x 15.35m opening in the centre, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Grade R

No 1

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6	Roof construction to double pitched roof with two hipped ends, 47.83m x 28.98m overall on plan x 1685mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Library and Laboratories	No	1
7	Roof construction to double pitched roof with two gable ends, 25.99m x 10.28m overall on plan x 1855mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Sports Facility	No	1
8	Roof construction to double pitched roof with two gable ends, 8.52m x 5.84m overall on plan x 1315mm high overall, including trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 700mm centres maximum for roof covering (wall plates elsewhere) - Guard House	No	1
<b><u>EAVES, VERGES, ETC.</u></b>			
<b><u>"Nutec" or similar approved moulded barge boards:</u></b>			
9	275 x 80mm Barge boards, including 12 x 40mm countersunk brass screws with PVC H-profile barge board joiners (Code: 721-740).	m	221
<b><u>Medium density plain fibre-cement fascia and barge boards:</u></b>			
10	12 x 225mm Fascia boards, including galvanised steel H-profile joiners, etc.	m	1,334
<b><u>SKIRTINGS</u></b>			
<b><u>Wrought meranti:</u></b>			
11	19mm x 76mm Skirtings including 19mm quadrant bead, nailed to walls including all nails to be punched and filled at 600mm centres	m	1,676

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**Section No. 4  
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CARPENTRY AND JOINERY**

**CORNICES**

**Timber quadrant:**

12	Standard 19 x 19 x 3000mm timber quadrant fixed to wall with 38mm galvanised clout nails at 300mm centers into wall and at 400mm centers to bandering.	m	2,082
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**DOORS ETC.**

**Standard approved semi solid meranti doors with 15 horizontal panels in projection:**

13	40mm Thick single leaf framed, ledged & braced solid meranti hardwood door (D1), size 813mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	44
14	40mm Thick, single leaf solid core pine softwood timber (D2), size 813mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	37
15	40mm Thick, single leaf solid core pine softwood timber (D3), size 936mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	5
16	40mm Thick single leaf framed, ledged & braced solid meranti hardwood door (D4), size 813mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	30
17	40mm Thick, Custom made single leaf solid core pine softwood timber door (D5), size 813mm x 1932mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	54
18	40mm Thick single leaf framed, ledged & braced solid meranti hardwood door (D6), size 813mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	9

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CARPENTRY AND JOINERY**

19	44mm Thick, double leaf meranti hardwood timber door (D7), size 1800mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	6
20	40mm Thick double leaf framed, ledged & braced solid meranti hardwood door (D14), size 1609mm x 2032mm high, all as indicated on Architect's door schedule attached to these bills of quantities.	No	1
<b><u>SHELVING</u></b>			
<b><u>Hardboard (HDF):</u></b>			
21	16mm Hardboard (HDF) screw fixed onto Gelmar (2974) or equally approved heavy duty stayed brackets (elsewhere). All as indicated on Architect's Drawing No. T3CLRM-A1002	m2	333
<b><u>FITTINGS</u></b>			
<b><u>The references given in the descriptions are to the respective types of fittings detailed on the architect's drawings annexed to these bills of quantities for tender purposes:</u></b>			
<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.</p> <p>All joinery must be completed after the Architect's approval of samples.</p> <p><b>Note:</b> All dimensions to be confirmed on site.</p>			
22	Tuck shop cupboard unit, size approximately 1705mm long x 600mm wide x 890mm high, including hole for drop-in sink (sink elsewhere measured) including all finishes, all as indicated on Architect's drawing No. TGR-A8001, annexed to these bills of quantities.	No	1

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**Section No. 4  
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23	Staff kitchenette room cupboard unit, size 1690mm long x 600mm wide x 2150mm high, including hole for drop-in sink (sink elsewhere measured), all finishes and counter tops, all as indicated on Architect's drawing No. TCH-A8007, annexed to these bills of quantities.	No	1	
24	Grade -R- kitchen room cupboard unit, size 2600mm long x 600mm wide x 2150mm high, including hole for drop-in sink (sink elsewhere measured), all finishes and counter tops, all as indicated on Architect's drawing no. TCH-A8007, annexed to these bills of quantities.	No	1	
25	Guard house cupboard and counter top unit, size approximately 2420mm long x 600mm wide x 902mm high, including hole for drop in sink (elsewhere) and all finishes, worktops, all as indicated on Architect's drawing No. TGH - A8000, annexed to these bills of quantities.	No	1	
26	Computer room computer table unit, size approximately 11400mm long x 750mm wide x 650mm high, including all finishes, all as indicated on Architect's Drawing No. TLL-A8004 and TLL-A8005 annexed to these bills of quantities.	No	1	
27	Computer room computer table unit, size approximately 9200mm long x 750mm wide x 650mm high, including all finishes, all as indicated on Architect's Drawing No. TLL-A8004 and TLL-A8005 annexed to these bills of quantities.	No	1	
28	Computer room computer table unit, size approximately 3390mm long x 750mm wide x 650mm high, including all finishes, all as indicated on Architect's Drawing No. TLL-A8004 and TLL-A8005 annexed to these bills of quantities.	No	4	
29	Computer room computer table unit, size approximately 1500mm long x 750mm wide x 650mm high, including all finishes, all as indicated on Architect's Drawing No. TLL-A8004 and TLL-A8005 annexed to these bills of quantities.	No	1	
<b>Carried to Collection</b>				
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30	Laboratory student table unit, size approximately 3000mm long x 600mm wide x 700mm high, including all finishes, privacy panel, etc. All as indicated on Architect's Drawing No. TLL-A8003, annexed to these bills of quantities.	No	20
31	Caretakers room cupboard and wardrobe unit, size 5116mm long x 600mm wide x 2150mm high, including all finishes and counter tops, all as indicated on Architect's drawing No. TCH-A8000, annexed to these bills of quantities.	No	1
32	Multi purpose room counter unit - Saligna, size approximately 7090mm long x 600mm wide x 700mm high, including holes for drop-in sinks (sinks elsewhere measured) including all finishes, all as indicated on Architect's Drawing No. TLL-A8006, annexed to these bills of quantities.	No	1

**TIMBER BENCH ETC**

The following 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.

All joinery must be completed after the Architect's approval of samples.

**The references given in the descriptions are to the respective types of fittings detailed on the architect's drawings annexed to these bills of quantities for tender purposes:**

**Note:**  
All dimensions to be confirmed on site.

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CARPENTRY AND JOINERY**

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33	L-Shaped boys changer bench ,size approximately 5020mm long x 450mm wide x 450mm high made of 32 x 68mm planned saligna slots bevelled and sanded down to a fine smooth finish and apply two coats lotus sheen dark brown or (equally approved) including 30 x 30mm M.S hollow section stiffener,M.S plate fixing cleat rawl all as indicated on Architect's drawing No. TCH-A8001, annexed to these bills of quantities.	No	1
34	L-Shaped Girls changer bench-01 ,size approximately 3305mm long x 450mm wide x 450mm high made of 32 x 68mm planned saligna slots bevelled and sanded down to a fine smooth finish and apply two coats lotus sheen dark brown or (equally approved) including 30 x 30mm M.S hollow section stiffener,M.S plate fixing cleat rawl all as indicated on Architect's drawing No. TCH-A8001, annexed to these bills of quantities.	No	1
35	Girls changer bench-02 ,size approximately 2205mm long x 450mm wide x 450mm high made of 32 x 68mm planned saligna slots bevelled and sanded down to a fine smooth finish and apply two coats lotus sheen dark brown or (equally approved) including 30 x 30mm M.S hollow section stiffener,M.S plate fixing cleat rawl all as indicated on Architect's drawing No. TCH-A8001, annexed to these bills of quantities.	No	1

**SCHOOL FURNITURE**

**All furniture units to comply with SABS standards. Sizes and specifications to be in strict compliance to drawings and specifications**

**DESKS, TABLES, ETC**

36	Teacher's desk - Saligna size 1200 x 700 x 750mm high, complete as per Figure 4.2 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	39
37	Teacher's demonstration desk - Salvocorp size 2250 x 610 x 975mm high, complete as per Figure 9.1 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660:2009.	No	2

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**Section No. 4  
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CARPENTRY AND JOINERY**

38	Student service station - Salvocorp size 1200 x 600 x 975mm high, complete as per Figure 9.2 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660:2009.	No	20		
39	Office desk size 1500 x 850 x 750mm high, complete as per Figure 4.3 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	19		
40	Primary combination desk size 1065 x 400 x 650mm high, complete as per Figure 3.1 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660:2009.	No	435		
41	Computer table size 1200 x 700 x 750mm high, complete as per Figure 5.7 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	1		
42	Higher primary table size 1000 x 450 x 650mm high complete as per Figure 2.3 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660:2009.	No	48		
43	Meeting table - oak melamine, complete as per Figure T5 of the Architect's Drawing No: TCH-A6001, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	1		
44	Dinning desk size 900 x 1200 x 650mm high complete as per Figure 2.3 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	70		
<b>Carried to Collection</b>					
<b>Section No. 4 NEW BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY</b>				R	

45	Grade 'R' saligna table size 1000 x 1000 x 500mm high complete as per Figure 2.1 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	1	
46	Staffroom 'saligna' table size 1200 x 700 x 750mm high complete as per Figure 4.1 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	1	
47	'Reboni' or similar approved trapezium size 1200 x 600 x 600mm high and rectangular table combination size 600 x 1200 x 550mm high complete as per manufacturers specifications.	No	110	
<b><u>CHAIRS, ETC</u></b>				
48	Upholstered teacher's chair without arms complete as per Figure 7.1 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-1:2008.	No	36	
49	Upholstered teacher's chair with arms complete as per Figure 7.2 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-1:2008.	No	45	
50	Upholstered side chair with arms complete as per Figure 7.5 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-1:2008.	No	50	
51	Typist's chair complete as per Figure 7.3 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-1:2008.	No	1	
52	Higher primary chair - Masonite, complete as per Figure 1.7 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	30	
<b>Carried to Collection</b>				
<b>Section No. 4</b>				
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53	Laboratory stool, size 350 x 460mm high complete as per Figure 9.4 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	62	
54	Laboratory stool, size 350 x 600mm high complete as per Figure 9.5 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	8	
55	Higher primary chair - Polypropylene, complete as per Figure 1.3 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	376	
56	Grade 'R' chair - Polypropylene, complete as per Figure 1.5 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660:2009.	No	167	
<b><u>FILING CABINETS, ETC</u></b>				
57	Shelving unit 5 tier oak melamine size 900 x 300 x 1800mm, complete as per Figure 6.17 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	12	
58	Bookshelf double - saligna, complete as per Figure 8.8 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	16	
59	Catalogue cabinet, complete as per Figure 8.9 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	3	
60	Book Trolley, complete as per Figure 8.12 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	9	
<b>Carried to Collection</b>				R
<b>Section No. 4 NEW BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY</b>				

61	Correspondence rack size 170 x 353 x 76mm high, complete as per Figure 5.4 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	1	
62	Pigeon hole size 900 x 360 x 1500mm high, complete as per Figure 5.5 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-3:2009.	No	40	
<b><u>PINNING BOARDS, WRITING BOARDS, ETC</u></b>				
63	Pin board/Notice board, complete as per Figure 8.15 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 660: 2009.	No	79	
64	White board size 2400 x 1200mm, complete as per Figure WB of the Architect's Drawing No: TLL-A6002, attached to the back of these Bills of Quantities.	No	39	
<b><u>HANGERS, ETC</u></b>				
65	Coat and hat stand, complete as per Figure 5.11 of the School and Office Furniture Specifications, attached to the back of these Bills of Quantities. All in compliance with SANS 1528-2:2008.	No	12	
<b><u>BEDS, ETC</u></b>				
66	Caretaker's single bed - Mahogany size 910 x 1810 x 330mm high including inner spring mattress or similar approved suitable for bed. As per Drawing No: TCH-A6001.	No	1	
67	Steel frame single bed - size 1910 x 910 x 430mm high including plastic foam mattress or similar approved suitable for bed size 1910 x 910 x 150mm thick. As per Drawing No: TGR-A6001 Rev 1.0.	No	7	
<b>Carried to Collection</b>				R
<b>Section No. 4 NEW BUILDING WORKS Bill No. 7 CARPENTRY AND JOINERY</b>				

**Section No. 4**

**Bill No. 7**

**CARPENTRY AND JOINERY**

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 NEW BUILDING WORKS  
 Bill No. 7  
 CARPENTRY AND JOINERY**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 8</u></b></p>			
<p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Descriptions:</u></p>			
<p>Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.</p>			
<p>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.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 8                  CEILING, PARTITIONS AND ACCESS FLOORING</b></p>			
		R	

**SUSPENDED CEILINGS**

**Acoustic ceiling tiles size 1200 x 600mm x 15mm thick laid on and including aluminium main tees, cross tees, hold-down clips, wedges, etc., all suspended with aluminium hangers at hanger centres not exceeding 1200mm:**

1 Ceiling suspended not exceeding 1000mm below timber/steel purlins at ± 1400mm centres (trusses at ± 1000mm centres) m2 1,613

2 Extra over ceiling for 700 x 700mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around. No 29

**Gypsum ceiling panels size 1200 x 600 x 9mm thick including aluminium main tees, cross tees, hold-down clips, wedges, etc., all suspended with aluminium hangers at hanger centres not exceeding 1200mm**

3 Ceilings including 38 x 50mm sawn softwood brander at 400mm centres with cross brander at 400mm centres and at joints, ends of sheets and at light fittings, etc. m2 1,342

4 Extra over ceiling for 700 x 700mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around. No 51

**Premium biologically absorbable mineral wool ceiling tiles, with square-edge size 1200 x 600mm x 15mm thick laid on fire rated exposed suspension system comprising galvanised hangers at centres not exceeding 1200mm and all installed to manufacturers instruction.L-trim, plugged and screwed at centres not exceeding 200mm:**

5 Ceiling suspended not exceeding 1000mm below timber/steel purlins at ± 1400mm centres (trusses at ± 1000mm centres). m2 66

Carried to Collection

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**Section No. 4  
NEW BUILDING WORKS  
Bill No. 8  
CEILINGS, PARTITIONS AND ACCESS FLOORING**

**NAILED UP AND SCREW UP CEILINGS**

**1200 x 2400 x 6mm thick fibre-cement ceiling boards with H type joint strips**

6 Ceilings including 38 x 50mm sawn softwood brandering at 600mm centres with cross brandering at joints, ends of sheets and at light fittings, etc. m2 2,165

7 Extra over ceiling for 600 x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around. No 22

**1200 X 2400 6.4mm Rhinoboard Classic flush plastered ceiling with square edged Rhinoboard fixed print side up with 35mm Rhinoboard sharp point screws at 150mm centers.**

8 Ceilings including 38 x 38mm SA Pine brandering at 300mm centers in one direction. All joints to be covered with Rhinotape fixed over joints (double over butt joints) and plastered with 3mm to 6mm thick Rhinolite Multipurpose plaster, all in accordance with the manufacturer's recommendations. m2 18

9 Extra over ceiling for 600 x 600mm hinged trap door of wrought softwood rebated framing with one sawn softwood cross brander covered with ceiling board and fitted flush in opening, including necessary trimmers all around. No 3

**INSULATION**

**Knauf insulation 135mm thick ceiling roll(un-cut) flexible non-combustible glass mineral wool thermal insulation(R-value: 3.38m2.K/W), complying with SANS 1381-1:2007 and SANS 428:2012 and laid according to the manufactures recommendations.**

10 Above ceiling boards. m2 5,189

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CEILINGS, PARTITIONS AND ACCESS FLOORING**

**Section No. 4**

**Bill No. 8**

**CEILINGS, PARTITIONS AND ACCESS FLOORING**

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 NEW BUILDING WORKS  
 Bill No. 8  
 CEILINGS, PARTITIONS AND ACCESS FLOORING**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>FLOOR COVERINGS, WALL LININGS, ETC</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>Cleaning:</u></p>			
<p>Rates for floor covering shall include for proper cleaning on completion.</p>			
<p><u>Fixing:</u></p>			
<p>Floor coverings, wall linings, etc. shall, where applicable, be fixed with adhesive as recommended by the manufacturers of the flooring, linings, etc.</p>			
<p><u>Sizes:</u></p>			
<p>Sizes and patterns of vinyl sheeting described hereunder may vary from the final specification.</p>			
<p>No claim for extras in respect of additional labour or wastage will be entertained should final sizes vary from those described hereunder.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 9                  FLOOR COVERINGS, WALL LININGS ETC</b></p>			
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Rates:

Rates for vinyl sheeting are deemed to include for laying in patterns in differing contracting colour and in one or alternating tones of colours as any be specified by the Architect.

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**Section No. 4  
NEW BUILDING WORKS  
Bill No. 9  
FLOOR COVERINGS, WALL LININGS ETC**

R

**FLOOR COVERINGS**

**2mm Thick homogeneous (PUR) fully flexible vinyl sheeting:**

1	On floors.	m2	2,346	
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**POLISH, SEALERS, ETC**

**Scrub with neutral detergent and seal with three coats water based polymer emulsion or equally approved sealer:**

2	On vinyl flooring.	m2	2,346	
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Section No. 4  
 NEW BUILDING WORKS  
 Bill No. 9  
 FLOOR COVERINGS, WALL LININGS ETC

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**Section No. 4**

**Bill No. 9**

**FLOOR COVERINGS, WALL LININGS ETC**

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**Section No. 4  
 NEW BUILDING WORKS**

**Bill No. 9  
 FLOOR COVERINGS, WALL LININGS ETC**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 10</u></b></p>			
<p><b><u>IRONMONGERY</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Proprietary products in descriptions:</u></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent:</p>			
<p><u>Finishes to ironmongery:</u></p>			
<p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:</p>			
<p>BS Satin bronze lacquered                  CP 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 Fixing</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 10                  IRONMONGERY</b></p>			
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Descriptions of wall mounted and floor standing ironmongery items shall be deemed to include for fixing in position and all fixing accessories.

Descriptions of proprietary items shall be deemed to include fixing in position and all fixing accessories.

**Carried to Collection**

**Section No. 4  
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IRONMONGERY**

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**HINGES, BOLTS, ETC.**

**Manufactured by "Dormakaba" or similar approved:**

1	Hinges by steel manufacture (Code: HBSFM)	No	198
2	100 x 150mm aluminium projection hinges a W & B hardware (B2530), finish to be finalised prior to ordering.	No	45
3	153mm Satin Chrome manual flush bolt with heel (Code: DFB-SC-180).	No	32
4	200mm Aluminium sinkless hinges, centres pin, Anodised (Code: 2040)	No	76
5	100 x 25mm Satin chrome on brass Barrel Bolt.	No	53
6	Adjustable stainless steel roller bolt (Code: DBC-SS-022).	No	30
7	Hinges and locks box by gate manufacture (Code: HLBGM).	No	63

**CATCHES, CABIN HOOK, ETC.**

**Manufactured by "Dormakaba" or similar approved:**

8	Stainless Steel hat and coat hook with rubber buffer (Code: DHC-SS-031B).	No	53
9	200mm Cabin Hook and eye with 100 x 75mm chamfered wrot meranti block (Code: 166).	No	65

**LOCKS**

**Manufactured by "Dormakaba" or similar approved:**

10	Stainless steel cylinder sash lock, case dimensions (mm) 116.5H x 78D, forend dimensions (mm) 168H x 22W, backset 57mm, at 61mm centres (Code: D036S SS).	No	130
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IRONMONGERY**

11	Stainless steel cylinder sash lock, case dimensions (mm) 102H x 78D, forend dimensions (mm) 155H x 22W, backset 57mm, at 61mm centres (Code: D035S SS).	No	74	
12	Stainless steel multiple lever sash lock, case dimensions (mm) 102H x 78D, forend dimensions (mm) 155H x 22W, backset 57mm, at 62mm centres (Code: D035S SS).	No	37	
13	Stainless steel cylinder dead lock, case dimensions (mm) 116.5H x 78D, forend dimensions (mm) 168H x 22W, backset 57mm centres (Code: D037D SS).	No	30	
14	Stainless steel bathroom deadlock, case dimensions (mm) 38H x 76D, forend dimensions (mm) 78H x 22.5W, backset 55mm centres (Code: DMWC-SS-008).	No	68	
15	43mm Five pin satin nickel Euro-profile cylinder grand master keyed (Code: DSC104301 MK).	No	30	
16	50mm Satin nickel padlock master keyed and spring clip to secure gates.	No	65	
17	63mm Five pin satin nickel Euro-profile double cylinder master keyed (Code: DDC206301 MK)	No	164	
18	Five pin satin nickel Euro-profile single cylinder master keyed (Code: DSC204101 MK)	No	39	
19	66mm Five pin satin nickel Euro-profile double cylinder master keyed (Code: DDC106601 MK).	No	81	
20	Nickel plated rebate conversion kit for Euro-profile locks (Code: D038R NP).	No	14	
21	Stainless Steel Disabled WC indicator and turnknob for physically impaired (Code: DWC-006).	Sets	5.0	
22	Stainless Steel Disabled WC (Red & white) indicator and turnknob (Code: DWC-005).	Sets	54.0	
<b>Carried to Collection</b>				
<b>Section No. 4 NEW BUILDING WORKS Bill No. 10 IRONMONGERY</b>				R

23	55mm back set single long throw profile cylinder gate lock, ISEO 1450.00.55. (Code: 1450).	No	64
24	Stainless steel latch lock, case dimensions 102H x 72D. fore dimensions 155H x 22W. backset 57mm centres (Code: D031L SS).	No	30
25	Stainless Steel round cylinder escutcheon (Code: DCE-002 S.S).	Pairs	22.0
<b><u>HANDLES</u></b>			
<b><u>Manufactured by "Dormakaba" or similar approved:</u></b>			
26	Satin Chrome lever handle on plate with cylinder cutout (Code: CB30 Cyl S.C)	Sets	81.0
27	150mm SC brass surface fix pull handle fitted with one way type screw (Code: 109 SC).	No	60
28	Pull handle on a 150 x 300mm x 1.2mm thick grade 430 stainless steel plate with no cylinder cutout with 6 counter sunk holes.	Pairs	30.0
29	325 x 25mm Stainless Steel straight tubular pull handle flange fixing (Code: DPH301B).	No	27
30	200 x 22mm Stainless steel straight tubular pull handle BTB (BTB fixing sets included) - (Code: DPH209 BTB).	Pairs	44.0
31	149 x 19mm Stainless Steel straight tubular pull handle (Code: DPH301C BT).	No	137
32	149 x 19mm Stainless Steel straight tubular pull handle BTB (BTB fixing sets included)- (Code: DPH301C BTB).	Pairs	74.0
33	Stainless steel lever handle on rose with cylinder escutcheons (Code: CR001 Cyl S.S).	No	130
34	Stainless steel lever handle on rose with KH escutcheons (Code: CR001 KEY S.S).	Sets	36.0
35	Stainless steel lever handle on rose - latch (Code: CR001 Latch)	Sets	50.0

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**Section No. 4  
NEW BUILDING WORKS  
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IRONMONGERY**

**DOOR CLOSERS**

**Manufactured by "Dormakaba" or similar approved:**

36	Silver EN 2-4 Parallel arm delayed action door closer (Code: TS73V PA DC). Push side fixing (parallel arm bracket included) EN2 750-850, EN3 850-950, EN4 950-1100, or similar approved.	Sets	5.0
37	Silver EN 2-4 Regular arm non hold open door closer - adjustable strength, hydraulic speed control (Code: TS73V). Pull side fixing EN2 750-850, EN3 850-950, EN4 950-1100, or similar approved.	No	74

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**PUSH PLATES AND KICK PLATES**

**Manufactured by "Dormakaba" or similar approved:**

38	150mm Stainless Steel kick plate 150 x width of door x 1.2mm thick grade 430 to be glue fixed (Code: DKP-430-GF 150).	No	28
39	200 x 144 x 1,2mm thick (Grade 430) Stainless steel kick plate formed over the top of the door, bent twice extending 50mm down top edge of door on both sides (Code: FSSP/DC).	No	35
40	300 x 150 x 1,2mm thick (Grade 430) Stainless steel push plate with 6 counter sunk holes for fixing screws and cylinder cutout, formed over the top of the door, bent twice extending 50mm down top edge of door on both sides (Code: FSSP/DC).	No	30
41	170 x 170 x 1,2mm thick (Grade 430) Stainless steel plate stainless steel plate to have 4 countersunk holes for screw fixing (Code: DPP-430-BL-SF-170 x 170).	No	54

**LETTERS, NAMEPLATES, ETC.**

All signage specifications to be in line with SABS Standards and to comply with all SANS Regulations.

Manufacturers to provide guarantees on all items and art work for weather proofing and UV protection. All fixing details to be in accordance with Engineer's recommendations and manufacturers specifications.

**Lasercut stainless steel lettering with 6mm pins welded to back:**

42	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'DNC' mounted to wall with 6mm pins welded to back, all as indicated in the Architects drawing: TDNC-A6003	No	1
43	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK L' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TCH-A6003	No	1

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**Section No. 4  
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44	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK H' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TLL-A6003	No	1
45	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK J' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TGR-A6003	No	1
46	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'BLOCK I' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: T12-A6003	No	1
47	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'REFUSE ROOM' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TRR-A6000	No	1
48	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'GATE HOUSE' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TGH-A6000	No	2
49	3mm Thick x 300mm high Reflective laser cut stainless steel lettering with letters 'GENERATOR ROOM' mounted to wall with 6mm pins welded to back, all as indicated in the Architects Drawing No: TGEN-A6000	No	1
50	3mm Thick reflective laser cut stainless steel signage system 'WL-2', size 200mm wide x 300mm high. Wall mounted with 6mm pins welded to back, all as indicated in the Architects Drawing No: TCH-A6003.	No	8
51	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "H.O.D OFFICE 01" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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**Section No. 4**  
**NEW BUILDING WORKS**  
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52	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "H.O.D OFFICE 02" in colour black mounted on door, all as indicated in the signage schedule.	No	1
53	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "H.O.D OFFICE 03" in colour black mounted on door, all as indicated in the signage schedule.	No	1
54	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STORE ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	25
55	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "GENERAL STORE" in colour black mounted on door, all as indicated in the signage schedule.	No	4
56	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "SICK ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	5
57	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STAFF TOILETS" in colour black mounted on door, all as indicated in the signage schedule.	No	1
58	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "ENTRANCE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
59	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "KITCHENETTE" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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**Section No. 4  
NEW BUILDING WORKS  
Bill No. 10  
IRONMONGERY**

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60	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "I.C.T ROOM 01" in colour black mounted on door, all as indicated in the signage schedule.	No	1
61	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "I.C.T ROOM 02" in colour black mounted on door, all as indicated in the signage schedule.	No	1
62	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "DB ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
63	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "DB ROOM 01" in colour black mounted on door, all as indicated in the signage schedule.	No	2
64	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "DB ROOM 02" in colour black mounted on door, all as indicated in the signage schedule.	No	2
65	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "ADMINISTRATION" in colour black mounted on door, all as indicated in the signage schedule.	No	1
66	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "RECEPTION" in colour black mounted on door, all as indicated in the signage schedule.	No	2
67	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "DELIVERY" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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**Section No. 4  
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IRONMONGERY**

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68	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "GROCERY STORE" in colour black mounted on door, all as indicated in the signage schedule.	No	1
69	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "COLD ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
70	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "PLANT ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1
71	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "WASHING AREA" in colour black mounted on door, all as indicated in the signage schedule.	No	1
72	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CATERING" in colour black mounted on door, all as indicated in the signage schedule.	No	1
73	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "TUCK SHOP" in colour black mounted on door, all as indicated in the signage schedule.	No	2
74	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLEANERS STORE" in colour black mounted on door, all as indicated in the signage schedule.	No	5
75	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "LIBRARY" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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76	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "H.O.D OFFICE" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
77	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "COMPUTER ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
78	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "MULTIPURPOSE ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
79	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "RESOURCE ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
80	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "I.C.T ROOM" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
81	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "SCIENCE LABORATORY 01" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
82	300 x 105 x 3mm Thick Anodised silver engraved nameplate with the letters "SCIENCE LABORATORY 02" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
83	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CARETAKER" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
<b>Carried to Collection</b>				
<b>Section No. 4</b>				
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<b>IRONMONGERY</b>				
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84	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "KITCHEN" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
85	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "STAFF TOILETS" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
86	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 30" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
87	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 29" in colour black mounted on door, all as indicated in the signage schedule.	No	1	
88	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 28" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
89	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 27" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
90	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 26" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
91	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 25" in colour black mounted on door, all as indicated in the signage schedule.	No	2	
<b>Carried to Collection</b>				
<b>Section No. 4 NEW BUILDING WORKS Bill No. 10 IRONMONGERY</b>				R

92	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 24" in colour black mounted on door, all as indicated in the signage schedule.	No	1
93	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 23" in colour black mounted on door, all as indicated in the signage schedule.	No	1
94	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 22" in colour black mounted on door, all as indicated in the signage schedule.	No	1
95	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 21" in colour black mounted on door, all as indicated in the signage schedule.	No	1
96	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 20" in colour black mounted on door, all as indicated in the signage schedule.	No	1
97	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 19" in colour black mounted on door, all as indicated in the signage schedule.	No	1
98	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 18" in colour black mounted on door, all as indicated in the signage schedule.	No	1
99	300 x 60 x 3mm Thick Anodised silver engraved nameplate with the letters "CLASSROOM 17" in colour black mounted on door, all as indicated in the signage schedule.	No	1

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**SUNDRIES**

**Manufactured by "Dormakaba" or similar approved:**

100	Halcast doorstop and holder (Code: 401SC).	No	74
101	38mm concealed fixing plain rubber door stop (Code: DJW).	No	59
102	Stainless Steel Heavy duty spring clip (Code: H076).	No	65
103	Door mounted door stop plugged to concrete floor (Code: DDS-SS-017).	No	99
104	Five point locking panic bar for 1000 x 2270mm high double door.	Sets	15.0
105	150mm aluminium flush bolt, natural anodised (Code: M1519N)	No	30
106	Dormakaba or equally approved stainless steel hat and coat hooks (Code: DHC-SS-030-A) screw fixed to wall with approved screws at 150mm centers at 1400mm height from FFL.	No	68

**BATHROOM FITTINGS**

**Manufactured by "Franke" or similar approved:**

107	19mm Stainless steel chromium plated towel rail, 600mm long, with end brackets plugged to plastered or tiled wall.	No	6
108	'Splashhaid' Stainless steel dog leg graib rail (Code: GRDL300), overall size 300 x 300 x 32mm, plugged and screwed to wall in accordance with the manufacturer's recommendations and 1-year guarantee.	No	5
109	'Splashhaid' Stainless steel straight graib rail (Code: GRST450), overall size 450mm, plugged and screwed to wall in accordance with the manufacturer's recommendations and 1 - year guarantee.	No	5

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110	'Stratos' STRX618 1.2/1.5mm Thick satin finished stainless steel soap dispenser, size 100 x 134 x 304mm high with a replaceable and refillable 1 litre container, cylinder lock with standard Franke key, plugged and screwed to the wall with stainless steel screws (Code: 2120041).	No	34
111	'Stratos' STRX672 1.2/1.5mm Thick satin finished stainless steel double toilet roll holder, size 15690 x 141 x 303mm high for 2 rolls maximum including 108mm diameter spindle system and cylinder lock with standard key, plugged and screwed to the wall with stainless steel screws. (Code: 2120044).	No	56
112	'Rodan' RODX602 0,8mm thick satin finished stainless steel paper towel and waste bin combination (Code: 2120093), size 41145 x 471 x 1148mm high with capacity of 500-800 towels, waste bin capacity of 23 litres and cylinder lock with standard Franke key, plugged and screwed to the wall with stainless steel screws.	No	25
113	BHM5P Polished stainless steel single arm soap rack, size 110 x 114mm deep, plugged and screwed to the wall with stainless steel screws (Code: 359943).	No	17
<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC.</u></b>			
<b><u>Meranti veneered 9mm plywood panel in frame for Honours Board plugged to wall with 5 x 90mm brass screws, all as per Architect's detail on drawing No. 1613.6-AR-DES-603.</u></b>			
114	High Honours board 1200 x 1500mm high overall.	No	1
<b><u>BLINDS</u></b>			
<b><u>Manually operated Roller Blind with enhanced light reduction, privacy and light control flame retardant fabric, size to match opening, controlled with Stainless steel chain or equally approved</u></b>			
115	Size 1200 x 1200mm	No	209
116	Size 1500 x 900mm	No	6
117	Size 2400 x 1200mm	No	9

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118 Size 1500 x 1800mm

No 3

119 Size 1143 x 2210mm

No 8

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 11</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p>Descriptions</p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers.</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>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described.</p>			
<p>NOTE: All steel will be galvanised unless otherwise stated.</p>			
<p><u>Reference to drawings and details:</u></p>			
<p>Where drawings and/ or details have been referred to Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p>			
<p><u>Descriptions of bolts, anchors, etc.:</u></p>			
<p>Unless otherwise described, descriptions of items shall be deemed to include for fixing to brickwork or concrete.</p>			
<p>Where item are described as "bolted", the bolts are measured elsewhere.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 4                  NEW BUILDING WORKS                  Bill No. 11                  METALWORKS</b></p>			
		R	

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.

Items described as 'holed for bolt(s)' shall be deemed to exclude the bolts unless otherwise described.

Fixing:

Items described as 'plugged' shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres.

Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be laminated performance glass as shown on the window schedules appended to these bills of quantities (as described in the headings to window descriptions). Glass thickness shall comply with SAGGA regulations irrespective of thickness shown on the schedules. Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed. For purpose made windows and doors, refer to drawings annexed to these bills of quantities.

The following certificates shall be provided prior to commencement of site work:

1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product.
2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively.
3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process.

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4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked.

5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years.

**ALUMINIUM DOORS AND FRAMES**

All doors to be approved by the Architect prior to installation.

**Note:**

Tenderers are referred to architect's drawings indicating the general door layout as annexed to these bills of quantities for tender purposes.

**All aluminium units to comply with AAAMSA standards and to Architects approval:**

**Powder coated aluminium doors and frames, factory glazed with 6.38mm white translucent tinted laminated safety glass on 3 reflex hinges with bush on either LHS or RHS with fixed side panels in accordance with manufacturers instructions:**

1 Purpose made double leaf aluminium framed door (D07) or similar approved fixed to charcoal powder coated frame size 1800 x 2032mm high overall to manufacturers specification, all as indicated on Architect's door schedule attached to these bills of quantities.

No 7

2 Purpose made double leaf aluminium framed door (D08) or similar approved fixed to charcoal powder coated frame size 3200 x 2100mm high overall to manufacturers specification, all as indicated on Architect's door schedule attached to these bills of quantities.

No 3

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**Section No. 4  
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METALWORKS**

**ALUMINIUM WINDOWS, ETC**

**Charcoal finished purpose made aluminium windows, complete with subframes, ironmongery, glazing to comply with SABS 0400, sealing, including 30 x 12mm galvanised steel flat bar with 10mm diameter galvanised steel round bars infill at approximately 125mm centres fixed to frame during manufacture, over all opening sections and fixing to brickwork with M10 expansion bolts. All coating and burglar bars to be executed by manufacturer in accordance with SANS 1796, all in accordance with Architect window schedule.**

3	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section, size 1200 x 1200mm high.	No	209
4	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section, size 900 x 900mm high.	No	37
5	Top hung aluminium window with laminated obscure glasses only, size 600 x 900mm high.	No	56
6	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section, size 600 x 900mm high.	No	7
7	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section, size 1500 x 900mm high.	No	14
8	Top hung aluminium window with laminated obscure glasses only, size 1500 x 900mm high.	No	42
9	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section, size 2400 x 1200mm high.	No	9
10	Top hung aluminium window with laminated safety clear glass and translucent tinted laminated safety glass on fixed section , size 1500 x 1800mm high.	No	3

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**Section No. 4  
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11	Top hung aluminium window with only translucent tinted laminated safety glass, size 2500 x 1360mm high.	No	10
12	Top hung aluminium window, with 28mm thick fixed clear bulletproof glass by specialist size 1000 x 1200mm high.	No	4
<b><u>DOOR FRAMES, DOORS, WINDOWS, ETC</u></b>			
<b><u>1,6mm Double rebated steel door frames suitable for 270mm walls:</u></b>			
13	Frame for door 813 x 2032mm high.	No	53
14	Frame for door 1609 x 2032mm high.	No	3
<b><u>1,6mm Double rebated steel door frames suitable for 110mm brick walls:</u></b>			
15	Frame for door 813 x 2032mm high.	No	121
16	Frame for door 936 x 2032mm high.	No	5
<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
<b><u>Mild steel windows:</u></b>			
17	Cottage top and bottom hung mild steel window, size 1143 x 2210mm high.	No	8
<b><u>Mild steel doors:</u></b>			
18	900 x 2034mm mild steel door with two louvres.	No	1
19	1500 x 2032mm mild steel door panel with two louvres.	No	2
<b><u>LOUVRE UNITS</u></b>			
<b><u>Mild steel louvre units:</u></b>			
20	500 x 1000mm mild steel louvre with steel frame to manufacturer's detail.	No	1

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**Section No. 4  
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METALWORKS**

**SECURITY GATES**

**Galvanised steel security gates:**

Note: The contractor is to check on site measurements before placing of order.

21	Entrance security grille gates (G01) size 813 x 2102mm high overall constructed from 38 x 38mm galvanised steel square tubes with 25 x 25mm galvanised steel square tubes infill laid diagonally at 45 degrees at 125mm centres.	No	49
22	Entrance security grille gates (G02) size 813 x 2100mm high overall constructed from 38 x 38mm galvanised steel square tubes with 25 x 25mm galvanised steel square tubes infill laid diagonally at 45 degrees at 125mm centres.	No	16
23	Entrance security grille gates (G01) size 1500 x 2102mm high overall constructed from 38 x 38mm galvanised steel square tubes with 25 x 25mm galvanised steel square tubes infill laid diagonally at 45 degrees at 125mm centres.	No	1

**CORNICES**

**Aluminium PS1 shadow wall trim:**

24	Fixed to plastered brickwork with 5 x 25mm wall anchors at 450mm centers. Or similar approved.	m	1,409
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**SHELVING**

**Approved standard white powder coated finish shelving, etc. fixed in position strictly in accordance with the manufacturer's specification:**

25	Gelmar (2974) or equally approved heavy duty stayed bracket, size 300 x 350mm mild steel bracket with black powder coat finish, screw fixed to walls at maximum 800mm centers, all as indicated on Architect's Drawing No. T3CLRM-A1002	No	1,130
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**Section No. 4  
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**BURGLAR BARS**

**Burglar bars constructed from 30mm x 12mm galvanised steel flat bar with 10mm diameter galvanised steel round bars infill at approximately 125mm centres:**

Note: The contractor is to check on site measurements before placing of order.

26	Galvanised steel burglar bars, size 600 x 900mm high.	No	63
27	Galvanised steel burglar bars, size 900 x 900mm high.	No	37
28	Ditto, size 1200 x 1200mm high.	No	198
29	Ditto, size 1500 x 900mm high.	No	56
30	Ditto, size 1500 x 1800mm high.	No	3
31	Ditto, size 2400 x 1200mm high.	No	9

**STEEL ROLLER SHUTTERS ETC.**

**Galvanized chain operated industrial roller shutter door with 75mm slats as per Architect's drawing:**

32	Roll-up galvanised steel chain operated 75 x 0.8mm end-locked slatted curtain roller shutter to fit opening size (1800 x 2125mm) with overhead box 457mm high including canopy cover, standard bottom rail, 75mm wide guides, extruded aluminium T-bar with rubber seal, hot dip galvanised ancillary components including 4,5mm thick end plates, guide rails, centre lock, fixed to brick jambs and concrete lintel. Colour to Architect's approval.	No	8
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33	Roll-up galvanised steel chain operated 75 x 0.8mm end-locked slatted curtain roller shutter to fit opening size (2000 x 2100mm) with overhead box 457mm high including canopy cover, standard bottom rail, 75mm wide guides, extruded aluminium T-bar with rubber seal, hot dip galvanised ancillary components including 4,5mm thick end plates, guide rails, centre lock, fixed to brick jambs and concrete lintel. Colour to Architect's approval.	No	1
34	Roll-up galvanised steel chain operated 75 x 0.8mm end-locked slatted curtain roller shutter to fit opening size (2050 x 2125mm) with overhead box 457mm high including canopy cover, standard bottom rail, 75mm wide guides, extruded aluminium T-bar with rubber seal, hot dip galvanised ancillary components including 4,5mm thick end plates, guide rails, centre lock, fixed to brick jambs and concrete lintel. Colour to Architect's approval.	No	1
35	Roll-up galvanised steel chain operated 75 x 0.8mm end-locked slatted curtain roller shutter to fit opening size (3000 x 2100mm) with overhead box 457mm high including canopy cover, standard bottom rail, 75mm wide guides, extruded aluminium T-bar with rubber seal, hot dip galvanised ancillary components including 4,5mm thick end plates, guide rails, centre lock, fixed to brick jambs and concrete lintel. Colour to Architect's approval.	No	4
36	Roll-up galvanised steel chain operated 75 x 0.8mm end-locked slatted curtain roller shutter to fit opening size (3200 x 2125mm) with overhead box 457mm high including canopy cover, standard bottom rail, 75mm wide guides, extruded aluminium T-bar with rubber seal, hot dip galvanised ancillary components including 4,5mm thick end plates, guide rails, centre lock, fixed to brick jambs and concrete lintel. Colour to Architect's approval.	No	2

**STEEL SPIKES**

**Carried to Collection**

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**Wall spikes to Refuse yard as per Architect's Dwg  
No. TRR-A1000:**

37

On walls.

m

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**STRUCTURAL STEEL COMPONENTS**

**Columns, comprising channels welded to form box sections:**

38	100 x 100 x 3mm Mild steel square tube columns in 2410mm lengths.	m	29
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**Mild steel beams:**

39	50 x 200mm Mild steel lipped channel beam as per Architect's Drawing No. TRR - A1000.	m	32
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**Galvanised Mild Steel:**

40	9000mm High flagpole formed of 87mm (87mm for 5000mm, then reduces to 80mm for 4000mm) diameter steel pole, with pole cap and rope ring, eye, pulley, cleat and hinge stand, bolted with 3 x 12 mm diameter stainless steel threaded rod and bolts to and including 2 steel support channels 125 x 75 x 20 x 3 x 2000mm long welded to 80 x 80 x 6mm angle fixing cleats, each securely fixed to concrete base with 2 x 16mm diameter steel rods 600mm long embedded 600mm deep in ground, or equal approved, in and including 800 x 800 x 800mm deep cement concrete (25 MPa/19 mm stone) base including all excavation in earth, backfilling and ramming etc. complete.	No	2
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**Sundries:**

41	1800 x 1200mm Corporate digitally printed flag onto Ultra sheen including rope and toggle and including all branding, courier to client, artwork, redrawing etc. with School Logo.	No	2
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42	1800 x 1200mm Corporate digitally printed flag onto Ultra sheen including rope and toggle and including all branding, courier to client, artwork, redrawing etc. South African national flag.	No	2
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**GALVANIZED STEEL SECURITY MESH**

**Hot dip galvanized steel security mesh welded to 50 x 50mm hot dip galvanised angles and screw fixed between trusses:**

43	Under roof sheeting.	m2	7,326
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**Section No. 4  
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**KITCHEN FURNITURE**

44	Franke 1,2mm Grade 304 18/10 stainless steel P2 pot sinks (code:2620482), size 1850 x 650 x 1050mm with 2No: 760 x 460 x 380mm deep bowls, 150mm high integral splash back to rear, 50 x 10mm turn down and 40mm waste outlet, stainless steel solid under shelf (Code 2620086),size 1850 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No detachable Grade 304 (18/10) stainless steel square legs (code: 354650), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.Bolted to floor.	No	1
45	Franke 1,2mm Grade 304 18/10 stainless steel wall bench (code:2620114), size 1500 x 650 x 1050mm with 150mm high integral splash back to rear, 50 x 10mm turn down , stainless steel solid under shelf (Code 2620043),size 1500 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No detachable Grade 304 (18/10) stainless steel square legs (code: 352660), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.Bolted to floor.	No	2
46	Franke 1,2mm Grade 302 18/10 stainless steel fast track modular shelving (Code 2620063) with 4 No. 750 x 500mm wide louvred shelves, fixed to vertical posts with die cast aluminium corner brackets, fitted to 4No.posts, size 25mm x 1500mm high with adjustable foot piece and end caps (Code 2620028)	No	1
47	Franke 1,2mm Grade 302 18/10 stainless steel fast track modular shelving (Code 2620064) with 4 No. 1000 x 500mm wide louvred shelves, fixed to vertical posts with die cast aluminium corner brackets, fitted to 4No.posts, size 25mm x 1500mm high with 125mm diameter castors (Code: 2620032)	No	1
48	Franke 1,2mm Grade 304 18/10 stainless steel Z series shelving (Code 2620041) with 4 No. 1200 x 400mm wide perforated shelves with 25mm apron to front and sides, 30mm turn up at back of shelf with safety edge on corners, fixed to wall with 4 No. 1500mm long stainless steel wall band (Code:2620124) and bolted to wall with anchor bolts.	No	1

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49	Franke 1,2mm Grade 304 18/10 stainless steel Z series shelving (Code 2620038) with 4 No. 900 x 400mm wide perforated shelves with 25mm apron to front and sides, 30mm turn up at back of shelf with safety edge on corners, fixed to wall with 4 No. 1500mm long stainless steel wall band (Code:2620124) and bolted to wall with anchor bolts.	No	1
50	Franke 1,2mm Grade 304 18/10 stainless steel fastrack modular shelving (Code 2620058) with 4 No. 1500 x 500mm wide solid shelves fixed to vertical posts with die cast aluminium corner brackets, fitted 4 No. Posts,size 25mm x 1500mm high with 125mm diameter castors (Code:2620032)	No	1
51	Franke 1,2mm Grade 304 18/10 stainless steel T table (code:2620108), size 2400 x 650 x 1050mm with, 50 x 10mm turn down , stainless steel solid under shelf (Code 2620088),size 2400 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No detachable Grade 304 (18/10) stainless steel square legs (code: 352660), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.Bolted to floor	No	3
52	Franke 1,2mm Grade 304 18/10 stainless steel S1 catering sink (code:2620016), size 1200 x 650 x 1050mm with 500 x 500 x 230mm deep right hand pressed bowl, 150mm high integral splash back to rear, 50 x 10mm turn down and 40mm waste outlet, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No detachable Grade 304 (18/10) stainless steel square legs (code: 352650), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.Bolted to floor.	No	1

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53	Franke 1,2mm Grade 304 18/10 stainless steel S1P1 double bowl preparation sink (code:26201485), size 1850 x 650 x 1050mm with 760 x 460 x 380mm deep left hand pot sink bowl and 500 x 500x 230mm deep pressed catering bowl,150mm high integral splash back to rear, 50 x 10mm turn down and 40mm waste outlet, stainless steel slatted undershelf (Code 2620093),size 1850 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No detachable Grade 304 (18/10) stainless steel square legs (code: 354650), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.Bolted to floor	No	1
54	Franke 1,2mm Grade 304 18/10 stainless steel Z series shelving (Code: 2620042) with 5 No. 1200 x 400mm wide solid shelves with 25mm apron to front and sides, 30mm turn up at back of shelf with safety edge on corners, fixed to wall with 3 No. 1800mm long stainless steel wall band (Code: 2620126) and bolted to wall with anchor bolts.	No	3
55	Franke 1,2mm Grade 304 18/10 stainless steel Z series shelving (Code: 2620037) with 5 No. 900 x 400mm wide solid shelves with 25mm apron to front and sides, 30mm turn up at back of shelf with safety edge on corners, fixed to wall with 3 No. 1500mm long stainless steel wall band (Code: 2620124) and bolted to wall with anchor bolts.	No	1
56	Cambro element shelving add on unit 910 x 460 x 1830mm (h) product Code:2610134.	No	4
57	Cambro element shelving add on unit 1070 x 460 x 1830mm (h) product Code:2610135A	No	1
58	Cambro element shelving add on unit 1220 x 460 x 1830mm (h) product Code:2610137	No	2
59	Cambro dunnage rack 910 x 530 x 310mm (h) product Code:2610094 - DRS46480	No	3
60	Vulcan or equally approved wire type racks dimensions: 915 x 560 x 1600mm (h) - product Code:2745024-VR-9	No	1

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	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLASTERING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Moisture tests:</u></p> <p>Before any finishes, coverings, etc. are applied to screeds, plastering, etc. or any other in-situ finish moisture tests are to be carried out to the complete satisfaction of the Principal Agent to ensure that these surfaces have the correct moisture content for the finish to be applied.</p> <p><u>Labours, etc.:</u></p> <p>Labours such as fair, rounded and chamfered edges, trowel cuts, throats, V-joints, angles, etc. shall be deemed to be included in the descriptions.</p> <p><u>Granolithic:</u></p> <p>Coloured granolithic shall be tinted with an approved colouring pigment mixed into a true and even colour.</p> <p>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.</p> <p>Granolithic shall be laid in panels not exceeding 14m<sup>2</sup> for monolithic finishes, not exceeding 9,5m<sup>2</sup> for bonded finishes and not exceeding 6m<sup>2</sup> for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width.</p>			
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Unless otherwise described, granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic.

For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all dirt, oil, etc. is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic.

Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints.

Cement plaster:

Unless otherwise described, cement plaster shall be taken to mean Class 1 cement plaster.

Self - levelling screed:

To Contractor's expense should Grade 1 variance in F1 above not be achieved. Grind & prime existing surface with self-leveling Tal-Screed Master or equal & approved - thickness between between 4 to 5mm.

**SCREEDS**

**3:1 Cement plaster screeds power floated on concrete:**

1	40mm Thick screed on floors and landings.	m2	3,562
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**GRANOLITHIC**

**Stucco grano floor screed applied by approved applicators in accordance with Technical Finishes recommendations:**

2	On floors and landings	m2	326
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**INTERNAL PLASTER**

**12mm Thick 4:1 One coat cement plaster steel trowelled on brickwork:**

3	On walls.	m2	6,806
4	In narrow widths.	m2	325

**EXTERNAL PLASTER**

**Cement plaster wood floated on brickwork:**

5	On walls	m2	680
6	On narrow widths	m2	51

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Item No	<b><u>BILL NO. 13</u></b>	Quantity	Rate	Amount
	<p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Fixing:</u></p> <p>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.</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key - coat.</p> <p>Ceramic, tiles are to be fixed and grouted with suitable adhesives and grouts from the Professional range of products as recommended by the manufacturer of the tiles.</p> <p><b><u>WALL TILING</u></b></p> <p><b><u>600 x 600mm non-slip full body porcelain tiles laid onto wall to manufacturer's instructions and specifications with a suitable grout with joints, continuous in both directions:</u></b></p>			
1	Walls.	m2	926	
2	Walls in splashbacks.	m2	32	
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3	Internal cills.	m	12
<b><u>FLOOR TILING</u></b>			
<b><u>600 x 600mm non-slip full body porcelain tiles laid according to manufacturer's instructions and specifications with a suitable grout with joints, continuous in both directions:</u></b>			
4	On floors.	m2	768
<b><u>SUNDRIES</u></b>			
<b><u>Aluminium dividing strips, etc.:</u></b>			
5	38mm Aluminium dividing strip to suit material transitions as per manufacturers recommendations.	m	85
6	30 x 30 x 10mm High natural anodised aluminium wall corner protector, bedded in tile adhesive or similar approved.	m	644

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<p><b><u>BILL NO. 14</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p>			
<p><b><u>PREAMBLES</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p>Proprietary products shall be used as specified. Substitute products of similar quality and specification may only be used with prior approval by the Principal Agent.</p>			
<p><u>References to details and drawings:</u></p>			
<p>Where drawings and/ or details have been referred to Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders 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>Stormwater channels:</u></p>			
<p>Descriptions of channels shall be deemed to include necessary excavation, surface preparation, compaction, etc., and disposal of surplus material on site.</p>			
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French drains:

Descriptions of French drains shall be deemed to include excavation, stone filling graded from 300mm diameter at bottom to 75mm diameter at top, approved geo-fabric filter blanket over stone, 300mm earth filling over and disposal of surplus material on site.

Stainless steel basins, sinks, wash troughs, urinals, etc.:

Stainless steel for economy basins, domestic sinks and worktops shall be Type 430 (17/0) Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc. shall be Type 304 (18/8) Stainless steel for laboratory sinks, photographic equipment, etc. shall be Type 316 (18/8) Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.

Sealing of edges:

Outer edges of sinks, basins, baths, urinals, etc. are to be sealed against adjacent surfaces with approved silicone.

uPVC pipes and fittings:

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings.

uPVC pressure pipes and fittings:

Pipes of 50mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 63mm 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.

High density polyethylene (HDPE) pipes and fittings:

Pipes shall be type IV and of the class specified with Plasson or Alprene compression fittings.

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Polycop polypropylene pipes:

Polypropylene pipes 54mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with Fast-fuse heat welded thermoplastic or where so described Polylock compression fittings 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.

Copper pipes:

Pipes shall be hard drawn and half-hard Maksal pipes of the class described. 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-siphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016.

Copper pipes are to be installed in accordance with the latest revision of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc. to be strictly in accordance with the manufacturer's requirements with special attention to copper flux composition.

Reducing fittings:

Where fittings have reducing ends or branches they are described as 'reducing' and 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.

Fixing of pipes:

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.

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Paper wrapping to pipes:

Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings.

Disinfection of water pipework:

Water pipework is to be disinfected at completion in accordance with SABS 1200L (provision for disinfection elsewhere).

Laying, backfilling, bedding, etc. of pipes:

Pipes shall be laid and bedded in accordance with manufacturers' instructions and trenches shall be carefully backfilled.

Where no manufacturers' instructions exist, pipes shall be laid in accordance with Clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines SABS 1200LD : Sewers SABS 1200LE : Stormwater drainage Pipe trenches, etc. shall be backfilled in accordance with Clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200DB : 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 1200LB : Bedding (Pipes) Unless otherwise described bedding of rigid pipes shall be Class B bedding.

General:

Descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete (adaptors for joints to PVC pipes, etc. are given separately) Descriptions of overflow pipes where measured in number, shall be deemed to include joints to cisterns and splay cut ends.

Descriptions of pipes laid in and including trenches and of inspection chambers, catchpits, etc. shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 93% Mod AASHTO density and disposal of surplus material on site.

Descriptions of service pipes and flexible connecting pipes shall be deemed to include connections to taps, cisterns, etc. and to steel pipes (adaptors for connections to copper pipes, etc. are given separately).

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Descriptions of WC pans, slop hoppers, etc. shall be deemed to include for joints to soil pipes (pan connectors are separately measured).

As-built drawings:

Where required, the contractor shall prepare an updated set of as-built drawings. At completion of the contract the contractor shall hand these drawings to the principal agent for reproducing onto the originals for handing over to the employer (provision for allowance of as-built drawings elsewhere).

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**RAINWATER DISPOSAL**

**125mm x 100mm x 0.5mm Thick Galvanised steel gutter with stop ends (or equally approved) fixed on Nutec fascia board @ 800mm centres by 125mm x 100mm x 8mm thick galvanised square brackets with 75mm x 50mm x 0.5mm Thick Galvanised circular crimped downpipe (or equally approved) fixed to wall by 3 round holder bats screw fixed to wall at equal spacing with 1 x 8mm x 65mm long top hat screw and 2 x 6 x 20mm gutter bolts and nuts including all necessary bends, elbows, shoes etc, painted with one coat Galvanised Iron primer and two coats Status Matt using a roller, brush or airless spray gun:**

1	125 x 125mm Eaves gutter.	m	1,334
2	125 x 125mm Eaves gutter stopped end.	No	26
3	125 x 125mm Eaves gutter mitre corner.	No	203
4	100 x 75mm Eaves gutter outlet.	No	104
5	100 x 75mm Fluted rainwater pipe.	m	274
6	100 x 75mm Crimped rainwater pipe bend.	No	104
7	100 x 75mm Crimped rainwater pipe shoe.	No	104

**SANITARY FITTINGS, TANKS, GEYSERS, ETC**

**Supply and fix the following sanitary fittings, geysers and equipment together with loose ancillary fittings supplied therewith, including unloading, storing, unpacking, hoisting or lowering as required, fixing and building into position, cutting all mortices and chases as required for fixing and building in position, cutting, brackets, clamps, etc., and connecting up pipework and handing over in perfect working order at completion:**

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**Manufactured by "Franke" or similar approved:**

8	Franke 1,2mm Grade 304 18/10 stainless steel HDTX597 wall and floor mounted shrouded pan (Code: 2540167), size 500 x 360 x 450mm high with internal flange with 250mm long extended pipes, exposed back entry flush valve (elsewhere specified) and 60mm flush pipe, bolted to wall and floor with anchor bolts, compliant with SABS 497:1991 and SABS 1733:2002.	No	58
9	Franke Grade 304 18/10 stainless steel CMPX594 wall hung WC pan for disabled persons (Code: 2540138), size 360 x 700 x 350mm high, exposed back entry flush valve (elsewhere specified) and 38mm flush pipe, 3mm stainless steel bracket bolted to wall with 4 x 8mm anchor bolts, compliant with SABS 1733:2002.	No	5
10	Franke Stratos STRX618 1,2/1,5mm thick satin finished stainless steel soap dispenser (Code: 2120041), size 100 x 134 x 304mm high with a replaceable and refillable 1 litre container, cylinder lock with standard Franke key, plugged and screwed to the wall with stainless steel screws.	No	14
11	Franke 0.8mm Grade 304 18/10 stainless steel WB001 wash hand basin with tiling key (Code: 2520003), size 535 x 420 x 150mm deep with a one piece pressed bowl, 32mm high apron and 40mm waste outlet, galvanised mild steel Eagle brackets size 408 x 319mm (Code: 2120008) bolted to wall with 2No. 6mm anchor bolts. Or similar approved.	No	5
12	1,2mm Grade 304 18/10 stainless steel wash trough (Code: 2560003), size 500 x 450 x 240mm deep with pressed bowl with radiused corners, slanted ribbed front side for scrubbing and 40mm waste outlet, stainless steel brackets (Code: 2120014) bolted to wall with anchor bolts.	No	4
13	Franke 1,6mm Grade 304 18/10 stainless steel FB18 flatbed (Code: 2520013), size 1800 x 550 x 50mm deep with 50mm deep trough basin, 100mm apron and 40mm waste outlet, 3mm thick stainless steel bracket bolted to the wall with anchor bolts.	No	15

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14	Franke 1,2mm Grade 304 18/10 stainless steel BE Barron bowl urinal (Code: 2540055), size 316 x 241 x 425mm high, Cobra Junior Flushmaster (Code: FJ8.102) exposed back entry flush valve, 40mm waste outlet, pressed perforated stainless steel grid and chrome plated button spreader connected to 15mm water supply, 2mm thick mounting plate bolted to wall with anchor bolts. Or similar approved.	No	15
15	Franke or similar approved 1050mm x 535mm wide 711 Trenline Stainless steel single bowl drop sink, unit Local Code: 311850, complete with 38mm waste fitting and pvc trap.	No	4
16	Franke Model Oval A or similar approved wash hand basin, 420 x 340 x 185mm deep. Unit to include a one piece pressed bowl, 360 x 280 x 130mm deep with a 40mm waste outlet, with a 50mm splashback and 100,mm radiused apron. Basin to be fixed to the wall with 4 x 6mm anchor bolts. Manufactured from Grade 304(18/10) stainless steel, 1.2mm gauge.	No	11
17	Franke 1,2 Grade 304 (18/10) stainless steel BS401 shower tray (Code: 2580005) size 900 x 900 x 75mm, patterned base, 40mm apron all round and 38mm integrated waste outlet.	No	17
18	Franke or similar approved 1,2mm Grade 304 18/10 stainless steel DF (Code: 2610001), size 400 x 400 x 920mm high with one piece pressed bowl, 40mm waste outlet and bubbler kit (Code: 2330286), reinforced fixing flange bolted to floor with 10mm masonry bolts.	No	1
19	Vandal proof shower head, single- function, chrome. Includes: 1/2" BSP male inlet, 10L/min maximum flow restrictor, self-cleaning spray nozzle, and minimum flow pressure 50 kPa.	No	17

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**Grade 304 (18/10) stainless steel sanitary ware:**

20	<p>Franke or similar approved 1,2mm Grade 304 18/10 stainless steel S2 catering sink (Code: 2620022), size 1500 x 650 x 1050mm with 2No. 500 x 500 x 230mm deep pressed bowls, 150mm high integral splashback to rear, 50 x 10mm turndown and 40mm waste outlet, stainless steel solid undershelf (Code: 2620043), size 1500 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No. detachable Grade 304 (18/10) stainless steel square legs (Code: 354650), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.</p>	No	2
21	<p>Franke or similar approved 1,2mm Grade 304 18/10 stainless steel table (Code: 2620103), size 1850 x 650 x 1050mm with 50 x 10mm turndown, stainless steel solid undershelf (Code: 2620086), size 1850 x 40mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No. detachable Grade 304 (18/10) stainless steel square legs (Code:352660), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.</p>	No	2
22	<p>Franke or similar approved 1,2mm Grade 304 18/10 stainless steel P1 pot sinks (Code: 2620481), size 900 x 650 x 1050mm with 760 x 460 x 380mm deep bowl, 150mm high integral splashback to rear, 50 x 10mm turndown and 40mm waste outlet, stainless steel solid undershelf, size 900 x 420mm wide, underside sprayed with vermin proof bitumastic sound deadening, fixed to wall with anchor bolts 900mm from finished floor level and supported on 2No. detachable Grade 304 (18/10) stainless steel square legs (Code: 354650), size 40 x 40 x 1,2mm thick, fitted with chrome plated adjustable flanged foot pieces.</p>	No	2
23	<p>'Basterfield' 1800mm Grade 304 18/10 stainless steel wall mounted wall trough with tap landing and 50mm splashback (Code: B34674) with 40mm right waste outlet fixed to the wall with heavy-duty brackets.</p>	No	8

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<b><u>'Vaal' or equally approved:</u></b>			
24	Vaal Sanitary Ware (or similar approved) fin fireclay 435x335x180mm rectangular laboratory sink without overflow with a center end waste outlet. Product Code:234500. To have acid resistant waste (code 8791Z0) and 38mm Chrome plated waste (code: 8783Z0) or similar approved. Fixed under counter top.	No	1
<b><u>TAPS, VALVES, ETC.</u></b>			
<b><u>Manufactured by "Cobra" or similar approved:</u></b>			
25	Cobra Demand Pillar tap. Code SKU: FPT2A1DT-0GT01. Chrome finished silver tap. Deck mounted commercial style with dimensions height: 78mm, diameter: 42mm, projection: 89mm, installation depth: 48mm, spout to deck height: 30mm. Or equally approved.	No	55
26	Cobra Carina wall type sink mixer or similar approved, with aerated swivel outlet, chrome. Includes: 1/2" BSP male inlets, and concealed connections. SANS 226 Type 1, DZR Brass.	No	6
27	ISCA Chrome Iscamix89 medical mixer (Code:8919CH)/similar approved, manufactured in accordance with SANS 1480:2005 and SANS 226:2004.	No	5
28	Cobra-standard Brass Bib Tap (Code: COB-100-15). Include 3/4" BSP male inlet, 1/2" heavy-pattern low resistance for low pressure or higher water demand installations. SANS 226 Type. Or similar approved.	No	5
29	Deck mounted swing goose neck water tap (hot & cold). Brass body with high gloss epoxy finish, UV and chemical resistant. Valve unit: ceramic headwork, 90 turn, Nozzle: brass, detachable. Knob: high grade PP, ergonomic design and resistant to chemicals.	No	1
30	Water Faucet Lead-free Brass Public Drinking Fountain Faucet. Chrome finished solid Brass construction Bubbler tap. Drinking Water Filter Faucet with Push Botton Turn On/Off. Inlet diameter: 12MM (ie two points). Or similar approved.	No	24

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**PLUMBING AND DRAINAGE**

<b><u>Valves, etc.</u></b>				
31	COBRA Flush Master Toilet Flush Valve. Exposed back entry. Non-hold open feature with wall flange, integral vacuum breaker and control stop with integral non-return valve inlet. Adjustable control stop to valve connection 108mm to 140mm. With bent flushpipe and rubber pan connector. 1 1/4BSP female iron connection end. Recommended optimum design pressures: inlet flow pressure 30 - 300kPa for back entry WC pans: Maximum system pressure 600kPa. Product code: FM1-100/N. Or similar approved.	No	58	
<b><u>WASTE UNIONS, TRAPS, ETC.</u></b>				
<b><u>Manufactured by "Cobra" or similar approved:</u></b>				
32	Bottle trap with adjustable telescopic waste connection pipe. 1 1/4BSP female inlet connection. 1 1/4BSP male iron outlet connection. Brass body. Comes with waste adaptor 1 1/4 to 1 1/2 BSP & outlet adaptors 1 1/4 & 1 1/2. Product Code: 340/N.	No	59	
33	Cobra sink waste: Un-slotted bath Aquawaste (click clack waste) with 1 1/2' BSP male outlet connection.	No	11	
34	Cobra' or similar approved Watertech 40mm chrome plated shower waste (Code:323CP) with 75mm diameter shower grating.	No	17	
<b><u>Floor drains, etc.</u></b>				
35	Rofo Engineering grade AISI 304 stainless steel RO 125 NW 50 with square top flange and square cover plate with slots (Code: RO125HNW50SQ - slots), suitable for tiled floor covering, overall size 150mm x 195mm deep, with 50,8mm diameter horizontal waste outlet with mitred bend connected to waste pipe.	No	1	
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<b>Section No. 4 NEW BUILDING WORKS Bill No. 14 PLUMBING AND DRAINAGE</b>				R

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**Bill No. 14**

**PLUMBING AND DRAINAGE**

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**Section No. 4  
 NEW BUILDING WORKS  
 Bill No. 14  
 PLUMBING AND DRAINAGE**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 15</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>PREAMBLES</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Float glass:</u>			
	The term 'float glass' is used for monolithic annealed glass.			
	<b><u>GLAZING TO ALUMINIUM WITH CLIP ON BEADS</u></b>			
	<b><u>6.38mm laminated safety clear glass:</u></b>			
1	Panes exceeding 0,1m <sup>2</sup> and not exceeding 0,5m <sup>2</sup> .	m2	3	
2	Panes exceeding 0.5m <sup>2</sup> and not exceeding 2m <sup>2</sup> .	m2	182	
3	Panes exceeding 2m <sup>2</sup> and not exceeding 4m <sup>2</sup> .	m2	54	
	<b><u>6.38mm white translucent tinted laminated safety glass:</u></b>			
4	Panes exceeding 0.1m <sup>2</sup> and not exceeding 0.5m <sup>2</sup> .	m2	113	
5	Panes exceeding 0.5m <sup>2</sup> and not exceeding 2m <sup>2</sup> .	m2	34	
	<b>Carried to Collection</b>			R
	<b>Section No. 4 NEW BUILDING WORKS Bill No. 15 GLAZING</b>			

	<b><u>6.38mm laminated safety obscure glass:</u></b>				
6	Panes exceeding 0.5m <sup>2</sup> and not exceeding 2m <sup>2</sup> .	m2	34		
	<b><u>FIXED BULLETPROOF GLAZING</u></b>				
	<b><u>Fixed bulletproof glazing to specialist detail. All to comply with standards:</u></b>				
7	Panes exceeding 0,5m <sup>2</sup> and not exceeding 2m <sup>2</sup>	m2	5		
	<b><u>TOPS, SHELVES, DOORS, MIRRORS, ETC.</u></b>				
	<b><u>8mm "Franke" mirrors or equally approved , concealed thief resistant fixings, plugged and screwed to the wall with stainless steel screws</u></b>				
8	Mirror 500mm x 600mm x 6mm thick fixed above wash-hand basin (Code: 2120080).	No	67		
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p><b>Section No. 4 NEW BUILDING WORKS Bill No. 15 GLAZING</b></p>			R	

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**Bill No. 15**

**GLAZING**

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 NEW BUILDING WORKS  
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 GLAZING**

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	<b><u>Prepare surfaces and remove all loose material, apply one coat alkaline resistant primer, one universal undercoat and two coats of super acrylic paint:</u></b>				
3	On walls	m2	680		
4	On narrow widths	m2	51		
	<b><u>ON FIBRE-CEMENT BOARD SURFACES</u></b>				
	<b><u>Prepare and apply one coat zinc chromate to nail heads and H-spline strips, one universal undercoat and apply two finishing coats of eggshell enamel on:</u></b>				
5	Ceilings and cornices.	m2	2,146		
6	Fascias and barge boards.	m2	128		
	<b><u>ON METAL SURFACES</u></b>				
	<b><u>Prepare, clean standard steel surfaces and apply one coat approved primer and two finishing coats of enamel paint on:</u></b>				
7	Burglar gates and frame.	m2	358		
	<b><u>Prepare, clean mild steel surfaces and apply two coats anti-corrosive paint and two finishing coats of enamel paint to Architect's choice on:</u></b>				
8	Doors.	m2	18		
9	Column and beams.	m2	5		
	<b><u>Epoxy coating in standard colours to Architect's specification:</u></b>				
10	Security gates.	m2	50		
	<b><u>Prepare and apply one coat universal undercoat and two finishing coats enamel paint to approval and manufacturer's detail:</u></b>				
11	Door frames.	m2	286		
	<b>Carried to Collection</b>				
	<b>Section No. 4 NEW BUILDING WORKS Bill No. 16 PAINTWORK</b>				R

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NEW BUILDING WORKS  
Bill No. 16  
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**ON WOOD SURFACES**

**Sand down, prepare and apply three coats high gloss clear varnish on:**

12 Skirtings and quadrant bead, rails, etc., not exceeding 300 mm girth. m 2,676

**Prepare, clean and apply one coat of woodcare knot seal, prime with one coat wood primer and finish with two coat water water based velvagio or similar approved.**

13 Door frames. m2 439

**Prepare, clean and apply one coat of woodcare knot seal, prime with one coat wood primer and finish with two coat water water based velvagio or similar approved.**

14 Doors. m2 746

**Prepare and paint with one coat of universal undercoat and two coats super acrylic PVA, or similar approved. Colour as per Architect.**

15 Cornices m 2,082

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Bill No. 16  
PAINTWORK

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**Bill No. 16**

**PAINTWORK**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.1</u></b></p> <p><b><u>LOW VOLTAGE DISTRIBUTION</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>LOW VOLTAGE CABLES</u></b></p> <p>Supply, deliver to site and install 600/1000V PVC/SWA stranded copper cable laid in open trenches, drawn in sleeves, fixed to cable rack or on surface including strapping or clamping, supports, etc as necessary. Cable terminations to include glands, shrouds, lugs, connections and commissioning per cable end.</p> <p><b><u>NOTE:</u></b></p> <p><b><u>Checking of cable lengths</u></b></p> <p>Not with standing the fact that the lengths of cables as given in the Bill of Quantities have been measured from scaled drawings, the contractor shall check such lengths on site before ordering the cable as he / she will not be paid for excess cable after the completion of the service. Any allowance for off-cuts shall be made in the unit rates. The final measurements shall be based on the nett route length of the cable and overhead lines concerned.</p> <p><b><u>4mm2 PVC Cu LV 3 Core SWA Armoured cable</u></b></p>			
1	Supply	m	11	
2	Install	m	11	
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	<p><b>Section No. 5</b> <b>ELECTRICAL INSTALLATION</b> <b>Bill No. 1</b> <b>LOW VOLTAGE DISTRIBUTION</b></p>			

3	Termination	No	2
	<b><u>4mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
4	Supply	m	110
5	Install	m	110
6	Termination	No	11
	<b><u>6mm2 PVC Cu LV 3C SWA Armoured cable</u></b>		
7	Supply	m	440
8	Install	m	440
9	Termination	No	49
	<b><u>6mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
10	Supply	m	90
11	Install	m	90
12	Termination	No	6
	<b><u>10mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
13	Supply	m	90
14	Install	m	90
15	Termination	No	6
	<b><u>16mm2 PVC Cu 4C SWA Armoured cable</u></b>		
16	Supply	m	506
17	Install	m	506
18	Termination	No	11
	<b><u>25mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
19	Supply	m	11
20	Install	m	11

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21	Termination	No	2
	<b><u>35mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
22	Supply	m	11
23	Install	m	11
24	Termination	No	2
	<b><u>50mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
25	Supply	m	1,177
26	Install	m	1,177
27	Termination	No	14
	<b><u>70mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
28	Supply	m	1,672
29	Install	m	1,672
30	Termination	No	18
	<b><u>95mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
31	Supply	m	11
32	Install	m	11
33	Termination	No	2
	<b><u>120mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
34	Supply	m	11
35	Install	m	11
36	Termination	No	2
	<b><u>150mm2 PVC Cu LV 4C SWA Armoured cable</u></b>		
37	Supply	m	605
38	Install	m	605

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ELECTRICAL INSTALLATION  
Bill No. 1  
LOW VOLTAGE DISTRIBUTION**

39	Termination	No	14
	<b><u>Excavations</u></b>		
	<b><u>Excavations for cable and sleeve trench including temporary support of sides, keeping excavation dry, bedding material, backfilling, and compacting as specified. Where required, the removal of excess material from site shall be included in the rates below. Assuming 1000mm deep x 600m wide trench. To include river sand bedding (300mm), backfill and compaction of trench. Measured per running meter</u></b>		
40	Excavation in soft material	m	446
41	Excavation in intermediate material	m	565
42	Excavation in hard rock	m	110
	<b><u>Sleeve Pipes</u></b>		
	<b><u>50mm dia. Flexible uPVC underground sleeves suitable for electrical cables</u></b>		
43	Supply	m	1,056
	<b><u>110mm dia. Flexible uPVC underground sleeves suitable for electrical cables</u></b>		
44	Supply	m	4,224
	<b><u>Seal Sleeve Ends</u></b>		
45	Seal sleeve ends with water-proof expandable foam	No	66
	<b><u>Reticulation Related</u></b>		
	<b><u>PVC Warning Tape</u></b>		
46	Supply and install PVC electrical danger tape in trench above cables or sleeves	m	1,320
	<b><u>Cable Markers</u></b>		
47	Low voltage concrete cable route markers	No	66

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**LOW VOLTAGE DISTRIBUTION**

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 LOW VOLTAGE DISTRIBUTION**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>DISTRIBUTION BOARDS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>Distribution boards complete with doors, frames, sub-frames, chassis, fixtures, switchgear, terminations, bus-bars, wiring, metering, labelling, legend cards and spare space as specified and indicated on the drawings</u></b></p> <p><b><u>LV Distribution - Main Distribution: lockable board to accommodate all circuits Admin Block c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p>			
1	Supply and install.	No	1	
	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits 12 Class Block c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p>			
2	Supply and install.	No	2	
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	<p><b>Section No. 5</b> <b>ELECTRICAL INSTALLATION</b> <b>Bill No. 2</b> <b>DISTRIBUTION BOARDS</b></p>			

3	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Library/Lab Block c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	2	
4	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Grade R Block c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	2	
5	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits DNC Block c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	1	
6	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Block B c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	1	
7	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Block D c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	1	
8	<p><b><u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Block F c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u></b></p> <p>Supply and install.</p>	No	1	
<p style="text-align: center;"><b>Carried to Collection</b></p>				
<p><b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 2 DISTRIBUTION BOARDS</b></p>				<p style="text-align: center;">R</p>

9	<u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Block J c/w, breakers,isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u>	No	1	
10	<u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Guardhouse c/w, breakers,isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum</u>	No	1	
11	<u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Generator Room c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u>	No	1	
12	<u>LV Distribution - Sub Distribution: lockable board to accommodate all circuits Changing Rooms c/w, breakers, isolators, meters and surge arrestors; consist of 1.3mm thickness steel minimum.</u>	No	1	
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<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 2 DISTRIBUTION BOARDS</b>				

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**DISTRIBUTION BOARDS**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 3</u></b>			
	<b><u>LIGHTING INSTALLATION</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>LIGHT FITTINGS</u></b>			
	Supply and install light fittings over round boxes in brickwork or ceiling, complete with suspending Chains, brackets, supports, connectors, wiring,flexible cable, connections and installation of lamps.			
	<b><u>Type A1 : EN-FP 6060C/40, 36W LED PANEL LIGHT, 4000K - AURORA OR EQUAL AND APPROVED</u></b>			
1	Supply and install.	No	53	
	<b><u>Type B: EN-ANT 1240, 4400lm, LED, COOL WHITE - SUPPLIED BY AURORA OR EQUAL &amp; APPROVED</u></b>			
2	Supply and install.	No	259	
	<b><u>Type B1: EN-ANT 620, 4400lm, LED, COOL WHITE - SUPPLIED BY AURORA OR EQUAL &amp; APPROVED</u></b>			
3	Supply and install.	No	28	
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	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 3 LIGHTING INSTALLATION</b>			

4	<b><u>Type BE: AS "B" BUT WITH 20% MAINTAINED BATTERY PACK. A SEPARATE NON-SWITCHED LIVE FEED FROM OUT-GOING SIDE OF MCB TO EMERGENCY FITTING IS TO BE INSTALLED. 24HR</u></b>	No	55	
5	<b><u>Type BH1: EN-BH15, 1150lm, LED, COOL WHITE - SUPPLIED BY AURORA OR EQUAL &amp; APPROVED</u></b>	No	182	
6	<b><u>Type BH2: EN-BH120, 1650lm, COOL WHITE - AURORA LIGHTING OR EQUAL AND APPROVED</u></b>	No	118	
7	<b><u>Type HB: 70W HIGH BAY, COOL WHITE - AURORA LIGHTING OR EQUAL AND APPROVED</u></b>	No	62	
8	<b><u>Type HB: AS "HB" BUT WITH 20% MAINTAINED BATTERY PACK. A SEPARATE NON-SWITCHED LIVE FEED FROM OUT-GOING SIDE OF MCB TO EMERGENCY FITTING IS TO BE INSTALLED. 24HR</u></b>	No	31	
9	<p><b><u>Light Switches (SANS Type)</u></b></p> <p>Supply and install light switches, complete with 100x50 or 100x100 box and cover plate</p> <p><b><u>Supply &amp; install 16A, 250V, 1-Lever, 1-Way light switch in flush 100x50x50 box. To include cover plate and galvanised wall box</u></b></p>	No	214	
10	<p><b><u>Supply &amp; install 16A, 250V, 1-Lever, 2-Way light switch in flush 100x50x50 box. To include cover plate and galvanised wall box</u></b></p>	No	14	
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<p><b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 3 LIGHTING INSTALLATION</b></p>			R	

	<p><b><u>Supply &amp; install 16A, 250V, 2-Lever, 1-Way light switch in flush 100x50x50 box. To include cover plate and galvanised wall box</u></b></p>				
11	Supply and install.	No	9		
	<p><b><u>Supply &amp; install 10A, 250 V photo sensitive daylight Switch in empty 'bulkhead' Light fitting (Type BH2) cover to ensure water and dust proof installation.</u></b></p>				
12	Supply and install.	No	17		
	<p><b><u>Sports Lighting</u></b></p>				
	<p><b><u>Supply &amp; install 30W LED floodlight on 4m galvanised steel pole.</u></b></p>				
13	Supply and install.	No	22		
	<p><b>Section No. 5                  ELECTRICAL INSTALLATION                  Bill No. 3                  LIGHTING INSTALLATION</b></p>				<p>R</p>

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**LIGHTING INSTALLATION**

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 Bill No. 3  
 LIGHTING INSTALLATION**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>POWER OUTLETS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>Switch Sockets</u></b></p> <p>All the socket outlets (exclude dedicated socket outlets) must accommodate both SANS 164-1 and SANS 164-2 sockets, the SANS 164-2 socket outlet will accommodate two-point Euro-plug sockets Complete with galvanised 100x100 box and cover plate</p> <p><b><u>Supply and install Single 16A 250V 3 pin SSO, flush mounted switched socket outlets to accommodate both SANS 164-1 and SANS 164-2 sockets (socket outlet to accommodate two-point Euro-plug sockets) as indicated on the drawings. Include cover plate.</u></b></p>			
1	Supply and install.	No	98	
	<p><b><u>Supply and install Double 16A 250V 3 pin SSO, flush mounted switched socket outlets to accommodate both SANS 164-1 and SANS 164-2 sockets (socket outlet to accommodate two-point Euro-plug sockets) as indicated on the drawings. Include cover plate and galvanised wall box</u></b></p>			
2	Supply and install.	No	591	
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	<p><b>Section No. 5</b> <b>ELECTRICAL INSTALLATION</b> <b>Bill No. 4</b> <b>POWER OUTLETS</b></p>			

3	<b><u>Supply and install 16A 250V 3 pin SSO, Socket outlets for power skirting as indicated on the drawings. Include cover plate and galvanised wall box</u></b>	No	53
4	<b><u>Supply and install 16A un-switched socket outlets. To include cover plate and galvanised wall box</u></b>	No	24
5	<b><u>Supply and install Double 16A 250V 3 pin UPS SSO, flush mounted switched socket outlets with shaved earth pin Include cover plate and galvanised wall box.</u></b>	No	24
6	<b><u>Supply and install Type T1 Outlet as per drawings</u></b>	No	23

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**Section No. 5**

**Bill No. 4**

**POWER OUTLETS**

**COLLECTION**

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**Section No. 5  
 ELECTRICAL INSTALLATION  
 Bill No. 4  
 POWER OUTLETS**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>CABLES AND WIREWAYS</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>WIRE WAYS AND ACCESSORIES</u></b>			
	<b><u>Conduit</u></b>			
	<u>Supply and install conduit placed in position for casting into concrete or screed, for building-in or chased into brickwork and for surface mounting in ceiling void including bending, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u>			
1	20 mm diameter PVC Conduit	m	12,199	
2	25 mm diameter PVC Conduit	m	1,787	
3	32 mm diameter . PVC Conduit	m	660	
	<b><u>Boxes</u></b>			
	<b><u>Supply and install galvanised steel wall boxes for casting into concrete, building or chased into brickwork or surface mounted, including locknuts and bushes</u></b>			
4	Flush 100 x 50 x 50 deep galvanised steel	No	104	
5	Flush 100 x 100 x 50 deep galvanised steel	No	207	
	<b>Carried to Collection</b>			R
	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 5 CABLES AND WIREWAYS</b>			

6	20mm Galvanised steel conduit	m	621		
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**WIRING CHANNELS**

Supply, deliver and install galvanised steel channels complete with covers and accessories (Elbow, Tpiece, joints etc.):

**Supply and install P9000 trunking as indicated on the drawings**

7	Supply and install.	m	1,056		
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**Supply and install P8000 trunking as indicated on the drawings**

8	Supply and install.	m	1,056		
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**POWER SKIRTING**

Supply, deliver and install powder coated power skirting complete with covers and accessories (Elbow, Tpiece, joints etc.):

**Supply and install 1-compartment power skirting as indicated on the drawings**

9	Supply and install.	m	126		
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**Supply and install 2-compartment power skirting as indicated on the drawings**

10	Supply and install.	m	22		
----	---------------------	---	----	--	--

**Supply and install 3-compartment power skirting as indicated on the drawings**

11	Supply and install.	m	11		
----	---------------------	---	----	--	--

**CONDUCTORS AND CABLES**

Supply and install 600/1000 V grade PVC insulated stranded copper conductors drawn in conduit, trunking or power skirting.

**Conductors**

Carried to Collection

R

**Section No. 5  
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Bill No. 5  
CABLES AND WIREWAYS**

	<b><u>2.5 mm2 (Red, White, Blue, Black)</u></b>		
12	Supply and install.	m	12,583
	<b><u>4 mm2 (Red, White, Blue, Black)</u></b>		
13	Supply and install.	m	26,155
	<b><u>6 mm2 (Red, White, Blue, Black)</u></b>		
14	Supply and install.	m	3,208

Carried to Collection

**Section No. 5  
 ELECTRICAL INSTALLATION  
 Bill No. 5  
 CABLES AND WIREWAYS**

R

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**Bill No. 5**

**CABLES AND WIREWAYS**

**COLLECTION**

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**Section No. 5  
 ELECTRICAL INSTALLATION  
 Bill No. 5  
 CABLES AND WIREWAYS**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 6</u></b>			
	<b><u>EARTHING AND BONDING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>EARTHING</u></b>			
	<b><u>Earth Wire</u></b>			
	Bare stranded copper earth wire drawn in sleeves or laid in trench. Terminations to DB include drilling, boltings, lugs and connections. Terminations to earth electrode to include brass clamp and sealing with approved grease tape after testing			
	<b><u>2.5mm2 BCEW</u></b>			
1	Supply and install.	m	19,369	
	<b><u>4mm2 BCEW</u></b>			
2	Supply and install.	m	2,381	
	<b><u>6mm2 BCEW</u></b>			
3	Supply and install.	m	2,044	
	<b><u>10mm2 BCEW</u></b>			
4	Supply and install.	m	11	
	<b>Carried to Collection</b>			R
	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 6 EARTHING AND BONDING</b>			

	<b><u>16mm2 BCEW</u></b>		
5	Supply and install.	m	506
	<b><u>25mm2 BCEW</u></b>		
6	Supply and install.	m	11
	<b><u>35mm2 BCEW</u></b>		
7	Supply and install.	m	11
	<b><u>50mm2 BCEW</u></b>		
8	Supply and install.	m	1,177
	<b><u>70mm2 BCEW</u></b>		
9	Supply and install.	m	1,672
	<b><u>95mm2 BCEW</u></b>		
10	Supply and install.	m	11
	<b><u>120mm2 BCEW</u></b>		
11	Supply and install.	m	11
	<b><u>150mm2 BCEW</u></b>		
12	Supply and install.	m	605

Carried to Collection

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 ELECTRICAL INSTALLATION  
 Bill No. 6  
 EARTHING AND BONDING**

R

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**Bill No. 6**

**EARTHING AND BONDING**

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**Section No. 5  
 ELECTRICAL INSTALLATION  
 Bill No. 6  
 EARTHING AND BONDING**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 7</u></b>			
	<b><u>LOCAL EQUIPMENT ISOLATOR</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)- (GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>Supply and install 20 amp 2-pole isolator</u></b>			
1	Supply and install	m	39	
	<b><u>Supply and install 30 amp 2-pole isolator</u></b>			
2	Supply and install.	m	16	
	<b><u>Supply and install 5 amp 2-pole isolator</u></b>			
3	Supply and install.	m	4	
	<b><u>Supply and install 10 amp 4-pole isolator</u></b>			
4	Supply and install.	m	5	
	<b><u>Supply and install 40 amp 4-pole isolator</u></b>			
5	Supply and install.	m	3	
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	<b>Section No. 5</b>			
	<b>ELECTRICAL INSTALLATION</b>			
	<b>Bill No. 7</b>			
	<b>LOCAL EQUIPMENT ISOLATOR</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 8</u></b>			
	<b><u>STANDBY GENERATOR INSTALLATION</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>200kVA Standby generator complete with automatic changeover witch, sound attenuation, 1000 liter diesel day tank and exhaust system, complete.</u></b>			
1	Supply and install.		SUM	
	<b><u>Test &amp; Commissioning</u></b>			
2	Supply and install.		SUM	
	<b><u>Substation Fittings &amp; Accessories</u></b>			
	Provide complete furnished and fitted substation per standard specification (Supply & Installation)			
3	Notices and Danger Signs - L.V. Rooms		SUM	
4	A0 drawing display frame in plant rooms	No	1	
	<b>Carried Forward to Summary of Section No. 5</b>		R	
	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 8 STANDBY GENERATOR INSTALLATION</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 9</u></b>			
	<b><u>LIGHTNING PROTECTION</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>Earth soil restivity test</u></b>			
1	Supply and install.		SUM	
	<b><u>Supply and install 25mm diameter PVC condui</u></b>			
2	Supply and install.	m	190	
	<b><u>Supply and install 70mm<sup>2</sup> insulated copper conductor.</u></b>			
3	Supply and install.	m	473	
	<b><u>Supply and install test points at 300mm between anti-theft conductor and copper conductor to earth electrode.</u></b>			
4	Supply and install.	No	95	
	<b><u>Bonding of down wires to rooftop sheeting c/w lugs and bolts</u></b>			
5	Supply and install.	No	95	
	<b>Carried to Collection</b>			R
	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 9 LIGHTNING PROTECTION</b>			



**Section No. 5**

**Bill No. 9**

**LIGHTING PROTECTION**

**COLLECTION**

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 ELECTRICAL INSTALLATION  
 Bill No. 9  
 LIGHTING PROTECTION**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>MUNICIPAL ELECTRICAL CONNECTION</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>Electrical connection to grid as per local municipality requirement:</u></b></p>			
1	Allow for connection to Electrical suppliers grid as per Maximum.		SUM	
	<p>Carried Forward to Summary of Section No. 5</p> <p>Section No. 5 ELECTRICAL INSTALLATION Bill No. 10 MUNICIPAL ELECTRICAL CONNECTION</p>		R	

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>COMMON BOXES</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools                      *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-                      (GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>Two Flush mounted electrical common boxes (with doors that are lockable with a padlock, but with hinges that can be unclipped from the frame) must be supplied. The first must be installed on the side wall of the stage. The second in the Multi Media Room of the hall as indicated on the layout drawing of Block LA - Nutrition Center / Dining/School Hall Must include isolators, fan control panel, light switches and socket outlets. Shop drawings to be approved by the engineer.</u></b></p>			
1	Supply and install.	No	3	
	<p>Carried Forward to Summary of Section No. 5</p> <p>Section No. 5                      ELECTRICAL INSTALLATION                      Bill No. 11                      COMMON BOXES</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 13</u></b></p> <p><b><u>COMMISSIONING AND FINALIZATION OF PROJECT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.</p> <p><b><u>TESTING AND COMMISSIONING</u></b></p>			
1	Test and commission complete electrical system,including provision and issue of Certificate of Compliance.			SUM
	<p><b><u>AS BUILT' RECORD DRAWINGS</u></b></p>			
2	Provide marked up copy of "As built" record drawings of the complete electrical System per Building.			SUM
	<p><b><u>OTHER</u></b></p>			
3	Maintenance period of 12 months site visits for every month			SUM
	<p><b>Carried Forward to Summary of Section No. 5</b></p> <p><b>Section No. 5</b> <b>ELECTRICAL INSTALLATION</b> <b>Bill No. 12</b> <b>COMMISSIONING AND FINALIZATION OF PROJECT</b></p>			R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 14</u></b>			
	<b><u>ELECTRONIC SERVICES INSTALLATION</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE: Tenderers are advised to study the latest version of the *Guidelines for Electrical Installation Requirements for New Prototype Schools *Standard Quality Specification for General Electrical Installations (Schools)(GP/E6/1 Rev 1)-(GP/EP/1) Standard Quality Specification for General Electrical Material and Equipment (Schools)(GP/E6/2 Rev 1)-(GP/EP/2) The requirements of the Guidelines for Electrical Installation Requirements for New Prototype Schools will however take precedence over GP/E6/1 and GP/E6/2.			
	<b><u>INTERCOM SYSTEM</u></b>			
	<b><u>Intercom System, Complete</u></b>			
1	Supply and install.		SUM	
	<b><u>SIREN SYSTEM</u></b>			
	<b><u>Siren System Complete</u></b>			
2	Supply and install.		SUM	
	<b><u>COMMISSIONING AND FINALIZATION OF PROJECT</u></b>			
	<b><u>Testing and commissioning:</u></b>			
3	Test and commission complete Electronic System installation, including provision of Certificates of Compliance.		SUM	
	<b>Carried to Collection</b>		R	
	<b>Section No. 5 ELECTRICAL INSTALLATION Bill No. 13 ELECTRONIC SERVICES INSTALLATION</b>			

**As built' record drawings:**

4 Provide marked up copy of "As built" record drawings of the complete Electronic System per Building.

SUM

**OTHER**

5 Allow for any other items the tender may deem necessary to successfully complete the contract

SUM

6 Maintenance period of 12 months site visits for every month

SUM

**Carried to Collection**

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**Section No. 5  
 ELECTRICAL INSTALLATION  
 Bill No. 13  
 ELECTRONIC SERVICES INSTALLATION**

**Section No. 5**

**Bill No. 13**

**ELECTRONIC SERVICES INSTALLATION**

**COLLECTION**

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 ELECTRICAL INSTALLATION  
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 ELECTRONIC SERVICES INSTALLATION**

R



Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 2</u></b>			
	<b><u>12 CLASSROOM BLOCK</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	4	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	2	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>			
3	E1	No	4	
4	E2	No	4	
5	E3	No	16	
6	F4	No	2	
7	F5	No	6	
8	F6	No	6	
	<b>Carried Forward to Summary of Section No. 6</b>			R
	<b>Section No. 6</b>			
	<b>FIRE PROTECTION</b>			
	<b>Bill No. 1</b>			
	<b>12 CLASSROOM BLOCK</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 3</u></b>			
	<b><u>DNC BLOCK</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	6	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	3	
	<b><u>Fire Signage - SABS approved photoluminescent signage 290x290 mm to be mechanically fixed</u></b>			
3	E1	No	4	
4	EE2	No	4	
5	E3	No	8	
6	F4	No	3	
7	F5	No	4	
8	F6	No	4	
	<b>Carried to Collection</b>			
	<b>Section No. 6 FIRE PROTECTION Bill No. 2 DNC BLOCK</b>			R

**SMOKE EXTRACTION**

**SMOKE EXTRACTION FANS**

9	AMS LCA800/150/5 FIRE RATED - 300°C @ 120min - Ø800	No	1
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**SMOKE EXTRACTION GRILLES**

10	1200x600 Grille	No	4
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 Bill No. 2  
 DNC BLOCK

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**Section No. 6**

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**DNC BLOCK**

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**Section No. 6  
 FIRE PROTECTION  
 Bill No. 2  
 DNC BLOCK**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>GRADE R BLOCK</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	4	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	2	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>			
3	E1	No	5	
4	E2	No	5	
5	E3	No	5	
6	F4	No	2	
7	F5	No	2	
8	F6	No	2	
	<b>Carried Forward to Summary of Section No. 6</b>			
	<b>Section No. 6</b>			
	<b>FIRE PROTECTION</b>			
	<b>Bill No. 3</b>			
	<b>GRADE R BLOCK</b>			
				R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>GUARD HOUSE</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	1	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed:</u></b>			
2	E3	No	6	
3	F4	No	1	
4	F5	No	1	
5	F6	No	1	
6	F13	No	1	
	<b>Carried Forward to Summary of Section No. 6</b>			R
	<b>Section No. 6 FIRE PROTECTION Bill No. 4 GUARD HOUSE</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 6</u></b>			
	<b><u>LIBRARY AND LABORATORY</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	2	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	1	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>			
3	E2	No	2	
4	E3	No	2	
5	E3	No	11	
6	F4	No	1	
7	F5	No	1	
8	F6	No	1	
	<b>Carried to Collection</b>			R
	<b>Section No. 6 FIRE PROTECTION Bill No. 5 LIBRARY AND LABORATORIES</b>			

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No 4

**Section No. 6  
FIRE PROTECTION  
Bill No. 5  
LIBRARY AND LABORATORIES**

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**Bill No. 5**

**LIBRARY AND LABORATORIES**

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**Section No. 6  
 FIRE PROTECTION**

**Bill No. 5  
 LIBRARY AND LABORATORIES**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 7</u></b>			
	<b><u>CHANGING ROOMS</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	2	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	1	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>			
3	E3	No	7	
4	F4	No	1	
5	F5	No	1	
	<b>Carried Forward to Summary of Section No. 6</b>			
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	<b>FIRE PROTECTION</b>			
	<b>Bill No. 6</b>			
	<b>CHANGING ROOMS</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 8</u></b>			
	<b><u>ADMINISTRATION BLOCK</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE EQUIPMENT</u></b>			
	<b><u>Fire extinguishers complete with backing boards and holding clips</u></b>			
1	4.5 kg DPC	No	2	
2	Fire hose reel complete with weather cover: Fire hose reel complete with mounting brackets, stands, valve and union and line pressure guage with vent cock	No	1	
	<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>			
3	E1	No	2	
4	E2	No	2	
5	E3	No	4	
6	F4	No	3	
7	F5	No	1	
8	F6	No	1	
	Carried Forward to Summary of Section No. 6			R
	<b>Section No. 6</b>			
	<b>FIRE PROTECTION</b>			
	<b>Bill No. 7</b>			
	<b>ADMINISTRATION BLOCK</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 9</u></b>			
	<b><u>SMOKE DETECTION</u></b>			
	<b><u>CONVENTIONAL DETECTION SYSTEM</u></b>			
	Price given below shall be nett cost of equipment and materials supplied and installed on site and shall:			
	- exclude profit, overheads, financing, insurance and guarantee costs			
	- exclude engineering and management costs			
	- exclude VAT			
	<b><u>CONVENTIONAL FIRE ALARM PANEL (COMPLETE) (2 LOOP)</u></b>			
1	Allow for the procurement, delivery, installation, connection, testing and commissioning of conventional fire detection and alarm system control panel, excluding the items listed below.	No	1	
	<b><u>FIRE RATED CABLING (PH 30)</u></b>			
	<b><u>Allow for adequate cabling for all systems according to specifications (min 1mm2 multi-stand cabling)</u></b>			
2	Loop 1	m	120	
	<b><u>CONDUIT AND COUPLINGS</u></b>			
3	Allow for the procurement of GALVANISED conduit (with necessary couplings, junction boxes, etc.) in terms of the specifications.25 mm diameter.	m	120	
	<b><u>SIGNAGE</u></b>			
4	Provide zone diagrams, layouts, operating instructions, associated signage etc., laminated and framed behind glass at entrance and at individual gas cylinder banks	Item		2,598.00
	<b>Carried to Collection</b>			R
	<b>Section No. 6</b>			
	<b>FIRE PROTECTION</b>			
	<b>Bill No. 8</b>			
	<b>SMOKE DETECTION</b>			

**POWER SUPPLY UNITS**

5 Allow for the procurement, delivery, installation, connection, testing and commissioning of power supply units as required for 24hr standby and 30min alarm

Item 2,500.00

**PVC SPRAGUE AND ACCESSORIES**

6 Provide the necessary sprague and accessories not specifically mentioned elsewhere in B.O.Q.

Item 30.00

**CONSUMABLES**

7 Allow for consumable items used in installation of fire detection system.

Item 2,500.00

**DEVICES**

**CONVENTIONAL CEILING LOOP POWERED SOUNDER/STROBE COMBINATION**

8 Allow for the procurement, installation, testing and commissioning

No 4

**MANUAL CALL POINTS**

9 Allow for the procurement, installation, testing and commissioning

No 6

**CONVENTIONAL FIRE PANEL**

10 Allow for the procurement, installation, testing and commissioning of conventional fire panel

No 1

**INTERFACE UNIT**

11 Allow for the procurement, installation, testing and commissioning of interface unit

No 1

**Carried to Collection**

R

**Section No. 6  
FIRE PROTECTION  
Bill No. 8  
SMOKE DETECTION**

**Section No. 6**

**Bill No. 8**

**SMOKE DETECTION**

**COLLECTION**

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**Section No. 6  
 FIRE PROTECTION  
 Bill No. 8  
 SMOKE DETECTION**

R

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>SITE FIRE PROTECTION</u></b>			
	All in accordance with the drawings and specification. All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	exclude profit, overheads, financing, insurance and guarantee costs			
	Include any additional items not specified for a functioning system			
	<b><u>FIRE PROTECTION PIPEWORK</u></b>			
	<b><u>HDPE CLASS 16</u></b>			
	<b><u>equal &amp; approved Piping - including all fittings, hangers, supports, brackets, bracing, couplings and droppers to outlets</u></b>			
1	25 mm Pipe	m	127	
2	32 mm Pipe	m	63	
3	100 mm Pipe	m	461	
	<b><u>HDPE Class 16 bend 90°</u></b>			
4	25-25mm	No	4	
5	32-32mm	No	2	
6	100-100mm	No	5	
	<b>Carried to Collection</b>			R
	<b>Section No. 6</b>			
	<b>FIRE PROTECTION</b>			
	<b>Bill No. 9</b>			
	<b>SITE FIRE PROTECTION</b>			

<b><u>HDPE Class 16 tee</u></b>					
7	25-25-25mm	m	1		
8	32-32-32mm	No	1		
9	100-100-100mm	No	12		
<b><u>HDPE Class 16 transition piece</u></b>					
10	32-25mm	No	3		
11	100-25mm	No	8		
12	100-32mm	No	2		
13	110-100mm	No	1		
<b><u>Fire Signage - SABS approved photoluminescent signage 190x190 mm to be mechanically fixed</u></b>					
14	F15	No	5		
<b><u>ø65 Instantaneous Fire hydrant complete</u></b>					
15	Fire hydrant complete with mounting brackets, all to detail	No	5		
<b><u>Fire Main Connection: Allow for connecting to municipal main</u></b>					
16	Isolating valve - ø100mm				SUM
17	Non-return valve - ø100mm				SUM
18	Instantaneous twin booster connection - ø65mm				SUM
19	Booster T-piece - ø100mm				SUM
20	Stortz suction fire hydrant - ø100mm - Fire hydrant complete with mounting brackets, all to detail				SUM
21	Hydrant T-piece - ø100mm				SUM
<b>Carried to Collection</b>					R
<b>Section No. 6 FIRE PROTECTION Bill No. 9 SITE FIRE PROTECTION</b>					

**Section No. 6**

**Bill No. 9**

**SITE FIRE PROTECTION**

**COLLECTION**

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**Section No. 6  
 FIRE PROTECTION**

**Bill No. 9  
 SITE FIRE PROTECTION**

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**SECTION SUMMARY - FIRE PROTECTION**

<b>Bill No</b>		<b>Page No</b>	<b>Amount</b>
1	12 CLASSROOM BLOCK	268	
2	DNC BLOCK	271	
3	GRADE R BLOCK	272	
4	GUARD HOUSE	273	
5	LIBRARY AND LABORATORIES	276	
6	CHANGING ROOMS	277	
7	ADMINISTRATION BLOCK	278	
8	SMOKE DETECTION	281	
9	SITE FIRE PROTECTION	284	
<p><b>Section No. 6                      FIRE PROTECTION</b></p>			<p style="text-align: center;">R</p>

**Carried to Final Summary**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 1</u></b>			
	<b><u>PLUMBING AND DRAINAGE</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and Specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	exclude engineering and management costs.			
	exclude VAT.			
	Include any additional items not specified for a functioning system			
	<b><u>SANITARY PLUMBING.</u></b>			
	<b><u>Geberit HDPE equal &amp; approved Piping and Fittings</u></b>			
1	56 mm Pipe to walls, soffits, trenches etc.	m	333	
2	110 mm Pipe to walls, soffits, trenches etc.	m	151	
3	160 mm Pipe to walls, soffits, trenches etc.	m	90	
	<b><u>HDPE pipe for:</u></b>			
	<b><u>Geberit HDPE bend 90°</u></b>			
4	56-56mm	No	410	
5	110-110mm	No	189	
6	56-56-56mm	No	1	
	<b><u>Geberit HDPE branch fitting 45°</u></b>			
7	56-56-56mm	No	97	
	<b>Carried to Collection</b>			R
	<b>Section No. 7 MECHANICAL INSTALLATION Bill No. 1 PLUMBING AND DRAINAGE</b>			

8	110-110-56mm	No	31
9	110-110-110mm	No	25
10	160-160-56mm	No	31
11	160-160-110mm	No	36
	<b><u>Geberit HDPE reducer</u></b>		
12	160-110mm	No	2
	<b><u>Geberit HDPE reducer</u></b>		
13	d=110mm, di=120mm	No	62
14	110mm Vent valve	No	63
15	110mm Vent cowl	No	63
16	Domestic to Civil Sewer tie in connection	No	1
	<b><u>WATER SUPPLIES (DOMESTIC)</u></b>		
	<b><u>Geberit Mepla ML Equal &amp; Approved PIPE and FITTINGS</u></b>		
17	12mm Diameter Cold Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc	m	982
18	15mm Diameter Cold Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc	m	200
19	20mm Diameter Cold Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc	m	115
20	26mm Diameter Cold Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc	m	23
21	12mm Diameter Hot Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc (hot water piping and fittings to be lagged)	m	328
22	15mm Diameter Hot Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc (hot water piping and fittings to be lagged)	m	11

Carried to Collection

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**Section No. 7**  
**MECHANICAL INSTALLATION**  
**Bill No. 1**  
**PLUMBING AND DRAINAGE**

23	20mm Diameter Hot Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc (hot water piping and fittings to be lagged)	m	146		
24	26mm Diameter Hot Water pipes fixed to walls, in chases, in ceilings or roofs, columns or slabs, etc (hot water piping and fittings to be lagged)	m	2		
<b><u>Extra over on piping for:</u></b>					
<b><u>Geberit Mepla ML Elbow</u></b>					
25	16-16mm	No	743		
26	26-26mm	No	6		
27	20-20mm	No	13		
28	32-32mm	No	4		
29	16-16mm hot water	No	189		
30	26-26mm Hot water	No	5		
<b><u>Geberit Mepla ML T-piece</u></b>					
31	16-16-16mm	No	72		
32	20-16-16mm	No	12		
33	20-20-16mm	No	26		
34	26-16-16mm	No	1		
35	26-20-16mm	No	2		
36	26-20-20mm	No	1		
37	26-26-20mm	No	1		
38	26-26-16mm	No	49		
39	32-26-20mm	No	1		
40	26-16-20mm	No	4		
41	26-26-26mm	No	2		
<b>Carried to Collection</b>					
<b>Section No. 7 MECHANICAL INSTALLATION Bill No. 1 PLUMBING AND DRAINAGE</b>					R

42	20-20-20mm	No	1
43	32-26-26mm	No	2
44	16-16-16mm Hot water	No	8
45	20-16-16mm Hot water	No	4
46	26-16-16mm Hot water	No	1
47	26-16-20mm Hot water	No	1
48	20-20-16mm Hot water	No	2
49	26-20-16mm Hot water	No	2
50	26-26-16mm Hot water	No	29
51	26-26-20mm Hot water	No	1
52	26-26-26mm Hot water	No	2
53	32-26-26mm Hot water	No	1
	<b><u>Geberit Mepla ML Reducer</u></b>		
54	26-16mm Hot water	No	2
	<b><u>Geberit Mepla elbow tap connector 90°</u></b>		
55	16mm	No	159
	<b><u>Geberit Mepla bend adapter 90° with male thread: d=20mm, R=1/2"</u></b>		
56	20mm	No	78
57	26mm Ball valve	No	7
58	40mm Analog cold water meter	No	7
59	40mm tail pieces per pair including female adaptors	No	7
60	In line Restrictor	No	7
61	16mm cobra angle regulating valves or similler approved	No	135

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**Section No. 7  
MECHANICAL INSTALLATION  
Bill No. 1  
PLUMBING AND DRAINAGE**

62	20mm cobra angle regulating valves or similler approved	No	78
63	40mm Gate valve	No	7
64	40mm Stainer	No	7
65	40mm PSV	No	6
66	40mm PRV	No	1
67	20mm - 32mm Braided Flexi Connectors	No	202
68	Standard Solar Hot Water Geyser - 300 Litres, by an approved manufacturer - including installation and commissioning	No	2
69	Domestic to Civil Supply tie in connection	No	1
70	Testing	No	1

Carried to Collection

**Section No. 7  
 MECHANICAL INSTALLATION  
 Bill No. 1  
 PLUMBING AND DRAINAGE**

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**Section No. 7**

**Bill No. 1**

**PLUMBING AND DRAINAGE**

**COLLECTION**

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**Section No. 7  
 MECHANICAL INSTALLATION  
 Bill No. 1  
 PLUMBING AND DRAINAGE**

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Item No	<b><u>BILL NO. 2</u></b>	Quantity	Rate	Amount
	<p><b><u>DOMESTIC WATER PUMP</u></b></p> <p>All equipment, handling, installation shall comply with relevant SANS documents and specifications.</p> <p>Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:</p> <p>a) exclude engineering and management costs                      b) exclude VAT                      C) Include any additional items not specified for a functioning system</p> <p><b><u>DOMESTIC WATER SUPPLY PUMP</u></b></p> <p><b><u>Supply, delivery in accordance with the detailed specification including installation, electrical connections, brackets and commissioning of the following centrifugal water pumps: as per civil engineers specification and drawing.</u></b></p>			
1	Water Jet pump equal and approved - 490 Litres/min at 117 kPa	No	1	
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	<p><b>Section No. 7</b>  <b>MECHANICAL INSTALLATION</b>  <b>Bill No. 2</b>  <b>DOMESTIC WATER PUMP</b></p>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 3</u></b>			
	<b><u>HVAC</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and specifications.			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	a) exclude engineering and management costs			
	b) exclude VAT			
	c) include any additional items not specified for a functioning system.			
	For the complete supply, delivery, installation, testing, commissioning and handing over of the following in terms of the air-conditioning specification			
	For the supply, delivery to site, complete installation, commissioning and balancing of the following insulated ducting, complete with all brackets, mountings connections and fasteners.			
	* All exposed ductwork to be internally insulated and powder coated to architects specification.			
1	Mid-wall split Unit-2.6kW - single split inverter, LG or similar and approved manufacture including refrigerant piping, condensate drainage, condensate pump, brackets, mountings fittings, insulation, etc	No	1	
2	Lockable vandal-proof cage for outdoor unit- cage to be hot-dipped galvanised complete with lock.	No	1	
3	Electrical connection to ventilation system, including isolator up to 1.5m from fan.	No	1	
	<b><u>ROUND SPIRAL DUCTING</u></b>			
4	200 diameter	m	10	
5	250 diameter	m	53	
6	300 diameter	m	15	
	<b>Carried to Collection</b>			R
	<b>Section No. 7</b>			
	<b>MECHANICAL INSTALLATION</b>			
	<b>Bill No. 3</b>			
	<b>HVAC</b>			

7	350 diameter	m	10
8	400 diameter	m	7
9	450 diameter	m	5
10	550 diameter	m	4
11	800 diameter	m	1

**DUCT FITTINGS**

**Rectangular to round piece**

12	550 diameter - 600 x 600	No	1
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**Round galvanised spigot**

13	200 diameter	No	2
14	250 diameter	No	3
15	250 diameter - 250 diameter	No	10

**Round transition piece**

16	350 diameter- 300 diameter	No	1
17	300 diameter - 400 diameter	No	1
18	400 diameter - 450 diameter	No	1
19	550 diameter - 450 diameter	No	1

**Rectangular transition piece**

20	600 x 600 - 800 x 800	No	2
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**Round Bend**

21	250 diameter - 250 diameter	No	8
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**Stop end**

22	300 diameter	No	2
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Carried to Collection

Section No. 7  
MECHANICAL INSTALLATION  
Bill No. 3  
HVAC

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**AIR CONDITIONING INSTALLATION**

**Supply and delivery in accordance with the detailed specification incl installation, electrical connections, drain piping, drain pumps, brackets, condenser and commissioning of the following inverter split R410a equipment:**

36	LG or similar and approved 11.2kW cooling capacity DX ducted hideaway split.	No	1
37	Mid-wall Split Unit - 2.6kW - single split inverter, LG or similar and approved manufacture	No	1

**For the supply, delivery to site, installation and connection of the following insulated copper refrigeration piping, measured in pairs (liquid pipe size / gas pipe size), including supports, sockets and bends: installed on cable trays.**

38	9.52mm diameter	m	10
39	19.05mm diameter.	m	10

**DRAIN PIPING**

**For the supply, delivery to site, installation following uPVC class 6 condensate drain piping, installed on galvanised wired mesh light duty cable tray including all tees and elbows:**

Piping

40	32mm	m	10
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**For the supply, delivery to site, installation and connection of the following equipment for condensate drains:**

41	Connection to drain socket with 'p- traps'	No	1
42	Insulation for each unit	No	1

**TRUNKING**

Carried to Collection

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Section No. 7  
MECHANICAL INSTALLATION  
Bill No. 3  
HVAC

**For the supply, delivery to site and complete installation of galvanised sheet metal trunking, etched and primed for painting. Including bends, tees, hangers and brackets:**

43 Cable trays m 10

**For the supply, delivery to site and complete installation of galvanised sheet metal trunking, etched and primed for painting. Including bends, tees, hangers and brackets:**

44 Cable trays m 10

**For the supply, delivery to site and complete installation and connection of all control wiring installed on light duty cable strays:**

45 Control wiring SUM

46 Power wiring SUM

**For the delivery to site, installation and connection of the following remote controllers.**

47 Wired touch controller No 1

**For the complete pressure testing, purging and charging with refrigerant of the following DX split system:**

48 1.2kW DX ducted hideaway split SUM

49 Lockable vandal-proof cage for outdoor unit - cage to be hot- dipped galvanised complete with lock No 1

50 Electrical connection to HVAC system, including isolator up to 1.5m from AC unit. No 1

**KITCHEN EXTRACTION CANOPY**

**Round spiral ducting - stainless steel**

51 350 diameter m 5

**Rectangular ducting - stainless steel**

52 350 x 250 No 4

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**Section No. 7  
MECHANICAL INSTALLATION  
Bill No. 3  
HVAC**

	<b><u>Round ben - stainless steel</u></b>		
53	350 diameter - 350 diameter	No	1
	<b><u>Transition piece- stainless steel</u></b>		
54	350 diameter- 350 x 350	No	1
	<b><u>Weather louvre with vermin screen.</u></b>		
55	350 x 350	No	1
	<b><u>Fans</u></b>		
56	Mixvent series compact mixed flow fans 150l/s @250Pa - 355 diameter with VSD and magnehelic gauge.	No	1
	<b><u>Sound attenuator - podded type</u></b>		
57	350 diameter	No	2
	<b><u>Extractor canopy hood</u></b>		
58	3600 x 1200 x 600 Kitchen extractor hood - waal canopy type- stainless steel with no 4 satin finish, including filters.	No	1
	<b><u>Extraction canopy fore protection system supply, install and commission the following equipment as per the technical specification.</u></b>		
59	ANSUL Automatic fire suppression system with fusible links	No	1
60	Electrical connection to extractor system, including isolator up to 1.5m from fan.	No	1

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**Section No. 7**

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**HVAC**

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 HVAC**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>LPG SUPPLY</u></b>			
	All equipment, handling, installation shall comply with relevant SANS documents and specifications			
	Prices given below shall be nett costs of new equipment and materials supplied and installed and shall:			
	a) exclude engineering and management cost.			
	b) exclude VAT.			
	c) Include any additional items not specified for a functioning system.			
	<b><u>PIPEWORK AND PIPE FITTINGS</u></b>			
	<b><u>SANS 460/85 Class 1 copper pipe and fittings, including bends, reducers, tees, stop ends and sleeves.</u></b>			
	<b><u>Piping</u></b>			
1	8mm diameter	m	6	
2	10mm diameter	m	71	
3	15mm diameter	m	19	
4	18mm diameter	m	30	
5	20mm diameter	m	26	
	<b><u>Reducers</u></b>			
6	20mm diameter - 18mm diameter	No	2	
7	20mm diameter - 10mm diameter	No	8	
	<b>Carried to Collection</b>			R
	<b>Section No. 7 MECHANICAL INSTALLATION Bill No. 4 LPG SUPPLY</b>			

8	18mm diameter - 15mm diameter	No	2
9	18mm diameter - 10mm diameter	No	6
10	15mm diameter - 10mm diameter	No	10
11	10mm diameter - 8mm diameter	No	60
<b><u>Tees</u></b>			
12	20mm - 20mm - 20mm diameter	No	10
13	15mm - 15mm - 15mm diameter	No	7
14	10mm - 10mm - 10mm diameter	No	43
15	18mm - 18mm - 18mm diameter	No	6
<b><u>Bends- 90 degree elbow</u></b>			
16	10mm diameter	No	29
17	15mm diameter	No	4
18	18mm diameter	No	4
19	20mm diameter	No	18
<b><u>LPG EQUIPMENT AND FITTINGS</u></b>			
<b><u>Valves</u></b>			
20	8mm diameter isolating valves	No	62
21	10mm diameter isolating valves	No	22
22	15mm diameter isolating valves	No	2

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**Section No. 7**  
**MECHANICAL INSTALLATION**  
**Bill No. 4**  
**LPG SUPPLY**

23	20mm diameter isolating valves	No	2
<b><u>Threaded Connection</u></b>			
24	8mm diameter threaded connection	No	62
25	10mm diameter threaded connection	No	1
26	15mm diameter threaded connection	No	1
27	48kg LGP Gas cylinders including the following standard fittings as per drawing and strictly according to manufactures instruction (per cylinder):  1 x Delivery pressure gage 1 x cylinder pressure gauge 1 x regulator nut 1 x regulator dial 1 x cylinder valve 1 x delivery valve 1 x non-return valve	No	10
<b><u>Trunking</u></b>			
28	60 x 40 epoxy powder coated trunking	m	60
29	Provisions for protective enclosure for gas cylinders as per SANS 10087 and architect specification- lockable with relevant signage.	No	4

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**Section No. 7  
MECHANICAL INSTALLATION  
Bill No. 4  
LPG SUPPLY**

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**Section No. 7**

**Bill No. 4**

**LPG SUPPLY**

**COLLECTION**

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 LPG SUPPLY**

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**SECTION SUMMARY - MECHANICAL INSTALLATION**

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 MECHANICAL INSTALLATION**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO.1</u></b>			
	<b><u>BULK EARTHWORKS</u></b>			
	<b><u>PREAMBLES</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.			
	<u>Reference to drawings and details:</u>			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Site Clearance</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, scrubs, bush, etc. and trees not exceeding 200m girth.	m2	17,145	
2	Stripping average 200mm thick layer top soil and depositing material in prescribed stock piles on site.	m2	17,145	
	<b><u>Excavation in earth not exceeding 2m deep to reduce levels:</u></b>			
3	To reduce level to final levels under floors, etc.	m3	10,130	
4	Trenches.	m3	13	
5	Bases.	m3	5	
	<b>Carried to Collection</b>			R
	<b>Section No. 8</b>			
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	<b>BULK EARTHWORKS</b>			

6	Holes.	m3	28
<b><u>Extra over trench and hole excavations in earth for excavation in:</u></b>			
7	Soft rock.	m3	1,017
8	Hard rock.	m3	509
<b><u>Extra over all excavations for carting away:</u></b>			
9	Carting away rubble off site to a dumping area identified by contractor.	m3	17,145
10	Surplus material from stock piles on site to a dumping site to be located by the contractor.	m3	6,166
<b><u>Risk of Collapse:</u></b>			
11	Sides of trenches and holes not exceeding 1.5m deep.	m2	5,688
<b><u>Keeping excavations free of water:</u></b>			
12	Keeping excavations free of water.		Item
<b><u>SABS approved brand of anti-termite soil poison in accordance with SANS 5859 applied by a Registered Pest Control Company and guaranteed against termite infestation for ten (10) years:</u></b>			
13	To bottoms and sides of trenches, holes, etc.	m2	29,792
<b><u>EARTH FILLING, ETC.</u></b>			
<b><u>Earth filing obtained from excavations and/or prescribed stock piles on site compacted to 95% Mod AASHTO density:</u></b>			
14	Backfilling to trenches, holes, etc.	m3	1,231
<b><u>RIP and Compact in-situ roadbed to 93% Mod AASHTO density:</u></b>			
15	Over site to form platforms.	m3	3,370

Carried to Collection

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**Section No. 8  
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BULK EARTHWORKS**



**Section No. 8**

**Bill No. 1**

**BULK EARTHWORKS**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.2</u></b></p> <p><b><u>WALKWAYS, PARKING AND ASSEMBLY AREA</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p>NOTE: Any defects which may become evident due to bad workmanship or materials within six months of completion shall be made good by the Contractor at his own expense.</p> <p>-----</p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><b><u>EARTH FILLING, ETC.</u></b></p> <p><b><u>Coarse river sand filling supplied by the contractor:</u></b></p>			
1	Under surface beds, slabs etc.	m3	245	
	<p><b><u>Compaction of surfaces:</u></b></p>			
2	Compaction of ground surface under walkways, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 93% Mod AASHTO density.	m2	7,274	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 8</b> <b>EXTERNAL WORKS</b> <b>Bill No. 2</b> <b>WALKWAYS, PARKINGS AND ASSEMBLY AREA</b></p>			

**DAMPPROOFING OF WALLS AND FLOORS**

**One layer of 250 micron green polyethylene damp proof membrane (as per clause 7.2 of specification SABS-0400), all side overlaps sealed with approved contact adhesive**

3	Under surface beds.	m2	5,916	
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**BOND AND INTERLOCKING CONCRETE PAVERS**

**Plain Precast Cement Concrete (25MPa) Type SA Interlocking Bond Paving Bricks Size 200 x 100 x 60mm Thick Laid On And Including 30mm Thick Sand Bed With Joints Filled With Sand:**

4	60mm Interlocking block type S-A with compressive strength of 25Mpa in Herringbone pattern 45 degree to kerb including 25mm bedding layer of thin, clean, silt free commercial coarse river sand approved by Engineer (Include all cutting of blocks and sand infill).	m2	2,764	
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5	Extra over, 60mm interlocking block type S-A with compressive strength of 25Mpa brick-on-edge header course including 25mm bedding layer of thin, clean, silt free commercial coarse river sand approved by Engineer (Include all cutting of blocks and sand infill).	m	1,179	
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6	80mm Interlocking block type S-A with compressive strength of 25Mpa in Herringbone pattern 45 degree to kerb including 25mm bedding layer of thin, clean, silt free commercial coarse river sand approved by Engineer (Include all cutting of blocks and sand infill).	m2	3,185	
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**Plain Precast Concrete (25MPa) Paving slabs Size 450 x 450 x 50mm Thick Laid On And Including 30mm Thick Sand Bed With Joints Filled With Sand:**

7	50mm Paving slab with compressive strength of 25Mpa in Stack bond 45 degree to kerb including 30mm bedding layer of thin, clean, silt free commercial coarse river sand approved by Engineer (elsewhere measured) including sand infill. (Colour: Grey)	m2	1,325	
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**PRE-CAST CONCRETE KERBS**

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**Pre-cast concrete kerbs (complying with SABS 927) in maximum lengths of 1m lengths, wet presses, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at the back of each joint, excavation, backfilling, ramming, etc.:**

8	75 x 250mm High Kerbs, laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.	m	3,407
9	75 x 250mm High Kerbs circular on plan not exceeding 4m radius formed with 330mm lengths of straight kerb.	m	30

**PAINTWORK**

**Prepare and apply one coat white reflective road marking paint on pre-cast concrete paving blocks, etc.:**

10	100mm Wide white line	m	650
11	100mm Wide yellow line	m	650
12	Paraplegic parking sign in parking area	No	4
13	Paraplegic ramp markings (Yellow and White) in parking area	m2	50

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WALKWAYS, PARKINGS AND ASSEMBLY AREA**

**Section No. 8**

**Bill No. 2**

**WALKWAYS, PARKINGS AND ASSEMBLY AREA**

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 WALKWAYS, PARKINGS AND ASSEMBLY AREA**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO.3</u></b>			
	<b><u>STORMWATER DRAINAGE</u></b>			
	<b><u>PREAMBLES</u></b>			
	<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p>			
	<b><u>STORMWATER DRAINAGE</u></b>			
	<p><b><u>Class PN12.5 HDPe type PE100 pipes with interlocking joints, including 1050mm wide trenches, 100mm Sand bedding, 300mm selected granular fill compacted to 93% Mod AASHTO and selected backfill to match ground level all compacted to 93% Mod AASHTO density :</u></b></p>			
1	200mm Pipes laid in and including trenches not exceeding 1m deep.	m	54	
2	250mm Pipes laid in and including trenches not exceeding 1m deep.	m	38	
3	315mm Pipes laid in and including trenches not exceeding 1m deep.	m	72	
4	355mm Pipes laid in and including trenches not exceeding 1m deep.	m	10	
5	400mm Pipes laid in and including trenches not exceeding 1m deep.	m	31	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 8</b> <b>EXTERNAL WORKS</b> <b>Bill No. 3</b> <b>STORMWATER MANAGEMENT</b></p>			

6	450mm Pipes laid in and including trenches not exceeding 1m deep.	m	7
7	710mm Pipes laid in and including trenches not exceeding 1m deep.	m	57
8	200mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	26
9	315mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	28
10	355mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	5
11	400mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	5
12	450mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	12
13	500mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	77
14	560mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	20
15	710mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	59
16	800mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	5
	<b><u>Class 100D concrete pipes with interlocking joints, including 1050mm wide trenches, 100mm Sand bedding, 300mm selected granular fill compacted to 93% Mod AASHTO and selected backfill to match ground level all compacted to 93% Mod AASHTO density :</u></b>		
17	600mm Pipes laid in and including trenches not exceeding 1m deep.	m	33

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**Section No. 8  
EXTERNAL WORKS  
Bill No. 3  
STORMWATER MANAGEMENT**

**Manhole including excavation, imported backfill compacted to 90% Mod AASHTO, 20MPa 200mm thick concrete base with two layers of mesh Ref 395, 15MPa mass concrete benching for 110mm Diameter pipes to 250mm thick, walls formed of 'ROCLA' or similar approved pre-cast manhole chambers, all manhole joints to be sealed with 'DENSO' sealstrip or similar approved, 4A replacement cover/adaptor slab concrete lid can fit this slab directly (gratings and covers elsewhere):**

18	1830 x 1500mm Manhole chambers not exceeding 1100mm deep internally.	No	3
19	1830 x 1500mm Manhole chambers exceeding 1100mm and not exceeding 1600mm deep internally.	No	4

**Grid inlet including excavation, imported backfill compacted to 90% Mod AASHTO, 20MPa 200mm thick concrete base with two layers of mesh Ref 395, 15MPa mass concrete benching for 110mm Diameter pipes to 250mm thick, walls formed of 'ROCLA' or similar approved pre-cast manhole chambers, all manhole joints to be sealed with 'DENSO' sealstrip or similar approved, 4A replacement cover/adaptor slab concrete lid can fit this slab directly (gratings and covers elsewhere):**

20	1830 x 1500mm Brick catch pit not exceeding 1100mm deep internally.	No	14
21	1830 x 1500mm Brick catch pit exceeding 1100mm and not exceeding 1600mm deep internally.	No	4

**Cast iron gratings, covers, etc.:**

22	'Saint Gobain' or equally approved 550mm diameter 2A cast iron manhole cover and frame. (SKU: 023634).	No	7
23	'Saint Gobain' or equally approved 450 x 600mm PAM cast iron storm water grate and frame. (SKU: 022510).	No	18
24	Lifting-key for manhole cover (handed to employer).	No	2

**STORMWATER CHANNELS**

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**Section No. 8  
EXTERNAL WORKS  
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STORMWATER MANAGEMENT**

<p><b><u>Pre-cast concrete 25Mpa/19 stone open storm water channels having half round shaped waterway formed in top, cast in suitable lengths including, bedding and pointing in (3:1) cement mortar:</u></b></p>				
25	'Valstone' or similar approved D11 large shallow open-ended channel section, size 660mm wide x 225mm thick with 140mm diameter half round channel waterway (Prod no.: P2-0609).	m	1,233	
26	Extra over for angle.	No	33	
27	Extra over for intersections.	No	6	
28	Extra over for junctions.	No	3	
<p><b><u>JOINT SEALANTS, ETC.</u></b></p>				
<p><b><u>Two-part polysulphide sealing compound including backing cord, bond breaker, primer, etc.:</u></b></p>				
29	10 x 20mm In-between channels including raking out expansion joint filler as necessary.	m	1,639	
<p><b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b></p>				
<p><b><u>One layer 250 micron embossed polyethylene dampproof course (SANS 952-1985 type B) or similar approved:</u></b></p>				
30	Under 660mm wide channels, with 150mm turn up against brick walls.	m2	814	
<p><b><u>HEADWALLS, ETC.</u></b></p>				
<p><b><u>Stormwater channel outlets:</u></b></p>				
31	Irregular shaped headwall as channel outlet size 4460mm wide x 2280mm long x 900mm high formed of 150mm 30MPa concrete wingwall resting on reinforced concrete slab overall size 2430 x 4160 x 150mm thick, including 400mm diameter encased stormwater pipe (e/m) as per headwall details.	No	2	
<p><b>Carried to Collection</b></p>				R
<p><b>Section No. 8 EXTERNAL WORKS Bill No. 3 STORMWATER MANAGEMENT</b></p>				

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**STORMWATER MANAGEMENT**

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**STORMWATER MANAGEMENT**

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Item No	<b><u>BILL NO.4</u></b>	Quantity	Rate	Amount
	<b><u>SOIL DRAINAGE</u></b>			
	<b><u>PREAMBLES</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.			
	<u>Reference to drawings and details:</u>			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	Excavations of pipe trenches will be measured in accordance with "Method B" and the width of excavations in more difficult material will be determined in accordance with "Method A" of the Standard System of Measuring Building Work Six Edition			
	<b><u>SOIL DRAINAGE, ETC.</u></b>			
	<b><u>Heavy duty (Class 10) uPVC sewer and drain pipes, including 650mm wide trenches, 110mm thick sand bedding, imported fill compacted to 95% Mod AASHTO density match ground levels:</u></b>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep.	m	509	
2	110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep.	m	66	
	<b>Carried to Collection</b>			R
	<b>Section No. 8 EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE</b>			

<p><b><u>Extra over 110mm pipes laid in for 25MPa concrete encasing 310mm Diameter around pipe at maximum 45 degree angles including setting in 45 Degree junction, to maximum depth of 2000mm:</u></b></p>					
3	Unreinforced concrete encasing to 110mm horizontal and sloping pipes.	m3	116		
<p><b><u>Extra over heavy duty (Class 34) uPVC sewer and drain pipes for fittings:</u></b></p>					
4	110mm Bend.	No	22		
5	110mm Junction.	No	6		
6	110mm Access rodding eye.	No	18		
<p><b><u>Gulleys:</u></b></p>					
7	190 x 110mm Gully head and Gate.	No	40		
8	110mm Gully 'P' trap.	No	40		
9	110mm 45 Degree cast iron rodding eye and cover.	No	96		
10	110mm 45 Degree junction.	No	12		
<p><b><u>Manhole including excavation, imported backfill compacted to 90% Mod AASHTO, 20MPa 200mm thick concrete base with two layers of mesh Ref 395, 15MPa mass concrete benching for 110mm Diameter pipes to 250mm thick, walls formed of 'ROCLA' or similar approved pre-cast manhole chambers, all manhole joints to be sealed with 'DENSO' sealstrip or similar approved, 4A replacement cover/adaptor slab concrete lid can fit this slab directly (gratings and covers elsewhere):</u></b></p>					
11	1000mm Diameter manhole drops exceeding 500mm and not exceeding 1000mm deep internally.	No	25		
12	1000mm Diameter manhole drops exceeding 1000mm and not exceeding 1500mm deep internally.	No	3		
<p><b><u>Cast iron gratings, covers, etc.:</u></b></p>					
13	'Saint Gobain' or equally approved 550mm diameter 2A cast iron manhole cover and frame. (SKU: 023634).	No	28		
<p><b>Carried to Collection</b></p>					R
<p><b>Section No. 8 EXTERNAL WORKS Bill No. 4 SOIL DRAINAGE</b></p>					

14	Lifting-key for manhole cover (handed to employer).	No	4
<b><u>Sundries:</u></b>			
15	300 x 300 x 100mm Pre-cast concrete inspection eye marker slab set in ground.	No	12
16	100mm Cast iron cleaning eye	No	12
<b><u>Testing:</u></b>			
17	Testing drainage pipe system		Item

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SOIL DRAINAGE

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**SOIL DRAINAGE**

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 SOIL DRAINAGE**

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO.5</u></b>			
	<b><u>WATER RETICULATION</u></b>			
	<b><u>PREAMBLES</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.			
	<u>Reference to drawings and details:</u>			
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	<b><u>WATER SUPPLIES IN GROUND</u></b>			
	<b><u>Class N12.5 HDPe type IV pipes, including excavations and filling:</u></b>			
1	110mm Pipes laid in and including trenches not exceeding 1m deep.	m	573	
2	110mm Pipes laid in and including trenches exceeding 1m not exceeding 2m deep.	m	246	
	<b><u>Extra over Class N12.5 HDPe type IV pipes for fittings, bends, junctions, reducing junctions, connectors, etc.:</u></b>			
3	110mm Fittings.	No	399	
	<b><u>Trust block including, setting in position in pipe tranches complete as per Engineers ...:</u></b>			
4	90 Degree Bend thrust block set in position.	No	9	
5	T-Junction thrust block set in position.	No	13	
	<b>Carried to Collection</b>			R
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	<b>Bill No. 5</b>			
	<b>WATER RETICULATION</b>			

6	Junction thrust block set in position.	No	5
	<b><u>Air Valve and pipe work complete as per Engineers...</u></b>		
7	Air Valve complete including piping and fittings.	No	18
	<b><u>Manhole chamber including excavation, imported backfill compacted to 90% Mod AASHTO, 20MPa 420mm x 100mm thick concrete footing, 100mm thick 19mm concrete stone filling, 220mm NFX Brickwork in class II mortar, bagging to internal walls, 30MPa 150mm reinforced concrete cover slabs with 40mm diameter pipe vent and setting in manhole cover frame into covers slab (cover and frame elsewhere):</u></b>		
8	1580 x 1180mm Brick chamber not exceeding 1100mm deep internally.	No	18
	<b><u>Cast iron gratings, covers, etc.:</u></b>		
9	'Saint Gobain' or similar approved 25.4kg 450 x 600mm cast iron manhole cover and frame.	No	18
10	Lifting-key for manhole cover (handed to employer).	No	4
	<b><u>Valves:</u></b>		
11	50mm Gate valve, two connectors, 200 x 150 x 300 PVC valve box and cover, 100mm crush stone bed to box valve and additional pipe where needed, including excavation, setting in valve and filling around box valve with suitable material.	No	5
12	50mm Isolation ball Valve, two connectors, 200 x 150 x 300 PVC valve box and cover, 100mm crush stone bed to box valve and additional pipe where needed, including excavation, setting in valve and filling around box valve with suitable material.	No	2
13	50mm Non-return valve, two connectors, 200 x 150 x 300 PVC valve box and cover, 100mm crush stone bed to box valve and additional pipe where needed, including excavation, setting in valve and filling around box valve with suitable material.	No	2

**TANK FARM, ETC.**

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WATER RETICULATION**

**EXCAVATION, FILLING, ETC. OTHER THAN BULK**

**Excavation in earth not exceeding 2 000mm deep:**

14	Reducing levels under floors	m3	11
15	Holes	m3	8

**Extra over trench and hole excavations in earth for excavation:**

16	Soft rock.	m3	2
17	Hard rock.	m3	1

**Extra over all excavations for carting away:**

18	Surplus material from excavations, stock piles, e.t.c on site to a dumping site to be located by the Contractor.	m3	19
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**Risk of Collapse:**

19	Sides of trenches and holes not exceeding 1 500mm deep.	m2	17
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**Keeping excavations free of water:**

20	Keeping excavations free of all water other than subterranean water.		Item
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**EARTH FILLING, ETC.**

**C3 Cement stabilised gravel compacted to 97% Mod AASHTO density:**

21	Over site.	m3	8
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**Compaction of surfaces:**

22	Compaction of ground surface under walkways, etc. including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material from excavated material where necessary and compacting to 93% Mod AASHTO density.	m2	42
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**TESTS, ETC.**

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WATER RETICULATION**

<b><u>Prescribed Density Tests As Check On Contractors Tests Included In Filling Above</u></b>		
23	Modified AASHTO density test and deliver the results to the Engineer and Principal Agent within 24 hours of the tests being completed.	No 2
<b><u>SOIL POISONING</u></b>		
<b><u>SABS approved brand of anti-termite soil poison in accordance with SANS 5859 applied by a Registered Pest Control Company and guaranteed against termite infestation for ten (10) years:</u></b>		
24	Under floors, etc.	m2 42
25	To bottoms and sides of trenches, holes, e.t.c	m2 21
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>		
<b><u>10MPa/20mm concrete:</u></b>		
26	Surface Blinding.	m3 1
<b><u>REINFORCED CONCRETE CAST ON FORMWORK</u></b>		
<b><u>30MPa/20mm concrete:</u></b>		
27	Surface beds on waterproofing including ground beams.	m3 10
28	Bases.	m3 4
<b><u>Finishing top surfaces of concrete smooth with a power float:</u></b>		
29	Surface beds, slabs, etc.	m2 42
<b><u>TESTS CUBES</u></b>		
<b><u>Concrete test cubes:</u></b>		
30	Set of three concrete test cubes size 150mm x 150mm x 150mm overall including testing.	Sets 6.0

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WATER RETICULATION



37 Submersible pump type v400, 5.5kw Pump with HP of 7.5, complete with concrete plinth, brickwork and cover lid.

No

1

**Testing:**

38 Allow for testing all drains, and water supplies to the satisfaction of the Principal Agent. All defective work is to be taken out and replaced at the Contractor's expense.

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**WATER RETICULATION**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.6</u></b></p> <p><b><u>LANDSCAPING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><b><u>LANDSCAPING</u></b></p> <p><b><u>Trees:</u></b></p> <p><u>The tenderer is to allow in his price for watering all newly planted trees twice a week for the first three months.</u></p>			
1	Ficus Microcarpa (Ficus Nitida), size at maturity to be 10-20m including planting, fertilizing, staking, mulching and watering, all by a specialist subcontractor or nursery.	No	19	
2	Citrus x sinensis (Orange tree), size at maturity to be 9-10m including planting, fertilizing, staking, mulching and watering, all by a specialist subcontractor or nursery.	No	7	
3	Psidium Guajava (Guava tree), size at maturity to be 2-8m including planting, fertilizing, staking, mulching and watering, all by a specialist subcontractor or nursery.	No	5	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 8</b> <b>EXTERNAL WORKS</b> <b>Bill No. 6</b> <b>LANDSCAPING</b></p>			



**Section No. 8**

**Bill No. 6**

**LANDSCAPING**

**COLLECTION**

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**Section No. 8  
 EXTERNAL WORKS  
 Bill No. 6  
 LANDSCAPING**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.7</u></b></p> <p><b><u>FENCING AND ENTRANCE WALL</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>10MPa/20mm concrete:</u></b></p>			
1	Surface Blinding.	m3	1	
	<p><b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b></p> <p><b><u>25MPa/19mm Concrete:</u></b></p>			
2	Strip footings.	m3	3	
3	Bases.	m3	26	
	<b>Carried to Collection</b>			
	<p><b>Section No. 8</b> <b>EXTERNAL WORKS</b> <b>Bill No. 7</b> <b>FENCING AND ENTRANCE WALL</b></p>			
				R

**TESTS CUBES**

**Concrete test cubes:**

4	Set of three concrete test cubes size 150mm x 150mm x 150mm overall including testing.	Sets	12.0
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**REINFORCEMENT**

**High Tensile Steel Bar Reinforcement To Structural Concrete Work:**

5	Various sizes.	t	3.52
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**BRICKWORK IN FOUNDATIONS**

**Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:**

6	Piers.	m3	1
7	One brick wall.	m2	13

**BRICKWORK IN SUPERSTRUCTURE**

**Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:**

8	Piers.	m3	2
9	One brick wall.	m2	37

**BRICKWORK SUNDRIES**

**Cement infill of 1:3 liquid cement and sand mixture:**

10	To brick piers.	m3	1
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**2,5mm Galvanised brick reinforcement:**

11	75mm Wide reinforcement built in horizontally in foundations.	m	53
12	75mm Wide reinforcement built in horizontally superstructure.	m	48

Carried to Collection

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Section No. 8  
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Bill No. 7  
FENCING AND ENTRANCE WALL

13	150mm Wide reinforcement built in horizontally in foundations.	m	156
14	150mm Wide reinforcement built in horizontally in superstructure.	m	140
<b><u>FACE BRICKWORK</u></b>			
<b><u>Face bricks (FBS) Autumn Wheat Travertine pointed with bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints suitable for exposure zones 1-2. Mortar colour to be charcoal grey:</u></b>			
15	Extra over brickwork for face brickwork.	m2	24
<b><u>PLASTERING</u></b>			
<b><u>Cement plaster on brickwork:</u></b>			
16	On walls.	m2	26
17	On narrow widths.	m2	2
<b><u>PAINTWORK</u></b>			
<b><u>Prepare And Apply One Coat Universal Undercoat And Two Coats Acrylic PVA Paint On:</u></b>			
18	On plastered walls.	m2	26
19	On narrow widths.	m2	2

Carried to Collection

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Section No. 8  
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Bill No. 7  
FENCING AND ENTRANCE WALL

**FENCING**

**'ClearVu' fencing system or Equally Approved:**

20	High density anti-climbing and anti-cut pressed mesh panel fencing 1 800mm high, with 600mm Anti Burrow extension formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with marine fusion bond coating, colour to Architect's specification, with aperture size 76.2mm x 12.7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85-4mm taper locking posts 3m high including locking recess mechanism at 3,382m centres with sealed base anchors with posts bedded in 25MPa concrete bases size 400mm x 400mm x 600mm deep, complete installation in accordance with the manufacturer's specifications.	m	186
21	Extra over for 1000mm x 1800mm high single swing gate comprising 60mm x 60mm square tube frame with welded ClearVu in-fill.	No	3

**'ClearVu' fencing system or Equally Approved:**

22	High density anti-climbing and anti-cut pressed mesh panel fencing 2 400mm high, with 600mm Anti Burrow extension formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with marine fusion bond coating, colour to Architect's specification, with aperture size 76.2mm x 12.7mm and reinforcing V-section ribs, bolted with vandal resistant bolts and clamping plates to 85-4mm taper locking posts 3m high including locking recess mechanism at 3,382m centres with sealed base anchors with posts bedded in 25MPa concrete bases size 400mm x 400mm x 600mm deep, complete installation in accordance with the manufacturer's specifications.	m	696
23	Extra over for 1000mm x 2400mm high single swing gate comprising 60mm x 60mm square tube frame with welded ClearVu in-fill.	No	1
24	Extra over for 4000mm x 2400mm high double swing gate comprising 60mm x 60mm square tube frame with welded ClearVu in-fill.	No	2

**Carried to Collection**

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**Section No. 8  
EXTERNAL WORKS  
Bill No. 7  
FENCING AND ENTRANCE WALL**

25	Extra over for 1000mm high galvanised 'Shark tooth' type spikes rails with marine fusion bond coating, bolted to 50mm wide ClearVu mesh flange bent along fence top, complete installation in accordance with the manufacturer's specifications.	m	696
	<b><u>Two coats bituminous emulsion to metal surfaces applied on both sides over the full flat area:</u></b>		
26	600mm High Anti Burrow ClearVu extension	m	696
	<b><u>Miscellaneous:</u></b>		
27	50mm Union padlock with 3 keys, 7mm boron steel shackle, double locking, brass body with satin nickel finish suitable for high security applications and outdoor use. Tested to 240 hours for corrosion resistance and 10 000 opening/closing cycles with 5 pin cylinder.	No	6
	<b><u>Signage:</u></b>		
28	550mm x 350mm x 3mm Thick aluminium sign with anodised silver engraved text to Architect's detail.	No	1
29	2 x 5mm Black perspex lettering spelling "THOLIMFUNDO PRIMARY SCHOOL" fixed 5mm off wall with chemical bonding to Architect's specification.		Item

Carried to Collection

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**Section No. 8**  
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**FENCING AND ENTRANCE WALL**

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 EXTERNAL WORKS  
 Bill No. 7  
 FENCING AND ENTRANCE WALL**

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.8</u></b></p> <p><b><u>COMBI COURTS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.</p> <p>NOTE: Any defects which may become evident due to bad workmanship or materials within six months of completion shall be made good by the Contractor at his own expense.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Reference to drawings and details:</u></p> <p>Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.</p> <p><b><u>EARTH FILLING, ETC.</u></b></p> <p><b><u>Compaction of surfaces:</u></b></p>			
1	<p>Compaction of ground surface under platforms etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density.</p>	m2	2,687	
	<p><b><u>Earth filling supplied by the contractor under combi courts:</u></b></p>			
2	<p>Sub-base course of suitable gravel/crusher run material compacted to 90% Mod AASHTO density</p>	m3	188	
	<b>Carried to Collection</b>			R
	<p><b>Section No. 8</b>  <b>EXTERNAL WORKS</b>  <b>Bill No. 8</b>  <b>COMBI COURTS</b></p>			

3	Base course of G1 graded 13mm crusher stone material, sprayed with bitumen SS60 compacted to 90% Mod AASHTO density	m3	126
4	Base course of G1 grade 6.7mm stone material, sprayed with bitumen SS60 emulsion compacted to 90% Mod AASHTO density	m3	101

**TESTS, ETC.**

**Prescribed Density Tests As Check On Contractors Tests Included In Filling Above**

5	Modified AASHTO density test and deliver the results to the Engineer and Principal Agent within 24 hours of the tests being completed.	No	28
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**WEED KILLERS, INSECTICIDES, ETC**

**Combi Court Base to be treated with a SANS 10400 approved weed killer:**

6	On base course	m2	1,256
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**DAMPPROOFING OF WALLS AND FLOORS**

**One layer 200 micron embossed polyethylene dampproof course (SANS 952-1985 type B) or similar approved:**

7	Under surface bed.	m2	2,687
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**COMBI COURT SURFACING**

**Welded Mesh:**

8	Bara Mesh	m2	1,256
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**Slurry Surfacing:**

9	Slurry layer to be compacted to 90% Mod AASHTO density	m2	1,256
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Carried to Collection

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Section No. 8  
EXTERNAL WORKS  
Bill No. 8  
COMBI COURTS



19	<p><b><u>'Class A' Galvanised Gates:</u></b></p> <p>Single leaf steel gate size 900mm wide x 2100mm high overall, formed of 50mm diameter x 2.5mm parameter framing and one diagonal brace, all scribed and welded at corners and intersections, covered with Galvanised Diamond Mesh, straining wires all as per fencing, including fitting with 30mm diameter x 300mm girth u-shaped cleats and three 24mm diameter x 300mm long eye bolt hinges bolted and welded to adjoining 100mm diameter gate post (elsewhere measured), including 500mm long heavy duty chain spot welded to gate and Union padlock.</p>	No	2
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**BOND AND INTERLOCKING CONCRETE PAVERS**

**Plain Precast Cement Concrete (25MPa) Type SA Interlocking Bond Paving Bricks Size 200 x 100 x 60mm Thick Laid On And Including 30mm Thick Sand Bed With Joints Filled With Sand:**

20	<p>60mm Interlocking block type S-A with compressive strength of 25Mpa in Herringbone pattern 45 degree to kerb including 25mm bedding layer of thin, clean, silt free commercial coarse river sand approved by Engineer (Include all cutting of blocks and sand infill).</p>	m2	1,430
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**PRE-CAST CONCRETE KERBS**

**Pre-cast concrete kerbs (complying with SABS 927) in maximum lengths of 1m lengths, wet presses, placed in position, bedded and jointed in (3:1) cement mortar and flush pointed on exposed faces, including 15MPa/19mm unreinforced concrete haunching at the back of each joint, excavation, backfilling, ramming, etc.:**

21	<p>75 x 250mm high overall, laid in lengths not exceeding 1000mm on a well rammed earth bottom or base course.</p>	m	431
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**SCHOOL SPECTATOR SEATING AREA**

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Section No. 8  
EXTERNAL WORKS  
Bill No. 8  
COMBI COURTS

**5m x 5 Tier Standard School Spectator Stand**

22 2mm x 40 mm Square Tubing, Hot dip galvanised finish with treated Pine seating.

No 15

**SUNDRIES**

**Scoreboard:**

23 3m x 1.5m Aluminium structure frame with aluminium plate screen scoreboard, painted with Antique Green Matte Enamel paint background composition and white enamel paint for school name, borders for score boxes and overall frame.

No 2

**Combi Court Posts and Nets:**

24 2x 76mm Removable adjustable square Mild Steel posts powder coated, painted in Antique Green Gloss Enamel paint with Brass Winders mechanism and handle allowing locking for tensioning including high performance 12.8m heavy duty 3.5mm braided HDPE net twine and features a quad-stitched optic white headband.

No 2

25 Permanent 76mm square mild steel Netball Goal Post, with solid ring and net included, bolted to the slab. 2 x hoops to accommodate junior & senior players, painted in Antique Green Gloss Enamel paint.

No 4

**Carried to Collection**

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**COMBI COURTS**

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 COMBI COURTS**

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Item No	<b><u>BILL NO.9</u></b>	Quantity	Rate	Amount
	<b><u>PLAY AREA EQUIPMENT</u></b>			
	<b><u>PLAY AREA EQUIPMENT</u></b>			
	<b><u>Jungle Gym:</u></b>			
	<u>Main 100/125mm poles and stays are to be set in concrete min 600mm deep and with bottom ends of poles protruding through concrete base to allow water to drain. 10mm Stainless steel threaded bar, stainless steel flat washers and nuts are to be used to assemble the structure.</u>			
1	Timber Jungle Gym (tanalith treated) with raised platforms, size 3.707 x 1.240mm and 1.180 x 1.220mm wide, with 95% UV protected shade cloth roof, with wooden hand railings on three sides, with nylon cargo net, with 3.045mm glass fibre slide fixed to platform, with suspended rope bridge size 1.180 x 1.655mm wide connecting platforms including wooden balustrade to sides, including ramp size 3.093 x 1.138mm wide connecting one raised platform to the ground level with wooden balustrade to two sides, with swing bar 1.255mm long connected between two posts and including monkey bars in lengths 1.160mm long installed complete with all fittings by an approved manufacturer.	No	1	
	<b><u>Miscellaneous:</u></b>			
2	Allow for movement of jungle gym to the correct position, including taking out, grubbing up and removing all foundation concrete, making good by backfilling from stockpiles or imported fill on completion.		Item	
	<b>Carried Forward to Summary of Section No. 8</b>			R
	<b>Section No. 8 EXTERNAL WORKS Bill No. 9 PLAY AREA EQUIPMENT</b>			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO.10</u></b>			
	<b><u>ATTENUATION POND</u></b>			
	<b><u>PREAMBLES</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition), the Department of Public Works document No. PW 371 Specification of Materials and Methods to be used and to the Supplementary Preambles which are incorporated hereunder.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Reference to drawings and details:</u>			
	Where drawings and/ or details have been referred to in the description of items the Tenderers should price for complete detail and specification on such details and/ or drawing. No claims relating to the omissions on the part of tenders will be entertained.			
	<b><u>BULK EXCAVATION, FILLING, ETC.</u></b>			
	<b><u>Bulk excavations in earth for attenuation dam:</u></b>			
1	Not exceeding 2m deep.	m3	1,720	
2	Exceeding 2m and not exceeding 4m deep.	m3	860	
	<b><u>Extra over bulk excavations in earth for excavation in:</u></b>			
3	Soft rock.	m3	206	
4	Hard rock.	m3	103	
	<b><u>Extra over bulk excavations in earth for breaking up and removing:</u></b>			
5	Brickwork.	m3	10	
6	Unreinforced concrete.	m3	10	
	<b>Carried to Collection</b>			R
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	<b>EXTERNAL WORKS</b>			
	<b>Bill No. 10</b>			
	<b>ATTENUATION POND</b>			

7	Reinforced concrete.	m3	10
<b><u>Extra over all excavations for cart away:</u></b>			
8	Surplus excavated material from excavations and/or stock piles on site to a dumping site identified by the contractor.	m3	2,580
<b><u>Risk of collapse of excavations:</u></b>			
9	Sides of bulk excavations not exceeding 1.5m deep.	m2	171
10	Sides of bulk excavations exceeding 1.5m deep.	m2	171
11	Keeping excavations free of water.		Item

Carried to Collection

Section No. 8  
EXTERNAL WORKS  
Bill No. 10  
ATTENUATION POND

R

<b><u>De-watering of seepage water and water from other subterranean sources in excavations:</u></b>				
12	Provide water pump for de-watering of water including maintenance and removal.	No	1	
13	Provide necessary hoses for the above, including couplings, etc.	m	100	
14	Allow for pumping (One pump).		Item	
<b><u>FILLING, ETC</u></b>				
<b><u>Filling supplied by the contractor under attenuation pond, etc.</u></b>				
15	G7 Gravel-soil material compacted to 93% Mod AASHTO density.	m3	92	
<b><u>100mm Thick layer of 'Geocells' filled with 5Mpa concrete with a smooth brushed finish:</u></b>				
16	Over waterproof sheeting.	m2	468	
<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density:</u></b>				
17	In landscape mounds, berms, etc.	m3	4	
<b><u>Compaction of surfaces:</u></b>				
18	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize materials, adding suitable material where necessary and compacting to 93% Mod AASHTO density.	m2	688	
<b><u>TESTS, ETC.</u></b>				
<b><u>Prescribed tests to determine degree of compaction or other properties of ground or filling:</u></b>				
19	Modified AASHTO density test and deliver the results to the Engineer and Principal Agent within 24 hours of the tests being completed.	No	5	
<b>Carried to Collection</b>				R
<b>Section No. 8 EXTERNAL WORKS Bill No. 10 ATTENUATION POND</b>				

**GABIONS AND INTERLOCKING BLOCK  
RETAINING STRUCTURES**

**Gabions of galvanised wire boxes laced together  
and filled with broken stone:**

20	1000mm Thick retaining wall of 1 x 1 x 1m boxes properly bonded (Total height not exceeding 5m).	m3	342
21	1000mm Thick retaining wall of 1 x 1 x 0.5m boxes properly bonded (Total height not exceeding 5m).	m3	1
22	300mm Thick retaining wall of 1 x 1 x 0.3m boxes properly bonded (Total height not exceeding 5m).	m3	1
23	300mm Thick base protection of 1 x 1 x 0.3m reno mattresses on flat.	m3	2

**FILTER FABRIC**

**1.5mm Thick smooth HDPE membrane liner:**

24	Under stone filled gabion mattresses, including preparing ground surface under.	m2	702
25	Vertically behind stone filled gabion retaining walls.	m2	456

**1200g/m2 Needle punched nonwoven geotextile protection:**

26	Under stone filled gabion mattresses including preparing ground surface under.	m2	702
27	Vertically behind stone filled gabion retaining walls.	m2	456

**MANHOLE**

28	540 x 540mm Brick inspection chamber 950mm deep internally with 200 x 200mm opening to top of concrete reducer slab.	No	1
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**SPILLWAY**

29	Grassed 'Armoflex 140' lining laid sloping.	m2	8
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Carried to Collection

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**Section No. 8  
EXTERNAL WORKS  
Bill No. 10  
ATTENUATION POND**

**CONCRETE CHANNELS, ETC**

30 2000mm Wide x 500mm deep trapezoidal concrete channel with 100mm thick walls , comprising 25MPa concrete cast in 1m sections , 193 mesh reinforcement and finished smooth on exposed surfaces including necessary excavation and formwork.

m

3

Carried to Collection

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Section No. 8  
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**Section No. 8**

**Bill No. 10**

**ATTENUATION POND**

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Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 1</u></b></p>			
<p><b><u>PROVISIONAL SUMS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>General:</u></b></p>			
<p>Unless otherwise described, all prime cost amounts and provisional sums shall be nett. No provision for 5 percent cash discount shall be included for the main Prime cost amounts and provisional sums exclude value added tax.</p>			
<p>In the event of a prime cost amount or provisional sum being omitted the items "Allow for profit"... and "allow for attendance" applicable, shall be omitted together with the prime cost amount or provisional sum and no claim whatsoever will be entertained in this regard. The principal agent shall be entitled to nominate or select any further specialist and other to execute work or supply and fix any goods whether or not a provisional sum is included in the bills of quantities and such specialists and other will then be deemed to be "selected subcontractors" as the case may be. Where profit stated, the contractor may allow for profit if required</p>			
<p><b><u>Attendance upon nominated/selected subcontractors:</u></b></p>			
<p>The item "Allow for attendance...." which follows each provisional sum for nominated/selected subcontractors work, shall be deemed to cover all the contractors costs incurred in providing free of charge to the subcontractor the service as set out in the relevant clause in the preliminaries</p>			
<p><b><u>Taking delivery:</u></b></p>			
<p>Taking delivery of goods or articles by the contractor on site shall mean getting in, unpacking, checking that the quantity is correct and that the goods are complete and undamaged, submitting a report thereof to the interested parties and issuing vouchers for the receipt of such goods. The contractor is to store the goods and will be held responsible for the safety thereof and indemnify the employer against any damage or loss which may occur.</p>			
<p><b>Carried to Collection</b></p>			
<p><b>Section No. 9                  PROVISIONAL SUMS                  Bill No. 1                  PROVISIONAL SUMS</b></p>			
		R	

**Works executed under a separate/direct contract:**

The contractor shall permit access to the site and to the places where the work is to be carried out and provide every facility to enable the specialist to carry out his work in a workmanlike manner and in proper order and sequence.

**Co-ordination:**

The contractor shall obtain all necessary particulars of the subcontractors work timeously and the contractor will be responsible for the programming and coordination of the works.

**Number of nominated/selected subcontractors:**

The contractors attention is drawn to the fact that the indicated individual provisional sums may consist of numerous specialist, all of which will become nominated/selected subcontractors. The contractor must therefore allow in his tender for any cost implication this may bring about, as no claims in this regard will be entertained.

The contractor shall obtain all necessary particulars of the subcontractors work timeously and the contractor will be responsible for the programming and coordination of the works

**Carried to Collection**

**Section No. 9  
PROVISIONAL SUMS  
Bill No. 1  
PROVISIONAL SUMS**

R

**PROVISIONAL SUMS FOR  
NOMINATED/SELECTED SUB-  
CONTRACTORS**

**Eskom Connection Upgrade:**

1 Provide the sum of R100 000.00 (One Hundred Thousand Rand) for Upgrade of Eskom Supply to including transformer, the amount to be used at the discretion of the Principal Agent or deducted in whole or in part if not required

Item

2 Profit

Item

3 Attendance

Item

**Food Garden:**

4 Provide the sum of R50 000.00 (Fifty Thousand Rand) for establishment of school garden, the amount to be used at the discretion of the Principal Agent or deducted in whole or in part if not required.

Item

5 Profit

Item

6 Attendance

Item

**Podium:**

7 Provide the sum of R300 000.00 (Three Hundred Thousand Rand) for construction of podium into existing block A in accordance with engineers specification complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required

Item

8 Profit

Item

9 Attendance

Item

**Elevated Steel Tank:**

10 Provide the sum of R800 000.00 (Eight Hundred Thousand Rand) for elevated steel tank supplied and installed complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.

Item

**Carried to Collection**

R

**Section No. 9  
PROVISIONAL SUMS  
Bill No. 1  
PROVISIONAL SUMS**

11	Profit	Item
12	Attendance	Item
<b><u>Sewer Connection Upgrade:</u></b>		
13	Provide the sum of R850 000.00 (Eight Hundred and Fifty Thousand Rand) for Sewer Connection Upgrade, the amount to be used at the discretion of the Principal Agent or deducted in whole or in part if not required.	Item
14	Profit	Item
15	Attendance	Item
<b><u>Walkways and Parking Cover Structure:</u></b>		
16	Provide the sum of R850 000.00 (Eight Hundred and Fifty Thousand Rand) for walkways and parking covering and structure, the amount to be used at the discretion of the Principal Agent or deducted in whole or in part if not required.	Item
17	Profit	Item
18	Attendance	Item
<b><u>Structural Steel Roof Construction:</u></b>		
19	Provide the sum of R1 500 000.00 (One Million Five Hundred Thousand Rand) for steel roof construction supplied and installed complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item
20	Profit	Item
21	Attendance	Item
<b><u>Cold Room:</u></b>		
22	Provide the sum of R500 000.00 (Five Hundred Thousand Rand) for Cold Room supplied and installed complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item

**Carried to Collection**

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23	Profit	Item
24	Attendance	Item
<b><u>Kitchen Equipment:</u></b>		
25	Provide the sum of R800 000.00 (Eight Hundred Thousand Rand) for Kitchen Equipment supplied and installed complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item
26	Profit	Item
27	Attendance	Item
<b><u>BUDGETARY ALLOWANCES</u></b>		
<b><u>Builders Work:</u></b>		
28	Provide the sum of R300 000.00 (Three Hundred Thousand Rand) for Builders work complete, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item
29	Profit	Item
30	Attendance	Item
<b><u>TECHNICAL TRAINING AND SOCIO-ECONOMIC DELIVERABLES</u></b>		
<b><u>Community Liason Officer</u></b>		
31	Provide the sum of R126 000.00 (One Hundred and Twenty Six Thousand Rand) for Community Liason Officer, to be used at the discretion of the Principal Agent and deducted in whole or in part if not required.	Item
32	Profit	Item
33	Attendance	Item

**Carried to Collection**

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7	MECHANICAL INSTALLATION	305	
8	EXTERNAL WORKS	352	
9	PROVISIONAL SUMS	358	
	TOTAL BUILDING WORKS		R
	<b><u>CSDG CONSTRUCTION SKILLS DEVELOPMENT GOAL</u></b>		
	Provide a sum of 0.5% of the total for building works for the Construction Skills Development Goal as per CIDB B.U.I.L.D Programme requirements.	Item	
	TOTAL BUILDING COSTS		R
	<b><u>CIDB BEST PRACTICE PROJECT FEE</u></b>		
	Provide a sum of 0.2% (GB) of the total for building works for CIDB Best Practice Project Levy to be paid directly to the CIDB at the employer's discretion	Item	
	<b>Carried Forward</b>		R

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
	<b>Brought Forward</b>		R
	<b><u>ESCALATION</u></b>		
	Provide the sum of R 2 000 000.00 (Two million Rand) for statutory increases (CPAP), to be adjusted, used and paid as instructed by the Client for and based on contractually calculated escalation per item 3.2.4 of the contract data of the Preliminaries Bill and in terms of clauses 17, 31 and 32 of the Principal Building Agreement (refer JBCC).	Item	2,000,000.00
	Sub Total		R
	<b><u>CONTINGENCIES</u></b>		
	Provide the Sum of R 5 400 000.00 (Five Million Four Hundred Thousand Rand) for contingencies be used at the Employer's discretion in terms of Clause 17 of the Principal Building Agreement.		R 5,400,000.00
	TOTAL CONSTRUCTION COSTS (Excluding VAT)		R
	VAT at the rate of 15%		R
	<b>Carried to Form of Tender</b>		R